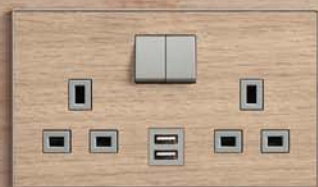


MK Electric Catalogue



WIRELESS
WIRING DEVICES
CIRCUIT PROTECTION
CABLE MANAGEMENT
POWER DISTRIBUTION SYSTEMS

Catalogue No. 49



Technical Hotline
+44 (0)1268 563720



MK ELECTRIC

The Arnold Centre
Paycocke Road
Basildon
Essex SS14 3EA
Telephone 01268 563000
UK Sales Fax 01268 563405
Email mkorderenquiries@honeywell.com

WEBSITE

For further information and other literature items please visit www.mkelectric.co.uk

TECHNICAL SERVICES

For advice on product selection, help with system planning, technical guidance, quotations and technical literature

Telephone +44 (0)1268 563720
Fax +44 (0)1268 563064
Email mk.technical@honeywell.com

CUSTOMER SERVICES

For assistance regarding orders and deliveries
Telephone +44 (0)1268 563404
Fax +44 (0)1268 563405
Email mkorderenquires@honeywell.com

R.O.I. CUSTOMERS

Telephone 01 4296530
Fax 01 4296501
Email mkorders@honeywell.com

All marks in this document identified with a ® or ™ symbol adjacent to the mark are Trade Marks of Novar ED&S Limited © Novar ED&S Limited

Every reasonable effort has been made to ensure that all information in this catalogue is accurate at the time of print. Information is subject to change without prior notice. For the most up-to-date information please visit www.mkelectric.co.uk.

Wiring Devices

Range	Product Pages	Technical Data
Wireless		
Echo Wireless, batteryless, self-powered technology	21-31	437-440
White		
Logic Plus Widest selection of wiring devices in one range	32-52	441-484
Ceiling Accessories Lampholders, pendant sets and ceiling switches	53-56	492-494
Decorative		
Decorative Introduction	67-69	
Elements Revolutionary range of stylish wiring devices with touch control switches and dimmers	70-97	497-525
Aspect Range of slimline, flawless profile devices	98-128	441-484
Edge Function and style with very slim profile frontplate	130-166	441-484
Albany Plus Satin Gold and Brushed Chrome devices	167-188	441-484
Modular		
Grid Plus Modular switching and monitoring system	189-207	526-532
Lighting Controls		
Link Plug-in connection and distribution system for lighting	58-62	495-496
Sensors A range of energy saving and lighting management products	63-66	485-491
High Power Dimmer Range of dimmers to control large lighting loads	208-210	534-536



Technical Hotline
+44 (0)1268 563720

Wiring Devices & Circuit Protection

Range	Product Pages	Technical Data
Boxes and Ancillary Products		
Boxes Wide selection of surface and flush mounted, metal and PVC boxes	211-217	NA
Ancillary Products A selection of miscellaneous wiring devices	218-223	NA
Surface		
Metalclad Plus Tough, impact resistant surface mounted devices	224-235	441-484
Portable Power		
Duraplug Durable, strong and reliable accessories	236-239	538-540
Plugs and Adaptors High quality plugs and adaptors	240-241	541
Ingress Protected		
Masterseal Plus Comprehensive range of IP66 weatherproof devices	242-249	542-553
Commando Safetyswitch Impact resistant switches for indoors or outdoors	250-253	554-555
Commando Comprehensive selection of industrial plugs and connectors	254-263	556-567
Commando Combination Units RCD protection with high impact PBT units	264-267	568-573
Commando Modular Combi Factory built modular system for industrial and service applications	268-269	NA
Circuit Protection		
Sentry Consumer units and a wide variety of modular protection and control products	271-286	575-604
Sentrysocket RCD protected switchsockets with active and passive control circuits	288-289	606-607

Range	Product Pages	Technical Data
Perimeter and Distribution		
Prestige 3D Introduction	290	
Prestige 3D Dado and Skirting Three compartment dado trunking system for compliance with Cat 6 structured cabling	291-296	612-615
Prestige 3D Antibac Blue Antibacterial solution for power and data distribution in environments where hygiene is priority	297-303	616-617
Prestige 3D Compact 3 compartment trunking with a smaller footprint for more confined installations	305-310	618-621
Prestige 2com Two compartments provide maximum data capacity around radiused bends	311-316	623-629
Prestige Poles and Posts Poles and Posts for supplying multi-services to work stations	318-319	630-631
Powerlink Plus Busbar trunking system with flush fitting accessories	321-331	632-639
Pinnacle Versatile angular bench trunking system	332-337	640-644
Premier Integrated trunking system with snap fit mouldings	338-343	645-649
Norwich Durable and popular trunking system	344-345	650-654
Ega Industrial Heavy duty trunking in a variety of sizes	346-347	656-661
Ega Cornice Trunking for wall/ceiling junctions	348-349	662-665
Conduit and Mini		
Egatube Conduit High impact conduit with a comprehensive range of fittings	350-360	666-671
Ega Mini Trunking Wide selection of mini trunking profiles and fittings	361-365	672-674
Alarm and Communication		
Red Alert Trunking for alarm circuit identification	366-370	672-674



Technical Hotline
+44 (0)1268 563720

Power Distribution Systems

Range	Product Pages	Technical Data
Raised Floor Systems		
Interact Underfloor Power Low profile Powertrack system for single or multi-circuit applications	371-376	675-676
Cablelink Plus Modular 2, 3 and 4 module floorboxes designed for robustness	377-382	677-680
Cablelink Plus Single Pan Box Floorbox ideal for floor voids with restricted space	383-386	681-682
Slab Boxes Alternative power distribution system to floorboxes	387-390	NA
Grommets Ideal for use with Slab Box and Deskpod™	391-394	683
DeskPod™ Customisable and pre-configured desk modules	395-401	684
Screeded Floor Systems		
Onix Plus™ A unique alternative to hard floor power and data distribution	403-411	685-688
Cablelink Plus Screed System Provides adaptable power and data distribution in screed floors	413-424	689-694
Overhead Systems		
Interact Overhead Power 40A overhead Powertrack system for single, three phase or dual circuit applications	425-429	695-696
Hangmann Range of hanging power, data and compressed air modules	430-432	NA
Full Product Index		697-747
Abbreviation Key		755
Standard Conditions of Sale		756



SERVING THE UK FOR ALMOST 100 YEARS



MK Electric has key manufacturing facilities in the UK, Germany, Saudi Arabia, Malaysia and India, sales offices across Europe and the Middle East, that distribute to over 100 countries and employ over 1500 people worldwide.

UK operations feature 4 locations, employs over 600 people, and is one of the few businesses to retain manufacturing sites in the UK for the UK market.



Sockets | Wireless | Switches | Circuit Protection |
Thermostats | Cable Management Anti-Microbial |
Sensors | Lighting Management | Power Distribution |
Security Lighting | Doorbells | Building Control Systems |
Fluid Controls | Heating Controls

HONEYWELL ENVIRONMENTAL AND ENERGY SOLUTIONS (E&ES)



For almost 100 years, MK Electric has led the market in electrical wiring accessories.

Today, MK Electric continues to lead the way in innovation with additions to the widest range of wiring accessories such as LED Dimmers, USB Charging Solutions, wireless, batteryless Echo switches, as well as the stylish MK Elements collection of wiring accessories.

MK Electric also manufactures a host of other products, including overhead and underfloor power and data distribution, cable management and circuit protection.



Honeywell

Honeywell is the UK's leading supplier of domestic heating and combustion controls, with a portfolio of products that includes time, temperature, gas and water control offerings.

Honeywell also offers over 4,000 water and heating products, amounting to a wealth of coordinated, easy to use system solutions. The portfolio includes pressure reducing valves, thermostatic mixing valves, filtration and much more.



Honeywell

Honeywell Doorbells represent the next generation in technology for the home, taking Friedland's 60 year heritage to create the best doorbells in the world.

The revolutionary range offers a wide selection of wireless and wired portfolios to ensure you never miss a visitor.



Ex-Or are acknowledged leaders in developing elegant and innovative lighting control systems that are easy to install and maintain. Ex-Or solutions help customers to reduce their energy bills, lower their carbon footprints, and improve performance.

Ex-Or's range of new generation lighting controls switch lights off when no-one's there, and dim or switch them off when there's enough natural light, helping to reduce energy costs, sometimes as much as 70%, year after year.



TREND

Trend is one of the world's leading Building Energy Management Systems manufacturers. Through close control and monitoring of heating, ventilation, air conditioning and other building services, Trend systems are able to minimise energy consumption and maintain consistently comfortable conditions – as well as bringing other key benefits such as lower plant maintenance costs. Systems are to be found in virtually every type of non-residential building, from schools, hospitals and leisure centres to office blocks, shops and factories.



CentralLine is one of the fastest growing brands in the Building Automation industry. Established in 2004 by Honeywell as an independent brand for networked Building Automation, it has developed a Europe-wide infrastructure with 360 carefully selected and specially trained CentralLine PARTNERS. CentralLine solutions are based on leading Honeywell technology which is saving energy in more than 100 million homes and buildings worldwide.



Made GREAT In Britain



MK Electric: leading the market in Quality, Reliability, Safety and Responsibility since 1919.

As MK Electric nears its 100th anniversary the business is still evolving and innovating to meet the ever changing demands of our customers and the market place.

Quality, Reliability, Safety and Responsibility are embedded at all levels of the company. These, and our unrivalled product portfolio, see us well equipped to face the challenges that lie before us. As ever, our customers are at the centre of everything we do, and MK and Honeywell solutions and technologies are delivering new products and processes which are more energy efficient and less harmful to the environment.

Where does it come from?

Over 80% of MK products are manufactured in the UK. In the example of the MK Logic Plus 2 Gang Switch Socket Outlet for the UK market, it is estimated that the components and product travel a distance of 16 times less when manufactured in one of MK's UK facilities, compared to one produced in a Far Eastern facility. With over 70,000 less miles travelled from the UK manufactured socket there is a clear reduction in the products' carbon footprint when compared to one of its Far Eastern manufactured counterparts.

Wherever possible MK Electric manufacture within, or close to, a local market. This not only keeps the transportation of components and finished products to a minimum, but also allows us to react quickly to changes in the market requirements. Products come off the production line and are delivered direct to our UK warehouse within 24 hours. Far Eastern manufactured products can often spend over 3 months in transit, negating any opportunity for late changes in production to meet a specific market or customer demand.



Who made it?

All MK Electric factories operate to the Health, Safety and Environmental Management Standards implemented globally by Honeywell. In addition all MK Electric Operating Sites are accredited to the following third party assessed international standards:

ISO 9001

Quality

OHSAS 18001

Health & Safety

ISO 14001

Environment

MK Electric

"We consider the well being of workers in our international supply chains to be a priority.

As a condition of supply we ensure that all goods made on our behalf are produced in conditions that are safe, decent and that support working people in maintaining a reasonable standard of living".

MK ELECTRIC BRAND VALUES

Responding to our customers' and market feedback, we are constantly striving to develop ever more innovative products underpinned by excellent customer service levels.

Quality and Reliability

At MK we pride ourselves on using superior manufacturing techniques in all our manufacturing sites. All MK products are manufactured from superior quality materials to ISO 9001 certification.

Whilst other manufacturers may make claims on reliability, MK products are truly reliable, we demonstrate this with comprehensive product guarantees of up to 20 years*.

All MK products undergo rigorous testing to ensure maximum Quality, Reliability and Safety. Each product undergoes 100% electrical and visual testing at the point of manufacture. British Standards require a socket outlet to be tested to 15,000 socket insertions – the MK test laboratory has tested MK sockets to over 1,000,000 plug insertions with no reported faults, or issues with wear and tear. Similarly, British Standards require a 10A switch to be tested to 20,000 switches, the MK test laboratory has tested MK switches to over 1,000,000 on-off switch operations with no reported faults, or issues with wear and tear.

*See individual ranges for exceptions



MK Electric's range of



LOGIC PLUS



ELEMENTS



ASPECT



EDGE



MASTERSEAL PLUS

CONTOURED TO BLEND INTO THE WALL

DOUBLE POLE SWITCHING

Switches both live and neutral (neutral makes first, breaks last) means added safety for the user

OPTIONAL NEON INDICATOR ILLUMINATES WHEN SWITCH IS ON

3mm MINIMUM SWITCH CONTACT GAP

3-PIN "CHILD RESISTANT SHUTTER SYSTEM"

Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

HIGH GLOSS, HIGH QUALITY THERMOSET MATERIAL

Inherent antimicrobial properties, resists scratching, maintains appearance

wiring devices



ECHO



ALBANY PLUS



METALCLAD PLUS

- ✓ **Quality** – Manufactured to ISO 9001 certification, using superior manufacturing techniques
- ✓ **Reliability** – Comprehensive 20 year product guarantee, 10 years for Electronic Devices, Circuit Protection and Cable Management*
- ✓ **Safety** – 100% factory tested, each product undergoes up to 200 individual tests, for a 'fit and forget' installation every time
- ✓ **Responsibility** – Our solutions and technologies expand sustainable capacity and improve the efficiency of products and processes, fostering sustainability.

Safety

MK Sockets – The Safest Available

MK's sockets have a "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all three pins of a British plug are in position.

By choosing our sockets, you can be sure that you are giving your building the ultimate in electrical protection. All electrical sockets manufactured to the British Standard must incorporate a shutter mechanism. British Standards require that a minimum safety level is achieved in the design and manufacture of electrical accessories. MK's socket design offers the maximum safety benefit and is the most difficult shutter mechanism to defeat unless correctly used with a British plug.

All standard 13A MK sockets incorporate the 3-pin operated shutter system.

*See individual ranges for exceptions

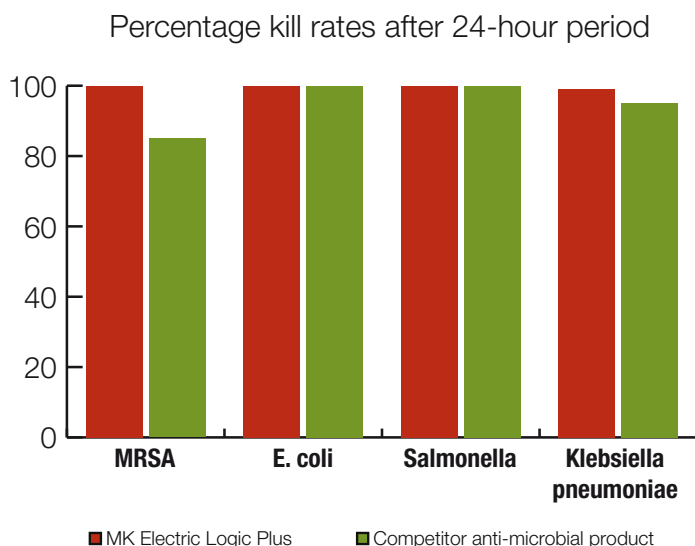
MK ELECTRIC BRAND VALUES

Safety

Anti-Microbial Products

The issues around the cleanliness within health establishments such as hospitals, surgeries and dentists etc. continue to be raised by health professionals, government departments, the media and the general public.

In 2008, MK Electric commissioned independent testing on the Logic Plus range and a competitor's 'Anti-Microbial' range by a reputable independent UKAS accredited laboratory. The laboratory tested the products, after cleaning with disinfectant (the Government's 'Deep Clean' policy targeted all hospitals to adopt a deep clean program, which includes cleaning all fixtures and fittings). The organisms MRSA, E-Coli, Salmonella and Klebsiella Pneumoniae were applied to the products. Results were collected at 0 minutes, 4 hour, 8 hour and 24 hour intervals.



Source: MK commissioned report, 2008



The Results

MRSA

Logic Plus has a kill rate of 99.9% compared to the competitor's Anti Microbial product with only 86.4%. Both products had an equal 99.9% kill rate for **E-Coli** and **Salmonella**.

Klebsiella Pneumoniae

Logic Plus has a kill rate of 98.9%, compared to the competitor's Anti Microbial product with 95.4%. The Logic Plus range is produced using Urea Formaldehyde, a high grade thermoset material, which has similar inherent properties to antimicrobial additives, which inhibit the growth of infectious diseases such as MRSA, E-Coli, Salmonella and Klebsiella Pneumoniae. In addition, Logic Plus products are scratch-free thanks to high quality mould tools, which means there are no dirt traps for bacteria to breed. Whilst cleanliness is key to fighting these infections, and not replaced by the use of MK's Logic Plus products, the independent results show that the range is more effective than a competitor's Anti-Microbial products at killing MRSA organisms and contributes beneficially to any hygiene regime.





MK SENSORS: ENERGY SAVING SOLUTIONS
FOR LIGHTING CONTROL

Responsibility

MK Electric, and the wider Honeywell business, has teams of engineers and technology specialists working to develop new products for our customers and processes for our business.

Honeywell's energy efficient technologies help our global customers better meet the growing demand for electricity while curbing fossil fuel emissions. 50% of Honeywell's \$38.6 billion product portfolio is geared towards delivering energy savings and efficiency – from building management and process solutions systems to biofuel technologies and turbocharged engine platforms.

To Honeywell, environmental stewardship means acting in a way that is both productive and sustainable. We design products that help conserve energy, reduce waste, and protect our homes, offices and public buildings. We help other companies become more efficient and productive with our products and solutions.

Honeywell solutions and technologies expand sustainable capacity and improve the efficiency of products and processes, fostering what we call our 'Sustainable Opportunity'.



ALL MK MANUFACTURING SITES ARE WORKING UNDER ENVIRONMENTAL MANAGEMENT SYSTEMS TO REDUCE THEIR IMPACT ON THE ENVIRONMENT

JUST PRODUCTS THE WAY YOU WANT THEM

The MK Design Service offers customers bespoke products, perfect for when only a customised solution can meet your requirements. Whether you want to highlight furnishings, accentuate lighting or simply blend in with the overall décor, our dedicated team can help to put the accent on style and creativity – from concept to completion.

Sometimes though it's about more than just aesthetics. The MK Design Service Team have created additional tamper proof features on products destined for prisons or schools, unique combination plates hosting a range of European or worldwide sockets for global hotel chains along with many other custom solutions, in order to satisfy specific project requirements.

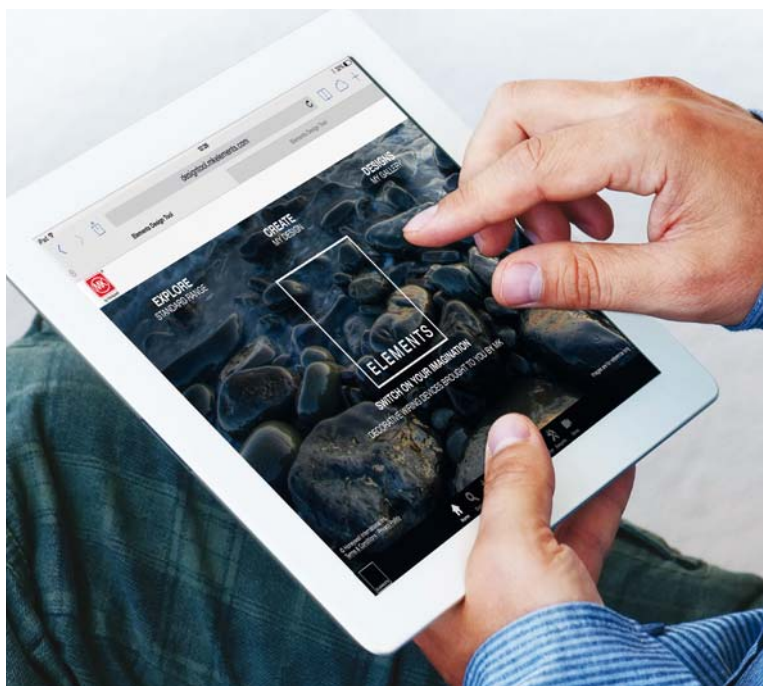
The Right Tools

The MK Design Service Team spent six months interviewing architects and interior designers to assess how technology could help them do a better job of delivering bespoke light switches and electric sockets for their clients and the results were fascinating. The designers interviewed all stressed the importance of instantaneous samples in order to effectively source materials for a room or space. Paired with this, the ability to change that sample graphically in real time was also a key priority.

For example, if a designer is with a client or customer and there are 5-6 different finishes that may work for a room – they may be looking for the perfect front plate to match a black granite countertop or a metallic finish to blend with stainless steel appliances.

The tool allows designers to work with their clients to narrow that selection down to 2-3 just by having the ability to show the selected background or surroundings.

The MK Electric Design Tool is optimised to work with MK Elements Collection on a tablet or laptop.*



Ultimately ensuring designers are equipped with a tool where they can produce, store and manage their own wiring accessory designs – with the ability to generate thousands of new design combinations with different colours, textures and materials – will result in satisfied clients, quicker turnaround for room completion and further differentiation from competitors.



Function

In addition to the aesthetics of the product, the MK Design Service Team can work with you to create bespoke functionality into your creation.

Giving you total control at your fingertips. Such functionality could include enhanced security features, providing you with a product suitable for the most demanding environments.



Figure

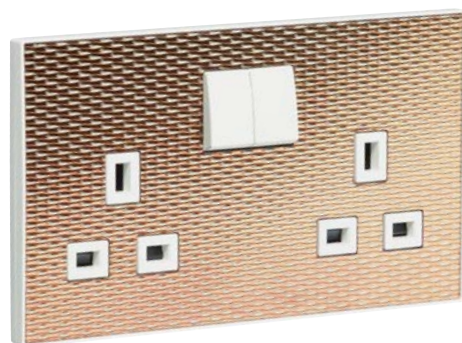
The devil is in the detail, you can add a level of detail that identifies key functions or adds that personal or corporate touch with discreet logos, symbols or text.



Form

If square and rectangle do not suit, then that's not a problem. Together with MK, design unique shapes to suit your aspirations.

Good design however, is nothing without delivery. The MK Design Service is totally focused on achieving the perfect result, utilising its technical, manufacturing and supply expertise to ensure your vision is realised.



Turn an idea into reality, a desire into a finished design, an inspiration into a statement. MK's Design Service Team can help you achieve your design goals.

Email: design.service@honeywell.com Telephone: 01268 563720

HONEYWELL'S SUSTAINABLE OPPORTUNITY POLICY



Based on the principle that by integrating health, safety, and environmental considerations into all aspects of its business, Honeywell protects its people, its communities, and the environment; achieves sustainable growth and accelerated productivity; drives compliance with all applicable regulations; and develops technologies that expand the sustainable capacity of our world.

Greenhouse Gas and Energy Efficiency

Our commitment to be more efficient and responsible is reflected in the extensive work we do to make our businesses more environmentally friendly, safer, and more sustainable. By 2019 Honeywell will reduce our global greenhouse gas emissions by an additional 10 percent per dollar of revenue from our 2013 levels.

We exceeded our first public goal to reduce global greenhouse gases by more than 30 percent and improve energy efficiency by more than 20 percent between 2004 and 2011.

A second five-year goal, set to reduce greenhouse gas emissions by an additional 15 percent per dollar of revenue from 2011 levels, was met three years early.

Since 2010, our facilities have implemented more than 2,100 efficiency projects including building automation/controls, lighting, and mechanical upgrades.

We exceeded our first public goal to reduce global greenhouse gases by more than 30 percent and improve energy efficiency by more than 20 percent between 2004 and 2011.



Safety

A sustainable environment is also a safe environment. Our corporate-wide core processes identify and address risks and promote a culture of safety excellence. In fact, we have achieved a safety record that is more than two times better than the average of the industries in which we do business.

Nearly 50 percent of our portfolio is dedicated to energy efficient products and services. From programmable thermostats and energy management systems to turbochargers and green fuels to industrial controls and lighter aircraft components, our technologies are building a world that is safer and more secure, more comfortable and energy efficient, and more innovative and productive... right now.

In fact, the use of Honeywell technologies could reduce energy demand in the United States and Europe by 20 to 25 percent if they were immediately and comprehensively adopted across the residential, commercial, industrial, and transportation sectors.

GETTING READY FOR LEVEL 2 BIM COMPLIANCE

Building Information Modeling (BIM), the generation and management of digital representations of physical and functional characteristics, has been around for over 20 years and has gained steady traction in the construction industry.



BIM, and the coordination, efficiency, cost and planning benefits it provides has been championed by the UK government. They have introduced legislation requiring all manufacturers to become Level 2 BIM compliant by 1st April 2016, ensuring they provide the minimum amount of data regarding products now being required for all UK Government projects.

Manufacturers already have the required information to become compliant, but a simple and industry-wide approach to product data parameters and templates has until now been a challenge.

The industry must come together to create a single and unified approach to product data. Without this, the cost and time savings released by BIM will not be achieved, as key functions such as clash detection and product compatibility issues will be missed. Environmental benefits from product re-use and recycling will also likely be overlooked.

MK Electric, alongside Honeywell, is leading the way in BIM standardisation for the industry working with BEAMA, CIBSE, the UK government, and several other manufacturers to ensure that the industry collaborates and defines a consistent way forward.

MK Electric is committed to supporting the evolving needs of the digital construction industry, by providing contractors, architects and consultants access to the accurate and reliable data they need to comply with relevant European and international standards.

Visit mkelectric.co.uk for more information.



ECHO™

RANGE INTRODUCTION

Imagine switch technology and automated systems that need no wiring, use no batteries and are effortless to install and commission. Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls which can work together offering even more convenience and energy saving opportunities.

Echo™ enables you to create your own automated control system for a domestic or commercial environment. With the ability to incorporate a range of transmitters from switches and presence detectors, alongside a range of receivers, the installer can create a flexible system which can deliver safety, comfort, cost savings and energy efficiency for the building owner or user.

The MK Echo™ portfolio is enabled by EnOcean technology. EnOcean based products make use of the energy generated by slight changes in pressure, light levels or temperature, to provide self-powered, batteryless and wireless solutions. This technology is used by many world leading manufacturers, products from these companies can be used together to provide solutions for energy efficient buildings which are more flexible and cost efficient to design, build and operate.

To find out more visit www.mkelectric.co.uk.

FEATURES & BENEFITS

WIRELESS

Instant installation and location flexibility, reducing disruption and cost, as there is no need to run switching cables.

SELF-POWERED

Innovative patented technology to 'harvest' energy means zero maintenance as there are no batteries to change.

ULTIMATE FLEXIBILITY

Each receiver can be controlled by up to 32 switches/transmitters.

ENERGY SAVINGS

With additional local control, alongside the use of presence detectors users can create an energy efficient environment.

HOW TO SPECIFY

A range of switches and controls which are self powered and to be enabled by EnOcean technology. Transmitters to be totally wireless and batteryless, with no direct connection to the final circuit. All transmitter modules to be available in a range of aesthetics and finishes which match to other required wiring accessories. Receivers to have the ability to be controlled by up to 32 switches/transmitters. All products to be manufactured in Europe.

Echo™

APPLICATION EXAMPLE: HOTEL BEDROOM

In this example the installer is able to create an automated system ensuring comfort for the guest, whilst delivering energy efficiency and cost savings for the hotel without disturbing the fabric of the room. In addition, with wireless transmitters, the layout and positioning is completely flexible and can be changed quickly without disruption.

The guest is able to easily control their local environment from a number of locations within the room. A 2 channel transmitter by the entry doorway enables control of both the bedroom and living area lighting. An additional 4 channel transmitter next to the bed gives further control of the bedroom and living area lighting and an all off function. There is additional control in the bathroom and on the balcony.

The hotel is able to control all lighting, heating and cooling by the card switch transmitter, ensuring guests do not leave lighting or air conditioning on when they leave the room. The hotel is also able to ensure a safe environment; the presence detector can be programmed to turn low level lighting on when a guest enters the room. In addition the presence detector can be programmed to turn lighting off, or dim to a low level when no presence is detected in the room but the card switch is still in place. Door contacts ensure the air conditioning is not in use whilst the balcony doors are open, offering further energy savings.



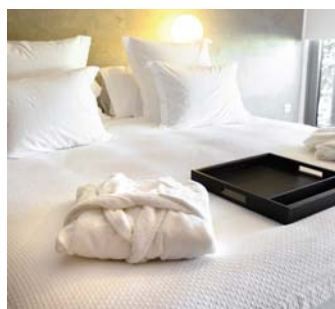
WIRELESS



BATTERYLESS



SELF-POWERED



SWITCH RECEIVER



PLUG-THROUGH SWITCH RECEIVER



4 CHANNEL TRANSMITTER

- 1 - Living area lights
- 2 - Bedroom lights
- 3 - Plug-through light
- 4 - All off



1 CHANNEL TRANSMITTER



SWITCH RECEIVER

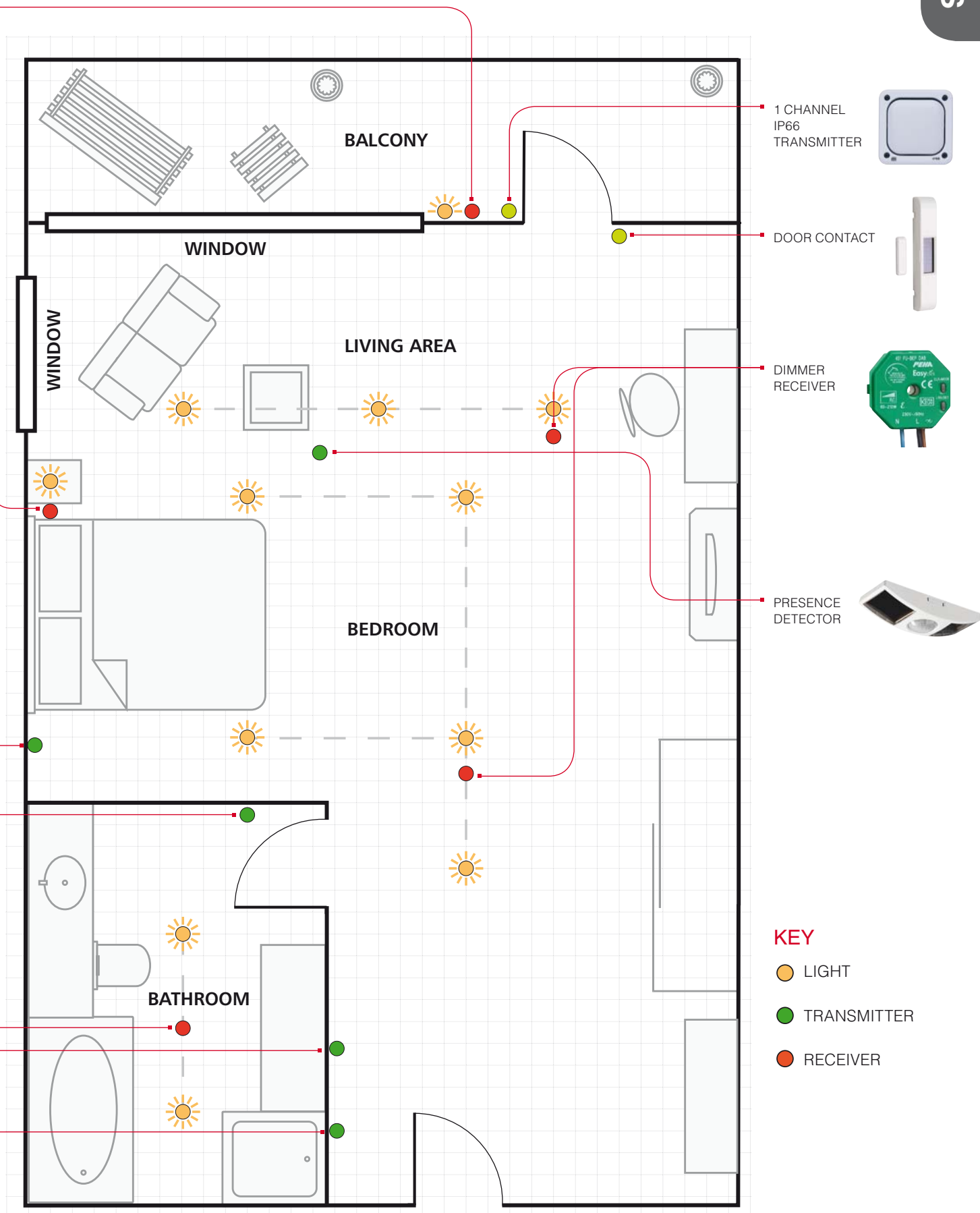


2 CHANNEL TRANSMITTER

- 1 - Bedroom Lights
- 2 - Living area



CARD TRANSMITTER



Modular Transmitters

1 CHANNEL
MODULAR
TRANSMITTER

2 CHANNEL
MODULAR
TRANSMITTER

MODULAR
CARD SWITCH
TRANSMITTER

FINISHES

WHITE

K5786WHI

1

K5789WHI

1

K5744CWHI

1

BLACK

K5786BLK

1

K5789BLK

1

K5744CBLK

1

ALUMINIUM

K5786ALU

1

K5789ALU

1

K5744CALU

1

For use with K5776, K5779 frames and K5412 locator.

OPERATING FREQUENCY

868.3Mhz

IP RATING

IP2 x D

DIMENSIONS

55 x 55mm

ETSI EN 301489-1/3

ETSI EN 300220-1/2

For use with K5776, K5779 frames and K5412 locator.

OPERATING FREQUENCY

868.3Mhz

IP RATING

IP2 x D

DIMENSIONS

55 x 55mm

ETSI EN 301489-1/3

ETSI EN 300220-1/2

For use with K5776, K5779 frames and K5412 locator.

OPERATING FREQUENCY

868.3Mhz

IP RATING

IP2 x D

DIMENSIONS

55 x 55mm

ETSI EN 301489-1/3

ETSI EN 300220-1/2

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied.

All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads





Modular Frames

1G FRAME
GLOSSY FINISH

2G FRAME
GLOSSY FINISH

1G FRAME
GLOSSY FINISH

2G FRAME
GLOSSY FINISH

FINISHES			FINISHES		
WHITE	K5776WHI 1	K5779WHI 1	GLASS, BLACK	K5776GLAB 1	K5779GLAB 1
BLACK	K5776BLK 1	K5779BLK 1	GLASS, GREEN	K5776GLAG 1	K5779GLAG 1
ALUMINIUM	K5776ALU 1	K5779ALU 1	GLASS, ALUMINIUM	K5776GLAA 1	K5779GLAA 1
			GLASS, GROOVED ALUMINIUM	K5776GLAGA 1	K5779GLAGA 1

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.
Surface mount installation only.

DIMENSIONS
83 x 83mm

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.
Surface mount installation only.

DIMENSIONS
83 x 154mm

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.
Surface mount installation only.

DIMENSIONS
85 x 85mm

For use with K5412 locator and K5786, K5789, K5744, K5744C transmitters.
Surface mount installation only.

DIMENSIONS
85 x 157mm

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied.

All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

Transmitters

Logic Plus™

1 CHANNEL
TRANSMITTER2 CHANNEL
TRANSMITTER

FINISHES		
WHITE	K4786WHI 1	K4789WHI 1
GRAPHITE	K4786GRA 1	K4789GRA 1

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

Aspect

1 CHANNEL
TRANSMITTER2 CHANNEL
TRANSMITTER

FINISHES		
BRUSHED STAINLESS STEEL	K23476BSS* 1	K23477BSS* 1
LACQUERED BRUSHED STEEL	K23476LBS* 1	K23477LBS* 1
BRUSHED CHROME	K23476BRC* 1	K23477BRC* 1
POLISHED CHROME	K23476POC* 1	K23477POC* 1
SATIN GOLD	K23476SAG* 1	K23477SAG* 1
PORCELAIN WHITE	K23476WHIW 1	K23477WHIW 1
LUSTROUS IVORY	K23476LIVW 1	K23477LIVW 1
LUSTROUS BLACK	K23476LBKB 1	K23477LBKB 1
POLISHED BRASS	K23476PBR* 1	K23477PBR* 1
TEXTURED IRON	K23476TIRB 1	K23477TIRB 1
DESERT BRONZE	K23476DBZB 1	K23477DBZB 1
ANTIQUE BRASS	K23476ABSB 1	K23477ABSB 1
TEXTURED COPPER	K23476TCOB 1	K23477TCOB 1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

LEAD TIMES
Please contact our Customer
Services Department on:
01268 563 404

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

Edge™

1 CHANNEL
TRANSMITTER



2 CHANNEL
TRANSMITTER



Albany Plus™

1 CHANNEL
TRANSMITTER



2 CHANNEL
TRANSMITTER



K13476BSS*	1	K13477BSS*	1	K4766BSS	1	K4767BSS	1
K13476LBS*	1	K13477LBS*	1				
K13476BRC*	1	K13477BRC*	1	K4766BRC	1	K4767BRC	1
K13476POC*	1	K13477POC*	1	K4766PCR	1	K4767PCR	1
K13476SAG*	1	K13477SAG*	1	K4766SAG	1	K4767SAG	1
K13476WHIW	1	K13477WHIW	1				
K13476LIVW	1	K13477LIVW	1				
K13476LBKB	1	K13477LBKB	1				
K13476PBR*	1	K13477PBR*	1				
K13476TIRB	1	K13477TIRB	1				
K13476DBZB	1	K13477DBZB	1				
K13476ABSB	1	K13477ABSB	1				
K13476TCOB	1	K13477TCOB	1				

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

OPERATING FREQUENCY
868.3Mhz
IP RATING
IP2 x D
DIMENSIONS
86 x 86mm
ETSI EN 301 489-1 + -3 :
ESTI EN 300 220-3

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied.
Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

Echo™

mkelectric.co.uk



Transmitters

Metalclad Plus™

1 CHANNEL
TRANSMITTER2 CHANNEL
TRANSMITTER

Masterseal Plus™

1 CHANNEL
TRANSMITTER2 CHANNEL
TRANSMITTER

Other

REMOTE
CONTROL
TRANSMITTERWINDOW/
DOOR CONTACT
TRANSMITTER

FINISHES

ALUMINIUM

K3786ALM

1

K3787ALM

1

GREY

K55400GRY

1

K55406GRY

1

WHITE

K3786WHI

1

K3787WHI

1

K55400WHI

1

K55406WHI

1

BLACK

K55400BLK

1

K55406BLK

1

K5417R

1

K5421

1

OPERATING
FREQUENCY:

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

50 x 82 x 21mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

Provides interlock
functionality for use
with multi-function
receivers.

Solar powered.

OPERATING
FREQUENCY:

868.3Mhz

IP RATING

IP40

DIMENSIONS

110 x 19 x 15mm

and 23 x 14 x 6mm

BS EN 301489-1/3

BS EN 300220-1/2

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

86 x 86mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

86 x 86mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP66

DIMENSIONS

95 x 95 x 57mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

OPERATING

FREQUENCY

868.3 Mhz

IP RATING

IP66

DIMENSIONS

95 x 95 x 57mm

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied. All can be mounted to back boxes – screws supplied. Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads

Receivers

1 Channel Switch Receivers

2 Channel Switch Receivers

1 Channel Dimmer Receiver



K5432R 1 CHANNEL MULTI-FUNCTION SWITCH RECEIVER

1

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

SUPPLY
230V / 50Hz
LOAD RATINGS
GLS/Incandescent: 2500W
Halogen: 1200W
Inductive: 600VA
ELECTRONIC BALLASTS
3 units
OPERATING FREQUENCY
868.3MHz
DIMENSIONS
Depth: 27mm
BS EN 60669-2-1
BS EN 301489-1/3
BS EN 300220-1/2

K5431R 1 CHANNEL VOLT-FREE, MULTI-FUNCTION SWITCH RECEIVER

1

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

SUPPLY
230V / 50Hz
LOAD RATINGS
GLS/Incandescent:
1200W @ 230Vac
50W @ 30Vdc
Halogen: 600W @ 230Vac
OPERATING FREQUENCY
868.3MHz
DIMENSIONS
Depth: 27mm
BS EN 60669-2-1
BS EN 301489-1/3
BS EN 300220-1/2

K5437R 1 CHANNEL MULTI-FUNCTIONAL SWITCH RECEIVER LEADED

1

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

SUPPLY
230V / 50Hz
LOAD RATINGS
GLS/Incandescent: 2500W
Halogen: 1200W
Inductive: 600VA
ELECTRONIC BALLASTS
3 units
OPERATING FREQUENCY
868.3MHz
DIMENSIONS
Depth: 27mm
BS EN 60669-2-1
BS EN 301489-1/3
BS EN 300220-1/2

K5433R 2 CHANNEL MULTI-FUNCTION SWITCH RECEIVER

1

Multi-functional device with repeater functionality providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

SUPPLY
230V / 50Hz
LOAD RATINGS
(per channel)
GLS / incandescent: 500W
Halogen: 100W
Inductive: 100VA
Electronic Ballasts: 1 unit
OPERATING FREQUENCY
868.3MHz
DIMENSIONS
Depth: 27mm
BS EN 60669-2-1
BS EN 301489-1/3
BS EN 300220-1/2

K5436R 1 CHANNEL MULTI-FUNCTIONAL DIMMER RECEIVER LEADED

1

Multi-functional device providing: soft start, turn-on memory, switch, stairwell and scene operating modes.

SUPPLY
230V / 50Hz
LOAD RATINGS
60-210W
Suitable for use with GLS/ Incandescent/Halogen lamps and 12V low voltage lighting powered by dimmable electronic transformers only.
OPERATING FREQUENCY
868.3MHz
DIMENSIONS
Depth: 27mm
BS EN 60669-2-1
BS EN 301489-1/3
BS EN 300220-1/2

Echo™

Receivers

Plug-Through Receiver

Alternative Receiver


K5427S
 PLUG-THROUGH
 SWITCH

Multi-functional device providing: single button, stairwell, time-delay, fan, scene operating modes and interlock functions for use with window contact.

SUPPLY

230V / 50Hz

LOAD RATINGS

GLS/Incandescent: 2500W

Halogen: 1250W

Inductive: 600VA

Electronic Ballasts: 3 units

OPERATING FREQUENCY

868.3MHz

DIMENSIONS

130 x 68 x 48mm

BS EN 60669-2-1

BS EN 301489-1/3

BS EN 300220-1/2



1

K5420R
 10AX SWITCH
 RECEIVER/REPEATER
OPERATING FREQUENCY

868.3MHz

IP RATING

IP2 x D

DIMENSIONS

175.5 x 50.3 x 32.25mm

BS EN 60669-1 :

BS EN 60669-2-1 :

ETSI EN 301 489-1 + -3 :

ESTI EN 300 220-3

1





Technical Hotline
+44 (0)1268 563720

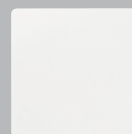
Echo™

WIRING DEVICES
WIRELESS

Presence Detector

Accessories

SOLAR-PRESENCE
DETECTOR



K5756 1
SENDS WIRELESS
SIGNALS TO RECEIVING
DEVICES WHEN MOTION
IS DETECTED.

HARVESTS INDOOR LIGHT
TO POWER THE SENSOR
WITH OPTIONAL BACKUP
BATTERY.

OPERATING FREQUENCY

868.3Mhz

IP RATING

IP50

DIMENSIONS

160 x 60 x 37mm

EN301489-1/3

EN300220-1/2

K5412L 1
LUMINOUS LOCATOR
FRAME FOR USE WITH
MODULAR TRANSMITTERS

K4710P 1
SURFACE MOUNTED
PATTRESS FOR USE WITH
LOGIC PLUS™ TRANSMITTER

K55000GRY 1
K55000WHI 1
K55000BLK 1
IP66 ENCLOSURE FOR USE
WITH RECEIVERS, CHECK
INDIVIDUAL RECEIVER
DIMENSIONS

KPAD 1
ADHESIVE PAD
FOR USE WITH LOGIC
PLUS™ SWITCH
TRANSMITTER AND
ASPECT SWITCH
TRANSMITTER

MOUNTING SWITCH TRANSMITTERS: All can be mounted directly to the wall surface – screws supplied.

All can be mounted to back boxes – screws supplied.

Logic Plus™ and Aspect type transmitters can also be mounted using supplied adhesive pads



LOGIC PLUS™

RANGE INTRODUCTION

Logic Plus™ wiring devices from MK Electric have been designed to perfectly complement modern interiors, offering an unobtrusive and sophisticated look totally in keeping with today's design.

Technically, they exceed British Standard requirements with patented features that make these products the most advanced and safest available.

Logic Plus™ products are made from a high grade thermoset material which has an inherent antimicrobial property. In independent tests, the Logic Plus™ products were equal to, or exceeded, competitor 'Anti-Bac' products when tested for resistance to MRSA, E.Coli, Salmonella and Klebsiella pneumoniae.

They are easy to install and available through our extensive distributor network. The range is backed by MK's quality and reliability and provides the largest selection of wiring devices in any single range.

HOW TO SPECIFY

A Urea moulded Anti-Bacterial range of wiring accessories, designed with a soft curved edge and a chamfered top edge that prevents dust collection, whilst offering a slim unobtrusive appearance. Cable connections must be upward facing, with easy to identify white markings on a dark background and grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts arranged such that the neutral pole makes before and breaks after the live pole to improve safety.

FEATURES & BENEFITS

TOTAL SAFETY

3-pin operated 'child resistant shutter system', which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position. Logic Plus™ products include an inherent antimicrobial property as a result of the high grade thermoset material used to manufacture.

UNRIVALLED QUALITY AND RELIABILITY

Products are made from the very best materials and production processes. All products are 100% tested.

QUICK AND EASY TO INSTALL

Features to ensure a quick and easy installation come as standard across the range, including in-line terminals, funnel entrances to terminals, backed out and captive screws and clear terminal markings.

EXTENSIVE RANGE

Outstanding selection of wiring devices providing a total solution.

20 YEAR GUARANTEE

Gives total peace of mind to you and your customers. (Up to 10 year guarantee on electronic products)

CONTOURED TO BLEND INTO THE WALL

DOUBLE POLE SWITCHING
Switches both live and neutral (neutral makes first, breaks last) means added safety for the user

OPTIONAL NEON INDICATOR SHOWS WHEN SWITCH IS ON

3mm MINIMUM SWITCH CONTACT GAP

3-PIN "CHILD RESISTANT SHUTTER SYSTEM"
Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

HIGH GLOSS, HIGH QUALITY THERMOSET MATERIAL
Inherent antimicrobial properties, resists scratching, maintains appearance

TERMINAL SCREWS
Backed out and held captive within the terminal housing

TERMINAL MARKINGS
Clearly marked on all rear mouldings

IN-LINE TERMINALS
Allow wire to be cut stripped to the same length

FUNNEL ENTRANCE TO TERMINALS
Terminals are upwards facing to make installation easier

DUAL EARTH TERMINALS
Available for installations that require high integrity earthing



Comprehensive range of Part M compliant products including socket outlets with outboard rockers, wide rocker switches and graphite coloured frontplates



Combined TV, FM, DAB, satellite and telephone sockets save on installation time and space



Simple but effective screwless cord grip on connection units – securely holds the cable

Specification Notes



The 3 pin operated safety shutter makes Logic Plus™ sockets the safest available.



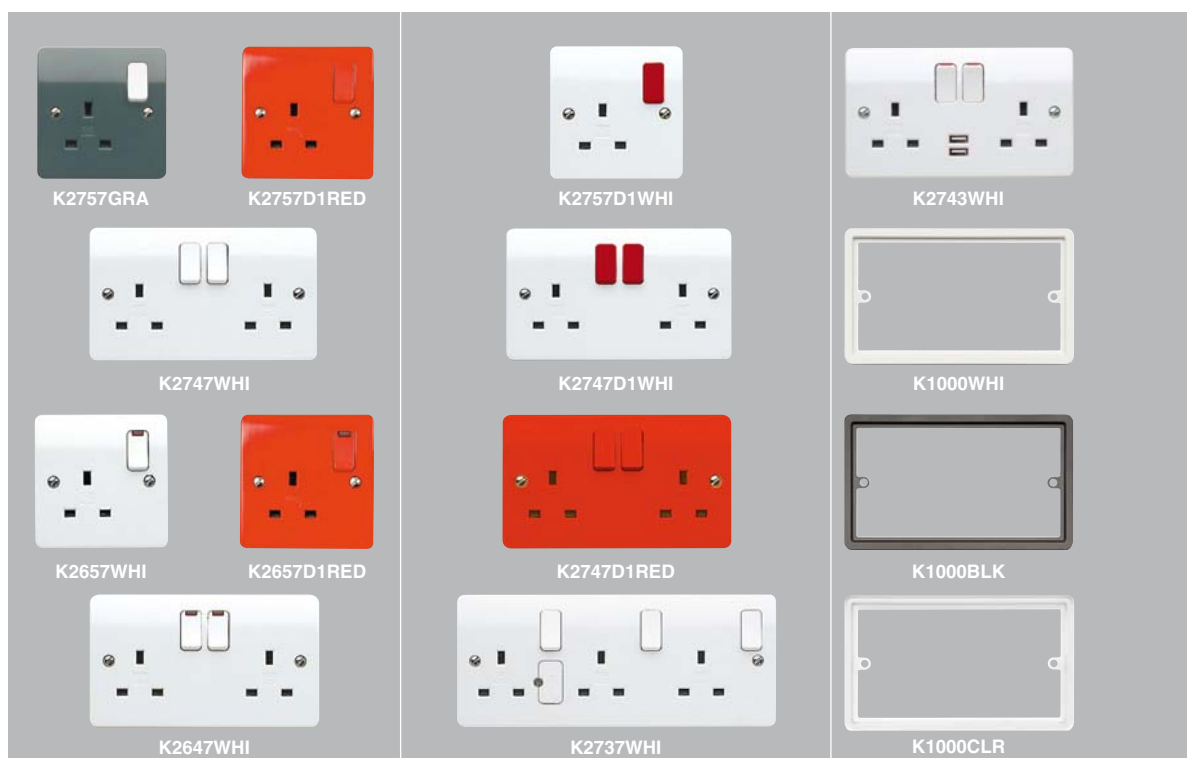
Many sockets are fitted with two earth terminals to provide high integrity earthing.



Terminals are grouped in-line with terminal screws backed out ready for easy wiring. Clear marking on dark background makes the terminals easily identifiable.

Switchsocket Outlets

FLUSH
13 AMP



K2757WHI	10
K2757GRA	10
1 GANG DP WITH DUAL EARTH TERMINALS	
K2757D1RED	5
1 GANG DP WITH RED FRONTPLATE, RED ROCKER AND DUAL EARTH TERMINALS	
K2747WHI	50
2 GANG DP	
K2657WHI	10
K2657GRA	10
1 GANG DP WITH NEON AND DUAL EARTH TERMINALS	
K2657D1RED	5
1 GANG DP WITH RED FRONTPLATE, RED ROCKER, NEON AND DUAL EARTH TERMINALS	
K2647WHI	5
2 GANG DP WITH NEONS	

MOUNTING BOXES	3 GANG: K2153WHI
FLUSH 25MM	
1 GANG: 861ZIC	
2 GANG: 862ZIC	
FLUSH 35MM	
(for extra wiring space)	
1 GANG: 866ZIC	
2 GANG: 866ZIC	
3 GANG: K863	
SURFACE	
1 GANG: K2140WHI	
2 GANG: K2142WHI	

DIMENSIONS
1 GANG: 86 x 86mm
2 GANG: 86 x 146mm
3 GANG: 86 x 206mm
FIXING CENTRES
1 GANG: 60.3mm
2 GANG: 120.6mm
3 GANG: 180.9mm
BS 1363 Pt 2:1995

K2757D1WHI	10
1 GANG DP WITH RED ROCKER AND DUAL EARTH TERMINALS	
K2757D2WHI	10
1 GANG DP WITH GREEN ROCKER AND DUAL EARTH TERMINALS	
K2747D1WHI	5
2 GANG DP WITH RED ROCKERS	
K2747D1RED	5
2 GANG DP WITH RED FRONTPLATE AND RED ROCKERS	
K2737WHI	5
3 GANG DP WITH DUAL EARTH TERMINALS	

HIGH INTEGRITY EARTHING
K2757, K2657, K2743 and K2737
Fitted earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671 IET Wiring Regulations

K2737
13A fuse protects all three outlets

K2743WHI	1
K2743GRA	1
2 GANG DP WITH 2 X USB CHARGING PORTS AND DUAL EARTH TERMINALS	
K1000WHI	1
2 GANG 10MM WHITE PATRESS	
K1000BLK	1
2 GANG 10MM BLACK PATRESS	
K1000CLR	1
2 GANG 10MM CLEAR PATRESS	

MOUNTING BOXES
FLUSH 35MM
886ZIC
FLUSH 47MM
(for extra wiring space)
887ZIC
BS 5733:2010

K2743WHI
Features 2 USB charging sockets, each capable of supporting 2A charge (total of 2A)

K1000WHI, K1000BLK, K1000CLR
Patresses for use where existing back box is too shallow



Technical Hotline
+44 (0)1268 563720

Logic Plus™

WIRING DEVICES
WHITE

WITH OUTBOARD
ROCKERS
FLUSH
13 AMP



K2746WHI



K2746GRA



K2476WHI



K2476GRA



K2746D1WHI



K2746D1RED



K2746D2WHI



K2746WHI 10
K2746GRA 10
2 GANG DP
WITH OUTBOARD ROCKERS
AND DUAL EARTH TERMINALS
K2746CEWHI 10
2 GANG DP
WITH OUTBOARD ROCKERS
AND 'CLEAN EARTH' FACILITY
K2476WHI 10
K2476GRA 10
2 GANG DP
WITH OUTBOARD ROCKERS
DUAL EARTH AND NEONS
K2746CEWHI 10
2 GANG DP
WITH OUTBOARD ROCKERS,
NEONS AND 'CLEAN EARTH'
FACILITY

K2746CEWHI & K2476CEWHI
Provided with facility for 'clean earth' connection
DIMENSIONS

86 x 146mm
FIXING CENTRES
120.6mm

BS 1363 Pt 2:1995

HIGH INTEGRITY EARTHING

Fitted earth terminals to provide a double earth
facility for use when installations require a high
integrity protective connection as specified within
BS 7671 IET Wiring Regulations

K2746D1WHI 10
K2746D1RED 10
2 GANG DP
WITH RED OUTBOARD
ROCKERS AND DUAL
EARTH TERMINALS
K2746CED1RED 10
2 GANG DP WITH RED
OUTBOARD ROCKERS
WITH CLEAN EARTH
FACILITY
K2476D1WHI 10
K2476D1RED 10
2 GANG DP
WITH RED OUTBOARD
ROCKERS, NEONS AND
DUAL EARTH TERMINALS
K2746D2WHI 10
2 GANG DP
WITH GREEN OUTBOARD
ROCKERS AND DUAL
EARTH TERMINALS

DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363 Pt 2:1995

Logic Plus™

mkelectric.co.uk



RCD PROTECTED
FLUSH
13 AMP



K6231WHI



K6233WHI



K6300WHI



K6303WHI

FILTERED
FLUSH
13 AMP



K1816WHI



K1826WHI



K1800WHI

K6231WHI 1

2 GANG SP
30mA RATED TRIPPING
CURRENT
ACTIVE CONTROL CIRCUIT

K6233WHI 1

2 GANG SP
30mA RATED TRIPPING
CURRENT
PASSIVE CONTROL CIRCUIT

MOUNTING BOXES
FLUSH

886ZIC – 35mm deep

SURFACE

K2140WHI – 30mm deep

EARTH PIN OPERATED SHUTTER

These a.c. and pulsating d.c. fault current sensitive products have up to 15mm thick frontplates and are suitable for boxes with 30mm min. depth and supply voltages of 240V 50Hz.

A 25mm deep box (862ZIC) can be used but conduit entry is restricted.

Refer to Sentrysocket section, page 288, for more information on active and passive control circuits.

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 7288:1990

All units are a.c. and pulsating d.c. fault current sensitive devices.

Maximum total load 13A

K6300WHI 1

1 GANG DP
30mA RATED TRIPPING
CURRENT ACTIVE
CONTROL CIRCUIT

K6303WHI 1

1 GANG DP
30mA RATED TRIPPING
CURRENT PASSIVE
CONTROL CIRCUIT

MOUNTING BOXES
FLUSH

886ZIC – 35mm deep

SURFACE

K2140WHI – 30mm deep

EARTH PIN OPERATED SHUTTER

These a.c. and pulsating d.c. fault current sensitive products have up to 15mm thick frontplates and are suitable for boxes with 30mm min. depth and supply voltages of 240V 50Hz.

A 25mm deep box (862ZIC) can be used but conduit entry is restricted.

Refer to Sentrysocket section, page 288, for more information on active and passive control circuits.

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 7288:1990

All units are a.c. and pulsating d.c. fault current sensitive devices.

Maximum total load 13A

K1816WHI 1

2 GANG DP
SPIKE

K1826WHI 1

2 GANG DP
SPIKE AND RFI

K1800WHI 5

REPLACEMENT FILTER
CASSETTE

MOUNTING BOXES

FLUSH

886ZIC

SURFACE

K2172WHI

K1816

Provides filtering to reduce voltage spikes only.

K1826

Provides two way filtering to reduce voltage spikes and radio frequency interference on the mains. Protected by thermal cut-out.

BS 5733:2010

Multimedia Plates

FLUSH
13 AMP



K2741WHI 1
2 GANG DP
COMBINATION PLATE
WITH 4 X EURO APERTURE
K2740WHI 1
4 GANG DP
COMBINATION PLATE WITH
TV/FM/DAB/SAT X 2 QUAD,
TV, TELEPHONE AND
4 X EURO APERTURE

MOUNTING BOXES

FLUSH 35MM

2 GANG: 857ZIC*

4 GANG: 853ZIC*

FLUSH 47MM

2 GANG: 858ZIC*

4 GANG: 854ZIC*

DIMENSIONS

K2741: 173 x 146mm

K2740: 173 x 294mm

BS 1363 Pt 2:1995

*Provides segregation between power and TV/FM/SAT/DAB/
Euro Module sections

Switchsocket Outlets

NON STANDARD
FLUSH
13 AMP



K1257WHI 10
1 GANG DP
K1246WHI 5
2 GANG DP
K1257D1WHI 10
1 GANG DP
WITH RED ROCKER
K1246D1WHI 5
2 GANG DP
WITH RED ROCKERS
K1246D1RED 5
2 GANG DP
WITH RED FRONTPLATE
AND RED ROCKERS

MOUNTING BOXES

FLUSH 25MM

1 GANG: 861ZIC

2 GANG: 862ZIC

FLUSH 35MM (for extra wiring space)

1 GANG: 866ZIC. 2 GANG: 886ZIC

SURFACE

1 GANG: K2140WHI. 2 GANG: K2142WHI

These products are provided with facilities for 'clean earth'
connection and are suitable for non standard plugs with 'T'
shaped earth pin. See page 240.

DIMENSIONS

1 GANG: 86 x 86mm

2 GANG: 86 x 146mm

FIXING CENTRES

1 GANG: 60.3mm

2 GANG: 120.6mm

BS 1363 Pt 2:1995 where relevant

ROUND PIN
FLUSH



K2891WHI 10
1 GANG
5A DP SHUTTERED
K2893WHI 10
1 GANG
15A DP SHUTTERED
K2493WHI 10
1 GANG
15A DP SHUTTERED
WITH NEON

MOUNTING BOXES

FLUSH

861ZIC (25mm)

866ZIC (35mm for extra wiring space)

SURFACE

K2140WHI

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 546:1950

Logic Plus™

mkelectric.co.uk



Socket Outlets

FLUSH
13 AMP

ROUND PIN
FLUSH

127V
FLUSH
15 AMP
(NON UK)



K780WHI



K781WHI



K781RED



K770WHI



K771WHI



K772WHI



K2251WHI



K2252WHI

K780WHI 10

1 GANG

K781WHI 5

2 GANG

WITH DUAL EARTH
TERMINALSMOUNTING BOXES
FLUSH 25MM

1 GANG: 861ZIC

2 GANG: 862ZIC

FLUSH 35MM

(for extra wiring space)

1 GANG: 866ZIC

2 GANG: 886ZIC

SURFACE

1 GANG: K2140WHI

2 GANG: K2142WHI

K781 is fitted with two earth terminals to provide a double
earth facility for use when installations require a high
integrity protective connection as specified within

BS 7671 IET Wiring Regulations

DIMENSIONS

1 GANG: 86 x 86mm

2 GANG: 86 x 146mm

FIXING CENTRES

1 GANG: 60.3mm

2 GANG: 120.6mm

BS 1363: Pt2:1995

K770WHI 10

1 GANG

2A SHUTTERED

K771WHI 10

1 GANG

5A SHUTTERED

K772WHI 10

1 GANG

15A SHUTTERED

MOUNTING BOXES

FLUSH

861ZIC (25mm)

866ZIC

(35mm for extra wiring space)

SURFACE

K2140WHI

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 546:1950

K2251WHI 10

1 GANG

SHUTTERED

(NON UK)

K2252WHI 5

2 GANG

SHUTTERED

(NON UK)

MOUNTING BOXES

FLUSH 25MM

1 GANG: 861ZIC

2 GANG: 862ZIC

FLUSH 35MM

(for extra wiring space)

1 GANG: 866ZIC

2 GANG: 886ZIC

SURFACE

1 GANG: K2140WHI

2 GANG: K2142WHI

DIMENSIONS

1 GANG: 86 x 86mm

2 GANG: 86 x 146mm

FIXING CENTRES

1 GANG: 60.3mm

2 GANG: 120.6mm

SASO 2204:2003



Technical Hotline
+44 (0)1268 563720

Logic Plus™

WIRING DEVICES
WHITE

Socket Outlets

2P + E
FLUSH
16 AMP
(NON UK)



K4150WHI



K4152WHI

Three Pole Fan Isolator

FLUSH
10 AMP



K4857WHI



K4859WHI



K4858



K2000

Shaver Socket Outlet



K700WHI

Shaver/Toothbrush Supply Units



K701WHI



K706WHI

K4150WHI

1 GANG
16A 250V
SHUTTERED
(NON UK)

10

K4152WHI

2 GANG
16A 250V
SHUTTERED
(NON UK)

5

MOUNTING BOXES

FLUSH 35MM
1 GANG: 866ZIC
2 GANG: 886ZIC

SURFACE

1 GANG: K2031WHI
2 GANG: K2172WHI

These products are not suitable for installation in 25mm boxes.

DIMENSIONS

1 GANG: 86 x 86mm
2 GANG: 86 x 146mm

FIXING CENTRES

1 GANG: 60.3mm
2 GANG: 120.6mm
IEC 60884-1:2006

K4857WHI

WITH SWITCHLOCK
AND PADLOCK

1

K4859WHI

WITHOUT SWITCHLOCK

10

K4858

SWITCHLOCK
FOR FAN ISOLATOR

10

K2000

PADLOCK

1

MOUNTING BOXES

FLUSH
3995ZIC

SURFACE

K2160WHI

For local isolation of fans with or without timers for repair or routine maintenance.

DIMENSIONS

86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-4

K700WHI

SHAVER SOCKET OUTLET
200-250 VOLTS 50/60HZ
FUSED
INCORPORATES A SELF-RESETTING
OVERLOAD DEVICE, LIMITING
CURRENT TO 20VA.

1

MOUNTING BOXES

FLUSH

861ZIC

SURFACE

K2140WHI

Must not be installed in a bathroom or shower room.

Designed for wiring onto lighting circuits.

DIMENSIONS

86 x 86mm
FIXING CENTRES
60.3mm
BS 4573:1970

K701WHI

SHAVER/TOOTHBRUSH
SUPPLY UNIT
DUAL VOLTAGE
115/230V OUTPUT
(220/240V 50/60HZ INPUT)

1

K706WHI

SHAVER/TOOTHBRUSH
SUPPLY UNIT
DUAL VOLTAGE
115/230V OUTPUT
(120/130V 50/60HZ INPUT)
(NON UK)

1

MOUNTING BOXES

FLUSH

878ZIC

SURFACE

K2172WHI

This design incorporates a double wound isolating transformer rated 20VA at 230 or 115 volts it meets BS EN 61558 making it safe for use in bathrooms. Insertion of a shaver/toothbrush plug automatically switches on by energising the primary side of the isolating transformer – removal automatically switches off. The transformer is protected against overload by an automatic solid state overload device with automatic resetting.

DIMENSIONS

146 x 86mm
FIXING CENTRES
120.6mm
BS EN 61558-2-5:1998

Features and Benefits



A screwless cord grip automatically clamps and securely holds the cable in connection units with base and front flex outlets



Switched units are double pole with neutral pole contacts 'making' before and 'breaking' after live contacts. Rockers with built-in indicators are available



When servicing or repairing appliances, fuse carriers remain attached to the frontplate when opened and can be padlocked for safety



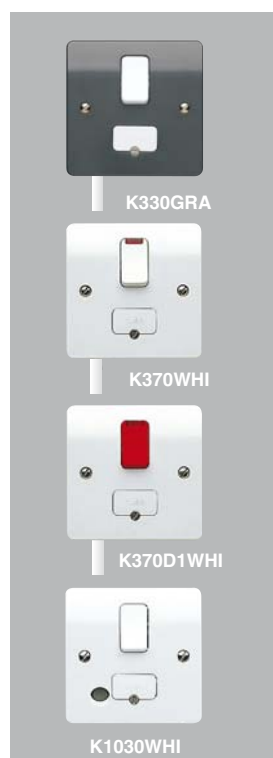
An optional tamperproof screw on fuse carriers is particularly useful for appliances in public areas



In-line terminals, backed out captive terminal screws and clear marking make installation easy

Connection Units

SWITCHED 13 AMP



K330WHI
K330GRA
DP WITH FLEX OUTLET IN BASE AND THICK FRONTPLATE

K370WHI
K370GRA
DP WITH NEON, FLEX OUTLET IN BASE AND THICK FRONTPLATE

K370D1WHI
DP WITH NEON, FLEX OUTLET IN BASE, THICK FRONTPLATE AND RED ROCKER

K1030WHI
DP WITH FRONT FLEX OUTLET

MOUNTING BOXES
K1030, K1040, K1060 and K1070
FLUSH
866ZIC (35mm)
SURFACE
K2031WHI

K330, K385 and K370
FLUSH
866ZIC (35mm)
SURFACE
K2140WHI

All units are fitted with a 13A fuse-link to BS 1362. See page 222 for spare fuse-links.

The fuse carrier can be locked in the open position by removing the fuse and using K2000 fuse carrier padlock

10 **K385WHI**
10 13A RCD CONNECTION UNIT 30mA PASSIVE AND THICK FRONTPLATE

10 **K1040WHI**
10 DP

10 **K1040KOWHI**
10 DP WITH TAMPERPROOF SCREW

10 **K1060WHI**
10 DP WITH NEON

10 **K1060D1WHI**
10 DP WITH NEON AND RED ROCKER

10 **K1070WHI**
10 DP WITH FRONT FLEX OUTLET AND NEON

10 **K1070D1WHI**
10 DP WITH FRONT FLEX OUTLET, NEON AND RED ROCKER

10 **K2000**
10 PADLOCK

K1030 and K1070 front flex outlet products cannot be mounted directly onto M1 Cable Box K2131WHI. A mounting frame K2134WHI will have to be used between the product and the box.

Base entry frontplates are 12.5mm deep.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363 Pt 4:1995

UNSWITCHED 13 AMP



1 **K337WHI**
10 WITH FLEX OUTLET IN BASE AND THICK FRONTPLATE

10 **K337KOWHI**
10 WITH FLEX OUTLET IN BASE, THICK FRONTPLATE AND TAMPERPROOF SCREW FOR FUSE CARRIER

10 **K377WHI**
10 WITH FLEX OUTLET IN BASE, NEON AND THICK FRONTPLATE

MOUNTING BOXES:
FLUSH
866ZIC (35mm)
SURFACE
K2140WHI

All units are fitted with a 13A fuse-link to BS 1362. See page 222 for spare fuse-links.

Base entry frontplates are 12.5mm deep. The fuse carrier can be locked in the open position by removing the fuse and using K2000 fuse carrier padlock.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363 Pt 4:1995
K1040KO AND K337KO
Key (3405ZIC) is supplied



Technical Hotline
+44 (0)1268 563720

Logic Plus™

WIRING DEVICES
WHITE

Dual Switch

FLUSH
20 AMP



K5208WHI



K5207WHI

DP Switches

FLUSH
20 AMP



K5403WHI



K5423WHI



K5423WHWHI



K5423D1WHI

FLUSH
32 AMP



K5105WHI

MOULDED
FLUSH
50 AMP



K5205WHI



K5215CKWHI

METAL
50 AMP



K5230WHI



K5012WHI

K5208WHI
K5207WHI
WITH NEON

10
10

FOR CONTROLLING DUAL
IMMERSION HEATERS
MOUNTING BOXES
FLUSH
866ZIC (35mm)
SURFACE:
K2140WHI

Only mounting boxes with an earth
terminal should be used.
These products are marked 'on' and
'off' against the one-way DP switch and
'sink' and 'bath' against the two-way
SP switch.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

K5403WHI
WITH FLEX OUTLET IN BASE
K5423WHI
WITH FLEX OUTLET IN BASE
AND NEON

10
10

K5423WHWHI
WITH FLEX OUTLET IN BASE,
NEON AND MARKED
'WATER HEATER'.

10

K5423D1WHI
WITH FLEX OUTLET IN BASE,
NEON AND RED ROCKER

10

MOUNTING BOXES:
FLUSH
866ZIC (35mm)

SURFACE
K2140WHI
K2031WHI (for extra wiring space)
Base entry frontplates are
12.5mm deep.

All switches are complete with earth
terminals.
Not recommended for switching large
banks of PCs.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

K5105WHI
WITH NEON
K5105GRA
WITH NEON

1
1

MOUNTING BOXES:

FLUSH
866ZIC (6mm² conductors)
877ZIC (10mm² conductors)
SURFACE

K2140WHI (6mm² conductors)
K2031WHI (10mm² conductors)
Supplied with 8 self-adhesive plastic
identification labels marked hob,
fan, oven, water heater, shower, air
conditioner, cooker and washing
machine.

Not recommended for switching large
banks of PCs.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

K5205WHI
K5215WHI
WITH NEON
K5215CKWHI
WITH NEON
AND MARKED 'COOKER'
K5215SHWHI
WITH NEON
AND MARKED 'SHOWER'

1
1
1
1

MOUNTING BOXES:

FLUSH
886ZIC (6mm² conductors)
878ZIC (10mm² conductors)

SURFACE
K2172WHI
K5205WHI and **K5215WHI**
Supplied with 8 self-adhesive plastic
identification labels marked hob,
fan, oven, water heater, shower, air
conditioner, cooker and washing
machine.

Not recommended for switching large
banks of PCs.

DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS EN 60669-1:1999

K5230WHI
WITH NEON
SURFACE MOUNTED
K5012WHI
WITH NEON
FLUSH MOUNTED

1
1
1

K5230
Supplied with mounting box.
Earth terminal fitted on base of box.
Not recommended for switching
large banks of PCs.

DIMENSIONS
150 x 89 x 50mm
KNOCKOUTS
8 x 20mm

K5012
Not supplied with mounting box.
FLUSH
5120ALM
Supplied with earth terminals.
Not recommended for switching
large banks of PCs.

DIMENSIONS
178 x 165mm
BS EN 60669-1:1999

Logic Plus™

mkelectric.co.uk



Cooker Connection Unit

45 AMP

Cooker Controls

MOULDED
FLUSH
45 AMP

MOULDED
SURFACE
45 AMP

METAL
FLUSH
45 AMP

METAL
SURFACE
45 AMP



K5045WHI



K5060WHI



K5040WHI



K5061WHI



K5041WHI



K5011WHI



K5001WHI

K5045WHI

10

MOUNTING BOX FLUSH

877ZIC (46mm)
Supplied complete with terminal block, each terminal of which will accommodate up to two 10mm² conductors.

Moulded cover plate, cable clamp included.

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS EN 60670-22:2006

K5060WHI

1

45A DP MAIN SWITCH AND 13A SWITCHSOCKET OUTLET

K5061WHI

1

45A DP MAIN SWITCH AND 13A SWITCHSOCKET OUTLET WITH NEONS

MOUNTING BOXES FLUSH

886ZIC (6mm² conductors)

878ZIC (10mm² conductors)

Rotary operated shutter.

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 4177:1992

K5040WHI

1

45A DP MAIN SWITCH AND 13A SWITCHSOCKET OUTLET

K5041WHI

1

45A DP MAIN SWITCH AND 13A SWITCHSOCKET OUTLET WITH NEONS

Supplied complete with mounting box and cable restraint.

Fitted with earth terminals.

Rotary operated shutter.

DIMENSIONS

86 x 146 x 60mm

BS 4177:1992

K5011WHI

1

45A DP MAIN SWITCH AND 13A SWITCHSOCKET OUTLET WITH NEONS

MOUNTING BOX FLUSH

5120ALM

Fitted with earth terminals.

Rotary operated shutter.

DIMENSIONS

178 x 165mm

BS 4177:1992

K5001WHI

1

45A DP MAIN SWITCH AND 13A SWITCHSOCKET OUTLET WITH NEONS

Supplied complete with mounting box.

Fitted with earth terminals.

Rotary operated shutter.

DIMENSIONS

156 x 144 x 67mm

KNOCKOUTS

5 x 25mm.

Two in each of top and bottom, one in back.

BS 4177:1992



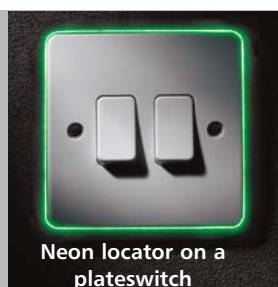
Technical Hotline
+44 (0)1268 563720

Logic Plus™

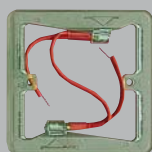
WIRING DEVICES
WHITE

Plateswitches

NEON LOCATOR



Neon locator on a
plateswitch



K3041

FLUSH
10 AMP



K4870GRA



K4871WHI



K4872WHI



K4872GRA

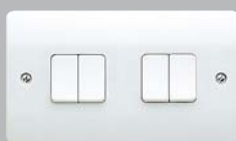
FLUSH
10 AMP



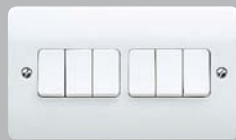
K4875WHI



K4873WHI



K4874WHI



K4879WHI

FLUSH
20 AMP



K4870D2WHI



K4871D2WHI



K4872D2WHI



K4873D2WHI

FLUSH
10 AMP



K4878BWHI



K4878PWHI

K3041 5
NEON PLATESWITCH
LOCATOR
200-250V, 50HZ.
TUNGSTEN GLS LAMPS ONLY

Neon Plateswitch Locator is for use
with any 1, 2 and 3 GANG Logic Plus™
plateswitches.
Used for location of switches in dark
situations.
FIXING CENTRES
60.3mm
BS 5733:2010

K4870WHI 10
K4870GRA 10
1 GANG SP
ONE-WAY
K4871WHI 10
K4871GRA 10
1 GANG SP
TWO-WAY
K4872WHI 10
K4872GRA 10
2 GANG SP
TWO-WAY

MOUNTING BOXES
FLUSH

1, 2 & 3 GANG: 861ZIC
4 & 6 GANG: 862ZIC

SURFACE

1, 2 & 3 GANG: K2160WHI
4 & 6 GANG: K2161WHI

These switches do not have to be
derated when used with fluorescent or
inductive loads.

K4871, K4872, K4873,
K4874, K4879

These switches can be wired as either
one-way or two-way.

K4875WHI 10
1 GANG
INTERMEDIATE
K4876WHI 10
1 GANG DP
ONE-WAY
K4873WHI 10
3 GANG SP
TWO-WAY
K4874WHI 5
4 GANG SP
TWO-WAY
K4879WHI 5
6 GANG SP
TWO-WAY

DIMENSIONS

1, 2 & 3 GANG: 86 x 86mm
4 & 6 GANG: 86 x 146mm

FIXING CENTRES

1, 2 & 3 GANG: 60.3mm
4 & 6 GANG: 120.6mm

BS EN 60669-1:1999

K4870D2WHI 10
1 GANG SP
ONE-WAY
K4871D2WHI 10
1 GANG SP
TWO-WAY
K4872D2WHI 10
2 GANG SP
TWO-WAY
K4873D2WHI 10
3 GANG SP
TWO-WAY
K4874D2WHI 5
4 GANG SP
TWO-WAY
K4875D2WHI 10
1 GANG INTERMEDIATE

MOUNTING BOXES

FLUSH

861ZIC

SURFACE

K2160WHI

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

K4878BWHI 10
1 GANG SP
TWO WAY
PUSH SWITCH WITH
BELL SYMBOL
PUSH TO MAKE OR
BREAK
K4878PWHI 10
1 GANG SP
TWO WAY
PUSH SWITCH MARKED
'PRESS'
PUSH TO MAKE OR BREAK

MOUNTING BOXES

FLUSH

861ZIC

SURFACE

K2160WHI

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS EN 60669-1:1999

Logic Plus™

mkelectric.co.uk



Plateswitches

DP FLUSH
20 AMP



K4867WHI



K4868WHI

Lockable Fire Alarm Isolator Switch

DP FLUSH
20 AMP



K4780WHI

Architrave Switches

FLUSH
10 AMP



K4841WHI



K4842WHI



K4848BWHI



K4848PWHI

Wide Rocker Switches

FLUSH
10 AMP



K4781GRA



K4782GRA



K4783WHI



K4785WHI

K4867WHI 10
1 GANG DP
K4868WHI 10
2 GANG DP

MOUNTING BOXES

866ZIC

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS EN 60669-1:1999

K4780WHI 1
20A DP LOCKABLE FIRE
ALARM ISOLATOR SWITCH

MOUNTING BOXES

866ZIC

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 60669-2-4:2005

K4841WHI 5
1 GANG SP
TWO-WAY

K4842WHI 5
2 GANG SP
TWO-WAY

K4848BWHI 5
1 GANG SP PUSH SWITCH
WITH BELL SYMBOL
PUSH TO MAKE OR BREAK

K4848PWHI 5
1 GANG SP PUSH SWITCH
MARKED 'PRESS'
PUSH TO MAKE OR BREAK

MOUNTING BOXES

FLUSH

1 GANG: 3921ZIC

2 GANG: 3922ZIC

SURFACE

1 GANG: k2151WHI

2 GANG: k2152WHI

These switches do not have to be derated when used with fluorescent or inductive loads.

K4841, K4842 These switches can be wired as either one-way or two-way.

DIMENSIONS

1 GANG: 86 x 32mm;

2 GANG: 146 x 32mm

FIXING CENTRES

1 GANG: 60.3mm;

2 GANG: 120.6mm

BS EN 60669-1:1999

K4781WHI 10
K4781GRA 10
1 GANG SP TWO-WAY
WITH WIDE ROCKER

K4782WHI 10
K4782GRA 10
2 GANG SP TWO-WAY
WITH WIDE ROCKERS

K4783WHI 10
3 GANG SP TWO-WAY
WITH WIDE ROCKERS

K4785WHI 10
K4785GRA 10
1 GANG SP INTERMEDIATE
WITH WIDE ROCKER

K4787WHI 10
1G 20A DP ONE-WAY
WITH WIDE ROCKER

K4788WHI 10
2 GANG DP WITH
WIDE ROCKER

MOUNTING BOXES

FLUSH

861ZIC

SURFACE

K2160WHI

K2140WHI (for extra

wiring space)

These switches do not have to be derated when used with fluorescent or inductive loads.

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS EN 60669-1:1999

20A DP VERSIONS

K4787WHI is 20A DP

1 way version of K4781.

BS EN 60669-1: 1999

K4788WHI is 20A DP

1 way version of K4782.

BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Logic Plus™

WIRING DEVICES
WHITE

Intelligent LED Dimmer Switch

220V TO 240V A.C. 50HZ
LED, TUNGSTEN FILAMENT
AND LOW VOLTAGE
HALOGEN LIGHTING



K1523WHILV



K1524WHILV

Intelligent Dimmer Switches

230V A.C. 50HZ
TUNGSTEN FILAMENT
AND LOW VOLTAGE
HALOGEN LIGHTING



K1501WHILV



K1521WHILV



K1522WHILV

Standard Dimmer Switches

230V A.C. 50HZ
TUNGSTEN FILAMENT



K1511WHI



K1531WHI



K1532WHI



K1533WHI

Dimmer Switches (NON UK)

200-250V A.C.
50 OR 60HZ



K1541WHI



K1561WHI



K1661WHI



4053PLWHIT9

K1523WHILV

1 GANG SINGLE
2 WAY
40W/VA - 300W/240VA
LED: 4-70W

K1524WHILV

1 GANG DOUBLE
2 WAY
40W/VA - 300W/240VA
LED: 4-70W

MOUNTING BOXES

FLUSH

861ZIC – 25mm deep min

SURFACE

K2140WHI – 30mm deep

Micro controller based circuitry to provide electronic soft-start and overload protection. Suitable for use with most major manufacturers LED lamps or electronic / wire wound transformers. Can also be used with good quality mains voltage GU10 halogen lamps.

Do not mix load types

This dimmer offers the user the ability to adjust the minimum brightness level.

Max number of lamps (10)

DIMENSIONS
86 x 86mm

FIXING CENTRES
60.3mm
BS EN 60669-2-1

K1501WHILV

1 GANG SINGLE
TWO WAY 60W/VA-500W/400 VA

K1521WHILV

1 GANG SINGLE
TWO WAY 40W/VA-300W/240 VA

K1522WHILV

1 GANG DOUBLE
TWO WAY 2 X 40W/VA-300W/240 VA

FLUSH

861ZIC/866ZIC

SURFACE

K2140WHI

Micro controller based circuitry to provide electronic soft-start and overload protection. Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

Conforms to BS EN 60669-2-1

K1511WHI

1 GANG SINGLE
ONE WAY 65-450W

K1531WHI

1 GANG SINGLE
ONE WAY 40-250W

K1532WHI

1 GANG DOUBLE
ONE WAY 2 X 40-250W

K1533WHI

1 GANG DOUBLE
TWO WAY 2 X 40-250W

K1534WHI

1 GANG SINGLE
TWO WAY 40-250W

K1535WHI

1 GANG SINGLE
TWO WAY 65-450W

MOUNTING BOXES

FLUSH

861ZIC/866ZIC

SURFACE

K2140WHI

Not suitable for fluorescent lamps or low voltage lighting.

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

Conforms to BS EN 60669-2-1

K1541WHI

1 GANG SINGLE
ONE WAY

75-500W 50HZ

K1561WHI

1 GANG SINGLE
TWO WAY
100-1000W 50HZ

K1641WHI

1 GANG SINGLE
ONE WAY
75-500W 60HZ

K1661WHI

1 GANG SINGLE
TWO WAY
100-1000W 60HZ

MOUNTING BOXES

FLUSH

861ZIC/866ZIC

SURFACE

K2140WHI

PATRESS

For mounting in 16mm deep boxes a mounting frame 40533PLWHIT9 is available.

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

40533PLWHIT9

CAN BE USED WITH
LOGIC PLUS DIMMERS TO
STAND PRODUCT FROM
MOUNTING SURFACE
WHERE BACK BOX DEPTH
IS NOT SUFFICIENT

DIMENSIONS

86 x 86mm

Patress thickness is 5mm

FIXING CENTRES

60.3mm

Blank Plates

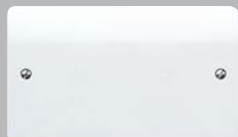
Flex Outlet
FrontplateEuro Modular
FrontplatesEuro Power
Modules

20 AMP



K3825WHI

K3827WHI



K3828WHI



K5033WHI



K1090WHI



K181WHI



K182WHI



K184WHI



K5830WHI



K5831WHI



K5832WHI



K5833WHI



K5834WHI



K5837WHI

K3825WHI
1 GANG MOULDED
ARCHITRAVE

10

K3827WHI
1 GANG MOULDED

10

K3828WHI
2 GANG MOULDED

10

K5033WHI
METAL

1

K3825WHI
For use with 3921ZIC and K2151WHI
MOUNTING BOXES.

K5033WHI
For use with 5120ALM deep metal box.

DIMENSIONS
K3825WHI: 86 x 31mm
K3827WHI: 86 x 86mm
K3828WHI: 86 x 146mm
K5033WHI: 178 x 165mm

FIXING CENTRES
K3825WHI: 60.3mm
K3827WHI: 60.3mm
K3828WHI: 120.6mm
K5033WHI: 133mm
BS 5733:2010

K1090WHI
FLEX OUTLET FRONTPLATE
UNFUSED

10

Complete with three pairs of terminals, each
suitable for 2 x 2.5mm² conductors and a
1.5mm² flexible cord.
A cord-grip is also fitted.

Frontplate thickness is 12.5mm.
Cable entry diameter is 11mm.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60670-22:2006

K181WHI
1 GANG EURO FRONTPLATE
ONE MODULE

10

APERTURE SIZE 25 X 50MM

K182WHI
K182GRA

10

10

1 GANG EURO FRONTPLATE
TWO MODULE

APERTURE SIZE 50 X 50MM

K184WHI
K184GRA

10

10

2 GANG EURO FRONTPLATE
FOUR MODULE

APERTURE SIZE 100 X 50MM

K185WHI

10

3 GANG EURO FRONTPLATE
SIX MODULE

APERTURE SIZE 150 X 50MM

MOUNTING BOXES
Suitable for flush boxes to
BS 4662:2006 and surface boxes to
BS 5733:2010 Refer to appropriate
module for minimum box depth.

K185WHI MOUNTING BOX
35mm VTS8035 (For use with
Pinnacle and Premier cable
management systems) K2153WHI
30mm

FIXING CENTRES
1 GANG: 60.3mm 2 GANG: 120.6mm
BS 5733:2010 where applicable

Note: No grid required, modules just
clip into place

K5830WHI
K5830BLK
UK 1 GANG EURO 2 MODULE
13A 250V SHUTTERED

1

1

K5831WHI
K5831BLK

10

10

GERMAN 2P+E
16A 250V SHUTTERED

EURO 2 MODULE (NON UK)

K5832WHI
K5832BLK

10

10

AMERICAN 2P+E
15A 127V SHUTTERED

EURO 2 MODULE (NON UK)

K5830
MOUNTING BOX
35mm minimum
46mm (for extra wiring space)

DIMENSIONS
50 x 50mm
BS 1363 Pt2:1995

K5831
MOUNTING BOX
46mm

DIMENSIONS
50 x 50mm
IEC 60884-1:2006

K5832
MOUNTING BOX
35mm
46mm (for extra wiring space)

DIMENSIONS
50 x 50mm
SASO 2204:2003

DIMENSIONS
50 x 50mm
SASO 2204:2003

DIMENSIONS
50 x 50mm
SASO 2204:2003

K5833WHI
K5833BLK
UK 1 GANG EURO 2 MODULE
5A 250V SHUTTERED

10

10

K5834WHI
K5834BLK

10

10

FRENCH/BELGIAN 2P+E
16A 250V SHUTTERED

EURO 2 MODULE (NON UK)

K5837WHI
K5837BLK

1

1

USB CHARGING MODULE
EURO 2 MODULE

K5833
MOUNTING BOX
35mm minimum
46mm (for extra wiring space)

DIMENSIONS
50 x 50mm
BS 546:1950

K5834
MOUNTING BOX
46mm

DIMENSIONS
50 x 50mm
NF C61-314

K5837
MOUNTING BOX
35mm, 46mm (for extra wiring space)

DIMENSIONS
50 x 50mm
USB charging sockets, each capable of
supporting 2A charge (total of 2A).

IEC 60950-1
IEC 61000-6-1/3

IEC 60950-1
IEC 61000-6-1/3



Technical Hotline
+44 (0)1268 563720

Logic Plus™

WIRING DEVICES
WHITE

Euro Datacom Modules

RJ11/12



K5887WHI



K5887BLK

K5887WHI
K5887BLK
RJ11/12
ONE MODULE 25 X 50MM

Suitable for both RJ11 and RJ12 jacks
RJ11: 4 wire
RJ12: 6 wire
MOUNTING BOXES
Minimum box depth 25mm
FCC68
EN 41003

RJ45 CAT 6



K5846WHI



K5846SBLK



K5864WHI

K5846WHI
K5846BLK
RJ45 CAT 6
ONE MODULE 25 X 50MM
K5846SWHI
K5846SBLK
RJ45 CAT 6 SCREENED
ONE MODULE 25 X 50MM
K5864WHI
RJ45 CAT 6 ANGLED
ONE MODULE 25 X 50MM

Cat 6 performance.
Suitable for both 568A and 568B wiring schemes.
MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

RJ45 CAT 5e



K5844WHI



K5845WHI



K5845BLK

K5844WHI
RJ45 CAT 5e ANGLED
ONE MODULE 25 X 50MM
K5845WHI
K5845BLK
RJ45 CAT 5e
ONE MODULE 25 X 50MM

Enhanced Cat 5 performance.
Suitable for both 568A and 568B wiring schemes.
Supplied with cable tie and cable anchors to secure wires in the connectors.
MOUNTING BOXES
Minimum box depth 25mm standard
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

TELEPHONE



K5820WHI



K5821WHI



K5821BLK

K5820WHI
K5820BLK
TELEPHONE MASTER
ONE MODULE 25 X 50MM
K5821WHI
K5821BLK
TELEPHONE SECONDARY
ONE MODULE 25 X 50MM

MOUNTING BOXES
Minimum depth 25mm
BS 6312 Pt 2

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671 IET Wiring Regulations for details.

Euro Multimedia Modules

TV CO-AXIAL OUTLETS FOR DIGITAL TV SCREENED
NON ISOLATED



K5850WHI



K5850BLK



K5851WHI



K5851BLK



K5855WHI



K5855BLK



K5852WHI



K5852DABWHI



K5853WHI



K5853DABWHI



K5854DABWHI



K5807WHI



K5805WHI



K5806WHI

K5850WHI 5
K5850BLK 5
SINGLE OUTLET (IEC MALE)
ONE MODULE 25 X 50MM
K5851WHI 5
K5851BLK 5
SINGLE OUTLET
(IEC FEMALE)
ONE MODULE 25 X 50MM
K5855WHI 5
K5855BLK 5
SINGLE F-TYPE SATELLITE
SOCKET
ONE MODULE 25 X 50MM

Fully screened non isolated TV outlets
containing a combination of single, TV/
FM Diplexer and TV/FM/SAT Triplexer
for use within digital TV systems and
interactive TV services. Single outlets
for connection to a single TV, FM or
Satellite co-axial aerial lead.

K5852WHI 5
K5852BLK 5
TWIN OUTLET
TV/FM DIPLEXER
TWO MODULE 50 X 50MM
(IRELAND ONLY)
K5852DABWHI 5
K5852DABBLK 5
TWIN OUTLET TV-FM/DAB
DIPLEXER
TWO MODULE 50 X 50MM
K5853WHI 5
K5853BLK 5
TRIPLE OUTLET
TV/FM/SATELLITE TRIPLEXER
TWO MODULE 50 X 50MM
(IRELAND ONLY)

TV/FM diplexer units for connection to a single co-axial aerial lead with combined
TV and FM signals.
TV/FM/SAT triplexer units for connection to a single co-axial aerial lead with
combined TV, FM and Satellite signals

K5853DABWHI 5
K5853DABBLK 5
TRIPLE OUTLET
TV-FM/DAB-SAT TRIPLEXER
TWO MODULE 50 X 50MM
K5854DABWHI 5
K5854DABBLK 5
QUAD OUTLET
TV-FM/DAB-2XSAT
TWO MODULE 50 X 50MM

K5807WHI 5
K5807BLK 5
FEMALE HDMI OUTLET

K5807 Female HDMI Outlet is HDMI
1.1, 1.2, 1.3 and 1.4 compatible, HDCP
compliant.
DATA RATE
Up to 2.25 Gbps
SCAN
Up to 1080p/1920x1200
INPUT CONNECTOR
1 x HDMI Female (Type A)
OUTPUT CONNECTOR
1 x HDMI Female (Type A)
Supports high resolution input
PC
VGA, SVGA, SXVGA (1280x1024)
and UXGA (1600x1200, 1920x1200)
HDTV
480p, 720p, 1080i and 1080p
HDMI input cable should be no larger
than 20m.
DIMENSIONS
50 x 50 x 20mm

K5805WHI 5
K5805BLK 5
AUDIO BINDING POST
SET FOR SINGLE LOUD
SPEAKER
K5806WHI 5
K5806BLK 5
RCA TO SCREW
TERMINATION SET
1 RED AND 1 BLACK

DIMENSIONS
50 x 25 x 28mm

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications

MOUNTING BOXES

Min box depth 32mm

DIMENSIONS

1 Module 25 x 50mm
2 Module 50 x 50mm
BS 3041:1997
IEC 169-2:1965
BS EN 50083 & BS 5733:2010
where applicable

PERFORMANCE

SINGLE OUTLETS

TV/FM Iec Male Or Female

DC-950MHz

SAT F-TYPE

DC-1.75GHz

TV/FM/SAT PRODUCTS

Outlet:

TV:

FM/DAB:

SAT:

Outlet:

TV:

FM:

SAT1:

Diplexer

5-65MHz

470-862MHz

87.5-108MHz

N/A

Triplexer

5-65MHz

470-862MHz

87.5-108MHz

950-2300MHz

TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

Outlet:

TV:

FM/DAB:

SAT OR SAT1:

SAT2:

Diplexer

5-65MHz

470-862MHz

87.5-230MHz

N/A

Triplexer

5-65MHz

470-862MHz

87.5-230MHz

950-2300MHz

SAT2:

5-2300MHz



Technical Hotline
+44 (0)1268 563720

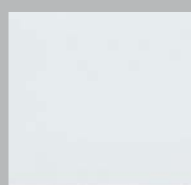
Logic Plus™

WIRING DEVICES
WHITE

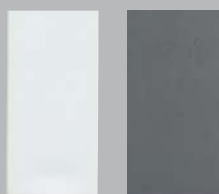
LJU6C Datacom Frontplates

LJU6C Datacom Modules

BLANKS

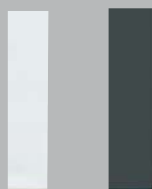


K180WHI



K188WHI

K188BLK



K186WHI

K186BLK



K172WHI



K5787WHI



K5746WHI



K5746BLK



K5746SWHI



K5746SBLK

RJ45 CAT 5e



K5745WHI



K5745BLK

BLANKS



K170WHI



K170BLK

K180WHI 10
TWO MODULE
BLANK 50 X 50MM
K188WHI 10
K188BLK 10
ONE MODULE
BLANK 25 X 50MM
K186WHI 10
K186BLK 10
HALF MODULE
BLANK 12.5 X 50MM

BS 5733:2010 where
applicable

K172WHI 10
1 GANG TWIN
LJU6C FRONTPLATE
TWO MODULE
APERTURE SIZE
22 X 37MM

MOUNTING BOXES
suitable for flush boxes to
BS 4662:2006 and surface
boxes to BS 5733:2010

Refer to appropriate module
for minimum box depth.

FIXING CENTRES
1 GANG: 60.3mm
2 GANG: 120.6mm
BS 5733:2010 where applicable
Note: No grid required,
modules just clip into place.

K5787WHI 5
RJ11/12
ONE MODULE

Suitable for both RJ11 and
RJ12 jacks.

RJ11: 4 wire
RJ12: 6 wire

MOUNTING BOXES
Minimum box depth 25mm
FCC68
EN41003

K5746WHI 5
K5746BLK 5
RJ45 CAT 6
ONE MODULE
K5746SWHI 5
K5746SBLK 5
RJ45 CAT 6
SCREENED
ONE MODULE

Cat 6 performance.
Suitable for both 568A and
568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

K5745WHI 5
K5745BLK 5
RJ45 CAT 5e
ONE MODULE

Enhanced Cat 5 performance.
Suitable for both 568A and 568B
wiring schemes.

MOUNTING BOXES
Minimum box depth 25mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

K170WHI 10
K170BLK 10
ONE MODULE BLANK

BS 5733:2010 where applicable

Logic Plus™

mkelectric.co.uk



Telephone Socket Outlets

FLUSH

TV/FM and Satellite Co-Axial Socket Outlets

FOR DIGITAL AND INTERACTIVE SERVICES
SCREENED, NON ISOLATED
FLUSH



K422WHI



K427WHI



K4817WHI



K3540WHI



K3550WHI



K3551WHI



K3555WHI



K3552WHI



K3552DABWHI



K3553WHI



K3553DABWHI



K3554DABWHI

K422WHI	10
1 GANG TELEPHONE MASTER	
K427WHI	10
1 GANG TELEPHONE SECONDARY	
K4817WHI	10
1 GANG RJ11 TELEPHONE SOCKET	
K3540WHI	10
3 PIN WITH TELEPHONE SYMBOL (NON UK)	
400NAT	10
IDC INSERTION TOOL	

BS 6312 Pt 2
K4817 FCC 68
K3540
Accepts standard BS 546
2A 2 pin and earth plug where 2 pins are
used for telephone circuits and the earth
pin is used to ensure correct polarity.
BS 546:1950 where applicable

K3550WHI	1	K3552DABWHI	1
SINGLE OUTLET (IEC MALE)		TWIN TV/FM DAB DIPLEXER	
K3551WHI	5	K3553WHI	5
SINGLE OUTLET (IEC FEMALE)		TRIPLE TV/FM/SAT TRIPLEXER	
K3555WHI	1	K3553DABWHI	1
SINGLE OUTLET F-TYPE SATELLITE SOCKET		TRIPLE TV/FM DAB/SAT TRIPLEXER	
K3552WHI	5	K3554DABWHI	1
TWIN TV/FM DIPLEXER		QUAD TV/FM DAB/SATX2 QUADPLEXER	

Fully screened non isolated TV outlets
containing a combination of single,
TV/FM Diplexer, TV/FM/SAT Triplexer
and secondary telephone outlets for
use within digital TV systems and
interactive TV services.

Single outlets for connection to a single
TV, FM or Satellite co-axial aerial lead.
TV/FM diplexer units for connection to a
single co-axial aerial lead with combined
TV and FM signals.

MOUNTING BOXES

Minimum box depth 32mm	
1 GANG:	Flush: 866ZIC
	Surface: K2181WHI
2 GANG:	Flush: 886ZIC
	Surface: K2183WHI

DIMENSIONS

1 GANG:	86 x 86mm
2 GANG:	86 x 146mm

FIXING CENTRES

1 GANG:	60.3mm
2 GANG:	120.6mm

PERFORMANCE

Refer to page 474 for technical
specification.

TV/FM and Satellite Co-Axial Socket Outlets with Telephone Outlet

FOR DIGITAL AND INTERACTIVE TV SERVICES
FLUSH



K3557WHI



K3561WHI



K3560DABWHI



K3561DABWHI



K3562WHI



K3563WHI



K3563DABWHI



K3564DABWHI



K3565DABWHI



K3566DABWHI

K3557WHI
SINGLE OUTLET
(IEC MALE)
WITH TELEPHONE
SECONDARY

1

K3561WHI
TRIPLE TV/FM/SAT
TRIPLEXER
WITH TELEPHONE
SECONDARY

5

Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.
TV/FM diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

K3560DABWHI
TWIN TV/FM DAB DIPLEXER
WITH TELEPHONE SECONDARY

1

K3561DABWHI
TRIPLE TV/FM DAB/SAT TRIPLEXER
WITH TELEPHONE SECONDARY

1

K3562WHI
TWIN TV/FM DIPLEXER
WITH SINGLE TV (IEC MALE)
AND TELEPHONE SECONDARY

5

K3563WHI
TRIPLE TV/FM/SAT TRIPLEXER
WITH SINGLE TV (IEC MALE)
AND TELEPHONE SECONDARY

5

Telephone Secondary outlet for use with interactive TV digital services.

K3562 and K3563 outlets with additional single TV (male) outlet for secondary distribution of TV signal

K3563DABWHI
TRIPLE TV/FM/DAB/SAT TRIPLEXER
WITH SINGLE TV (IEC MALE)
AND TELEPHONE SECONDARY

1

K3564DABWHI
QUAD TV/FM DAB/SATx2 QUADPLEXER
WITH TELEPHONE SECONDARY

1

K3565DABWHI
QUADPLEXER + RJ45
AND TELEPHONE SECONDARY

1

K3566DABWHI
QUADPLEXER
WITH TELEPHONE SECONDARY
AND SINGLE TV (IEC MALE)

1

Logic Plus™

mkelectric.co.uk



TV/FM and Satellite Co-Axial Socket Outlets

NON ISOLATED
FLUSH

ISOLATED
FLUSH



K3520WHI



K3523WHI



K3525WHI



K3525D1WHI



K3521WHI



K3522WHI



K3631GRA



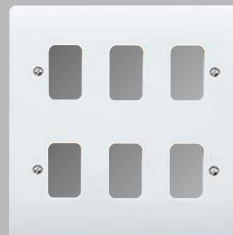
K3632WHI



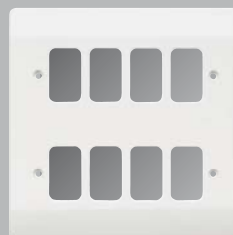
K3633GRA



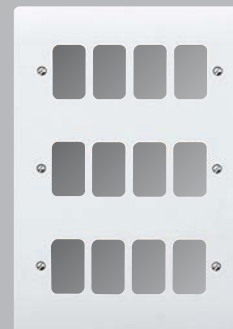
K3634WHI



K3636WHI



K3638WHI



K3639WHI

K3520WHI
SINGLE OUTLET

10

K3523WHI
TWIN OUTLET

10

K3525WHI
SINGLE F TYPE
SATELLITE SOCKET

10

K3525D1WHI
TWIN F TYPE
SATELLITE SOCKET

10

MOUNTING BOXES
FLUSH
861ZIC (25mm)
SURFACE
K2140WHI

Single outlet for connection to a single TV or FM co-axial aerial lead. Twin outlet for connection to each of two separate TV/FM, co-axial aerial leads.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010 where applicable
BS 3041:1977
IEC 169-2:1965

K3521WHI
SINGLE OUTLET

10

K3522WHI
TWIN OUTLET
WITH FM/TV DIPLEXER

10

MOUNTING BOXES
FLUSH
861ZIC (25mm)
SURFACE
K2140WHI

Provides safety isolation rated at 2000Va.c. between aerial lead and socket.
Single outlet for connection to a single TV or FM co-axial aerial lead.
Twin outlet with TV/FM diplexer for connection to single co-axial aerial lead with combined TV & FM signals.

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010 where applicable
BS 3041:1977 IEC 169-2:1965

K3631WHI
K3631GRA

10

1 MODULE

10

K3632WHI

10

K3632GRA

10

2 MODULE

K3633WHI

10

K3633GRA

10

3 MODULE

K3634WHI

10

K3634GRA

10

4 MODULE

All modules from the Grid Plus range can be used with these frontplates.

DIMENSIONS
1 & 2 MODULE: 86 x 86mm
3 & 4 MODULE: 86 x 146mm
6 & 8 MODULE: 146 x 146mm
12 MODULE: 206 x 146mm
BS 5733:2010

K3636WHI
K3636GRA

1

6 MODULE

1

K3638WHI

1

K3638GRA

1

8 MODULE

K3639WHI
12 MODULE

1



CEILING ACCESSORIES

RANGE INTRODUCTION

MK Electric offers a comprehensive range of white ceiling accessories for all requirements. Included in the range are enhanced 'safety' lampholders.

Unlike most other 'safety' lampholders, when the lamp is removed Shockguard Plus automatically shields the contact by means of a specially designed shutter and it remains that way until a lamp is replaced.

Therefore when no lamp is in place contact pins are totally isolated, eliminating danger of electrocution.

FEATURES & BENEFITS

EASE OF INSTALLATION

Pendant sets incorporate a heat resistant lampholder, ceiling rose with a transparent base and clear terminal markings for ease of identification. Terminals are grouped in line with neutral, loop-in and earth terminals.

SAFETY

Shockguard Plus has a specially designed shutter that automatically shields the lamp contacts, therefore eliminating the danger of electrocution.

RELIABILITY

All products are 100% tested before delivery for confidence, so a 'fit and forget' installation can be achieved. Fully compliant with the relevant British Standards BS 7895 for bayonet lampholders with enhanced safety and BS EN 61184.

DURABILITY

Manufactured from the highest quality materials to give a high gloss finish, which is both scratch and colour fade resistant.

Ceiling Accessories

mkelectric.co.uk



Ceiling Switches

6 AMP
SURFACE

WITHOUT
MOUNTING BLOCKS
FLUSH

50A
FLUSH

Mounting Blocks and Cords



K3191WHI



3190RCWHI



K3131WHI



3164WHI



K2051WHI

K2056WHI



K3191D1WHI



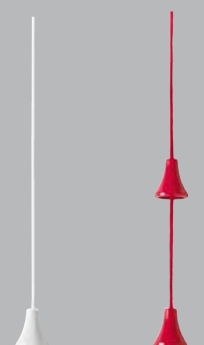
3190RCD1WHI



3151WHI



8329SSWHID1T9



8329SSWHIT9 9420SST9

K3191WHI
6A SP ONE-WAY
1.5M WHITE CORD WITH
WHITE ACORN
K3191D1WHI
6A SP ONE-WAY
2M WHITE CORD
AND 1X GRAPHITE BANGLE
K3192WHI
6A SP TWO-WAY
1.5M WHITE CORD
AND WHITE ACORN
K3192D1WHI
6A SP TWO-WAY
2M WHITE CORD
AND 1X GRAPHITE BANGLE

Supplied with mounting blocks.
Earth terminal is riveted in base of
mounting blocks.
BANGLE DIAMETER
50mm
These switches do not have to be
derated when used with fluorescent or
inductive loads.
FIXING CENTRES
50.8mm
BS EN 60669-1:1999

5 3190RCWHI
6A SP TWO WAY
2M RED CORD WITH RED ACORN
PULL TO MAKE OR PULL TO
BREAK (MOMENTARY SWITCH
ACTION)
5 3190RCD1WHI
6A SP TWO-WAY
3M RED CORD
AND 2X RED BANGLE
5
Supplied with mounting blocks.
BANGLE DIAMETER
50mm
BS EN 60669-1:1999

5 K3131WHI
6A SP TWO-WAY
5 3151WHI
16A DP ONE-WAY
Mounting blocks are not supplied. Use
K2051WHI or K2056WHI.
Suitable for installation in small circular
conduit boxes to BS EN 61386-1:2008
See page 354.
Ceiling switch cords are 1.5m minimum
length.
These switches do not have to be
derated when used with fluorescent or
inductive loads.
FIXING CENTRES
50.8mm
BS EN 60669-1:1999

5 3164WHI
50A DP ONE-WAY
WITH NEON
1.5M WHITE
5 8329SSWHID1T9
2M WHITE CORD WITH JOINT
UNION AND GRAPHITE BANGLE

MOUNTING BOXES
Surface Moulded
2140WHI, 2180WHI
2031WHI (extra wiring space)
Flush Steel
877ZIC (for full load applications)
Surface Metal
2211ALM, 2213ALM
Fitted with a mechanical 'OFF' indicator.
The switch fully complies with the
requirements within BS 7671 IET Wiring
Regulations with respect to safety
isolation for maintenance purposes
and provides a full 3mm contact gap
when 'OFF'.
DIMENSIONS
86 x 86mm
BANGLE DIAMETER
50mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

5 K2051WHI
10 MOUNTING BLOCK
FOR 6A OR 16A
SWITCHES
5 K2056WHI
5 MOUNTING BLOCK
WITH NEON
FOR 6A OR 16A
SWITCHES
10 8329SSWHIT9
10 1.5M WHITE CEILING
SWITCH CORD COMPLETE
WITH ACORN AND ONE PIECE
JOINT UNION
1 9420SST9
1 2M RED CEILING SWITCH
CORD COMPLETE WITH TWO
RED ACORNS AND ONE PIECE
JOINT UNION
10 9420SSD1
10 3M RED CEILING SWITCH
CORD COMPLETE WITH 2 X RED
BANGLES AND JOINT UNION
K2051WHI and K2056WHI
Earth terminal riveted in base.
DIAMETER
76mm not including Neon Lens
FIXING CENTRES
50.8mm
BS EN 60669-1:1999

Ceiling Roses

Lampholders



Unlike most 'safety' lampholders, when a lamp is removed Shockguard Plus automatically seals the contact by means of specially designed shutter and it remains that way until the lamp is replaced.

This means that with no bulb in place there is no danger of electrocution from exposed contacts, as the contact pins are fully shielded.



The MK Ceiling Rose has a transparent base, pre-cut aperture and clear markings for ease of installation. Terminal layout allows cables to be cut to the same length and the earth terminal is positioned for easier cable access.



K1161WHI
FOUR TERMINALS
LINE, NEUTRAL,
LOOP-IN AND EARTH
K1163WHI
CEILING ROSE HALO

Incorporate tunnel type terminals, which accommodate 3 x 2.5mm² cables and allow for off centre cable entries, transparent terminal block and equal length wire stripping.
Suitable for fittings of up to 5kgs. Heavier fittings must be installed using independent support eg. ceiling hook.
The ceiling roses are suitable for mounting over BS EN 61386-1:2008 circular conduit boxes.

DIAMETER
(Cover) 86mm
DEPTH
(Cover) 34mm3
BS 67:1987

The Ceiling Rose Halo gives a neat finish should the ceiling be damaged.

10 **K1170WHI**
BC PENDANT LAMPHOLDER
WITH AUTOMATIC CORDGRIP
AND STRAIGHT SKIRT

10 **K1171WHI**
BC PENDANT LAMPHOLDER
WITH AUTOMATIC CORDGRIP
AND PROTECTIVE SKIRT

10 **K1180WHI**
STRAIGHT SKIRT FOR
MK LAMPHOLDERS

10 **K1181WHI**
PROTECTIVE SKIRT FOR
MK LAMPHOLDERS

All MK lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.
BS EN 61184:1997 T2 Rated.

Ceiling Accessories

Lampholders

SG TYPE



1150WHI

Pendant Sets

SG TYPE



K1186WHI



K1189WHI



1146WHI



1149WHI

Batten Lampholders

SG TYPE



K1172WHI



1152WHI



1174WHI



1154WHI

1150WHI 10

BC PENDANT
SG TYPE LAMPHOLDER

Shockguard SG Type lampholders automatically shield contacts by means of a shutter when the lamp is removed. All MK SG Type lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.
BS EN 61184:1997
BS 7895:1997

K1186WHI 10

150MM PENDANT SET
K1189WHI 10

230MM PENDANT SET

K1186WHI and K1189WHI incorporate a lampholder (K1170WHI), heat resisting PVC insulated and sheathed flexible 0.75mm² two core circular cable complying with BS EN 50525-2-11 and a ceiling rose fitted with line, neutral, loop-in and earth terminals (K1161WHI). This assembly will support a light fitting of up to 3kgs.

1146WHI 10

SG TYPE
150MM PENDANT SET
1149WHI 10

SG TYPE
230MM PENDANT SET

1146WHI and 1149WHI incorporate a SG lampholder (1150WHI), heat resisting PVC insulated and sheathed flexible 0.75mm² two core circular cable complying with BS EN 50525-2-11 and a ceiling rose fitted with line, neutral, loop-in and earth terminals (1174WHI). This assembly will support a light fitting of up to 3kgs.

K1172WHI 10

BC ANGLED
1174WHI 10

HEAT RESISTANT TAILS,
LIVE, NEUTRAL, LOOP-IN
AND EARTH TERMINALS

All MK lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.
1174WHI also incorporates heat resistant wires connecting the terminals in the base to the lampholder. It has terminals mounted in the base and knockouts which accommodate 3 x 2.5 mm² cables and allow for off centre cable entries.
BS EN 61184:1997 T2 Rated.

1152WHI 10

SG TYPE
ANGLED BATTEN
LAMPHOLDER
HEAT RESISTANT TAILS,
LIVE, NEUTRAL, LOOP-IN
AND EARTH TERMINALS
1154WHI 10

SG TYPE
BATTEN LAMPHOLDER
HEAT RESISTANT TAILS,
LIVE, NEUTRAL, LOOP-IN
AND EARTH TERMINALS

Shockguard SG Type lampholders automatically shield contacts by means of a shutter when the lamp is removed. All MK SG Type lampholders are heat resistant to category T2 of BS EN 61184 and are therefore capable of operation with lamp cap temperatures up to 210°C.
1152WHI and 1154WHI also incorporate heat resistant wires connecting the terminals in the base to the lampholder.
BS EN 61184:1997 T2 Rated.
BS 7895:1997



Oxford University Images / David Williams

CASE STUDY

THE MALTHOUSE, OXFORD UNIVERSITY – MK PORTFOLIO

Oxford University Estates Services, who are responsible for managing over 350 buildings and properties for the university, have their offices located at The Malthouse in central Oxford.

Their fully functional office space has been refurbished utilising a variety of MK products including Prestige 3D Compact and Integrated USB sockets, which were selected due to their superior manufacturing quality, reliability and functionality.





LINK

RANGE INTRODUCTION

The MK Link connection and distribution system brings plug-in convenience and versatility for lighting installations.

It is a modular plug and socket interface that provides electrical connection in one easy click-in action. Luminaires can be plugged in without circuit isolation. All live contacts are inaccessible and the earthing connection is made before any other.

Wired products incorporate either heat resisting flex or low smoke zero halogen (LSF) insulated and sheathed flexible 0.75mm four core circular cable.

FEATURES & BENEFITS

- Live contacts are inaccessible
- Earth contact – first to make, last to break
- Mechanical and electrical connection in one 'click-in' action
- Strong load grips support up to 5kg

HOW TO SPECIFY

A secure lighting connection and control system, which is modular in design to enable electrical connection in one easy action. Live contacts to be inaccessible to enable luminaires to be plugged in and removed without circuit isolation. Static suspension load for plugs, sockets and pre-wired assemblies, must be able to support up to 5kg weight.

3 Pin Accessories

3 PIN PLUGS
6 AMP



K3230WHI



K3212WHI



K3220WHI

3 PIN CEILING ROSES
6 AMP



K3240WHI



3 Pin Pre-wired

3 PIN PLUGS
6 AMP



K3232WHI



K3233WHI

3 PIN CEILING ROSES
6 AMP



K3242WHI



K3243LSF

K3230WHI
WHITE 3 PIN PLUG
WITH CORD GRIP

10

DIMENSIONS
57 x 25 x 25mm

TERMINALS
Phase, neutral and earth terminals
will each accept 1 x 0.75,
1 x 1.00mm² conductors.

NOTE
K3230 can be used with the 4 pin
socket outlets in this range.
BS 6972 & BS 5733

K3220WHI
CIRCULAR (BESA)
K3212WHI
ARCHITRAVE
WITH TRUNKING CLAMP

10

10

DIMENSIONS
K3220
75mm dia. & 7mm depth
K3212
86 x 33 x 6mm deep & 7mm projection
FIXING CENTRES
K3220
50.8mm diagonal BESA
K3212
60.3mm
MOUNTING BOXES
K3220: Conduit BESA Egatube boxes
TERMINALS
Phase, neutral, earth & 'loop in'
terminals will each accept
5 x 0.75, 5 x 1.00, 4 x 1.50, 3 x 2.50 or
2 x 4.00mm² conductors
NOTE
only 3 pin plugs can be used with these
sockets
BS 6972 & BS 5733

K3240WHI
CEILING ROSE (BESA)
WITH 3 PIN PLUG

10

DIMENSIONS
K3240
75mm dia. x 44mm & 7mm fitting depth
FIXING CENTRES
K3240
50.8mm diagonal BESA
MOUNTING BOXES
K3240: Conduit BESA Egatube boxes
TERMINALS
Phase, neutral, earth and 'loop in'
terminals will each accept 5 x 0.75,
5 x 1.00, 4 x 1.50, 3 x 2.50, or
2 x 4.00mm conductors
BS 6972 & BS 5733.

K3232WHI
3 PIN PLUG FITTED WITH
2M WHITE PVC FLEX
K3233WHI
3 PIN PLUG FITTED WITH
3M WHITE PVC FLEX

10

5

K3232WHI & K3233WHI incorporate
K3230WHI fitted with the respective
length of heat resisting PVC insulated
and sheathed flexible 0.75mm three
core circular cable complying with
BS 6500: 2000 (Table 29).

K3242WHI
CEILING ROSE AND 3 PIN PLUG
FITTED WITH 2M PVC FLEX

10

K3243WHI
CEILING ROSE AND 3 PIN PLUG
FITTED WITH 3M PVC FLEX

5

K3242LSF
CEILING ROSE AND 3 PIN PLUG
FITTED WITH 2M LSF FLEX

10

K3243LSF
CEILING ROSE AND 3 PIN PLUG
FITTED WITH 3M LSF FLEX

5

K3242WHI & K3243WHI incorporate
K3240WHI fitted with the respective
length of heat resisting PVC insulated
and sheathed flexible 0.75mm three
core circular cable complying with
BS 6500: 2000 (Table 29).
K3242LSF & K3243LSF incorporate
K3240WHI fitted with the respective
length of low smoke zero halogen
insulated and sheathed flexible
0.75mm three core circular cable to
BS 6972 & BS 5733.

GENERAL SPECIFICATION

Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz
Rated load current for all plugs, sockets and pre-wired assemblies 6A
Static suspension load for plugs, sockets and pre-wired assemblies 5kg max.

4 Pin Accessories

4 PIN PLUGS 6 AMP



K4230WHI

4 PIN SOCKETS 6 AMP



K4214WHI



K4220WHI

4 PIN CEILING ROSES 6 AMP



K4240WHR



K4240WHR

4 Pin Pre-wired

PREWIRED 4 PIN PLUGS 6 AMP



K4232WHR



PREWIRED 4 PIN CEILING ROSES 6 AMP



K4242WHR



K4243LSF



K4230WHI
WHITE 4 PIN PLUG WITH
CORD GRIP

DIMENSIONS
57 x 35 x 44mm
TERMINALS

Phase, neutral, earth and auxiliary
terminals will each accept
1 x 0.75, 1 x 1.00mm conductors

NOTE
K4230 cannot be used with the
3 pin socket outlets in this range.
BS 6972 & BS 5733

10

K4214WHI
ONE GANG 4 PIN SOCKET
OUTLET

K4220WHI
CIRCULAR (BESA) 4 PIN
SOCKET OUTLET

DIMENSIONS

K4214 86 x 86 x 9mm & 5mm depth

K4220 75mm dia. & 7mm depth

FIXING CENTRES

K4214

60.3mm

K4220

50.8mm diagonal (BESA)

MOUNTING BOXES

K4214

Surface K2160WHI,

flush dryline QFB1whi or

flush solid 861ZIC

K4220

Conduit BESA Egatube boxes

TERMINALS

Phase, neutral, earth, auxiliary &

'loop in' terminals will each accept

5 x 0.75, 5 x 1.00, 4 x 1.50,

3 x 2.50 or 2 x 4.00mm conductors

NOTE

3 and 4 pin plugs can be used with the

4 pin socket outlets in this range.

BS 6972 & BS 5733

10

10

K4240WHR
CEILING ROSE (BESA) WITH
RED 4 PIN PLUG

DIMENSIONS

FIXING CENTRES

50.8mm diagonal (BESA)

MOUNTING BOXES

Conduit BESA Egatube boxes

TERMINALS

Phase, neutral, earth, auxiliary &

'loop in' terminals will each accept

5 x 0.75, 5 x 1.00, 4 x 1.50,

3 x 2.50 or 2 x 4.00mm conductors

BS 6972 & BS 5733

10

K4232WHR
RED 4 PIN PLUG WITH 2M
WHITE PVC FLEX.

K4233WHR
RED 4 PIN PLUG WITH 3M
WHITE PVC FLEX

K4232WHR & K4233WHR

incorporate K4230WHI fitted with the
respective length of heat resisting PVC
insulated and sheathed flexible 0.75mm
four core circular cable complying with
BS 6500:2000 (Table 29)

BS 6972 & BS 5733

10

5

K4242WHR
CEILING ROSE WITH RED
4 PIN PLUG AND 2M PVC FLEX

K4243WHR
CEILING ROSE WITH RED
4 PIN PLUG AND 3M PVC FLEX

K4242LSF
CEILING ROSE WITH RED
4 PIN PLUG AND 2M LSF FLEX

K4243LSF
CEILING ROSE WITH RED
4 PIN PLUG AND 3M LSF FLEX

K4242WHR & K4243WHR

incorporate K4240WHR fitted
with the respective length of
heat resisting PVC insulating and
sheathed flexible 0.75mm four
core circular cable complying with
BS 6500:2000 (Table 29)

K4242LSF & K4243LSF incorporate
K4240WHR fitted with the respective
length of low smoke zero halogen
insulated and sheathed flexible
0.75mm four core circular cable to
BS 6972 & BS 5733

GENERAL SPECIFICATION

Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz

Rated load current for all plugs, sockets and pre-wired assemblies 6A

Static suspension load for plugs, sockets and pre-wired assemblies 5kg max.

Mounting Boxes

ARCHITRAVE
MOULDED
FLUSH

STEEL
FLUSH

SQUARE
MOULDED
FLUSH

STEEL
FLUSH

CIRCULAR
SURFACE



K2151WHI



3921ZIC



QFB1WHI



861ZIC



2ECR1WHI



QFB/IG1



2ECR3WHI



K2160WHI

K2151WHI
1 GANG
ARCHITRAVE BOX

10

K2151WHI
Earth terminal fitted in base.
DIMENSIONS
87 x 33 x 16mm
FIXING CENTRES
60.3mm
BS 5733:1995

3921ZIC
1 GANG
ARCHITRAVE BOX

With earth terminal
DIMENSIONS
75 x 27 x 27mm
FIXING CENTRES
60.3mm
KNOCKOUTS
3 x 16mm
BS 4662:1970

10

QFB1WHI
1 GANG
DRY LINING BOX
QFB/IG1
1 GANG
DRY LINING BOX
WITH INTUMESCENT GASKET
K2160WHI
1 GANG 16MM
MOULDED BOX

20

20

10

QFB1
All round flange for flush fit. One piece moulded lug automatically snaps into place. No rear projections. Clamp device on cable entry. Will accommodate partition thicknesses between 6mm and 16mm. Earth terminal facility.

K2160WHI
Earth terminal fitted in base of boxes.
DIMENSIONS
K2160: 87 x 87mm
FIXING CENTRES
60.3mm
BS 5733:1995
QFB/IG1

Pre-fitted with intumescent gaskets to give fire protection, in accordance with BS 476 Pt 22:1987. In a fire situation, a chemical reaction will occur with the intumescent material. The void behind the wiring device will be filled, providing protection against the passage of fire.

BS 4662:1970 where applicable.

861ZIC
1 GANG
ONE ADJUSTABLE LUG

With earth terminal
DIMENSIONS
75 x 75mm
FIXING CENTRES
60.3mm
KNOCKOUTS
12 x 20mm
BS 4662:1970

10

2ECR13WHI 25
2ECR13BLK 25
20MM LOOP-IN
2ECR1WHI 25
2ECR1BLK 25
20MM BACK OUTLET
2ECR3WHI 25
2ECR3BLK 25
20MM TWO WAY
2ECR8WHI 10
2ECR8BLK 10
20MM TWO WAY AND
BACK OUTLET

CONDUIT BOXES
20mm Loop-in boxes have 4 x 20mm knockouts on underside.
MATERIAL
PVC-U
LID FIXING CENTRES
50.8mm
PILLAR THREAD SIZE
M4 (Brass inserts) All boxes contain a moulded recess for earth terminal.
See pages 354 for the full selection of circular conduit boxes.

GENERAL SPECIFICATION

Rated voltage for all plugs, sockets and pre-wired assemblies 250V 50Hz
Rated load current for all plugs, sockets and pre-wired assemblies 6A
Static suspension load for plugs, sockets and pre-wired assemblies 5kg max.

Distribution Boxes



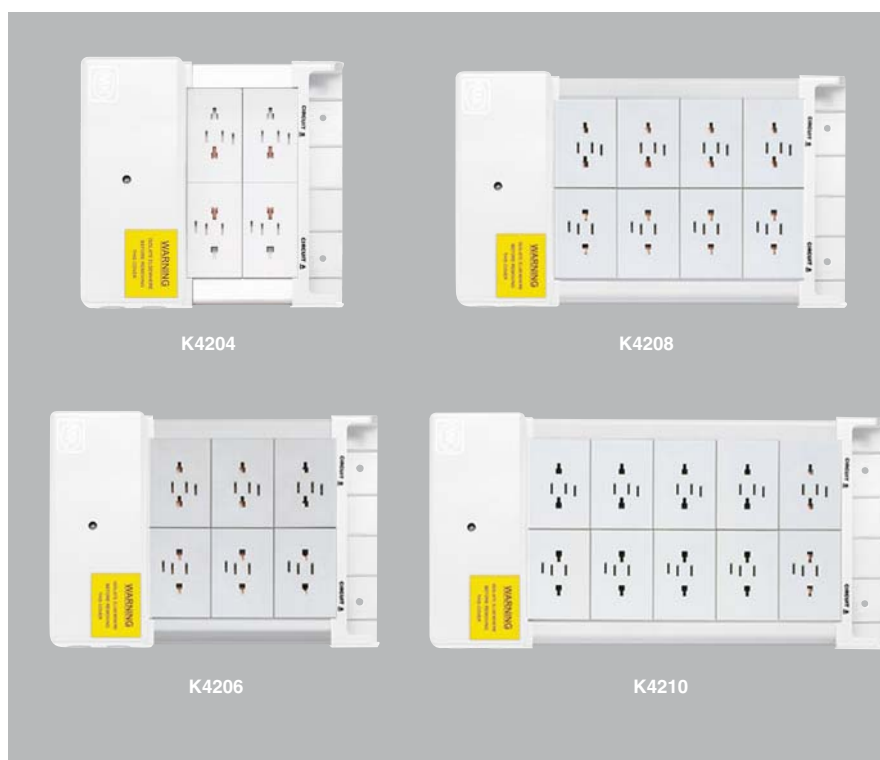
Fixing of the distribution box to lighting trunking is made easy through the choice of cable entry points.



The distribution box can be suspended on drop rods utilising Caddy Clips.*



The distribution box can be fitted directly to the wall or ceiling using the pilot holes provided in the base.



K4204
4 GANG 6A
4 PIN SOCKET
LIGHTING DISTRIBUTION BOX

1

K4206
6 GANG 6A
4 PIN SOCKET
LIGHTING DISTRIBUTION BOX

1

K4208
8 GANG 6A
4 PIN SOCKET
LIGHTING DISTRIBUTION BOX

1

K4210
10 GANG 6A
4 PIN SOCKET
LIGHTING DISTRIBUTION BOX

1

DIMENSIONS

K4204: 80 x 222 x 237mm
K4206: 80 x 222 x 290mm
K4208: 80 x 222 x 400mm
K4210: 80 x 222 x 465mm

MOUNTINGS

Provision for screw (No. 8) fix to walls or trunking and slots for *Caddy Clips on top, bottom and back faces.

Conduit entries with snap fit blanks; 20 & 25mm in top, bottom and back faces. Outlets can be wired as 1 or 2 banks.

TERMINAL CAPACITY

3 x 6mm rated at 16A.
Each socket is rated at 6A.
Extruded aluminium body with V0 rated plastic terminal housing. Both 3 & 4 pin plugs can be used with the distribution box 4 pin socket outlets.
BS 5733

*Caddy Clip is a registered trade mark of Erico Europa (UK) Ltd. Reading.



SENSORS

RANGE INTRODUCTION

MK Sensors are designed to deliver energy savings and lighting control in a range of commercial and domestic applications. Lighting represents 19% of a building's total energy consumption* lighting controls can help you cut that by up to 70%.

The MK Sensor range deploys PIR and ultrasonic sensing technology to provide effective presence detection.

All products in the MK sensors range have a built in photocell, providing accurate light level detection. This allows sensors to harness natural daylight, delivering further energy savings by either holding off, switching lights off or regulating to maintain a constant light level.

*Source: Department of Energy and Climate change (July 2012)

FEATURES & BENEFITS

- Built in photocell provides light level detection
- Sensors can be installed for absence detection
- 2A, 6A and 10A products
- Easy to install and program
- Flush and surface mounted variants available
- Ideal for most interior environments
- Switching and digital dimming detectors
Ideal for retrofit and new build installations

Sensors



Product featured is a Superior PIR.

SimpleFit Sensors

DUAL MOUNT
6A



K5017

SimpleFit Sensors

DEDICATED SURFACE
AND FLUSH MOUNT
6A



K5015

K5016

Superior PIRs

SWITCHING
10A



K5030F

K5030SM

Superior PIRs

DIMMING
10A



K5040F

K5040SM

BattenFit Sensor

IP65
2A



K4047

K5017
SIMPLE FIT DUAL MOUNT
PIR SENSOR WITH
PHOTOCELL
FLUSH AND SURFACE CEILING
MOUNT
6M DETECTION
6A

DIMENSIONS
66 x 97mm

1

K5015
SIMPLE FIT PIR SENSOR
WITH PHOTOCELL
FLUSH MOUNT
CEILING MOUNT
6M DETECTION
6A

K5016
SIMPLE FIT PIR SENSOR
WITH PHOTOCELL
SURFACE MOUNT
CEILING MOUNT
6M DETECTION
6A

DIMENSIONS
FLUSH
76 x 86mm
SURFACE
86 x 86mm x 54.5mm

1

K5030F
SUPERIOR PIR
FLUSH MOUNT
10M DETECTION
10A

K5030SM
SUPERIOR PIR
SURFACE MOUNT
10M DETECTION
10A

DIMENSIONS
87 x 93mm

K4098 HAND-HELD
PROGRAMMER REQUIRED FOR
COMMISSIONING OF THESE
PRODUCTS

1

1

K5040F
SUPERIOR PIR FOR DIGITAL
DIMMING (DALI AND DSI)
FLUSH MOUNT
10M DETECTION
10A

K5040SM
SUPERIOR PIR FOR DIGITAL
DIMMING (DALI AND DSI)
SURFACE MOUNT
10M DETECTION
10A

DIMENSIONS
87 x 93mm

K4098 HAND-HELD
PROGRAMMER REQUIRED FOR
COMMISSIONING OF THESE
PRODUCTS

1

K4047
BATTENFIT SENSOR
2A SWITCHING PHOTOCELL
6M DETECTION
IP65

DIMENSIONS
150 x 40 x 29mm

K4058 HAND-HELD
PROGRAMMER REQUIRED FOR
COMMISSIONING OF THESE
PRODUCTS

1

1

OPERATING VOLTAGE: 230V 50Hz, Material: Flame retardant PC/ABS, RECOMMENDED CIRCUIT PROTECTION: 10A

Sensors

Ultrasonic

10A



K4030



K4031

K4030

CORNER MOUNTED, SURFACE, 10A

K4031

CORNER MOUNTED, SEMI FLUSH, 10A

DIMENSIONS

CEILING

100 x 72mm

CORNER

74 x 95mm

Hand-Held Programming tools



K4058



K4098

1

K4058

HAND HELD PROGRAMMER FOR USE WITH K4047

1

K4098

HAND HELD PROGRAMMER FOR USE WITH K5030 AND K5040

1

1





DECORATIVE

RANGE INTRODUCTION

MK's decorative wiring device portfolio now includes the MK Elements range which stylishly showcases new colours, materials and finishes for greater choice and flexibility.

With 29 high quality finishes available across 4 individual ranges you will now find a style and finish that will compliment any modern, contemporary or traditional interior design scheme.

Great design relies on that precise combination of material, texture, colour and tone to create that wow factor. The ability to do the same thing with your wiring devices means you never have to settle for second best. Whether it's a new finish, combining technology or adding engraving to your products MK's Design Service team can help you achieve your design goals.

MK Electric have continued to invest in their UK manufacturing equipment, in order to be more flexible to your decorative wiring device needs whilst still offering the same level of quality and service.

FEATURES & BENEFITS

- 29 stunning finishes across 5 different material types including metal, glass effect and wood
- 4 Individual range options
- Choices of a screwed or screwless aesthetic
- Choice of frontplate depth – modern 1.5mm, contemporary 4mm, distinctive 7.5mm or traditional 9mm
- Compliment any interior design scheme
- Flexibility and custom options with MK's Design Service

Decorative

RANGE INTRODUCTION

Aspect, Edge and Albany Plus Finish Options



BRUSHED
STAINLESS STEEL
(BSS*)



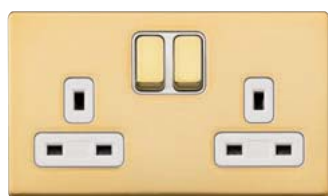
LACQUERED
BRUSHED STEEL
(LBS*)



BRUSHED CHROME
(BRC*)



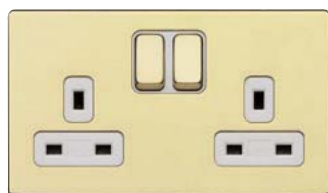
POLISHED CHROME
(POC/PCR*)



SATIN GOLD
(SAG*)



PORCELAIN WHITE
(WHI)



POLISHED BRASS
(PBR*)



LUSTROUS BLACK
(LBK)

*Available with the option of either white or black inserts

RANGE INTRODUCTION

Elements Finish Options



SYNTHETIC
CHALK WHITE
(SCW)



GLASS EFFECT
ICE WHITE
(GIW)



SYNTHETIC
NATURAL STONE
(SNS)



GLASS EFFECT
POLISHED ONYX
(GPO)



SYNTHETIC
BEACH PEBBLE
(SBP)



METALLIC
BRUSHED STEEL
(MBS)



METALLIC
SATIN PLATINUM
(MSP)



METALLIC
SATIN TITANIUM
(MST)



METALLIC
BRUSHED BRONZE
(MBB)



ELEMENTS

RANGE INTRODUCTION

The MK Elements collection is a revolutionary range of stylish wiring devices. Innovative, iconic and inspiring, the Elements collection is the perfect fusion of distinctive design and unparalleled quality. Inspired by materials such as wood, leather and stone, and with electronic touch control switches and dimmers, the MK Elements collection offers the perfect companion for any interior.

With Elements comes the ultimate fusion of distinctive design and unparalleled quality. The range provides slim, screwless profiles and silent operation, alongside a diverse range of colours, styles and textures, providing the ultimate choice for any interior.

HOW TO SPECIFY

A modern square edged range of wiring devices with metal, glass effect, natural & synthetic finished front plates designed to be fixed within and flush to the colour co-ordinated moulded trim. Moulded Frontplates to be polycarbonate and constructed of two colour matched sections, with an overall profile depth of 7.5mm. Frontplates to be screwless, removable by flat blade screwdriver through discreet bottom access apertures. There shall be no plastic bezel/ surround to switch rockers and socket inserts are to be designed with clean, crisp edges. Plug pins shall insert into separate individual socket apertures. Switch rockers and socket inserts to be colour matched to moulded trim. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

FEATURES & BENEFITS

16 STANDARD HIGH QUALITY FINISHES WITH ULTIMATE FLEXIBILITY

16 standard finishes across 4 material groups allow designers to easily complement any interior design. The design service offering also means we can create tailor-made products to suit individual needs.

TOTAL SAFETY

3-pin operated 'child resistant shutter system', which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position.

UNRIVALLED QUALITY AND RELIABILITY

Products are made from the very best materials and production processes. All products are 100% tested.

COMPREHENSIVE RANGE OF SOCKETS, SWITCHES AND MODULAR ANCILLARY PRODUCTS

Whatever the application, the Elements range has a wiring device to suit.

20 YEAR GUARANTEE

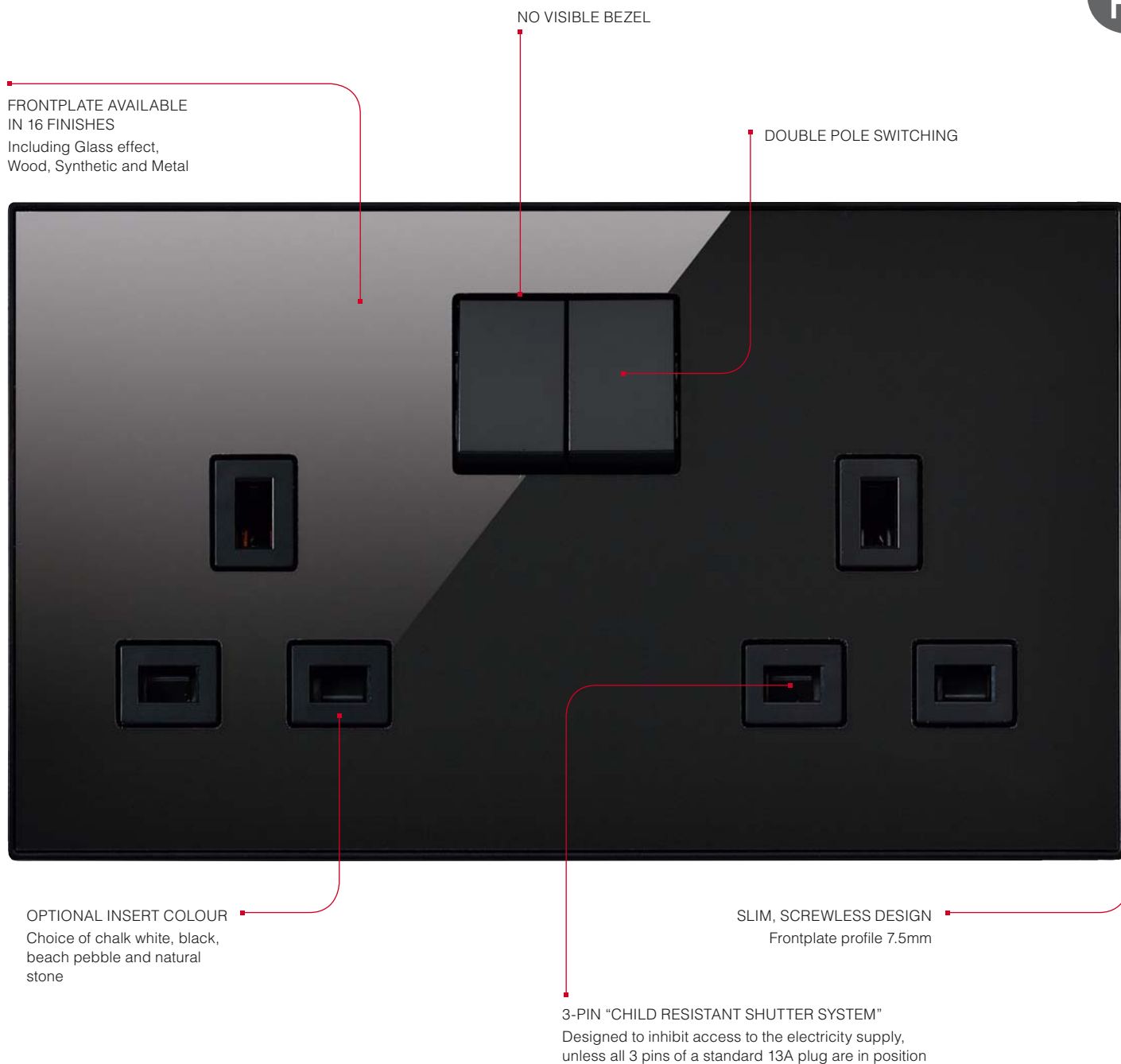
Gives total peace of mind to you and your customers. (5 year guarantee for electronic devices)



Technical Hotline
+44 (0)1268 563720

Elements

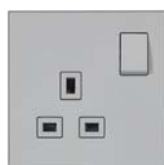
WIRING DEVICES
DECORATIVE



Naturals



Synthetics



Metallic



Glass Effect



Elements

Switchsocket Outlets

1 GANG DP
DUAL EARTH
13 AMP

1 GANG DP
WITH LED
INDICATOR/
LOCATOR DUAL
EARTH
13 AMP

2 GANG DP
13 AMP

2 GANG DP
WITH LED
INDICATOR/
LOCATOR
13 AMP

2 GANG DP
DUAL EARTH
13 AMP

SYNTHETIC FINISHES

CHALK WHITE – SCW	K34357SCW	1	K34357NSCW	1	K34347SCW	1	K34347NSCW	1	K34547SCW	1
NATURAL STONE – SNS	K34357SNS	1	K34357NSNS	1	K34347SNS	1	K34347NSNS	1	K34547SNS	1
BEACH PEBBLE – SBP	K34357SBP	1	K34357NSBP	1	K34347SBP	1	K34347NSBP	1	K34547SBP	1

GLASS EFFECT FINISHES

ICE WHITE – GIW	K34357GIW	1	K34357NGIW	1	K34347GIW	1	K34347NGIW	1	K34547GIW	1
POLISHED JADE – GPJ	K34357GPJ	1	K34357NGPJ	1	K34347GPJ	1	K34347NGPJ	1	K34547GPJ	1
POLISHED ONYX – GPO	K34357GPO	1	K34357NGPO	1	K34347GPO	1	K34347NGPO	1	K34547GPO	1
POLISHED STONE – GPS	K34357GPS	1	K34357NGPS	1	K34347GPS	1	K34347NGPS	1	K34547GPS	1

METALLIC FINISHES

BRUSHED STEEL – MBS	K34357MBS	1	K34357NMBS	1	K34347MBS	1	K34347NMBS	1	K34547MBS	1
BRUSHED BRONZE – MBB	K34357MBB	1	K34357NMBB	1	K34347MBB	1	K34347NMBB	1	K34547MBB	1
CAST IRON – MCI	K34357MCI	1	K34357NMCI	1	K34347MCI	1	K34347NMCI	1	K34547MCI	1
SATIN PLATINUM – MSP	K34357MSP	1	K34357NMSP	1	K34347MSP	1	K34347NMSP	1	K34547MSP	1
SATIN TITANIUM – MST	K34357MST	1	K34357NMST	1	K34347MST	1	K34347NMST	1	K34547MST	1

NATURAL FINISHES

BRITISH OAK – NBO	K34357NBO	1	K34357NNBO	1	K34347NBO	1	K34347NNBO	1	K34547NBO	1
CREAM HIDE – NCH	K34357NCH	1	K34357NNCH	1	K34347NCH	1	K34347NNCH	1	K34547NCH	1
DARK HIDE – NDH	K34357NDH	1	K34357NNDH	1	K34347NDH	1	K34347NNDH	1	K34547NDH	1
DARK WENGE – NDW	K34357NDW	1	K34357NNDW	1	K34347NDW	1	K34347NNDW	1	K34547NDW	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
35mm
866ZIC
47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
35mm
866ZIC
47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
35mm
866ZIC
47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

2 GANG DP
DUAL EARTH
WITH LED
INDICATOR/
LOCATOR
13 AMP

2 GANG DP
WITH 2 X USB
CHARGING PORTS
DUAL EARTH
13 AMP

1 GANG SP
ROUND PIN
5 AMP

Socket Outlets

1 GANG
UNSWITCHED
13 AMP



K34547NSCW	1	K34343SCW	1	K34382SCW	1	K34780SCW	1
K34547NSNS	1	K34343SNS	1	K34382SNS	1	K34780SNS	1
K34547NSBP	1	K34343SBP	1	K34382SBP	1	K34780SBP	1
K34547NGIW	1	K34343GIW	1	K34382GIW	1	K34780GIW	1
K34547NGPJ	1	K34343GPJ	1	K34382GPJ	1	K34780GPJ	1
K34547NGPO	1	K34343GPO	1	K34382GPO	1	K34780GPO	1
K34547NGPS	1	K34343GPS	1	K34382GPS	1	K34780GPS	1
K34547NMBS	1	K34343MBS	1	K34382MBS	1	K34780MBS	1
K34547NMBB	1	K34343MBB	1	K34382MBS	1	K34780MBB	1
K34547NMCi	1	K34343MCI	1	K34382MCI	1	K34780MCI	1
K34547NMSP	1	K34343MSP	1	K34382MSP	1	K34780MSP	1
K34547NMST	1	K34343MST	1	K34382MST	1	K34780MST	1
K34547NNBO	1	K34343NBO	1	K34382NBO	1	K34780NBO	1
K34547NNCH	1	K34343NCH	1	K34382NCH	1	K34780NCH	1
K34547NNDH	1	K34343NDH	1	K34382NDH	1	K34780NDH	1
K34547NNDW	1	K34343NDW	1	K34382NDW	1	K34780NDW	1

MOUNTING BOXES
35mm
86ZIC
47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

USB charging sockets, each capable of supporting 2A charge (total of 2A)
Pattress available for use where existing back box is too shallow, see page 34

MOUNTING BOXES
35mm
86ZIC
47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS5733:2010

MOUNTING BOXES
35mm
86ZIC
46MMmm
877ZIC
(for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

MOUNTING BOXES
35mm
86ZIC
46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

Elements

Multimedia Plates

2 GANG DP
SWITCHSOCKET,
EURO 2 MODULE
50 X 50MM (RIGHT SIDE)
13 AMP

2 GANG DP
SWITCHSOCKET,
EURO 2 MODULE
50 X 50MM (LEFT SIDE)
13 AMP

2 GANG DP
SWITCHSOCKET,
EURO 4 MODULE
50 X 50MM (X2)
13 AMP



SYNTHETIC FINISHES

CHALK WHITE – SCW	K34206SCW	1	K34207SCW	1	K34208SCW	1
NATURAL STONE – SNS	K34206SNS	1	K34207SNS	1	K34208SNS	1
BEACH PEBBLE – SBP	K34206SBP	1	K34207SBP	1	K34208SBP	1

GLASS EFFECT FINISHES

ICE WHITE – GIW	K34206GIW	1	K34207GIW	1	K34208GIW	1
POLISHED JADE – GPJ	K34206GPJ	1	K34207GPJ	1	K34208GPJ	1
POLISHED ONYX – GPO	K34206GPO	1	K34207GPO	1	K34208GPO	1
POLISHED STONE – GPS	K34206GPS	1	K34207GPS	1	K34208GPS	1

METALLIC FINISHES

BRUSHED STEEL – MBS	K34206MBS	1	K34207MBS	1	K34208MBS	1
BRUSHED BRONZE – MBB	K34206MBB	1	K34207MBB	1	K34208MBB	1
CAST IRON – MCI	K34206MCI	1	K34207MCI	1	K34208MCI	1
SATIN PLATINUM – MSP	K34206MSP	1	K34207MSP	1	K34208MSP	1
SATIN TITANIUM – MST	K34206MST	1	K34207MST	1	K34208MST	1

NATURAL FINISHES

BRITISH OAK – NBO	K34206NBO	1	K34207NBO	1	K34208NBO	1
CREAM HIDE – NCH	K34206NCH	1	K34207NCH	1	K34208NCH	1
DARK HIDE – NDH	K34206NDH	1	K34207NDH	1	K34208NDH	1
DARK WENGE – NDW	K34206NDW	1	K34207NDW	1	K34208NDW	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
47mm
870ZIC
DIMENSIONS
90.5 x 238mm
BS 1363-2: 1995

MOUNTING BOXES
47mm
870ZIC
DIMENSIONS
90.5 x 238mm
BS 1363-2: 1995

MOUNTING BOXES
47mm
868ZIC
DIMENSIONS
90.5 x 325.3mm
BS 1363-2: 1995



Technical Hotline
+44 (0)1268 563720

Elements

EURO 8 MODULE
100 X 50MM (X2)

EURO 12 MODULE
150 X 50MM (X2)

Shaver/Toothbrush Supply Units

DUAL VOLTAGE
OUTPUT 115/230V
INPUT 220/240V
50/60HZ



K34209SCW	1	K34210SCW	1	K34709SCW	1
K34209SNS	1	K34210SNS	1	K34709SNS	1
K34209SBP	1	K34210SBP	1	K34709SBP	1
K34209GIW	1	K34210GIW	1	K34709GIW	1
K34209GPJ	1	K34210GPJ	1	K34709GPJ	1
K34209GPO	1	K34210GPO	1	K34709GPO	1
K34209GPS	1	K34210GPS	1	K34709GPS	1
K34209MBS	1	K34210MBS	1	K34709MBS	1
K34209MBB	1	K34210MBB	1	K34709MBB	1
K34209MCI	1	K34210MCI	1	K34709MCI	1
K34209MSP	1	K34210MSP	1	K34709MSP	1
K34209MST	1	K34210MST	1	K34709MST	1
K34209NBO	1	K34210NBO	1	K34709NBO	1
K34209NCH	1	K34210NCH	1	K34709NCH	1
K34209NDH	1	K34210NDH	1	K34709NDH	1
K34209NDW	1	K34210NDW	1	K34709NDW	1

MOUNTING BOXES
47mm
858ZIC
DIMENSIONS
177.8 x 150.5mm
BS 5733:2010

MOUNTING BOXES
47mm
869ZIC
DIMENSIONS
177.8 x 210.8mm
BS 5733:2010

MOUNTING BOXES
47mm
878ZIC
DIMENSIONS
146 x 86mm
FIXING CENTRES
120.6mm
BS EN 61558-2-5:1998

Elements

Connection Units

SWITCHED
13 AMP



SWITCHED
WITH FLEX OUTLET
& NEON
13 AMP



UNSWITCHED
WITH FLEX OUTLET
& NEON
13 AMP



High Current Switches

1 GANG DP
WITH NEON
32 AMP



SYNTHETIC FINISHES

CHALK WHITE – SCW	K34941SCW	1	K34971SCW	1	K34978SCW	1	K34305SCW	1
NATURAL STONE – SNS	K34941SNS	1	K34971SNS	1	K34978SNS	1	K34305SNS	1
BEACH PEBBLE – SBP	K34941SBP	1	K34971SBP	1	K34978SBP	1	K34305SBP	1

GLASS EFFECT FINISHES

ICE WHITE – GIW	K34941GIW	1	K34971GIW	1	K34978GIW	1	K34305GIW	1
POLISHED JADE – GPJ	K34941GPJ	1	K34971GPJ	1	K34978GPJ	1	K34305GPJ	1
POLISHED ONYX – GPO	K34941GPO	1	K34971GPO	1	K34978GPO	1	K34305GPO	1
POLISHED STONE – GPS	K34941GPS	1	K34971GPS	1	K34978GPS	1	K34305GPS	1

METALLIC FINISHES

BRUSHED STEEL – MBS	K34941MBS	1	K34971MBS	1	K34978MBS	1	K34305MBS	1
BRUSHED BRONZE – MBB	K34941MBB	1	K34971MBB	1	K34978MBB	1	K34305MBB	1
CAST IRON – MCI	K34941MCI	1	K34971MCI	1	K34978MCI	1	K34305MCI	1
SATIN PLATINUM – MSP	K34941MSP	1	K34971MSP	1	K34978MSP	1	K34305MSP	1
SATIN TITANIUM – MST	K34941MST	1	K34971MST	1	K34978MST	1	K34305MST	1

NATURAL FINISHES

BRITISH OAK – NBO	K34941NBO	1	K34971NBO	1	K34978NBO	1	K34305NBO	1
CREAM HIDE – NCH	K34941NCH	1	K34971NCH	1	K34978NCH	1	K34305NCH	1
DARK HIDE – NDH	K34941NDH	1	K34971NDH	1	K34978NDH	1	K34305NDH	1
DARK WENGE – NDW	K34941NDW	1	K34971NDW	1	K34978NDW	1	K34305NDW	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS1363-4:1995

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS1363-4:1995

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS1363-4:1995

MOUNTING BOXES
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BSEN60669-1:1999

DP Switches are not
recommended for switching
large banks of PCs.

1 GANG DP
50 AMP



1 GANG DP
MARKED "COOKER"
50 AMP



1 GANG DP
WITH NEON
50 AMP



1 GANG DP
WITH NEON
MARKED "COOKER"
50 AMP



**3 Pole Fan
Isolator**

10 AMP



K34337SCW	1	K34337CKSCW	1	K34337NSCW	1	K34337NCKSCW	1	K34859SCW	1
K34337SNS	1	K34337CKSNS	1	K34337NSNS	1	K34337NCKSNS	1	K34859SNS	1
K34337SBP	1	K34337CKSBP	1	K34337NSBP	1	K34337NCKSBP	1	K34859SBP	1
K34337GIW	1	K34337CKGIW	1	K34337NGIW	1	K34337NCKGIW	1	K34859GIW	1
K34337GPJ	1	K34337CKGPJ	1	K34337NGPJ	1	K34337NCKGPJ	1	K34859GPJ	1
K34337GPO	1	K34337CKGPO	1	K34337NGPO	1	K34337NCKGPO	1	K34859GPO	1
K34337GPS	1	K34337CKGPS	1	K34337NGPS	1	K34337NCKGPS	1	K34859GPS	1
K34337MBS	1	K34337CKMBS	1	K34337NMBS	1	K34337NCKMBS	1	K34859MBS	1
K34337MBB	1	K34337CKMBB	1	K34337NMBB	1	K34337NCKMBB	1	K34859MBB	1
K34337MCI	1	K34337CKMCI	1	K34337NMCI	1	K34337NCKMCI	1	K34859MCI	1
K34337MSP	1	K34337CKMSP	1	K34337NMSP	1	K34337NCKMSP	1	K34859MSP	1
K34337MST	1	K34337CKMST	1	K34337NMST	1	K34337NCKMST	1	K34859MST	1
K34337NBO	1	K34337CKNBO	1	K34337NNBO	1	K34337NCKNBO	1	K34859NBO	1
K34337NCH	1	K34337CKNCH	1	K34337NNCH	1	K34337NCKNCH	1	K34859NCH	1
K34337NDH	1	K34337CKNDH	1	K34337NNDH	1	K34337NCKNDH	1	K34859NDH	1
K34337NDW	1	K34337CKNDW	1	K34337NNDW	1	K34337NCKNDW	1	K34859NDW	1

MOUNTING BOXES
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-4
K4858 switchlock is suitable for this product

DP Switches are not recommended for switching large banks of PCs.

Elements

mkelectric.co.uk



Electronic Switches

1 GANG SINGLE
2 WAY SP
400W

1 GANG DOUBLE
2 WAY SP
2 X 400W

1 GANG SINGLE
1 WAY SP 10AX

Electronic Dimmers

2 WAY SINGLE
60-500W/400VA
6-150W LED
LEADING EDGE

SYNTHETIC FINISHES

CHALK WHITE – SCW	K34371SCW	1	K34372SCW	1	K34370SCW	1	K34100SCW	1
NATURAL STONE – SNS	K34371SNS	1	K34372SNS	1	K34370SNS	1	K34100SNS	1
BEACH PEBBLE – SBP	K34371SBP	1	K34372SBP	1	K34370SBP	1	K34100SBP	1
GLASS EFFECT FINISHES								
ICE WHITE – GIW	K34371GIW	1	K34372GIW	1	K34370GIW	1	K34100GIW	1
POLISHED JADE – GPJ	K34371GPJ	1	K34372GPJ	1	K34370GPJ	1	K34100GPJ	1
POLISHED ONYX – GPO	K34371GPO	1	K34372GPO	1	K34370GPO	1	K34100GPO	1
POLISHED STONE – GPS	K34371GPS	1	K34372GPS	1	K34370GPS	1	K34100GPS	1
METALLIC FINISHES								
BRUSHED STEEL – MBS	K34371MBS	1	K34372MBS	1	K34370MBS	1	K34100MBS	1
BRUSHED BRONZE – MBB	K34371MBB	1	K34372MBB	1	K34370MBB	1	K34100MBB	1
CAST IRON – MCI	K34371MCI	1	K34372MCI	1	K34370MCI	1	K34100MCI	1
SATIN PLATINUM – MSP	K34371MSP	1	K34372MSP	1	K34370MSP	1	K34100MSP	1
SATIN TITANIUM – MST	K34371MST	1	K34372MST	1	K34370MST	1	K34100MST	1
NATURAL FINISHES								
BRITISH OAK – NBO	K34371NBO	1	K34372NBO	1	K34370NBO	1	K34100NBO	1
CREAM HIDE – NCH	K34371NCH	1	K34372NCH	1	K34370NCH	1	K34100NCH	1
DARK HIDE – NDH	K34371NDH	1	K34372NDH	1	K34370NDH	1	K34100NDH	1
DARK WENGE – NDW	K34371NDW	1	K34372NDW	1	K34370NDW	1	K34100NDW	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

2 WAY SINGLE
40-300W/240VA
6-120W LED
LEADING EDGE

2 WAY DOUBLE
40-300W/240VA
6-120W LED FOR EACH
DIMMER
LEADING EDGE

2 WAY SINGLE
25-500W/400VA
TRAILING EDGE

2 WAY SINGLE
25-300W/240VA
TRAILING EDGE



K34101SCW	1	K34102SCW	1	K34103SCW	1	K34104SCW	1
K34101SNS	1	K34102SNS	1	K34103SNS	1	K34104SNS	1
K34101SBP	1	K34102SBP	1	K34103SBP	1	K34104SBP	1
K34101GIW	1	K34102GIW	1	K34103GIW	1	K34104GIW	1
K34101GPJ	1	K34102GPJ	1	K34103GPJ	1	K34104GPJ	1
K34101GPO	1	K34102GPO	1	K34103GPO	1	K34104GPO	1
K34101GPS	1	K34102GPS	1	K34103GPS	1	K34104GPS	1
K34101MBS	1	K34102MBS	1	K34103MBS	1	K34104MBS	1
K34101MBB	1	K34102MBB	1	K34103MBB	1	K34104MBB	1
K34101MCI	1	K34102MCI	1	K34103MCI	1	K34104MCI	1
K34101MSP	1	K34102MSP	1	K34103MSP	1	K34104MSP	1
K34101MST	1	K34102MST	1	K34103MST	1	K34104MST	1
K34101NBO	1	K34102NBO	1	K34103NBO	1	K34104NBO	1
K34101NCH	1	K34102NCH	1	K34103NCH	1	K34104NCH	1
K34101NDH	1	K34102NDH	1	K34103NDH	1	K34104NDH	1
K34101NDW	1	K34102NDW	1	K34103NDW	1	K34104NDW	1

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

Elements

Electronic Dimmers

2 WAY DOUBLE
25-300W/240VA
TRAILING EDGE

1 WAY 6AX
1-10V

Rotary Dimmers

2 WAY SINGLE
230V A.C. 50HZ
60W/VA MIN. -
500W/400VA MAX

2 WAY DOUBLE
230V A.C. 50HZ
40W/VA MIN. -
300W/240VA MAX.
FOR EACH DIMMER

Grid Modular Frontplates

1 MODULE

SYNTHETIC FINISHES

CHALK WHITE – SCW	K34105SCW	1	K34499SCW	1	K34301SCW	1	K34522SCW	1	K35131SCW	1
NATURAL STONE – SNS	K34105SNS	1	K34499SNS	1	K34301SNS	1	K34522SNS	1	K35131SNS	1
BEACH PEBBLE – SBP	K34105SBP	1	K34499SBP	1	K34301SBP	1	K34522SBP	1	K35131SBP	1
GLASS EFFECT FINISHES										
ICE WHITE – GIW	K34105GIW	1	K34499GIW	1	K34301GIW	1	K34522GIW	1	K35131GIW	1
POLISHED JADE – GPJ	K34105GPJ	1	K34499GPJ	1	K34301GPJ	1	K34522GPJ	1	K35131GPJ	1
POLISHED ONYX – GPO	K34105GPO	1	K34499GPO	1	K34301GPO	1	K34522GPO	1	K35131GPO	1
POLISHED STONE – GPS	K34105GPS	1	K34499GPS	1	K34301GPS	1	K34522GPS	1	K35131GPS	1
METALLIC FINISHES										
BRUSHED STEEL – MBS	K34105MBS	1	K34499MBS	1	K34301MBS	1	K34522MBS	1	K35131MBS	1
BRUSHED BRONZE – MBB	K34105MBB	1	K34499MBB	1	K34301MBB	1	K34522MBB	1	K35131MBB	1
CAST IRON – MCI	K34105MCI	1	K34499MCI	1	K34301MCI	1	K34522MCI	1	K35131MCI	1
SATIN PLATINUM – MSP	K34105MSP	1	K34499MSP	1	K34301MSP	1	K34522MSP	1	K35131MSP	1
SATIN TITANIUM – MST	K34105MST	1	K34499MST	1	K34301MST	1	K34522MST	1	K35131MST	1
NATURAL FINISHES										
BRITISH OAK – NBO	K34105NBO	1	K34499NBO	1	K34301NBO	1	K34522NBO	1	K35131NBO	1
CREAM HIDE – NCH	K34105NCH	1	K34499NCH	1	K34301NCH	1	K34522NCH	1	K35131NCH	1
DARK HIDE – NDH	K34105NDH	1	K34499NDH	1	K34301NDH	1	K34522NDH	1	K35131NDH	1
DARK WENGE – NDW	K34105NDW	1	K34499NDW	1	K34301NDW	1	K34522NDW	1	K35131NDW	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-1:2004

MOUNTING BOXES
35mm
866ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS5733:2010

Includes mounting frame

Grid Modules

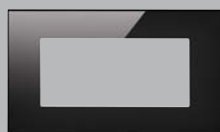
2 MODULE

3 MODULE

4 MODULE

1 WAY SP
10 AMP

1 WAY SP
LED LOCATOR
10 AMP



K35132SCW	1	K35133SCW	1	K35134SCW	1		
K35132SNS	1	K35133SNS	1	K35134SNS	1		
K35132SBP	1	K35133SBP	1	K35134SBP	1		
K35132GIW	1	K35133GIW	1	K35134GIW	1		
K35132GPJ	1	K35133GPJ	1	K35134GPJ	1		
K35132GPO	1	K35133GPO	1	K35134GPO	1		
K35132GPS	1	K35133GPS	1	K35134GPS	1		
K35132MBS	1	K35133MBS	1	K35134MBS	1	K34881SCW	1
K35132MBB	1	K35133MBB	1	K35134MBB	1	K34881SNS	1
K35132MCI	1	K35133MCI	1	K35134MCI	1	K34881SBP	1
K35132MSP	1	K35133MSP	1	K35134MSP	1	K34881BLK	1
K35132MST	1	K35133MST	1	K35134MST	1		
K35132NBO	1	K35133NBO	1	K35134NBO	1		
K35132NCH	1	K35133NCH	1	K35134NCH	1		
K35132NDH	1	K35133NDH	1	K35134NDH	1		
K35132NDW	1	K35133NDW	1	K35134NDW	1		

MOUNTING BOXES
35mm
886ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS5733:2010

MOUNTING BOXES
35mm
886ZIC
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS5733:2010

MOUNTING BOXES
35mm
886ZIC
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS5733:2010

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

Includes mounting frame

Elements

Grid Modules

1 WAY SP
WIDE ROCKER
10 AMP



1 WAY SP
WIDE ROCKER
LED LOCATOR
10 AMP



2 WAY SP
10 AMP



2 WAY SP
LED LOCATOR
10 AMP



SYNTHETIC FINISHES

CHALK WHITE – SCW	K34981SCW	1	K34981NSCW	1	K34882SCW	1	K34882NSCW	1
NATURAL STONE – SNS	K34981SNS	1	K34981NSNS	1	K34882SNS	1	K34882NSNS	1
BEACH PEBBLE – SBP	K34981SBP	1	K34981NSBP	1	K34882SBP	1	K34882NSBP	1
BLACK – BLK	K34981BLK	1	K34981NBLK	1	K34882BLK	1	K34882NBLK	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

These switches do NOT have to be
derated when used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be
derated when used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be
derated when used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be
derated when used with fluorescent or
inductive loads.
BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Elements

2 WAY SP
WIDE ROCKER
10 AMP



2 WAY SP
WIDE ROCKER
LED LOCATOR
10 AMP



2 WAY SP
RETRACTIVE
MARKED 'PRESS'
10 AMP



2 WAY SP
WIDE ROCKER
RETRACTIVE
MARKED 'PRESS'
10 AMP



K34982SCW	1	K34982NSCW	1	K34910SCW	1	K34911SCW	1
K34982SNS	1	K34982NSNS	1	K34910SNS	1	K34911SNS	1
K34982SBP	1	K34982NSBP	1	K34910SBP	1	K34911SBP	1
K34982BLK	1	K34982NBLK	1	K34910BLK	1	K34911BLK	1

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

Elements

Grid Modules

2 WAY SP
RETRACTIVE
MARKED WITH
BELL SYMBOL
10 AMP

2 WAY SP
WIDE ROCKER
RETRACTIVE
MARKED WITH
BELL SYMBOL
10 AMP

2 WAY SP
RETRACTIVE PUSH
10 AMP

2 WAY SP
WIDE ROCKER
RETRACTIVE PUSH
10 AMP

SYNTHETIC FINISHES

CHALK WHITE – SCW	K34885BSCW	1	K34985BSCW	1	K34885SCW	1	K34985SCW	1
NATURAL STONE – SNS	K34885BSNS	1	K34985BSNS	1	K34885SNS	1	K34985SNS	1
BEACH PEBBLE – SBP	K34885BSBP	1	K34985BSBP	1	K34885SBP	1	K34985SBP	1
BLACK – BLK	K34885BBLK	1	K34985BBLK	1	K34885BLK	1	K34985BLK	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

2 WAY
CENTRE OFF
RETRACTIVE
10 AMP



2 WAY
WIDE ROCKER
CENTRE OFF
RETRACTIVE
10 AMP



WIDE ROCKER
INTERMEDIATE
10 AMP



1 WAY SP
20 AMP



1 WAY SP
LED LOCATOR
20 AMP



K34900SCW	1	K34901SCW	1	K34993SCW	1	K34891SCW	1	K34891NSCW	1
K34900SNS	1	K34901SNS	1	K34993SNS	1	K34891SNS	1	K34891NSNS	1
K34900SBP	1	K34901SBP	1	K34993SBP	1	K34891SBP	1	K34891NSBP	1
K34900BLK	1	K34901BLK	1	K34993BLK	1	K34891BLK	1	K34891NBLK	1

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

Elements

Grid Modules

1 WAY SP
WIDE ROCKER
20 AMP



1 WAY SP
WIDE ROCKER
LED LOCATOR
20 AMP



2 WAY SP
20 AMP



2 WAY SP
LED LOCATOR
20 AMP



SYNTHETIC FINISHES

CHALK WHITE – SCW	K34991SCW	1	K34991NSCW	1	K34892SCW	1	K34892NSCW	1
NATURAL STONE – SNS	K34991SNS	1	K34991NSNS	1	K34892SNS	1	K34892NSNS	1
BEACH PEBBLE – SBP	K34991SBP	1	K34991NSBP	1	K34892SBP	1	K34892NSBP	1
BLACK – BLK	K34991BLK	1	K34991NBLK	1	K34892BLK	1	K34892NBLK	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Elements

WIRING DEVICES
DECORATIVE

2 WAY SP
WIDE ROCKER
20 AMP



2 WAY SP
WIDE ROCKER
LED LOCATOR
20 AMP



INTERMEDIATE
20 AMP



INTERMEDIATE
LED LOCATOR
20 AMP



K34992SCW	1	K34992NSCW	1	K34894SCW	1	K34894NSCW	1
K34992SNS	1	K34992NSNS	1	K34894SNS	1	K34894NSNS	1
K34992SBP	1	K34992NSBP	1	K34894SBP	1	K34894NSBP	1
K34992BLK	1	K34992NBLK	1	K34894BLK	1	K34894NBLK	1

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

Elements

Grid Modules

WIDE ROCKER
INTERMEDIATE
LED LOCATOR
20 AMP

1 WAY DP
20 AMP

1 WAY DP
LED LOCATOR
20 AMP

1 WAY DP
WIDE ROCKER
20 AMP



SYNTHETIC FINISHES

CHALK WHITE – SCW	K34994NSCW	1	K34896SCW	1	K34896NSCW	1	K34996SCW	1
NATURAL STONE – SNS	K34994SNS	1	K34896SNS	1	K34896SNS	1	K34996SNS	1
BEACH PEBBLE – SBP	K34994NSBP	1	K34896SBP	1	K34896NSBP	1	K34996SBP	1
BLACK – BLK	K34994NBLK	1	K34896BLK	1	K34896NBLK	1	K34996BLK	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Elements

WIRING DEVICES
DECORATIVE

2 WAY
WIDE ROCKER
LED LOCATOR
20 AMP

FUSE UNIT
13 AMP

BLANK INSERT



K34992NSCW	1	K34890SCW	1	K34880SCW	1
K34992NSNS	1	K34890SNS	1	K34880SNS	1
K34992NSBP	1	K34890SBP	1	K34880SBP	1
K34992NBLK	1	K34890BLK	1	K34880BLK	1

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

BS5733:2010

BS5733:2010



Elements

Euro Modular Frontplates



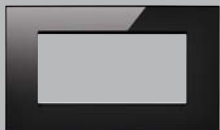

1 MODULE
25 X 50MM

2 MODULE
50 X 50MM

4 MODULE
100 X 50MM

Wireless Transmitters for Echo™

1 CHANNEL

				
SYNTHETIC FINISHES				
CHALK WHITE – SCW	K35111SCW 1	K35112SCW 1	K35114SCW 1	K35208SCW 1
NATURAL STONE – SNS	K35111SNS 1	K35112SNS 1	K35114SNS 1	K35208SNS 1
BEACH PEBBLE – SBP	K35111SBP 1	K35112SBP 1	K35114SBP 1	K35208SBP 1
GLASS EFFECT FINISHES				
ICE WHITE – GIW	K35111GIW 1	K35112GIW 1	K35114GIW 1	K35208GIW 1
POLISHED JADE – GPJ	K35111GPJ 1	K35112GPJ 1	K35114GPJ 1	K35208GPJ 1
POLISHED ONYX – GPO	K35111GPO 1	K35112GPO 1	K35114GPO 1	K35208GPO 1
POLISHED STONE – GPS	K35111GPS 1	K35112GPS 1	K35114GPS 1	K35208GPS 1
METALLIC FINISHES				
BRUSHED STEEL – MBS	K35111MBS 1	K35112MBS 1	K35114MBS 1	K35208MBS 1
BRUSHED BRONZE – MBB	K35111MBB 1	K35112MBB 1	K35114MBB 1	K35208MBB 1
CAST IRON – MCI	K35111MCI 1	K35112MCI 1	K35114MCI 1	K35208MCI 1
SATIN PLATINUM – MSP	K35111MSP 1	K35112MSP 1	K35114MSP 1	K35208MSP 1
SATIN TITANIUM – MST	K35111MST 1	K35112MST 1	K35114MST 1	K35208MST 1
NATURAL FINISHES				
BRITISH OAK – NBO	K35111NBO 1	K35112NBO 1	K35114NBO 1	K35208NBO 1
CREAM HIDE – NCH	K35111NCH 1	K35112NCH 1	K35114NCH 1	K35208NCH 1
DARK HIDE – NDH	K35111NDH 1	K35112NDH 1	K35114NDH 1	K35208NDH 1
DARK WENGE – NDW	K35111NDW 1	K35112NDW 1	K35114NDW 1	K35208NDW 1

LEAD TIMES
Please contact our Customer Services Department on
01268 563 404

MOUNTING BOXES
Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010
Refer to appropriate module for minimum box depth.
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010 where applicable.

MOUNTING BOXES
Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010
Refer to appropriate module for minimum box depth.
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010 where applicable.

MOUNTING BOXES
Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010
Refer to appropriate module for minimum box depth.
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 5733:2010 where applicable.

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
OPERATING FREQUENCY
868.3Mhz
ETSI EN 301 489-1 + -3 :
ETSI EN 300 220-3

No grid required, modules just clip into place

2 CHANNEL



1 CHANNEL WITH SYMBOLS



2 CHANNEL WITH SYMBOLS



K35209SCW	1	K35206SCW	1	K35207SCW	1
K35209SNS	1	K35206SNS	1	K35207SNS	1
K35209SBP	1	K35206SBP	1	K35207SBP	1
K35209GIW	1	K35206GIW	1	K35207GIW	1
K35209GPJ	1	K35206GPJ	1	K35207GPJ	1
K35209GPO	1	K35206GPO	1	K35207GPO	1
K35209GPS	1	K35206GPS	1	K35207GPS	1
K35209MBS	1	K35206MBS	1	K35207MBS	1
K35209MBB	1	K35206MBB	1	K35207MBB	1
K35209MCI	1	K35206MCI	1	K35207MCI	1
K35209MSP	1	K35206MSP	1	K35207MSP	1
K35209MST	1	K35206MST	1	K35207MST	1
K35209NBO	1	K35206NBO	1	K35207NBO	1
K35209NCH	1	K35206NCH	1	K35207NCH	1
K35209NDH	1	K35206NDH	1	K35207NDH	1
K35209NDW	1	K35206NDW	1	K35207NDW	1

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
ETSI EN 301489-1/3
ETSI EN 300220-1/2

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
ETSI EN 301489-1/3
ETSI EN 300220-1/2

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
ETSI EN 301489-1/3
ETSI EN 300220-1/2



Elements

Other Switch Products

ROLLER
SHUTTER/BLIND
CONTROL
10 AMP

3 GANG
2 WAY SP
20 AMP

DO NOT DISTURB
/ MAKE UP ROOM
SWITCH

BELL PUSH
DO NOT DISTURB
/ MAKE UP ROOM
SWITCH

PIR
DETECTOR

KEY CARD
SWITCH
50/60HZ
2 WAY
30 SEC OFF
DELAY

SYNTHETIC FINISHES

CHALK WHITE – SCW	K35203SCW	1	K34373SCW	1	K33900DNDSCW	1	K33885DNDSCW	1	K35202SCW	1	K35201SCW	1
NATURAL STONE – SNS	K35203SNS	1	K34373SNS	1	K33900DNDSNS	1	K33885DNDSNS	1	K35202SNS	1	K35201SNS	1
BEACH PEBBLE – SBP	K35203SBP	1	K34373SBP	1	K33900DND SBP	1	K33885DND SBP	1	K35202SBP	1	K35201SBP	1

GLASS EFFECT FINISHES

ICE WHITE – GIW	K35203GIW	1	K34373GIW	1	K33900DNDGIW	1	K33885DNDGIW	1	K35202GIW	1	K35201GIW	1
POLISHED JADE – GPJ	K35203GPJ	1	K34373GPJ	1	K33900DNDGPJ	1	K33885DNDGPJ	1	K35202GPJ	1	K35201GPJ	1
POLISHED ONYX – GPO	K35203GPO	1	K34373GPO	1	K33900DNDGPO	1	K33885DNDGPO	1	K35202GPO	1	K35201GPO	1
POLISHED STONE – GPS	K35203GPS	1	K34373GPS	1	K33900DNDGPS	1	K33885DNDGPS	1	K35202GPS	1	K35201GPS	1

METALLIC FINISHES

BRUSHED STEEL – MBS	K35203MBS	1	K34373MBS	1	K33900DNDMBS	1	K33885DNDMBS	1	K35202MBS	1	K35201MBS	1
BRUSHED BRONZE – MBB	K35203MBB	1	K34373MBB	1	K33900DNDMBB	1	K33885DNDMBB	1	K35202MBB	1	K35201MBB	1
CAST IRON – MCI	K35203MCI	1	K34373MCI	1	K33900DNDMCI	1	K33885DNDMCI	1	K35202MCI	1	K35201MCI	1
SATIN PLATINUM – MSP	K35203MSP	1	K34373MSP	1	K33900DNDMSP	1	K33885DNDMSP	1	K35202MSP	1	K35201MSP	1
SATIN TITANIUM – MST	K35203MST	1	K34373MST	1	K33900DNDMST	1	K33885DNDMST	1	K35202MST	1	K35201MST	1

NATURAL FINISHES

BRITISH OAK – NBO	K35203NBO	1	K34373NBO	1	K33900DNDNBO	1	K33885DNDNBO	1	K35202NBO	1	K35201NBO	1
CREAM HIDE – NCH	K35203NCH	1	K34373NCH	1	K33900DNDNCH	1	K33885DNDNCH	1	K35202NCH	1	K35201NCH	1
DARK HIDE – NDH	K35203NDH	1	K34373NDH	1	K33900DNDNDH	1	K33885DNDNDH	1	K35202NDH	1	K35201NDH	1
DARK WENGE – NDW	K35203NDW	1	K34373NDW	1	K33900DNDNDW	1	K33885DNDNDW	1	K35202NDW	1	K35201NDW	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
35mm
866ZIC
47mm
877ZIC
IEC 60669-1

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
These switches do NOT
have to be derated when
used with fluorescent or
inductive loads
BS EN 60669-1:1999

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
IEC 60669-2-1

MOUNTING BOXES
35mm
866ZIC
46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
IEC 60669-2-1

Euro Modules

RJ11/12
1 MODULE
25 X 50MM






RJ45 CAT 6
1 MODULE
25 X 50MM

MASTER
TELEPHONE
1 MODULE
25 X 50MM

SECONDARY
TELEPHONE
1 MODULE
25 X 50MM

SINGLE TV
CO-AXIAL
NON-ISOLATED
(IEC MALE)
1 MODULE
25 X 50MM

SYNTHETIC FINISHES

SYNTHETIC FINISHES					
CHALK WHITE – SCW	K5887SCW 5	K5846SCW 5	K5820SCW 5	K5821SCW 5	K5850SCW 5
NATURAL STONE – SNS	K5887SNS 5	K5846SNS 5	K5820SNS 5	K5821SNS 5	K5850SNS 5
BEACH PEBBLE – SBP	K5887SBP 5	K5846SBP 5	K5820SBP 5	K5821SBP 5	K5850SBP 5
BLACK – BLK	K5887BLK 5	K5846BLK 5	K5820BLK 5	K5821BLK 5	K5850BLK 5

Suitable for both RJ11 and RJ12 jacks
RJ11; 4 wire
RJ12; 6 wire
MOUNTING BOXES
Minimum box depth 25mm
FCC68
EN 41003

Cat 6 performance.
Suitable for both 568A and 568B wiring schemes.
MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

MOUNTING BOXES
Minimum depth 25mm
BS 6312 Pt 2

MOUNTING BOXES
Minimum depth 25mm
BS 6312 Pt 2

Fully screened non isolated single TV outlets for connection to a single TV co-axial lead.
MOUNTING BOXES
Min box depth 32mm
BS 3041:1997
IEC 169-2:1965
BS EN 50083 & BS 5733:2010 where applicable

Elements

Euro Modules

SINGLE OUTLET
(IEC FEMALE)
1 MODULE
25 X 50MM

SINGLE F-TYPE
SATELLITE SOCKET
1 MODULE
25 X 50MM

TWIN OUTLET
TV/FM DIPLEXER
2 MODULE
50 X 50MM

TRIPLE OUTLET
TV/FM/SATELLITE
TRIPLEXER
2 MODULE
50 X 50MM

QUAD OUTLET
TV-FM/DAB-2XSAT
2 MODULE
50 X 50MM

SYNTHETIC FINISHES

CHALK WHITE – SCW	K5851SCW	5	K5855SCW	5	K5852DABSCW	5	K5853DABSCW	5	K5854DABSCW	5
NATURAL STONE – SNS	K5851SNS	5	K5855SNS	5	K5852DABSNS	5	K5853DABSNS	5	K5854DABSNS	5
BEACH PEBBLE – SBP	K5851SBP	5	K5855SBP	5	K5852DABSBP	5	K5853DABSBP	5	K5854DABSBP	5
BLACK – BLK	K5851BLK	5	K5855BLK	5	K5852DABBLK	5	K5853DABBLK	5	K5854DABBLK	5

Fully screened non isolated TV outlets containing a combination of single, TV/FM Diplexer and TV/FM/SAT Triplexer for use within digital TV systems and interactive TV services. Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.

PERFORMANCE SINGLE OUTLETS

TV/FM Iec Male Or Female
DC-950MHz
SAT F-TYPE
DC-1.75GHz

MOUNTING BOXES

Min box depth 32mm
BS 3041:1997
IEC 169-2:1965
BS EN 50083 & BS 5733:2010
where applicable

TV/FM/SAT PRODUCTS

Outlet Diplexer
TV 5-65MHz
470-862MHz
FM/DAB 87.5-108MHz FM
SAT N/A

TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

Outlet Diplexer
TV 5-65MHz
470-862MHz
FM/DAB 87.5-230MHz FM
SAT OR SAT1 N/A
SAT2

Outlet Triplexer
TV 5-65MHz
470-862MHz
87.5-108MHz
SAT1 950-2300MHz

Outlet Triplexer
TV 5-65MHz
470-862MHz
87.5-230MHz
SAT1 950-2300MHz
SAT2 5-2300MHz

Euro Power Modules

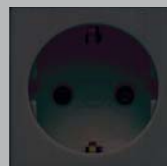
AMERICAN
127V SHUTTERED
2 MODULE 50 X 50MM
(NON UK)
15 AMP

UK
250V SHUTTERED
2 MODULE
50 X 50MM
5 AMP

UK
250V
2 MODULE
50 X 50MM
13 AMP

FRENCH/BELGIAN
2P+E
250V SHUTTERED
2 MODULE
50 X 50MM
(NON UK)
16 AMP

FEMALE HDMI
OUTLET
2 MODULE
50 X 50MM



K5832SCW	10	K5833SCW	10	K5830SCW	10	K5831SCW	10	K5807SCW	5
K5832SNS	10	K5833SNS	10	K5830SNS	10	K5831SNS	10	K5807SNS	5
K5832SBP	10	K5833SBP	10	K5830SBP	10	K5831SBP	10	K5807SBP	5
K5832BLK	10	K5833BLK	10	K5830BLK	10	K5831BLK	10	K5807BLK	5

MOUNTING BOX
35mm minimum
46mm (for extra wiring space)
SASO 2204:2003

MOUNTING BOX
35mm minimum
46mm (for extra wiring space)
BS 546: 1950

MOUNTING BOX
35mm minimum
46mm (for extra wiring space)
BS 1363: Pt2: 1995

MOUNTING BOX
46mm
IEC 60884-1: 2006

K5807 Female HDMI Outlet
is HDMI 1.1, 1.2, 1.3 and 1.4
compatible, HDCP compliant.
DATA RATE
Up to 2.25 Gbps
SCAN
Up to 1080p/1920x1200
INPUT CONNECTOR
1 x HDMI Female (Type A)
OUTPUT CONNECTOR
1 x HDMI Female (Type A)
Supports high resolution input
PC
VGA, SVGA, SXVGA (1280x1024)
and UXGA (1600x1200,
1920x1200)
HDTV
480p, 720p, 1080i and 1080p
HDMI input cable should be no
larger than 20m.
MOUNTING BOX
46mm

Elements

Euro Modules

USB CHARGING 2 MODULE 50 X 50MM	RCA TO SCREW TERMINATION SET 1 RED AND 1 BLACK 1 MODULE 25 X 50MM	TERMINATION SET 1 YELLOW, 1 WHITE AND 1 RED 1 MODULE 25 X 50MM	AUDIO BINDING POST FOR SINGLE LOUD SPEAKER 1 MODULE 25 X 50MM	BLANK 1 MODULE 25 X 50MM	BLANK 2 MODULE 50 X 50MM
---------------------------------------	---	--	---	--------------------------------	--------------------------------

SYNTHETIC FINISHES

CHALK WHITE – SCW	K5837SCW	1	K5806SCW	5	K5809SCW	5	K5805SCW	5	K188SCW	10	K180SCW	10
NATURAL STONE – SNS	K5837SNS	1	K5806SNS	5	K5809SNS	5	K5805SNS	5	K188SNS	10	K180SNS	10
BEACH PEBBLE – SBP	K5837SBP	1	K5806SBP	5	K5809SBP	5	K5805SBP	5	K188SBP	10	K180SBP	10
BLACK – BLK	K5837BLK	1	K5806BLK	5	K5809BLK	5	K5805BLK	5	K188BLK	10	K180BLK	10

USB charging sockets,
each capable of
supporting 2A charge
(total of 2A).
K5837 MOUNTING BOX
Minimum Box depth
35mm
46mm for extra wiring
space
IEC 60950-1
IEC 61000-6-1/3

MOUNTING BOX
35mm minimum

MOUNTING BOX
35mm minimum

MOUNTING BOX
35mm minimum

BS 5733: 2010 where
applicable

BS 5733: 2010 where
applicable

Blank Plates

1 GANG

2 GANG

SYNTHETIC FINISHES

	1 GANG	2 GANG
CHALK WHITE – SCW	K34330SCW 1	K34329SCW 1
NATURAL STONE – SNS	K34330SNS 1	K34329SNS 1
BEACH PEBBLE – SBP	K34330SBP 1	K34329SBP 1

MOUNTING BOXES
FLUSH
866ZIC
DIMENSIONS:
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010

MOUNTING BOXES
FLUSH
866ZIC
DIMENSIONS:
86 x 146mm
FIXING CENTRES
120.6mm
BS 5733:2010





ASPECT

RANGE INTRODUCTION

The simple, clean styling of Aspect is both modern and contemporary, so it looks at home anywhere, in almost any kind of environment where style and quality are important.

The profile is just 4mm slim, so it's discreet, as well as stylish, while the concealed screws leave an elegant frontplate, making it more attractive still.

In addition to impressive looks, with Aspect comes unrivalled safety. Utilising MK's 3-pin operated safety shutter, that prevents misuse and unsafe access to live circuitry, Aspect offers the user the peace of mind and comfort that they have the safest range of wiring devices available installed in their surroundings.

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches, only available from MK Electric and in finishes to complement the Aspect range. Please see page 21 for details.

HOW TO SPECIFY

A slimline metal, flush mounting range of wiring devices with screwless frontplates. Snap-on frontplates with a 4mm profile easily removable with a flat blade screwdriver through discreet bottom access apertures. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large and concave with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

FEATURES & BENEFITS

SLIM PROFILE 'SCREWLESS' FRONT PLATES OF ONLY 4MM

Provide a clean and flawless look that complements the décor of the finest interiors.

TOTAL SAFETY

3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position.

COMPREHENSIVE RANGE OF SOCKETS, SWITCHES AND MODULAR ANCILLARY PRODUCTS

Mean that whatever the application, the Aspect range has a wiring device to suit.

13 STANDARD HIGH QUALITY FINISHES

Aspect now offers a range of fresh, reassuring and creative colours.

DESIGN SERVICE

Perfect for when only a creative solution will do.



Technical Hotline
+44 (0)1268 563720

Aspect

WIRING DEVICES
DECORATIVE

MATCHING METAL CAPPED
ROCKERS AVAILABLE AS
STANDARD

(excluding porcelain white
finish and switches with
neons)

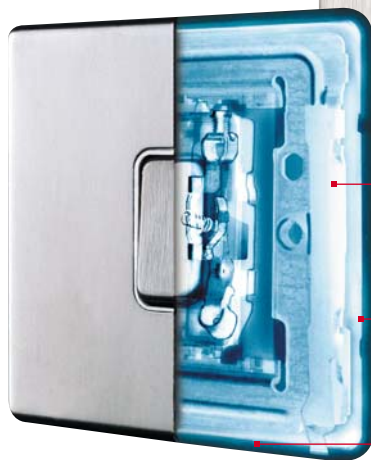
CHOICE OF BLACK
OR WHITE INSERTS
ON MOST FINISHES

Provide impact
resistance in any
environment

DOUBLE POLE
SWITCHING

13 HIGH QUALITY
FINISHES TO CHOOSE
FROM

STYLISH
SLIM DESIGN
Frontplate profile
only 4mm



PATENTED SPRING CLIP FOR
POSITIVE EARTHING

CORROSION RESISTANT
SURFACE TREATED FRAME

SCREWDRIVER GUIDING RAMP

3-PIN "CHILD RESISTANT SHUTTER SYSTEM"

Designed to inhibit access to the electricity supply, unless all 3 pins of
a standard British 13A plug are in position

Terminal screws are backed out and
captive Terminals are upwards facing
to make installation easier.

Funnel entrance to terminals.

Clear terminal markings for easy
identification.

As well as a wide choice of finishes, MK Aspect is available in a range of
outlets for interactive and digital TV, IT and telecomms services. There are
reliable and effective dimmer switches, and a comprehensive range of modular
switches – all simple to install.



Switchsocket Outlets



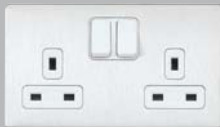

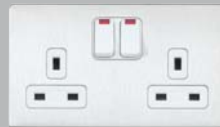
1 GANG DP
DUAL EARTH
13 AMP

1 GANG DP
WITH NEON
DUAL EARTH
13 AMP

2 GANG DP
DUAL EARTH
13 AMP

2 GANG DP
WITH 2 X USB
CHARGING PORTS
DUAL EARTH
13 AMP

2 GANG DP
WITH NEON
DUAL EARTH
13 AMP

FINISHES					
BRUSHED STAINLESS STEEL	K24357BSS* 1	K24657BSS* 1	K24347BSS* 1	K24343BSS* 1	K24647BSS* 1
LACQUERED BRUSHED STEEL	K24357LBS* 1	K24657LBS* 1	K24347LBS* 1	K24343LBS* 1	K24647LBS* 1
BRUSHED CHROME	K24357BRC* 1	K24657BRC* 1	K24347BRC* 1	K24343BRC* 1	K24647BRC* 1
POLISHED CHROME	K24357POC* 1	K24657POC* 1	K24347POC* 1	K24343POC* 1	K24647POC* 1
SATIN GOLD	K24357SAG* 1	K24657SAG* 1	K24347SAG* 1	K24343SAG* 1	K24647SAG* 1
PORCELAIN WHITE	K24357WHIW 1	K24657WHIW 1	K24347WHIW 1	K24343WHIW 1	K24647WHIW 1
LUSTROUS IVORY	K24357LIVW 1	K24657LIVW 1	K24347LIVW 1	K24343LIVW 1	K24647LIVW 1
LUSTROUS BLACK	K24357LBKB 1	K24657LBKB 1	K24347LBKB 1	K24343LBKB 1	K24647LBKB 1
POLISHED BRASS	K24357PBR* 1	K24657PBR* 1	K24347PBR* 1	K24343PBR* 1	K24647PBR* 1
TEXTURED IRON	K24357TIRB 1	K24657TIRB 1	K24347TIRB 1	K24343TIRB 1	K24647TIRB 1
DESERT BRONZE	K24357DBZB 1	K24657DBZB 1	K24347DBZB 1	K24343DBZB 1	K24647DBZB 1
ANTIQUE BRASS	K24357ABSB 1	K24657ABSB 1	K24347ABSB 1	K24343ABSB 1	K24647ABSB 1
TEXTURED COPPER	K24357TCOB 1	K24657TCOB 1	K24347TCOB 1	K24343TCOB 1	K24647TCOB 1

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35MM
866ZIC
FLUSH 46MM
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35MM
866ZIC
FLUSH 46MM
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995
Neon is only available in white or
black insulated rocker.

MOUNTING BOXES
FLUSH 35MM
886ZIC
FLUSH 47MM
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

USB charging sockets, each
capable of supporting 2A charge
(total of 2A)
Patress available for use where
existing back box is too shallow,
see page 34

MOUNTING BOXES
FLUSH 35MM
886ZIC
FLUSH 47MM
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 5733:2010

MOUNTING BOXES
FLUSH 35MM
886ZIC
FLUSH 47MM
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
Neon is only available in white or
black insulated rocker.

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

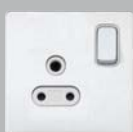
Multimedia Plates

1 GANG DP
ROUND PIN
5 AMP

1 GANG DP
ROUND PIN
15 AMP

2 GANG DP DUAL EARTH
SWITCHSOCKET, EURO 2 MODULE
50 X 50MM (RIGHT SIDE)
13 AMP

2 GANG DP DUAL EARTH
SWITCHSOCKET, EURO 2 MODULE
50 X 50MM (LEFT SIDE)
13 AMP



K24382BSS*	1	K24383BSS*	1	K24206BSS*	1	K24207BSS*	1
K24382LBS*	1	K24383LBS*	1	K24206LBS*	1	K24207LBS*	1
K24382BRC*	1	K24383BRC*	1	K24206BRC*	1	K24207BRC*	1
K24382POC*	1	K24383POC*	1	K24206POC*	1	K24207POC*	1
K24382SAG*	1	K24383SAG*	1	K24206SAG*	1	K24207SAG*	1
K24382WHIW	1	K24383WHIW	1	K24206WHIW	1	K24207WHIW	1
K24382LIVW	1	K24383LIVW	1	K24206LIVW	1	K24207LIVW	1
K24382LBKB	1	K24383LBKB	1	K24206LBKB	1	K24207LBKB	1
K24382PBR*	1	K24383PBR*	1	K24206PBR*	1	K24207PBR*	1
K24382TIRB	1	K24383TIRB	1	K24206TIRB	1	K24207TIRB	1
K24382DBZB	1	K24383DBZB	1	K24206DBZB	1	K24207DBZB	1
K24382ABSB	1	K24383ABSB	1	K24206ABSB	1	K24207ABSB	1
K24382TCOB	1	K24383TCOB	1	K24206TCOB	1	K24207TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35MM
866ZIC
FLUSH 46MM
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

MOUNTING BOXES
FLUSH 35MM
866ZIC
FLUSH 46MM
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

MOUNTING BOXES
FLUSH 47MM
870ZIC

BS 1363 Pt 2:1995

MOUNTING BOXES
FLUSH 47MM
870ZIC

BS 1363 Pt 2:1995

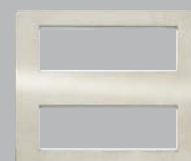
Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details.

2 GANG DP DUAL EARTH
SWITCHSOCKET, EURO 4
MODULE 50 X 50MM (X2)
13 AMP

EURO 8 MODULE
100 X 50MM (X2)

EURO 12 MODULE
150 X 50MM (X2)



FINISHES						
BRUSHED STAINLESS STEEL	K24208BSS*	1	K24209BSS	1	K24210BSS	1
LACQUERED BRUSHED STEEL	K24208LBS*	1	K24209LBS	1	K24210LBS	1
BRUSHED CHROME	K24208BRC*	1	K24209BRC	1	K24210BRC	1
POLISHED CHROME	K24208POC*	1	K24209POC	1	K24210POC	1
SATIN GOLD	K24208SAG*	1	K24209SAG	1	K24210SAG	1
PORCELAIN WHITE	K24208WHIW	1	K24209WHI	1	K24210WHI	1
LUSTROUS IVORY	K24208LIVW	1	K24209LIV	1	K24210LIV	1
LUSTROUS BLACK	K24208LBKB	1	K24209LBK	1	K24210LBK	1
POLISHED BRASS	K24208PBR*	1	K24209PBR	1	K24210PBR	1
TEXTURED IRON	K24208TIRB	1	K24209TIR	1	K24210TIR	1
DESERT BRONZE	K24208DBZB	1	K24209DBZ	1	K24210DBZ	1
ANTIQUE BRASS	K24208ABSB	1	K24209ABS	1	K24210ABS	1
TEXTURED COPPER	K24208TCOB	1	K24209TCO	1	K24210TCO	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 47MM
858ZIC
BS 5733:2010

MOUNTING BOXES
FLUSH 47MM
869ZIC
BS 5733:2010

MOUNTING BOXES
FLUSH 47MM
868ZIC

BS 1363 Pt 2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details.



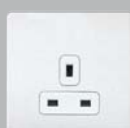
Technical Hotline
+44 (0)1268 563720

Aspect

WIRING DEVICES
DECORATIVE

Socket Outlets

1 GANG
DUAL EARTH
13 AMP



2 GANG
DUAL EARTH
13 AMP



1 GANG
ROUND PIN
5 AMP



Shaver/Toothbrush Supply Outlet

DUAL VOLTAGE
OUTPUT 115/230V
INPUT 220/240V
50/60HZ



K24780BSS*	1	K24781BSS*	1	K24381BSS*	1	K24709BSS*	1
K24780LBS*	1	K24781LBS*	1	K24381LBS*	1	K24709LBS*	1
K24780BRC*	1	K24781BRC*	1	K24381BRC*	1	K24709BRC*	1
K24780POC*	1	K24781POC*	1	K24381POC*	1	K24709POC*	1
K24780SAG*	1	K24781SAG*	1	K24381SAG*	1	K24709SAG*	1
K24780WHIW	1	K24781WHIW	1	K24381WHIW	1	K24709WHIW	1
K24780LIVW	1	K24781LIVW	1	K24381LIVW	1	K24709LIVW	1
K24780LBKB	1	K24781LBKB	1	K24381LBKB	1	K24709LBKB	1
K24780PBR*	1	K24781PBR*	1	K24381PBR*	1	K24709PBR*	1
K24780TIRB	1	K24781TIRB	1	K24381TIRB	1	K24709TIRB	1
K24780DBZB	1	K24781DBZB	1	K24381DBZB	1	K24709DBZB	1
K24780ABSB	1	K24781ABSB	1	K24381ABSB	1	K24709ABSB	1
K24780TCOB	1	K24781TCOB	1	K24381TCOB	1	K24709TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35MM
866ZIC
FLUSH 46MM
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35MM
886ZIC
FLUSH 47MM
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35MM
866ZIC
FLUSH 46MM
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

MOUNTING BOXES
FLUSH
878ZIC
This design incorporates a double wound isolating transformer rated 20VA at 230 or 115 volts and meets BS EN 61558-2-5: 1998 making it safe for use in bathrooms.
Insertion of a shaver/toothbrush plug automatically switches on by energising the primary side of the isolating transformer – removal automatically switches off. The transformer is protected against overload by an automatic solid state overload device with automatic resetting.
DIMENSIONS
146 x 86mm
FIXING CENTRES
120.6mm
BS EN 61558-2-5:1998

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

Aspect

mkelectric.co.uk



Connection Units Switched

DP
13 AMP

DP
WITH NEON
13 AMP

DP WITH
NEON & FLEX OUTLET
13 AMP

Connection Units Unswitched

WITH NEON
13 AMP

FINISHES				
BRUSHED STAINLESS STEEL	K24941BSS* 1	K24961BSS* 1	K24971BSS* 1	K24958BSS* 1
LACQUERED BRUSHED STEEL	K24941LBS* 1	K24961LBS* 1	K24971LBS* 1	K24958LBS* 1
BRUSHED CHROME	K24941BRC* 1	K24961BRC* 1	K24971BRC* 1	K24958BRC* 1
POLISHED CHROME	K24941POC* 1	K24961POC* 1	K24971POC* 1	K24958POC* 1
SATIN GOLD	K24941SAG* 1	K24961SAG* 1	K24971SAG* 1	K24958SAG* 1
PORCELAIN WHITE	K24941WHIW 1	K24961WHIW 1	K24971WHIW 1	K24958WHIW 1
LUSTROUS IVORY	K24941LIVW 1	K24961LIVW 1	K24971LIVW 1	K24958LIVW 1
LUSTROUS BLACK	K24941LBKB 1	K24961LBKB 1	K24971LBKB 1	K24958LBKB 1
POLISHED BRASS	K24941PBR* 1	K24961PBR* 1	K24971PBR* 1	K24958PBR* 1
TEXTURED IRON	K24941TIRB 1	K24961TIRB 1	K24971TIRB 1	K24958TIRB 1
DESERT BRONZE	K24941DBZB 1	K24961DBZB 1	K24971DBZB 1	K24958DBZB 1
ANTIQUE BRASS	K24941ABSB 1	K24961ABSB 1	K24971ABSB 1	K24958ABSB 1
TEXTURED COPPER	K24941TCOB 1	K24961TCOB 1	K24971TCOB 1	K24958TCOB 1

LEAD TIMES

Please contact our Customer Services Department on 01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW = Lustrous Ivory Finish with White inserts

MOUNTING BOXES
FLUSH 47MM
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
Neon is only available in white or black insulated rocker.

MOUNTING BOXES
FLUSH 47MM
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
Neon is only available in white or black insulated rocker.

MOUNTING BOXES
FLUSH 47MM
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
Neon is only available in white or black insulated rocker.

MOUNTING BOXES
FLUSH 47MM
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
Neon is only available in white or black insulated rocker.

Matching metal capped fuse carriers are standard on all Aspect Connection Units (except Porcelain White).

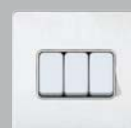
Switches

WITH NEON &
FLEX OUTLET
13 AMP

1 GANG SP
2 WAY
20 AMP

2 GANG SP
2 WAY
20 AMP

3 GANG SP
2 WAY
10 AMP



K24978BSS*	1	K24371BSS*	1	K24372BSS*	1	K24373BSS*	1
K24978LBS*	1	K24371LBS*	1	K24372LBS*	1	K24373LBS*	1
K24978BRC*	1	K24371BRC*	1	K24372BRC*	1	K24373BRC*	1
K24978POC*	1	K24371POC*	1	K24372POC*	1	K24373POC*	1
K24978SAG*	1	K24371SAG*	1	K24372SAG*	1	K24373SAG*	1
K24978WHIW	1	K24371WHIW	1	K24372WHIW	1	K24373WHIW	1
K24978LIVW	1	K24371LIVW	1	K24372LIVW	1	K24373LIVW	1
K24978LBKB	1	K24371LBKB	1	K24372LBKB	1	K24373LBKB	1
K24978PBR*	1	K24371PBR*	1	K24372PBR*	1	K24373PBR*	1
K24978TIRB	1	K24371TIRB	1	K24372TIRB	1	K24373TIRB	1
K24978DBZB	1	K24371DBZB	1	K24372DBZB	1	K24373DBZB	1
K24978ABSB	1	K24371ABSB	1	K24372ABSB	1	K24373ABSB	1
K24978TCOB	1	K24371TCOB	1	K24372TCOB	1	K24373TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW = Lustrous Ivory Finish with White inserts

MOUNTING BOXES
FLUSH 47MM
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

Matching metal capped fuse
carriers are standard on all Aspect
Connection Units
(except Porcelain White).

Switches

1 GANG SP
2 WAY
WITH LARGE ROCKER
20 AMP

2 GANG SP
2 WAY
WITH LARGE ROCKERS
20 AMP

1 GANG SP
2 WAY
WITH WIDE ROCKER
20 AMP

High Current Switches

1 GANG DP
WITH NEON
32 AMP



FINISHES				
BRUSHED STAINLESS STEEL	K23471BSS*1	K23472BSS*1	K23473BSS*1	K24305BSS*1
LACQUERED BRUSHED STEEL	K23471LBS*1	K23472LBS*1	K23473LBS*1	K24305LBS*1
BRUSHED CHROME	K23471BRC*1	K23472BRC*1	K23473BRC*1	K24305BRC*1
POLISHED CHROME	K23471POC*1	K23472POC*1	K23473POC*1	K24305POC*1
SATIN GOLD	K23471SAG*1	K23472SAG*1	K23473SAG*1	K24305SAG*1
PORCELAIN WHITE	K23471WHIW1	K23472WHIW1	K23473WHIW1	K24305WHIW1
LUSTROUS IVORY	K23471LIVW1	K23472LIVW1	K23473LIVW1	K24305LIVW1
LUSTROUS BLACK	K23471LBKB1	K23472LBKB1	K23473LBKB1	K24305LBKB1
POLISHED BRASS	K23471PBR*1	K23472PBR*1	K23473PBR*1	K24305PBR*1
TEXTURED IRON	K23471TIRB1	K23472TIRB1	K23473TIRB1	K24305TIRB1
DESERT BRONZE	K23471DBZB1	K23472DBZB1	K23473DBZB1	K24305DBZB1
ANTIQUE BRASS	K23471ABSB1	K23472ABSB1	K23473ABSB1	K24305ABSB1
TEXTURED COPPER	K23471TCOB1	K23472TCOB1	K23473TCOB1	K24305TCOB1

LEAD TIMES

Please contact our Customer Services Department on 01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW = Lustrous Ivory Finish with White inserts

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
ROCKER DIMENSIONS
22 x 40mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
ROCKER DIMENSIONS
22 x 40mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
ROCKER DIMENSIONS
50 x 40mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 35MM
866ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

1 GANG DP
WITH NEON
50 AMP

Three Pole Fan Isolator

10 AMP

Intelligent Dimmers

2 WAY SINGLE
230V A.C. 50HZ
60W/VA MIN-500W/400VA
MAX



K24336BSS*	1	K24859BSS*	1	K24301BSS	1
K24336LBS*	1	K24859LBS*	1	K24301LBS	1
K24336BRC*	1	K24859BRC*	1	K24301BRC	1
K24336POC*	1	K24859POC*	1	K24301POC	1
K24336SAG*	1	K24859SAG*	1	K24301SAG	1
K24336WHIW	1	K24859WHIW	1	K24301WHI	1
K24336LIVW	1	K24859LIVW	1	K24301LIV	1
K24336LBKB	1	K24859LBKB	1	K24301LBK	1
K24336PBR*	1	K24859PBR*	1	K24301PBR	1
K24336TIRB	1	K24859TIRB	1	K24301TIR	1
K24336DBZB	1	K24859DBZB	1	K24301DBZ	1
K24336ABSB	1	K24859ABSB	1	K24301ABS	1
K24336TCOB	1	K24859TCOB	1	K24301TCO	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 47MM
878ZIC
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 25MM
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-2-4

MOUNTING BOXES
FLUSH 35MM
866ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm

These dimmers employ the latest micro-controller based circuitry to provide electronic soft-start and overload protection. They are suitable for use with good quality electronic or wire-wound transformers. Can also be used with good quality halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

NOT SUITABLE FOR FLUORESCENT LOADS.

Conform to latest standards BS EN 60669-2-1.

All intelligent dimmers have a combined push-on/push-off switch and rotary dimmer control, and are suitable for one or two-way switching. Only one dimmer can be used in a two way switching circuit.



Aspect

Intelligent Dimmers

2 WAY SINGLE 230V
A.C. 50HZ 40W/VA MIN.
300W/240VA MAX.

2 WAY DOUBLE 230V
A.C. 50HZ 40W/VA MIN.
300W/240VA MAX.
FOR EACH DIMMER

Grid Plus Modular Frontplates

SUPPLIED WITH MOUNTING FRAME

1 MODULE

2 MODULE

				
FINISHES				
BRUSHED STAINLESS STEEL	K24521BSS1	K24522BSS1	K24331BSS1	K24332BSS1
LACQUERED BRUSHED STEEL	K24521LBS1	K24522LBS1	K24331LBS1	K24332LBS1
BRUSHED CHROME	K24521BRC1	K24522BRC1	K24331BRC1	K24332BRC1
POLISHED CHROME	K24521POC1	K24522POC1	K24331POC1	K24332POC1
SATIN GOLD	K24521SAG1	K24522SAG1	K24331SAG1	K24332SAG1
PORCELAIN WHITE	K24521WHI1	K24522WHI1	K24331WHI1	K24332WHI1
LUSTROUS IVORY	K24521LIV1	K24522LIV1	K24331LIV1	K24332LIV1
LUSTROUS BLACK	K24521LBK1	K24522LBK1	K24331LBK1	K24332LBK1
POLISHED BRASS	K24521PBR1	K24522PBR1	K24331PBR1	K24332PBR1
TEXTURED IRON	K24521TIR1	K24522TIR1	K24331TIR1	K24332TIR1
DESERT BRONZE	K24521DBZ1	K24522DBZ1	K24331DBZ1	K24332DBZ1
ANTIQUE BRASS	K24521ABS1	K24522ABS1	K24331ABS1	K24332ABS1
TEXTURED COPPER	K24521TCO1	K24522TCO1	K24331TCO1	K24332TCO1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH 35MM
866ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm

MOUNTING BOXES
FLUSH 35MM
866ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm

MOUNTING BOX
FLUSH
891ALM
DIMENSIONS
86 x 86mm
BS 5733:2010

MOUNTING BOX
FLUSH
891ALM
DIMENSIONS
86 x 86mm
BS 5733:2010

These dimmers employ the latest micro-controller based circuitry to provide electronic soft-start and overload protection. They are suitable for use with good quality electronic or wire-wound transformers. Can also be used with good quality halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

NOT SUITABLE FOR FLUORESCENT LOADS.

Conform to latest standards BS EN 60669-2-1.

All intelligent dimmers have a combined push-on/push-off switch and rotary dimmer control, and are suitable for one or two-way switching. Only one dimmer can be used in a two way switching circuit.

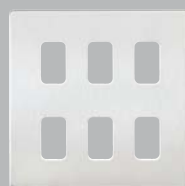
3 MODULE



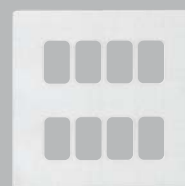
4 MODULE



6 MODULE



8 MODULE



K24333BSS	1	K24334BSS	1	K24346BSS	1	K24348BSS	1
K24333LBS	1	K24334LBS	1	K24346LBS	1	K24348LBS	1
K24333BRC	1	K24334BRC	1	K24346BRC	1	K24348BRC	1
K24333POC	1	K24334POC	1	K24346POC	1	K24348POC	1
K24333SAG	1	K24334SAG	1	K24346SAG	1	K24348SAG	1
K24333WHI	1	K24334WHI	1	K24346WHI	1	K24348WHI	1
K24333LIV	1	K24334LIV	1	K24346LIV	1	K24348LIV	1
K24333LBK	1	K24334LBK	1	K24346LBK	1	K24348LBK	1
K24333PBR	1	K24334PBR	1	K24346PBR	1	K24348PBR	1
K24333TIR	1	K24334TIR	1	K24346TIR	1	K24348TIR	1
K24333DBZ	1	K24334DBZ	1	K24346DBZ	1	K24348DBZ	1
K24333ABS	1	K24334ABS	1	K24346ABS	1	K24348ABS	1
K24333TCO	1	K24334TCO	1	K24346TCO	1	K24348TCO	1

MOUNTING BOX
FLUSH
892ALM
DIMENSIONS
86 x 146mm
BS 5733:2010

MOUNTING BOX
FLUSH
892ALM
DIMENSIONS
86 x 146mm
BS 5733:2010

MOUNTING BOX
FLUSH: 893ALM
DIMENSIONS
146 x 146mm
BS 5733:2010

MOUNTING BOX
FLUSH: 893ALM
DIMENSIONS
146 x 146mm
BS 5733:2010

Aspect

Grid
Modules

BLANK INSERT

Switch Modules
10 AmpSP 1 WAY
10 AMPSwitch Modules
10 AmpDP 1 WAY
10 AMPSP 2 WAY
10 AMP

FINISHES				
BRUSHED STAINLESS STEEL	K4880BSS*	1	K4881BSS*	1
LACQUERED BRUSHED STEEL	K4880LBS*	1	K4881LBS*	1
BRUSHED CHROME	K4880BRC*	1	K4881BRC*	1
POLISHED CHROME	K4880POC*	1	K4881POC*	1
SATIN GOLD	K4880SAG*	1	K4881SAG*	1
PORCELAIN WHITE	K4880WHI	10	K4881WHI	10
LUSTROUS IVORY	K4880LIVW	1	K4881LIVW	1
LUSTROUS BLACK	K4880LBKB	1	K4881LBKB	1
POLISHED BRASS	K4880PBR*	1	K4881PBR*	1
TEXTURED IRON	K4880TIRB	1	K4881TIRB	1
DESERT BRONZE	K4880DBZB	1	K4881DBZB	1
ANTIQUE BRASS	K4880ABSB	1	K4881ABSB	1
TEXTURED COPPER	K4880TCOB	1	K4881TCOB	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

BS 5733:2010

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

SP 2 WAY
RETRACTIVE
10 AMP

SP 2 WAY
RED RETRACTIVE
10 AMP

SP 2 WAY
RETRACTIVE MARKED
BELL SYMBOL
10 AMP



K4885BSS*	1		
K4885LBS*	1		
K4885BRC*	1		
K4885POC*	1		
K4885SAG*	1		
K4885WHI	10		
K4885LIVW	1		
K4885LBKB	1		
K4885PBR*	1		
K4885TIRB	1		
K4885DBZB	1		
K4885ABSB	1		
K4885TCOB	1		
		K4885RED K4885REDB	1 1
		K4885BWHI K4885BBLK	1 1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering. E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999



Switch Modules 10 Amp

SP 2 WAY
RETRACTIVE
MARKED 'PRESS'
10 AMP

2 WAY
CENTRE OFF
RETRACTIVE
10 AMP

Switch Modules 20 Amp

SP 1 WAY
20 AMP

DP
1 WAY
PUSH TO MAKE
20 AMP

DP
1 WAY
RED ROCKER
PUSH TO MAKE
20 AMP

FINISHES

BRUSHED STAINLESS STEEL
LACQUERED BRUSHED STEEL
BRUSHED CHROME
POLISHED CHROME
SATIN GOLD
MK WHITE (PLASTIC ROCKER)
LUSTROUS IVORY
LUSTROUS BLACK
POLISHED BRASS
TEXTURED IRON
DESERT BRONZE
ANTIQUE BRASS
TEXTURED COPPER



K4885PWHI
K4885PBLK

10
1

K4900BSS*	1
K4900LBS*	1
K4900BRC*	1
K4900POC*	1
K4900SAG*	1
K4900WHI	10
K4900LIVW	1
K4900LBKB	1
K4900PBR*	1
K4900TIRB	1
K4900DBZB	1
K4900ABSB	1
K4900TCOB	1

K4891BSS*	1
K4891LBS*	1
K4891BRC*	1
K4891POC*	1
K4891SAG*	1
K4891WHI	10
K4891LIVW	1
K4891LBKB	1
K4891PBR*	1
K4891TIRB	1
K4891DBZB	1
K4891ABSB	1
K4891TCOB	1

K4910BSS*	1
K4910LBS*	1
K4910BRC*	1
K4910POC*	1
K4910SAG*	1
K4910WHI	10
K4910LIVW	1
K4910LBKB	1
K4910PBR*	1
K4910TIRB	1
K4910DBZB	1
K4910ABSB	1
K4910TCOB	1

K4910RED
K4910REDB

10
1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts.



Technical Hotline
+44 (0)1268 563720

Aspect

WIRING DEVICES
DECORATIVE

Switch Modules 20 Amp

DP 1 WAY
PUSH TO BREAK
RETRACTIVE
20 AMP

DP 1 WAY
RED ROCKER
PUSH TO BREAK
RETRACTIVE
20 AMP

SP 2 WAY
20 AMP

SP 2 WAY
RED ROCKER
20 AMP

SP 2 WAY WITH
INTEGRAL NEON
LOCATOR
20 AMP

SP 2 WAY
& CENTRE OFF
20 AMP



K4915WHI 10 K4915BLK 10	K4915RED 10 K4915REDB 1	K4892BSS* 1	K4892RED 10 K4892REDB 10	K4892LWHI 10 K4892LBLK 1	K4899BSS* 1
		K4892LBS* 1			K4899LBS* 1
		K4892BRC* 1			K4899BRC* 1
		K4892POC* 1			K4899POC* 1
		K4892SAG* 1			K4899SAG* 1
		K4892WHI 10			K4899WHI 10
		K4892LIVW 1			K4899LIVW 1
		K4892LBKB 1			K4899LBKB 1
		K4892PBR* 1			K4899PBR* 1
		K4892TIRB 1			K4899TIRB 1
		K4892DBZB 1			K4899DBZB 1
		K4892ABSB 1			K4899ABSB 1
		K4892TCOB 1			K4899TCOB 1

NOTE

Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

NOTE

Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
Additional information on printed modules available in Grid Plus Section, pages 175.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts.

Matching metal capped rockers available as standard (excluding porcelain white finish).

Matching metal capped rockers available as standard (excluding porcelain white finish).

Switch Modules






SP 2 WAY
& CENTRE OFF
RED ROCKER
20 AMP

INTERMEDIATE
20 AMP

INTERMEDIATE
RED ROCKER
20 AMP

DP
1 WAY
20 AMP

DP
1 WAY
WITH NEON
20 AMP

FINISHES					
BRUSHED STAINLESS STEEL	K4899RED K4899REDB 10 10	K4893BSS* 1	K4893RED K4893REDB 10 10	K4896BSS* 1	K4896NWHI K4896NBLK 1 1
LACQUERED BRUSHED STEEL		K4893LBS* 1		K4896LBS* 1	
BRUSHED CHROME		K4893BRC* 1		K4896BRC* 1	
POLISHED CHROME		K4893POC* 1		K4896POC* 1	
SATIN GOLD		K4893SAG* 1		K4896SAG* 1	
MK WHITE (PLASTIC ROCKER)		K4893WHI 1		K4896WHI 1	
LUSTROUS IVORY		K4893LIVW 1		K4896LIVW 1	
LUSTROUS BLACK		K4893LBKB 1		K4896LBKB 1	
POLISHED BRASS		K4893PBR* 1		K4896PBR* 1	
TEXTURED IRON		K4893TIRB 1		K4896TIRB 1	
DESERT BRONZE		K4893DBZB 1		K4896DBZB 1	
ANTIQUE BRASS		K4893ABSB 1		K4896ABSB 1	
TEXTURED COPPER		K4893TCOB 1		K4896TCOB 1	

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts.

Matching metal capped
rockers available as
standard (excluding
porcelain white finish).

Matching metal capped
rockers available as
standard (excluding
porcelain white finish).

Switch Modules

DP
1 WAY
WITH WINDOW
20 AMP

DP
1 WAY
RED ROCKER
20 AMP



Printed Modules with and without Neon



K4896WWHI 10
K4896WBLK 10

K4896RED 10
K4896REDB 10

K4896 PRINTED MODULE

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896BRWHI OR K4896BRBLK

BOILER K4896BR	WASTE DISPOSAL K4896WD	HOB K4896HB
DISHWASHER K4896DW	WASHING MACHINE K4896WM	IMMERSION HEATER K4896IH
COOKER HOOD K4896CH	TUMBLE DRYER K4896TD	PLINTH HEATER K4896PH
FAN K4896FN	WASHER DRYER K4896WDR	WORKTOP LIGHTING K4896WL
FRIDGE K4896Fg	MICROWAVE K4896MW	WINE COOLER K4896WC
FREEZER K4896FZ	HEATER K4896HR	WARMING DRAWER K4896WDA
FRIDGE FREEZER K4896FF	OVEN K4896OV	COFFEE MACHINE K4896CM

K4896N PRINTED MODULE WITH NEON

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896NBRWHI OR K4896NBRBLK

BOILER K4896NBR	WASTE DISPOSAL K4896NWD	HOB K4896NHB
DISHWASHER K4896NDW	WASHING MACHINE K4896NWM	IMMERSION HEATER K4896NIH
COOKER HOOD K4896NCH	TUMBLE DRYER K4896NTD	PLINTH HEATER K4896NPH
FAN K4896NFN	WASHER DRYER K4896NWDR	WORKTOP LIGHTING K4896NWL
FRIDGE K4896NFg	MICROWAVE K4896NMW	WINE COOLER K4896NWC
FREEZER K4896NFZ	HEATER K4896NHR	WARMING DRAWER K4896NWDA
FRIDGE FREEZER K4896NFF	OVEN K4896NOV	COFFEE MACHINE K4896NCM

NOTE

K4896NIH (Immersion Heater with Neon) is not available with black rockers.

BS EN 60669-1:1999

BS EN 60669-1:1999

Aspect

mkelectric.co.uk



Key Switch Modules

INTERMEDIATE
20 AMP

SP
2 WAY
20 AMP

SP 2 WAY
EMERGENCY
LIGHTING
20 AMP

DP
1 WAY
20 AMP

DP
EMERGENCY
LIGHTING
20 AMP

SP
2 WAY
RETRACTIVE
20 AMP



FINISHES

WHITE	K4894WHI 10	K4898WHI 10	K4898ELWHI 10	K4917WHI 10	K4917ELWHI 10	K4918WHI 10
BLACK	K4894BLK 1	K4898BLK 1	K4898ELBLK 1	K4917BLK 1		K4918BLK 10

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.



Technical Hotline
+44 (0)1268 563720

Aspect

WIRING DEVICES
DECORATIVE

Indicator Modules

200-250V
NEON



K4889RED
K4889REDB

10
1

BS 5733:2010

200-250V
NEON



K4889AMB

10

BS 5733:2010

200-250V
FLUORESCENT



K4889GRN

10

BS 5733:2010

21-36V
FILAMENT



K4836RED

10

BS 5733:2010

21-36V
FILAMENT



K4836AMB

10

BS 5733:2010

21-36V
FILAMENT



KK4836GRN

10

BS 5733:2010

Will Operate On Both A.C. And D.C

Not available in other finishes

Dimmer Switch Modules

1 GANG 40W/
VA-220W/180VA,
230VA.C, 50HZ
2 WAY
1 MODULE

1 GANG 60W/
VA-400W/320VA,
230VA.C, 50HZ
2 WAY
2 MODULE

1 GANG
40-220W/180VA/
4-70W LED DIMMER
2 WAY
1 MODULE

0-10V/1-10V
FLUORESCENT
CONTROLLER
1 MODULE



FINISHES					
BRUSHED STAINLESS STEEL	K4501BSS*LV	1	K4500BSS*LV	1	K4511BSS*LV 1 K4499BSS* 1
LACQUERED BRUSHED STEEL	K4501LBS*LV	1	K4500LBS*LV	1	K4511LBS*LV 1 K4499LBS* 1
BRUSHED CHROME	K4501BRC*LV	1	K4500BRC*LV	1	K4511BRC*LV 1 K4499BRC* 1
POLISHED CHROME	K4501POC*LV	1	K4500POC*LV	1	K4511POC*LV 1 K4499POC* 1
SATIN GOLD	K4501SAG*LV	1	K4500SAG*LV	1	K4511SAG*LV 1 K4499SAG* 1
PORCELAIN WHITE	K4501WHIWL	1	K4500WHIWL	1	K4511WHIWL 1 K4499WHI 1
LUSTROUS IVORY	K4501LIVWL	1	K4500LIVWL	1	K4511LIVWL 1 K4499LIVW 1
LUSTROUS BLACK	K4501LBKBL	1	K4500LBKBL	1	K4511LBKBL 1 K4499LBKB 1
POLISHED BRASS	K4501PBR*LV	1	K4500PBR*LV	1	K4511PBR*LV 1 K4499PBR* 1
TEXTURED IRON	K4501TIRBL	1	K4500TIRBL	1	K4511TIRBL 1 K4499TIRB 1
DESERT BRONZE	K4501DBZBL	1	K4500DBZBL	1	K4511DBZBL 1 K4499DBZB 1
ANTIQUE BRASS	K4501ABSBL	1	K4500ABSBL	1	K4511ABSBL 1 K4499ABSB 1
TEXTURED COPPER	K4501TCOBL	1	K4500TCOBL	1	K4511TCOBL 1 K4499TCOB 1

LEAD TIMES

Please contact our Customer Services Department on
01268 563 404

These dimmers incorporate the latest in micro-controller based circuitry to provide electronic soft-start and overload protection. Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability. K4500 is only suitable for use in 2, 4 and 8 module grids. They are not suitable for fluorescent lamps.

MK Fluorescent Grid Dimmers are low voltage controllers for connection to 1-10V controllable ballasts.






NOTE

Refer to technical section for derating factors when more than one unit is used in any one box.
BS EN 60669-2-1.

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

When ordering K4500, K4501 & K4511, use the suffix 'LV' right at the end, eg. K4501BSSWL

Accessory Modules

SINGLE TV CO-AXIAL OUTLET NON-ISOLATED	SINGLE TV CO-AXIAL OUTLET ISOLATED	BUZZER UNIT 200-250V	BUZZER UNIT 21-36V	CORD OUTLET 16 AMP	
					
K4520WHI 10 K4896WBLK 10	K4521WHI 10 K4521BLK 10	K4000WHI 10	K4001WHI 10	K4886WHI 10 K4886BLK 10	

For direct connection to TV or FM aerial co-axial download. NOT to be used in same enclosure as mains exceeding 50V.
BS 3041:1977
IEC 169-2:1965
BS 5733:2010 where applicable.

For direct connection to TV or FM aerial co-axial download. NOT to be used in same enclosure as mains exceeding 50V.
BS 3041:1977
IEC 169-2:1965
BS 5733:2010 where applicable.

200-250V
BS 5733:2010

Sound output level
Av 61 db @ 15 feet.
BS 5733:2010

Complete with 3 pairs of terminals. The supply terminals are suitable for up to 2 x 2.5mm² or 1 x 4mm² solid conductors. The load terminals are suitable for one 1.5mm² flexible cord.
A cord grip is also fitted.
BS 5733:2010

Accessory Modules

FUSE UNIT
13 AMP

FUSE UNIT WITH
TAMPERPROOF
SCREW
13 AMP

Euro Modular Frontplates

EURO
1 MODULE
25 X 50MM

EURO
2 MODULE
50 X 50MM

EURO
4 MODULE
100 X 50MM

FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUÉ BRASS

TEXTURED COPPER

K4890WHI 10
K4890BLK 10

K4890KOWHI 10
K4890KOBK 10

K24181BSS	1	K24182BSS	1	K24184BSS	1
K24181LBS	1	K24182LBS	1	K24184LBS	1
K24181BRC	1	K24182BRC	1	K24184BRC	1
K24181POC	1	K24182POC	1	K24184POC	1
K24181SAG	1	K24182SAG	1	K24184SAG	1
K24181WHI	1	K24182WHI	1	K24184WHI	1
K24181LIV	1	K24182LIV	1	K24184LIV	1
K24181LBK	1	K24182LBK	1	K24184LBK	1
K24181PBR	1	K24182PBR	1	K24184PBR	1
K24181TIR	1	K24182TIR	1	K24184TIR	1
K24181DBZ	1	K24182DBZ	1	K24184DBZ	1
K24181ABS	1	K24182ABS	1	K24184ABS	1
K24181TCO	1	K24182TCO	1	K24184TCO	1

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

Fuse carrier comes with 13A
cartridge fuse link to BS 1362.
BS 5733:2010

Key 3405ZIC supplied
Fuse carrier comes with 13A
cartridge fuse link to BS 1362.
BS 5733:2010

MOUNTING BOXES

Suitable for flush boxes to
BS 4662:2006 and surface
boxes to BS 5733:2010
Refer to appropriate module for
minimum box depth.

FIXING CENTRES

60.3mm

BS 5733:2010 where
applicable.

Note: No grid required,
modules just clip into place.

MOUNTING BOXES

Suitable for flush boxes to
BS 4662:2006 and surface
boxes to BS 5733:2010
Refer to appropriate module for
minimum box depth.

FIXING CENTRES

60.3mm

BS 5733:2010 where
applicable.

Note: No grid required,
modules just clip into place.

MOUNTING BOXES

Suitable for flush boxes to
BS 4662:2006 and surface boxes
to BS 5733:2010
Refer to appropriate module for
minimum box depth.

FIXING CENTRES

120.6mm

BS 5733:2010 where applicable.
Note: No grid required, modules
just clip into place.

Euro Power Modules

UK
250V
2 MODULE
50 X 50MM
13 AMP

GERMAN
2P+E 250V
SHUTTERED
2 MODULE (NON UK)
16 AMP

AMERICAN
127V SHUTTERED
2 MODULE
50 X 50MM (NON UK)
15 AMP

UK
250V SHUTTERED
2 MODULE
50 X 50MM
5 AMP

FRENCH/BELGIAN
2P+E
250V SHUTTERED
2 MODULE
50 X 50MM (NON UK)
16 AMP



K5830WHI **10**
K5830BLK **10**

K5831WHI **10**
K5831BLK **10**

K5832WHI **10**
K5832BLK **10**

K5833WHI **10**
K5833BLK **10**

K5834WHI **10**
K5834BLK **10**

MOUNTING BOX
35mm minimum
46mm (for extra wiring space).
DIMENSIONS
50 x 50mm
BS 1363 Part 2:1995

MOUNTING BOX
46mm
DIMENSIONS
50 x 50mm
IEC 60884-1:2006

MOUNTING BOX
35mm
46mm (for extra wiring space)
DIMENSIONS
50 x 50mm
SASO 2204:2003

MOUNTING BOX
35mm minimum
46mm (for extra wiring space).
DIMENSIONS
50 x 50mm
BS 546:1950

MOUNTING BOX
46mm
DIMENSIONS
50 x 50mm
NF C61-314

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Power Modules

USB CHARGING
2 MODULE
50 X 50MM



Euro Datacom Modules

RJ11/12
1 MODULE
25 X 50MM



RJ45
CAT 6
1 MODULE
25 X 50MM



RJ45
CAT 6
SCREENED
1 MODULE
25 X 50MM



RJ45
CAT 6
ANGLED
1 MODULE
25 X 50MM



FINISHES

WHITE	K5837WHI	1	K5887WHI	5	K5846WHI	5	K5846SWHI	5	K5864WHI	5
BLACK	K5837BLK	1	K5887BLK	5	K5846BLK	5	K5846SBLK	5		

LEAD TIMES

Please contact our Customer Services Department on
01268 563 404

USB charging sockets, each capable of supporting 2A charge (total of 2A)

K5837 MOUNTING BOX
35mm minimum
46mm for extra wiring space
IEC 60950-1
IEC 61000-6-1/3

Suitable for both RJ11 and RJ12 jacks
RJ11; 4 wire
RJ12; 6 wire

MOUNTING BOXES
Minimum box depth 35mm
FCC68
EN 41003

Cat 6 performance.
Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Cat 6 performance.
Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Cat 6 performance.
Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

RJ45
CAT 5e
ANGLED
1 MODULE
25 X 50MM

RJ45
CAT 5e
1 MODULE
25 X 50MM

TELEPHONE
MASTER
1 MODULE
25 X 50MM

TELEPHONE
SECONDARY
1 MODULE
25 X 50MM

BNC 50Ω
1 MODULE
25 X 50MM



K5844WHI	5	K5845WHI	5	K5820WHI	5	K5821WHI	5	K5801WHI	5
		K5845BLK	5	K5820BLK	5	K5821BLK	5		

Enhanced Cat 5 performance.
Suitable for both 568A and 568B
wiring schemes.

MOUNTING BOXES
Minimum box depth
35mm standard
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Enhanced Cat 5 performance.
Suitable for both 568A and 568B
wiring schemes.

MOUNTING BOXES
Minimum box depth 35mm
standard
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

MOUNTING BOXES
Minimum depth 35mm
BS 6312-2

MOUNTING BOXES
Minimum depth 35mm
BS 6312-2

50 Ohm crimp connector suitable
for use with RG58, URM43,
URM76 and Beldon 9907 type
co-axial cables.

MOUNTING BOXES
Minimum box depth 35mm

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Multimedia Modules

SINGLE OUTLET
(IEC MALE)
1 MODULE
25 X 50MM

SINGLE OUTLET
(IEC FEMALE)
1 MODULE
25 X 50MM

SINGLE F-TYPE
SATELLITE
SOCKET
1 MODULE
25 X 50MM

TWIN OUTLET
TV/FM DIPLEXER
2 MODULE
50 X 50MM
(IRELAND ONLY)

FINISHES

WHITE	K5850WHI	5	K5851WHI	5	K5855WHI	5	K5852WHI	5
BLACK	K5850BLK	5	K5851BLK	5	K5855BLK	5	K5852BLK	5

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

Fully screened non isolated TV outlets containing a combination of single, TV/FM Diplexer, TV/FM/SAT Triplexer and BT secondary telephone outlets for use within digital TV systems and interactive TV services.
Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.

MOUNTING BOXES

Min box depth 47mm

DIMENSIONS

ONE MODULE 25 x 50mm

TWO MODULE 50 x 50mm

BS 3041:1997, IEC 169-2:1965, BS EN 50083 & BS 5733:2010 where applicable.

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

PERFORMANCE

Single	TV:	DC - 950MHz
	Sat:	DC - 1.75GHz
Diplexer	TV:	5-65MHz
		470-862MHz
	FM:	87.5-108 MHz

TV/FM/DAB FOR DIGITAL RADIO

PERFORMANCE

Diplexer	TV:	5-65MHz
		470-862MHz
	FM/DAB:	87.5-230MHz

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Multimedia Modules

TWIN OUTLET
TV-FM/DAB
DIPLEXER
2 MODULE
50 X 50MM



TRIPLE OUTLET
TV/FM/SATELLITE
TRIPLEXER
2 MODULE
50 X 50MM
(IRELAND ONLY)



TRIPLE OUTLET
TV-FM/DAB-SAT
TRIPLEXER
2 MODULE
50 X 50MM



QUAD OUTLET
TV-FM/DAB-2XSAT
2 MODULE
50 X 50MM



FEMALE HDMI OUTLET
2 MODULE
50 X 50MM



K5852DABWHI	5	K5853WHI	5	K5853DABWHI	5	K5854DABWHI	5	K5807WHI	5
K5852DABBLK	5	K5853BLK	5	K5853DABBLK	5	K5854DABBLK	5	K5807BLK	5

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

PERFORMANCE

Single 950MHz	TV:	DC -
1.75GHz Diplexer	Sat:	DC -
862MHz	TV:	5-65MHz 470-
MHz	FM:	87.5-108

TV/FM/DAB FOR DIGITAL RADIO PERFORMANCE

Diplexer	TV:	5-65MHz 470-
862MHz	FM/DAB:	87.5-
230MHz		

TV/FM diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.
TV/FM/SAT triplexer units for connection to a single co-axial aerial lead with combined TV, FM and Satellite signals

PERFORMANCE

SINGLE OUTLETS
TV/FM IEC MALE OR FEMALE
DC-950MHz
SAT F-TYPE
DC-1.75GHz

TV/FM/SAT PRODUCTS

OUTLET TV	DIPLEXER	OUTLET TV
FM/DAB SAT	5-65MHz 470-862MHz 87.5-108MHz N/A	FM SAT1
TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO		
OUTLET TV	DIPLEXER	OUTLET TV
FM/DAB SAT OR SAT1 SAT2	5-65MHz 470-862MHz 87.5-230MHz N/A	FM SAT1 SAT2

TRIPLEXER
5-65MHz
470-862MHz
87.5-108MHz
950-2300MHz

TRIPLEXER
5-65MHz
470-862MHz
87.5-230MHz
950-2300MHz
5-2300MHz

K5807 Female HDMI Outlet is HDMI 1.1, 1.2, 1.3 and 1.4b compatible, HDCP compliant.

DATA RATE

Up to 2.25 Gbps

SCAN

Up to 1080p/1920x1200

INPUT CONNECTOR

1 x HDMI Female (Type A)

OUTPUT CONNECTOR

1 x HDMI Female (Type A)

Supports high resolution input:

PC: VGA, SVGA,

SXVGA (1280x1024) and UXGA

(1600x1200, 1920x1200)

HDTV: 480p, 720p, 1080i and 1080p

HDMI input cable should be no larger than 20m.

DIMENSIONS

50 x 50 x 20mm

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Blank Modules

2 MODULE
50 X 50MM

1 MODULE
25 X 50MM

1/2 MODULE
12.5 X 50MM

AUDIO BINDING
POST FOR SINGLE
LOUD SPEAKER
1 MODULE
25 X 50MM

RCA TO SCREW
TERMINATION SET
1 RED AND 1 BLACK
1 MODULE
25 X 50MM

FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K180WHI
K180BLK

10
10

K188WHI
K188BLK

10
10

K186WHI
K186BLK

10
10

K5805WHI
K5805BLK

5
5

K5806WHI
K5806BLK

5
5

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

BS 5733:2010 where applicable

BS 5733:2010 where applicable

BS 5733:2010 where applicable

DIMENSIONS

50 x 25 x 28mm

DIMENSIONS

50 x 25 x 28mm



Technical Hotline
+44 (0)1268 563720

Aspect

WIRING DEVICES
DECORATIVE

LJU6C Datacom Frontplate

1 GANG
2 MODULE
22 X 37MM



LJU6C Datacom Modules

RJ11/12
1 MODULE



RJ45 CAT 6
1 MODULE



RJ45
CAT 6
SCREENED
1 MODULE



RJ45
CAT 5e
1 MODULE



K14172BSS*	1	K5787WHI	5	K5746WHI K5746BLK	5 5	K5746SWHI K5746SBLK	5 5	K5745WHI K5745BLK	5 5
K14172LBS*	1								
K14172BRC*	1								
K14172POC*	1								
K14172SAG*	1								
K14172WHIW	1								
K14172LIVW	1								
K14172LBK	1								
K14172PBRB	1								
K14172TIRB	1								
K14172DBZB	1								
K14172ABSB	1								
K14172TCOB	1								

MOUNTING BOXES

Suitable for flush boxes to BS 4662:1970 and surface boxes to BS 5733:2010

Refer to appropriate module for minimum box depth.

FIXING CENTRES

1 gang: 60.3mm

2 gang: 120.6mm

BS 5733:2010 where applicable

NOTE

No grid required, modules just clip into place

Suitable for both RJ11 and RJ12 jacks.

RJ11: 4 wire

RJ12: 6 wire

MOUNTING BOXES

Minimum box depth 35mm

FCC68

EN41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum box depth 25mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

* Available with White or Black inserts.

LJU6C Datacom Blanks

LJU6C
1 MODULE
22 X 37MM

Blank Plates

1 GANG

2 GANG

FINISHES

BRUSHED STAINLESS STEEL
LACQUERED BRUSHED STEEL
BRUSHED CHROME
POLISHED CHROME
SATIN GOLD
PORCELAIN WHITE
LUSTROUS IVORY
LUSTROUS BLACK
POLISHED BRASS
TEXTURED IRON
DESERT BRONZE
ANTIQUE BRASS
TEXTURED COPPER

K170WHI
K170BLK

10
10

K24330BSS	1	K24329BSS	1
K24330LBS	1	K24329LBS	1
K24330BRC	1	K24329BRC	1
K24330POC	1	K24329POC	1
K24330SAG	1	K24329SAG	1
K24330WHI	1	K24329WHI	1
K24330LIV	1	K24329LIV	1
K24330LBK	1	K24329LBK	1
K24330PBR	1	K24329PBR	1
K24330TIR	1	K24329TIR	1
K24330DBZ	1	K24329DBZ	1
K24330ABS	1	K24329ABS	1
K24330TCO	1	K24329TCO	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
BS 5733:2010

MOUNTING BOXES
FLUSH
866ZIC
DIMENSIONS:
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010

MOUNTING BOXES
FLUSH
866ZIC
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 5733:2010



CASE STUDY

ST GEORGE BATTERSEA REACH DEVELOPMENT, LONDON

The new MK Elements range was specified extensively at the St George Battersea Reach development in London. This ongoing residential development from the Berkeley Group, is situated in the bustling vicinity of England's capital and offers a wide range of high end apartments.

The Client, St George favoured the glass effect finish and touch controlled dimmers for their elegant styling, which perfectly complements the superior character of such a prestigious development.





Edge™

RANGE INTRODUCTION

Edge™ is a range of wiring devices that combine function and style. The design is smooth, clean and the products are very slim – in fact just 1.5mm. Edge™ is the choice in modern, contemporary or traditional interiors where style and detail are the desired effect.

With Edge™ comes unrivalled safety. Utilising MK's 3-pin operated safety shutter, that prevents misuse and unsafe access to live circuitry, Edge™ offers the user the peace of mind and comfort that they have the safest range of wiring devices available installed in their surroundings.

HOW TO SPECIFY

A metal flatplate flush mounting range of wiring accessories, to be made in the UK. Frontplate to have a maximum 1.5mm profile and subtle 5mm radius rounded corners. Fixing screws to be flathead design, flush fitting & coloured to match the frontplate. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large and concave with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

FEATURES & BENEFITS

SLIM PROFILE FRONTPLATES OF ONLY 1.5MM WITH MATCHING FLAT HEAD SCREWS THROUGHOUT

A clean and practical range of products that complement the finest interiors.

TOTAL SAFETY

3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position.

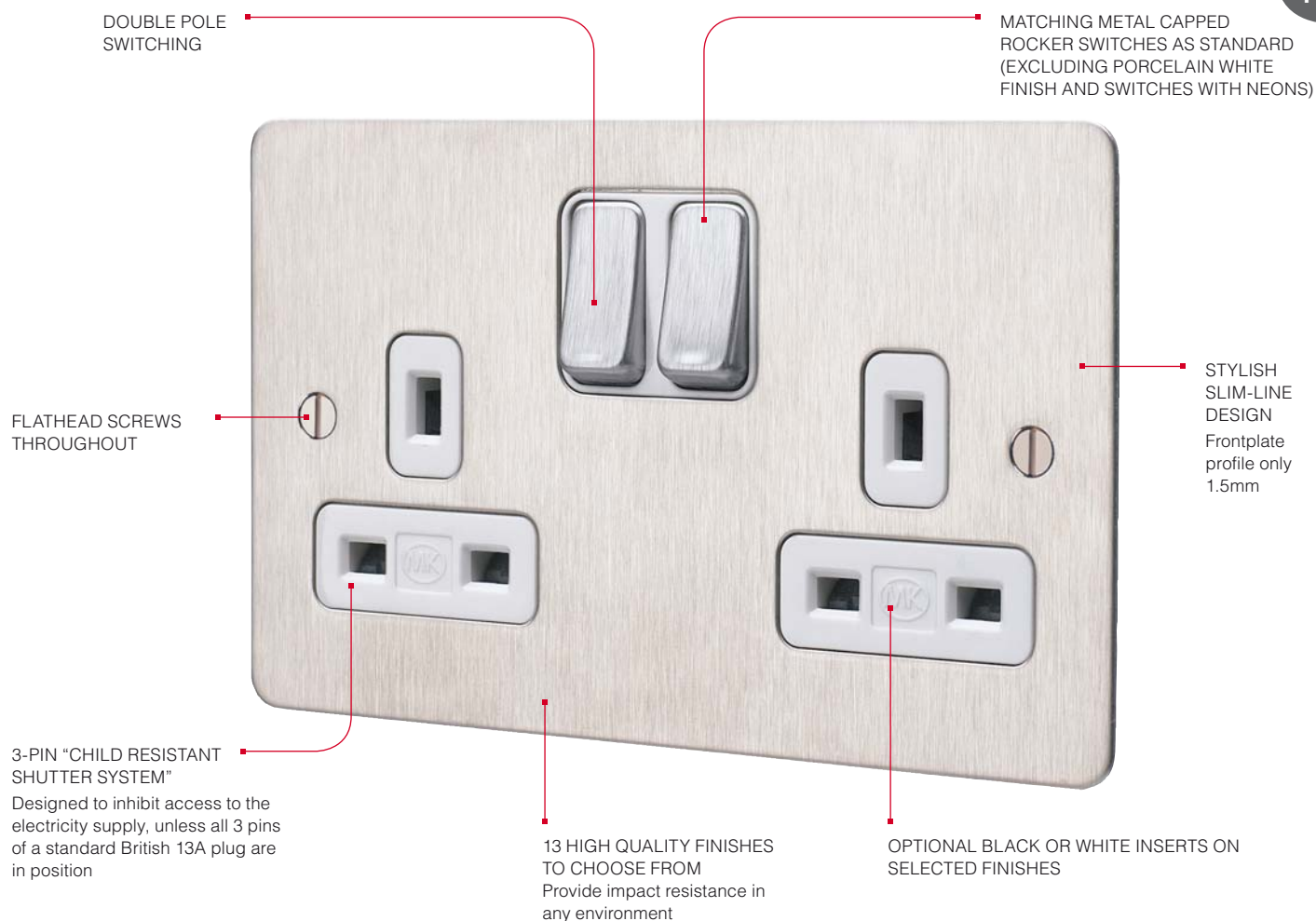
COMPREHENSIVE RANGE OF SOCKETS, SWITCHES AND MODULAR ANCILLARY PRODUCTS

Mean that whatever the application, the Edge™ range has a wiring device to suit.

13 STANDARD HIGH QUALITY FINISHES WITH A MADE-TO-ORDER SERVICE

Allows designers the flexibility to provide the finish of their choice.

In addition to the wide choice of standard finishes, a made-to-order service gives designers the ability to match almost any RAL colour required.



Terminal screws are backed out and captive. Terminals are upwards facing to make installation easier.

Funnel entrance to terminals.

Clear terminal markings for easy identification.

The built-in lock in the Edge™ 13A Key Operated Socket ensures that power cannot be turned on or off without the removeable key, making it ideal for communal areas such as hotel lobbies.

Combination plates provide a neat solution to all power, data, TV and satellite outlet requirements.



Switchsocket Outlets

1 GANG DP
DUAL EARTH
13 AMP

1 GANG DP
WITH NEON
DUAL EARTH
13 AMP

NON STANDARD
1 GANG DP
CLEAN EARTH
13 AMP

2 GANG DP
WITH 2 X USB
CHARGING PORTS
DUAL EARTH
13 AMP

2 GANG DP
DUAL EARTH
13 AMP



FINISHES

BRUSHED STAINLESS STEEL	K14357BSS*	1	K14657BSS*	1	K14268BSS*	1	K14343BSS*	1	K14347BSS*	1
LACQUERED BRUSHED STEEL	K14357LBS*	1	K14657LBS*	1	K14268LBS*	1	K14343LBS*	1	K14347LBS*	1
BRUSHED CHROME	K14357BRC*	1	K14657BRC*	1	K14268BRC*	1	K14343BRC*	1	K14347BRC*	1
POLISHED CHROME	K14357POC*	1	K14657POC*	1	K14268POC*	1	K14343POC*	1	K14347POC*	1
SATIN GOLD	K14357SAG*	1	K14657SAG*	1	K14268SAG*	1	K14343SAG*	1	K14347SAG*	1
PORCELAIN WHITE	K14357WHIW	1	K14657WHIW	1	K14268WHIW	1	K14343WHIW	1	K14347WHIW	1
LUSTROUS IVORY	K14357LIVW	1	K14657LIVW	1	K14268LIVW	1	K14343LIVW	1	K14347LIVW	1
LUSTROUS BLACK	K14357LBKB	1	K14657LBKB	1	K14268LBKB	1	K14343LBKB	1	K14347LBKB	1
POLISHED BRASS	K14357PBR*	1	K14657PBR*	1	K14268PBR*	1	K14343PBR*	1	K14347PBR*	1
TEXTURED IRON	K14357TIRB	1	K14657TIRB	1	K14268TIRB	1	K14343TIRB	1	K14347TIRB	1
DESERT BRONZE	K14357DBZB	1	K14657DBZB	1	K14268DBZB	1	K14343DBZB	1	K14347DBZB	1
ANTIQUE BRASS	K14357ABSB	1	K14657ABSB	1	K14268ABSB	1	K14343ABSB	1	K14347ABSB	1
TEXTURED COPPER	K14357TCOB	1	K14657TCOB	1	K14268TCOB	1	K14343TCOB	1	K14347TCOB	1

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35mm

866ZIC

FLUSH 46mm

877ZIC (for extra wiring space)

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 1363-2:1995

MOUNTING BOXES
FLUSH 35mm

866ZIC

FLUSH 46mm

877ZIC (for extra wiring space)

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 1363-2:1995

Neon is only available in white
or black insulated rocker.

MOUNTING BOXES
FLUSH 35mm

866ZIC

FLUSH 46mm

877ZIC (for extra wiring space)

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 1363-2:1995 (where
relevant)

These products are provided
with facilities for 'clean earth'
connections and are suitable
for non-standard plugs with 'T'
shaped earth pins.

USB charging sockets, each
capable of supporting 2A
charge (total of 2A)
Pattress available for use
where existing back box is too
shallow, see page 34

MOUNTING BOXES

FLUSH 35mm

866ZIC

FLUSH 47mm

878ZIC (for extra wiring space)

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 5733:2010

MOUNTING BOXES
FLUSH 35mm

866ZIC

FLUSH 47mm

878ZIC (for extra wiring
space)

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

2 GANG DP
CLEAN EARTH
13 AMP

2 GANG DP
WITH NEON
DUAL EARTH
13 AMP

NON STANDARD
2 GANG DP
CLEAN EARTH
13 AMP

1 GANG DP
ROUND PIN
15 AMP

1 GANG DP
5 AMP



K14345BSS*	1	K14647BSS*	1	K14246BSS*	1	K14383BSS*	1	K14382BSS*	1
K14345LBS*	1	K14647LBS*	1	K14246LBS*	1	K14383LBS*	1	K14382LBS*	1
K14345BRC*	1	K14647BRC*	1	K14246BRC*	1	K14383BRC*	1	K14382BRC*	1
K14345POC*	1	K14647POC*	1	K14246POC*	1	K14383POC*	1	K14382POC*	1
K14345SAG*	1	K14647SAG*	1	K14246SAG*	1	K14383SAG*	1	K14382SAG*	1
K14345WHIW	1	K14647WHIW	1	K14246WHIW	1	K14383WHIW	1	K14382WHIW	1
K14345LIVW	1	K14647LIVW	1	K14246LIVW	1	K14383LIVW	1	K14382LIVW	1
K14345LBKB	1	K14647LBKB	1	K14246LBKB	1	K14383LBKB	1	K14382LBKB	1
K14345PBR*	1	K14647PBR*	1	K14246PBR*	1	K14383PBR*	1	K14382PBR*	1
K14345TIRB	1	K14647TIRB	1	K14246TIRB	1	K14383TIRB	1	K14382TIRB	1
K14345DBZB	1	K14647DBZB	1	K14246DBZB	1	K14383DBZB	1	K14382DBZB	1
K14345ABSB	1	K14647ABSB	1	K14246ABSB	1	K14383ABSB	1	K14382ABSB	1
K14345TCOB	1	K14647TCOB	1	K14246TCOB	1	K14383TCOB	1	K14382TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35mm
886ZIC
FLUSH 47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35mm
886ZIC
FLUSH 47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
Neon is only available in white or black insulated rocker.

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671: 2008.

MOUNTING BOXES
FLUSH 35mm
886ZIC
FLUSH 47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995 (where relevant)
These products are provided with facilities for 'clean earth' connections, and are suitable for non-standard plugs with T shaped earth pins. Refer to non-standard plugs page 240.

MOUNTING BOXES
FLUSH 35mm
886ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

MOUNTING BOXES
FLUSH 35mm
886ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

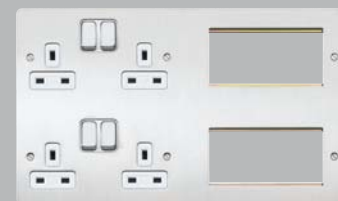
* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

Multimedia Plates

4 GANG DP DUAL EARTH
SWITCHSOCKET,
EURO 4 MODULE
100 X 50MM
13 AMP

2 GANG DP DUAL EARTH
SWITCHSOCKET,
EURO 6 MODULE
50 X 50MM (X3)
13 AMP

4 GANG DP DUAL EARTH
SWITCHSOCKET,
EURO 8 MODULE
100 X 50MM (X2)
13 AMP



FINISHES						
BRUSHED STAINLESS STEEL	K14200BSS*	1	K14205BSS*	1	K14100BSS*	1
LACQUERED BRUSHED STEEL	K14200LBS*	1	K14205LBS*	1	K14100LBS*	1
BRUSHED CHROME	K14200BRC*	1	K14205BRC*	1	K14100BRC*	1
POLISHED CHROME	K14200POC*	1	K14205POC*	1	K14100POC*	1
SATIN GOLD	K14200SAG*	1	K14205SAG*	1	K14100SAG*	1
PORCELAIN WHITE	K14200WHIW	1	K14205WHIW	1	K14100WHIW	1
LUSTROUS IVORY	K14200LIVW	1	K14205LIVW	1	K14100LIVW	1
LUSTROUS BLACK	K14200LBKB	1	K14205LBKB	1	K14100LBKB	1
POLISHED BRASS	K14200PBR*	1	K14205PBR*	1	K14100PBR*	1
TEXTURED IRON	K14200TIRB	1	K14205TIRB	1	K14100TIRB	1
DESERT BRONZE	K14200DBZB	1	K14205DBZB	1	K14100DBZB	1
ANTIQUE BRASS	K14200ABSB	1	K14205ABSB	1	K14100ABSB	1
TEXTURED COPPER	K14200TCOB	1	K14205TCOB	1	K14100TCOB	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35mm
K14201
FLUSH 47mm
K14202
DIMENSIONS
86 x 442.8mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35mm
K14206
FLUSH 47mm
K14207
DIMENSIONS
86 x 407.9mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35mm
K14101
FLUSH 47mm
K14102
DIMENSIONS
173 x 293.6mm
BS 1363-2:1995

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture.
Refer to BS 7671:2008 for details.

Multimedia Plates

2 GANG DP DUAL EARTH
SWITCHSOCKET,
EURO 2 MODULE
50 X 50MM (RIGHT SIDE)
13 AMP

2 GANG DP DUAL EARTH
SWITCHSOCKET,
EURO 2 MODULE
50 X 50MM (LEFT SIDE)
13 AMP

2 GANG DP DUAL EARTH
SWITCHSOCKET,
EURO 4 MODULE
50 X 50MM (X2)
13 AMP

EURO 8 MODULE
100 X 50MM (X2)

EURO 12 MODULE
150 X 50MM (X2)



K14216BSS*	1	K14217BSS*	1	K14208BSS*	1	K14209BSS*	1	K14210BSS*	1
K14216LBS*	1	K14217LBS*	1	K14208LBS*	1	K14209LBS*	1	K14210LBS*	1
K14216BRC*	1	K14217BRC*	1	K14208BRC*	1	K14209BRC*	1	K14210BRC*	1
K14216POC*	1	K14217POC*	1	K14208POC*	1	K14209POC*	1	K14210POC*	1
K14216SAG*	1	K14217SAG*	1	K14208SAG*	1	K14209SAG*	1	K14210SAG*	1
K14216WHIW	1	K14217WHIW	1	K14208WHIW	1	K14209WHIW	1	K14210WHIW	1
K14216LIVW	1	K14217LIVW	1	K14208LIVW	1	K14209LIVW	1	K14210LIVW	1
K14216LBKB	1	K14217LBKB	1	K14208LBKB	1	K14209LBKB	1	K14210LBKB	1
K14216PBR*	1	K14217PBR*	1	K14208PBR*	1	K14209PBR*	1	K14210PBR*	1
K14216TIRB	1	K14217TIRB	1	K14208TIRB	1	K14209TIRB	1	K14210TIRB	1
K14216DBZB	1	K14217DBZB	1	K14208DBZB	1	K14209DBZB	1	K14210DBZB	1
K14216ABSB	1	K14217ABSB	1	K14208ABSB	1	K14209ABSB	1	K14210ABSB	1
K14216TCOB	1	K14217TCOB	1	K14208TCOB	1	K14209TCOB	1	K14210TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
867ZIC
DIMENSIONS
233.3 x 86mm
BS 1363-2:1995

MOUNTING BOXES
867ZIC
DIMENSIONS
233.3 x 86mm
BS 1363-2:1995

MOUNTING BOXES
868ZIC
DIMENSIONS
320.6 x 86mm
BS 1363-2:1995

MOUNTING BOXES
858ZIC
DIMENSIONS
146.4 x 173.3mm
BS 5733:2010

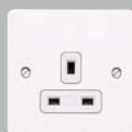
MOUNTING BOXES
869ZIC
DIMENSIONS
206.3 x 173.3mm
BS 5733:2010

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture.
Refer to BS 7671:2008 for details.

Socket Outlets

1 GANG
DUAL EARTH
13 AMP



2 GANG
DUAL EARTH
13 AMP



1 GANG
2 AMP



1 GANG
5 AMP



FINISHES					
BRUSHED STAINLESS STEEL	K14780BSS*	1	K14781BSS*	1	K14380BSS*1
LACQUERED BRUSHED STEEL	K14780LBS*	1	K14781LBS*	1	K14380LBS*1
BRUSHED CHROME	K14780BRC*	1	K14781BRC*	1	K14380BRC*1
POLISHED CHROME	K14780POC*	1	K14781POC*	1	K14380POC*1
SATIN GOLD	K14780SAG*	1	K14781SAG*	1	K14380SAG*1
PORCELAIN WHITE	K14780WHIW	1	K14781WHIW	1	K14380WHIW1
LUSTROUS IVORY	K14780LIVW	1	K14781LIVW	1	K14380LIVW1
LUSTROUS BLACK	K14780LBKB	1	K14781LBKB	1	K14380LBKB1
POLISHED BRASS	K14780PBR*	1	K14781PBR*	1	K14380PBR*1
TEXTURED IRON	K14780TIRB	1	K14781TIRB	1	K14380TIRB1
DESERT BRONZE	K14780DBZB	1	K14781DBZB	1	K14380DBZB1
ANTIQUE BRASS	K14780ABSB	1	K14781ABSB	1	K14380ABSB1
TEXTURED COPPER	K14780TCOB	1	K14781TCOB	1	K14380TCOB1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 35mm
886ZIC
FLUSH 47mm
878ZIC (for extra wiring space)
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 25mm
861ZIC
FLUSH 35mm
866ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
Earth pin linear operated shutter
BS 546:1950

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

Dual Earth: Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.



Technical Hotline
+44 (0)1268 563720

Edge™

WIRING DEVICES
DECORATIVE

Floor Mounted Euro Frames

1 GANG
EURO 2 MODULE
50 X 50MM

2 GANG
EURO 4 MODULE
100 X 50MM



K14790BSS	1	K14791BSS	1
K14790LBS	1	K14791LBS	1
K14790BRC	1	K14791BRC	1
K14790POC	1	K14791POC	1
K14790SAG	1	K14791SAG	1
K14790WHI	1	K14791WHI	1
K14790LIV	1	K14791LIV	1
K14790LBK	1	K14791LBK	1
K14790PBR	1	K14791PBR	1
K14790TIR	1	K14791TIR	1
K14790DBZ	1	K14791DBZ	1
K14790ABS	1	K14791ABS	1
K14790TCO	1	K14791TCO	1



MOUNTING BOXES FLUSH 1 GANG

866ZIC

DIMENSIONS

102 x 86mm

FIXING CENTRES

60.3mm

Boxes must have a minimum
depth of 35mm.

BS 5733:2010

MOUNTING BOXES FLUSH 2 GANG

886ZIC

DIMENSIONS

102 x 146mm

FIXING CENTRES

120.6mm

Boxes must have a minimum
depth of 35mm.

BS 5733:2010

Key Operated Socket Outlet and Switch

1 GANG DP
DUAL EARTH
13 AMP

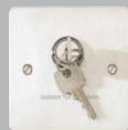
1 GANG
DP SWITCH
20 AMP

1 GANG DP
FIRE ALARM
ISOLATOR SWITCH
20 AMP

Shaver/Toothbrush Supply Units

DUAL VOLTAGE
OUTPUT 115/230V
INPUT 220/240V
50/60HZ

120/130 V INPUT
(NON UK)



FINISHES					
BRUSHED STAINLESS STEEL	K14355BSS* 1	K14378BSS 1	K14379BSS 1	K14709BSS* 1	K14710BSS* 1
LACQUERED BRUSHED STEEL	K14355LBS* 1			K14709LBS* 1	K14710LBS* 1
BRUSHED CHROME	K14355BRC* 1			K14709BRC* 1	K14710BRC* 1
POLISHED CHROME	K14355POC* 1			K14709POC* 1	K14710POC* 1
SATIN GOLD	K14355SAG* 1			K14709SAG* 1	K14710SAG* 1
PORCELAIN WHITE	K14355WHIW 1			K14709WHIW 1	K14710WHIW 1
LUSTROUS IVORY	K14355LIVW 1			K14709LIVW 1	K14710LIVW 1
LUSTROUS BLACK	K14355LBKB 1			K14709LBKB 1	K14710LBKB 1
POLISHED BRASS	K14355PBR* 1			K14709PBR* 1	K14710PBR* 1
TEXTURED IRON	K14355TIRB 1			K14709TIRB 1	K14710TIRB 1
DESERT BRONZE	K14355DBZB 1			K14709DBZB 1	K14710DBZB 1
ANTIQUE BRASS	K14355ABSB 1			K14709ABSB 1	K14710ABSB 1
TEXTURED COPPER	K14355TCOB 1			K14709TCOB 1	K14710TCOB 1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

MOUNTING BOXES
FLUSH 47mm
878ZIC
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOX
FLUSH 46mm
877ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 60669-2-4: 2005
The isolator has primarily been
introduced for use in alarm
systems that must comply with
BS 5839-1

MOUNTING BOXES
FLUSH
878ZIC
This design incorporates a double wound isolating transformer
rated 20VA at 230 or 115 volts and meets BS EN 61558-2-5:1998,
making it safe for use in bathrooms.
Insertion of a shaver/toothbrush plug automatically switches on
output by energising the primary side of the isolating transformer –
removal automatically switches it off. The transformer is protected
against overload by an automatic solid state overload device with
automatic resetting.
DIMENSIONS
146 x 86mm
FIXING CENTRES
120.6mm
BS EN 61558-2-5:1998

Dual Earth: Fitted with
two earth terminals to
provide a double earth
facility for use when
installations require a
high integrity protective
connection as specified
within BS 7671:2008.

Connection Units Switched

DP
13 AMP

DP
WITH NEON**
13 AMP

DP
WITH FLEX OUTLET
13 AMP

DP
WITH NEON**
& FLEX OUTLET
13 AMP



K14941BSS*	1	K14961BSS*	1	K14931BSS*	1	K14971BSS*	1
K14941LBS*	1	K14961LBS*	1	K14931LBS*	1	K14971LBS*	1
K14941BRC*	1	K14961BRC*	1	K14931BRC*	1	K14971BRC*	1
K14941POC*	1	K14961POC*	1	K14931POC*	1	K14971POC*	1
K14941SAG*	1	K14961SAG*	1	K14931SAG*	1	K14971SAG*	1
K14941WHIW	1	K14961WHIW	1	K14931WHIW	1	K14971WHIW	1
K14941LIVW	1	K14961LIVW	1	K14931LIVW	1	K14971LIVW	1
K14941LBKB	1	K14961LBKB	1	K14931LBKB	1	K14971LBKB	1
K14941PBR*	1	K14961PBR*	1	K14931PBR*	1	K14971PBR*	1
K14941TIRB	1	K14961TIRB	1	K14931TIRB	1	K14971TIRB	1
K14941DBZB	1	K14961DBZB	1	K14931DBZB	1	K14971DBZB	1
K14941ABSB	1	K14961ABSB	1	K14931ABSB	1	K14971ABSB	1
K14941TCOB	1	K14961TCOB	1	K14931TCOB	1	K14971TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
**NOTE
Neon is only available in white or black insulated rocker.

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995





MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
**NOTE
Neon is only available in white or black insulated rocker.

Matching metal capped fuse carriers are standard on all Edge™ Connection Units (except WHI and Neon).

Connection Units Unswitched

13 AMP

WITH NEON
13 AMPWITH FLEX OUTLET
13 AMPWITH NEON &
FLEX OUTLET
13 AMP

FINISHES				
BRUSHED STAINLESS STEEL	K14948BSS* 1	K14958BSS* 1	K14989BSS* 1	K14978BSS* 1
LACQUERED BRUSHED STEEL	K14948LBS* 1	K14958LBS* 1	K14989LBS* 1	K14978LBS* 1
BRUSHED CHROME	K14948BRC* 1	K14958BRC* 1	K14989BRC* 1	K14978BRC* 1
POLISHED CHROME	K14948POC* 1	K14958POC* 1	K14989POC* 1	K14978POC* 1
SATIN GOLD	K14948SAG* 1	K14958SAG* 1	K14989SAG* 1	K14978SAG* 1
PORCELAIN WHITE	K14948WHIW 1	K14958WHIW 1	K14989WHIW 1	K14978WHIW 1
LUSTROUS IVORY	K14948LIVW 1	K14958LIVW 1	K14989LIVW 1	K14978LIVW 1
LUSTROUS BLACK	K14948LBKB 1	K14958LBKB 1	K14989LBKB 1	K14978LBKB 1
POLISHED BRASS	K14948PBR* 1	K14958PBR* 1	K14989PBR* 1	K14978PBR* 1
TEXTURED IRON	K14948TIRB 1	K14958TIRB 1	K14989TIRB 1	K14978TIRB 1
DESERT BRONZE	K14948DBZB 1	K14958DBZB 1	K14989DBZB 1	K14978DBZB 1
ANTIQUE BRASS	K14948ABSB 1	K14958ABSB 1	K14989ABSB 1	K14978ABSB 1
TEXTURED COPPER	K14948TCOB 1	K14958TCOB 1	K14989TCOB 1	K14978TCOB 1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH 35mm
866ZIC
FLUSH 46mm
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

Matching metal capped fuse carriers are standard on all Edge™ Connection Units (except WHI and Neon).

Switches

1 GANG SP
2 WAY
20 AMP

2 GANG SP
2 WAY
20 AMP

3 GANG SP
2 WAY
10 AMP

1 GANG SP
2 WAY
WITH LARGE ROCKER
20 AMP

2 GANG SP
2 WAY
WITH LARGE
ROCKERS
20 AMP



K14371BSS*	1	K14372BSS*	1	K14373BSS*	1	K13471BSS*	1	K13472BSS*	1
K14371LBS*	1	K14372LBS*	1	K14373LBS*	1	K13471LBS*	1	K13472LBS*	1
K14371BRC*	1	K14372BRC*	1	K14373BRC*	1	K13471BRC*	1	K13472BRC*	1
K14371POC*	1	K14372POC*	1	K14373POC*	1	K13471POC*	1	K13472POC*	1
K14371SAG*	1	K14372SAG*	1	K14373SAG*	1	K13471SAG*	1	K13472SAG*	1
K14371WHIW	1	K14372WHIW	1	K14373WHIW	1	K13471WHIW	1	K13472WHIW	1
K14371LIVW	1	K14372LIVW	1	K14373LIVW	1	K13471LIVW	1	K13472LIVW	1
K14371LBKB	1	K14372LBKB	1	K14373LBKB	1	K13471LBKB	1	K13472LBKB	1
K14371PBR*	1	K14372PBR*	1	K14373PBR*	1	K13471PBR*	1	K13472PBR*	1
K14371TIRB	1	K14372TIRB	1	K14373TIRB	1	K13471TIRB	1	K13472TIRB	1
K14371DBZB	1	K14372DBZB	1	K14373DBZB	1	K13471DBZB	1	K13472DBZB	1
K14371ABSB	1	K14372ABSB	1	K14373ABSB	1	K13471ABSB	1	K13472ABSB	1
K14371TCOB	1	K14372TCOB	1	K14373TCOB	1	K13471TCOB	1	K13472TCOB	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts.

MOUNTING BOXES
FLUSH
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
861ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
861ZIC
DIMENSIONS
86 x 86mm
ROCKER DIMENSIONS
22 x 40mm
FIXING CENTRES
120.6mm
BS 60669-1:1999

MOUNTING BOXES
FLUSH
861ZIC
DIMENSIONS
86 x 86mm
ROCKER DIMENSIONS
22 x 40mm
FIXING CENTRES
120.6mm
BS 60669-1:1999

High Current Switches

1 GANG DP
WITH NEON
32 AMP

1 GANG DP
WITH NEON
50 AMP

Cooker Control Unit

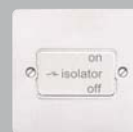
DP SWITCH AND
13 AMP
SWITCHSOCKET
OUTLET WITH NEONS
45 AMP

3 Pole Fan Isolator

10 AMP

Triple Pole & Neutral Switch

32 AMP



FINISHES

BRUSHED STAINLESS STEEL	K14305BSS*	1	K14336BSS*	1	K14361BSS*	1	K14859BSS*	1	K14114BSS*	1
LACQUERED BRUSHED STEEL	K14305LBS*	1			K14361LBS*	1	K14859LBS*	1	K14114LBS*	1
BRUSHED CHROME	K14305BRC*	1			K14361BRC*	1	K14859BRC*	1	K14114BRC*	1
POLISHED CHROME	K14305POC*	1			K14361POC*	1	K14859POC*	1	K14114POC*	1
SATIN GOLD	K14305SAG*	1			K14361SAG*	1	K14859SAG*	1	K14114SAG*	1
PORCELAIN WHITE	K14305WHIW	1			K14361WHIW	1	K14859WHIW	1	K14114WHIW	1
LUSTROUS IVORY	K14305LIVW	1			K14361LIVW	1	K14859LIVW	1	K14114LIVW	1
LUSTROUS BLACK	K14305LBKB	1			K14361LBKB	1	K14859LBKB	1	K14114LBKB	1
POLISHED BRASS	K14305PBR*	1			K14361PBR*	1	K14859PBR*	1	K14114PBR*	1
TEXTURED IRON	K14305TIRB	1			K14361TIRB	1	K14859TIRB	1	K14114TIRB	1
DESERT BRONZE	K14305DBZB	1			K14361DBZB	1	K14859DBZB	1	K14114DBZB	1
ANTIQUE BRASS	K14305ABSB	1			K14361ABSB	1	K14859ABSB	1	K14114ABSB	1
TEXTURED COPPER	K14305TCOB	1			K14361TCOB	1	K14859TCOB	1	K14114TCOB	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH 35mm
866ZIC
877ZIC (for extra wiring space)
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 47mm
878ZIC
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH 47mm
878ZIC
45A DP Main Switch and 13A
Switchsocket outlet (Up to
10mm² conductor).
Rotary operated shutter.
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 4177:1992
To allow adequate wiring
space, mounting box must be
installed 6mm to 10mm sub
flush to the wall surface.

MOUNTING BOXES
FLUSH 46mm
877ZIC
DIMENSIONS
86 x 186mm
FIXING CENTRES
60.3mm
BS EN 60947-3:1999
To allow adequate wiring
space, mounting box must be
installed 6mm to 10mm sub
flush to the wall surface.

MOUNTING BOXES:
FLUSH
5268ALM (Mounting box
should be mounted 6 to 10mm
sub-flush to the wall)
DIMENSIONS
203 x 140mm
TERMINAL CAPACITY
16mm² conductors
BS EN 60947-3:1999

Intelligent Dimmers

2 WAY SINGLE
230V A.C. 50HZ
60W/VA MIN.
500W/400VA MAX.

2 WAY DOUBLE
230V A.C. 50HZ
60W/VA MIN.
450W/360VA MAX.
FOR EACH DIMMER

2 WAY SINGLE
230V A.C. 50HZ
40W/VA MIN.
300W/240VA MAX.

2 WAY DOUBLE
230V A.C. 50HZ
40W/VA MIN.
300W/240VA MAX.
FOR EACH DIMMER



K14301BSS	1	K14302BSS	1	K14521BSS	1	K14522BSS	1
K14301LBS	1	K14302LBS	1	K14521LBS	1	K14522LBS	1
K14301BRC	1	K14302BRC	1	K14521BRC	1	K14522BRC	1
K14301POC	1	K14302POC	1	K14521POC	1	K14522POC	1
K14301SAG	1	K14302SAG	1	K14521SAG	1	K14522SAG	1
K14301WHI	1	K14302WHI	1	K14521WHI	1	K14522WHI	1
K14301LIV	1	K14302LIV	1	K14521LIV	1	K14522LIV	1
K14301LBK	1	K14302LBK	1	K14521LBK	1	K14522LBK	1
K14301PBR	1	K14302PBR	1	K14521PBR	1	K14522PBR	1
K14301TIR	1	K14302TIR	1	K14521TIR	1	K14522TIR	1
K14301DBZ	1	K14302DBZ	1	K14521DBZ	1	K14522DBZ	1
K14301ABS	1	K14302ABS	1	K14521ABS	1	K14522ABS	1
K14301TCO	1	K14302TCO	1	K14521TCO	1	K14522TCO	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

MOUNTING BOXES
FLUSH
866ZIC – 35mm deep min
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm

MOUNTING BOXES
FLUSH
886ZIC – 35mm deep min
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm

MOUNTING BOXES
FLUSH
866ZIC – 35mm deep min
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm

MOUNTING BOXES
FLUSH
866ZIC – 35mm deep min
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm

These dimmers employ the latest micro-controller based circuitry to provide electronic soft-start and overload protection. They are suitable for use with good quality electronic or wire-wound transformers. Can also be used with good quality halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

NOT SUITABLE FOR FLUORESCENT LOADS.

Conform to latest standards BS EN 60669-2-1.

All intelligent dimmers have a combined push-on/push-off switch and rotary dimmer control, and are suitable for one or two-way switching.

Toggle Switch Frontplates

SUPPLIED WITH GRIDS

1 MODULE

2 MODULE

3 MODULE

4 MODULE

FINISHES

BRUSHED STAINLESS STEEL	K14431BSS	1	K14432BSS	1	K14433BSS	1	K14434BSS	1
LACQUERED BRUSHED STEEL	K14431LBS	1	K14432LBS	1	K14433LBS	1	K14434LBS	1
BRUSHED CHROME	K14431BRC	1	K14432BRC	1	K14433BRC	1	K14434BRC	1
POLISHED CHROME	K14431POC	1	K14432POC	1	K14433POC	1	K14434POC	1
SATIN GOLD	K14431SAG	1	K14432SAG	1	K14433SAG	1	K14434SAG	1
PORCELAIN WHITE	K14431WHI	1	K14432WHI	1	K14433WHI	1	K14434WHI	1
LUSTROUS IVORY	K14431LIV	1	K14432LIV	1	K14433LIV	1	K14434LIV	1
LUSTROUS BLACK	K14431LBK	1	K14432LBK	1	K14433LBK	1	K14434LBK	1
POLISHED BRASS	K14431PBR	1	K14432PBR	1	K14433PBR	1	K14434PBR	1
TEXTURED IRON	K14431TIR	1	K14432TIR	1	K14433TIR	1	K14434TIR	1
DESERT BRONZE	K14431DBZ	1	K14432DBZ	1	K14433DBZ	1	K14434DBZ	1
ANTIQUE BRASS	K14431ABS	1	K14432ABS	1	K14433ABS	1	K14434ABS	1
TEXTURED COPPER	K14431TCO	1	K14432TCO	1	K14433TCO	1	K14434TCO	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOX
FLUSH
891ALM
DIMENSIONS
86 x 86mm
BS 5733:2010

MOUNTING BOX
FLUSH
891ALM
DIMENSIONS
86 x 86mm
BS 5733:2010

MOUNTING BOX
FLUSH
892ALM
DIMENSIONS
86 x 146mm
BS 5733:2010

MOUNTING BOX
FLUSH
892ALM
DIMENSIONS
86 x 146mm
BS 5733:2010

Toggle Switch Modules

SP 1 WAY
20 AMP

SP 2 WAY
20 AMP

DP 1 WAY
20 AMP

INTERMEDIATE
20 AMP



Grid Plus Modular Frontplates SUPPLIED WITH GRIDS

1 MODULE

2 MODULE



K14891BSS	1	K14892BSS	1	K14896BSS	1	K14893BSS	1	K14331BSS	1	K14332BSS	1
K14891LBS	1	K14892LBS	1	K14896LBS	1	K14893LBS	1	K14331LBS	1	K14332LBS	1
K14891BRC	1	K14892BRC	1	K14896BRC	1	K14893BRC	1	K14331BRC	1	K14332BRC	1
K14891POC	1	K14892POC	1	K14896POC	1	K14893POC	1	K14331POC	1	K14332POC	1
K14891SAG	1	K14892SAG	1	K14896SAG	1	K14893SAG	1	K14331SAG	1	K14332SAG	1
K14891WHI	1	K14892WHI	1	K14896WHI	1	K14893WHI	1	K14331WHI	1	K14332WHI	1
K14891LIV	1	K14892LIV	1	K14896LIV	1	K14893LIV	1	K14331LIV	1	K14332LIV	1
K14891LBK	1	K14892LBK	1	K14896LBK	1	K14893LBK	1	K14331LBK	1	K14332LBK	1
K14891PBR	1	K14892PBR	1	K14896PBR	1	K14893PBR	1	K14331PBR	1	K14332PBR	1
K14891TIR	1	K14892TIR	1	K14896TIR	1	K14893TIR	1	K14331TIR	1	K14332TIR	1
K14891DBZ	1	K14892DBZ	1	K14896DBZ	1	K14893DBZ	1	K14331DBZ	1	K14332DBZ	1
K14891ABS	1	K14892ABS	1	K14896ABS	1	K14893ABS	1	K14331ABS	1	K14332ABS	1
K14891TCO	1	K14892TCO	1	K14896TCO	1	K14893TCO	1	K14331TCO	1	K14332TCO	1

BS EN 60699-1:1999

BS EN 60699-1:1999

BS EN 60699-1:1999

BS EN 60699-1:1999

MOUNTING BOX
FLUSH
891ALM
DIMENSIONS
86 x 86mm
BS 5733:2010

MOUNTING BOX
FLUSH
891ALM
DIMENSIONS
86 x 86mm
BS 5733:2010

Grid Plus
Modular Frontplates
 SUPPLIED WITH GRIDS






3 MODULE

4 MODULE

6 MODULE

8 MODULE

9 MODULE

										
FINISHES										
BRUSHED STAINLESS STEEL	K14333BSS	1	K14334BSS	1	K14346BSS	1	K14348BSS	1	K14349BSS	1
LACQUERED BRUSHED STEEL	K14333LBS	1	K14334LBS	1	K14346LBS	1	K14348LBS	1	K14349LBS	1
BRUSHED CHROME	K14333BRC	1	K14334BRC	1	K14346BRC	1	K14348BRC	1	K14349BRC	1
POLISHED CHROME	K14333POC	1	K14334POC	1	K14346POC	1	K14348POC	1	K14349POC	1
SATIN GOLD	K14333SAG	1	K14334SAG	1	K14346SAG	1	K14348SAG	1	K14349SAG	1
PORCELAIN WHITE	K14333WHI	1	K14334WHI	1	K14346WHI	1	K14348WHI	1	K14349WHI	1
LUSTROUS IVORY	K14333LIV	1	K14334LIV	1	K14346LIV	1	K14348LIV	1	K14349LIV	1
LUSTROUS BLACK	K14333LBK	1	K14334LBK	1	K14346LBK	1	K14348LBK	1	K14349LBK	1
POLISHED BRASS	K14333PBR	1	K14334PBR	1	K14346PBR	1	K14348PBR	1	K14349PBR	1
TEXTURED IRON	K14333TIR	1	K14334TIR	1	K14346TIR	1	K14348TIR	1	K14349TIR	1
DESERT BRONZE	K14333DBZ	1	K14334DBZ	1	K14346DBZ	1	K14348DBZ	1	K14349DBZ	1
ANTIQUE BRASS	K14333ABS	1	K14334ABS	1	K14346ABS	1	K14348ABS	1	K14349ABS	1
TEXTURED COPPER	K14333TCO	1	K14334TCO	1	K14346TCO	1	K14348TCO	1	K14349TCO	1

LEAD TIMES
 Please contact our Customer
 Services Department on
01268 563 404

MOUNTING BOX
 FLUSH
 892ALM
 DIMENSIONS
 86 x 146mm
 BS 5733:2010

MOUNTING BOX
 FLUSH
 892ALM
 DIMENSIONS
 86 x 146mm
 BS 5733:2010

MOUNTING BOX
 FLUSH
 893ALM
 DIMENSIONS
 146 x 146mm
 BS 5733:2010

MOUNTING BOX
 FLUSH
 893ALM
 DIMENSIONS
 146 x 146mm
 BS 5733:2010

MOUNTING BOX
 FLUSH
 895ALM
 DIMENSIONS
 206 x 146mm
 BS 5733:2010



Technical Hotline
+44 (0)1268 563720

Edge™

WIRING DEVICES
DECORATIVE

Grid Plus Modular Frontplates

SUPPLIED WITH GRIDS

12 MODULE

18 MODULE



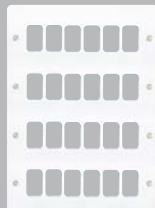



24 MODULE

1 MODULE
ARCHITRAVE

Grid Plus Spare Mounting Frames

1 MODULE
MOUNTING
FRAME

2 MODULE
MOUNTING
FRAME

						
K14352BSS 1	K14358BSS 1	K14354BSS 1	K14401BSS 1	K14701 10	K14702 10	
K14352LBS 1	K14358LBS 1	K14354LBS 1	K14401LBS 1			
K14352BRC 1	K14358BRC 1	K14354BRC 1	K14401BRC 1			
K14352POC 1	K14358POC 1	K14354POC 1	K14401POC 1			
K14352SAG 1	K14358SAG 1	K14354SAG 1	K14401SAG 1			
K14352WHI 1	K14358WHI 1	K14354WHI 1	K14401WHI 1			
K14352LIV 1	K14358LIV 1	K14354LIV 1	K14401LIV 1			
K14352LBK 1	K14358LBK 1	K14354LBK 1	K14401LBK 1			
K14352PBR 1	K14358PBR 1	K14354PBR 1	K14401PBR 1			
K14352TIR 1	K14358TIR 1	K14354TIR 1	K14401TIR 1			
K14352DBZ 1	K14358DBZ 1	K14354DBZ 1	K14401DBZ 1			
K14352ABS 1	K14358ABS 1	K14354ABS 1	K14401ABS 1			
K14352TCO 1	K14358TCO 1	K14354TCO 1	K14401TCO 1			

MOUNTING BOX
FLUSH
895ALM
DIMENSIONS
206 x 146mm
BS 5733:2010

MOUNTING BOX
FLUSH
898ALM
DIMENSIONS
206 x 206mm
BS 5733:2010

MOUNTING BOX
FLUSH
900ALM
DIMENSIONS
207 x 267mm
BS 5733:2010

MOUNTING BOX
FLUSH
3891ZIC
DIMENSIONS
38.8 x 91.75
BS 5733:2010

Grid Plus Spare Mounting Frames

Switch Modules

3 MODULE
MOUNTING FRAME4 MODULE
MOUNTING FRAME6 MODULE
MOUNTING FRAME1 MODULE
ARCHITRAVE
MOUNTING FRAME

BLANK INSERT



FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

MK WHITE (PLASTIC ROCKER)

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K14703

10

K14704

10

K14706

10

K14801

10

K4880BSS*

1

K4880LBS*

1

K4880BRC*

1

K4880POC*

1

K4880SAG*

1

K4880WHI

10

K4880LIVW

1

K4880LBKB

1

K4880PBR*

1

K4880TIRB

1

K4880DBZB

1

K4880ABSB

1

K4880TCOB

1

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

Will only fit MK Mounting Box
3891ZIC

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

BS 5733:2010

Switch Modules 10 Amp

SP 1 WAY
10 AMP

DP 1 WAY
10 AMP

SP 2 WAY
10 AMP

SP 2 WAY
RETRACTIVE
10 AMP

SP 2 WAY
RED
RETRACTIVE
10 AMP

SP 2 WAY
RETRACTIVE
MARKED BELL
SYMBOL
10 AMP



K4881BSS*	1	K4981BSS*	1	K4882BSS*	1	K4885BSS*	1		
K4881LBS*	1	K4981LBS*	1	K4882LBS*	1	K4885LBS*	1		
K4881BRC*	1	K4981BRC*	1	K4882BRC*	1	K4885BRC*	1		
K4881POC*	1	K4981POC*	1	K4882POC*	1	K4885POC*	1		
K4881SAG*	1	K4981SAG*	1	K4882SAG*	1	K4885SAG*	1		
K4881WHI	10	K4981WHI	10	K4882WHI	10	K4885WHI	10		
K4881LIVW	1	K4981LIVW	1	K4882LIVW	1	K4885LIVW	1		
K4881LBKB	1	K4981LBKB	1	K4882LBKB	1	K4885LBKB	1		
K4881PBR*	1	K4981PBR*	1	K4882PBR*	1	K4885PBR*	1		
K4881TIRB	1	K4981TIRB	1	K4882TIRB	1	K4885TIRB	1		
K4881DBZB	1	K4981DBZB	1	K4882DBZB	1	K4885DBZB	1		
K4881ABSB	1	K4981ABSB	1	K4882ABSB	1	K4885ABSB	1		
K4881TCOB	1	K4981TCOB	1	K4882TCOB	1	K4885TCOB	1		
						K4885RED	1	K4885BWHI	1
						K4885REDB	1	K4885BBLK	1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.

Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent loads.
BS EN 60669-1:1999

Switch Modules 10 Amp

SP 2 WAY
RETRACTIVE
MARKED 'PRESS'
10 AMP

2 WAY
CENTRE OFF
RETRACTIVE
10 AMP

Switch Modules 20 Amp

SP 1 WAY
20 AMP

DP
1 WAY
PUSH TO MAKE
20 AMP

DP
1 WAY
RED ROCKER
PUSH TO MAKE
20 AMP

FINISHES

BRUSHED STAINLESS STEEL	K4885PWHI K4885PBLK	10 1	K4900BSS*	1	K4891BSS*	1	K4910BSS*	1	K4910RED K4910REDB	10 1
LACQUERED BRUSHED STEEL			K4900LBS*	1	K4891LBS*	1	K4910LBS*	1		
BRUSHED CHROME			K4900BRC*	1	K4891BRC*	1	K4910BRC*	1		
POLISHED CHROME			K4900POC*	1	K4891POC*	1	K4910POC*	1		
SATIN GOLD			K4900SAG*	1	K4891SAG*	1	K4910SAG*	1		
MK WHITE (PLASTIC ROCKER)			K4900WHI	10	K4891WHI	10	K4910WHI	10		
LUSTROUS IVORY			K4900LIVW	1	K4891LIVW	1	K4910LIVW	1		
LUSTROUS BLACK			K4900LBKB	1	K4891LBKB	1	K4910LBKB	1		
POLISHED BRASS			K4900PBR*	1	K4891PBR*	1	K4910PBR*	1		
TEXTURED IRON			K4900TIRB	1	K4891TIRB	1	K4910TIRB	1		
DESERT BRONZE			K4900DBZB	1	K4891DBZB	1	K4910DBZB	1		
ANTIQUE BRASS			K4900ABSB	1	K4891ABSB	1	K4910ABSB	1		
TEXTURED COPPER			K4900TCOB	1	K4891TCOB	1	K4910TCOB	1		

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

Switch Modules 20 Amp

DP 1 WAY
PUSH TO BREAK
RETRACTIVE
20 AMP

DP 1 WAY
RED ROCKER
PUSH TO BREAK
RETRACTIVE
20 AMP

SP 2 WAY
20 AMP

SP 2 WAY
RED ROCKER
20 AMP

SP 2 WAY
SWITCH WITH
INTEGRAL NEON
LOCATOR
20 AMP

SP 2 WAY
AND CENTRE
OFF
20 AMP



K4915WHI 10 K4915BLK 10	K4915RED 10 K4915REDB 1	K4892BSS* 1	K4892RED 10 K4892REDB 10	K4892LWHI 10 K4892LBLK 1	K4899BSS* 1
		K4892LBS* 1			K4899LBS* 1
		K4892BRC* 1			K4899BRC* 1
		K4892POC* 1			K4899POC* 1
		K4892SAG* 1			K4899SAG* 1
		K4892WHI 10			K4899WHI 10
		K4892LIVW 1			K4899LIVW 1
		K4892LBKB 1			K4899LBKB 1
		K4892PBR* 1			K4899PBR* 1
		K4892TIRB 1			K4899TIRB 1
		K4892DBZB 1			K4899DBZB 1
		K4892ABSB 1			K4899ABSB 1
		K4892TCOB 1			K4899TCOB 1

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterix, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW Lustrous Ivory finish with white inserts

NOTE

Push switches are not
designed for fluorescent loads.
BS EN 60669-1:1999

NOTE

Push switches are not
designed for fluorescent loads.
BS EN 60669-1:1999

These switches do NOT have
to be derated when used with
fluorescent or inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with
fluorescent or inductive loads.
Additional information on printed modules available in Grid Plus
Section, pages 175.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

Switch Modules






SP 2 WAY
AND CENTRE
OFF, RED ROCKER
20 AMP

INTERMEDIATE
20 AMP

INTERMEDIATE
RED ROCKER
20 AMP

DP
1 WAY
20 AMP

DP
1 WAY
WITH NEON
20 AMP

					
FINISHES					
BRUSHED STAINLESS STEEL	K4899RED K4899REDB	K4893BSS* 1	K4893RED K4893REDB	K4896BSS* 1	K4896NWHI K4896NBLK
LACQUERED BRUSHED STEEL		K4893LBS* 1		K4896LBS* 1	
BRUSHED CHROME		K4893BRC* 1		K4896BRC* 1	
POLISHED CHROME		K4893POC* 1		K4896POC* 1	
SATIN GOLD		K4893SAG* 1		K4896SAG* 1	
MK WHITE (PLASTIC ROCKER)		K4893WHI 1		K4896WHI 1	
LUSTROUS IVORY		K4893LIVW 1		K4896LIVW 1	
LUSTROUS BLACK		K4893LBKB 1		K4896LBKB 1	
POLISHED BRASS		K4893PBR* 1		K4896PBR* 1	
TEXTURED IRON		K4893TIRB 1		K4896TIRB 1	
DESERT BRONZE		K4893DBZB 1		K4896DBZB 1	
ANTIQUE BRASS		K4893ABSB 1		K4896ABSB 1	
TEXTURED COPPER		K4893TCOB 1		K4896TCOB 1	

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW.
Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxLIVW
Lustrous Ivory finish with white inserts

Switch Modules

DP
1 WAY
WITH WINDOW
20 AMP

DP
1 WAY
RED ROCKER
20 AMP



Printed Modules with and without Neon



K4896WWHI 10
K4896WBLK 10

K4896RED 10
K4896REDB 10

K4896 PRINTED MODULE

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896BRWHI OR K4896BRBLK

BOILER K4896BR	WASTE DISPOSAL K4896WD	HOB K4896HB
DISHWASHER K4896DW	WASHING MACHINE K4896WM	IMMERSION HEATER K4896IH
COOKER HOOD K4896CH	TUMBLE DRYER K4896TD	PLINTH HEATER K4896PH
FAN K4896FN	WASHER DRYER K4896WDR	WORKTOP LIGHTING K4896WL
FRIDGE K4896Fg	MICROWAVE K4896MW	WINE COOLER K4896WC
FREEZER K4896FZ	HEATER K4896HR	WARMING DRAWER K4896WDA
FRIDGE FREEZER K4896FF	OVEN K4896OV	COFFEE MACHINE K4896CM

K4896N PRINTED MODULE WITH NEON

FOR WHITE ROCKERS, USE THE SUFFIX 'WHI'. FOR BLACK ROCKERS, USE THE SUFFIX 'BLK'. FOR EXAMPLE: K4896NBRWHI OR K4896NBRBLK

BOILER K4896NBR	WASTE DISPOSAL K4896NWD	HOB K4896NHB
DISHWASHER K4896NDW	WASHING MACHINE K4896NWM	IMMERSION HEATER K4896NIH
COOKER HOOD K4896NCH	TUMBLE DRYER K4896NTD	PLINTH HEATER K4896NPH
FAN K4896NFN	WASHER DRYER K4896NWDR	WORKTOP LIGHTING K4896NWL
FRIDGE K4896NFg	MICROWAVE K4896NMW	WINE COOLER K4896NWC
FREEZER K4896NFZ	HEATER K4896NHR	WARMING DRAWER K4896NWDA
FRIDGE FREEZER K4896NFF	OVEN K4896NOV	COFFEE MACHINE K4896NCM

NOTE

K4896NIH (Immersion Heater with Neon) is not available with black rockers.

BS EN 60669-1:1999

BS EN 60669-1:1999

Key Switch Modules

INTERMEDIATE
KEY SWITCH
20 AMP

SP
KEY SWITCH
2 WAY
20 AMP

SP KEY SWITCH
2 WAY
EMERGENCY
LIGHTING
20 AMP

DP
KEY SWITCH
1 WAY
20 AMP

DP
EMERGENCY
LIGHTING
20 AMP

SP
KEY SWITCH
2 WAY
RETRACTIVE
20 AMP



FINISHES

WHITE	K4894WHI 10	K4898WHI 10	K4898ELWHI 10	K4917WHI 10	K4917ELWHI 10	K4918WHI 10
BLACK	K4894BLK 1	K4898BLK 1	K4898ELBLK 1	K4917BLK 1		K4918BLK 10

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS EN 60669-1:1999
Key (3405ZIC) is supplied.



Technical Hotline
+44 (0)1268 563720

Edge™

Indicator Modules

200-250V
NEON



K4889RED 10
K4889REDB 1

BS 5733:2010

200-250V
NEON



K4889AMB 10

BS 5733:2010

200-250V
FLUORESCENT



K4889GRN 10

BS 5733:2010

21-36V
FILAMENT



K4836RED 10

BS 5733:2010

21-36V
FILAMENT



K4836AMB 10

BS 5733:2010

21-36V
FILAMENT



K4836GRN 10

BS 5733:2010

Will Operate On Both A.C. And D.C

Not available in other finishes

Dimmer Switch Modules

1 GANG 40W/
VA-220W/180VA,
230VA.C, 50HZ
2 WAY
1 MODULE

1 GANG 60W/
VA-400W/320VA,
230VA.C, 50HZ
2 WAY
2 MODULE

1 GANG
40-220W/180VA/
4-70W LED DIMMER
2 WAY
1 MODULE

0-10V/1-10V
FLUORESCENT
CONTROLLER
1 MODULE



FINISHES								
BRUSHED STAINLESS STEEL	K4501BSS*LV	1	K4500BSS*LV	1	K4511BSS*LV	1	K4499BSS*	1
LACQUERED BRUSHED STEEL	K4501LBS*LV	1	K4500LBS*LV	1	K4511LBS*LV	1	K4499LBS*	1
BRUSHED CHROME	K4501BRC*LV	1	K4500BRC*LV	1	K4511BRC*LV	1	K4499BRC*	1
POLISHED CHROME	K4501POC*LV	1	K4500POC*LV	1	K4511POC*LV	1	K4499POC*	1
SATIN GOLD	K4501SAG*LV	1	K4500SAG*LV	1	K4511SAG*LV	1	K4499SAG*	1
PORCELAIN WHITE	K4501WHIWL	1	K4500WHIWL	1	K4511WHIWL	1	K4499WHI	1
LUSTROUS IVORY	K4501LIVWL	1	K4500LIVWL	1	K4511LIVWL	1	K4499LIVW	1
LUSTROUS BLACK	K4501LBKBL	1	K4500LBKBL	1	K4511LBKBL	1	K4499LBKB	1
POLISHED BRASS	K4501PBR*LV	1	K4500PBR*LV	1	K4511PBR*LV	1	K4499PBR*	1
TEXTURED IRON	K4501TIRBL	1	K4500TIRBL	1	K4511TIRBL	1	K4499TIRB	1
DESERT BRONZE	K4501DBZBL	1	K4500DBZBL	1	K4511DBZBL	1	K4499DBZB	1
ANTIQUE BRASS	K4501ABSBL	1	K4500ABSBL	1	K4511ABSBL	1	K4499ABSB	1
TEXTURED COPPER	K4501TCOBL	1	K4500TCOBL	1	K4511TCOBL	1	K4499TCOB	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

These dimmers incorporate the latest in micro-controller based circuitry to provide electronic soft-start and overload protection.
Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen
lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.
K4500 is only suitable for use in 2, 4 and 8 module grids.
They are not suitable for fluorescent lamps.

MK Fluorescent Grid Dimmers are low
voltage controllers for connection to 1-10V
controllable ballasts.

NOTE

Refer to technical section for derating factors when more than one unit is used in any one box.
Conforms to the latest standard BS EN 60669-2-1.

* Available with the option of either White or Black inserts. Add Suffix 'W' or 'B' to part number when ordering, E.g. KxxxxBSSW. Where there is no asterisk, the final suffix W = White Insert, B = Black Insert, E.g. KxxxxWHIW = Porcelain White finish with White inserts

When ordering K4500, K4501 & K4511, use the suffix 'LV' right at the end, eg. K4501BSSWL








Technical Hotline
+44 (0)1268 563720

Edge™

WIRING DEVICES
DECORATIVE

Accessory Modules

SINGLE TV CO-AXIAL OUTLET NON-ISOLATED	SINGLE TV CO-AXIAL OUTLET ISOLATED	BUZZER UNIT 200-250V	BUZZER UNIT 21-36V	CORD OUTLET 16 AMP	
					
K4520WHI 10 K4896WBLK 10	K4521WHI 10 K4521BLK 10	K4000WHI 10	K4001WHI 10	K4886WHI 10 K4886BLK 10	

For direct connection to TV or FM aerial co-axial download. NOT to be used in same enclosure as mains exceeding 50V.
BS 3041:1977
IEC 169-2:1965
BS 5733:2010 where applicable.

For direct connection to TV or FM aerial co-axial download. NOT to be used in same enclosure as mains exceeding 50V.
BS 3041:1977
IEC 169-2:1965
BS 5733:2010 where applicable.

200-250V
BS 5733:2010

Sound output level
Av 61 db @ 15 feet.
BS 5733:2010

Complete with 3 pairs of terminals. The supply terminals are suitable for up to 2 x 2.5mm² or 1 x 4mm² solid conductors. The load terminals are suitable for one 1.5mm² flexible cord.
A cord grip is also fitted.
BS 5733:2010

Accessory Modules

FUSE UNIT
13 AMP



FUSE UNIT WITH
TAMPERPROOF
SCREW
13 AMP



Euro Modular Frontplates

EURO
1 MODULE
25 X 50MM



EURO
2 MODULE
50 X 50MM



EURO
4 MODULE
100 X 50MM



FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K4890WHI 10
K4890BLK 10

K4890KOWHI 10
K4890KOBLK 10

K14181BSS	1	K14182BSS	1	K14184BSS	1
K14181LBS	1	K14182LBS	1	K14184LBS	1
K14181BRC	1	K14182BRC	1	K14184BRC	1
K14181POC	1	K14182POC	1	K14184POC	1
K14181SAG	1	K14182SAG	1	K14184SAG	1
K14181WHI	1	K14182WHI	1	K14184WHI	1
K14181LIV	1	K14182LIV	1	K14184LIV	1
K14181LBK	1	K14182LBK	1	K14184LBK	1
K14181PBR	1	K14182PBR	1	K14184PBR	1
K14181TIR	1	K14182TIR	1	K14184TIR	1
K14181DBZ	1	K14182DBZ	1	K14184DBZ	1
K14181ABS	1	K14182ABS	1	K14184ABS	1
K14181TCO	1	K14182TCO	1	K14184TCO	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

Fuse carrier comes with 13A
cartridge fuse link to BS 1362.
BS 5733:2010

Key 3405ZIC supplied
Fuse carrier comes with 13A
cartridge fuse link to BS 1362.
BS 5733:2010

MOUNTING BOXES
Suitable for flush boxes to
BS 4662:2006 and surface boxes
to BS 5733:2010
Refer to appropriate module for
minimum box depth.
FIXING CENTRES
60.3mm
BS 5733:2010 where applicable.
Note: No grid required, modules
just clip into place.

MOUNTING BOXES
Suitable for flush boxes to
BS 4662:2006 and surface boxes
to BS 5733:2010
Refer to appropriate module for
minimum box depth.
FIXING CENTRES
60.3mm
BS 5733:2010 where applicable.
Note: No grid required, modules
just clip into place.

MOUNTING BOXES
Suitable for flush boxes to
BS 4662:2006 and surface boxes
to BS 5733:2010
Refer to appropriate module for
minimum box depth.
FIXING CENTRES
120.6mm
BS 5733:2010 where applicable.
Note: No grid required, modules
just clip into place.

Euro Power Modules

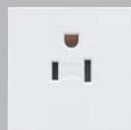
UK
250V
2 MODULE
50 X 50MM
13 AMP

GERMAN
2P+E 250V
SHUTTERED
2 MODULE (NON UK)
16 AMP

AMERICAN
127V SHUTTERED
2 MODULE
50 X 50MM (NON UK)
15 AMP

UK
250V SHUTTERED
2 MODULE
50 X 50MM
5 AMP

FRENCH/BELGIAN
2P+E
250V SHUTTERED
2 MODULE
50 X 50MM (NON UK)
16 AMP



K5830WHI 10
K5830BLK 10

K5831WHI 10
K5831BLK 10

K5832WHI 10
K5832BLK 10

K5833WHI 10
K5833BLK 10

K5834WHI 10
K5834BLK 10

MOUNTING BOX
35mm minimum
46mm (for extra wiring space).
DIMENSIONS
50 x 50mm
BS 1363 Part 2:1995

MOUNTING BOX
46mm
DIMENSIONS
50 x 50mm
IEC 60884-1:2006

MOUNTING BOX
35mm
46mm (for extra wiring space)
DIMENSIONS
50 x 50mm
SASO 2204:2003

MOUNTING BOX
35mm minimum
46mm (for extra wiring space).
DIMENSIONS
50 x 50mm
BS 546:1950

MOUNTING BOX
46mm
DIMENSIONS
50 x 50mm
NF C61-314

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Power Modules

USB CHARGING
2 MODULE
50 X 50MM

Euro Datacom Modules

RJ11/12
1 MODULE
25 X 50MM

RJ45
CAT 6
1 MODULE
25 X 50MM

RJ45
CAT 6
SCREENED
1 MODULE
25 X 50MM

RJ45
CAT 6
ANGLED
1 MODULE
25 X 50MM

FINISHES**WHITE****K5837WHI****1****K5887WHI****5****K5846WHI****5****K5846SWHI****5****K5864WHI****5****BLACK****K5837BLK****1****K5887BLK****5****K5846BLK****5****K5846SBLK****5****LEAD TIMES**

Please contact our Customer
Services Department on
01268 563 404

USB charging sockets, each
capable of supporting 2A charge
(total of 2A)

K5837 MOUNTING BOX
Minimum Box depth 35mm
46mm for extra wiring space
IEC 60950-1
IEC 61000-6-1/3

Suitable for both RJ11 and
RJ12 jacks
RJ11; 4 wire
RJ12; 6 wire
MOUNTING BOXES
Minimum Box depth 35mm
FCC68
EN 41003

Cat 6 performance.
Suitable for both 568A and
568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Cat 6 performance.
Suitable for both 568A and
568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Cat 6 performance.
Suitable for both 568A and
568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

RJ45
CAT 5e
ANGLED
1 MODULE
25 X 50MM

RJ45
CAT 5e
1 MODULE
25 X 50MM

TELEPHONE
MASTER
1 MODULE
25 X 50MM

TELEPHONE
SECONDARY
1 MODULE
25 X 50MM

BNC 50Ω
1 MODULE
25 X 50MM



K5844WHI	5	K5845WHI	5	K5820WHI	5	K5821WHI	5	K5801WHI	5
		K5845BLK	5	K5820BLK	5	K5821BLK	5		

Enhanced Cat 5 performance.
Suitable for both 568A and 568B
wiring schemes.

MOUNTING BOXES
Minimum box depth
35mm standard
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Enhanced Cat 5 performance.
Suitable for both 568A and 568B
wiring schemes.

MOUNTING BOXES
Minimum box depth 35mm
standard
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

MOUNTING BOXES
Minimum depth 35mm
BS 6312-2

MOUNTING BOXES
Minimum depth 35mm
BS 6312-2

50 Ohm crimp connector suitable
for use with RG58, URM43,
URM76 and Beldon 9907 type
co-axial cables.

MOUNTING BOXES
Minimum box depth 35mm

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Multimedia Modules

SINGLE OUTLET
(IEC MALE)
1 MODULE
25 X 50MM

SINGLE OUTLET
(IEC FEMALE)
1 MODULE
25 X 50MM

SINGLE F-TYPE
SATELLITE
SOCKET
1 MODULE
25 X 50MM

TWIN OUTLET
TV/FM DIPLEXER
2 MODULE
50 X 50MM
(IRELAND ONLY)

FINISHES

WHITE	K5850WHI	5	K5851WHI	5	K5855WHI	5	K5852WHI	5
BLACK	K5850BLK	5	K5851BLK	5	K5855BLK	5	K5852BLK	5

LEAD TIMES

Please contact our Customer
Services Department on
01268 563 404

Fully screened non isolated TV outlets containing a combination of single, TV/FM Diplexer, TV/FM/SAT Triplexer and BT secondary telephone outlets for use within digital TV systems and interactive TV services.
Single outlets for connection to a single TV, FM or Satellite co-axial aerial lead.

MOUNTING BOXES

Minimum Box Depth 47mm
BS 3041:1997, IEC 169-2:1965, BS EN 50083 & BS 5733:2010 where applicable.

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

PERFORMANCE

Single	TV:	DC - 950MHz
	Sat:	DC - 1.75GHz
Diplexer	TV:	5-65MHz
		470-862MHz
	FM:	87.5-108 MHz

TV/FM/DAB FOR DIGITAL RADIO

PERFORMANCE

Diplexer	TV:	5-65MHz
		470-862MHz
	FM/DAB:	87.5-230MHz

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Multimedia Modules

TWIN OUTLET
TV-FM/DAB
DIPLEXER
2 MODULE
50 X 50MM



TRIPLE OUTLET
TV-FM/SATELLITE
TRIPLEXER
2 MODULE
50 X 50MM
(IRELAND ONLY)



TRIPLE OUTLET
TV-FM/DAB-SAT
TRIPLEXER
2 MODULE
50 X 50MM



QUAD OUTLET
TV-FM/DAB-2XSAT
2 MODULE
50 X 50MM



FEMALE HDMI OUTLET
2 MODULE
50 X 50MM



K5852DABWHI	5	K5853WHI	5	K5853DABWHI	5	K5854DABWHI	5	K5807WHI	5
K5852DABBLK	5	K5853BLK	5	K5853DABBLK	5	K5854DABBLK	5	K5807BLK	5

TV/FM Diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.

PERFORMANCE

Single	TV:	DC -
950MHz	Sat:	DC -
1.75GHz	TV:	5-65MHz
Diplexer	FM:	87.5-108
862MHz		
MHz		
TV/FM/DAB FOR DIGITAL RADIO		
PERFORMANCE		
Diplexer	TV:	5-65MHz
		470-
862MHz	FM/DAB:	87.5-
230MHz		

TV/FM diplexer units for connection to a single co-axial aerial lead with combined TV and FM signals.
TV/FM/SAT triplexer units for connection to a single co-axial aerial lead with combined TV, FM and Satellite signals

PERFORMANCE

SINGLE OUTLETS
TV/FM IEC MALE OR FEMALE
DC-950MHz
SAT F-TYPE
DC-1.75GHz

TV/FM/SAT PRODUCTS

OUTLET	DIPLEXER	OUTLET
TV	5-65MHz	TV
	470-862MHz	
FM/DAB	87.5-108MHz	FM
SAT	N/A	SAT1
TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO		
OUTLET	DIPLEXER	OUTLET
TV	5-65MHz	TV
	470-862MHz	
FM/DAB	87.5-230MHz	FM
SAT OR SAT1	N/A	SAT1
SAT2		SAT2

TRIPLEXER
5-65MHz
470-862MHz
87.5-108MHz
950-2300MHz

TRIPLEXER
5-65MHz
470-862MHz
87.5-230MHz
950-2300MHz

K5807 Female HDMI Outlet is HDMI 1.1, 1.2, 1.3 and 1.4b compatible, HDCP compliant.

DATA RATE

Up to 2.25 Gbps

SCAN

Up to 1080p/1920x1200

INPUT CONNECTOR

1 x HDMI Female (Type A)

OUTPUT CONNECTOR

1 x HDMI Female (Type A)

Supports high resolution input:

PC: VGA, SVGA,
SXVGA (1280x1024) and UXGA
(1600x1200, 1920x1200)
HDTV: 480p, 720p, 1080i and 1080p
HDMI input cable should be no larger
than 20m

These products are fully compatible with Labgear TV distribution systems and are approved for use in "Sky Homes" and "Homes On" specifications.

Mains operated products and extra low voltage modules must not be installed within the same frontplate.
Refer to BS 7671:2008 for details.

Euro Blank Modules

AUDIO BINDING
POST FOR SINGLE
LOUD SPEAKER
1 MODULE
25 X 50MM

RCA TO SCREW
TERMINATION SET
1 RED AND 1 BLACK
1 MODULE
25 X 50MM

2 MODULE
50 X 50MM

1 MODULE
25 X 50MM

1/2 MODULE
12.5 X 50MM



FINISHES

BRUSHED STAINLESS STEEL

LACQUERED BRUSHED STEEL

BRUSHED CHROME

POLISHED CHROME

SATIN GOLD

PORCELAIN WHITE

LUSTROUS IVORY

LUSTROUS BLACK

POLISHED BRASS

TEXTURED IRON

DESERT BRONZE

ANTIQUE BRASS

TEXTURED COPPER

K5805WHI 5
K5805BLK 5

K5806WHI 5
K5806BLK 5

K180WHI 10
K180BLK 10

K188WHI 10
K188BLK 10

K186WHI 10
K186BLK 10

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

DIMENSIONS
50 x 25 x 28mm

DIMENSIONS
50 x 25 x 28mm

BS 5733:2010 where applicable

BS 5733:2010 where applicable

BS 5733:2010 where applicable



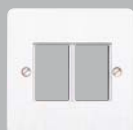
Technical Hotline
+44 (0)1268 563720

Edge™

WIRING DEVICES
DECORATIVE

LJU6C Datacom Frontplate

1 GANG
2 MODULE
22 X 37MM



LJU6C Datacom Modules

RJ11/12
1 MODULE



RJ45 CAT 6
1 MODULE



RJ45
CAT 6
SCREENED
1 MODULE



RJ45
CAT 5e
1 MODULE



K14172BSS*	1	K5787WHI	5	K5746WHI K5746BLK	5 5	K5746SWHI K5746SBLK	5 5	K5745WHI K5745BLK	5 5
K14172LBS*	1								
K14172BRC*	1								
K14172POC*	1								
K14172SAG*	1								
K14172WHIW	1								
K14172LIVW	1								
K14172LBK	1								
K14172PBRB	1								
K14172TIRB	1								
K14172DBZB	1								
K14172ABSB	1								
K14172TCOB	1								

MOUNTING BOXES

Suitable for flush boxes to BS 4662:1970 and surface boxes to BS 5733:2010

Refer to appropriate module for minimum box depth.

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm

BS 5733:2010 where applicable

NOTE

No grid required, modules just clip into place

Suitable for both RJ11 and RJ12 jacks.

RJ11: 4 wire

RJ12: 6 wire

MOUNTING BOXES

Minimum box depth 35mm

FCC68

EN41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum Box Depth 25mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

* Available with White or Black inserts.

LJU6C Datacom Blanks

LJU6C
1 MODULE

Blank Plates

1 GANG

2 GANG

FINISHES			
BRUSHED STAINLESS STEEL	K170WHI K170BLK	10 10	K14330BSS 1 K14329BSS 1
LACQUERED BRUSHED STEEL			K14330LBS 1 K14329LBS 1
BRUSHED CHROME			K14330BRC 1 K14329BRC 1
POLISHED CHROME			K14330POC 1 K14329POC 1
SATIN GOLD			K14330SAG 1 K14329SAG 1
PORCELAIN WHITE			K14330WHI 1 K14329WHI 1
LUSTROUS IVORY			K14330LIV 1 K14329LIV 1
LUSTROUS BLACK			K14330LBK 1 K14329LBK 1
POLISHED BRASS			K14330PBR 1 K14329PBR 1
TEXTURED IRON			K14330TIR 1 K14329TIR 1
DESERT BRONZE			K14330DBZ 1 K14329DBZ 1
ANTIQUE BRASS			K14330ABS 1 K14329ABS 1
TEXTURED COPPER			K14330TCO 1 K14329TCO 1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

BS 5733:2010 where appropriate

MOUNTING BOXES
FLUSH
866ZIC
DIMENSIONS:
86 x 86mm
FIXING CENTRES
1 gang: 60.3mm
BS 5733:2010

MOUNTING BOXES
FLUSH
866ZIC
DIMENSIONS
86 x 146mm
FIXING CENTRES
2 gang: 120.6mm
BS 5733:2010





ALBANY PLUS™

RANGE INTRODUCTION

Available in Brushed Stainless Steel, Brushed Chrome, Satin Gold and Polished Chrome finishes, Albany Plus™ brings stylish yet subtle good looks to both contemporary and classical interiors.

Being manufactured from the finest materials, Albany Plus™ wiring devices maintain their high quality appearance for years to come.

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches, only available from MK Electric and in finishes to complement the Albany Plus™ range. Please see page 21 for details.

HOW TO SPECIFY

A metal, flush mounting range of wiring devices. Frontplates with a maximum 9mm profile and subtle 7mm radius rounded corners. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to be large and concave with a minimum 3mm contact gap with a positive 'click' to denote successful operation.

FEATURES & BENEFITS

AVAILABLE IN BRUSHED STAINLESS STEEL, BRUSHED CHROME, SATIN GOLD AND POLISHED CHROME

Providing a range of products that complement the décor and requirements of any interior.

ALBANY PLUS™ BRUSHED CHROME AND SATIN GOLD ARE PRE-TREATED WITH A HEAT-CURED POWDER LACQUER FINISH

Brushed Chrome and Satin Gold products are coated with a special heat-cured powder lacquer finish ensuring that the range is durable, tarnish resistant and maintains its stylish and understated appearance for many years.

TOTAL SAFETY

MK sockets have a 3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply unless all 3 pins of a standard British 13A plug are in position.

DESIGN SERVICE

Perfect for when only a customised solution will do.

Albany Plus™

mkelectric.co.uk



DOUBLE POLE
SWITCHING

MATCHING
SCREWS

STYLISH CURVED DESIGN
Blends unobtrusively into the
environment

3-PIN "CHILD RESISTANT SHUTTER
SYSTEM"
Designed to inhibit access to the
electricity supply, unless all 3 pins of a
standard British 13A plug are in position

PRE-TREATED HEAT-CURED POWDER
LACQUER FINISH (BRC AND SAG)
Ensures that the range is durable and
tarnish resistant

Terminal screws are backed out
and captive. Terminals are upwards
facing to make installation easier.

Funnel entrance to terminals.

Clear terminal markings for easy
identification.

Polished Chrome finish
complements modern
interior design.

Brushed Chrome finish has subtle good looks to suit
classic interiors.





Technical Hotline
+44 (0)1268 563720

Albany Plus™

WIRING DEVICES
DECORATIVE

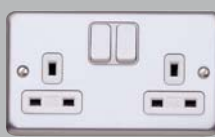
Switchsocket Outlets

1 GANG DP
DUAL EARTH TERMINALS
13 AMP

2 GANG DP
13 AMP

2 GANG DP WITH
RED ROCKERS
13 AMP

1 GANG DP
DUAL EARTH TERMINALS
WITH NEON
13 AMP



FINISHES

BRUSHED STAINLESS STEEL	K2958BSS	10	K2948BSS	5	K2948D6BSS	5	K2458BSS	5
BRUSHED CHROME	K2958BRC	1	K2948BRC	1	K2948D6BRC	1	K2458BRC	1
SATIN GOLD	K2958SAG	1	K2948SAG	1			K2458SAG	1
POLISHED CHROME	K2958PCR	1	K2948PCR	1			K2458PCR	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH 25MM
1 gang: 861ZIC
FLUSH 35MM
(for extra wiring space)
1 gang: 866ZIC
SURFACE WITH KNOCKOUTS
1 gang: K899ALM
SURFACE WITHOUT KNOCKOUTS
1 gang: K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last).
HIGH INTEGRITY EARTHING
Fitted with two earth terminals to
provide a double earth facility for
use when installations require a high
integrity protective connection as
specified within BS 7671:2008

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 866ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last)

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 866ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last)

MOUNTING BOXES
FLUSH 25MM
1 gang: 861ZIC
FLUSH 35MM
(for extra wiring space)
1 gang: 866ZIC
SURFACE WITH KNOCKOUTS
1 gang: K899ALM
SURFACE WITHOUT KNOCKOUTS
1 gang: K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last).
HIGH INTEGRITY EARTHING
Fitted with two earth terminals to
provide a double earth facility for
use when installations require a high
integrity protective connection as
specified within BS 7671:2008

Albany Plus™

mkelectric.co.uk



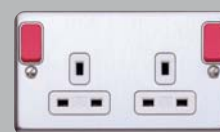
Switchsocket Outlets

2 GANG DP
WITH NEONS
13 AMP

2 GANG DP
WITH 2 X USB
CHARGING PORTS
DUAL EARTH
13 AMP

2 GANG DP WITH
OUTBOARD ROCKERS
AND DUAL EARTH
TERMINALS
13 AMP

2 GANG DP
WITH OUTBOARD
RED ROCKERS AND DUAL
EARTH TERMINALS
13 AMP



FINISHES

BRUSHED STAINLESS STEEL	K2448BSS	5	K2943BSS	1	K2947BSS	5	K2947D6BSS	5
BRUSHED CHROME	K2448BRC	1	K2943BRC	1	K2947BRC	1	K2947D6BRC	1
SATIN GOLD	K2448SAG	1	K2943SAG	1	K2947SAG	1		
POLISHED CHROME	K2448PCR	1	K2943PCR	1	K2947PCR	1		

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 886ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last)

USB charging sockets, each capable of
supporting 2A charge (total of 2A)

MOUNTING BOXES
FLUSH 35MM
2 gang: 886ZIC
FLUSH 46MM
(for extra wiring space)
2 gang: 877ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 5733: 2010
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last)
HIGH INTEGRITY EARTHING
Fitted with two earth terminals to
provide a double earth facility for
use when installations require a high
integrity protective connection as
specified within BS 7671:2008

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 886ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last)
HIGH INTEGRITY EARTHING
Fitted with two earth terminals to
provide a double earth facility for
use when installations require a high
integrity protective connection as
specified within BS 7671:2008

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 886ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
DOUBLE POLE SWITCHING
All switchsockets have double pole
switching (neutral makes first, breaks
last)
HIGH INTEGRITY EARTHING
Fitted with two earth terminals to
provide a double earth facility for
use when installations require a high
integrity protective connection as
specified within BS 7671:2008

Patress available for use
where existing back box is
too shallow, see page 34

2 GANG DP
WITH OUTBOARD
ROCKERS AND
'CLEAN EARTH'
FACILITY
13 AMP

1 GANG DP NON
STANDARD WITH
CLEAN EARTH
FACILITY
13 AMP

2 GANG DP
NON STANDARD
WITH CLEAN
EARTH
FACILITY
13 AMP

2 GANG DP
DUAL EARTH
FILTERED
SPIKE AND RFI
13 AMP

REPLACEMENT
FILTER CASSETTE

1 GANG DP
ROUND PIN
5 AMP



K2947CEBSS	5	K1258BSS	5	K1259BSS	5	K2826BSS	1	K1800WHI	5	K2881BSS	5
K2947CEBRC	1	K1258BRC	1	K1259BRC	1	K2826BRC	1			K2881BRC	1
										K2881SAG	1
										K2881PCR	1

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 886ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM

This product is provided with facilities for 'clean earth' connection.
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 25MM
861ZIC
FLUSH 35MM
(for extra wiring space)
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM

These products are provided with facilities for 'clean earth' connection and are suitable for non standard plugs with 'T' shaped earth pin. See page 240.
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995 where relevant

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 886ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT KNOCKOUTS
2 gang: K830ALM

This product provides facilities for 'clean earth' connection and are suitable for non standard plugs with 'T' shaped earth pin. See page 240.
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995 where relevant

MOUNTING BOX
886ZIC
Provides two way filtering to reduce voltage spikes and radio frequency interference. Protected by thermal cut out. Fitted with two earth terminals to provide a double earth facility when installations require a high integrity protective connection as specified within BS 7671:2008.
DIMENSIONS
86 x 146 x 39mm
FIXING CENTRES
120.6mm
BS 5733:2010

MOUNTING BOXES
FLUSH 25MM
861ZIC
FLUSH 35MM
(for extra wiring space)
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

Albany Plus™

mkelectric.co.uk



Switchsocket Outlets

1 GANG DP
ROUND PIN
15 AMP

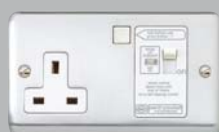


Switchsocket Outlets RCD Protected

1 GANG DP 30MA
RATED TRIPPING
CURRENT ACTIVE
CONTROL CIRCUIT
13 AMP



1 GANG DP 30MA
RATED TRIPPING
CURRENT PASSIVE
CONTROL CIRCUIT
13 AMP

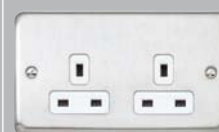


Socket Outlets

1 GANG
13 AMP



2 GANG WITH
DUAL EARTH
TERMINALS
13 AMP



FINISHES

BRUSHED STAINLESS STEEL	K2883BSS	5	K6301BSS	1	K6304BSS	1	K732BSS	5	K733BSS	5
BRUSHED CHROME	K2883BRC	1	K6301BRC	1	K6304BRC	1	K732BRC	1	K733BRC	1
SATIN GOLD	K2883SAG	1	K6301SAG	1						
POLISHED CHROME	K2883PCR	5	K6301PCR	1						

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH 25MM
861ZIC
FLUSH 35MM
(for extra wiring space)
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 546:1950

MOUNTING BOXES
FLUSH
886ZIC
Boxes must have a minimum
depth of 30mm
SURFACE WITH KNOCKOUTS
K897ALM
SURFACE WITHOUT
KNOCKOUTS
K830ALM
It is important to ensure that
the correct control circuit,
active or passive, is selected
for each application.
Only suitable for supply
voltage of 240V a.c.
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 7288:1990

MOUNTING BOXES
FLUSH 35MM
2 gang: 886ZIC
FLUSH 46MM
(for extra wiring space)
2 gang: 877ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT
KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
It is important to ensure that
the correct control circuit,
active or passive, is selected
for each application.
Only suitable for supply
voltage of 240V a.c.
BS 7288:1990

MOUNTING BOXES
FLUSH 25MM
1 gang: 861ZIC
FLUSH 35MM
(for extra wiring space)
1 gang: 866ZIC
SURFACE WITH KNOCKOUTS
1 gang: K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH 25MM
2 gang: 862ZIC
FLUSH 35MM
(for extra wiring space)
2 gang: 886ZIC
SURFACE WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT
KNOCKOUTS
2 gang: K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995
HIGH INTEGRITY EARTHING
Fitted with two earth
terminals to provide a
double earth facility for use
when installations require
a high integrity protective
connection as specified within
BS 7671:2008



Technical Hotline
+44 (0)1268 563720

Albany Plus™

WIRING DEVICES
DECORATIVE

Socket Outlets - Medical Locations

1 GANG DP
SWITCHED
13 AMP



K2958BLU

1

1 GANG
UNSWITCHED
13 AMP



K732BLU

1

2 GANG DP
CLEAN EARTH
WITH OUTBOARD
ROCKERS
13 AMP



K2947CEBLU

5

2 GANG
CLEAN EARTH
UNSWITCHED
13 AMP



K733CEBLU

1

Key Operated Socket Outlet and Switch

1 GANG DP
DUAL EARTH
13 AMP



K2949BSS

1

K2949BRC

1

1 GANG DP
20 AMP



K2158BSS

1

K2158BRC

1

MOUNTING BOXES

FLUSH 25MM

1 gang: 861ZIC

FLUSH 35MM

(for extra wiring space)

1 gang: 866ZIC

SURFACE WITH KNOCKOUTS

1 gang: K899ALM

SURFACE WITHOUT KNOCKOUTS

1 gang: K829ALM

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS 1363-2:1995

Product helps support compliance to BS7671 – 710.553.1

K2947CEBLU, K733CEBLU

These product are provided with facilities for "clean earth" connection.

MOUNTING BOXES

FLUSH 25MM

2 gang: 862ZIC

FLUSH 35MM

(for extra wiring space)

2 gang: 886ZIC

SURFACE WITH KNOCKOUTS

2 gang: K897ALM

SURFACE WITHOUT KNOCKOUTS

2 gang: K830ALM

DIMENSIONS

86 x 146mm

FIXING CENTRES

120.6mm

BS 1363-2:1995

Product helps support compliance to BS7671 – 710.553.1

MOUNTING BOXES

FLUSH 35MM

2 gang: 886ZIC

SURFACE WITH KNOCKOUTS

2 gang: K897ALM

SURFACE WITHOUT

KNOCKOUTS

2 gang: K830ALM

DIMENSIONS

86 x 146mm

BS 1363 Pt2:1995

HIGH INTEGRITY EARTHING

Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008

MOUNTING BOXES

FLUSH 35MM

1 gang: 866ZIC

SURFACE WITH KNOCKOUTS

1 gang: K899ALM

SURFACE WITHOUT

KNOCKOUTS

1 gang: K829ALM

DIMENSIONS

86 x 86mm

BS EN 60669-1:1999

Albany Plus™

mkelectric.co.uk



Floor Mounted Socket Outlets

1 GANG SP
SWITCH SOCKET
SPRING LOADED
HINGED COVER PLATE
13 AMP

1 GANG UNSWITCHED
SOCKET SPRING
LOADED HINGED
COVER PLATE
13 AMP

2 GANG
UNSWITCHED
SOCKET SPRING
LOADED HINGED
COVER PLATE
13 AMP

Connection Units Switched

DP WITH FLEX
OUTLET
13 AMP

DP
13 AMP

FINISHES

BRUSHED STAINLESS STEEL	740BSS	10	741BSS	5	742BSS	1	K931BSS	5	K941BSS	1
BRUSHED CHROME	740BRC	1	741BRC	1	742BRC	1	K931BRC	1	K941BRC	1
SATIN GOLD	740SAG	5	741SAG	1	742SAG	1	K931SAG	1	K941SAG	1
POLISHED CHROME							K931PCR	1	K941PCR	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH
1 gang: 866ZIC
Boxes must have a minimum
depth of 35mm
Rotary operated shutter.
DIMENSIONS
102 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH
1 gang: 866ZIC
Boxes must have a minimum
depth of 35mm
Rotary operated shutter.
DIMENSIONS
102 x 86mm
FIXING CENTRES
60.3mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH
2 gang: 886ZIC
Boxes must have a minimum
depth of 35mm
Rotary operated shutter.
DIMENSIONS
102 x 146mm
FIXING CENTRES
120.6mm
BS 1363-2:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995



Technical Hotline
+44 (0)1268 563720

Albany Plus™

WIRING DEVICES
DECORATIVE

DP WITH
TAMPERPROOF FUSE
CARRIER SCREW
13 AMP

DP WITH NEON
13 AMP

DP RED ROCKER
WITH NEON
13 AMP

DP WITH FLEX
OUTLET AND NEON
13 AMP

DP RED ROCKER
WITH FLEX OUTLET
AND NEON
13 AMP



K941KOBSS	1	K961BSS	1	K961D6BSS	1	K971BSS	5	K971D6BSS	5
K941KOBRC	1	K961BRC	1	K961D6BRC	1	K971BRC	1	K971D6BRC	5
		K961SAG	1	K961D6SAG	1	K971SAG	1		
		K961PCR	1			K971PCR	1		

MOUNTING BOXES
FLUSH
866ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995
Key (3405ZIC) is
supplied.

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

Albany Plus™

mkelectric.co.uk



Connection Units Unswitched

13 AMP

WITH NEON
13 AMPWITH FLEX OUTLET AND NEON
13 AMP

FINISHES						
BRUSHED STAINLESS STEEL	K948BSS	5	K958BSS	1	K978BSS	1
BRUSHED CHROME	K948BRC	1	K958BRC	1	K978BRC	1
SATIN GOLD	K948SAG	1			K978SAG	1
POLISHED CHROME	K948PCR	1			K978PCR	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 1363-4:1995

DP Switches

20 AMP



WITH NEON
20 AMP



WITH FLEX OUTLET,
RED ROCKER
AND NEON
20 AMP



WITH FLEX OUTLET
AND NEON
20 AMP



High Current Switches

DP WITH NEON
32 AMP



DP WITH NEON
50 AMP



K5213BSS	1	K5233BSS	1	K5233D6BSS	1	K5250BSS	1	K5106BSS	1	K5236BSS	1
K5213BRC	1	K5233BRC	1	K5233D6BRC	1	K5250BRC	1	K5106BRC	1	K5236BRC	1
		K5233SAG	1			K5250SAG	1	K5106SAG	1	K5236SAG	1
		K5233PCR	1			K5250PCR	1	K5106PCR	1	K5236PCR	1

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
866ZIC
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
866ZIC (6mm² conductors)
877ZIC (10mm² conductors)
SURFACE WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999

MOUNTING BOXES
FLUSH
886ZIC (6mm² conductors)
878ZIC (10mm² conductors)
SURFACE WITH KNOCKOUTS
K897ALM
SURFACE WITHOUT
KNOCKOUTS
K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS EN 60669-1:1999

DP Switches are not recommended for switching large banks of PCs

Albany Plus™

mkelectric.co.uk



Cooker Control Unit

DP MAIN SWITCH
AND 13 AMP
SWITCHSOCKET
OUTLET WITH NEONS

45 AMP

Triple Pole & Neutral Switch

32 AMP

Shaver/Toothbrush Supply Units

DUAL VOLTAGE
115/230V OUTPUT
220/240V INPUT
50/60HZ

Flex Outlets (NON UK)

Plateswitches

SP
2 WAY
10 AMP



FINISHES

BRUSHED STAINLESS STEEL	K5261BSS	1	K5114BSS	1	K703BSS	1	K2240BSS	1	K4671BSS	5
BRUSHED CHROME	K5261BRC	1	K5114BRC	1	K703BRC	1	K2240BRC	1	K4671BRC	1
SATIN GOLD	K5261SAG	1	K5114SAG	1	K703SAG	1			K4671SAG	1
POLISHED CHROME	K5261PCR	1	K5114PCR	1	K703PCR	1			K4671PCR	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH
86ZIC
(Up to 6mm² conductor)
87ZIC
(Up to 10mm² conductor)
Rotary operated shutter.
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 4177:1992

MOUNTING BOX
FLUSH
878ZIC
This product is rated at
440 volts with a motor load
rating of up to 12kW – 16 HP
at 415V 3 phase.
It has a utilisation category of
AC22A – switching of mixed
resistive and inductive loads
including moderate overloads
for a continuous duty of 32
amps. Making capacity is 2000
amps peak.
TERMINAL CAPACITY
16mm² conductors.
DIMENSIONS
146 x 86mm
BS EN 60947-3:1992

MOUNTING BOXES
FLUSH
878ZIC
This design incorporates
a double wound isolating
transformer rated 20VA at 230
or 115 volts and meets
BS EN 61558-2-5:1998
making it safe for use in
bathrooms.
Insertion of a shaver/
toothbrush plug automatically
switches on by energising the
primary side of the isolating
transformer – removal
automatically switches
off. The transformer is
protected against overload
by an automatic solid state
overload device with automatic
resetting.
DIMENSIONS
146 x 86mm
FIXING CENTRES
120.6mm
BS EN 61558-2-5:1998

MOUNTING BOXES
FLUSH
866ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
CABLE DIAMETER
Minimum 4mm
Maximum 14.5mm
DIMENSIONS
1 gang: 86 x 86mm
FIXING CENTRES
1 gang: 60.3mm
BS 5733:2010

MOUNTING BOXES
FLUSH
3995ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
These switches do not have
to be derated when used with
fluorescent or inductive loads.
Switches can be wired as
either one-way or two-way.
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS EN 60669-1:1999
If an intermediate switch is
required, a modular (Grid Plus)
version is available. Order
K3431 grid plate, K3701 grid
frame and K4893WHI 20A
intermediate switch



Technical Hotline
+44 (0)1268 563720

Albany Plus™

WIRING DEVICES
DECORATIVE

3 Pole Fan Isolator

2 GANG SP
2 WAY
10 AMP

3 GANG SP
2 WAY
10 AMP

1 GANG SP
2 WAY
WIDE ROCKER
10 AMP

2 GANG SP
2 WAY
WIDE ROCKER
10 AMP

WITHOUT
SWITCHLOCK
10 AMP

SWITCHLOCK
FOR FAN
ISOLATOR



K4672BSS	1	K4673BSS	5	K4761BSS	5	K4762BSS	5	K4860BSS	1	K4858	10
K4672BRC	1	K4673BRC	1	K4761BRC	1	K4762BRC	1	K4860BRC	1		
K4672SAG	1	K4673SAG	1	K4761SAG	1	K4762SAG	1	K4860SAG	1		
K4672PCR	1	K4673PCR	1	K4761PCR	1	K4762PCR	1	K4860PCR	1		

MOUNTING BOXES
FLUSH
3995ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

DIMENSIONS
86 x 86mm

FIXING CENTRES
60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

MOUNTING BOXES
FLUSH
3995ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

DIMENSIONS
86 x 86mm

FIXING CENTRES
60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

MOUNTING BOXES
FLUSH
3995ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

DIMENSIONS
86 x 86mm

FIXING CENTRES
60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

MOUNTING BOXES
FLUSH
3995ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM

These switches do not have to be derated when used with fluorescent or inductive loads.

Switches can be wired as either one-way or two-way.

DIMENSIONS
86 x 86mm

FIXING CENTRES
60.3mm

BS EN 60669-1:1999

If an intermediate switch is required, a modular (Grid Plus) version is available. Order K3431 grid plate, K3701 grid frame and K4893WHI 20A intermediate switch

MOUNTING BOXES
FLUSH
3995ZIC
SURFACE
WITH KNOCKOUTS
K2160WHI

For local isolation of fans with or without timers for repair or routine maintenance.

DIMENSIONS
86 x 86mm

FIXING CENTRES
60.3mm

BS EN 60669-2-4

For use with K4860

Albany Plus™

mkelectric.co.uk



Standard Dimmer Switches

2 WAY SINGLE
230V A.C. 50HZ
40W MIN -
250W MAX

2 WAY SINGLE
230V A.C. 50HZ
60W MIN -
500W MAX

2 WAY DOUBLE
230V A.C. 50HZ
40W MIN - 250W
MAX FOR EACH
DIMMER

2 WAY DOUBLE
230V A.C. 50HZ
60W MIN - 450W
MAX FOR EACH
DIMMER

2 WAY TRIPLE
230V A.C. 50HZ
40W MIN - 250W
MAX FOR EACH
DIMMER

					
FINISHES					
BRUSHED STAINLESS STEEL	K1534BSS1	K1551BSS1	K1532BSS1	K1552BSS1	K1533BSS1
BRUSHED CHROME	K1534BRC1	K1551BRC1	K1532BRC1	K1552BRC1	K1533BRC1
SATIN GOLD	K1534SAG1	K1551SAG1	K1532SAG1	K1552SAG1	K1533SAG1
POLISHED CHROME	K1534PCR1	K1551PCR1	K1532PCR1	K1552PCR1	K1533PCR1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

BS EN 60669-2-1, overload protected and are suitable for use with tungsten filament lamps only.
Two way dimmers use push on/push off switches.

They are not suitable for use with fluorescent loads, LED or with electronic/wire-wound transformers in low voltage lighting systems.

Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases.
Please check with lamp manufacturer to determine suitability.

Intelligent Dimmer Switches

2 WAY SINGLE
230V A.C. 50HZ
40W/VA MIN -
300W/240VA MAX

2 WAY SINGLE
230V A.C. 50HZ
60W/VA MIN -
500W/400VA MAX

2 WAY DOUBLE
230V A.C. 50HZ
40W/VA MIN -
300W/240VA MAX

2 WAY DOUBLE
230V A.C. 50HZ
60W/VA MIN -
450W/360VA MAX
FOR EACH DIMMER



K1536BSSLV	1	K1551BSSLV	1	K1532BSSLV	1	K1552BSSLV	1
K1536BRCLV	1	K1551BRCLV	1	K1532BRCLV	1	K1552BRCLV	1
K1536SAGLV	1	K1551SAGLV	1	K1532SAGLV	1	K1552SAGLV	1
K1536PCRLV	1	K1551PCRLV	1	K1532PCRLV	1	K1552PCRLV	1

BS EN 60669-2-1, 'state of the art' micro controller based circuitry to provide soft start and overload protection.

The soft start feature helps in greatly prolonging the life of tungsten, or halogen lamps.

Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases.

Please check with lamp manufacturer to determine suitability.

Not suitable for use with fluorescent or LED loads.

Albany Plus™

mkelectric.co.uk



Blank Plates

TV/FM Coaxial Socket Outlets

TWIN OUTLET
WITH TV/FM
DIPLEXER

1 GANG

2 GANG

NON ISOLATED

ISOLATED

FINISHES

BRUSHED STAINLESS STEEL	K3330BSS	10	K3329BSS	5	K3580BSS	5	K3581BSS	5	K3582BSS	5
BRUSHED CHROME	K3330BRC	1	K3329BRC	1	K3580BRC	1	K3581BRC	1	K3582BRC	1
SATIN GOLD	K3330SAG	1	K3329SAG	1	K3580SAG	1	K3581SAG	1	K3582SAG	1
POLISHED CHROME	K3330PCR	1	K3329PCR	1	K3580PCR	1	K3581PCR	1	K3582PCR	1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

MOUNTING BOXES
FLUSH
1 gang: 86ZIC
SURFACE
WITH KNOCKOUTS
1 gang: K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
BS 5733:2010

MOUNTING BOXES
FLUSH
2 gang: 88ZIC
SURFACE
WITH KNOCKOUTS
2 gang: K897ALM
SURFACE WITHOUT
KNOCKOUTS
K830ALM
DIMENSIONS
86 x 146mm
FIXING CENTRES
120.6mm
BS 5733:2010

MOUNTING BOXES
FLUSH
861ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
K3580
Single outlet for connection
to a single TV or FM co-axial
aerial lead

MOUNTING BOXES
FLUSH
861ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
K3581
Provides safety isolation rated
at 2000Va.c. between aerial
lead and socket. Single outlet
for connection to a single TV
or FM co-axial aerial lead

MOUNTING BOXES
FLUSH
861ZIC
SURFACE
WITH KNOCKOUTS
K899ALM
SURFACE WITHOUT
KNOCKOUTS
K829ALM
K3582
Provides safety isolation rated
at 2000Va.c. between aerial
lead and socket. Single outlet
for connection to a single TV
or FM co-axial aerial lead. Twin
outlet with TV/FM



Technical Hotline
+44 (0)1268 563720

Albany Plus™

WIRING DEVICES
DECORATIVE

Satellite Socket Outlets

SINGLE OUTLET
F TYPE SATELLITE
SOCKET



K3585BSS	1
K3585BRC	1
K3585SAG	1
K3585PCR	1

DIMENSIONS
86 x 86mm
FIXING CENTRES
60.3mm
IEC 169-2:1965
BS 5733:2010 where applicable

Floor Mounted Euro Frames

1 GANG STANDARD



790BSS	1
790BRC	1
790SAG	1

MOUNTING BOXES
FLUSH
1 gang: 866ZIC
Boxes must have a minimum depth of 35mm
DIMENSIONS
1 gang: 102 x 86mm
FIXING CENTRES
1 gang: 60.3mm
NOTE
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010
For a complete selection of Euro modules, see pages 46-48.

1 GANG RECESSED



791BSS	1
791BRC	1
791SAG	1

MOUNTING BOXES
FLUSH
1 gang: 866ZIC
Boxes must have a minimum depth of 35mm
DIMENSIONS
1 gang: 102 x 86mm
FIXING CENTRES
1 gang: 60.3mm
NOTE
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010
For a complete selection of Euro modules, see pages 46-48.

2 GANG STANDARD



795BSS	1
795BRC	1
795SAG	1

MOUNTING BOXES
FLUSH
2 gang: 886ZIC
Boxes must have a minimum depth of 35mm
DIMENSIONS
2 gang: 102 x 146mm
FIXING CENTRES
2 gang: 120.6mm
NOTE
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010
For a complete selection of Euro modules, see pages 46-48.

2 GANG RECESSED



796BSS	1
796BRC	1
796SAG	1

MOUNTING BOXES
FLUSH
2 gang: 886ZIC
Boxes must have a minimum depth of 35mm
DIMENSIONS
2 gang: 102 x 146mm
FIXING CENTRES
2 gang: 120.6mm
NOTE
Use 'F' type connectors with recessed euro frame products. This ensures full lid closure when the aerial lead is disconnected. Power sockets must only be used with the standard Euro Frame products as the recessed type may NOT allow full plug engagement. BS 5733:2010
For a complete selection of Euro modules, see pages 46-48.

Fully screened modular
TV/Satellite outlets are
available to fit
Euro frontplates.
See page 48 for details.

Albany Plus™

mkelectric.co.uk



Euro Modular Frontplates

EURO
1 MODULE
25 X 50MM



EURO
2 MODULE
50 X 50MM



EURO
4 MODULE
100 X 50MM



LJU6C Datacom Frontplate

1 GANG
2 MODULE
22 X 37MM



FINISHES

BRUSHED STAINLESS STEEL	K181BSS	5	K182BSS	5	K184BSS	5	K172BSS	5
BRUSHED CHROME	K181BRC	1	K182BRC	1	K184BRC	1	K172BRC	1
SATIN GOLD	K181SAG	1	K182SAG	1	K184SAG	1	K172SAG	1
POLISHED CHROME	K181PCR	5	K182PCR	5	K184PCR	5	K172PCR	5

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

DIMENSIONS
86 x 86mm
BS 5733:2010

NOTE
Euro Data Frontplates: no grid required,
modules just clip into place.

DIMENSIONS
86 x 86mm
BS 5733:2010

NOTE
Euro Data Frontplates: no grid required,
modules just clip into place.

DIMENSIONS
86 x 146mm
BS 5733:2010

NOTE
Euro Data Frontplates: no grid required,
modules just clip into place.

DIMENSIONS
86 x 86mm
BS 5733:2010

NOTE
LJU6C Data Frontplates: no grid
required, modules just clip into place.

For a complete selection of Euro modules and more information see pages 46-48.



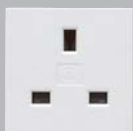
Technical Hotline
+44 (0)1268 563720

Albany Plus™

WIRING DEVICES
DECORATIVE

Euro Power Modules

UK 250V
2 MODULE
50 X 50MM
13 AMP



K5830WHI
K5830BLK

10
10

MOUNTING BOX
35mm minimum
46mm (for extra wiring space).
DIMENSIONS
50 x 50mm
BS 1363 Part 2:1995

GERMAN
2P+E 250V
SHUTTERED
2 MODULE
(NON UK)
16 AMP

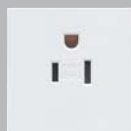


K5831WHI
K5831BLK

10
10

MOUNTING BOX
46mm
DIMENSIONS
50 x 50mm
IEC 60884-1:2006

AMERICAN
127V SHUTTERED
2 MODULE
50 X 50MM
(NON UK)
15 AMP



K5832WHI
K5832BLK

10
10

MOUNTING BOX
35mm
46mm (for extra wiring space)
DIMENSIONS
50 x 50mm
SASO 2204:2003

UK 250V SHUTTERED
2 MODULE
50 X 50MM
5 AMP



K5833WHI
K5833BLK

10
10

MOUNTING BOX
35mm minimum
46mm (for extra wiring space).
DIMENSIONS
50 x 50mm
BS 546:1950

FRENCH/BELGIAN
2P+E
250V SHUTTERED
2 MODULE
50 X 50MM
(NON UK)
16 AMP



K5834WHI
K5834BLK

10
10

MOUNTING BOX
46mm
DIMENSIONS
50 x 50mm
NF C61-314

Albany Plus™

mkelectric.co.uk



Euro Power Modules

USB CHARGING
2 MODULE
50 X 50MM



Grid Plus Modular Frontplates (SUPPLIED WITH GRIDS)

1 MODULE

2 MODULE

3 MODULE



FINISHES

BRUSHED STAINLESS STEEL

BRUSHED CHROME

SATIN GOLD

POLISHED CHROME

K5837WHI
K5837BLK

1

1

K3431BSS

10

K3431BRC

1

K3431SAG

1

K3431PCR

1

K3432BSS

10

K3432BRC

1

K3432SAG

1

K3432PCR

1

K3433BSS

5

K3433BRC

1

K3433SAG

1

K3433PCR

1

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

USB charging sockets, each capable of
supporting 2A charge (total of 2A)

K5837 MOUNTING BOX
Minimum Box depth 35mm
46mm for extra wiring space
IEC 60950-1
IEC 61000-6-1/3

DIMENSIONS
86 x 86mm
BS 5733:2010

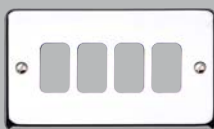
DIMENSIONS
86 x 86mm
BS 5733:2010

DIMENSIONS
86 x 146mm
BS 5733:2010

Mains operated products and
extra low voltage modules
must not be installed within
the same frontplate.
Refer to BS 7671:2008 for
details.

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.

4 MODULE



6 MODULE



8 MODULE



K3434BSS	5	K3436BSS	1	K3438BSS	1
K3434BRC	1	K3436BRC	1	K3438BRC	1
K3434SAG	1	K3436SAG	1	K3438SAG	1
K3434PCR	1	K3436PCR	1	K3438PCR	1

DIMENSIONS
86 x 146mm
BS 5733:2010

DIMENSIONS
146 x 146mm
BS 5733:2010

DIMENSIONS
146 x 146mm
BS 5733:2010

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.

Albany Plus™

mkelectric.co.uk




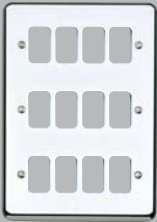

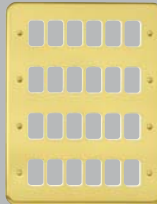
Grid Plus Modular Frontplates (SUPPLIED WITH GRIDS)

9 MODULE

12 MODULE

18 MODULE

24 MODULE

FINISHES					
BRUSHED STAINLESS STEEL					
	K3439BSS	K3442BSS	K3448BSS	K3454BSS	
BRUSHED CHROME	K3439BRC	K3442BRC	K3448BRC	K3454BRC	
SATIN GOLD	K3439SAG	K3442SAG	K3448SAG	K3454SAG	
POLISHED CHROME	K3439PCR	K3442PCR	K3448PCR	K3454PCR	

LEAD TIMES
Please contact our Customer
Services Department on
01268 563 404

DIMENSIONS
9 module: 206 x 146mm
BS 5733:2010

DIMENSIONS
206 x 146mm
BS 5733:2010

DIMENSIONS
206 x 206mm
BS 5733:2010

DIMENSIONS
206 x 207mm
BS 5733:2010

For a complete selection of Grid Plus switch modules see Grid Plus pages 190-205.





GRID PLUS

RANGE INTRODUCTION

Grid Plus is a modular switching and monitoring system in a choice of attractive finishes to match complementary accessory ranges.

The comprehensive range of modules includes switches, indicators, dimmers, secret key switches, printed switches and buzzer units – making it the ideal system for commercial and public building applications.

Easy to fit and change, Grid Plus modules simply clip into place from the front of the mounting frame.

HOW TO SPECIFY

A modular switching and monitoring wiring device system. Modules to have a simple 'clip fit' mechanism to hold them to the mounting frame, which do not require specialist tools and are fitted in to place from the front. Accompanying front plates must be able to hold up to 24 modules in a variety of aesthetics and finishes. All products must be made in the UK and provided with a 20 year guarantee.

FEATURES & BENEFITS

VAST RANGE

Comprehensive range of frontplates and grid modules from a single manufacturer making the range flexible and suitable for more installations.

EASE OF INSTALLATION

Grid modules 'clip fit' to the frame without any requirement for special tools. They can be moved, removed or replaced whilst the frame is fitted to the box making installation or replacement speedy and simple.

DURABILITY

Grid frames are made from pre-galvanised steel to provide extra high corrosion resistance, preventing tarnishing and ensuring the longevity of the product.

SAFETY

Grid frames earth terminal capacity exceeds current standards for total safety assurance. All products are 100% tested before delivery for confidence of a 'fit and forget' installation. 20 year guarantee (10 years for electronic devices).

Grid Plus

mkelectric.co.uk









Blank Inserts

1 MODULE

Switch Modules 10 Amp

1 WAY SP
10 AMP1 WAY DP
10 AMP2 WAY SP
10 AMP2 WAY
RETRACTIVE
SWITCH SP
10 AMP2 WAY
RED
RETRACTIVE
SWITCH SP
10 AMP

FINISHES						
WHITE	K4880WHI 10	K4881WHI 10	K4981WHI 10	K4882WHI 10	K4885WHI 10	K4885RED 1
BLACK	K4880BLK 10	K4881BLK 10	K4981BLK 10	K4882BLK 1	K4885BLK 10	K4885REDB 1
GRAPHITE	K4880GRA 10	K4881GRA 10		K4882GRA 10		

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed for fluorescent loads.
BS EN 60669-1:1999

B suffix on the list number denotes black inserts



Technical Hotline
+44 (0)1268 563720

Grid Plus

WIRING DEVICES
MODULAR

2 WAY
RETRACTIVE
SWITCH
MARKED WITH
BELL SYMBOL SP
10 AMP

2 WAY
RETRACTIVE
SWITCH MARKED
'PRESS' SP
10 AMP

2 WAY
CENTRE OFF
RETRACTIVE
SWITCH SP
10 AMP

Switch Modules 20 Amp

1 WAY SP
20 AMP

1 WAY PUSH TO
MAKE DP
20 AMP

1 WAY
RED ROCKER
PUSH TO MAKE DP
20 AMP



K4885BWHI 1	K4885PWHI 10	K4900WHI 10	K4891WHI 10	K4910WHI 10	K4910RED 10
K4885BBLK 1	K4885PBLK 1	K4900BLK 10	K4891BLK 10	K4910BLK 10	K4910REDB 1
			K4891GRA 10		

NOTE
Push switches are not
designed for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

These switches do NOT have
to be derated when used with
fluorescent or inductive loads.
BS EN 60669-1:1999

NOTE
Push switches are not designed
for fluorescent loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent loads.
BS EN 60669-1:1999

B suffix on the list
number denotes
black inserts

Grid Plus

mkelectric.co.uk



Switch Modules 20 Amp

1 WAY
PUSH TO
BREAK
RETRACTIVE DP
20 AMP







1 WAY
RED ROCKER
PUSH TO BREAK
RETRACTIVE DP
20 AMP

2 WAY SP
20 AMP

2 WAY
RED ROCKER SP
20 AMP

2 WAY
SWITCH WITH
INTEGRAL
NEON
LOCATOR SP
20 AMP

2 WAY
AND CENTRE
OFF SP
20 AMP

FINISHES						
	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
WHITE	K4915WHI 10	K4915RED 10	K4892WHI 10	K4892RED 10	K4892LWHI 10	K4899WHI 10
BLACK	K4915BLK 10	K4915REDB 1	K4892BLK 10	K4892REDB 1	K4892LBLK 1	K4899BLK 10
GRAPHITE						

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

NOTE
Push switches are not
designed for fluorescent
loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

These switches do NOT
have to be derated when
used with fluorescent or
inductive loads.
BS EN 60669-1:1999

B suffix on the list
number denotes
black inserts

B suffix on the list
number denotes
black inserts



Technical Hotline
+44 (0)1268 563720

Grid Plus

WIRING DEVICES
MODULAR

RED ROCKER
2 WAY AND
CENTRE OFF SP
20 AMP

INTERMEDIATE
20 AMP

INTERMEDIATE
RED ROCKER
20 AMP

1 WAY DP
20 AMP

1 WAY
NEON DP
20 AMP

1 WAY
WITH WINDOW DP
20 AMP



K4899RED 10	K4893WHI 10	K4893RED 10	K4896WHI 10	K4896NWHI 1	K4896WWHI 10
K4899REDB 1	K4893BLK 10	K4893REDB 10	K4896BLK 10	K4896NBLK 1	K4896WBLK 10
			K4896GRA 10	K4896NGRA 1	

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999

B suffix on the list number denotes black inserts

B suffix on the list number denotes black inserts

Grid Plus

Switch Modules 20 Amp

1 WAY
RED ROCKER DP
20 AMP



Printed Modules with and without Neon

1 WAY
BOILER DP
20 AMP



1 WAY
BOILER
NEON DP
20 AMP



1 WAY
DISHWASHER DP
20 AMP



1 WAY
DISHWASHER
NEON DP
20 AMP



FINISHES

WHITE

K4896RED

10

K4896BRWHI

1

K4896NBRWHI

1

K4896DWWHI

1

K4896NDWWHI

1

BLACK

K4896REDB

1

K4896BRBLK

1

K4896NBRBLK

1

K4896DWBLK

1

K4896NDWBLK

1

These switches do NOT have
to be derated when used with
fluorescent or inductive loads.
BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Grid Plus

WIRING DEVICES
MODULAR

1 WAY
COOKER HOOD DP
20 AMP

1 WAY
COOKER HOOD
NEON DP
20 AMP

1 WAY
FAN DP
20 AMP

1 WAY FAN
NEON DP
20 AMP

1 WAY
FRIDGE DP
20 AMP



K4896CHWHI 1	K4896NCHWHI 1	K4896FNWHI 1	K4896NFNWHI 1	K4896FGWHI 1
K4896CHBLK 1	K4896NCHBLK 1	K4896FNBLK 1	K4896NFNBLK 1	K4896FGBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

Grid Plus

Printed Modules with and without Neon






1 WAY
FRIDGE
NEON DP
20 AMP

1 WAY
FREEZER DP
20 AMP

1 WAY
FREEZER
NEON DP
20 AMP

1 WAY
FRIDGE
FREEZER DP
20 AMP

1 WAY
FRIDGE FREEZER
NEON DP
20 AMP

FINISHES					
WHITE	K4896NFGWHI 1	K4896FZWHI 1	K4896NFZWHI 1	K4896FFWHI 1	K4896NFFWHI 1
BLACK	K4896NFGBLK 1	K4896FZBLK 1	K4896NFZBLK 1	K4896FFBLK 1	K4896NFFBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Grid Plus

MODULAR
WIRING DEVICES

1 WAY
WASTE
DISPOSAL DP
20 AMP

1 WAY
WASTE DISPOSAL
NEON DP
20 AMP

1 WAY
WASHING
MACHINE DP
20 AMP

1 WAY
WASHING
MACHINE
NEON DP
20 AMP

1 WAY
TUMBLE
DRYER DP
20 AMP

1 WAY
TUMBLE DRYER
NEON DP
20 AMP



K4896WDWHI 1

K4896NWDWHI 1

K4896WMWHI 1

K4896NWMWHI 1

K4896TDWHI 1

K4896NTDWHI 1

K4896WDBLK 1

K4896NWDBLK 1

K4896WMBLK 1

K4896NWMBLK 1

K4896TDBLK 1

K4896NTDBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

Grid Plus

Printed Modules with and without Neon

1 WAY
WASHER DRYER DP
20 AMP

1 WAY
WASHER DRYER
NEON DP
20 AMP

1 WAY
MICROWAVE DP
20 AMP

1 WAY
MICROWAVE
NEON DP
20 AMP

1 WAY
HEATER DP
20 AMP

FINISHES					
WHITE	K4896WDRWHI 1	K4896NWDRWHI 1	K4896MWWHI 1	K4896NMWWHI 1	K4896HRWHI 1
BLACK	K4896WDRBLK 1	K4896NWDRBLK 1	K4896MWBLK 1	K4896NMWBLK 1	K4896HRBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Grid Plus

MODULAR
WIRING DEVICES

1 WAY
HEATER
NEON DP
20 AMP



1 WAY
OVEN DP
20 AMP



1 WAY
OVEN NEON DP
20 AMP



1 WAY
HOB DP
20 AMP



1 WAY
HOB NEON DP
20 AMP



1 WAY
IMMERSION
HEATER DP
20 AMP



K4896NHRWHI 1

K4896OVWHI 1

K4896NOVWHI 1

K4896HBWHI 1

K4896NHBWHI 1

K4896IHWHI 1

K4896NHRBLK 1

K4896OVBLK 1

K4896NOVBLK 1

K4896HBBLK 1

K4896NHBBLK 1

K4896IHBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

Grid Plus

mkelectric.co.uk



Printed Modules with and without Neon

1 WAY
IMMERSION
HEATER NEON DP
20 AMP

1 WAY
PLINTH HEATER DP
20 AMP

1 WAY
PLINTH HEATER
NEON DP
20 AMP

1 WAY
WORKTOP
LIGHTING DP
20 AMP

1 WAY
WORKTOP
LIGHTING
NEON DP
20 AMP

FINISHES					
WHITE	K4896NIHWHI 1	K4896PHWHI 1	K4896NPHWHI 1	K4896WLWHI 1	K4896NWLWHI 1
BLACK		K4896PHBLK 1		K4896WLBLK 1	K4896NWLBLK 1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999



Technical Hotline
+44 (0)1268 563720

Grid Plus

WIRING DEVICES
MODULAR

1 WAY
WINE COOLER DP
20 AMP



1 WAY
WINE COOLER
NEON DP
20 AMP



1 WAY
WARMING
DRAWER DP
20 AMP



1 WAY
WARMING
DRAWER NEON DP
20 AMP



1 WAY
COFFEE
MACHINE DP
20 AMP



1 WAY
COFFEE MACHINE
NEON DP
20 AMP



K4896WCWHI	1	K4896NWCWHI	1	K4896WDAWHI	1	K4896NWDAWHI	1	K4896CMWHI	1	K4896NCMWHI	1
K4896WCBLK	1	K4896NWCBLK	1	K4896WDABLK	1	K4896NWDABLK	1	K4896CMBLK	1	K4896NCMBLK	1

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

BS EN 60669-1:1999

Grid Plus

mkelectric.co.uk



Secret Key Switch Modules






INTERMEDIATE
SECRET KEY
SWITCH
20 AMP

2 WAY
SECRET KEY
SWITCH SP
20 AMP

2 WAY
SECRET KEY
SWITCH MARKED
'EMG LTG TEST' SP
20 AMP

1 WAY
SECRET KEY
SWITCH DP
20 AMP

EMERGENCY
LIGHTING DP
20 AMP

FINISHES					
	WHITE	BLACK	WHITE	WHITE	WHITE
WHITE	K4894WHI 10	K4898WHI 10	K4898ELWHI 10	K4917WHI 10	K4917ELWHI 10
BLACK	K4894BLK 1	K4898BLK 1	K4898ELBLK 1	K4917BLK 1	

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.

These switches do NOT have to be derated when used with fluorescent or inductive loads. BS EN 60669-1:1999 Key (3405ZIC) is supplied.



Technical Hotline
+44 (0)1268 563720

Grid Plus

WIRING DEVICES
MODULAR

Indicator Unit Modules

2 WAY
SECRET KEY
SWITCH (BIASED
1 WAY) SP
20 AMP

200-250V
NEON

200-250V
NEON

200-250V
FLUORESCENT

21-36V
FILAMENT

21-36V
FILAMENT



K4918WHI

10

K4889RED

10

K4889AMB

10

K4889GRN

10

K4836RED

10

K4836AMB

10

K4918BLK

10

K4889REDB

1

These switches do NOT have
to be derated when used with
fluorescent or inductive loads.
BS EN 60669-1:1999
Key (3405ZIC) is supplied.

BS 5733:2010

BS 5733:2010

BS 5733:2010

BS 5733:2010

BS 5733:2010

B suffix on the list
number denotes black
inserts

Will Operate On Both A.C. And D.C

Grid Plus

mkelectric.co.uk



Indicator Unit Modules

21-36V
FILAMENT

Dimmer Switch Modules

TUNGSTEN FILAMENT AND LOW VOLTAGE LIGHTING

40W/VA-220W/
180VA MAX
230V A.C., 50HZ
1 MODULE

60W/VA-400W/
320VA MAX
230V A.C., 50HZ
2 MODULE

0-10V/1-10V
FLUORESCENT
CONTROLLER
1 MODULE

40-220W/180VA/
4-70W
LED INTELLIGENT
DIMMER
1 MODULE

					
FINISHES					
WHITE	K4836GRN10	K4501WHILV1	K4500WHILV1	K4499WHI1	K4511WHILV1
BLACK		K4501BLKLV1	K4500BLKLV1	K4499BLK1	K4511BLKLV1

BS 5733:2010

These dimmers employ the latest microcontroller based circuitry to provide electronic soft start and overload protection. Suitable for use with good quality electronic or wire wound transformers. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

K4501WHI/BLK Max. No. of low voltage T/F's – 3

K4500WHI/BLK Max. No. of low voltage T/F's – 5

Not suitable for fluorescent loads.

All dimmers have push on – push off, 2 way switches, integral with rotary control.

NOTE

Refer to technical section for derating.

Conform to BS EN 60669-2-1 and BS EN 55015

MK Fluorescent Grid Dimmers are low voltage controllers for connection to 1-10V controllable ballasts.

K4511WHILV 1 Module 2 Way 40-220W/180VA/4-70W LED Intelligent Dimmer.

K4511BLKLV 1 Module 2 Way 40-220W/180VA/4-70W LED Intelligent Dimmer.

Will Operate On Both
A.C. And D.C



Technical Hotline
+44 (0)1268 563720

Grid Plus

WIRING DEVICES
MODULAR

Accessory Modules

SINGLE TV
CO-AXIAL
OUTLET
NON-ISOLATED

SINGLE TV
CO-AXIAL
OUTLET
ISOLATED

200-250V A.C.
BUZZER UNIT

21-36V A.C.
BUZZER UNIT

16A
CORD
OUTLET

13A
FUSE UNIT

13A
FUSE UNIT WITH
TAMPERPROOF
SCREW



K4520WHI 10

K4521WHI 10

K4000WHI 10

K4001WHI 10

K4886WHI 10

K4890WHI 10

K4890KOWHI 10

K4520BLK 10

K4521BLK 10

K4886BLK 10

K4890BLK 10

K4890KOBK 10

For direct connection to TV or FM aerial co-axial downlead. NOT to be used in same enclosure as mains exceeding 50V. BS 3041:1977 IEC 169-2:1965 BS 5733:2010 where applicable.

For direct connection to TV or FM aerial co-axial downlead. NOT to be used in same enclosure as mains exceeding 50V. BS 3041:1977 IEC 169-2:1965 BS 5733:2010 where applicable.

SOUND OUTPUT LEVEL
Av 61 db @ 15 feet.
BS 5733:2010

SOUND OUTPUT LEVEL
Av 61 db @ 15 feet.
BS 5733:2010











Complete with 3 pairs of terminals. The supply terminals are suitable for up to 2 x 2.5mm² or 1 x 4mm² solid conductors. The load terminals are suitable for one 1.5mm² flexible cord. A cord grip is also fitted.
BS 5733:2010













Fuse carrier comes with 13A cartridge fuse link to BS 1362.
BS 5733:2010

Fuse carrier comes with 13A cartridge fuse link to BS 1362.
BS 5733:2010
Key (3405ZIC) is supplied.

Grid Plus

SELECTION CHART

	1 	2 	3 	4 	6 	
	COVER PLATES					
LOGIC PLUS™	K3631WHI/GRA 10	K3632WHI/GRA 10	K3633WHI/GRA 10	K3634WHI/GRA 10	K3636WHI/GRA 1	
METALCLAD PLUS™	K3491ALM 10	K3492ALM 10	K3493ALM 5	K3494ALM 5	K3496ALM 1	
ALBANY PLUS™ SEE ALBANY PLUS PG 167	K3431 1	K3432 1	K3433 1	K3434 1	K3436 1	
EDGE™ SEE EDGE PG 130	K14331 1	K14332 1	K14333 1	K14334 1	K14346 1	
ASPECT SEE ASPECT PG 98	K24331 1	K24332 1	K24333 1	K24334 1	K24346 1	
	BOXES					
LOGIC PLUS FLUSH	891ALM 10 2 X 20MM KNOCKOUTS	891ALM 10 2 X 20MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	
	821ALM 10 WITHOUT KNOCKOUTS	821ALM 10 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	823ALM 5 WITHOUT KNOCKOUTS	
LOGIC PLUS SURFACE METAL	K2213ALM 5 5 X 20MM KNOCKOUTS	K2213ALM 5 5 X 20MM KNOCKOUTS	K2214ALM 5 7 X 20MM KNOCKOUTS	K2214ALM 5 7 X 20MM KNOCKOUTS		
	K2211ALM 5 WITHOUT KNOCKOUTS	K2211ALM 5 WITHOUT KNOCKOUTS	K2212ALM 5 WITHOUT KNOCKOUTS	K2212ALM 5 WITHOUT KNOCKOUTS		
LOGIC PLUS SURFACE MOULDED	K2140WHI 10 WITHOUT KNOCKOUTS	K2140WHI 10 WITHOUT KNOCKOUTS	K2142WHI 5 WITHOUT KNOCKOUTS	K2142WHI 5 WITHOUT KNOCKOUTS		
LOGIC PLUS SURFACE PVC	K2181WHI 10 WITHOUT KNOCKOUTS	K2181WHI 10 WITHOUT KNOCKOUTS	K2183WHI 5 WITHOUT KNOCKOUTS	K2183WHI 5 WITHOUT KNOCKOUTS		
METALCLAD PLUS & ALBANY PLUS SURFACE	K8891ALM 10 5 X 20MM KNOCKOUTS	K8891ALM 10 5 X 20MM KNOCKOUTS	K8892ALM 5 7 X 20MM KNOCKOUTS	K8892ALM 5 7 X 20MM KNOCKOUTS	K8893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	
	K8821ALM 10 WITHOUT KNOCKOUTS	K8821ALM 10 WITHOUT KNOCKOUTS	K8822ALM 5 WITHOUT KNOCKOUTS	K8822ALM 5 WITHOUT KNOCKOUTS	K8823ALM 1 WITHOUT KNOCKOUTS	
	K8901ALM 5 DEEP BOX 5 X 20MM KNOCKOUTS	K8901ALM 5 DEEP BOX 5 X 20MM KNOCKOUTS	K8902ALM 5 DEEP BOX 4 X 20MM, 4 X 25MM KNOCKOUTS	K8902ALM 5 DEEP BOX 4 X 20MM, 4 X 25MM KNOCKOUTS		
ALBANY PLUS ASPECT & EDGE FLUSH	891ALM 10 2 X 20MM KNOCKOUTS	891ALM 10 2 X 20MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	892ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	
	821ALM 10 WITHOUT KNOCKOUTS	821ALM 10 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	822ALM 5 WITHOUT KNOCKOUTS	823ALM 5 WITHOUT KNOCKOUTS	
	GRIDS					
EDGE & ASPECT COVER PLATES INCLUDE AN INTEGRAL GRID	K3701 10 	K3702 10 	K3703 10 	K3704 10 	K3703 X 2 10 	

	8 	9 	12 	18 	24 	Architrave 
	K3638WHI/GRA 1		K3639WHI 1			
	K3498ALM 1	K3499ALM 1	K3502ALM 1	K3508ALM 1	K3514ALM 1	
	K3438 1	K3439 1	K3442 1	K3448 1	K3454 1	K3401 1
	K14348 1	K14349 1	K14352 1	K14358 1	K14354 1	K14401 1
	K24348 1					
	893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS		895ALM 1 5 X 20MM, 5 X 25MM KNOCKOUTS			
	823ALM 5 WITHOUT KNOCKOUTS		825ALM 1 WITHOUT KNOCKOUTS			
	K8893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	K8895ALM 1 5 X 20MM, 5 X 25MM KNOCKOUTS	K8895ALM 1 5 X 20MM, 5 X 25MM KNOCKOUTS	K8898ALM 1 5 X 20MM, 5 X 25MM KNOCKOUTS	K8900ALM 1 6 X 20MM, 6 X 25MM KNOCKOUTS	
	K8823ALM 5 WITHOUT KNOCKOUTS	K8825ALM 1 WITHOUT KNOCKOUTS	K8825ALM 1 WITHOUT KNOCKOUTS	K8826ALM 1 WITHOUT KNOCKOUTS	K8827ALM 1 WITHOUT KNOCKOUTS	
	893ALM 5 4 X 20MM, 4 X 25MM KNOCKOUTS	895ALM 1 5 X 20MM, 5 X 25MM KNOCKOUTS	895ALM 1 5 X 20MM, 5 X 25MM KNOCKOUTS	898ALM 1 6X 32MM KNOCKOUTS	900ALM 1 6X 32MM KNOCKOUTS	3895ZIC 5 3 X 20MM KNOCKOUTS (FOR FLUSH MOUNTING ONLY)
	823ALM 5 WITHOUT KNOCKOUTS	825ALM 1 WITHOUT KNOCKOUTS	825ALM 1 WITHOUT KNOCKOUTS			3891ZIC 5 1 GANG ARCHITRAVE BOXES FOR EDGE
	K3704 X 2 10	K3703 X 3 10	K3704 X 3 10	K3706 X 3 10	K3706 X 4 10	K3708ZIC 10
						



HIGH POWER DIMMER

RANGE INTRODUCTION

When an installation requires the specification of a dimmer to control larger lighting loads, the MK Electric High Power Dimmer will meet your requirements, and give you the confidence that you have specified a product which comes with MK's brand standards of quality, reliability, safety and responsibility.

As with all MK products the High Power Dimmer is manufactured to ISO 9002 certification using only the most superior manufacturing techniques and raw materials. Each product undergoes 100% electrical and visual testing to ensure reliability and safety, and is guaranteed for 2 years.

The High Power Dimmer includes a host of different functions, enabling lighting scene control, stairwell lighting and push button dimmer with memory. For applications up to 3000W loads, an installation can be specified to include a Master and up to 2 Slaves.

Dimming can offer energy savings compared to powering a lamp to full brightness.

FEATURES & BENEFITS

- Up to 1000W dimming output per unit
- Up to 3000W dimming output when utilising Master and Slaves
- Provides rotary control using a 1-10V interface such as the K4499 Fluorescent Controller Module from the MK Electric Grid Plus Range
- Universal, Trailing Edge and Leading Edge Dimmers available
- Automatic load detection on Universal module
- Central on/off function
- Staircase lighting function with or without switch-off warning
- Lighting scene control with two, user adjustable, preset scene levels
- Overload and short circuit protection

HOW TO SPECIFY

A lighting control solution for dimming loads up to a maximum of 3000W with the ability to control trailing edge and leading edge load types. Where necessary, automatic load detection and lighting scene control with two user adjustable scene levels to be available. Dimming module to have stairwell lighting control with a turn off period between 1 second and 8 minutes with a 50% brightness warning function. Dimming module to be din rail mounted and provide overload and short circuit protection.

High Power Dimmer

OPERATING MODES

Function	Description
Push button dimmer with memory	Non cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at last dimming level.
Push button dimmer without memory	Non cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at maximum level.
Push button cyclic dimmer with memory	Cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at last dimming level.
Push button cyclic dimmer without memory	Cyclic dimming with maximum & minimum brightness limit adjustment. Soft start switch on at maximum level.
Stairwell lighting controller with turn off warning	Time Delay Switch with 50% brightness turn off warning. Adjustable time-on period between 1sec – 2.3hrs. Adjustable turn-off warning periods between 1sec – 8min.
Stairwell lighting controller without turn of warning	Time Delay Switch without turn off warning. Adjustable brightness and time-on period.
Scene Control Dimmer	Two user adjustable preset scene levels.
Rotary Dimmer using 0/1-10V control	Rotary control dimming with conventional 0/1-10V controls, (e.g. MK K4499).

PRODUCT SELECTOR

List Number	Description	230V Tungsten Filament Lamps	12V Wirewound Transformers	12V Electronic Transformers
K1400	1kW Universal Dimmer – Master/Slave	Yes 60-1000W	Yes 50-900VA	Yes 50-900VA
K1401M	1kW Leading Edge Dimmer – Master	Yes 60-1000W	Yes 50-900VA	–
K1401S	1kW Leading Edge Dimmer – Slave	Yes 60-1000W	Yes 50-900VA	–
K1402M	1kW Trailing Edge Dimmer – Master	Yes 60-1000W	–	Yes 50-900VA
K1402S	1kW Trailing Edge Dimmer – Slave	Yes 60-1000W	–	Yes 50-900VA

COMPATIBLE WIRING DEVICES

List Number	Description	Product Range
K4499WHI / BLK	0-10V Fluorescent Controller One Module	Grid Plus
K4900WHI / BLK	10A Retractive Grid Switch	Grid Plus

High Power Dimmer

mkelectric.co.uk



1kW Din Rail Dimmer Modules

UNIVERSAL
1kW



K1400

LEADING EDGE
1kW



K1401M

1kW



K1401S

TRAILING EDGE
1kW



K1402M

1kW



K1402S

K1400 1
1kW UNIVERSAL
DIMMER – MASTER/SLAVE

DIMENSIONS

108 x 55 x 60mm
6 DIN module

MOUNTING

Suitable for mounting onto 35mm
DIN rail

TERMINALS

MAINS SUPPLY/SLAVE CONTROL

2 x 1.5mm² or 1 x 2.5mm²

T1/2/3 SWITCH CONTROL

1 x 1mm²

LOADS

Resistive, Incandescent and Mains

Halogen lamps: 60-1000W

Low voltage wire-wound

transformers: 50-900VA

Low voltage electronic transformers:

50-900VA

MAXIMUM CONTROL LINE LENGTH

100m

EN 60669-2-1

For use with up to 2 x K1400 units
configured as slaves

K1401M 1
1kW LEADING EDGE
DIMMER – MASTER

DIMENSIONS

108 x 55 x 60mm
6 DIN module

MOUNTING

Suitable for mounting onto 35mm
DIN rail

TERMINALS

MAINS SUPPLY/SLAVE CONTROL

2 x 1.5mm² or 1 x 2.5mm²

T1/2/3 SWITCH CONTROL

1 x 1mm²

LOADS

Resistive, Incandescent and Mains

Halogen lamps: 60-1000W

Low voltage wire-wound

transformers: 50-900VA

MAXIMUM CONTROL LINE LENGTH

100m

EN 60669-2-1

For use with up to 2 x K1401S or
K1402S slaves

K1401S 1
1kW LEADING EDGE
DIMMER – SLAVE

DIMENSIONS

108 x 55 x 60mm
6 DIN module

MOUNTING

Suitable for mounting onto 35mm
DIN rail

TERMINALS

MAINS SUPPLY/SLAVE CONTROL

2 x 1.5mm² or 1 x 2.5mm²

T1/2/3 SWITCH CONTROL

1 x 1mm²

LOADS

Resistive, Incandescent and Mains

Halogen lamps: 60-1000W

Low voltage wire-wound

transformers: 50-900VA

MAXIMUM CONTROL LINE LENGTH

100m

EN 60669-2-1

For use with K1401M or K1402M
Master dimmers

K1402M 1
1kW TRAILING EDGE
DIMMER – MASTER

DIMENSIONS

108 x 55 x 60mm
6 DIN module

MOUNTING

Suitable for mounting onto 35mm
DIN rail

TERMINALS

MAINS SUPPLY/SLAVE CONTROL

2 x 1.5mm² or 1 x 2.5mm²

T1/2/3 SWITCH CONTROL

1 x 1mm²

LOADS

Resistive, Incandescent and Mains

Halogen lamps: 60-1000W

Low voltage electronic transformers:

50-900VA

MAXIMUM CONTROL LINE LENGTH

100m

EN 60669-2-1

For use with up to 2 x K1401S or
K1402S slaves

K1402S 1
1kW TRAILING EDGE
DIMMER – SLAVE

DIMENSIONS

108 x 55 x 60mm
6 DIN module

MOUNTING

Suitable for mounting onto 35mm
DIN rail

TERMINALS

MAINS SUPPLY/SLAVE CONTROL

2 x 1.5mm² or 1 x 2.5mm²

T1/2/3 SWITCH CONTROL

1 x 1mm²

LOADS

Resistive, Incandescent and Mains

Halogen lamps: 60-1000W

Low voltage electronic transformers:

50-900VA

MAXIMUM CONTROL LINE LENGTH

100m

EN 60669-2-1

For use with K1401M or K1402M
Master dimmers

High Powered Dimmers are Din Rail mounted, suitable for any standard BS EN 50022 35mm Din Rail, and are 6 Din Modules wide.



Technical Hotline
+44 (0)1268 563720

Boxes

Steel Boxes

25MM
FLUSH



35MM
FLUSH



35MM
FLUSH



46MM
47MM
FLUSH



861ZIC
1 GANG
ONE ADJUSTABLE LUG
862ZIC
2 GANG
ONE ADJUSTABLE LUG

10

K863
3 GANG
35MM DEEP
FOR 3 GANG K2737 LOGIC PLUS™
SWITCHSOCKET

5

5

866ZIC
1 GANG
ONE ADJUSTABLE LUG
886ZIC
2 GANG
ONE ADJUSTABLE LUG

10

877ZIC
1 GANG
46MM DEEP
878ZIC
2 GANG 47MM DEEP
ONE ADJUSTABLE LUG

10

5

With earth terminal and adjustable lug
DIMENSIONS
1 gang: 75 x 75mm
2 gang: 75 x 135mm
FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
KNOCKOUTS
1 gang: 10 x 20mm
2 gang: 12 x 20mm
BS 4662:2006

Fitted with two earth terminals.
Two adjustable lugs.
DIMENSIONS
203 x 75mm
FIXING CENTRE
180.9mm
KNOCKOUTS
3 gang: 14 x 20mm, 6 x 25mm
BS 4662:2006

DIMENSIONS
1 gang: 75 x 75mm
2 gang: 75 x 135mm
FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
KNOCKOUTS:
1 gang: 7 x 20mm, 3 x 25mm
2 gang: 11 x 20mm, 4 x 25mm
BS 4662:2006

DIMENSIONS
1 gang: 75 x 75mm
2 gang: 75 x 135mm
FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
KNOCKOUTS
1 gang: 6 x 20mm, 4 x 25mm
2 gang: 9 x 20mm, 6 x 25mm
BS 4662:2006

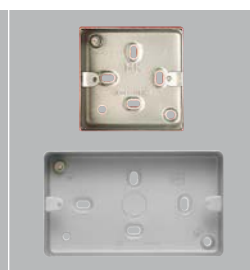
Mounting box accessories see page 217

41MM FOR USE WITH
LOGIC PLUS™
SURFACE

41MM
SQUARE CORNERS
SURFACE

Flush and surface mounted metal boxes and frames, surface PVC and moulded urea boxes, frames and accessories.

All MK flush metal boxes are manufactured from superior materials and are fitted with earth terminals, an adjustable lug for out of square alignment and include more than an adequate number of knockouts.



K2211ALM
1 GANG
WITHOUT KNOCKOUTS
K2212ALM
2 GANG
WITHOUT KNOCKOUTS

5

K2213ALM
1 GANG
5 X 20MM KNOCKOUTS
K2214ALM
2 GANG
7 X 20MM KNOCKOUTS

5

2211ALM
1 GANG
WITHOUT KNOCKOUTS
2212ALM
2 GANG
WITHOUT KNOCKOUTS

5

5

2213ALM
1 GANG
5 X 20MM KNOCKOUTS
2214ALM
2 GANG
7 X 20MM KNOCKOUTS

5

All boxes are fitted with an earth terminal.
DIMENSIONS
1 gang: 86 x 86mm
2 gang: 86 x 146mm
FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

Boxes

Steel Boxes

35MM / 47MM

FLUSH

**K14101**35MM FOR EDGE™
COMBINATION PLATE K14100**K14102**47MM FOR EDGE™
COMBINATION PLATE K14100Fitted with two earth terminals.
Two adjustable lugs.**DIMENSIONS**

279.6 x 159.5mm

FIXING CENTRES

268.2mm / 87.3mm

KNOCKOUTS

35mm 18 x 20mm, 6 x 25mm

47mm 12 x 20mm, 12 x 25mm

BS 5733:2010

1

K1420135MM FOR EDGE™ IN-LINE
COMBINATION PLATE K14200

1

K1420247MM FOR EDGE™ IN-LINE
COMBINATION PLATE K14200Fitted with two earth terminals.
Two adjustable lugs.**DIMENSIONS**

430 x 75mm

FIXING CENTRES

417.4mm

KNOCKOUTS

35mm Middle Box: 6 x 20mm, 2 x 25mm

35mm End Boxes: 15 x 20mm, 5 x 25mm

47mm Middle Box: 4 x 20mm, 4 x 25mm

47mm End Boxes: 10 x 20mm, 10 x 25mm

BS 5733:2010



K14201 / K14202



K14206 / K14207

1

K1420635MM FOR EDGE™ IN-LINE
COMBINATION PLATE K14205

1

1

K1420747MM FOR EDGE™ IN-LINE
COMBINATION PLATE K14205

1

Fitted with two earth terminals.
Two adjustable lugs.**DIMENSIONS**

392 x 75mm

FIXING CENTRES

382.5mm

KNOCKOUTS

35mm Left 2G Box: 7 x 20mm, 3 x 25mm

35mm Middle Boxes: 4 x 20mm

35mm Right Box: 6 x 20mm

47mm Left 2G Box: 4 x 20mm, 6 x 25mm

47mm Middle Boxes: 2 x 20mm, 1 x 25mm

47mm Right Box: 4 x 20mm, 1 x 25mm

BS 5733:2010

Steel Boxes

35MM / 47MM

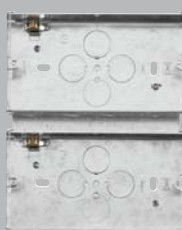
FLUSH

47MM

FLUSH



853ZIC



857ZIC



867ZIC

853ZIC35MM FOR LOGIC PLUS™
4 GANG COMBINATION PLATE K2740WHI

1

854ZIC47MM FOR LOGIC PLUS™
4 GANG COMBINATION PLATE K2740WHI

1

BS 5733:2010

DIMENSIONS

279.6 x 159.5mm

857ZIC35MM FOR LOGIC PLUS™
2 GANG COMBINATION PLATE K2741WHI

1

858ZIC47MM FOR LOGIC PLUS™
2 GANG COMBINATION PLATE K2741WHI
AND 4+4 MODULE COMBINATION PLATES
(EDGE™/ASPECT/ELEMENTS)

1

BS 5733:2010

DIMENSIONS

135 x 159.5mm

867ZIC47MM BOX FOR
2+1 COMBINATION PLATE
(EDGE™)

1

BS EN 60670-1:2005

DIMENSIONS

220 x 75mm

Mounting box accessories see page 217

Steel Boxes

47MM

FLUSH



868ZIC

47MM BOX FOR
1G+2G+1G COMBINATION PLATE
(EDGE™/ASPECT/ELEMENTS)

BS EN 60670-1:2005
DIMENSIONS
305 x 75mm

1



869ZIC

47MM BOX FOR
6+6 MODULE COMBINATION PLATE
(EDGE™/ASPECT/ELEMENTS)

BS EN 60670-1:2005
DIMENSIONS
203 x 159.5mm

1

47MM

FLUSH



870ZIC

870ZIC

47MM BOX FOR
2+1 COMBINATION PLATE
(ASPECT/ELEMENTS)

BS EN 60670-1:2005
DIMENSIONS
220x75mm

1

41MM

SURFACE



2001ALM

1 GANG
WITHOUT KNOCKOUTS

2002ALM

2 GANG
WITHOUT KNOCKOUTS

5

5



2003ALM

1 GANG
5 X 20MM KNOCKOUTS

2004ALM

2 GANG
7 X 20MM KNOCKOUTS

5

5

All boxes are fitted with an earth terminal.

DIMENSIONS

1 gang: 86 x 86mm
2 gang: 86 x 146mm

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

Mounting box accessories see page 217

Boxes

mkelectric.co.uk



Steel Boxes

48MM
SURFACE**K5400WHI**

1

2 GANG
4 X 20MM KNOCKOUTS
4X 25MM KNOCKOUTS

DIMENSIONS

86 x 146mm
FIXING CENTRES
120.6mm
BS 5733:201055MM
FLUSH**5120ALM**

1

FOR FLUSH
COOKER CONTROL UNIT
K5011WHI

Fitted with two earth terminals.

DIMENSIONS
152 x 140 x 55mm

KNOCKOUTS

5 x 25mm.
Two in each of the top & bottom,
one in the back.
BS 4177:199265MM
FLUSH**5268ALM**

1

FOR 32 AMP
TP & N SWITCHES 5114WHI

Fitted with 2 earth terminals

DIMENSIONS
178 x 114 x 65mm

KNOCKOUTS

5 x 25mm.
Two in each of the top and bottom,
one in the back.
BS 5733:201040MM
SURFACE**K829ALM**

5

1 GANG
WITHOUT KNOCKOUTS**K830ALM**

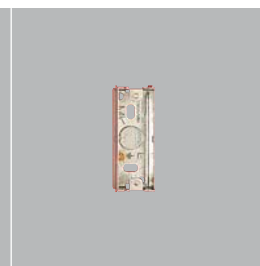
5

2 GANG
WITHOUT KNOCKOUTS**K899ALM**

10

1 GANG
5 X 20MM KNOCKOUTS**K897ALM**

5

2 GANG
8 X 20MM KNOCKOUTSSpares or replacements for the
surface Metalclad Plus range.
All boxes are fitted with an earth
terminal.
BS 5733:2010ARCHITRAVE
FLUSH**3921ZIC**

10

1 GANG

DIMENSIONS

1 gang: 75 x 27 x 27mm
FIXING CENTRES
1 gang: 60.3mm
KNOCKOUTS
1 gang: 3 x 16mm
BS 4662:2006Metal Frames
For Panel
MountingDUAL
FLUSH**887ZIC**

5

DUAL BOX

888ZIC

10

DIVIDING SCREEN
FOR DUAL BOXDual box 887ZIC will accept any two flush
accessories with 86mm square plates and
two M3.5 fixing holes on 60.3mm centres.
Fitted with 2 earth terminals.DIMENSIONS
75 x 161 x 35mm

KNOCKOUTS

2 gang: 10 x 20mm, 4 x 25mm
BS 4662:2006**K2200**

10

1 GANG

K2202

5

2 GANG

FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

Blank Plates

METALCLAD PLUS™

**K3390ALM**

5

FOR 1 GANG
SURFACE BOXES
K899 & K829**K3369ALM**

5

FOR 2 GANG
SURFACE BOXES
K830 & K897

DIMENSIONS

K3390: 86 x 86mm
K3369: 86 x 147mm

FIXING CENTRES

K3390: 60.3mm
K3369: 120.6mm
BS 5733:2010

METALCLAD

**3390ALM**

10

FOR 1 GANG SURFACE
BOXES 899 & 829**3370ALM**

10

FOR 1 GANG SURFACE
BOXES 891 & 821**3369ALM**

5

FOR 2 GANG SURFACE
BOXES 892 & 822

DIMENSIONS

3390: 81 x 81mm
3370: 76 x 76mm
3369: 76 x 136mm

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010



Technical Hotline
+44 (0)1268 563720

Boxes

PVC Boxes

19MM
SURFACE



2120WHI
FOR 1, 2 AND 3 GANG
PLATESWITCHES

10

With earth terminal
DIMENSIONS
87 x 87mm
FIXING CENTRES
60.3mm

Knockouts 'Cut-out' provided in top and bottom for 16mm oval PVC conduit. 20mm round 'push-out' type knockout in base for cable entry. Fixing holes are also provided for mounting to wall or over BS 4568-2 small circular boxes.

BS 5733:2010

32MM
SURFACE



2180WHI
1 GANG
2181WHI
1 GANG

10

10

DIMENSIONS
87 x 87mm
FIXING CENTRES
60.3mm

KNOCKOUTS

2180: One 'push-out' for 20mm oval conduit in top, one 'cut-out' for 20mm or 25mm oval conduit and one 20mm round 'push-out' in the base.

2181: One 'push-out' for 20mm round conduit in top and one 20mm round 'push-out' in base.
BS 5733:2010



2182WHI
2 GANG
2183WHI
2 GANG

5

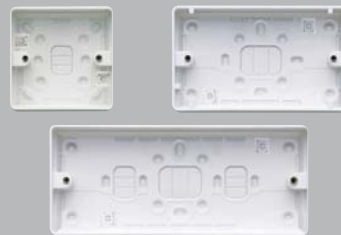
5

DIMENSIONS
87 x 148mm
FIXING CENTRES
120.6mm

KNOCKOUTS

2182: Two 'push-outs' for 20mm oval conduit in top, two 'cut-outs' for 20mm or 25mm oval conduit and one 20mm round 'push-out' in base

2183: One 'push-out' for 20mm round conduit in top and one 20mm round 'push-out' in base.
BS 5733:2010



K2181WHI
FOR 1 GANG LOGIC PLUS™ POWER ACCESSORIES
K2183WHI
FOR 2 GANG LOGIC PLUS™ POWER ACCESSORIES
K2185WHI
FOR 3 GANG LOGIC PLUS™ POWER ACCESSORIES

10

5

5

KNOCKOUTS

K2181: One 'cut-out' for 20mm round conduit in top face, one 'cut-out' for 20mm or 25mm oval conduit in lower face and one 20mm round 'push-out' in the base.

K2183 and K2185: One 'cut-out' for 20mm round conduit in top face, two 'cut-outs' for 20mm or 25mm oval conduit in lower face and one 20mm round 'push-out' in the base. Both boxes are suitable for fitting over 1 gang and 2 gang BS 4662 flush steel boxes respectively.

DIMENSIONS

1 gang: 87 x 87mm
2 gang: 87 x 148mm
3 gang: 87 x 208mm

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm
3 gang: 180.9mm
BS 4662:2006
where applicable

Moulded Boxes

ARCHITRAVE
SURFACE



K2151WHI
1 GANG
ARCHITRAVE BOX
K2152WHI
2 GANG
ARCHITRAVE BOX

10

5

Earth terminal fitted in base of boxes.

DIMENSIONS
1 gang: 87 x 33 x 16mm
2 gang: 148 x 33 x 16mm

FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

16MM
SURFACE



K2160WHI
FOR 1, 2 AND
3 GANG LOGIC PLUS™ PLATESWITCHES
K2161WHI
FOR 4 AND 6 GANG
LOGIC PLUS™
PLATESWITCHES

10

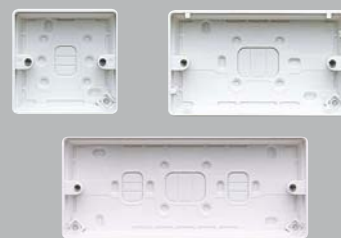
5

Earth terminal fitted in base of boxes.
Knockouts provided in sides and bases.

DIMENSIONS
1 gang: 87 x 87mm
2 gang: 87 x 148mm

FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

30MM
SURFACE



K2140WHI
FOR 1 GANG
LOGIC PLUS™
POWER ACCESSORIES
K2142WHI
FOR 2 GANG
LOGIC PLUS™
POWER ACCESSORIES

10

5

Knockouts in base and sides for cable entry
K2142 and K2153 are suitable for fitting over 1 gang and 2 gang BS 4662 flush steel boxes respectively

K2153WHI
FOR 3 GANG
LOGIC PLUS™
POWER ACCESSORIES

5

DIMENSIONS
1 gang: 87 x 87mm
2 gang: 87 x 148mm
3 gang: 87 x 208mm

FIXING CENTRES
1 gang: 60.3mm
2 gang: 120.6mm
3 gang: 180.9mm
BS 5733:2010

Boxes

mkelectric.co.uk



Moulded Boxes

32MM
SURFACE



2140WHI
FOR 1 GANG
POWER ACCESSORIES
SQUARE CORNERS

10

Knockouts are provided in base and sides for cable entry

DIMENSIONS

1 gang: 87 x 87mm
2 gang: 87 x 148mm

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

44MM
SURFACE



2031WHI
FOR 1 GANG
POWER ACCESSORIES
SQUARE CORNERS

10

Knockouts in base and sides for cable entry.

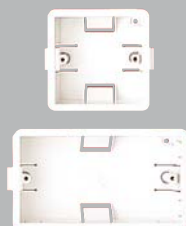
DIMENSIONS

87 x 87mm

FIXING CENTRES

60.3mm
BS 5733:2010

DRY LINING
35MM
FLUSH



QFB1WHI
1 GANG
QFB2WHI
2 GANG

20

10

All round flange for a flush fit. One piece moulded lug automatically snaps into place. No rear projections. Clamp device on cable entry. Will accommodate partition thickness between 6mm and 16mm. Earth terminal facility.
BS 4662:2006



QFB/IG1
1 GANG WITH
INTUMESCENT GASKET
QFB/IG2
2 GANG WITH
INTUMESCENT GASKET

20

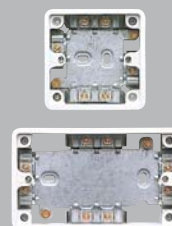
10

QFB/IG1 & QFB/IG2

Pre-fitted with intumescent gaskets to give fire protection, in accordance with BS 476-2:1987. In a fire situation, a chemical reaction will occur with the intumescent material. The void behind the wiring device will be filled, providing protection against the passage of fire.

BS 4662:2006

MI CABLE BOXES
37MM
SURFACE



K2131WHI
1 GANG
10 CLAMPS
K2132WHI
2 GANG
12 CLAMPS

5

5

Clamps accept 20mm sealing pots.

DIMENSIONS

1 gang: 92 x 92mm
2 gang: 92 x 152mm

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

DUAL BOX
38MM
SURFACE



K2025WHI
FOR MOUNTING
TWO 1 GANG
LOGIC PLUS™
ACCESSORIES

5

This box has two slots in base with 60.3mm and 120.6mm fixing centres for fitting over BS 4226 flush boxes. Knockouts provided for cable entry.

Includes integral dividing fillet.

DIMENSIONS
86 x 172 mm
BS 5733:2010

40MM
SURFACE



K2031WHI
FOR 1 GANG
LOGIC PLUS™
POWER ACCESSORIES
K2172WHI
FOR 2 GANG
LOGIC PLUS™ 50 AMP
DP SWITCHES

10

5

Knockouts provided in sides and base.

K2172: Earth terminal fitted in base of box.

DIMENSIONS

K2031: 87 x 87mm
K2172: 87 x 148mm

FIXING CENTRES

K2031: 60.3mm
K2172: 120.6mm
BS 5733:2010

FLANGE BOXES
45MM
FLUSH



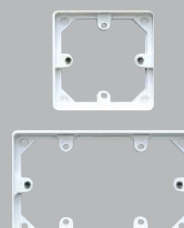
K2061WHI
1 GANG
K2062WHI
2 GANG

5

5

DIMENSIONS
K2061: 88 x 88mm
K2062: 88 x 148mm
FIXING CENTRES
K2061: 60.3mm
K2062: 120.6mm
BS 5733:2010

Mounting
Pattresses
SURFACE



K2134WHI
1 GANG 20MM DEEP
FOR LOGIC PLUS™
ACCESSORIES
K2133WHI
2 GANG 20MM DEEP
FOR LOGIC PLUS™
ACCESSORIES

10

10

FIXING CENTRES

1 gang: 60.3mm
2 gang: 120.6mm
BS 5733:2010

LOGIC PLUS™ ACCESSORIES/BOX COMPATIBILITY CHART

SURFACE MOUNTING

	DEPTH: (MM)								
MOULDED	16 MOULDED	30 MOULDED	32* PVC	38 MOULDED	40 MOULDED	41 STEEL	41* STEEL	48* STEEL	55
1 GANG SOCKETS (13A)		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
2 GANG SOCKETS		K2142	K2183		K2172	K2212ALM	K2214ALM	K5400	
3 GANG SOCKETS		K2153	K2185						
RCD SOCKETS					K2172	K2212ALM	K2214ALM	K5400	
FILTERED SOCKETS					K2172	K2212ALM	K2214ALM	K5400	
CONNECTION UNITS		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
20A DP SWITCHES		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
K5105 32A DP SWITCH		K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
K5205, K5215 (CK & SH)					K2172	K2212ALM	K2214ALM		
K5230								K5400	
K5060, K5061					K2212	K2214ALM		K5400	
K5040, K5041									
K5001									
K700		K2140	K2181	K2025		K2211ALM	K2213ALM		
K701					K2172				
1, 2 & 3 GANG SWITCHES	K2160	K2140	K2181	K2025	K2031	K2211ALM	K2213ALM		
4 & 6 GANG SWITCHES	K2161	K2142	K2183		K2172	K2212ALM	K2214ALM	K5400	
1 GANG ARCHITRAVE SWITCH	K2151								
2 GANG ARCHITRAVE SWITCH	K2152								
DIMMERS USING PATTRESS									
K1501, K1511, K1531, K1532	K2160								
K1521, K1534, K1533, K1535	K2160								
DIMMERS NOT USING PATTRESS									
K1501, K1511, K1531, K1532		K2140	K2181	K2025	K2031				
K1521, K1534, K1533, K1535		K2140	K2181	K2025		K2211ALM	K2213ALM		
DATA/TELECOM PLATES	K2160	K2140	K2181	K2025		K2211ALM	K2213ALM		

FLUSH MOUNTING

	DEPTH: (MM)						
(STEEL & DRY LINING)	16	25*	27*	35*	45	47*	55
1 GANG SOCKETS (13A)		861ZIC		QFB/IG1	K2061	877ZIC	
2 GANG SOCKETS		862ZIC		QFB/IG2	K2062	878ZIC	
3 GANG SOCKETS		K863					
RCD SOCKETS				886ZIC	K2062	878ZIC	
FILTERED SOCKETS				886ZIC	K2062	878ZIC	
CONNECTION UNITS				866ZIC	K2061	877ZIC	
20A DP SWITCHES				866ZIC	K2061	877ZIC	
K5105 32ADP SWITCH				866ZIC		877ZIC	
K5205, K5215 (CK & SH)				886ZIC	K2062	878ZIC	
K5012							5120ALM
K5045					K2061	877ZIC	
K5060, K5061				886ZIC	K2061	878ZIC	
K5011							5120ALM
K700		861ZIC		866ZIC	K2061	877ZIC	
K701						878ZIC	
1, 2 & 3 GANG SWITCHES		861ZIC		866ZIC	K2061	877ZIC	
4 & 6 GANG SWITCHES		862ZIC		886ZIC	K2062		
1 GANG ARCHITRAVE SWITCH			3921ZIC				
DIMMERS USING PATTRESS							
K1501, K1511, K1531, K1532							
K1521, K1534, K1533, K1535						878ZIC	
DIMMERS NOT USING PATTRESS							
K1501, K1511, K1531, K1532		861ZIC		866ZIC	K2061	877ZIC	
K1521, K1534, K1533, K1535		861ZIC			K2062	877ZIC	
DATA/TELECOM PLATES		861ZIC		866ZIC	K2061	877ZIC	

BOX SUPPLIED WITH ACCESSORY

DEPENDENT UPON MODULES USED

* WITH CONDUIT ENTRY KNOCKOUTS

NOTE: THE SIZE OF THE CABLE AND NATURE OF INSTALLATION SHOULD BE TAKEN INTO CONSIDERATION WHEN CHOOSING BOX DEPTH.

Ancillary Products

mkelectric.co.uk



Switchsocket Outlets

MINI LOGIC
SURFACE
13 AMP



2959WHI



2949WHI

PANEL MOUNTING
13 AMP



2531WHI



2532WHI

Socket Outlets

PANEL MOUNTING
13 AMP



734WHI



735WHI



1232D1

2959WHI

1 GANG SP

2949WHI

2 GANG SP

These products are supplied with a mounting box.
Mounting boxes have knockouts for cables.

DIMENSIONS

1 gang: 74 x 64 x 46mm

2 gang: 133 x 64 x 46mm

BS 1363-2:1995

10

2531WHI

1 GANG SP

SWITCHSOCKET

5

2532WHI

2 GANG SP

SWITCHSOCKET

Supplied with M3.5 threaded eyelets and fixing screws.

These products have side entry terminals.

BS 1363-2:1995

5

734WHI

1 GANG

CRUCIFORM SOCKET

10

5

735WHI

1 GANG

CIRCULAR SOCKET

10

1232D1

1 GANG

NON STANDARD

10

Supplied with M3.5 threaded eyelets and fixing screws.
734 and 735 have side entry terminals.

They are also available with rear entry terminals.

Use suffix D5WHI when ordering.

1232D1 has rear entry terminals and is provided with facilities for 'clean earth' connection and are suitable for non-standard plugs with 'T' shaped earth pin.

734, 735

BS 1363-2:1995

1232D1

BS 1363-2:1995 where relevant.

Triple Pole & Neutral Switches

METAL FLUSH
32 AMP



5114WHI

SURFACE



5115WHI



5116WHI

Energy Saving Switch

FLUSH



4724WHI



4700WHI

Clock Connectors

FUSED



995WHI

5114WHI
FLUSH MOUNTED
WITH NEON

1

5115WHI
SURFACE MOUNTED
WITH NEON

1

5116WHI
SURFACE MOUNTED
WITH NEON

1

4724WHI
20A DP SWITCH
WITH KEYTAG

10

4700WHI
SPARE KEYTAG

10

995WHI
FLUSH MOUNTING

10

MOUNTING BOX FLUSH 5268ALM

These products have a utilisation category of AC22 – rated operational current (Ie), 32A – rated operational voltage (Ue), 440V. They are suitable for switching mixed resistive and inductive loads including moderate overloads.

5114 is also available in Albany Plus finishes (page 178).

All switches may be locked in the 'ON' or 'OFF' position with 1 the use of the MK Padlock K2000.

5116 is available in Metalclad Plus version (page 230).

TERMINAL CAPACITY

16mm² conductors. On surface mounted versions the earth terminal is fitted on base of box.

DIMENSIONS

5114 203 x 140mm

5115 182 x 118 x 82mm

5116 137 x 76 x 53mm

KNOCKOUTS

5115 5 x 25mm. Two top and bottom, one in back

5116 6 x 20mm. Wiring space limits recommended cable size to 6mm².

BS EN 60947-3:1999

MOUNTING BOXES

FLUSH

866ZIC

SURFACE

2160WHI

The MK Energy Saving Switch provides a simple and effective way of reducing electricity consumption while increasing safety in buildings where appliances may be left on in unoccupied rooms.

By removing the keytag the power is switched off eliminating the need to switch off each individual light or appliance. A neon locator light on the switch unit makes it easy to locate when entering darkened rooms.

DIMENSIONS

86 x 86mm

FIXING CENTRES

60.3mm

BS EN 60669-1:1999

Fitted with 2 amp fuse-link to BS 1362. Terminals will accommodate 2.5mm² conductors.

995WHI

Includes earthing facilities and is suitable for mounting in BS 4662 boxes. The removable fuse carrier is fully recessed and total projection of the plate is only 4.2mm. A knockout on the underside is provided so an M3.5 screw or hook engages with a tapped lug on the box (for hanging a wall clock).

DIMENSIONS

995WHI 86 x 86mm

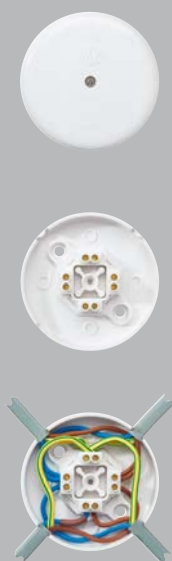
FIXING CENTRES

995WHI 60.3mm

BS 5733:2010

Ancillary Products

Junction Boxes



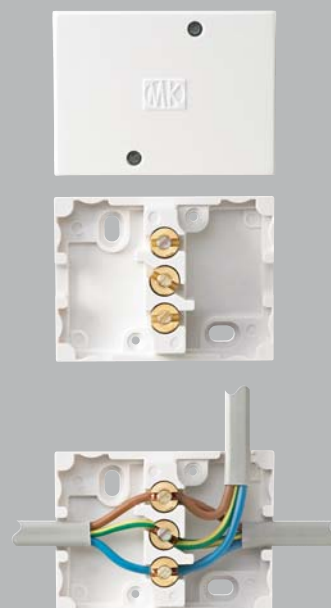
1131WHI



1132WHI



1133WHI



1130WHI

1131WHI

4 TERMINAL BLOCKS
10A

DIMENSIONS

OVERALL DIAMETER

81.5mm

DEPTH WITH COVER

22.5mm

TERMINAL CAPACITY

1131 6 x 1.5mm² conductors1132 4 x 4mm² conductors

BS EN 60670-22 (where applicable)

1132WHI

3 TERMINAL BLOCKS
30A

DIMENSIONS

OVERALL DIAMETER

81.5mm

DEPTH WITH COVER

22.5mm

TERMINAL CAPACITY

1131 6 x 1.5mm² conductors1132 4 x 4mm² conductors

BS EN 60670-22 (where applicable)

1133WHI

3 TERMINAL BLOCKS
30A

DIMENSIONS

OVERALL DIAMETER

95mm

DEPTH WITH COVER

25mm

TERMINAL CAPACITY

Each terminal block accepts

up to 4 x 6mm² conductors

BS EN 60670-22 (where applicable)

1130WHI

3 TERMINAL
30A

Particularly suitable for taking spurs off un-cut ring circuit conductors.

DIMENSIONS

86 x 64 x 31mm

TERMINAL CAPACITY

Each terminal accepts

3 x 4mm² conductors.

CABLE ENTRIES

Two opposite 'through' entries are 'open'.

Eight further knockouts are provided.

BS EN 60670-22 (where applicable)



Technical Hotline
+44 (0)1268 563720

Ancillary Products

WIRING DEVICES
BOXES AND ANCILLARY
PRODUCTS

Terminal Blocks

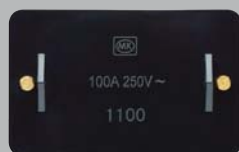


913WHI



914WHI

Service Connector Boxes



1100BLK



1101BLK

Accessories For Boxes



3714



3710



800ZIC



3840ZIC

Neon Lamp Assemblies



5144SS000T9



17270SS

913WHI

3 WAY

914WHI

4 WAY

TERMINAL CAPACITY

913

Each terminal accepts up to 3 x 2.5mm² (solid conductors) or 3 x 4mm² (stranded conductors).

914

Each terminal accepts up to 4 x 1.5mm² conductors.

FIXING CENTRES

60.3mm for mounting on 'spare' lugs of 4 or 6 lug BS 4662 boxes.

5

1100BLK

5 WAY DOUBLE POLE
100A

5

1101BLK

5 WAY SINGLE POLE
100A

TERMINAL CAPACITY

All 35mm²

Where it is necessary to take the outer sheath of a double insulated cable into the box, the cable sizes are restricted to 16mm².

DIMENSIONS (OVERALL)

1100BLK 110 x 70 x 60mm

1101BLK 65 x 50 x 38mm

BS 7657:2010

10

3714

BRASS EARTH TERMINAL
WITH BRACKET

10

K3716

BRASS EARTH TERMINAL

3710

EXTENSION STUD

M3.5

ZINC-PLATED STEEL

OVERALL LENGTH 34MM

800ZIC

BOX FIXING FLANGE

USE TWO TO MOUNT ANY FLUSH
MK BOX IN A DRY-PARTITION WALL

3840ZIC

CONVERSION BRACKET

COMPLETE WITH EARTH TERMINAL.

CONVERTS 25MM DEEP FLUSH SWITCH
BOXES WITH 42MM FIXING CENTRES TO
ACCOMMODATE PLATESWITCHES WITH
60.3MM FIXING CENTRES

100

5144SS000T9

LAMP LEAD AND
RESISTOR ASSEMBLY
FOR CEILING SWITCH BLOCKS
AND 32A DP SWITCHES

100

100

17270SS

LAMP LEAD AND
RESISTOR ASSEMBLY
TAG ENDED NEON FOR USE WITH
45A, 50A SWITCHES AND COOKER
CONTROL UNITS

20

7179PS

LAMP LEAD AND RESISTOR
ASSEMBLY, MALE CONNECTOR
FOR SWITCH SOCKETS

10

1

10

10

Ancillary Products

mkelectric.co.uk



Fuse-Links

BS 646:1958
250V 50-60 HZ

BS HD 60269-3:2010
250V 50-60HZ

BS 1362:1973
250V 50-60HZ



K600



K630



K602



K601



K606



K603



K605



K604



K610



K612



K609



K608



K607

K600
5A RED
K630
3A BLACK
K602
2A YELLOW
K601
1A GREEN

DIMENSIONS
OVERALL LENGTH
19.1mm +0.8mm -0.4mm
END-CAP DIAMETER
5.3mm +0.1mm -0.1mm
END-CAP LENGTH
4.0mm +0.8mm -0.8mm

10 K606
32A RED
10 K603
20A YELLOW
10 K605
16A BLUE
10 K604
5A WHITE

K606
OVERALL LENGTH
29.0mm +0.4mm -0.4mm
END-CAP DIAMETER
12.7mm +0.1mm -0.1mm
END-CAP LENGTH
8.0mm +0.5mm -0.5mm
K604
OVERALL LENGTH
23.0mm +0.0mm -0.8mm
END-CAP DIAMETER
6.35mm +0.1mm -0.1mm
END-CAP LENGTH
4.8mm +0.5mm -0.5mm
K603, K605
OVERALL LENGTH
26.0mm +0.2mm -0.6mm
END-CAP DIAMETER
10.32mm +0.1mm -0.1mm
END CAP LENGTH
6.4mm +0.5mm -0.5mm

10 K610
13A BROWN*
10 K612
3A RED*
10 K609
10A BLACK #
10 K608
5A BLACK#
10 K607
2A BLACK#

* These ratings are for use with
plugs complying with BS 1363,
fused connections units and similar
accessories.

These ratings are for use with
fused connection units and similar
accessories.

DIMENSIONS
OVERALL LENGTH
25.4mm +0.8mm -0.4mm
END-CAP DIAMETER
6.3mm +0.2mm -0.5mm
END-CAP LENGTH
5.5mm +0.8mm -0.8mm

Extra Screws

USE WITH
EDGE™/ASPECT™
FRONTPLATES



10 43066SSABST9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 4352SSTIRT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100
10 43066SSNIPT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 4352SSWHIT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100
10 43066SSDBZT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 4352SSNIPT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100
10 43066SSLBKT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 4352SSPBRT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100
10 43066SSLIVT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 K14S42506ABST9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 43066SSPBRT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 K14S42506DBZT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 43066SSBRST9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 K14S42506LBKT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 43066SSWHIT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 K14S42506BRST9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 43066SSTCOT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 K14S42506TCOT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 43066SSTIRT9 SCREW M3.5 22MM (2 SCREWS/PKT)	100 K14S42506TIRT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 4352SSABST9 SCREW M3.5 28MM (2 SCREWS/PKT)	100 K14S42506NIPT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 4352SSDBZT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100 K14S42506LIVT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 4352SSLBKT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100 K14S42506PBRT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 4352SSLIVT9 SCREW M3.5 28MM (2 SCREWS/PKT)	100 K14S42506WHIT9 SCREW M3.5 47MM (2 SCREWS/PKT)	100
10 4352SSBRST9 SCREW M3.5 28MM (2 SCREWS/PKT)		
10 4352SSTCOT9 SCREW M3.5 28MM (2 SCREWS/PKT)		

BRS finish for use with SAG
accessories.

NIP finish for use with BSS, BRC,
ALM, PCR/POC and Logic Plus™
accessories.

Tamperproof screws include one key
per pack.



Technical Hotline
+44 (0)1268 563720

Ancillary Products

USE WITH
EDGE™/ASPECT™
GRID PLUS™
FRONTPLATES

USE WITH
LOGIC PLUS™/ALBANY PLUS™
GRID PLUS™
FRONTPLATES

USE WITH
LOGIC PLUS™/ALBANY PLUS™
FRONTPLATES

Replacement Components



3405ZIC

48370SSABST9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSDBZT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSLBKT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSLIVT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSBRST9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSCOT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSIRT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSPBRT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSNIPT9
SCREW M3.0 12MM
(2 SCREWS/PKT)
48370SSWHIT9
SCREW M3.0 12MM
(2 SCREWS/PKT)

100
100
100
100
100
100
100
100
100
100
100

11130BR SMA
SCREW M3.0 12MM
11130NIPMA
SCREW M3.0 12MM
11430BR SMA
SCREW M3.0 12MM
TAMPERPROOF
11430NIPMA
SCREW M3.0 12MM
TAMPERPROOF

100
100
100
100

BRS finish for use with SAG accessories.
NIP finish for use with BSS, BRC, ALM, PCR/POC
and Logic Plus™ accessories.
Tamperproof screws include one key per pack.

11135NIPMA
SCREW M3.5 14MM
11135BR SMA
SCREW M3.5 14MM
11135NIPMB
SCREW M3.5 22MM
11135BR SMB
SCREW M3.5 22MM
11135NIPMN
SCREW M3.5 25MM
11135BR SMN
SCREW M3.5 25MM
11135BR SME
SCREW M3.5 32MM
11135NIPME
SCREW M3.5 32MM
11135BR SMG
SCREW M3.5 48MM
11135NIPMG
SCREW M3.5 48MM
11435BR SMJ
SCREW M3.5 29MM
TAMPERPROOF
11435NIPMJ
SCREW M3.5 29MM
TAMPERPROOF
11435BR SME
SCREW M3.5 35MM
TAMPERPROOF
11435NIPME
SCREW M3.5 35MM
TAMPERPROOF

100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100
100

645NIP
SECRET SCREW
FOR USE WITH 646, 655 & 647
644ZIC
KEY FOR 645NIP
3400ZIC
TAMPERPROOF KEY
3405ZIC
DUAL USE KEY FOR TAMPER
PROOF KEY SWITCH AND SECRET
SCREW CONNECTION UNITS

100
10
10
10

BRS finish for use with SAG accessories.
NIP finish for use with BSS, BRC, ALM, PCR/POC
and Logic Plus™ accessories.
Tamperproof screws include one key per pack.

BRS finish for use with SAG accessories.
NIP finish for use with BSS, BRC, ALM, PCR/POC
and Logic Plus™ accessories.
Tamperproof screws include one key per pack.



METALCLAD PLUS™

RANGE INTRODUCTION

All MK products are made to stand up to the wear and tear of everyday use, but in some areas you need them to be even tougher. That's why the Metalclad Plus™ range of surface mounted accessories is ideal for factories, workshops, garages and sheds.

Made from heavy gauge steel they're tough and impact resistant and they look good too. There is a wide selection of surface mounted products in the range including switchsockets with outboard rockers and light switches with wide rockers, both very useful when wearing gloves. An RCD protected socket is also available which is essential when operating power tools.

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches and in finishes to complement the Metalclad Plus™ range. Please see page 21 for details.

HOW TO SPECIFY

A metal, surface and flush mounting range of wiring devices. Frontplates to have a maximum 9mm profile and subtle 7mm radius rounded corners. Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation. All sockets to have a 3 pin operated shutter safety mechanism and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety. Switches to have a minimum 3mm contact gap with a positive 'click' to denote successful operation.

FEATURES & BENEFITS

TOUGH AND IMPACT RESISTANT

Metalclad Plus™ is ideal for factories, workshops, garages and sheds. White Metalclad Plus™ is ideal for Schools and Sports Halls.

COMPREHENSIVE RANGE

Suits all your needs where hard wearing performance is required.

FRONTPLATES HAVE SMOOTHLY CHAMFERED EDGES

Fits flush with the backbox providing a neat finish.

TOTAL SAFETY

3-pin operated "child resistant shutter system", which is designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13 Amp plug are in position.

All products are Surface mounted (supplied with box) with exception of White and D5 variants. Boxes can be obtained separately if needed. See page 211.



Technical Hotline
+44 (0)1268 563720

Metalclad Plus™

WIRING DEVICES
SURFACE

METALLIC POWDER PAINT
Finish is corrosion and scratch resistant

HIGHLY IMPACT RESISTANT

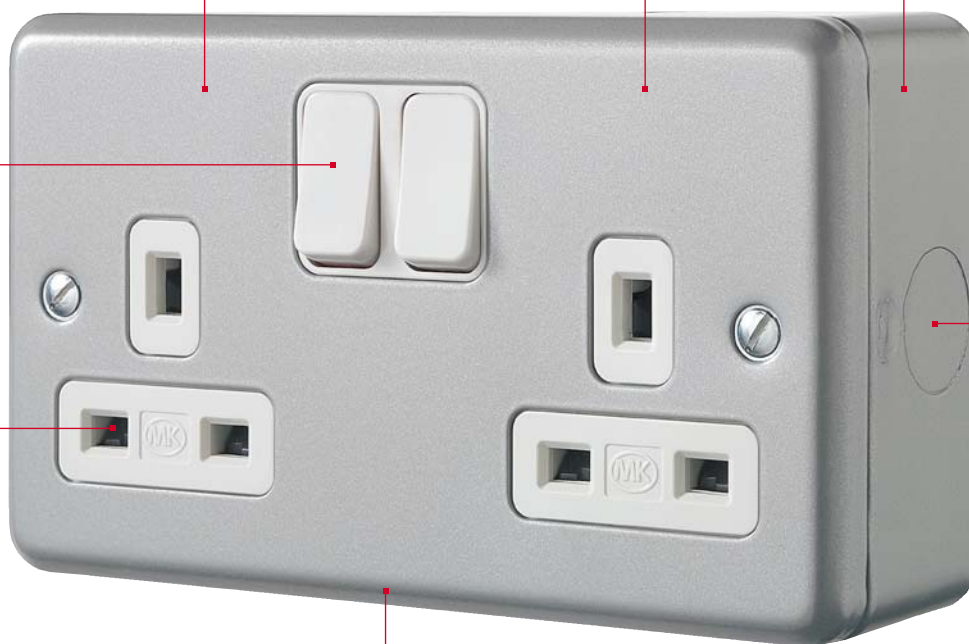
SPECIFICALLY DESIGNED BACK BOXES
Ensure neat and exact fit

DOUBLE POLE SWITCHING

3-PIN "CHILD RESISTANT SHUTTER SYSTEM"
Designed to inhibit access to the electricity supply, unless all 3 pins of a standard British 13A plug are in position

STYLISH CURVED DESIGN

BOXES AVAILABLE WITH OR WITHOUT KNOCKOUTS



Terminal screws are backed out and captive terminals are upwards facing to make installation easier.

Funnel entrance to terminals enables positive cable connection.

Outboard rocker sockets are ideal for gloved hands.

Clear terminal markings for easy identification.



Metalclad Plus™

mkelectric.co.uk



Switchsocket Outlets

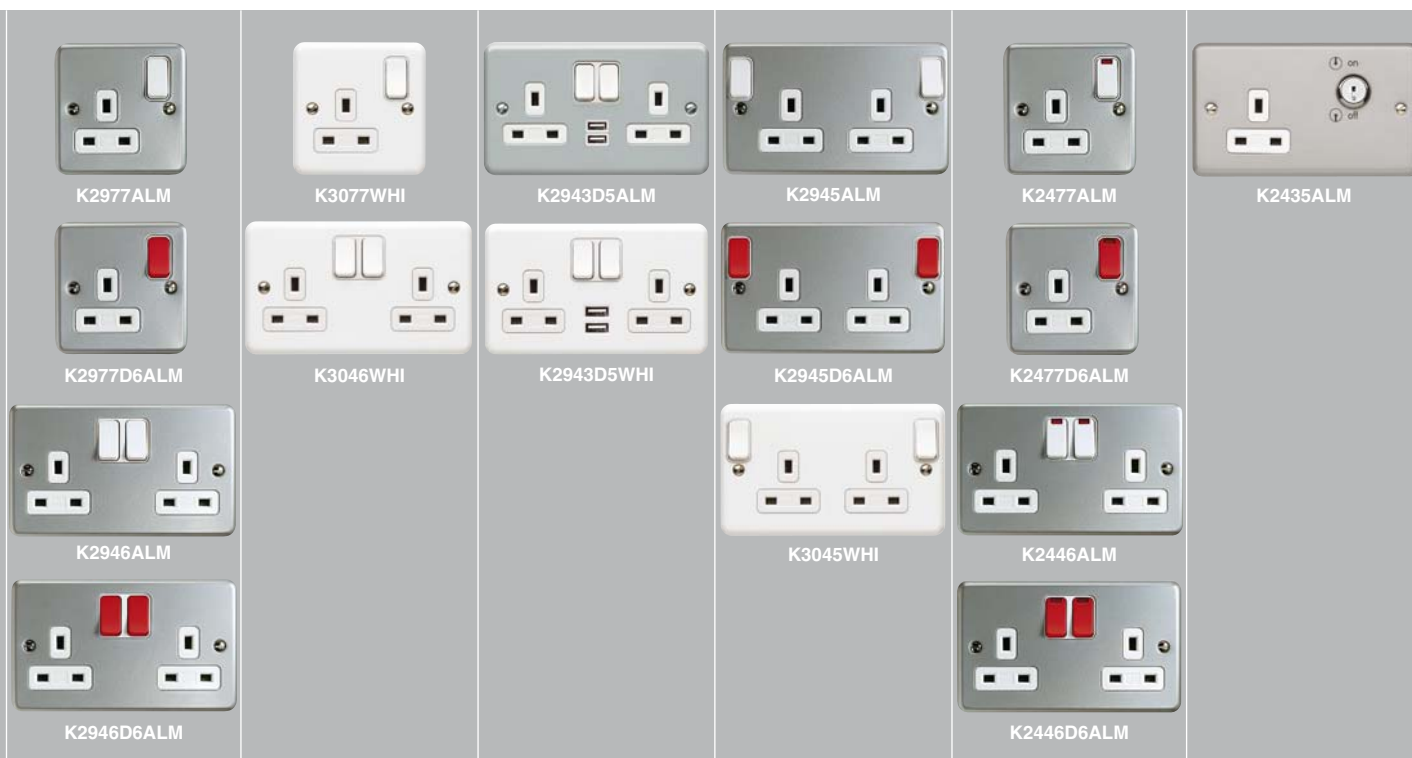
DP
13 AMP

2 GANG DP
WITH 2 X USB
CHARGING PORTS
DUAL EARTH
13 AMP

WITH OUTBOARD
ROCKERS
13 AMP

WITH NEONS
13 AMP

1 GANG DP



K2977ALM 5
1 GANG DP WITH
DUAL EARTH
TERMINALS
K2977D5ALM 1
1 GANG DP WITH DUAL
EARTH TERMINALS
WITHOUT BOX
K2977D6ALM 1
1 GANG DP WITH RED
ROCKER AND DUAL
EARTH TERMINALS
K2946ALM 5
2 GANG DP
K2946D5ALM 1
2 GANG DP
WITHOUT BOX
K2946D6ALM 1
2 GANG DP WITH
RED ROCKERS

K3077WHI 10
1 GANG DP
WITHOUT BOX
K3046WHI 5
2 GANG DP
WITHOUT BOX

K2943D5ALM 1
2 GANG DP WITH DUAL
EARTH TERMINALS
WITH INTEGRAL USB
CHARGING WITHOUT
BOX
K2943D5WHI 1
2 GANG DP WITH DUAL
EARTH TERMINALS
WITH INTEGRAL USB
CHARGING WITHOUT
BOX
Features 2 USB charging
sockets, each capable of
supporting 2A charge
(total of 2A)
BS5733: 2010
MOUNTING BOX
K897ALM
K897WHI

K2945ALM 5
2 GANG DP
WITH OUTBOARD
ROCKERS AND DUAL
EARTH TERMINALS
K2945D5ALM 5
2 GANG DP
WITH OUTBOARD
ROCKERS AND DUAL
EARTH TERMINALS
WITHOUT BOX
K2945D6ALM 1
2 GANG DP
WITH RED OUTBOARD
ROCKERS AND DUAL
EARTH TERMINALS
K3045WHI 5
2 GANG DP
WITHOUT BOX
WITH OUTBOARD
ROCKERS AND DUAL
EARTH TERMINALS

K2477ALM 5
1 GANG DP
WITH NEON AND DUAL
EARTH TERMINALS
K2477D6ALM 1
1 GANG DP
WITH NEON,
RED ROCKER AND DUAL
EARTH TERMINALS
K2446ALM 5
2 GANG DP
WITH NEONS
K2446D6ALM 1
2 GANG DP
WITH NEONS
AND RED ROCKERS

K2435ALM 1
13A DP KEY
OPERATED SOCKET
Earth terminal fitted in boxes.
DIMENSIONS
86 x 146 x 51mm
KNOCKOUTS
8 x 20mm – Three in top two
in bottom sides and one in
each end. One in base.
MOUNTING BOX
K830ALM* K897ALM
(*without side knockouts)
All boxes have a base
knockout.
BOXES
BS 5733:2010
SOCKET
BS 1363-2:1995

Earth terminal fitted in boxes.

DIMENSIONS

1 gang 86 x 86 x 51mm
2 gang 86 x 146 x 51mm

KNOCKOUTS

1 gang 6 x 20mm – Two in one side and one in
each of the other three sides. One in base.
2 gang 8 x 20mm – Three in top two in bottom
sides and one in each end. One in base.

SPARE BOXES

1 gang K829ALM* K899ALM
2 gang K830ALM* K897ALM

(*without side knockouts)

All boxes have a base knockout.

BOXES

BS 5733:2010

SOCKET

BS 1363-2:1995

HIGH INTEGRITY EARTHING

One gang switchsockets, two gang outboard
switchsockets, two gang integrated USB
switchsockets and two gang unswitched sockets
are fitted with two earth terminals to provide a
double earth facility for use when installations
require a high integrity protective connection as
specified within BS 7671:2008

DOUBLE POLE SWITCHING

All switchsockets have double pole switching
(neutral makes first, breaks last).

All units are supplied with backboxes (except WHI, D5 products and Blankplates)



Technical Hotline
+44 (0)1268 563720

Metalclad Plus™

WIRING DEVICES
SURFACE

Socket Outlets

RCD PROTECTED
13 AMP

ROUND PIN

NON STANDARD
13 AMP

13 AMP

ROUND PIN



K6102ALM



K6302ALM



K6231ALM



K2871ALM



K2873ALM



K1247ALM



K1247D6ALM



K1248ALM



K1248D6ALM



K848ALM



K850ALM



K841ALM



K842ALM



K843ALM

K6102ALM

1 GANG DP
10mA ACTIVE CIRCUIT

K6302ALM

1 GANG DP
30mA ACTIVE CIRCUIT

K6305ALM

1 GANG DP
30mA PASSIVE CIRCUIT

K6231ALM

2 GANG SP
30mA ACTIVE CIRCUIT

K6233ALM

2 GANG SP
30mA PASSIVE CIRCUIT

It is important to ensure that the correct control circuit, active or passive, is selected for each application. See page 288 for definition.
Only suitable for supply voltage of 240V a.c.

DIMENSIONS
86 x 147 x 54mm

KNOCKOUTS
8 x 20mm – Three in top side, two in bottom side, one in base and one in each end.

SPARE BOX
K897ALM
BS 7288:1990

1

1

1

1

1

K2871ALM

1 GANG
5A DP

K2873ALM

1 GANG
15A DP

SHUTTERD

Earth terminal fitted in boxes.

DIMENSIONS
86 x 86 x 51mm

KNOCKOUTS
6 x 20mm – Two in one side and one in each of other three sides.
One in base.

Spare Boxes with and without knockouts are available.
All boxes have a base knockout.
BS 546:1950

1

5

K1247ALM

1 GANG DP WITH
CLEAN EARTH FACILITY

K1247D6ALM

1 GANG DP
WITH RED ROCKER AND
CLEAN EARTH FACILITY

K1248ALM

2 GANG DP WITH
CLEAN EARTH FACILITY

K1248D6ALM

2 GANG DP
WITH RED ROCKERS AND
CLEAN EARTH FACILITY

These products are provided with facilities for 'clean earth' connection and are suitable for non standard plugs with 'T' shaped earth pin. Earth terminal fitted in boxes.

NOTE

A suitable plug for these non standard sockets is 647WHI, see page 240.

DIMENSIONS
1 gang 86 x 86 x 51mm
2 gang 86 x 146 x 51mm

KNOCKOUTS
1 gang 6 x 20mm – Two in one side and one in each of other three sides.
One in base.
2 gang 8 x 20mm – Three in top, two in bottom sides and one in each end.
One in base.

Spare Boxes with and without knockouts are available.
All boxes have a base knockout
BS 1363-2:1995 where relevant

5

1

1

1

1

K848ALM

1 GANG

K850ALM

2 GANG
WITH DUAL EARTH
TERMINALS

K850ALM has two earth terminals providing a double earth facility when installations require a high integrity protective connection as specified within BS 7671:2008..

DIMENSIONS
1 gang 86 x 86 x 47mm
2 gang 86 x 146 x 47mm

KNOCKOUTS
1 gang 6 x 20mm – Two in one side and one in each of other three sides.
One in base.

2 gang 8 x 20mm – Three in top, two in bottom sides and one in each end.
One in base.

Spare Boxes with and without knockouts are available.
All boxes have a base knockout.
BS 1363-2:1995

5

5

1

1

1

K841ALM

1 GANG

2A

SHUTTERD

K842ALM

1 GANG

5A

SHUTTERD

K843ALM

1 GANG

15A

SHUTTERD

Earth terminal fitted in box.

DIMENSIONS
86 x 86 x 47mm

KNOCKOUTS
6 x 20mm – Two in one side and one in each of other three sides.
One in base.

Spare Boxes with and without knockouts are available.
All boxes have a base knockout.
BS 546:1950

5

5

5

5

Metalclad Plus™

mkelectric.co.uk



Features and Benefits



When servicing or repairing appliances fuse carriers on connection units can be padlocked for additional safety



A secret key-operated switch helps prevent unauthorised usage



An optional tamperproof screw on the fuse carrier is particularly useful for appliances in public areas



In-line terminals means that cables can be cut to the same length. White printing gives instant terminal identification



A simple but effective cord grip securely holds the cable in connection units



Backboxes come with or without side knockouts. All boxes have a central knockout in the base for added on-site flexibility

Socket Outlets

127V
(NON UK)
15 AMP



Connection Units

SWITCHED
FUSED
13 AMP



K2271ALM
1 GANG
SHUTTERED
(NON UK)

K2272ALM
2 GANG
SHUTTERED
(NON UK)

Earth terminal fitted in box.

DIMENSIONS

1 gang 86 x 86 x 47mm

2 gang 86 x 146 x 47mm

KNOCKOUTS

1 gang 6 x 20mm.

Two in one side and one in each of other three sides. One in base

2 gang 8 x 20mm.

Three in top, two in bottom sides and one in each end. One in base

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

SASO 2204:2003

5 K963KOALM
DP WITH SECRET KEY
OPERATED SWITCH,
NEON AND TAMPERPROOF
FUSE CARRIER SCREW*

5 K942ALM
DP SWITCHED
K942D5ALM
DP SWITCHED WITHOUT
BOX

K962ALM
DP SWITCHED WITH NEON

K962D6ALM
DP SWITCHED WITH
NEON AND RED ROCKER

Earth terminal fitted in base of the box.

DIMENSIONS

86 x 86 x 47mm

KNOCKOUTS

6 x 20mm.

Two in one side and one in each of other three sides, one in base.

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.
BS 1363-4:1995

* Secret Key – 3405ZIC found on page 223.

1 K3042WHI
DP SWITCHED
WITHOUT BOX

10 K3062WHI
DP SWITCHED
WITH NEON
WITHOUT BOX

All units are supplied with backboxes (except WHI, D5 products and Blankplates)



Technical Hotline
+44 (0)1268 563720

Metalclad Plus™

WIRING DEVICES
SURFACE

Switches

UNSWITCHED
FUSED
13 AMP

10 AMP



K932ALM



K972ALM



K972D6ALM



K3072WHI



K954ALM



K983ALM



K989ALM



K986ALM



K3054WHI



K3086WHI



K3591ALM



K3592ALM



K3593ALM



K5252ALM



K3091WHI



K3092WHI

K932ALM
DP SWITCHED
WITH FLEX OUTLET
K972ALM
DP SWITCHED
WITH FLEX OUTLET
AND NEON
K972D6ALM
DP SWITCHED
WITH FLEX OUTLET,
NEON AND RED ROCKER
K3072WHI
DP SWITCHED
WITH FLEX OUTLET
AND NEON
WITHOUT BOX

5 **K954ALM**
UNSWITCHED
5 **K983ALM**
UNSWITCHED WITH NEON
5 **K989ALM**
UNSWITCHED
WITH FLEX OUTLET
1 **K986ALM**
UNSWITCHED
WITH FLEX OUTLET AND NEON
10 **DIMENSIONS**
86 x 86 x 47mm
KNOCKOUTS
6 x 20mm.
Two in one side and one in each of
other three sides, one in base.
Spare Boxes with and without
knockouts are available.
All boxes have a base knockout.
BS 1363-4:1995

5 **K3054WHI**
UNSWITCHED
WITHOUT BOX
5 **K3086WHI**
UNSWITCHED WITH
FLEX OUTLET AND NEON
WITHOUT BOX
5 **MOUNTING BOX**
1 gang K829ALM* K899ALM
(*without side knockouts)
All boxes have a base knockout

10 **K3591ALM**
1 GANG SP
TWO WAY
10 **K3592ALM**
2 GANG SP
TWO WAY
K3593ALM
3 GANG SP
TWO WAY
K5252ALM
20AX DP KEY
OPERATED SWITCH
DIMENSIONS
Key Operated: 86 x 86 x 51mm
Switch: 86 x 86 x 47mm
SPARE BOXES
1 gang K829ALM* K899ALM
(*without side knockouts)
All boxes have a base knockout.
BS 5733:2010
SOCKET
BS 1363-2:1995
SWITCH
BS EN 60669-1:1999
These switches do NOT have to be
derated when used with fluorescent or
inductive loads.
An earth terminal is fitted in each box.
KNOCKOUTS
6 x 20mm
Two in one side and one in each of
other three sides, one in base.
BS EN 60669-1:1999

5 **K3091WHI**
1 GANG SP
TWO WAY
WITHOUT BOX
5 **K3092WHI**
2 GANG SP
TWO WAY
WITHOUT BOX
1 **MOUNTING BOX**
1 gang K829ALM* K899ALM
(*without side knockouts)
All boxes have a base knockout

10

10

Metalclad Plus™

mkelectric.co.uk



Switches

WIDE ROCKERS
10 AMP



K3781ALM



K3782ALM

DP Switches

20 AMP



K5212ALM



K5232ALM



K3012WHI

32 AMP AND
50 AMP



K5240ALM



K5230ALM

Triple Pole

32 AMP AND
10 AMP



K5116ALM



K2857ALM



K4858

Euro Data Frontplates



K181ALM



K182ALM



K184ALM

K3781ALM
1 GANG SP
TWO WAY
WITH WIDE ROCKER
K3782ALM
2 GANG SP
TWO WAY
WITH WIDE ROCKERS

5

These switches do NOT have to be derated when used with fluorescent or inductive loads.

An earth terminal is fitted in each box.

DIMENSIONS

86 x 86 x 47mm

KNOCKOUTS

6 x 20mm.

Two in one side and one in each of other three sides, one in base.

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

BS EN 60669-1:1999

K5212ALM
DP SWITCH
K5232ALM
DP SWITCH
WITH NEON
K5242ALM
DP SWITCH
WITH FLEX OUTLET
AND NEON
K3012WHI
DP SWITCH
WITHOUT BOX

5

5

1

5

10

Earth terminal fitted in base of box.

DIMENSIONS

86 x 86 x 47mm

KNOCKOUTS

6 x 20mm.

Two in one side and one in each of other three sides, one in base.

Spare Boxes with and without knockouts are available.

All boxes have a base knockout.

BS EN 60669-1:1999

DP Switches are not recommended for switching large banks of PCs.

K5240ALM
32A DP SWITCH
WITH NEON
K5230ALM
50A DP SWITCH
WITH NEON

5

1

5

Earth terminal fitted in base of box.

DIMENSIONS

K5240 86 x 86 x 65mm

K5230 147 x 86 x 65mm

KNOCKOUTS

K5240 6 x 20mm. Two in one side and one in each of other three sides, one in base.

K5230 4 x 20mm, 4 x 25mm

SPARE BOX

K5240 K8901ALM

K5230 K8902ALM

All boxes have a base knockout.

BS EN 60669-1:1999

1

1

K5116ALM
32A THREE POLE AND
N SWITCH WITH NEON AND
EARTH TERMINAL

1

K2857ALM
10A THREE POLE FAN
ISOLATOR WITH SWITCHLOCK
AND PADLOCK

1

K2859ALM
10A THREE POLE FAN
ISOLATOR WITHOUT SWITCHLOCK

1

K4858
SWITCHLOCK
FOR FAN ISOLATOR

10

K5116

440V max. AC22, 12kW (16HP) & 415V, 3 phase 32A continuous duty.

Making capacity is 2000A peak.

Lockable 'ON' or 'OFF' with MK padlock no K2000.

K2857

For local isolation of fans with or without timers for repair or routine.

DIMENSIONS

K5116 147 x 86 x 65mm

K2857 86 x 86 x 47mm

KNOCKOUTS

K5116 4 x 20mm², 4 x 25mm²

K2857 6 x 20mm²

SPARE BOXES

K5116 K8902ALM

K2857 K899ALM, K829ALM

BS EN 60947-3:1999

BS EN 60669-2-4 (K2857)

K181ALM
1 GANG EURO FRONTPLATE
ONE MODULE
APERTURE SIZE 25 X 50MM

5

K182ALM
1 GANG EURO FRONTPLATE
TWO MODULE
APERTURE SIZE 50 X 50MM

5

K184ALM
2 GANG EURO FRONTPLATE
FOUR MODULE
APERTURE SIZE 100 X 50MM

1

MOUNTING BOXES

Mounting Box is not supplied with frontplate.

Suitable for flush boxes to BS 4662:2006 and surface boxes to BS 5733:2010 Refer to appropriate module for minimum box depth.

FIXING CENTRES

1 gang 60.3mm

2 gang 120.6mm

STANDARDS

BS 5733:2010 where appropriate

NOTE

No grid required, modules just clip into place.

All units are supplied with backboxes (except WHI, D5 products and Blankplates)

All units are supplied with backboxes
(except WHI, D5 products and Blankplates)



Technical Hotline
+44 (0)1268 563720

Metalclad Plus™

WIRING DEVICES
SURFACE

Euro Power Modules

Euro Datacom Modules

RJ11/12

RJ45 CAT 6

RJ45 CAT 5e



K3182WHI

K3184WHI



K5830WHI

K5831WHI

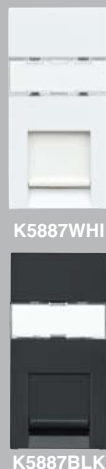
K5832WHI



K5833WHI

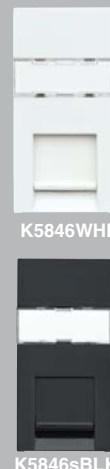
K5834WHI

K5837WHI



K5887WHI

K5887BLK



K5846WHI

K5846sBLK



K5844WHI

K5845WHI

K5845BLK

K3182WHI 1
1 GANG EURO
FRONTPLATE
TWO MODULE
APERTURE SIZE
50 X 50MM

K3184WHI 1
2 GANG EURO
FRONTPLATE
FOUR MODULE
APERTURE SIZE
100 X 50MM

MOUNTING BOXES
Mounting Box is not supplied
with frontplate.
Suitable for flush boxes to
BS 4662:2006 and surface
boxes to BS 5733:2010 Refer
to appropriate module for
minimum box depth.

FIXING CENTRES
1 gang 60.3mm
2 gang 120.6mm

STANDARDS
BS 5733:2010 where
applicable

NOTE
No grid required, modules just
clip into place.

K5830WHI 10
K5830BLK 10
UK 1 GANG
EURO 2 MODULE
13A 250V SHUTTERED

K5831WHI 10
K5831BLK 10
GERMAN 2P+E
16A 250V SHUTTERED
EURO 2 MODULE
(NON UK)

K5832WHI 10
K5832BLK 10
AMERICAN 2P+E
15A 127V SHUTTERED
EURO 2 MODULE
(NON UK)

K5830
MOUNTING BOX
35mm
46mm (for extra wiring space)

DIMENSIONS
50 x 50mm
BS 1363-2:1995

K5831
MOUNTING BOX
46mm

DIMENSIONS
50 x 50mm
IEC 60884-1:2006

K5832
MOUNTING BOX:
35mm
46mm (for extra wiring space)

DIMENSIONS
50 x 50mm
SASO 2204:2003

K5833WHI 10
K5833BLK 10
UK 1 GANG EURO 2
MODULE
5A 250V SHUTTERED

K5834WHI 10
K5834BLK 10
FRENCH/BELGIAN 2P+E
16A 250V SHUTTERED
EURO 2 MODULE
(NON UK)

K5837WHI 1
K5837BLK 1
USB CHARGING MODULE
EURO 2 MODULE

K5833
MOUNTING BOX
35mm
46mm
(for extra wiring space)

DIMENSIONS
50 x 50mm
BS 546:1950

K5834
MOUNTING BOX
46mm

DIMENSIONS
50 x 50mm
NF C61-314

K5837
MOUNTING BOX
35mm
46mm
(for extra wiring space)

K5887WHI 5
K5887BLK 5
RJ11/12
ONE MODULE 25 X 50MM

Suitable for both RJ11 and
RJ12 jacks

RJ11
4 wire
RJ12
6 wire

MOUNTING BOXES
Minimum box depth 25mm
FCC68
EN 41003

K5846WHI 5
K5846BLK 5
RJ45 CAT 6
ONE MODULE 25 X 50MM

K5846SWHI 5
K5846SBLK 5
RJ45 CAT 6 SCREENED
ONE MODULE 25 X 50MM

K5864WHI 5
RJ45 CAT 6 ANGLED
ONE MODULE 25 X 50MM

Cat 6 performance.
Suitable for both 568A and
568B wiring schemes.

MOUNTING BOXES
Minimum Box Depth 35mm
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

K5844WHI 5
RJ45 CAT 5e ANGLED
ONE MODULE 25 X 50MM

K5845WHI 5
K5845BLK 5
RJ45 CAT 5e
ONE MODULE 25 X 50MM

Enhanced Cat 5 performance.
Suitable for both 568A and
568B wiring schemes.

MOUNTING BOXES
Minimum box depth 25mm
standard
ISO/IEC 11801
EN 50173
TIA 568
EN 41003

Mains operated products
and extra low voltage
modules must not be
installed within the same
frontplate. Refer to
BS 7671:2008 for details.

DIMENSIONS
50 x 50mm
Features 2 charging sockets
each delivering 1A charging
current at 5Vdc (total 2A max).
Allows charging of portable
devices via USB 2.0 type A
plug.
IEC 60950-1
IEC 61000-6-1/3

For the full range of euro modules see
Logic Plus pages 46-48

Metalclad Plus™

mkelectric.co.uk



Euro Datacom Modules

LJU6C Data Frontplates

TELEPHONE

BNC

BLANKS

FRONTPLATES



K5820WHI



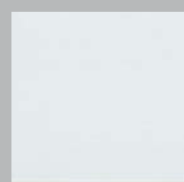
K5821WHI



K5821BLK



K5801WHI



K180WHI



K188WHI



K188BLK



K186WHI



K186BLK



K172ALM

K5820WHI
K5820BLK
 TELEPHONE MASTER
 ONE MODULE 25 X 50MM
K5821WHI
K5821BLK
 TELEPHONE SECONDARY
 ONE MODULE 25 X 50MM

MOUNTING BOXES
 Minimum depth 25mm
 BS 6312-2

5 K5801WHI
5 BNC 50Ω
 ONE MODULE 25 X 50MM

5 50 Ohm crimp connector suitable for use with
 RG58, URM43, URM76 and Belden 9907 type
 co-axial cables.
5 MOUNTING BOXES
 Minimum box depth 25mm

5 K180WHI
 TWO MODULE
 BLANK 50 X 50MM
K188WHI
K188BLK
 ONE MODULE
 BLANK 25 X 50MM
K186WHI
K186BLK
 HALF MODULE
 BLANK 12.5 X 50MM

BS 5733:2010 where applicable

10 K172ALM
10 1 GANG TWIN
10 LJU6C FRONTPLATE
10 TWO MODULE
10 APERTURE SIZE
 22 X 37MM

10 MOUNTING BOXES
 Suitable for flush boxes to
 BS 4662:2006 and surface boxes to
 BS 5733:2010
 Refer to appropriate module for minimum box
 depth.
10 FIXING CENTRES
10 1 gang 60.3mm
 BS 5733:2010 where appropriate
NOTE
 No grid required, modules just clip into place

For the full range of euro modules see Logic Plus pages 46-48



Technical Hotline
+44 (0)1268 563720

Metalclad Plus™

WIRING DEVICES
SURFACE

LJU6C Datacom Modules

RJ11/12



K5787WHI

K5787WHI
RJ11/12
ONE MODULE

Suitable for both RJ11 and RJ12 jacks.

RJ11

4 wire

RJ12

6 wire

MOUNTING BOXES

Minimum box depth 25mm

FCC68

EN41003

RJ45 CAT 6



K5746WHI



K5746BLK



K5746SWHI



K5746SBLK

5

K5746WHI
K5746BLK
RJ45 CAT 6
ONE MODULE

K5746SWHI

K5746SBLK

RJ45 CAT 6

SCREENED

ONE MODULE

Cat 6 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum Box Depth 35mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

RJ45 CAT 5e



K5745WHI



K5745BLK

5

K5745WHI
K5745BLK
RJ45 CAT 5e
ONE MODULE

5

5

Enhanced Cat 5 performance.

Suitable for both 568A and 568B wiring schemes.

MOUNTING BOXES

Minimum box depth 25mm

ISO/IEC 11801

EN 50173

TIA 568

EN 41003

BLANKS



K170WHI



K170BLK

5

K170WHI
K170BLK
ONE MODULE BLANK

5

BS 5733:2010 where appropriate

10

10

Metalclad Plus™

mkelectric.co.uk



Boxes

Blank Plates

Grid Plus Frontplates



K829ALM



K830ALM



K899ALM



K899WHI



K897ALM



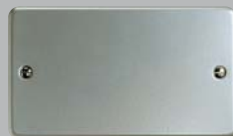
K897WHI



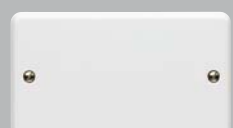
K3390ALM



K3390WHI



K3369ALM



K3369WHI



K3492ALM



K3494ALM



K3502ALM



K3491WHI



K3492WHI



K3493WHI



K3494WHI

K829ALM

1 GANG
WITHOUT KNOCKOUTS

5

K830ALM

2 GANG
WITHOUT KNOCKOUTS

5

K899ALM

1 GANG
6 X 20MM KNOCKOUTS

10

K899WHI

1 GANG
6 X 20MM KNOCKOUTS

10

All boxes are fitted with a brass earth terminal and a base knockout.

DIMENSIONS

1 gang 86 x 86 x 38mm

2 gang 86 x 147 x 38mm

These boxes are not suitable for mounting Grid Plus modules or modular data/telecom modules.

BS 5733:2010

K897ALM

K897WHI

2 GANG
8 X 20MM KNOCKOUTS

5

5

K3390ALM

K3390WHI

1 GANG

5

5

K3369ALM

K3369WHI

2 GANG

5

5

DIMENSIONS

K3390 86 x 86mm

K3369 86 x 147mm

FIXING CENTRES

K3390 60.3mm

K3369 120.6mm

BS 5733:2010

Blank plates supplied without backboxes.

K3491ALM

1 MODULE

10

K3492ALM

2 MODULE

10

K3493ALM

3 MODULE

5

K3494ALM

4 MODULE

5

K3496ALM

6 MODULE

1

K3498ALM

8 MODULE

1

K3499ALM

9 MODULE

1

K3502ALM

12 MODULE

1

K3508ALM

18 MODULE

1

K3514ALM

24 MODULE

1

K3491WHI

1 MODULE

10

K3492WHI

2 MODULE

10

K3493WHI

3 MODULE

5

K3494WHI

4 MODULE

5

DIMENSIONS

1 & 2 module 86 x 86mm

3 & 4 module 86 x 146mm

6 & 8 module 146 x 146mm

9 & 12 module 146 x 206mm

18 module 206 x 206mm

24 module 206 x 266mm

BS 5733:2010

See Grid Plus page 189 for a complete selection of switching modules.



Technical Hotline
+44 (0)1268 563720

Metalclad Plus™

WIRING DEVICES
SURFACE

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches, only available from MK Electric.

Echo™ Transmitters

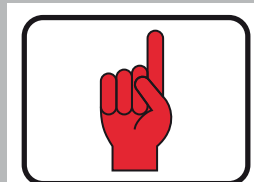
1 AND 2 CHANNEL
TRANSMITTERS FOR
ECHO™



WIRELESS



BATTERYLESS



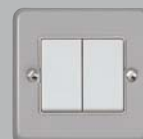
SELF-POWERED



K3786ALM



K3786WHI



K3787ALM



K3787WHI

WIRELESS

No wires offers the benefits of almost instant switch installation and total location flexibility, resulting in reduced costs and disruption as well as improved speed and ease of installation – invaluable for areas needing to rearrange space periodically, e.g. commercial offices, or those where the channelling of walls isn't permissible or feasible, such as historic buildings or glass partition walls.

BATTERYLESS

No batteries means low maintenance and low running costs. No need to buy, fit, replace or dispose of batteries, eliminating nuisance and waste for a more sustainable option.

SELF-POWERED

The new Echo™ range works by harvesting tiny amounts of ambient energy which power a switch (Transmitter) to send an RF signal to the Switch Receiver which is connected to the lighting circuit – operating lighting at ranges of up to 30 metres within typical buildings.

For more information on Echo™, please see the Echo™ section page 21.

K3786ALM

1

K3786WHI

1

1 CHANNEL SWITCH
TRANSMITTER
FOR ECHO™

K3787ALM

1

K3787WHI

1

2 CHANNEL SWITCH
TRANSMITTER
FOR ECHO™

OPERATING FREQUENCY

868.3 Mhz

IP RATING

IP2 x D

DIMENSIONS

86 x 86mm

BS EN 60669-1

BS EN 60669-2-1

ETSI EN 301 489-1+ -3

ETSI EN 300 220-3



DURAPLUG®

RANGE INTRODUCTION

The Duraplug® range of heavy duty products has become a virtual byword for durability, strength and reliability.

Duraplug® offers a wide range of products including a complete range of safety extension leads featuring rubber covered plugs, extension leads, trailing sockets, lead connectors and cable couplers. All Duraplug® products are made from top quality, high impact resistant materials such as ABS/polycarbonate and rubber.

FEATURES & BENEFITS

- Produced with top quality, high impact resistant materials such as ABS/polycarbonate and rubber
- Sockets have visible red nylon shutters
- Lead connectors have retaining lugs to prevent accidental disconnection
- All internal parts of trailing sockets are retained in the base for ease of wiring



Technical Hotline
+44 (0)1268 563720

Duraplug®

WIRING DEVICES
PORTABLE POWER

Heavy Duty Extension Leads

4 WAY
13 AMP



EXL135WHI EXL135BLK

13 AMP



EXL136WHI EXL136BLK

13 AMP



EXL137WHI EXL137BLK

Heavy Duty Portable Socket

4 WAY
FILTERED
13 AMP



744WHI

EXL135WHI EXL135BLK 13A WITH FUSE, NEON AND 2 METRE CABLE

1
1

Fitted with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug.
The sockets are manufactured in high impact ABS/Polycarbonate.
Fitted with a fuse carrier and 13A fuse to BS 1362 BS 1363/A-2:1995
BS EN 50525-2-11 – Cable

EXL136WHI EXL136BLK 13A WITH SWITCH, NEON AND 2 METRE CABLE

1
1

Fitted with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug.
The sockets are manufactured in high impact ABS/Polycarbonate.
BS 1363/A-2:1995
BS EN 50525-2-11 – Cable

EXL137WHI EXL137BLK 13A WITH FUSE, SWITCH, NEON AND 2 METRE CABLE

1
1

Fitted with approved PVC insulated cable of appropriate core size for maximum 13A rating and a Duraplug® rubber plug.
The sockets are manufactured in high impact ABS/Polycarbonate.
BS 1363/A-2:1995
BS EN 50525-2-11 – Cable

744WHI 13A WITH SWITCH, NEON AND FUSE

1

Fitted with a fuse carrier and 13A fuse to BS 1362.
Manufactured in high impact ABS/Polycarbonate. Can also be wall mounted.
Fitted with a fuse carrier and 13A fuse to BS 1362
DIMENSIONS
317 x 68 x 31mm
SPECIFICATION
Max. Power 3.14kW
Response time (Varistor) better than 20ns
BS 1363/A-2:1995

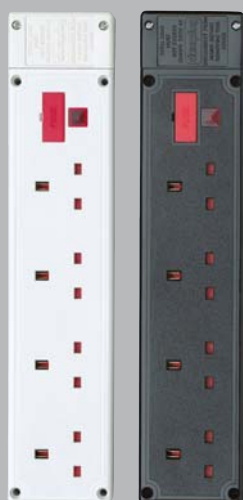
Duraplug®

mkelectric.co.uk



Heavy Duty Portable Socket

4 WAY
13 AMP



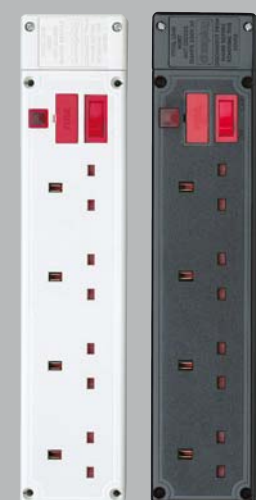
FC4134WHI FC4134BLK

13 AMP



FC4135WHI FC4135BLK

13 AMP



FC4136WHI FC4136BLK

Heavy Duty Trailing Sockets

13 AMP



FC133WHI



FC133ORG



FC133BLK



FCT133WHI



FCT133BLK



FC153BLK

FC4134WHI 1
FC4134BLK 1
13A WITH FUSE AND NEON

Manufactured in high impact ABS/
Polycarbonate incorporating optional
wall mounting holes and equal length
wire stripping.

DIMENSIONS
317 x 68 x 31mm
BS 1363/A-2:1995

FC4135WHI 1
FC4135BLK 1
13A WITH SWITCH AND NEON

Manufactured in high impact ABS/
Polycarbonate incorporating optional
wall mounting holes and equal length
wire stripping.

DIMENSIONS
317 x 68 x 31mm
BS 1363/A-2:1995

FC4136WHI 1
FC4136BLK 1
13A WITH SWITCH, FUSE
AND NEON

Manufactured in high impact ABS/
Polycarbonate incorporating optional
wall mounting holes and equal length
wire stripping.

DIMENSIONS
317 x 68 x 31mm
BS 1363/A-2:1995

FC133WHI 10
FC133BLK 10
FC133ORG 10
13A SINGLE OUTLET

Manufactured from tough
Polypropylene with rubber cover. All
internal component parts are retained
in the base for ease of wiring.

DIMENSIONS
79 x 62 x 29mm
BS 1363/A-2:1995

FCT133WHI 10
FCT133BLK 10
FCT133ORG 10
13A TWIN OUTLET

FC153BLK 10
15A SINGLE OUTLET
ROUND PIN

FCT133
Manufactured from tough
Polypropylene with rubber cover. All
internal component parts are retained
in the base for ease of wiring.
BS 1363/A-2:1995

FC153
Rubber cover.
BS 546:1950
DIMENSIONS
FCT133 80 x 125 x 29mm
FC153 67 x 53 x 33mm



Technical Hotline
+44 (0)1268 563720

Duraplug®

WIRING DEVICES
PORTABLE POWER

Lead Connectors

TWO & THREE PIN
10 AMP

SPARES
10 AMP



LCP102BLK



LCP102PBLK



LCP102SBLK



LCP103BLK



LCP103SBLK



LCP103PBLK



LCP103PWHI

Rubber Plugs

Cable Couplers



PF133WHI



PF133ORG



P153BLK



CCP53BLK



CCP153BLK

LCP102BLK 10
LCP102ORG 10
TWO PIN 10A PLUG
AND SOCKET
LCP103WHI 10
LCP103BLK 10
THREE PIN 10A PLUG
AND SOCKET

This range of connectors provides a safe and easy method of extending power cables and electrical tools and appliances. With rubber cover and polypropylene inserts with integral cable grips. Retaining lugs prevent accidental disconnection.

Two pin versions are only for use with double insulated Class 2 appliances. Three pin versions must be used with earthed appliances.

DIMENSIONS

40 x 25 x 80mm
BS 5733:2010

Comply with IP44 Ingress Protection rating to BS EN 60529:1992

LCP102PBLK 10
LCP102PORG 10
10A PLUG TWO PIN
LCP102SBLK 10
LCP102SORG 10
10A SOCKET TWO PIN

BS 5733:2010

Comply with IP44 Ingress Protection rating to BS EN 60529:1992

LCP103PWHI 10
LCP103PBLK 10
10A PLUG THREE PIN
LCP103SWHI 10
LCP103SBLK 10
10A SOCKET THREE PIN

BS 5733:2010

Comply with IP44 Ingress Protection rating to BS EN 60529:1992

P53BLK 10
5A ROUND PIN
PF133WHI 10
PF133ORG 10
PF133BLK 10
FITTED WITH 13A FUSE
P153BLK 10
15A ROUND PIN

PF133

With rubber cover.
Available with alternative fuse ratings to special order only.
Approved by ASTA Licence no.470
BS 1363/A-1:1995

P53BLK

Manufactured in rubber

P153BLK

With rubber cover and ABS/
Polycarbonate base.
BS 546:1950

CCP53BLK 1
5A PLUG & SOCKET
CCP153BLK 1
15A PLUG & SOCKET
CCP133PBLK 1
SPARE 13A PLUG

These splashproof couplers are a rugged means of connecting cables in industrial and commercial environments. Fitted with heavy duty cable clamps, tapered cable entry and fuse (13A version only).

DIMENSIONS

Diameter x Length
CCP53 60 x 173mm
CCP133 65 x 182mm
CCP153 68 x 180mm
BS 5733:2010 (BS 1363 Pin centres for 13A versions)
BS 5733:2010 (BS 546 Pin centres for 5A and 15A versions)

Plugs and Adaptors

mkelectric.co.uk



Established range of plugs and adaptors. The established names of Safetyplug™ and Toughplug™ strengthen MK's reputation for high quality products with the accent on safety and quality.

Safetyplugs

Toughplugs

NON STANDARD



646WHI	10
646CHA	10
FITTED WITH 13A FUSE	
64603WHI	10
FITTED WITH 3A FUSE	
645NIP	100
SECRET SCREW FOR SAFETYPLUG AND TOUGHPLUG	
644ZIC	10
KEY FOR SECRET SCREW	

See page 222 for spare fuse links.
BS 1363-1:1995

647WHI	10
647CHA	10
FITTED WITH 13A FUSE	

See page 222 for spare fuse links.
T shaped earth pin for use with MK non-standard 13A sockets only.
BS 1363-1:1995 (where relevant)

655WHI	10
FITTED WITH 13A FUSE	
65503WHI	10
FITTED WITH 3A FUSE	
655BLK	10
655ORG	10
655RED	10
FITTED WITH 13A FUSE	
655D8WHI	10
655D8RED	10
MARKED 'HOSPITAL PROPERTY'	
FITTED WITH 13A FUSE	

See page 222 for spare fuse links.
BS 1363/A-1:1995

Round Pin Plugs

Plug Adaptors



505WHI



515WHI



641WHI



690WHI



692WHI



696WHI



698PPK

502WHI	10
2A	
505WHI	10
5A	
515WHI	10
15A RESILIENT COVER	
641WHI	10
5A FUSED	
643WHI	10
15A FITTED WITH 5A FUSE	

See page 222 for spare fuse links to BS 646.
BS 546:1950

690WHI	5
13A WITH 1 X 13A AND 1 COMBINED 16A UNIVERSAL AND GERMAN TYPE 2P+E SOCKET OUTLET	
FUSED 13A	

BS 1363-3:1995 (where relevant)

692WHI	5
13A WITH 3 X 13A SOCKET OUTLETS	
FUSED 13A	
696WHI	5
13A WITH 2 X 13A SOCKET OUTLETS	
UNFUSED	
698PPK	10
13A WITH 1 X 1A SHAVES SOCKET OUTLET	
FUSED 1A	

BS 1363-3:1995 (where relevant)



MASTERSEAL PLUS™

RANGE INTRODUCTION

Masterseal Plus™ has been specifically developed for use in both outdoor and indoor environments, and where wiring devices and accessories would be at risk from penetration by dust or water.

With a rating of IP66*, Masterseal Plus™ offers total protection against dust, and is protected against high pressure jets of water from any direction. Masterseal Plus™ sockets can seal around virtually any standard 13A plug – including moulded on plugs – allowing safe connection for any appliance.

An improved catch eases the opening and closing of the lid, whilst ensuring the integrity of the seal. The gasket is fixed to the mounting frame of the product, enabling rapid installation, and removing the risk of error when placing a floating gasket.

The Masterseal Plus™ range extends to over 90 product variations as the enclosures house selected products from the Logic Plus™ portfolio – thus offering all the benefits of the Logic Plus™ range within the Masterseal Plus™ enclosures.

FEATURES & BENEFITS

IP66*

Masterseal Plus™ offers total dust ingress protection, and is protected against high-pressure water jets from any direction, when in use.

ROBUST CONSTRUCTION AND TEMPERATURE TOLERANT

Masterseal Plus™ will not discolour, crack or fade in UV light (unlike many other plastics), and will maintain operation in extremes of heat and cold.

IMPACT PROTECTION

Masterseal Plus™ enclosures are made from polycarbonate, one of the toughest thermoplastics available – incidentally also used in products such as motorcycle helmets.

WIDEST RANGE

The Masterseal Plus™ range extends to over 90 product variants. The enclosures house products from the Logic Plus™ range, all enclosures and switches are available in Grey, White and Black.

20 YEAR GUARANTEE

Masterseal Plus™ is guaranteed for an industry-leading 20 years. (10 years for electronic products)



*Grid Plus enclosures are IP56



Technical Hotline
+44 (0)1268 563720

Masterseal Plus™

WIRING DEVICES
INGRESS PROTECTED IP66

ULTIMATE PROTECTION For the Great British Weather



MK Electric has always been at the forefront of technical innovation, not least in the IP environment.

Masterseal Plus™ has been tested to levels well in excess of British Standards. Masterseal Plus™ safeguards users in the harshest of environments, employing a gel seal for improved protection.

With a superb rating of IP66, Masterseal Plus™ is dust-tight to any ingress, and water-tight against high-pressure water jets from any direction.

HOW TO SPECIFY

A range of water and dust tight enclosures, rated at IP66 when in use, manufactured from UV stable thermoplastic material and utilising a gel gasket seal and easy to open catch mechanism.

To enable quick and easy installation the seal will be fixed to the mounting frame of the unit.

Containing a urea moulded anti-bacterial range of wiring accessories, designed with soft curves and chamfered top edges that offer a slim unobtrusive appearance.

Cable connections must be upward facing with easy to identify white markings on a dark background, grouped in a straight line with captive terminal screws for ease of installation.

All standard BS sockets to have a 3 pin operated "child Resistant" shutter system and double pole switching, with the contacts designed such that the neutral makes before and breaks after the live pole for improved safety.

All products to be made in the UK.

Masterseal Plus™

mkelectric.co.uk



IP66

Protection against any particles of dust and powerful water jets

REAR DRILL HOLES
For easier installation

FIXED GASKET
SPEEDS
INSTALLATION
and removes risk
of error when
placing a floating
gasket

MANUFACTURED FROM
POLYCARBONATE
For impact protection

IMPROVED CATCH
Eases opening and closing

AVAILABLE IN
GREY, WHITE
AND BLACK

HAS ALL THE
FEATURES AND
BENEFITS OF THE
LOGIC PLUS™
RANGE

SEALED IN USE WITH VIRTUALLY
ANY STANDARD 13A PLUG
including moulded on plugs

GEL SEAL
Durable water and dust tight seal
for improved protection



Masterseal Plus™

To view the video visit the
MK Electric by Honeywell
YouTube channel





Technical Hotline
+44 (0)1268 563720

Masterseal Plus™

WIRING DEVICES
INGRESS PROTECTED IP66

Switchsocket Outlets, Timer Socket Outlets, and Key Operated Socket Outlets

13 AMP
IP66

RCD PROTECTED
13 AMP
IP66

Socket Outlets

13 AMP
IP66

16 AMP
IP66
(NON UK)



K56486GRY



K56482BLK



K56488GRY



K56485GRY



K56485WHI



K56487GRY



K56301GRY



K56231BLK



K56233WHI



K56480GRY



K56481WHI



K56481BLK



K56483GRY



K56483WHI



K56483BLK

K56486GRY 1
K56486WHI 1
K56486BLK 1
13A DP
1 GANG SWITCHED
K56482GRY 1
K56482WHI 1
K56482BLK 1
13A DP
2 GANG SWITCHED
K56488GRY 1
K56488WHI 1
K56488BLK 1
13A DP SWITCHED
2 GANG
NEON
CLEAR COVER

Fixing holes are for No.8 woodscrews (not supplied).

K56486 has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal in the back box.

2 gang backbox has 5 cable entries, 2 on top and 1 centrally on other 3 sides. Supplied with earth terminals in backbox.

DIMENSIONS

1 gang 157 x 110 x 89mm
2 gang 157 x 175 x 89mm
BS 1363-2:1995
IP66 BS EN 60529:1992

K56485GRY 1
K56485WHI 1
K56485BLK 1
13A SP
1 GANG
WITH ELECTRONIC
TIMER MODULE
K56487GRY 1
K56487WHI 1
K56487BLK 1
13A 1 GANG DP
KEY OPERATED SOCKET

Timer Module meets the requirements of IEC 60730-1 and IEC 60730-2-7 Standards

K56301GRY 1
K56301WHI 1
K56301BLK 1
1 GANG DP
30mA RATED TRIPPING
CURRENT ACTIVE
CONTROL CIRCUIT
K56231GRY 1
K56231WHI 1
K56231BLK 1
2 GANG SP
30mA RATED TRIPPING
CURRENT ACTIVE
CONTROL CIRCUIT
K56233GRY 1
K56233WHI 1
K56233BLK 1
2 GANG SP
30mA RATED TRIPPING
CURRENT PASSIVE
CONTROL CIRCUIT

RCD protected sockets are pulsating d.c. and a.c. fault current sensitive. Fixing holes are for No.8 woodscrews (not supplied).

Supplied with an earth terminal in the back box. The Sentriesocket has 5 entries. Suitable for supply voltage of 240V a.c.

Standard Shutters.

DIMENSIONS

157 x 175 x 89mm
BS 7288:1990
IP66 BS EN 60529:1992

K56480GRY 1
K56480WHI 1
K56480BLK 1
13A 1 GANG
UNSWITCHED
K56481GRY 1
K56481WHI 1
K56481BLK 1
13A 2 GANG
UNSWITCHED

Fixing holes are for No.8 woodscrews (not supplied).

K56480 has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal in the back box.

BS 1363-2:1995

IP66 BS EN 60529:1992

K56481 Backbox has 5 cable entries, 2 on top and 1 centrally on other 3 sides. Supplied with earth terminals in backbox.

DIMENSIONS

1 gang 157 x 110 x 89mm
2 gang 157 x 175 x 89mm
BS 1363-2:1995
IP66 BS EN 60529:1992

K56483GRY 1
K56483WHI 1
K56483BLK 1
16A
1 GANG
2P+E
UNSWITCHED
(NON UK)

Fixing holes are for No.8 woodscrews (not supplied).

K56483 is for use with plugs having right angled cable exit.

DIMENSIONS

157 x 110 x 89mm
IEC 60884-1:2006
IP66 BS EN 60529:1992

Masterseal Plus™ enclosures are manufactured from polycarbonate. This provides an extremely high level of impact resistance. However some chemicals and synthetic oils can harm polycarbonate. Refer to chemical resistance table on page 553.

Masterseal Plus™

mkelectric.co.uk



Key Operated Switches

20 AMP
IP66



K56425GRY



K56425WHI



K56425BLK

Connection Units

13 AMP
IP66



K56410WHI



K56410BLK



K56410GRY

Switches

10 AMP
IP66



K56400GRY



K56401WHI



K56402BLK

10 AMP
IP66



K56406GRY



K56407BLK



K56408WHI

20 AMP
IP66



K56409GRY



K56409WHI



K56409BLK

Grid Plus Enclosures

IP56



K56414GRY



K56414WHI



K56414BLK

K56425GRY
K56425WHI
K56425BLK

20A
1 GANG
DP KEY OPERATED
SWITCH

Fixing holes are for No.8 woodscrews (not supplied).
K56425 Backbox has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal in the back box.

DIMENSIONS
160 x 117 x 89mm
BS EN 60669-1:1999
IP66 BS EN 60529:1992

K56410GRY
K56410WHI
K56410BLK

13A DP
1 GANG
SWITCHED, FUSED

Fitted with a 13A fuse link to BS 1362.
Fixing holes are for No.8 woodscrews (not supplied).
Backbox has 4 x 20mm entries, 1 on each edge, and is supplied with an earth terminal in the backbox.

DIMENSIONS
160 x 117 x 89mm
BS 1363-4:1995
IP66 BS EN 60529:1992

K56400GRY
K56400WHI
K56400BLK

10A 1 GANG
SP ONE-WAY

K56401GRY
K56401WHI
K56401BLK

10A 1 GANG
SP TWO-WAY

K56402GRY
K56402WHI
K56402BLK

10A 2 GANG
SP ONE-WAY

DIMENSIONS
95 x 95 x 57mm
BS EN 60669-1:1999
IP66 to BS EN 60529:1992

K56406GRY
K56406WHI
K56406BLK

10A 1 GANG
DP ONE-WAY

K56407GRY
K56407WHI
K56407BLK

10A 1 GANG
SP TWO-WAY

K56408GRY
K56408WHI
K56408BLK

10A 1 GANG
SP TWO-WAY

DIMENSIONS
95 x 95 x 57mm
BS EN 60669-1:1999
IP66 to BS EN 60529:1992

K56409GRY
K56409WHI
K56409BLK

20A 1 GANG
DP ONE-WAY
'PRESS'

K56414GRY
K56414WHI
K56414BLK

20A 1 GANG
DP ONE-WAY
'PRESS'

DIMENSIONS
95 x 95 x 57mm
BS EN 60669-1:1999
IP66 to BS EN 60529:1992

Fixing holes are for No.8 woodscrews (not supplied).
Each switch is fitted with a neon which can be wired as a locator.
The enclosure has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal and a loop terminal in the back box.

DIMENSIONS
95 x 95 x 57mm
BS EN 60669-1:1999
IP66 to BS EN 60529:1992

K56414GRY
K56414WHI
K56414BLK

MODULAR GRID PLUS
ENCLOSURE SUPPLIED
WITH 1 AND 2 GANG
INSERTS*

Fixing holes are for No.8 woodscrews (not supplied).
Backbox has 4 x 20mm entries, 1 on top, bottom and each side.
Supplied with an earth terminal and a loop terminal in the backbox.

DIMENSIONS
95 x 95 x 80mm
BS EN 60669-1:1999
IP56 to BS EN 60529:1992

DIMENSIONS
95 x 95 x 57mm
BS EN 60669-1:1999
IP66 to BS EN 60529:1992

Fixing holes are for No.8 woodscrews (not supplied).
Each switch is fitted with a neon which can be wired as a locator.
The enclosure has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal and a loop terminal in the back box.
These switches (except push switches) do NOT have to be derated when used with fluorescent or inductive loads.

DIMENSIONS
95 x 95 x 57mm
BS EN 60669-1:1999
IP66 to BS EN 60529:1992

* NOTE: Installers may select any switch or neon modules, excluding dimmers, from Grid Plus range and configure product to suit installation requirements.



Technical Hotline
+44 (0)1268 563720

Masterseal Plus™

WIRING DEVICES
INGRESS PROTECTED IP66

Switch Enclosures

IP66



K56420GRY



K56421WHI



K56422BLK



K56422GRY

Switch Modules

10 AMP



56881BLK



56882BLK

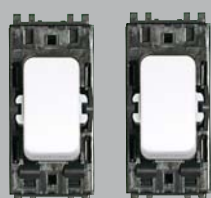


56883BLK

20 AMP



56891BLK



56892BLK 56893BLK



56896BLK

Neon Modules



56889RED

Data/Telecom Enclosures Euro Format

IP66



K56423GRY



K56423WHI



K56423BLK

Euro Data Modules

TELECOM



K5820WHI



K5820BLK



K5821WHI



K5821BLK

K56420GRY 1
K56420WHI 1
K56420BLK 1
1 GANG FOR USE WITH ANY ONE SWITCH MODULE
K56421GRY 1
K56421WHI 1
K56421BLK 1
1 GANG WITH NEON FOR USE WITH ANY SWITCH AND ANY NEON MODULE
K56422GRY 1
K56422WHI 1
K56422BLK 1
2 GANG FOR USE WITH ANY TWO SWITCH MODULES

Fixing holes are for No.8 woodscrews (not supplied). Each enclosure is fitted with a neon which should be wired as a locator. The enclosure has 4 x 20mm entries, 1 on top, bottom and each side and is supplied with an earth terminal and a loop terminal in the back box.

NOTE

These enclosures are for use with the Masterseal Plus™ switch and neon modules.

DIMENSIONS

95 x 95 x 57mm
IP66 to BS EN 60529:1992

56881BLK 10
10A SP ONE-WAY
56882BLK 10
10A SP TWO-WAY
56883BLK 10
10A DP ONE-WAY
For use only with Masterseal Plus™ switch enclosures.
These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

56891BLK 10
20A SP ONE-WAY
56892BLK 10
20A SP TWO-WAY
56893BLK 10
20A INTERMEDIATE
56896BLK 10
20A DP ONE-WAY
For use only with Masterseal Plus™ switch enclosures.
These switches do NOT have to be derated when used with fluorescent or inductive loads.
BS EN 60669-1:1999

56889RED 10
200-250V NEON RED
BS 5733: 2010

K56423GRY 1
K56423WHI 1
K56423BLK 1
1 GANG DATA ENCLOSURE FOR 2 MODULE EURO OUTLET
2 data modules can be accommodated providing care is used to ensure that the cables are correctly routed through the outlet.
Fixing holes are for No.8 woodscrews (not supplied). Backbox has 4 x 20mm entries, 1 on each edge. Supplied with an earth terminal and a loop terminal in the backbox.
DIMENSIONS
160 x 117 x 89mm
IP66 to BS EN 60529:1992

K5820WHI 5
K5820BLK 5
TELEPHONE MASTER ONE MODULE
K5821WHI 5
K5821BLK 5
TELEPHONE SECONDARY ONE MODULE
DIMENSIONS
25 x 50mm
BS 6312-2

See Logic Plus page 46-48 for a full range of Euro modules

Masterseal Plus™

mkelectric.co.uk



Euro Data Modules

DATA



K5844WHI



K5887WHI

K5887BLK

K5844WHI 5
RJ45 CAT 5e
ANGLED UNSCREENED
ONE MODULE
K5887WHI 5
K5887BLK 5
RJ11/12
ONE MODULE

K5844
Enhanced Cat 5e performance.
Suitable for both 568A and
568B wiring schemes.

ISO/IEC 11801
EN 50173
TIA 568
EN 41003

K5887
Suitable for both RJ11 and
RJ12 jacks
RJ11 4 wire
RJ12 6 wire

FCC68
EN 41003
DIMENSIONS
25 x 50mm

See Logic Plus
page 46-48 for a
full range of
Euro modules

Junction Boxes

30 AMP
IP66

K56506GRY

K56506WHI
(COVER ON)K56506WHI
(COVER OFF)

K56506GRY 1
K56506WHI 1
K56506BLK 1
JUNCTION BOX
WITH FOUR
4-WAY TERMINALS

Fixing holes are for No. 8
woodscrews (not supplied).
The enclosure has 4 entries, 1
on top, bottom and both sides.

TERMINAL CAPACITY
Each terminal block accepts
four 2.5mm² cables.

DIMENSIONS
95 x 95 x 65mm
BS 6220:1983
IP66 to BS EN 60529

Flush Mounting Frames



K56500GRY



56500WHI



K56501GRY

K56500GRY 1
K56500WHI 1
1 GANG
PLASTER/TILE FLUSH
MOUNTING FRAME WITH
PROTECTIVE COVER
FOR USE WITH
160 X 117MM PRODUCTS

56500GRY 1
56500WHI 1

1 GANG
PLASTER/TILE FLUSH
MOUNTING FRAME WITH
PROTECTIVE COVER
FOR USE WITH
95 X 95MM SWITCHES
K56501GRY 1
K56501WHI 1
2 GANG
PLASTER/TILE FLUSH
MOUNTING FRAME WITH
PROTECTIVE COVER

The Flush adaptors for plaster
and tile can be used with finish
depths up to 20mm, by using
the spacers provided. Allows
flush mounted Masterseal
Plus™ products to maintain
their IP rating.
Can be used with side entry or
back entry enclosures.

DIMENSIONS
56500 115 x 115 x 34mm
K56500 135 x 135 x 34mm
K56501 135 x 195 x 34mm

Flush Mounting Bezels



K56502GRY



56502WHI



K56503GRY

K56502GRY 1
K56502WHI 1
1 GANG
FLUSH MOUNTING
BEZEL FOR USE WITH
160 X 117MM PRODUCTS
56502GRY 1
56502WHI 1
1 GANG
FLUSH MOUNTING
BEZEL FOR USE WITH
95 X 95MM SWITCHES
K56503GRY 1
K56503WHI 1
2 GANG
FLUSH MOUNTING BEZEL

The Flush adaptors for brick
and cavity walls should be
used on vertical surfaces
where no additional finishing,
such as plastering is required.

Allows flush mounted
Masterseal Plus™ products to
maintain their IP rating.
Can only be used with back
entry enclosures.

Supplied with 4 self tapping
screws to fix enclosure to
mounting bezel.

Clip-on surround hides
mounting screws.

DIMENSIONS
56502 145 x 145 x 41mm
K56502 165 x 165 x 41mm
K56503 165 x 245 x 41mm

Conduit Entries



56460WHI



56461WHI



56462WHI



56463WHI



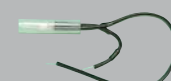
56464WHI

56460GRY 5
56460WHI 5
ENTRY BLANK
56461BLK 5
56461WHI 5
PVC CABLE ENTRY
TO PROVIDE DIRECT
ENTRY OF POWER CABLE
TO THE UNIT VIA THE
BOTTOM BOX ENTRY
56462BLK 5
56462WHI 5
20MM PLAIN CONDUIT
ENTRY PUSH FIT
ADAPTOR BETWEEN
BACK BOX AND 20MM
PLAIN CONDUIT
56463BLK 5
56463WHI 5
20MM THREADED
CONDUIT ENTRY PUSH
FIT ADAPTOR BETWEEN
BACK BOX AND 20MM
THREADED CONDUIT
56464BLK 5
56464WHI 5
BOX COUPLER
FOR GANGING ONE
MASTERSEAL PLUS™
BOX NEXT TO ANOTHER

Accessories



MK9933



56890GRN

MK9933 1
M20 EARTH LEAD
ADAPTOR FOR EARTHING
METAL CONDUIT
56890GRN 5
REPLACEMENT
NEON LOCATOR



Technical Hotline
+44 (0)1268 563720

Masterseal Plus™

WIRING DEVICES
INGRESS PROTECTED IP66

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches, only available from MK Electric

1 and 2 Channel Transmitter For Echo™

Enclosure

IP66

IP66



WIRELESS



BATTERYLESS



SELF-POWERED



K55400GRY



K55000GRY



K55406WHI



K55406BLK

WIRELESS

No wires offers the benefits of almost instant switch installation and total location flexibility, resulting in reduced costs and disruption as well as improved speed and ease of installation – invaluable for areas needing to rearrange space periodically, e.g. commercial offices, or those where the channelling of walls isn't permissible or feasible, such as historic buildings or glass partition walls.

BATTERYLESS

No batteries means low maintenance and low running costs. No need to buy, fit, replace or dispose of batteries, eliminating nuisance and waste for a more sustainable option.

SELF-POWERED

The new Echo™ range works by harvesting tiny amounts of ambient energy which power a switch (Transmitter) to send an RF signal to the Switch Receiver which is connected to the lighting circuit – operating lighting at ranges of up to 30 metres within typical buildings.

K55400GRY
K55400WHI
K55400BLK
1 CHANNEL
TRANSMITTER
FOR ECHO™

1
1
1

K55000GRY
K55000WHI
K55000BLK

1
1
1

K55406GRY
K55406WHI
K55406BLK
2 CHANNEL
TRANSMITTER
FOR ECHO™

1
1
1

See page 29 for a full range of Echo™ receivers and accessories

No wires

- Instant switch installation
- Location/relocation flexibility
- Simplifies office 'churn' – less disruption

No batteries

- Low maintenance
- Low running costs
- Less waste, a more sustainable option
- No nuisance factor

Flexibility

- No wires, no constraints
- Suitable for all wall types, including where channelling isn't feasible
- Ideal for commercial, residential and historic buildings

Quality reliability and safety come as standard
10 year guarantee



COMMANDO SAFETY SWITCH

RANGE INTRODUCTION

Commando Safetyswitches are manufactured from Polybutylene Terephthalate (PBT) for maximum impact resistance.

The range offers a selection of IP54 and IP65 ratings to cover a variety of indoor and outdoor needs. The units are lockable for added safety and accept auxiliary contacts to increase further the range of applications.

A range of Triple Pole and Neutral switches are also available, manufactured from Polycarbonate (PC).

FEATURES & BENEFITS

IMPACT RESISTANT

PBT and PC enclosures provide remarkable impact resistance

WATER RESISTANT

IP54, IP65 and IP66 ratings mean Commando Safetyswitch and Triple Pole and Neutral switches are suitable for outdoor and indoor use

ADDED SAFETY

Commando Safetyswitches have mechanically interlocked lids meaning the cover is impossible to remove when the switch is in the 'ON' position

HOW TO SPECIFY

A range of industrial "Commando" triple pole and neutral Safety Switches designed to provide IP65 ingress protection. Product case must be interlocked to ensure that the case cannot be opened while the switch is in the "ON" position. All switches are to have Neutral and earth terminals fitted as standard and have I.S.O. metric conduit entries for ease of installation.



Technical Hotline
+44 (0)1268 563720

Commando Safetyswitch

Commando Safetyswitches

I.S.O. metric
conduit entries for
ease of installation

Neutral and Earth
terminals fitted as
standard

PBT enclosure
offers remarkable
impact resistance

Choice of units
splashproof to
IP54 and IP65
for use
indoors or
outdoors

Direct acting
operating handle
gives positive
indication of the
state of the
contacts

63A, 100A and
125A units have
mechanically
operated lids for
additional safety
in use. This
means the cover
is impossible to
remove when the
switch is in the
'ON' position



Switch Disconnectors

16 AMP (lth)
3 POLE
IP65

25 AMP (lth)
3 POLE
IP65



K6816



K6825



K6816YEL



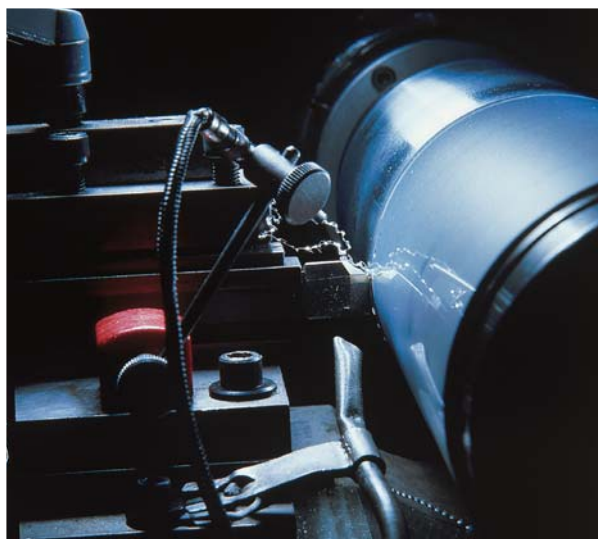
K6825YEL

K6816
K6816YEL
UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (I_e) 10A
VOLTAGE (U_e) 415V 50/60 HZ
POWER 5.5 KW

K6825
K6825YEL
UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (I_e) 20A
VOLTAGE (U_e) 415V 50/60 HZ
POWER 11 KW

IP RATING
K6816 IP65
K6816YEL IP65
Supplied with blanking plugs and
neutral terminals
TERMINAL CAPACITY
1.5 - 4mm²
CONDUIT ENTRY
4 x M20
K6816
Auxiliary contacts
List No: 6818 and 6819
Will accept one auxiliary contact.
K6816YEL
Auxiliary contact included.
BS EN 60947-3:2009

IP RATING
K6825 IP65
K6825YEL IP65
Supplied with blanking plugs and
neutral terminals
TERMINAL CAPACITY
1.5 - 4mm²
CONDUIT ENTRY
4 x M20
K6825
Auxiliary contacts
List No: 6818 and 6819
Will accept one auxiliary contact.
K6825YEL
Auxiliary contact included.
BS EN 60947-3:2009



Commando Safetyswitch

mkelectric.co.uk



Switch Disconnectors

25 AMP (Ith)
6 POLE
IP65



K6725



K6725YEL

40 AMP (Ith)
3 POLE
IP65



K6840



K6840YEL

63 AMP (Ith)
3 POLE
IP54 and IP65



6863



6863YEL

K6725

K6725YEL

UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (Ie) 20A
VOLTAGE (Ue) 415V 50/60 HZ
POWER 11 KW

IP RATING

K6725 IP65

K6725YEL IP65

Supplied with blanking plugs and neutral terminals

TERMINAL CAPACITY

1.5 – 4mm²

CONDUIT ENTRY

4 x M20

2 x 18mm knockouts

K6725

Auxiliary contacts

List No: 6818 and 6819

Will accept one auxiliary contact.

K6725YEL

Auxiliary contact included.

BS EN 60947-3:2009

1
1

K6840

K6840YEL

UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (Ie) 25A
VOLTAGE (Ue) 415V 50/60 HZ
POWER 15 KW

IP RATING

K6840 IP65

K6840YEL IP65

Supplied with blanking plugs and neutral terminals

TERMINAL CAPACITY

1.5 – 10mm²

CONDUIT ENTRY

4 x M25

K6840

Auxiliary contacts

List No: 6818 and 6819

Will accept one auxiliary contact.

K6840YEL

Auxiliary contact included.

BS EN 60947-3:2009

1
1

K6863

K6863YEL

UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (Ie) 45A
VOLTAGE (Ue) 415V 50/60 HZ
POWER 22 KW

IP RATING

6863 IP54

6863YEL IP65

Supplied with blanking plugs and neutral terminals

TERMINAL CAPACITY

1.5 – 16mm²

CONDUIT ENTRY

4 x M32

2 x M16

6863

Auxiliary contacts

List No: 6813 or 6814

6863YEL

Auxiliary contact included.

BS EN 60947-3:2009

1
1



Technical Hotline
+44 (0)1268 563720

Commando Safetyswitch

WIRING DEVICES
INGRESS PROTECTED

Triple Pole And Neutral Switches

4 POLE
IP66



M4413



M4414

M4413
4 POLE
UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (Ie) 32A
VOLTAGE (Ue) 240/415V 50/60 HZ
POWER 11 KW

M4414
4 POLE
UTILISATION CATEGORY AC23A RATED
OPERATIONAL:
CURRENT (Ie) 20A
VOLTAGE (Ue) 240/415V 50/60 HZ
POWER 7.5 KW

TERMINAL CAPACITY
16mm² (Rigid stranded cable)
CONDUIT ENTRY
2 x 25mm cable entry top and bottom. Supplied
with 2 x 25mm conduit adaptors.
4 x 20mm, 2 x 25mm knockouts for rear cable
entry.
BS EN 60947-3:2009

2 POLE
IP66



M4417



M4418

M4417
2 POLE
UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (Ie) 32A
VOLTAGE (Ue) 240V 50/60 HZ
POWER 5.5 KW

M4418
2 POLE
UTILISATION CATEGORY
AC23A RATED OPERATIONAL:
CURRENT (Ie) 20A
VOLTAGE (Ue) 240V 50/60 HZ
POWER 3.75 KW

Auxiliary Contacts



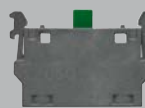
6813



6814



6817



6818



6819

6813
16A (Ith) SINGLE POLE
NORMALLY OPEN
4A OPERATIONAL CURRENT (Ie)

6814
16A (Ith) SINGLE POLE
NORMALLY CLOSED
4A OPERATIONAL CURRENT (Ie)

6817
10A (Ith) SINGLE POLE
NORMALLY OPEN
1.5A OPERATIONAL CURRENT (Ie)

6818
10A (Ith) SINGLE POLE
NORMALLY OPEN,
6A OPERATIONAL CURRENT (Ie)
AC15 @ 230V

6819
10A (Ith) SINGLE POLE
NORMALLY CLOSED, 6A
OPERATIONAL CURRENT (Ie)
AC15 @ 230V

Accessories



MK9933



6810

MK9933
EARTH LEAD ADAPTOR
M20 X 1.5 / M20 X 1.5 THREAD
SIZE FOR 16A & 25A
SAFETYSWITCHES

6810
SHACKLE FOR UP TO 6 PADLOCKS

M4413, M4414, M4417, M4418 ENCLOSURES ARE POLYCARBONATE
Polycarbonate enclosures provide extremely high levels of impact resistance. Some chemicals and
synthetic oils can harm polycarbonate. Call technical hotline for further information.



COMMANDO

RANGE INTRODUCTION

Commando offers a comprehensive range of industrial plugs, connectors, socket outlets, appliance inlets, Combi and Modular-Combi units.

The Commando range is designed to meet all relevant European and British Standards, whilst offering remarkable impact strength and an excellent choice of ingress protection ratings. Outstanding temperature performance and good resistance to chemicals make it ideal for the most arduous applications. Contact pins and sleeves are of solid brass with stainless steel springs to keep contacts free of dirt and to ensure constant contact pressure.

HOW TO SPECIFY

A range of industrial "Commando" industrial plugs, connectors, sockets and switches designed to provide IP44 & IP67 ingress protection. Products to have outstanding temperature performance and resistance to chemicals to ensure operation in arduous applications. All sockets to have self cleaning contacts and nickel plated pins to provide resistance to humidity and wear. Cable entry must be secured via a cable clamp that applies pressure to the cable for the lifetime of the product. Products must have prolonged earth pole connections to ensure that earth terminals are last to disconnect. Terminals to be clearly identified and have terminal screws backed out to provide fast and easy installation.

FEATURES & BENEFITS

RELIABILITY

Features like the calibrated contact sleeves with stainless steel springs, brass screws in brass contacts, and the double earthing screws – all mean that this plug or socket will perform better and longer in difficult conditions.

ERGONOMIC DESIGN

All edges and corners are rounded to remove sharp edges. Cable protection is improved. New design offers a better and more comfortable grip for connection / disconnection.

CABLE GLAND

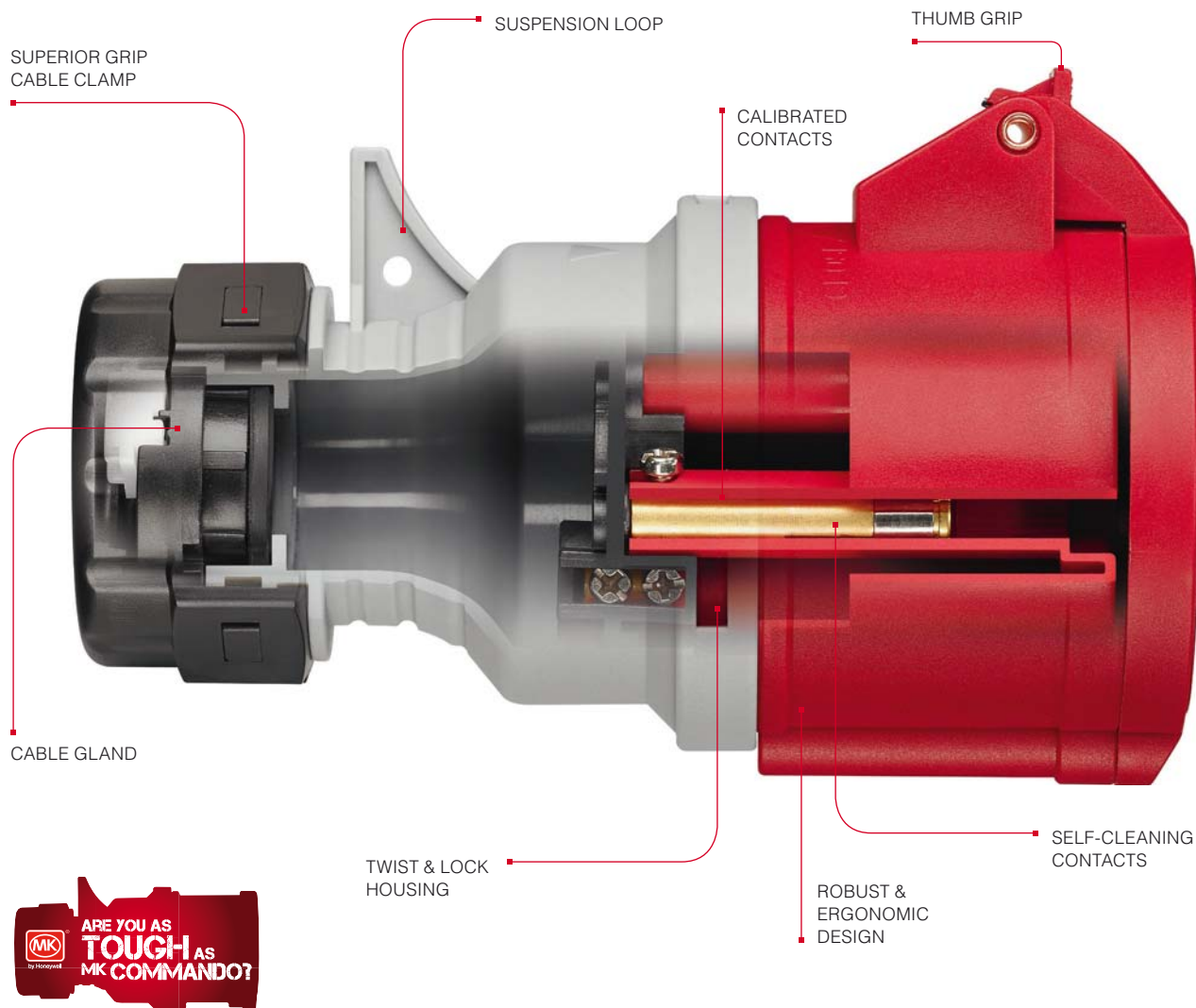
Every product across the range has a new cable clamp with an improved locking mechanism that will apply pressure to the cable for the lifetime of the product.

EASY WIRING

All screws are backed out and retained. Twin contact earth screws.

OUTSTANDING TEMPERATURE PERFORMANCE

Successful operation guaranteed between -25°C and 55°C.



HIGH QUALITY MATERIALS

The Commando range offers remarkable impact strength.

Outstanding temperature performance and good resistance to chemicals make it ideal for the arduous applications.

CONNECTION SEAL

Prevent accidental disconnection or theft of equipment.

TIGHT AND SECURE

The cable gland has an improved locking mechanism that will apply pressure to the cable for the lifetime of the product.

PROLONGED EARTH CONNECTION

The earth connection is specifically designed, so that in the unlikely event of failure of the cable gland and the wires detach from the terminals the earth terminal will be the last to disconnect.

For extra protection the earth terminal is provided with 2 connection screws.

SUSPENSION LOOP

Products can be suspended above the floor, helping to keep the workspace in order.

QUICK AND EASY TO USE

Clear markings and terminal identification.

Clear instructions for cable strip length, tightening torque and opening of the product.

Commando

mkelectric.co.uk



**IP44
SPLASHPROOF
100-130V
50-60 HZ**

Plugs

Connectors

Socket Outlets

ANGLED
SURFACE

STRAIGHT
PANEL MOUNTING

SURFACE – LOOP IN

Amps	Pin. Config- uration	Earth					
16	2P+E	4	K9000YEL	K9100YEL	K9200YEL	K9400YEL	K13300YEL
32	2P+E	4	K9032YEL	K9132YEL	K9232YEL	K9432YEL	K13232YEL

Fitted with cable entry seal.
BS EN 60309

Fitted with cable entry seal.
BS EN 60309

16A
Top conduit (M20) or rear
cable entry, complete with
blanking plug.

32A
Top conduit (M25) or rear
cable entry, complete with
blanking plug.
BS EN 60309

All flanges have the same
fixing centres and outside
dimensions to assist panel
builders.
BS EN 60309

Suitable for top entry 1 x M20
and 1 x M25 or bottom entry
1 x M20 and 1 x M25
BS EN 60309

**IP67
WATERTIGHT
100-130V
50-60 HZ**

Plugs






Connectors

Socket Outlets

ANGLED
SURFACE

PANEL MOUNTING

SURFACE – LOOP IN

Amps	Pin. Config- uration	Earth					
16	2P+E	4	K9023YEL	K9123YEL	K9193YEL	K9802YEL	K13323YEL
32	2P+E	4	K9053YEL	K9155YEL	K9761YEL		K13303YEL

Suitable for flexible cable only.
BS EN 60309

Suitable for flexible cable only.
BS EN 60309

16A Top conduit (M20) or rear
cable entry, complete with
blanking plug.
32A Top conduit (M25) or rear
cable entry, complete with
blanking plug
BS EN 60309

All flanges have the same
fixing centres and outside
dimensions to assist panel
builders
BS EN 60309

Suitable for top entry 1 x M20
and 1 x M25 or bottom entry
1 x M20 and 1 x M25
BS EN 60309

Switchsocket Outlets

ANGLED
INTERLOCKED
SURFACE

Amps	Pin. Configuration	Earth	
16	2P+E	4	K73600YEL
32	2P+E	4	K13632YEL

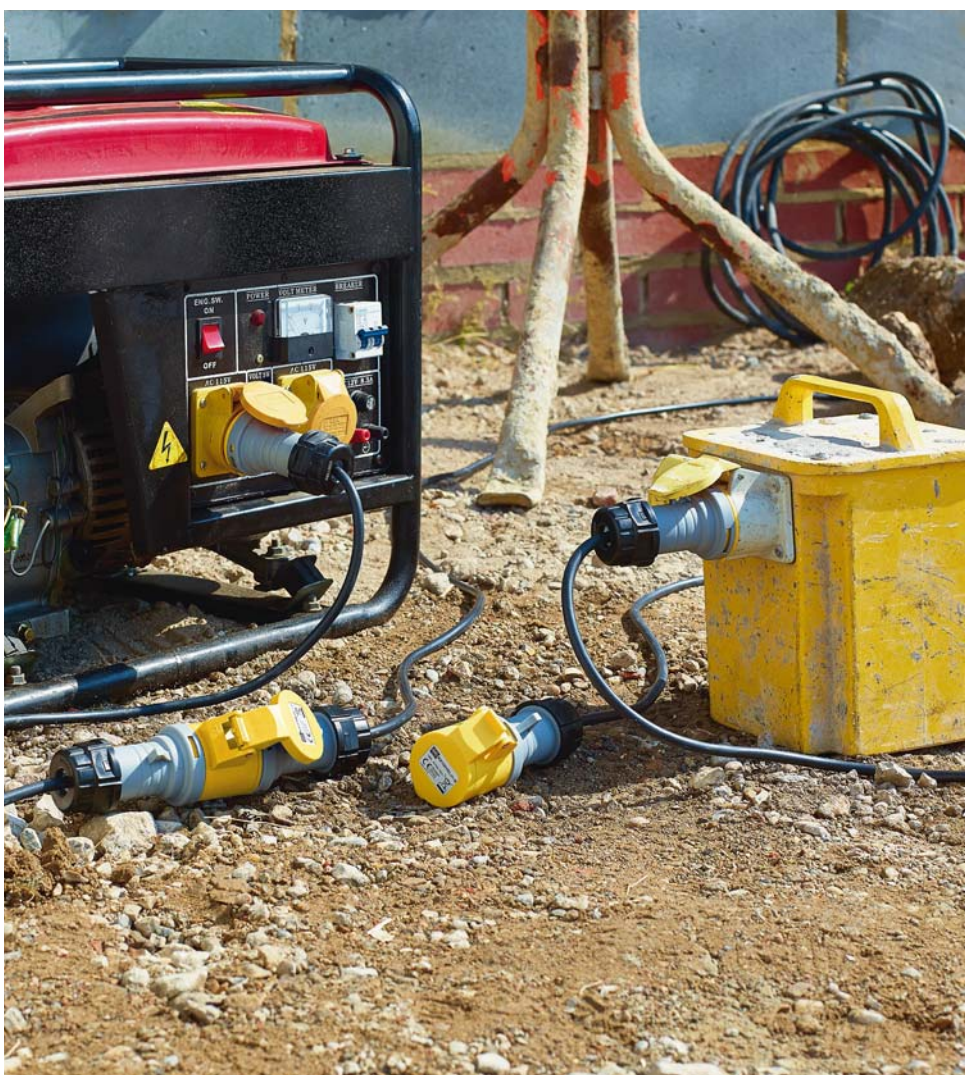
Switch can be locked in open or closed position.
Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25
BS EN 60309

Switchsocket Outlets

ANGLED
INTERLOCKED
SURFACE

Amps	Pin. Configuration	Earth	
16	2P+E	4	K73623YEL
32	2P+E	4	K13653YEL

Switch can be locked in open or closed position.
Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25
BS EN 60309



Commando

IP44
 SPLASHPROOF
 200 - 250V
 50 - 60 HZ

Plugs

Connectors

Socket Outlets

ANGLED
 SURFACE

SURFACE-LOOP IN

STRAIGHT
 PANEL MOUNTING

Amps	Pin. Config- uration	Earth					
16	2P+E	6	K9001BLU	K9101BLU	K9201BLU	K13301BLU	K9401BLU
16	3P+E	9	K9006BLU	K9106BLU	K9206BLU		
16	3P+N+E	9	K9014BLU	K9114BLU	K9214BLU		
32	2P+E	6	K9033BLU	K9133BLU	K9233BLU	K13333BLU	K9433BLU
32	3P+E	9	K9036BLU	K9136BLU	K9236BLU		
32	3P+N+E	9	K9044BLU	K9143BLU	K9240BLU		
63	2P+E	6	K9063BLU	K9172BLU	K9274BLU		K9472BLU

16A/32A
 Fitted with cable entry gland.
 63A
 Fitted with cable entry gland
 BS EN 60309

16A/32A
 Fitted with cable entry gland.
 63A
 Fitted with cable entry gland
 BS EN 60309

16A Top conduit (M20) or rear
 cable entry, complete with
 blanking plug.
 32A Top conduit (M25) or rear
 cable entry, complete with
 blanking plug.
 63A Top conduit (M32) or rear
 cable entry, complete with
 blanking plug
 BS EN 60309

Suitable for top entry 1 x M20
 and 1 x M25 or bottom entry
 1 x M20 and 1 x M25
 BS EN 60309

16/32A
 All flanges have the same
 fixing centres and outside
 dimensions to assist panel
 builders
 BS EN 60309





Plugs

Connectors

Socket Outlets

ANGLED
 SURFACE

SURFACE – LOOP IN

Amps	Pin. Config- uration	Earth				
16	2P+E	6	K9024BLU	K9124BLU	K9194BLU	K13024BLU
16	3P+E	6	K9081BLU	K9082BLU	K9083BLU	
32	2P+E	6	K9054BLU	K9156BLU	K9762BLU	K13054BLU
32	3P+E	6				
63	2P+E	6	K9298BLU	K9856BLU	K9857BLU	

Suitable for flexible cable only
 63A. With external clamp
 BS EN 60309

Suitable for flexible cable only
 63A. With external clamp
 BS EN 60309

Suitable for top entry 2 x M25
 or bottom entry 2 x M20.
 Will accept FL13 flange at top
 BS EN 60309

Suitable for top entry 1 x M20
 and 1 x M25 or bottom entry
 1 x M20 and 1 x M25
 BS EN 60309

Switchsocket Outlets

Appliance Inlets

ANGLED
PANEL MOUNTING

ANGLED
INTERLOCKED
SURFACE

ANGLED
SURFACE



Amps	Pin. Configuration	Earth			
16	2P+E	6	K9771BLU	K73601BLU	K9701BLU
16	3P+E	9		K9601BLU	
16	3P+N+E	9		K9607BLU	
32	2P+E	6	K9774BLU	K73633BLU	K9733BLU
32	3P+E	9		K9633BLU	
32	3P+N+E	9		K9639BLU	
63	2P+E	6		K9306BLU	

16/32A
new range has different fixing centres to old range.
Old range is available for limited period. See technical section for details
BS EN 60309

Switch can be locked in open or closed position.
Suitable for top entry 2 x M32 or 2 x M40 or bottom entry 2 x M32 or 2 x M40
BS EN 60309

16A Top conduit (M20) or rear cable entry, complete with blanking plug.
32A Top conduit (M25) or rear cable entry, complete with blanking plug
BS EN 60309

Switchsocket Outlets

ANGLED
INTERLOCKED
SURFACE



Amps	Pin. Configuration	Earth	
16	2P+E	6	K73624BLU
16	3P+E	9	
32	2P+E	6	K73654BLU
32	3P+E	9	
63	2P+E	6	

Switch can be locked in open or closed position.
Suitable for top entry 1 x M20 and 1 x M25 or bottom entry 1 x M20 and 1 x M25
BS EN 6030

Commando

mkelectric.co.uk



**IP44
SPLASHPROOF
380 - 415V
50 - 60 HZ**





Plugs

Connectors

Socket Outlets

ANGLED
SURFACE

STRAIGHT
PANEL MOUNTING

Amps	Pin. Config- uration	Earth				
16	3P+E	6	K9007RED	K9107RED	K9207RED	K9407RED
16	3P+N+E	6	K9015RED	K9115RED	K9215RED	K13315RED
32	3P+E	6	K9037RED	K9137RED	K9237RED	K9437RED
32	3P+N+E	6	K9045RED	K9144RED	K9241RED	K9445RED
63	3P+E	6	K9066RED	K9165RED	K9265RED	
63	3P+N+E	6	K9071RED	K9170RED	K9269RED	K9470RED

16A/32A
Fitted with cable entry gland.
63A
Fitted with cable entry gland.
Thread size M48
BS EN 60309

16A/32A
Fitted with cable entry gland.
63A
Fitted with cable entry gland.
Thread size M48
BS EN 60309

16A Top conduit (M20) or rear cable entry, complete with blanking plug.
32A Top conduit (M25) or rear cable entry, complete with blanking plug.
63A Top conduit (M32) or rear cable entry, complete with blanking plug.
BS EN 60309

16/32A
All flanges have the same fixing centres and outside dimensions to assist panel builders
BS EN 60309

**IP67
WATERTIGHT
380 - 415V
50 - 60 HZ**

Plugs





Connectors

Socket Outlets

Switchsocket Outlets

ANGLED
SURFACE

ANGLED INTERLOCKED
SURFACE

Amps	Pin. Config- uration	Earth				
16	3P+E	6	K9025RED	K9125RED	K9763RED	K13625RED
16	3P+N+E	6	K9026RED	K9126RED	K9764RED	K73626RED
32	3P+E	6	K9055RED	K9157RED	K9765RED	K13655RED
32	3P+N+E	6	K9056RED	K9158RED	K9766RED	K73656RED
63	3P+E	6	K9282RED	K9842RED	K9858RED	K9432RED
63	3P+N+E	6	K9292RED	K9852RED	K9859RED	K73658RED

Suitable for flexible cable only.
BS EN 60309

Suitable for flexible cable only.
BS EN 60309

2 x 29/37mm knockouts
(top), 1 x Ø29 and 1 x Ø23
knockout (bottom).
Will accept FL13 flanges top
and bottom
BS EN 60309

Switch can be locked in open or closed position.
Suitable for top entry 2 x M32 or
2 x M40 or bottom entry 2 x M32 or
2 x M40
BS EN 60309



Technical Hotline
+44 (0)1268 563720

Commando

WIRING DEVICES
INGRESS PROTECTED

Switchsocket Outlets

ANGLED
INTERLOCKED
SURFACE



Amps	Pin. Config- uration	Earth	
16	3P+E	6	K13607RED
16	3P+N+E	6	K73615RED
32	3P+E	6	K13637RED
32	3P+N+E	6	K73641RED
63	3P+E	6	K9665RED
63	3P+N+E	6	K73643RED

Switch can be locked in open
or closed position.
Suitable for top entry 2 x M32
or 2 x M40 or bottom entry
2 x M32 or 2 x M40
BS EN 60309



Commando

Protective Covers For Inlets

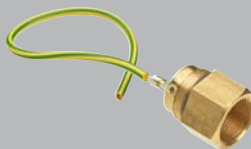


9960BLK

Earth Lead Adaptors and Blanking Plugs



MK9933



MK9934

9960BLK
FOR 2P+E, 16A
NO 125A OFFERING
9966BLK
2P+E, 3P+E, 32A
9967BLK
FOR ALL 63A (IP44)

1	MK9933 M20 X 1.5/ M20 X 1.5 THREAD SIZE USED ON ALL 16A SOCKET OUTLETS AND APPLIANCE INLETS (EXCEPT INTERLOCKED). ALSO USED ON 16A AND 25A SAFETYSWITCHES	1
1	MK9934 M25 X 1.5/ M25 X 1.5 THREAD SIZE USED ON ALL 32A SOCKET OUTLETS AND APPLIANCE INLETS (EXCEPT INTERLOCKED)	5
1	9936 PG21/ M25 X 1.5 THREAD SIZE USED ON 16A & 32A INTERLOCKED SWITCHSOCKET OUTLETS	5
	MK9937 M32 X 1.5/ M32 X 1.5 THREAD SIZE USED ON ALL 63A SOCKET OUTLETS AND APPLIANCE INLETS	5

MK9937 must not be used on installations that are rated above 63A.

Commando Industrial Plugs and Sockets



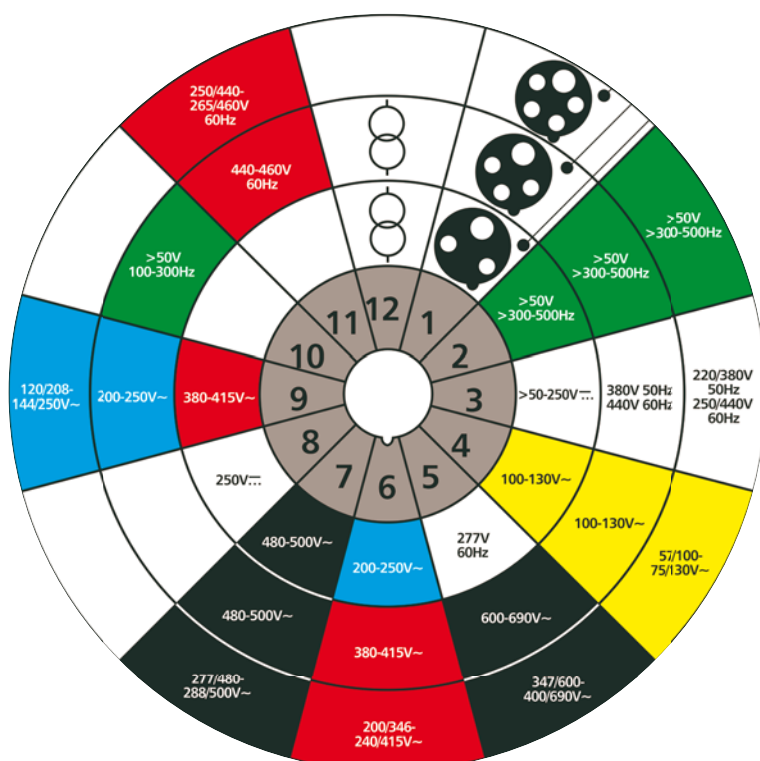
By referring to the chart below, it can be seen that there can be no interchangeability of products as the earth socket tube is placed in a different 'clock' position according to the voltage and frequency. This clock position is determined by looking into a socket-outlet from the front with the key-way at the bottom.

Unless otherwise stated all frequencies are 50-60Hz.

RATING CODE

The rating code which is found on the rating label of each accessory gives details of rated current, rated (operating) voltage (or range of voltages), rated frequency (if not 50/60Hz) and a symbol to indicate the position of the earth contact.

(i) For all products (except extra low voltage) the position given is that of the earth pin when a socket-outlet/connector is viewed from the front with the key-way at the bottom. When viewing a plug/ appliance inlet from the front with the key at the bottom, the position of the earth pin is reversed, i.e., a 10 o'clock will appear at 2 o'clock and other positions are relative.





COMMANDO COMBI™

RANGE INTRODUCTION

Commando Combi units offer RCD protection in hazardous environments.

Enclosed in PC and ABS boxes, these units offer protection against high impact and are available in IP44 (Splashproof) or IP67 (Watertight), making Commando Combination units some of the safest products available.

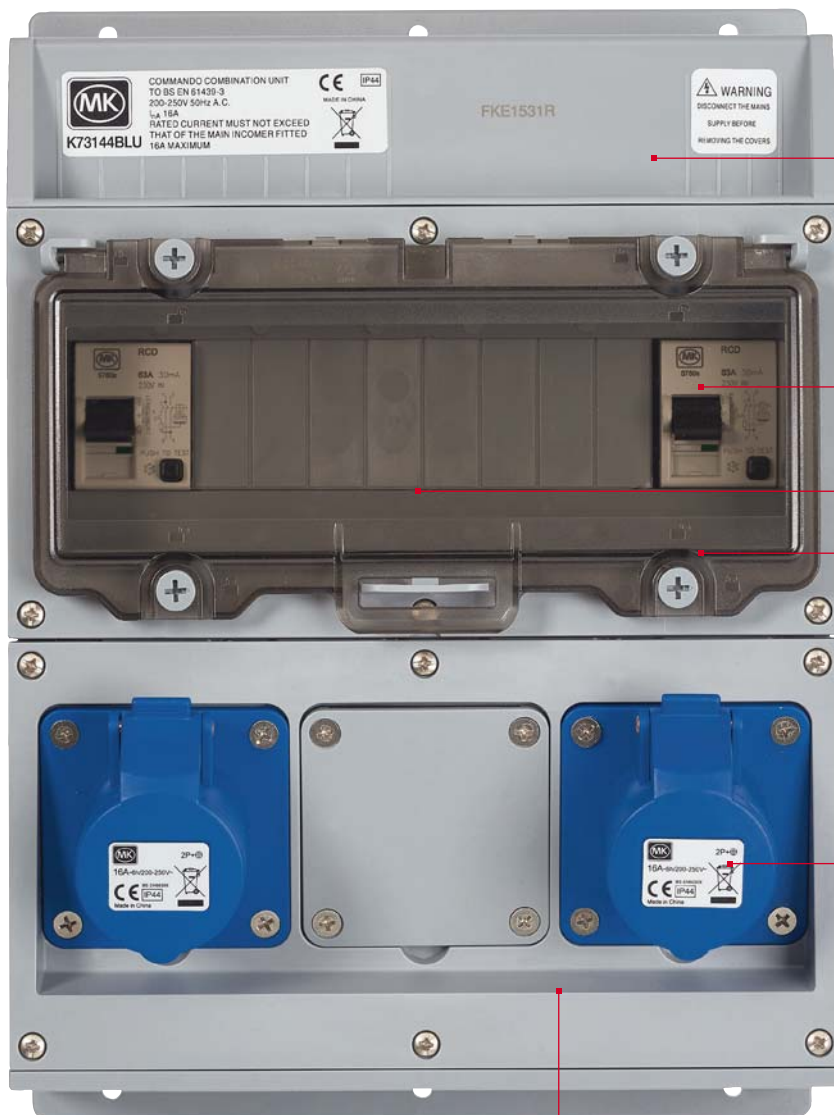
FEATURES & BENEFITS

- High Impact Protection to IK08
- Available in either IP44 (Splashproof) or IP67 (Watertight) options
- Pre-designed, factory built option

HOW TO SPECIFY

An industrial range of IP44 & IP67 ingress protected "Commando" combination units designed to provide RCD protection in hazardous environments. Options must be available for a maximum of three Commando sockets. Products must have outstanding temperature performance and resistance to chemicals to ensure operation in arduous applications. All sockets to have self-cleaning contacts and nickel plated pins to provide resistance to humidity and wear. Terminals to be clearly identified and have terminal screws backed out to provide ease of installation.

Commando Combi™



TOUGH AND IMPACT
RESISTANT TO IK08

OPTIONAL RCD
PROTECTION

LOCKABLE LID

GOOD CHEMICAL
RESISTANCE

IP44 PRE-CONFIGURED SOCKET
OUTLETS (IP67 AVAILABLE UPON
REQUEST CONTACT TECHNICAL
HOTLINE ON +44 (0)1268 563720)

CUSTOM DESIGNED, FACTORY BUILT
OPTION AVAILABLE
CONTACT TECHNICAL HOTLINE
ON +44 (0)1268 563720
SEE PAGE 268.

Socket outlet selection includes 16A, 32A
and 63A angled socket outlets across all
relevant voltages.



IP44 and IP67
waterproof socket and
switchsocket outlets.



Commando Combi™

mkelectric.co.uk



**IP44
SPASHPROOF
100 - 130V
50 - 60 HZ**

Socket Outlets

SINGLE
PRE-WIRED WITH
30mA RCD

TWIN
PRE-WIRED WITH
30mA RCD
INDIVIDUALLY PROTECTED

ANGLED
TWIN
SURFACE
PRE-WIRED

Switchsocket Outlet

INTERLOCKED
PRE-WIRED WITH
30mA RCD



Pin.
Config-
uration
Earth

16	2P+E	4	K13413YEL	K73173YEL	K73143YEL	K13309YEL
32	2P+E	4				K13342YEL

Suitable for top entry
2 x 25mm

Suitable for top entry
2 x ø25 / 2 x ø38
bottom entry 3 x 47.5mm

Suitable for top entry
2 x ø25 / 2 x ø38
bottom entry 3 x 47.5mm

Suitable for top entry
2 x ø25

**IP44
SPASHPROOF
200 - 250V
50 - 60 HZ**

Socket Outlets

SINGLE
PRE-WIRED WITH
30mA RCD

ANGLED
TWIN
SURFACE
PRE-WIRED

Switchsocket Outlet

INTERLOCKED
PRE-WIRED WITH
30mA RCD



Pin.
Config-
uration
Earth

16	2P+E	6	K73414BLU	K73174BLU	K73310BLU
63	2P+E	6	K73463BLU		K13343BLU

Suitable for top entry
2 x 25mm

Suitable for top entry
2 x ø25 / 2 x ø38
Bottom entry 3 x 47.5mm

Suitable for top entry
2 x 25mm

**IP44
SPASHPROOF
380 - 415V
50 - 60 HZ**

Socket Outlets

SINGLE
PRE-WIRED WITH
30mA RCD

SINGLE
PRE-WIRED WITH
SINGLE
30mA RCD

Switchsocket Outlet

INTERLOCKED
PRE-WIRED WITH
30mA RCD



Pin.
Config-
uration
Earth

16	3P+E	6	K13415RED		K13311RED
16	3P+N+E	6	K13416RED		K13312RED
32	3P+E	6	K13434RED		K13344RED
32	3P+N+E	6	K73435RED		K13345RED
63	3P+N+E	6		K73465RED	

16/32A Suitable for top entry
2 x 25mm

Suitable for top entry
2 x ø25 / 2 x ø38
Bottom entry 3 x 47.5mm

Suitable for top entry
2 x 25mm



Technical Hotline
+44 (0)1268 563720

Commando Combi™

WIRING DEVICES
INGRESS PROTECTED

**IP67
WATERTIGHT
100 - 130V
50 - 60 HZ**

Socket Outlet
SINGLE
PRE-WIRED WITH
30mA RCD

**Switchsocket
Outlet**
INTERLOCKED
PRE-WIRED WITH
30mA RCD



Pin.
Config-
uration Earth

Amps	Pin. Config- uration	Earth
16	2P+E	4
32	2P+E	4

Amps	Pin. Config- uration	Earth
16	2P+E	4
32	2P+E	4

K13713YEL

K13346YEL

Suitable for top entry
2 x ø25

Suitable for top entry
2 x ø25

**IP67
WATERTIGHT
200 - 250V
50 - 60 HZ**

Socket Outlet
SINGLE
PRE-WIRED
WITH
30mA RCD

**Switchsocket
Outlet**
INTERLOCKED
PRE-WIRED WITH
30mA RCD



Pin.
Config-
uration Earth

Amps	Pin. Config- uration	Earth
16	2P+E	6
16	3P+E	9
32	2P+E	6

Amps	Pin. Config- uration	Earth
16	2P+E	6
16	3P+E	9
32	2P+E	6

K73714BLU

K13348BLU

Suitable for top entry
2 x ø25

Suitable for top entry
2 x ø25

**IP67
SPLASHPROOF
380 - 415V
50 - 60 HZ**

Socket Outlet
SINGLE
PRE-WIRED WITH
30mA RCD

**Switchsocket
Outlet**
INTERLOCKED
PRE-WIRED WITH
30mA RCD



Pin.
Config-
uration Earth

Amps	Pin. Config- uration	Earth
16	3P+E	6
16	3P+N+E	6
32	3P+E	6
32	3P+N+E	6

Amps	Pin. Config- uration	Earth
16	3P+E	6
16	3P+N+E	6
32	3P+E	6
32	3P+N+E	6

K13716RED

K13351RED

K13352RED

K73353RED

Suitable for top entry
2 x ø25

Suitable for top entry
2 x ø25





MODULAR COMBI™

RANGE INTRODUCTION

A custom design service for Commando Combi products offering circuit protection, control and data products for use in hazardous environments. Modular Combi units are made to order and designed for almost any application.

Enclosed in durable Polycarb and ABS boxes, these units offer protection against high impact and are available in both IP44 and IP67, making Commando Combination units some of the safest products available.

Please contact the Technical Helpline (01268 563720) for further details or email mk.technical@honeywell.com for assistance on options available to meet your application requirements.

FEATURES & BENEFITS

- Compact units replace outlets traditionally scattered around walls
- Combination of outlets with MCB and RCD protection
- High Impact Protection
- Custom design service to suit various applications

HOW TO SPECIFY

An industrial range of IP44 & IP67 ingress protected "Commando" combination units designed to provide RCD protection in hazardous environments. Options must be available for a maximum of three Commando sockets, Masterseal and data connections. Products must have outstanding temperature performance and resistance to chemicals to ensure operation in arduous applications. All sockets to have self-cleaning contacts and nickel plated pins to provide resistance to humidity and wear. Terminals to be clearly identified and have terminal screws backed out to provide ease of installation.



Technical Hotline
+44 (0)1268 563720

Modular Combi™

WIRING DEVICES
INGRESS PROTECTED

SUMMARY GUIDE

STEP 1 Choose your system type and number of Commando socket outlets

Rating	Pin Config.	SOCKET OUTLETS - STRAIGHT			SOCKET OUTLETS - INTERLOCKED		
		100-130V	200-250V	380-415V	100-130V	200-250V	380-415V
16A	2P+E	✓	✓		✓	✓	
16A	3P+E	✓	✓	✓			✓
16A	3P+N+E	✓	✓	✓			✓
32A	2P+E	✓	✓		✓	✓	
32A	3P+E			✓			✓
32A	3P+N+E		✓	✓			✓
63A	2P+E		✓				
63A	3P+E			✓			
63A	3P+N+E			✓			

STEP 2 Choose the type of circuit protection for the outlets

Rating	SWITCH DISCONNECTOR		MCB SINGLE POLE					MCB DOUBLE POLE			MCB TRIPLE POLE		
	2 POLE	4 POLE	6kA TYPE B	TYPE C	10kA TYPE B	TYPE C	TYPE D	TYPE B	TYPE C	TYPE D	TYPE B	TYPE C	TYPE D
16A			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25A													
32A			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
40A													
63A	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
80A													
100A	✓												
125A	✓	✓											

Rating	SRCBO One Module SOLID NEUTRAL (30mA) 6kA TYPE B		RCD 110V DOUBLE POLE		RCD 230V DOUBLE POLE		RCD PULSATING		RCD 230/400V FOUR POLE	
	10mA	30mA	10mA	30mA	10mA	30mA	10mA	30mA	30mA	
16A	✓	✓	✓	✓	✓	✓	✓			
25A									✓	
32A	✓	✓		✓		✓		✓		
40A									✓	
63A					✓				✓	
80A					✓					
100A					✓					

STEP 3 Choose the Control Products

Rating	CONTACTORS			TIME SWITCHES					
	ONE MODULE	TWO MODULE	THREE MODULE	SYNCHRONOUS THREE MODULE	QUARTZ STABILISED THREE MODULE	SYNCHRONOUS ONE MODULE	DIGITAL ONE CHANNEL TWO MODULE	ONE MODULE	DIGITAL TWO CHANNEL TWO MODULE
16A				✓	✓	✓	✓	✓	✓
20A	✓	✓		✓	✓				

STEP 3 Choose the Control Products

MASTERSEAL				
SOCKET OUTLETS		SWITCH ENCLOSURES		SWITCH MODULES
13AMP	16AMP			20AMP 10AMP
✓	✓	✓		✓

Overall Dimensions

DIMENSIONS				
HEIGHT	WIDTH	DEPTH (WITH VARIOUS PRODUCTS)		
1 ROW	228 MM	252MM	16A SKT OUTLET	139MM
2 ROW	358MM	252MM	32A SKT OUTLET	148MM
3 ROW	488MM	252MM	16A INTERLOCK	152MM
4 ROW	618MM	252MM	32A SKT OUTLET	161MM
5 ROW	748MM	252MM	63A SKT OUTLET	167MM
			MASTERSEAL SKT O/T, FCU & DATA	146MM
			MASTERSEAL SWITCH	135MM

STEP 4 Email mk.technical@honeywell.com for design and quotation prior to placing your order.



CASE STUDY

BROADMOOR HOSPITAL – BESPOKE PRODUCTS

The redevelopment of Broadmoor Hospital required bespoke wiring device plates that would not only be resilient, but maintain the highest levels of safety at all times.

The complexities of this application meant that only a specialist solution would suffice and the MK Design Service were able to provide an offering that met their requirements whilst still delivering unrivalled quality from a UK manufacturer.





SENTRY

RANGE INTRODUCTION

The Sentry range of Consumer Units from MK Electric has been stylishly designed to blend in with its environment. The curved lines and slim-line appearance mean it won't look out of place when installed in hallways, lounges or kitchens of new properties.

The expanded range includes a 21-module unit for larger installations and also a 4-module unit to cater for small one-off installations and extensions to existing ones.

The MK Electric Design Service offers a pre-assembly service for custom built boards with all devices fitted, busbars cut and fitted with devices, live and neutral cables terminated.

SUPPORTS 17TH EDITION AMENDMENT 3 COMPLIANCE

Full range of products to support compliance with the 17th Edition Amendment 3 of the Wiring Regulations, including Full Metal non-combustible enclosures for Consumer Units.

MK ELECTRIC DESIGN SERVICE FOR PRE-ASSEMBLED CONSUMER UNITS

Save time and money by specifying project requirements through the MK Electric Design Service. Pre-assembled custom built boards, with all devices pre-fitted with busbars and cables are available to suit any installation.

FLOATING BUSBAR SYSTEM

Gives maximum installation flexibility.

BROAD SELECTION OF PRE-ASSEMBLED SPLIT LOAD UNITS AVAILABLE

Suits a variety of applications and saves installation time.

HOW TO SPECIFY

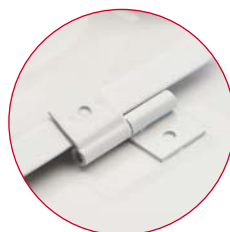
A metal range of consumer unit and accessories (Switch's MCB's, RCD's & RCBO's) designed to comply to the 17th Edition Amendment 3 of the wiring regulations (BS 7671:2008). Consumer unit doors must be top hinged to ensure the door is closed when the unit is not in use. The base, lid & door of the consumer unit must be earthed to provide safe operation at all times. A floating busbar system to be employed to ensure maximum installation flexibility and acceptance of control devices. All consumer units must have a curved door to prevent dust collection and offer a unobtrusive appearance that blends into the environment. Backed out captive screws, removable DIN rails and sufficient wiring space are required to ensure ease of installation and maintenance.

MK Sentry Consumer Unit Features and Benefits



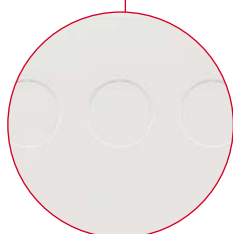
NEW: Manufactured from Zintec Steel

Corrosion resistant material which ensures full compliance with 17th Edition Amendment 3



NEW: Top Hinged Door

Prevents door being left open after use leading to a possible fire risk



NEW: Multiple extra large knock outs

Aides and eases installation



NEW: MK White Colour

Modernised aesthetics for visible installations.

Design service available for bespoke requests



Curved Stylish Design

Blends into the environment

NEW: Continual Earthing

Only need to earth once via the base

Broad Selection Available

Suits a variety of applications



Backed out and captive combi-head screws

Allows simple and speedy installation



Fixing holes

Tripod fixing to cope with uneven surfaces



Easily removable Din Rail

Simplifying and easing first fix

Colour coded earth and neutral terminal locked

At top of unit for ease of wiring



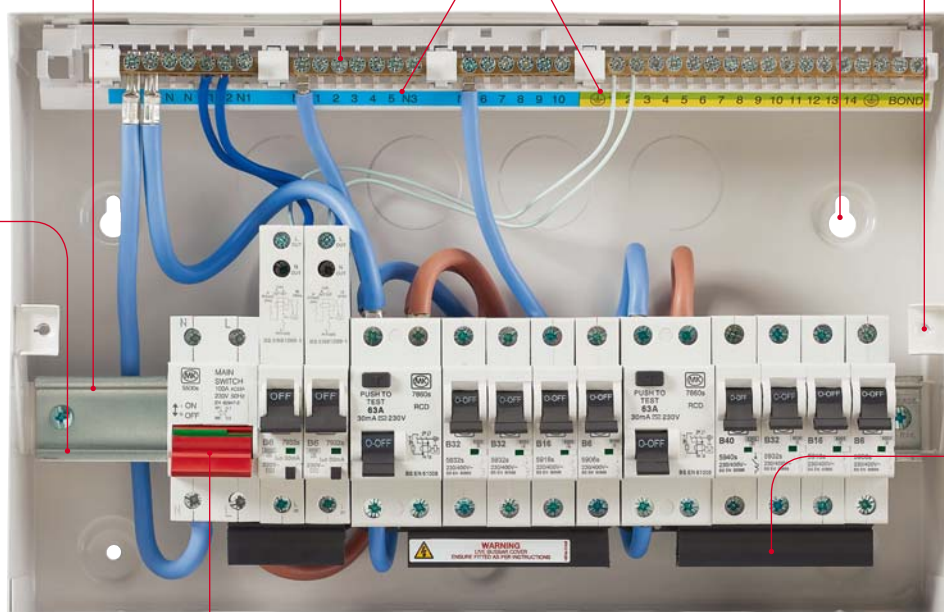
NEW: 10mm Increased Height

Additional wiring space



NEW: Supporting Din Rail "T" Bar

Additional support to prevent bowing and twisting which has been raised for improved cable routing



Floating busbar system

For maximum installation flexibility including acceptance of control modules

CONSUMER UNIT SELECTION GUIDE

STEP 1	Determine the type of consumer unit configuration required. e.g Split Load, Standard or combination of split load / single RCD or dual RCD. For each Switch Disconnector or RCD to be used allow 2 modular ways.
STEP 2	Determine the number of outgoing circuits required. e.g Cooker, Lighting, Ring Main etc. For each circuit to be protected by an MCB or RCBO allow 1 modular way.
STEP 3	Determine what control products are required. e.g Bell Transformer, Time Delay Switch, contactors, timeswitches etc.
STEP 4	Determine the number of 'spare' modular ways required for future upgrades. For each 'spare' modular way select 1 Sentry blank module – 5544s or K5545sMAG (cover mounted blanks supplied with consumer units. See page 286).
STEP 5	Now add together the total number of modular ways required.
STEP 6	Select from our range of Insulated, Metal, Flush or stacked consumer units (using standard consumer units plus stacking kits). Choose the type and size most appropriate for your requirements.



Offset Incomer

Provides additional wiring space making mains input connections easier

The MK Electric Design Service

THE MK ELECTRIC DESIGN SERVICE IS PERFECT FOR WHEN ONLY A CUSTOMISED SOLUTION CAN MEET YOUR REQUIREMENTS, OR WHEN FULLY ASSEMBLED CONSUMER UNITS CAN BE PROVIDED FOR YOUR PROJECT TO SAVE YOU INSTALLATION TIME.

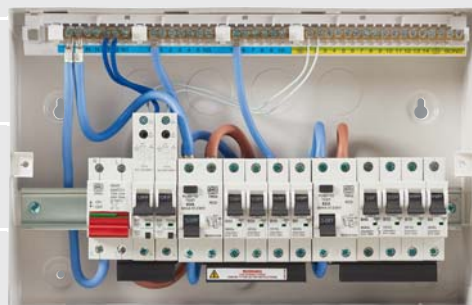
Our dedicated team can help you to build the best configurations for your project, and then assemble the boards ready for installation. Using standard and non-standard Sentry components we can build and supply fully assembled units to an agreed design. For example, have your split load boards supplied with all the devices pre-fitted with busbars and cables to suit the installation. This service is ideal for housing developers, or any project application*.

*Minimum order quantity of 20 of the same design

- Dedicated team on hand to build configuration to meet your needs
- Service is available for all MK Consumer Units
- Faster installation time on site
- Fast turnaround – 1 working day response time to initial enquiry

To find out more visit www.mkelectric.co.uk and follow the links to the **Design Service**.

STEP 1	Call the MK Electric Technical Services Team on 01268 563720 or email mk.technical@honeywell.com
STEP 2	Discuss the details of your project and circuit protection requirements with a member of the MK Technical Services Team or complete the online enquiry and click send
STEP 3	Within one working day you will have a response to your initial enquiry
STEP 4	Confirm the configurations and quantities
STEP 5	Receive the quote for your order
STEP 6	Place your order with your wholesaler
STEP 7	Your order will be delivered to the wholesaler of your choice. All boards will be fully assembled and ready for installation



Consumer Units

METAL
ENCLOSURE ONLY
SURFACE

METAL
ENCLOSURE + SWITCH
DISCONNECTOR
SURFACE



K5604sMET



K5608sMET



K5612sMET



K5616sMET



K5621sMET



K5704sMET



K5708sMET



K5712sMET



K5716sMET



K5721sMET

K5604sMET
4 WAY ENCLOSURE
ACCEPTS 4 ONE MODULE PRODUCTS
(1 INTEGRAL NEUTRAL BAR)

1

K5608sMET
8 WAY ENCLOSURE
ACCEPTS 8 ONE MODULE PRODUCTS
(1 INTEGRAL NEUTRAL BAR)

1

K5612sMET
12 WAY ENCLOSURE
ACCEPTS 8 ONE MODULE PRODUCTS
(2 INTEGRAL NEUTRAL BARS FITTED
WITH LINKS)

1

K5616sMET
16 WAY ENCLOSURE
ACCEPTS 16 ONE MODULE PRODUCTS
(3 INTEGRAL NEUTRAL BARS FITTED
WITH LINKS)

1

K5621sMET
21 WAY ENCLOSURE
ACCEPTS 21 ONE MODULE PRODUCTS
(3 INTEGRAL NEUTRAL BARS FITTED
WITH LINKS)

1

K5704sMET
4 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
ACCEPTS A FURTHER 2 ONE MODULE
PRODUCTS

1

K5708sMET
8 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
ACCEPTS A FURTHER 6 ONE MODULE
PRODUCTS

1

K5712sMET
12 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
ACCEPTS A FURTHER 10 ONE MODULE
PRODUCTS

1

K5716sMET
16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
ACCEPTS A FURTHER 14 ONE MODULE
PRODUCTS

1

K5721sMET
21 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
ACCEPTS A FURTHER 19 ONE MODULE
PRODUCTS

1

All units are white coloured.
All units feature a robust galvanized metal base,
lid & door.
The DIN rail embodies a useful alignment and
fixing mechanism that allows quick installation.
Cable entry points are located on top, bottom,
side and rear surfaces.

DIMENSIONS:	Width	Height	Depth
4 WAY	144	x 244	x 116mm
8 WAY	238	x 244	x 116mm
12 WAY	310	x 244	x 116mm
16 WAY	382	x 244	x 116mm
21 WAY	472	x 244	x 116mm

MAIN INCOMER RATING:
4 way enclosures: 63A
8, 12, 16 & 21 way enclosures: 100A
Degree of protection to BS EN 60529 to IP2XC.
Precautions must be taken to maintain the IP
rating, e.g. Use of cable glands and knockouts.
BS EN 61439-3

All units are pre-fitted with a switch disconnecter

DIMENSIONS:	Width	Height	Depth
4 WAY	144	x 244	x 116mm
8 WAY	238	x 244	x 116mm
12 WAY	310	x 244	x 116mm
16 WAY	382	x 244	x 116mm
21 WAY	472	x 244	x 116mm

MAIN INCOMER RATING:
4 way enclosures: 63A
8, 12, 16 & 21 way enclosures: 100A
Degree of protection to BS EN 60529 to IP2XC.
Precautions must be taken to maintain the IP
rating, e.g. Use of cable glands and knockouts.
BS EN 61439-3

FACTORY BUILT SERVICE: MK can save you time and money by pre-assembling consumer
units with your required Sentry components

Cover mounted blanks are supplied with ALL consumer units
(2 off x 1 for 4, 8 and 12 way enclosures and 2 off x 2 for 16 and 21 way enclosures)

Consumer Units

SPLIT-LOAD
SINGLE RCD ARRANGEMENTS
METAL
SURFACE

SPLIT-LOAD
DUAL RCD ARRANGEMENTS
METAL
SURFACE



K5682sMET



K5662sMET



K5666sMET



K5687sMET

K5682sMET 1
12 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
63A 30mA RCD
ACCEPTS A FURTHER 8 ONE MODULE PRODUCTS

K5689sMET 1
16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
63A 30mA RCD
ACCEPTS A FURTHER 12 ONE MODULE PRODUCTS

K5662sMET 1
12 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
80A 30mA RCD
ACCEPTS A FURTHER 8 ONE MODULE PRODUCTS

K5685sMET 1
16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
80A 30mA RCD
ACCEPTS A FURTHER 12 ONE MODULE PRODUCTS

K5684sMET 1
21 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
80A 30mA RCD
ACCEPTS A FURTHER 17 ONE MODULE PRODUCTS

K5666sMET 1
16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 63A 30mA RCD'S
ACCEPTS A FURTHER 10 ONE MODULE PRODUCTS

K5688sMET 1
16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 80A 30mA RCD'S
ACCEPTS A FURTHER 10 ONE MODULE PRODUCTS

K5686sMET 1
16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
1 X 63A & 1 X 80A 30mA RCD'S
ACCEPTS A FURTHER 10 ONE MODULE PRODUCTS

K5683sMET 1
21 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 63A 30mA RCD'S
ACCEPTS A FURTHER 15 ONE MODULE PRODUCTS

K5687sMET 1
21 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 80A 30mA RCD'S
ACCEPTS A FURTHER 15 ONE MODULE PRODUCTS

K5681sMET 1
21 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
1 X 63A & 1 X 80A 30mA RCD'S
ACCEPTS A FURTHER 15 ONE MODULE PRODUCTS

All units are white coloured.

All units are pre-fitted with a switch disconnector and RCD together with all the necessary split-load cabling. The flexibility of design allows the RCD to be positioned to suit the required configuration of RCD protected and non-protected circuits, subject to the rating of either the switch or RCD not being exceeded. MK recommends the use of RCBO's for non RCD protected circuits to comply with the 17th Edition Amendment 3 Wiring Regulations.

DIMENSIONS:	Width	Height	Depth
4 WAY	144 x	244 x	116mm
8 WAY	238 x	244 x	116mm
12 WAY	310 x	244 x	116mm
16 WAY	382 x	244 x	116mm
21 WAY	472 x	244 x	116mm

MAIN INCOMER RATING:

4 way enclosures: 63A

8, 12, 16 & 21 way enclosures: 100A

Degree of protection to BS EN 60529 to IP2XC.
Precautions must be taken to maintain the IP rating, e.g. Use of cable glands and knockouts.
BS EN 61439-3

All units are white coloured.

All units are pre-fitted with a switch disconnector and RCD together with all the necessary split-load cabling. The flexibility of design allows the RCD to be positioned to suit the required configuration of RCD protected and non-protected circuits, subject to the rating of either the switch or RCD not being exceeded. MK recommends the use of RCBO's for non RCD protected circuits to comply with the 17th Edition Amendment 3 Wiring Regulations.

DIMENSIONS:	Width	Height	Depth
4 WAY	144 x	244 x	116mm
8 WAY	238 x	244 x	116mm
12 WAY	310 x	244 x	116mm
16 WAY	382 x	244 x	116mm
21 WAY	472 x	244 x	116mm

MAIN INCOMER RATING:

4 way enclosures: 63A

8, 12, 16 & 21 way enclosures: 100A

Degree of protection to BS EN 60529 to IP2XC.
Precautions must be taken to maintain the IP rating, e.g. Use of cable glands and knockouts.
BS EN 61439-3

FULLY POPULATED
ARRANGEMENTS
METAL
SURFACE



K6550sMET



K7663sMET



K7664sMET



K7673sMET



K7665sMET



K7666sMET



K6551sMET



K6552sMET



K7678sMET



K6550sMET

4 WAY ENCLOSURE
63A 30mA RCD
2 X MCB'S (1 X 6A & 1 X 16A)

1

K7663sMET

12 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
63A 30mA RCD
6 X MCB'S (2 X 6A, 2 X 16A & 2 X 32A)
2 X RCBO'S (1 X 6A & 1 X 40A)

1

K7664sMET

12 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 63A 30mA RCD'S
6 X MCB'S (2 X 6A, 1 X 16A, 2 X 32A & 1 X 40A)

1

K7673sMET

12 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
6 X RCBO'S (2 X 6A, 1 X 16A, 2 X 32A & 1 X 40A)
ACCEPTS A FURTHER 4 ONE MODULE PRODUCTS

1

K7665sMET

16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 63A 30mA RCD'S
8 X MCB'S (2 X 6A, 2 X 16A, 3 X 32A & 1 X 40A)
ACCEPTS A FURTHER 2 ONE MODULE PRODUCTS

1

K7666sMET

16 WAY ENCLOSURE
100A SWITCH DISCONNECTOR
2 X 63A 30mA RCD'S
10 X MCB'S (3 X 6A, 2 X 16A, 4 X 32A & 1 X 40A)

1

K6551sMET

4 WAY ENCLOSURE
63A 30mA RCD
1 X MCB (1 X 50A)

1

K6552sMET

8 WAY ENCLOSURE
63A 30mA RCD
6 X MCB'S
(3 X 6A, 1 X 16A & 2 X 20A)

1

K7678sMET

21 WAY ENCLOSURE
1 X 63A & 1 X 80A 30mA RCD'S
12 X MCB'S
(3 X 6A, 2 X 16A, 2 X 20A, 4 X 32A & 1 X 40A)
ACCEPTS A FURTHER 3 ONE MODULE PRODUCTS

1

All units are white coloured.

All units are pre-fitted with a switch disconnect and RCD together with all the necessary split-load cabling. The flexibility of design allows the RCD to be positioned to suit the required configuration of RCD protected and non-protected circuits, subject to the rating of either the switch or RCD not being exceeded.

MK recommends the use of RCBO's for non RCD protected circuits to comply with the 17th Edition Amendment 3 Wiring Regulations.

DIMENSIONS:	Width	Height	Depth
4 WAY	144	x 244	x 116mm
8 WAY	238	x 244	x 116mm
12 WAY	310	x 244	x 116mm
16 WAY	382	x 244	x 116mm
21 WAY	472	x 244	x 116mm

MAIN INCOMER RATING:

4 way enclosures: 63A

8, 12, 16 & 21 way enclosures: 100A

Degree of protection to BS EN 60529 to IP2XC.

Precautions must be taken to maintain the IP rating,

e.g. Use of cable glands and knockouts.

BS EN 61439-3

Consumer Units

INSULATED
SURFACE

K5604sMAG



K5608sMAG



K5612sMAG



K5616sMAG



K5621sMAG

K5604SMAG

4 WAY ENCLOSURE
ACCEPTS 4 ONE MODULE PRODUCTS
(1 INTEGRAL NEUTRAL BAR)

K5608SMAG

8 WAY ENCLOSURE
ACCEPTS 8 ONE MODULE PRODUCTS
(1 INTEGRAL NEUTRAL BAR)

All units are magnolia coloured.

All units feature a robust base together with an all over front cover and moulded lid in an impact resistant, flame retardant thermoplastic. Cable entry points are located on top, bottom, side and rear surfaces.

DIMENSIONS:	Width	Height	Depth
K5604sMAG	140 x	230 x	110mm
K5608sMAG	234 x	230 x	110mm
K5612sMAG	306 x	230 x	110mm
K5616sMAG	378 x	230 x	110mm
K5621sMAG	468 x	230 x	110mm

MAIN INCOMER MAXIMUM RATING

K5604sMAG and K5604sMAG: 63A

All other consumer units: 100A

- 1 **K5612SMAG**
12 WAY ENCLOSURE
ACCEPTS 12 ONE MODULE PRODUCTS
(2 INTEGRAL NEUTRAL BARS
FITTED WITH LINK)

- 1 **K5616SMAG**
16 WAY ENCLOSURE
ACCEPTS 16 ONE MODULE PRODUCTS
(3 INTEGRAL NEUTRAL BARS
FITTED WITH LINK)

- K5621SMAG**
21 WAY ENCLOSURE
ACCEPTS 21 ONE MODULE PRODUCTS
(4 INTEGRAL NEUTRAL BARS
FITTED WITH LINKS)

K5687SMAG17ED

Degree of protection to BS EN 60529 to IP2XC.
Precautions must be taken to maintain the IP rating, e.g. use of cable glands and knockouts.
BS EN 60439-3:1999

Switch
Disconnectors
Double Pole

TWO MODULE



5500s



5560s

- 1 **5500s**
100A 230V
- 1 **5560s**
63A 230V

- 1 Suitable for installation in Sentry Consumer Units and two or four module enclosures. Accepts direct to busbar or cable-in / cable-out connection.

CATEGORY OF DUTY:

AC22A for switching of resistive and inductive loads.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:

81 x 36 x 76mm

CABLE CAPACITY:

50mm²

- 1 BS EN 60947-3:1999

FACTORY BUILT SERVICE: MK can save you time and money by pre-assembling consumer units with your required Sentry components

MCBs Single Pole

TYPE B
ONE MODULE



5903s 5906s



5910s 5916s



5920s 5940s



5945s 5950s

MCB Single Pole

TYPE C
ONE MODULE



8703s 8706s



8710s 8716s



8720s 8732s



8740s 8750s

5903s

3A 230V

5906s

6A 230V

5910s

10A 230V

5916s

16A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:

83 x 18 x 74mm

CABLE CAPACITY:

35mm²

Short-circuit breaking capacity: 6KA

BS EN 60898:2003

10

5920s

20A 230V

5925s

25A 230V

5932s

32A 230V

5940s

40A 230V

5945s

45A 230V

5950s

50A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:

83 x 18 x 74mm

CABLE CAPACITY:

35mm²

SHORT-CIRCUIT BREAKING CAPACITY:

6KA

BS EN 60898:2003

10

8703s

3A 230V

8706s

6A 230V

8710s

10A 230V

8716s

16A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:

83 x 18 x 74mm

CABLE CAPACITY:

35mm²

SHORT-CIRCUIT BREAKING CAPACITY:

6KA

BS EN 60898:2003

10

10

10

10

10

10

10

10

10

8720s

20A 230V

8725s

25A 230V

8732s

32A 230V

8740s

40A 230V

8750s

50A 230V

8763s

63A 230V

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

Positive contact status indication in accordance with 17th Edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:

83 x 18 x 74mm

CABLE CAPACITY:

35mm²

SHORT-CIRCUIT BREAKING CAPACITY:

6KA

BS EN 60898:2003

10

10

10

10

10

10

10

10

Sentry

mkelectric.co.uk



RCBOs With Solid Neutral Single Pole

TYPE B
ONE MODULE



7932s 7933s



7936s 7937s



7934s 7935s



7938s 7939s

TYPE C
ONE MODULE



8932s 8933s 8934s



8935s 8936s

Residential 6kA RCD Double Pole Type AC

16 AMP
TWO MODULE



7816s

7932s
6A 230V
30mA
TRIPPING CURRENT

1

7933s
10A 230V
30mA
TRIPPING CURRENT

1

7934s
16A 230V
30mA
TRIPPING CURRENT

1

Suitable for installation in Sentry Consumer Units.
Positive contact status indication in accordance
with 17th Edition IEE Wiring Regulations
(537.2.2.2 and 537.3.2.2)

DIMENSIONS:
119 x 18 x 73mm

CABLE CAPACITY:

Live 25mm²

Neutral 25mm²

SHORT CIRCUIT BREAKING CAPACITY:
6kA

BS EN 61009-1

BS IEC 61009-2-2

7935s
20A 230V
30mA TRIPPING CURRENT

1

7936s
32A 230V
30mA TRIPPING CURRENT

1

7937s
40A 230V
30mA TRIPPING CURRENT

1

7938s
45A 230V
30mA TRIPPING CURRENT

1

7939s
50A 230V
30mA TRIPPING CURRENT

1

8932s
6A 230V
30mA
TRIPPING CURRENT

1

8933s
10A 230V
30mA
TRIPPING CURRENT

1

8934s
16A 230V
30mA
TRIPPING CURRENT

1

8935s
20A 230V
30mA
TRIPPING CURRENT

1

8936s
32A 230V
30mA
TRIPPING CURRENT

1

7816s
16A 230V
30mA TRIPPING CURRENT

1



Technical Hotline
+44 (0)1268 563720

Sentry

32 AMP
TWO MODULE



7832s

7832s
32A 230V
30mA TRIPPING CURRENT

40 AMP
TWO MODULE



7840s

7840s
40A 230V
30mA TRIPPING CURRENT

63 AMP
TWO MODULE



7860s



7660s

7860s
63A 230V
30mA TRIPPING CURRENT
7560s
63A 230V
100mA
TRIPPING CURRENT
7660s
63A 230V
300mA TRIPPING CURRENT

80 AMP
TWO MODULE



7880s



7680s

7880s
80A 230V
30mA TRIPPING CURRENT
7580s
80A 230V
100mA TRIPPING CURRENT
7680s
80A 230V
300mA TRIPPING CURRENT

Industrial 10kA RCDs Double Pole Type AC

16 AMP
TWO MODULE

32 AMP
TWO MODULE

40 AMP
TWO MODULE

63 AMP
TWO MODULE

80 AMP
TWO MODULE

100 AMP
TWO MODULE



6016s



6032s



5740s



5760s



6080s



6600s



6316s



6730s



5860s



5880s



7800s

6016s
16A 110V
10mA TRIPPING
CURRENT

1

6416s
16A 110V
30mA TRIPPING
CURRENT

1

6316s
16A 230V
10mA TRIPPING
CURRENT

1

5716s
16A 230V
30mA TRIPPING
CURRENT

1

6032s
32A 110V
30mA TRIPPING
CURRENT

1

6730s
32A 230V
30mA TRIPPING
CURRENT

1

5740s
40A 230V
30mA TRIPPING
CURRENT

1

5760s
63A 230V
30mA TRIPPING
CURRENT

1

6160s
63A 230V
100mA TRIPPING
CURRENT

1

5860s
63A 230V
300mA TRIPPING
CURRENT

1

6080s
80A 110V
30mA TRIPPING
CURRENT

1

5780s
80A 230V
30mA TRIPPING
CURRENT

1

6180s
80A 230V
100mA TRIPPING
CURRENT

1

5880s
80A 230V
300mA TRIPPING
CURRENT

1

7700s
100A 230V
30mA TRIPPING
CURRENT

1

6600s
100A 230V
100mA TRIPPING
CURRENT

1

7800s
100A 230V
300mA TRIPPING
CURRENT

1

Suitable for installation in
Sentry Consumer Units and
two or four module enclosures.
Positive contact status
indication in accordance
with 17th Edition IET Wiring
Regulations (537.2.2.2 and
537.3.2.2)

DIMENSIONS:
85 x 36 x 75mm
CABLE CAPACITY:
50mm²
BS EN 61008:1995

Industrial 10kA RCDs Pulsating d.c. Fault Current Sensitive Double Pole Type A

TWO MODULE



6216s

5640s



6630s

6216s
16A 230V
10mA TRIPPING CURRENT

6630s
32A 230V
30mA TRIPPING CURRENT

5640s
40A 230V
30mA TRIPPING CURRENT

5660s
63A 230V
30mA TRIPPING CURRENT

Suitable for installation in Sentry Consumer Units and two or four module enclosures.
Positive contact status indication in accordance with 17th Edition IET Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:
85 x 36 x 75mm

CABLE CAPACITY:
50mm²

BS EN 61008:1995

Industrial 10kA RCDs Time Delayed Double Pole

TWO MODULE



6980s



6400s

6980s
80A 230V
100mA TRIPPING CURRENT
TIME DELAYED

6400s
100A 230V
100mA TRIPPING CURRENT
TIME DELAYED

Suitable for installation in Sentry Consumer Units and Four Module enclosures. When used as a mains incomer these units will provide discrimination with downstream instantaneously operating 10mA or 30mA RCD's. For example, they can be used as main incomers on split load consumer units where it is not desirable, because of the possibility of unwanted tripping, to place all of the circuits on an instantaneous 30mA RCD, but where earth leakage protection is still required for these circuits or where compliance is required to the indirect contact protection requirements of the IET Wiring Regulations.

DIMS: 81 x 36 x 76mm

CABLE CAPACITY: 50mm²

BS EN 61008:1995

NOT TO BE USED FOR PERSONAL PROTECTION AGAINST ELECTRIC SHOCK

Industrial 10kA RCDs Four Pole Type AC

25 AMP
FOUR MODULE



6425s

6425s
25A 230/400V
30mA TRIPPING CURRENT

Suitable for installation in Sentry four module enclosures and Commando Combi.
Positive contact status indication in accordance with 17th Edition IET Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:
85 x 72 x 75mm

CABLE CAPACITY:
50mm²

BS EN 61008:1995

40 AMP
FOUR MODULE



6440s

6440s
40A 230/400V
30mA TRIPPING CURRENT

6240s
40A 230/400V
100mA TRIPPING CURRENT

FACTORY BUILT SERVICE
MK can save you time and money by pre-assembling consumer units with your required Sentry components

Industrial 10kA RCDs Four Pole Type AC

63 AMP

FOUR MODULE



6463s



6363s

Industrial 10kA RCD Pulsating d.c. Fault Current Sensitive, Four Pole Type A

FOUR MODULE



6640s

Contactors

ONE MODULE



6220s



6720s

TWO MODULE



7240s



7263s

THREE MODULE



7440s



7463s

6463s
63A 230/400V
30mA TRIPPING CURRENT

6363s
63A 230/400V
100mA TRIPPING CURRENT

6263s
63A 230/400V
300mA TRIPPING CURRENT

1

1

1

6640s
40A 230/400V
30mA TRIPPING CURRENT

1

Suitable for installation in Sentry two or four module enclosures.
Positive contact status indication in accordance with 17th Edition IET Wiring Regulations (537.2.2.2 and 537.3.2.2)

DIMENSIONS:
85 x 72 x 75mm
CABLE CAPACITY:
50mm²
BS EN 61008:1995

6220s
20A
DOUBLE POLE

6720s
20A
DOUBLE POLE
WITH MANUAL OVERRIDE

1

1

Suitable for installation in Sentry Consumer Units and two or four module enclosures. Automatically switches higher loads than possible with a time switch eg; off peak tariffs.

A manual override enables the temporary setting of the contactor in either the on or off position in addition to normal automatic operation.

When a contactor is mounted alongside an MCB of greater than 10 amp current rating or two contactors are mounted alongside an MCB or side by side, it is necessary to insert a blank module between them (list no.5544s).

6420s
20A
FOUR POLE

7240s
40A
DOUBLE POLE

7263s
63A
DOUBLE POLE

1

1

1

7440s
40A
FOUR POLE

7463s
63A
FOUR POLE

1

1

CONTACTOR RATINGS:

List no	6220s 6420s 6720s	7240s 7440s	7263s 7463s
RATED CURRENT Ith	20A	40A	63A
HEATING			
Single phase 230V	5.4kW	8.6kW	13.6kW
Three phase 400V	16kW	26kW	41kW
MOTORS			
Single phase 230V	1.1kW	2.2kW	4kW
Three phase 400V	4kW	7.5kW	11kW
LIGHTING			
Incandescent and Halogen lamps:	2,800W	7,000W	10,000W
Fluorescent Lamps: (Electronic Ballast)	2,000W	4,200W	6,300W
VOLTAGE RATING (coil)	230V 50Hz	230V 50Hz	230V 50Hz
CABLE CAPACITY	6mm ² rigid	25mm ² rigid	25mm ² rigid
BS EN 61095			
DIMENSIONS:			
6220S:	84 x 18 x 66mm	6420S:	84 x 18 x 66mm
7240S:	84 x 36 x 66mm	7263S:	84 x 36 x 66mm
7463S:	84 x 54 x 66mm	7440S:	84 x 54 x 66mm
			(including half module blank)

Bell Transformer

TWO MODULE



5711s

Time Switches

SYNCHRONOUS
THREE MODULE



5707s

QUARTZ
STABILISED
THREE MODULE



5824s

SYNCHRONOUS
ONE MODULE



5833s

DIGITAL
ONE CHANNEL
TWO MODULE



5731s

DIGITAL
ONE CHANNEL
ONE MODULE



5733s

DIGITAL
TWO CHANNEL
TWO MODULE



5732s

5711s 1
RATING 1A AT 8V
PRIMARY
220 – 240V A.C.50Hz

Suitable for installation in Sentry Consumer Units and two or four module enclosures.

NOTE:

When installed in a consumer unit, ensure that output cables inside the enclosures are suitable for a 230V environment, either by sleeving the bell wire to BS 2848 or using 230V cable.

Complete with terminal covers. Also suitable for surface mounting.

DIMENSIONS:
88 x 36 x 67mm
CABLE CAPACITY:
1 x 2.5mm²
EN 61558-2-8

5707s 1
7 DAY DIAL
MIN SETTING
3 HOURS

5724s 1
24 HOUR DIAL
MIN SETTING
30 MINUTES

Suitable for DIN rail mounting in Sentry Consumer Units or four module enclosures.

VOLTAGE RATING:
220-240Va.c. 50Hz
CURRENT RATING:
Resistive load 16A
Inductive load 4A
Tungsten lamps 6A (1350W)
Fluorescent lamps 1350W
DIMENSIONS:
85 x 54 x 68mm
CABLE CAPACITY:
2 x 2.5mm² or 4 x 1.5mm²

5824s 1
24 HOUR DIAL
MIN SETTING
30 MINUTES

Suitable for DIN rail mounting in Sentry Consumer Units and two or four module enclosures.

Power reserve 150 hours
VOLTAGE RATING:
220-240Va.c. 50-60Hz
CURRENT RATING:
Resistive load 16A
Inductive load 4A
Tungsten lamps 6A (1350W)
Fluorescent lamps 1350W
DIMENSIONS:
85 x 54 x 68mm
CABLE CAPACITY:
2 x 2.5mm² or 4 x 1.5mm²
EN 60730-2-7:1993

5833s 1
24 HOUR DIAL
MIN SETTING
30 MINUTES

Suitable for DIN rail mounting in Sentry Consumer Units and two or four module enclosures.

VOLTAGE RATING:
240V 50Hz
CURRENT RATING:
Resistive load 16A
Inductive load 4A
Tungsten lamps 6A (1350W)
Fluorescent lamps 1350W
DIMENSIONS:
90 x 18 x 68mm
CABLE CAPACITY:
2 x 2.5mm² or 4 x 1.5mm²
EN 60730-2-7:1993

5731s 1
24 HOUR/7 DAY
DISPLAY
MIN SETTING
1 MINUTE

Pre-programmed with UK time and automatic summer/winter adjustment. Provides 50 programming selections. Freely selectable day grouping facility. Manual override, winter/summer time adjustment. Power reserve of 3 years. Suitable for DIN-rail mounting in Sentry Consumer Units and two or four module enclosures.

VOLTAGE RATING:
240V 50/60Hz
CURRENT RATING:
Resistive load 16A
Inductive load 2.5A
Tungsten lamps 5A (1000W)
Fluorescent lamps 1000W
DIMENSIONS:
85 x 36 x 68mm
CABLE CAPACITY:
2 x 2.5mm² or 4 x 1.5mm²
EN 60730-2-7:1993

5733s 1
24 HOUR DIAL
MIN SETTING
1 MINUTE

Provides 50 programming selections. Freely selectable day grouping facility. Manual override, winter/summer time adjustment. Power reserve of 150 hours.

Suitable for DIN rail mounting in Sentry Consumer Units and two or four module enclosures.
VOLTAGE RATING:
240V 50/60Hz
CURRENT RATING:
Resistive load 16A
Inductive load 2.5A
Tungsten lamps 5A (1000W)
Fluorescent lamps 1000W
DIMENSIONS:
90 x 18 x 74mm
CABLE CAPACITY:
2 x 2.5mm² or 4 x 1.5mm²
EN 60730-2-7:1993

5732s 1
24 HOUR/7 DAY
DISPLAY
MIN SETTING
1 MINUTE

Pre-programmed with UK time and automatic summer/winter adjustment. Provides 50 programming selections. Freely selectable day grouping facility. Manual override, winter/summer time adjustment. Power reserve of 3 years.

Suitable for DIN-rail mounting in Sentry Consumer Units and two or four module enclosures.
VOLTAGE RATING:
240V 50/60Hz
CURRENT RATING:
Resistive load 16A
Inductive load 2.5A
Tungsten lamps 5A (1000W)
Fluorescent lamps 1000W
DIMENSIONS:
85 x 36 x 68mm
CABLE CAPACITY:
2 x 2.5mm² or 4 x 1.5mm²
EN 60730-2-7:1993

Time Delay Switches

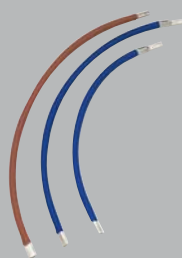
Consumer Unit Cable Kits

Accessories

ONE MODULE



5650s



K5563s



K5565s



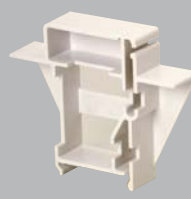
5562s



K8041s



K5593s



5544s



K5545sMAG



K5511s



KAX26s



K5597s



K5599s



K6061SMET



K6060SMET

5650s DELAY RANGE 1 - 7 MINUTES (APPROX)

Suitable for installation in Sentry Consumer Units and two or four module enclosures. Offers time delay control for complete circuits of either tungsten or fluorescent lighting with any number of standard push switches. It can also be used to control fans in bathrooms without a window. Delay setting can be over-ridden by setting to 'Perm-on' mode, or by fitting a remote overriding switch. Switch has a switching capacity of 16A Resistive loads (upf) Fluorescent lamps uncompensated Series compensated 1300W Parallel compensated 480W CFLS 100W Max. Maximum of 9 units can be connected Incandescent lamps 2000W Neon glow lamp load (locating lamp for Push Switch) 50mA max

VOLTAGE RATING:
230V 50Hz

DIMENSIONS:
84 x 18 x 70mm

CABLE CAPACITY:
1 x 4mm² or 2 x 1.5mm²

1

K5563s SPLIT-LOAD KIT CONSISTS OF 3 CABLES (2 NEUTRAL AND 1 LIVE) FOR USE WHEN ASSEMBLING A SPLIT LOAD ARRANGEMENT

5

K5565s MULTI-INCOMER KIT CONSISTS OF A BLUE FLEXIBLE CABLE WITH PRE-FITTED TERMINAL FOR THE NEUTRAL RETURN FROM SWITCH OR RCD TO SECOND OR THIRD NEUTRAL BAR

5

K5568s 17TH EDITION CABLE KIT FOR SWITCH AND TWIN RCD ARRANGEMENT

5

K5567s A&D CABLE KIT FOR SWITCH PLUS TRIPLE RCD ARRANGEMENT

5

K5563S
For use when assembling split-load arrangement.

K5565S
For use when assembling a consumer unit in a multi-incomer arrangement with separate supply to each incomer. These kits must be used to ensure compliance with BS EN 60439-3

5562s EXTENSION TERMINAL FOR USE WHEN ASSEMBLING A CONSUMER UNIT AS A DISTRIBUTION BOARD. ENABLES DIRECT CONNECTION OF CABLES TO THE NEUTRAL BAR. CONSISTS OF A 25MM2 CAPACITY TERMINAL WITH CLAMP SCREW

1

K8041s LOCKING DEVICE FOR USE WHEN LOCKING A SENTRY MCB, RCBO, RCD OR SWITCH DISCONNECTOR IN EITHER THE ON OR OFF POSITION

10

K5593s BARREL LOCK AND KEY KIT SUITABLE FOR SECURING 'K' SERIES SENTRY CONSUMER UNIT LIDS. ONLY SUITABLE FOR HYBRID AND INSULATED CONSUMER UNITS

1

5544s MCB BLANK – GREY DESIGNED TO FILL UNUSED MODULES IN SENTRY CONSUMER UNITS AND SMALL ENCLOSURES. DIN-RAIL MOUNTED

5

K5545sMAG COVER MOUNTED BLANK FOR FILLING SPACES IN THE 'K' SERIES SENTRY CONSUMER UNIT COVER, WHERE THERE ARE UNUSED MODULES

10

K5511s BUSBAR 11 MODULE

1

K5590s BUSBAR 20 MODULE

1

KAX26s BUSBAR COVER SUITABLE FOR INSULATING THE BUSBARS K5511S AND K5590S 20 MODULE. ONLY SUITABLE FOR HYBRID AND INSULATED CONSUMER UNITS

10

K5597s CONSUMER UNIT LABELS ADDITIONAL PRINTED AND BLANK LABELS, FOR IDENTIFYING DEVICES AND CIRCUITS ON DUAL & TRIPLE RCD BOARDS

5

K5599s CONSUMER UNIT LABELS ADDITIONAL PRINTED AND BLANK LABELS, FOR IDENTIFYING DEVICES AND CIRCUITS ON SINGLE RCD BOARDS

5

K5804sD1MAG K5808sD1MAG K5812sD1MAG K5816sD1MAG K5821sD1MAG REPLACEMENT PLASTIC FRONT COVERS

K6060SMET
16 WAY METAL CONSUMER
UNIT SURFACE MOUNTING KIT

K6061SMET
12 WAY METAL CONSUMER
UNIT STACKING KIT

K6062SMET
16 WAY METAL CONSUMER
UNIT STACKING KIT

1

1

1



PRODUCT APPLICATION

ASPECT DOUBLE SOCKET – BESPOKE FINISH

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit www.mkelectric.co.uk





SENTRYSOCKET®

RANGE INTRODUCTION

Sentrysocket provides a high level of protection against electrocution and is available in 4 MK wiring device ranges to suit most applications.

FEATURES & BENEFITS

ACTIVE CONTROL CIRCUIT

This version of Sentrysocket incorporates a 'RE-SET' mechanism and is mains failure sensitive ie. it will function under all normal conditions expected of an RCD but it will also trip in the event of a power cut or a dramatic reduction in mains voltage. This makes it ideal for use where hazardous situations could occur due to equipment such as rotating machinery and heat developing apparatus becoming suddenly energised after a power cut.

PASSIVE CONTROL CIRCUIT

This version of Sentrysocket incorporates a 'STAY-SET' mechanism and is mains failure proof ie. it will function under all normal conditions expected of an RCD but will not trip in the event of a power cut. This makes it suitable for freezers or use in inaccessible or unmanned locations.

ALL SENTRYSOCKETS ARE PULSATING D.C. AND A.C. FAULT CURRENT SENSITIVE PRODUCTS



Technical Hotline
+44 (0)1268 563720

Sentrysocket®

RCD Protected Switchsocket Outlets

13 AMP
LOGIC PLUS
FLUSH

ALBANY PLUS
FLUSH

METALCLAD PLUS
SURFACE

MASTERSEAL PLUS
IP66
SURFACE



K6300WHI



K6303WHI



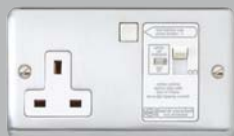
K6231WHI



K6233WHI



K6301BRC



K6304BSS



K6102ALM



K6302ALM



K6305ALM



K6231ALM



K6233ALM



K56301GRY



K56231BLK



K56231WHI

K6300WHI
1 GANG DP, 30mA RATED,
TRIPPING CURRENT,
ACTIVE CONTROL CIRCUIT

1

K6303WHI
1 GANG DP, 30mA RATED,
TRIPPING CURRENT, PASSIVE
CONTROL CIRCUIT

1

K6231WHI
2 GANG SP, 30mA RATED,
TRIPPING CURRENT,
ACTIVE CONTROL CIRCUIT

1

K6233WHI
2 GANG SP, 30mA RATED,
TRIPPING CURRENT,
PASSIVE CONTROL CIRCUIT

1

MOUNTING BOXES

Flush: 886ZIC – 35mm deep
Boxes must have a minimum depth
of 30mm

SURFACE

K2140WHI, 30mm deep, products have
up to 15mm thick frontplates

DIMENSIONS

86 x 146mm

FIXING CENTRES
120.6mm

BS 7288:1990

K6301BSS
K6301BRC
K6301PCR
K6301SAG
1 GANG DP
30mA RATED TRIPPING
CURRENT
ACTIVE CONTROL CIRCUIT
K6304BRC
K6304BSS
1 GANG DP
30mA RATED TRIPPING
CURRENT
PASSIVE CONTROL CIRCUIT

1

1

1

1

1

1

1

1

1

MOUNTING BOXES

Flush: 886ZIC – 35mm deep
Boxes must have a minimum depth
of 30mm

SURFACE

with knockouts: K897ALM
without knockouts: K830ALM

DIMENSIONS

86 x 146mm

FIXING CENTRES
120.6mm

BS 7288:1990

K6102ALM
1 GANG DP
10mA RATED TRIPPING
CURRENT
ACTIVE CONTROL CIRCUIT
K6302ALM
1 GANG DP
30mA RATED TRIPPING
CURRENT
ACTIVE CONTROL CIRCUIT
K6305ALM
1 GANG DP
30mA RATED TRIPPING
CURRENT
PASSIVE CONTROL CIRCUIT

1

1

1

1

1

1

1

DIMENSIONS

86 x 147 x 54mm

KNOCKOUTS

8 x 20mm

Three in top side, two in bottom side,
one in each end and one in base

SPARE BOX

K897ALM

BS 7288:1990

K6231ALM
2 GANG SP
30mA RATED TRIPPING
CURRENT
ACTIVE CONTROL CIRCUIT
K6233ALM
2 GANG SP
30mA RATED TRIPPING
CURRENT
PASSIVE CONTROL CIRCUIT

1

1

1

1

DIMENSIONS

86 x 147 x 54mm

KNOCKOUTS

8 x 20mm

Three in top side, two in bottom side,
one in each end and one in base

SPARE BOX

K897ALM

BS 7288:1990

K56301GRY
K56301WHI
K56301BLK
1 GANG DP
30mA RATED TRIPPING
CURRENT ACTIVE CONTROL
CIRCUIT
K56231GRY
K56231WHI
K56231BLK
2 GANG SP
30mA RATED TRIPPING
CURRENT ACTIVE CONTROL
CIRCUIT

1

1

1

1

1

1

1

1

1

K56233GRY
K56233WHI
K56233BLK
2 GANG SP
30mA RATED TRIPPING
CURRENT
PASSIVE CONTROL CIRCUIT

1

1

1

Fixing holes are for No.8 woodscrews
(not supplied).
Supplied with an earth terminal in
the back box. The Sentrysocket has
5 entries. Suitable for supply voltage
of 240V a.c.

Standard Shutters

DIMENSIONS

157 x 175 x 89mm

BS 7288:1990

IP66 BS EN 60529:1992

ALL SENTRYSOCKETS ARE PULSATING D.C. AND A.C. FAULT CURRENT SENSITIVE PRODUCTS:

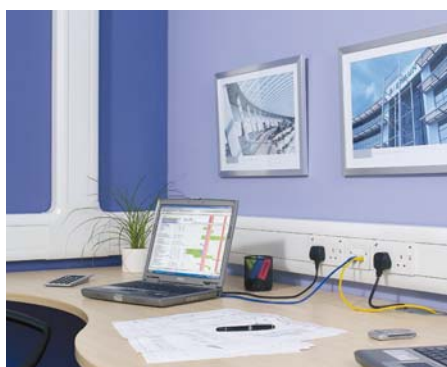
It is important to ensure that the correct control circuit, active or passive, is selected for each application.
Suitable for supply voltage of 240V a.c.

Prestige 3D

mkelectric.co.uk



Prestige 3D is a family of three compartment trunking from MK Electric, which satisfies the growing demands of cable management installations, as well as providing greater trunking depth to cater for Cat 5e, 6 and 7 structured cabling. Prestige 3D is rich in unique features offering greater cabling capacity and improved aesthetics.



**PRESTIGE 3D
DADO AND SKIRTING**

PRESTIGE 3D DADO AND SKIRTING

Prestige 3D Dado and Skirting offers a comprehensive range of Cat 5e, 6 and 7 compliant full 3 compartment trunking with maximum cable capacity.

- Fully Cat 5e, 6 and 7 compliant
- Patented Data Sweep maximises cable capacity without the need for bulbous corners



**PRESTIGE 3D
ANTIBAC BLUE**

PRESTIGE 3D ANTIBAC BLUE

Prestige 3D Antibac Blue offers an antibacterial cable management solution for power and data distribution in environments where hygiene is a priority. Prestige 3D Antibac Blue is designed to kill bacteria which can grow on surfaces such as trunking systems. It uses a silver based additive inherent within the PVCu which acts as an effective weapon in fighting harmful bacteria such as MRSA. Independent laboratory tests show kill rate of >99.9% over a 24 hour period for MRSA, and Klebsiella pneumoniae.

- Improved aesthetics with single piece covers
- All PVC extrusions manufactured from 100% recycled materials*



**PRESTIGE 3D
COMPACT**

PRESTIGE 3D COMPACT

Prestige 3D Compact is a Dado system which has a smaller footprint and offers a solution where space is restricted such as above radiators and below window sills. Cables are run in the top and bottom compartments allowing the full depth of the centre compartment for termination to devices. The Compact range is a lower price alternative especially if there are low quantities of cable to manage.

- 10 Year guarantee

*Based on 2014 consumption



PRESTIGE 3D DADO AND SKIRTING

RANGE INTRODUCTION

Prestige 3D Dado and Skirting offers a comprehensive range of Cat 5e, 6 and 7 compliant compartment trunking with maximum cable capacity.

Prestige 3D meets both the demands for easier and faster installation while maintaining high aesthetics.

HOW TO SPECIFY

A range of 3 compartment Dado and Skirting manufactured from recycled PVCu, designed with a curved covers to compliment MK Logic Plus accessories. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilising data sweeps that ensure no loss of capacity without the need for bulky protruding covers. Products to have pre-punched bases and divider knockouts at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

FEATURES & BENEFITS

CAT 5E, 6 & 7 COMPLIANT

Flexible Internal and External Corners, moulded Flat Angles and Tees

TOOL FREE CABLE ENTRY

Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool-free cable entry

MAXIMISES CAPACITY

Innovative External Corner Data Sweep allows continuous cable capacity and maintains the minimum trunking depth

PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

HINGED LID

Supports cables during installation

STYLISH AND ROBUST

Curved outer covers that complement MK Logic Plus accessories

MADE FROM 100% RECYCLED PVCu*

10 YEAR GUARANTEE

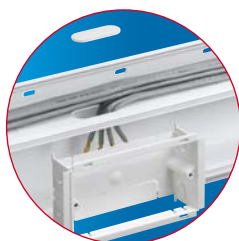
*Based on 2014 consumption

MK Electric Catalogue

291

Prestige 3D Dado and Skirting

mkelectric.co.uk



DIVIDER KNOCKOUTS

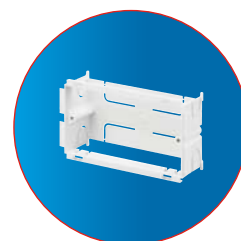
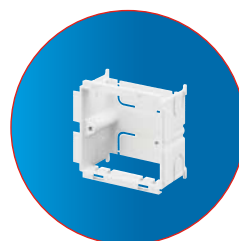
Wiring is also made easy with 50 x 21mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.

BACK BOXES

1, 2 and 3 gang 45mm deep back boxes and 1 and 2 gang 40mm frames ensure Cat 5e, 6 and 7 compliance and ease of connection to power and data devices. The open top/bottom allows unhindered tool free cable entry, through the trunking compartment divider knockout. The back box can slide to align with appropriate knockout (see technical pages for restrictions on use).

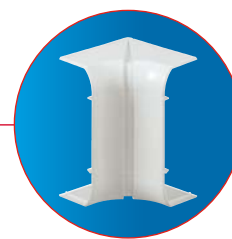
END CAPS

Neatly finishes runs of trunking. (Moulding provides internal location for extra security from optional screw fixing).



PRE-PUNCHED BASES

Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensures no drilling is required.



INTERNAL CORNER

Designed to accommodate irregularities in the squareness of the corner with a +/- 5 degrees flexibility range. The centre split gives maximum adjustment. Covers are radiused and compatible with Cat 5e, 6 and 7 data cabling requirements.

PART M

Compliance to Part M building regulations can be achieved using Part M flange, charcoal devices or charcoal straight cover.



SCREW FIXING KIT

Where higher security is required, e.g. schools, all fitting covers can be secured using the Screw Fixing Kit.

The Screw Fixing Kit is self-locating on the styling line of the system and has a cover to hide the screw head.



Technical Hotline
+44 (0)1268 563720

Prestige 3D Dado and Skirting



FLAT TEES AND ANGLES

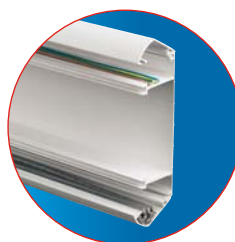
The ingenuity of the patented tee design allows a variety of cable drop permutations. The tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct segregation and Cat 5e, 6 and 7 compliance. Screw fixing hole locations have a protective shroud to prevent the chafing of cables.

Both the Flat Angle and Tee compartment divider walls are curved (Cat 5e, 6 and 7 compliant) to allow data cables to lay in with no loss of capacity. The covers are one piece and clip securely into place, and the base is also a single moulded item, giving more strength than fabrication. Joint covers are not required where the tee/angle meets the trunking as the moulded covers now overlap the junction.



ELECTROMAGNETIC INTERFERENCE

Additional data cable/signal protection is provided by fitting screening divider VP30.

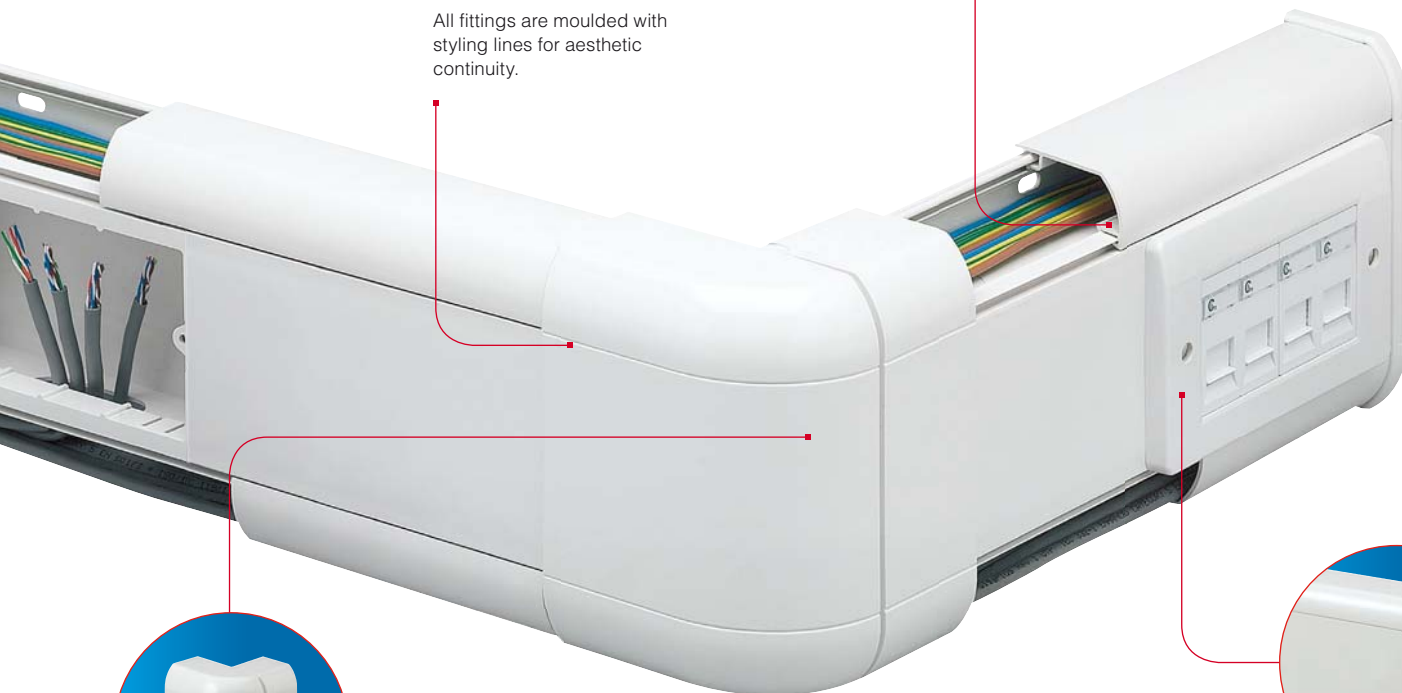


TRUNKING HINGE LIDS

A two stage location gives a hinge effect, enabling cables to be supported by the trunking cover during the installation. Cover design avoids dust traps and makes cleaning easier, and continues the aesthetics of the trunking.

STYLING LINES

All fittings are moulded with styling lines for aesthetic continuity.



EXTERNAL CORNER

External Corners accommodate +/- 5 degree irregularities in the squareness of a corner. Corners come ready assembled to click into place, and offset side splits hide the effect of the split line for aesthetics.



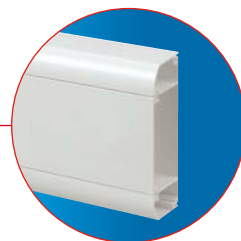
DATA SWEEP

The unique patented Data Sweep provides Cat 5e, 6 and 7 data cabling compliance, with no loss of capacity and without the need for bulky, protruding corner covers.

CHOICE OF TWO PROFILES

Available in Dado and Skirting profiles to suit most installations.

Available in white and charcoal.



Prestige 3D Dado and Skirting

mkelectric.co.uk



Component Selector Chart

Profile Lengths

Main Carrier

3 METRES
6m



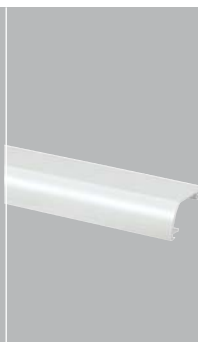
Straight Cover

3 METRES
30m



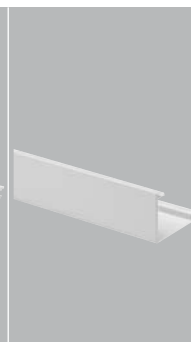
Curved Cover

3 METRES
30m



Square Cover

3 METRES
30m



Fittings

Flexible Internal Corner

2



VP180WHI
VP180CHA

VP100WHI
VP100CHA*

VP110WHI X2
VP110CHA X2

VP181WHI
VP181CHA



VP180WHI
VP180CHA

VP100WHI
VP100CHA*

VP110WHI
VP110CHA

VP115WHI
VP115CHA

VP191WHI
VP191CHA

* Use Charcoal lid to help achieve compliance to Part M



Technical Hotline
+44 (0)1268 563720

Prestige 3D Dado and Skirting

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Flexible External Corner

CONSISTS OF
COVER AND
DATA SWEEP

2

End Cap

SUPPLIED AS LEFT
AND RIGHT-HAND
PAIR

2

Joint Cover

5

Flat Angle

CONSISTS OF
COVER AND
CARRIER

1

Flat Tee

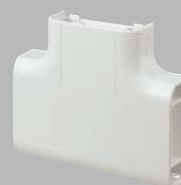
CONSISTS OF
COVER AND
CARRIER

1

Adaptor

SUITABLE FOR
20 AND 25MM CONDUIT
AND YT2 AND YT4
MINI-TRUNKING

10



VP182WHI
VP182CHA

VP183WHI
VP183CHA

VP184WHI
VP184CHA

VP185WHI
VP185CHA

VP187WHI
VP187CHA

VP188WHI
VP188CHA

VP192WHI
VP192CHA

VP193WHI
VP193CHA

VP194WHI
VP194CHA

FLAT ANGLE UP
VP195WHI
VP195CHA

FLAT ANGLE DOWN
VP196WHI**
VP196CHA**

VP197WHI
VP197CHA

VP188WHI
VP188CHA

** These items are fabricated

Prestige 3D Dado and Skirting

mkelectric.co.uk



Accessories

Socket Spacer



VP129WHI
VP129CHA
SOCKET SPACER
25MM WIDE

50
50

Visible width is 9mm after
installation.

Part M Flange and Socket Spacer



VX40CHA
VX40BLU
PART M FLANGE FITTED
BOTH SIDES OF A DEVICE
VX41CHA
VX41BLU
PART M SOCKET SPACER

20
20

10
10

Provides colour contrast with wiring
device to comply with Part M.
Visible width is 25mm after
installation.

Open Back Boxes



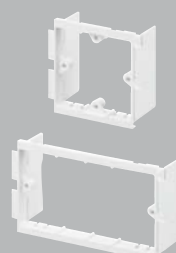
VP121WHI
1 GANG 45MM
OPEN BACK BOX
VP122WHI
2 GANG 45MM
OPEN BACK BOX
VP123WHI
3 GANG 45MM
OPEN BACK BOX

25

10

5

Open Mounting Frames*



VP131WHI
VP131CHA
1 GANG 40MM OPEN
MOUNTING FRAME
VP132WHI
VP132CHA
2 GANG 40MM OPEN
MOUNTING FRAME

25

25

10

10

1 Gang frame is used in vertical
applications.

Wings may be removed for greater
wiring space.

*Open mounting frames are only
suitable where services running in
the centre compartment are the same
as that of the accessory.

MCB/RCD Housing



VP35WHI
MCB/RCD HOUSING
WITH COVER
(ACCESSORY NOT SUPPLIED)

1

Mounts directly to central compartment
of trunking to accept up to 2 x one
module products from the Sentry range
of MCBs and RCDs (excluding one
module RCBOs).

Cable Retainer



VP105WHI
CABLE RETAINER

50

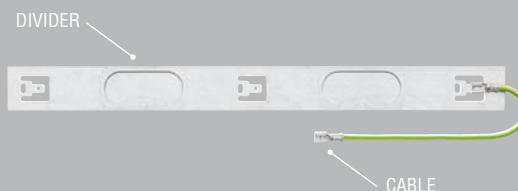
Screw Fixing Kit



VTS1000
SCREW FIXING KIT

20

Screening Divider



VP30**
1.5M SCREENING
DIVIDER
VX31
300MM SCREEN
CONNECTING CABLE

15m

10

** Cable not included



PRESTIGE 3D
ANTIBAC BLUE
INSTALLED WITH
LOGIC PLUS PART
M SWITCH SOCKET
OUTLETS

PRESTIGE 3D ANTIBAC BLUE

RANGE INTRODUCTION

Prestige 3D Antibac Blue offers an antibacterial cable management solution for power and data distribution in environments where hygiene is a priority.

With ongoing concern over hospital acquired infections such as MRSA, the demand for antibacterial products continues to rise. Prestige 3D Antibac Blue is designed to kill bacteria which can grow on surfaces such as trunking systems. It uses a silver based additive inherent within the PVCu which acts as an effective weapon in fighting harmful bacteria such as MRSA, and Klebsiella pneumoniae. MK offer a complete antibacterial solution, by complementing Prestige 3D Antibac Blue with Logic Plus wiring devices, the entire installation will meet the requirements of an antibacterial specification. The trunking and wiring devices are both open to contact, therefore the control of the spread of bacteria and infections can only be effective with a complete solution. MK's Prestige 3D Antibac Blue range will meet the demands of the Healthcare Trusts, Infection Control Departments or Facilities Managers specifying antibacterial products.

HOW TO SPECIFY

A range of antibacterial 3 compartment Dado and Skirting, designed with a curved covers to compliment MK Logic Plus accessories. Products to have Blue fluorescent additive to clearly identify antibacterial properties. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilising data sweeps that ensure no loss of capacity without the need for bulky protruding covers. Products to have pre-punched bases and divider knockouts at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

FEATURES & BENEFITS

UNIQUE ANTIBACTERIAL SOLUTION

Offers a complete antibacterial solution. >99.9% kill rate against MRSA and Klebsiella pneumoniae

UNIQUE PATENTED FLUORESCENCE

Demonstrable under UV light, providing customer confidence

CAT5E, 6 & 7 COMPLIANT

Flexible internal and external corners, moulded flat angles and tees

TOOL FREE CABLE ENTRY

Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool free cable entry

MAXIMISES CAPACITY

Innovative external corner data sweep allows continuous cable capacity and maintains the minimum trunking depth

PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

TAMPER RESISTANT

Screw fixing Kit available for installations where higher security is required e.g. public buildings, hospitals, schools

PART M COMPLIANCE

Achievable utilising MK Logic Plus Graphite accessories or Part M Flange or Socket Spacer

10 YEAR GUARANTEE

Prestige 3D Antibac Blue

mkelectric.co.uk



Reports show 300,000 healthcare associated infections were contracted in the UK in 2008, with an annual investment of £270million in infection control.

- Healthcare associated infections cause 5000 deaths a year, at a cost of £1billion.
- Patients recovering from such infections spend on average 10 extra days in hospital, which costs the NHS three times their original treatment.
- The use of antibacterial products supports the existing infection control initiatives such as hand hygiene and barrier nursing.



PRESTIGE 3D **ANTIBAC BLUE** INSTALLED WITH MEIGAN SOCKET OUTLETS

HOW DOES PRESTIGE 3D ANTIBAC BLUE WORK?

Prestige 3D Antibac Blue is an antibacterial 3 compartment power and data trunking system designed to kill bacteria which can grow on surfaces.

It uses a silver based additive inherent within the PVCu which acts as an effective weapon in fighting bacteria such as MRSA and other harmful bacteria. The silver additive is a bactericide and will therefore kill bacteria instead of just restricting their growth.

As the additive is inherent within the PVCu compound the antibacterial protection runs throughout the products themselves. There is no loss of protection where the trunking lengths are cut on-site or if the trunking surface becomes scuffed or scratched.

The antibacterial additive depends on intimate contact between surfaces of the trunking and the user, so any barriers such as dirt or grime will reduce or negate the antibacterial effect.

Prestige 3D Antibac Blue is not intended to replace standard cleaning regimes. It is an additional protection which can only operate efficiently if the surfaces are kept free of dirt and grime.

The antibacterial additive used in Prestige 3D Antibac Blue is registered with the Environmental Protection Agency (EPA) and compliant with the European Biocidal Products Directive (BPD).

The additive provides effective protection against both gram positive and gram negative bacteria, unlike some other anti-bacterial additives which are only effective against gram positive bacteria.



Technical Hotline
+44 (0)1268 563720

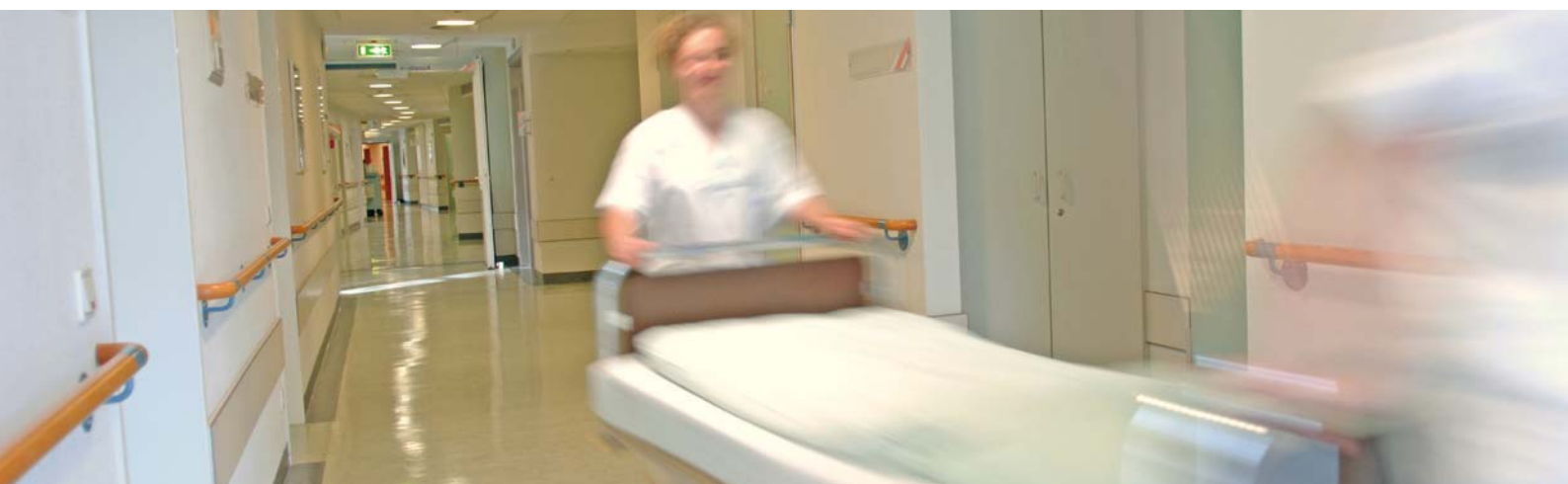
Prestige 3D Antibac Blue

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

MK Electric have commissioned independent tests to verify the antibacterial properties of Prestige 3D Antibac Blue.

The results, collected over a 24 hour period shows results of >99.9% kill rates on the organisms MRSA, and Klebsiella pneumoniae.

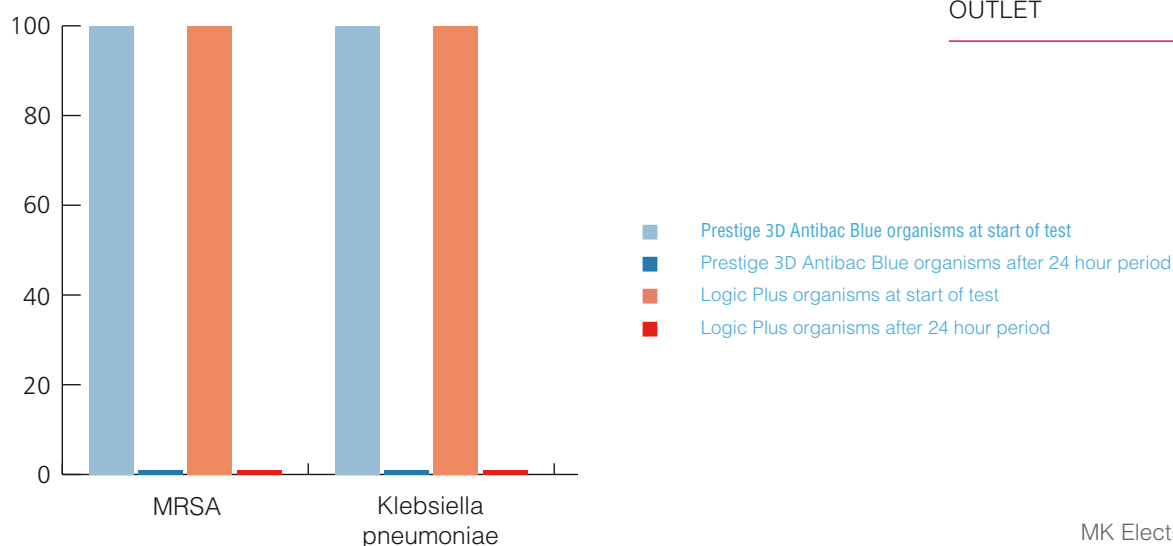
MK Electric have also commissioned independent tests to verify the antibacterial properties of Logic Plus. The results, collected over a 24 hour period shows results of 99.9% kill rates on the organism MRSA and 98.9% kill rates on the organism Klebsiella pneumoniae.



PRESTIGE 3D ANTIBAC BLUE			LOGIC PLUS	
	% ORGANISMS AT START OF TEST	% ORGANISMS AFTER 24 HOUR PERIOD	% ORGANISMS AT START OF TEST	% ORGANISMS AFTER 24 HOUR PERIOD
MRSA	100	<0.1	100	0.1
KLEBSIELLA PNEUMONIAE	100	<0.1	100	1.1



LOGIC PLUS SWITCHSOCKET
OUTLET



Prestige 3D Antibac Blue

mkelectric.co.uk



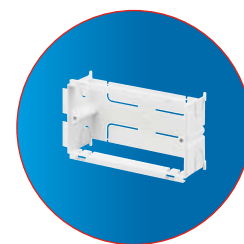
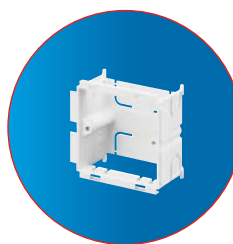
DIVIDER KNOCKOUTS

Wiring is also made easy with 50 x 21mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes, with no drilling or cutting.



BACK BOXES

1, 2 and 3 gang 45mm deep back boxes and 1 and 2 gang 40mm frames ensure Cat 5e, 6 and 7 compliance and ease of connection to power and data devices. The open top/bottom allows unhindered tool free cable entry, through the trunking compartment divider knockout. The back box can slide to align with appropriate knockout (see technical pages for restrictions on use).



END CAPS

Neatly finishes runs of trunking. (Moulding provides internal location for extra security from optional screw fixing).



PRE-PUNCHED BASES

Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensures no drilling is required.



PART M

Compliance to Part M building regulations can be achieved using Part M flange or charcoal devices.



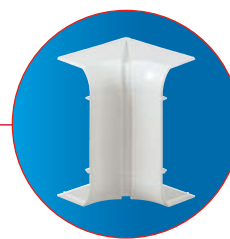
SCREW FIXING KIT

Where higher security is required, e.g. schools, all fitting covers can be secured using the Screw Fixing Kit.

The Screw Fixing Kit is self-locating on the styling line of the system and has a cover to hide the screw head.

INTERNAL CORNER

Designed to accommodate irregularities in the squareness of the corner with a +/- 5 degrees flexibility range. The centre split gives maximum adjustment. Covers are radiused and compatible with Cat 5e, 6 and 7 data cabling requirements.



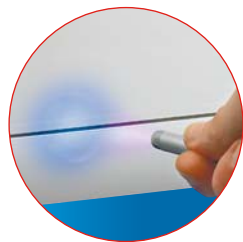


Technical Hotline
+44 (0)1268 563720

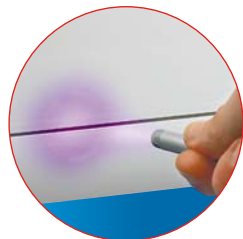
Prestige 3D Antibac Blue

UNIQUE FLUORESCENCE

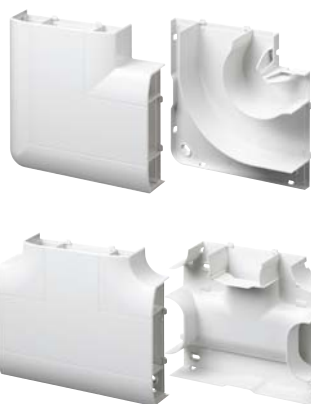
For complete customer confidence, Prestige 3D Antibac Blue features a patented fluorescent additive which glows bright blue under a UV light, unlike standard PVCu which glows dull purple.



PRESTIGE 3D ANTIBAC BLUE



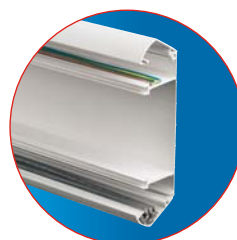
PRESTIGE 3D



FLAT TEES AND ANGLES

The ingenuity of the patented tee design allows a variety of cable drop permutations. The tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct segregation and Cat 5e, 6 and 7 compliance. Screw fixing hole locations have a protective shroud to prevent the chafing of cables.

Both the Flat Angle and Tee compartment divider walls are curved (Cat 5e, 6 and 7 compliant) to allow data cables to lay in with no loss of capacity. The covers are one piece and clip securely into place, and the base is also a single moulded item, giving more strength than fabrication. Joint covers are not required where the tee/angle meets the trunking as the moulded covers now overlap the junction.

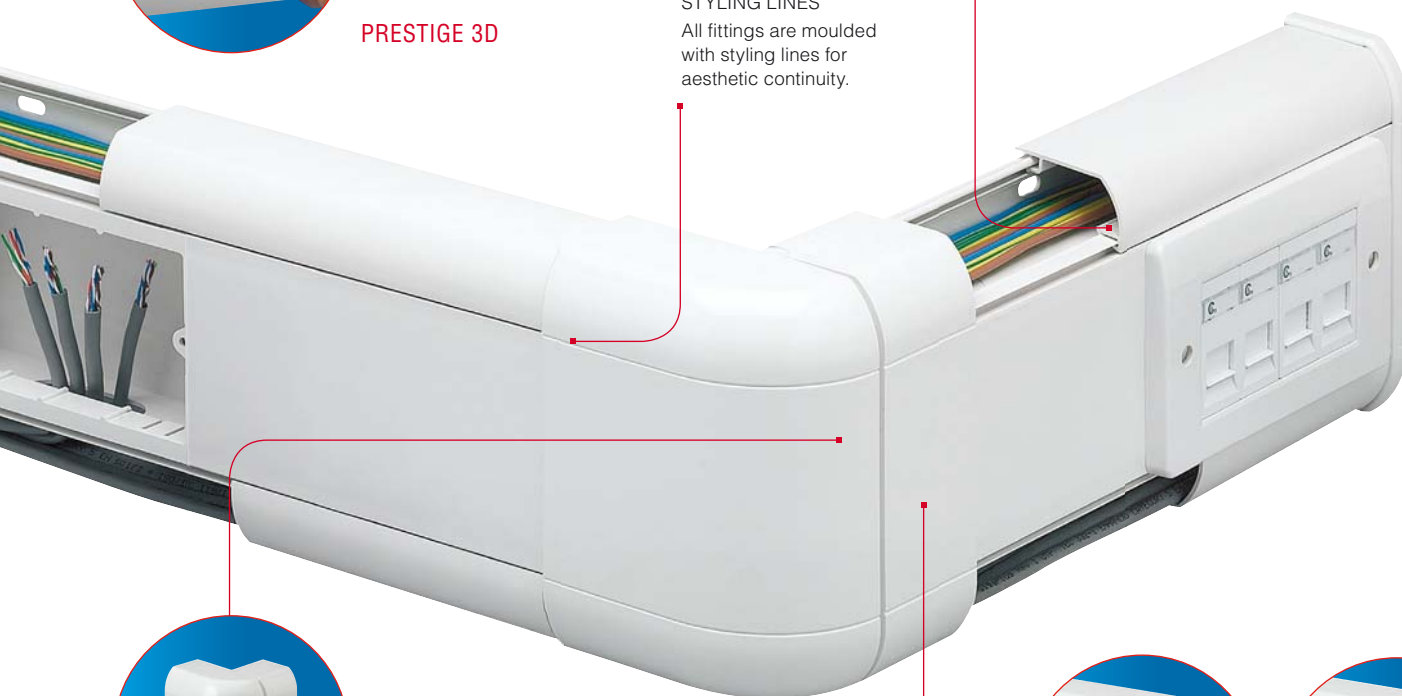


TRUNKING HINGE LIDS

A two stage location gives a hinge effect, enabling cables to be supported by the trunking cover during the installation. Cover design avoids dust traps and makes cleaning easier, and continues the aesthetics of the trunking.

STYLING LINES

All fittings are moulded with styling lines for aesthetic continuity.



EXTERNAL CORNER

External Corners accommodate +/- 5 degree irregularities in the squareness of a corner. Corners come ready assembled to click into place, and offset side splits hide the effect of the split line for aesthetics.

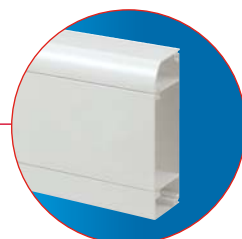
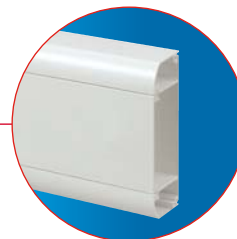


DATA SWEEP

The unique patented Data Sweep provides Cat 5e, 6 and 7 data cabling compliance, with no loss of capacity and without the need for bulky, protruding corner covers.

ELECTROMAGNETIC INTERFERENCE

Additional data cable/signal protection is provided by fitting screening divider VP30.



CHOICE OF TWO PROFILES

Available in Dado and Skirting profiles to suit most installations.

Prestige 3D Antibac Blue

mkelectric.co.uk



Profile Lengths

Component
Selector
Chart

**Main
Carrier***

3 METRES
6m

**Straight
Cover**

3 METRES
6m

**Curved
Cover**

3 METRES
30m

**Square
Cover**

3 METRES
30m

Fittings

**Flexible
Internal
Corner**

2

**Flexible
External
Corner**

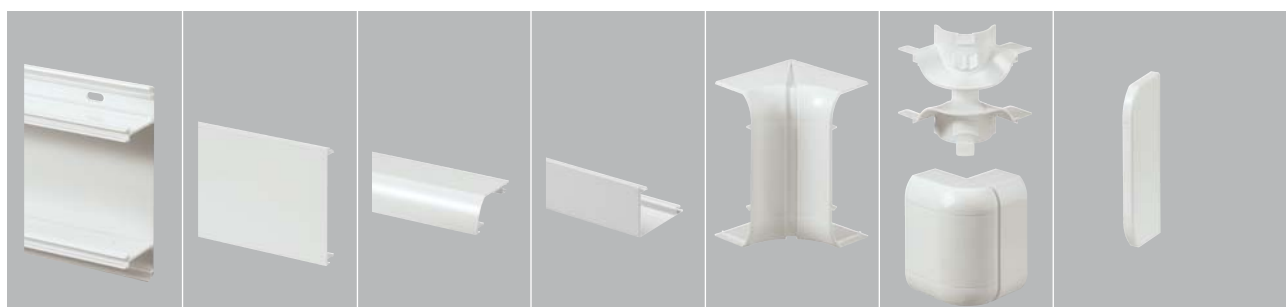
CONSISTS OF
COVER AND
DATA SWEEP

2

End Cap

SUPPLIED
AS LEFT AND
RIGHT-HAND
PAIR

2



VP180WHI

VPAB100WHI

VPAB110WHI
X2

VPAB181WHI

VPAB182WHI

VPAB183WHI



VP180WHI

VPAB100WHI

VPAB110WHI

VPAB115WHI

VPAB191WHI

VPAB192WHI

VPAB193WHI

* Carrier components do not require the antibacterial additive as they have no exposure once the installation is complete. As such, the standard main carrier is sufficient, as are standard back boxes, mounting frames and cable retainers. The carrier components of the External Corner, Flat Angle and Flat Tee are also standard PVCu due to no exposure once installation is complete.



Technical Hotline
+44 (0)1268 563720

Prestige 3D Antibac Blue

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Accessories

Joint Cover

2

Flat Angle

CONSISTS OF
COVER AND
CARRIER

1

Flat Tee

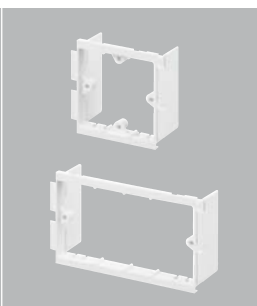
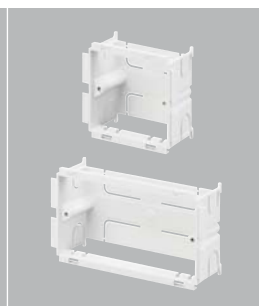
CONSISTS OF
COVER AND
CARRIER

1

Flange and Socket Spacer

Open Back Boxes

Open Mounting Frames*



VPAB184WHI

VPAB185WHI

VPAB187WHI

VXAB40CHA* 20
PART M FLANGE FITTED
BOTH SIDES OF A DEVICE

VXAB41CHA* 10
PART M SOCKET SPACER

VPAB129WHI** 50
SOCKET SPACER

Provides colour contrast with
wiring device to comply with
Part M.

* Visible width is 25mm after
installation.

** Visible width is 9mm after
installation.

VP121WHI 25
1 GANG 45MM
OPEN BACK BOX

VP122WHI 10
2 GANG 45MM
OPEN BACK BOX

VP123WHI 5
3 GANG 45MM
OPEN BACK BOX

VP131WHI 25
1 GANG 40MM OPEN
MOUNTING FRAME

VP132WHI 10
2 GANG 40MM OPEN
MOUNTING FRAME

1 Gang frame is used in vertical
applications.
Wings may be removed for greater
wiring space.

*Open mounting frames are only
suitable where services running in
the centre compartment are
the same as that of the accessory.

VPAB194WHI

FLAT ANGLE
UP
VPAB195WHI

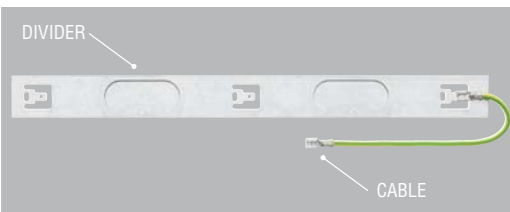
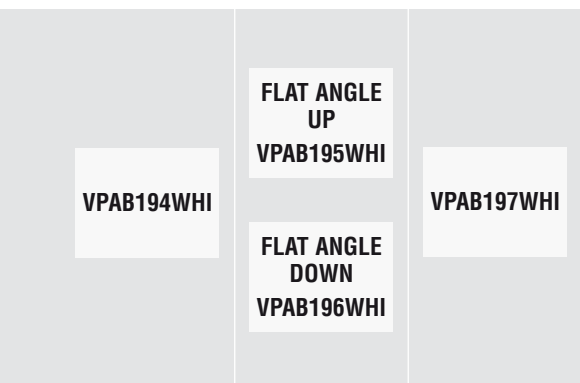
FLAT ANGLE
DOWN
VPAB196WHI

VPAB197WHI

Cable Retainer

Screw Fixing Kit

Screening Divider



VP105WHI 50
CABLE RETAINER

VTSAB1000WHI 20
SCREW FIXING KIT

VP30** 15m
1.5M SCREENING
DIVIDER

VX31 10
300MM SCREEN
CONNECTING CABLE

**Cable not included



CASE STUDY

GLASGOW ROYAL INFIRMARY GETS A HEALTHY DOSE OF PRESTIGE 3D ANTIBAC BLUE

Infection control is a major concern in the healthcare sector. To help reduce the risk of spreading infections, bacteria and more, Glasgow Royal Infirmary's Intensive Care Unit installed more than 55 metres of Prestige 3D Antibac Blue during a recent refurbishment — becoming the first hospital in the UK to improve patient and staff safety through antibacterial cabling.

BENEFITS

COMPLETE SOLUTION

Only MK Electric offers a complete antibacterial solution that includes both wiring devices and cable management, but the single course for every product was just one of the reasons that the Glasgow Royal Infirmary chose Prestige 3D Antibac Blue. The product is also complete in that it offers effective protection against both gram-positive and gram-negative bacteria rather than just one.

BEYOND HEALTHCARE

Of course, the hospital would not have chosen Prestige 3D Antibac Blue if it wasn't also an outstanding cable management solution above and beyond its health benefits. Like any healthcare facility, Glasgow Royal Infirmary's Intensive Care Unit has a large number of people moving about at any given time. The cable management provided by MK Electric not only ensures proper cabling to all equipment, but also ensures a clean, uncluttered work area for added safety.

For Glasgow Royal Infirmary's Intensive Care Unit, Prestige 3D Antibac Blue is an investment that's sure to have a healthy return.



PRESTIGE 3D COMPACT

RANGE INTRODUCTION

Prestige 3D Compact completes the 3D offering with all the 3D benefits of faster installation, Cat 5e, 6 and 7 compliance and improved aesthetics, but in a smaller footprint & ideal for confined locations.

The new concept uses the full trunking depth with a sliding open box (frame) principle to ease power and data connections.

HOW TO SPECIFY

A range of compact 3 compartment Dado and Skirting manufactured from recycled PVCu, designed with a curved covers to compliment MK Logic Plus accessories. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners utilising data sweeps that ensure no loss of capacity without the need for bulky protruding covers. Products to have pre-punched bases and divider knockouts at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

FEATURES & BENEFITS

CAT5E, 6 & 7 COMPLIANT

Flexible Internal and External Corners, moulded Flat Angles and Tees

TOOL FREE CABLE ENTRY

Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool-free cable entry

MAXIMISES CAPACITY

Innovative External Corner Data Sweep allows continuous cable capacity and maintains the minimum trunking depth

PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

HINGED LID

Mounting frames for LJU6/Euro data outlets to maximise use of space

STYLISH AND ROBUST

Curved outer covers that complement MK Logic Plus accessories

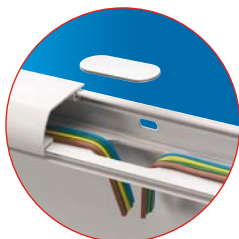
MADE FROM 100% RECYCLED PVCu*

10 YEAR GUARANTEE

*Based on 2014 consumption

Prestige 3D Compact

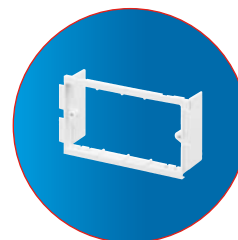
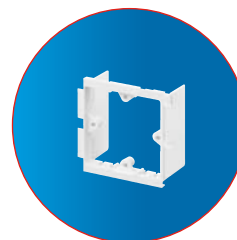
mkelectric.co.uk



DIVIDER KNOCKOUTS
Wiring is also made easy with 50mm x 21mm knockouts at 100mm intervals along compartment dividers, providing instant access to mounting boxes with no drilling or cutting.

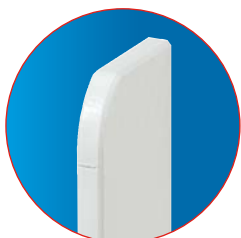
MOUNTING FRAMES

1 gang and 2 gang 'open box' mounting frames use the full trunking depth allowing ease of connection to power and data devices. The open top/bottom allows unhindered tool free cable entry through the trunking compartment divider knockout. The frame can slide to align with appropriate knockout.



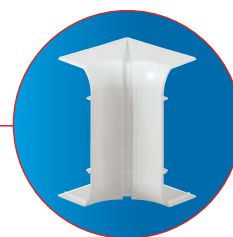
END CAPS

Neatly finishes runs of trunking. Moulding provides internal location for extra security from optional screw fixing.



PRE-PUNCHED BASES

Wall fixing is simplified by the inclusion of pre-punched oval holes at 100mm intervals, ensures no drilling is required.



SCREW FIXING KIT

Where higher security is required, all fitting covers can be secured using the Screw Fixing Kit. The Screw Fixing Kit is self-locating on the styling line of the system and has a cover to hide the screw head.



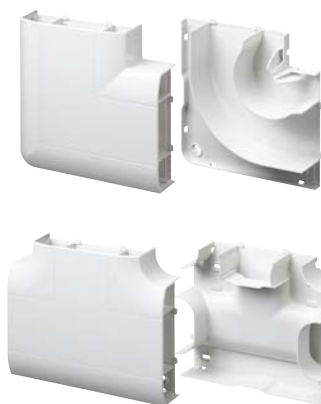
INTERNAL CORNER

Designed to accommodate irregularities in the squareness of the corner with a +/- 5 degree flexibility range. The centre split gives maximum adjustment. Covers are radiused and compatible with Cat 5e, 6 and 7 data cabling requirements.



Technical Hotline
+44 (0)1268 563720

Prestige 3D Compact



FLAT TEES AND ANGLES

The ingenuity of the patented tee design allows a variety of cable drop permutations. The tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct segregation and Cat 5e, 6 and 7 compliance. Screw fixing hole locations have a protective shroud to prevent the chafing of cables.

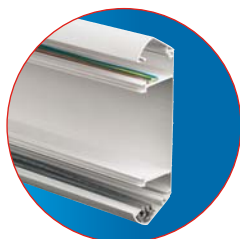
Both the Flat Angle and Tee compartment divider walls are curved (Cat 5e, 6 and 7 compliant) to allow data cables to lay in with no loss of capacity. The covers are one piece and clip securely into place, and the base is also a single moulded item, giving more strength than fabrication. Joint covers are not required where the tee/angle meets the trunking as the moulded covers now overlap the junction.

ELECTROMAGNETIC INTERFERENCE

Additional data cable/signal protection is provided by fitting screening divider VCT30.

STYLING LINES

All fittings are moulded with styling lines for aesthetic continuity.



TRUNKING HINGED LIDS

A patented two stage location gives a hinge effect, enabling cables to be supported by the trunking cover during the installation. Cover design avoids dust traps and makes cleaning easier and continues the aesthetics of the trunking.



EXTERNAL CORNER

External Corners accommodate +/- 5 degree irregularities in the squareness of a corner. Corners come ready assembled to click into place, and offset side splits hide the effect of the split line for aesthetics.

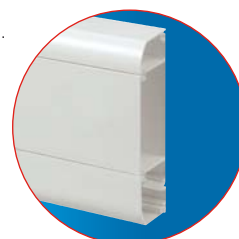
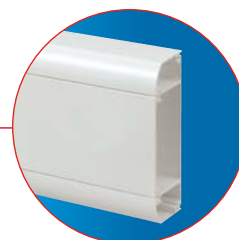
DATA SWEEP

The unique patented Data Sweep provides Cat 5e, 6 and 7 data cabling compliance, with no loss of capacity and without the need for bulky, protruding corner covers.

CHOICE OF TWO PROFILES

Available in Dado and Skirting profiles to suit most installations.

Available in white and charcoal.



Prestige 3D Compact

mkelectric.co.uk



Profile Lengths

Component
Selector
Chart

Main
Carrier

Extension
Carrier

Straight
Cover

Curved
Cover

Extension
Cover

3 METRES
6m

3 METRES
15m

3 METRES
30m

3 METRES
30m

3 METRES
15m



DADO
140 X 45MM

VCT140WHI

VCT100WHI

VCT110WHI X2



EXTENDED DADO
160 X 45MM

VCT140WHI

VCT160WHI

VCT100WHI

VCT110WHI

VCT120WHI



Technical Hotline
+44 (0)1268 563720

Prestige 3D Compact

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Fittings

**Flexible
Internal
Corner**

2



**Flexible
External
Corner**

CONSISTS
OF COVER
AND DATA
SWEEP

2



End Cap

SUPPLIED AS
PAIR OF LEFT
AND RIGHT-
HAND END
CAPS

2



**Joint
Cover**



**Flat Angle
Up**

CONSISTS OF
COVER AND
CARRIER

5



**Flat Angle
Down**

CONSISTS OF
COVER AND
CARRIER

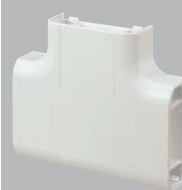
2



Flat Tee

CONSISTS OF
COVER AND
CARRIER

1



VCT141WHI

VCT142WHI

VCT143WHI

VCT144WHI

VCT145WHI

VCT145WHI

VCT147WHI

VCT161WHI

VCT162WHI

VCT163WHI
(2X L/R PAIRS)

VCT164WHI

VCT165WHI

VCT166WHI

VCT167WHI
(UP ONLY)

Prestige 3D Compact

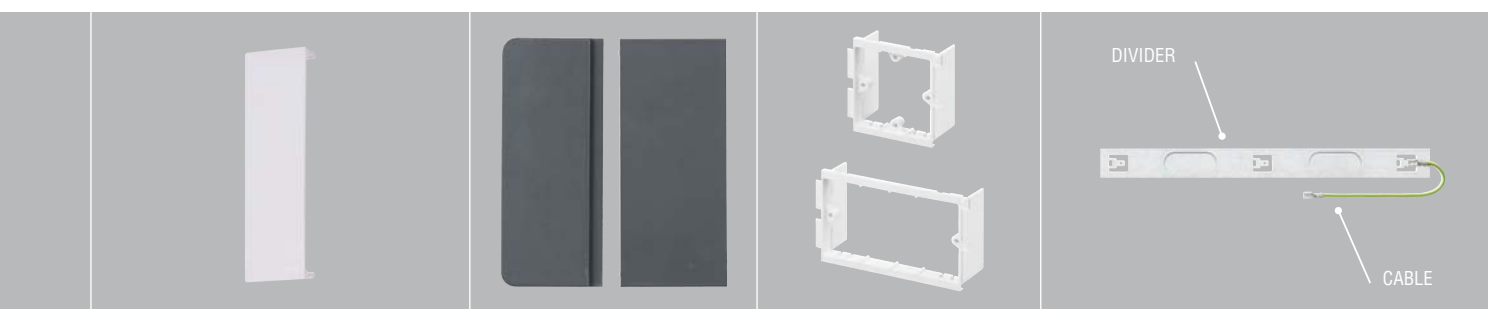
Accessories

Socket Spacer

Part M Flange and Socket Spacer

Open Mounting Frames

Screening Divider



VCT25WHI SOCKET SPACER

10

Visible width is 9mm after installation.

VX40CHA VX40BLU PART M FLANGE FITTED BOTH SIDES OF A DEVICE VX41CHA VX41BLU PART M SOCKET SPACER

20

20

10

10

Provides colour contrast with wiring device to comply with Part M.
Visible width is 25mm after installation.

VCT121WHI 1 GANG 40MM OPEN MOUNTING FRAME VCT122WHI 2 GANG 40MM OPEN MOUNTING FRAME

25

10

Wings may be removed for increased wiring space.

VCT30* 1.5M SCREENING DIVIDER VX31 300MM SCREEN CONNECTING CABLE

15m

10

* Cable not included

Adaptors

SUITABLE FOR 20 AND 25MM CONDUIT AND YT2 AND YT4 MINI-TRUNKING. CONSISTS OF COVER AND CENTRE COMPARTMENT CABLE BRIDGE

Cable Retainer

Screw Fixing Kit

MCB/RCD Housing



VCT148WHI FOR USE WITH COVER VCT110WHI

10

VCT105WHI CABLE RETAINER

50

VTS1000 SCREW FIXING KIT

20

VCT35WHI MCB/RCD HOUSING WITH COVER (ACCESSORY NOT SUPPLIED)

1

Mounts directly to central compartment of trunking to accept up to 2 x one module products from the Sentry range of MCBs and RCDs (excluding one module RCBOs).



PRESTIGE 2COM

RANGE INTRODUCTION

Prestige 2com trunking is designed to meet the needs of current and future data cabling.

Prestige 2com is Cat 5e, 6 and 7 compliant and provides maximum capacity for data cabling.

HOW TO SPECIFY

A range of 60mm deep 2 compartment Dado trunking manufactured from recycled PVCu, designed with covers to maximise data channel cabling. Cat 5e, 6 and 7 compliant on all Tees, Angles, Internal and External corners to avoid deformation. Products to have pre-drilled trunking bases at 100mm intervals to facilitate easy installation without the need for drilling and cutting.

FEATURES & BENEFITS

CAT 5e, 6 & 7 COMPLIANT

50mm radius bends on all corners so cables lie in trunking correctly to avoid any deformation which may result in signal distortion and loss

MAXIMISES CAPACITY

60mm deep trunking with two equal compartments to maximise data channel cabling

FLEXIBLE ACCESSORIES

Accessories can be mounted on either or both compartments – enables maximum use of wiring space in one compartment

FRAMES MAXIMISE SPACE

Mounting frames for LJU6/Euro data outlets to maximise use of space

STYLISH AND ROBUST

Single piece end caps, corners and couplers for improved aesthetics and solid construction. Screw fix option for security of corner fittings

PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL*

* Based on 2014 consumption.

Prestige 2com

mkelectric.co.uk



AESTHETIC PROFILE
Stylish, contoured elegance.

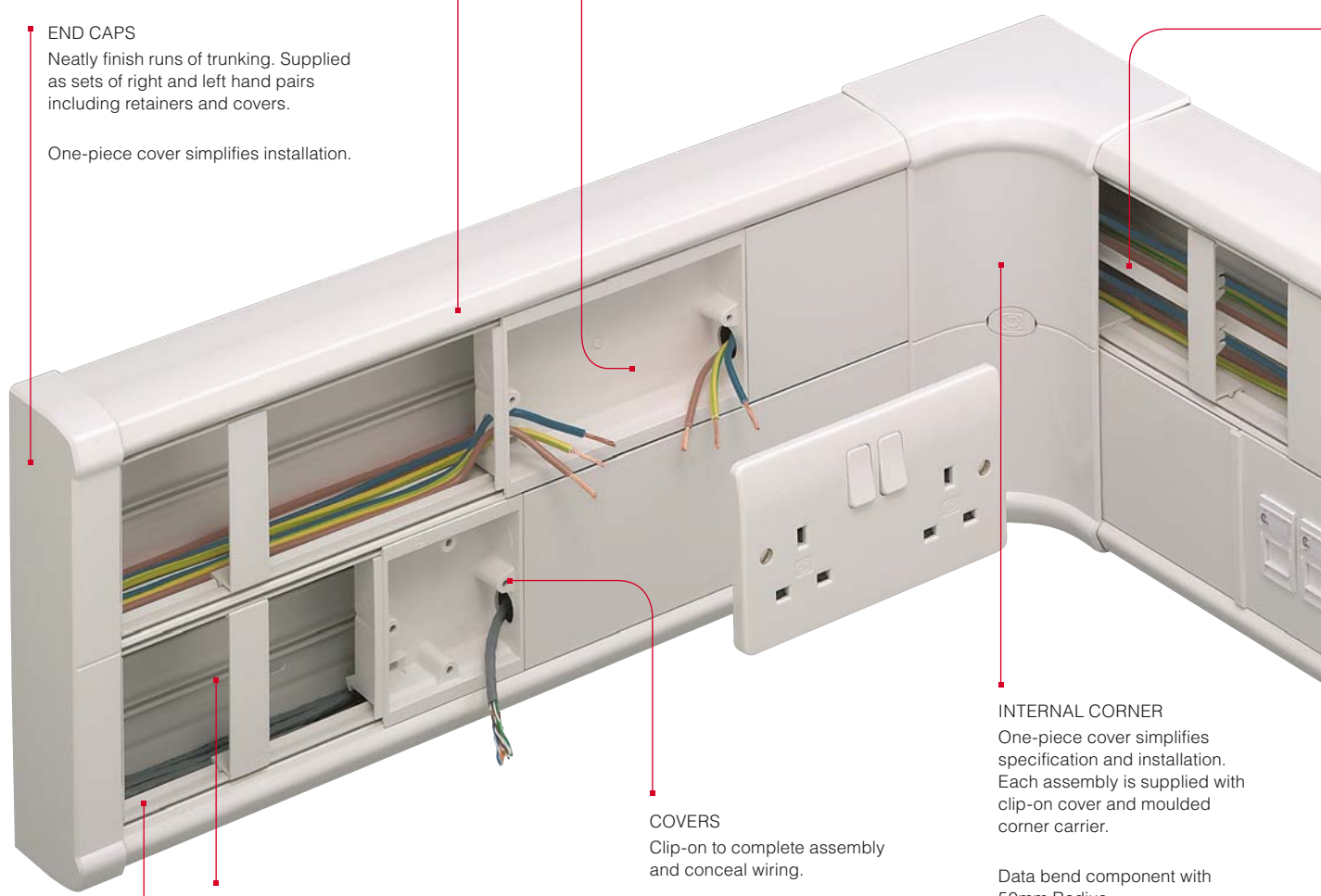
ACCESSORY MOUNTING BOXES AND FRAMES
All boxes have facility to 'knockout' back for greater depth.

35mm boxes for larger cabling size requirements, deep accessories, data and power.

Accessories can be mounted in either or both compartments.

END CAPS
Neatly finish runs of trunking. Supplied as sets of right and left hand pairs including retainers and covers.

One-piece cover simplifies installation.



CABLE RETAINERS
Hold cables securely in place.

COVERS
Clip-on to complete assembly and conceal wiring.

INTERNAL CORNER
One-piece cover simplifies specification and installation. Each assembly is supplied with clip-on cover and moulded corner carrier.

Data bend component with 50mm Radius.

Screw fix option
Unobtrusive screw fixings to maximise security against tampering.

MAIN CARRIER
Pre-drilled at 100mm centres for ease and speed of installation.



Technical Hotline
+44 (0)1268 563720

Prestige 2com

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION



EXTERNAL CORNER

One-piece cover component for ease of assembly and styling. Each assembly is supplied with clip-on cover and moulded corner carriers.

Data bend component with 50mm Radius.

Screw fix option: unobtrusive screw fixings to maximise security against tampering.

FLAT TEES AND ANGLES

These enable the Prestige 2com trunking configuration to follow the contours of the installation in the vertical plane and include 50mm radius inserts to ensure continued data cable protection.



CABLE DIVIDER

Sub-divides internal compartments.

2 COMPARTMENTS

For maximum data cable capacity complete compartment area can be used.

MINI TRUNKING ADAPTORS

For cable distribution to and from Prestige 2com a range of MK mini trunking and Egatube Conduit can be used.

COUPLER

One-piece cover component for ease of assembly. Each assembly is supplied with carrier moulding and clip-on cover (shown below).



CROSSOVER BRIDGE

Permits cabling to cross from one cable compartment to another within the assembly, whilst maintaining segregation.



Prestige 2com

mkelectric.co.uk



Main Carrier

DIMENSIONS
210 X 60MM



VTS2001WHI
3 METRE LENGTHS
VTS2001D1WHI
2 METRE LENGTHS
for (non uk) markets

Not supplied with lid (cover)

Straight Cover



VTS5WHI
3 METRE LENGTHS
VTS5D1WHI
2 METRE LENGTHS
FOR (NON UK) MARKETS

Note each main carrier requires two straight covers

Coupler Assembly



VTS2005WHI

Lid Joint Cover



VTS2010WHI
USED TO JOIN 2 COVER
PIECES AT REMOTE POINT FROM
COUPLER

Cable Retainer



VTS2011WHI
CABLE RETAINER

Crossover Bridge



VTS2090WHI
CROSSOVER BRIDGE

Mini Trunking Adaptor



VTS2081WHI
YT1-YT3 MINI TRUNKING
ADAPTOR.
USE APPROPRIATE YEA ADAPTOR
(YEA1-YEA3) TO CONNECT
MINI TRUNKING
VTS2084WHI
YT4 MINI TRUNKING
ADAPTOR

Socket Spacer



VTS25SWHI
ACCESSORY
SOCKET SPACER
TO ESTABLISH THE
MINIMUM DISTANCE
BETWEEN OUTLETS



Technical Hotline
+44 (0)1268 563720

Prestige 2com

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Internal Corner Assembly

CONSISTS OF
COVER AND
CARRIER



VTS2004WHI
INCLUDES ADDITIONAL
SCREW FIXING FOR
EXTRA SECURITY
50MM RADIUS BEND

1

VTS2018WHI
SPARE INTERNAL
SCREW COVERS FOR
CORNER PIECES

10

External Corner Assembly

CONSISTS OF COVER,
CARRIER AND
RADIUS INSERT



VTS2003WHI
INCLUDES ADDITIONAL
SCREW FIXING FOR
EXTRA SECURITY
50MM RADIUS BEND

1

VTS2019WHI
SPARE EXTERNAL
SCREW COVERS FOR
CORNER PIECES

10

Radius Insert

EXTERNAL
CORNER



VTS2009WHI
50MM RADIUS BEND
INSERT FOR DATA CABLES
EXTERNAL CORNER

1

End Cap Assembly



VTS2006WHI
END CAP ASSEMBLY

2

Cable Divider



VTS50WHI
CABLE DIVIDER
3 METRE LENGTHS

30m

Mounting Frames



VTS6000WHI
1 GANG
ACCESSORY
MOUNTING FRAME

10

VTS7000WHI
2 GANG
ACCESSORY
MOUNTING FRAME

5

Flat Tee



VTS2014WHI
50MM RADIUS BEND

1

Flat Angle



VTS2012WHI
50MM RADIUS BEND

1

Prestige 2com

mkelectric.co.uk



Accessory Boxes



VTS6035WHI



VTS7035WHI



VTS8028WHI



VTS4545WHI



VTS4545RWHI

VTS6025WHI 25
1 GANG 25MM DEEP
VTS6035WHI 25
1 GANG
35MM DEEP

VTS7025WH 10
2 GANG 25MM DEEP
VTS7035WHI 10
2 GANG 35MM DEEP
VTS8028WHI 5
3 GANG
28MM DEEP

VTS8035 10
3 GANG 35MM DEEP
K3716 100
BOX EARTH TERMINAL

VTS4545WHI 10
FLAT ADAPTOR PLATE
(NON UK)
45MM X 45MM APERTURE
VTS4545RWHI 10
RAISED ADAPTOR PLATE
(NON UK)
45MM X 45MM APERTURE



PRODUCT APPLICATION

ECHO 2 CHANNEL TRANSMITTER – ALBANY PLUS BRUSHED CHROME

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls. Being wireless offers fantastic benefits, including instant installation and location flexibility. This reduces disruption and cost as there is no need to channel walls and run switching cables.



Prestige Poles and Posts

PRESTIGE POWER POLES

- Power Poles stand between the floor and ceiling and can be integrated with Interact Underfloor Power as part of a co-ordinated Cable Management system
- Particularly suited to raised floors and suspended ceilings, but can also be used with solid floors and ceilings
- Secured to the floor by a load plate
- A jacking assembly allows adjustment for varying ceiling heights as well as to secure it to the ceiling
- An extension bar is required for stability where the height exceeds 3.6 metres
- Outlet boxes can be located at virtually any height on the poles, so power and data points, light switches and accessory housings can be positioned quickly and easily at the optimum level for efficient operation
- All PVC extrusions manufactured from 100% recycled material*

Prestige Power Poles

PPA100WHI
POWER POLE ASSEMBLY
WITH WHITE PAINTED
ALUMINIUM BODY,
WHITE PVC-U COVER
AND 6 OUTLET BOXES

1

PPA100ALM
POWER POLE ASSEMBLY
WITH ANODISED
ALUMINIUM BODY,
WHITE AND CHARCOAL
PVC-U COVERS
AND 6 OUTLET BOXES

1

PRESTIGE POWER POSTS

- Power Posts stand neatly on the floor and accept cables from below. They are ideal for raised floors but can also be installed on solid surfaces, fed for example from Cablelink Plus Screeded Floor Systems
- Fit unobtrusively under desks, and a single unit will provide up to twelve outlets for any combination of power and data points, light switches and accessory housings
- All PVC extrusions manufactured from 100% recycled material*

* Based on 2014 consumption.

Prestige Power Posts

PPT650WHI
POWER POST ASSEMBLY
WITH WHITE PAINTED
ALUMINIUM BODY,
WHITE PVC-U COVER
AND 5 OUTLET BOXES

1

PPT650ALM
POWER POST ASSEMBLY
WITH ANODISED
ALUMINIUM BODY,
WHITE AND CHARCOAL
PVC-U COVERS
AND 5 OUTLET BOXES

1



Prestige Poles and Posts

Accessories for Poles and Posts



To allow flexibility in matching interior design and colour schemes, the pole and post bodies are available in a white epoxy coated or natural anodised aluminium finish, and the PVCu component covers come in charcoal or white.

The bodies accept a variety of co-ordinated accessories from MK's slim profile Edge and flawless Aspect ranges, to the Logic Plus range, as well as all other MK accessory ranges.

A matching MCB/RCD housing unit is available, also in charcoal or white.



PPC20WHI
OUTLET BOX ASSEMBLY

PPC10WHI
DIVIDING STRIP

PPC40WHI
TOP END COLLAR

PPC60WHI
PPC60CHA

POWER POST END CAP

PPCMHWHI

PPCMHCHA
MCB/RCD HOUSING
AVAILABLE IN A CHOICE OF TWO
COLOURS, WHITE OR CHARCOAL.
ACCEPTS UP TO 4 X ONE MODULE
SENTRY PRODUCTS, EXCLUDING
SINGLE MODULE RCBO'S, UP TO A
MAXIMUM COMBINED RATING OF 63A
(SEE PAGES 279-280).
THE HOUSING UNIT INCLUDES FIXING
KIT, SENTRY MOUNTING DIN RAIL AND
COVER MOULDING.

PPA100LIDWHI
SPARE LIDS
3.6M LENGTHS

1

3m

1

10

10

1

1

2

PPK1WHI
EXTENSION BAR
FIXING KIT (0.9 METRE) FOR
INSTALLATIONS WHERE THE HEIGHT
FROM FLOOR TO SOLID CEILING
(OR TO STRUCTURAL CONCRETE
WHERE SUSPENDED CEILINGS ARE
INSTALLED) EXCEEDS 3.6 METRES.

PPC50WHI
END LOAD PLATE

1

1



CASE STUDY

PRIVATE RESIDENCE

This UK-based designer was looking to create a home environment with modern and abstract design touches to the fore.

The highly contemporary interiors demanded something out of the ordinary, something unusual but nevertheless striking. MK was commissioned to manufacture working designs based on sketches from the client. The outcome was a customised range of products – both sockets and switches – that delivered both a uniqueness of design and that essential modern feel.

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit www.mkelectric.co.uk



POWERLINK PLUS

RANGE INTRODUCTION

Powerlink Plus is a busbar trunking system developed to meet the power and data distribution needs of offices, schools and laboratories.

A comprehensive range of unique flush fitting accessories and gently curved covers combine to create a visually unrivalled installation. The system offers flexibility to easily adapt to future needs for the installer.

HOW TO SPECIFY

A busbar trunking system manufactured from recycled PVCu designed with plug in flush fitting accessories. Pre-fabricated corners and end caps supplied with carriers and busbar shields to provide maximum flexibility, systems integrity and protection. Pre-drilled trunking bases aid easy assembly and installation.

FEATURES & BENEFITS

CHOICE OF 3 PROFILES

To suit all your skirting and dado requirements

ONE-PIECE CORNER, COUPLERS AND END CAP COVERS

Simplifies installation and improves aesthetics

63A BUSBAR FOR PLUG-ON ACCESSORIES AND HIGH PROTECTIVE CONDUCTOR CURRENT COMPLIANCE

Quick and easy installation, eliminating the requirement for hard wiring

UNIQUE FLUSH FITTING ACCESSORIES

Provide an unobtrusive finish

PRE-DRILLED TRUNKING BASES

Eliminates the need to measure and drill fixing holes on site thus reducing installation time

LARGE DATA CABLING CAPABILITY IN OUTER COMPARTMENTS

For all your communication and data requirements

MADE FROM 100% PVCu

Powerlink Plus is both robust and easily workable on site

ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL*

*Based on 2014 consumption.

Powerlink Plus

mkelectric.co.uk



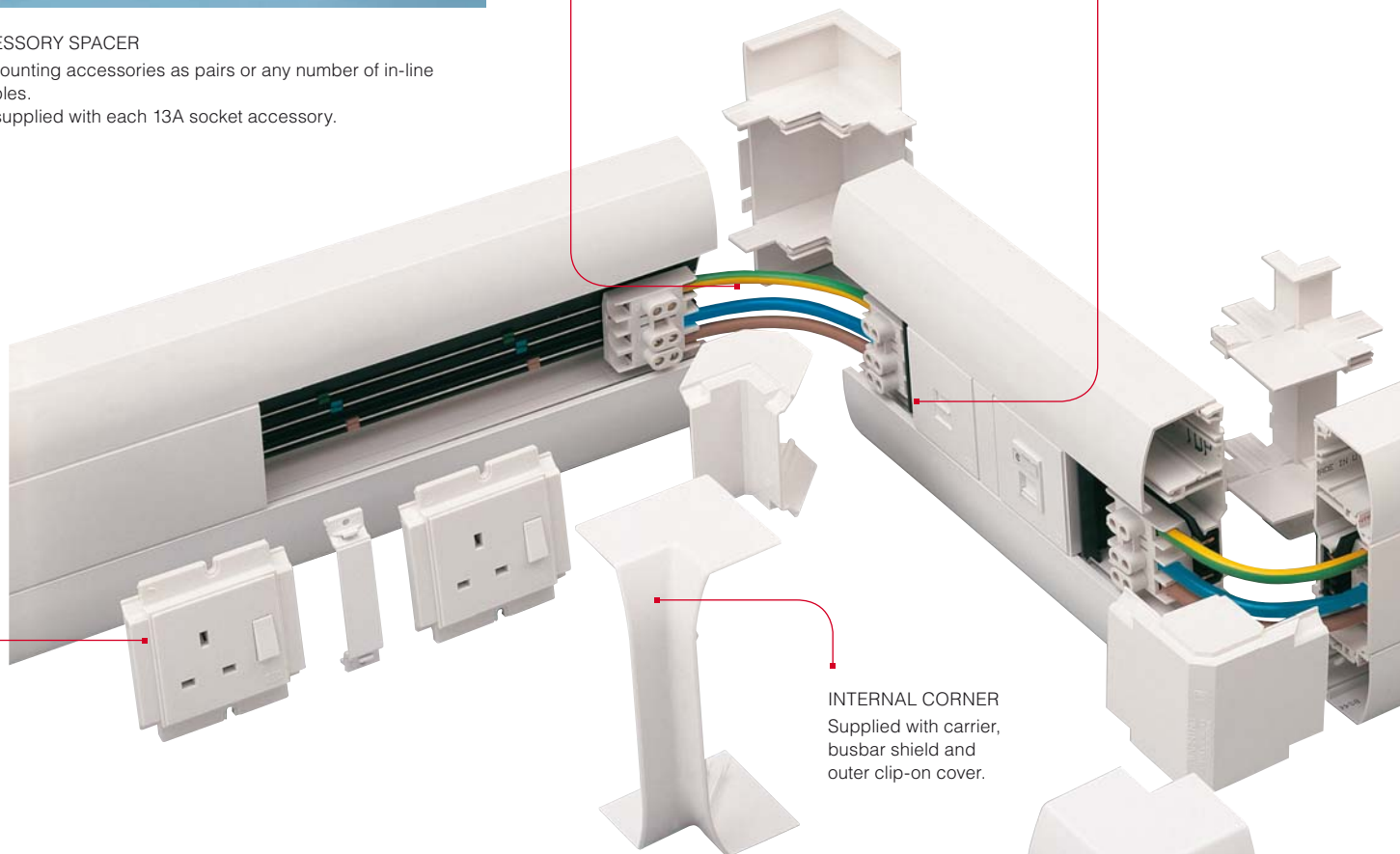
ACCESSORY SPACER

For mounting accessories as pairs or any number of in-line multiples.
One supplied with each 13A socket accessory.

PRE-WIRED CABLE ASSEMBLY
For electrical connection of busbar around corners.

FLUSH FITTING ACCESSORIES

Powerlink Plus offers a wide selection of flush fitting accessories, including switch sockets, DP switches, connection units and virtually every type of computer and telecom connector. All power accessories are available as plug-on units or with wire-in terminals. If that is not enough, an optional mounting kit will accept virtually any accessory within the entire MK range.



INTERNAL CORNER
Supplied with carrier, busbar shield and outer clip-on cover.

EXTERNAL CORNER
Supplied with carrier, busbar shield and outer clip-on cover.

CHOICE OF DELIVERY

With Powerlink Plus the choice is yours – hard wiring or an integral 63A busbar with power accessories that simply plug into place.





Technical Hotline
+44 (0)1268 563720

Powerlink Plus

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

MCB/RCD

Housing mounts directly to central compartment and accepts any one or two module product from the MK Sentry range (excluding RCBOs).



COUPLER

Joins trunking lengths together and to pre-assembled angles, crossovers or special corners. Supplied with busbar shield.

END CAP

Neatly finishes runs of trunking. Supplied with screw fix carrier/busbar shield and clip-on cover.



Powerlink Plus

mkelectric.co.uk



Component Selector Chart

Standard length: 3 metres
Supplied with covers
Trunking size: 170mm (Height) x 50mm (Depth)
With extension fitted:
212mm (Height) x 50mm (Depth)
Material PVCu
Colour: White



**Dado
Trunking
With
Busbars**



**Dado
Trunking
Without
Busbars**



**Skirting
And Dado
Trunking
With
Busbars**

Profile Lengths

Trunking

WITH AND WITHOUT
63 AMP BUSBARS



Coupler

WITH BUSBAR SHIELD



K1963WHI

3m

K1908WHI

5

K1903WHI

3m

K1908WHI

5

K1962WHI

3m

K1945WHI

5

Fittings

End Caps

SUPPLIED AS A PAIR



K1904WHI
K1904CHA

1
1

Internal Corner

WITH BUSBAR SHIELD



K1905WHI*

1

External Corner

WITH BUSBAR SHIELD



K1906WHI*

1

K1904WHI

1

K1905WHI

1

K1906WHI

1

K1944WHI

1

K1911WHI*

1

K1912WHI*

1

*Requires 1 x 1919 Cable Link Assembly

Powerlink Plus

mkelectric.co.uk



Flat Angle

Flat Tee



**Dado
Trunking
With
Busbars**

K1992WHI*
UP/DOWN

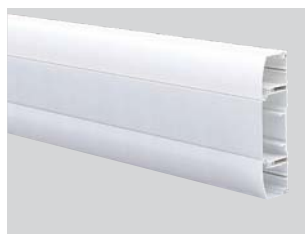
1

K1973WHI
UP
K1972WHI
DOWN

1

1

*Requires 2 x 1919 Cable Link Assembly



**Dado
Trunking
Without
Busbars**

K1992WHI
UP/DOWN

1

K1973WHI
UP
K1972WHI
DOWN

1

1



**Skirting
And Dado
Trunking
With Busbars**

K1957WHI*
UP
K1958WHI*
DOWN

1

1

*Requires 1 x 1919 Cable Link Assembly



Technical Hotline
+44 (0)1268 563720

Powerlink Plus

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Spares

Cable Retainers



VTS11WHI



VTS12WHI

VTS11WHI
CABLE RETAINERS
FOR USE WITH
EXTENSION
TRUNKING

VTS12WHI
CABLE RETAINERS
FOR USE IN OUTER
COMPARTMENTS

10

Cable Entry Box



1922ALM

10

1922ALM
CABLE ENTRY BOX
FOR USE WITH
K1920 AND K1929

Three compartment flush mounted
box with adjustable plate.
Included in the pack is a template
for positioning on site prior to the
trunking being installed.

DIMENSIONS
133 x 133 x 40mm
KNOCKOUTS
4 x 20mm
4 x 25mm

FLUSH

MCB/RCD Housing



K1949WHI

5

K1949WHI

Mounts directly to the centre
compartment to accept up to 2 one
module products from the MK Sentry
range (except RCBOs).

DIMENSIONS
220mm (Length) x
100mm (Depth)
when mounted on trunking.

Mini Trunking Adaptors



K1926WHI



K1927WHI

1

K1926WHI
YT4MINI TRUNKING
ADAPTOR
FOR USE WITH YEA
ADAPTORS FOR YT1, YT2
AND YT3 TRUNKING

Accepts MK Ega Mini Trunking
adaptors.

Covers and Cable Divider



K1932WHI



K1935WHI



1934WHI



K1936WHI

3 METRE LENGTHS

10

K1932WHI
OUTER COVER
SQUARE
SUPPLIED IN
3 METRE LENGTHS

K1935WHI
OUTER COVER
CURVED
SUPPLIED IN
3 METRE LENGTHS

1934WHI
CENTRAL COVER
STRAIGHT
SUPPLIED IN
3 METRE LENGTHS

K1936WHI
EXTENSION COVER
SUPPLIED IN
3 METRE LENGTHS

15m

15m

15m

15m

Powerlink Plus

mkelectric.co.uk



Socket Outlets

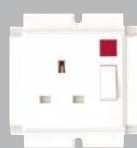
'PLUG-ON'
13 AMP
STANDARD



1956WHI

Switchsocket Outlets

'PLUG-ON'
13 AMP
STANDARD



1950WHI

'PLUG-ON'
13 AMP
NON STANDARD



1953WHI

'WIRE-IN'
13 AMP
STANDARD



1952WHI

'WIRE-IN'
13 AMP
NON STANDARD



1955WHI



1951WHI

1956WHI
STANDARD
SOCKET OUTLET

5

For plugging onto the busbars.
Supplied complete with one
accessory spacer and fixing screws.

1950WHI
STANDARD SWITCHSOCKET
WITH NEON

5

1951WHI
STANDARD
SWITCHSOCKET

5

For plugging onto the busbars.
Supplied complete with one accessory
spacer and fixing screws.

1953WHI
NON STANDARD
SWITCHSOCKET

5

For plugging onto the busbars.
With a 'T' shape earth pin aperture and
for use only with the non standard 13A
Safetyplug, list no. 647.
Supplied complete with one accessory
spacer and fixing screws.

1952WHI
STANDARD
SWITCHSOCKET

5

Fitted with screw terminals for
independent wiring.
Supplied complete with one accessory
spacer and fixing screws.

1955WHI
NON STANDARD
SIDE WIRED
SWITCHSOCKET

5

Fitted with screw terminals for
independent wiring. With a 'T'
shape earth pin aperture and for
use only with the non standard
13A Safetyplug, list no. 647.
Supplied complete with one
accessory spacer and
fixing screws.



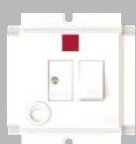
Technical Hotline
+44 (0)1268 563720

Powerlink Plus

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Connection Units

DP SWITCHED
'PLUG-ON'



1971WHI

DP Switches

32 AMP
'PLUG-ON'



1943WHI

Two Way Switch

20 AMP SP



1942WHI

Telephone Socket Outlets



1995WHI

1970WHI
WITH NEON AND
13A FUSE

5

1971WHI
WITH NEON
FLEX OUTLET AND
13A FUSE

5

For feeding from the busbars and
controlling remote equipment.
Supplied complete with
fixing screws.

1943WHI
WITH NEON

5

For plugging onto the busbars.
Can be used either as a busbar switch
disconnecter or for feeding and
controlling remote equipment.
The switch can accommodate up to
10mm² cables. Supplied complete with
fixing screws.

1942WHI

5

Can be used for lighting and remote
equipment. It is not connected to the
busbars and requires separate cables.
Supplied complete with fixing screws.

1995WHI
HANDSET POLARISED
SOCKET OUTLET

5

1999WHI
RJ11
TELEPHONE/DATA SOCKET

5

1980 Supplied complete with enclosure
box together with fixing screws,
connecting tool, cable tie and fixing
screws for mounting on to the dado
trunking. A full list of instructions
with wiring diagrams is supplied in
every pack. Approved for use with
telecommunication systems run by BT
in accordance with the conditions in the
instructions for use.

1995 Supplied complete with enclosure
box together with fixing screws,
connecting tool, cable tie and fixing
screws for mounting on to the dado
trunking. Approved
for use with telecommunication
branch systems in accordance
with the conditions in the instructions
for use.

Powerlink Plus

mkelectric.co.uk



Data Outlets

RJ45



1978WHI



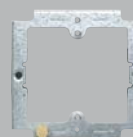
1976WHI

ELV Blank Plates



1986WHI

Flush Accessory Mounting Frames



1928GLV



1946WHI



1998

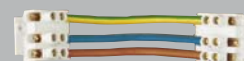


12024SLT9

Trunking Accessories and Plug in Cable Terminations (3 Pole)



K1925WHI



1919



1923WHI



1924WHI

1978WHI
RJ45 CATEGORY 5E
COMPUTER/DATA SOCKET

1976WHI
RJ45/EURO OUTLET
TWO MODULE UNSERVICED

1947WHI
RJ45/LJU6C OUTLET
TWO MODULE, UNSERVICED

1978 Data socket to
Category 5e.

K1976 Euro 50x50mm
(accommodates 2 outlets).

K1947 Cut out dimensions LJU6C 22x37mm
for each outlet.

5 1986WHI
ELV BOX AND COVER

5 Can be punched for use with any ELV
accessory that can be mounted over the
busbars.

5 Supplied complete with enclosure box
together with fixing screws for mounting on
to the trunking.

5 1928GLV
2 GANG ACCESSORY
MOUNTING KIT
WITH FRAME AND
PATTRESS

5 1946WHI
2 GANG ACCESSORY
MOUNTING KIT
WITH FRAME AND
PATTRESS

5 1998
1 GANG MOUNTING
FRAME & BOX FOR ELV
ACCESSORIES

10 12024SLT9
MOUNTING FRAME FOR
2 GANG ACCESSORY

1928GLV For fixing standard single gang
accessories to the trunking. The accessories
can be connected to the busbars by using
one of the cable termination components
or wired separately. Complete with fixing
screws.

1946 For fixing Sentrysockets, Filtered
sockets and two gang accessories to the
trunking. Supplied with busbar terminations
and cover, mounting frame and extension
pattress together with fixing screws.

1998 For fixing standard single gang
extra low voltage outlets to the trunking.
Supplied complete with enclosure box
together with all the necessary fixing
screws.

10 K1925WHI
PLUG IN BUSBAR COUPLER

5 1919
CABLE LINK ASSEMBLY

5 1923WHI
10MM² CABLE TERMINATION

10 1924WHI
25MM² CABLE TERMINATION

5 K1925 To connect lengths of individual busbars
together. Rating 63A.

10 1919 Prewired corner cable link for internal and
external corners.
Rating 63A.

1937 Suitable for bridging the central
compartment, where there are no busbars
(Busbars are coupled by cables passing
underneath).

1939 To maintain segregation between the
wall and the busbars or cables when installing
Powerlink around a pillar of less than 125mm.

1923 To connect the busbar to the mains supply
or to electrical accessories mounted onto
mounting frames.
Rating: 50A.

1924 To connect the busbars to the mains supply
and for connecting the busbars around corners
(two required). Rating: 63A.

Trunking Components and Spares



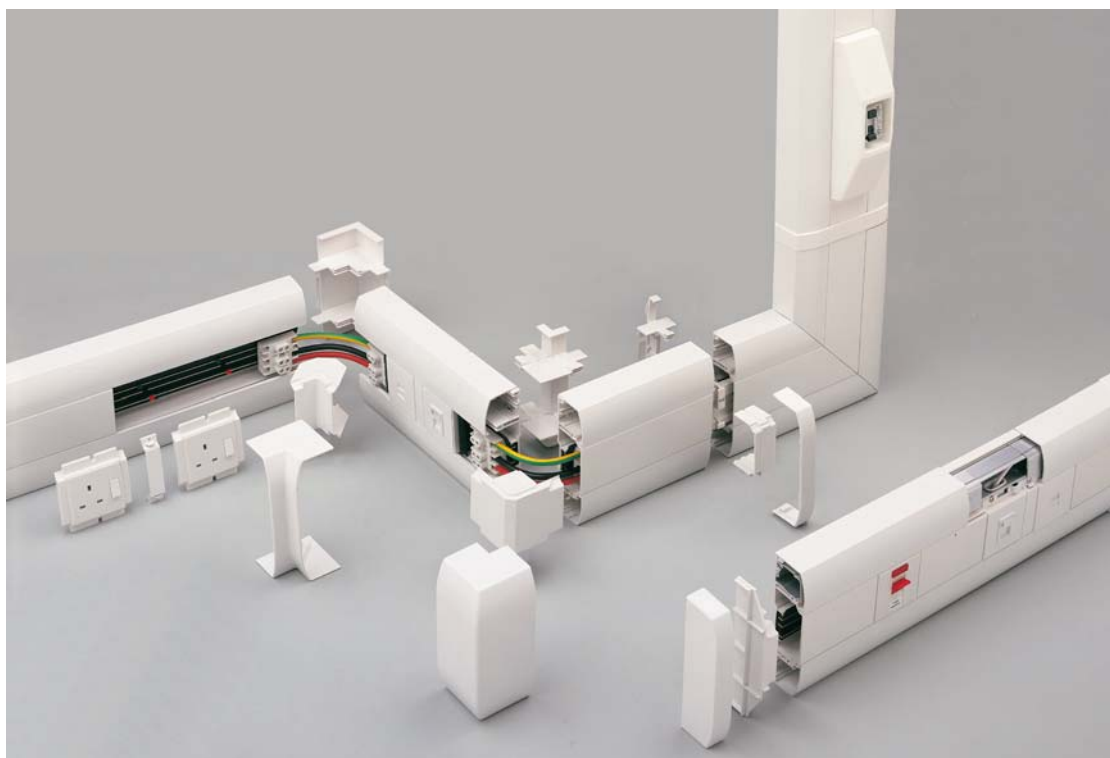
1909WHI



1930WHI



1933WHI



1909WHI	10
CENTRAL COVER COUPLER	
1930WHI	10
ACCESSORY SPACER	
1933WHI	3m
BUSBAR SECTION FOR DADO TRUNKING WITHOUT BUSBARS. SUPPLIED IN 3M LENGTHS	
11817PS	100
CABLE TERMINATION & BUSBAR COVER SCREWS	
11827PS	100
FIXING SCREW BUSHES	

PINNACLE

RANGE INTRODUCTION

When it comes to providing direct bench top access to low voltage electrical, communications and data services, MK Pinnacle is the flexible and versatile solution.

Styled to the same high standards as the MK Logic Plus™ range, it features a high quality finish, a curved design and twin segregated compartments. These features mean MK Pinnacle is the bench top solution for laboratories, schools and workshops.

HOW TO SPECIFY

A bench top trunking system manufactured from recycled PVCu designed to compliment MK Logic Plus accessories. Pre-fabricated corners to provide maximum flexibility, systems integrity and protection. Two separate compartments to provide cable segregation with the option to sub-divide the main compartment by means of a clip-in cable divider. Coupler sets provide fixing between two units while maintaining IP4X classification.

FEATURES & BENEFITS

UNIQUE CURVED APPEARANCE

Total physical and visual integration with the MK Logic Plus™ range

DESIGNED TO MEET THE 'HEAVY DUTY' REQUIREMENTS OF BS 4678 PART 4

Offers high levels of mechanical protection and electrical safety

VERSATILITY

MK Pinnacle is versatile. Available in single or double configuration, it can be installed with a choice of two profile heights and fascia angles

MADE FROM 100% PVCu

Pinnacle is robust, easily manipulated on site and non-corrosive

ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL*

*Based on 2014 consumption.



Technical Hotline
+44 (0)1268 563720

Pinnacle

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

PRE-FABRICATED CORNERS

Pre-fabricated internal and external corners are available for maximum flexibility, system integrity and protection.

USE PINNACLE WITH A WIDE SELECTION OF MK ACCESSORY RANGES

CABLE SEGREGATION

Two separate compartments provide cable segregation with the facility to further subdivide the main compartment by means of a clip-in cable divider.

COUPLER SETS FOR GREATER STRENGTH AND PROTECTION
Wherever two units need to be joined, coupler sets maintain the extra protection of Pinnacle's Heavy Duty and IP4X classification.

BENCH UNITS

One gang, two gang, two gang plus one gang and three gang bench units are available as single and two sided assemblies.

VERSATILITY

Available in single or double configuration, Pinnacle can be installed with a choice of two profile heights and fascia angles. The system may be installed horizontally or vertically.

UNDERSHELF

Pinnacle can be installed safely in any orientation, even conveniently tucked away under a shelf, giving easy and discreet access to power and data outlets.



Pinnacle

Trunking

End Caps

Coupler Set*



PTS2WHI **4m**
SINGLE TRUNKING 2 METRE LENGTH
SUPPLIED WITH LIDS
90MM HIGH X 105MM WIDE
PTS3WHI **6m**
SINGLE TRUNKING 3 METRE LENGTH
SUPPLIED WITH LIDS
90MM HIGH X 105MM WIDE

PECSWHI

10

PCWHI

10

***COUPLER SETS**
To maintain Heavy Duty
and IP4X classification
both coupler and joint cover must be used



PTS2WHI **4m**
PTS3WHI **6m**

PECSWHI

10

PCWHI
CONSISTS OF COUPLER
AND JOINT COVER

10

***COUPLER SETS**
To maintain Heavy Duty
and IP4X classification
both coupler and joint cover must be used



PTD2WHI **2m**
PTD3WHI **3m**

PECDWHI
PAIR

5

PCWHI
CONSISTS OF COUPLER
AND JOINT COVER

10

***COUPLER SETS**
To maintain Heavy Duty
and IP4X classification
both coupler and joint cover must be used



Technical Hotline
+44 (0)1268 563720

Pinnacle

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Internal Corner

FABRICATED



PICLWHI

1

External Corner

FABRICATED



PECLWHI

1

Cable Divider

2 METRE LENGTHS



PD2WHI

20m

Cable Retainer



VTS11WHI

10

PICLWHI

1

PECLWHI

1

PD2WHI

20m

VTS11WHI

10

PD2WHI

20m

VTS11WHI

10

Bench Units

ONE GANG AND TWO GANG



PBUS1WHI

PBUD1WHI



PBUS2WHI



PBUD2WHI

PBUS1WHI 1
1 GANG SINGLE BENCH
UNIT WITH 1 GANG
ACCESSORY BOX
(VTS6035)

PBUD1WHI 1
Supplied complete with
accessory boxes, end caps and
pre-cut lids.

DIMENSIONS

PBUS1:
105mm high
90mm deep
130mm wide

PBUD1:
105mm high
185mm deep
130mm wide

PBUS2WHI 1
2 GANG
SINGLE BENCH UNIT
WITH
2 GANG ACCESSORY BOX
(VTS7025)

PBUD2WHI 1
Supplied complete with
accessory boxes, end caps and
pre-cut lids.

DIMENSIONS

PBUS2:
105mm high
90mm deep
190mm wide

PBUD2:
105mm high
185mm deep
190mm wide

TWO GANG PLUS ONE GANG



PBUS21WHI



PBUD21WHI

PBUS21WHI 1
Supplied complete with
accessory boxes, end caps and
pre-cut lids.

DIMENSIONS

PBUS21:
105mm high
90mm deep
290mm wide

PBUD21WHI 1
2 + 1 GANG
DOUBLE BENCH UNIT
WITH 2 X 2 GANG
(VTS7025)
AND 2 X 1 GANG
(VTS6035)
ACCESSORY BOXES

Supplied complete with
accessory boxes, end caps and
pre-cut lids.

DIMENSIONS

PBUD21:
105mm high
185mm deep
290mm wide

THREE GANG



PBUS3 WHI



PBUD3WHI

PBUS3WHI 1
3 GANG
SINGLE BENCH UNIT
WITH 3 GANG
ACCESSORY BOX
(VTS8028)

Supplied complete with
accessory boxes, end caps
and pre-cut lids.

DIMENSIONS

PBUS3:
105mm high
90mm deep
250mm wide

PBUD3WHI 1
3 GANG
DOUBLE BENCH UNIT
WITH 2 X 3 GANG
ACCESSORY BOXES
(VTS8028)

Supplied complete with
accessory boxes, end caps
and pre-cut lids.

DIMENSIONS

PBUD3:
105mm high
185mm deep
250mm wide



Technical Hotline
+44 (0)1268 563720

Pinnacle

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Accessory Boxes

Mounting Frames

Trunking Cover Spares

2 AND 3 METRE LENGTHS



VTS6035WHI



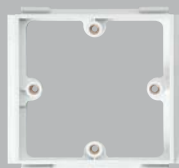
VTS25SWHI



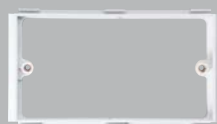
VTS7035WHI



VTS8028 WHI



VTS6000WHI



VTS7000 WHI



PSC2WHI



PCCS2WHI



PCCD2WHI

VTS6025WHI

1 GANG OUTLET BOX
25MM DEEP
HORIZONTAL AND
VERTICAL MOUNTING

25

VTS6035WHI

1 GANG OUTLET BOX
35MM DEEP
HORIZONTAL AND
VERTICAL MOUNTING

25

VTS7025WHI

2 GANG OUTLET BOX
25MM DEEP

10

VTS8035

3 GANG OUTLET BOX
35MM DEEP

5

VTS7035WHI

2 GANG OUTLET BOX
35MM DEEP

10

VTS8028WHI

3 GANG OUTLET BOX
28MM DEEP

5

VTS25SWHI

SOCKET SPACER TO
ESTABLISH THE MINIMUM
DISTANCE BETWEEN
ACCESSORIES

10

K3716

BOX EARTH TERMINAL

100

VTS6000WHI

1 GANG
ACCESSORY MOUNTING
FRAME

10

VTS7000WHI

2 GANG
ACCESSORY MOUNTING
FRAME

5

PSC2WHI

STRAIGHT COVER

20m

PCCS2WHI

CURVED COVER FOR
SINGLE TRUNKING (2M)

20m

PCCD2WHI

CURVED COVER
FOR DOUBLE
TRUNKING (2M)

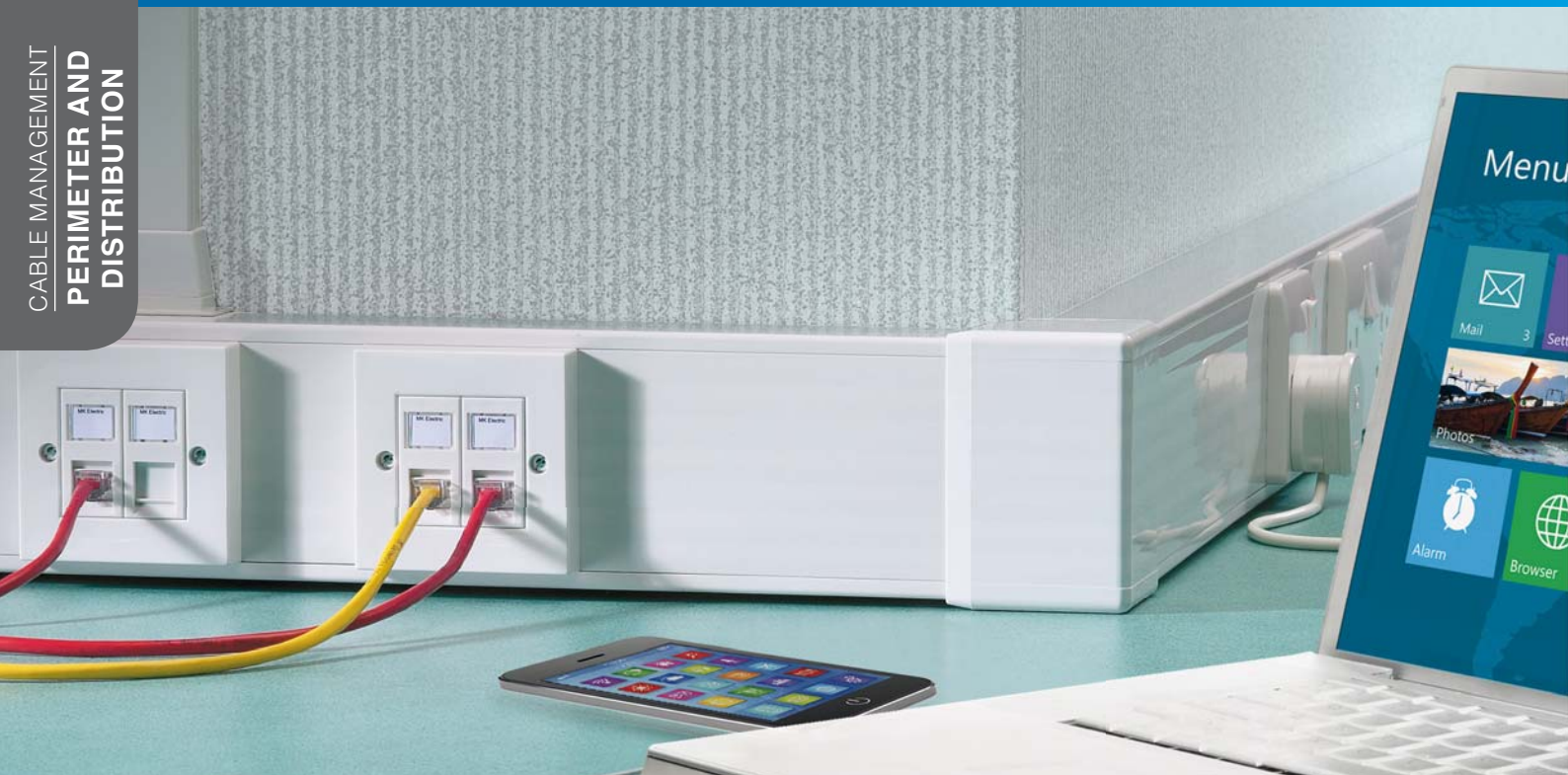
10m

VTSMH1WHI
MCB/RCD HOUSING
WITH COVER
(ACCESSORIES NOT
PROVIDED)

1

Mounts directly to trunking
to accept up to 2 x one
module products from the
Sentry range of MCBs and
RCDs (excluding one module RCB0s).





PREMIER

RANGE INTRODUCTION

Premier is a modern integrated trunking system which provides the means to distribute power, data and telecom services around buildings.

A wide range of snap fit mouldings, including reducers, make it easy to run continuous lengths of trunking as cable feeders and, where required, to provide dado trunking with the necessary power, data and telecom outlets.

Premier trunking is also compliant with Cat 5e and 6 data cable installation, and the MK Aspect and Logic Plus accessory ranges complement the style and finish of Premier Trunking.

HOW TO SPECIFY

An modern integrated trunking system compliant with Cat 5e and 6. Manufactured from recycled PVCu and designed to compliment MK Logic Plus accessories. Clip on covers provide continuous access for wiring devices and aid assembly and installation. Internal and external corners eliminate the need to mitre corners whilst ensuring data bend radiuses. Internal cable dividers provide segregation of services and adaptors provide integration to minimum trunking for local distribution.

FEATURES & BENEFITS

SIMPLE, CLEAN LINES

Stylish and unobtrusive finish

WIDE RANGE OF INTEGRATED COMPONENTS

Maximises versatility in application

CLIP-ON COVERS PROVIDE CONTINUOUS ACCESS FOR WIRING MODIFICATIONS

Easy to assemble and install

DATA CORNERS PROVIDE 32MM RADIUS COMPATIBLE WITH CAT 5E AND CAT 6 DATA CABLES

Enables data cables to perform to their maximum capabilities (NCT1050 only)

TAPERED JOINTS PROVIDE COMPLETE PROTECTION AT JUNCTIONS MASKING CUT ENDS

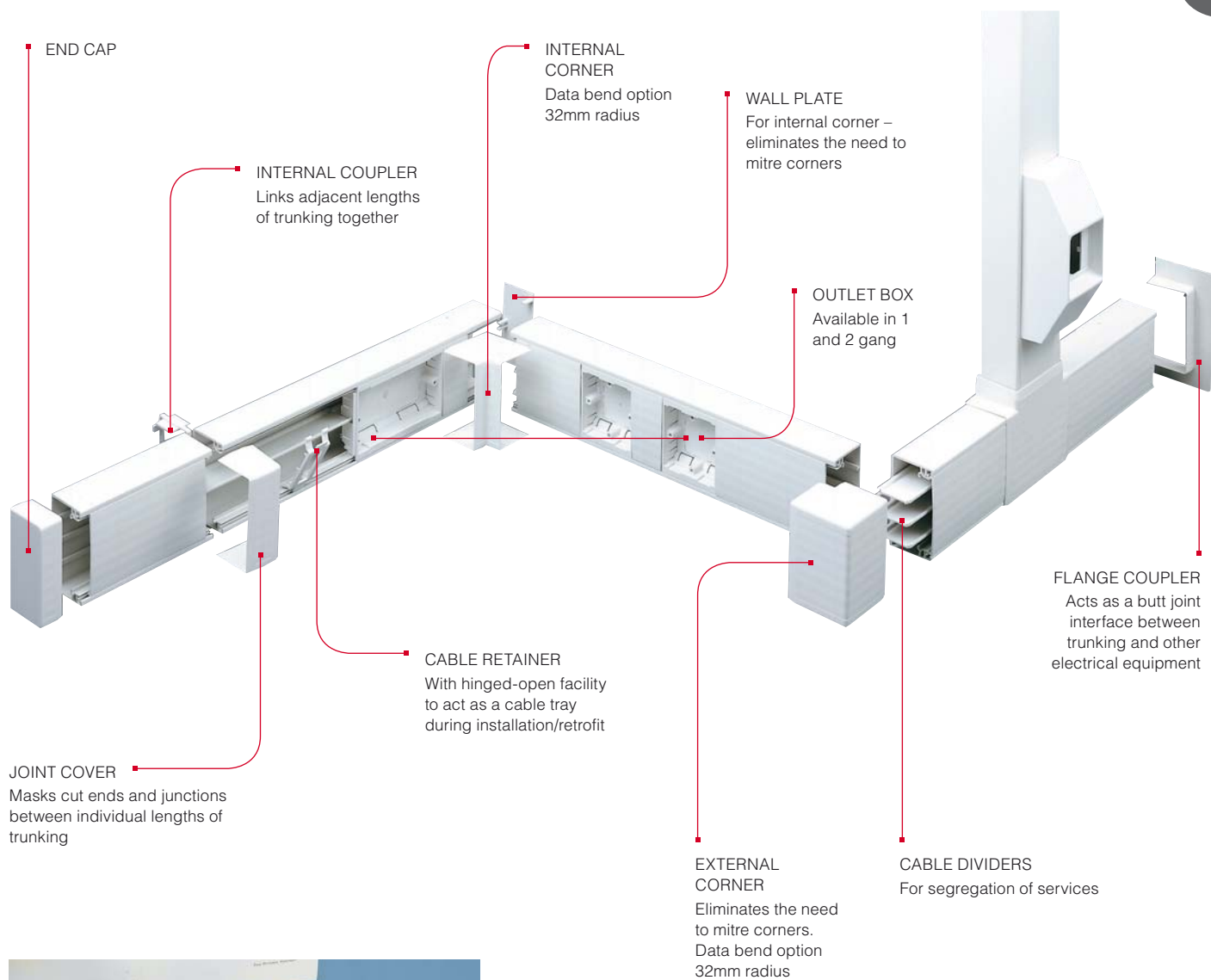
Uniform and neat finish to any installation

MADE FROM 100% PVCU

Premier is both robust and easily workable on site

ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL*

*Based on 2014 consumption.



Adaptors provide integration with Ega Mini and Communication Trunking for local distribution.



Moulded flat cross available for all distribution trunking.

Material:
Pvcu Colour:
White

Trunking

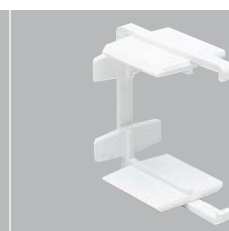
3 METRE
LENGTHS

2 METRE
LENGTHS

SPARE
TRUNKING LID
3 METRE
LENGTHS

Internal Coupler

MOULDED



50 X 50MM	NCT5050WHI	12m	NCT5050D1WHI*	12m	NCT50LIDWHI	12m	NCI5050WHI	5
75 X 50MM	NCT7550WHI	12m	NCT7550D1*	12m	NCT50LIDWHI	12m	NCI7550WHI	5
75 X 75MM	NCT7575WHI	12m	NCT7575D1*	8m	NCT75LIDWHI	12m	NCI7575WHI	5
100 X 40MM	NCT1040WHI	12m	NCT1040D1*	8m	NCT100LIDWHI	12m	NCI1040WHI	5
100 X 50MM	NCT1050WHI	12m	NCT1050D1*	8m	NCT100LIDWHI	12m	NCI1050WHI	5
100 X 100MM	NCT1010WHI	12m	NCT1010D1*	8m	NCT100LIDWHI	12m	NCI1010WHI	5

* 2 metre lengths are available
for NON UK markets

External Corner

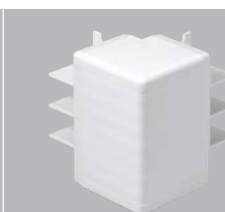
MOULDED

WITH
DATA CORNER
MOULDED

Internal Corner

MOULDED

WITH
DATA CORNER
MOULDED



50 X 50MM	NAE5050WHI	2		NAI5050WHI	2	
75 X 50MM	NAE7550WHI	2		NAI7550WHI	2	
75 X 75MM	NAE7575WHI	2		NAI7575WHI	2	
100 X 40MM	NAE1040WHI	2		NAI1040WHI	2	
100 X 50MM	NAE1050WHI	2	NDAE1050WHI	2	NAI1050WHI	2
100 X 100MM	NAE1010WHI*	1		NAI1010WHI*	1	

* Fabricated

Data corner provides
32mm (1¼" or 1.25") radius
compatible with Cat 5e and 6
data cables

* Fabricated

Data corner provides
32mm (1¼" or 1.25")
radius compatible with
Cat 5e and 6 data cables



Technical Hotline
+44 (0)1268 563720

Premier

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Joint Cover

MOULDED



Cable Retainer

MOULDED



Cable Divider

3 METRE
LENGTHS



End Cap

UNIVERSAL
FOR USE AT
EITHER END
MOULDED



NJC5050WHI	10	NBP50WHI	10	NVS50WHI	36m	NEP5050WHI	5
NJC7550WHI	10	NBP75WHI	10	NVS50WHI	36m	NEP7550WHI	5
NJC7575WHI	10	NBP75WHI	10	NVS75WHI	36m	NEP7575WHI	5
NJC1040WHI	5	NBP100WHI	10	NVS40WHI	36m	NEP1040WHI	5
NJC1050WHI	5	NBP100WHI	10	NVS50WHI	36m	NEP1050WHI	5
NJC1010WHI	5	NBP100WHI	10	NVS100WHI	36m	NEP1010WHI	5

Flat Angle

MOULDED



WITH
DATA CORNER
MOULDED



Flat Tee

MOULDED



WITH
DATA CORNER
MOULDED



Double Set

FABRICATED



NAF5050WHI	2		NTF5050WHI	2		NMD5050WHI	2
NAF7550WHI	2		NTF7550WHI	2			
NAF7575WHI	2		NTF7575WHI	2			
NAF1040WHI	2		NTF1040WHI	2			
NAF1050WHI	2	NDAF1050WHI	2	NTF1050WHI	2	NDTF1050WHI	2
NAF1010WHI*	1		NTF1010WHI*	1			

* Fabricated

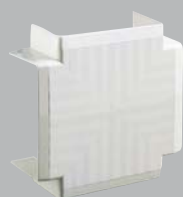
Data corner provides 32mm
(1¼" or 1.25") radius compatible
with Cat 5e and 6 data cables

* Fabricated

Data corner provides 32mm
(1¼" or 1.25") radius compatible
with Cat 5e and 6 data cables

Flat Cross

MOULDED



Flange Coupler



Wall Plates

FOR INTERNAL
CORNERS
MOULDED



50 X 50MM	NCU5050WHI	1	NFC5050WHI	1	NWP5050WHI	5
75 X 50MM	NCU7550WHI	1	NFC7550WHI	1	NWP7550WHI	5
75 X 75MM	NCU7575WHI	1	NFC7575WHI	1	NWP7575WHI	5
100 X 40MM	NCU1040WHI	1	NFC1040WHI	1	NWP1040WHI	5
100 X 50MM	NCU1050WHI	1	NFC1050WHI	1	NWP1050WHI	5
100 X 100MM	NCU1010WHI	1	NFC1010WHI	1		

Mounting Frames



Accessory Spacer



VTS6000WHI
1 GANG
ACCESSORY MOUNTING FRAME
VTS7000WHI
2 GANG
ACCESSORY MOUNTING FRAME

10
5
NSP100WHI
ACCESSORY SPACER
FOR 100MM WIDE
TRUNKING

10



Technical Hotline
+44 (0)1268 563720

Premier

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

MCB/RCD Housings



VTSKMH1WHI

VTS/KMH includes cover.
Accessory not provided

Accessory Boxes

ONE GANG
25MM & 35MM DEEP FOR
100MM WIDE TRUNKING



1

**VTS6025WHI
VTS6035WHI**

35mm deep boxes are only
for use in 100 x 50mm
and 100 x 100mm trunking

TWO GANG
25MM & 35MM DEEP FOR
100MM WIDE TRUNKING



25

25

**VTS7025WHI
VTS7035WHI**

35mm deep boxes are only
for use in 100 x 50mm
and 100 x 100mm trunking

10

10

THREE GANG
28MM & 35MM DEEP FOR
100MM WIDE TRUNKING



10

10

VTS8028WHI

VTS8035

K3716

BOX EARTH TERMINAL

5

5

100

Norwich Trunking is a very popular system for use in schools, offices and commercial installations, because of its durability and the facility to retrofit extra sockets and outlets as required.

Standard Length: 3 metres

Material: PVCu

Colour: White

- 2 sizes with one or two compartments
- Easy to add sockets and outlets once installed
- Secure lid fit enables wall or ceiling mounting
- Unobtrusive and neat
- Easy to assemble and install
- Durable and impact resistant to Heavy Classification BS 4678 Part 4
- All extrusions manufactured from 100% recycled material*

Profile Lengths

Single Compartment Trunking

3 METRE
LENGTHS



NBT3WHI 12m
100 X 25MM
SINGLE COMPARTMENT

3 METRE
LENGTHS



NBT4WHI 12m
100 X 40MM
SINGLE COMPARTMENT

Two Compartment Trunking

3 METRE
LENGTHS



NBT3TCWHI 12m
100 X 25MM
TWO COMPARTMENT

3 METRE
LENGTHS



NBT4TCWHI 12m
100 X 40MM
TWO COMPARTMENT

HOW TO SPECIFY

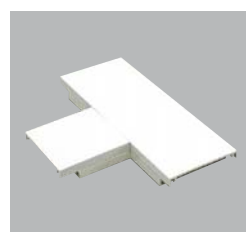
A one or two compartment trunking system manufactured from recycled PVCu and designed to compliment MK Logic Plus accessories. Durable and impact resistant to Heavy Classification BS 4678 Part 4. Clip on covers and accessories aid easy assembly and installation whilst a wide range of accessories provide maximum versatility of installation.



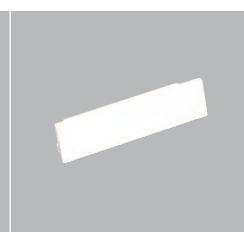
Fittings

Flat Tees

3 METRE
LENGTHS



End Caps



1 COM 100 X 25MM	NTF3WHI 1	NEP3WHI 10
1 COM 100 X 40MM	NTF4WHI 1	NEP4WHI 10
2 COM 100 X 25MM	NTF3TCWHI 1	NEP3WHI 10
2 COM 100 X 40MM	NTF4TCWHI 1	NEP4WHI 10

* Based on 2014 consumption.

Fittings

Flat Angle

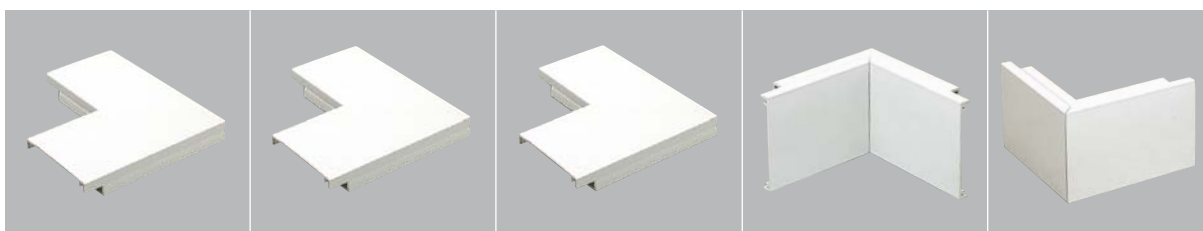
Flat Angle

SMALL
COMPARTMENT
TO OUTSIDE

SMALL
COMPARTMENT
TO INSIDE

Internal Corner

External Corner



1 COM 100 X 25MM	NAF3WHI 1			NAI3WHI 1	NAE3WHI 1
1 COM 100 X 40MM	NAF4WHI 1			NAI4WHI 1	NAE4WHI 1
2 COM 100 X 25MM		NAF3TCWHI 1	NAF3TCSIWHI 1	NAI3TCWHI 1	NAE3TCWHI 1
2 COM 100 X 40MM		NAF4TCWHI 1	NAF4TCSIWHI 1	NAI4TCWHI 1	NAE4TCWHI 1

Internal Couplings

Accessory Mounting Frames

1 GANG

2 GANG

Accessory Mounting Frame with backbox

1 GANG

Spare Trunking Lid

3 METRE
LENGTHS



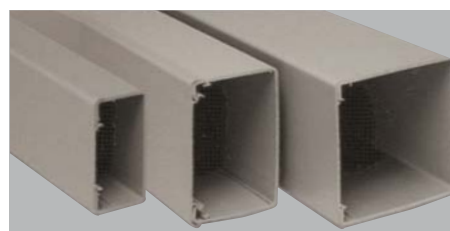
1 COM 100 X 25MM	NCI3WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m
1 COM 100 X 40MM	NCI4WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m
2 COM 100 X 25MM	NCI3WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m
2 COM 100 X 40MM	NCI4WHI 10	NSO1WHI 10	NSO2WHI 5	NSO1TWHI 5	NBT100LIDWHI 12m



Trunking

3 METRE LENGTHS

TO ORDER, USE GRY OR WHI SUFFIX,
E.G. CLT1WHI



50 X 50MM	CLT1	12m
75 X 50MM	CLT2	12m
75 X 75MM	CLT3	12m
100 X 50MM	CLT4	12m
100 X 75MM	CLT5	6m
100 X 100MM	CLT6	6m
150 X 75MM	CLT7	6m
150 X 100MM	CLT8	3m
150 X 150MM	CLT9	3m

Ega Heavy Duty Industrial Cable Trunking is used extensively for industrial wiring purposes. It is available in a large variety of sizes and has found wide acceptance throughout the world. Its durability, safety and strength are well proven. All trunkings have a clip-on cover which enables fast, efficient installation.

All extrusions manufactured from 100% recycled material.*

Manufactured in accordance with BS 4678 Part 4.

Standard Length: 3 metres

Material: PVCu

Colour: White

When ordering, use colour suffix GRY or WHI, e.g. FTF1WHI

*Based on 2014 consumption.

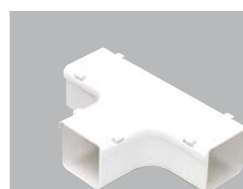
HOW TO SPECIFY

A heavy duty industrial cable trunking system manufactured from recycled PVCu. Durable and impact resistant to Heavy Classification BS 4678 Part 4. Clip on covers and accessories aid easy assembly and installation whilst a wide range of accessories provide maximum versatility of installation.

Flat Tee

MOULDED
GRY OR WHI

FABRICATED
GRY OR WHI



50 X 50MM	FTF1	1	
75 X 50MM	FTF2	1	
75 X 75MM	FTF3	1	
100 X 50MM		FTF4	1
100 X 75MM		FTF5	1
100 X 100MM		FTF6	1
150 X 75MM		FTF7	1
150 X 100MM		FTF8	1
150 X 150MM		FTF9	1



Technical Hotline
+44 (0)1268 563720

Egatube® Industrial

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Spare Trunking Lid

3 METRE LENGTHS
TO ORDER, USE GRY
OR WHI SUFFIX,
E.G. CLT1WHI



Flat Angle

MOULDED
GRY OR WHI

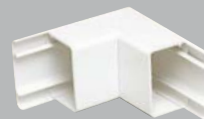


FABRICATED
GRY OR WHI



External Corner

FABRICATED
GRY OR WHI



Internal Corner

FABRICATED
GRY OR WHI



CLT50LID	12m	FAF1	1		FAE1*	1	FAI1*	1	
CLT75LID	12m	FAF2	1		FAE2*	1	FAI2*	1	
CLT75LID	12m	FAF3	1		FAE3*	1	FAI3*	1	
CLT100LID	12m			FAF4	1	FAE4*	1	FAI4*	1
CLT100LID	12m			FAF5	1	FAE5*	1	FAI5*	1
CLT100LID	12m			FAF6	1	FAE6*	1	FAI6*	1
CLT150LID	12m			FAF7	1	FAE7*	1	FAI7*	1
CLT150LID	12m			FAF8	1	FAE8*	1	FAI8*	1
CLT150LID	12m			FAF9	1	FAE9*	1	FAI9*	1

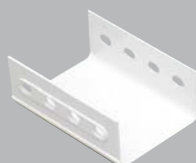
End Cap

MOULDED
GRY OR WHI

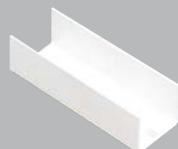


Couplings

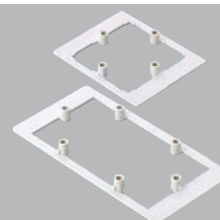
EXTERNAL
WITH RIVETS
MOULDED
GRY OR WHI



INTERNAL PLAIN
GRY OR WHI



Accessories



TEP1	10		TCI1	10	
TEP2	10		TCI2	10	
TEP3	5		TCI3	5	
TEP4	5		TCI4	5	
TEP5 (WHI ONLY)	5		TCI5	5	
TEP6	5	TCE6	5	TCI6	5
TEP7*	1	TCE7*	1		
TEP8*	1	TCE8*	1		
TEP9*	1	TCE9*	1		

EGF5WHI 10
1 GANG
ACCESSORY FRAME
TPR1GRY 200
PUSH IN RIVETS
GREY PLASTIC
HOLE SIZE 7.2MM
TPR1WHI 200
PUSH IN RIVETS
WHITE PLASTIC
HOLE SIZE 7.2MM

* Fabricated

* Fabricated Couplings must be purchased separately for fabricated fittings. Moulded fittings do not require couplings.

Egatube® Cornice

mkelectric.co.uk



Ega Cornice is designed for surface mounting at the wall/ceiling junction as a functional and decorative covering.

It is compatible with Ega Mini Trunking. The smaller, single compartment trunking is ideal for domestic rewires whereas the larger three compartment trunking is best suited to commercial and sheltered housing applications.

- Two trunking profiles
- Wide range of integrated components maximises versatility of application
- Neat and unobtrusive
- Accessories designed to overlap edge of trunking cover, hiding joint line
- Easy to assemble and install
- Durable and impact resistant
- All extrusions manufactured from 100% recycled material*

* Based on 2014 consumption.

HOW TO SPECIFY

A cornice trunking system manufactured from recycled PVCu and available in 40mm x 40mm and 90mm x 90mm. Accessories designed to overlap the edge of trunking covers to hide joint line. Clip on covers and accessories aid easy assembly and installation whilst a wide range of accessories provide maximum versatility of installation.

Trunking 40 x 40mm

SINGLE
COMPARTMENT
3 METRE LENGTHS



Trunking 90 x 90mm

THREE
COMPARTMENT
3 METRE LENGTHS



40 X 40MM	CT1WHI	30m	
90 X 90MM			CT2WHI 12m

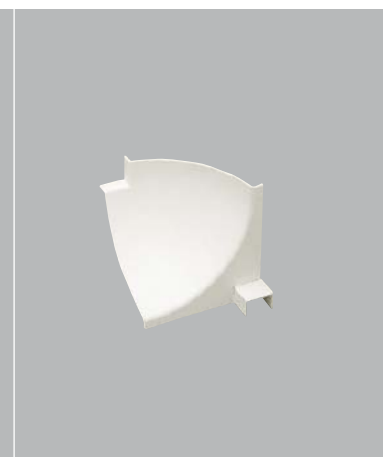
Mini Trunking Adaptors

FOR USE WITH YEA
ADAPTOR CA2 SUPPLIED
WITH ONE BLANKING PLATE



Intersection CT2 to YT2 Mini Trunking

LEFT HAND



40 X 40MM	CA1WHI	10	
90 X 90MM	CA2WHI	10	CAL22WHI 1

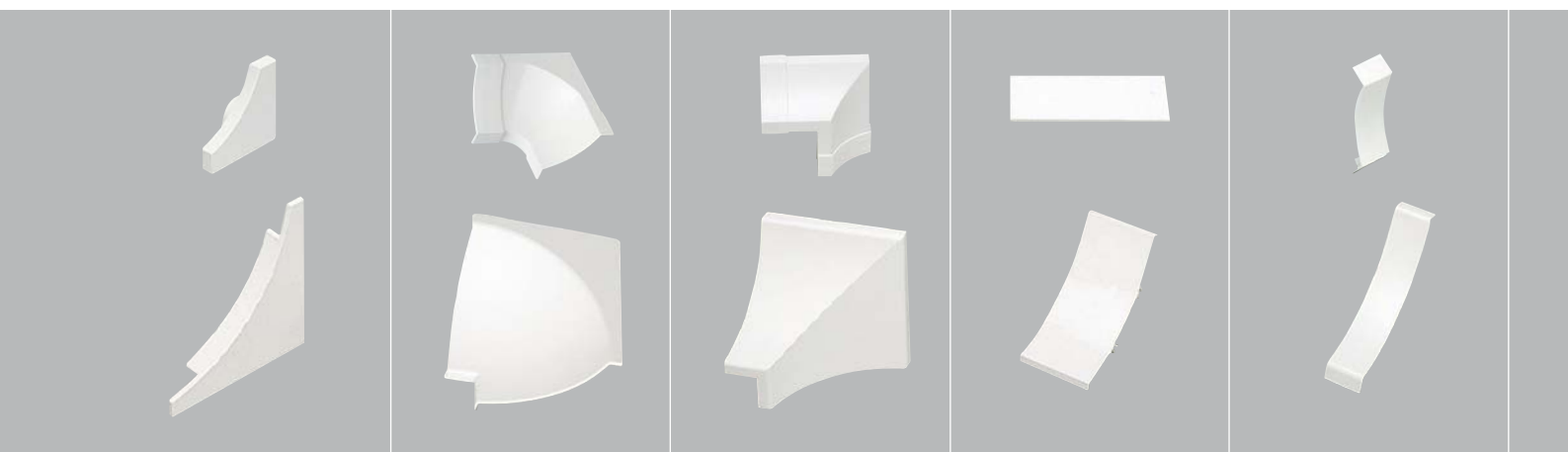
End Caps

Internal Corners

External Corners

Cable Retaining Straps

Joint Covers



CEP1WHI	10	CIP1WHI	10	CXP1WHI	10	CST1WHI	25	CJC1WHI	10
CEP2WHI	10	CIP2WHI	10	CXP2WHI	10	CST2WHI	10	CJC2WHI	10

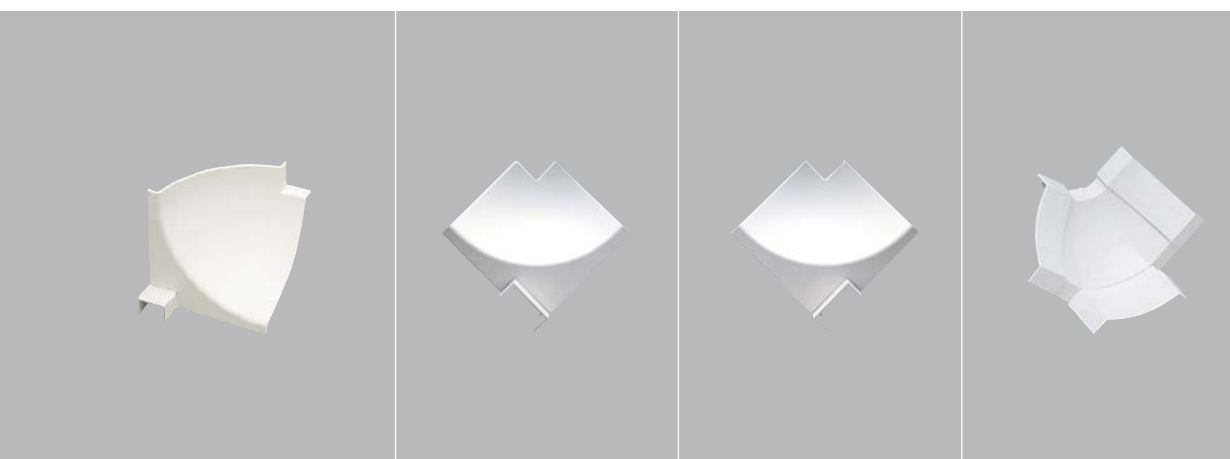
Intersection CT2 to YT3 Mini Trunking

Intersection

RIGHT HAND

LEFT HAND

RIGHT HAND



			C11WHI	10	
CAR22WHI	1	CAL23WHI	1	CAR23WHI	1

EGATUBE® CONDUIT

RANGE INTRODUCTION

Egatube high impact PVCu conduit offers a cost effective solution for both new building and refurbishment contracts.

The wide range of fittings and ancillary products means that almost any installation can be specified with confidence.

- Wide range of sections and sizes
- Oval, round and corrugated sections are compatible
- Simple and fast installation
- Very wide range of components maximises versatility of application
- Very durable and impact resistant
- 2 grades of round conduit to suit various site conditions
- All extrusions manufactured from 100% recycled material*

*Based on 2014 consumption

HOW TO SPECIFY

A range of conduit manufactured from recycled PVCu and available in 16mm to 50mm sizes and available in oval, round and corrugated configurations. All products designed and manufactured to comply to BSEN 61386. A wide range of accessories provide maximum versatility of installation.

Normal Bends

HEAVY GAUGE
FITTED WITH TWO
COUPLINGS
BLK OR WHI

Where there is a choice of colour state the appropriate suffix with the list number when ordering e.g. HIP2BLK
For 16mm sizes use 20mm fittings with reducers.
(Ref. ER1).



16mm		
20mm	ENB2	25
25mm	ENB3	10
32mm		
38mm		
50mm		

Egatube Round Conduit

Manufactured in accordance with:
BS EN 61386-1
BS EN 61386-21

Standard length:
3 metres

Material:
PVCu

High Impact Conduit Heavy Gauge

3 METRE LENGTHS
BLK OR WHI



High Impact Conduit Light Gauge

3 METRE LENGTHS
WHI ONLY



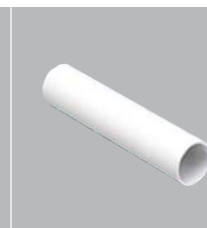
Heavy Gauge Coupling

BLK OR WHI



Expansion Coupling

BLK OR WHI



16mm	HIP1	90m	HLG1WHI	90m	ESC1	50	EEC1BLK ONLY	25
20mm	HIP2	90m	HLG2WHI	90m	ESC2	100	EEC2	100
25mm	HIP3	90m	HLG3WHI	90m	ESC3	50	EEC3	50
32mm	HIP4	30m	HLG4WHI	30m	ESC4	50	EEC4	10
38mm	HIP5BLK	30m	HLG5WHI	30m	ESC5	25	EEC5	10
50mm	HIP6BLK	30m	HLG6WHI	30m	ESC6	20	EEC6	10

WALL THICKNESS: (nominal mm):

HIP1	1.7
HIP2	1.8
HIP3	1.9
HIP4	2.5
HIP5	2.5
HIP6	3.2

WALL THICKNESS: (nominal mm):

HLG1	1.1
HLG2	1.2
HLG3	1.5
HLG4	1.5
HLG5	1.5
HLG6	1.8

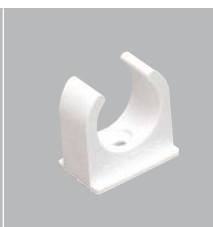
Spacer Bar Saddle

BLK OR WHI



Spring Clip Saddle

BLK OR WHI



Strap Saddle

BLK OR WHI



Quickfit Spacer Saddle

BLK OR WHI



Conduit Clip

BLK OR WHI



LIGHT GAUGE
COUPLINGS NOT
REQUIRED
WHI ONLY

LNB1WHI	25	ESB1	50				
LNB2WHI	100	ESB2	100	MEC2	100	ES2	100
LNB3WHI	50	ESB3	100	MEC3	50	ES3	100
LNB4WHI	50	ESB4	50	MEC4WHI	25		
LNB5WHI	25	ESB5	25				
LNB6WHI	25	ESB6	25				

Egatube® Conduit

mkelectric.co.uk



Inspection Elbow

BLK OR WHI



Quick Fit Inspection Elbow

BLK OR WHI



Inspection Tee

BLK OR WHI



Quick Fit Tee

BLK OR WHI



Inspection Bend

BLK OR WHI



20mm	EIE2	25	EQE2	25	EIT2	25	EQT2	25	EIB2	25
25mm					EIT3	25	EQT3	25	EIB3	25
32mm										
38mm										
50mm										

Compression Gland

*BLK OR WHI



Adaptor Male Thread

WITH LOCK RING
BLK OR WHI


Adaptor Female Thread

WITH MALE BUSH
BLK OR WHI


Clip-in Adaptor

WHI ONLY



Bell Mouth Bush

WHI ONLY



20mm	ECG2* 7-10.5	100	EMA2	100	EFA2	100	CEA2WHI	50	BMB2WHI	50
25mm	ECG3BLK 8-13	50	EMA3	50	EFA3	50				
32mm			EMA4	25	EFA4	25				
38mm			EMA5	25	EFA5	25				
50mm			EMA6	10	EFA6	10				



Technical Hotline
+44 (0)1268 563720

Egatube® Conduit

CABLE MANAGEMENT
CONDUIT AND
MINI

Quick Fit Inspection Bend

BLK OR WHI



Plug Plain

BLK OR WHI



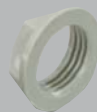
Plug Screwed

BLK OR WHI



Locknut

GRY ONLY



Lockring

BLK OR WHI



Reducer

BLK OR WHI



EQB2	25	EP2	100	EP2S	100	EHL2GRY	100	ECL2	100	ER1 20 x 16	50
EQB3	25	EP3	100	EP3S	100	EHL3GRY	100	ECL3	100	ER2 25 x 20	50
								ECL4	50		
								ECL5	25	ER5WH 38 x 32	10
								ECL6	25		

Male Bush Plain

BLK OR WHI



Male Bush Screwed

BLK ONLY



Female Bush Screwed

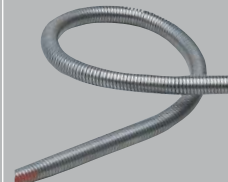
BLK ONLY



Bending Springs

GREEN
HEAVY GAUGE
FOR HIP AND ESP

RED
LIGHT GAUGE
FOR HLG



MPB2	100	SMB2BLK	50	EBF2BLK	100	ESS2	1	ELS2	1
MPB3	100	SMB3BLK	50	EBF3BLK	100	ESS3	1	ELS3	1
		SMB4BLK	50						
		SMB5BLK	25						
		SMB6BLK	25						

Egatube® Boxes

mkelectric.co.uk



Circular Boxes

BLK OR WHI



2ECR1



ECR12EL

Terminal Boxes

BLK OR WHI



2ECR2



2ECR7

Through Boxes

BLK OR WHI



2ECR3



2ECR8

Branch Boxes

BLK OR WHI



2ECR17



2ECR18

2ECR13
20mm LOOP-IN
2ECR1
2ECR1ELWHI*
20mm BACK OUTLET
ECR12
ECR12EL*
NO SPOUT

20

20

20

10

10

2ECR2
20mm ONE WAY
3ECR2
25mm ONE WAY
2ECR7
20mm ONE WAY AND
BACK OUTLET

20

10

20

2ECR3
20mm TWO WAY
3ECR3
25mm TWO WAY
2ECR8
20mm TWO WAY AND
BACK OUTLET

20

10

20

2ECR17
20mm 'U' TWO WAY
2ECR18
20mm 'Y' THREE WAY

20

20

* Fixed external lugs.
20mm Loop-in boxes have 4 x 20mm knockouts
on underside.

MATERIAL:
PVCu
LID FIXING CENTRES:
50.8mm
PILLAR THREAD SIZE:
M4 (Brass inserts)
All boxes contain a moulded recess for
earth terminal.

ALL CIRCULAR BOXES
For 16mm sizes use 20mm fittings with reducers. (Ref. ER/1)
Some circular boxes are available with extended lugs for the support of heavy loads.

LOAD SUSPENSION
Standard Circular Box: 3kg. @ 60°C max.
Extended Lug Box: 10kg. @ 60°C max.
For enclosed lighting fittings see 'Heat Resistant Box' on page 356 or use 'Steel Insert Clips' on page 357.



Technical Hotline
+44 (0)1268 563720

Egatube® Boxes

CABLE MANAGEMENT
CONDUIT AND
MINI

Angle Boxes

BLK OR WHI



2ECR4

Tee Boxes

BLK OR WHI



3ECR5

Intersection Boxes

BLK OR WHI



3ECR6

Tangent Boxes

BLK OR WHI



3ECR14



3ECR15

2ECR4
20mm TWO WAY
3ECR4
25mm TWO WAY

20 **2ECR5**
20 **2ECR5EL***
10 20mm THREE WAY
3ECR5
25mm THREE WAY

* Swivel lug.

20 **2ECR6**
20 **2ECR6EL***
10 20mm FOUR WAY
3ECR6
25mm FOUR WAY

* Swivel lug.

20 **2ECR14**
20 20mm ANGLE
10 **3ECR14**
25mm ANGLE
2ECR15
20mm TEE
3ECR15
25mm TEE

20
10
20
10

MATERIAL:

PVCu

LID FIXING CENTRES:

50.8mm

PILLAR THREAD SIZE:

M4 (Brass inserts)

All boxes contain a moulded recess for earth terminal.

ALL CIRCULAR BOXES

For 16mm sizes use 20mm fittings with reducers. (Ref. ER/1)

Some circular boxes are available with extended lugs for the support of heavy loads.

LOAD SUSPENSION

Standard Circular Box: 3kg. @ 60°C max.

Extended Lug Box: 10kg. @ 60°C max.

For enclosed lighting fittings see 'Heat Resistant Box' on page 356 or use 'Steel Insert Clips' on page 357.

Egatube® Accessories

mkelectric.co.uk



Adaptable Boxes

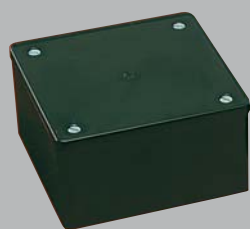
BLK OR WHI



MAB1



MAB2



MAB3

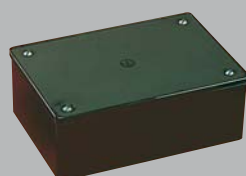
BLK OR WHI



MAB4



MAB5



MAB6

Heat-Resistant Boxes

BLK ONLY



2ECR25

Earth Electrode Box

BLK ONLY



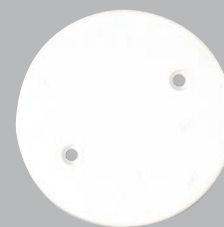
EEB1

Circular Lids Gaskets and Screws

BLK OR WHI



EL1



EL2



EL3

MAB1
EXTERNAL SIZE
75 x 75 x 41mm

5

MAB2
EXTERNAL SIZE
75 x 75 x 53mm

5

MAB3
INTERNAL SIZE
100 x 100 x 50mm

5

MAB4
INTERNAL SIZE
100 x 100 x 75mm

5

Available in Black or White.
When ordering use colour suffix BLK or WHI.

MATERIAL:

PVCu

NOTE:

Boxes are not IP Rated.

MAB5
INTERNAL SIZE
150 x 75 x 50mm

5

MAB6
INTERNAL SIZE
150 x 100 x 50mm

5

MAB7
INTERNAL SIZE
150 x 150 x 75mm

5

2ECR25BLK
20MM FLAT BASED WITH
20MM CUT-OUTS FOR
CONDUIT ENTRY

5

Available in Black only.

MATERIAL:

Noryl/PVCu

LID FIXING CENTRES:

50.8mm

PILLAR THREAD SIZE:

M4 (metal inserts)

LOAD SUSPENSION:

10kg. @ 100°C max.

All Heat Resistant Boxes include keying facility.

EEB1BLK
75 x 75 x 70mm

10

Available in Black only.

MATERIAL:

PVCu

The Egatube Earth Electrode Box is to protect the connection to an earth electrode.

EL1
LIDS 66mm DIA

5

EL2

OVERLAPPING LIDS
85mm DIA

EL3

RUBBER GASKETS
66mm DIA

M4X10SS
SCREWS FOR CIRCULAR
BOXES

EL1/EL2

Available in Black or White.
When ordering use colour suffix BLK or WHI.

EL3

Is available in Black only.

MATERIAL:

EL/1 and EL/2: PVCu

EL/3: Rubber

LID FIXING CENTRES:

50.8mm



Technical Hotline
+44 (0)1268 563720

Egatube® Accessories

CABLE MANAGEMENT
CONDUIT AND
MINI

Extension Rings

BLK OR WHI



EER3



EER6



EER7

Pendant Dome Cover

BLK OR WHI



EDC1

Accessories



SIC



BET1



BET2

Sundries



EWPLUS



ECT1



DRA10

- EER3**
NOM DEPTH 12.5mm **25**
- EER5**
NOM DEPTH 19mm **25**
- EER6**
NOM DEPTH 25mm **25**
- EER7**
NOM DEPTH 32mm **25**
- EER8**
NOM DEPTH 38mm **25**
- EER9**
NOM DEPTH 50mm **25**

Available in Black or White.
When ordering use colour suffix BLK or WHI.
MATERIAL:
PVCu
FIXING CENTRES:
50.8mm
To suit circular conduit boxes.
EER6-EER9 are fitted with slots to suit Steel Insert Clips.

- EDC1** **25**
PENDANT DOME COVER
Available in Black or White.
When ordering use colour suffix BLK or WHI.
FIXING CENTRES:
50.8mm
To suit circular conduit boxes. 20mm conduit female thread only.

- SIC** **100**
STEEL INSERT CLIP
- BET1** **50**
BRASS EARTHING TERMINALS
5 AMP
- BET2** **50**
BRASS EARTHING TERMINALS
15 AMP
- STEEL INSERT CLIP**
Fits most Egatube circular boxes through base knock-outs. Provides additional support for heavy pendants. Tapped M4
NOTE:
Must be fitted before installation of box.
BRASS EARTHING TERMINALS
Fits standard circular boxes and switch/socket boxes.
Supplied complete with screws.

- EWPLUS** **1**
EGAWELD PLUS
0.25 LITRE
EGAWELD PLUS
A specially prepared waterproof vinyl solvent cement for making watertight joints between PVC conduit, trunking and fittings.
COSSH information is available on the MK website: www.mkelectric.co.uk

- ECT1** **1**
EGASNIP CUTTING TOOL
- DRA10** **1**
NYLON DRAW TAPE
10M LENGTH
- DRA20** **1**
NYLON DRAW TAPE
20M LENGTH
- EGASNIP**
A cutting tool which enables conduit, up to 32mm in diameter, and mini trunking, up to 40mm x 25mm, to be cut easily and precisely giving a clean finish with no swarf.
Single handed operation.
Two types of anvil.
Accurate mitre capability.
NYLON DRAW TAPES
An eyelet is fitted.

Egatube® Accessory Boxes

mkelectric.co.uk



Round Corner Accessory Boxes

16mm
PLASTER DEPTH
FLUSH



ESU61WHI

25mm
FLUSH



ESU9MLWHI

35mm
FLUSH



ESU8MLWHI

25mm
SURFACE



ESU241WHI

Square Corner Accessory Boxes

25mm
SURFACE



ESU261WHI

32mm
SURFACE



ESU281WHI



ESU92MLWHI



ESU82MLWHI



ESU242WHI



ESU262WHI



ESU282WHI

ESU61WHI 25
1 GANG
ONE FIXED PILLAR AND
ONE ADJUSTABLE LUG

KNOCKOUTS:
One 16mm oval and
one 20mm oval

MATERIAL:
PVCu

DIMENSIONS:
1 gang: 73 x 73mm

FIXING CENTRES:
1 gang: 60.3mm
BS 4662 and BS 5733
where applicable.

ESU9MLWHI 25
1 GANG
ADJUSTABLE LUGS
ESU92MLWHI 10
2 GANG
ADJUSTABLE LUGS

KNOCKOUTS:
1 gang: Six 20mm round
2 gang: Seven 20mm round
and one 25mm oval

MATERIAL:
PVCu

DIMENSIONS:
1 gang: 73 x 73mm
2 gang: 73 x 134mm

FIXING CENTRES:
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733
where applicable.

ESU81WHI 25
1 GANG
FIXED LUGS
ESU8MLWHI 25
1 GANG
ADJUSTABLE LUGS
ESU82MLWHI 10
2 GANG
ADJUSTABLE LUGS

KNOCKOUTS:
1 gang: Eight 20mm round
2 gang: Nine 20mm round and
one 25mm oval

MATERIAL:
PVCu

DIMENSIONS:
1 gang: 73 x 73mm
2 gang: 73 x 134mm

FIXING CENTRES:
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733
where applicable.

ESU241WHI 25
1 GANG
ESU242WHI 10
2 GANG

KNOCKOUTS:
1 gang:
One 20mm round and
one mini trunking entry
2 gang:
One 20mm round and
three mini trunking entries

MATERIAL:
PVCu

DIMENSIONS:
1 gang: 86 x 86mm
2 gang: 86 x 146mm

FIXING CENTRES:
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733
where applicable.

ESU261WHI 25
1 GANG
ESU262WHI 10
2 GANG

KNOCKOUTS:
ESU261: One 20mm round
ESU262: One 20mm round

MATERIAL:
PVCu

DIMENSIONS:
1 gang: 86 x 86mm
2 gang: 86 x 146mm

FIXING CENTRES:
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733
where applicable.

ESU281WHI 25
1 GANG
ESU282WHI 10
2 GANG

KNOCKOUTS:
1 gang: One 20mm round
2 gang: One 20mm round and
one mini trunking entry

MATERIAL:
PVCu

DIMENSIONS:
1 gang: 86 x 86mm
2 gang: 86 x 146mm

FIXING CENTRES:
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733
where applicable.

Oval Conduit

Coupling

Oval to Round Adaptor

3 METRE LENGTHS



Manufactured in accordance with:

BS 4607 Part 5

Standard length: 3 metres

Material: PVCu

Colour: White

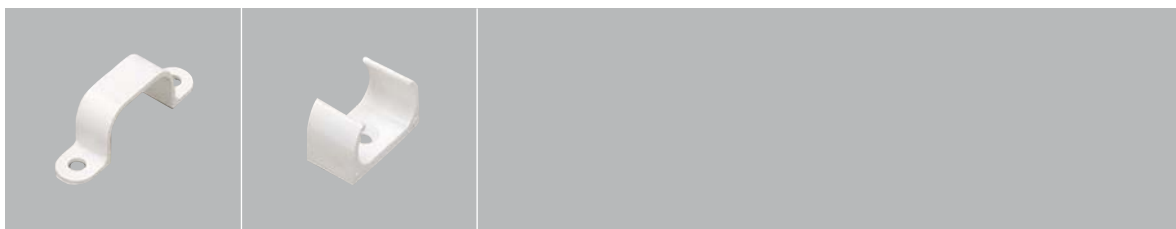
All extrusions manufactured from
100% recycled material.*

* Based on 2014 consumption.

13mm x 8mm	EOC1WHI	150m		
16mm x 10mm	EOC2WHI	150m		
22.5mm x 11mm	EOC3WHI	150m	CO3WHI	50
29mm x 11mm	EOC4WHI	150m	CO4WHI	50
29mm x 16mm	EOC5WHI	150m		
23mm x 14mm	EOC6WHI	150m		

Saddle

External Spring Clip Oval



16mm	OS2WHI	100	XC2WHI	100
20mm	OS3WHI	100	XC3WHI	100
25mm	OS4WHI	100	XC4WHI	100

Egaflex

The Egaflex PVCu conduit range is a corrugated pliable system which can be used for the connection of vibrating equipment or to provide tight bends for interconnecting conduits. The range can be surface mounted or cast-in concrete and can also be used with standard conduit fittings.

Manufactured in accordance with:

BS EN 61386-1

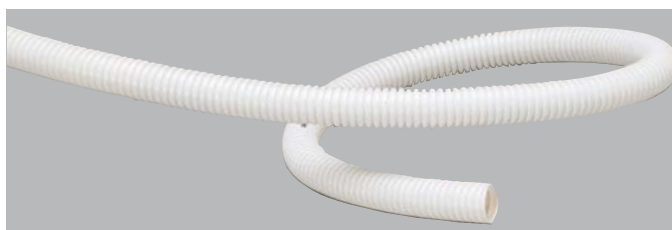
BS EN 61386-22

Material: PVCu

Colour: White

Standard length: 50 metres coil

Corrugated PVCu Conduit



Adaptor Nylon



16mm	EF1WHI	50m Coil	FAB1WHI	50
20mm	EF2WHI	50m Coil	FAB2WHI	50
25mm	EF3WHI	50m Coil	FAB3WHI	50

Rectangular Channelling

2 METRE LENGTHS

Wall thickness: 0.9mm

Material: PVCu

Colour: White

Standard length: 2 metres

Other lengths can be supplied against quantity orders.

All extrusions manufactured from 100% recycled material.*

* Based on 2014 consumption.



12mm	(8mm DEPTH APPROX)	REC1WHI	150mm
25mm	(8mm DEPTH APPROX)	REC2WHI	150mm
25mm	(9.5mm DEPTH APPROX)	REC3WHI	150mm

EGA® MINI

RANGE INTRODUCTION

Ega Mini Trunking consists of a range of sizes of extruded PVCu sections for the containment of electrical and data cabling for surface wiring.

The products are ideally suited for refurbishment programmes as well as new installation projects, both in the domestic and commercial sectors.

Speedfix Mini Trunking is complete with an acrylic foam adhesive for fast location of power circuits and secure containment of low voltage wiring.

FEATURES & BENEFITS

WIDE RANGE OF TRUNKING PROFILES

WIDE RANGE OF INTEGRATED COMPONENTS

Maximises versatility of application

EASY TO ASSEMBLE AND INSTALL

DURABLE AND IMPACT RESISTANT

SPEEDFIX OPTIONS

For faster installation

ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL*

5 YEAR GUARANTEE

*Based on 2014 consumption

HOW TO SPECIFY

A range of mini conduit manufactured from recycled PVCu and available in 16mm x 16mm to 50mm x 50mm sizes. All products to be designed and manufactured to comply to BS EN 50085 Part 1 whilst a wide range of accessories provide maximum versatility and installation. Additional optional "Speedfix" mini trunking to utilize foam adhesive for fast location and installation for power circuits and low voltage wiring.

Ega Mini®

mkelectric.co.uk



Manufactured in accordance with BS EN 50085 Part 1.

Standard Length: 3 metres

Available in 2 metre lengths for Non UK Markets.

Material: PVCu

Mini
Trunking

3 METRE LENGTHS

2 METRE LENGTHS
(FOR NON UK MARKETS)

Coupling

MOULDED



16 x 16mm	YT1WHI	90m		YT1D1WHI	60m	YC1WHI	20	
25 x 16mm	YT2WHI	90m	YT2CHA	30m	YT2D1WHI	60m	YC2WHI OR CHA	20
32 x 12.5mm	YT200WHI	30m		YT200D1WHI	32m	YC200WHI	20	
40 x 16mm	YT3WHI	45m		YT3D1WHI	32m	YC3WHI	10	
40 x 25mm	YT4WHI	45m	YT4CHA	30m	YT4D1WHI	32m	YC4WHI	10
40 x 40mm	YT5WHI	45m		YT5D1WHI	32m	YC5WHI	10	
50 x 25mm	YT6WHI	30m		YT6D1WHI	32m			
50 x 32mm	YT7WHI	30m		YT7D1WHI	32m			
50 x 50mm	YT8WHI	12m				YC8WHI	10	

Manufactured in accordance with BS EN 50085 Part 1.

Standard Length: 3 metres

Available in 2 metre lengths for Non UK Markets.

Material: PVCu

Self Adhesive Tape should not be relied upon for permanent fixing of the Speedfix range. A permanent means (such as screws) should also be used.

Speedfix
Mini
Trunking

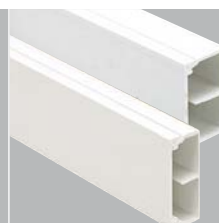
3 METRE LENGTHS



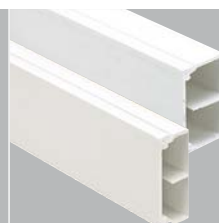
2 METRE LENGTHS

Twin
Compartment
Trunking

3 METRE LENGTHS



2 METRE LENGTHS



16 x 16mm	SPF1WHI	60m	SPF1D1WHI	60m		
25 x 16mm	SPF2WHI	30m	SPF2D1WHI	60m		
32 x 12.5mm						
40 x 16mm	SPF3WHI	30m	SPF3D1WHI	32m	ZT3WHI	30m
40 x 25mm	SPF4WHI	30m			ZT4WHI	30m
40 x 40mm						
50 x 25mm						
50 x 32mm						
50 x 50mm						

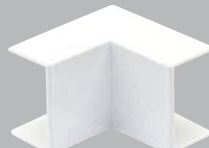
End Cap

MOULDED



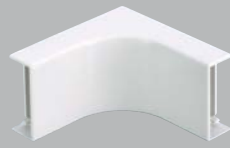
Internal Corner

MOULDED



Internal Data Corner

MOULDED



External Corner

MOULDED



External Data Corner

MOULDED



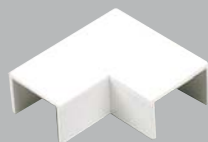
YEP1WHI	20	YAI1WHI	20		YAE1WHI	20	
YEP2WHI OR CHA	20	YA12WHI OR CHA	20		YAE2WHI OR CHA	20	
YEP200WHI	20	YA1200WHI	20		YAE200WHI	20	
YEP3WHI	20	YA13WHI	5	YDA13WHI	10	YAE3WHI	5
YEP4WHI OR CHA	20	YA14WHI OR CHA	5		YAE4WHI OR CHA	5	
YEP5WHI	20	YA15WHI	5		YAE5WHI	5	
YEP6WHI	10	YA16WHI	5		YAE6WHI	5	
YEP7WHI	10	YA17WHI*	5		YAE7WHI*	5	
YEP8WHI	10	YA18WHI	5		YAE8WHI	5	

*Fabricated

*Fabricated

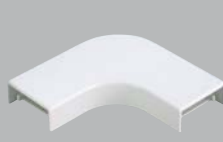
Flat Angle

MOULDED



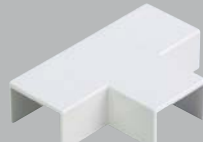
Flat Data Angle

MOULDED



Flat Tee

MOULDED



Flat Data Tee

MOULDED



MOULDED



YAF1WHI	20		YTF1WHI	20			
YAF2WHI OR CHA	20		YTF22WHI OR CHA	20	YTF21WHI	20	
YAF200WHI	20		YTF200WHI	20			
YAF3WHI	5	YDAF3WHI	10	YTF3WHI	5	YDTF3WHI	10
YAF4WHI OR CHA	5		YTF4WHI OR CHA	5	YTF42WHI OR CHA	5	
YAF5WHI	5		YTF5WHI	5	Flat Tee vertical aperture sizes: YTF21WHI 16 x 16mm Flat Tee vertical aperture sizes: YTF42WHI 25 x 16mm		
YAF6WHI	5		YTF6WHI	5			
YAF7WHI*	5		YAF6WHI*	5			
YAF8WHI	5		YAF8WHI	5			

Flat Tee vertical aperture sizes:
YTF42WHI 25 x 16mm

*Fabricated

*Fabricated

Ega Mini®

mkelectric.co.uk



Side Tee

MOULDED



MOULDED



Adaptors

FOR USE WITH
MINI TRUNKING
BOXES MOULDED

MOULDED



16 x 16mm			YEA1WHI	25				
25 x 16mm	YST21WHI	10	YST22WHI	10	YEA2WHI	25	UEA2WHI	25
40 x 16mm			YEA3WHI	25	UEA3WHI	25		

Side Tees (perpendicular)
Aperture Sizes
YST22WHI: 25 x 16mm

UEA Adaptors
For fixing with adhesive. They are
particularly useful when spurring off from
a larger trunking section.

Circular
Boxes

MOULDED



16 x 16mm	YCR1ELWHI	10
25 x 16mm	YCR1ELWHI	10
40 x 16mm	YCR1ELWHI	10

Circular Boxes
Accept standard ceiling roses, pull switches and plug-in lighting fittings.
The base incorporates an earth terminal facility
(order terminal separately, see page 356).
Lid fixing centres: 50.8mm
Pillar thread size: M4 (Metal inserts)
Load Suspension: 5kg @ 60°C max.

Round Corner Accessory Boxes

SURFACE



ESU231WHI



ESU2311WHI



ESU2323WHI



ESU3511WHI



ESU3523WHI

- ESU231WHI** 25
1 GANG 25MM
ONE ENTRY
CENTRE (TOP)
- ESU2311WHI** 25
1 GANG 25MM
ONE ENTRY (SIDE)
- ESU2323WHI** 10
2 GANG 25MM
THREE ENTRIES
(TOP & BOTH SIDES)
- ESU3511WHI** 25
1 GANG 32MM
ONE ENTRY
CENTRE (TOP)
- ESU3523WHI** 10
2 GANG 32MM
THREE ENTRIES.
(TOP, LEFT & RIGHT SIDE)

Square Corner Accessory Boxes

SURFACE



ESU2211WHI



ESU2512WHI



ESU2523WHI

- ESU2211WHI** 25
1 GANG 25MM
ONE ENTRY (SIDE)
- ESU2512WHI** 25
1 GANG 25MM
TWO ENTRIES
(TOP & BOTTOM)
- ESU2223WHI** 10
2 GANG 25MM
THREE ENTRIES
(TOP & BOTH SIDES)
- ESU2523WHI** 10
2 GANG 25MM
THREE ENTRIES
(TOP & BOTTOM)

SURFACE



ESU2713WHI



ESU2721WHI



ESU4423WHI

- ESU2713WHI** 10
1 GANG 32MM
THREE ENTRIES
(TOP & BOTTOM)
- ESU2721WHI** 10
2 GANG 32MM
ONE ENTRY
CENTRE (TOP)
- ESU4423WHI** 5
2 GANG 41MM
THREE ENTRIES
(TOP & BOTH SIDES)
- Ega Round and Square Corner boxes are for use in conjunction with mini trunking adaptors, reference:
YEA – straight entry and YSA – side entry.
- Material:**
PVCu
- Dimensions:**
1 gang: 86 x 86mm
2 gang: 86 x 146mm
- Fixing Centres:**
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733 where applicable.

SIDE MOUNTING SURFACE



ESU32140WHI



ESU32225WHI

- ESU32125WHI** 10
1 GANG TO FIT 25 X 16MM
TRUNKING. TWO ENTRIES
- ESU32140WHI** 10
1 GANG TO FIT 40 X 16MM
TRUNKING. TWO ENTRIES
- ESU32225WHI** 10
2 GANG TO FIT 25 X 16MM
TRUNKING. TWO ENTRIES
- ESU32240WHI** 10
2 GANG TO FIT 40 X 16MM
TRUNKING. TWO ENTRIES

Side mounting boxes do not require adaptors and can be used with 25mm x 16mm and 40 x 16mm mini trunking.

Material:
PVCu

Dimensions:
1 gang: 86* x 86mm
2 gang: 86* x 146mm
* excluding plinth

Fixing Centres:
1 gang: 60.3mm
2 gang: 120.6mm
BS 4662 and BS 5733 where applicable.

Egaline Wall Box Assemblies

FOR AMERICAN ACCESSORIES



ESUUSB17WHI



ESUUSB19WHI



ESUUSB22WHI



ESUUSB53WHI

- ESUUSB17WHI** 5
1 GANG
38MM DEPTH
FOUR ENTRIES
(NON UK)
- ESUUSB19WHI** 5
1 GANG
45MM DEPTH
FOUR ENTRIES
(NON UK)
- ESUUSB22WHI** 5
1 GANG
51MM DEPTH
FOUR ENTRIES
(NON UK)
- ESUUSB53WHI** 5
2 GANG
DEEP BOX
FOUR ENTRIES
(NON UK)
- Egaline Wall Box assemblies are for use in conjunction with Mini Trunking
- Spout adaptors reference:**
YEA – straight entry and YSA-side entry.
- Material:**
PVCu
- Dimensions:**
1 gang: 124 x 79mm



RED ALERT™

RANGE INTRODUCTION

Based on MK's well proven Ega Mini Trunking System, Red Alert brings all of the benefits in reducing the installation time on call points, computer power supply switches, water heaters, boiler switches, emergency stops, panic alarms, smoke detectors, sounders and warning lights.

Manufactured in PVCu, the Red Alert Mini Trunking System meets the growing specification requirement for alarm circuit identification. In addition it affords extra mechanical protection to cables, dramatically improves the overall appearance of Mineral Insulated surface wiring and further serves, where necessary, to highlight the locations of manual call points.

HOW TO SPECIFY

A range of mini trunking designed specifically for alarm circuit identification. Manufactured from recycled PVCu and available in 16mm x 16mm to 40mm x 16mm sizes. Clip on covers and accessories aid easy assembly and installation, whilst a wide range of accessories provide maximum versatility of installation.

FEATURES & BENEFITS

WIDE RANGE OF TRUNKING PROFILES

WIDE RANGE OF INTEGRATED COMPONENTS

Maximises versatility of application.

EASY TO ASSEMBLE AND INSTALL

DURABLE AND IMPACT RESISTANT

SPEEDFIX OPTIONS ALLOW FAST INSTALLATION

ALL EXTRUSIONS MANUFACTURED FROM 100% RECYCLED MATERIAL*

* Based on 2014 consumption

EASILY CUT TO
REQUIRED LENGTH

CLIP ON COMPONENTS FOR EASY
INSTALLATION

DOUBLE LID CLIP CREATES
STRONG RIGID STRUCTURE

NO WALL CHASING

FEWER CABLE CLIPS

MULTIPLE WIRING FACILITY

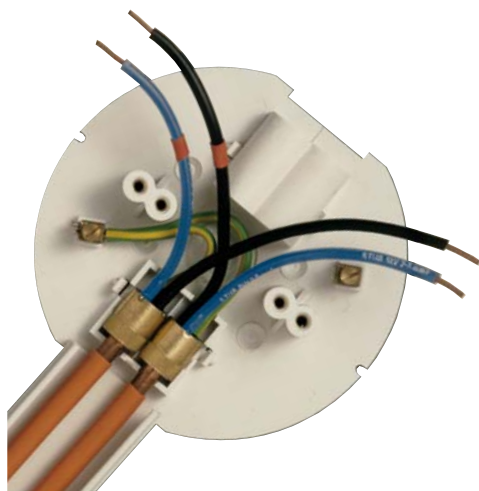
NO NEED FOR CABLE GLANDS
AND SHROUDS

UNIQUE POT CLAMPS

MANUFACTURED FROM NON
CONDUCTIVE CORROSIVE
RESISTANT MATERIAL

ALL BOXES FITTED WITH
EARTH TERMINAL

FIXING PILLARS WITH
THREADED BRASS INSERTS



Trunking

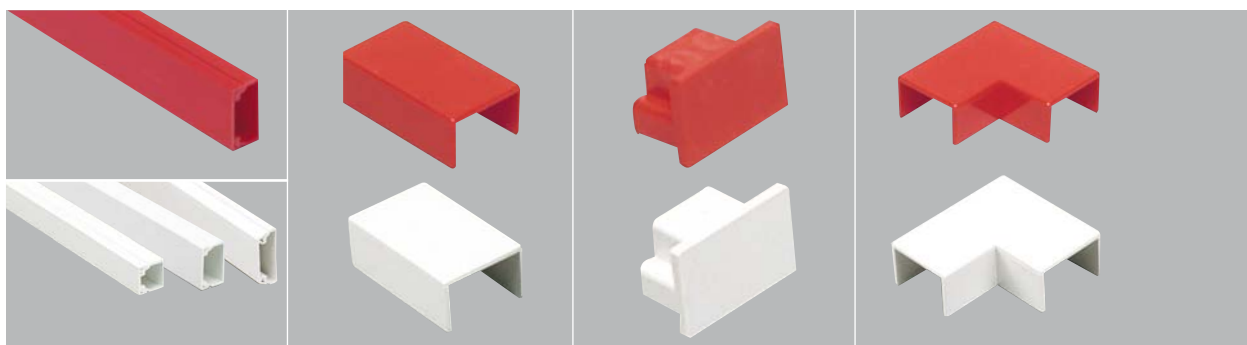
Coupling

End Cap

Flat Angle

3 METRE LENGTHS

Red trunking and fittings are only available in the 25 x 16mm profile



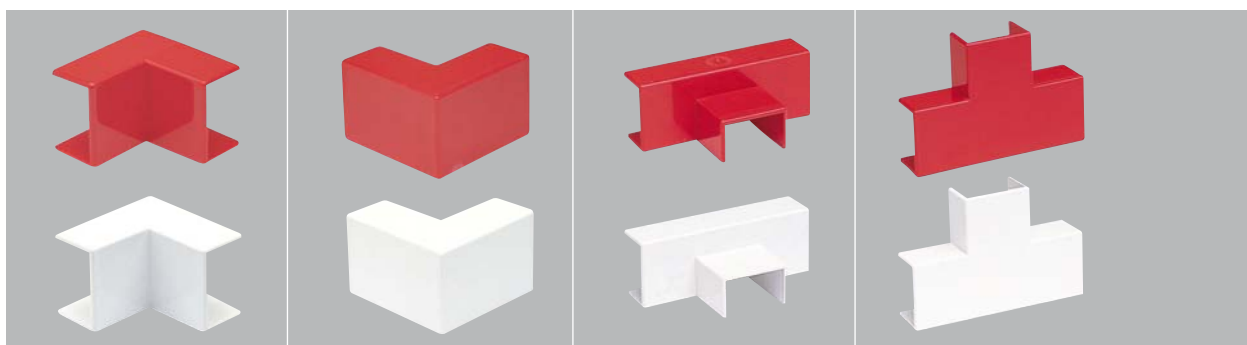
16 x 16mm	YT1WHI	90m	YC1WHI	20	YEP1WHI	20	YAF1WHI	20
25 x 16mm	YT2RED	30m	YC2RED	20	YEP2RED	20	YAF2RED	20
	YT2WHI	90m	YC2WHI	20	YEP2WHI	20	YAF2WHI	20
32 x 12.5mm	YT200WHI	30m	YC200WHI	20	YEP200WHI	20	YAF200WHI	20
40 x 16mm	YT3WHI	45m	YC3WHI	10	YEP3WHI	20	YAF3WHI	5

Internal Corner

External Corner

Side Tee

Flat Tee



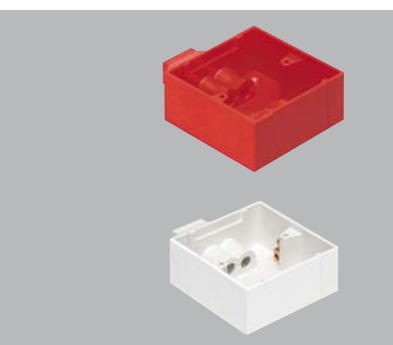
16 x 16mm	YAI1WHI	20	YAE1WHI	20		YTF1WHI	20	
25 x 16mm	YAI2RED	20	YAE2RED	20	YST21WHI	10	YTF21WHI	20
	YAI2WHI	20	YAE2WHI	20	YST22RED	10	YTF22RED	20
					YST22WHI	10	YTF22WHI	20
32 x 12.5mm	YAI200WHI	20	YAE200WHI	20		YTF200WHI	20	
40 x 16mm	YAI3WHI	5	YAE3WHI	10		YTF3WHI	5	

APERTURE SIZES
YST21:
16 x 16mm
YST22:
25 x 16mm

APERTURE SIZES
YTF21WHI:
16 x 16mm
YTF22:
25 x 16mm

Boxes

MI ACCESSORY BOX (1 ENTRY)



STANDARD ACCESSORY BOX (1 ENTRY)



CIRCULAR ACCESSORY BOX (1/2 ENTRY)



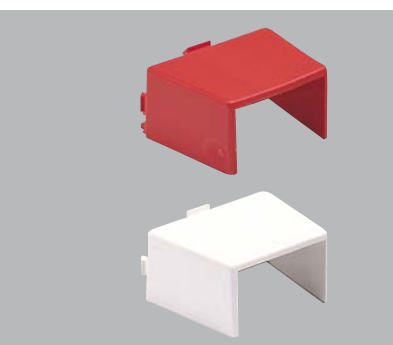
ESU501RED	5	ESU503RED	5	YCR502RED	5
ESU501WHI	5	ESU503WHI	5	YCR502WHI	5

SQUARE ACCESSORY BOXES
Accessory fixing centres: 60.3mm
External dimensions: 86 x 86 x 38mm
Pillar thread size: M3.5

CIRCULAR ACCESSORY BOXES
Accessory fixing centres:
50.8mm and 70.0mm
External dimensions:
134mm diameter
Pillar thread size:
M4
Load suspension:
3kg at 60°C max

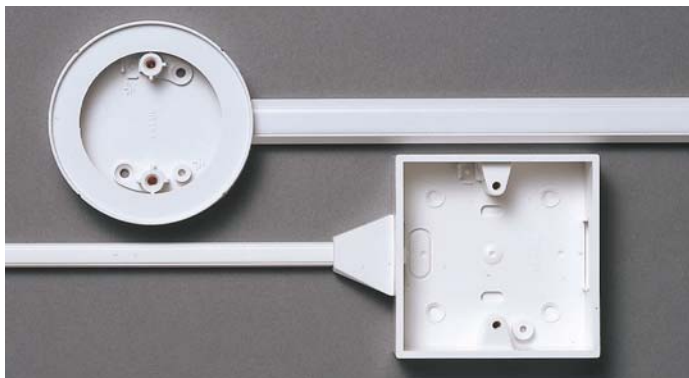


Adaptors



YEA1WHI	25
YEA2RED	25
YEA2WHI	25
YEA200WHI	25
YEA3WHI	25





Ega Communication trunking is a series of unobtrusive low profile PVCu trunkings designed to contain the smaller diameter cables used for telecommunication and signal purposes. There are three sizes available and the systems are complete with fittings to enable them to be used in conjunction with the mini trunking boxes.

All extrusions manufactured from 100% recycled material.*

* Based on 2014 consumption.

Communication Trunking

3 METRE LENGTHS

2 METRE LENGTHS
(NON UK)



11 x 8mm	CMT1WHI	60m	CMT1D1WHI	60m
16 x 10mm	CMT3WHI	60m		
20 x 12.5mm	CMT4WHI	60m		

Standard Length:

3 metres
2 metre lengths are available
for Non UK Markets.

Material:

PVCu

COLOUR:

White

Available in 2 metre lengths
for non UK markets.

Speedfix™ Trunking

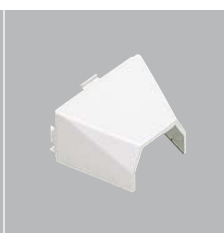
3 METRE LENGTHS

2 METRE
LENGTHS
(NON UK)



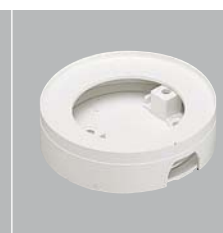
Self adhesive tape should not be relied upon for permanent fixing of the Speedfix range. Additional fixing means (such as screws) should be used.

Spout Adaptor



Circular Box

ONE ENTRY



Circular Box Through

TWO ENTRY



11 x 8mm	SMT1WHI	60m	SMT1D1WHI	60m	CMA1WHI	25		
16 x 10mm	SMT3WHI	60m	SMT3D1WHI	60m	CMA3WHI	25		
20 x 12.5mm	SMT4WHI	60m	SMT4D1WHI	60m	CMA4WHI	25	YCR1001ELWHI	10

Available in 2 metre lengths
for non UK markets.

Spout adaptors are for
use with switch and
socket boxes.

Circular boxes accept standard ceiling roses and pull switches.
The base incorporates earth terminal facility (order terminal
separately, see page 356).

LID FIXING CENTRES:

50.8mm

PILLAR THREAD SIZE:

M4 (Metal inserts)

Load suspension:

5kg @ 60°C max



INTERACT UNDERFLOOR POWER

RANGE INTRODUCTION

Interact Underfloor Power is a low profile powertrack system catering for single and multi-circuit applications, specifically designed to ensure a fast and simple installation.

It is suitable for standard, clean earth, uninterrupted or dedicated power supplies and allows power throughout the building.

HOW TO SPECIFY

A low profile 63A underfloor powertrack system to cater for single and multi-circuit applications. Snap fast crocodile joints to ensure fast and simple installation with provision for 300mm socket spacing's. Key and colour coded tap-offs and sockets used to prevent cross pole contamination.

FEATURES & BENEFITS

PATENTED 'SNAP FAST' CROCODILE JOINTS

Ensures fast and simple installation

DUAL TAP-OFF FOR TWIN SYSTEM

Offers simple 'single fit' installation

KEY CODED AND COLOUR CODED TAP-OFFS

Provides mechanical protection against cross pole contamination

POWERTRACK WITH INTEGRAL END FEED AVAILABLE

COMPLIES WITH WIRING REGULATIONS

Complies with both the requirements of BS EN 61534 and BS 7671:2014 IET Wiring Regulations (17th Edition)

AVAILABLE IN 63A

5 YEAR GUARANTEE

Interact Under

mkelectric.co.uk



TRACK INTERLINKS AVAILABLE

- Flexibility to achieve maximum floor coverage



AVAILABLE IN 63A

- Flexible to suit project requirements
- Lower rating opens opportunities for low cost installations

KEY CODED TRACK

- Prevents inadvertent mixing of configurations

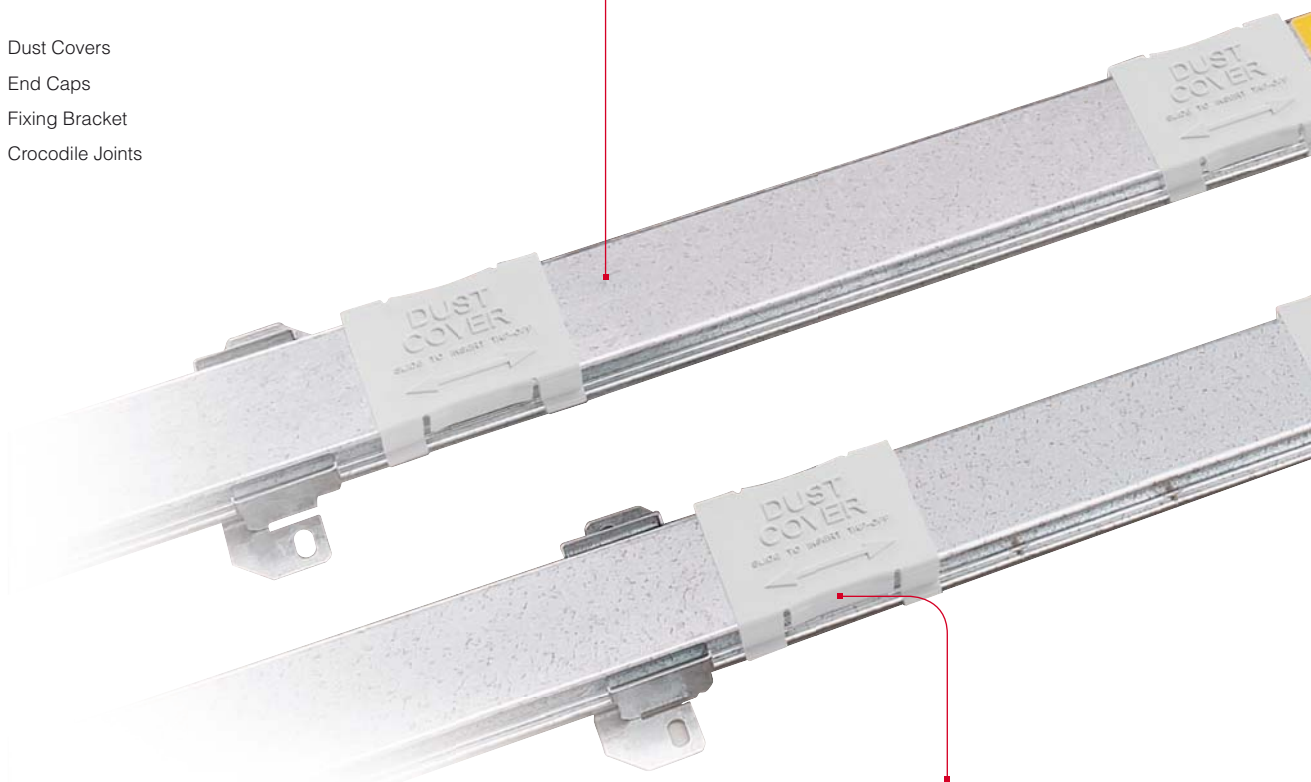
SIMPLIFIED TRACK ORDERING

Track comes complete with:

- Dust Covers
- End Caps
- Fixing Bracket
- Crocodile Joints

A GENUINE TWIN POWERTRACK SYSTEM

- Clean Earth and Standard Earth in one single track
- Single fitting of two circuits for speed of installation



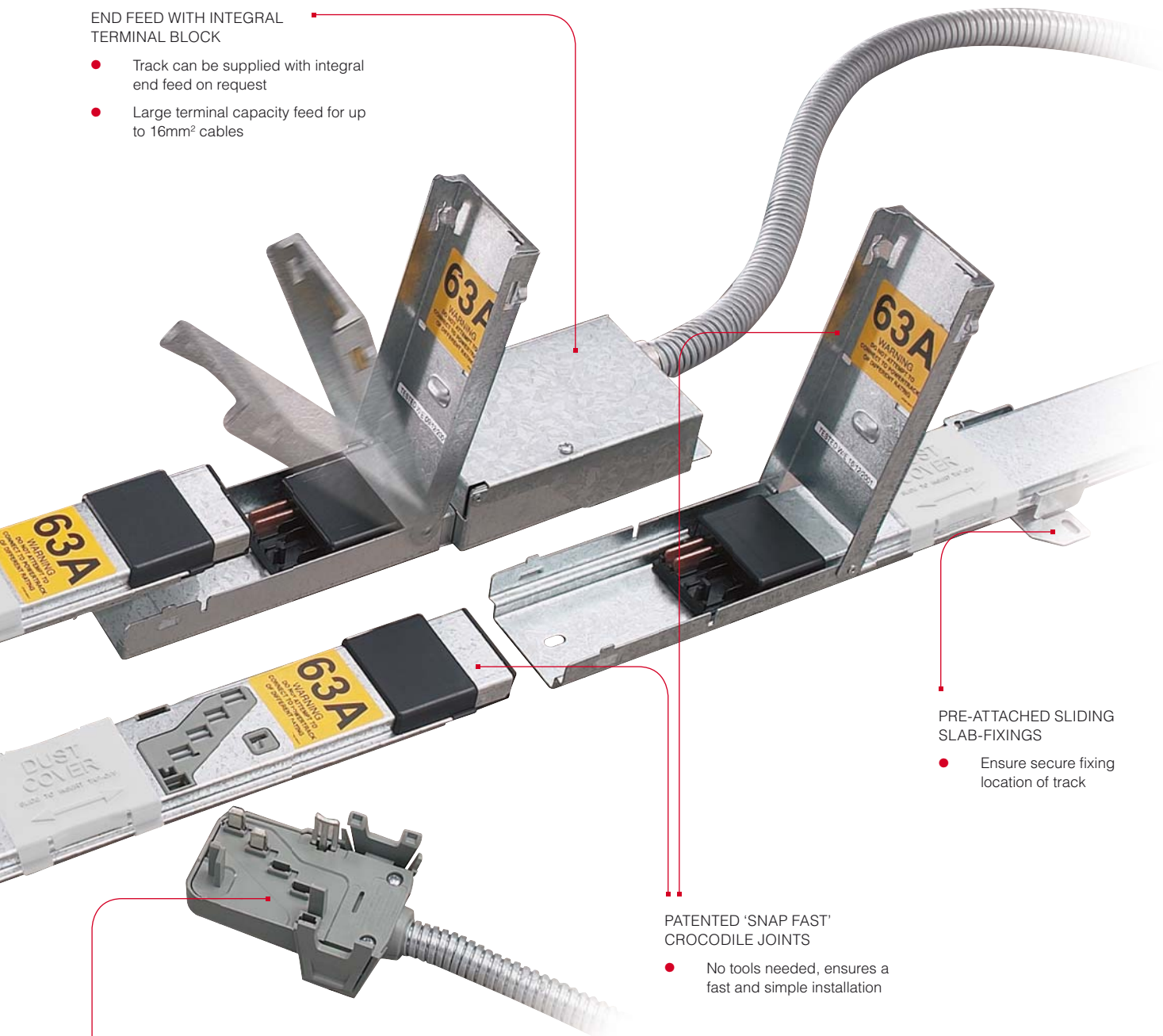
PRE-ATTACHED SLIDING DUST COVERS

- Keeps track clean prior to and during installation

Designed for use with cablelink plus modular, cablelink plus single pan floorboxes, slab boxes, grommets and deskpod

END FEED WITH INTEGRAL TERMINAL BLOCK

- Track can be supplied with integral end feed on request
- Large terminal capacity feed for up to 16mm² cables



PRE-ATTACHED SLIDING SLAB-FIXINGS

- Ensure secure fixing location of track

PATENTED 'SNAP FAST' CROCODILE JOINTS

- No tools needed, ensures a fast and simple installation

KEY CODED AND COLOUR CODED TAP-OFFS AND SOCKETS

- Provides mechanical protection against cross pole contamination

SOCKET SPACINGS

- 300mm socket spacings
- Enables tap-off to be fitted at regular intervals

Interact Under

63 AMP SYSTEM

63 Amp Track



STANDARD GREY
SPN



AUX GREEN SINGLE
PHASE



CLEAN EARTH
RED CE



3 PHASE GREEN TPN



DUAL CE & STD RED
/ GREY DUAL



1.2m TRACK

PE IS EARTHED TO CASE

PE IS EARTHED TO CASE

PITCH 300MM 4 SOCKETS	UB61233GRY	UB61233GRN	UB61234RED	UB61235GRN	UB61236DUO
--------------------------	------------	------------	------------	------------	------------

2.4m TRACK

PITCH 300MM 8 SOCKETS	UB62433GRY	UB62433GRN	UB62434RED	UB62435GRN	UB62436DUO
--------------------------	------------	------------	------------	------------	------------

3.6m TRACK

PITCH 300MM 12 SOCKETS	UB63633GRY	UB63633GRN	UB63634RED	UB63635GRN	UB63636DUO
---------------------------	------------	------------	------------	------------	------------

All 63A underfloor powertrack incorporate shutters and are rated to IP4X. Complies with the requirements of BS EN 61534.
Track comes with the following slab mounting brackets: 1.2m = 1, 2.4m = 1, 3.6m = 2

63 AMP SYSTEM

63 Amp System



STANDARD GREY



AUX GREEN



CLEAN EARTH RED



3 PHASE GREEN



DUAL CE & STD
RED / GREY

End Feeds



Standard Grey	Aux Green	Clean Earth Red	3 Phase Green	Dual CE & Std Red / Grey
STANDARD				
UF63GRY	UF63GRN	UF64RED	UF65GRN	UF66DUO
OPPOSITE END FEED				
UF63GRYLH	UF63GRNLH	UF64REDLH	UF65GRNLH	UF66DUOLH

Each opposite End Feed comes with an end cap to close off the powertrack run.
Terminal Capacity = 16mm².

Integral Feed Track



Standard Grey	Aux Green	Clean Earth Red
1.2M* PITCH 300MM 4 SOCKETS		
IFUB61233GRY	IFUB61233GRN	IFUB61234RED
2.4M* PITCH 300MM 8 SOCKETS		
IFUB62433GRY	IFUB62433GRN	IFUB62434RED
3.6M* PITCH 300MM 12 SOCKETS		
IFUB63633GRY	IFUB63633GRN	IFUB63634RED

* Nominal length of Interact Underfloor Power excluding feed section. Feed section is 100mm in length.

Flexible Interlinks








Standard Grey	Aux Green	Clean Earth Red	3 Phase Green	Dual CE & Std Red / Grey
1.2M				
UI6312GRY	UI6312GRN	UI6412RED	UI6512GRN	UI6612DUO
2.4M				
UI6324GRY	UI6324GRN	UI6424RED	UI6524GRN	UI6624DUO
3.6M				
UI6336GRY	UI6336GRN	UI6436RED	UI6536GRN	UI6636DUO

Interact Under

Tap-off Leads

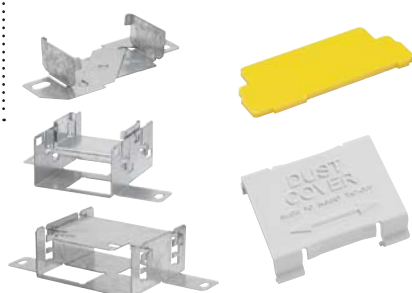


TYPE	PIN POSITION			CABLE / CONDUIT	CURRENT RATING	PROTECTION	3 METRE** 2.5MM ²	4.0MM ²	5 METRE* 2.5MM ²	4.0MM ²	KEY CODES†
STANDARD GREY			N2 L2 PE	LSF / LSF	13A	FUSED	UT31301C		UT51301C		
				16MM	32A	UNFUSED		UT33201†††		UT53201†††	
				16MM	13A	FUSED	UT31301		UT51301		
AUX / PHASE 1 GREEN	PE	N1	L1	LSF / LSF	13A	FUSED	UT31302C		UT51302C		
				16MM	32A	UNFUSED		UT33202†††		UT53202†††	
				16MM	13A	FUSED	UT31302		UT51302		
PHASE 2 GREEN	PE	N1	L2	LSF / LSF	13A	FUSED	UT31310C		UT51310C		
				16MM	32A	UNFUSED		UT33210		UT53210	
				16MM	13A	FUSED	UT31310		UT51310		
PHASE 3 GREEN	PE	N1	L3	LSF / LSF	13A	FUSED	UT31311C		UT51311C		
				16MM	32A	UNFUSED		UT33211		UT53211	
				16MM	13A	FUSED	UT31311		UT51311		
ALL PHASE GREEN	PE	N1	L1 L2 L3	16MM	28A	UNFUSED		UT33205		UT53205	
CE RED	CE	N1	L1	LSF / LSF	13A	FUSED	UT31304C		UT51304C		
				16MM	32A	UNFUSED		UT33204†††		UT53204†††	
				16MM	13A	FUSED	UT31304		UT51304		
DUO (RED)	CE	N1	L1 N2 L2 PE	20MM	28A	UNFUSED		UT33206		UT53206	

Tap-offs are supplied as single cables inside steel flexible conduit, except those with 'C' suffix, which are supplied with 3 or 4 core LSF flex, as appropriate. * Unfused tap-offs in excess of 3m, must only be used on powertrack protected with a 32A (or less) circuit protection device. ** 3M tap offs. Stated length refers to length of wires within the unit, not the conduit length. Conduit length will be between 2.7 and 2.8 meters in length when fully extended. When un-extended, conduit length will decrease by a further 0.1 to 0.2 meters. Minimum length of un-extended conduit will be 2.5 meters.

This is to comply with BS7671:2008 17th Edition IET Wiring Regulations. † Key codes shown are from the perspective of the Power Track socket, the tap-off key code will be a mirror image when viewed from underneath. †† Add 'DE' suffix for Dual Earth High Integrity Earthing, e.g. UT51301DE. Unfused tap-offs – High Integrity Earthing as standard. Fused tap-offs – add '607' suffix for High Integrity Earthing by use of a single 4mm² earth conductor, e.g. UT51301607 ††† Neutrik tap-offs – add 'DEN' suffix for Dual Earth High Integrity Earthing with a neutrik connector e.g. UT33201DEN. For UT33204 and UT53204 add 'N' suffix for the neutrik connector

Other Components



PART NO.	DESCRIPTION
UK1	Additional Slab Brackets
UK3	Additional End Plates
UK5*	Height Adjustable Slab Bracket – Track 17mm, 27mm And 39mm
UK5F*	Height Adjustable Slab Bracket – End Feed 17mm, 27mm And 39mm
UKDC	Additional Dust Cover

* Fixing brackets should be positioned within 300mm from either end of a track run and either side of all joints. Minimum support requirement 3.6m length = 4 brackets, 2.4m length = 3 brackets, 1.2m length = 2 brackets.

†† In the published 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7. (16th Edition = Section 607)



CABLELINK PLUS MODULAR

RANGE INTRODUCTION

Cablelink Plus Modular Floorboxes have been specifically engineered to ensure robustness, a faster installation and maximum life span flexibility.

The unique "Ladder" design enables modules to be positioned at lower heights within the box to cater for Cat 6, 6A & 7 patch leads, transformer plug tops and audio visual applications. The design allows the complete box and modules to be easily installed and removed.

HOW TO SPECIFY

A range of modular 2, 3 and 4 module floorboxes designed for robustness, maximum product life, easy installation and tested to EN50085-2-2. Product to utilise a "ladder" design to enable modules to be positioned and 100-124mm heights with increased clearance for Cat 6 & 6A patch leads, transformer plugs and audio visual applications. Product to have a self-closing lid with locking option available. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations.

FEATURES & BENEFITS

TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD

SUPPORTS CAT 6, CAT 6A & CAT 7

QUICK RELEASE BLADES

Ensures fast and simple installation

FLEXIBLE SOLUTION

Choice of two frame sizes provide 3 and 4 module options

COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

SELF CLOSING LID

In accordance with IEC 61534-22

WIDE RANGE OF POWER AND DATA ACCESSORIES

5 YEAR GUARANTEE

CP Modular

mkelectric.co.uk



Cablelink Plus Modular Floorbox

**TESTED TO EN 50085-2-2
TO ACCEPT 5000N LOAD**

OUTLET BOX COLOUR

- Grey (RAL 7011)

ROBUST CORD CAPS

- Designed for improved retention

HANDLE

- Designed for improved accessibility

8MM RECESSED LID

- Simple carpet cut out
- Easily removable and reversible for improved accessibility
- Can be hinged from either of two sides
- Self Closing in accordance with BS EN 61534-22

OPTIONAL LOCKABLE LID

- Added security when not in use

SQUARE BOX OPTION

- 90° rotation of floorbox for system flexibility**

OPTIONAL LID TETHER

- Added security
- Eliminates lid losses

MODULE RETAINER CLIP

Secures module to 'ladder' frame*

ONE PIECE MOULDED FRAME

- Simple ordering of product
- Faster installation

LADDER DESIGN

- Modules can be positioned at different heights (100-124mm range)
- Increased clearance for Cat 6, 6A and 7 patch leads, transformer plugs and audio visual applications
- Improved module retention via easy fix clips

BLADES

- Quick release blades to secure firmly in position for a "fit and forget" installation
- No tools required for faster installation
- Self adjusting blades – ensures floorbox remains secure throughout service life
- Fixes to floor thicknesses of 15-50mm

MODULES

- Design enables modules to be installed/removed whilst box is still in situ
- Left and right handed power plates provide plug top cable strain relief
- Pre-wired power modules available for quicker installation
- Cat 6, 6A and 7 and fibre solutions available

*When module retainer clip fitted, first rung of 'ladder' frame can not be used.

**Only on 265 X 265 boxes.

Cablelink Plus Modular Floorbox

The Modular Floorbox and Modules are ideal for use with the Interact Underfloor Power System – see page 371 for details.

Modular Floorbox Selector Guide

The Design Service enables bespoke customised floorboxes to be configured and delivered to meet the customers individual requirements.

- Step 1** Choose the number of compartments required (3 or 4 compartments)
- Step 2** Choose whether the lid is lockable or not
- Step 3** Choose which modules are required (See below for power options and next page for data / other options)
- Step 4** What height are the modules to be fitted (100mm, 108mm, 116mm or 124mm)
- Step 5** Do the power modules require tap-offs?
- Step 6** If yes choose which type (See page 376 for tap-off options)

Floorbox



Box Size Compartment	265 x 265mm 3	340 x 265mm 4
100–124MM DEPTH	CRMB265-3GRY*	CRMB340-4GRY*

* Lockable option available – add suffix 'L' e.g CRMB265-3GRYL. Floorbox lids must never be locked whilst in use. Box not supplied with key. Supplied complete as floorbox with 8mm recess lid. Smaller compartment floorbox available in Cablelink Plus Single Pan Box, see page 384 for more details.
For pre-configured options available – see page 381.

Serviced Power Modules



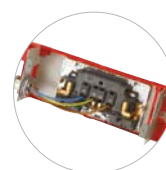
LEFT HAND MODULE –
CRM11730



RIGHT HAND MODULE
– CRM11730RH

Description	Left Hand Modules	
	Standard	Clean Earth
2G 13A SWITCH SOCKET OUTLET	CRM11730*	CRM11730CE*
2G 13A SWITCH SOCKET OUTLET NON STANDARD (T PIN)	CRM11730NS*	CRM11730NSCE
2G 13A SOCKET OUTLET	CRM11731*	
2G 13A 30MA PASSIVE RCD SWITCH SOCKET OUTLET	CRM11735*	CRM11735CE
3G 13A SOCKET OUTLET	CRM11720	CRM11720CE
4G 13A SWITCH SOCKET OUTLET†	CRM11750	CRM11750CE
4G 13A SWITCH SOCKET OUTLET NON STANDARD (T PIN)†	CRM11750NS	CRM11750NSCE
4G 13A SOCKET OUTLET†	CRM11751	

- Modules are available Left Hand and Right Hand to achieve a 'staggered' arrangement
- 'Staggered' arrangement ensures strain relief clearance for moulded plug tops
- Add 'RH' suffix for Right Hand Module, e.g CRM11730RH
- When four socket outlets are required, order CRM11750 'staggered' arrangement
- For more detail on how to order and configure your Cablelink Plus Modular Floorbox, please see page 731-734



Modules have unique two piece design to provide quick and safe installation. Earthing achieved through screwed connection between base and module plate.

Additional plates are available via the Design Service, see page 16

† Double module size with staggered arrangement to provide strain relief clearance for moulded plugs.

* Add 'RH' suffix for Right Hand Module, e.g. CRM11730RH

CP Modular

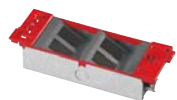
Accessory Modules

The conduit entry faces are integral with the accessory plate, enabling quick termination to the power or data plate and facilitates the remaining part of the back box to be fitted quickly with no risk to wiring being damaged.

Unserviced Data Modules



CRM21201



CRM21215

Part No.	Description
CRM21201	4 x LJU6C Apertures (Knockouts)
CRM21301	6 x LJU6C Apertures
CRM21500	4 x ST Fibre Connector Apertures
CRM21215*	4 x LJU6C Aperture Wave Plate
CRM21117	4 x Alphasnap Apertures
CRM31501	2 x Euro 50 x 50mm Apertures

Earthing studs are provided on all Unserved data modules to enable a reliable connection to earth to be made. Earthing Kit CX-10 is recommended for use to ensure the earthing cable is connected correctly.

* Larger back boxes are available on request via the Design Service, see page 16.

Optional Extras



LID TETHER


Part No.	Description
CX-01	Cable Retainers – pack of 10
CX-02	Lid Tether Kit – pack of 5
CX-04GRY	Cord Cap for 265 x 265 and 340 x 265mm Lid – Grey
CX-10	Earthing Kit – pack of 10
CRXKEY	Lock Key – pack of 2
CRM31201	Blank Module

Pre-Configured Range

To aid fast and simple product selection, storage and installation, a selection of popular pre-configured floorboxes are available to order:




- 2, 3 or 4 module options
- Supplied with Serviced Power and/or Unserviced Data Plates
- Choice of standard modules or pre-wired to a tap-off
- Pre-wired boxes supplied with a 3m tap-off, High Integrity Earthing compliance as standard

2 Module Configuration – 265 x 265mm Floorbox

	Part no.	Module 1	Module 2	Module 3	Tap-Off
	CRM321	2G Switch Socket Outlet	BLANK	4G DATA PLATE LJU6C	NA
	CRM321W	2G Switch Socket Outlet	BLANK	4G DATA PLATE LJU6C	UT33201 GREY 4MM ² 3M




All modules supplied set at 90mm from top of lid to base of module.

3 Module Configurations – 265 x 265mm Floorbox

	Part no.	Module 1	Module 2	Module 3	Tap-Off
	CRM333	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	CRM333W	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4MM ² 3M
	CRM334	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	NA
	CRM334W	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	UT33201 GREY 4MM ² 3M
	CRM336	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	NA
	CRM336W	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	UT33204 CE RED 4MM ² 3M

All modules supplied set at 90mm from top of lid to base of module

4 Module Configurations – 340 x 265mm Floorbox

	Part no.	Module 1	Module 2	Module 3	Module 4	Tap-Off
	CRM431	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	NA
	CRM431W	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	UT33201 GREY 4MM ² 3M
	CRM434	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	NA
	CRM434W	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	UT33201 GREY 4MM ² 3M
	CRM444	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	CRM444W	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4MM ² 3M

All modules supplied set at 90mm from top of lid to base of module.



PRODUCT APPLICATION

MULTIMEDIA SOLUTIONS – COMBINATION PLATES

The combination plates provide unrivalled aesthetic enhancement and reduced visual impact on the wall, created when numerous devices are individually installed in one location. Additionally they offer a functional solution for when power, audio visual and data connectivity are required at a single point.

There are 10 different configurations offered over 4 of our ranges – Logic Plus, Edge, Elements and Aspect.





CABLELINK PLUS SINGLE PAN BOX

RANGE INTRODUCTION

Cablelink Plus Single Pan Box provides an effective interface between services beneath the floor and the office environment.

Designed to offer robustness and constructed with a single piece metal frame, the floorbox is available with 1, 3 and 4 compartments and a choice of 70mm or 95mm box depths to cater for floor voids of restricted space.

HOW TO SPECIFY

A range of 1, 2, 3 and 4 module single pan floorboxes designed to meet EN50085-2-2. Product to incorporate a ratchet self-levelling system enable rapid fitting of the frame and lid. Pan design to incorporate side knockouts and compartment segregation and be available in both 70mm and 95mm pan depths. Product to have a self-closing lid with locking option available. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations.

FEATURES & BENEFITS

TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD

SUPPORTS CAT 6 & CAT 7

70mm through the use of the wave plate

SHALLOW VOIDS ACCOMMODATED

With 70mm pan depth

ADJUSTABLE DEVICE PLATE

To increase wiring space or greater plug top clearance

COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

SELF-CLOSING LID

In accordance with IEC 61534-22

FLOORBOXES ARE RATED IP2X IN ACCORDANCE WITH BS EN 50085-1

WIDE RANGE OF POWER AND DATA ACCESSORY PLATES

5 YEAR GUARANTEE

CP Single Pan Box

mkelectric.co.uk



Cablelink Plus Single Pan Box

TESTED TO EN50085-2-2
TO ACCEPT 5000N LOAD

ROBUST CORD CAPS

- Designed for improved retention

OUTLET BOX COLOUR

- Grey (RAL 7011)

RATCHET LEVELLING SYSTEM

- Self levelling and rapid fitting of frame and lid

OPTIONAL CABLE RETAINERS



FLANGE FIXINGS

- Fast and simple installation

WIDE RANGE OF POWER AND DATA PLATES

- Suitable for all applications
- Pre-configured options available for fast and simple installation on site

HANDLE

- Designed for improved accessibility

OPTIONAL LOCKABLE LID

- Added security when not in use

LID

- Simple carpet cut out
- Easily removable and reversible for improved accessibility
- Lid can be hinged from either of two sides
- Self closing in accordance with IEC 61534-22

OPTIONAL TETHER

- Added security
- Eliminates lid losses

STAGGERED PLATE

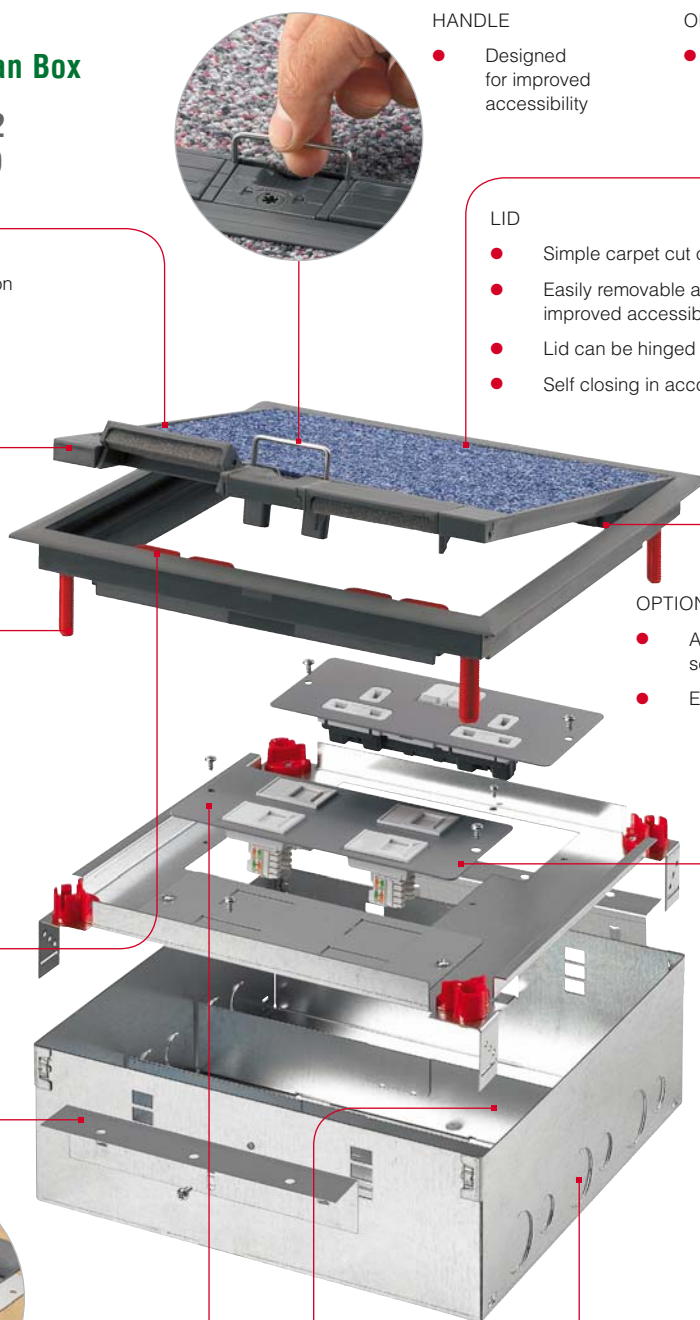
- Provides strain relief clearance for moulded plug tops
- Device plate positioned to provide 35mm wiring space for 70mm deep box and 45mm wiring space for 95mm deep box
- Stagger plate only available within 3 compartment floorbox

ONE PIECE FRAME

- Robust metal design
- 70mm pan depth is ideal for shallow applications and plenum floors
- 70mm and 95mm pan depths available

SIDE KNOCKOUTS

- Pre-cut for fast and simple installation



COMPARTMENT SEGREGATION



Cablelink Plus Single Pan Box

The Single Pan Box is ideal for use with the Interact Underfloor Power System – see page 371 for more details. The design service enables bespoke customised floorboxes to be configured and delivered to meet individual requirements.

Floorbox selector guide

- Step 1** Choose either a 1, 3 or 4 compartment box
- Step 2** Choose the depth required (70mm or 95mm)
- Step 3** Choose which accessories are required (See below for accessory plate options)
- Step 4** Do the power modules require tap-offs?
- Step 5** If yes choose which type? (see page 376 for tap-off options)

Floorbox



Compartments	1	3	4
Box Size	100 x 200mm	265 x 265mm	340 x 265mm
70mm Depth	CRB100UK-70-1GRY**	CRB265UK-70-3GRY*	CRB340UK-70-4GRY*
95mm Depth	CRB100UK-1GRY**	CRB265UK-3GRY*	CRB340UK-4GRY*

*Lockable option available – add suffix 'L' e.g CRB265UK-3GRYL. Floorbox lids must never be locked whilst in use. Box not supplied with key. 95mm depth floorbox device plate provides wiring space of 45mm allowing for Cat 6 / Cat 7 compliance. 70mm depth floorbox device plate provides wiring space of 35mm. Spare lids and frames are available, please see page 439 for details. **These boxes will only accept CXP10745 for power plate option.

Accessory Plates

Accessory plates are common to most ranges, they will fit all Cablelink Plus Single Pan, Screed and Onix Plus™ floorboxes. Standard Plates are for use with 100 x 200mm, 265 x 265mm and 340 x 265mm floorboxes.

Serviced Power Plates

Standard Part No.	Description
CXP10730*=	2G 13A Switch Socket Outlet
CXP10730NS*=	2G 13A Switch Socket Outlet Non-Standard (T Pin)
CXP10731*=	2G 13A Socket Outlet
CXP10731NS	2G 13A Socket Outlet Non Standard (T Pin)
CXP10745	2G 13A Angled Socket Outlet
CXP10735*	2G 13A RCD 30mA Passive Switch Socket Outlet**
CXP10760	2G 13A Switch Socket Outlet – Side Wired
CXP10720	3G 13A Socket Outlet
CXP10740	2G 16A 2P+E German Socket Outlet** Non UK

* For Clean Earth wiring – add suffix 'CE' e.g CXP10730CE.
Clean Earth Switched Power plates are identified with red rockers, unswitched with red sockets.
** Requires a 45mm wiring space, not suitable with 70mm depth boxes
= Supplied with the MK Electric 3-pin safety shutter as standard.

Unserviced Data Plates

Standard Part No.	Description
CXP20200	2 x LJU6C Apertures
CXP20201*	4 x LJU6C Apertures (Knockouts)
CXP20215	4 x LJU6C Wave Apertures
CXP20205	4 x Krone Apertures
CXP20301	6 x LJU6C Apertures
CXP30501	2 x Euro 50 x 50mm Apertures
CXP30503	1 x Euro 150 x 50mm Aperture
CXP30502	2 x 45 x 45mm Module Apertures
CXP20500	4 x ST Fibre Connector Apertures
CXP30201	Blank Plate

* Data apertures are supplied as knockouts.

Optional Extras

Part No.	Description
CX-01	Cable Retainers (Pack of 10)
CX-02	Lid Tether Kit (Pack of 5)
CX-03GRY	Cord Cap for 100 x 200mm Lid – Grey (Pack of 10)
CRXKEY	Lock Key (Pack of 2)




CP Single Pan Box

Pre-Configured Range





To aid fast and simple product selection, storage and installation, a selection of popular pre-configured 95mm floorboxes are available to order:

- 1, 3 or 4 compartment options
- Supplied with Service Power/or Unserved Data Plates




1 Compartment Configuration – 100 x 200mm Floorbox

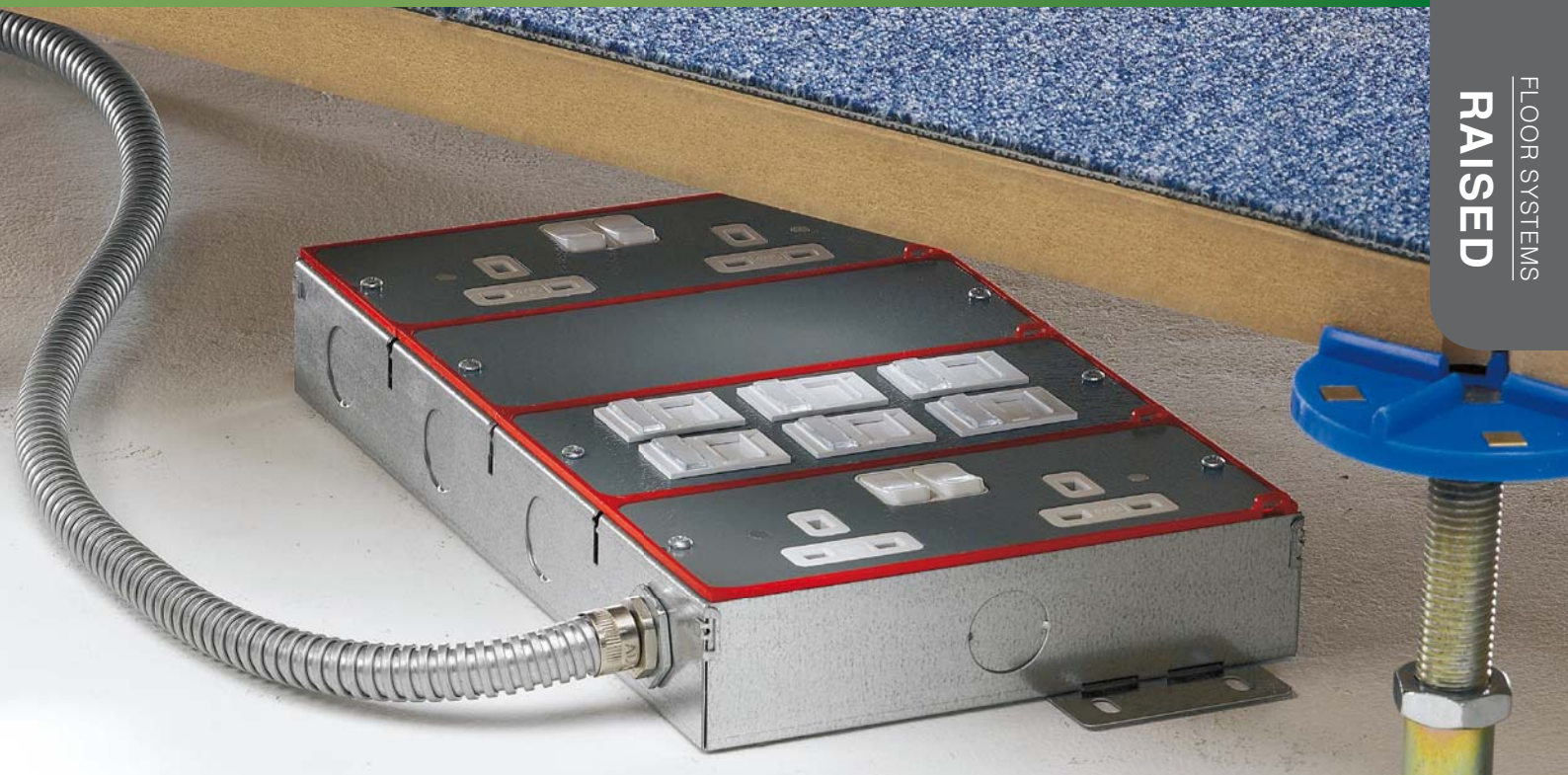
	Part no.	Accessory Plate 1	Tap-Off
	CRP100-RCD	RCD Socket	NA
	CRP101	2G 13A Angled/Unswitched Socket Outlet	NA
	CRP121	1G 13A Switch Socket and 2 x LJU6C aperture	NA

3 Compartment Configurations – 265 x 265mm Floorbox

	Part no.	Accessory Plate 1	Accessory Plate 2	Accessory Plate 3	Tap-Off
	CRP321	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	NA
	CRP321W	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	UT33201 GREY 4mm ² 3m
	CRP333	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	CRP333W	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4mm ² 3m
	CRP334	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	NA
	CRP334W	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	UT33201 GREY 4mm ² 3m
	CRP336	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	NA
	CRP336W	2G Switch Socket Outlet Clean Earth	2G Switch Socket Outlet Clean Earth	4G Data Plate LJU6C	UT33204 CE RED 4mm ² 3m

4 Compartment Configurations – 340 x 265mm Floorbox

	Part no.	Accessory Plate 1	Accessory Plate 2	Accessory Plate 3	Accessory Plate 4	Tap-Off
	CRP421	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	NA
	CRP421W	2G Switch Socket Outlet	Blank	Blank	4G Data Plate LJU6C	UT33201 GREY 4mm ² 3m
	CRP434	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	NA
	CRP434W	2G Switch Socket Outlet	2G Switch Socket Outlet	Blank	4G Data Plate LJU6C	UT33201 GREY 4mm ² 3m
	CRP444	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	NA
	CRP444W	2G Switch Socket Outlet	2G Switch Socket Outlet	4G Data Plate LJU6C	4G Data Plate LJU6C	UT33201 GREY 4mm ² 3m



SLAB BOXES

RANGE INTRODUCTION

The Slab Box provides the same services (power and data) as a floorbox, but with the benefit of a more aesthetically pleasing grommet access.

FEATURES & BENEFITS

FLEXIBLE EFFECTIVE UNDERFLOOR SOLUTION

ALTERNATIVE OPTION TO FLOORBOXES

Use in conjunction with a grommet for an aesthetic alternative

COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

WIDE RANGE OF POWER AND DATA ACCESSORIES

FAST AND EFFICIENT INSTALLATION

5 YEAR GUARANTEE

HOW TO SPECIFY

A range of 1, 2, 3 and 4 module Slab Boxes designed to be used on raised floor systems. Cable outlet via floor grommet products provide less obtrusive and aesthetically pleasing access to power and data services. "Products to feature" options for Cat 5E, 6 and fibre solutions with a wide range of power sockets and data plates and outlets. Side and end knockouts ensure fast and simple installation. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations.

Slab Boxes

CONNECTION POINT FOR THE DISTRIBUTION OF POWER AND DATA SERVICES

- Flexible and cost effective underfloor solution

WIDE RANGE OF POWER SOCKETS, DATA PLATES AND OUTLETS

- Comprehensive range to meet all requirements
- Product quality guaranteed

CABLE OUTLET VIA THE GROMMET

- Aesthetically less obtrusive alternative to other underfloor solutions
- Facilitates minimum floor disruption

CAT 5E, 6, AND FIBRE SOLUTIONS AVAILABLE

- Offers flexibility and choice of data solution

SLAB BOXES CAN BE SUPPLIED PRE-WIRED TO AN INTERACT TAP-OFF

- Fast and efficient installation

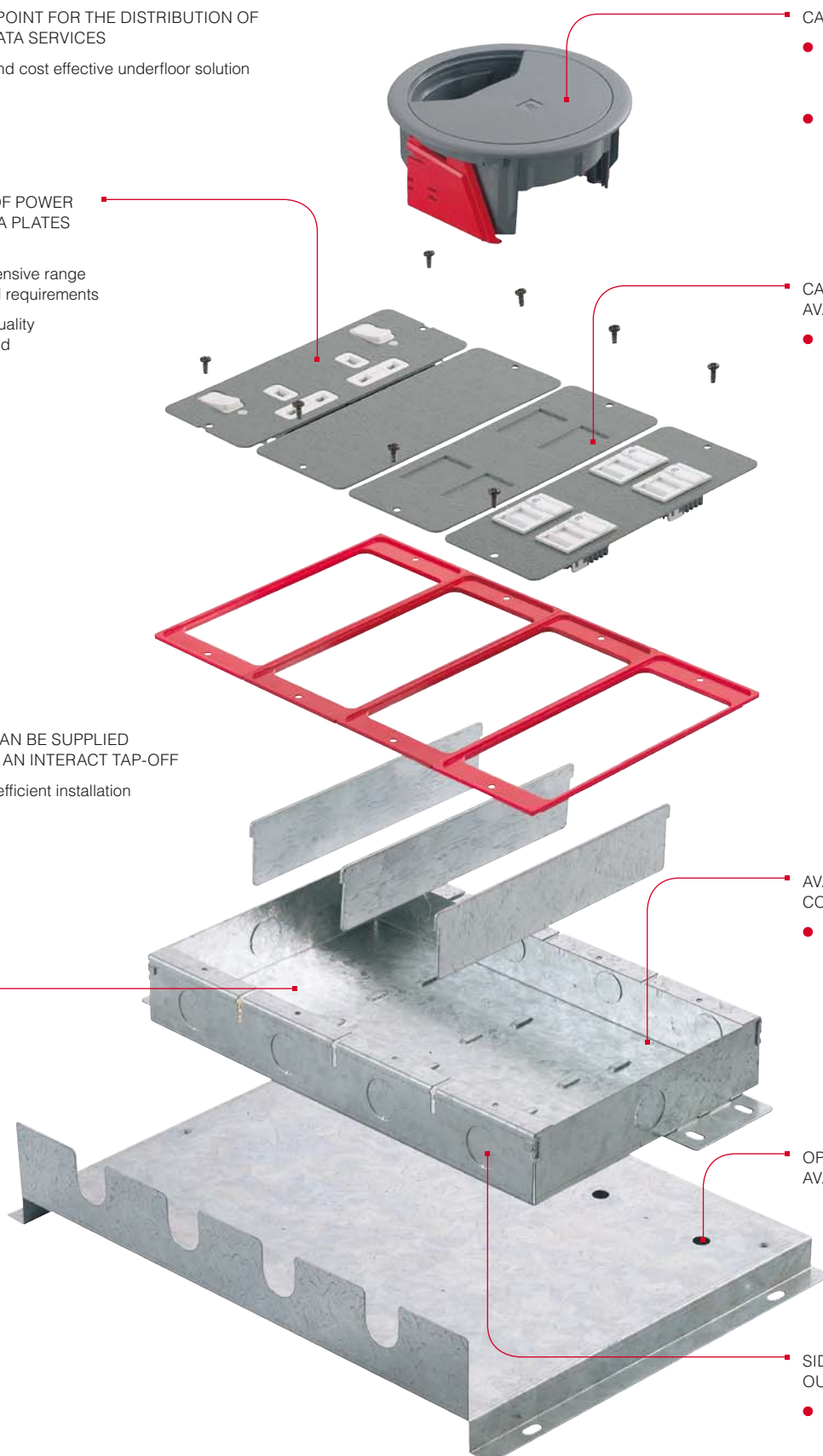
AVAILABLE IN 1, 2, 3 AND 4 COMPARTMENTS

- Accommodates a wide range of accessory mounting plates

OPTIONAL BOX SUPPORT AVAILABLE

SIDE AND END ENTRY KNOCK OUTS

- Ensures a fast and simple installation



Slab Boxes



Part No.	Description
SB100	1 Compartment 190 x 76 x 45mm
SB200	2 Compartments 190 x 154 x 45mm
SB300	3 Compartments 190 x 231 x 45mm
SB400	4 Compartments 190 x 310 x 45mm

Box Supports



Part No.	Description
SB9001	1 Compartment Box Support
SB9002	2 Compartments Box Support
SB9003	3 Compartments Box Support
SB9004	4 Compartments Box Support

Partitions



Part No.	Description
SB9005	Blank Partition
SB9006	Interlink Partition

Slab Boxes

Accessory Plates

Accessory Plates are supplied in Light Grey (LGY) finish.

Serviced Power Plates



CRX10731NS



CRX10720



CRX10741

Part No.	Description
CRX10730*†	2G 13A Switch Socket Outlet
CRX10735*†	2G 13A Passive RCD Switch Socket Outlet
CRX10731†	2G 13A Socket Outlet
CRX10731NS†	2G 13A Socket Outlet Non-Standard (T Pin)
CRX10720	3G 13A Socket Outlet
CRX10741	2G 15A 127V USA Socket Outlet (non UK)

* For Clean Earth wiring – add suffix 'CE' e.g CRX10730CE.

† Plates are supplied with the MK Electric 3-pin safety shutter.

Unserviced Data Plates



CRX20201



CRX20301



CRX30501



CRX30201

Part No.	Description
CRX20101	2 x LJU/2 Apertures
CRX20201*	4 x LJU6C Apertures
CRX20301	6 x LJU6C Apertures
CRX20215	Angled Mounting Plate to accept 4 x LJU6C apertures
CRX30501	2 x Euro 50x50mm Apertures **
CRX30502	2 x 45x45mm Apertures
CRX30201	Blank Plate

* Data apertures are supplied as knockouts.

** Will not accept power module.



GROMMETS

RANGE INTRODUCTION

Power, data and accessory grommets offer an ideal solution for a fast, simple and unobtrusive installation.

Easy to install and relocate if necessary, Grommets are ideal for use with Slab Box and DeskPod™, perfect for any office environment.

FEATURES & BENEFITS

ROTARY OR SPLIT LID VARIATIONS

To meet all requirements

ONE TOUCH SELF-ADJUSTING MECHANISM

For a fast, simple and secure installation

SPRING LOADED BLADES

For fast and simple installation

LID TETHER

For added security

WIDE RANGE

Available in 5" and 8"

5 YEAR GUARANTEE

HOW TO SPECIFY

A range of 5" and 8" power, data and accessory grommets for use on underfloor power systems. Access to be available via rotary or split lid configurations. A one touch self-adjusting fixing mechanism featuring spring loaded blades to enable fast and simple installation. Integral lid tethers to provide additional security and prevent lid losses.

Grommets

Access Grommets

GROMMET COLOUR

- Grey (RAL 7011)

ROTARY AND SPLIT LID VARIATIONS

- Accept up to 2 x 40mm flexible conduits for maximum data cable access

SIMPLE ACCESS

- Simple 'push fit' for fast installation
- Crush ribs for secure fixing

SPLIT LID OPTION

- Integral foam inserts for secure cable grip to minimise pressure loss in plenum floors

REVERSIBLE CENTRE LID

- 6mm carpet cut out for improved installation aesthetics

SPRING LOADED BLADES

- Fast and simple installation
- Secure fixing guaranteed
- One touch self adjusting fixing mechanism

Serviced Grommets

GROMMET COLOUR

- Grey (RAL 7011)

LID TETHER

- Added security
- Eliminates lid losses

ANGLED POWER SOCKETS

- Provide strain relief clearance for moulded plugs

BACK BOX

- 28mm back box pre-fitted for ease of installation

SPRING LOADED BLADES

- Fast and simple installation
- Secure fixing guaranteed
- One touch self adjusting fixing mechanism

UNSERVICED LJU6C OR EURO ACCESSORY GROMMETS ARE AVAILABLE
Compatible with MK data outlets

Grommet Boxes

Grommets provide an aesthetic alternative to floorboxes and offer the additional benefits of being fast and simple to install.

- Choose from 5" or 8" grommets
- Range includes both Access Grommets and Serviced Grommets
- Ideal for use with DeskPod™ (8" Grommet) or Slab Box

5" Access Grommet Boxes



Part Number	Description
GR500GRY	Simple Access Grommet
GR510GRY	Secure Access Grommet
GR100GRY	Split Lid Grommet

5" Power Grommet Boxes



Part Number	Description
GR200GRY	Power Grommet BS 1363 MK Switch Socket Outlet
GR201GRY	Power Grommet MK Non-Standard Switch Socket Outlet
GR205GRY	Power Grommet BS546 5A MK Switch Socket Outlet

5" Data Outlet Grommet Boxes



Part Number	Description
GR5050GRY	50 x 50mm EURO Accessory Grommet (unserviced)
GR800GRY	2 x LJU6C Grommet (unserviced)

Grommets

8" Grommets

Larger grommets have an increased cord outlet size making them ideal to house DeskPod™ conduits.

8" Access Grommets



GR855GRY

Part Number	Description
GR850GRY	Simple Access Grommet (push fit)
GR855GRY	Secure Access Grommet*

* Comes with fixing clips

1 Compartment Cablelink Plus Single Pan Floorboxes



Part Number	Description
CRB100UK-1GRY*	100 x 200mm Single Compartment Floorbox – 95mm Deep
CRP100-RCD	100 x 200mm Single Compartment Floorbox fitted with RCD 16A 30mA 2 x module RCD Socket Outlet
CRP101	100 x 200mm Single Compartment Floorbox fitted with 2G 13A Socket Outlet
CRP121	100 x 200mm Single Compartment Floorbox fitted with 1G 13A Socket outlet and 2 x LJU6C aperture

* Accessory Plates – see below for details.

Accessory Plates for 1 Compartment Cablelink Plus Single Pan Floorboxes

Serviced Power Plates

Standard Part No.	Description
CXP10745	2G 13A Angled Socket Outlet

Unserviced Data Plates

Standard Part No.	Description
CXP20101	2 x LJU/2 Apertures
CXP20200	2 x LJU6C Apertures
CXP20201*	4 x LJU6C Apertures
CXP20215	4 x LJU6C Wave Apertures
CXP20205	4 x Krone Apertures
CXP20301	6 x LJU6C Apertures
CXP30501	2 x Euro 50x50mm Apertures
CXP20500	4 x ST Fibre Connector Apertures
CXP30201	Blank Plate

* Data apertures are supplied as knockouts.



DESKPOD™

RANGE INTRODUCTION

DeskPod™ offers a comprehensive range of fully customisable and pre-configured desk modules, providing convenient access to power and data services to the end user, where it is needed.

Delivering the final link in the chain of the power distribution circuit, DeskPod™ modules are compatible with the Interact Underfloor Power System, Cablelink Plus Floorboxes and Grommets.

The range incorporates in-built product design features to address the increasing and varied demands of individual requirements.

FEATURES & BENEFITS

TOTAL FLEXIBILITY

Custom designed and versatile to suit all requirements

MANUFACTURED FROM ANODISED ALUMINIUM AND POLYCARBONATE

Chemical, colour fade, impact resistant and flame retardant

AVAILABLE WITH DUAL USB CHARGING MODULE

With Dynamic Device Recognition ideal for tablets, smart phones, cameras

PRE-WIRED TAP OFFS

For easy installation

COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

5 YEAR GUARANTEE

HOW TO SPECIFY

A range of 3 and 4 pole desk modules to provide convenient access to power and data services with provision for data modules and RCD protection. Product to be manufactured from anodised aluminium and polycarbonate to provide, chemical, colour fade, impact resistance and flame retardant properties.

DeskPod™

mkelectric.co.uk



TAP-OFFS

Available pre-wired to tap-offs for quick installation – see page 401



8" GROMMET

Provide access where DeskPods are contained within the floor void – see page 394

INTEGRAL FIXING BRACKET

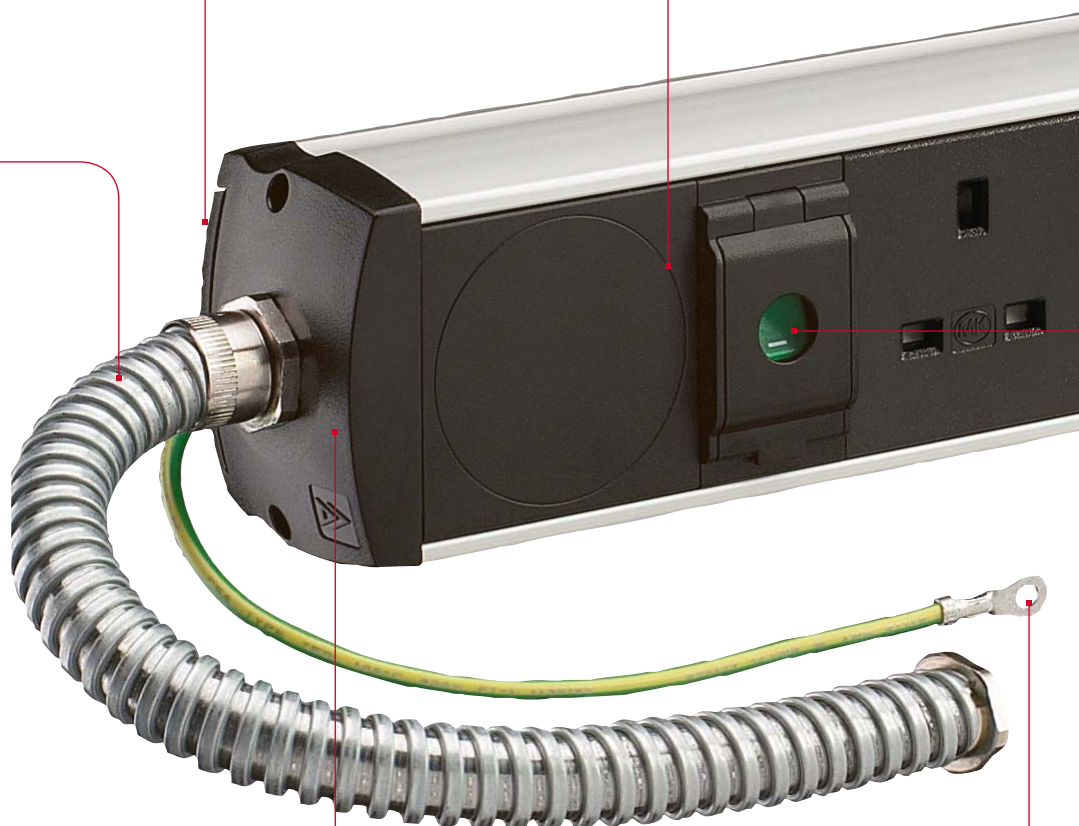
- In-built 2 position bracket to allow fast and simple mounting of the unit

PROTECTION

- Choice of MCB, RCD, RCBO or unit fusing at 12.5A

INCOMING SUPPLY

- Conduit entry available for hard wiring tap-offs
- Flex entry available for hard wiring to a BS1363 plug
- 3 and 4 pole Wago or Wieland connectors
- Other industry standard options available on request



WIRING CONFIGURATION

- Available as Standard, Clean Earth or High Integrity Earthing† compliant

EXTERNAL EARTH LEAD

- All power units include an earth lead to allow bonding to any metalwork, e.g. desk installation



FUSED



UNFUSED

SOCKET OUTLETS

- All standard socket outlets incorporate the patented MK Electric 3 pin safety shutter as standard
- Option of integral fused (3.15A or 5A) or unfused sockets
- Pre-configured and Custom Design options available to suit your requirements

ANODISED ALUMINIUM EXTRUDED 'POD'

- Styled and finished to be aesthetically pleasing
- Robust construction ensures durability whilst in use

DATA SUPPLY

- 20mm or 25mm flexible conduits in metal or plastic

DATA MODULES

- Available with choice of Euro or LJU6C sized apertures
- Wide range of Euro and LJU6C modules available
- Choose from 2 to 16 module apertures in a 'Data Module Only' unit

SEGREGATION

- Combined power and data units come pre-segregated for installation convenience

SWITCH

- Optional Double Pole Neon Switch available
- Neon Indicator to provide user with visible indication of power supply
- Positive Switch Action – audible indication of switching
- Switch Cover (with viewing cut out) – protects the unit from inadvertent switching
- Double Pole Switch – all contacts are disconnected for added user safety

Custom Designed DeskPods

The design service enables customised floorboxes to be configured and delivered to meet individual requirements.

- Step 1** Choose the shroud for the DeskPod unit
- Step 2** Choose the in feed option
- Step 3** Does the unit require any connection to a tap-off?
- Step 4** Does the unit require any protection?
- Step 5** Choose the number and type of sockets required
- Step 6** Choose the number and type of data modules
- Step 7** Choose the end feed options

Supply Options

	Option Ref.	Description
	NONE	End cap includes 20mm diameter hole for conduit or cable gland
	PRE-WIRED TO TAP-OFF	Module can be supplied pre-wired to supply cord or powertrack tap-off
	3 POLE CONNECTOR	Wieland GST* or Wago Winsta** standard power
	4 POLE CONNECTOR	Wieland GST* or Wago Winsta** clean earth system Dual earth conductors for compliance to High Integrity Earthing=, BS 7671:2008 IET Wiring Regulations


All end caps include fixing bracket. * Wieland GST connectors include retaining clip to minimise risk of accidental disconnection. ** Wago Winsta, Neuturik and other components available on request.

Wiring Options

Option Ref.	Description
STANDARD	Single protective conductor
CLEAN EARTH	Additional clean earth protective conductor
HIGH INTEGRITY EARTHING†	Protective conductor meets requirements for High Integrity Earthing=, BS 7671:2008 IET Wiring Regulations


† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7.

Circuit Protection Options

	Option Ref.	Description
	UNIT FUSE	12.5A High breaking capacity ceramic fuse to BS EN60127-2 Fuse length: 32mm Fuse diameter: 6.35mm
	MCB	16A*, Type B, Single Pole, 6kA (MK Sentry)
	RCD	16A, 30mA tripping current, Double Pole, 6kA (MK Sentry)
	RCBO	10A*, Type C, 30mA tripping current, Double Pole 6kA




* Alternative circuit protection ratings available on request. All circuit protection devices are from the MK Sentry range. RCD's do not provide overcurrent protection.

Circuit Isolation

Option Ref.	Description
	DOUBLE POLE NEON SWITCH Double Pole Switch with green neon, switch cover fitted as standard





* Alternative circuit protection ratings available on request. All circuit protection devices are from the MK Sentry range. RCD's do not provide overcurrent protection.

Socket Outlets – Standard

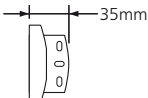
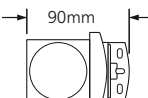
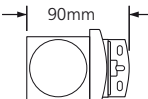
Item	Description
	UNFUSED Colour of socket outlet – black
	FUSED Individually fused 3.15 or 5A*. Colour of socket outlet – black
	USB MODULE Dual USB charging module

* For information regarding available socket and fuse options see technical page 684.

Spacers

Item	Description
	HALF SPACER To provide extra space for internal cable termination and capacity, extra width on the socket for transformer plugs and other adaptors
	FULL SPACER To provide extra space for internal cable termination and capacity, extra width on the socket for transformer plugs and other adaptors
	LJU6C Aperture size: 22.2mm x 37.6mm A range of data connectors suitable for this module are available from MK Electric
	EURO Aperture size: 50mm x 50mm A range of Euro size data connectors suitable for this module are available from MK Electric


End Caps

Item	Description
	BLANK CONDUIT ENTRY Solid end cap. End cap includes Ø20mm or Ø25mm cutter position holes for conduit or cable gland (used for data only module)
	3 POLE CONNECTOR Wieland GST or Wago Winsta, standard power
	4 POLE CONNECTOR Wieland GST or Wago Winsta clean earth system


* In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7

DeskPod™

End Caps

	Part Number		Description
	Wieland GST Connector	Wago WINSTA Connector	
	DPC1120	DPC1320	Power lead 1.5mm ² , 13A plug to 3 Pole (female) connector 2 metres
	DPC1130	DPC1330	Power lead 1.5mm ² , 13A plug to 3 Pole (female) connector 3 metres
	DPC1150	DPC1350	Power lead 1.5mm ² , 13A plug to 3 Pole (female) connector 5 metres

End Caps

	Part Number		Description
	Wieland GST Connector	Wago WINSTA Connector	
	DPC2205	DPC4405	Interlink cable (1.5mm ² ,) 3 Pole connector 0.5 metre
	DPC2210	DPC4410	Interlink cable (1.5mm ² ,) 3 Pole connector 1 metre
	DPC3305	DPC5505	Interlink cable (1.5mm ² ,) 4 Pole connector 0.5 metre
	DPC3310	DPC5510	Interlink cable (1.5mm ² ,) 4 Pole connector 1 metre

Refer to BS 6396 where appropriate.

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7

Tap-off Leads

- Choose from a vast range of tap-off leads to meet installation requirements
- Alternative tap-offs available on request

DUAL USB
CHARGING



ACCESS GROMMET
A range of 5" and 8" grommets are available. Please refer to page 393 - 394 for details.



Type	Pin Position	Cable / Conduit	Current Rating	Protection	3 metre** 2.5mm ²	4.0mm ²	5 metre* 2.5mm ²	4.0mm ²	Key codes†
STANDARD GREY	N2 L2 PE	LSF / LSF	13A	Fused	UT31301C		UT51301C		
		16mm	32A	Unfused		UT33201		UT53201	
		16mm	13A	Fused	UT31301		UT51301		
AUX / PHASE 1 GREEN	PE N1 L1	LSF / LSF	13A	Fused	UT31302C		UT51302C		
		16mm	32A	Unfused		UT33202		UT53202	
		16mm	13A	Fused	UT31302		UT51302		
PHASE 2 GREEN	PE N1 L2	LSF / LSF	13A	Fused	UT31310C		UT51310C		
		16mm	32A	Unfused		UT33210		UT53210	
		16mm	13A	Fused	UT31310		UT51310		
PHASE 3 GREEN	PE N1 L3	LSF / LSF	13A	Fused	UT31311C		UT51311C		
		16mm	32A	Unfused		UT33211		UT53211	
		16mm	13A	Fused	UT31311		UT51311		
ALL PHASE GREEN	PE N1 L1 L2 L3	16mm	28A	Unfused		UT33205		UT53205	
CE RED	CE N1 L1 PE	LSF / LSF	13A	Fused	UT31304C		UT51304C		
		16mm	32A	Unfused		UT33204		UT53204	
		16mm	13A	Fused	UT31304		UT51304		
DUO (RED)	CE N1 L1 N2 L2 PE	20mm	28A	Unfused		UT33206		UT53206	

4m tap-offs and other alternatives are available on request via MK Design Service, See page 16.

Tap-offs are supplied as single cables inside steel flexible conduit, except those with 'C' suffix, which are supplied with 3 or 4 core LSF flex, as appropriate.

* Unfused tap-offs in excess of 3m, can only be used on powertrack protected with a 32A (or less) circuit protection device.

** When fully stretched to ensure the conductor lengths do not exceed 3m to comply with BS 7671:2008 17th Edition IET Wiring Regulations to ensure the conduit remains flexible this is then shortened by a further 0.1 – 0.2 of slack when wired to a module.

† Key codes shown are from the perspective of the Power Track socket, the tap-off key code will be a mirror image when viewed from underneath. Add 'DE' suffix for Dual Earth High Integrity Earthing††, e.g. UT51301DE. Unfused tap-offs – High Integrity Earthing†† as standard. Fused tap-offs – add '607' suffix for High Integrity Earthing††, e.g. UT51301607



CASE STUDY

SIR CHRIS HOY VELODROME, GLASGOW

The Sir Chris Hoy Velodrome, part of the Emirates Arena complex, is a brand new, state-of-the-art facility owned by Glasgow City Council. Opened in October 2012, the joint venue is located on a 10.5 hectare site in Dalmarnock and provides a first class venue that will inspire thousands of youngsters to follow in the footsteps of some of their favourite sport stars.

As part of the £113m development, MK Electric's Power Distribution Systems was chosen by the architect group, 3DReid, and consultant, Arup, in conjunction with the project managers to supply three main products to the site; the Onix Plus screed floorbox, the Cablelink Plus single pan raised floorbox and the DeskPod.

"Further to workshops with the design team, FES selected MK Electric as we believed their product range would be the best solution to complement the building fabric."

Chris Allen, senior operations director, FES



ONIX PLUS™

RANGE INTRODUCTION

Onix Plus™ Floorboxes and Power Grommets are a unique, innovative solution to hard floor power and data distribution requirements in screed floors with coverings such as laminate, wood, stone and marble.

Stylish and robust design offers superior load bearing performance and greater durability. Floorbox lids with snorkel or plain lid provide wet wash solutions.

Used in conjunction with the Cablelink Plus Screed Ducting System these products are ideal for reception areas, offices, airports, shopping malls and exhibition halls.

HOW TO SPECIFY

A range of 2, 3 and 4 compartment floorboxes and grommets to supply power and data services in screed floor systems. Products to be wet washable to IP44 when products are not in use and tested to EN50085-2-2 to accept 10,000N loads. Adjustable to accommodate floor covering thicknesses between 12mm and 30mm. Provision of RCD protection to support compliance to 17th Edition Wiring Regulations. Available in Aluminium, Nickel and Brass colour options.

FEATURES & BENEFITS

IP44 RATED

Wet washable and IP44 rated when not in use

TESTED TO EN 50085-2-2 TO ACCEPT 10,000N LOAD

5kN for Onix Plus Grommet

COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations

SUPPORTS CAT 6

FLEXIBLE SOLUTION

Selection of lid recess depths available, allowing for various floor depths

WIDE RANGE OF POWER AND DATA ACCESSORIES

5 YEAR GUARANTEE

Onix Plus™

mkelectric.co.uk



Onix Plus™ Floorbox with Snorkel Cord Outlet Lid

TESTED TO EN50085-2-2
TO ACCEPT 10,000N LOAD

SNORKEL CORD OUTLET

- Design allows access of plug tops and 16A 2P+E MK Commando Plug
- Supplied with a 9mm wide flange to cater for poorly cut tile infills

WET WASHABLE

- Plain lid and snorkel design allows floor to be washed even when in use
- The lid will withstand 10mm of standing water when in use



ATTRACTIVE, AESTHETIC LIDS

- Stylishly designed
- Recess depth options available to suit

ROBUST LOAD PLATE

- Superior load bearing performance
- Ideal for areas of heavy foot traffic
- A tile lifter should be used to lift all Onix Plus lids

SQUARE BOX OPTION

- 90° rotation of floorbox for system flexibility

STAGGERED PLATE

- Provides strain relief clearance for moulded plug tops
- Stagger only available with 3 and 4 compartment floorboxes

COMPARTMENT SEGREGATION

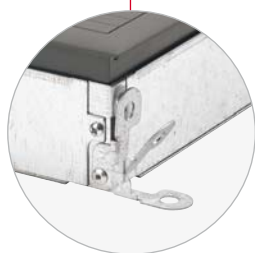
- Set at 35mm as standard
- Height adjustable – 25 to 45mm with appropriate CUBA kit
- Deeper Screed depths have fixed wiring spaces

SERVICE OUTLET BOX

- Option of two screed depths: 55-80mm and 80-110mm
- Deeper screed depths available on request
- Flat sided base design ensures a stronger screed solution and faster taping

BASE FIXING FEET

- 'Fast fix' installation



Onix Plus™ Boxes and Snorkel Lids

The Base Units are installed prior to screeding. Designed for use with the Cablelink Plus Screed Ducting System (see page 422 for more details). Snorkel design allows floor to be washed even when in use – IP44 when not in use, IP2 x when in use.

Onix Plus Box Selector Guide

- Service Outlet Boxes and Junction Boxes are ordered as two parts – “Base” and “Lid”
- Base – identify screed depth, number of compartments required and preferred box size
- Lid – choice of lid type, available with and without snorkel
- Junction Box – supplied complete with disposable steel screed lid and cable flyover
- Accessory Plates – select from wide range of power and data see page 423 for details
- Alternative deeper Junction Boxes and Screed Base Unit depths are available - please contact Technical Services for details

Screed Base Units: Standard



Base size Compartment	200 x 200mm 2	265 x 265mm 3	340 x 340mm 4
SCREED 55-80MM 35MM WIRING SPACE	NXB200UK-2	NXB265UK-3	NXB340UK-4
SCREED 80-110MM 35MM WIRING SPACE		NXB265XUK-3	NXB340XUK-4

Wiring space can also be reduced to 25mm when used in shallow screed depths. Both require the use of a plate height adjustment kit - part number CUBA-1. For 200x200mm base, use 'Compact' power and data plates only – see page 423.

Supplied with PVC ducting side plates. Number of ducting knockouts varies by size: 200 x 200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. see page 423 for alternative plates.

If screed depth is 55-65mm, reduce height by use of CUBA-1 and use side entry power socket outlets – see page 423.

Junction Boxes



Size	200 x 200mm	265 x 265mm	340 x 340mm
55-80MM	NXJ200UK	NXJ265UK	NXJ340UK
80-110MM	NXJ200XUK	NXJ265XUK	NXJ340XUK

Disposable steel screed lid and cable flyover supplied as standard. **LIDS MUST BE ORDERED SEPARATELY.**

Supplied with four side adaptor plates, 4 PVC ducting plates. Number of ducting knockout varies by size: 200x200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. see page 411 for alternative plates.

Increased screed depth junction boxes available on request.

Box Lid: Snorkel Lid



Size	200 x 200mm	265 x 265mm	340 x 340mm
Depth 80-110 MM			
RECESS DEPTH 15MM	NXLS200X-15	NXLS265X-15	NXLS340X-15
RECESS DEPTH 20MM	NXLS200X-20	NXLS265X-20	NXLS340X-20
RECESS DEPTH 25MM	NXLS200X-25	NXLS265X-25	NXLS340X-25
RECESS DEPTH 30MM	NXLS200X-30	NXLS265X-30	NXLS340X-30

See page 685 to determine the minimum screed depth/finished floor depth combination required to enable the snorkel lid to close. All supplied as stainless steel lid with snorkel. Lids are supplied with frame and fittings.

Onix Plus™

mkelectric.co.uk



Onix Plus™ Floorbox with Edge Cord Outlet Lid

TESTED TO EN50085-2-2
TO ACCEPT 10,000N LOAD

ROBUST CORD CAPS*

- Designed for improved retention

ATTRACTIVE, AESTHETIC LIDS

- Stylishly designed
- Lid options allow for various floor coverings to be used

ROBUST LOAD PLATE

- Superior load bearing performance
- Ideal for areas of heavy foot traffic
- A tile lifter should be used to lift all Onix Plus lids



STAGGERED PLATE

- Provides strain relief clearance for moulded plug tops
- Stagger only available with 3 and 4 compartment floorboxes



BASE FIXING FEET

- 'Fast fix' installation

OUTLET BOX

- Option of two screed depths: 55-80mm and 80-110mm
- Flat sided base design ensures a stronger screed solution and faster taping
- Deeper screed depths available on request

COMPARTMENT SEGREGATION

- Set at 35mm as standard
- Height adjustable – 25 to 45mm with appropriate CUBA kit
- Deeper Screed depths have fixed wiring spaces

*Cord Outlet Lids are not suitable for Wet Wash applications.

Onix Plus™ Boxes, Cord Outlet and Blank Lids

The Base Units are installed prior to screeding. Designed for use with the Cablelink Plus Screed Ducting System – see page 422 for more details. Blank Lid is suitable for wet wash applications.

Onix Plus Box Selector Guide

- Service Outlet Boxes and Junction Boxes are ordered as two parts, “Base” and “Lid”
- Junction Boxes – are supplied as a base and cable flyover
- Base – identify screed depth, number of compartments required and preferred box size
- Lid – choice of lid type. Cord Outlet Lid or Blank Lid. Cord caps must be ordered separately
- Accessory Plates – select from wide range of power and data options, see page 423 for details
- Alternative deeper Junction Boxes and Screed Base Unit depths are available - please contact Technical Services for details

Screed Base Units: Standard



Base size Compartment	200 x 200mm 2	265 x 265mm 3	340 x 340mm 4
SCREED 55-80MM 35MM WIRING SPACE	NXB200UK-2	NXB265UK-3	NXB340UK-4
SCREED 80-110MM 35MM WIRING SPACE		NXB265XUK-3	NXB340XUK-4

Wiring space can also be reduced to 25mm when used in shallow screed depths. Both require the use of a plate height adjustment kit – part number CUBA-1. For 200 x 200mm base, use ‘Compact’ power and data plates only – see page 423.
Supplied with four PVC side adaptor plates. Number of apertures varies by size: 200 x 200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. See page 423 for alternative plates.
If screed depth is 55-65mm, reduce wiring space to 25mm by use of suitable CUBA kit and use side entry power socket outlets – see page 423.

Junction Boxes



Size	200 x 200mm	265 x 265mm	340 x 340mm
55-80MM	NXJ200UK	NXJ265UK	NXJ340UK
80-110MM	NXJ200XUK	NXJ265XUK	NXJ340XUK

Supplied complete with a disposable steel screed lid and cable flyover as standard. LIDS MUST BE ORDERED SEPARATELY.
Supplied with four side adaptor plates, 4 x PVC ducting plates. Number of apertures varies by size: 200 x 200mm – 2 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. See page 411 for alternative plates.

Box Lids: Cord Outlet Lid



Size	200 x 200mm	265 x 265mm	340 x 340mm
Depth 55-80mm			
RECESSS DEPTH 15MM	NXLC200-15	NXLC265-15	NXLC340-15
RECESSS DEPTH 20MM	NXLC200-20	NXLC265-20	NXLC340-20
RECESSS DEPTH 25MM	NXLC200-25	NXLC265-25	NXLC340-25
RECESSS DEPTH 30MM	NXLC200-30	NXLC265-30	NXLC340-30
Depth 80-110mm			
RECESSS DEPTH 15MM	NXLC200X-15	NXLC265X-15	NXLC340X-15
RECESSS DEPTH 20MM	NXLC200X-20	NXLC265X-20	NXLC340X-20
RECESSS DEPTH 25MM	NXLC200X-25	NXLC265X-25	NXLC340X-25
RECESSS DEPTH 30MM	NXLC200X-30	NXLC265X-30	NXLC340X-30

Cord outlet lid is not suitable for wet wash applications. Supplied as stainless steel lid.
Cord caps must be ordered separately. Lids are supplied with frame and fittings.

Onix Plus™

Box Lids: Blank Lid



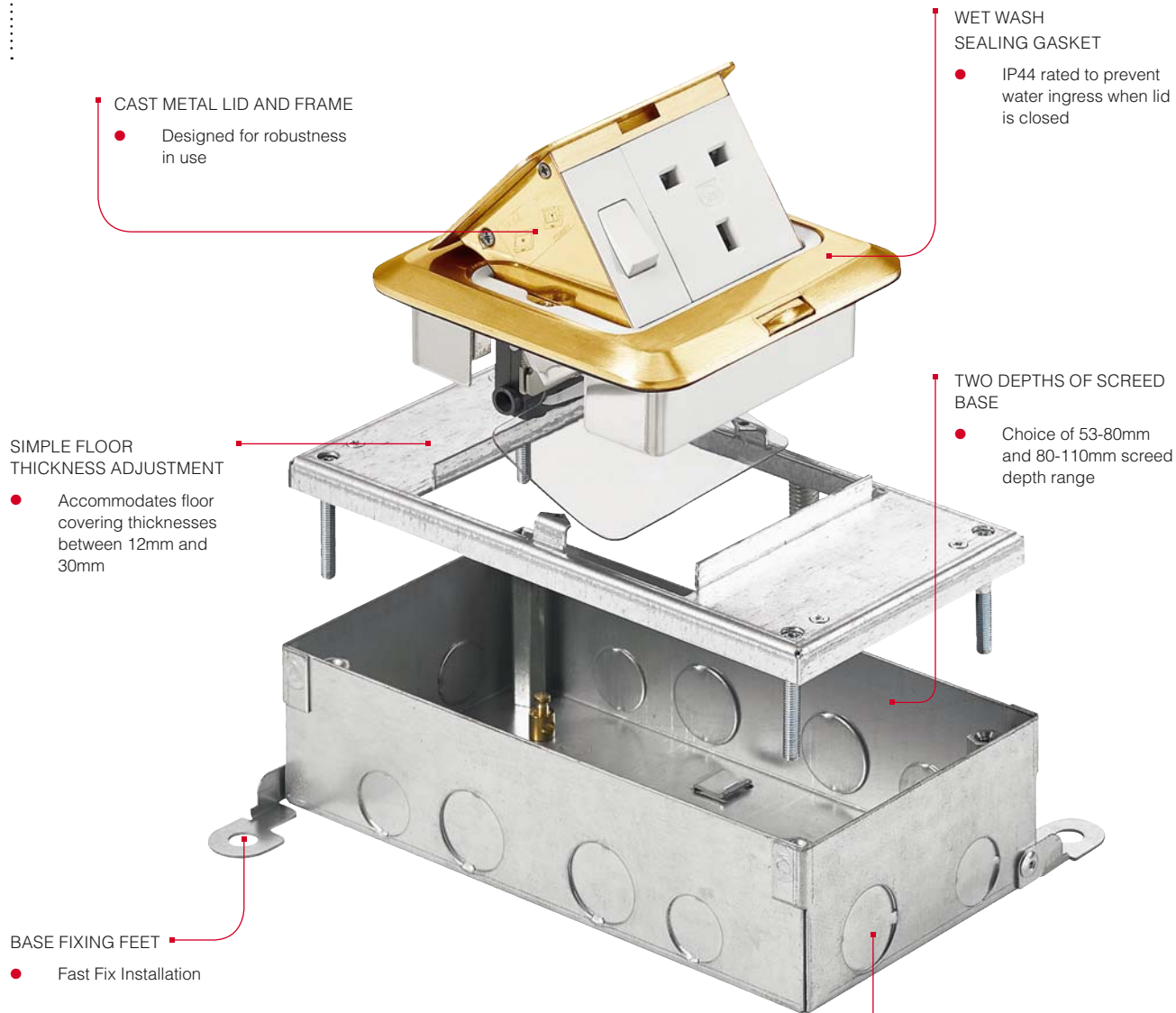
Size	200 x 200mm	265 x 265mm	340 x 340mm
Depth 55-80mm			
RECESSS DEPTH 15MM	NXLB200-15	NXLB265-15	NXLB340-15
RECESSS DEPTH 20MM	NXLB200-20	NXLB265-20	NXLB340-20
RECESSS DEPTH 25MM	NXLB200-25	NXLB265-25	NXLB340-25
RECESSS DEPTH 30MM	NXLB200-30	NXLB265-30	NXLB340-30
Depth 80-110mm			
RECESSS DEPTH 15MM	NXLB200X-15	NXLB265X-15	NXLB340X-15
RECESSS DEPTH 20MM	NXLB200X-20	NXLB265X-20	NXLB340X-20
RECESSS DEPTH 25MM	NXLB200X-25	NXLB265X-25	NXLB340X-25
RECESSS DEPTH 30MM	NXLB200X-30	NXLB265X-30	NXLB340X-30

Blank Lid is suitable for wet wash applications. Supplied as a stainless steel lid.
Lids are supplied with frame and fittings.

CORD CAP

Part Number	Description
NXLC-01GRY	Cord Cap – Grey (RAL 7011)
NXLC-01BEG	Cord Cap – Beige (RAL 1019)

Onix Plus™ Metal Power Grommet



COLOUR OPTIONS

- Available in Aluminium, Nickel finish and Brass

Onix Plus™

Onix Plus™ Metal Power Grommet

The range of power grommets provide access to power in areas where standard plastic grommets are not robust enough, where improved aesthetics are required, or a wet wash solution is required.

IP44 Wet Wash

Specifically designed to seal against water ingress to IP44 when the lid is closed, allowing the floor to be washed.

Onix Plus Metal Grommet Selector Guide

- Base – select preferred base depth (use for screed floors only)
- Grommet – choose finish of unserviced grommet
- Select either switched Socket Outlet or Unserved Data Outlet to service the grommet
- Serviced Data Grommets are available via the Design Service

Screed Base Units



Part No.	Description
NXGB100-1	Grommet Base Unit 55-80mm depth
NXGB100X-1	Grommet Base Unit 80-110mm

* A minimum finished floor thickness of 68mm is required. (Screed and floor tile thickness added together).
* Conduit entry only, not compatible with ducting.

Serviced Power Grommets*

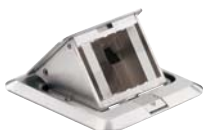


NXGCALP

Part No.	Description
NXGCALP	13A 1G Switched Socket Outlet Grommet – Aluminium
NXGCBRP	13A 1G Switched Socket Outlet Grommet – Brass
NXGCNIP	13A 1G Switched Socket Outlet Grommet – Nickel

Socket outlets feature the MK Electric 3-pin operated safety shutter.
*Not dual earth.

Unserviced Data Grommets



MXGCALD

Part No.	Description
NXGCALD	Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Aluminium
NXGCBRD	Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Brass
NXGCNID	Unserviced Grommet with 1 x 50 x 75mm Euro aperture – Nickel

Accessory Plates

Accessory plates are common to most ranges, they will fit all Onix Plus™, Cablelink Plus Single Pan, and Screed floorboxes. Standard Plates are for use with 265 x 265mm, 340 x 265mm and 340 x 340mm Floorboxes. Compact Plates are for use with 200 x 200mm Floorboxes only. Both Standard and Compact Plates are supplied in Light Grey (LGY) finish.

Serviced Power Plates



CXP10730



CXP10731NS



CXP10745



CXP10740

Standard Part No.	Compact Part No.	Description
CXP10730*†	CXPC10730*†	2G 13A Switch Socket Outlet
CXP10730NS*†	CXPC10730NS*†	2G 13A Switch Socket Outlet Non-Standard (T Pin)
CXP10731*†	CXPC10731*†	2G 13A Socket Outlet
CXP10731NS*	CXPC10731NS*	2G 13A Socket Outlet Non Standard (T Pin)
CXP10745	CXPC10745*	2G 13A Angled Socket Outlet
CXP10735*	CXPC10735	2G 13A 30mA Passive RCD Switch Socket Outlet**
CXP10760		2G 13A Switch Socket Outlet – Side Wired
CXP10720		3G 13A Socket Outlet
CXP10740	CXPC10740	2G 16A 2P+E German Socket Outlet (non UK)**

* For Clean Earth wiring – add suffix 'CE' e.g CXP10730CE. Clean Earth switched power plates are identified with red rockers.

† Plates are supplied with the MK Electric 3-pin safety shutter. Compact Plates (power and data) are for use with 200 x 200mm bases.

**Minimum 45mm wiring space required. If 2 socket plates are required in the 200 x 200 base, then only CXPC10745 / CXPC10745CE can be used.

Unserviced Data Plates



CXP20215



CXP20301



CXP30201

Standard Part No.	Compact Part No.	Description
CXP20200	CXPC20200	2 x LJU6C Apertures
CXP20201*	CXPC20201*	4 x LJU6C Apertures
CXP20215†	CXPC20215†	4 x LJU6C Wave Apertures
CXP20205	CXPC20205	4 x Krone Apertures
CXP20301	CXPC20301	6 x LJU6C Apertures
CXP30501	CXPC30501	2 x Euro 50 x 50mm Apertures
CXP30503		1 x Euro 150 x 50mm Aperture
CXP30502	CXPC30502	2 x 45 x 45mm Apertures
CXP20500†	CXPC20500†	4 x ST Fibre Connector Apertures
CXP30201	CXPC30201	Blank Plate

* Data apertures are supplied as knockouts. – Additional floor depth restrictions apply when using these plates - See page 685 for details.
Compact Plates (power and data) are for use with 200 x 200mm bases.

Optional Extras

Part No.	Description
NXLC-01GRY	Cord Cap – Grey (RAL 7011)
NXLC-01BEG	Cord Cap – Beige (RAL 1019)
CUBA-1	Plate Height Adjustment Kit +/- 10mm. Suitable for 265 x 265mm and 340 x 340mm boxes only
CX-10	Earthing Kit, pack of 10

Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

see page 421 for information regards PVCu ducting, see page 422 for metal ducting. * Knockouts 20mm and 25mm.



CASE STUDY

THE CO-OPERATIVE GROUP HEADQUARTERS, MANCHESTER

When The Co-operative Group set about identifying a site to replace its city centre estate the challenge lied in erecting a flexible and future-proofed building that could accommodate a mobile and dynamic working style, without compromising aesthetics.

To meet The Group's needs, MK Electric supplied 89 Onix Plus™ Floorboxes and Power Grommets with snorkel lids, and 21 of the same solution with blank lids.

"From the design and construction of the building, to the electrical components used and management of the project, One Angel Square sets a new international benchmark in sustainable design within the commercial sector and is widely acknowledged as one of the most sustainable large office spaces in Europe. The new head office also benefits from MK Electric's innovative floorbox solution which will allow our business to be as flexible as possible as our building and layout needs change and evolve."

David Pringle, Director of NOMA



CABLELINK PLUS SCREED SYSTEM

RANGE INTRODUCTION

Cablelink Plus Screed System provides adaptable power and data distribution highways in screed floors.

Specifically designed to offer superior load bearing performance and greater robustness.

The Screed System consists of Service Outlet Boxes, Junction Boxes, Vertical Access Boxes, PVCu and Metal Ducting. These can be used together to provide a complete layout in floors with an overall finished floor depth as low as 64mm.

HOW TO SPECIFY

A power and data distribution system designed for use in screed floors consisting of outlet boxes, junction boxes, access boxes PVCu and Metal ducting. All product to be suitable to fit in screeded depths of 55mm to 110mm and tested to comply to EN50085-2-2. One, Two, Three and Four compartment floorbox products to be available with self closing lids and wide provision of RCD protection to support compliance to 17th Edition Wiring Regulations. All products to be designed to support Cat 6 structured cabling systems.

FEATURES & BENEFITS

TESTED TO EN 50085-2-2 TO ACCEPT 5000N LOAD

CAT 6 & CAT 6A COMPLIANT

FLEXIBLE SOLUTION

Choice of 1, 2, 3 or 4 compartment floorboxes

SUITABLE FOR SCREED DEPTH FROM 55MM TO 110MM

COMPLIES WITH WIRING REGULATIONS

Provision of RCD protections supports IET 17th Edition Wiring Regulations. Floorboxes are IP2X rated in accordance with BS EN 50085-1

SELF-CLOSING LID

In compliance with IEC 61534-22

PVCu DUCTING MANUFACTURED FROM 100% RECYCLED MATERIAL*

WIDE RANGE OF POWER AND DATA ACCESSORIES

5 YEAR GUARANTEE

*Based on 2014 consumption

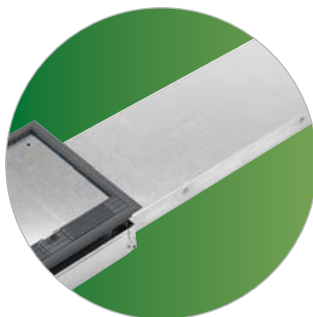
Screed System

mkelectric.co.uk



DUCTING

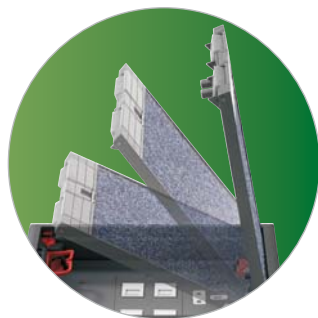
- Choice of PVCu or metal
- PVCu ducting sizes: 90 x 35mm and 60 x 25mm
- PVCu ducting manufactured from 100% recycled material



**TESTED TO EN50085-2-2
TO ACCEPT 5000N LOAD**

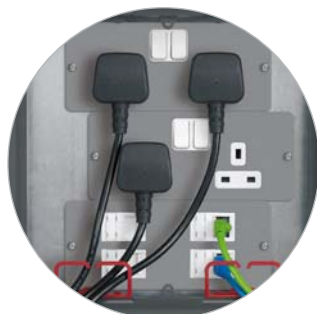
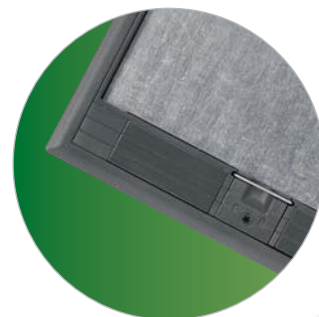
LID OPENING TO 80°

- Self closing lid in accordance with IEC 61534-22



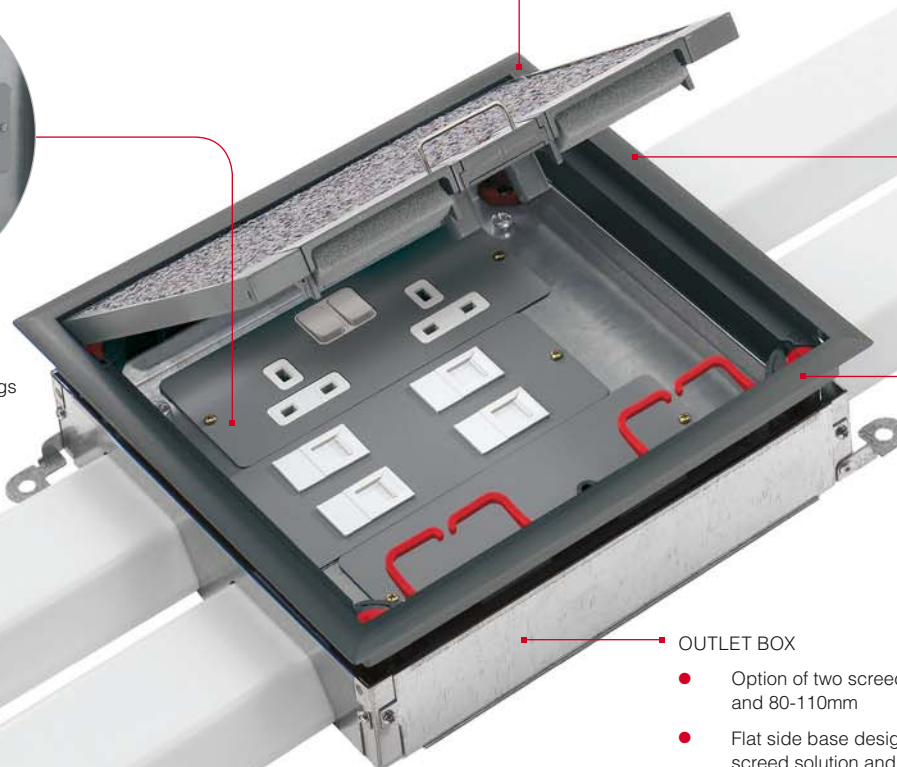
OUTLET BOX COLOUR

- Grey (RAL 7011)



STAGGERED PLATES

- Provides strain relief clearance for moulded plugs
- Stagger only available with 3 and 4 compartment floorboxes



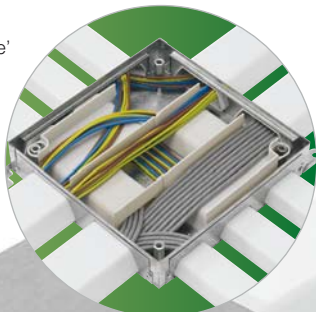
OUTLET BOX

- Option of two screed depth variants: 55-80mm and 80-110mm
- Flat side base design ensures a stronger screed solution and faster taping
- Optional 10mm plate height adjustment kit for increased wiring space to support Cat 6 and Cat 6A compliance
- Deeper screed depths available on request
- Deeper screed depths have fixed wiring spaces
- IP2X rated in accordance with BS EN 50085-1

Screed System

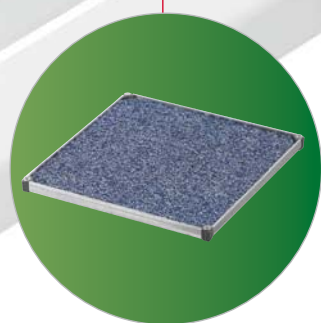
JUNCTION BOX FLY OVER

- Allows for 'through', 'tee', 'angle' and 'crossover' configurations
- Supports Cat 6 & Cat 6A compliance



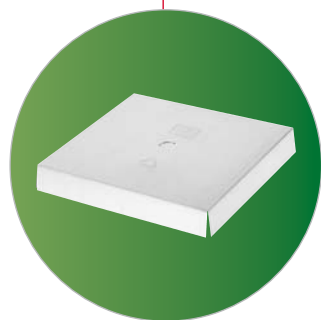
RATCHET LEVELLING SYSTEM

- Self levelling and rapid fitting of frame and lid



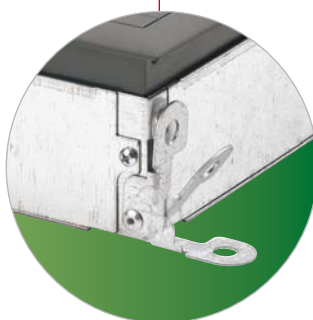
JUNCTION BOX

- Supplied with plain lid and cable flyover, optional recessed lids available



DISPOSABLE STEEL SCREEDING LID

- Supplied with all Cablelink Plus Screed Floorboxes
- Recyclable



BASE FIXING FEET

- Fast fix installation



SIDE ADAPTOR PLATE OPTIONS

- Selection of side plates to suit PVCu or metal ducting



Screed System

mkelectric.co.uk



Service Outlet Box

ROBUST CORD CAPS

- Designed to improve retention



OPTIONAL CABLE RETAINERS

- Acts as cable tidy to prevent cables being trapped

RATCHET LEVELLING SYSTEM

- Self levelling and rapid fitting of frame and lid



STAGGERED PLATE

- Provides strain relief clearance for moulded plug tops
- Stagger only available with 3 and 4 compartment floorboxes



BASE FIXING FEET

- Fast fix installation

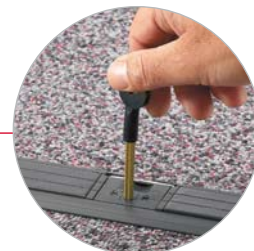


HANDLE

- Designed for improved accessibility

LID

- Simple carpet cut out
- 8mm or 12mm (metal lid and trim) recessed lids available
- Can be hinged from either of two sides

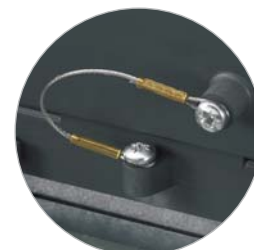


OPTIONAL LOCKABLE LID

- Added security when not in use

* SQUARE BOX OPTION

- 90° rotation of floorbox for system flexibility



OPTIONAL LID TETHER

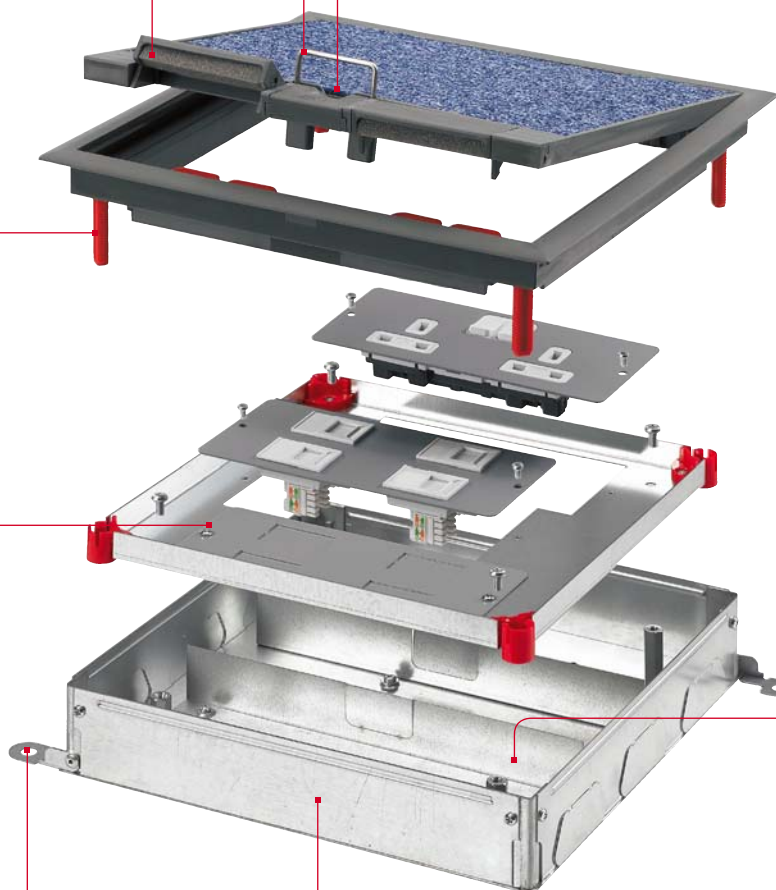
- Added security
- Eliminates lid losses

COMPARTMENT SEGREGATION

OUTLET BOX

- Option of two screed depths: 55-80mm and 80-110mm.
- Deeper screed depths available on request.
- Flat sided base design ensures a stronger screed solution and faster taping
- Optional 10mm plate height adjuster kit for greater screed depths to support Cat 6 & Cat 6A compliance
- IP2X rated in accordance with BS EN 50085-1

TESTED TO EN 50085-2-2
TO ACCEPT 5000N LOAD



Screed Outlet Boxes

The Service Outlet Box should be positioned directly on the structural floor slab. The box provides location and connection facilities for power and data service outlets.

Service Outlet Box Selector Guide

- Service Outlet Boxes are ordered as two parts – “Base” and “Frame and Lid”
- Base – identify screed depth, number of compartments required and preferred box size
- Frame and Lid – choose trim colour and lid recess depth
- Side Adaptor Plates – choose alternative to PVC ducting plates if required
- Accessory Plates – select from wide range of power and data options – see page 423

Base

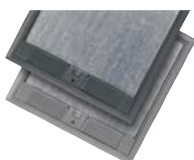


Base size Compartment	100 x 200MM* 1	200 x 200MM 2	265 x 265MM 3	340 x 265MM 4
SCREED 55-80MM 35MM WIRING SPACE	CUB100UK-1	CUB200UK-2	CUB265UK-3	CUB340UK-4
SCREED 80-110MM 35MM WIRING SPACE	CUB100XUK-1	CUB200XUK-2	CUB265XUK-3	CUB340XUK-4

Increased wiring space of 45mm below the plate is required to achieve Cat 6 & Cat 6A compliance. Wiring space can also be reduced to 25mm when used in shallow screed depths. Both require the use of a plate height adjustment kit - part number CUBA-1.

Disposable steel screed lid (recyclable) supplied as standard. If screed depth is 55mm, reduce wiring space to 25mm by use of suitable CUBA kit, floor covering must be 8mm thick when compressed, and use side wired socket outlets – see page 423. Supplied with 4 x PVC Ducting side plates. Number of knockouts varies by size: 100 x 200mm – 1 x 60 x 25mm, 265 x 265mm – 3 x 60 x 25mm and 340 x 265mm – 3 x 90 x 35mm. *These boxes will only accept CXP10745

Frames and Lid



Frame/Lid Size	100 X 200MM	200 X 200MM	265 X 265MM	340 X 265MM
RECESS: 8MM	CXL100-8GRY	CXL200-8GRY*	CXL265-8GRY*	CXL340-8GRY*
RECESS: 12MM**		CXL200-12GRY	CXL265-12GRY	CXL340X-12GRY

* Lockable option available – add suffix 'L' e.g CXL265-8GRYL. Floorboxes must never be locked whilst in use. Not supplied with key.

An optional 2mm lid packer is available when used with thinner carpet tiles – see Optional Extras below.

If a 12mm lid is required for use in 80-110mm screed, please add 'X' e.g. CXL265X-12GRY.

** For 12mm recess depth lids use Onix Plus™ base, see page 405 i.e NXB265UK-3.

Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

See page 421 for information regards PVCu ducting, page 422 for metal ducting. * Knockouts 20mm and 25mm.

Optional Extras



LID TETHER

Part No.	Description
CX-01	Cable Retainers – pack of 10
CX-02	Lid Tether Kit – pack of 5
CX-03GRY	Cord Cap for 100 x 200mm Lid – Grey
CX-04GRY	Cord Cap for 265 x 265 and 340 x 265mm Lid – Grey
CX-05	Ratchet levelling kit
CUBA-1	Plate Height Adjustment Kit +/- 10mm. Suitable for 265 x 265mm and 340 x 265mm boxes only
CRXKEY	Lock Key – pack of 2

Screed System

mkelectric.co.uk



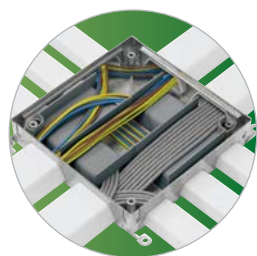
Junction Box

CHOICE OF JUNCTION BOX LID

- Supplied with a plain lid, optional recessed lids available

JUNCTION BOX FLY OVER

- Allows for 'through,' 'tee,' 'angle' and 'crossover' configurations
- Supports Cat 6 & Cat 6A compliance



**TESTED TO EN50085-2-2
TO ACCEPT 5000N LOAD**

DISPOSABLE STEEL SCREEDING LID

- Supplied with all Cablelink Plus Screed Floorboxes
- Recyclable

OPTIONAL RECESSED LID

- Simple carpet cut out

BASE FIXING FEET

- Fast fix installation

JUNCTION BOX

- Option of two screed depth variants: 55-80mm and 80-110mm.
- Deeper screed depths available on request.
- Flat side base design ensures a stronger screed solution and faster taping
- Supplied with cable flyover
- IP2X rated in accordance with BS EN 50085-1

Junction Boxes

The Junction Box should be positioned directly on the structural floor slab. The box provides access to cables at the intersection of ducting runs or changes of direction. The ducting forms a system of tunnels to segregate services within the junction box.

Junction Box Selector Guide

- Junction Boxes are supplied as a base, lid and cable flyover as standard
- Lid – supplied complete as a plain flat lid as standard
- Alternative deeper Junction Boxes are available – please contact Technical Services for details

Junction Box



Depth/Base Size	200 X 200MM	265 X 265MM	340 X 340MM
55-80MM	CUJ200UK	CUJ265UK	CUJ340UK
80-110MM	CUJ200XUK	CUJ265XUK	CUJ340XUK

Supplied complete with a plain flat lid, disposable steel screed lid and cable flyover as standard.
Supplied with four side adaptor plates, 4 x PVC ducting plates – number of ducting knockouts varies by size:
265 x 265mm – 3 x 60 x 25mm and 340 x 340mm – 3 x 90 x 35mm. See below for alternative plates.

Recessed Lid and Frame



Recess/Base Size	200 X 200MM	265 X 265MM	340 X 340MM
Depth 53-80MM			
RECESS DEPTH 8MM	CUJL200-8GRY	CUJL265-8GRY	CUJL340-8GRY
RECESS DEPTH 12MM	CUJL200-12GRY	CUJL265-12GRY	CUJL340-12GRY
Depth 80-110MM			
RECESS DEPTH 8MM	CUJL200X-8GRY	CUJL265X-8GRY	CUJL340X-8GRY
RECESS DEPTH 12MM	CUJL200X-12GRY	CUJL265X-12GRY	

Supplied as a recessed lid to accept floor covering.

Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

See page 421 for information regards PVCu ducting, page 422 for metal ducting.
* Knockouts 20mm and 25mm.

Screed System

Vertical Access Boxes

The Vertical Access Box provides draw-in facilities to allow for a change of plane or direction of the ducting and connection to skirting trunking systems, distribution boards, boxes etc.

- Conduit or ducting can be run vertically or horizontally from the box

Vertical Access Boxes – for PVC Ducting



List No.	Type	List No.	Type
Shallow Access		Full Access	
SF88152	TWIN	SF88172	TWIN
SF88153	TRIPLE	SF88173	TRIPLE

When using VAB with 2 or 3 compartment trunking, the full access version of the VAB should be used to give maximum accessibility. If using 60 x 25mm ducting, the ducting can be joined into the box using SF88150

Cover Plates – for Vertical Access Boxes (PVC Ducting)

List No.	Type	List No.	Type
Overlapping Shallow Access		Flush Shallow Access	
SF88180	TWIN	SF88176	TWIN
SF88181	TRIPLE	SF88177	TRIPLE
Overlapping Shallow Access		Flush Shallow Access	
SF88188	TWIN	SF88184	TWIN
SF88189	TRIPLE	SF88185	TRIPLE

Vertical Access Boxes – for Metal Ducting



Box Size	265MM	340MM
VERTICAL ACCESS BOX	CUV265UK-2	CUV340UK-3

Supplied with flush cover plate and Metal Ducting side adaptor plate:
265mm box = CUBP265-08, 340mm box = CUBP340-08. CUV boxes are supplied 3 compartment and can be easily converted to 2 compartment on site.

Spares

Box Size	265MM	340MM
OVERLAPPING COVER PLATES	CUVP265	CUVP340

Supplied as singles.

Ducting and Accessories

The ducting is intended primarily for installation within the floor screed thickness, but it can also be cast direct into the structural slab, attached to the soffit with access through from the floor above or used for vertical service risers.

- Underfloor ducting is available in two sizes, 90mm x 35mm and 60mm x 25mm. Comes in 12 metre packs and is white in colour.

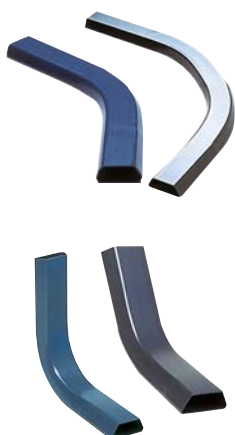
PVCu Ducting



3M lengths

60 X 25MM	SF88200
90 X 35MM	SF88100

Ducting Bends



Part No.	Ducting System	Angle	Mean Centre Line Radius
PVCu ducting horizontal bends			
SF88144	SF88100	90°	465mm
SF88145	SF88100	45°	465mm
SF88248	SF88200	90°	450mm
SF88249	SF88200	45°	450mm
PVCu ducting vertical bends			
SF88142	SF88100	90°	100mm
SF88143	SF88100	45°	100mm
SF88246	SF88200	90°	95mm
SF88247	SF88200	45°	95mm

Ducting Bends require the jointing sleeve to connect to the ducting.

Accessories



Part No.	Description
SF88106	Jointing Sleeve (SF88100). Pack of 5
SF88206	Jointing Sleeve (SF88200). Pack of 5
CUFC60-2	2 Compartment Fixing Clip (SF88200). Pack of 10
CUFC60-3	3 Compartment Fixing Clip (SF88200). Pack of 10
SF88116	2 Compartment Fixing Clip (SF88100). Pack of 10
SF88117	3 Compartment Fixing Clip (SF88100). Pack of 10
SF88105	Conduit entry adaptor for PVC ducting VAB's. Pack of 5
SF88107	Ducting Adaptor. Pack of 5
SF88150	Duct Reducer. Pack of 5

Screed System

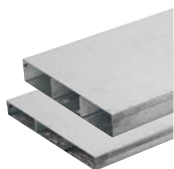
Metal Ducting System

Metal Ducting Systems are offered as an alternative to PVCu systems.

- Provide greater cable protection
- Provides EMC Screening
- Manufactured from pre-galvanised sheet steel



Metal Ducting



Ducting Width	100MM	225MM	225MM	250MM	275MM	300MM
Compartment	1	2	3	3	3	3
Ducting Height						
38MM	CUD100-38-1	CUD225-38-2	CUD225-38-3	CUD250-38-3	CUD275-38-3	CUD300-38-3

Supplied in lengths of 2.44m.

Joint Sleeves



Ducting Width	100MM	225MM	250MM	275MM	300MM
Ducting Height					
38MM	CUDJ100-38	CUDJ225-38	CUDJ250-38	CUDJ275-38	CUDJ300-38

Fixing Clips



Ducting Width	100MM	225MM	250MM	275MM	300MM
Ducting Height					
38MM	CUDF100-38	CUDF225-38	CUDF250-38	CUDF275-38	CUDF300-38

Side Adaptor Plates



Side plate	CUBP200-01	CUBP200-02	CUBP200-03	CUBP200-04	CUBP200-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 100X38
NO. PER PLATE		2/2	2	1	
Side plate	CUBP265-01	CUBP265-02	CUBP265-03	CUBP265-04	CUBP265-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 225X38
NO. PER PLATE		3/2	3	2	
Side plate	CUBP340-01	CUBP340-02	CUBP340-03	CUBP340-04	CUBP340-08
APERTURE TYPE	BLANK BLANK	ROUND CONDUIT*	PVC	PVC	METAL DUCTING
APERTURE SIZE (MM)		25 / 20	60 / 25	90 / 35	UP TO 300X38
NO. PER PLATE		4/4	4	3	

See page 421 for information regards PVCu ducting, page 422 for metal ducting.
* Knockouts 20mm and 25mm.

Accessory Plates

Accessory plates are common to most ranges, they will fit all Cablelink Plus Single Pan, Screed and Onix Plus™ floorboxes. Standard Plates are for use with 100 x 200mm, 265 x 265mm and 340 x 265mm floorboxes. Standard Plates are supplied in Light Grey (LGY) finish.

Serviced Power Plates



CXP10730



CXP10745



CXP10735

Standard Part No.	Compact Part No.	Description
CXP10730**	CXPC10730**	2G 13A Switch Socket Outlet
CXP10730NS**	CXPC10730NS**	2G 13A Switch Socket Outlet Non-Standard (T Pin)
CXP10731**	CXPC10731**	2G 13A Socket Outlet
CXP10731NS*	CXPC10731NS*	2G 13A Socket Outlet Non-Standard (T Pin)
CXP10745	CXPC10745*	2G 13A Angled Socket Outlet – Power plate for CUB100
CXP10735*	CXPC10735	2G 13A 30mA Passive RCD Switch Socket Outlet**
CXP10760		2G 13A Switch Socket Outlet – Side Wired (single earth)
CXP10720		3G 13A Socket Outlet
CXP10740	CXPC10740	2G 16A 2P+E German Socket Outlet (non UK)**

* For Clean Earth wiring – add suffix 'CE' e.g CXP10730CE. Clean Earth switched power plates are identified with red rockers, unswitched with red sockets.

* Plates are supplied with the MK Electric 3-pin safety shutter. Compact Plates (power and data) are for use with 200 x 200mm bases only.

If 2 socket plates or a socket plate and wave plate are to be used then only CXP10745 and CXPC10745 socket plate can be used.

**requires a 45mm wiring space.

Unserviced Power Plates

Standard Part No.	Description
CXP20106	1G Accessory Plate with 60.3mm fixing centres
CXP20107*	2G accessory Plate with 120.6mm fixing centres

* Recommend that a MK Electric Aspect, Edge or Logic Plus Socket Outlet is used. Can only be used in 4 module floorboxes.

Unserviced Data Plates



CXP20201



CXP20215



CXP20301



CXP30201

Standard Part No.	Compact Part No.	Description
CXP20200	CXPC20200	2 x LJU6C Apertures
CXP20201*	CXPC20201*	4 x LJU6C Apertures
CXP20215	CXPC20215	4 x LJU6C Wave Apertures
CXP20205	CXPC20205	4 x Krone Apertures
CXP20301	CXPC20301	6 x LJU6C Apertures
CXP30501	CXPC30501	2 x Euro 50 x 50mm Apertures
CXP30503		1 x Euro 150 x 50mm Aperture
CXP30502	CXPC30502	2 x 45 x 45mm Apertures
CXP20500	CXPC20500	4 x ST Fibre Connector Apertures
CXP30201	CXPC30201	Blank Plate

* Data apertures are supplied as knockouts.

Additional floor restrictions apply when using these plates - see page 411 for details.

Compact Plates (power and data) are for use with 200 x 200mm bases

Screed System

Screed System Product Selection Table

SCREED OUTLET BOX				
Base Size	100 x 200 mm	200 x 200 mm	265 x 265 mm	340 x 265 mm
Number of Compartments	1	2	3	4
BASE 55-80mm	CUB100UK-1	CUB200UK-2	CUB265UK-3	CUB340UK-4
80-100mm	CUB100XUK-1	CUB200XUK-2	CUB265XUK-3	CUB340XUK-4
LID & FRAME 8mm RECESS	CXL100-8GRY	CXL200-8GRY	CXL265-8GRY	CXL340-8GRY
ADAPTOR PLATE SIZE	N/A	200	265	340
SIDE PLATES AS STD	N/A	2 X CUBP200-03	2 X CUBP265-03	2 X CUBP340-04
NO. / TYPE OF APERTURE ON SIDE PLATE	20 & 25MM CONDUIT DIRECTLY INTO BASE UNIT	2 X PVC 60X25mm	3 X PVC 60 X 25mm	3 X PVC 90 X 35mm
OPTIONAL SIDE PLATE ADAPTORS	N/A	CUBP200-01	CUBP265-01	CUBP340-01
	N/A	CUBP200-02	CUBP265-02	CUBP340-02
	N/A	CUBP200-03	CUBP265-03	CUBP340-03
	N/A	CUBP200-04	CUBP265-04	CUBP340-04
	N/A	N/A	CUBP265-08	CUBP340-08

JUNCTION BOX				
Base Size	200 x 200 mm	265 x 265 mm	340 x 340 mm	
Number of Compartments	2	3	4	
BASE 55-80mm	CUJ200UK	CUJ265UK	CUJ340UK	
80-110mm	CUJ200XUK	CUJ265XUK	CUJ340XUK	
JUNCTION BOX FLY OVER INCLUDED	2 WAY	3 WAY	3 WAY	
LID SUPPLIED AS STANDARD	PLAIN FLAT	PLAIN FLAT	PLAIN FLAT	
LID OPTIONS AVAILABLE				
DEPTH 55-80mm 8mm RECESS	CUJL200-8	CUJL265-8	CUJL340-8	
12mm RECESS	CUJL200-12	CUJL265-12	CUJL340-12	
DEPTH 80-110mm 8mm RECESS	CUJL200X-8	CUJL265X-8	CUJL340X-8	
12mm RECESS	CUJL200X-12	CUJL265X-12	CUJL340X-12	
ADAPTOR PLATE SIZE	200	265	340	
SIDE PLATES AS STANDARD	4 X CUBP200-003	4 x CUBP265-03	4 x CUBP340-04	
NO. / TYPE OF APERTURE ON SIDE PLATE	2 X PVC 60 X 25MM	3 X PVC 60 X 25MM	3 X PVC 90 X 35mm	
OPTIONAL SIDE PLATE ADAPTORS	CUBP200-01	CUBP265-01	CUBP340-01	
	CUBP200-02	CUBP265-02	CUBP340-02	
	CUBP200-03	CUBP265-03	CUBP340-03	
	CUBP200-04	CUBP265-04	CUBP340-04	
		CUBP265-08	CUBP340-08	

VERTICAL ACCESS BOX		METAL DUCTING	
Size	265mm	340mm	
No of Compartments	2	3	
VERTICAL ACCESS BOX	CUV265	CUV340	
COVER PLATES AS STANDARD	FLUSH	FLUSH	
COVER PLATES OPTIONAL	CUVP265	CUVP340	

VERTICAL ACCESS BOX		PVC _u DUCTING			
Size	Shallow		Full Access		
Number of Compartments	2	3	2	3	
VERTICAL ACCESS BOX	SF88152	SF88153	SF88172	SF88173	
COVER PLATES - OVERLAPPING	SF88180	SF88181	SF88188	SF88189	
COVER PLATES - FLUSH	SF88176	SF88177	SF88184	SF88185	



INTERACT OVERHEAD POWER

RANGE INTRODUCTION

Interact Overhead Power System is a powertrack catering for single, 3 phase or dual circuit applications suitable for standard, permanent live, uninterrupted or dedicated power supply up to 480V.

Interact is fast and simple to install and has the additional benefit of all standard tap-offs being designed to be 'fail safe' should any incompatible track/tap-off connections be made.

FEATURES & BENEFITS

PATENTED 'SNAP FAST' CROCODILE JOINTS

Ensures fast and simple installation

STRONG, RIGID BUT LIGHTWEIGHT DESIGN

Enables greater spans between fixing brackets for quick and easy installation

KEY CODED AND COLOUR CODED TAP-OFFS

Provides mechanical protection against cross pole contamination

COMPLIES WITH WIRING REGULATIONS

Complies with both the requirements of BS EN 61534 and BS 7671:2014 IET Wiring Regulations (17th Edition)

AVAILABLE IN 40A

5 YEAR GUARANTEE

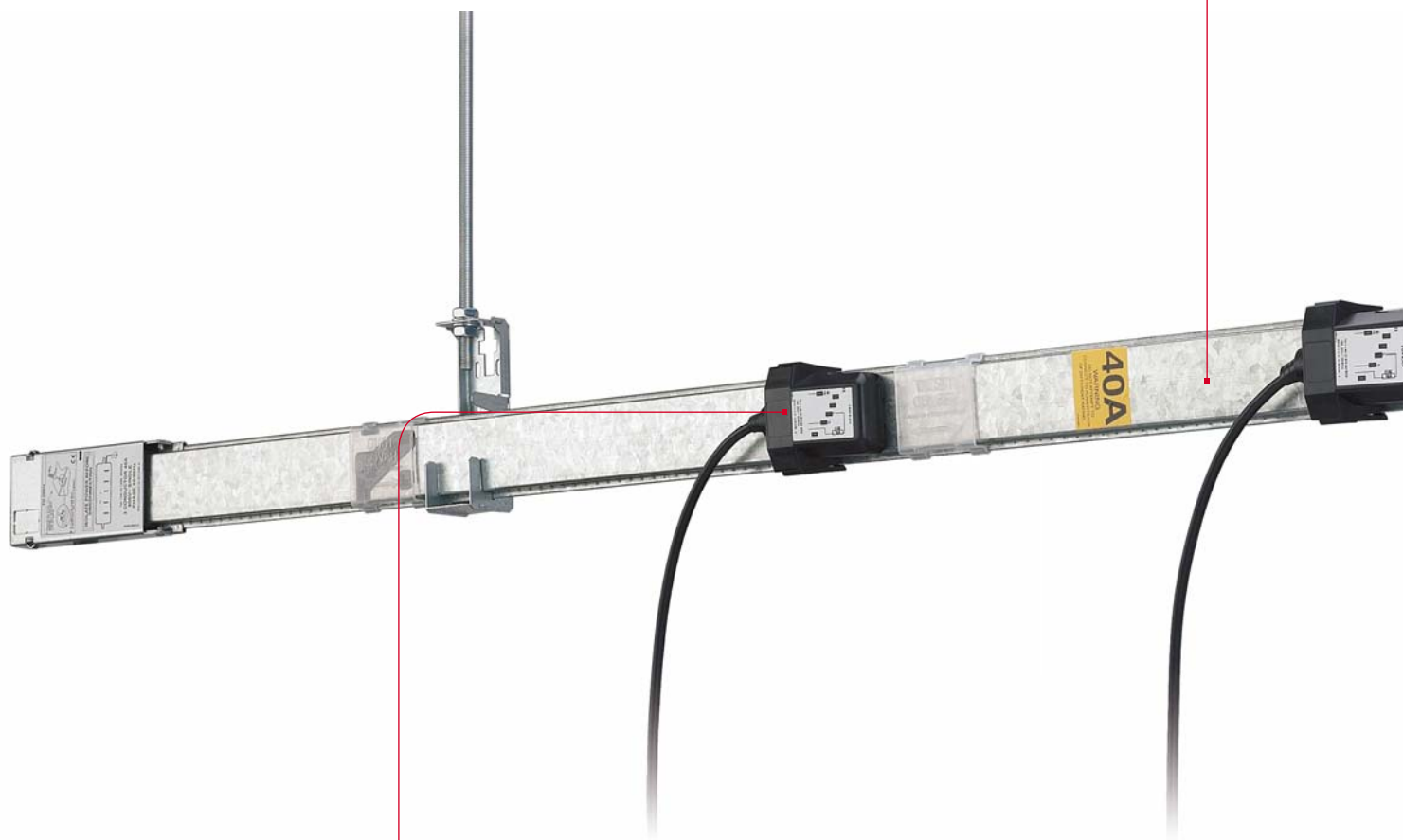
HOW TO SPECIFY

A 40A overhead powertrack system to cater for single, three phase or dual circuit applications. Snap fast crocodile joints to ensure fast and simple installation with provision for 300mm socket spacing's. Key and colour coded tap-offs and sockets used to prevent cross pole contamination. Snap fix suspension brackets to enable fast and simple installation without additional fitting tools.

Interact Overhead Power

OVERHEAD POWER TRACK

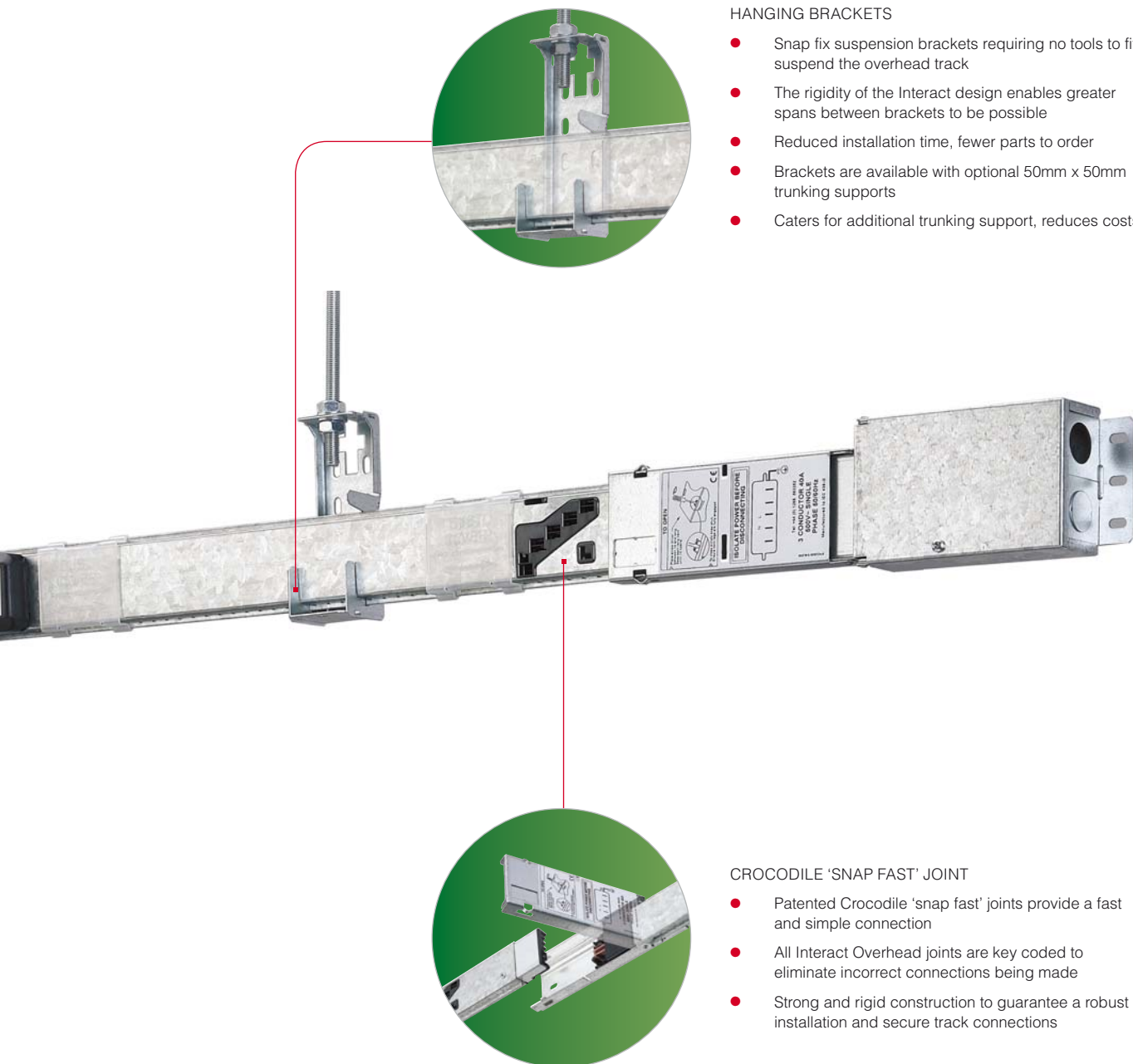
- Strong and rigid construction to guarantee a robust installation and secure track and fittings suspension
- Lightweight structure enabling a faster installation and easier handling on site
- Available in a choice of 2m and 4m lengths to suit
- 500mm socket outlet pitch as standard



EXTENSIVE RANGE OF TAP-OFFS

- Comprehensive pre-wired range available, fused and unfused, 1m, 3m and 5m lengths – other lengths available on special request, all designed to meet exact requirements
- All Interact Overhead tap-offs are key coded to eliminate incorrect connections being made
- In situations where incompatible connections are accidentally made, all standard tap-offs are designed to be 'fail safe' – eliminates potential health and safety risks

Interact Overhead Power



HANGING BRACKETS

- Snap fix suspension brackets requiring no tools to fit, suspend the overhead track
- The rigidity of the Interact design enables greater spans between brackets to be possible
- Reduced installation time, fewer parts to order
- Brackets are available with optional 50mm x 50mm trunking supports
- Caters for additional trunking support, reduces costs

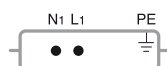
CROCODILE 'SNAP FAST' JOINT

- Patented Crocodile 'snap fast' joints provide a fast and simple connection
- All Interact Overhead joints are key coded to eliminate incorrect connections being made
- Strong and rigid construction to guarantee a robust installation and secure track connections

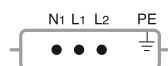
Whilst the track can remain 'live' when connecting or disconnecting tap-offs, appliances should not be on load.

Interact Overhead Power

40 Amp System



2+PE



3+PE



4+PE



5+PE



DUAL GREY 5+PE

Powertrack



2+PE

3+PE

4+PE

5+PE

Dual Grey 5+PE

Length 2m Pitch 500mm 4 sockets

LB42053

LB42054

LB42055

LB42056

LB42056GRY

Length 4m Pitch 500mm 8 sockets

LB44053

LB44054

LB44055

LB44056

LB44056GRY

All overhead powertrack sockets do not contain shutters and are rated to IP2X.

Infeeds



2+PE

3+PE

4+PE

5+PE

Dual Grey 5+PE

Standard

LF43

LF44

LF45

LF46

LF46GRY

Opposite End Feed

LF43 LH

LF44 LH

LF45 LH

LF46 LH

LF46GRY LH

Terminal Capacity = 16mm²

Opposite end feed suffix must be added when ordering where applicable.

Each opposite end feed comes with an end cap to close off the powertrack run.

Flexible Interlinks



2+PE

3+PE

4+PE

5+PE

Dual Grey 5+PE

1m

LI4310

LI4410

LI4510

LI4610

LI4610GRY

3m

LI4330

LI4430



LI4530

LI4630

LI4630GRY

Interact Overhead Power

Tap-off Leads

Type	Pin Position						Current Rating	Protection	1 metre 2.5mm²	3 metre 2.5mm²	5 metre 2.5mm²	Key Code
	SINGLE PHASE	N1	L1			PE	25A	UNFUSED	LT12501C	LT32501C	LT52501C	L
							16A	FUSED	LT11601C	LT31601C	LT51601C	
		N1		L2		PE	25A	UNFUSED	LT12502C	LT32502C	LT52502C	
							16A	FUSED	LT11602C	LT31602C	LT51602C	
		N1			L3	PE	25A	UNFUSED	LT12503C	LT32503C	LT52503C	
							16A	FUSED	LT11603C	LT31603C	LT51603C	
	L4	N1				PE	25A	UNFUSED	LT12504C	LT32504C	LT52504C	
	L4	N1	L1			PE	25A	UNFUSED	LT12521C	LT32521C	LT52521C	L
	L4	N1	L1(F)			PE	16A	FUSED	LT11621C	LT31621C	LT51621C	
	L4	N1		L2		PE	25A	UNFUSED	LT12522C	LT32522C	LT52522C	
	L4	N1		L2(F)		PE	16A	FUSED	LT11622C	LT31622C	LT51622C	
	L4	N1			L3	PE	25A	UNFUSED	LT12523C	LT32523C	LT52523C	
	L4	N1			L3(F)	PE	16A	FUSED	LT11623C	LT31623C	LT51623C	
ALL PHASE		N1	L1	L2	L3	PE	25A	UNFUSED	LT12505C	LT32505C	LT52505C	L
ALL PHASE + L4	L4	N1	L1	L2	L3	PE	20A	UNFUSED	LT12506C	LT32506C	LT52506C	
CIRCUIT 1 GREY	PE1	N1	L1				25A	UNFUSED	LT12501GRY	LT32501GRY	LT52501GRY	
							16A	FUSED	LT11601GRY	LT31601GRY	LT51601GRY	
CIRCUIT 2 GREY				N2	L2	PE2	16A	FUSED	LT11625GRY	LT31625GRY	LT51625GRY	
							25A	UNFUSED	LT12525GRY	LT32525GRY	LT52525GRY	
DUAL GREY	PE1	N1	L1	N2	L2	PE2	20A	UNFUSED	LT12526GRY	LT32526GRY	LT52526GRY	

(F) = Fused.

LSF Cable is supplied as standard. For PVC cable replace suffix 'C' with suffix 'PVC'. For Dual Grey system simply add suffix 'PVC'. Suffix must be added when ordering.

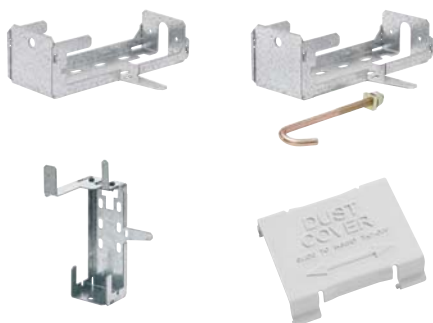
Polarity of tap-offs are configured to enable L4 to be used as a continuous conductor for Emergency Line.

When using tap-offs ensure that the line is protected by an appropriately rated protective device.

Key codes shown are from the perspective of the powertrack socket with the keycode in the top right corner.

The tap-off key code will be a mirror image when viewed from underneath.

Other Components



Part No.	Description
UK2	Hanging Bracket to suit up to ø10mm tie rod
UK2E	Hanging Bracket with 50mm x 50mm Trunking Suspension Arm
UK4	Hanging Bracket with Hook
UKDC	Additional Dust Cover

Please refer to Interact Overhead Power Technical – page 695, for details regards support bracket spacing and maximum suspended load.



HANGMANN

RANGE INTRODUCTION

Hangmann is a range of hanging service modules providing a portable and convenient means of distributing power, data and compressed air flow from overhead supplies.

Available as either a power module or combined power and compressed air module the units are made from a flame retardant grade of polyamide and are durable and resistant to chemicals.

FEATURES & BENEFITS

ROBUST DESIGN

To suit demanding applications

SUSPENSION CHAIN

Provides easy positioning of unit

FLEXIBLE SOLUTION

Wide range of modules

IDEAL FOR GARAGES, WORKSHOPS AND FACTORIES

5 YEAR GUARANTEE

HOW TO SPECIFY

A range of robust hanging service modules that provide portable and convenient power, data and compressed air. Product to feature a suspension hook for fast and simple installation and be resistant to impact, fire and chemical damage. An additional grab handle should be available to provide easy positioning of the device and space for tool hanging.



Technical Hotline
+44 (0)1268 563720

Hangmann

OVERHEAD
SYSTEMS

OVERHEAD POWER MAKES A SAFER
WORK ENVIRONMENT

SUSPENSION HOOK

- Fast and simple installation

ROBUST DESIGN

- Impact resistant
- Fire retardant
- Chemical resistant

PRE-ASSEMBLED
OPTIONS

- Ease of installation
- Simplified ordering

RANGE OF MODULES AND
MOUNTING PLATES

- MK Commando products available
- Compressed air modules available
- Built in flexibility

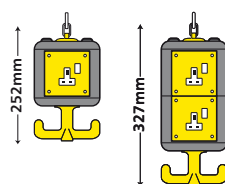
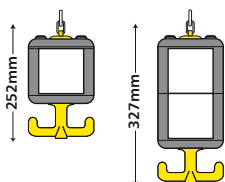
SUITED FOR USE
IN 'TOUGH'
ENVIRONMENTS

GRAB HANDLE

- Hang tools
- Easy positioning of unit

MK 3 PIN SAFETY
SHUTTER AS STANDARD

Power Modules



Part No.

Description

SM34900A0

Single Empty module*

SM34900C0

Double Empty Module*

* Selection of accessories and mounting plates are available below.

Part No.

Description

SM49004

Single Starter Pack:
2 x 13A Switch socket outlets
2 x Blank plates

SM49005

Single Starter Pack:
4 x 13A Switch socket outlets

SM49006

Double Starter Pack:
4 x 13A Switch socket outlets
4 x Blank plates

SM49007

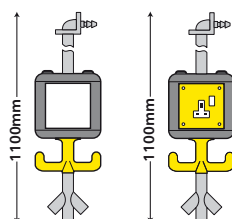
Double Starter Pack:
8 x 13A Switch socket outlets

SM49010

Single Starter Pack:
3 x 13A Switch socket outlets
1 x Mounting plate for 2 x LJU6C modules
(includes segregation backing plate)

Power modules arrive on site as individual components and have to be assembled separately

Compressed Air Modules



Part No.

Description

SM34901A0

Single Empty air Module*

SM49019

Single Air Starter Pack:
4 x 13A Switch socket outlets

SM49018

Single Air Starter Pack:
2 x 13A Switch socket outlets
2 x Blank plates

* Selection of accessories and mounting plates are available.

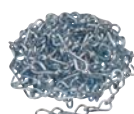
Mounting Plates and Accessories



SM49009



SM49011



SMCHAIN5



SM42449

Part No.

Description

SM49008

13A Socket Outlet

SM49009

13A Switch socket outlet

SM49011

Mounting plate for 2 x LJU6C modules (includes segregation back plate)

SM49012

130V 16A Straight socket – Yellow (K9400YEL)

SM49013

250V 16A Straight socket – Blue (K9401BLU)

SM937895

Mounting plate for BS EN60309-2 socket outlet, 60mm fixing centres

SM910101

Blank mounting plate

SMCHAIN5

Suspension chain – 5m length

SM42449

Spring VHF80 80N

SM980911

Balancer Unit

SM980922

Locking balancer unit

Alternative configurations, including data and circuit protection options are available via the MK Design Service.

Made

GREAT

In Britain



Optimal USB Charging from MK

MK Electric's USB Integrated Sockets are designed to provide optimal charging efficiency through Dynamic Device Recognition; the ability to detect charging nuances in the device and its appetite for power. For the ultimate user experience, different devices from multiple manufacturers can be charged simultaneously.

USB outlets provide a total of 2A combined charging, even when only one outlet is engaged, and vertically stacked ports ensure free access when socket outlets are in use.

MK's USB Integrated Sockets come with quality, safety and reliability as standard.



Range	Technical Data
Wireless	
Echo Wireless, batteryless, self-powered technology	437-440
White	
Logic Plus Widest selection of wiring devices in one range	441-484
Decorative	
Elements Stylish wiring devices - Innovative and iconic	497-525
Aspect Range of slimline, screwless devices	441-484
Edge Function and style with very slim profile frontplate	441-484
Albany Plus Contemporary Wiring Devices	441-484
Modular	
Grid Plus Modular switching and monitoring system	526-536
Lighting Controls	
Sensors A range of energy saving and lighting management products	485-491
Ceiling Accessories Lampholders, pendant sets and ceiling switches	492-494
Link Plug-in connection and distribution system for lighting	495-496
High Power Dimmer Range of dimmers to control large lighting loads	534-536



Technical Hotline
+44 (0)1268 563720

Technical

Range	Technical Data
Surface	
Metalclad Plus Tough, impact resistant surface mounted devices	441-484
Portable Power	
Duraplug Durable, strong and reliable accessories	538-540
Plugs and Adaptors High quality plugs and adaptors	541
Ingress Protected	
Masterseal Plus Comprehensive range of IP66 weatherproof devices	542-553
Commando Safetyswitch Impact resistant switches for indoors or outdoors	554-555
Commando Plugs and Sockets Comprehensive selection of industrial plugs and connectors	556-567
Commando Combination Units RCD protection with high impact PBT units	568-573



CASE STUDY

THE MONARCH, DUBAI

With its distinctive blue glass skin, Monarch Dubai and The Monarch Office Tower are a striking landmark on the Dubai skyline. Inside the twin towers the interiors of the hotel with its 236 luxury rooms and suites, and the 37 storey building of office space with each floor at approximately 12,000 square feet, are no less impressive.

MK's Edge range, manufactured in a unique dark brass finish, was an essential component in creating the overall look of sumptuous quality. Given a material sample by the project's interior design team, MK was able to quickly produce a finished example that achieved the levels of elegance and sophistication required for this prestigious development.

Impressed by the speedy response and the factory-ready sample the interiors team gave the go-ahead to specify the customised product range throughout.

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit www.mkelectric.co.uk





Technical Hotline
+44 (0)1268 563720

Transmitters

Standards and approvals

BS EN 60669-1, BS EN 60669-2-1,
ETSI EN301 489-1 & -3, ETSI EN61000-6-2,
ETSI EN300 220-3

TECHNICAL SPECIFICATION

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to + 40°C

OPERATING FREQUENCY

868.3 MHz

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 meters

Dimensions

Transmitters: 86mm x 86mm

Fixing centres: 60.3mm

Mounting Transmitters

- All Transmitters can be mounted to any 1-gang back box.
- All can be mounted directly to the wall surface – screws supplied.
- All can be mounted to back boxes – screws supplied.
- Logic Plus™ and Aspect type Transmitters can also be mounted using supplied adhesive pads.



Description

Echo™ is an innovative range of entirely wireless, batteryless and self powered switches, only available from MK Electric.

Wireless – allows for instant switch installation and location flexibility, reducing disruption and cost, as there is no need to run switching cables.

Self-Powered – Innovative patented technology to ‘harvest’ energy means zero maintenance as there are no batteries to change.

Ultimate Flexibility – Each receiver can be controlled by up to 32 switches/transmitters.

Features

- Wireless and Batteryless – using RF technology with ranges up to 30m indoors
- Available in all MK wiring device aesthetics
- Quick and easy to install with no need for cabling from the switch to the lighting circuit
- Robust Metalclad Plus™ and Masterseal Plus™ available
- 400w and 10AX receiver/repeaters available to cover most installation needs
- Switch Receivers are capable of switching all lighting types
- Each receiver can be controlled by up to 32 switches/transmitters

For a full range of corresponding products,
see pages 21-31 in the product selector.

Switch Receivers and Repeater

Standards and approvals

BS EN 60669-1, BS EN 60669-2-1,
ETSI EN301 489-1 & -3, ETSI EN61000-6-2,
ETSI EN300 220-3



K5420R

TECHNICAL SPECIFICATION

ELECTRICAL

K5420R (WHEN USED AS A RECEIVER)

VOLTAGE RATING

250V a.c. 50Hz

CURRENT RATINGS

10AX – No de-rating when used on standard
magnetic ballast fluorescent loads.

TERMINALS

Terminal screw size: M3
Rated terminal screw torque: 0.5 Nm

TERMINAL CAPACITY

4 x 1mm²
3 x 1.5mm²
2 x 2.5mm²

PHYSICAL

OPERATING TEMPERATURE

-5°C to + 40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 meters

K5420R

The 10AX Receiver/Repeater can function both as a 1 level repeater and as a 10AX Switch Receiver.

Dimensions

10AX Switch Receiver/Repeater – K5420R

Length: 175.5mm

Width: 50.3mm

Height: 33.25mm

Transmitters, Receivers and Accessories

Echo™ Installer Guide

1. INTRODUCTION

The MK Echo™ range of products are different from all other products in MK's Wiring Devices portfolio in so far as the "switches" are RF transmitters which communicate with Switch Receivers. It is the Switch Receivers that actually switch the mains power.

Echo™ Transmitters send an RF signal at 868.3 MHz. The unique feature of these products is that the signal transmission is made without the need for mains power, or batteries.

Compared to installing hard-wired systems, wireless systems are much simpler and provide the flexibility to relocate or add to a system.

A symbol is visible on all Switch Receivers to indicate the position of the antenna. Although not always possible, the best reception will always be achieved if the front face of the Transmitter is directly facing the surface of the Switch Receiver on which the antenna symbol is shown.

2. PRINCIPLES OF RADIO SIGNALS IN BUILDINGS

Echo™ Transmitters send wireless transmissions to the Echo™ Switch Receivers. The receiver checks the incoming signal for accuracy and uses the data to control outputs. Radio signals are electromagnetic waves; hence the signal becomes weaker the further it travels.

Please note that RF signals also decrease in strength when they pass through certain materials between the transmitted signal and the receiver.

While radio waves can penetrate a wall, they are dampened more than on a direct line-of-sight path. A few examples of different types of wall and the realistic typical reduction in signal strength that can be seen are:

MATERIAL	ATTENUATION
Wood, plaster, uncoated glass, with no metal content	0 – 10%
Brick, pressed board	5 – 35%
Ferro-concrete	10 – 90%
Metal, aluminium lining	90 – 100%

In practice, this means that the material used in a building must be taken into consideration during any assessment for radio coverage.

Here are some typical guideline figures when using Logic Plus style Transmitters with plastic frontplates:

Line-of-sight connections:	typically 30m range in corridors, or up to 100m in halls
Plasterboard walls / dry wood:	typically 30m range, through 5 walls
Brick walls / aerated concrete:	typically 20m range, through 3 walls
Ferro-concrete walls / ceilings:	typically 10m range, through 1 ceiling

All other Transmitters in the range that have metal frontplates, do of course cause a reduction in the signal strength and therefore the transmission distance. Generally, the line of site distance in a hall is reduced from 100m described above for Logic Plus™, down to 30m.

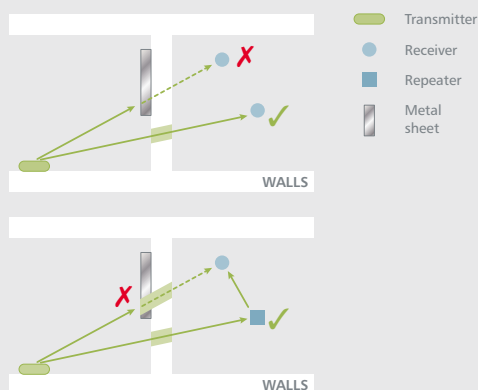
3. SCREENING

Objects made of metal, such as wall reinforcements, the metal foil often used in certain forms of insulation, or metallised heat protected glass, reflect electromagnetic waves and thus create what is known as a radio shadow and thereby a reduction in transmission distance.

The main factors decreasing coverage include:

- A Transmitter mounted on metal surfaces (typically 30% loss of range).
- Transmitters with metal frontplates (typically 60% loss of range).
- Hollow lightweight walls filled with insulating wool on metal foil.
- Inserted ceilings with panels made of metal or carbon fibre.
- Lead glass or glass with metallised coating, steel furniture.

Please note: Fire-safety walls, elevator shafts, staircases and supply areas should be considered as screening.



Simple example of a possible screening problem.

Depending on the material used to build the walls and assuming the distance between the transmitters and receivers are within specification, the illustrations above show a typical screening problem.

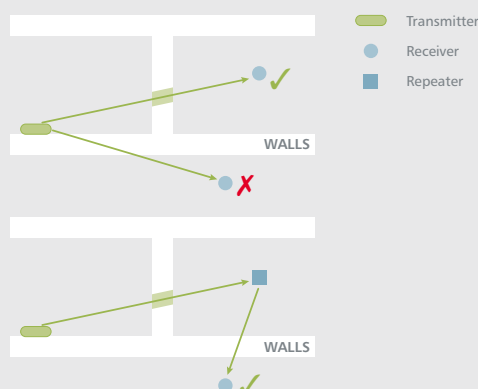
For the best range performance a minimum distance of 10mm to 20mm should be allowed from the whole length of the antenna to any conductive objects, which effectively means the area surrounding the Switch Receiver module.

Avoid screening by repositioning the Transmitter and / or Switch Receiver away from the screening objects (radio shadow), or if this is not possible, by using a Repeater.

MK Echo™ Technical

4. PENETRATION ANGLE

The angle at which the transmitted signal hits the wall is very important. The effective wall thickness – and with it the signal attenuation – varies according to this angle. Signals should be transmitted as directly as possible through the wall. Wall niches should be avoided.

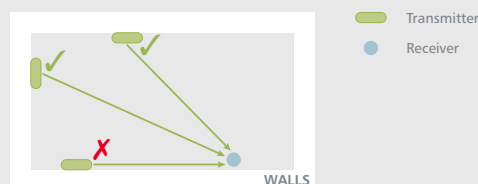


Avoid an unfavourable penetration angle by repositioning the Transmitter and / or Receiver, or by using a Repeater.

Do not position a Switch Receiver behind a Transmitter. In this position the signal strength is greatly reduced, even if there is no wall in-between.

5. ANTENNA INSTALLATION

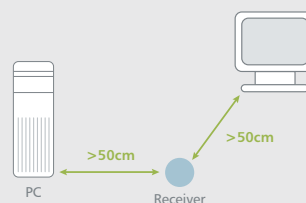
Switch Receivers should not be installed on the same wall as the Transmitter. When positioned near a wall, the radio waves are likely to be subject to interfering dispersions or reflections.



In a similar manner to the comment in the previous section, positioning transmitters and receivers along the same wall will mean the signal strength is greatly reduced.

6. DISTANCE BETWEEN SWITCH RECEIVERS AND A SOURCE OF INTERFERENCE

The distance between Switch Receivers and other transmitters (e.g. GSM / DECT / wireless LAN) or high-frequency sources of interference (computers, audio and video equipment) should be at least 500mm. However, Echo™ Transmitters can be installed next to any other high-frequency transmitter without a problem.



7. USE OF REPEATERS

In the case of poor reception, it may be helpful to use the repeater functionality built into switch receivers or a dedicated Repeater.

The 10AX Switch Receiver/Repeater (K5420R) is also a repeater when not programmed with any switches. The various possibilities of use are shown by the illustrations in sections 3. SCREENING and 4. PENETRATION ANGLE.

A Repeater has similar requirements in being positioned as a Switch Receiver, i.e. it too has an antenna and needs to receive the signal from the Transmitter and be within range of the Switch Receiver with which it is intended to communicate.

While planning, it may be worth considering retrofitting the system with a Repeater.

Installation general information

Socket outlets, switches and other MK wiring accessories can be wall or bench mounted. Do not use a trailing lead for sockets and connection units or mount any devices where they may be subject to excessive moisture or dampness.

Cable management

Socket outlets, switches and other MK wiring accessories can be mounted in a variety of MK trunking systems.

13A Socket Outlets

Standards and approvals

13A socket outlets comply with
BS 1363 Part 2:1995.

Replacement fuses to the 3 gang switchsocket outlets (Logic Plus only) comply with
BS 1362:1973.



Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the MK range of wiring devices. The 2 gang sockets with outboard rockers (available in Logic Plus and Albany Plus) are of particular value for use by the infirm and partially sighted whilst the same feature in Metalclad Plus is ideal for use with gloved hands.

Non-standard clean earth sockets are for use on installations where restricted access is required and will only accept a 647WHI 13A non-standard plug with T-shaped earth pin. The sockets have two independent earth terminals so that they can also be used for 'clean earth' installations. The K2746CE and K2947CE also have two independent earth terminals for 'clean earth' installations.

A variety of sockets (see Technical Specification) are fitted with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within the latest edition of BS 7671 which should be referred to for guidance.

The products can be quickly installed as replacement for existing 13A sockets or in a new installation.

Fuse carriers

(Logic Plus 3 gang switchsocket only)

The fuse carrier is opened by a fast-acting, screwdriver-operated, worm-drive screw for ease of replacement.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13A

(3 Gang Switchsocket 13A total)

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (standard)

(Dual earth terminals on list Nos. K781, K2657, K2737, K2746, K2757, all standard Edge and Aspect sockets, K733, K2958, K2458, K2947, K2947D6, K850, K2977, K2477, K3045, K3077, K2945, K2945D6 and K5357)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

13A Socket Outlets

Installation

1 gang switchsocket – view from rear

Top-facing, angled, backed-out terminals make wiring easier and quicker.



FEATURES

- Moulded 'on' indicator flash on plastic switches will not rub off – totally safe
- Matching Metal rocker Switches (Edge™ and Aspect only)
- Optional neon indicators in the switch rockers with 175° visibility in the horizontal and vertical planes
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Choice of inboard or outboard positioned rockers
- Additional electrical safety from DP Switch, neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Only one size of screwdriver required for installation
- Selection of products incorporating dual earth terminals for high integrity earthing
- Backed out and captive terminal screws
- 'Clean earth' sockets available
- Non-standard 'clean earth' sockets available

Wiring Devices Technical

– Logic Plus™

2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

Standards and approvals

Logic Plus™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and relevant parts of BS 1363-2 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC and RoHS directives.



TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

13A

Combined total 2A drawn from USB outlets

STANDBY POWER

< 150mW

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Logic Plus™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

Installation

Logic Plus™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

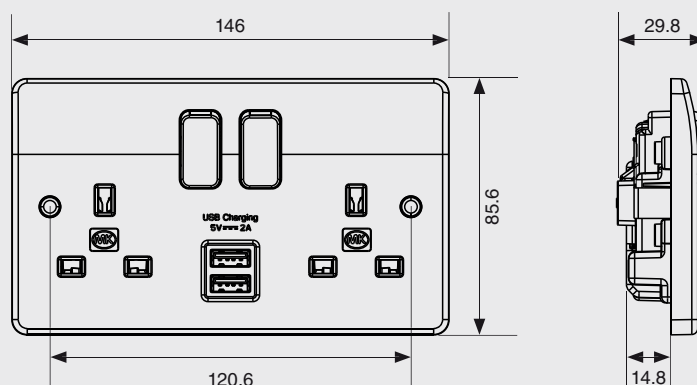
Cable management

Logic Plus™ socket outlets can be mounted in a variety of MK trunking systems.

MODEL	MINIMUM BOX DEPTH	BOX DEPTH FOR EXTRA WIRING SPACE MINIMUM BOX DEPTH
Logic Plus™	25mm*	35mm
	*For compliance to BS 1363 use either a 35mm back box or the K1000 pattress	

Note: When carrying out insulation resistance testing, first DISCONNECT the product. Failing to do this could damage the product and will also give spurious insulation readings.

Dimensions (mm)



Wiring Devices Technical

– Aspect

mkelectric.co.uk



2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

Standards and approvals

Aspect 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

13A

Combined total 2A drawn from USB outlets

STANDBY POWER

150mW

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Aspect range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

FEATURES

- Slim screwless frontplate design
- Matching metal rocker switches
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

Installation

Aspect socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

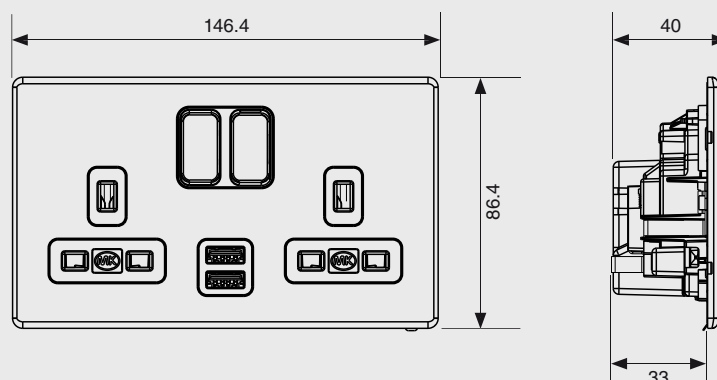
Cable management

Aspect socket outlets can be mounted in a variety of MK trunking systems.

BOX TYPES WITHOUT PATRESS

GANG	FLUSH
2 GANG	DEPTH 47MM
	878 ZIC

Dimensions (mm)





Technical Hotline
+44 (0)1268 563720

Wiring Devices Technical

– Edge™

2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

Standards and approvals

Edge™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

13A

Combined total 2A drawn from USB outlets

STANDBY POWER

150mW

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Edge™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

FEATURES

- Matching metal rocker switches
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB Outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

Installation

Edge™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

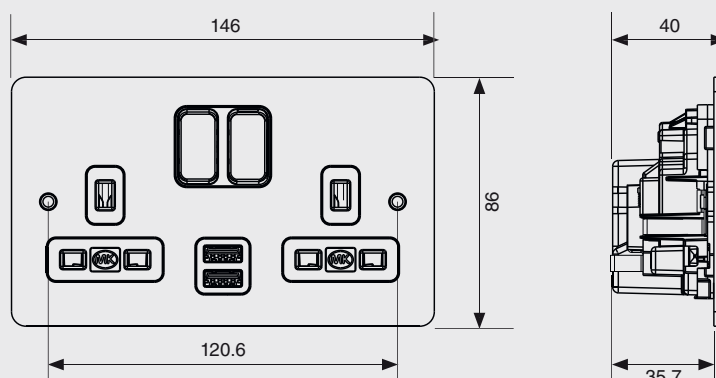
Cable management

Edge™ socket outlets can be mounted in a variety of MK trunking systems.

BOX TYPES WITHOUT PATRESS

GANG	FLUSH
2 GANG	DEPTH 47MM
	878 ZIC

Dimensions (mm)



Wiring Devices Technical

– Albany Plus™

mkelectric.co.uk



2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

Standards and approvals

Albany Plus™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

13A

Combined total 2A drawn from USB outlets

STANDBY POWER

150mW

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Albany Plus™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Dual earthed

Installation

Albany Plus™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

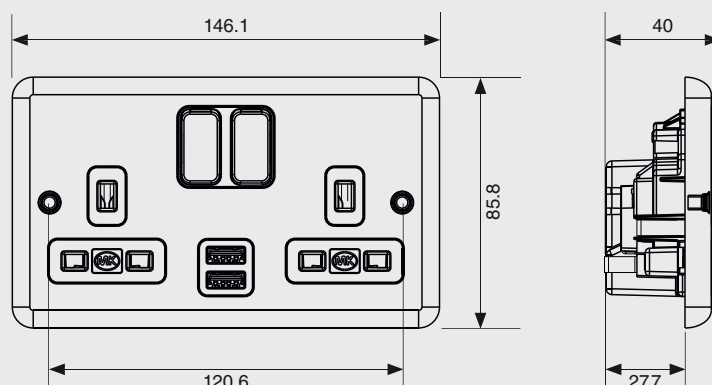
Cable management

Albany Plus™ socket outlets can be mounted in a variety of MK trunking systems.

BOX TYPES WITHOUT PATRESS

GANG	FLUSH	SURFACE INSULATED	SURFACE METAL
	DEPTH 35MM	DEPTH 40MM	DEPTH 41MM
2 GANG	886 ZIC	K2172 WHI	K2212ALM / K2214ALM

Dimensions (mm)



Wiring Devices Technical

– Metalclad Plus™

2 Gang Switchsocket Outlet with Integrated Dual USB Charging Capability

Standards and approvals

Metalclad Plus™ 13A socket outlets and 2A USB charging outlets comply with BS 5733 and IEC 61558-2-16.

EMC Compatibility:

IEC 61000-6-1

IEC 61000-6-3

Products are CE marked and meet the requirements of the Low Voltage, EMC, RoHS and WEEE directives.



TECHNICAL SPECIFICATION

13A SOCKET OUTLETS

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

13A

Combined total 2A drawn from USB outlets

STANDBY POWER

150mW

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Metalclad Plus™ range. Dual USB charging outlets offer end users easy access to power for charging a variety of devices such as smart phones, tablets and cameras.

FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter on 13A socket outlets
- USB 2.0 and 3.0 compatible
- Can charge a device at up to a full 2A
- If only one device is connected to a USB outlet the total output current of 2A is available from either outlet
- If two devices are connected to USB outlets the the total rated current of 2A is divided between the two outlets
- Differing manufacturers devices can be charged simultaneously via the two USB outlets
- If the total charging current exceeds the rated level of 2A then the device will enter a current limiting safety mode
- Electronically protected against an overload or short circuit on either USB outlet
- USB outlets are designed to provide optimum charging compatibility across a wide range of devices
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws
- Metallic powder paint finish is corrosion and scratch resistant
- Dual earthed
- High impact resistance

Installation

Metalclad Plus™ socket outlets can be wall or bench mounted.

Do not mount or use as a trailing socket or where they may be subject to excessive moisture or damp.

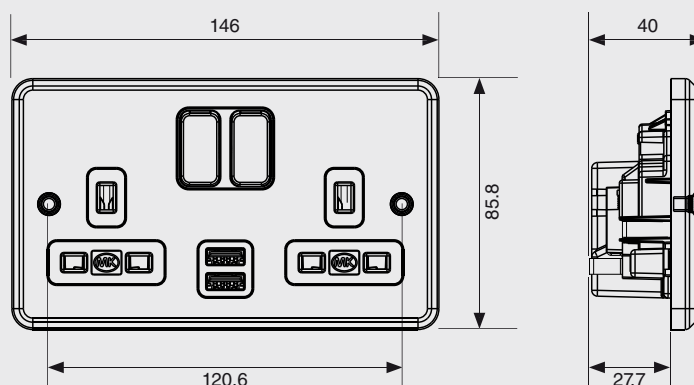
Cable management

Metalclad Plus™ socket outlets can be mounted in a variety of MK trunking systems.

BOX TYPES WITHOUT PATRESS

GANG	FLUSH	SURFACE
2 GANG	DEPTH 35MM	DEPTH 38MM
	886 ZIC	K830 ALM (without knockouts) K897 ALM and K897 WHI (with 8 x 20mm knockouts)

Dimensions (mm)



Sentrysocket

Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:

Low Voltage Directive

Electromagnetic Compatibility Directive
(89/336/EEC)

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:

BS 7288:1990

BS EN 50082-1:1998

Sentrysocket RCD SP Double Sockets also comply with the requirements of BS EN 61543:1996.

TECHNICAL SPECIFICATION

ELECTRICAL

RATED VOLTAGE

240V a.c.

CURRENT RATING

13A resistive

Rated tripping current 10mA/30mA

TERMINAL CAPACITY

3 x 4mm² for 1 gang

2 x 4mm² for 2 gang

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

IP66 (K56301/K56231/K56233)

MAX. INSTALLATION ALTITUDE

2000 metres

Sentrysockets are not suitable for connection across two lines of a 127V line to Neutral Voltage System

Cable management

Logic Plus™, Albany Plus™ and Metalclad Plus™ Sentrysockets can be mounted in a variety of MK trunking systems.

Installation

Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.



Description

Sentrysocket provides a high level of protection against electrocution and gives further protection when used with appliances vulnerable to insulation damage, particularly when they are in damp environments or outdoors. The Sentrysocket units are not suitable for mounting in damp environments or outdoors.

Sentrysocket, incorporating an RCD, is part of a complete range of fixed and portable wiring devices and circuit protection devices suitable for use in domestic, commercial and light industrial applications.

Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, i.e. they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

Passive control circuits

Incorporate a 'Stay-set' mechanism and is mains failure proof, i.e. it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

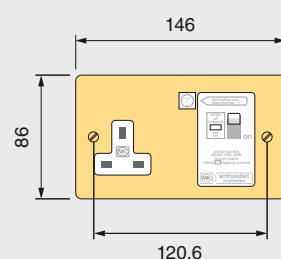
FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Flexible and versatile in use
- Single Sockets have double pole switching, double sockets are single pole switching
- Masterseal Plus products are ideal for use with equipment subject to wet weather or high humidity
- Part of a complete range of MK circuit protection devices
- They are a.c. and pulsating d.c. sensitive for residual current
- Double Socket products have an enhanced RF Immunity performance

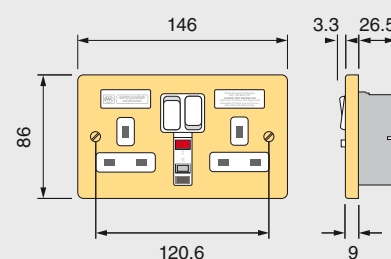
Sentrysockets products can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Dimensions (mm)

Single socket



Double socket



Sentrysocket

Installation

Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

Socket Testing

Single Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly:

1. Ensure that no appliance is connected to the Sentrysocket.
Switch Sentrysocket on: The switch should remain closed and the red flag will appear in the window. If the switch fails to remain closed, check that the Supply L and N connections are not reversed or the Supply N connection is not open circuit. If the Sentrysocket is correctly connected and still trips after being switched on, the Sentrysocket is faulty and should not be used.
2. If the Sentrysocket stays on, **press the test button:** The switch will open and the white flag will appear in the window. If the Sentrysocket does not trip and there is mains voltage present at the socket outlet, Sentrysocket is faulty and should not be used.
3. **Switch Sentrysocket on:** Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:
≤ 200 ms AT RATED TRIP CURRENT
≤ 40 ms AT 5 x RATED TRIP CURRENT

If the Sentrysocket does not trip within the specified times then the product is faulty and should not be used (If more than one RCD is in series then there is no guarantee as to which device will trip first).
4. **Reset all tripped RCD's including the Sentrysocket.**
5. **Switch off the mains supply switch disconnecter.** On mains failure, a Sentrysocket with Active Control Circuit will trip, whilst a Sentrysocket with Passive Control Circuit will not trip. If the Active Control device does not trip, it is faulty and should not be used – see note below. If no faults have been found then installation testing has been completed successfully.

Note: If a fault is identified at any stage of installation testing procedure do not use Sentrysocket, and contact your local electrician, or your local MK stockist.

Double Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly follow the steps 1 to 4 below:

1. Ensure that no appliance is connected to the Sentrysocket.
2. **Reset** – Press the button marked R (for Reset) – the contact status indicator should show red, indicating that the socket outlets are now live (if the switches are in the ON positions).
3. **Test** – Press the TEST button marked T (for Test), the product should trip with the contact status indicator showing black. In this state the socket outlets are disconnected from the supply.
4. **Reset** – Press the button marked R again, the contact status indicator should show red.
5. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times below:
≤ 200 ms AT RATED TRIP CURRENT
≤ 40 ms AT 5 x RATED TRIP CURRENT
6. Reset the Sentrysocket as in step 2 above.
7. Switch off the Mains Supply Switch Disconnecter.
8. A Sentrysocket with Active Control Circuit should trip while a Sentrysocket with Passive Control Circuit should not trip.

If all the operations in steps 2 to 8 above give correct results, the Sentrysocket RCD socket outlet is safe to use.

If the procedures in steps 2 to 8 above are not completed correctly, do not use the Sentrysocket product and seek professional advice or contact the MK Technical Sales and Service department on +44 (0)1268 563720.

Filtered Switchsocket Outlets (Logic Plus and Albany Plus)

Standards and approvals

Filtered socket outlets comply with BS 5733:2010.

TECHNICAL SPECIFICATION

ELECTRICAL

CURRENT RATING

13A maximum total for 2 sockets

VOLTAGE RATING

250V a.c.

EARTH LEAKAGE

0.5 mA

SUPPRESSION

150 kHz – 30 MHz (transients)

MAXIMUM ENERGY ABSORPTION

140 Joules L – N

140 Joules L – E

TERMINAL CAPACITY

2 x 6mm²

3 x 4mm²

3 x 2.5mm²

3 x 1.5mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

THERMAL OVERLOAD

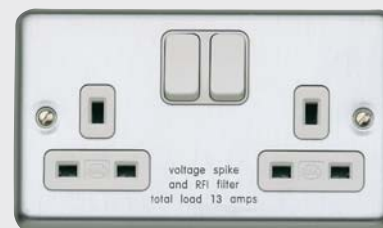
The K1826 and K2826 filter socket incorporates a thermal overload device in the RFI filter section. Overload current causes temperature rise, resulting in automatic 'trip out'. The overload device will re-set as the temperature falls.

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres



Description

A range of sockets in the Logic Plus and Albany Plus styles, designed to combat interference to or data losses on sensitive electrical products and systems due to mains borne voltage spikes and RFI.

Such systems include:

- Computer or microprocessor based equipment
- Telecommunications systems
- Electronic measurement equipment
- Cash registers
- Audio visual and hi-fi equipment

These products can be quickly installed as replacements for existing twin 13A sockets or in a new installation.

Fitted with two earth terminals to provide a double earth facility for use when installations require a high integrity protective connection as specified within the latest edition of BS 7671.

Filter cassettes

Filter cassettes are supplied with sockets and have an LED which shows green under normal conditions but will turn red or extinguish when a replacement cassette (K1800WHI) is required. An alarm will also beep at 5 second intervals to indicate replacement necessity. It can be de-activated if required.

FEATURES

- Moulded 'on' indicator flash on switches will not rub off – totally safe
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Reduces risk of damage to equipment and down time
- Reduces risk of data loss
- 2 way filtering – into appliance and back into mains supply
- Additional electrical safety from DP Switch, neutral 'make first', 'break last' feature
- Double pole switches
- Dual earth terminals for high integrity earthing
- Clearly visible LED on filter cassette, changes from green to red when replacement required
- Simple replacement of cassettes
- 10 year guarantee (except filter cassette)
- 3mm minimum switch contact gap
- Backed out and captive terminal screws

Filtered Switchsocket Outlets

Product features

Ensure that the connecting pins protruding from the bottom of the replacement Filter Cassette are not damaged or bent before installation. If in doubt, contact MK Technical Sales Service Department on +44 (0)1268 563720.

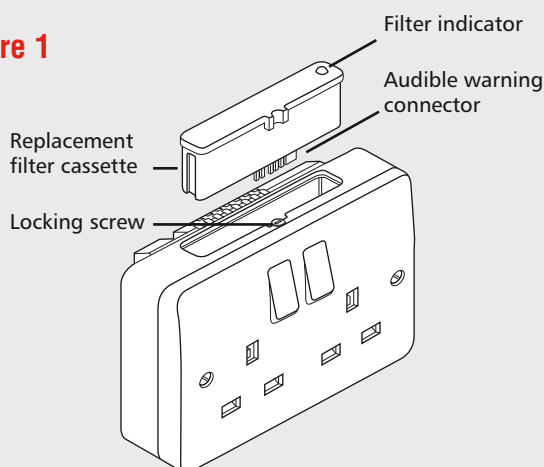
The MK Filtered Switchsocket, in common with many other filters uses Voltage Dependant Resistors for spike suppression purposes. The performance of these devices will eventually degrade with use to a level where they will no longer provide adequate protection.

When this occurs the spike filter performance of the MK Filtered Switchsocket outlet can be restored by replacing the filter cassette.

When the filter cassette needs replacing, the green indicator on the Replacement Filer Cassette will glow red or go out, an audible beep every five seconds may also be heard.

Note: As with all filters, these Filter Sockets will reduce the magnitude of RFI and spikes and consequently their ability to interfere with connected equipment. They will not completely remove the interference from the supply.

Figure 1



Installation

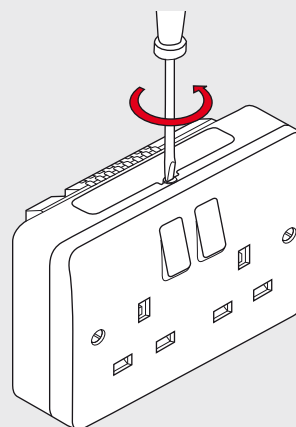
Replaceable Spike Filter Cassette

Note: To ensure a safe installation;

- this product should be installed by a competent person.
 - it is important that all connections are made as instructed.
1. The filter cassette can be removed and replaced without switching off the mains or removing any plugs from the filter socket.
 2. Remove the filter cassette by turning the jacking screw anti-clockwise to partially eject it (see Figure 2), and then gently pulling the cassette upwards, (see Figure 2a).
 3. **Only fit the MK Replacement Filter Cassette (K1800WHI).**

Unpack the new filter cassette and check that the pins along the bottom edge are not bent or broken. If these pins are damaged, do not fit the replacement cassette. The audible sound indicating that the filter cassette needs replacing, is optional. It may be prevented by removing the small connector on the two end pins, (see Figure 2b), before fitting it into the socket.

Figure 2



4. Fit the new filter cassette by carefully sliding it into the aperture and gently pushing it down while turning the screw clockwise until the filter cassette is flush with the surface. Do not turn the screw any further as this will cause distortion of the plastic mouldings.

Product and packaging can safely be disposed of via standard refuse facilities at the end of its useful life.

Figure 2a

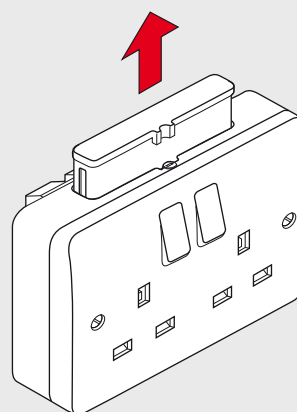
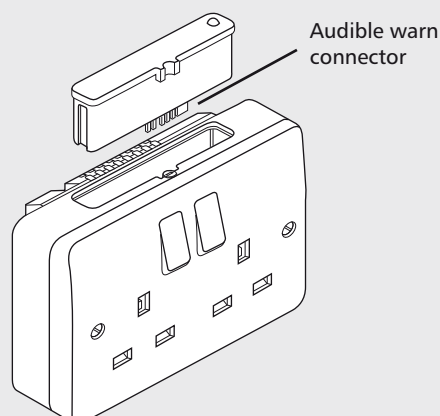


Figure 2b



Round Pin Socket Outlets

Standards and approvals

Round pin socket outlets comply with BS 546:1950.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

TERMINAL CAPACITIES

2A sockets:

7 x 1mm²

4 x 1.5mm²

2 x 2.5mm²

1 x 4mm²

5A sockets:

3 x 2.5mm²

2 x 4mm²

2 x 6mm² (stranded)

15A sockets:

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres



Description

A range of round pin socket outlets designed for ease of installation and having all the advantages and design features of the MK range of wiring devices.

These products can be quickly installed as replacements for existing socket outlets or in new installations.

FEATURES

- Top access terminals make wiring easier and quicker
- Integral ON indicator on plastic switches will not rub off – totally safe
- Switch contact gap, 3mm minimum
- Double pole switching
- Terminal screws backed out
- Additional electrical safety from neutral “make first”, “break last” feature on switched sockets
- Switch contacts with silver contact points on both surfaces for good continuity
- 5A and 15A sockets contain a 3 pin operated safety shutter.
- Printed terminal markings on grey rear mouldings for clearer identification

Non UK Socket Outlets

Standards and approvals

15A American sockets comply with
SASO 2004:2003

16A 2P+E German sockets comply with
IEC 60884-1:2006

TECHNICAL SPECIFICATION

ELECTRICAL

15A AMERICAN

VOLTAGE RATING
127V a.c.

CURRENT RATING
15A

TERMINAL CAPACITY
Live, neutral & earth
3 x 2.5mm²
2 x 4mm²
1 x 6mm² (stranded)

MAX. INSTALLATION ALTITUDE
2000 metres

16A 2P+E GERMAN SOCKET

VOLTAGE RATING
250V a.c.

CURRENT RATING
16A

TERMINAL CAPACITY
Live, neutral & earth
4 x 1.5mm²
2 x 2.5mm²
1 x 4mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP2XD

MAX. INSTALLATION ALTITUDE
2000 metres

15A AMERICAN (Logic Plus*)



BOX TYPES

GANG	FLUSH	FLUSH (FOR EXTRA WIRING SPACE)	SURFACE
1 GANG	861ZIC	866ZIC	K2140WHI
2 GANG	862ZIC	886ZIC	K2142WHI

16A 2P+E GERMAN (Logic Plus*)



BOX TYPES

GANG	FLUSH	SURFACE
1 GANG	861ZIC	K2140WHI
2 GANG	862ZIC	K2142WHI

Note: 16A 2P+E German Outlet: These products are NOT suitable for 25mm deep boxes.

*15A American Sockets and 16A 2P+E German Sockets are also available in a modular format for MK decorative wiring device ranges.

Three Pole Fan Isolators

Standards and approvals

Comply with BS EN 60669-2-4:2005

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

10A

RATED CONDITIONAL SHORT

CIRCUIT CURRENT (Inc)

3000A

TERMINAL CAPACITY

4 x 1mm²

4 x 1.5mm²

3 x 2.5mm²

2 x 4mm²

1 x 6mm²

CONTACT GAP

4mm switch contact gap

RECOMMENDED SCPD

GE Power Controls TIA32M40 32A IEC269-2-1 Fuse-link

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP4X

MAX. INSTALLATION ALTITUDE

2000 metres

Features

- Switchlock list no. K4858 is available to allow the isolator to be locked in the disconnected position to facilitate fan maintenance



Description

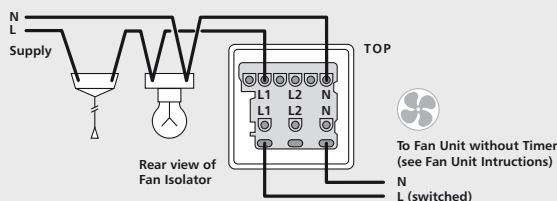
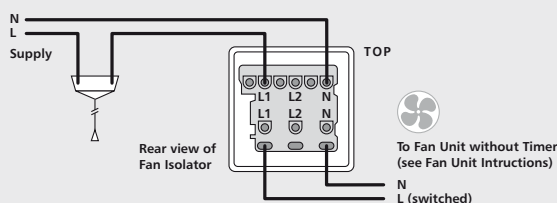
The MK Three Pole Fan Isolator provides a safe and simple method of isolating mechanical fan units and is particularly useful in bathrooms, toilets, storerooms and basements where there is little or no natural light.

For example, timer controlled fans are often linked into the lighting circuit for energy saving and convenience. In such an installation there is often a need for the lighting circuit to remain live to provide light whilst the fan unit is externally isolated so that routine maintenance and repairs can be carried out in complete safety.

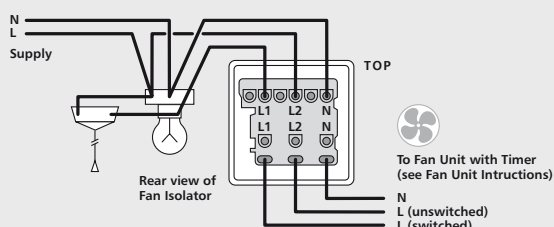
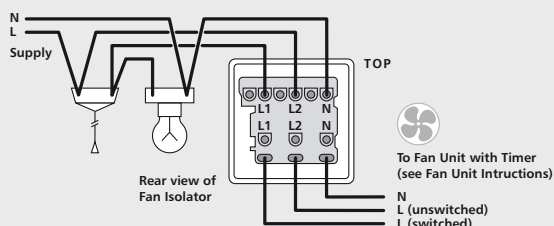
The fan isolator can be used as a double pole or triple pole isolator. In addition it includes a clear on/off indicator and the frontplate features a fan isolator symbol for easy circuit identification.

Wiring diagrams

Two pole switching for fan units without timers



Three pole switching for fan units incorporating timers



Wiring Devices Technical

– Logic Plus™

Shaver Socket Outlets

Standards and approvals

Shaver socket outlets comply with BS 4573:1970 and IEC 60884-1:2006.

Plug pin apertures, and engagement face dimensions comply with BS 4573:1970.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

200-250V a.c. Input

MAXIMUM LOAD

200 mA (internal thermister trip current)

TERMINAL CAPACITIES

Each terminal will accommodate

1 x 4mm², or 2 x 2.5mm², 3 x 1.5 solid conductors

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres



Description

Designed for ease of installation and having many of the advantageous features of the Logic Plus™ range.

The shaver socket outlet accommodates the following plugs:

British 5mm dia pins on 16.6mm pitch (230V socket) to BS 4573:1970.

European 4mm dia pins on 17 to 19mm pitch (230V socket) to IEC 83:1975 Standard C5.

Australian 6.5 x 1.6 flat blades each set at 30° to the vertical on a nominal pitch of 13.7mm (230V socket).

AS C112:1964.

The fuse carrier is captive and opened by a fast acting, screwdriver operated worm drive screw for ease of replacement.

FEATURES

- Top access terminals make wiring quicker and easier
- Only one size of screwdriver required for installation
- Terminal screws supplied 'backed out' and held captive within the terminal moulding
- White printed terminal markings on grey rear mouldings for clearer identification
- Front plate fixing screws retained on rear case moulding

Installation

This shaver socket **must not** be used in bathrooms and washrooms. Non-isolated, fused, shaver socket outlets must never be installed in any location subject to splashes, condensation or damp conditions.

For installation in any other room where a wash basin or shower cubicle is installed then refer to the current IET wiring regulations.

Shaver/Toothbrush Supply Units

Standards and approvals

Shaver/Toothbrush supply units comply with BS 61558-2-5:1998

Accommodates plugs as follows:

- British 5mm dia pins on 16.6mm pitch (230V socket) to BS 4573:1970.
- European 4mm dia pins on 17 to 19mm pitch (230V socket) to BS EN 50075
- Australian 6.5 x 1.6 flat blades each set at 30° to the vertical on a nominal pitch of 13.7mm (230V socket) AS/NZS 3112:2000
- American 6.6 x 1.6 flat horizontal blades on 12.7mm pitch (115V socket) to UL498 / NEMA WD6.



Description

Designed for ease of installation and having many of the advantageous design features of the MK range of wiring devices.

May be used in bathrooms and washrooms – must only be installed in accordance with the latest edition of BS 7671.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

K701: 230V a.c. Input (will operate at 220-250V a.c.)

K706: 127V a.c. Input (will operate at 110-130V a.c.)
230V or 115V nominal outputs

CURRENT RATING

K701: 200mA max.

(internal thermister trip current)

K706: 400mA max.

(internal thermister trip current)

MAXIMUM LOAD

20VA

No load voltage < 275V

TERMINAL CAPACITIES

Each terminal will accommodate 1 x 4mm² or
2 x 2.5mm² solid conductors

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP41 (In Zone 2 if fixed where direct spray from
showers is unlikely)

MAX. INSTALLATION ALTITUDE

2000 metres

FEATURES

- Top access terminal screws make wiring quicker and easier
- Automatic primary supply switching on insertion of plug
- Choice of 230V or 115V output socket positions
- Safety interlocked shutters to prevent insertion of two plugs simultaneously
- Only one size of screwdriver required for installation
- Front plate fixing screws retained on rear case moulding
- Integral over current device to protect transformer
- Suitable for use with electric toothbrush chargers

Installation

Shaver/Toothbrush supply unit should be wall mounted.

13A Connection Units, 20A Switches and Flex Outlets

Standards and approvals

All Connection Units comply with BS 1363-4:1995.

All 20A DP Switches comply with BS EN 60669-1:1999.

Flex Outlet complies with BS EN 60670-22:2006.

Fuses comply with BS 1362:1973.



Description

A range of 13A fused connection units and 20A DP switches designed for the connection of refrigerators, water heaters, central heating boilers and other fixed appliances.

The ranges are designed for ease of installation and have the advantageous design features of the MK range of wiring devices.

Neon indicators

Products are available with Neon indicators included in the rockers of the switched connection units. In the case of unswitched units, they are positioned centrally and uppermost on the face plate. Neon indicators are integrally wired into the product and do not require separate connection when installing. The design gives 175° visibility in the horizontal and vertical planes.

Fuse carriers

These are captive and are opened by a fast acting, screwdriver operated worm drive for ease of replacement. A tamper-proof version is also available.

Fuse carriers can be locked open using a padlock, List No. K2000.

Flex outlets

Bottom outlet types are supplied with blanking plug allowing use where the bottom outlet is not required.

The products are equipped with very strong, push-fit nylon cord grips making installation safe, quick and easy.

Flex outlet plate

An unfused flex outlet with cord grip and 3 pairs of terminals.

Installation

Wiring

Products must be installed in accordance with current IET Regulations.

Changing Fuses

1. Unscrew the fuse carrier screw to partially eject the carrier.
2. Carefully lever the carrier out further to remove the fuse.
Note: The carrier does not come fully out.
3. Always replace with a BS 1362 type fuse (as used in 13A plugs) of the correct rating.
4. Consistent fuse blowing could mean a faulty appliance. If in doubt, consult a qualified electrician.
5. Push carrier back until engaging with jacking screw. Screw the carrier down until flush with surface of the plate. Do not over tighten the screw.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

Connection Units: 13A

DP switches: 20A

Flex outlets: 20A

TERMINAL CAPACITY

Supply terminal:

2 x 6mm² stranded

2 x 4mm²

3 x 2.5mm²

Load terminals:

2 x 6mm² stranded

2 x 4mm²

3 x 2.5mm²

CORD GRIP CAPACITY

Connection units:

min: 2 core, 0.5mm

max: 3 core, 1.5mm

20A DP switches & flex outlet plate:

min: 3 core, 1.5mm

max: 3 core, 2.5mm

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

With flex outlet: IP2XD

Without flex outlet: IP4X

MAX. INSTALLATION ALTITUDE

2000 metres

Wiring Devices Technical

mkelectric.co.uk

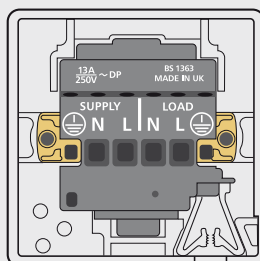


13A Connection Units, 20A Switches and Flex Outlets

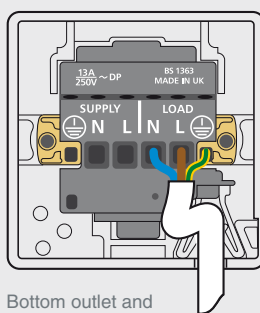
FEATURES

- Optional indicators in the switch rockers with 175° visibility in the horizontal and vertical planes
- Worm-drive operated fuse carriers for additional security (tamper-proof version available)
- Fuse carrier lockable in open position
- All supply and load cables can be cut and stripped to the same length
- Integrally wired Neon indicators save installation time
- Push-fit cord grips, for safer, quicker installation
- Angled, top mounted terminal screws simplify wiring
- Moulded 'on' indicator flash on switches cannot rub off – totally safe
- Captive fuse carrier
- Additional electrical safety from DP Switch, neutral 'make first', 'break last' feature
- Secure cable and flexible cord connection
- All terminal and fixing screws operated by one-size (4mm) screwdriver
- Backed out and captive terminal screws

Note: These switches are not recommended for switching large banks of PCs

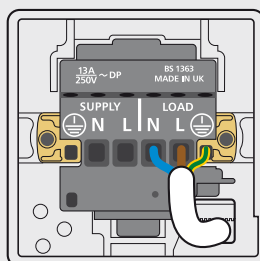
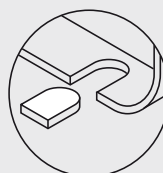


Supply and load cable cords cut and stripped to same length



Bottom outlet and cord grip

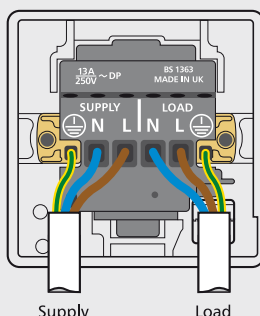
Blanking plug for bottom outlet



Front outlet cord grip



Lockable fuse carrier



Supply and non flexible load cables



K1090WHI Flex Outlet

20A Key Operated Fire Alarm Isolator Switch

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c.

CURRENT RATING
20A

TERMINAL CAPACITIES
Live, Neutral & Earth
3 x 2.5mm²
3 x 4mm²
2 x 6mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP2XD

MAX. INSTALLATION ALTITUDE
2000 metres



Description

The isolators comply with BS 60669-2-4:2005

The Isolator is intended for use with building alarm systems that are required to comply with BS 5839 Part 1.

FEATURES

- The built in lock ensures power cannot be provided without the key being operated, making it safe to carry out maintenance to fire alarms
- Printed terminal markings on grey rear of the switch moulding for clearer identification
- Double Pole switching
- Only one size of screwdriver required for installation

Note: The lock fitted to these isolators is universal for all MK 20A Isolators in the range i.e. a common key profile.

However, the keys are different to those used on all other MK Key Operated Switched Products, for added security.

High Current Switches and Cooker Control Units

Standards and approvals

All DP switches in the range comply with BS EN 60669-1:1999.

All Cooker Control Units in the range comply with BS 4177:1992.

Cooker Connection Unit comply with BS EN 60670-22:2006

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

32A Switch

45A Cooker Control Unit

45A Cooker Connection Unit

50A Switch (Resistive Load)

SWITCH

3mm contact gap

Double pole operation –

except socket switch on Cooker Control Units

TERMINAL CAPACITY 50A SWITCHES

Cooker Control Units, and Cooker Connection Units:

4 x 4mm²

3 x 6mm²

1 x 10mm²

1 x 16mm²

TERMINAL CAPACITY, 32A SWITCH

3 x 2.5mm²

2 x 4mm²

1 x 6mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

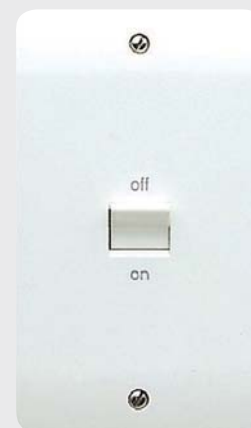
Cooker Control Units

IP4X

32A Switch, 50A Switch, Cooker Connection Unit

MAX. INSTALLATION ALTITUDE

2000 metres



Description

A range of switches and cooker control units suitable for the switching of all domestic, commercial and industrial appliances where higher current ratings are required, i.e. cookers, heaters, units etc. Metal units are particularly suitable for refurbishment projects.

FEATURES

- Positive switch action
- Positive double pole switching
- Toggle action switches
- Metal front plates available
- Replaceable neon indicators
- Wide product choice

Note: These switches are not recommended for switching large banks of PCs

Plateswitches

Standards and approvals

All MK plateswitches comply with
BS EN 60669-1:1999.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

10A – no derating when used on fluorescent
or inductive loads

20A – no derating when used on fluorescent
or inductive loads

Push / Retractive switch types are not intended for
fluorescent loads.

TERMINAL CAPACITY

4 x 1mm²

4 x 1.5mm²

3 x 2.5mm²

2 x 4mm²

1 x 6mm²

CONTACT GAP

3mm switch contact gap

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Operational testing (all plateswitches): tested to
100,000 operations for mechanical life tested to
40,000 operations at 10A rating tested to 10,000
operations at 20A rating.



Description

MK plateswitches are designed to blend in with the decor, whilst complementing a wide range of other MK wiring devices. They are designed for easy installation in plasterdepth boxes and are suitable for controlling lighting circuits in domestic, commercial and industrial applications.

Neon locator

A textured, polycarbonate moulding allowing the glow of the neon to be seen at almost any angle. Designed to complement the Logic Plus 1, 2, or 3 gang plateswitches.

It is easy to install in existing locations. For 3 gang applications using a 25mm deep box simplifies wiring.

FEATURES

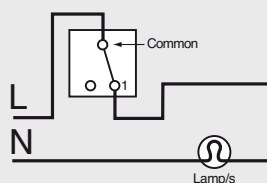
- Two way switches can be wired as one or two way
- Matching Grid switches available in 10 or 20A ratings
- 3mm switch contact gap
- Positive switch action
- Top access, backed out and captive terminal screws
- Neon locator available making switch easy to find in darkened rooms (Logic Plus™ only)



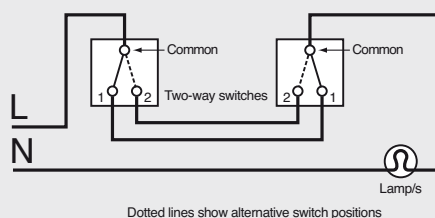
Plateswitches

Wiring diagrams

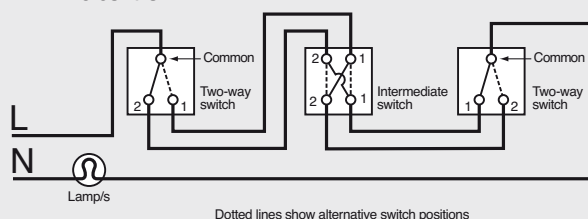
One-way switching



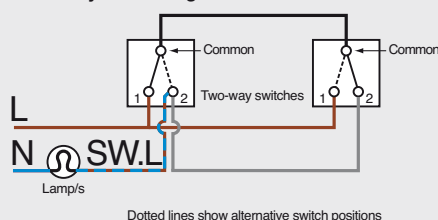
Two-way switching – 2 wire control



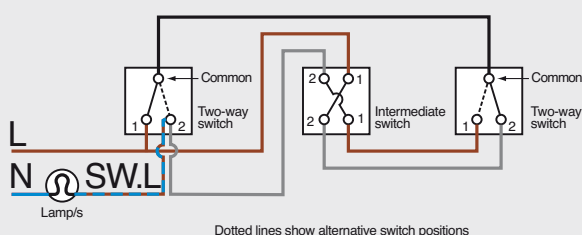
Two-way switching plus intermediate switching – 2 wire control



Two-way switching – 3 wire control



Two-way switching plus intermediate switching – 3 wire control



N.B. Terminal positions may alter. The above diagrams are to show wiring layout.

Dimmer Switches

Standards and approvals

All CE marked Logic Plus™ dimmer switches comply with the EC Low Voltage

Directive: 73/23/EEC, Electromagnetic Compatibility Directive 89/336/EEC

They also comply with BS EN 60669-2-1 and IEC 60669-2-1 (LED Intelligent Dimmer only)

*Non-UK dimmer switches see note below

TECHNICAL SPECIFICATION

ELECTRICAL

MAINS SUPPLY VOLTAGE

230V a.c. (Nominal)
220V a.c. (Nominal, Non-UK)
220V a.c. to 240V a.c. (For LED Intelligent Dimmer)

MAINS SUPPLY VOLTAGE RANGE

216V a.c. to 253V a.c.
200V a.c. to 250V a.c.
198V a.c. to 264V a.c. (For LED Intelligent Dimmer)

MAINS SUPPLY FREQUENCY

50Hz ±3Hz
60Hz ±3Hz

TYPE OF LOADS

STANDARD DIMMERS

Fused GLS Tungsten Filament lamps only to BS EN 60064:1996 and BS EN 60432-1:2000, rated at 230/240V

INTELLIGENT DIMMERS AND LED INTELLIGENT DIMMERS:

Fused GLS Tungsten Filament lamps to BS EN 60064:1996 and BS EN 60432-1,2 rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

Note: Transformer must be suitable for dimming using phase delay (leading edge) and NOT only phase cut (trailing edge) type of dimmers.

Warning: These dimmer switches are not suitable for use with Fluorescent Lamps or Energy Saving Lamps.

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres



Description

MK dimmer switches can fall into one of four categories

- 1) Standard Dimmer Switches
- 2) Intelligent Dimmer Switches
- 3) Non-UK Dimmer Switches
- 4) LED Intelligent Dimmer Switches

Standard Dimmer Switches

Dimmer Switches belonging to this category employ simpler electronic circuitry and the CE marked products make use of thermal switches to conform to the very stringent requirements of the Standard BS EN 60669-2-1, for overload protection. They are only suitable for use with normal tungsten filament lamps, conforming to BS EN 60064:1996 and BS EN 60432-1 Standards and do not have any added features, e.g. soft start, ability to control dimmable transformers for low voltage, etc.

Standard Dimmer Switches are not suitable for use with transformers for Low Voltage Lighting or Fluorescent Loads, including Energy Saving Lamps.

Intelligent and LED Intelligent Dimmer Switches

Dimmer Switches belonging to this category, employ the latest, state of the art, micro-controller based electronic circuitry and use current sensing to compute the load conditions. These products show progressive reaction to overload conditions, depending on the extent of overload as shown in the table below. List numbers belonging to this category are identified by the suffix letters LV, e.g. K1501 WHI LV. All MK Intelligent Dimmer Switches employ one pole change over switches to facilitate two way switching.

MK Intelligent and LED Intelligent Dimmer Switches are not suitable for use with Fluorescent Loads, including Energy Saving Lamps.

*Non-UK Dimmer Switches

Dimmer switches belonging to this category only conform to the relevant parts of BS EN 60669-2-1. Loads suitable for use with standard dimmer switches above are also suitable for use with this category of dimmer switch.

Only one Dimmer Switch can be used in a two-way switching circuit.

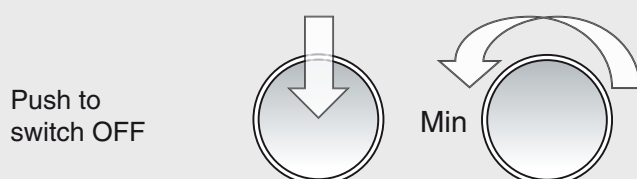
Minimum Brightness Adjustment for LED Intelligent Dimmers

The light output of some LED lamps may appear to be too dim or invisible when the dimmer knob is at the minimum dim level. Follow the steps below to adjust the minimum brightness level. This feature is primarily for adjusting the minimum brightness level of the LED lamp although it can be used for other load types.

For a double gang dimmer, the light level of each gang has to be adjusted separately.

Step 1 – Access To Programming Mode

1. Push the dimmer knob so that it is in OFF state.
2. Set the dimmer knob to minimum level.



3. Turn on the dimmer and immediately rotate the knob 3 times in full rotary span within 5 seconds.



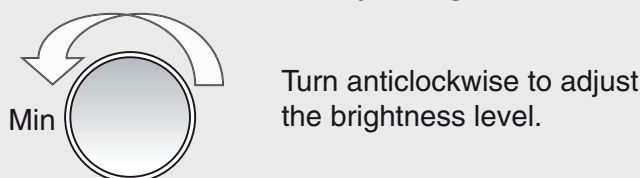
NOTE: Wait for 3 seconds, the lamp will then dim to minimum before automatically brightening to about 30% level. Turning/pushing the dimmer knob before the end of automatic brightening will end access to programming mode

4. Dimmer enters programming mode.

Step 2 – Adjust Brightness Level and Exit Programming Mode

5. Rotate the dimmer knob anticlockwise to adjust the lamp to the desired brightness level.

NOTE: Some LED lamps may not work properly if the brightness level is set too low thus it is recommended to keep the brightness level of the lamp at a visible level. The dimmer will exit programming mode automatically without saving the new setting if there is no dimmer knob movement for 15 seconds. The dimmer will restore its factory default light level.



6. Confirm the new setting and exit programming mode by turning OFF the dimmer.



Step 3 – Success indication (Programming Complete)

7. The next time the dimmer is turned on the lamp will automatically brighten to the maximum level before dimming to the brightness level corresponds to the knob level.

Dimmer Switches

FEATURES

Intelligent and LED Intelligent Dimmer Switches

incorporate the following advanced features

- Suitable for dimming Low Voltage Halogen lamps via good quality, fully dimmable electronic or wire-wound transformers. In addition, LED Intelligent dimmer switches are suitable for dimmable LED bulbs for incandescent replacement.
- Can be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability
- Load current sensing:
These dimmers continuously monitor the load current to help protect against overheating in wire wound transformers and to prevent overloading of the dimmer for long term reliability

- Soft Start, which gradually increases the light output from the load over 1 to 3 seconds after switch on. The Soft Start feature is also particularly beneficial when used to dim Mains Voltage Tungsten Halogen lamps which inherently have a very high inrush current at switch on

Standard Dimmer Switches

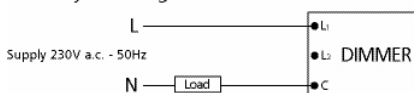
- Suitable only for use with fused GLS Tungsten Filament lamps to BS EN 60064 and BS EN 60432-1
- One way dimmer switches incorporate manual soft start
- Incorporate thermal switches for protection against overload

LOAD TYPES AND LOADINGS

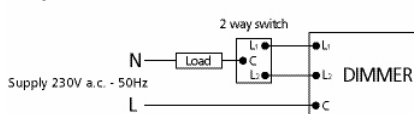
DIMMER SERIES	DIMMER SIZE (1 GANG)	RATING			MAX NO. OF TRANSFORMERS AND LEDS (TOTAL RATING MUST NOT EXCEED MAX.VA RATING OF DIMMER)	
		GLS AND MAINS VOLTAGE HALOGEN	ELECTRONIC OR WIRE WOUND LV TRANSFORMERS	LED	TRANSFORMERS	LEDS
INTELLIGENT DIMMER SWITCHES	single dimmer	40-300W	40-240W/VA	–	4	–
	double dimmer	2 x 40-300W	2 x 40-240W/VA	–	4 per dimmer	–
	single dimmer	60-500W	60-400W/VA	–	5	–
STANDARD DIMMER SWITCHES	single dimmer	40-250W	–	–	–	–
	double dimmer	2 x 40-250W	–	–	–	–
	single dimmer	65-450W	–	–	–	–
LED INTELLIGENT DIMMER SWITCHES	single dimmer	40-300W	40-240W/VA	4-70W	4	10
	double dimmer	2 x 40-300W	2 x 40-240W/VA	2 x 4-70W	4 per dimmer	10 per dimmer

Do not connect more than the maximum number of transformers stated for each dimmer.

One-way switching



Two-way switching (only one dimmer can be used)



Wires must be connected to the correct dimmer terminals.
DO NOT connect earth to dimmer.

OVERLOAD MANAGEMENT

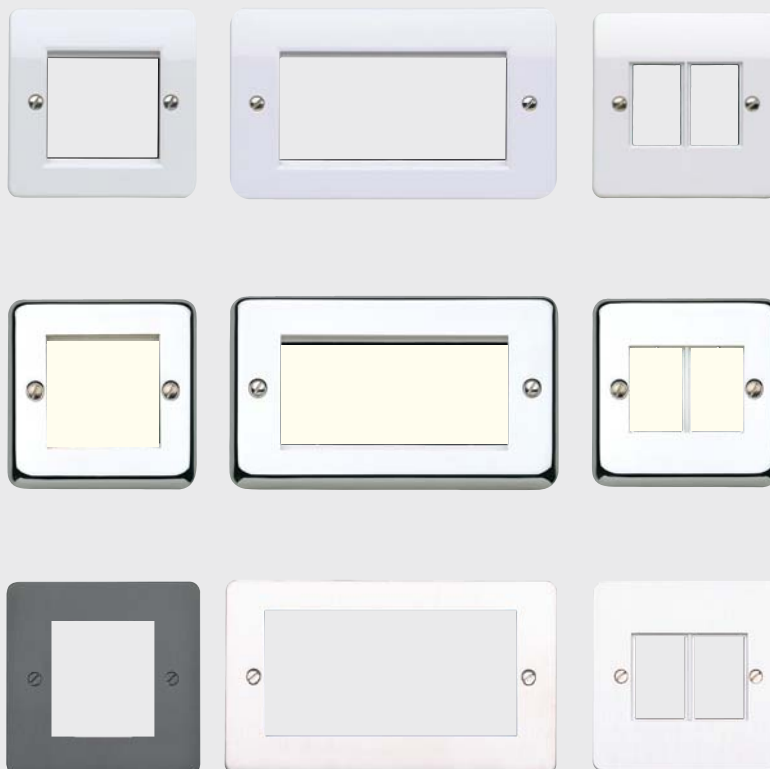
60-500W CIRCUIT	40-300W CIRCUIT	LED INTELLIGENT DIMMER
60-500W nominal	40-300W nominal	40-300W nominal
60-625W function without dimming	40-375W function without dimming	40-375W function without dimming
> 625-750W dim to 68V±8V r.m.s.	> 375-500W dim to 68V±8V r.m.s.	> 375-600W dim to minimum level
> 750W switch off	> 500W switch off	> 600W switch off

Please note the dimmer may be substituted for any Two-Way switches.

Euro and LJU6C Data Frontplates

Standards and approvals

BS 5733:2010



Description

Frontplates used for mounting snapfit modules.

FEATURES

- 1G, 2G and 3G Euro frontplates
- 1G LJU6C Frontplate
- Accept industry standard (Euro) and LJU6C snapfit modules
- 1G Euro frontplate accepts 2 Euro modules, (50 x 50mm aperture)
- 2G Euro frontplate accepts 4 Euro modules, (100 x 50mm aperture)
- 3G Euro frontplate accepts 6 Euro Modules, (150x50mm aperture)
- 1G LJU6C frontplate accepts two LJU6C modules (27 x 37mm aperture)
- 1/2 , 1 and 2 module Euro Blanks available
- 1 module LJU6C Blank available



Technical Hotline
+44 (0)1268 563720

Wiring Devices Technical

Power Modules

Standards and approvals

K5830: BS 1363 Part 2:1995

K5831: IEC 60884-1:2006

K5832: SASO 2204:2003

K5833: BS 546:1950

K5834: French National Standard NF C 61-314

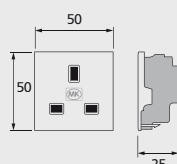
Description

A range of euro modules designed to provide a variety of power options.

TECHNICAL SPECIFICATION						
13A UK	5A UK	16A GERMAN	16A FRENCH/BELGIAN	15A AMERICAN	2A USB CHARGING MODULE	
ELECTRICAL VOLTAGE RATING 250V a.c. CURRENT RATING 13A TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 3 x 4mm ² 2 x 6mm ² (stranded) PHYSICAL AMBIENT OPERATING TEMPERATURE -5°C to +40°C IP RATING IP2XD MAX. INSTALLATION ALTITUDE 2000 metres	ELECTRICAL VOLTAGE RATING 250V a.c. CURRENT RATING 5A TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 3 x 4mm ² 2 x 6mm ² (stranded) PHYSICAL AMBIENT OPERATING TEMPERATURE -5°C to +40°C IP RATING IP2XD MAX. INSTALLATION ALTITUDE 2000 metres	ELECTRICAL VOLTAGE RATING 250V a.c. CURRENT RATING 16A TERMINAL CAPACITY Live, neutral & earth 4 x 1.5mm ² 2 x 2.5mm ² 1 x 4mm ² PHYSICAL AMBIENT OPERATING TEMPERATURE -5°C to +40°C IP RATING IP2XD MAX. INSTALLATION ALTITUDE 2000 metres	ELECTRICAL VOLTAGE RATING 250V a.c. CURRENT RATING 16A TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 3 x 4mm ² 1 x 6mm ² PHYSICAL AMBIENT OPERATING TEMPERATURE -5°C to +40°C IP RATING IP2XD MAX. INSTALLATION ALTITUDE 2000 metres	ELECTRICAL VOLTAGE RATING 127V a.c. CURRENT RATING 15A TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 3 x 4mm ² 1 x 6mm ² (stranded) PHYSICAL AMBIENT OPERATING TEMPERATURE -5°C to +40°C IP RATING IP2XD MAX. INSTALLATION ALTITUDE 2000 metres	ELECTRICAL INPUT VOLTAGE RATING 220-240V a.c. FREQUENCY 50-60Hz TERMINAL CAPACITY Live & neutral 3 x 2.5mm ² PHYSICAL AMBIENT OPERATING TEMPERATURE 0°C to +40°C IP RATING IP3xC MAX. INSTALLATION ALTITUDE 2000 metres	OUTPUT VOLTAGE RATING 2 x 5V d.c. MAX CURRENT Combined total of 2A CHARGING SOCKETS USB 2.0 Type A, USB 3.0

Dimensions (mm)

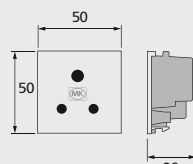
13A UK



K5830

BOX TYPES
MINIMUM
35MM
EXTRA WIRING SPACE
46MM

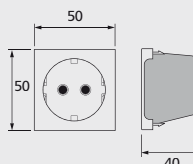
5A UK



K5833

BOX TYPES
MINIMUM
35MM
EXTRA WIRING SPACE
46MM

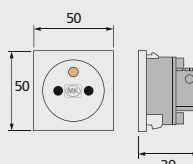
16A German



K5831

BOX TYPES
MINIMUM
46MM

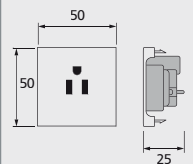
16A French/Belgian



K5834

BOX TYPES
MINIMUM
46MM

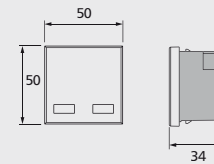
15A American



K5832

BOX TYPES
MINIMUM
35MM
EXTRA WIRING SPACE
46MM

2A USB Charging Module



K5837

MK EURO FRONT PLATE THICKNESS	BOX TYPES
> 7mm	Min 35mm
< 7mm	Min 46mm

RJ45 Data Outlets

Standards and approvals

ISO/IEC 11801

EN 50173

TIA 568

EN 41003



Installation

- Maximum cable length 90m.
- Cable bend radii, 40mm during installation, 20mm after installation.
- Maximum pull force 8.7kg.
- Do not over tighten cable ties.
- Do not unwind the twists in the wire pairs by more than 13mm max.

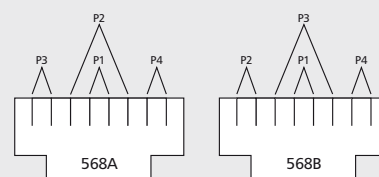
Description

Suitable for use in all LJU6C and Euro frontplates, available in the Logic Plus range, Cat 5e and Cat 6 modules suitable for use in structured cabling distribution systems.

Installation details and wiring diagram illustrations

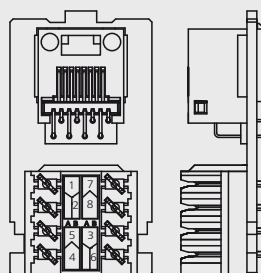
TIA WIRING SCHEME COLOUR CODES

PIN NO.	568A	568B
1	WHITE / green	WHITE / orange
2	GREEN / white	ORANGE / white
3	WHITE / orange	WHITE / green
4	BLUE / white	BLUE / white
5	WHITE / blue	WHITE / blue
6	ORANGE / white	GREEN / white
7	WHITE / brown	WHITE / brown
8	BROWN / white	BROWN / white

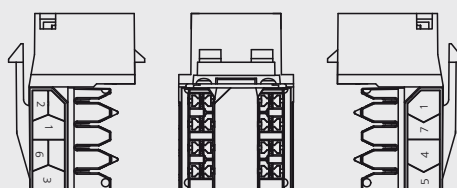


Pair 1 – BLUE/white & WHITE/blue
 Pair 2 – ORANGE/white & WHITE/orange
 Pair 3 – GREEN/white & WHITE/green
 Pair 4 – BROWN/white & WHITE/brown

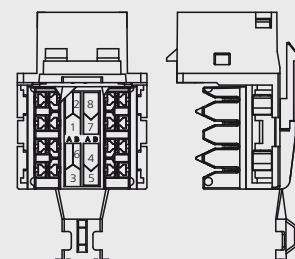
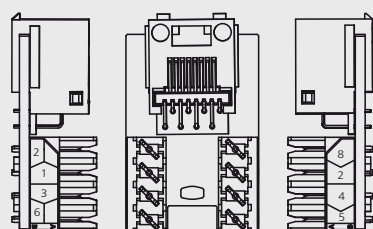
Euro and LJU6C modules are to be wired as follows



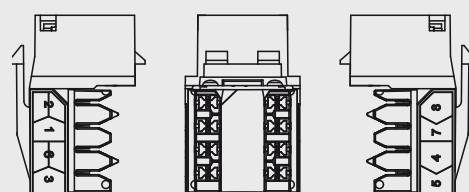
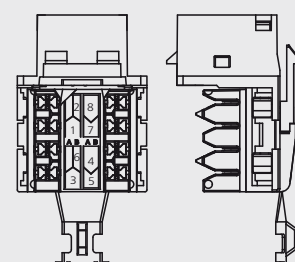
RJ45 Cat.5e Euro K5845



RJ45 Cat.5e Euro - Angled K5844

RJ45 Cat.6 Screened
K5746S - LJU6C, K5846S - Euro

RJ45 Cat.5e LJU6C K5745

RJ45 Cat.6 Euro - Angled K5746 - LJU6C
K5846 - Euro, K5864 - Euro AngledRJ45 Cat.5e Screened
K5845S - Euro

Telephone, RJ11/12, BNC Data and Blank Modules

Standards and approvals

Telephone sockets K5820 and K5821 comply with the following:

BS 6312: 2.2

Data sockets K5801, BS 5733: 2010 (where applicable).

K5887 complies with FCC68 and EN 41003.



TECHNICAL SPECIFICATION

ELECTRICAL

CABLE TYPES

Telephone: CW1311, CW1293, CW1308, CW1316

NO. OF CABLES PER TERMINATION

Telephone: 2

RJ11/12: 1

BNC

50 Ohms impedance cable – RG58, RG141, URM43 Belden 9907

FREQUENCY RANGE

BNC connector: 0 to 4GHz

IMPEDANCE

BNC Connector: 50. nominal

TERMINATION TYPE

Telephone module – IDC

BNC module – Crimped connection

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD – K5820, K5821, K5801 and K5787.

IP4X – K180, K188, K186 and K170

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of telephone, data and blank modules to fit Euro and LJ6UC front plates. BNC Euro modules with a 50Ohm crimp connector suitable for use with RG58, URM43, URM76 and Belden 9907 type co-axial cables are also available.

Installation (Telephone socket modules)

Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

Installation tools required IDC Connectors (telephone & RJ45 outlets)

MK insertion tool List No. 400NAT.

Wire pull-out force: 10.5 Newtons when installed correctly.

Wiring regulation restrictions

Domestic Installations: The total REN (Ring Equivalent Number) value of all telephone equipment connected on a line must not exceed 4.

FEATURES

- Meet all relevant BS and cabling standards
- Interchangeable modules clip into frontplates
- Front fixing facilitates easy exchange of modules
- Part of a complete range of products for telephone and data processing requirements

Data sockets

- Latest specification for high performance systems
- Wide range of data connectors available

For information on TV Satellite and FM Modules see pages 471-473

Telephone sockets

- Quick, simple and reliable IDC connectors
- Can be specified for all applications

Wiring Devices Technical

mkelectric.co.uk

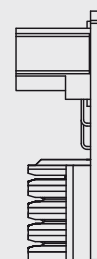
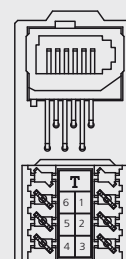
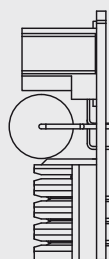
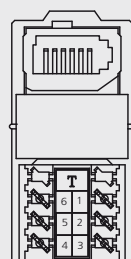


Telephone, RJ11/12, BNC Data and Blank Modules

Telephone Wiring Scheme

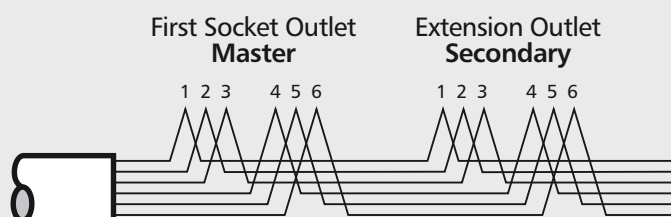
- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

Note: Main wire colour is shown in capitals



K5820

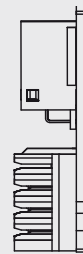
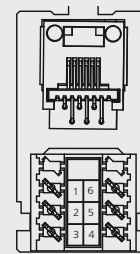
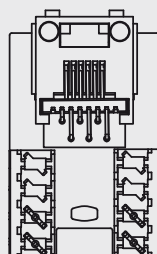
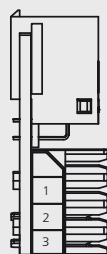
K5821



RJ11/12 Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE	SOLID COLOUR WIRE
1	WHITE / green	WHITE
2	WHITE / orange	BLACK
3	BLUE / white	RED
4	WHITE / blue	GREEN
5	ORANGE / white	YELLOW
6	GREEN / white	BLUE

Note: Main wire colour is shown in capitals



K5787

K5887

Telephone, TV/FM and Satellite Socket Outlets

Standards and approvals

Telephone and TV sockets comply with the following:

Telephone sockets K422 and K427

BS 6312: 2.2, BS 5733:2010 (where applicable).

K4817: BS 5733:2010 (where applicable) and FCC68.

TV sockets

BS 3041 Part 2:1977 / IEC 169-2:1977,
BS 5733:2010 (where applicable) and IEC65,
clauses 10.1, 10.3.

Satellite TV sockets

BS 5733:2010 (where applicable).



Description

A part of the very wide range of products to meet the latest technical requirements and the standards applicable to modern technology in the installation of telephone and television equipment. The master and secondary telephone sockets K422 and K427 comply with relevant approvals for direct and indirect connections between a termination point of a public telecommunications system and any piece of approved telecommunications apparatus. For applications requiring twin or dual telephone outlets, refer to the Modular Data section, pages 46-48.

Telephone and TV sockets fit into plaster depth boxes (except for RJ11).

The F-type Satellite Socket may be used for connection of CATV, MATV and satellite TV installations.

TECHNICAL SPECIFICATION

ELECTRICAL

TELEPHONE SOCKETS, CABLE SPECIFICATION
CW1311, CW1293, CW1308, CW1316

NO. OF CABLES PER TERMINATION
2

RE-USABILITY

>9 reterminations (should not be reterminated with smaller diameter wire)

TV SOCKETS

Cable specification: CT100 or equivalent Any standard

LOW-LOSS TV CO-AXIAL CABLE:

Outside 4-8mm diameter, inner conductor 0.5-2mm diameter

INSERTION LOSS

Insertion loss data available on request

'F' TYPE SATELLITE SOCKET (K3525), CABLE SPECIFICATION

Co-axial cable: inner core diameter – 0.5-1.2mm

RJ11 (K4817), CABLE SPECIFICATION

Capable of taking 0.08 to 0.65mm² solid or stranded cable

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

FEATURES

- Single screw termination on TV outlets
- Protected, fully enclosed PCBs
- Meet all relevant BS requirements
- Quick, simple and reliable terminal connection
- IDC connectors on telephone outlets
- Part of a complete range of products for telephone, television and data processing requirements
- Angled connector on TV outlets
- Sockets fit in plaster depth boxes (except K4817)

Telephone, TV/FM and Satellite Socket Outlets

Installation (Telephone sockets)

Product performance, systems compatibility

Master Sockets: for use as the first socket outlet on a direct exchange or PABX line. They contain surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets

For use as extension sockets when connected on the same line as a Master Socket.

Installation tools required

MK IDC insertion tool List No. 400NAT (not supplied with product).

Wiring regulation restrictions

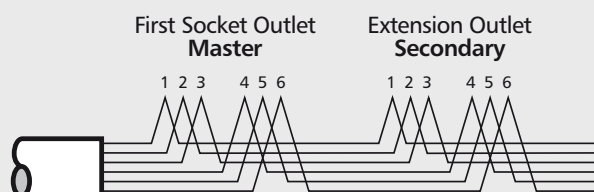
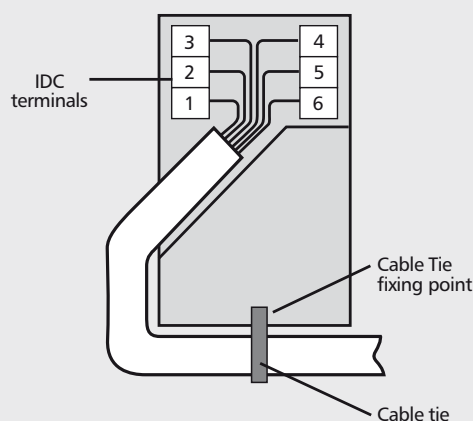
Domestic installations

Any number of MK sockets may be installed thereafter, with a total REN (Ring Equivalent Number) value of all telephone equipment connected on a line not exceeding 4.

Telephone Wiring Scheme

- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

Note: Main wire colour is shown in capitals



Digital TV and Telephone Outlets (Logic Plus and Modular Datacoms)

Installation (TV sockets)

Product performance, systems compatibility

Isolated Outlets are intended for use where safety isolation (rated at 2000V ac) is required to provide protection against faults occurring within any mains powered product used on different parts of the distribution system. They are not suitable for use in systems where DC signals are passed through the socket, (e.g. where masthead/headend equipment is controlled by receiver/decoder equipment).

Diplexer Outlets are used in distribution systems where both TV and FM band signals are combined on a single aerial download. The filtering in the diplexer separates the appropriate signals and feeds them through to the relevant output connection port.

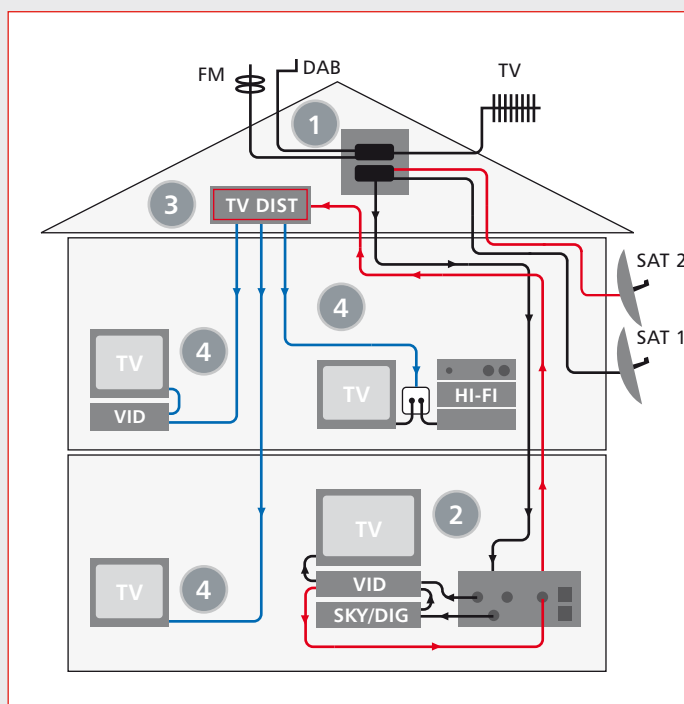
Cable Routing and Use of Cable Clamp

Sharp bends in the cable must be avoided during installation. The single TV/FM socket is fitted with a cable clamp that can be fixed on either side of the termination position to facilitate this.

When tightening the screening braid clamps ensure that the cable is firmly gripped and that the inner insulation is not squashed flat beyond a slight oval shape.

Safety Information

TV outlets or modules must not be installed in the same enclosure as equipment rated in excess of 50V, (e.g. mains rated 13A sockets or switches).



Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one download.

Conventional distribution system for TV and FM signals using a single aerial download.

- 1 The signals from the TV and FM aerials and the satellite dish are combined together using two products. The first combines the TV and FM signals and the second adds the Sky signal to the TV/FM signal and provides a DC control path to power the LNB unit on the satellite dish. (These products are not supplied by MK).

The single aerial down lead feeds into the triplexer (black lines in wiring diagram).

- 2 The separated satellite signal is then fed to the decoder. The decoded satellite signal is then fed into the VCR along with the TV signal from the Triplexer. The output signal from the VCR then feeds into the TV and also back to the single outlet and onto the distribution amplifier (black lines in wiring diagram).
- 3 The single cable back-feed then feeds back to the input of a multi way distribution amplifier, (typically located in the loft or garage) (red lines in wiring diagram).
- 4 Each individual output from the distribution amplifier is then fed to the individual rooms in the house to a standard TV (single or diplexer) outlet to which the TV/VCR and/or Hi-Fi can be connected (blue lines in wiring diagram).

Digital TV, Radio and Telephone Outlets

Standards and approvals

All Logic Plus TV Outlets comply with BS 5733 and BS EN 50083 where applicable.

Also IEC 169-2, BS EN 60169-24 and BS 6312 Part 2

Modular products are Euro compatible.

TECHNICAL SPECIFICATION

SINGLE OUTLETS

TV/FM IEC Male or Female DC-950MHz
SATF-Type DC-1.75GHz

DIPLEXER AND TRIPLEXER PRODUCTS

TV

Diplexer:
5-65MHz
470-862MHz

Triplexer:

5-65MHz
470-862MHz

FM

Diplexer: 87.5-108MHz
Triplexer: 87.5-108MHz

SAT

Diplexer: n/a
Triplexer: 950-2300MHz

TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

TV

Diplexer:
5-65MHz
470-862MHz

Triplexer:

5-65MHz
470-862MHz

FM/DAB

Diplexer: 87.5-230MHz
Triplexer: 87.5-230MHz

SAT OR SAT1

Diplexer: n/a
Triplexer: 950-2300MHz

SAT2

Diplexer: n/a
Triplexer: 5-2300MHz



Description

There are two ranges of diplexer and triplexer products, an established range suitable for VHF TV, and a range suitable for digital radio (DAB).

Diplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV and FM signals. The filtering in the diplexer splits out the appropriate signal and feeds it to the relevant output connection.

A DC control path is provided in the TV signal path through the diplexer.

Triplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV, FM and SAT signals. The filtering in the triplexer splits out the appropriate signal and feeds it to the relevant output connection.

A DC control path is provided in the SAT signal path through the triplexer.

The quad outlet contains a triplexer together with a separate satellite output, for use with Sky+, or more complex installations.

Telephone secondary outlets are provided on some products for connection of telephone or for interactive TV applications.

FEATURES

- Non Isolated
- Fully screened
- Earth terminal provided on TV modules
- Selected products with BT secondary outlets for interactive TV applications
- Selected products with supplementary TV outlet for back-feed for further distribution

BOX TYPES

FLUSH	FLUSH (FOR EXTRA WIRING SPACE)		SURFACE INSULATED	SURFACE METAL
1 GANG	861ZIC	866ZIC	K2140WHI	K2211ALM/K2213ALM
2 GANG	862ZIC	886ZIC	K2142WHI	K2212ALM/K2214ALM

Minimum recommended box depth 32mm

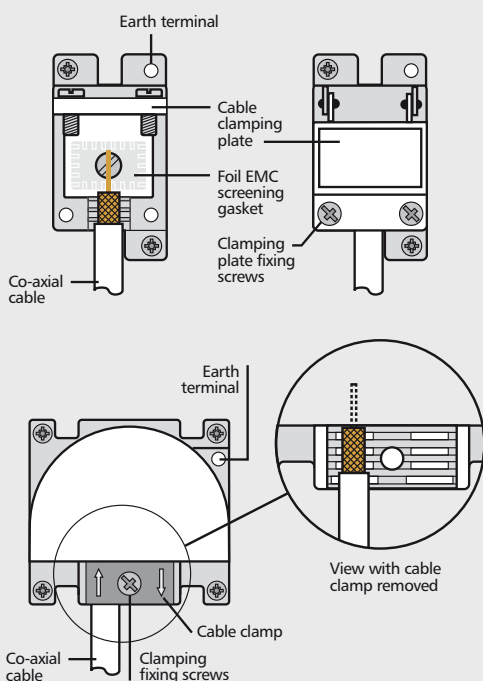
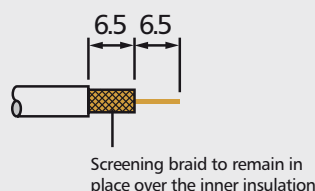
Note: Edge mounted modular products require 46mm box

Digital TV/FM and Telephone Outlets (Logic Plus and Modular Datacoms)

Installation

- When installing the TV co-axial cable ensure that all cable bends are smooth so that the inner insulation is not crushed or squashed, otherwise the TV signal quality may be affected
- Not suitable for loop-in loop-out installations
- Use CT100 cable (or equivalent)

TV Co-axial cable stripping details



Telephone Outlet Connection

Carefully strip 50mm of the telephone cable outer sheath to expose the inner insulated conductors. Using the insertion tool supplied, (MK List no. 400NAT) carefully push each lead into the appropriate IDC terminals according to the wiring colour code stated in the telephone Wiring Scheme diagram.

Pins 1 and 6 are frequently unused, 4 wire cable may be used in these installations.

If an existing installation uses a different wiring colour code system, this should be retained on any new or extended installation.

Additional secondary extension outlets should be wired in parallel with the existing installation via the IDC terminals, (i.e. pin 1 to pin1, pin 2 to pin 2, etc).

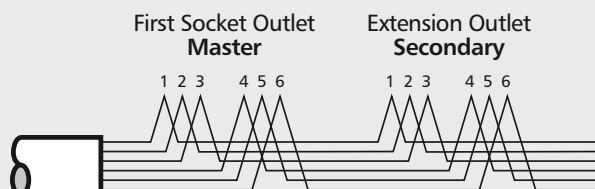
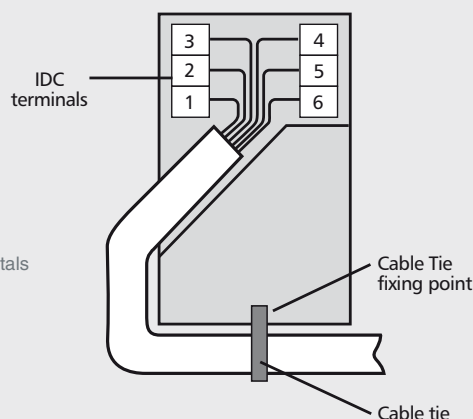
In the event that the earth terminal is required to be used, the installer must ensure that a suitable earth conductor is present to connect to the earth terminal. (In the case of 2G products both TV modules should be earthed).

In the event that the earth terminal is required to be used, the installer must ensure that a suitable earth conductor is present to connect to the earth terminal. (In the case of 2G products both TV modules should be earthed).

Telephone Wiring Scheme

- 1 GREEN / white
- 2 BLUE / white
- 3 ORANGE / white
- 4 WHITE / orange
- 5 WHITE / blue
- 6 WHITE / green

Note: Main wire colour is shown in capitals



Wiring Devices Technical

– Logic Plus™

mkelectric.co.uk



Combination Plates 2/4-gang Stacked Combination Plate

4 Gang Plate Description

The 4-gang Combination Plate carries 2x 2-gang 13A DP switched sockets, plus a Quad TV, FM/DAB, Satellite outlet, single TV (IEC Female) and an additional Telephone socket.

Additionally, there is a 4-module Euro area capable of accommodating any additional telephone or media products from the Euro modular range.



Quad TV, FM/DAB, Satellite outlet & additional TV Socket

As used on K3566 WHI

BT Telephone Socket

As used on K3566 WHI

4-module Euro Housing

This portion of the plate accepts up to 4 x 50mm high by 25mm wide Euro modules. (100mm x 50mm aperture)

TECHNICAL SPECIFICATION

FRONTPLATE

The frontplate complies with the mechanical strength requirements of BS 5733 2010.

SWITCHED SOCKET SPECIFICATION

Compliant to BS 1363 Part 2: 1995

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13 Amp

TERMINAL CAPACITY

Live, Neutral & Earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (standard)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Note

- Pre-configured back boxes available shall be used with these plates. These are 853ZIC, which is 35mm deep, and for greater wiring space 854ZIC, which is 47mm deep
- These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segmentation between mains and low voltage products is maintained
- Mains operated products and extra low voltage modules must not be installed within the same front plate aperture. Refers to BS 7671 IET Wiring regulations for detail
- When removing the fixing screws and front plate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

2 Gang Plate Description

The 2-gang Combination Plate carries a 2-gang 13A DP switched sockets and an additional 4-module Euro area capable of accommodating any additional telephone or media products from the Euro modular range.

TECHNICAL SPECIFICATION

FRONTPLATE

The frontplate complies with the mechanical strength requirements of BS 5733 2010.

SWITCHED SOCKET SPECIFICATION

Compliant to BS 1363 Part 2: 1995

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13 Amp

TERMINAL CAPACITY

Live, Neutral & Earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (standard)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Note

- Pre-configured back boxes available shall be used with these plates. These are 853ZIC, which is 35mm deep, and for greater wiring space 854ZIC, which is 47mm deep
- These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segmentation between mains and low voltage products is maintained
- Mains operated products and extra low voltage modules must not be installed within the same front plate aperture. Refers to BS 7671 IET Wiring regulations for detail
- When removing the fixing screws and front plate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

Wiring Devices Technical

– Aspect

Combination Plate

Standards and approvals

All Aspect 13A socket outlets comply with BS 1363: Part 2:1995.

K24209 and K24210 comply with BS 5733:2010.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13A

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

(Dual earth terminals)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

–5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

MOUNTING BOXES

Combination Plate List Number	47mm Mounting Box
K24206	870ZIC
K24207	870ZIC
K24208	868ZIC
K24209	858ZIC
K24210	869ZIC

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, finishes and markings.

Euro apertures can also be converted to grid-switch. For more information please visit www.mkelectric.co.uk or call 01268 563720



Description

A range of combination plates designed for ease of installation and having all the advantageous design features of the Aspect range.

These combination socket outlets provide interior designers and installers with a stylish and practical wiring device solution. The range also has larger euro module frontplates to house eight and twelve single euro modules without the inclusion of fixed socket outlets. The K24209 combination socket outlet, for example allows for the inclusion of up to eight single Euro modules, which could include datacoms, telecoms, plus TV and Satellite modules.

Alternatively, Euro Power Modules i.e. German, French/Belgium and American socket outlets may be used.

Note:

- Pre-configured back boxes are designed for use with the combination plates. These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segregation between mains and extra low voltage products is maintained
- For Aspect products, back boxes must be installed 10mm sub flush to the wall surface
- Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details
- When removing the fixing screws and frontplate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

All pre-fitted sockets come complete and are fitted with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671, IET Wiring Regulations.

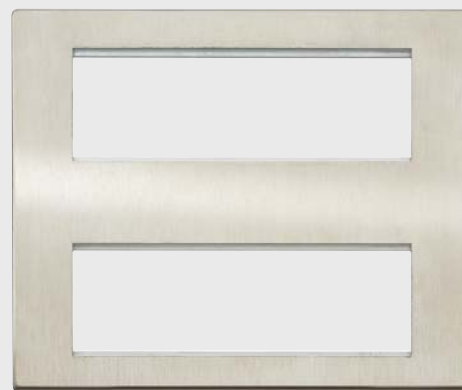
Wiring Devices Technical

– Aspect

Combination Plate

Features

- Metal-capped rockers designed to match the chosen front plate finish
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Dual earth terminals on pre-fitted sockets are for high integrity earthing
- Backed out and captive terminal screws on pre-fitted sockets
- Pre-configured backboxes to ensure alignment of the fixing screws is correct and proper segregation between circuits is maintained to comply with BS 7671 17th Edition wiring regulations



Installation

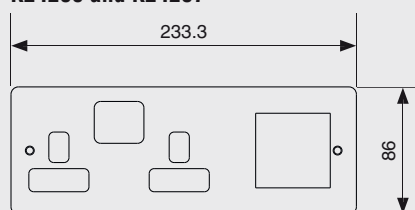
Aspect socket outlets can only be mounted on a wall. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Install corresponding back box 10mm sub flush to finished wall surface.

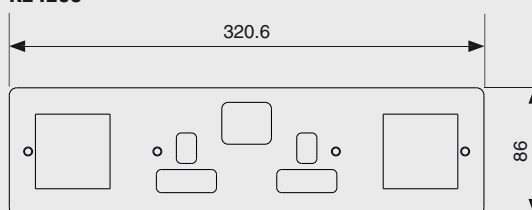
Aspect combination plates are supplied with clip on segregator.

Dimensions (mm)

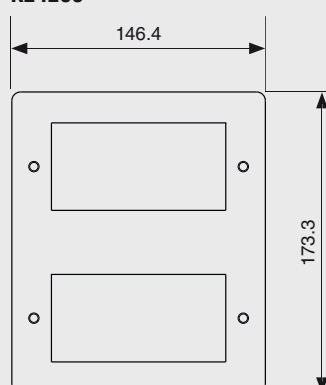
K24206 and K24207



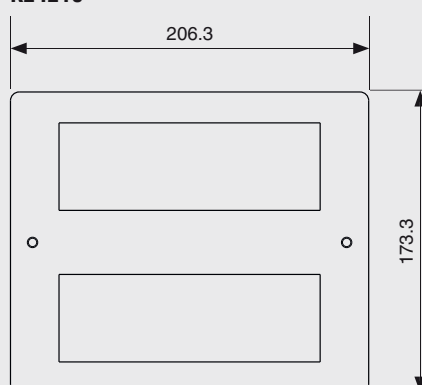
K24208



K24209



K24210



Wiring Devices Technical

– Edge™

Combination Plate

Standards and approvals

All Edge 13A socket outlets comply with BS 1363: Part 2:1995.

K14209 and K14210 comply with BS 5733:2010.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c.

CURRENT RATING
13A

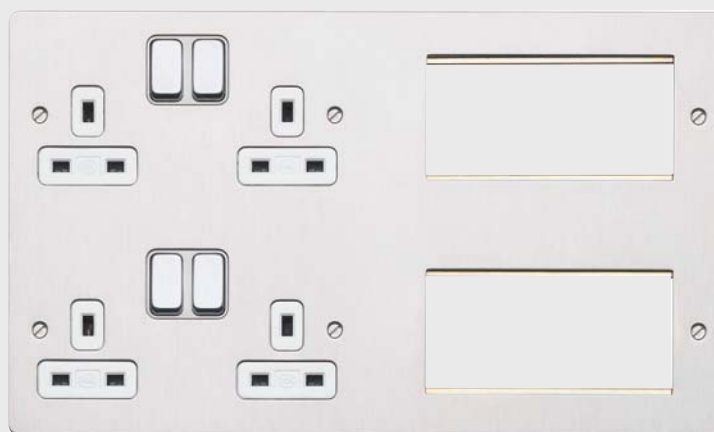
TERMINAL CAPACITY
Live, neutral & earth
3 x 2.5mm²
3 x 4mm²
2 x 6mm² (stranded)
(Dual earth terminals)

PHYSICAL

AMBIENT OPERATING TEMPERATURE
–5°C to +40°C

IP RATING
IP2XD

MAX. INSTALLATION ALTITUDE
2000 metres



Description

A range of combination plates designed for ease of installation and having all the advantageous design features of the Edge range.

These combination socket outlets provide interior designers and installers with a stylish and practical wiring device solution. The range also has larger euro module frontplates to house eight and twelve single euro modules without the inclusion of fixed socket outlets. The K14100 combination socket outlet, for example allows for the inclusion of up to eight single Euro modules, which could include datacoms, telecoms, plus TV and Satellite modules.

Alternatively, Euro Power Modules i.e. German, French/Belgium and American socket outlets may be used.

Note:

- Pre-configured back boxes are designed for use with the combination plates. These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segregation between mains and extra low voltage products is maintained
- For Edge products, back boxes must be installed flush to the wall surface
- Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671: 2008 for details
- When removing the fixing screws and frontplate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply

All pre-fitted sockets come complete and are fitted with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671, IET Wiring Regulations.



Combination plates allow the use of a variety of power and data modules making them ideal for hotels.

MOUNTING BOXES

Combination Plate List Number	35mm Mounting Box	47mm Mounting Box
K14200	K14201	K14202
K14205	K14206	K14207
K14100	K14101	K14102
K14216		867ZIC
K14217		867ZIC
K14208		868ZIC
K14209		858ZIC
K14210		869ZIC

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, finishes and markings.

Euro apertures can also be converted to grid-switch. For more information please visit www.mkelectric.co.uk or call 01268 563720

Wiring Devices Technical

– Edge™

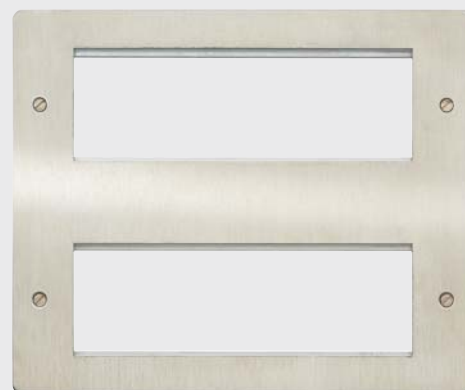
mkelectric.co.uk



Combination Plate

Features

- Metal-capped rockers designed to match the chosen front plate finish
- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Dual earth terminals on pre-fitted sockets are for high integrity earthing
- Backed out and captive terminal screws on pre-fitted sockets
- Pre-configured backboxes to ensure alignment of the fixing screws is correct and proper segregation between circuits is maintained to comply with BS 7671 17th Edition wiring regulations

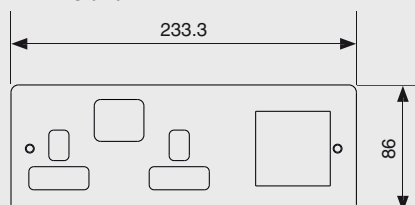


Installation

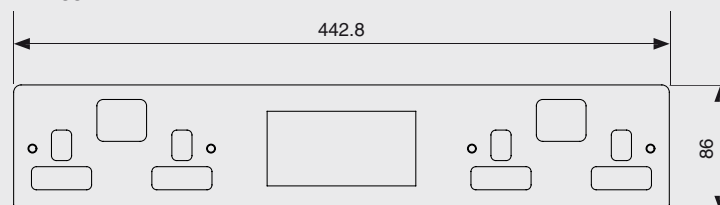
Edge socket outlets can be mounted on either a wall or suitable bench mounted trunking. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Dimensions (mm)

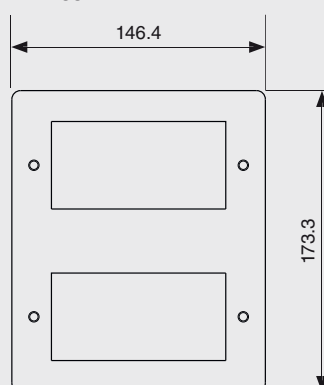
K14216 and K14217



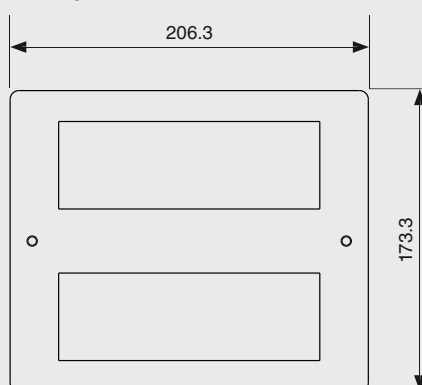
K14200



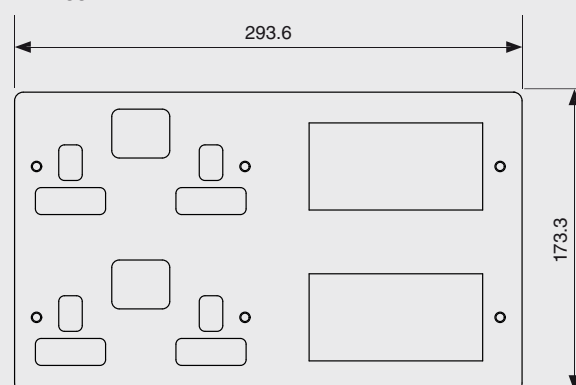
K14209



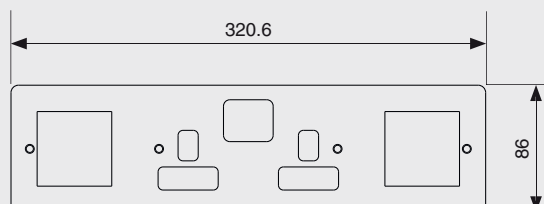
K14210



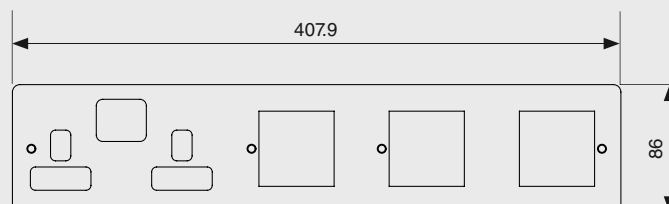
K14100



K14208



K14205



Key Operated Switchsocket Outlet

Standards and approvals

All Edge 13A socket outlets comply with BS 1363: Part 2:1995.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13A

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

2 x 4mm²

1 x 6mm² (stranded)

(Dual earth terminals)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres



Description

The Key Operated 13 amp socket is designed for ease of installation and has all the design features of the Edge range. The built-in lock ensures that power cannot be provided without key operation making it ideal for communal areas such as hotel lobbies. The key can be removed from the lock in the on or off position leaving the socket with or without power supply.

The product can be quickly installed as replacement for existing 2 gang 13 amp sockets or in a new installation (assuming suitable 47mm deep mounting box is in position).

Installation

Edge socket outlets can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Features

- Built in lock ensures power cannot be provided without key operation
- Printed terminal markings on grey rear mouldings for clearer identification
- Double pole switching
- Only one size of screwdriver required for installation
- Dual earth terminals for high integrity earthing

Note: The lock fitted to each socket is universal. i.e. a common key profile. However, the keys are different to those used on MK Key Operated Fire Alarm Isolator Switches, for added security.

Wiring Devices Technical

– Edge™

Edge™ Technical: General information

Mounting Boxes

Due to the slimline design MK Edge accessories require deeper back boxes than standard. They are designed to fit into folded metal boxes that comply with BS 4662. To ensure products can be correctly installed, the box must always be installed flush or sub flush to the surface to a maximum depth of 6mm.

The recommended depth of boxes for the different types of wiring accessories are as follows:

MOUNTING BOXES	
Product	Box Depth
Socket Outlets	35mm
Lockable Socket	47mm
Lockable Switch	47mm
German style 2 pole + E Socket Outlet mounted in Euro Frame	47mm
Connection Units	47mm
Plateswitches	35mm
Grid System Switches*	35mm
Dimmer Switches	35mm
Telephone, Television and Data Outlets	35mm
Cooker Control and 50A Switches	47mm
Shaver Supply Units	47mm
32A Triple Pole and Neutral Switch	List no. 5268ALM

*Note: If Grid system accessories are to be fitted and the installation requires the attachment of conduit via nuts inside the mounting box, then it is recommended that a box depth of 47mm is used.

Fixing Screws

The surface head of Edge fixing screws is treated and compliment the finish of the frontplate. To prevent damage to the fixing screw extreme care is required. It is recommended that a screwdriver with a maximum blade of 3.5mm is used.

Wiring Devices Technical

– Aspect

Aspect Installation

The MK 'Aspect' range of products consists of the main product complete with its support frame and clipping medium, plus a separate frontplate. The product is mounted to the wall, after wiring, and the front plate clipped onto the frame.

1. The frontplate is supplied loose to aid installation.
2. Make sure not to crush or deform the spring steel clips situated along one edge of the product support frame.
3. A gasket is also supplied with each product, which may prove useful on uneven walls. See note 5 below.
4. Using the gasket with all switches and the German socket, will ensure full compliance with the appropriate standards.
5. Both standards set out to guarantee full engagement of the frontplate on uneven surfaces, even when there is a mismatch of as much as 1mm between the distance the main body of the product is from the wall and that of the front plate.
6. Where no gasket is used, if thick wallpapers are cut such that they fit around the support frame and therefore remain under the edge of the frontplate, full plate engagement with the clips may be restricted.

Note: When installing Aspect do not over tighten screws, so as to prevent damage or distortion to the product or support frame.

Frontplate Removal

1. Turn off the power supply.
2. Carefully slide a screwdriver between the ramp on the main body of the product and the notch in the lower right hand edge of the plate.
3. On uneven walls, make sure the screwdriver does not go between the spring steel ramp and the wall, or damage to the wall and/or product could result.
4. Carefully slide the blade upwards and then gently lift the handle away from the wall, which will lever the plate away from the first clip. See Fig.4.
5. With the first clip released, support the plate with one hand and continue to move the blade to the left under.

Data products in euromounting frames

Products operating at extra low voltage levels (<50v) must not be mounted in the same Euro enclosures as equipment rated in excess of 50v.

Cleaning Frontplates

In order to protect the quality surface finish of the front plate, periodic cleaning should only consist of polishing with a dry lint free soft cloth.

FIGURE 1A

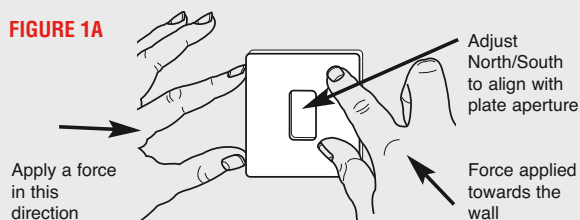
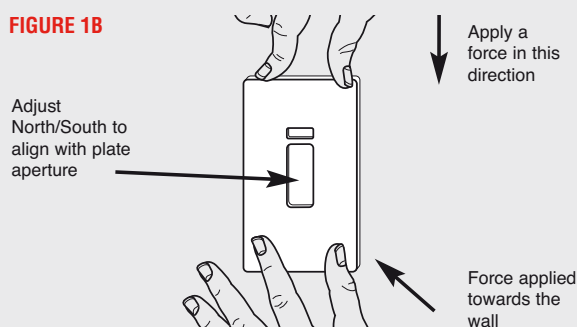


FIGURE 1B



Frontplate Installation

FIGURE 2

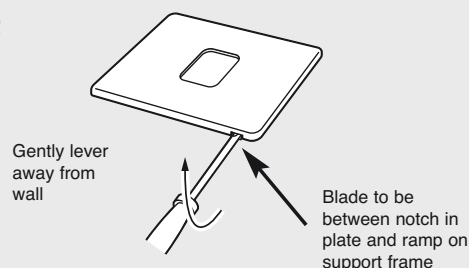


FIGURE 3

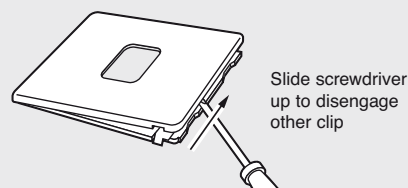


FIGURE 4

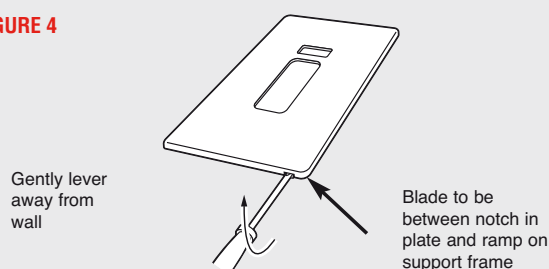
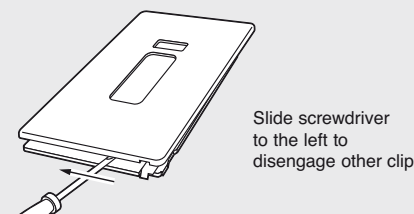


FIGURE 5



Frontplate Removal

Decorative Technical: General information

Earthing: All Metal Frontplate Products

To comply with the latest edition of the BS 7671 IET regulations: the metal front plate must be earthed. All earth terminals provided must be connected to the protective earth conductor.

Telephone Secondary and Data Sockets

To provide customers with a high level of flexibility the voice and data decorative wiring devices are available in modular formats.

For example to produce a Telephone Secondary Socket the following items are required:

RANGE	PRODUCTS REQUIRED	
Albany Plus	K181	K5821
Aspect	K24181	K5821
Edge	K14181	K5821

Or

RANGE	PRODUCTS REQUIRED		
Albany Plus	K182	K5821	2 x K186
Aspect	K24182	K5821	2 x K186
Edge	K14182	K5821	2 x K186



Technical Hotline
+44 (0)1268 563720

Sensors Technical

WIRING DEVICES
WHITE

Simple Fit Switching PIR Sensors

TECHNICAL SPECIFICATION

TECHNOLOGY

PIR

MAXIMUM RECOMMENDED MOUNTING HEIGHT

1.8m to 3m

RANGE

Cone-shaped detection pattern,
6m radius at 2.5m mounting height



OPERATING VOLTAGE

AC220-240V/50Hz

RECOMMENDED CIRCUIT PROTECTION

16A

MAXIMUM LOAD

6A or 600W fluorescent lighting load capacity

PHOTOCELL

Approx. 5 - 1000 Lux

OFF DELAY

5sec - 18min

COLOUR

White (RAL9010)

MATERIAL/ABS

Flame retardant PC

IP RATING

Surface Mount: IP44

Flush Mount:

IP44 (Sensor section only)

IP20 (Ceiling Board onwards)

K5017

DEPTH REQUIRED BEHIND CEILING

50mm

WEIGHT

269g



Description

MK Simple Fit Sensors offer cost effective presence detection for lighting control in small to medium areas. This one-box solution is easy to install and commission, and requires no additional parts. Providing cost effective presence detection for lighting control. Simple Fit dual mount sensors are easy to install and can deliver energy savings of up to 70%*

FEATURES

- Presence detection by passive infrared
- Innovative dual mount system requires only one sensor for either flush or surface mount applications
- External programming dials enable quick adjustment of time and lux levels
- Off delay adjustable between 5 seconds and 18 minutes following the last observed movement after which the lights switch off
- PIR Lens provides 360 degree detection
- Detection Range of up to 6m diameter at 25°C at 2.5m mounting height
- Manual on / off override function
- Mounting Height: Recommended ceiling mount 1.8m to 3m
- Loading up to 6 Amps
- Ability to wire more than 1 sensor in parallel to a load
- Ability to switch volt free loads
- Lens mask included to mask out any areas of unwanted detection

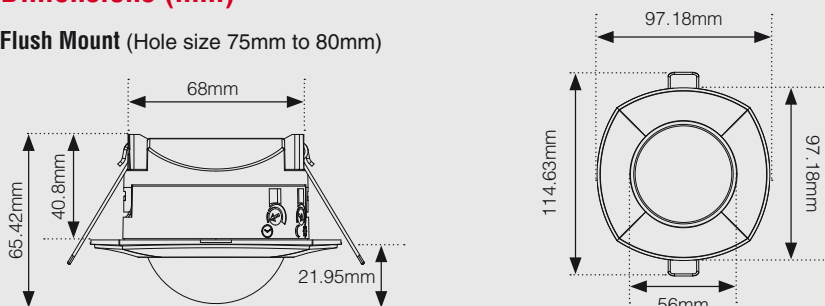
K5017

Flush and Surface Ceiling Mount PIR Sensor in one

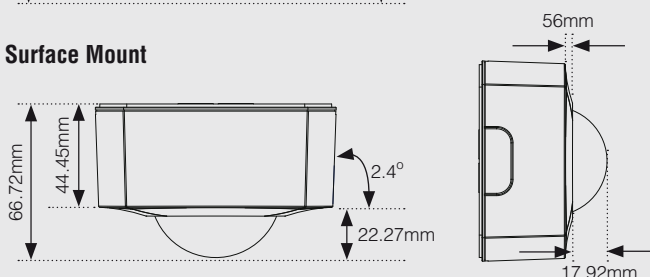
- For flush mount, spring clips enable ease of installation in ceilings with thickness between 5mm and 20mm
- Simple to switch between flush and surface options
- Surface mount can be fixed direct to the ceiling or on to a circular conduit or BESA box
- All screws and fixings supplied

Dimensions (mm)

Flush Mount (Hole size 75mm to 80mm)



Surface Mount



SWITCHABLE LOAD

	Max 2000W
	Max 600W
	Max 500W
	Max 120W
	Max 110W
	Max 75W

For a full range of corresponding products,
see pages 63-66 in the product selector.

Sensors Technical

Simple Fit Switching PIR Sensors

TECHNICAL SPECIFICATION

TECHNOLOGY

PIR

MAXIMUM RECOMMENDED MOUNTING HEIGHT

1.8m to 3m

RANGE

Cone-shaped detection pattern,
6m radius at 2.5m mounting height



OPERATING VOLTAGE

AC220~240V/50Hz

RECOMMENDED CIRCUIT PROTECTION

16A

MAXIMUM LOAD

6A or 1500W fluorescent/incandescent lighting load
capacity

PHOTOCELL

Approx. 30~200 Lux

OFF DELAY

5sec - 40min

COLOUR

White

MATERIAL

Flame retardant PC

IP RATING

IP20

K5015

DEPTH REQUIRED BEHIND CEILING

100mm

WEIGHT

105g excluding cable

K5016

WEIGHT

105g approx



K5015



K5016

Description

MK Simple Fit Sensors offer cost effective presence detection for lighting control in small to medium areas. These one-box solutions are easy to install and commission, also no additional parts are required.

The following versions are available:

- Flush mounted K5015 – Spring Clips enable ease of installation in plasterboard ceilings
- Surface Mounted K5016 – Screw and Plug Fixings can be mounted direct to the ceiling or on to a square pattress box (K2160 WHI)

FEATURES



Advanced presence detection by passive infrared (PIR) technology



Passive photocell holds lights off when area becomes occupied in bright ambient conditions



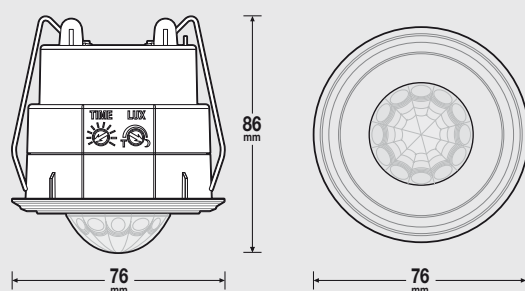
Off delay in minutes following the last observed movement after which lights switch off



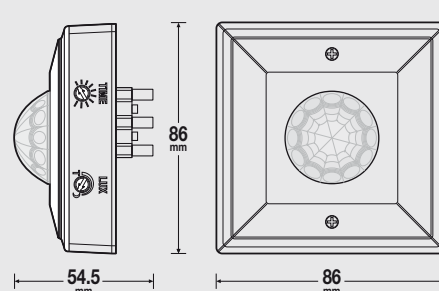
Detection pattern and approx range in metres at floor level for 2.5m mounting height (detection pattern is cone shaped).

Dimensions

K5015



K5016

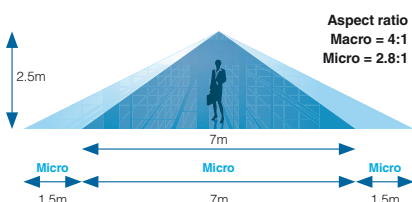


Superior Switching PIR Sensors

TECHNICAL SPECIFICATION

TECHNOLOGY
PIR

DETECTION RANGE
10m Macro / 7m Micro at 2.5m mounting height



SWITCHING CAPACITY
10A (Tungsten 6A)

PHOTOCELL RANGE (LUX)
Adjustable 10 to 1000 lux via K4098

DELAY TIME RANGE
Adjustable 5mins to 40 mins via K4098

IP RATING
IP4X

SUPPLY VOLTAGE
Mains 230V

TEMPERATURE RANGE
0-40 degrees

ACCESSORIES
K4098 Infrared programming tool required to adjust sensor settings



K5030F



K5030SM

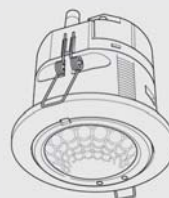
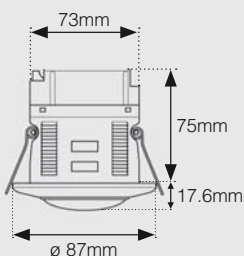
Description

A range of high performance switching PIR sensors for dependable switching of lighting loads.

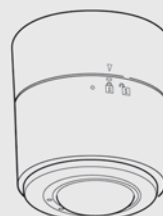
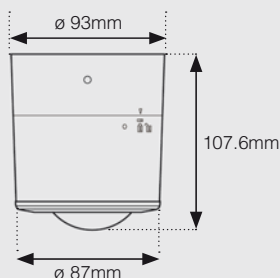
FEATURES

- High definition lenses, performance optics and software are all optimised to provide class leading sensitivity and occupancy detection ensuring that the lights are always on when required
- Superior switching sensors include integral adjustable active photocells which will hold the lights off in occupied areas or switch them off at a given light level
- Superior switching sensors deliver highly sensitive micro detection diameter of 7m within a 10m macro detection diameter (When installed at a mounting height of 2.5m)
- Colour coded connectors make superior switching sensors easy to install and reduce wiring faults
- The easy to use K4098 infrared programming tool simplifies sensor set up and commissioning

Flush Mount



Surface Mount



Sensors Technical

Superior PIRs for DALI or DSI Dimming

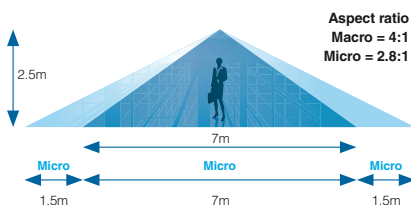
TECHNICAL SPECIFICATION

TECHNOLOGY

PIR

DETECTION RANGE

10m Macro / 7m Micro at 2.5m mounting height



SWITCHING CAPACITY

10A (Tungsten 6A)

DIGITAL DIMMING

DALI or DSI (Auto detect)

ANALOGUE DIMMING

1-10V

PHOTOCELL RANGE (LUX)

Adjustable 100 to 1000 lux via K4098

DELAY TIME RANGE

Adjustable 5mins to 40mins via K4098

IP RATING

IP4X

SUPPLY VOLTAGE

Mains 230V

TEMPERATURE RANGE

0-40 degrees

ACCESSORIES

K4098 Infrared programming tool required to adjust sensor settings



K5040F



K5040SM

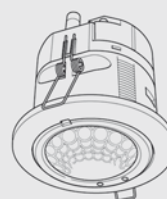
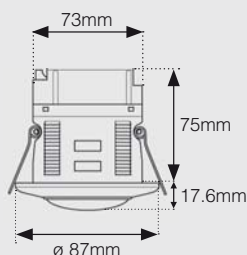
Description

A range of high performance PIR sensors for dependable control of digital dimming lighting loads.

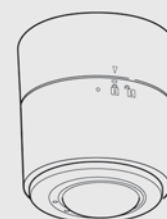
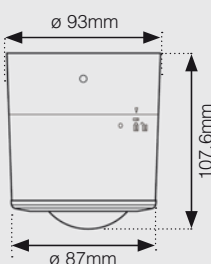
FEATURES

- High definition lenses, performance optics and software are all optimised to provide class leading sensitivity and occupancy detection ensuring that the lights are always on when required
- Dimming sensors include integral photocells which will hold the lights off in occupied areas or switch them off at a given light level. Regulating photocells enable a constant light level to be maintained through digital dimming
- Superior PIR sensors deliver highly sensitive micro detection diameter of 7m within a 10m macro detection diameter (When installed at a mounting height of 2.5m)
- Automatic detection of DALI and DSI digital dimming type luminaires reduces commissioning time and the potential for errors
- The easy to use K4098 infrared programming tool simplifies sensor set up and commissioning

Flush Mount



Surface Mount



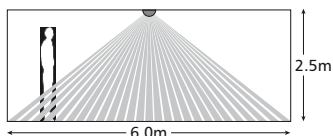
Battenfit Switching PIR Sensor

TECHNICAL SPECIFICATION

MAXIMUM RECOMMENDED MOUNTING HEIGHT
5.0m

RANGE

Cone-shaped detection pattern,
diameter (at floor level) = 2.4 x mounting height



OFF DELAY

1 minute – 40mins
10 second walk test mode

PHOTOCELL

Adjustable 50-5000 lux

OPERATING VOLTAGE

230V 50Hz

RECOMMENDED CIRCUIT PROTECTION

10 Amps

MAXIMUM LOAD

2A

COLOUR

White

MATERIAL

Flame retardant PC/ABS

WEIGHT

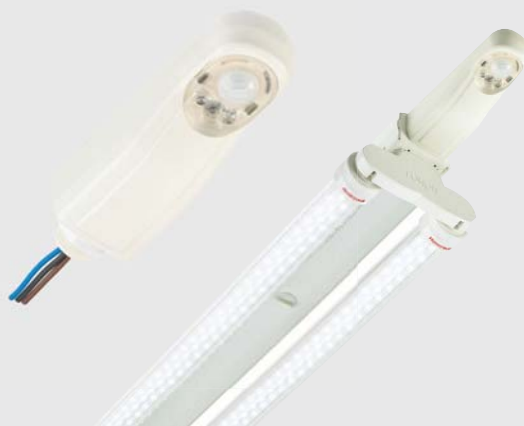
100g

IP RATING

IP65

ACCESSORIES

K4098 Infrared programming tool required to adjust sensor settings



K4047

Description

Ideal for retrofit installations, the BattenFit sensor is a simple-to-fit control solution for batten style luminaires which can deliver energy savings of up to 70%

FEATURES



Advanced presence detection by passive infrared (PIR) technology



Off delay in hours following the last observed movement after which lights switch off



Passive photocell holds lights off in bright ambient conditions. Active photocell has the capability to switch lights off in occupied areas



Detection pattern and range in meters under normal operating conditions



One Switch Manual input to turn luminaires on or off

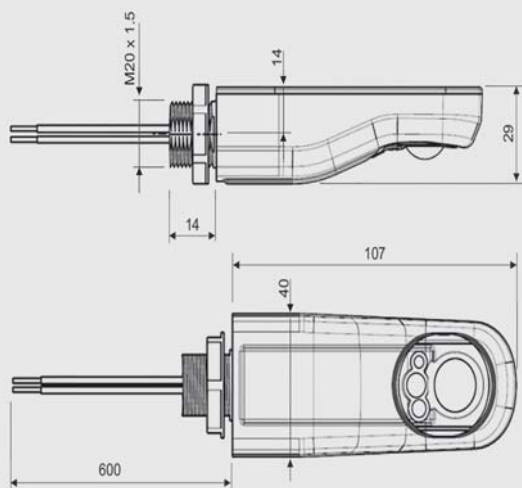


Infrared programming enables easy commissioning and re-commissioning via K4058



IP65

Dimensions (mm)

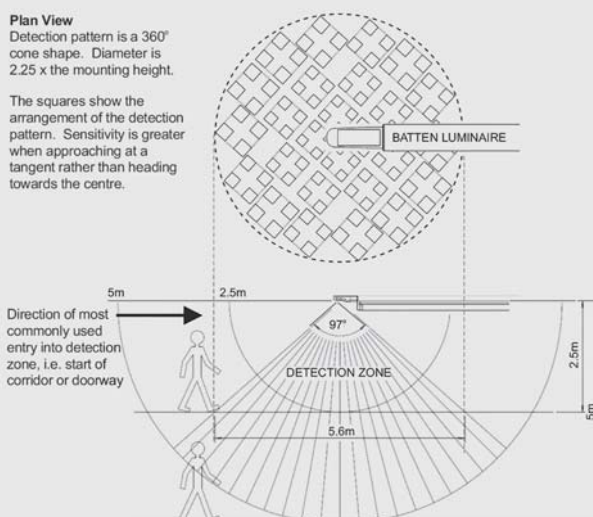


Detection Profile

Plan View

Detection pattern is a 360° cone shape. Diameter is 2.25 x the mounting height.

The squares show the arrangement of the detection pattern. Sensitivity is greater when approaching at a tangent rather than heading towards the centre.



Ultrasonic Sensors

TECHNICAL SPECIFICATION

OPERATING VOLTAGE

230V 50Hz

MAXIMUM RECOMMENDED MOUNTING HEIGHT

5 metres

SWITCH CAPACITY

10 Amps – Incandescent lamps: 1500W max (230V)

TERMINAL CAPACITY

2 x 1.5mm or 1 x 2.5mm

WEIGHT

148g

TIME DELAY

5, 10 or 15 mins

POWER-UP CONDITION

select on or off

DETECTOR RANGE

adjustable

ON/OFF RANGES:

adjustable

ULTRASONIC FREQUENCY

40kHz

PHOTOCELL

adjustable 50 to 5000 lux

Description

Ultrasonic sensors are general purpose, fully automatic, directional presence detectors with photocell. They save energy by switching off lights in unoccupied areas and by holding lights off in occupied areas which have adequate natural light. They use a specially developed ultrasonic radar to monitor the controlled space for movement. This radar is sensitive enough to respond to even very small movements thus ensuring that lights are sustained whenever the controlled space is occupied. If no movement has been detected for a pre-selected period, the sensors switch the lights off until the next visitor is detected.

The sensors control feature a movement detector, photocell and 10 Amp load switching element in one easily deployed housing. The technology has been refined and improved over many years of efficient, reliable service in a wide range of industrial and commercial environments. The latest designs use state-of-the-art miniaturisation to pack the features into a small, attractive yet rugged enclosure which gives full field-of-view adjustment. Detectors are available for surface or semi-flush mounting.



K4030



K4031

Features



Active presence detection by ultrasonic technology



Passive photocell holds lights off in bright ambient conditions



Off delay in minutes following the last observed movement after which the lights switch off

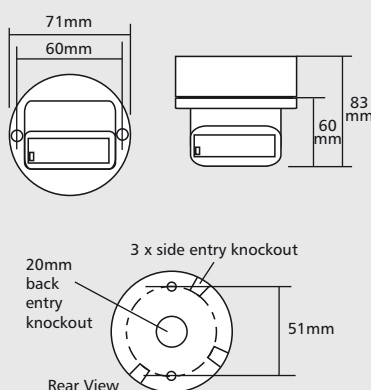


Detection pattern and range in metres under normal operating conditions

Dimensions

K4030 – Surface version

The back-box can be secured directly to a hard surface or to a conduit stop end box.

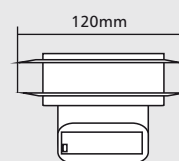


K4030 – Semi Flush version

Use a hole saw to drill a 76mm hole into the ceiling tile. The flush ring is designed to clamp the tile between its two halves.

Flush Plate & Clamp (K4078)

For simple flush mounting of detector to suspended ceilings.
Max clamping distance – 25mm



A sensor will fit to its own backplate or to a standard 25mm switch sinking box.

Ultrasonic sensors utilise ultrasonic radar to monitor a space for movement. This involves transmitting an ultrasound signal and examining the reflected signal for frequency variations called “doppler shifts”. The transmitted signal is more quickly dissipated in open space and squeezed out by constraining walls and ceilings. The range of the detector also depends upon the type of movement being observed: for example, walking activity can be observed at a greater distance than the slight hand or body movement to be expected from a person working at a desk. Note that detectors can see behind themselves slightly so must be inset in a storage aisle or corridor application.

Hand-Held Programming Tools

TECHNICAL SPECIFICATION

TRANSMISSION METHOD

Infrared

RANGE

15m approx

BATTERY

3Vdc CR2032 Lithium Button Cell

EXPECTED BATTERY LIFE

3 years

STORAGE TEMPERATURE

-25°C to +70°C

OPERATING TEMPERATURE

0°C to 40°C

IP RATING

4X

APPROVAL

CE

DIMENSIONS

K4058:87mm (H) x 40mm (W) x 7mm (D)

K4059:100mm (H) x 50mm (W) x 7mm (D)

WEIGHT

20g approx



K4058



K4059

Description

MK sensors* feature a range of programmable parameters which can be adjusted using a simple, low cost hand-held programming controller.

*Not including Simple fit

FEATURES K4058

- 3 simple time-delay settings (5 minutes/10 minutes/20 minutes)
- Presence detection mode
- Absence detection mode
- Enable/disable photocell
- Walk-test feature

FEATURES K4059

- 4 simple time-delay settings (5 minutes/10 minutes/20 minutes/40 minutes)
- Presence detection mode
- Absence detection mode
- Enable/disable photocell
- Walk-test feature
- Set regulating light level - when used in conjunction with a suitable lux meter
- Restore button functionality - press & hold reverts to factory default, short press reverts back to last configuration
- Lamp burn-in

Ceiling Accessories Technical

Ceiling Switches

Standards and approvals

3164WHI fully complies with the 17th Edition Wiring Regulations (BS 7671:2008 with respect to safety isolation for maintenance purpose. Conforms to BS EN 60669-1:1999

3151WHI, 3190WHI, K3191WHI, K3192WHI, K3131WHI, K2051WHI, K2056WHI, conform to BS EN 60669-1:1999

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c.

MAXIMUM RATING
See range details

Note: Switches do not have to be derated when used with resistive or fluorescent loads

TERMINAL CAPACITY

K3131, 3190, K3191, K3192
4 x 1.0mm²
3 x 1.5mm²

3151

4 x 2.5mm²
2 x 4.0mm²
1 x 6mm²

3164

4 x 4mm²
3 x 6mm²
1 x 10mm²
1 x 16mm²

K2051/K2056, Earth Terminal

6 x 1mm²
4 x 1.5mm²
2 x 2.5mm²
1 x 4mm²
1 x 6mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP3X

MAX. INSTALLATION ALTITUDE
2000 metres

Installation

MK ceiling accessories are safe for use in all normal lighting applications. Do not mount them where they may be subjected to excessive moisture or dampness.

Wiring

Products must be installed in accordance with BS 7671:2008.



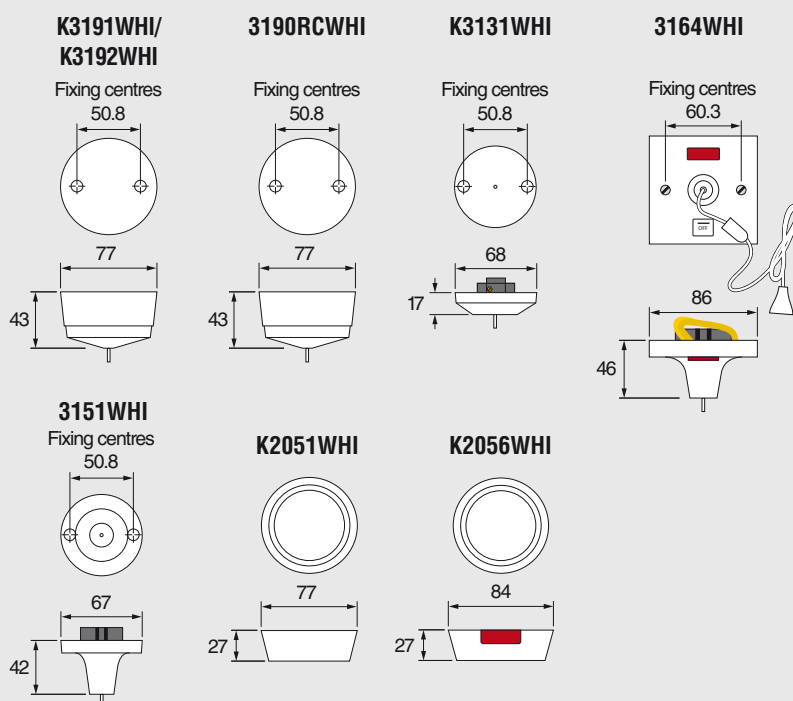
Description

A range of 6 and 16 Amp ceiling switch options plus a 50 Amp DP flush mounted ceiling switch.

Features

- Mounting blocks have an earth terminal rivetted into their bases
- 3190RCWHI has a retractive (momentary) switch action and can be wired as either pull to make or pull to break
- 3190RCWHI has a red pull cord
- Ceiling switches with standard white cords are 1.5m minimum length, and with standard red cords are 2m minimum length
- K3191, K3192 and K3131 have self locating feature when used with mounting block, to aid installation
- Ceiling switches with white cords **and bangles** are 2m minimum length, and with red cords **and bangles** are 3m minimum length
- 3164WHI is fitted with mechanical OFF indicator
- 3164 has a full 3 mm contact gap
- 3164 may be surface mounted

Dimensions (mm)



Ceiling Accessories Technical

Ceiling Roses and Pendants

Standards and approvals

Heat resistant lampholders comply with
BS EN 61184:1997 T2

All ShockGuard lampholders
comply with BS 7895:1997 and
BS EN 61184:1997 T2

Ceiling roses comply with BS 67:1987

Pendant sets are supplied with heat resisting
PVC insulated and sheathed flexible 0.75 two
core circular cable complying with
BS EN 50525 (H05V2V2-F)



Ceiling Rose



Pendant

TECHNICAL SPECIFICATION

ELECTRICAL

LAMP HOLDERS AND BATTEN LAMP HOLDERS

VOLTAGE RATING
250V a.c.

MAXIMUM RATING
150 watts

TERMINAL CAPACITY
Live, neutral & earth
3 x 1.0mm²
2 x 1.5mm²

CEILING ROSES & BASE OF PRE-WIRED BATTEN LAMP HOLDERS

VOLTAGE RATING
250V a.c.

MAXIMUM RATING
6 amps

TERMINAL CAPACITY
Live, neutral & earth
4 x 1.0mm²
3 x 1.5mm²
1 x 2.5mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

IP RATING
IP4X

MAX. INSTALLATION ALTITUDE
2000 metres

Description

The range includes ShockGuard™ SG type lampholders, pendant sets, batten lampholders and ceiling roses.

Features

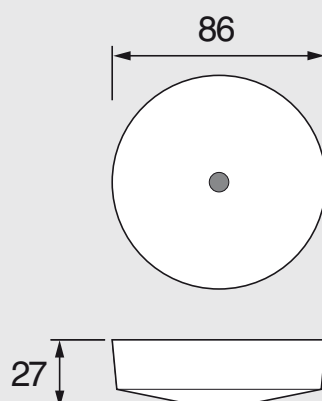
ShockGuard™

- Automatically shields the contacts as soon as the lamp is removed
- The contacts remain shielded until a new lamp is slotted into place
- While there is no lamp in place there is no danger of electrocution

Ceiling roses

- Clear base and pre-cut aperture for ease of installation
- Clear markings
- Terminal layout allows cables to be cut to even length
- Earth terminal point used for easier cable access
- Halo (K1163WHI) available to give professional finish on damaged ceilings (for use with ceiling roses and pendant sets only)

Dimensions (mm)



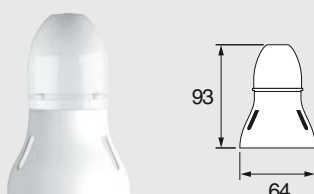
Ceiling Accessories Technical

Lampholders and Shockguard type Lampholders

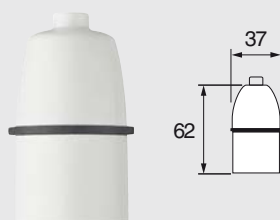
Dimensions (mm)



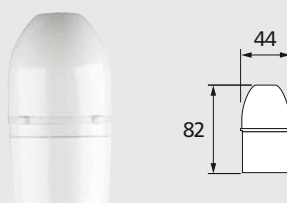
**Standard Lampholder
with protective skirt**



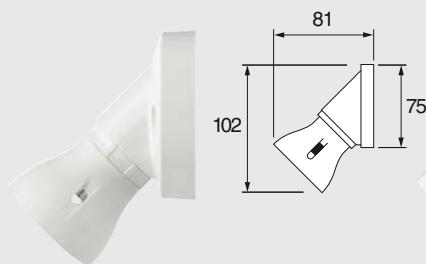
**SG Type Lampholder
with protective skirt**



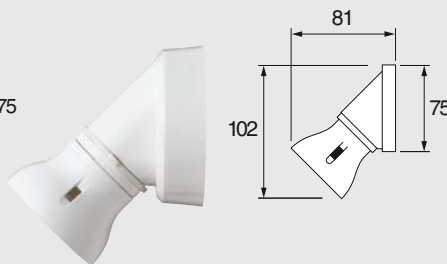
Standard Lampholder



SG Type Lampholder



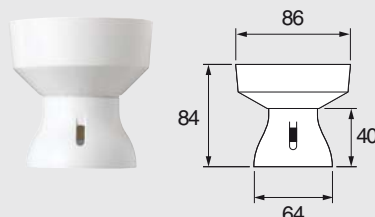
Standard Angled Batten Lampholder



SG Type Angled Batten Lampholder



Standard Batten Lampholder



SG Type Batten Lampholder

Heat Resistance

Two levels of heat resistance are nominated for lampholders but at different maximum working temperatures and the products must be identified by a different marking code.

HEAT RESISTANCE	MAX WORKING TEMP
T2	Lamp cap temp 210°C marked BS 7895 and BS EN 61184 T2

Lamp wattage rating

All MK lampholders comply with category T2 BS EN 61184. It is important to ensure that the wattage rating of the lamp used is not higher than that for which the particular shade or luminaire is designed.

Weight of fittings

Ceiling roses and pendant sets are suitable for fittings of up to 3 kg. Heavier fittings must be installed using independent support, e.g. ceiling hook.

Angled batten lampholders

Can be mounted direct to the wall.

Straight batten lampholders

Can be screwed direct to the ceiling but it must be ensured that it is fastened to a wooden joist. Integral Ceiling Rose included.

Ceiling roses and pendant sets

Flush mounting to circular conduit boxes in accordance with BS EN 61386-1:2008.

Installation

MK ceiling accessories are safe for use in all normal lighting applications. Do not mount them where they may be subjected to excessive moisture or dampness.

Wiring

Products must be installed in accordance with BS 7671:2008.

3 and 4 Pin Accessories/Pre-Wired

Standards and approvals

BS 6972 & BS 5733

Heat resisting three core circular cable BS 6972
& BS 5733 to BS 6500:2000 (Table 29)

Low smoke zero halogen three core circular cable



TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c. 50Hz

CURRENT RATING
6 Amp

TERMINAL CAPACITY (ACCESSORIES)

Phase, neutral, earth & 'loop in' terminals will each accept:

K3230, K4230 – 1 x 0.75 or 1 x 1.00mm conductors

K3220, K3212, K3240, K4220, K4214 and K4240 – 5 x 0.75, 5 x 1.00, 4 x 1.50, 3 x 2.50 or 2 x 4.00mm² conductors

PHYSICAL

STATIC SUSPENSION LOAD
5kg max

AMBIENT OPERATING TEMPERATURE

–5°C to +40°C
(not to exceed an average of more than 25°C in any 24 hour period)

IP RATING
IP2XD

MAX. INSTALLATION ALTITUDE
2000 metres

Description

A connection and distribution system that brings convenience and versatility to lighting installations. The range consists of a modular plug and socket interface which provides electrical connection in one easy click-in action. Luminaries can be plugged in without isolating the circuit. All live contacts are inaccessible and the earthing connection is made before any other.

Wired products incorporate either heat resisting flex or low smoke zero halogen (LSF) insulated and sheathed flexible 0.75mm four core circular cable.

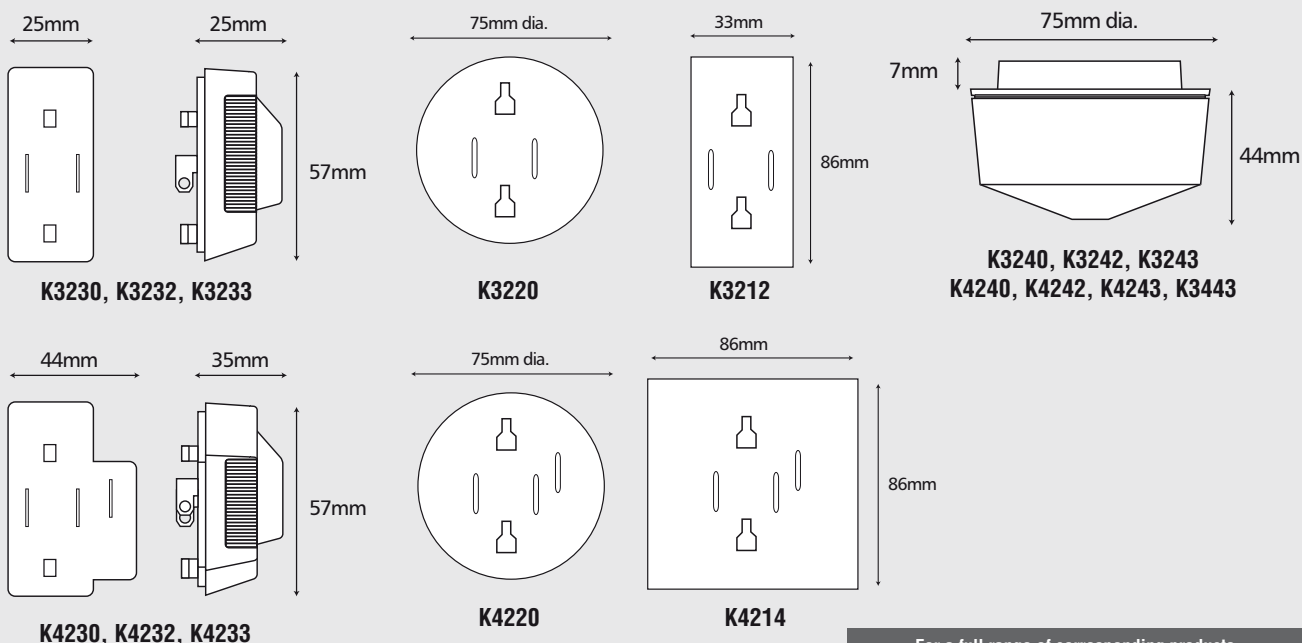
Features

- Live contacts are inaccessible
- Earth Contact – first to make, last to break
- Mechanical and Electrical Connection in one 'click-in' action
- Strong load grips support up to 5kg

MOUNTING BOXES

	Surface	Flush (dryline)	Flush (solid)
K3220/K3240	K3220/K4220/K4240WHI	N/A	N/A
K4214	K2160WHI	QFB1WHI	861ZIC

Dimensions



Distribution Boxes

Standards and approvals

BS 5733

TECHNICAL SPECIFICATION

ELECTRICAL

CURRENT RATING

6 amps

TERMINAL CAPACITY

3 x 6mm rated at 16 amps

PHYSICAL

CONDUIT ENTRIES WITH SNAP FIT BLANKS

20 and 25mm in top, bottom and back faces.
Outlets to be wired as 1 or 2 banks

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C
(not to exceed an average of more than 25°C in any 24 hour period)

IP RATING

IP2XD

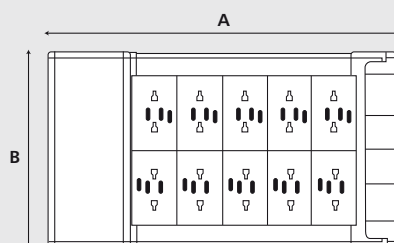
MAX. INSTALLATION ALTITUDE

2000 metres

Features

- Fixing of distribution box to lighting trunking made easy through choice of cable entry points
- Distribution box can be suspended on drop rods or fitted to the wall or ceiling

Dimensions



DIMENSIONS (mm)

	A	B
K4204	237	222
K4206	335	222
K4208	400	222
K4210	465	222



K4210 pictured

Description

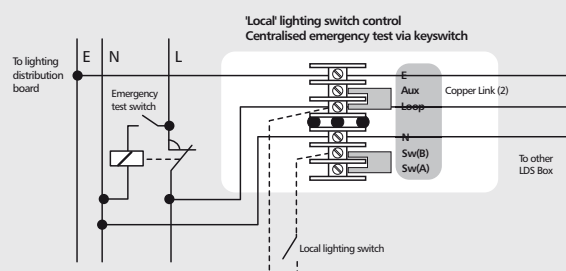
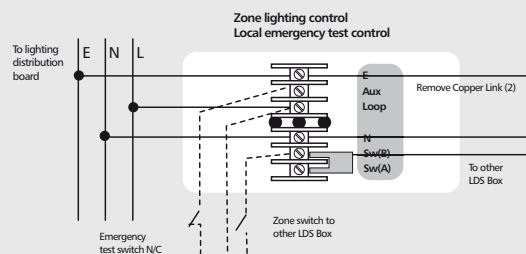
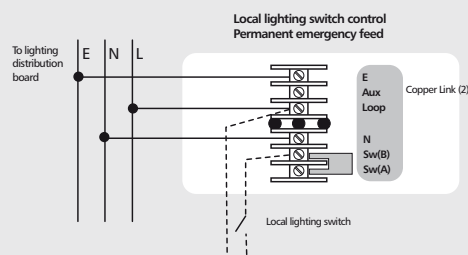
Distribution boxes consisting of an extruded aluminium body with V0 rated plastic terminal housing. Both 3 and 4 pin plugs can be used with the distribution box 4 pin socket outlets.

Installation

Provision for screw (No. 8) fix to walls or trunking and slots for Caddy Clips* on top, bottom and back faces. Conduit entries with snap fit blanks; 20 and 25mm in top, bottom and back faces. Outlets can be wired as 1 or 2 banks.

*Caddy Clip is a registered trade mark of Erico Europa (UK) Ltd. Reading.

Wiring Diagrams



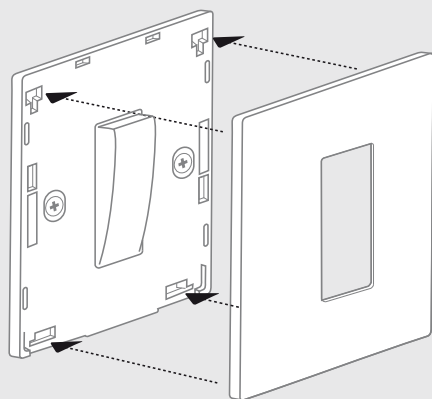
MK Elements Collection

Installation

The MK Elements Collection products consist of the main product module, complete with its' support frame, plus a separate clip on frontplate. The product is mounted to the wall, after wiring, and the frontplate is clipped onto the frame. The frontplate is supplied separately to aid installation.

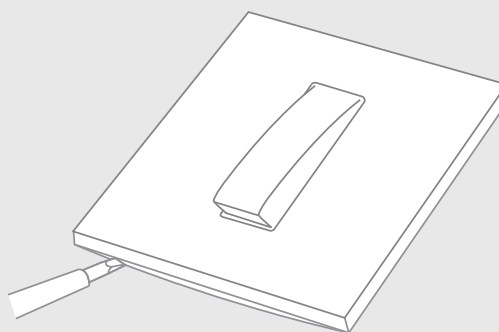
1. Ensure the depth of the back box is correct for the product and that it is fitted securely to the wall.
2. Install the cables in the normal way and, using the fixing screws supplied, mount the product, still minus its frontplate, to the wall. It is important the correct headed screws are used as any other may clash with the rear of the frontplate.
3. Do not over tighten the screws, so as to prevent damage or distortion to the product or support frame. Adjust so the frame or module sits squarely on the wall.
4. Care should be taken to ensure product features such as snap fits are not blocked during installation or decorating, preventing correct fitting of frontplates (for example plaster, tile grout, paint etc).

Fitting and removing the frontplate



Fitting the frontplate

1. Locate the top and bottom hooks on the back of the frontplate into the holes on the top and bottom of the module.
2. Gently push along the top edge of the frontplate followed by the bottom edge.



Removing the frontplate

1. Carefully insert a 4mm screwdriver into the slots provided along the bottom edge frontplate.
2. Carefully twist the screwdriver and lift the frontplate away disengaging the snap fits.

Note: Ensure the correct frontplate is fitted to the correct module or frame

For a full range of corresponding products,
see pages 70-97 in the product selector.

Note: Care should be taken to ensure product features such as snap fits are not blocked during installation or decorating, preventing correct fitting of frontplates (for example plaster, tile grout, paint etc).

Elements Collection

Technical

Electronic Switches

Standards and approvals

All Elements electronic switches comply with IEC 60669-2-1

TECHNICAL SPECIFICATION

ELECTRICAL

MAINS SUPPLY VOLTAGE

220-240V a.c. 50/60Hz

MAINS SUPPLY VOLTAGE RANGE

198 - 264V a.c.

MAINS SUPPLY FREQUENCY

50/60Hz ± 3 Hz

TERMINAL CAPACITY

All products

4 x 1mm²

4 x 1.5mm²

3 x 2.5mm²

2 x 4mm²

1 x 6mm²

PHYSICAL

OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP4X

MAX. INSTALLATION ALTITUDE

2000 metres

To prevent damage to frontplates during installation it is recommended that a screwdriver with a blade width of 4mm is used.



Description

Elements Electronic Switches offer intuitive touch sensitive silent switching (except K34370) with LED displays, for a unique user experience.

Features

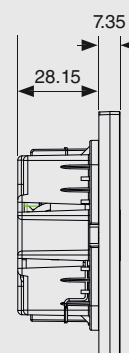
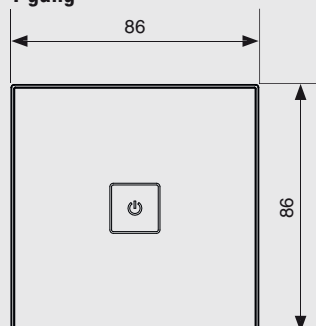
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Touch sensitive electronic switch with LED display
- Standby light to assist location in low light level applications
- Soft start and off offers superior user experience and prolongs lamp life
- Available as 1 and 2 gang
- LED compatible (requires neutral)
- High power switches up to 10A or fluorescent load (10AX)
- Intelligent overload protection (not applicable to 10A switch)
- 2-way switching available

MOUNTING BOX TYPE

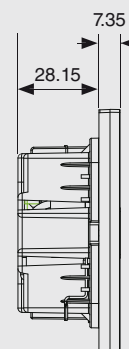
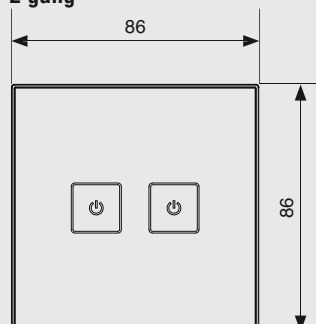
The minimum depth required is 35mm.
When using 2.5mm² cables the minimum box depth required is 40mm.

Dimensions (mm)

1 gang



2 gang



Electronic Switches

LOAD RATING AND TYPE		
Description	K34371 & K34372 (per gang)	K34370
GLS/ Tungsten Filament, Mains Tungsten Halogen	25 – 400W	25-2400W
Fluorescent tubes with ferro-magnetic ballast with power factor correction	*18-200VA	18-1800W
Fluorescent with electronic ballast	*18-400VA	18-540W
Low Energy PL-C and PL-S Fluorescent with Ferromagnetic ballast	*18-200VA	18-750W
Low Energy PL-C and PL-S Fluorescent with electronic ballast	*18-400VA	*18-750W
Compact Fluorescent (CFL)	*5-200W	*5-750W
ELV Tungsten Halogen with Ferro-magnetic transformer or Dimmable Electronic Transformer	50-400VA (Refer to note 4)	50-1500VA (Refer to note 4)
ELV Tungsten Halogen with Non-dimmable Electronic Transformer	*25-400VA	25 – 1500VA
Mains LED lamp for incandescent replacement	*4-150W (Max. 15 lamps)	*4-500W (Max. 15 lamps)
Ceiling Fan (Note: Not suitable for fan with remote controller function)	Not applicable	*1-2 Max. 250W
Ventilation Fan	*1-2 Max. 250W	
Dimmable or non-dimmable LED Driver	*4-150W (Max 10 LED drivers only)	*4-500W (Max 10 LED drivers only)

Note:

1. Do not use loads of different types on the same circuit.
2. Not suitable for use with any other load type.
3. *Neutral connection is required. It is recommended to connect neutral whenever possible when dimming LED lamps, to extend the load handling capability of the switch.
4. If neutral is connected to the switch then the minimum rating of the load can be reduced to 25VA.

Elements Collection

Technical

Electronic Dimmers

Standards and approvals

All Elements electronic dimmers comply with IEC 60669-2-1

TECHNICAL SPECIFICATION

ELECTRICAL

MAINS SUPPLY VOLTAGE
220-240V a.c. 50/60Hz

TERMINAL CAPACITY

All products

4 x 1mm²
4 x 1.5mm²
3 x 2.5mm²
2 x 4mm²
1 x 6mm²

For 1-10V control cable of K34499

2 x 0.75mm²
2 x 1mm²
2 x 1.5mm²
2 x Cat 5e Cable

PHYSICAL

OPERATING TEMPERATURE
-5°C to +40°C

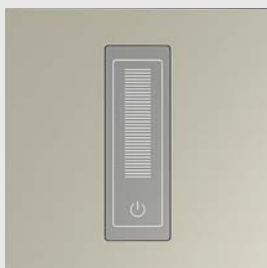
IP RATING
IP4X

MAX. INSTALLATION ALTITUDE
2000 metres

To prevent damage to frontplates during installation it is recommended that a screwdriver with a blade width of 4mm is used.

MOUNTING BOX TYPE

The minimum depth required is 35mm.
When using 2.5mm² cables the minimum box depth required is 40mm.



Description

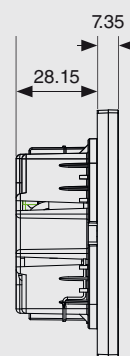
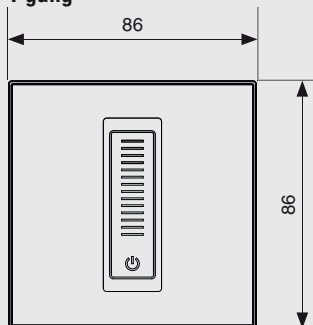
Elements Electronic Dimmers offer intuitive touch sensitive silent dimming with LED displays, for a unique user experience.

Features

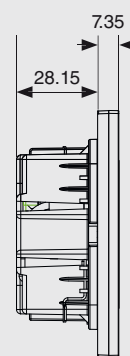
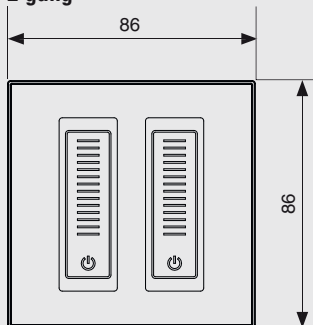
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Touch sensitive electronic dimmer with LED display
- LED Vapour trail follows users finger to indicate the power level
- Standby light to assist location in low light level applications
- Soft start and off offers superior user experience and prolongs lamp life
- When switched on lights return to last setting
- Available as 1 and 2 gang
- LED compatible
- Intelligent overload protection (not applicable to 1-10V dimmer)
- Leading edge and trailing edge dimmers available
- 2-way dimming available

Dimensions (mm)

1 gang



2 gang



Elements Collection

Technical

Electronic Dimmers

LOAD RATING AND TYPE		
Leading Edge Dimmers	K34100	K34101 & K34102 (per gang)
GLS/ Tungsten Filament, Mains Tungsten Halogen	40 - 500W	40 – 300W
Mains dimmable LED lamp for incandescent replacement	6 - 150W Max.12 lamps	6 - 120W Max. 12 lamps
ELV Tungsten Halogen with dimmable Ferro-magnetic transformer	35 - 400VA	35 - 240VA
Trailing Edge Dimmers	K34103	K34104 & K34105 (per gang)
GLS/ Tungsten filament, Mains Tungsten Halogen	25 – 500W	25 – 300W
ELV Tungsten Halogen with Dimmable Electronic Transformer	35 – 500VA	35 – 300VA
Dimmable LED Driver	*4-150W (Max 5 LED drivers only)	*4-120W (Max 5 LED drivers only)

Note:

1. Do not use loads of different types on the same circuit.
2. Not suitable for use with any other load type.
3. *Neutral connection is required. It is recommended to connect neutral whenever possible to extend the load handling capability of the dimmer.

1-10V Dimmer	K34499
Rated Load	6AX
Maximum number of ballasts	10

Neutral connection is mandatory on 1-10V Dimmer. Suitable for use with dimmable fluorescent or LED lighting which is driven by separate 0/1-10V control gear.

Suitable for use with 0/1-10V analogue dimmable ballast operating in accordance with IEC60929 annex E.

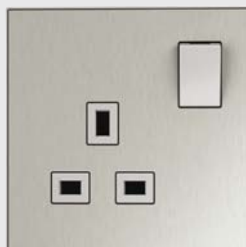
Elements Collection

Technical

Socket Outlets

Standards and approvals

13A socket outlets comply with BS 1363 Part 2.



Description

A range of socket outlets designed for ease of installation and having all the advantageous design features of the Elements Collection.

Sockets are available with two earth terminals on a common busbar to provide a double earth facility for use when installations require a high integrity protective connection as specified within BS 7671:2008.

The products can be quickly installed as replacements for existing 13 Amp sockets or in new installations (if suitable mounting box is in position).

Round pin sockets

A range of round pin sockets is also available.

Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Products with LED locators and indicators available
- 3 pin operated shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Only one size of screwdriver required for installation
- Dual earth terminals for high integrity earthing are available
- Backed out and captive terminal screws

13 Amp Socket Outlets

Standards and approvals

Elements 13A socket outlets comply with BS 1363 Part 2.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13A

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

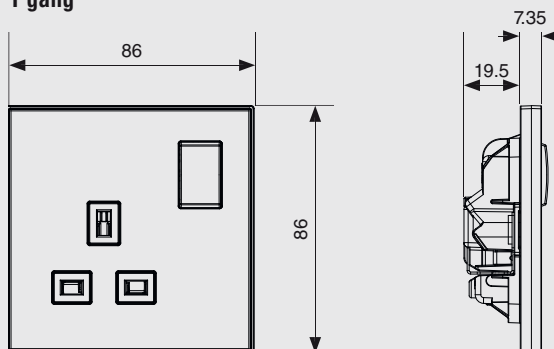
2000 metres

Installation

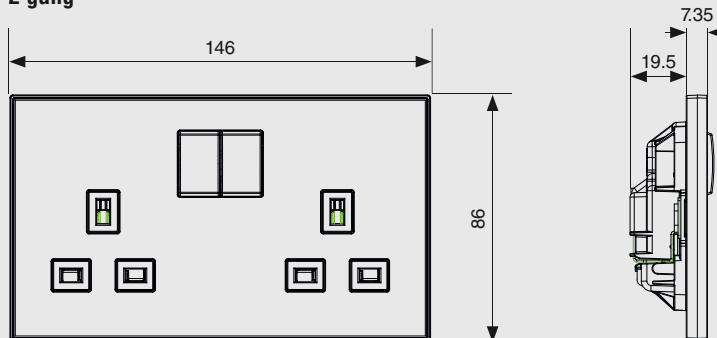
Elements socket outlets can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Dimensions (mm)

1 gang



2 gang



BOX TYPES

	Flush	Flush (for extra wiring space)
1 GANG	866ZIC	877ZIC
2 GANG	886ZIC	878ZIC

Elements Collection

Technical

5 Amp Socket Outlets

Standards and approvals

Round pin socket outlets comply with BS 546

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

TERMINAL CAPACITY

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of round pin socket outlets designed for ease of installation and having all the advantages and design features of the Elements Collection. These products can be quickly installed as replacements for existing socket outlets or in new installations.

Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- 3mm minimum switch contact gap
- Only one size of screwdriver required for installation
- Round Pin Socket Outlets available in 16 standard finishes

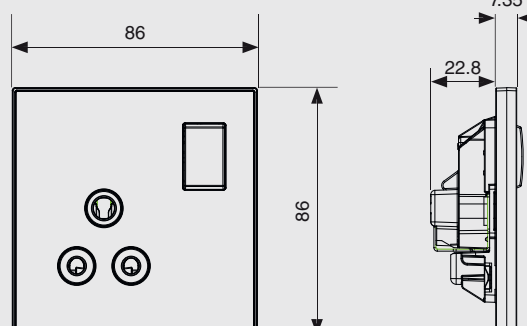
Installation

Elements socket outlets can be wall or bench mounted – do not mount or use as a trailing socket or where they may be subjected to excessive moisture or dampness.

BOX TYPES

Flush	Flush (for extra wiring space)
866ZIC (35mm deep)	877ZIC (46mm deep)

Dimensions (mm)



Shaver/Toothbrush Supply Unit

Standards and approvals

Shaver/Toothbrush supply units comply with BS EN 61558-2-5: 1998.

Accommodates plugs as follows:

- British 5mm dia pins on 16.6mm pitch (230V socket) to BS 4573:1970
- European 4mm dia pins on 17 to 19mm pitch (230V socket) to BS EN 50075
- Australian 6.5 x 1.6 flat blades each set at 30° to the vertical on a nominal pitch of 13.7mm (230V socket) AS/NZS 3112:2000
- American 6.6 x 1.6 flat horizontal blades on 12.7mm pitch (115V socket) to UL498/NEMA WD6

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

230V a.c. Input 50/60Hz
230V or 115V nominal outputs

CURRENT RATING

200mA max. (internal thermister trip current)

MAXIMUM LOAD

20VA
No load voltage < 275V

TERMINAL CAPACITIES

Each terminal will accommodate 1 x 4mm² or 2 x 2.5mm² solid conductors*

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP41 (In Zone 2 if fixed where direct spray from showers is unlikely)

MAX. INSTALLATION ALTITUDE

2000 metres

*The design of this unit means that on no load the transformer output is allowed to be as high as 275V. This means that rechargeable shavers and toothbrushes intended for use on the continent may be damaged by the inrush current created by this higher voltage. Rechargeable shavers and toothbrushes with a wide range of input voltage should be recharged at 115V. Shavers and toothbrushes manufactured for the UK are designed to be used with a transformer unit. Loads in excess of 20VA may cause the solid state overload to operate before shaving is completed. This is to protect the transformer.

Description

Designed for ease of installation and having many of the advantageous design features of the Elements Collection.

May be used in bathrooms and washrooms but must only be installed in accordance with the latest edition of BS 7671.

Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Top access terminal screws make wiring quicker and easier
- Automatic primary supply switching on insertion of plug
- Choice of 230V or 115V output socket positions
- Safety interlocked shutters to prevent insertion of two plugs simultaneously
- Only one size of screwdriver required for installation
- Frontplate fixing screws retained on rear case moulding
- Integral over current device to protect transformer
- Suitable for use with electric toothbrush chargers

Installation

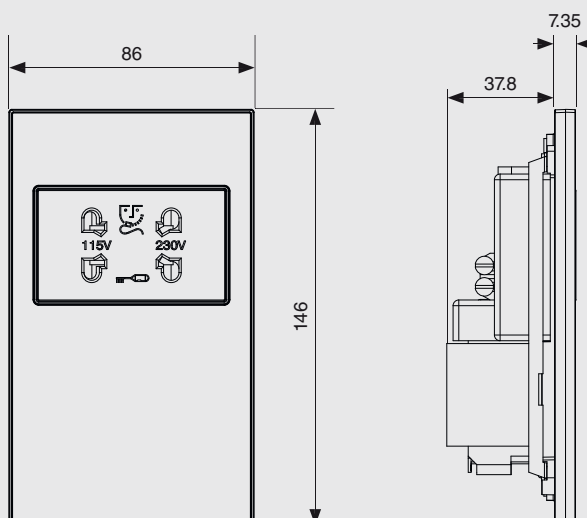
Shaver/Toothbrush supply unit should be wall mounted.

BOX TYPES

Flush mounting only

Metal box 878ZIC
(minimum metal mounting box depth is 47mm)

Dimensions (mm)



Elements Collection

Technical

Connection Units

Standards and approvals

All Elements Connection Units comply with BS 1363 Part 4



Description

A range of 13A fused connection units designed for the connection of refrigerators, central heating boilers and other fixed appliances.

The range is designed for ease of installation and has all the advantageous design features of the Elements Collection.

Fuse carriers

These are captive and are opened by a fast acting, worm-drive operated screwdriver for ease of replacement.

Flex outlets

The products are equipped with very strong, push-fit cord grips making installation safe, quick and easy.

Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Only one size of screwdriver required for installation
- Worm-drive operated fuse carriers for additional security
- Push-fit cord grips, for safer, quicker installation
- Additional electrical safety from neutral 'make first', 'break last' feature

Connection Units

Standards and approvals

All Elements Connection Units comply with BS 1363 Part 4

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13 Amp

TERMINAL CAPACITY

3 x 2.5mm²

2 x 4mm²

1 x 6mm² (stranded)

Flex outlet/cord grip capacities

Min. 2 Core, 0.5mm²

Max. 3 Core, 1.5mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

With flex outlet

IP2XD

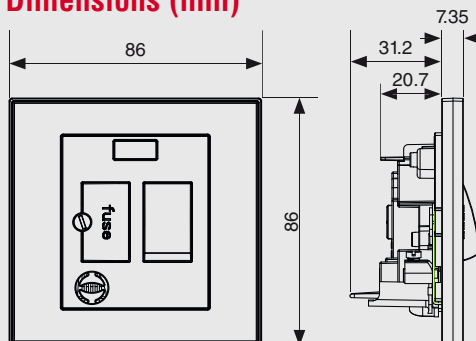
Without flex outlet

IP4X

MAX. INSTALLATION ALTITUDE

2000 metres

Dimensions (mm)



Installation

Elements connection units can be wall or bench mounted.

Do not use on a trailing lead.

BOX TYPES

Flush	Flush (for extra wiring space)
866ZIC (35mm deep)	877ZIC (46mm deep)

Changing Fuses

1. Unscrew the fuse carrier screw to partially eject the carrier.
2. Carefully lever (by screwdriver or finger) the carrier out further to remove the fuse. Note: The carrier does not come fully out.
3. Always replace with a BS 1362 type fuse (as used in 13A plugs) of the correct rating.

Elements Collection

Technical

Grid Switch Modules

Standards and approvals

All Elements switches comply with
BS EN 60669-1:1999.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c. 50Hz

CURRENT RATING

1way/2way – 10AX or 20AX versions available.

All Push switches – 10A only

Intermediate – 20AX only

Double Pole – 20AX only

Centre Off – 10A only

TERMINAL CAPACITY

All products

4 x 1mm²

4 x 1.5mm²

3 x 2.5mm²

2 x 4mm²

1 x 6mm²

CONTACT GAP

3mm switch contact gap
(Except K34900 and K34901)

PHYSICAL

OPERATING TEMPERATURE
–5°C to +40°C

IP RATING

IP4X

MAX. INSTALLATION ALTITUDE
2000 metres

BOX TYPES

	Flush
1 and 2 gang switches	861ZIC (25mm deep)
3 and 4 gang switches	862ZIC (25mm deep)



Description

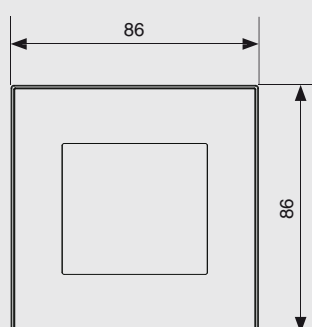
Elements Modular Switches require a separate frontplate, when ordering ensure the appropriate module and frontplate is selected.

Features

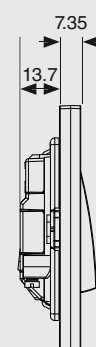
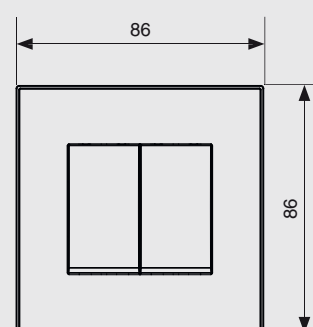
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Switch contacts with silver contacts on both surfaces for good continuity
- Positive switch action
- Only one size of screwdriver required for installation
- Backed out and captive terminal screws
- Locator versions available for low light level applications

Dimensions (mm)

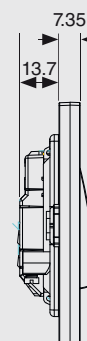
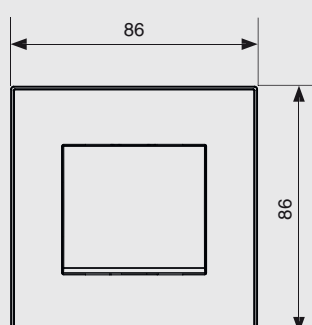
1 gang



2 gang



1 gang wide rocker

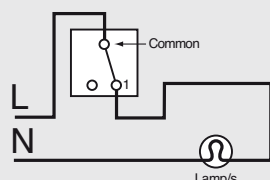


Sectional drawings show the furthest projections from the back of the frontplate (wall surface).

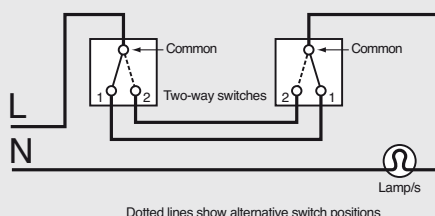
Grid Switch Modules

Wiring Diagrams

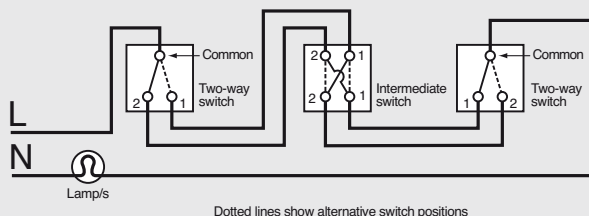
One-way switching



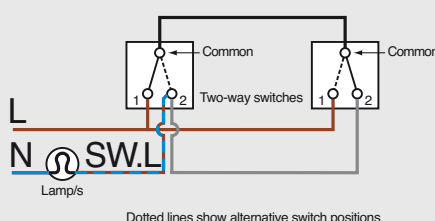
Two-way switching – 2 wire control



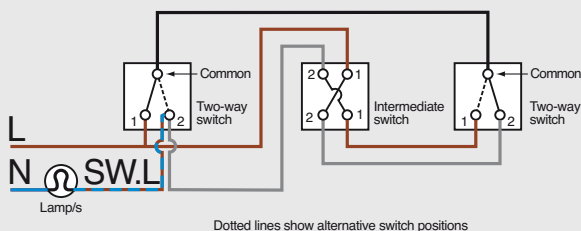
Two-way switching plus intermediate switching – 2 wire control



Two-way switching – 3 wire control



Two-way switching plus intermediate switching – 3 wire control



Note:

Switches featuring locators and indicators use LED illumination.

All switches fitted with a locator are intended to give a very low light output whilst the switch is turned off. The low level of power flowing in this circuit is compatible with the majority of installation requirements however, certain lamp types or installations using multiple intermediate switches on one circuit may require the use of a snubber capacitor. The recommended capacitor to use would be X2 rated 275V 0.1 μ F.

Switches incorporating indicator or locator illumination must be disconnected before carrying out any site installation testing.

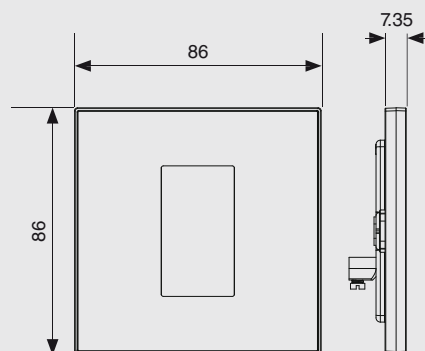
Note: Terminal positions may alter. The above diagrams are to show wiring layout.

Elements Collection Technical

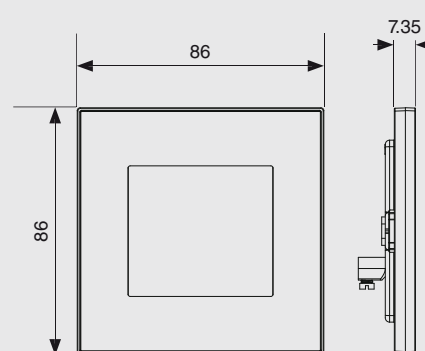
Grid Frontplates

Frontplate Dimensions (mm)

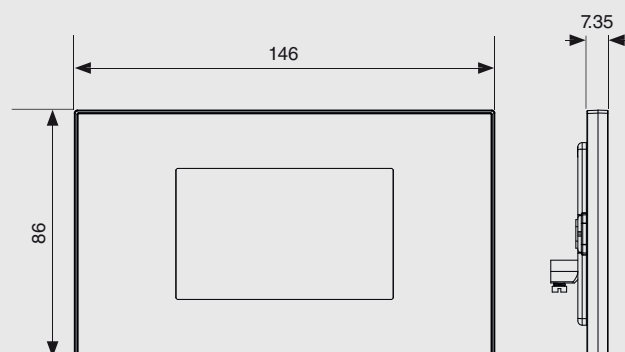
1 module – K35131



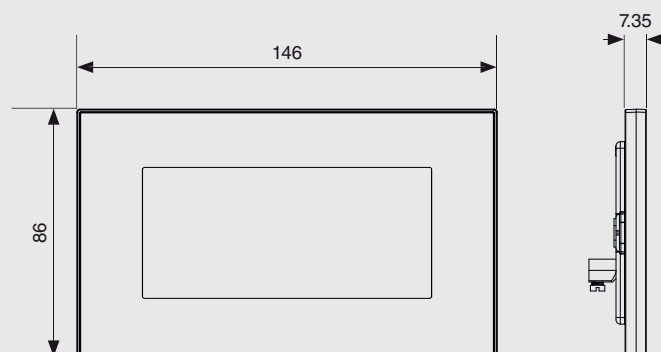
2 module – K35132



3 module – K35133



4 module – K35134



High Current Switches

Standards and approvals

High Current switches comply with
BS EN 60669-1

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT

32A Switch

50A Switch

SWITCH

3mm contact gap

Double pole operation

TERMINAL CAPACITY, 50A SWITCHES

4 x 4mm²

3 x 6mm²

1 x 10mm²

1 x 16mm²

TERMINAL CAPACITY, 32A SWITCHES

3 x 2.5mm²

2 x 4mm²

1 x 10mm²

1 x 6mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of switches harmonising with the Elements style, suitable for the switching of all domestic, commercial and industrial appliances where higher current ratings are required, i.e. cookers, heaters, commercial refrigeration units etc.

Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Positive double pole switching
- Toggle action switches
- Replaceable neon indicators

BOX TYPES

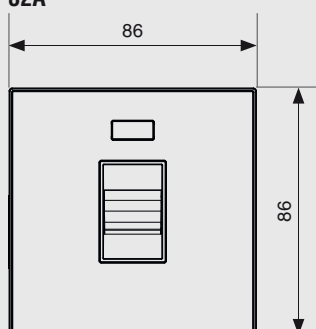
Switches	Max. Cable Size	Flush
32A	10mm ²	46mm
50A	16mm ²	46mm

BOX REFERENCES

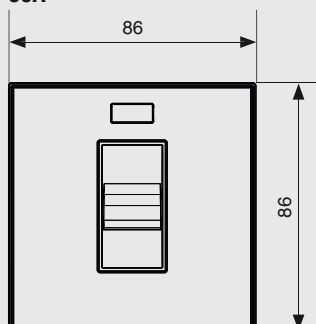
Flush Box depth	32A	50A
46mm	877ZIC	877ZIC

Dimensions (mm)

32A



50A



Note: These switches are **not** recommended for switching large banks of PCs.

Elements Collection

Technical

Do Not Disturb / Make Up Room Switches

Standards and approvals

All Elements switches comply with BS EN 60669-1:1999.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c. 50Hz

CURRENT RATING

10A

TERMINAL CAPACITY

All products

4 x 1mm²

4 x 1.5mm²

3 x 2.5mm²

2 x 4mm²

1 x 6mm²

CONTACT GAP

K33900DND – Mini gap

K33885DND – Normal gap

PHYSICAL

OPERATING TEMPERATURE

–5°C to +40°C

IP RATING

IP4X

MAX. INSTALLATION ALTITUDE

2000 metres

BOX TYPES

	Flush
All switches	861ZIC (25mm deep)

Description

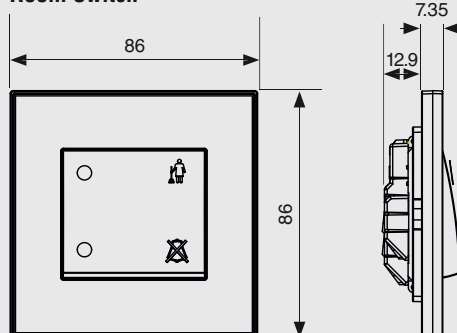
The Elements Do Not Disturb / Make Up Room Switches have been developed along with a number of other products for hotels and hospitality venues, offering guests comfort and control.

Features

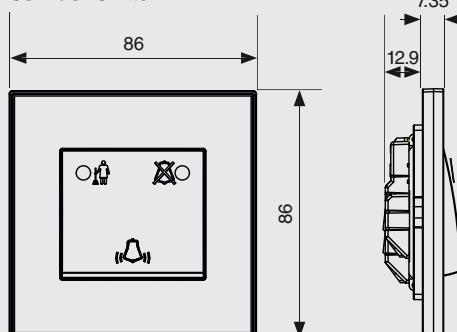
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- Switch contacts with silver contacts on both surfaces for good continuity
- Positive switch action
- Only one size of screwdriver required for installation
- Backed out and captive terminal screws

Dimensions (mm)

Room Switch

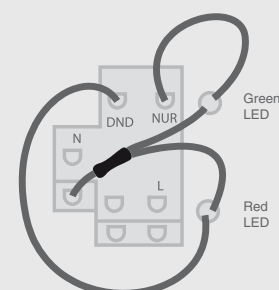


Corridor Switch

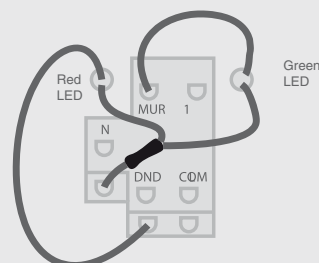


Connection of LED Indicators

Room Switch – Inside “Occupancy Selector”



Corridor Switch – Outside “Bell Push/Indicator”



Keycard Switch with Time Delay

Standards and approvals

BS EN 60669-2-1

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
220-240V, 50/60Hz

CURRENT RATING
10A

TERMINAL CAPACITY
4 x 1.5mm²
2 x 2.5mm²
1 x 4.0mm²
1 x 6.0mm²

EARTH TERMINAL
3 x 2.5mm²
2 x 4.0mm²
1 x 6.0mm²

CONTACT GAP
Micro Gap

PHYSICAL

AMBIENT OPERATING TEMPERATURE
0°C to +35°C

IP RATING
IP2X

MAX. INSTALLATION ALTITUDE
2000m

TIME DELAY (NON ADJUSTABLE)
30 seconds

Description

The Elements Keycard Switch with Time Delay has been developed along with a number of other products for hotels and hospitality venues, offering guests comfort and control, whilst delivering energy efficiency by avoiding energy waste in unoccupied rooms.

The Keycard Switch has a fixed time delay; once the card is removed guests are not left in the dark.

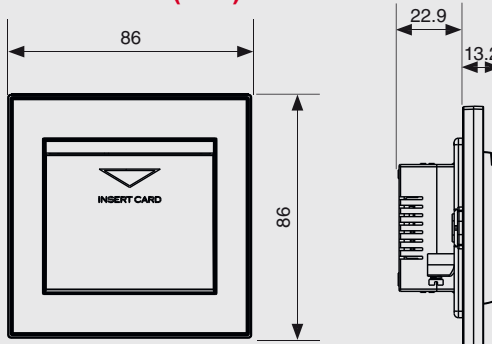
Features

- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- 30 Second fixed time delay
- Bespoke colours, materials and finishes available via the Design Service

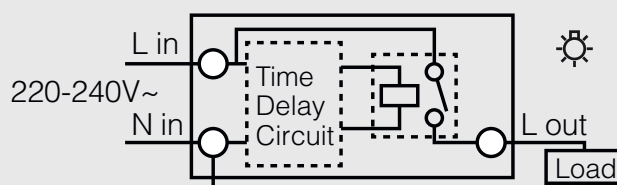
BOX TYPES

	Flush	Flush (for extra wiring space)
1 Gang	866ZIC (35mm deep)	877ZIC (46mm deep)

Dimensions (mm)



Wiring Diagram



Elements Collection

Technical

Euro Frontplates

Standards and approvals

Euro frontplates comply with BS 5733:2010

Description

Frontplates for mounting Euro Modules.

TECHNICAL SPECIFICATION

DIMENSIONS

HEIGHT

86mm

WIDTH

1G 86mm

2G 146mm

APERTURE DIMENSIONS

HEIGHT

50mm

WIDTH

1G 1 module 25mm

1G 2 module 50mm

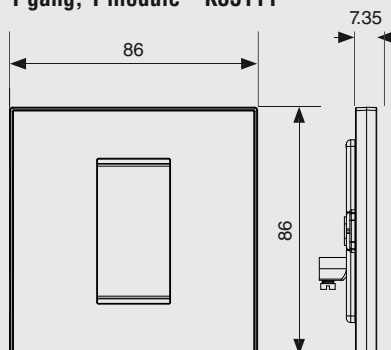
2G 4 module 100mm

Features

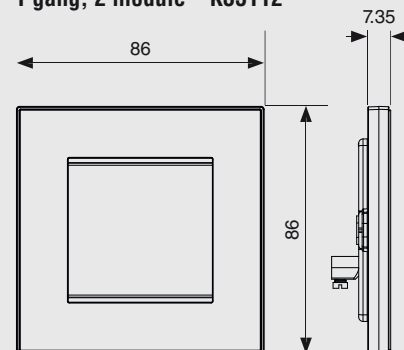
- 16 standard finishes
- Many more customised combinations of standard colours, materials and finishes available
- Bespoke colours, materials and finishes available via the Design Service
- 1G and 2G frontplates
- Accepts industry standard Euro snapfit modules
- 1G Euro frontplate accepts 1 or 2 Euro modules
- 2G Euro frontplate accepts 4 Euro modules (100 x 50mm aperture)
- Euro 1/2 module (12.5 x 50mm) blank available
- Interchangeable modules clip into frontplate

Dimensions (mm)

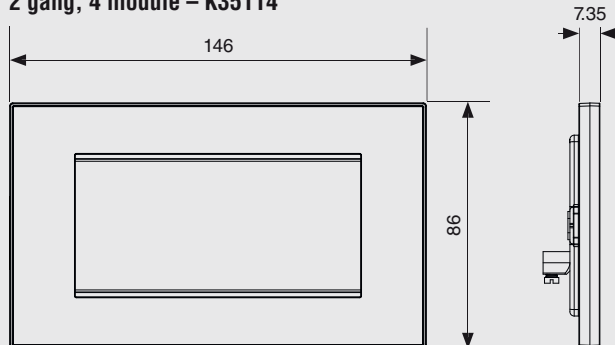
1 gang, 1 module – K35111



1 gang, 2 module – K35112



2 gang, 4 module – K35114



Power Modules

Standards and approvals

K5830: BS 1363 Part 2:1995

K5831: IEC 60884-1:2006

K5832: SASO 2204: 2003

K5833: BS 546: 1950

K5834: French National Standard
NF C 61-314

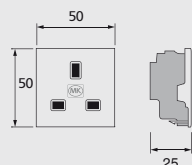
Description

A range of euro modules designed to provide a variety of power options.

TECHNICAL SPECIFICATION					
13A UK	5A UK	16A German	15A American	USB Charging Module	
ELECTRICAL	ELECTRICAL	ELECTRICAL	ELECTRICAL	ELECTRICAL	
VOLTAGE RATING 250V a.c.	VOLTAGE RATING 250V a.c.	VOLTAGE RATING 250V a.c.	VOLTAGE RATING 127V a.c.	INPUT	OUTPUT
CURRENT RATING 13A	CURRENT RATING 5A	CURRENT RATING 16A	CURRENT RATING 15A	VOLTAGE RATING 220-240V a.c.	VOLTAGE RATING 2 x 5V d.c. Max current
TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 3 x 4mm ² 2 x 6mm ² (stranded)	TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 2 x 4mm ² 2 x 6mm ² (stranded)	TERMINAL CAPACITY Live, neutral & earth 4 x 1.5mm ² 2 x 2.5mm ² 1 x 4mm ²	TERMINAL CAPACITY Live, neutral & earth 3 x 2.5mm ² 2 x 4mm ² 1 x 6mm ² (stranded)	FREQUENCY 50/60Hz	CHARGING SOCKETS USB 2.0 type A
PHYSICAL	PHYSICAL	PHYSICAL	PHYSICAL	RATED CURRENT 0.12A	2A can be delivered in total to either socket outlet, or be divided between the two.
AMBIENT OPERATING TEMPERATURE -5°C to +40°C	AMBIENT OPERATING TEMPERATURE -5°C to +40°C	AMBIENT OPERATING TEMPERATURE -5°C to +40°C	AMBIENT OPERATING TEMPERATURE -5°C to +40°C	TERMINAL CAPACITY Live & neutral 3 x 2.5mm ² 2 x 4mm ²	This module is not limited to 1A from each socket outlet.
IP RATING IP2XD	IP RATING IP2XD	IP RATING IP2XD	IP RATING IP2XD	PHYSICAL	
MAX. INSTALLATION ALTITUDE 2000 metres	MAX. INSTALLATION ALTITUDE 2000 metres	MAX. INSTALLATION ALTITUDE 2000 metres	MAX. INSTALLATION ALTITUDE 2000 metres	AMBIENT OPERATING TEMPERATURE 0°C to +40°C	
				IP RATING IP2XD	
				MAX. INSTALLATION ALTITUDE 2000 metres	

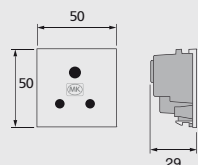
Dimensions (mm)

13A UK



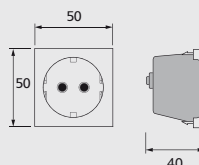
K5830

5A UK



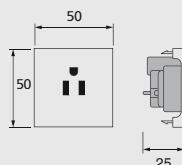
K5833

16A German



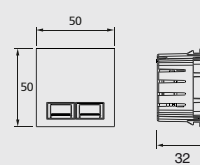
K5831

15A American



K5832

2A USB Charging Module



K5837

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

BOX TYPES
Minimum
46mm deep

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

BOX TYPES
Minimum
35mm deep
Extra wiring space
46mm deep

Elements Collection

Technical

RJ45 Data Outlets

Standards and approvals

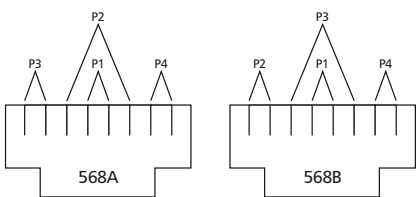
ISO/IEC 11801
 EN 50173
 TIA 568
 EN 41003

Installation

- Maximum cable length 90m.
- Cable bend radii, 40mm during installation, 20mm after installation.
- Maximum pull force 8.7kg.
- Do not over tighten cable ties.
- Do not unwind the twists in the wire pairs by more than 13mm max.

Installation details and wiring diagram illustrations

TIA WIRING SCHEME COLOUR CODES		
Pin No.	568A	568B
1	WHITE / green	WHITE / orange
2	GREEN / white	ORANGE / white
3	WHITE / orange	WHITE / green
4	BLUE / white	BLUE / white
5	WHITE / blue	WHITE / blue
6	ORANGE / white	GREEN / white
7	WHITE / brown	WHITE / brown
8	BROWN / white	BROWN / white



Pair 1 – BLUE/white & WHITE/blue
 Pair 2 – ORANGE/white & WHITE/orange
 Pair 3 – GREEN/white & WHITE/green
 Pair 4 – BROWN/white & WHITE/brown

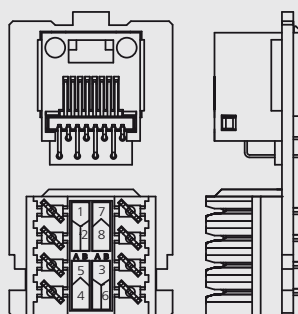


Description

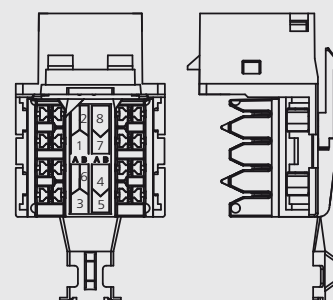
Suitable for use in all Euro modular frontplates, available in the Elements range, Cat 5e and Cat 6 modules suitable for use in structured cabling distribution systems.

Euro modules are to be wired as follows

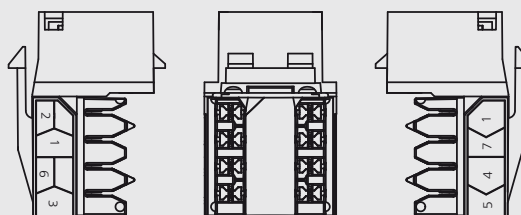
**RJ45 Cat.5e
K5845 – Euro**



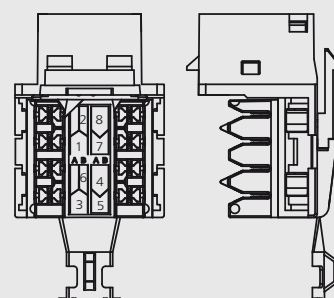
**RJ45 Cat.5e Screened
K5845S – Euro**



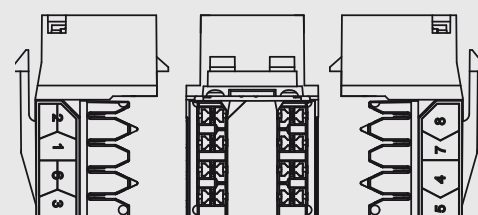
**RJ45 Cat.5
K5844 – Euro Angled**



**RJ45 Cat.6 Screened
K5846S – Euro**



**RJ45 Cat.6 Euro
K5846 – Euro, K5864 – Euro Angled**



Telephone, RJ11/12, BNC Data and Blank Modules

Standards and approvals

Telephone sockets K5820 and K5821 comply with BS 6312:2.2

Data sockets K5801 comply with BS 5733:2010 (where applicable).

K5887 complies with FCC68 and EN 41003.



TECHNICAL SPECIFICATION

ELECTRICAL

CABLE TYPES

Telephone – CW1311, CW1293, CW1308, CW1316

NO. OF CABLES PER TERMINATION

Telephone – 2

RJ11/12 – 1

BNC

50 Ohms impedance cable

RG58, RG141, URM43 Belden 9907

FREQUENCY RANGE

BNC Connector – 0 to 4GHz

IMPEDANCE

BNC Connector – 50. nominal

TERMINATION TYPE

Telephone module – IDC

BNC module – Crimped connection

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD – K5820, K5821, K5801 and K5787.

IP4X – K180, K188, K186 and K170

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of telephone, data and blank modules to fit Euro front plates. BNC Euro modules with a 50Ohm crimp connector suitable for use with RG58, URM43, URM76 and Belden 9907 type co-axial cables are also available.

Installation (Telephone socket modules)

Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

Installation tools required IDC Connectors (telephone & RJ45 outlets)

MK insertion tool List No. 400NAT.

Wire pull-out force: 10.5 Newtons when installed correctly.

Wiring regulation restrictions

Domestic Installations: The total REN (Ring Equivalent Number) value of all telephone equipment connected on a line must not exceed 4.

Features

- Meet all relevant BS and cabling standards
- Interchangeable modules clip into frontplates
- Front fixing facilitates easy exchange of modules
- Part of a complete range of products for telephone and data processing requirements

Telephone sockets

- Quick, simple and reliable IDC connectors
- Can be specified for all applications

Data sockets

- Latest specification for high performance systems
- Made to stringent quality assurance procedures
- Wide range of data connectors available

Elements Collection

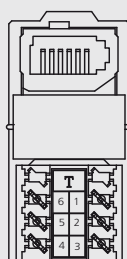
Technical

Telephone and RJ11/12

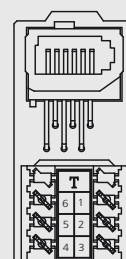
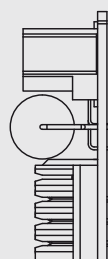
Telephone Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE
1	Green / white
2	BLUE / white
3	ORANGE / white
4	WHITE / orange
5	WHITE / blue
6	WHITE / green

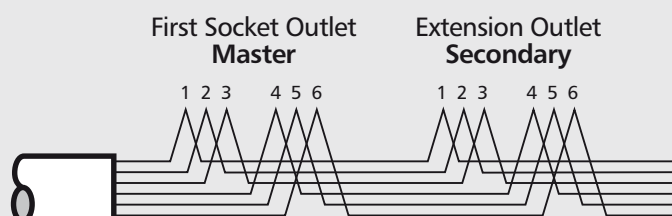
Note: Main wire colour is shown in capitals



K5820 (MASTER)



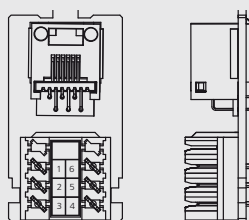
K5821 (SECONDARY)



RJ11/12 Wiring Scheme

PIN NO.	STRIPPED COLOUR WIRE	SOLID COLOUR WIRE
1	WHITE / green	WHITE
2	WHITE / orange	Black
3	BLUE / white	Red
4	WHITE / blue	Green
5	ORANGE / white	Yellow
6	GREEN / white	Blue

Note: Main wire colour is shown in capitals



K5887

Digital TV and Radio

Standards and approvals

All TV outlets comply with BS 5733 and BS EN 50083 where applicable.

TECHNICAL SPECIFICATION

SINGLE OUTLETS

TV/FM IEC MALE OR FEMALE
DC-950MHz

SATF-TYPE
DC-1.75GHz

TV/FM/DAB/SAT PRODUCTS FOR DIGITAL RADIO

TV

Diplexer: 5-65MHz
470-862MHz

Triplexer: 5-65MHz
470-862MHz

FM/DAB

Diplexer: 87.5-230MHz
Triplexer: 87.5-230MHz

SAT OR SAT1

Diplexer: n/a
Triplexer: 950-2300MHz

SAT2

Diplexer: n/a
Triplexer: 5-2300MHz



Description

There is one range of diplexer and triplexer products, which is suitable for digital radio (DAB).

Diplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV and FM signals. The filtering in the diplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the TV signal path through the diplexer.

Triplexer modules are for connecting to a single co-axial aerial down lead carrying combined TV, FM and SAT signals. The filtering in the triplexer splits out the appropriate signal and feeds it to the relevant output connection. A DC control path is provided in the SAT signal path through the triplexer.

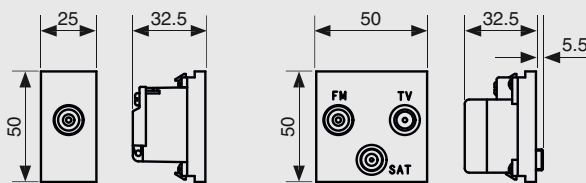
The quad outlet contains a triplexer together with a separate satellite output, for use with Sky+, or more complex installations.

Telephone secondary outlets are provided on some products for connection of telephone or for interactive TV applications.

Dimensions (mm)

Euro 1 module

Euro 2 module Triplexer and Quadplexer



Note: Minimum box depth: 47mm

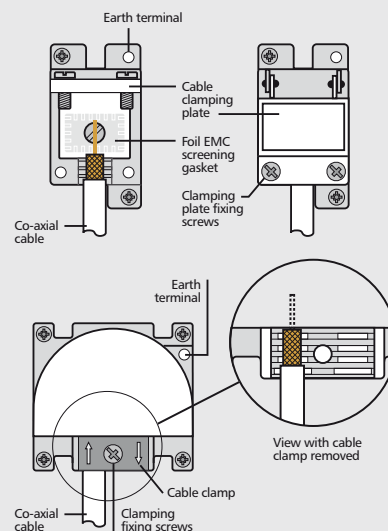
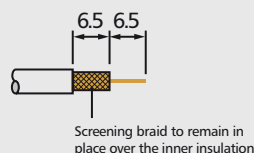
Features

- Non Isolated
- Fully screened
- Earth terminal provided on TV modules

Installation

- When installing the TV Co-axial cable ensure that all cable bends are smooth so that the inner insulation is not crushed or squashed. Otherwise the TV signal quality may be affected.
- Not suitable for loop-in loop-out installations.
- Use CT100 cable (or equivalent.)

TV Co-axial cable stripping details



Elements Collection

Technical

TV/FM and Satellite Socket Outlets

Installation (TV sockets)

Product performance, systems compatibility

Isolated Outlets are intended for use where safety isolation (rated at 2000V ac) is required to provide protection against faults occurring within any mains powered product used on different parts of the distribution system. They are not suitable for use in systems where DC signals are passed through the socket, (e.g. where masthead/headend equipment is controlled by receiver/decoder equipment).

Diplexer Outlets are used in distribution systems where both TV and FM band signals are combined on a single aerial download. The filtering in the diplexer separates the appropriate signals and feeds them through to the relevant output connection port.

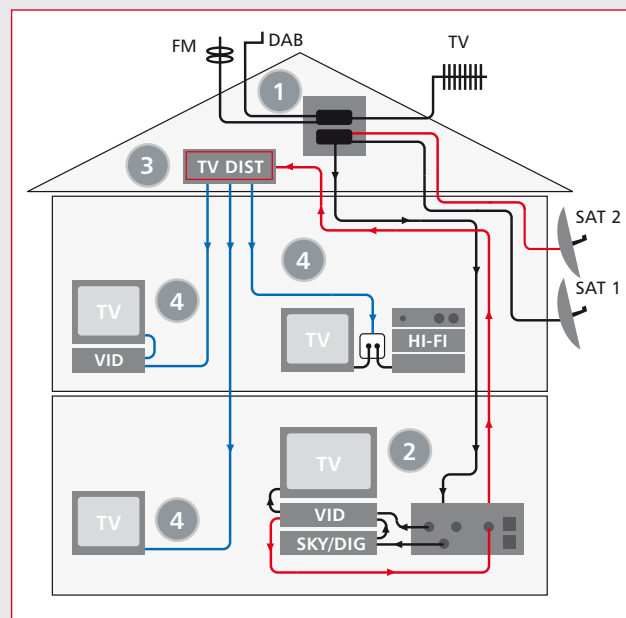
Cable Routing and Use of Cable Clamp

Sharp bends in the cable must be avoided during installation. The single TV/FM socket is fitted with a cable clamp that can be fixed on either side of the termination position to facilitate this.

When tightening the screening braid clamps ensure that the cable is firmly gripped and that the inner insulation is not squashed flat beyond a slight oval shape.

Safety Information

TV outlets or modules must not be installed in the same enclosure as equipment rated in excess of 50V, (e.g. mains rated 13A sockets or switches).



Method of installation of TV and FM aerial connection by using MK co-axial socket outlet and only one download.

Conventional distribution system for TV and FM signals using a single aerial download.

- 1 The signals from the TV and FM aerials and the satellite dish are combined together using two products. The first combines the TV and FM signals and the second adds the Sky signal to the TV/FM signal and provides a DC control path to power the LNB unit on the satellite dish. (These products are not supplied by MK).

The single aerial down lead feeds into the triplexer (black lines in wiring diagram).

- 2 The separated satellite signal is then fed to the decoder. The decoded satellite signal is then fed into the VCR along with the TV signal from the Triplexer. The output signal from the VCR then feeds into the TV and also back to the single outlet and onto the distribution amplifier (black lines in wiring diagram).
- 3 The single cable back-feed then feeds back to the input of a multi way distribution amplifier, (typically located in the loft or garage) (red lines in wiring diagram).
- 4 Each individual output from the distribution amplifier is then fed to the individual rooms in the house to a standard TV (single or diplexer) outlet to which the TV/ VCR and/or Hi-Fi can be connected (blue lines in wiring diagram).

Elements Collection

Technical

PIR Detector

Standards and approvals

IEC60669-2-1

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

220-240V

CURRENT RATING

10A

LOAD TYPE

Incandescent Light (resistive Load): 2300W

HV HALOGEN LAMPS

1500 W

INDUCTIVE LOAD

600VA

ELECTRONICS BALLAST

3 x 58W (max. inrush current 80A/20ms)

CONTACT GAP

Micro gap

TERMINAL CAPACITY (SCREWLESS TERMINAL)

Stranded Cables

1 x 2.5mm²

Solid Cables

1 x 2.5mm²

1 x 4mm²

EARTH TERMINAL (SCREW TERMINAL)

4 x 2.5mm²

3 x 4.0mm²

2 x 6.0mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +35°C

MAX INSTALLATION ALTITUDE

2000 metres

IP RATING

IP2X

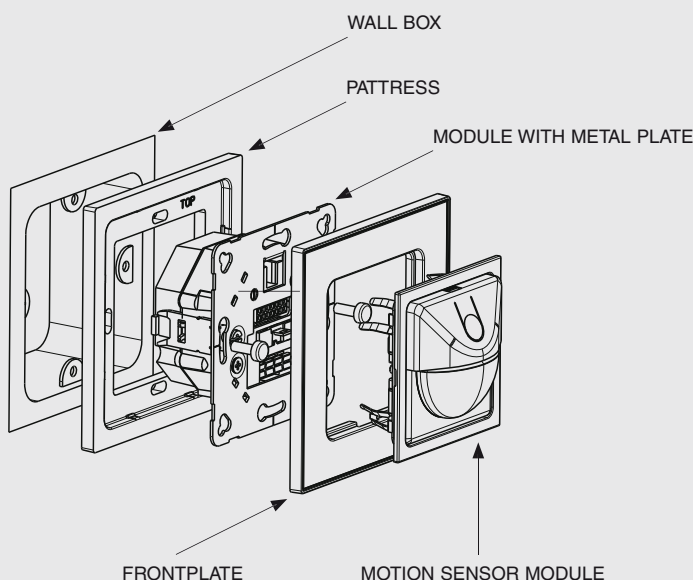
Description

The Elements PIR Detector will deliver energy savings and lighting usage management in a wide range of applications. Offering effective and efficient detection for control of lighting, this stand alone solution is easy to install and program, with the additional benefit of variable time delay from 30 minutes to permanently on.

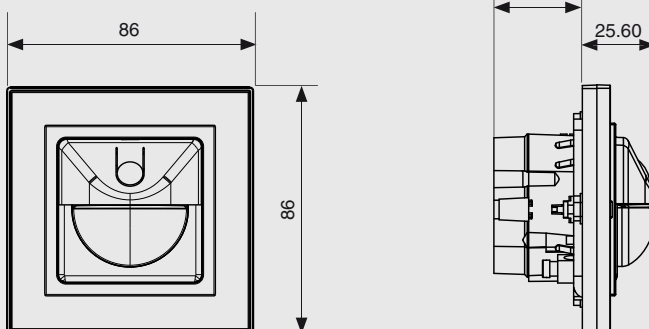
Features

- 16 standard finishes
- Many more customized combinations of standard colours, materials and finishes available
- Bespoke colour materials and finishes available via the Design Service
- Detection range of 8M
- Delivers energy saving by switching lights off when occupancy is not detected
- Offers safety and comfort by switching lights on when occupancy is detected
- Easy to install and program
- Time delay from 30 minutes to permanently on

Frontplate and Module Installation



Dimensions (mm)



Installation

For optimal detection and control sufficient distance (1M minimum) should be maintained between the PIR Detector and lighting fixtures in order to prevent undesirable motion detector switching. The optimal installation height is 0.8M – 1.2M. Installation in areas where excessive air movement occurs can cause false activations.

BOX TYPES

	Flush	Flush (for extra wiring space)
1 GANG	866ZIC (35mm)	877ZIC (47mm)

Elements Collection

Technical

Echo™ Transmitters

Standards and approvals

BS EN 60669-1, BS EN 60669-2-1,
 ESTI EN 301 489-1 & -3, ESTI EN 61000-6-2,
 ESTI EN 300 220-3, EN 60950-1

TECHNICAL SPECIFICATION

PHYSICAL

OPERATING TEMPERATURE

-5°C + 40°C

OPERATING FREQUENCY:

868.3 MHz

IP RATING

IP2X

MAX INSTALLATION ALTITUDE

2000m

Mounting Transmitters

- All transmitters can be mounted to any 1 gang back box
- All transmitters can be mounted directly to the wall surface

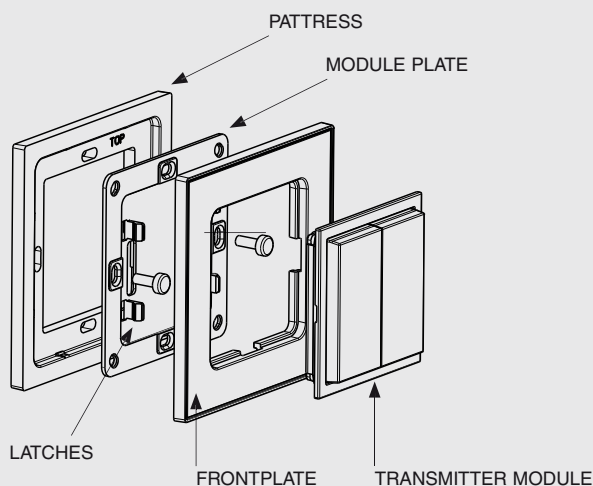
Description

The Elements Echo Transmitters are part of an innovative range of entirely wireless, batteryless and self powered switches. The Elements Echo Transmitters communicate with Echo receivers to switch mains power. Elements Echo Transmitters send an RF signal at 868.3 MHz, the unique feature of these transmitters is the signal transmission is made with no need for mains power or batteries.

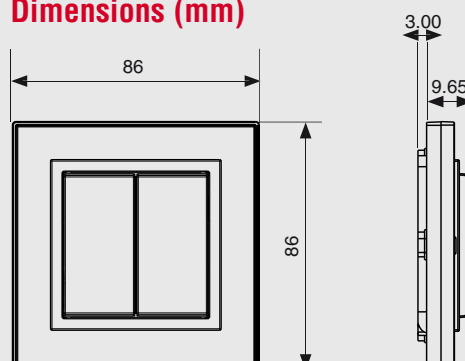
Features

- 16 standard finishes
- Many more customized combinations of standard colours, materials and finishes available
- Bespoke colour materials and finishes available via the Design Service
- Wireless and batteryless, using RF technology with ranges up to 30M in ideal conditions
- The transmitters are quick and easy to install with no need for cabling from the switch to the lighting circuit
- See the Echo range for available receivers

Frontplate and Module Installation



Dimensions (mm)



Roller Shutter / Blind Control

Standards and approvals

IEC60669-1

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250 VAC

CURRENT RATING

10A

TERMINAL CAPACITY

Stranded Cables

2 x 2.5mm²

1 x 4.0mm²

Solid Cables

2 x 2.5mm²

2 x 4.0mm²

EARTH TERMINAL

4 x 2.5mm²

3 x 4.0mm²

2 x 6.0mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +35°C

IP RATING

IP2X

MAX INSTALLATION ALTITUDE

2000 metres

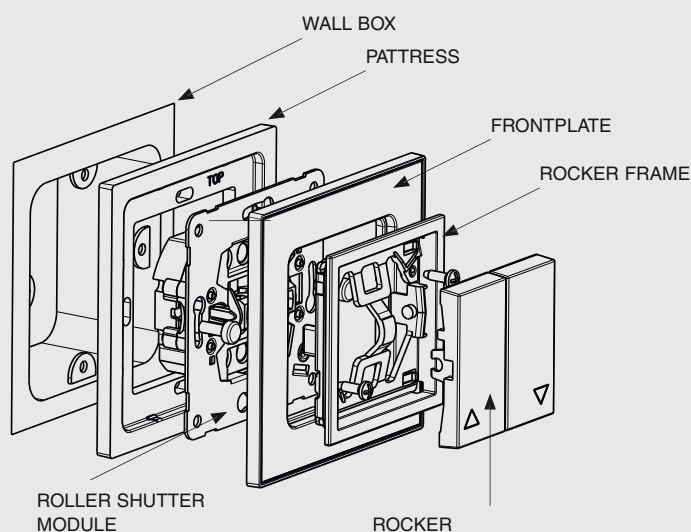
Description

The Elements Roller Shutter / Blind Control will operate a motor run device enabling the control of window coverings.

Features

- 16 standard finishes
- Many more customized combinations of standard colours, materials and finishes available
- Bespoke colour materials and finishes available via the Design Service
- Easy to install

Frontplate and Module Installation



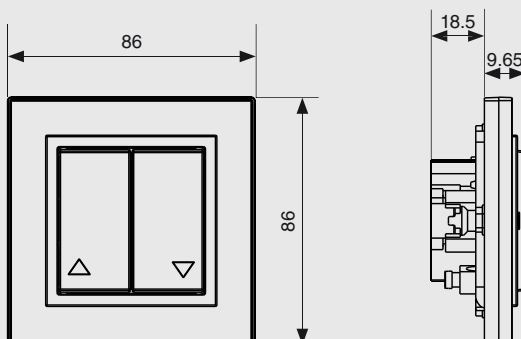
Installation

For optimal performance ensure the product is orientated correctly.

BOX TYPES

	Flush	Flush (for extra wiring space)
1 GANG	866ZIC (35mm)	877ZIC (47mm)

Dimensions (mm)



Elements Collection

Technical

Multimedia Plates

Standards and approvals

All Elements 13A socket outlets comply with BS 1363: Part 2:1995.

K34209 and K34210 comply with BS 5733:2010.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

13A

TERMINAL CAPACITY

Live, neutral & earth

3 x 2.5mm²

3 x 4mm²

2 x 6mm² (stranded)

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

MAX. INSTALLATION ALTITUDE

2000 metres

MOUNTING BOXES

Combination Plate List Number	47mm Mounting Box
K34206	870ZIC
K34207	870ZIC
K34208	868ZIC
K34209	858ZIC
K34210	869ZIC

Bespoke requirements can be achieved through the MK Design Service to deliver variation in colours, materials, function, finishes and markings.

For more information please visit www.mkelectric.co.uk or call 01268 563720



Description

A range of multimedia plates designed for ease of installation and having all the advantageous design features of the Elements range.

These multimedia socket outlets provide interior designers and installers with a stylish and practical wiring device solution. The range also has larger Euro module frontplates to house eight and twelve single Euro modules without the inclusion of fixed socket outlets. The K34209 multimedia socket outlet, for example allows for the inclusion of up to eight single Euro modules, which could include datacoms, telecoms, plus TV and Satellite modules.

Alternatively, Euro Power Modules i.e. German, French/Belgium and American socket outlets may be used.

Note:

- Pre-configured back boxes are designed for use with the multimedia plates. These back boxes should always be used to ensure alignment of the fixing screws is correct and proper segregation between mains and extra low voltage products is maintained (products are supplied with clip on segregators)
- Back boxes must be installed 10mm sub flush to the wall surface
- Mains operated products and extra low voltage modules must not be installed within the same frontplate aperture. Refer to BS 7671 for details
- When removing the fixing screws and frontplate from an installation to gain access to low voltage modules, please be aware that there will also be access to the mains supply



Multimedia plates allow the use of a variety of power and data modules making them ideal for hotels.

Features

- 3 pin operated safety shutter
- Printed terminal markings on grey rear mouldings for clearer identification
- Top access, angled terminals make wiring easier and quicker
- 3mm minimum switch contact gap
- Double pole switching
- Additional electrical safety from neutral 'make first', 'break last' feature
- Switch contacts with silver contacts on both surfaces for good continuity
- Backed out and captive terminal screws on pre-fitted sockets
- Pre-configured backboxes to ensure alignment of the fixing screws is correct and proper segregation between circuits is maintained to comply with BS 7671 17th Edition wiring regulations



Installation

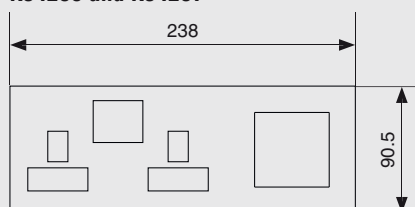
Elements socket outlets can only be mounted on a wall. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Install corresponding back box 10mm sub flush to finished wall surface.

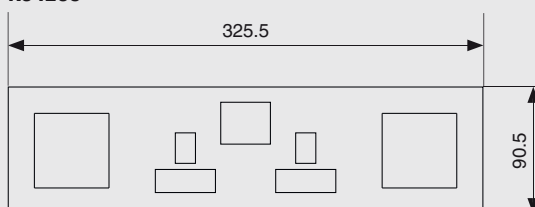
Elements multimedia plates are supplied with clip on segregator.

Dimensions (mm)

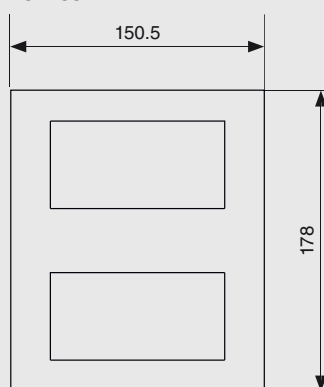
K34206 and K34207



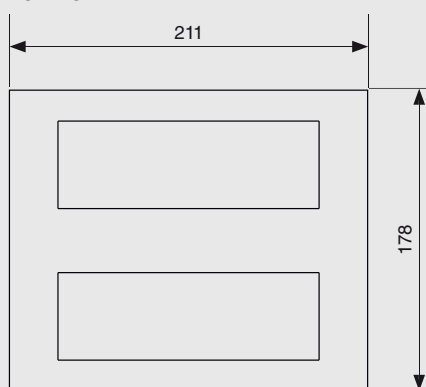
K34208



K34209



K34210



Grid Plus Technical

Modular Switching System

Standards and approvals

Switch modules

BS EN 60669-1:1999

Indicator units

BS 5733:2010

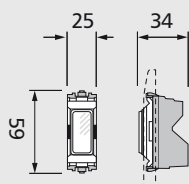
Dimmer switches

Dimmers comply with BS EN 60669-2-1

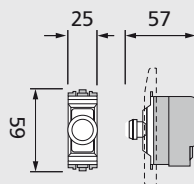
Accessory modules

Single non-isolated, TV/FM socket outlet,
BS 3041-2:1977

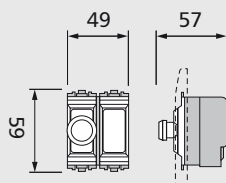
Module Dimensions (mm)



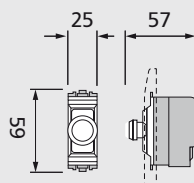
**24/240V
buzzer units**



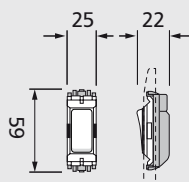
**Single dimmer
module**



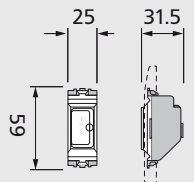
**Double dimmer
module**



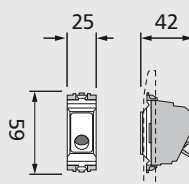
**Fluorescent
dimmer module**



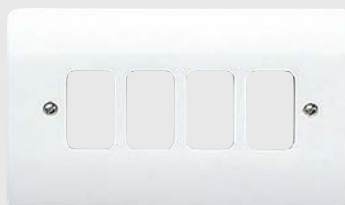
**All switch and
indicator modules**



Fuse unit



Cord unit

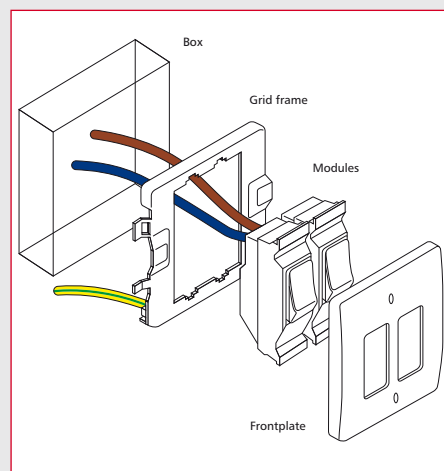


Description

Grid Plus is a comprehensive modular switching and monitoring system ideal for a variety of applications within the commercial, public and domestic sectors.

Grid Plus cover plates have the advantageous design features of the MK wiring device ranges and the interchangeable modules also feature many of the wiring and installation benefits common to the MK wiring device ranges.

The system is extremely easy to assemble (see illustration) and modules can be individually changed without re-wiring of complete assembly by removal of frontplate and simply clipping in or out as required. For further installation details see 'Installation' overleaf.



Features

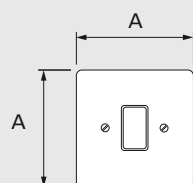
- Grid modules clip fit to frame without special tools
- Modules can be removed/replaced when grid frame is fixed in position
- Grid Plus frontplates available to match all MK wiring device ranges
- All products are 100% tested before delivery
- Options of neon/filament indicators label in rocker or printed rockers
- Wide variety of switch modules rated at 10 or 20 amps
- Single or double dimmer modules available
- Vast range of grid plates and modules from one source
- Manufactured from pre-galvanised steel to prevent corrosion
- Grid frame earth terminal has 16mm² cable capacity
- Backed out and captive terminal screws
- Up to 12 gang Logic Plus grid frontplates and up to 24 gang in decorative metal finish frontplates
- Top access terminal screws

For a full range of corresponding products,
see pages 70-97 in the product selector.

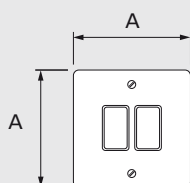
Modular Switching System

FRONTPLATE DIMENSIONS					
RANGE	MODULES	A	B	C	D
Logic Plus™	1,2,3,4,6,8,12	86	146	206	N/A
Aspect*	1,2,3,4,6,8	86	146	N/A	N/A
Edge™	1,2,3,4,6,8,9,12,18,24	86	146	206	267
Albany Plus™	1,2,3,4,6,8,9,12,18,24	86	146	206	267
Metalclad Plus™	1,2,3,4,6,8,9,12,18,24	86	146	206	267

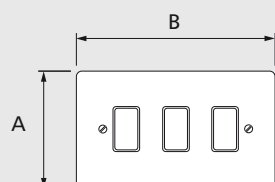
*Aspect 12 module front plate available through MK Design Service



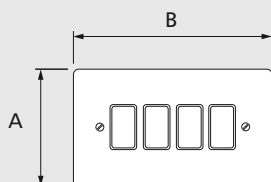
1 module



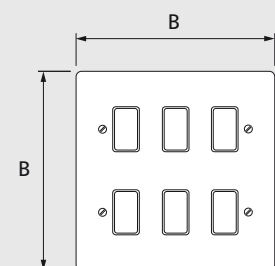
2 module



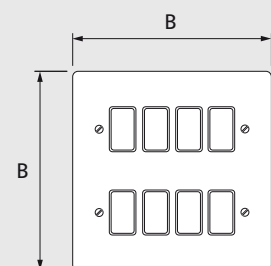
3 module



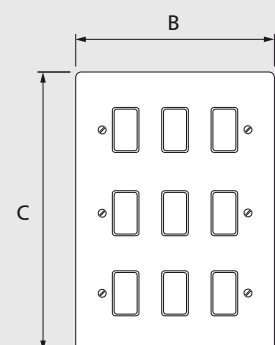
4 module



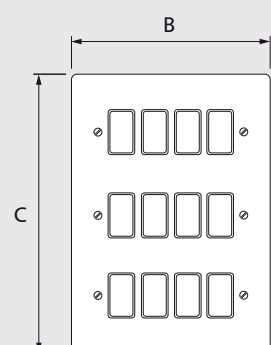
6 module



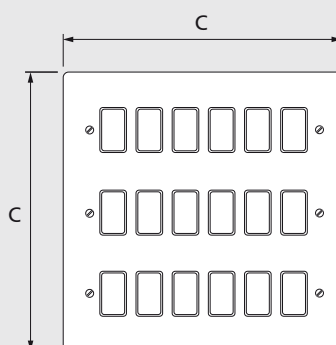
8 module



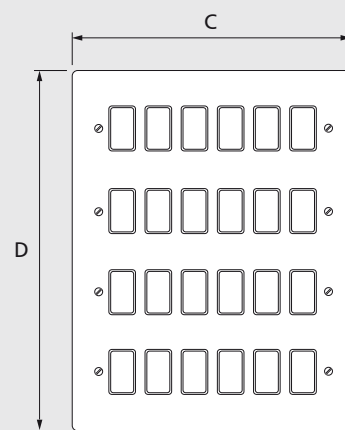
9 module



12 module



18 module



24 module

TECHNICAL SPECIFICATION

ELECTRICAL

SWITCHES

VOLTAGE RATING

250V a.c.

CURRENT RATING

10 or 20 amps – no derating when used on fluorescent or inductive loads

LOAD TYPE

No restriction

TERMINAL CAPACITY

4 x 1mm², 4 x 1.5mm², 4 x 1mm², 3 x 2.5mm², 2 x 4mm², 1 x 6mm²

INDICATOR UNITS

VOLTAGE RATING

24V indicators

min. 21V, max. 36V

240V indicators

min. 200V, max 250V

TERMINAL CAPACITY

as switches

BUZZER UNIT

VOLTAGE RATING (NOMINAL)

240V a.c.

24V a.c.

TERMINAL CAPACITY

as switches

FUSE UNIT

VOLTAGE RATING

250V

CURRENT RATING

13 amps

TERMINAL CAPACITY

2 x 4mm²

CORD OUTLET

VOLTAGE RATING

250V

CURRENT RATING

16 amps

TERMINAL CAPACITY

Supply – 2 x 4mm²

Load – 1 x 1.5mm² multi-strand

DIMMERS

VOLTAGE RATING

230V a.c., 50Hz

LOAD RATING

For single dimmer installations

K4500 min. 40W/VA, max. 400W/320 VA

K4501 min. 40W/VA, max. 220W/180 VA

K4511 min. 40W/VA, max. 220W/180VA LED 4-70W

For multiple dimmer installation see Load Adjustment table, page 531

LOAD TYPES

K4500, K4501 tungsten filament

(GLS) lamps

Low voltage lighting electronic or

wire-wound transformers

K4511 Good quality LED lamps

(10max)

SOFT START

Raises from low to control knob

setting in 1-3 secs, (increases

lamp life significantly)

TERMINAL CAPACITY

1 x 2.5mm², 2 x 1.5mm²

Grid Plus Technical

Modular Switching System

Standards and approvals

Switch modules

BS EN 60669-1:1999

Indicator units

BS 5733:2010

Dimmer switches

Dimmers comply with BS EN 60669-2-1

Accessory modules

Single non-isolated, TV/FM socket outlet,
BS 3041 Part 2: 1977

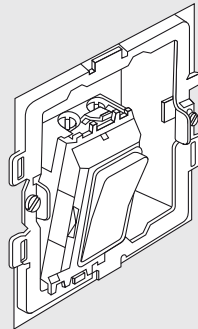
TECHNICAL SPECIFICATION

PHYSICAL (ALL PRODUCTS)

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

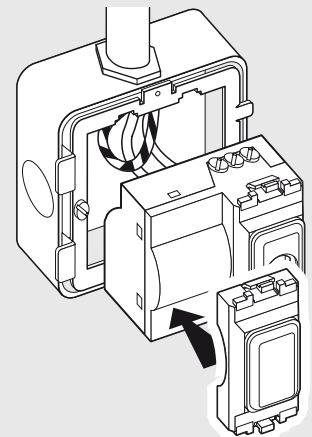
IP RATING
IP4X

MAX. INSTALLATION ALTITUDE
2000 metres



- 1 Locate bottom tab of module in base of grid.
- 2 Module pushes into place at top with a 'click'.
- 3 To remove module, press tab at top and lever forward.

Typical mounting arrangement



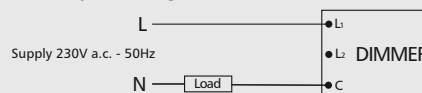
Dimmers

The two module size dimmer can be fitted to any grid mounting frame over 1 gang. The supplied blank module can be placed at the required pitch to fill in the second position on the grid.

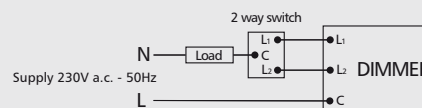
To avoid overheating when using more than one dimmer in the same Grid Plus enclosure it is recommended that the dimmers are preferentially mounted on the bottom row on 6, 8, 9, 12, 18 and 24 gang enclosures, before mounting on any other rows and its load adjusted in accordance with the information provided in the Load Adjustment Table 1 at the bottom of the next page.

Dimmer wiring diagram

One-way switching



Two-way switching (only one dimmer can be used)



Wires must be connected to the correct Dimmer terminals.
Supply Earth must only be connected to the installation metalwork and not to any of the terminals on the dimmer module.

Installation

General

Cut cables to length and make earth connections to grid. Earth: bond grid frame to metal mounting box. Grid frames are screwed to back box, modules wired as appropriate and simply clipped into grid frame by hand. No tools are necessary. The front plate is screw fixed to the grid frame to finish the assembly.

To remove or change modules, simply remove front plate. Individual modules fit perfectly into the frontplate in flush fitting installations.

Grid mounting

An integral design feature automatically ensures that the modules fit perfectly into the frontplate in flush fitting installations.

Some manual adjustment may be required for surface mounted applications or low profile ranges (Edge™).

Rocker window labels

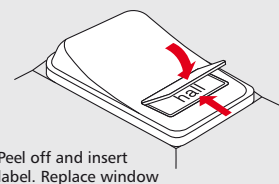
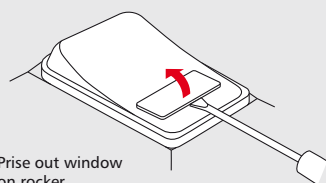
The following labels are available for insertion into window rockers.

air conditioner	water heater	dish washer	store
bedroom	dining area	kitchen	lounge
pool	lights	bar	conference room
office	reception	bell	push
front	middle	bottom	rear
back	top	landing	hall
porch	toilets	ladies	gents
exterior			

Modular Switching System

The simple installation process is shown below.

Spare labels and windows are available.



TV/FM socket outlets

The TV outlet must not be mounted in the same enclosure as mains voltage exceeding 50V.

Printed Modules

A wide range of pre-printed switches are also available. See pages 194-201 for details.

Grid Plus Dimmer Switches

Standards and approvals

All Grid Plus dimmer switches comply with the EC Low Voltage Directive: 73/23/EEC, Electromagnetic Compatibility Directive 89/336/EEC. They also comply with BS EN 60669-2-1 and BS EN 55015.

TECHNICAL SPECIFICATION

ELECTRICAL

MAINS SUPPLY VOLTAGE

230V a.c. (Nominal)

MAINS SUPPLY VOLTAGE RANGE

216V a.c. to 253V a.c.

MAINS SUPPLY FREQUENCY

50Hz

TYPE OF LOADS

Intelligent Dimmers

K4500, K4501

Fused GLS Tungsten Filament lamps to BS EN 60064: 1996 and BS EN 60432-1,2 rated at 230/240V. Dimmable wire wound or electronic Low Voltage Transformers of good quality. Can also be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability.

K4511

Is suitable for use with good quality dimmable LED lamps (10max). Due to market variability in LED lamp design it is advisable to check with lamp manufacturer to determine suitability. For best performance LED manufacturers lamps should not be mixed on one circuit.

Note: Transformers must be suitable for dimming leading or trailing edge dimmers.

Warning: These dimmer switches are not suitable for use with Fluorescent Lamps or CFL Lamps.

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +40°C

IP RATING

IP4X

MAX. INSTALLATION ALTITUDE

2000 metres



Description

Intelligent Dimmer Switches

Dimmer Switches belonging to this category employ the latest, state of the art, micro-controller base electronic circuitry and use current sensing to compute the load conditions. These products show progressive reaction to Over-load conditions, depending on the extent of Over-load – see Table 1. List numbers belonging to this category are identified by the suffix letters LV, e.g. K4501 WHI LV. These Dimmer Switches employ one pole change over switches to facilitate two way switching.

MK Grid Plus Dimmer Switches are not suitable for use with Fluorescent Lamps or CFL Lamps.

FEATURES

MK Grid Plus Dimmer Switches incorporate the following advanced features

- Suitable for dimming Low Voltage Halogen lamps via suitable, fully dimmable electronic or wire-wound transformers. See Table 2 for the number of transformers allowed to be used with each dimmer
- Can be used with good quality mains voltage halogen lamps incorporating GU10 bases. Please check with lamp manufacturer to determine suitability
- Unidirectional current sensing. While being used with wire-wound transformers for low voltage lighting, these dimmer switches continuously monitor the drive conditions to the transformers, which require essentially, bi-directional a.c. supply at their input terminals. If, due to some fault condition, the supply to the wire-wound transformer is detected to be unidirectional, which could result in over-heating and/or damaging the transformer, the dimmer switches' circuitry automatically stops supplying the transformer after a few cycles of detected unidirectional supply
- Soft Start, which gradually increases the light output from the load over 1 to 3 seconds after switch on. The Soft Start feature is also particularly beneficial when used to dim Mains Voltage Tungsten Halogen lamps which have inherent very high inrush current at switch on
- Grid Plus dimmer switches which are rated for LED load types incorporate a minimum brightness adjustment. This setting may be performed without removing any fixing screws to account for LED load performance. Please refer to the relevant installation instructions on mkelectric.co.uk

Multiple Dimmer Installation Load Ratings

When installing more than one dimmer in multi-gang plates, the power rating must be reduced to allow for heat generation.

See Table 1 page 531.

Grid Plus Dimmer Switches

TABLE 1 – LOAD ADJUSTMENT FOR GRID PLUS DIMMERS

FRONTPLATE SIZE, NUMBER OF GANGS	2	3	4	6	8	9	12	18	24
Max Power/Load per Row – Tungsten GLS Lamps – W	400	480	480	480	480	480	480	720	720
Max Power/Load per Row – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA	320	380	380	380	380	380	380	580	580
Max Power/Load for Total Plate – Tungsten GLS Lamps – W	400	480	480	740	740	940	940	1440	1800
Max Power/Load for Total Plate – Mains Tungsten Halogen Lamps or Low Voltage Transformers – W or VA	320	380	380	600	600	750	750	1155	1440

K4511 – No derating is required for LED load types.

TABLE 2 – OVERLOAD REACTION

40-400W CIRCUIT	40-300W CIRCUIT	COMMENTS
Overload management	Overload management	This is the minimum controlled voltage
40-400W nominal	40-220W nominal	
40-500W function without dimming	40-275W function without dimming	
> 500-700W dim to 68V±8V r.m.s.	> 275-375W dim to 68V±8V r.m.s.	
> 700W switch off	> 375W switch off	

Dimensions

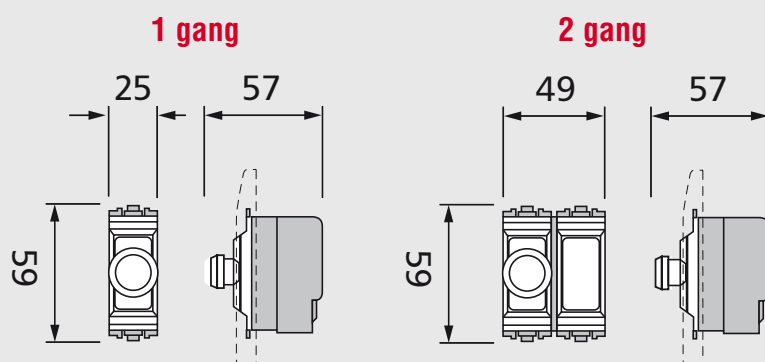


TABLE 3 – GRID PLUS INTELLIGENT DIMMER SWITCHES

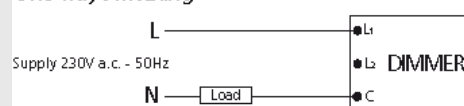
	RATING	MAX NO. OF TRANSFORMERS
1 module dimmer switch	40-220W (LV rating 40-180VA)	3
2 module dimmer switch	40-400W (LV rating 40-320VA)	5

Do not connect more than the maximum number of transformers stated for each dimmer. Grid Plus dimmer switch ratings are for each dimmer when installed singly.

In multiple installations, each dimmer switch must be de-rated – see Table 1 above.

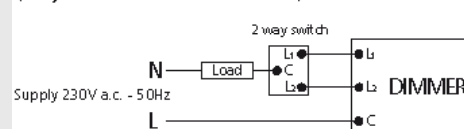
Wiring Diagrams

One-way switching



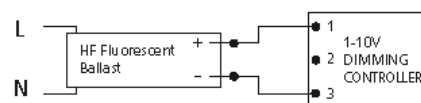
Two-way switching

(only one dimmer can be used)



Wires must be connected to the correct dimmer terminals.
DO NOT connect earth to dimmer.

Fluorescent dimmer



Wires must be connected to the correct dimmer terminals.
DO NOT connect earth to dimmer.

Fluorescent Dimmer

MK Fluorescent dimmers are low voltage controllers that require only a single two-core wire connection to 1-10V controllable ballast inputs. The dimmer operates by applying a variable resistance to the ballast 1-10V control input.

We recommend using a separate on/off switch to isolate the luminaire(s) in use.

Features

Preset adjust to set minimum light level. Preset adjust for use with multiple dimmable ballasts.

Up to four ballasts can be connected to one dimmer.

Grid Plus Technical

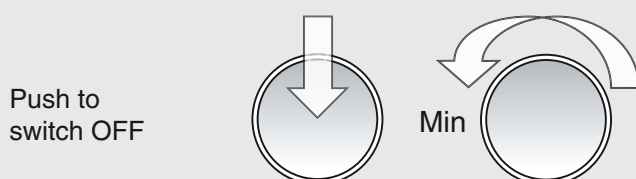
Minimum Brightness Adjustment for LED Intelligent Dimmers

The light output of some LED lamps may appear to be too dim or invisible when the dimmer knob is at the minimum dim level. Follow the steps below to adjust the minimum brightness level. This feature is primarily for adjusting the minimum brightness level of the LED lamp although it can be used for other load types.

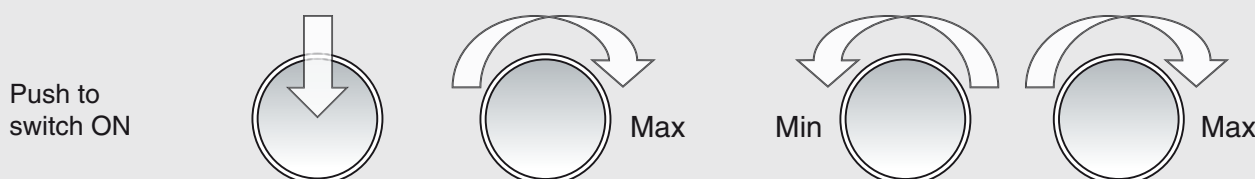
For a double gang dimmer, the light level of each gang has to be adjusted separately.

Step 1 – Access To Programming Mode

1. Push the dimmer knob so that it is in OFF state.
2. Set the dimmer knob to minimum level.



3. Turn on the dimmer and immediately rotate the knob 3 times in full rotary span within 5 seconds.



NOTE: Wait for 3 seconds, the lamp will then dim to minimum before automatically brightening to about 30% level. Turning/pushing the dimmer knob before the end of automatic brightening will end access to programming mode

4. Dimmer enters programming mode.

Step 2 – Adjust Brightness Level and Exit Programming Mode

5. Rotate the dimmer knob anticlockwise to adjust the lamp to the desired brightness level.

NOTE: Some LED lamps may not work properly if the brightness level is set too low thus it is recommended to keep the brightness level of the lamp at a visible level. The dimmer will exit programming mode automatically without saving the new setting if there is no dimmer knob movement for 15 seconds. The dimmer will restore its factory default light level.



6. Confirm the new setting and exit programming mode by turning OFF the dimmer.



Step 3 – Success indication (Programming Complete)

7. The next time the dimmer is turned on the lamp will automatically brighten to the maximum level before dimming to the brightness level corresponds to the knob level.

MK LED Dimmer



LED Dimmer from MK Electric offers the widest lamp compatibility for a reliable dimming solution and allows the user to create ambience for comfortable surroundings.

Product Specifications

- MK Electric is the first leading manufacturer to offer a LED dimming solution across its wiring devices range
- Available as a single or double dimmer, in MK Logic Plus and MK Grid Plus*
- MK Logic Plus product is rated 4 – 70W (300W/240VA)
- MK Grid Plus product is rated 4 – 70W (220W/180VA)
- Compatible with tungsten filament, low voltage halogen and dimmable LED lamps
- Greater user control, with a minimum load adjustment control on dimmer switch
- Maximum 10 lamps per circuit
- Intelligent load protection will prevent lamp wattage exceeding rating of dimmer



Reduce Energy Costs

LED lighting technology delivers enhanced lamp endurance and energy savings. Dimmable LED lamps can increase energy savings, allowing you to reduce energy costs further.

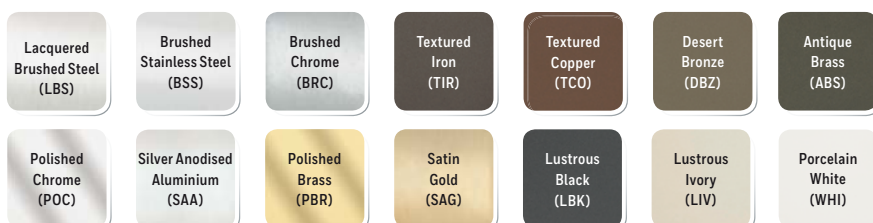
Achieve a Consistent Look

The MK LED Dimmer is available in a wide range of decorative finishes to compliment interior design styles. Matching wiring devices including sockets and switches are available to ensure a consistent look and feel.

A Perfect Match

The MK LED Dimmer has been tested with leading lamp manufacturers and is compatible with tungsten filament, low voltage halogen and a wide range of dimmable LED lamps.

Decorative LED Finish Selector



*Grid Plus range is available in 14 colour options, with black or white inserts. The Module is designed to be used with MK Electric's decorative range of Aspect, Edge, Albany Plus cover plates.

High Power Dimmer Technical

Standards and approvals

All High Power Dimmer modules comply with EN 60669-2-1

TECHNICAL SPECIFICATION

ELECTRICAL

MAINS SUPPLY
220-240V / 50Hz
220V / 60 Hz

TYPE OF LOADS

Fused GLS Tungsten filament lamps. Dimmable wirewound or electronic low voltage transformers of good quality. Inductive loads (i.e. conventional wire-wound transformers, etc.) must not be connected to the trailing edge dimmers.

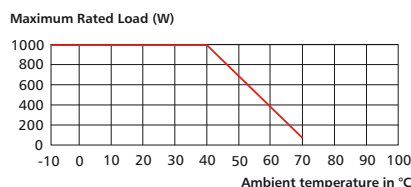
Warning: These dimmer modules are not suitable for use with fluorescent lamps or energy saving lamps.

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

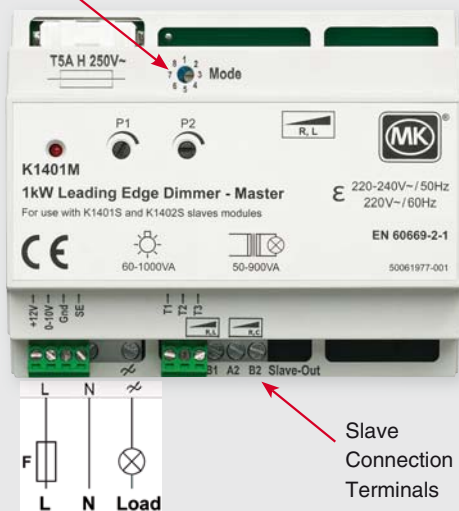
REDUCTION OF THE DIMMER POWER

If this product is used in an ambient temperature exceeding 40°C, the maximum allowable load will need to be reduced according to the table below. This will prevent the internal thermal protection in the product from activating and switching the load off.



Connection Diagram

Operating Mode
Selector Switch



Description

These dimmer modules are designed for mounting into distribution and consumer units containing 35mm Din rail according to EN50022. All master and slave dimmers must be connected to the same supply phase. Key points to observe during installation:

- The mains supply to the dimmer(s) must be protected by a suitable fuse or MCB rated no greater than 16A
- Do not exceed maximum control line length of 100m and do not run slave control lines parallel to mains and network cables
- Always observe the transformers recommended loading guidelines
- Load transformers at or close to their full rated capacity. Do not connect a small load to a larger transformers, (e.g. a 35W lamp on a 600VA transformer)
- Ensure that slaves are wired to the correct control terminals and that the polarity is observed

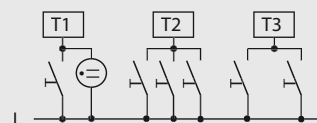
Note: The outputs of the K1402M and K1402S trailing edge dimmers may be connected in parallel to drive a single load greater than 1kW/900VA.

Control Wiring for operating Modes 1-6 (K1400) and Modes 1-7 (K1401/K1402)

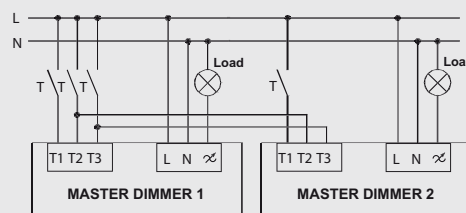
Control switches T1-3 should be push-to-make momentary contact switches.

Up to 10 operating switches may be wired in parallel with Neon indicators being allowed on control line T1 only.

Example 1: Multiple control buttons:



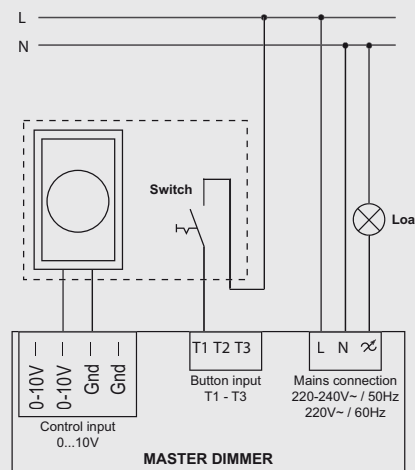
Example 2: Wiring for Multiple Master Dimmers with common Central-ON and Central-OFF



T1 = Separate Dimming control for each master
T2 = Central-ON for both master dimmers
T3 = Central-OFF for both master dimmers

Control Wiring for operating Mode 7 (K1400) and Mode 8 (K1401/K1402)

Control switches T1 should be a standard single pole light switch with dimming via the rotary 0/1-10V potentiometer connected between 0-10V and Gnd on the Master dimmer.

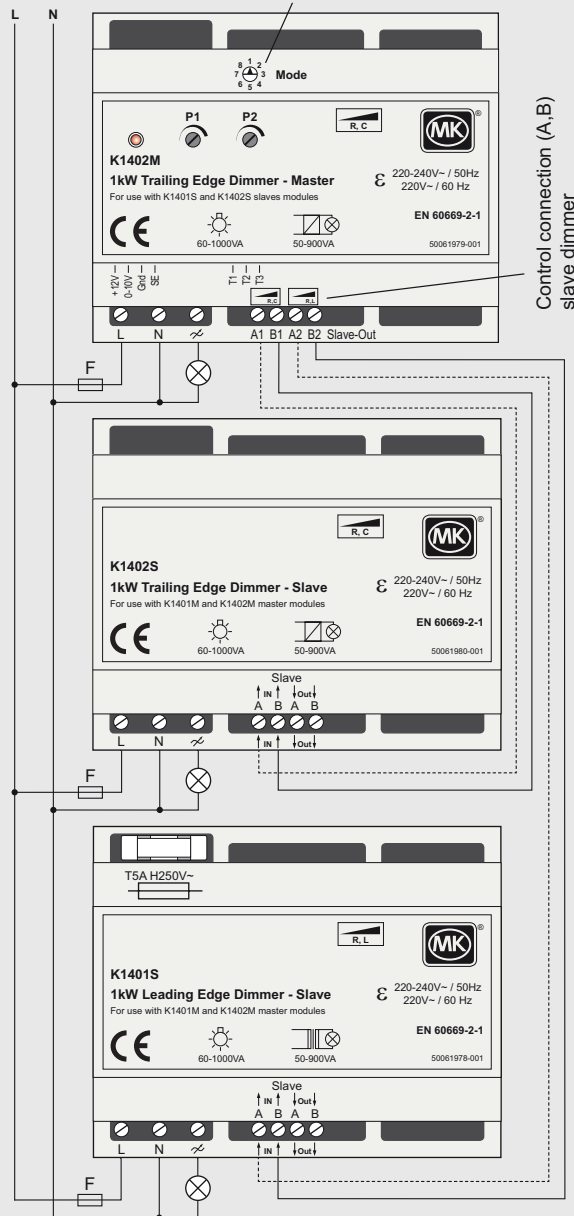


High Power Dimmer Technical

K1402M

220-240V~ / 50Hz
220V~ / 60Hz

Master-dimmer operating Mode 1 – 8



Control connection (A, B)
slave dimmer



PRODUCT APPLICATION

EDGE SINGLE DIMMER IN GOLD PLATED BESPOKE FINISH

Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit www.mkelectric.co.uk

Duraplug® Technical

mkelectric.co.uk



Plugs and Adaptors

Standards and approvals

All 13 Amp Duraplug® rubber plugs conform to BS 1363/A Part 1:1995. The plugs are third party approved and licensed by ASTA.

Round pin plugs comply with BS 546:1950.

TECHNICAL SPECIFICATION

TERMINAL/CABLE SIZE

LIST NO.	MAXIMUM CABLE SIZE	
	OUTER DIAMETER OF CABLE (MM)	CONDUCTOR C.S.A. (MM ²)
PF133	11.0	1.5
P53	9.4	0.75
P153	11.0	1.5



Description

13 Amp plugs

All Duraplug® 13 Amp plugs are supplied with 13 Amp fuses, and can be used on ring and radial circuits; however, alternative fuse ratings are available on special order.

Round pin plugs

Available unfused at 5 and 15 amp.

For a full range of corresponding products, see pages 236-239 in the product selector.

Lead Connectors, Extension Leads, Portable Sockets and Cable Couplers

Standards and approvals

2 pin Duraplug® lead connectors comply with BS 5733:2010.

3 pin Duraplug® lead connectors comply with BS 5733:2010.

All 13A Duraplug® trailing socket outlets comply with BS 1363/A Part 2:1995.

15A Round pin Duraplug® trailing socket outlets comply with BS 5733:2010 and BS 546 for plug pin aperture and engagement face dimensions.

All 13A Duraplug® portable socket outlets comply with BS 1363/A Part 2:1995.

Cable Couplers comply with BS 5733:2010. (BS 1363 pin centres for 13A, BS 546 pin centres for 5A and 15A).

Replacement fuses where fitted are to BS 1362.

Cables to BS EN 50525-2-11 (H05VV-F).



Description

A range of tough, rewirable lead connectors for use with extension leads for domestic, garden and light workshop applications. Two pin lead connectors are only for use with double insulated class 2 appliances. Three pin lead connectors must be used with earthed appliances.

Filtered socket only

Protects electronic equipment by filtering mains borne interference such as Voltage spikes. This product complies with the LV (72/23/EEC) directive.

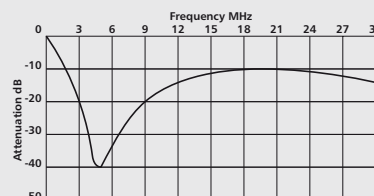
Filtered Response Characteristics

Mains filter rated at 250v RMS and 0.15µF

Varistar (Transient Voltage Suppressor) has a more constant voltage 275v ac

Clamping voltage @ 40A: 665v

Milliwatt constant: 800



TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c.

CURRENT RATING
As 'Product range' table

TERMINAL CAPACITIES
Lead connector – 1.0mm² conductor
Trailing/Portable socket – 1.5mm² conductor

MAX. CABLE CAPACITY
Lead connector – LCP102: 2-core insulated cable with 1.0mm² conductors, LCP103: 3-core insulated cable with 1.0mm² conductors. 11mm overall diameter
Trailing/Portable sockets – 3-core insulated cable with 1.5mm² conductors, 11mm overall diameter

PHYSICAL

AMBIENT OPERATING TEMPERATURE
-5°C to +40°C

MAX. INSTALLATION ALTITUDE
2000 metres

Installation

Duraplug® products should not be allowed to lie in excessively damp areas, e.g. wet grass, puddles etc. Care must be taken to avoid contact with petroleum spirits.

For added safety trailing sockets should be used in conjunction with a residual current device (RCD).

FEATURES

Lead connectors

- Manufactured with a thermoplastic elastomer cover and polypropylene inserts
- Integral cable grips
- Retaining lugs to prevent accidental disconnection

Trailing sockets

- Manufactured from tough ABS/Polycarbonate with rubber cover. FC153 is all-rubber construction
- All internal component parts are retained in the base for ease of wiring
- Visible red nylon shutters

Portable sockets

- Manufactured from high impact resistant ABS/Polycarbonate
- Equal length wire stripping for ease of wiring
- Visible red nylon shutters
- Optional wall mounting holes

Duraplug® Technical

mkelectric.co.uk



Extension Leads

TECHNICAL DATA GUIDE					
PRODUCT CODE	SOCKET OUTLETS	CABLE LENGTH CABLE	CABLE SPECIFICATION	PLUG TYPE	PLUG FUSE RATING
EXL135WHI	13A 4-gang socket with fuse and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour white	2	1.25mm ² <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.	Duraplug® Rubber cover type PF133. Colour white.	13
EXL135BLK	13A 4-gang socket with fuse and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour black	2	1.25mm ² <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.	Duraplug® Rubber cover type PF133. Colour black.	13
EXL136WHI	13A 4-gang socket with switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour white.	2	1.25mm ² <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.	Duraplug® Rubber cover type PF133. Colour white.	13
EXL136BLK	13A 4-gang socket with switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour black.	2	1.25mm ² <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.	Duraplug® Rubber cover type PF133. Colour black.	13
EXL137WHI	13A 4-gang socket with fuse, switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour white.	2	1.25mm ² <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour white.	Duraplug® Rubber cover type PF133. Colour white.	13
EXL137BLK	13A 4-gang socket with fuse, switch and neon, manufactured from high impact resistant ABS/Polycarbonate thermoplastic. BS 1363A Part 2:1995. Colour black.	2	1.25mm ² <HAR> 3-core PVC insulated cable to BS EN 50525-2-11 (H05VV-F). Colour black.	Duraplug® Rubber cover type PF133. Colour black.	13

Plugs and Adaptors Technical

Plugs and Adaptors

Standards and Approvals

All 13 Amp standard Safetyplugs conform to BS 1363 Part 1:1995. All 13 Amp Toughplugs conform to BS 1363/A Part 1:1995. The above plugs are third party approved and licensed by ASTA.

Round pin plugs comply with BS 546:1950.

Non-standard Safetyplugs comply with BS 1363 Part 1:1995 where applicable.



Description

13 Amp plugs

MK standard 13 Amp plugs can be used on ring and radial circuits and are available with 13 Amp fuses or 3 Amp fuses.

Round pin plugs

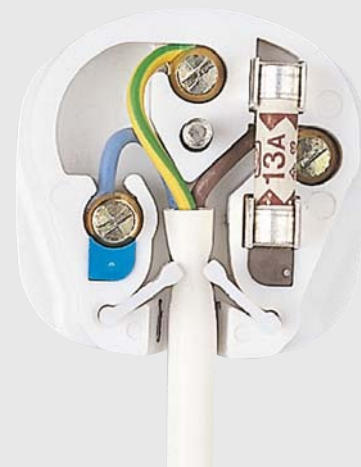
Available unfused at 2, 5 and 15 Amp. They can also be supplied fused, the 15 Amp fitted with a 5 Amp fuse. The British Standard does not allow the 15 Amp plug to be fused higher than 5 Amp. The 15 Amp plug is normally used on a radial system which is protected by a 20 Amp protective device.

Non standard safetyplug

Non standard safety plug utilizing "T" shaped earth pin specifically for use with MK non standard sockets only, e.g. K1257WHI – Logic Plus 1 Gang 13 Amp Switched, Non Standard Socket Outlet.

Adaptors

Both the 13 Amp two way adaptor and the shaver adaptor are designed to BS 1363: Part 3: 1995. The two way adaptor is unfused and has two shuttered 13 Amp socket outlets. The unique feature of the shaver adaptor is the raised wall on the socket face which restricts the size of plug which can be inserted to the typical shaver plug.



For a full range of corresponding products,
see pages 240-241 in the product selector.

Masterseal Plus™ Technical

13 Amp Socket Outlets

Standards and approvals

Socket outlets comply with
BS 1363 Part 2:1995.

All products allow compliance with
BS 7671:2008 when correctly installed.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING
250V a.c.

CURRENT RATING
13A

TERMINAL CAPACITY
Live, neutral & earth
3 x 2.5mm²
3 x 4mm²
2 x 6mm² (standard)

PHYSICAL

AMBIENT OPERATING TEMPERATURE
0°C to +40°C

IP RATING
IP66

MAX. INSTALLATION ALTITUDE
2000 metres



Description

A range of socket outlets specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water. Constructed from extremely robust polycarbonate, the range is sealed to IP66 against dust, water and is impact resistant and will completely protect virtually any 13 amp plug* including moulded plugs, allowing safe connection to any appliance.

*When in doubt, please use an MK 13A plug or Duraplug.

FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Patented gel seal provides durable water and dust tight seal for improved protection
- Sealed when in use with virtually any standard 13 Amp plug, including those with moulded on plug tops
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- 3 pin operated safety shutter on socket outlets
- 3mm minimum switch contact gap
- Additional electrical safety from neutral 'make first, break last' feature
- Moulded 'on' indicator flash on switches will not rub off
- Printed terminal markings on grey rear mouldings for clearer identification
- Double pole switching
- Switch contacts with silver contacts on both surface for good continuity
- Products are available in grey, black and white

Boxes

Rear entry back boxes are supplied for surface mounted situations or flush mounting when used with Flush Mounting Bezels (K56502, 1 gang / K56503, 2 gang). These boxes must also be used if cable or conduit enters the enclosure from the rear.

IP66 Protection

Each digit in the IP (Ingress Protection) rating denotes resistance to dust and water.

The Masterseal Plus™ IP66 rating breakdown is as follows:

IP COMPARISON

IP56	SOLID PROTECTION	LIQUID PROTECTION
	Dust protected. Ingress of dust is not entirely protected, but it must not enter in sufficient quantity to interfere with the satisfactory operation of the equipment. Complete protection against contact	Powerful jets of water against the enclosure from any direction shall have no harmful effects
IP66	SOLID PROTECTION	LIQUID PROTECTION
	Dust tight. No ingress of dust, complete protection against contact	Powerful jets of water against the enclosure from any direction shall have no harmful effects

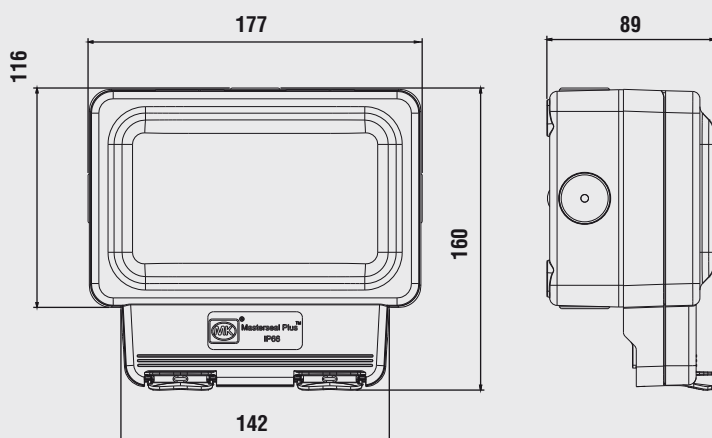
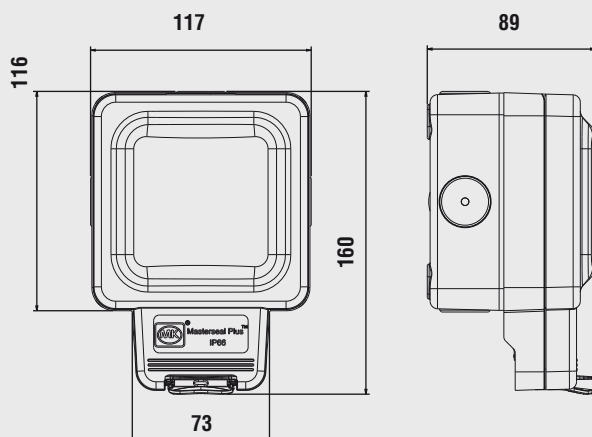
For a full range of corresponding products, see pages 242-249 in the product selector.

Masterseal Plus™ Technical

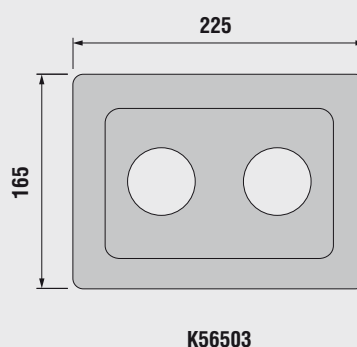
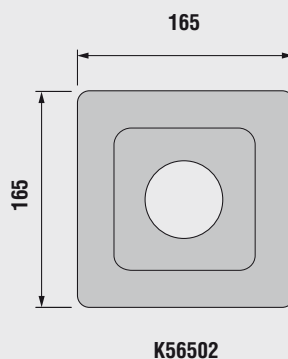
13 Amp Socket Outlets

Dimensions (mm)

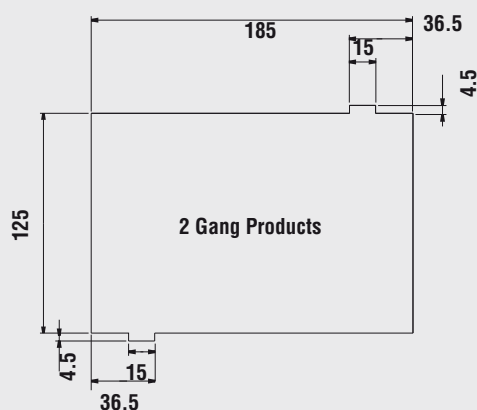
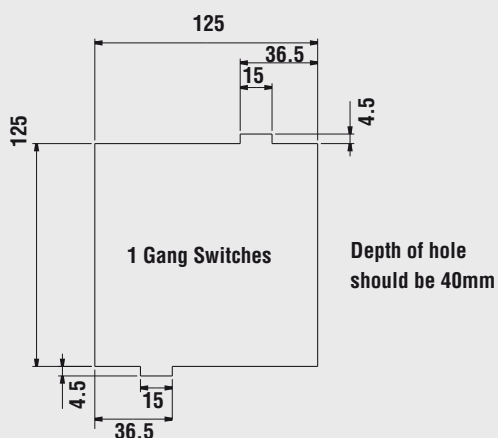
1 gang / 2 gang with fixing dimensions



Flush Mounting Bezels



Flush Mounting Bezel Cut-outs



Masterseal Plus™ Technical

Timer Socket Outlet

Standards and approvals

Socket outlet complies with
BS 1363 Part 2:1995.

Enclosure conforms to BS EN 60529 IP66

Timer module complies with IEC 60730-1
IEC 60730-2-7, EN 55014-1:2000, EN 55022,
EN 61000-3-2, EN 61000-4-2, EN 61000-4-4,
EN 61000-4-5, EN 61000-4-6, EN 61000-4-11

TECHNICAL SPECIFICATION

ELECTRICAL

SUPPLY VOLTAGE
230V a.c.

SUPPLY FREQUENCY
50Hz

CURRENT RATING FOR SOCKET OUTLET
(RESISTIVE) 13A

TERMINAL CAPACITY
Supply Line, Neutral and Earth
3 x 2.5mm²
3 x 4mm²
2 x 6mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
0°C to +40°C

IP RATING
IP66

MAX. INSTALLATION ALTITUDE
2000 metres



Description

This socket outlet, switched by a single pole timer module is specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water. Constructed from extremely robust polycarbonate, the product is sealed to IP66 against dust and water, and is impact resistant. The product ensures a very high degree of protection for virtually any 13A plug* to BS 1363, allowing safe connection to electrical appliances, which can be switched on and off at pre-determined times.

FEATURES

- Single 13A rated socket outlet switched via the Single Pole timer module
- Weekly Electronic Timer
- 24 hour clock
- Multi-function Liquid Crystal Display (LCD)
- 6 ON/OFF programmes per day
- Individual day selection as well as 4 block day selections
- Supplied with a LOOP terminal in the back box, which has 5 entries for cables
- Override button to switch the load ON/OFF directly, bypassing the timer
- Patented gel seal provides durable water and dust tight seal for improved protection
- Sealed when in use with virtually any standard 13 Amp plug, including those with moulded on plug tops
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- 3 pin operated safety shutter on socket outlets
- Products are available in grey, black and white

Timer module

The product employs an electronic timer module, which switches the Supply Line to the socket outlet, via a single pole relay. 6 ON/OFF cycles per day can be programmed via the buttons on the face of the timer module. Days in the week can be set individually or set to repeat in 4 separate blocks as follows:

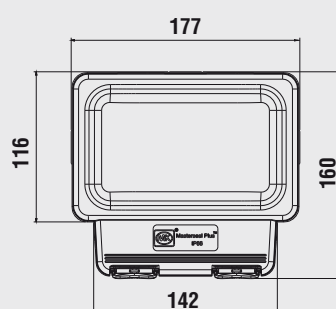
1. Monday to Friday
2. Saturday and Sunday
3. Monday to Saturday
4. Monday to Sunday

An Override button is available to switch the load ON/OFF directly, bypassing the timer.

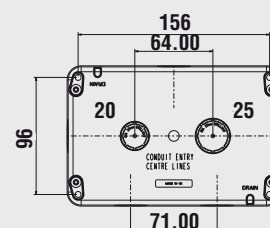
Boxes

Rear entry back box is supplied for surface mounted situations or flush mounting when used with Flush Mounting Bezel (K56503). These boxes must also be used if cable or conduit enters the enclosure from the rear.

Dimensions



Fixing Dimensions



* When in doubt, please use an MK 13A plug

Masterseal Plus™ Technical

Sentrysocket

Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:
Low Voltage Directive Electromagnetic Compatibility Directive (89/336/EEC)

Sentrysocket RCD Single Sockets also comply with the requirements of the following standards:
BS 7288:1990
BS EN 50082-1:1992

Sentrysocket RCD Double Sockets also comply with the requirements of the following standards:
BS 7288:1990
BS EN 61543:1996

TECHNICAL SPECIFICATION

ELECTRICAL

RATED VOLTAGE
240V a.c.

CURRENT RATING
13A resistive

RATED TRIPPING CURRENT
30mA

TERMINAL CAPACITY
1 Gang: 3 x 4mm²
2 Gang: 2 x 4mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE
0°C to +40°C

IP RATING
IP66

MAX. INSTALLATION ALTITUDE
2000 metres



Description

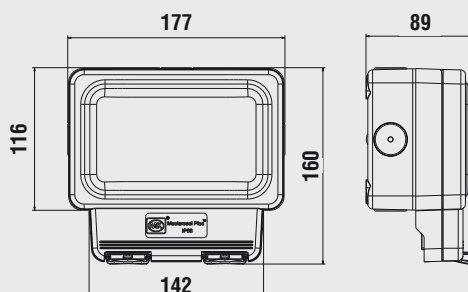
Sentrysocket provides a high level of protection for portable equipment when used in damp environments or outdoors.

FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Comply fully with current Wiring Regulations if installed correctly
- Double pole switching
- Flexible and versatile in use
- Ideal for use with equipment subject to wet weather or high humidity
- They are a.c. and pulsating d.c. fault current sensitives
- Products are available in grey, black and white

Dimensions (mm)

Single and double Sentrysockets are identical in size and shape.
The following dimensions apply



Masterseal Plus™
Sentrysocket is suitable for surface mounting only.

Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, ie they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

Passive control circuit

Incorporates a 'Stay-set' mechanism and is mains failure proof, ie it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

Masterseal Plus™ Technical

16A 2P+E Socket Outlet (Non UK)

Standards and approvals

Complies with IEC 60884-1:2006

TECHNICAL SPECIFICATION

ELECTRICAL

SUPPLY VOLTAGE

250V a.c.

CURRENT RATING

16A

TERMINAL CAPACITY

Supply Line, Neutral and Earth

4 x 1.5mm²

2 x 2.5mm²

2 x 4mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +40°C

IP RATING

IP66

MAX. INSTALLATION ALTITUDE

2000 metres

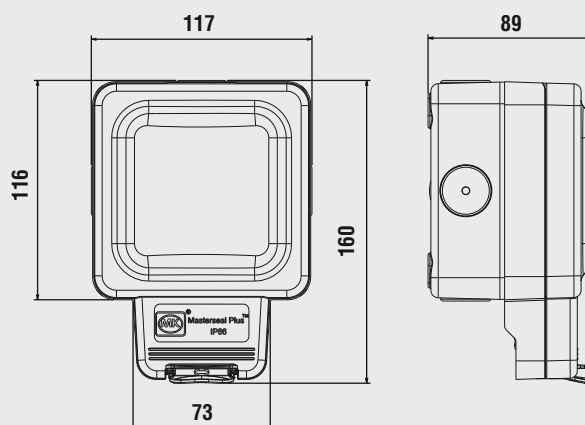


16A 2P + E German socket outlet is suitable for surface mounting only.

FEATURES

- IP66 protected to BS EN 60529:1992
- Patented gel seal provides durable water and dust tight seal for improved protection
- Sealed when in use with virtually any plug with a right-angled cable exit, including those with moulded on plug tops
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Products are available in grey, black and white

Dimensions (mm)





Technical Hotline
+44 (0)1268 563720

Masterseal Plus™ Technical

WIRING DEVICES
INGRESS PROTECTED
IP66

13A Connection Units

Standards and approvals

All Masterseal Plus™ Connection Units comply with BS 1363 Part 4:1995. All units are fitted with a 13A fuse link to BS 1362.

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

250V a.c.

CURRENT RATING

Connection units – 13 amp

TERMINAL CAPACITY

Supply terminal

2 x 6mm² stranded

3 x 4mm²

3 x 2.5mm²

3 x 1.5mm²

LOAD TERMINALS

1 x 1.5mm²

PHYSICAL

AMBIENT OPERATING TEMPERATURE

–5°C to +40°C

IP RATING

IP66

MAX. INSTALLATION ALTITUDE

2000 metres



Description

Masterseal Plus™ connection units are specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water. Constructed from extremely robust polycarbonate, the range is sealed to IP66 against dust, water and is impact resistant and will completely protect and provide a safe connection to any appliance.

FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Patented gel seal provides durable water and dust tight seal for improved protection
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Screw fitted fuse carrier
- Fuse carrier lockable in open position
- Captive fuse carrier
- 3mm minimum switch contact gap
- Double pole switching
- Moulded 'on' indicator flash on switches will not rub off

Impact Resistance

All Masterseal Plus™ products have an impact resistance equivalent to a 500g object falling from a height of 40cm.

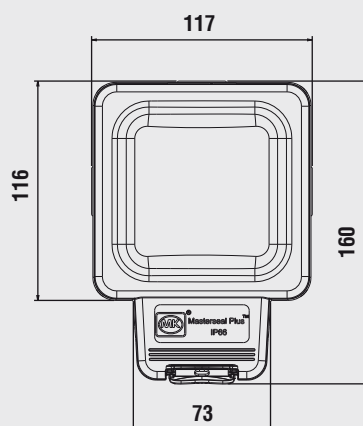
Boxes

Rear entry back boxes are supplied for 'tamper proof' surface mounted situations or flush mounting when used with Flush Mounting Bezels (K56502). These boxes must also be used if cable or conduit enters the enclosure from the rear.

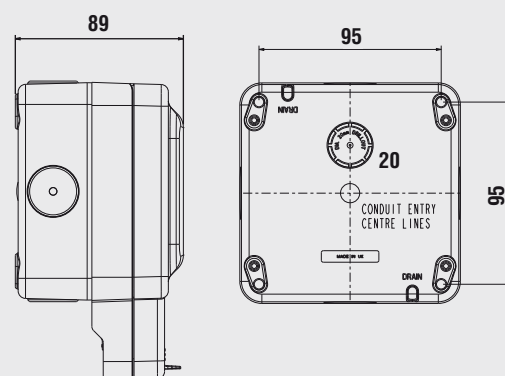
Installation

Masterseal Plus connection units can be wall or bench mounted. Do not use on a trailing lead.

Dimensions (mm)



Fixing Dimensions



Masterseal Plus™ Technical

Switches

Standards and approvals

Switches and enclosures comply with BS EN 60669-1:1999 and are IP66 for BS EN 60529:1992.

Switch modules comply with BS EN 60669-1:1999.

All products comply with or allow compliance with BS 7671:2008.



TECHNICAL SPECIFICATION

ELECTRICAL

SUPPLY VOLTAGE

250V a.c.

CURRENT RATING

10 or 20 amps – no derating when used on fluorescent or inductive loads.

LOAD TYPE

No restriction

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +40°C

IP RATING

IP66 (Grid Plus enclosures are IP56)

MAX. INSTALLATION ALTITUDE

2000 metres

Description

A range of switches and enclosures specifically designed for use outdoors or in areas heavily exposed to dust and/or splashing water.

Constructed from extremely robust polycarbonate, the range is sealed to *IP66 against dust, water and is impact resistant. Masterseal Plus™ is easy to install and the large rocker switches and clip in modules make it easy to use, even when wearing heavy gloves.

FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Large, easy to use rocker switches
- Wide range of switch modules and accessories make Masterseal Plus™ versatile
- Switch modules snap into position

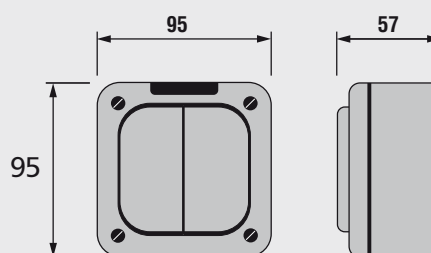
Boxes

Rear entry back boxes are supplied for surface mounted situations or flush mounting when used with Flush Mounting Bezels (56502). These boxes must also be used if cable or conduit enters the enclosure from the rear.

Customer Configurable Grid – K56414

1. Up to two wiring device modules may be selected from the MK Grid Plus modular range and fitted to the configurable grid enclosure.
2. If a TV outlet is to be fitted in combination with a mains voltage device, then it is essential that the cabling and modules are isolated from each other.
3. Grid modules are assembled into the front face of the front plate and clip firmly into position.
4. Two bezel mouldings are supplied. Select the appropriate bezel depending on whether one or two modules are fitted, locate in position and secure with the two screws provided as shown in Figure 1.

Dimensions (mm)



Fixing dimensions

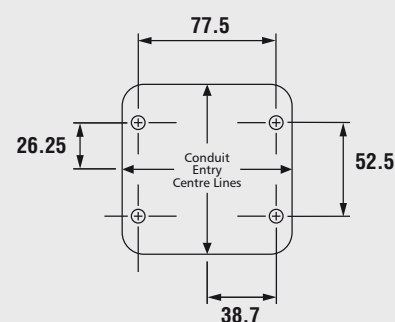
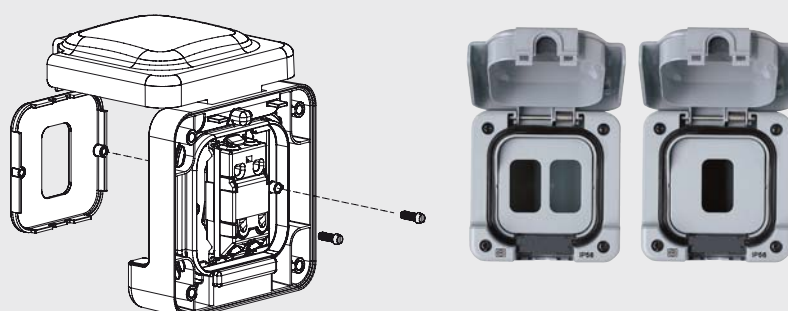


Figure 1



Masterseal Plus™ Technical

Euro Enclosure and Telephone and Data Modules

Standards and approvals

Telephone sockets K5820 and K5821 comply with the following: BS 6312-2.

K5844/K5845/K5845s comply with:
ISO/IEC 11801, EN 50173, TIA 568, and
EN 41003.

K5887 complies with FCC68 and EN 41003.

TECHNICAL SPECIFICATION

PHYSICAL

AMBIENT OPERATING TEMPERATURE

0°C to +40°C

IP RATING

IP66

MAX. INSTALLATION ALTITUDE

2000 metres



Description

A range of Euro telephone, data and blank modules and weatherproof enclosure. Enclosure accommodates 2 modules providing care is used to ensure that the cables are correctly routed through the outlet.

Installation (Telephone socket modules)

Product performance, systems compatibility

Master Sockets: For use as the first socket outlet on a direct exchange. They contain the required surge protector (for line protection against electrical surges) and ringing capacitor.

Secondary Sockets: for use as extension sockets when connected on the same line as a Master Socket.

FEATURES

- IP66 protected to BS EN 60529:1992
- Ideal for gardens, workshops, industry, commercial, public areas, farm buildings, ponds, pools etc.
- Easy to install: fixed gasket, captive backed out terminal screws, clearly marked top access angled terminals, push fit knockouts and conduit entries, rear drill holes
- Patented gel seal provides durable water and dust tight seal for improved protection
- Improved catch eases opening and closing during use
- Manufactured from polycarbonate for impact protection
- Products are available in grey, white and black

MODULE DIMENSIONS (MM)

25 x 50

For euro module wiring diagrams, please refer to wiring devices technical section, pages 467-475

Masterseal Plus™ Technical

Installation

Notes

1. The enclosure is made from polycarbonate which is a highly durable material, and ideal for most environments. However, if installing in areas where creosote, some chemicals, synthetic oils and harsh cleaners are used, seek advice from MK Technical Sales Service Department or refer to the table on page 552.
2. The enclosure must be mounted on a flat, vertical surface that is free from grease, dirt and loose material.
3. If the conduit cable entry is from the top or sides the lower drain hole in the mounting box must be drilled out using a 5mm diameter drill bit. This will allow any condensation formed in the conduit system to drain out of the unit.

NOTE: opening the drain hole will reduce the IP rating; therefore ensure that jetted water is not directed at the unit.

4. The drain hole should not be drilled out if the enclosure is to be installed in an excessively dusty environment. If the drain hole is not drilled out, only the bottom cable entry must be used.
5. If conduit is used for bottom cable entry, a 5 mm diameter drain hole needs to be drilled in the lowest point of the conduit run.
6. If wiring directly to the enclosure without conduit and the installation is outdoors, ensure that a cable specified for outside use is used.
7. PVC Cable Entry (see Service Items) must only be used at the bottom cable entry of the enclosure.

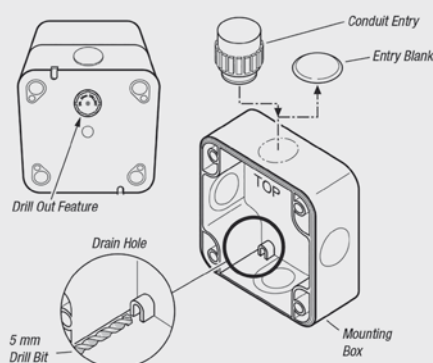
NOTE: If using box coupler 56464 to join boxes use a suitable sealant to ensure full IP protection is maintained.

Instructions

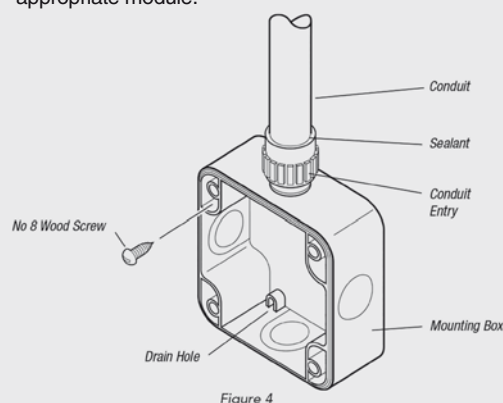
CAUTION

Do not allow paint or wood preservative to come into contact with the product. The product can be safely mounted on painted surfaces or surfaces treated with wood preservative when the paint or wood preservative is completely dry.

1. Read the safety instructions.
2. Mark the position of the fixing holes for the mounting box.
3. Drill holes and fit wall plugs suitable for a No. 8 wood screw.
4. Prior to fitting the mounting box to the wall, drill out the drain hole if required (see Installation Note 3). File out the complete drain hole profile. Take care not to damage the small internal wall.
5. Carefully remove the cable entry blanks, or drill out the rear cable entry, as required and fit conduit entry (see Service Items).
6. Secure the mounting box to wall with four No. 8 wood screws. Position drain hole at bottom left hand corner.
7. Align and install conduit or cable entry as required.
8. Seal the conduit and conduit entry with a non setting conduit sealant such as EWPLUS. Refer to Figure 4.



9. For instructions on how to wire the front plate of telephone and data products see the instruction leaflets supplied with the appropriate module.



10. Before wiring and fitting the front plate, position the seal on the front plate. Ensure the holes are aligned and seal is aligned with the ribs on the mounting box and the cables are threaded through the seal and screws are fully tightened.

Masterseal Plus™ Technical

Installation

11. Wire and fit the front plate. Ensure the seal is correctly located and the cables are not trapped or pinched.

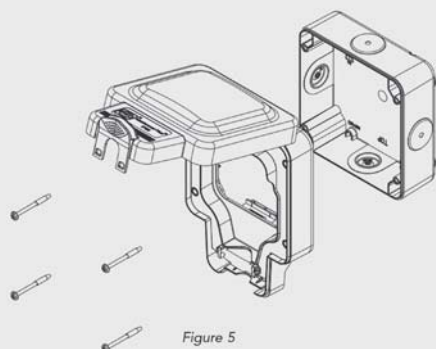


Figure 5

When installing connection units using the front flexible cable clamp

1. Strip back the outer sheath on the appliance flexible LOAD cable and trim wires to 55mm in length. Do not trim the insulation on the three individual cables for the moment.
2. When using cables of 10mm or more in diameter, it is necessary to prestress the cable clamp before attempting to load the cable.
3. To pre-stress the clamp insert a flat bladed screwdriver into the cord grip as shown in fig. 6a and flex the clamping jaw open until it touches the grey base moulding fig. 6b. Then remove the screwdriver.

IMPORTANT: The clamp must not be re-used for cables below 6mm diameter after pre-stressing.

4. Cables below 10mm diameter do not need the cable clamp pre-stressed and the installation from this point is the same for all products.
5. To assist pushing the load cable through the front of the product, ease the clamping jaw pressure by holding the product securely in one hand and pushing the tab firmly with your thumb in the direction shown in fig. 7a.
6. Continue pushing the cable through the clamp until the outer sheath reaches the cable stops. See fig. 7b. The jaws must clamp on the outer sheath.
7. Carefully strip back the insulation on all three cables to expose 10mm of the conductor.
8. Ensure all conductors are connected to the appropriate terminals.

NOTE: Terminal screws must be securely tightened. Pull on each cable to ensure that the terminal screw has securely fixed the conductor.

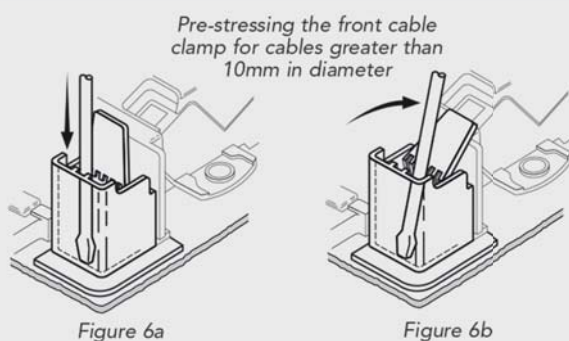


Figure 6a

Figure 6b

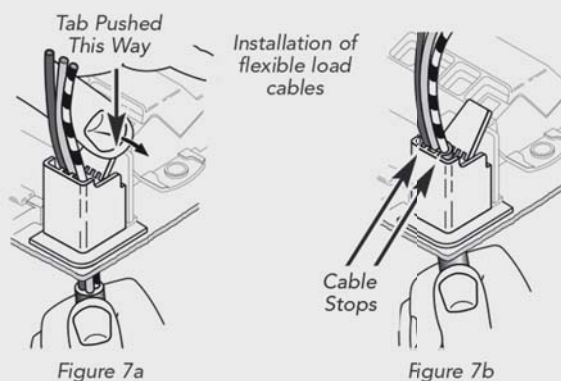


Figure 7a

Figure 7b

Testing

Test the completed installation in accordance with the latest edition of the IET wiring regulations (BS 7671).

Service and Maintenance

CLEANING

1. The exterior of the product must only be cleaned with a solution of mild detergent (e.g. washing up liquid) and warm water.

Masterseal Plus™

Technical

Polycarbonate Chemical Resistance Table

REAGENT	CONCENTRATION	RESISTANCE
ACETIC ACID, AQUEOUS	40	■
ACETIC ACID, AQUEOUS	5	▲
ACETONE		■
AMMONIA, AQUEOUS	10	■
BENZENE		■
BEVERAGES, ALCOHOLIC		▲
BITUMEN		Not tested
BLEACHING LYE, AQUEOUS		■
BORIC ACID		▲
BUTANOL		■
BUTTER		●
BUTYRIC ACID		■
CALCIUM CHLORIDE, AQUEOUS	10	▲
CARBON TETRACHLORIDE		■
CHLORINE GAS		●
CHLORINE, AQUEOUS SOLUTION		■
CHLOROFORM		■
CITRIC ACID, AQUEOUS	10	▲
COCONUT OIL		▲
DIESEL FUEL		●
EDIBLE FATS		▲
EDIBLE OILS		▲
ETHANOL	96	▲
ETHYLENE ACETATE		■
ETHYLENE ETHER		■
FORMALDEHYDE, AQUEOUS	30	▲
FORMIC ACID, AQUEOUS	40	●
FREON, LIQUID		▲
FRIGEN, LIQUID		▲
FRUIT JUICES		▲
FUEL OIL (HEATING)		●
GAS LIQUOR		Not tested
GLYCERINE		▲
GLYCOL		▲
GLYSANTINE, AQUEOUS	40	Not tested
HEXANE		▲
HYDROCHLORIC ACID, AQUEOUS	2	■
HYDROFLUORIC ACID, AQUEOUS	40	▲
HYDROGEN PEROXIDE, AQUEOUS	10	▲
INK		▲
IODINE TINCTURE, ALCOHOLIC		■

Key

- ▲ Resistant
- Limited resistance
- Not resistant

NOTE: Caution is advised to ensure compatibility of cleaning agents used in the vicinity of Polycarbonate plastics, particularly if frequent cleaning is employed.

Masterseal Plus™

Technical

Polycarbonate Chemical Resistance Table

REAGENT	CONCENTRATION	RESISTANCE
KEROSENE		■
LATIC ACID, AQUEOUS	10	▲
LAVENDER OIL		Not tested
LINSEED OIL		Not tested
MACHINE OILS		■
MERCURY		▲
METHANOL		■
METHYLENE CHLORIDE		■
MILK		▲
MINERAL OILS		▲
NITRIC ACID, AQUEOUS	2	▲
OLEIC ACID		▲
OZONE		▲
PARAFFIN OIL		▲
PEPPERMINT OIL		Not tested
PERFUMES		■
PETROL (GASOLINE)		●
PHENOL, AQUEOUS		■
PHOSPHORIC ACID, AQUEOUS	10	■
POTASSIUM HYDROXIDE SOLUTION, AQUEOUS	5	■
POTASSIUM HYDROXIDE SOLUTION, AQUEOUS	50	■
ROSE OIL		●
SALT SOLUTION, HOUSEHOLD, AQUEOUS	10	▲
SILICON OILS		▲
SOAP SOLUTION, AQUEOUS		▲
SODA SOLUTION, AQUEOUS	10	▲
SODIUM HYDROXIDE SOLUTION, AQUEOUS	10	■
SODIUM, AQUEOUS	10	Not tested
SULPHUR		▲
SULPHURIC ACID, AQUEOUS	10	▲
TALLOW		▲
TAR		▲
TETRACHLOROETHENE		■
TOLUENE		■
TRICHLOROETHANE		■
VASELINE		▲
WATER		▲
WATER, HOT (80°C)		●
WAX, MELTED		Not tested
XYLENE		■

Key

- ▲ Resistant
- Limited resistance
- Not resistant

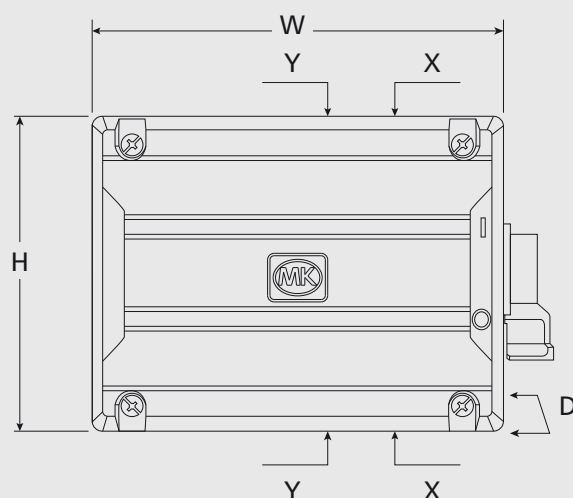
NOTE: Caution is advised to ensure compatibility of cleaning agents used in the vicinity of Polycarbonate plastics, particularly if frequent cleaning is employed.

Commando Safetyswitch Technical

mkelectric.co.uk

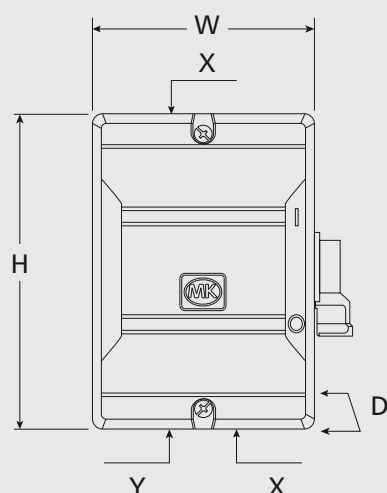


K6725


For a full range of corresponding products,
see pages 250-253 in the product selector.

K6725																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO) LIST NUMBER (NOT SUPPLIED)	ADDITIONAL AUXILIARY CONTACT (NC) LIST NUMBER (NOT SUPPLIED)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6725	25	20	11	1.5-4	6 (2xL1, 2xL2 & 2xL3)	2	6818	6819	IP65	190	130	65	2 x Ø25	1 x Ø16	124	90	5
K6725YEL	25	20	11	1.5-4	7 (2xL1, 2xL2, 2xL3 & AUX)	2	6818	6819	IP65	190	130	65	2 x Ø25	1 x Ø16	124	90	5

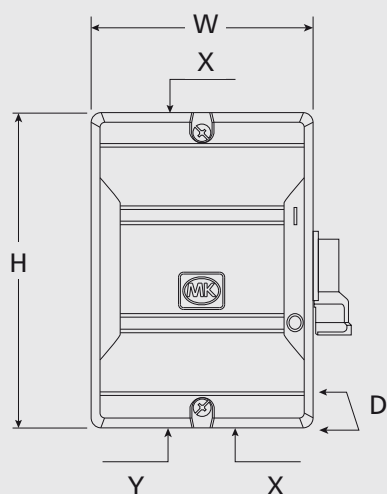
K6816



K6816																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO) LIST NUMBER (NOT SUPPLIED)	ADDITIONAL AUXILIARY CONTACT (NC) LIST NUMBER (NOT SUPPLIED)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6816	16	10	7.5	1.5-4	3 (L1, L2, & L3)	1	6818	6819	IP65	111	130	60	2 x M25	-	64	90	5
K6816YEL	16	10	7.5	1.5-4	3 (L1, L2, L3 & AUX)	1	6818	6819	IP65	111	130	60	2 x Ø25	-	64	90	5

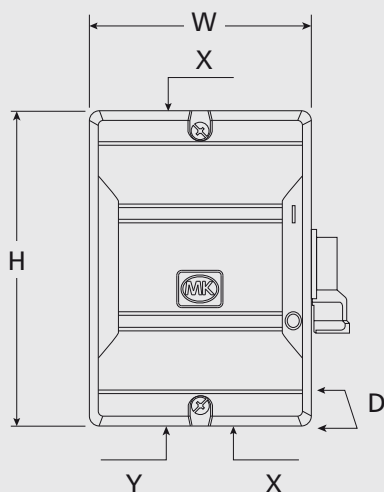
Commando Safetyswitch Technical

K6825



K6825																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO) LIST NUMBER (NOT SUPPLIED)	ADDITIONAL AUXILIARY CONTACT (NC) LIST NUMBER (NOT SUPPLIED)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6825	25	20	11	1.5-4	3 (L1, L2, & L3)	1	6818	6819	IP65	111	130	60	2 x M25	-	64	90	5
K6825YEL	25	20	11	1.5-4	3 (L1, L2, L3 & AUX)	1	6818	6819	IP65	111	130	60	2 x M25	-	64	90	5

K6840



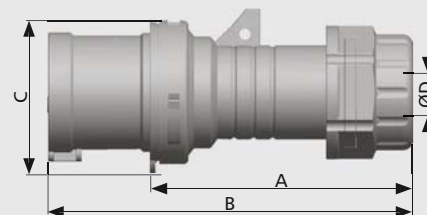
K6840																	
LIST NUMBER	ITHE (A)	IE (AC23A)	RATED OPERATIONAL POWER (KW)	TERMINAL CAPACITY (MM²)	NO OF POLES	MAX. NUMBER OF ADDITIONAL AUXILIARY CONTACTS	ADDITIONAL AUXILIARY CONTACT (NO)	ADDITIONAL AUXILIARY CONTACT (NC)	DEGREE OF INGRESS PROTECTION	ENCLOSURE SIZE (MM)			CABLE ENTRY		FIXING DIMENSIONS (MM)		
										W	H	D	X	Y	A	B	G
K6840	40	25	11	1.5-10	3 (L1, L2, & L3)	1	6818	6819	IP65	138	165	68	2 x M32	2 x M16	90	127	5
K6840YEL	40	25	11	1.5-10	3 (L1, L2, L3 & AUX)	1	6818	6819	IP65	138	165	68	2 x M32	2 x M16	90	127	5

Commando Technical

mkelectric.co.uk



Plugs 16 and 32 Amp

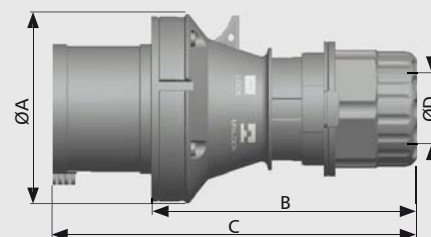
IP44 SPLASHPROOF


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM		
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C
16A	2P+E	K9000YEL	K9001BLU 6		8.2	13	1-2.5	132.3	95.5	55.5
16A	3P+E		K9006BLU 6	K9007RED 6	8.9	15.5	1-2.5	132.3	95.5	61.5
16A	3P+N+E		K9014BLU 9	K9015RED 6	10.1	17	1-2.5	132.3	95.5	67.5
32A	2P+E	K9032YEL 4	K9033BLU 6		11.7	18	2.5-6	135.8	90	72.5
32A	3P+E		K9036BLU	K9037RED 6	11.7	22	2.5-6	135.8	90	72.5
32A	3P+N+E		K9044BLU 9	K9045RED 6	14.2	22	2.5-6	141.8	95.8	79.7

Earth Hour Position

*Flexible conductors

Plugs 63 Amp

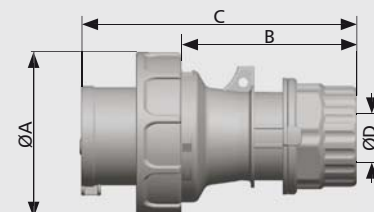
IP44 SPLASHPROOF


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D
63A	2P+E	K9063BLU 6			16.5	36	6-16	102	180.8	247.3	36.4
63A	3P+E		K9066RED 6		16.5	36	6-16	102	180.8	247.3	36.4
63A	3P+N+E			K9071RED 6	16.5	36	6-16	102	180.8	247.3	36.4

Earth Hour Position

*Flexible conductors

Plugs 16 and 32 Amp

IP67 WATERTIGHT


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM		
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C
16A	2P+E	K9023YEL 4	K9024BLU 6		8.2	13	1-2.5	72	81.2	117.6
16A	3P+E			K9025RED 6	8.9	17	1-2.5	75.4	87.2	123.6
16A	3P+N+E			K9026RED 6	10.1	17	1-2.5	88	93.6	129.6
32A	2P+E		K9054BLU 6		11.7	18	2.5-6	92	97.2	142.6
32A	3P+E									
32A	3P+N+E			K9056RED 6	14.2	22	2.5-6	98	102.9	148.3

Earth Hour Position

*Flexible conductors



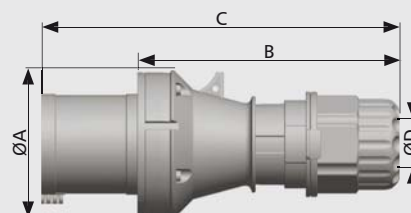
Technical Hotline
+44 (0)1268 563720

Commando Technical

WIRING DEVICES
INGRESS PROTECTED

Plugs 63 Amp

IP67 WATERTIGHT



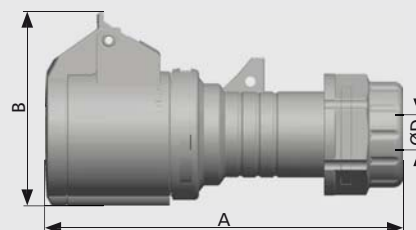
AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM		
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C
63A	2P+E	K9063BLU 6			16.5	36	6-16	102	180.8	247.3
63A	3P+E		K9066RED 6		16.5	36	6-16	102	180.8	247.3
63A	3P+N+E		K9292RED 6	K9071RED 6	16.5	36	6-16	102	180.8	247.3

Earth Hour Position

*Flexible conductors

Connectors 16, 32 and 63 Amp

IP44 SPLASHPROOF



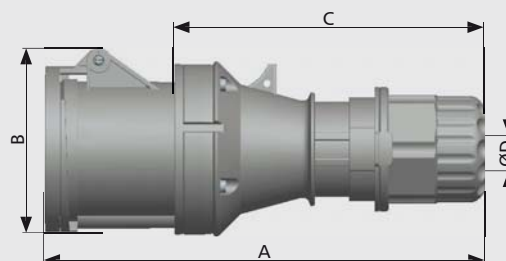
AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM	
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B
16A	2P+E	K9100YEL 4	K9101BLU 6		8.2	13	1-2.5	142	77.3
16A	3P+E			K9107RED 6	8.9	15.5	1-2.5	142	80.8
16A	3P+N+E			K9115RED 6	10.1	17	1-2.5	142	90
32A	2P+E	K9132YEL 4	K9133BLU 6		11.7	18	2.5-6	148	92
32A	3P+N+E		K9143BLU 9	K9144RED 6	11.1	22	2.5-6	154	98.5
63A	3P+N+E			K9170RED 6	16.5	36	6-16	109.5	256

Earth Hour Position

*Flexible conductors

Connectors 63 Amp

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM		
		LIST NO	LIST NO	MIN	MAX		A	B	C
63A	2P+E	K9172BLU 6		16.5	36	6-16	109.5	256	36.4
63A	3P+E								
63A	3P+N+E		K9170RED 6	16.5	36	6-16	109.5	256	36.4

Earth Hour Position

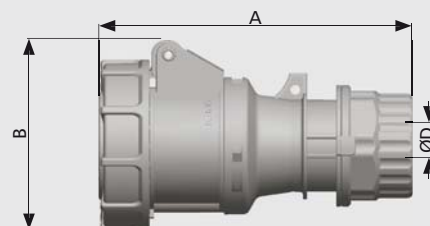
*Flexible conductors

Commando Technical

mkelectric.co.uk



Connectors 16 and 32 Amp

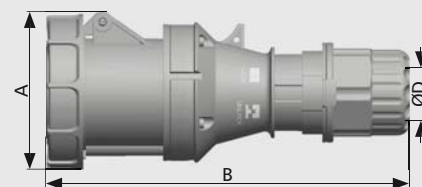
IP67 WATERTIGHT


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM	
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B
16A	2P+E	K9123YEL 4	K9124BLU 6		8.2	13	1-2.5	151	80
16A	3P+E			K9125RED 6	8.9	17	1-2.5	168	88
16A	3P+N+E			K9126RED 6	10.1	21.5	1-2.5	170	97
32A	2P+E	K9155YEL 4	K9156BLU 6		11.7	21.5	2.5-6	177	102
32A	3P+E			K9157RED 6	11.7	21.5	2.5-6	177	102
32A	3P+N+E			K9158RED 6	14.2	21.5	2.5-6	182	109

Earth Hour Position

*Flexible conductors

Connectors 63 Amp

IP67 WATERTIGHT


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM	
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B
63A	2P+E	K9855YEL 4	K9856BLU 6		14	41	4 - 16	286	111
63A	3P+E			K9842RED 6	16.5	41	4 - 16	286	111
63A	3P+N+E			K9852RED 6	16.5	41	4 - 16	286	111

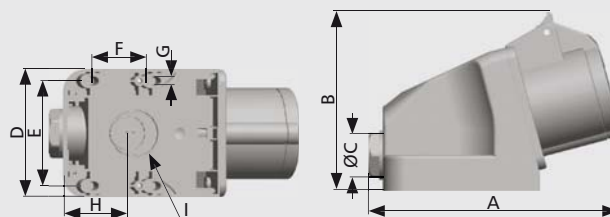
Earth Hour Position

*Flexible conductors

Socket Outlets Angled Surface Mounting 16 and 32 Amp

FITTED WITH CABLE ENTRY GLAND THREAD SIZE M48

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM²	DIMENSIONS IN MM								
		LIST NO 🕒	LIST NO 🕒	LIST NO 🕒	MIN	MAX		A	B	C	D	E	F	G	H	I
16A	2P+E	K9200YEL 4	K9201BLU 6		8.2	13	1-2.5	138.7	99	20	71	58	34	5	35	Ø19/26
16A	3P+E		K9206BLU 9	K9207RED 6	8.9	15.5	1-2.5	138.7	101	20	71	58	34	5	35	Ø19/26
16A	3P+N+E		K9214BLU 9	K9215RED 6	10.1	17	1-2.5	139.7	105	20	71	58	34	5	35	Ø19/26
32A	2P+E	K9232YEL 4	K9233BLU 6		11.7	18	2.5-6	150.6	107	25	71	58	34	5	35	Ø19/26
32A	3P+E		K9236BLU 9	K9237RED 6	11.7	22	2.5-6	150.6	107	25	71	58	34	5	35	Ø19/26
32A	3P+N+E		K9240BLU 9	K9241RED 6	11.1	22	2.5-6	151.6	110	25	71	58	34	5	35	Ø19/26
🕒 Earth Hour Position							*Solid or Stranded conductors									

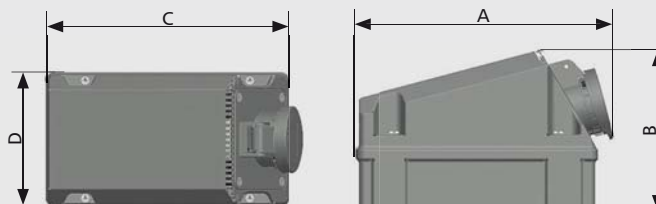
 Earth Hour Position


*Solid or Stranded conductors

Socket Outlets Angled Surface Mounting 63 Amp

TOP CONDUIT OR REAR CABLE ENTRY, COMPLETE WITH BLANKING PLUG

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			
		LIST NO 	LIST NO 		A	B	C	D
63A	2P+E	K9274BLU		6-16	300.8	165.4	274.5	135
63A	3P+N+E		K9269RED	6-16	300.8	166.1	275	135

 Earth Hour Position

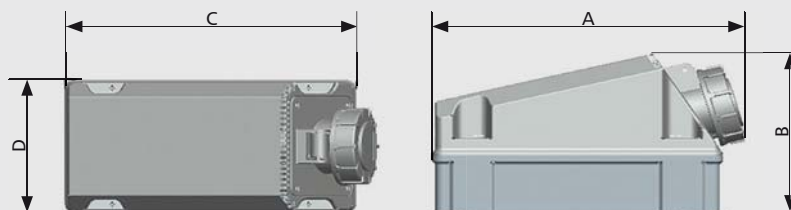
*Flexible conductors

Commando Technical

mkelectric.co.uk



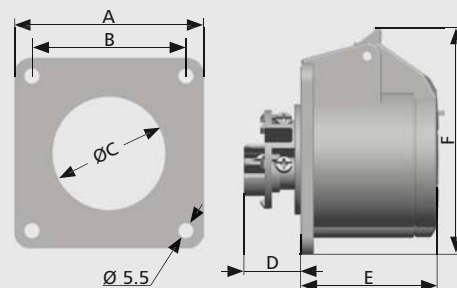
Socket Outlets Angled Surface Mounting 63 Amp

IP67 WATERTIGHT


AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			
		LIST NO	LIST NO		A	B	C	D
63A	2P+E	K9857BLU		6-16	300.8	165.4	274.5	135
63A	3P+E		K9858RED		300.8	166.1	275	135
63A	3P+N+E		K9859RED	6-16	300.8	166.1	275	135
Earth Hour Position				*Flexible conductors				

Socket Outlets Straight Panel Mounting 16 and 32 Amp

ALL FLANGES HAVE THE SAME FIXING CENTRES AND OUTSIDE DIMENSIONS
TO ASSIST PANEL BUILDING.

IP44 SPLASHPROOF


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM					
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D	E	F
16A	2P+E	K9400YEL 4	K9401BLU 6		8.2	13	1-2.5	70	56	41	20.9	50	83
32A	2P+E	K9432YEL 4	K9433BLU 6		11.7	18	2.5-6	70	56	55	26.5	60.4	92
32A	3P+N+E			K9445RED 6	11.1	22	2.5-6	70	56	55	26.5	60.4	98.5
Earth Hour Position								*Solid or Stranded conductors					



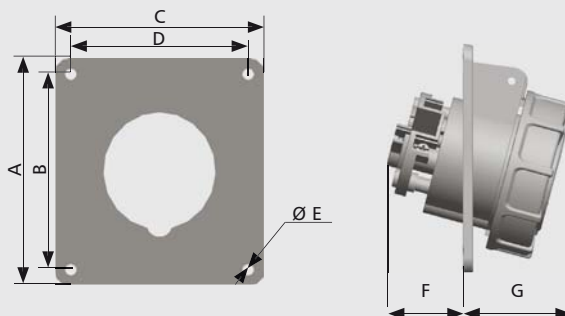
Technical Hotline
+44 (0)1268 563720

Commando Technical

WIRING DEVICES
INGRESS PROTECTED

Socket Outlets Angled Panel Mounting 16 and 32 Amp

IP67 WATERTIGHT



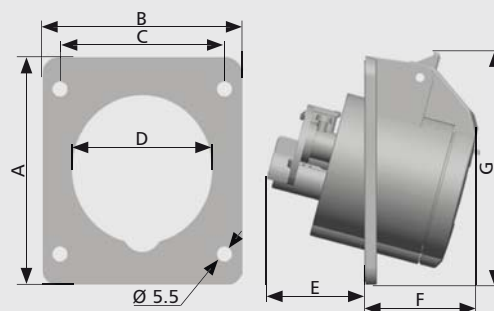
AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM						
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D	E	F	G
16A	2P+E	K9802YEL 4					1-2.5	100	85	92	77	5	33.6	46.8

Earth Hour Position

*Solid or Stranded conductors

Socket Outlets Angled Panel Mounting 16 and 32 Amp

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER D MM		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM						
		LIST NO	LIST NO	LIST NO	MIN	MAX		A	B	C	D	E	F	G
16A	2P+E		K9771BLU 6		8.2	13	1-2.5	84	74	60	51.2	36	41	85.6

Earth Hour Position

*Solid or Stranded conductors

Commando Technical

mkelectric.co.uk

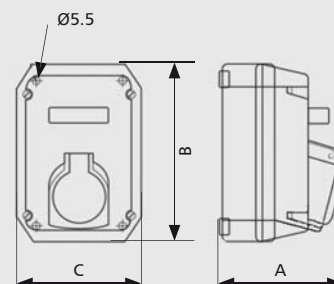


Switchsocket Outlets Interlocked Angled Surface Mounting 16, 32 and 63 Amp

SWITCH CAN BE LOCKED IN OPEN OR CLOSED POSITION

IP44 SPLASHPROOF

16 amp and 32 amp
Will accept auxiliary contact eg. 6813 and 6814
M32/M25 conduit entry, with mounting for FL9 flange plate
63 amp
M40 conduit entry with mounting for FL 13 flange plate
Switch Utilisation Category AC 22A



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			FIXING CENTRES
		LIST NO	LIST NO		A	B	C	
16	3P+E	K9601BLU 9		1.5-10	125	198	135	91.5 x 165
16	3P+N+E	K9607BLU 9		1.5-10	125	198	135	91.5 x 165
32	3P+E			1.5-10	135	198	135	91.5 x 165
32	3P+N+E	K9639BLU 9		1.5-10	135	198	135	91.5 x 165
63	3P+E		K9665RED 6	6-25	183	228	165	91.5 x 201
63	3P+N+E			6-25	183	228	165	91.5 x 201

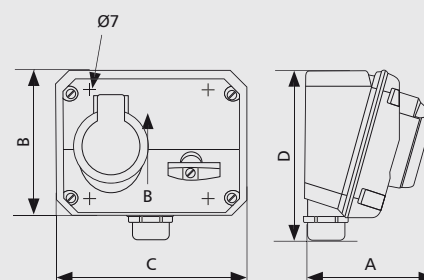
Earth Hour Position

*Solid or Stranded conductors

Switchsocket Outlets Interlocked Angled Conduit Entry Surface Mounting 63 Amp

IP44 SPLASHPROOF

16 amp and 32 amp
With 29mm knockout at top.
Will accept FL13 flange.
Bottom entry M25.
63 amp
FL13 flange entry at top.
Supplied with cover plate and gland plate.
Switch Utilisation Category AC 22A



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			FIXING CENTRES	CONDUIT ENTRY
		LIST NO	LIST NO	LIST NO		A	B	C		
63	2P+E		K9306BLU 6		6-25	168	168	206	152 x 132	2 x 32mm

Earth Hour Position

*Solid or Stranded conductors



Technical Hotline
+44 (0)1268 563720

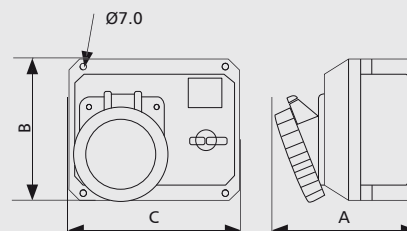
Commando Technical

WIRING DEVICES
INGRESS PROTECTED

Switchsocket Outlets Interlocked Angled Surface Mounting 63 Amp

IP67 WATERTIGHT

63 amp
With 32mm knockouts top and bottom.
Will accept FL13 flange top and bottom.
Switch can be locked in open position or closed position.
Switch Utilisation Category AC 22A



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			FIXING CENTRES	CONDUIT ENTRY
		LIST NO	LIST NO	LIST NO		A	B	C		
63A	3P+E			K9342RED	6-25	182	168	206	152 x 132	2 x 32mm

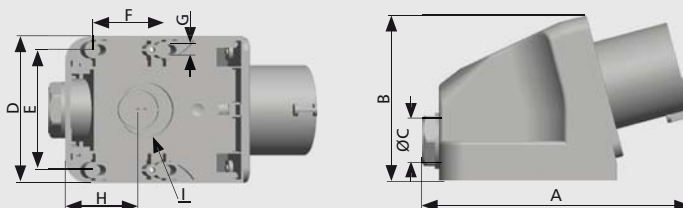
Earth Hour Position

*Solid or Stranded conductors

Splashproof Appliance Inlets Angled Surface Mounting 16 and 32 Amp

TOP CONDUIT OR REAR CABLE ENTRY, COMPLETE WITH BLANKING PLUG

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE DIAMETER		TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM							TOP CONDUIT ENTRY D	REAR ENTRY G
		LIST NO	LIST NO	LIST NO	MIN	MAX		B	C	C1	E1	F	H	I		
16A	2P+E		K9701BLU		8.2	14	1.5-10	66	75	54	72	5.5	110	30	M20	Ø23
32A	2P+E		K9733BLU		11.7	19.5	1.5-10	85	111	72	94	5.5	153	33	M25	Ø29

Earth Hour Position

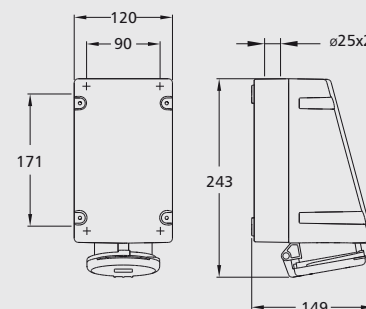
*Solid or Stranded conductors

Commando Technical

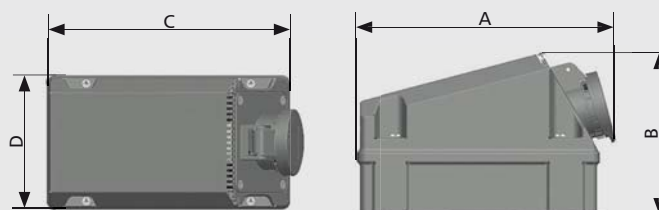
mkelectric.co.uk



Socket Outlets Loop in Surface Mounting 16 and 32 Amp

IP44 SPLASHPROOF


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE ENTRY KNOCKOUTS	TERMINAL CAPACITY* MM ²	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
32A	2P+E	K13232YEL 4			2 x Ø25 top	2 x (2.5-10)	90 x 170
Earth Hour Position						*Solid or Stranded conductors	



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			
		LIST NO	LIST NO	LIST NO		A	B	C	D
16A	2P+E	K13300YEL	K13301BLU		1-2.5	227.7	143.5	215	120
32A	2P+E		K13333BLU		2.5-6	235.5	143.5	215	120
32A	3P+N+E			K13341RED	2.5-6	235.5	143.5	215	120
Earth Hour Position					*Solid or Stranded conductors				



Technical Hotline
+44 (0)1268 563720

Commando Technical

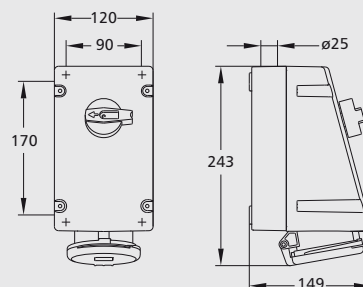
WIRING DEVICES
INGRESS PROTECTED

Switchsocket Outlets Interlocked Surface Mounting 16 and 32 Amp

(SUITABLE FOR TOP ENTRY)

IP44 SPLASHPROOF

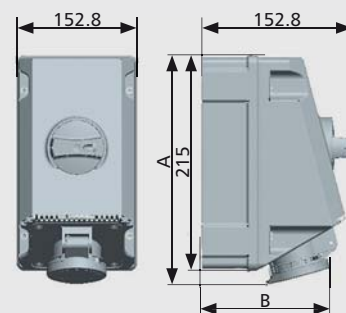
Switch Utilisation Category AC 22A
Will accept auxiliary contacts 6813 and 6814
Switch can be locked in open or closed position.



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE ENTRY KNOCKOUTS	TERMINAL CAPACITY* MM ²	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
16A	3P+E			K13607RED 6	2 x Ø25 top	1.5-4	90 x 170
32A	2P+E	K13632YEL 4			2 x Ø25 top	2.5-10	90 x 170
32A	3P+E			K13637RED 6	2 x Ø25 top	2.5-10	90 x 170

Earth Hour Position

*Solid or Stranded conductors

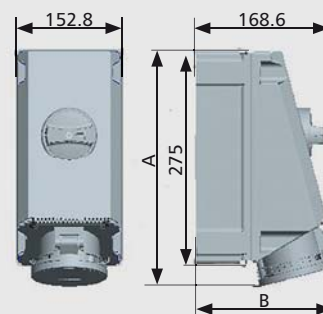


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	120/208- 144/250V 50-60HZ	200/346- 240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73600YEL 4	K73601BLU 6				228	128.5	1.5-4	Ø20/25+Ø25/32 top and bottom	108 x 165
16A	3P+N+E				K73603BLU 9	K73615RED 6	229	142.5	1.5-4	Ø20/25+Ø25/32 top and bottom	108 x 165
32A	2P+E		K73633BLU 6				235.5	148	2.5-10	Ø20/25+Ø25/32 top and bottom	108 x 165
32A	3P+E			K73637RED 6			235.5	148	2.5-10	Ø20/25+Ø25/32 top and bottom	108 x 165
32A	3P+N+E				K73635BLU 9	K73641RED 6	235.5	154.5	2.5-10	Ø20/25+Ø25/32 top and bottom	108 x 165

Earth Hour Position

*Solid or Stranded conductors

Switchsocket Outlets Interlocked Surface Mounting 63 Amp



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	120/208- 144/250V 50-60HZ	200/346- 240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	LIST NO	A	B			
63A	3P+N+E					K73643RED 6	301	175	6-25	2 x Ø32/40 top and bottom	123 x 225

Earth Hour Position

*Solid or Stranded conductors

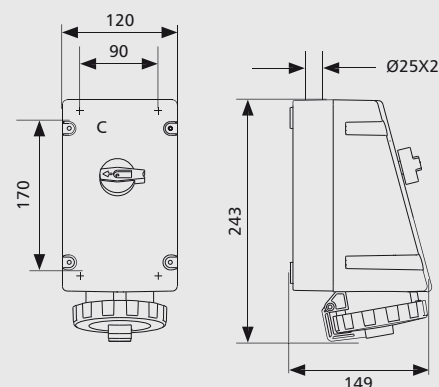
Commando Technical

mkelectric.co.uk



Switchsocket Outlets Interlocked Surface Mounting 16 and 32 Amp

Switch Utilisation Category AC 22A
Will accept auxiliary contacts 6813 and 6814
Switch can be locked in open or closed position.

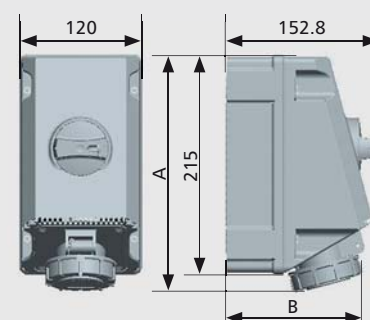


IP67 WATERTIGHT

AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	CABLE ENTRY KNOCKOUTS	TERMINAL CAPACITY* MM ²	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
16A	3P+E			K13625RED 6	2 x Ø25 top	1.5-4	90 x 170
32A	2P+E	K13653YEL 4			2 x Ø25 top	2.5-10	90 x 170
32A	3P+E			K13655RED 6	2 x Ø25 top	2.5-10	90 x 170

Earth Hour Position

*Solid or Stranded conductors

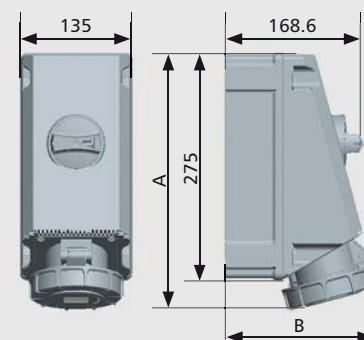


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73623YEL 4	K73624BLU 6		233	135	1.5-4	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+N+E			K73626RED 6	233	147	1.5-4	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	2P+E		K73654BLU 6		241	153	2.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+N+E			K73656RED 6	241	159	2.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165

Earth Hour Position

*Solid or Stranded conductors

Switchsocket Outlets Interlocked Surface Mounting 63 Amp



AMPS	PIN. CONFIGURATION	200-250V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	A	B			
63A	2P+E	K73660BLU 6		312	185	6-25	2 x Ø32/40 top and bottom	123 x 225
63A	3P+N+E		K73658RED 6	312	185	6-25	2 x Ø32/40 top and bottom	123 x 225

Earth Hour Position

*Solid or Stranded conductors



Technical Hotline
+44 (0)1268 563720

Commando Technical

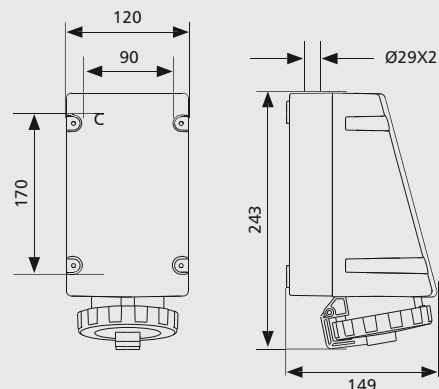
WIRING DEVICES
INGRESS PROTECTED

Socket Outlets Surface Mounting 16 and 32 Amp Loop In Versions

(SEE DIMENSIONS B)

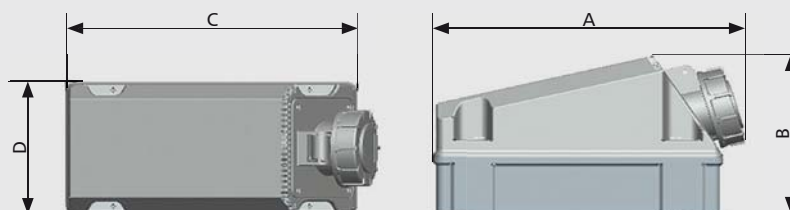
Fitted with terminals for Loop In

IP67 WATERTIGHT



Dimensions B

AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES MM
		LIST NO	LIST NO	LIST NO			
32	2P+E	K13053YEL 4			2 x (2.5-10)	2 x Ø25 top	90 x 170
Earth Hour Position					*Solid or Stranded conductors		



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	TERMINAL CAPACITY* MM ²	DIMENSIONS IN MM			
		LIST NO	LIST NO		A	B	C	D
16A	2P+E	K13323YEL	K13324BLU	1-2.5	232.5	143.5	215	120
32A	2P+E		K13354BLU	2.5-6	240.8	143.5	215	120
Earth Hour Position					*Solid or Stranded conductors			

Commando Combi™

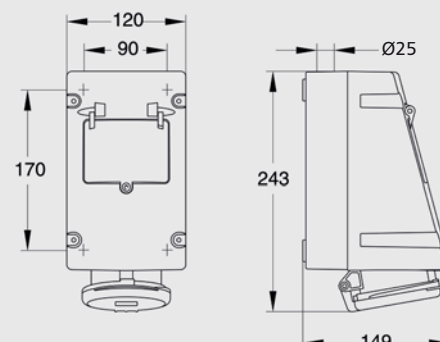
Technical

mkelectric.co.uk



Socket Outlets
Single Pre-wired with 30mA RCD
16 and 32 Amp

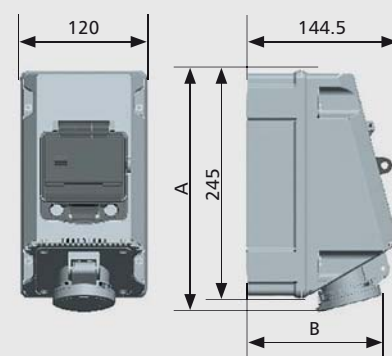
IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM ²		EARTH TERMINAL CAPACITY* MM ²		CABLE ENTRY KNOCKOUTS
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX	
16A	2P+E	K13413YEL 4			1.5	35	2.5	25	2 x Ø25 top
16A	3P+E			K13415RED 6	1.5	35	2.5	25	2 x Ø25 top
16A	3P+N+E			K13416RED 6	1.5	35	2.5	25	2 x Ø25 top
32A	3P+E			K13434RED 6	2.5	35	2.5	25	2 x Ø25 top

Earth Hour Position

*Solid or Stranded conductors



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73413YEL 4	K73414BLU 6			228	128.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+E			K73415RED 6		228	135.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+N+E				K73416RED 6	229	142.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	2P+E		K73433BLU 6			235.5	148	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+E			K73434RED 6		235.5	148	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+N+E				K73435RED 6	235.5	154.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165

Earth Hour Position

*Solid or Stranded conductors



Technical Hotline
+44 (0)1268 563720

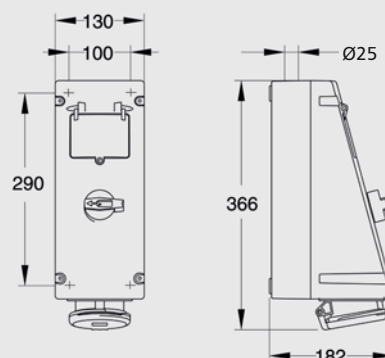
Commando Combi™

Technical

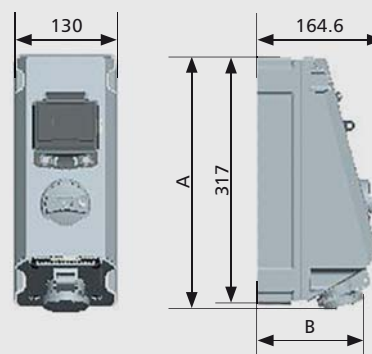
WIRING DEVICES
INGRESS PROTECTED

Switchsocket Outlets
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM²		EARTH TERMINAL CAPACITY* MM²		CABLE ENTRY KNOCKOUTS
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX	
16A	2P+E	K13309YEL 4			1.5	35	2.5	25	2 x Ø25 top
16A	3P+E			K13311RED 6	1.5	35	2.5	25	2 x Ø25 top
16A	3P+N+E			K13312RED 6	1.5	35	2.5	25	2 x Ø25 top
32A	2P+E	K13342YEL 4	K13343BLU 6		2.5	35	2.5	25	2 x Ø25 top
32A	3P+E			K13344RED 6	2.5	35	2.5	25	2 x Ø25 top
32A	3P+N+E			K13345RED 6	2.5	35	2.5	25	2 x Ø25 top
Earth Hour Position					*Solid or Stranded conductors				



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73309YEL 4	K73310BLU 6			325	136.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+E			K73311RED 6		325	143.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+N+E				K73312RED 6	326	150.5	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	2P+E	K73342YEL 4	K73343BLU 6			333	156	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+E			K73344RED 6		333	156	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+N+E				K73345RED 6	333	162	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
Earth Hour Position								*Solid or Stranded conductors		

For a full range of corresponding products,
see pages 264-267 in the product selector.

Commando Combi™

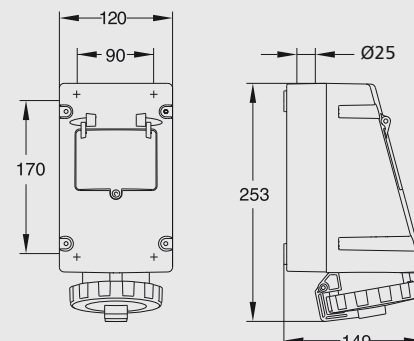
Technical

mkelectric.co.uk



Switchsocket Outlets
Interlocked Pre-wired with 30mA RCD
16 and 32 Amp

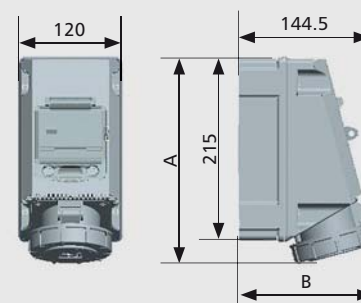
IP67 WATERTIGHT



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM²		EARTH TERMINAL CAPACITY* MM²		CABLE ENTRY KNOCKOUTS
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX	
16	2P+E	K13713YEL 6			1.5	35	2.5	25	2 x Ø25 top
16	3P+E			K13715RED 6	1.5	35	2.5	25	2 x Ø25 top
16	3P+N+E			K13716RED 6	1.5	35	2.5	25	2 x Ø25 top
32	2P+E		K13733BLU 6		2.5	35	2.5	25	2 x Ø25 top
32	3P+E			K13734RED 6	2.5	35	2.5	25	2 x Ø25 top

Earth Hour Position

*Solid or Stranded conductors



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73713YEL 4	K73714BLU 6			233	135	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+E		K73717BLU 9	K73715RED 6		233	141	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
16A	3P+N+E				K73716RED 6	233	147	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	2P+E	K73718YEL 4	K73733BLU 6			241	153	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+E		K73736BLU 9	K73734RED 6		241	153	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165
32A	3P+N+E				K73735RED 6	241	159	1.5-10	Ø20/25 + Ø25/32 top and bottom	108 x 165

Earth Hour Position

*Solid or Stranded conductors



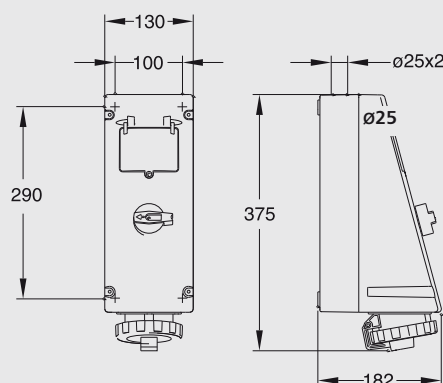
Technical Hotline
+44 (0)1268 563720

Commando Combi™ Technical

WIRING DEVICES
INGRESS PROTECTED

Switchsocket Outlets Interlocked Pre-wired with 30mA RCD 16 and 32 Amp

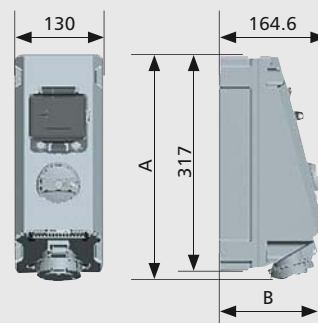
IP67 WATERTIGHT



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	200/346-240/415V 50-60HZ	RCD TERMINAL CAPACITY* MM ²		EARTH TERMINAL CAPACITY* MM ²		CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	MIN	MAX	MIN	MAX		
16	2P+E	K13346YEL 6	K13348BLU 6		1.5	35	2.5	25	2 x Ø25 top	100 x 290
16	3P+E			K13350RED 6	1.5	35	2.5	25	2 x Ø25 top	100 x 290
16	3P+N+E			K13351RED 6	1.5	35	2.5	25	2 x Ø25 top	100 x 290
32	2P+E	K13347YEL 6	K13349BLU 6		2.5	35	2.5	25	2 x Ø25 top	100 x 290
32	3P+E			K13352RED 6	2.5	35	2.5	25	2 x Ø25 top	100 x 290
32	3P+N+E			K13353RED 6	2.5	35	2.5	25	2 x Ø25 top	100 x 290

Earth Hour Position

*Solid or Stranded conductors



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346-240/415V 50-60HZ	DIMENSIONS IN MM		TERMINAL CAPACITY* MM ²	CABLE ENTRY KNOCKOUTS	FIXING CENTRES
		LIST NO	LIST NO	LIST NO	LIST NO	A	B			
16A	2P+E	K73346YEL 4	K73348BLU 6			330	143	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+E		K73354BLU 6	K73350RED 6		330	149	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
16A	3P+N+E				K73351RED 6	330	155	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	2P+E	K73347YEL 4	K73349BLU 6			338	161	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+E		K73355BLU 6	K73352RED 6		338	161	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261
32A	3P+N+E				K73353RED 6	338	167	1.5-10	Ø20/25 + Ø25/32 top and bottom	118 x 261

Earth Hour Position

*Solid or Stranded conductors

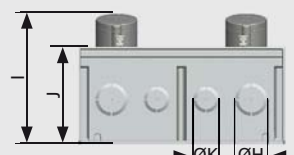
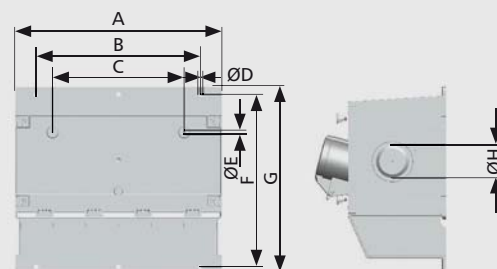
Commando Combi™

Technical

mkelectric.co.uk



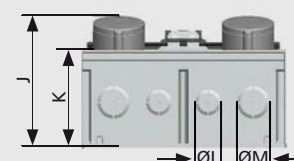
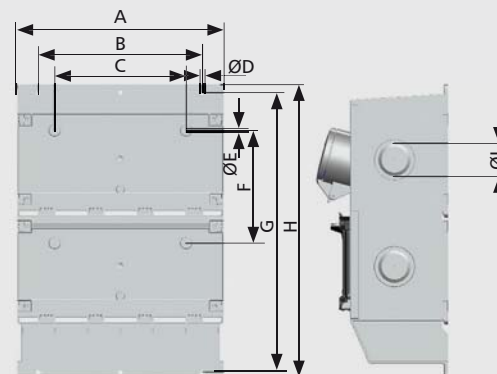
Twin Surface Socket Outlet 16 and 32 Amp

IP44 SPLASHPROOF


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	EARTH TERMINAL CAPACITY MM²		DIMENSIONS IN MM						CABLE ENTRY KNOCKOUTS			FIXING CENTRES	
		LIST NO	LIST NO	MIN	MAX	A	D	E	G	I	J	H	K	L	BXF	C
16A	2P+E	K73143YEL 4	K73144BLU 6	1.5	10	252	6	4.5	228	158.8	118.7	2xØ40	4xØ32	4xØ40	200x210	160

Earth Hour Position

Twin Surface Socket Outlet with Individual 30mA RCD Protection 16 and 32 Amp

IP44 SPLASHPROOF


AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	200/346- 240/415V 50-60HZ	EARTH TERMINAL CAPACITY MM²		DIMENSIONS IN MM						CABLE ENTRY KNOCKOUTS			FIXING CENTRES	
		LIST NO	LIST NO	LIST NO	LIST NO	MIN	MAX	A	D	E	H	J	K	I	L	M	BXG	CXF
16A	2P+E	K73173YEL 4	K73174BLU 6			1.5	65	252	6	4.5	358	158.8	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
16A	3P+E			K73175RED 6		1.5	65	252	6	4.5	358	158	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
16A	3P+N+E				K73176RED 6	1.5	65	252	6	4.5	358	160.1	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
32A	2P+E		K73184BLU 6			1.5	65	252	6	4.5	358	170.5	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
32A	3P+E			K73185RED 6		1.5	65	252	6	4.5	358	170.5	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
32A	3P+N+E				K73186RED 6	1.5	65	252	6	4.5	358	171.1	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137

Earth Hour Position



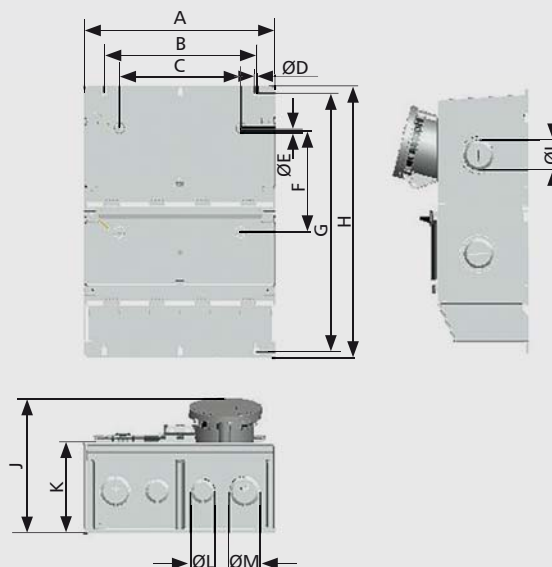
Technical Hotline
+44 (0)1268 563720

Commando Combi™ Technical

WIRING DEVICES
INGRESS PROTECTED

Socket Outlets
Single Pre-wired with 30mA RCD
63 Amp

IP44 SPLASHPROOF



AMPS	PIN. CONFIGURATION	100-130V 50-60HZ	200-250V 50-60HZ	380-415V 50-60HZ	EARTH TERMINAL CAPACITY MM²		DIMENSIONS IN MM						CABLE ENTRY KNOCKOUTS			FIXING CENTRES	
		LIST NO	LIST NO	LIST NO													
63A	2P+E		K73463BLU 6		1.5	65	252	6	4.5	358	177.9	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137
63A	3P+N+E			K73465RED 6	1.5	65	252	6	4.5	358	177.9	118.7	4 x Ø40	4 x Ø32	4 x Ø40	200 x 340	160 x 137

Earth Hour Position



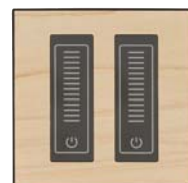
PRODUCT APPLICATION

DESIGN SERVICE TOOL

MK Electric has created a unique product configurator tool that enables interior designers to experiment with its MK Elements Collection on a tablet or laptop.

Selecting front plates to match interior finishes such as a black granite countertop or a metallic finish to blend with stainless steel appliances has never been easier. The tool allows designers to work with their clients to narrow that selection down to 2-3 just by having the ability to show the selected background or surroundings. When designs of customised light switches and sockets are cached on the device they can be stored for later use or emailed when designers are back online.

To find out more visit Designtool.mkelements.com





Technical Hotline
+44 (0)1268 563720

Sentry Technical

Range	Technical Data
Circuit Protection	
Sentry Consumer units and a wide variety of modular protection and control products	576-604
Sentrysocket RCD protected switchsockets with active and passive control circuits	606-607

For a full range of corresponding products,
see pages 271-286 in the product selector.

Metal Consumer Units and Enclosures

Standards and approvals

All Sentry consumer units are designed to fully comply with the requirements of BS EN 61439-3.

TECHNICAL SPECIFICATION

ELECTRICAL

MAXIMUM CURRENT RATING

All Sentry consumer units have a maximum rating of 100A except the 4 module range which is rated at 63A

TERMINAL CAPACITY

16mm² earth and neutral

RATED FREQUENCY

50Hz

RATED OPERATIONAL VOLTAGE

Consumer unit: 220-250V

RATED INSULATION VOLTAGE

Consumer unit: 300V

SHORT CIRCUIT WITHSTAND

16kA rms (based on the use of a BS 1361 Type 2 fuse of rating not exceeding 100A)

EARTHING SYSTEM

Suitable for use with TN-S, TN-C-S and TT systems

SPLIT LOAD

Split load units are supplied with a pre-fitted switch, RCD(s) and suitable cables



Description

Specific consumer unit configurations have been designed to provide flexible solutions in meeting the requirements of the 17th Edition with regards to RCD protection for circuits, cables and socket outlets. MK Sentry Metal Consumer units allow for protected and unprotected ways with the circuits being split across up to 2 RCDs, whilst the labelling sheet allows for full identification of all circuits.

Sentry Metal Consumer units and enclosures are designed on a modular basis, with 4 to 21 module enclosures in the range, to accommodate a wide variety of MK modular protection and control products. Sentry Metal Consumer units provide a housing with facility for earthing the metal box.

The enclosures are provided with ample wiring space and cable entry points.

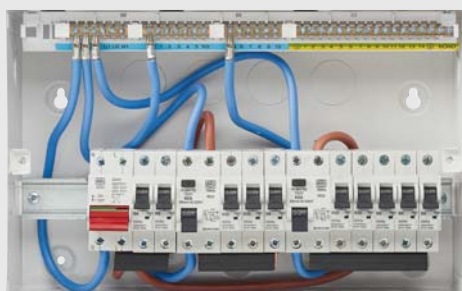
Colours / finishes

All Sentry Metal Consumer units are colored in white (UV protected powder coated paint).

Certain models are provided with a pre-assembled split load arrangement with switch and up to 2 RCDs. The range is complemented by a versatile selection of small four module enclosures suitable for housing RCDs or other combinations of Sentry products.

All Sentry Metal Consumer Units have neutral and earth terminal bars with 16mm² capacity for solid stranded copper cables.

For enquiries where large number of similarly designed consumer units i.e. specified. MK can provide complete pre-assembled factory built units, subject to certain conditions. For further information please contact the MK Electric Technical Services Department (01268 563720).



FEATURES

- Attractive styling
- Modular design
- Suitable for most residential, commercial and light industrial applications
- Single, dual and RCD consumer units available for 17th Edition compliance
- Fully comply with British and European Harmonised Standards
- Available as an empty enclosure or prefitted with switch disconnector and up to 2 RCDs
- Custom build options available

TECHNICAL SPECIFICATION

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C (not to exceed an average of more than 35°C in any 24 hour period)

IP RATING

IP2XC

WEIGHTS

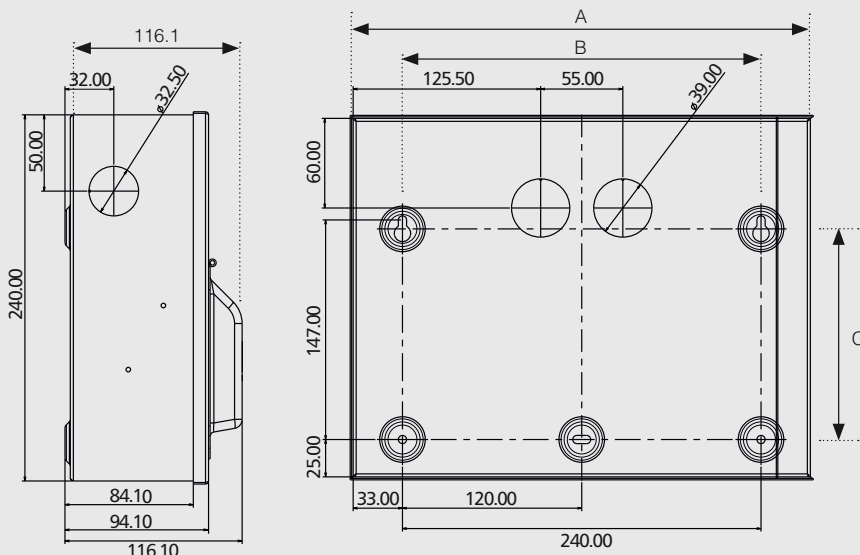
4 WAY: 1.9kg
8 WAY: 2.8kg
12 WAY: 3.4kg
16 WAY: 4.0kg
21 WAY: 4.7kg

METAL CONSUMER UNITS

WAYS	DIMENSIONS		
	A OVERALL WIDTH	B DISTANCE BETWEEN CENTRES OF FIXING HORIZONTAL	C DISTANCE BETWEEN FIXING CENTRES VERTICALLY AS ORIENTATED IN THE DIAGRAMS
4	144	85	147
8	238	168	147
12	310	240	147
16	382	308	147
21	472	400	147

Dimensions (mm)

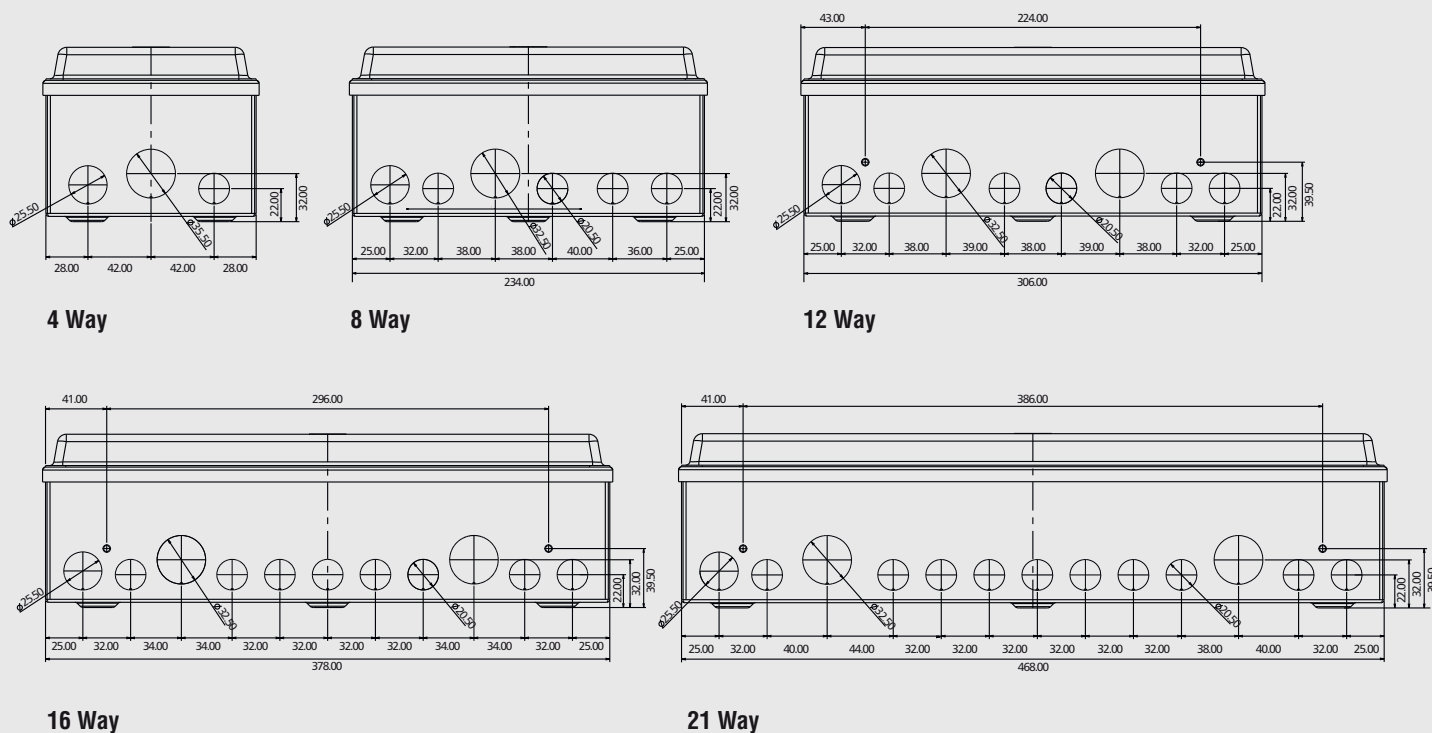
Consumer unit



Dimensions (mm)

Knockout

See Cable Management Section for male bushed flanges to suit all knockouts.



Consumer Units and Enclosures

Standards and approvals

All Sentry consumer units are designed to fully comply with the requirements of BS EN 61439-3.

TECHNICAL SPECIFICATION

ELECTRICAL

MAXIMUM CURRENT RATING

All Sentry consumer units have a maximum rating of 100A except K5504s, K5604s, which are rated at 63A

TERMINAL CAPACITY

16mm² earth and neutral

RATED FREQUENCY

50Hz

RATED OPERATIONAL VOLTAGE

Consumer unit: 220-250V

2 module enclosure: 220-250V

4 module enclosure: 220-415V

RATED INSULATION VOLTAGE

Consumer unit: 300V

2 module enclosure: 300V

4 module enclosure: 660V

SHORT CIRCUIT WITHSTAND

16kA rms (based on the use of a BS 1361 Type 2 fuse of rating not exceeding 100A)

EARTHING SYSTEM

Suitable for use with TN-S, TN-C-S and TT systems

SPLIT LOAD

Split load units are supplied with a pre-fitted switch, RCD and suitable cables.

The following versions are offered:

	MAIN INCOMER	RCD
K5682s	100A Switch	63A
K5662s	100A Switch	80A
K5666s	100A Switch	63A
K5686s	100A Switch	80A
K5681s	100A Switch	80A
K5582s	100A Switch	63A
K5566s	100A Switch	63A
K5586s	100A Switch	80A
K5581s	100A Switch	80A



Description

Specific consumer unit configurations have been designed to provide flexible solutions in meeting the requirements of the 17th Edition with regards to RCD protection for circuits, cables and socket outlets. MK Sentry Consumer Units, available in insulated and metal versions, allow for protected and unprotected ways with the circuits being split across up to 3 RCDs, whilst the labelling sheet allows for full identification of all circuits.

Sentry consumer units and enclosures are available in both surface metal and insulated types, designed on a modular basis, with 2 to 21 module enclosures in the range, to accommodate a wide variety of MK modular protection and control products.

Surface insulated units provide an all insulated housing. Metal units provide a housing with facility for earthing the metal box.

The enclosures are provided with ample wiring space and cable entry points.

Colours / finishes

All surface insulated consumer units have a textured magnolia cover and lid. The surface metal consumer units are white (powder coated paint). The flush bases are of galvanized steel.

Certain models are provided with a pre-assembled split load arrangement with switch and up to 3 RCDs. The range is complemented by a versatile selection of small, two and four module enclosures suitable for housing RCDs or other combinations of Sentry products. A 2 module enclosure K5592s is suitable for housing the one module RCBO.

All Sentry Consumer Units have neutral and earth terminal bars with 16mm² capacity for solid stranded copper cables.

For enquiries where large number of similarly designed consumer units i.e. specified. MK can provide complete pre-assembled factory built units, subject to certain conditions. For further information please contact the MK Electric Technical Services Department (01268 563720).



FEATURES

- Attractive styling
- Modular design
- Suitable for most residential, commercial and light industrial applications
- Single, dual and triple RCD consumer units available for 17th Edition compliance
- Fully comply with British and European Harmonised Standards
- Available as an empty enclosure or prefitted with switch disconnecter and up to 3 RCDs
- Factory built options available

For a full range of corresponding products, see pages 271-291 in the product selector.

TECHNICAL SPECIFICATION

ELECTRICAL (WEATHERPROOF ENCLOSURES ONLY)

MAXIMUM CURRENT RATING

5702s 2 pole devices up to 100A
5704s 4 pole devices up to 63A

Note:

5702s – Can accept up to 4 module ways with removal of moulded blanks.

5704s – Can accept up to 8 module ways with removal of moulded blanks.

TERMINAL CAPACITY

5702s: 4 x 6mm² earth and neutral
5704s: 2 x 6mm² and 6 x 4mm² earth and neutral.

RATED OPERATIONAL VOLTAGE

220-415V

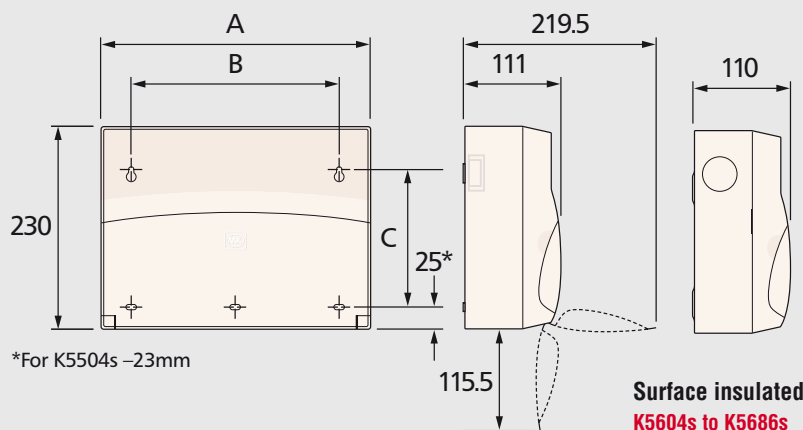
RATED INSULATION VOLTAGE

660V

Dimensions (mm)

Note: Knockout details on following page

Consumer unit



TECHNICAL SPECIFICATION

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C (not to exceed an average of more than +35°C in any 24 hour period)

IP ratings: (see also 'Service Conditions', below)

CONSUMER UNIT	IP2XC
2 module enclosure 5502s	IP3X
2 module enclosure 5702s	IP65
2 module enclosure K5592s	IP30
4 module enclosure 5504s	IP3X
4 module enclosure 5604s	IP3X
4 module enclosure 5704s	IP65
Max. installation altitude	2000m

SURFACE INSULATED K5604S / K5686S

UNIT	MODULES	DIMENSIONS		
		A	B	C
SURFACE INSULATED	4	140	70	156
	8	234	164	156
	12	306	236	156
	16	378	308	156
	21	468	398	156

Switch Disconnectors

Standards and approvals

Sentry switch disconnectors are designed to fully comply with the requirements of BS EN 60947-3.

They all feature positive contact status indication in accordance with the 17th Edition IEE Wiring Regulations (537.2.2.1 and 537.3.2.2).

TECHNICAL SPECIFICATION

ELECTRICAL

CATEGORY OF DUTY

AC22A

LOAD TYPE CAPABILITY

Both resistive and inductive

OPERATING VOLTAGE

240V a.c.

OPERATING FREQUENCY

50Hz

	5560S	5500S
RATED OPERATIONAL CURRENT LE	63A	100A
RATED DUTY	Uninterrupted	Uninterrupted
RATED MAKING CAPACITY LC	189A rms	300 rms
RATED SHORT TIME WITHSTAND CURRENT LCW	2kA rms for 1 sec	2kA rms for 1 sec
RATED SHORT CIRCUIT MAKING CAPACITY LCM	3kA peak	3kA peak
RATED CONDITIONAL SHORT CIRCUIT CURRENT	6kA rms prospective	6kA rms prospective

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

Front face IP3X, screw IP2X

TIGHTENING TORQUE

3Nm

MAX INSTALLATION ALTITUDE

2000 metres

RATING SPECIFICATION

SWITCH DISCONNECTOR	RATING
5500s	100A
5560s	63A



Description

The Sentry range offers a choice of switch disconnector rated at either 100A or 63A.

The operating dolly is capable of being locked in either the ON or OFF position. When locked in the ON position it will no longer operate as an isolator. Positive indication of the opening of the contacts is only given when the green stripe can be seen on the dolly.

The terminals are of a tunnel design and offer a generous cable capacity of 50mm² for solid stranded conductors and 35mm² for flexible conductors, on both current ratings.

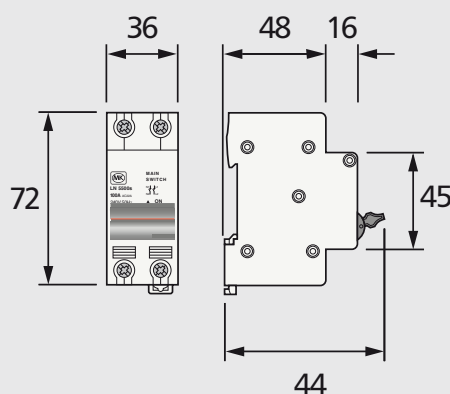
Category of duty

The Sentry switch disconnector is capable of switching both resistive and inductive loads and has a category of duty of AC22A.

FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Choice of current ratings
- Tunnel design terminals for ease of wiring
- Generous cable capacity
- Lockable operating dolly
- Make first, break last on neutral

Dimensions (mm)



Installation

The Sentry switch disconnector is designed to accept both cable-in/cable-out and direct-to-busbar connections.

The terminal screws are touch-proof to IP2X, captive and feature combination heads.

Miniature Circuit Breakers (MCBs)

Standards and approvals

Sentry switch disconnectors are designed to fully comply with the requirements of BS EN 60947-3.

They all feature positive contact status indication in accordance with the 17th Edition IEE Wiring Regulations (537.2.2.1 and 537.3.2.2).

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

230V/400V a.c.

OPERATING FREQUENCY

50Hz

RATED SHORT CIRCUIT CAPACITY I_{cn}

6000A

SERVICE SHORT CIRCUIT CAPACITY I_{cs}

6000A

When backed up by a BS 1361, 100A fuse, then the breaking capacity of the MCB is increased to 16,000A.

Energy limiting class: 3

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

CALIBRATION TEMPERATURE

+30°C

IP RATING

Front face IP4X, screw IP2X

TERMINAL CAPACITY

35mm²

TIGHTENING TORQUE

3Nm Max

MAX. INSTALLATION ALTITUDE

2000 metres



Description

Sentry MCBs are of the thermo-magnetic, current limiting type and are available with either Type B or Type C operating characteristics.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate. The contacts themselves are manufactured from carefully chosen materials, selected specifically for their low electrical resistance and low propensity to weld under fault conditions.

Positive contact status indication

When the green indicator is visible, then a contact gap of 4mm has been achieved. Sentry MCBs may therefore be used as single pole isolating switches where appropriate.

Terminals

The Sentry MCB features tunnel terminals of 35mm² capacity on all ratings. Each terminal has a protective shutter to prevent cable being installed incorrectly. The terminal screws are touch proof to IP2X, captive and feature combination heads.

Modes of operation

The mechanism of the Sentry MCB has been carefully designed and engineered using thermal and magnetic elements to detect overcurrents due to both overload and fault currents. The MCB will operate and interrupt the supply to prevent damage to the installation.

The thermal component is a carefully calibrated, thermally operated bi-metal element.

Larger overloads and fault current situations are dealt with using the magnetic tripping mode of the MCB. This acts very quickly, overriding the thermal operation.

BS EN 60898 requires the tripping to occur within 100 milliseconds and the design of the Sentry MCB allows fault currents of up to 6000A (M6) to be safely interrupted well within this time scale.

Miniature Circuit Breakers (MCBs)

RATING SPECIFICATION	
TYPE B SINGLE POLE	RATING
5903s	3A
5906s	6A
5910s	10A
5916s	16A
5920s	20A
5925s	25A
5932s	32A
5940s	40A
5945s	45A
5950s	50A
TYPE C SINGLE POLE	RATING
8703s	3A
8706s	6A
8710s	10A
8716s	16A
8720s	20A
8725s	25A
8732s	32A
8740s	40A
8750s	50A

FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Trip-free' mechanism
- Positive contact status indicator
- Tunnel type, touch-proof, captive terminals
- Generous terminal capacity
- Can be used as single pole isolating switch
- Protective shutter

Description (continued)

Operating characteristics

TYPE B

The magnetic operating limits are between 3 and 5 times the current rating of the MCB. Under these conditions the mechanism of a 10A MCB will operate between 30A and 50A in an overcurrent situation.

TYPE C

In the case of Type C MCBs, the magnetic operating limits are between 5 and 10 times the current rating of the MCB. Under these conditions the mechanism of a 10A MCB will operate between 50A and 100A in an overcurrent situation.

Type C devices are capable of supplying the majority of inductive and capacitive loads such as motors, transformers and tungsten or fluorescent lighting.

Time/Current and Energy let through characteristics of Sentry MCBs are shown graphically on the Time current characteristics chart (See separate document).

TYPE D

The Type D MCB is suitable for applications involving equipment generating very high inrush currents, e.g. x-ray equipment, transmitters and computer power supplies. The magnetic operating limits are between 10 and 50 times the current rating of the MCB.

(For Modular Combi use only)

Installation

Selection of the most suitable MCB should take into account the following considerations:

1. Operating voltage and frequencies

It is possible to use the Sentry MCB on other voltages than 230/400V a.c. 50Hz, but it should be noted that this takes the MCB outside the scope of BS EN 60898.

2. Type of load

RESISTIVE

No derating is required in the case of resistive loads.

INDUCTIVE

In the case of inductive loads from direct-on-line motors, the surge on energisation can produce up to 5 times full load current, which may be present for several seconds. It is therefore recommended that Type C MCBs are used for such circuits.

When using assisted start motors, the usually quoted figures are 2.5 times the full load current, for periods generally longer than those for direct-on-line starters. It is thus important to establish the degree of inrush current in order to select a suitable MCB. In all instances, reference should be made to both the motor manufacturer's curves and MK's circuit breaker curves in order to select the compatible miniature circuit breaker.

CAPACITIVE

Surges on energisation, for example with discharge lighting, may well reach 25 times the rated current of the device, but only for very short duration. Type B devices will often be adequate, but for more specialised circuits, a Type C may be required. The lighting fitting manufacturer's recommendations should be observed.

Miniature Circuit Breakers (MCBs)

3. Fault breaking capacity

All Sentry MCBs have a short circuit breaking capacity of 6,000A (M6).

For applications where the prospective fault current is in excess of this, a BS 1361, 100A (maximum) fuse should be used upstream of the MCB to provide a system breaking capacity of 16,000A (in accordance with BS EN 60439-3).

4. Discrimination

A Sentry MCB consumer unit will normally be supplied via an HRC fuse. The HRC in such instances will be the major device and remain unaffected by any fault current which causes the MCB to operate.

The level of fault current up to which this can be assured is determined by comparing the I^2t characteristics of the two devices. Discrimination will theoretically occur up to the level at which the value of the total operating I^2t of the MCB is below the minimum pre-arcing I^2t of the fuse, although in practice, discrimination will be achieved at higher levels than this.

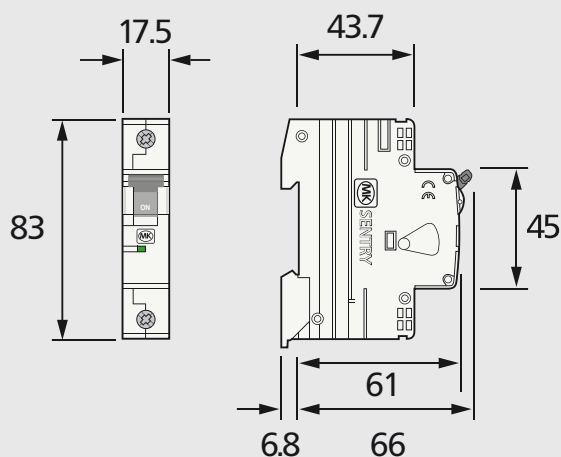
5. Cable protection

The current carrying capacity of the cable should always exceed the current rating of the MCB to prevent damage.

However, should this not be the case, a further calculation may show that the MCB can still interrupt the current in a sufficiently short time to prevent overheating of the cable insulation. Although this will prevent mechanical damage to the cables, further overload protection should be provided by a separate device, e.g. a motor overload relay.

In case of doubt please contact the MK Technical Sales and Service Department.

Dimensions (mm)



Tripping Characteristics Curve

Limit specified in BS EN 60898 1: 2003

In: Rated Current

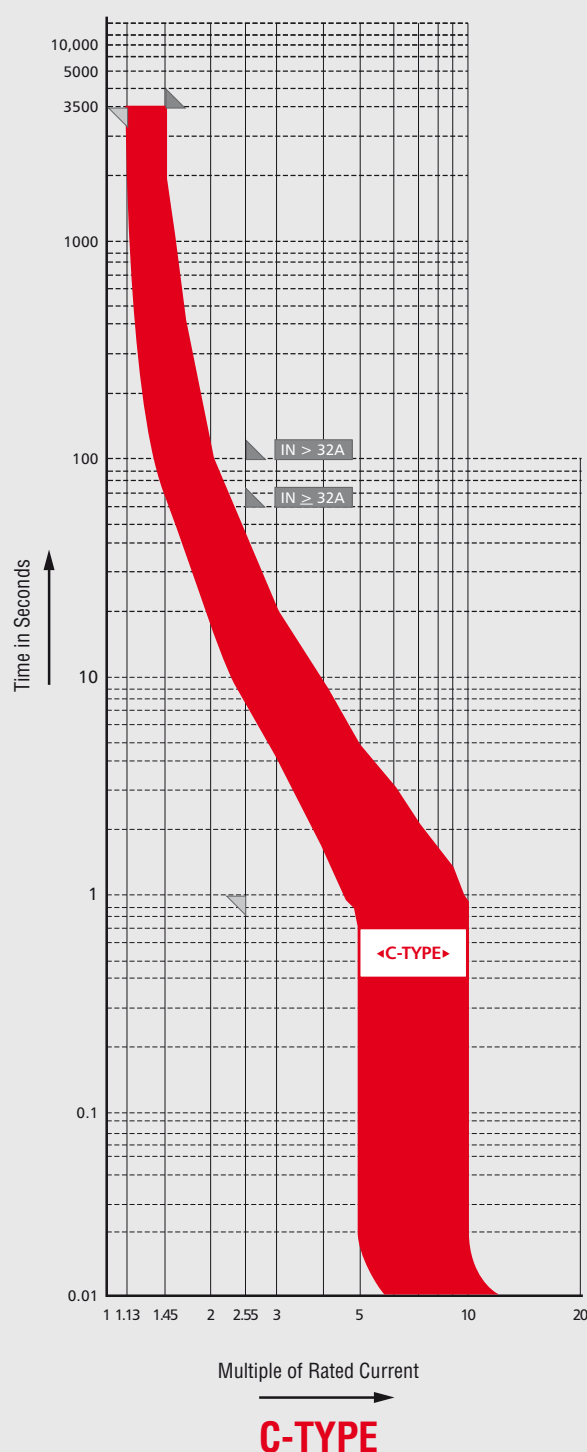
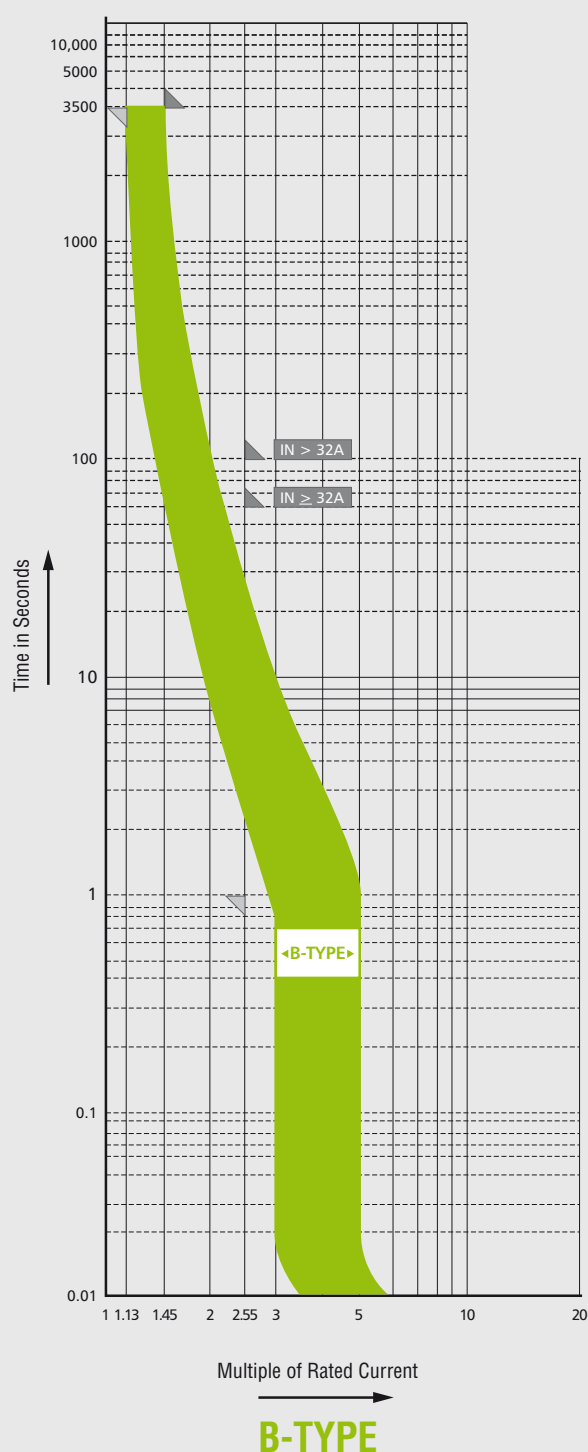
B TYPE: 3A to 50A

C TYPE: 3A to 50A

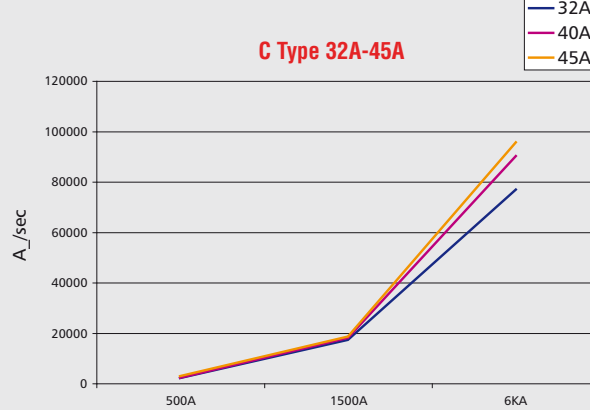
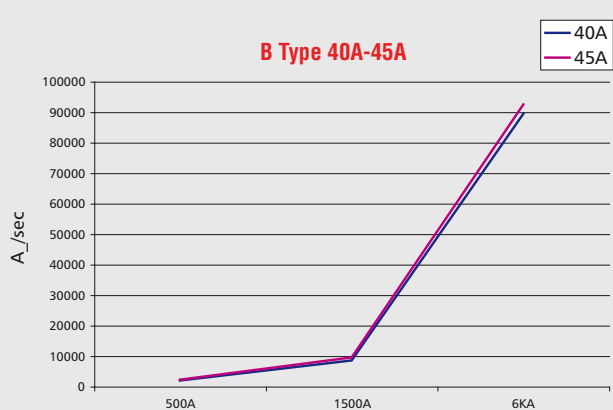
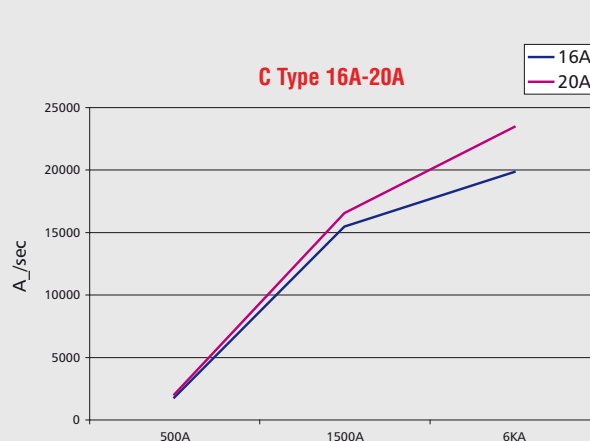
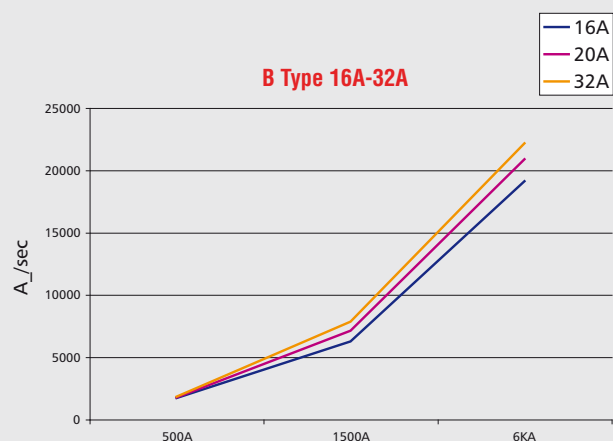
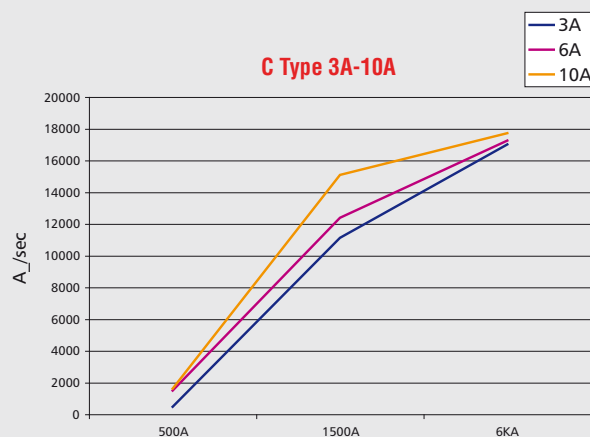
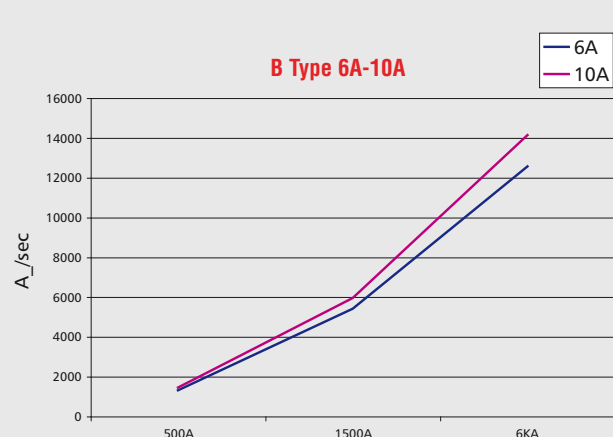
Reference calbi. temp. 30°C

Lower Limit as per Standard

Upper Limit as per Standard



I^2t curves



Sentry Technical

mkelectric.co.uk



Residual Current Breakers with Overcurrent Protection (RCBOs)

Standards and approvals

All Sentry RCBOs are designed to fully comply with the relevant requirements of BS EN 61009-1, BS IEC 61 009-2-2, BS 61543 for EMC.

The RCBOs feature positive contact status indication in accordance with 17th edition IEE Wiring Regulations (537.2.2.2 and 537.3.2.2).

TECHNICAL SPECIFICATION

ELECTRICAL

OPERATING VOLTAGE

230V a.c.

OPERATING FREQUENCY

50Hz

RATED SHORT CIRCUIT CAPACITY ICN

6,000A

SERVICE SHORT CIRCUIT CAPACITY ICS

6,000A

When backed up by a BS 1361, 100A fuse, then the breaking capacity of the RCBO is increased to 16,000A.

Type AC

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-25°C to +40°C

IP RATING

Front face IP4X, screw IP2X

TERMINAL CAPACITY

Line in 25mm²

Line and neutral out 25mm²

TIGHTENING TORQUE

2.5Nm

MAX. INSTALLATION ALTITUDE

2000 metres



Description

The Sentry range features solid neutral type single pole RCBOs in one module format.

The one module Sentry RCBOs are a combination of a Type B MCB and a Residual Current Device. This enables both overcurrent protection and earth fault current protection to be provided by a single unit.

This combination allows earth fault protection to be restricted to a single circuit, thus ensuring that only the circuit with the fault is interrupted. (When groups of circuits are protected by an RCD, all circuits would be interrupted under fault conditions, which may cause unnecessary inconvenience).

The operating switch on all Sentry RCBOs may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate.

Sentry RCBOs feature tunnel terminals of generous capacity, with 25mm² for live supply for live and neutral load terminals. The neutral supply (blue) and earth supply (white/cream) are provided via flying leads.

Mode of operation

As the RCBO is a combination of an MCB and RCD, reference should be made to the relevant technical information regarding these devices.

FEATURES

- Single module
- Meet BS EN and IEE Wiring Regulation requirements
- Allows both overcurrent and earth fault protection and detection
- Available in a range of current ratings
- Tunnel type terminals
- Generous terminal capacity
- Positive contact status indication

Residual Current Breakers with Overcurrent Protection (RCBOs)

RATING SPECIFICATION			
RATING RCBO	TRIPPING CURRENT	LIST NO. TYPE B	LIST NO. TYPE C
6A, 230V	30mA	7932s	8932s
10A, 230V	30mA	7933s	8933s
16A, 230V	30mA	7934s	8934s
20A, 230V	30mA	7935s	8935s
32A, 230V	30mA	7936s	8936s
40A, 230V	30mA	7937s	
45A, 230V	30mA	7938s	
50A, 230V	30mA	7939s	

Installation

Sentry RCBOs may be installed anywhere along the length of the busbar and will occupy one outgoing way.

Selection of the most suitable RCBO should take into account the following considerations:

1. Operating voltage and frequencies

2. Fault breaking capacity

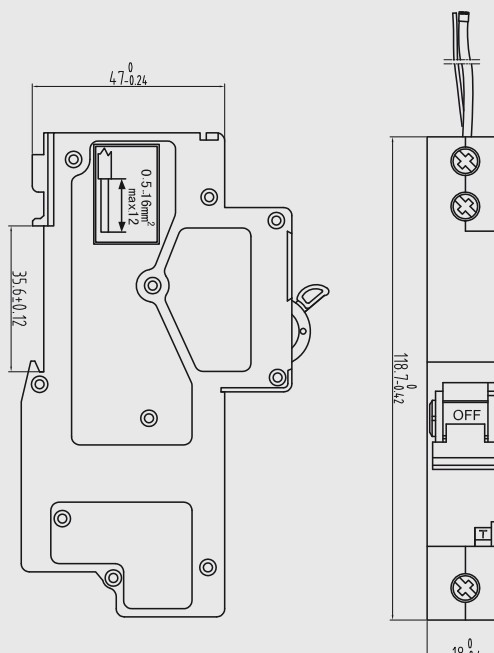
For applications where the prospective fault current is in excess of this, a BS 1361, 100A (maximum) fuse should be used upstream of the RCBO to provide a system breaking capacity of 16,000A.

3. Cable protection

The current carrying capacity of the cable should always exceed the current rating of the RCBO, to prevent damage. However, should this not be the case, a further calculation may show that the RCBO can still interrupt the current in a sufficiently short time to prevent overheating of the cable insulation. Although this will prevent mechanical damage to the cables, further overload protection should be provided by a separate device, e.g. a motor overload relay.

In case of doubt please contact the Technical Sales and Service Department.

Dimensions (mm)



Residential 6kA Residual Current Devices (RCDs)

Standards and approvals

All Sentry RCDs are designed to fully comply with the requirements of BS EN 61 008:1995. IEC 1008:1990

They all feature positive contact status indication in accordance with 17th edition IEE Wiring Regulations (537.2.2.2 and 537 .3 .2 .2).

TECHNICAL SPECIFICATION

ELECTRICAL

RATED MAKING AND BREAKING CAPACITY / M

16 - 40A = 500A

63 - 80A = 800A

Type AC

RATED SHORT-CIRCUIT CURRENT / INC

16A - 40A = 6,000A (100A Fuse)

Rated residual short-circuit current / I_{Am}: 16 - 100A = 6,000A

RATED VOLTAGES

2 pole devices, 230V

OPERATING VOLTAGES

2 pole devices, 230V - 100V to 250V

TRIPPING TIME

1 x I_{An} ~300ms

5 x I_{An} ~40ms

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-25°C to +40°C

IP RATING

Front face after installation of enclosure IP40

TERMINAL CAPACITY

Solid stranded - 1 x 1.5 - 35mm² Flexible with ferrule
- 1 x 1 .5 - 35mm²

TIGHTENING TORQUE

3Nm

MAX. INSTALLATION ALTITUDE

2000 metres



Description

The Sentry range of RCDs offer a comprehensive selection of devices designed to meet most residential, commercial and light industrial requirements.

The range is two pole, a.c. fault current sensitive with a selection of current ratings from 16 to 80A and is available in a variety of tripping sensitivities.

When in the OFF position a contact gap of 4mm is present, enabling Sentry RCDs to be used as isolating switches where appropriate.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate, i.e. the RCD is 'trip-free'. It is not possible to hold the contacts closed when a fault condition exists.

All Sentry RCDs incorporate a filtering device to provide protection against transient surges in the supply to the unit, thus reducing the occurrence of unwanted tripping.

FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Extensive range to suit all specifications
- Protect against unwanted tripping
- Positive contact status indication
- Suitable for most residential, commercial and light industrial applications
- Offer a high degree of protection against electrocution in accidental shock hazard situations
- Two module, double pole units available up to 80A

Residential 6kA Residual Current Devices (RCDs)

RATING SPECIFICATION		
DOUBLE POLE, 2 MODULE		
RATING RCBO	TRIPPING CURRENT	LIST NO.
16A	30mA	7816s
32A	30mA	7832s
40A	30mA	7840s
63A	30mA	7860s
80A	30mA	7880s
63A	100mA	7560s
80A	100mA	7580s
63A	300mA	7660s
80A	300mA	7680s

Operation

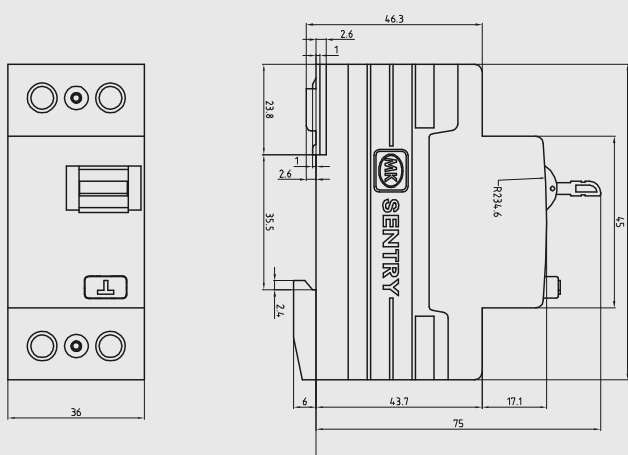
The RCD provides an indication of an earth fault and contact status as detailed below.

The operating dolly provides the following indication:

- I = Switched ON
- O = Switched OFF

The contact status is shown via dolly markings.

In the event of an Earth Fault in the installation or the operation of the test button, the dolly will move to the OFF position. To re-connect the supply the dolly must be reset by moving it to the ON position.



Testing

If an RCD is installed as additional protection for basic protection, it is a requirement of the IEE Regulations that the effectiveness of the RCD be verified. This must be achieved by a test simulating an appropriate fault condition and be independent of any test facility incorporated in the RCD. The test currents to be applied are as follows:

Test current	Condition
0.5 x I _{Δn}	RCD must not trip
1.0 x I _{Δn}	RCD must trip within 300ms
5.0 x I _{Δn}	RCD must trip within 40ms

Where I_{Δn} is the RCD's rated tripping current in accordance with wiring regulations and product standard BS EN 61008.

Industrial 10kA Residual Current Devices (RCDs)

Standards and approvals

All Sentry RCDs are designed to fully comply with the requirements of BS EN 61008:1995. IEC 1008:1990

They all feature positive contact status indication in accordance with the 17th Edition IEE Wiring Regulations (537.2.2.1 and 537.3.2.2).

TECHNICAL SPECIFICATION

ELECTRICAL

RATED MAKING AND BREAKING CAPACITY / M

16 - 40A = 500A
63 - 80A = 800A
100A = 1000A

Type AC

RATED SHORT-CIRCUIT CURRENT / INC

16A - 40A = 10,000A (63A Fuse)
63A - 80A = 10,000A (100A Fuse)
100A = 10,000A (125A Fuse)

RATED RESIDUAL SHORT-CIRCUIT CURRENT /ΔM

16 - 100A = 10,000A

RATED VOLTAGES

2 pole devices, 110V and 230V
4 pole devices, 230V to 440V

OPERATING VOLTAGES

2 pole devices, 110V - 100V to 250V
230V - 100V to 250V

4 pole devices, 185V - 440V

TRIPPING TIME

1 x $I_{\Delta n}$ ≤ 300ms
5 x $I_{\Delta n}$ ≤ 40ms

Time delay version

1 x $I_{\Delta n}$ - 150 - 500ms
5 x $I_{\Delta n}$ - 50 - 150ms

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-25°C to +40°C

IP RATING

Front face after installation of enclosure IP40

TERMINAL CAPACITY

Solid stranded - 1 x 1.5 - 50mm²
Flexible with ferrule - 1 x 1.5 - 35mm²

TIGHTENING TORQUE

3Nm

MAX. INSTALLATION ALTITUDE

2000 metres



Description

The Sentry range of RCDs offers a comprehensive selection of devices designed to meet most residential, commercial and light industrial requirements.

The range includes two and four pole, a.c., d.c. fault current sensitive and time delayed models and a selection of current ratings from 16 to 100A is available in a variety of tripping sensitivities.

When in the OFF position a contact gap of 4mm is present, enabling Sentry RCDs to be used as isolating switches where appropriate.

Positive indication of the opening of the contacts is only given when contact status indicator shows green.

The operating dolly may be locked in either the ON or OFF position without affecting the ability of the trip mechanism to operate, i.e. the RCD is 'trip-free'. It is not possible to hold the contacts closed when a fault condition exists.

All Sentry RCDs incorporate a filtering device to provide protection against transient surges in the supply to the unit, thus reducing the occurrence of unwanted tripping.

FEATURES

- Meet BS EN and IEE Wiring Regulation requirements
- Extensive range to suit all specifications
- Protect against unwanted tripping
- Positive contact status indication
- Suitable for most residential, commercial and light industrial applications
- Offer a high degree of protection against electrocution in accidental shock hazard situations
- Two module, double pole units available up to 100A
- Indication of earth fault, via central dolly position

Industrial 10kA Residual Current Devices (RCDs)

RATING SPECIFICATION		
DOUBLE POLE, 2 MODULE		
RATING RCBO	TRIPPING CURRENT	LIST NO.
16A, 110V	10mA	6016s
16A, 110V	30mA	6416s
16A, 230V	10mA	6316s
16A, 230V	30mA	5716s
32A, 110V	30mA	6032s
32A, 230V	30mA	6730s
40A, 230V	30mA	5740s
63A, 230V	30mA	5760s
63A, 230V	100mA	6160s
63A, 230V	300mA	5860s
80A, 230V	30mA	5780s
80A, 110V	30mA	6080s
80A, 230V	300mA	5880s
80A, 230V	100mA	6180s
100A, 230V	30mA	7700s
100A, 230V	100mA	6600s
100A, 230V	300mA	7800s
DOUBLE POLE, PULSATING D.C., FAULT CURRENT SENSITIVE, 2 MODULE		
16A, 230V	10mA	6216s
16A, 230V	30mA	6716s
32A, 230V	30mA	6630s
40A, 230V	30mA	5640s
63A, 230V	30mA	5660s
TIME DELAYED, 2 MODULE		
80A, 230V	100mA	6980s
100A, 230V	100mA	6400s
FOUR POLE, 4 MODULE		
25A, 230/400V	30mA	6425s
40A, 230/400V	30mA	6440s
40A, 230/400V	100mA	6240s
63A, 230/400V	30mA	6463s
63A, 230/400V	100mA	6363s
63A, 230/400V	300mA	6263s
FOUR POLE, PULSATING D.C., FAULT CURRENT SENSITIVE, 4 MODULE		
40A, 230/400V	30mA	6640s

Installation

Sentry RCDs must never be used as the sole method of basic protection, but are invaluable in providing supplementary protection in high risk environments where damage may occur.

Application

The choice of the most suitable RCD for a particular application should take into account the following considerations:

1. Sensitivity

10mA RCDs offer a high degree of protection against electrocution in an accidental shock hazard situation. They are of particular value in a high risk area where resistances external to the body are likely to restrict the earth fault current flowing through the body to less than 30mA and where 110V supply is being used.

30mA RCDs offer a high degree of protection in an accidental shock hazard situation and are by far the most popular sensitivity used in the United Kingdom. In a shock situation, the current flowing through the human body at 240V 50Hz could be between 80 and 240mA, depending on the resistance of the body in question. To ensure that there are no harmful physiological effects in such a situation, it is necessary for the RCD to operate within 300ms at 30mA and 40ms at 150mA. As the Sentry RCD typically operates well below these times, it clearly more than satisfies this requirement.

100mA RCDs may, in some circumstances, provide protection against electrocution in an accidental shock hazard situation. However, it is important to note that there is a likelihood that the earth fault current may be below the sensitivity of the RCD. This becomes increasingly likely if additional resistances to that of the human body are in the current path.

300mA RCDs provide protection against the risk of fire only. They do not provide protection against electrocution in an accidental shock hazard situation. A typical application would be lighting circuits where it is deemed that the risk of electric shock is small.

It is important to note that a current of less than 500mA flowing in a high resistance path is sufficient to bring metallic parts to incandescence and, potentially, initiate a fire.

2. Requirements of the IEE Wiring Regulations BS 7671

RCDs may be used to provide additional protection against both fault protection and basic protection.

Fault Protection

Defined as protection against electric shock under single fault conditions.

Effective earthing in conjunction with automatic disconnection should always be employed to protect against the effects of fault protection. The provision of a low resistance path back to the supply from the fault should ensure that the overcurrent device operates before damage occurs. This is the earth fault loop impedance.

In circumstances where the earth fault loop impedance in the circuit is too high to ensure operation of the overcurrent device, then the IEE Wiring Regulations allow the installation of an RCD. To comply with the Regulations, the earth loop impedance of the circuit (in ohms), multiplied by the rated tripping current of the RCD (in amperes) must not produce a value greater than 50. With this in mind, the maximum values of earth loop impedance permissible when installing an MK Sentry RCD are as follows:

$$Z_s (\text{max}) = \frac{50}{I_{\Delta n}} = \frac{50}{0.03} = 1667 \text{ Ohms}$$

Rated Tripping Current of RCD	Maximum Permissible Earth Fault Loop Impedance
10mA	5000 Ohms
30mA	1667 Ohms
100mA	500 Ohms
300mA	166 Ohms

RCD's are further specified for fault protection on TT systems (Regulation 411.5.2, 411.5.3 apply)

Industrial 10kA Residual Current Devices (RCDs)

Application (continued)

Direct Contact

Defined as "contact of persons or livestock with live parts".

The Regulations recognise four main means of providing protection against direct contact which include enclosures and the use of extra low voltage systems.

However, the use of RCDs is specified by the Regulations in the following instances:

- A socket outlet rated at 32A or less which may reasonably be expected to supply portable equipment for use outdoors shall be protected by an RCD having the characteristics specified in Regulation 412-06-02. (Regulation 471-16-01 applies.)
- Where socket outlets are used to supply caravans on caravan sites, then they must be protected by an RCD having the characteristics specified in Regulation 412-06-02

Regulation 412-06-02 stipulates among other things that where supplementary protection is provided by residual current devices, their rated residual operating current must not exceed 30mA and that they must trip within 40ms at 5 times rated operating current.

Although RCDs must never be used as the sole method of direct contact protection, they are invaluable in providing supplementary protection in high risk environments where damage may occur. Typical applications include situations where equipment may be used outside or fed by trailing sockets, equipment accessible to children or equipment used in wet areas.

For these reasons RCDs are commonly found in schools, hospitals and residential installations.

3. Types of fault current

In an installation different types of fault current can occur. MK offer RCDs to suit these conditions.

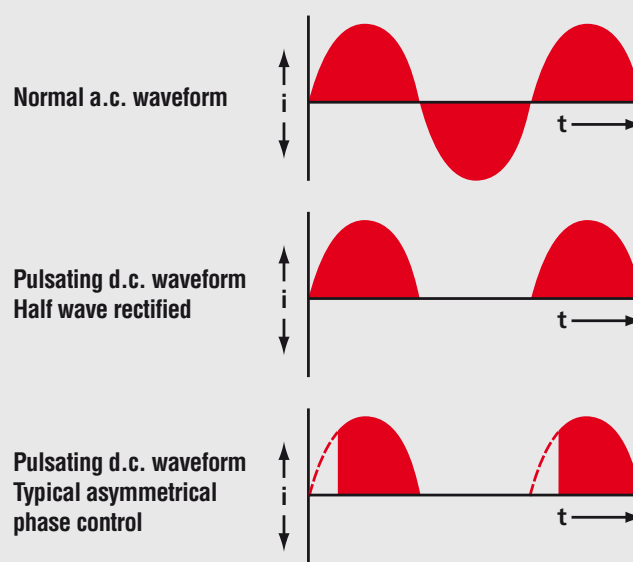
Sentry Type AC RCDs are suitable for situations where there are residual sinusoidal alternating currents, whether applied suddenly or rising slowly. This is the most commonly used type of RCD in the UK.

Sentry Type A RCDs (i.e. pulsating d.c. fault current sensitive) are suitable for situations where there are residual sinusoidal alternating currents, whether suddenly applied or slowly rising.

These situations can occur with the use of semiconductor devices in modern electrical and electronic equipment, such as computers, printers, plotters, televisions, video cassette recorders and hi-fi equipment, is growing.

Such devices may result in the normal sinusoidal a.c. waveform generated by the mains electrical supply being 'modified'. For example, the waveform may be rectified or, as in asymmetric phase control devices, the waveform may be chopped.

The resulting waveforms are said to contain a pulsating d.c. component as illustrated below.



Industrial 10kA Residual Current Devices (RCDs)

Application (continued)

Pulsating d.c. fault current sensitive RCDs

Should a waveform containing a pulsating d.c. component develop an earth fault, then it is possible that it may not be detected by an "a.c. only" sensitive RCD. For this reason, the Sentry range contains RCDs designed to be sensitive to pulsating d.c. fault currents thus maintaining the intended degree of protection.

Type B RCDs are suitable for situations where there are residual sinusoidal alternating currents, residual pulsating direct currents and smooth d.c. and a.c. residual current of various frequencies, which would not trip Type AC or A RCDs.

These situations can occur in 50Hz a.c. installations with electronic equipment, e.g. frequency converters, UPS installations, power supply unit or high-frequency power converters.

The following symbols are used on the front plate of the device to indicate the type of RCD.



– type AC RCD.




– type A RCD.



– type B RCD.

4. Temperature

All Sentry RCDs are suitable for use in the temperature range -25°C to $+40^{\circ}\text{C}$. This is indicated on the RCD by the symbol .

5. Time Delayed RCDs Type S (or selective)

When two or more Sentry RCDs are installed in series with one another, measures must be taken to ensure that they discriminate properly. In event of an earth fault, only the RCD immediately upstream from the fault should operate.

RCDs do not discriminate on rated tripping current alone, i.e. a 100mA rated RCD situated upstream from a 30mA rated RCD, will not offer inherent discrimination.

In order to ensure that discrimination is achieved, a Sentry Time Delayed RCD should be used. The in-built time delay period ensures that the downstream RCD opens the circuit before the upstream RCD starts to operate.

The maximum tripping time of a Sentry Time Delayed RCD is 500ms.

Please refer to the current edition of the Wiring Regulations BS 7671 for guidance on the use of these products.

6. 3 phase, 3 wire systems

Sentry 4 pole RCDs may be used to provide earth fault protection on 3 phase, 3 wire systems, as the current balance mechanism does not require a neutral to be connected in order to operate effectively.

Industrial 10kA Residual Current Devices (RCDs)

Operation

The RCD provides an indication of an earth fault and contact status as detailed below.

The operating dolly provides the following indication:

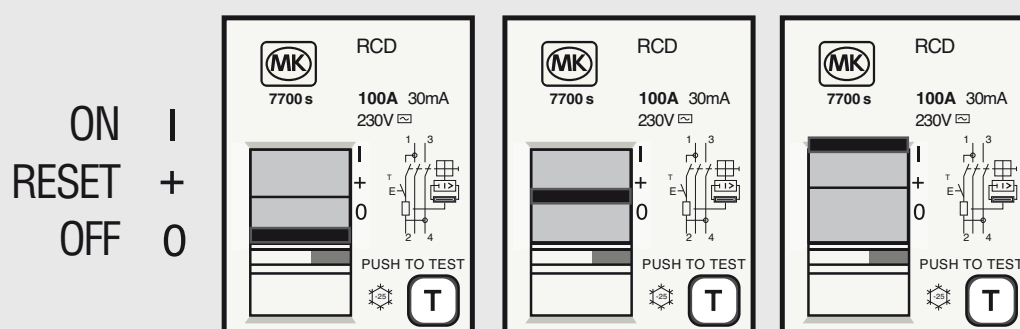
- I** = Switched ON
- +** = Switched OFF due to Earth Fault or test button operation
- 0** = Switched OFF

The contact status is shown through the window.

Red = contact closed

Green = contact open (RCD is switched off)

In the event of an Earth Fault in the installation or the operation of the test button, the dolly will move to the central position (+) and the contact status indicator shows green. To re-connect the supply the dolly must be reset by moving to the off position before switching on.



Testing

If an RCD is installed for additional protection against indirect contact, it is a requirement of the IEE Regulations that the effectiveness of the RCD be verified. This must be achieved by a test simulating an appropriate fault condition and be independent of any test facility incorporated in the RCD. The test currents to be applied are as follows:

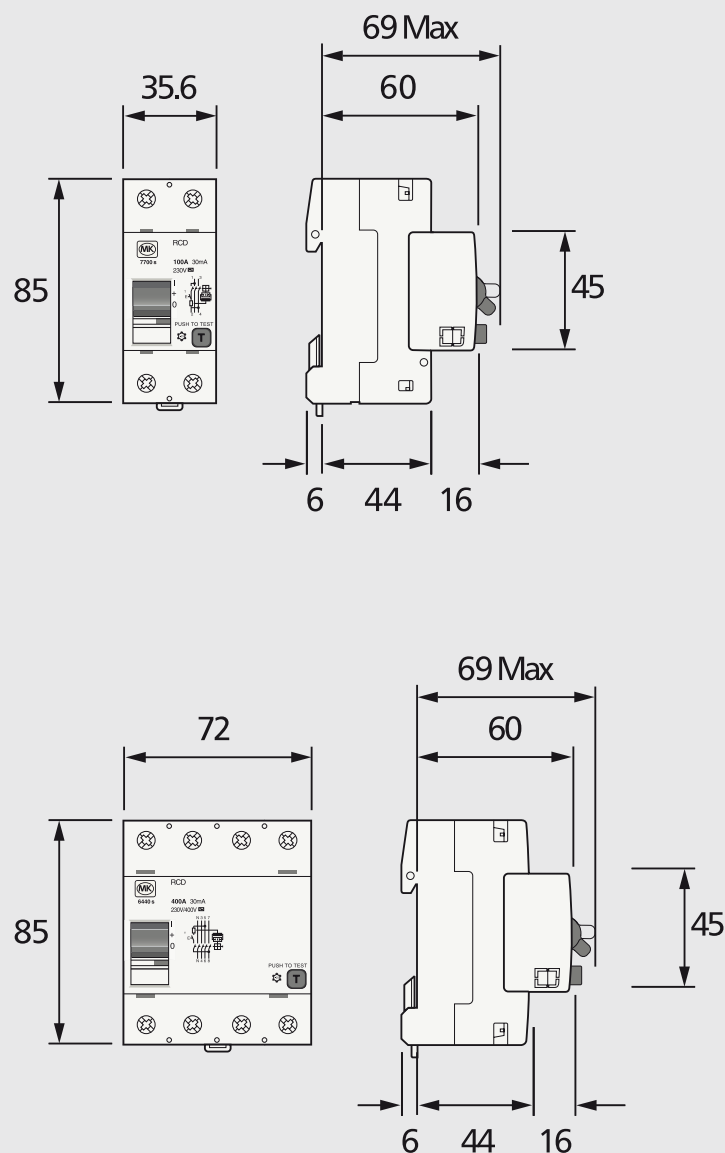
Test current	Condition
$0.5 \times I_{\Delta n}$	RCD must not trip
$1.0 \times I_{\Delta n}$	RCD must trip within 300ms
$5.0 \times I_{\Delta n}$	RCD must trip within 40ms

Where $I_{\Delta n}$ is the RCD's rated tripping current in accordance with wiring regulations and product standard BS EN 61008.

For time delay RCD $1.0 \times I_{\Delta n}$ RCD must trip between 130-500ms.

Industrial 10kA Residual Current Devices (RCDs)

Dimensions (mm)



Sentry Technical

mkelectric.co.uk



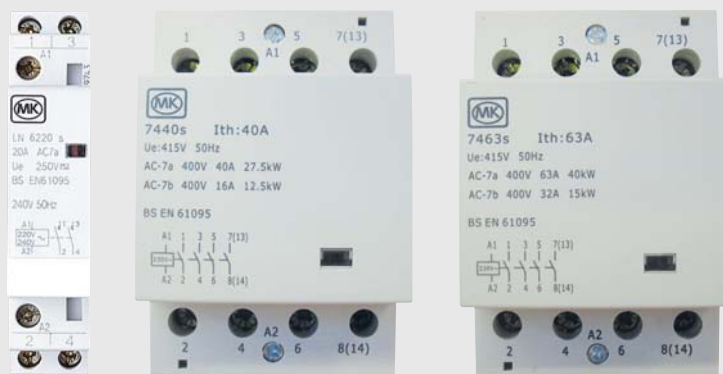
Contactors

Standards and approvals

All Sentry contactors in the range are designed to fully comply with BS EN 61095

RATING SPECIFICATION

TYPE	WIDTH	LIST NO.
20A, double pole	1 module	6220s
20A, four pole	3 module	6420s
40A, four pole	3 module	7440s
63A, four pole	3 module	7463s



Description

Sentry contactors provide a method of remotely switching single and three phase loads. In this regard, they are particularly useful for switching heating, lighting and ventilation circuits, in particular when used in conjunction with REC supply off-peak tariffs.

They are suitable for mounting on a standard DIN rail and are therefore fully compatible with all Sentry Consumer Units and small enclosures. (5704s, 5702s.)

Functions

CONTROL

Achieved by energising and de-energising the contactor coil, via an MK Time Switch or REC meter during 'off peak' hours as set by supply authorities. A coil status indicator is visible through the small window on the front of the contactor.

Contactors

TECHNICAL SPECIFICATION

All Contactor List Nos. are designed to operate at either 20, 40 or 63 amps continuous current (AC1-AC7b) 50Hz and have a mechanical life of 1,000,000 operations.

The coil voltages are 220/240V 50Hz.

LIST NO.	6220S	6420S	7440S	7463S
DESCRIPTION	CONTACTOR			
Contactor rating (Ith)	20A	20A	40A	63A
Includes manual override?	No	No	No	No
No. of poles (normally open only)	2	4	4	4
Width in 18mm modules	1	2	3	3
Rated Voltage (V)	400	500	500	500
(i) Insulation (Ui)	250	415	415	415
(ii) Max. operating (Ue)				
Average consumption of – inrush	15	34	53	53
control circuit coil (VA) – closed	3.8	4.6	6.5	6.5
Terminal cable capacity (max.) Controls	2 x 2.5mm ² flexible 2 x 1.5mm ² rigid			
Power	2 x 2.5mm ² flexible 2 x 6mm ² rigid		2 x 4mm ² flexible 2 x 25mm ² rigid	
Torque for terminals	1.2Nm		2.0Nm	

Installation

a) When a contactor is mounted alongside an MCB of greater than 10 amp current rating, or two contactors are mounted alongside an MCB of any current rating, it is advisable to insert a module blank between them. (List No. 5544s.)

b) When mounting more than two contactors side by side, it is necessary to insert a module blank between every two contactors, to give ventilation.

c) When using dual rail consumer units, it is advisable to mount electronic products on the lower rail and contactors on the upper rail. If mounting in a single rail consumer unit, it is advisable to mount electronic products as far away as possible from contactors. As a minimum they should be spaced by a single module width blank.

d) Ensure the load to be controlled is protected against short circuit and overload conditions by a suitable rated Sentry MCB.

e) Contactors are mounted into Sentry Consumer Units and enclosures, by clipping onto the DIN rail mounted in the base by means of the spring clip. If the contactor is required to be removed for any reason, unclip the contactor from the DIN rail by means of the spring clip on the contactor.

FEATURES

- Compatible with all Sentry Consumer Units (single phase only) (excludes 5502s) and the following Sentry enclosures: 5504s, 5604s, 5704s, 5702s (for single and three phase)
- Suitable for heating, lighting and ventilation circuits
- Choice of functions
- Ideal for use with REC supply off-peak tariffs

Contactors

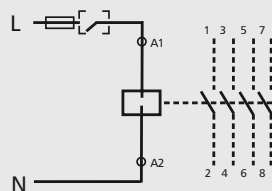
Terminal Layout

i) Contactor

- a) The coil connections to control energisation should be made between terminals A1 and A2
- b) One normally open main contact is between terminals 1 and 2
- c) A second normally open main contact is between terminals 3 and 4
- d) In the case of four pole contactors, the other main contacts are between terminals 5 and 6, and 7 and 8 respectively

Typical schematic layouts of modular contactors

Without Manual Override



Contactors

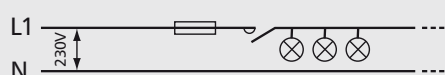
Applications and Maximum Ratings

LIGHTING – Maximum number of lamps

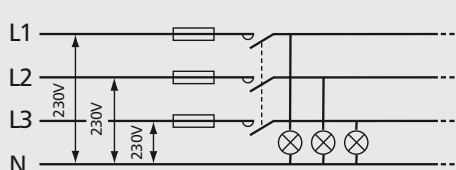
Presentation of installations according to type of supply.

The maximum number of lamps which can be operated per phase is equal to the total number of lamps in the “Single-Phase 230V” table.

Single-phase circuit, 230V



3-phase circuit, 400V (with neutral)



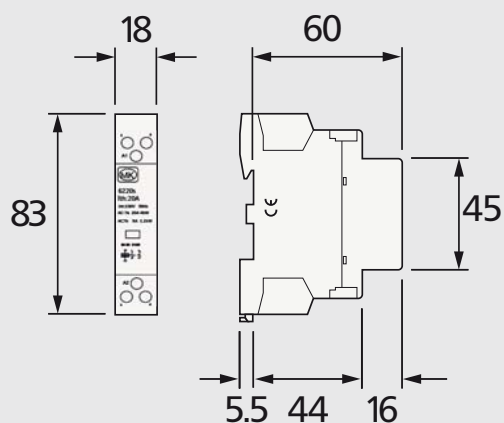
SINGLE-PHASE 230V TABLE						
TYPE OF LIGHTING APPLICATION (AC5A AND AC5B CATEGORIES)	6220S/6420S/ MAXIMUM NO. OF LAMPS		7440S MAXIMUM NO. OF LAMPS		7263S MAXIMUM NO. OF LAMPS	
INCANDESCENT AND HALOGEN LAMPS						
40W	57		115		172	
60W	45		85		125	
100W	28		70		100	
HALOGEN LAMPS USED WITH TRANSFORMER						
60W	14		27		40	
80W	12		23		35	
FLUORESCENT LAMP WITH STARTER (SINGLE FITTING WITH PARALLEL CORRECTION)						
15W	20		40		60	
20W	20		40		60	
40W	20		40		60	
FLUORESCENT LAMP WITH STARTER (SINGLE FITTING NON-CORRECTED)						
15W	30		70		100	
20W	30		70		100	
40W	28		70		100	
ELECTRONIC BALLAST (FLUORESCENT LAMP SINGLE SETTING)						
18W	111		222		333	
36W	58		117		176	
ELECTRONIC COMPACT LAMP (LOW CONSUMPTION)						
7W	200		400		600	
11W	120		240		360	
15W	88		176		264	
20W	66		132		200	
MOTORS – MAXIMUM POWER TYPE OF SMALL MOTOR APPLICATION (AC1 – AC7A CATEGORIES)						
220/240V single phase with capacitor	1.2kW		5.5kW		8.5kW	
400V three phase motor	3.2kW		12.5kW		15kW	
HEATING – MAXIMUM POWER TYPE OF SMALL HEATING APPLICATION (AC7B CATEGORY)						
NUMBER OF OPERATING CYCLES	230V SINGLE PH	400V 3 PH	230V SINGLE PH	400V 3 PH	230V SINGLE PH	400V 3 PH
100,000	5.4kW	16kW	8.6kW	26kW	13.6kW	41kW
150,000	4.6kW	14kW	7.4kW	22kW	11.6kW	35kW
200,000	3.5kW	10kW	5.6kW	17kW	8.8kW	26.5kW
500,000	1.6kW	5kW	2.6kW	7.5kW	4kW	12kW
1,000,000	1.2kW	3.5kW	1.9kW	6kW	3kW	9kW
ELECTRICAL ENDURANCE						
AC1 and AC7a categories	250,000 operations					

Sentry Technical

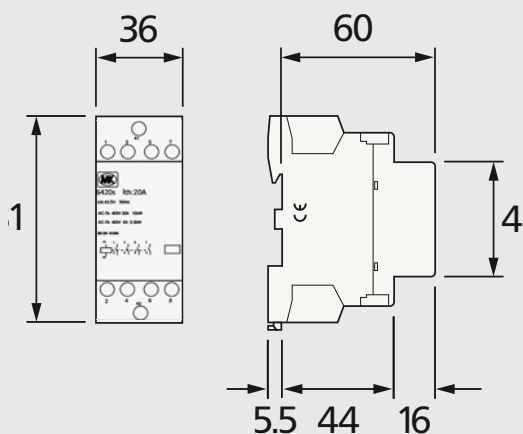
Contactors

Dimensions (mm)

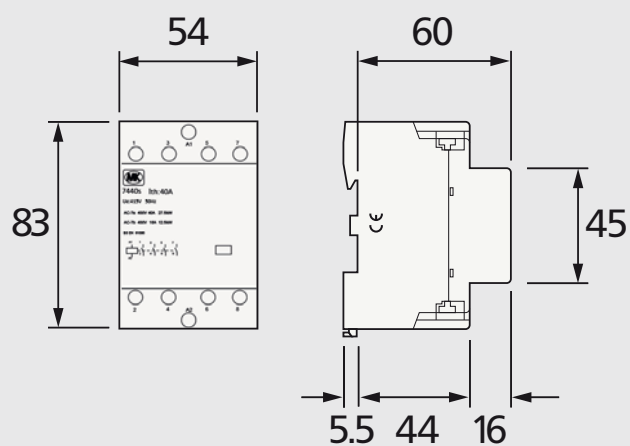
6220s



6420s



7440s/7463s



Bell Transformer

Standards and approvals

The Sentry Bell Transformer is designed to comply fully with the requirements of EN 60558-2-8.

TECHNICAL SPECIFICATION

ELECTRICAL

PRIMARY VOLTAGE

220V/240V a.c. 50Hz

SECONDARY VOLTAGE

8V a.c.

RATED OUTPUT CURRENT

1A

PHYSICAL

WIDTH

2 modules (36mm)

TERMINAL CAPACITY

1 x 2.5mm²

AMBIENT OPERATING TEMP

-5°C to +40°C

IP RATING

Front face IP4X

MAX. INSTALLATION ALTITUDE

2000 metres



Description

The Bell Transformer is of the safety isolating, fail safe type. The construction is all insulated, Class II.

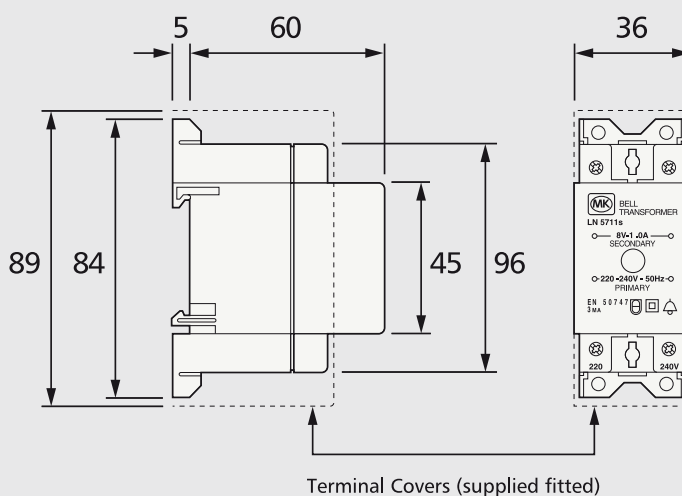
It may be mounted within a Sentry Consumer Unit within 2 or 4 module enclosures alongside MCBs, RCDs and RCBOs or surface mounted.

Installation

The Sentry Bell Transformer should always be connected in series with an MCB or other type of protective device of rating not exceeding 6A.

When installed in a 230V environment, i.e. inside a consumer unit, the cables used to connect the bell or chime to the transformer must have a 230V rated voltage. If bell wire is used, suitable sleeving must be provided to increase its insulation rating to 230V.

Dimensions (mm)



Electromechanical & Digital Timeswitches

Standards and approvals

EN 60730-1, EN 60730-2-7

FEATURES

- Ideal for independent programmable control of lighting, heating and other functions
- Can be mounted in Sentry Consumer Units and appropriate Sentry enclosures, or surface mounted
- Integral resistance to normal electrical interference
- Manual override of programmed commands
- Display indication of switch position for each Channel, i.e. ON or OFF (Digital only)
- Simple summer time to winter time (and vice versa) adjustment facility (Digital only)
- Random and holiday setting programme (5733s only)



Description

Sentry electromechanical and digital timeswitches enable pre-programmed commands to be executed on a given circuit. The Sentry time delay switches can be installed on circuits to energise suitable equipment for between 1 to 7 minutes.

Note: Inductive loads, particularly fluorescent lamps or energy saving lamps, place a heavy stress on the switching contacts. If in doubt about the ability of the timeswitches to directly switch a particular load it is advisable to install the timeswitch in conjunction with a suitable relay or contactor. If in doubt please consult the Technical Sales and Service Department for assistance.

Electromechanical

All Sentry electromechanical timeswitches are suitable for DIN rail mounting in Sentry Consumer Units and appropriate Sentry enclosures.

Quartz controlled units (5807s, 5824s) contain a power reserve of 150 hrs for accurate time keeping in the event of a mains failure.

3 module timeswitches have an additional insulated 'parking' terminal for earth or other connections.

24 hr units have a minimum switching time of 30 mins and 7 day units 3 hrs.

Digital

All Sentry digital timeswitches are suitable for DIN rail mounting in Sentry Consumer Units and 2 and 4 module Sentry enclosures.

Sentry digital timeswitches are available in both 1 and 2 module widths.

The 1 channel 1 module digital timeswitch (5733s) provides 50 programming selections, with random and holiday options. A simple summer to winter time (and vice versa) adjustment facility is provided. The timeswitch contains a power reserve of 150 hrs for accurate time keeping in the event of mains failure.

The two module digital timeswitches are available in both one channel (5731s) and 2 channel (5732s) versions. The units are supplied pre-programmed to UK time, and will automatically change from winter to summer time. The integral battery (with a 3 year power reserve) maintains the settings until the mains supply is connected. This feature will allow programming of switching commands prior to installation, if required.

The 1 channel 2 module digital timeswitch (5731s) provides for 20 programming selections.

The 2 channel 2 module digital timeswitch (5732s) provides a facility for independent control of two circuits. A maximum of 20 switching commands can be programmed for each channel.

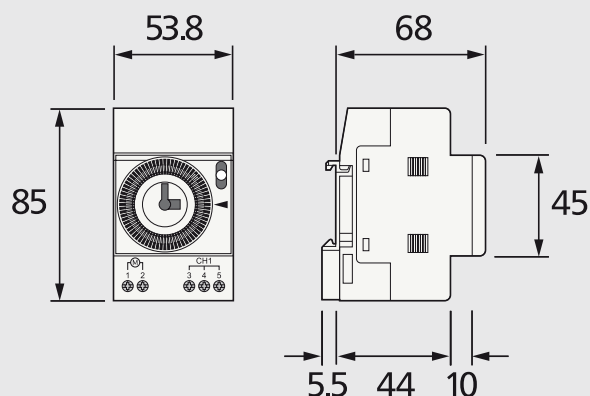
All digital timeswitches have a minimum programming time of 1 minute and a manual override. Commands can be programmed for individual days or for groups of days.

TECHNICAL SPECIFICATION					
ELECTROMECHANICAL	5707S	5724S	5833S	5807S	5824S
Supply voltage	220-240V a.c. 50Hz	220-240V a.c. 50Hz	220-240V a.c. 50Hz	220-240V a.c. 50-60Hz	220-240V a.c. 50-60Hz
Maximum power consumption	1VA	1VA	1VA	1VA	1VA
Switching capacity per channel					
– Resistive	16A	16A	16A	16A	16A
– Inductive	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)	4A (Cos.Ø 0.6)
– Fluorescent	1350W	1350W	1350W	1350W	1350W
Switching arrangement	1 x c/o	1 x c/o	1 x n/o	1 x c/o	1 x c/o
No. of switching commands	56	48	48	56	48
Minimum programme time	3hrs	30mins	30mins	3hrs	30mins
Operating temperature range	–25°C to +55°C	–25°C to +55°C	–25°C to +55°C	–20°C to +55°C	–20°C to +55°C
Running reserve	–	–	–	*150hrs	*150hrs
Width of unit	54mm (3 mods)	54mm (3 mods)	18mm (1 mod)	54mm (3 mods)	54mm (3 mods)
Terminal capacity	2 x 2.5mm ²	2 x 2.5mm ²	2 x 4mm ²	2 x 2.5mm ²	2 x 2.5mm ²
DIGITAL AND TIME DELAY	5731S	5732S	5733S		
Supply voltage	220-240V a.c. 50-60Hz	220-240V a.c. 50-60Hz	220-240V a.c. 50-60Hz		
Maximum power consumption	5VA	5VA	5VA		
Switching capacity per channel					
– Resistive	16A	16A	16A		
– Inductive	8A (Cos.Ø 0.6)	8A (Cos.Ø 0.6)	8A (Cos.Ø 0.6)		
– Fluorescent	1000W	1000W	1000W		
Switching arrangement	1 x c/o	2 x c/o	1 x c/o		
No. of switching commands	50	50	50		
Programme options	–	–	R/H		
Minimum programme time	1min	1min	1min		
Operating temperature range	–25°C to +55°C	–25°C to +55°C	–25°C to +55°C		
Operating accuracy @ 20°C	2.5sec/day	2.5sec/day	2.5sec/day		
Running reserve	3 years from factory	3 years from factory	3 years from factory		
Width of unit	36mm (2 mods)	36mm (2 mods)	18mm (1 mod)		
Terminal capacity	2 x 2.5mm ²	2 x 2.5mm ²	2 x 4mm ²		
Summer/winter changeover	Yes	Yes	Yes		
Neon indicator lamp load	–	–	–		

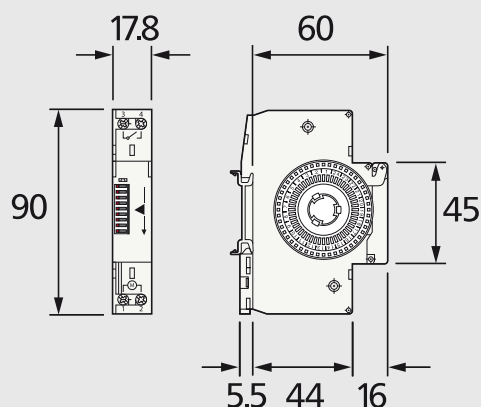
R/H = Random/holiday C/O = Changeover switch N/O = Normally open contact * = after 140hr charging time

Dimensions (mm)

5707s/5724s/5807s/5824s



5833s



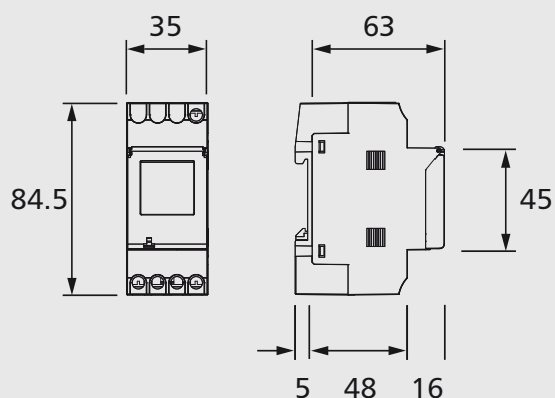
Sentry Technical

mkelectric.co.uk

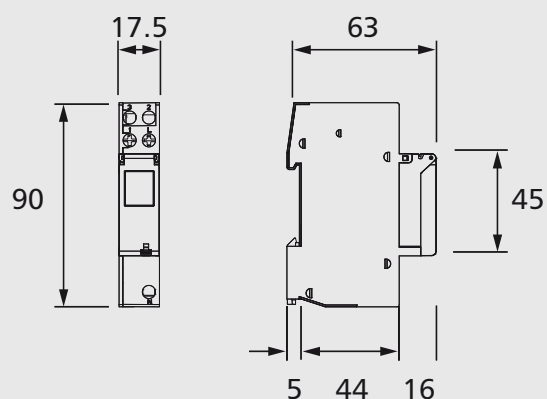


Dimensions (mm)

5731s/5732s



5733s





CASE STUDY

THE YORK BUILDING, LONDON

London's West End is renowned architecturally, for its style and sophistication and the York Building is no different.

The development, which occupies an island site close to Marble Arch, is a mix of commercial, retail and residential use. The 22 high quality residential apartments feature the latest and best in hi-tech services and MK was asked to design bespoke combination plates to provide a neat outlet for power and data applications.

The Design team came up with specially-designed in-line combination plates that met both the aesthetic and service requirements for these state of the art living spaces. Available on a worldwide basis, the MK Design Service is supported by a dedicated team to ensure the seamless delivery of your chosen products.

To find out more visit www.mkelectric.co.uk



Sentrysocket®

Technical

mkelectric.co.uk



Sentrysocket

Compliance with EC Directives, Standards and approvals

All Sentrysockets comply with the following EC Directives and are CE marked:

Low Voltage Directive

Electromagnetic Compatibility Directive
(89/336/EEC)

Sentrysocket RCD DP Single Sockets comply with the requirements of the following standards:

BS 7288:1990

BS EN 50082-1:1998

Sentrysocket RCD SP Double Sockets also comply with the requirements of BS EN 61543:1996.

TECHNICAL SPECIFICATION

ELECTRICAL

RATED VOLTAGE

240V a.c.

CURRENT RATING

13A resistive

Rated tripping current 10mA/30mA

TERMINAL CAPACITY

3 x 4mm² for 1 gang

2 x 4mm² for 2 gang

PHYSICAL

AMBIENT OPERATING TEMPERATURE

-5°C to +40°C

IP RATING

IP2XD

IP66 (K56301/K56231/K56233)

MAX. INSTALLATION ALTITUDE

2000 metres

Sentrysockets are not suitable for connection across two lines of a 127V line to Neutral Voltage System

Cable management

Logic Plus™, Albany Plus™ and Metalclad Plus™ Sentrysockets can be mounted in a variety of MK trunking systems.

Installation

Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

For a full range of corresponding products, see pages 288-289 in the product selector.



Description

Sentrysocket provides a high level of protection against electrocution and gives further protection when used with appliances vulnerable to insulation damage, particularly when they are in damp environments or outdoors. The Sentrysocket units are not suitable for mounting in damp environments or outdoors.

Sentrysocket, incorporating an RCD, is part of a complete range of fixed and portable wiring devices and circuit protection devices suitable for use in domestic, commercial and light industrial applications.

Active control circuits

Incorporate a 'Re-set' mechanism and are mains failure sensitive, i.e. they will function under all the normal conditions expected of an RCD, but will also trip in the event of a power cut or a sudden, dramatic reduction in mains voltage. This makes them ideal for use where it would be hazardous for equipment to suddenly energise after return of mains power, such as use with rotating machinery and heat developing apparatus.

Passive control circuits

Incorporate a 'Stay-set' mechanism and is mains failure proof, i.e. it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.

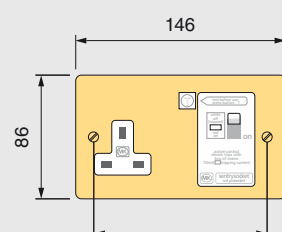
FEATURES

- Suitable for most residential, commercial and light industrial applications
- Active and passive control circuit applications
- Flexible and versatile in use
- Single Sockets have double pole switching, double sockets are single pole switching
- Masterseal Plus products are ideal for use with equipment subject to wet weather or high humidity
- Part of a complete range of MK circuit protection devices
- They are a.c. and pulsating d.c. sensitive for residual current
- Double Socket products have an enhanced RF Immunity performance

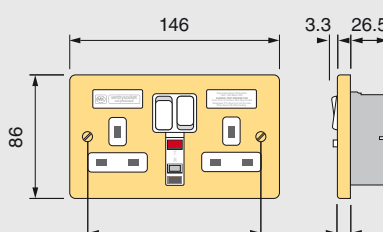
Sentrysockets products can be wall or bench mounted. Do not mount or use as a trailing socket or where they may be subject to excessive moisture or dampness.

Dimensions (mm)

Single socket



Double socket



Sentrysocket® Technical

Sentrysocket

Installation

Flush mounting steel wall box

It should be noted that some of the conduit entries may be restricted, depending upon their positions and the depth of box used.

Socket Testing

Single Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly:

1. Ensure that no appliance is connected to the Sentrysocket.
Switch Sentrysocket on: The switch should remain closed and the red flag will appear in the window. If the switch fails to remain closed, check that the Supply L and N connections are not reversed or the Supply N connection is not open circuit. If the Sentrysocket is correctly connected and still trips after being switched on, the Sentrysocket is faulty and should not be used.
2. If the Sentrysocket stays on, **press the test button:** The switch will open and the white flag will appear in the window. If the Sentrysocket does not trip and there is mains voltage present at the socket outlet, Sentrysocket is faulty and should not be used.
3. **Switch Sentrysocket on:** Connect an RCD tester and ensure that the Sentrysocket trips within the specified time:
≤ 200 ms AT RATED TRIP CURRENT
≤ 40 ms AT 5 x RATED TRIP CURRENT

If the Sentrysocket does not trip within the specified times then the product is faulty and should not be used (If more than one RCD is in series then there is no guarantee as to which device will trip first).
4. **Reset all tripped RCD's including the Sentrysocket.**
5. **Switch off the mains supply switch disconnecter.** On mains failure, a Sentrysocket with Active Control Circuit will trip, whilst a Sentrysocket with Passive Control Circuit will not trip. If the Active Control device does not trip, it is faulty and should not be used – see note below. If no faults have been found then installation testing has been completed successfully.

Note: If a fault is identified at any stage of installation testing procedure do not use Sentrysocket, and contact your local electrician, or your local MK stockist.

Double Socket Testing

After installation, turn the mains electricity supply on.

To test that the Sentrysocket is functioning correctly follow the steps 1 to 4 below:

1. Ensure that no appliance is connected to the Sentrysocket.
2. **Reset** – Press the button marked R (for Reset) – the contact status indicator should show red, indicating that the socket outlets are now live (if the switches are in the ON positions).
3. **Test** – Press the TEST button marked T (for Test), the product should trip with the contact status indicator showing black. In this state the socket outlets are disconnected from the supply.
4. **Reset** – Press the button marked R again, the contact status indicator should show red.
5. Connect an RCD Tester to either socket outlet and ensure that the Sentrysocket trips with the specified times below:
≤ 200 ms AT RATED TRIP CURRENT
≤ 40 ms AT 5 x RATED TRIP CURRENT
6. Reset the Sentrysocket as in step 2 above.
7. Switch off the Mains Supply Switch Disconnecter.
8. A Sentrysocket with Active Control Circuit should trip while a Sentrysocket with Passive Control Circuit should not trip.

If all the operations in steps 2 to 8 above give correct results, the Sentrysocket RCD socket outlet is safe to use.

If the procedures in steps 2 to 8 above are not completed correctly, do not use the Sentrysocket product and seek professional advice or contact the MK Technical Sales and Service department on +44 (0)1268 563720.

Cable Management Technical

Range

Technical Data

Perimeter and Distribution

Cable Management Introduction	610-611
Prestige 3D Dado and Skirting Three compartment dado trunking system for compliance with Cat 6 structured cabling	612-615
Prestige 3D Antibac Blue Antibacterial solution for power and data distribution in environments where hygiene is priority	616
Prestige 3D Compact 3 compartment trunking with a smaller footprint for more confined installations	617-621
Prestige 2com Two compartments provide maximum data capacity around radiused bends	623-629
Prestige Poles and Posts Poles and Posts for supplying multi-services to work stations	630-631
Powerlink Plus Busbar trunking system with flush fitting accessories	632-639
Pinnacle Versatile angular bench trunking system	640-644
Premier Integrated trunking system with snap fit mouldings	645-649
Norwich Durable and popular trunking system	650-654
Ega Industrial Heavy duty trunking in a variety of sizes	656-661
Ega Cornice Trunking for wall/ceiling junctions	662-666



Technical Hotline
+44 (0)1268 563720

Cable Management Technical

Range	Technical Data
Conduit and Mini	
Egatube Conduit High impact conduit with a comprehensive range of fittings	667-671
Ega Mini Trunking and Red Alert Wide selection of mini trunking profiles and fittings	672-674

Cable Management Technical

Material Specification

PVCu

PVCu is used for the production of extrusions and mouldings and is universally accepted as having the most suitable properties for use within the electrical industry.

Standards and Approvals

All MK PVCu products are manufactured in accordance with the requirements of BS EN 50085 Series, BS 4678: Part 4, BS EN 61386 Series and BS 4662. The PVCu material used has been tested by an approved laboratory in accordance with the requirements of the following British Standards: BS 4607: Part 1, BS 476: Part 7. Copies of test certificates are available upon request. MK has been awarded ISO 9001: 2008 accreditation. The system complies with all relevant requirements of BS 7671:2008.

CE marking

All relevant MK products in this brochure are CE marked, confirmation that they meet the EMC and LV directives.

Performance

Strength	Impact resistance	High impact resistance under normal climatic conditions, BS 4678: medium duty	
	Charpy notched impact strength	25 kJ/m ²	
	Tensile strength	at yield	34.62 N/mm ²
		at break	42.00 N/mm ²

Fire performance

The PVC-U materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 61386, BS EN 50085 and BS 4678. Extrusion material has been tested by an accredited laboratory in accordance with the requirements of BS 476: Part 7 and has achieved a Class 1Y classification. Moulding material has been tested by an accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C.

Thermal properties

All MK PVCu products are designed to accommodate local thermal expansion. Fitting instructions explain the procedure required to deal with the differential movement at the interface with the building fabric.

Coefficient of linear expansion	55 x 10 ⁻⁶ /°C (5mm/3000mm with a temperature rise of 25°C)
Operating temperatures	-5° to 60°C
Vicat softening point	81°C
Thermal conductivity	0.19w/mk

Chemical resistance

PVCu is non-corrosive and not affected by sea water. It has excellent resistance to mineral acids, alkalis and detergents, good resistance to alcohols, but liable to attack from solvents such as ketones, aromatics and hydrocarbons.

Electrical

PVCu is non-conductive.

Dielectric strength	40 kV/mm in DBP
	17 kV/mm in tx oil
Resistivity	1014 Ω ohm

Biological

Resistant to vermin and termites.

Workability

All MK PVCu products are lightweight and can be readily cut and drilled with hand tools. Short component lengths can be readily incorporated, reducing wastage of material. All covers and accessories are manufactured to fine tolerances to ensure a tight fit with ease of removal. Stop ends are secured to the carriers. For details, see the relevant installation guide.

Durability

All MK PVCu products are stable and will maintain their performance characteristics in accordance with the terms and conditions described above.

Maintenance

Clip-on covers with optional screw fix and interchangeable accessories provide continuous accessibility for rewiring, extensions and modifications to an installation. Covers and accessories can be cleaned with a damp cloth and household detergent. The surface can be decorated with commercial paints if required.

Mechanical performance

Impact resistance at -5°C, BS EN 50085: medium duty for trunking, BS EN 61386 heavy or medium, where relevant for conduits.

Aluminium

Standards and approvals

The Prestige 3D Aluminium System is manufactured in accordance with the requirements of BS EN 50085-1:2005 and BS EN 50085-2-1:2006. 1, 2 & 3 Gang Boxes conforming to BS 4662 where applicable.

IEE Wiring Regulations

All products are designed and manufactured to allow installation to comply with all relevant requirements of the latest edition of BS 7671:2008.

Quality Assurance

The system is manufactured to BS EN ISO 9001:2008

Earth Continuity

The system makes provision for earth bonding where required in accordance with BS 7671:2008.

When PVC cable trunking items are used that interrupt the earth continuity, Earth Kits (VP218 & VP219) are required to ensure continuity.

Impact Classification

Composite trunking systems (PVC / Al) will withstand "medium" impact to BS EN 50085. Metal components will withstand "heavy" impact as defined in BS EN 50085.

Thermal Properties

Min/Max installation and application temperature -5 to +60°C.

Coefficient of linear expansion 23 x 10⁻⁶ per°C.

1mm/m for 40 degree rise.

Maintenance

Resistant to staining. Wipe with soapy water (neutral 5/7 ph value).

Electrical Properties

Resistance to 0.03 ohm mm²/m.

Chemical Properties

Corrosion only occurs, to any extent, when ph value is less than 3 or greater than 9.



Technical Hotline
+44 (0)1268 563720

Cable Management Technical

PVCu Chemical Resistance Table

The resistance of unplasticised PVC to a wide range of chemicals is listed in the table below.

The symbols used to denote performance are as follows:

- ▲ Satisfactory
- Some attack or absorption: the material may be considered for use when alternative materials are unsatisfactory and where limited life is acceptable. When PVC is to be used with such chemicals full scale trials under realistic conditions are necessary.
- Unsatisfactory: so rated because of decomposition, solution, swelling, loss of ductility etc, of the samples tested.

For clarification and for details of resistance to other chemicals please call our Technical Hotline on +44 (0)1268 563720.

Note: to determine the suitability of PVCu for external applications we strongly advise you contact the MK Technical Sales and Service Department on +44 (0)1268 563720.

CHEMICAL	CONCENTRATION	UNPLASTICISED PVC 20°C	60°C
acetaldehyde	40% aq. solution	▲	■
acetic acid	60% aq. solution	▲	■
acetic anhydride		■	■
acetone	Traces	■	■
alcohol, ethyl	40% w/w water	▲	●
alcohol, isopropyl		▲	▲
alcohol, menthyl	6% aq. solution	▲	▲
	100%	▲	●
aliphatic hydrocarbons		▲	▲
aluminium chloride		▲	▲
aluminium hydroxide		▲	▲
ammonia	0.88S.G., aq. solution	▲	▲
	Anhydrous gas	■	■
	Anhydrous liquid	■	■
ammonium chloride		▲	▲
ammonium hydroxide		▲	▲
aniline		■	■
animal oils		▲	▲
aqua regia	Dilute	▲	▲
	Concentrated	▲	■
barium sulphate		▲	▲
beer		▲	▲
benzene		■	■
benzoyl chloride		■	■
borax		▲	▲
boric acid		▲	▲
brine		▲	▲
bromide	Traces, gas	●	■
	100% (dry gas)	■	■
	Liquid	■	■
calcium chloride	aq. solution	▲	▲
	20% in methyl alcohol	▲	▲
calcium hydroxide		▲	▲
calcium hypochlorite		▲	▲
carbon dioxide		▲	▲
carbonic acid		▲	▲
carbon monoxide		▲	▲
carbon tetrachloride		●	■
castor oil		▲	▲
chloric acid		▲	▲
chlorine	100% (dry gas)	▲	●
	10% (moist gas)	●	■
chlorine water	Sat. solution	●	●
chloroform		■	■
chrome allum		▲	▲
chromic acid	Plating solution	▲	▲
cider		▲	▲
citric acid		▲	▲
copper chloride		▲	▲
copper cyanide		▲	▲

CHEMICAL	CONCENTRATION	UNPLASTICISED PVC 20°C	60°C
copper nitrate		▲	▲
copper sulphate		▲	▲
cupric sulphate		▲	▲
cyclohexanone		■	■
detergent, synthetic	All concentrations	▲	▲
developers, photographic		▲	▲
dextrin		▲	▲
dextrose		▲	▲
diaz salts		▲	▲
dichlorodifluoromethane		▲	▲
diethyl ether		■	■
emulsifiers	All concentrations	▲	▲
emulsions, photographic		▲	▲
ethyl acetate		■	■
ethylene glycol		▲	▲
ethylene oxide		■	■
fatty acids		▲	▲
ferric chloride		▲	▲
ferric nitrate		▲	▲
ferric sulphate		▲	▲
ferrous ammonium citrate		▲	▲
ferrous chloride		▲	▲
ferrous sulphate		▲	▲
fixing solution, photographic		▲	▲
fluorine		●	●
formaldehyde	40% w/w water	▲	▲
formic acid	50% solution	▲	■
	100% solution	▲	■
fructose		▲	▲
fruit pulp		▲	▲
glucose		▲	▲
glycerol		▲	▲
grape sugar		▲	▲
heptane		▲	▲
hydrobromic acid	100%	▲	▲
hydrochloric acid	22% aq. solution	▲	▲
	Concentrated	▲	▲
hydrochloric acid	40% aq. solution	▲	●
	60% aq. solution	●	■
	Concentrated	▲	▲
hydrogen bromide	Anhydrous	▲	▲
hydrogen chloride	Anhydrous	▲	▲
hydrogen flouride	Anhydrous	▲	▲
hydrogen peroxide	3% (10vol)	▲	▲
	12% (40vol)	▲	▲
	30% (100vol)	▲	▲
	90% and above	▲	▲
hydrogen sulphide		▲	▲
iodine	Solution in potassium iodine	■	■
lactic acid	10% aq. solution	▲	▲
	100%	●	●
lanoline		▲	▲
linoleic acid		▲	▲
linseed oil		▲	▲
magnesium hydroxide		▲	▲
maleic acid	50% aq. solution	▲	●
	Concentrated	▲	▲
metallic soaps (water soluble)		▲	▲
methyl bromide		■	■
methyl chloride		■	■
methyl cyclohexanone		■	■
methyl ethyl ketone		■	■
methyl isobutyl ketone		■	■
methylated spirit		▲	▲
methylene chloride		■	■
milk		▲	▲
mineral oil		▲	▲
mixed acids (sulphuric/nitric Various proportions)		●	■
molasses		▲	▲
naphtha		▲	▲
naphthalene		■	■
nicotine		▲	▲
nitric acid	5% aq. solution	▲	▲
	50% aq. solution	▲	●
nitrobenzene		■	■
oleic acid		▲	▲

CHEMICAL	CONCENTRATION	UNPLASTICISED PVC 20°C	60°C
oxalic acid		▲	▲
oxygen		▲	▲
ozone		▲	▲
paraffin		▲	▲
pentane		▲	▲
petrol		▲	▲
phosphoric acid	30% aq. solution	▲	▲
	95% aq. solution	▲	▲
photographic developers		▲	▲
potassium bromide		▲	▲
potassium carbonate		▲	▲
potassium cyanide		▲	▲
potassium ferricyanide		▲	▲
potassium hydroxide	10% aq. solution	▲	▲
	Concentrated	▲	▲
potassium hypochlorite		▲	▲
potassium permanganate		▲	▲
propane		▲	▲
propylene glycol		▲	▲
propylene oxide		■	■
saccharose		▲	▲
sea water		▲	▲
silver nitrate		▲	▲
soap solution		▲	▲
sodium bicarbonate		▲	▲
sodium bisulphate		▲	▲
sodium borate		▲	▲
sodium bromide		▲	▲
sodium carbonate		▲	▲
sodium chlorate		▲	▲
sodium chloride		▲	▲
sodium cyanide		▲	▲
sodium ferricyanide		▲	▲
sodium ferrocyanide		▲	▲
sodium fluoride		▲	▲
sodium hydroxide	40% aq. solution	▲	▲
	Concentrated	▲	▲
sodium hypochlorite 15% Cl		▲	▲
sodium hyposulphate		▲	▲
sodium nitrate		▲	▲
sodium peroxide		▲	▲
sodium silicate		▲	▲
sodium sulphate		▲	▲
sodium sulphide	25% aq. solution	▲	▲
	sodium sulphite	▲	▲
soft soap		▲	▲
surface active agents (All concentrations) (emulsifiers, synthetic detergents and wetting agents)		▲	▲
starch		▲	▲
stearic acid		▲	▲
sucrose		▲	▲
sulphur	Colloidal	▲	▲
sulphur dioxide	Dry	▲	▲
	Liquid	●	■
sulphuric acid	80% aq. solution	▲	▲
	90% aq. solution	▲	●
	Fuming	■	■
sulphurous acid	10% aq. solution	▲	▲
tallow		▲	▲
tanning extracts		▲	▲
tartaric acid		▲	▲
transformer oil		▲	▲
trichloroethane		■	■
trichloroethylene		■	■
turpentine		▲	▲
vegetable oils		▲	▲
vinegar		▲	▲
water		▲	▲
wetting agents	All concentrations	▲	▲
wines and spirits		▲	▲
xylene		■	■
zinc carbonate		▲	▲
zinc chloride		▲	▲
zinc sulphide		▲	▲

Prestige 3D Technical – Dado & Skirting

Data Trunking System

Standards and Approvals

The Prestige 3D System is manufactured in accordance with the requirements of BS EN 50085-1:2005 and BS 4662:2006. Copies of test certificates are available upon request. The system complies with all the relevant requirements of BS 7671:2008. MK has been awarded ISO 9002 accreditation.

TECHNICAL SPECIFICATION

CE MARKING

All relevant MK products in this brochure are CE marked, confirmation that they meet the EMC and LV directives.

MANUFACTURE

All trunking components are manufactured from PVCu.

APPEARANCE

Prestige 3D is manufactured in white. The trunking surface can be painted, if required, after installation. Antibac Blue must not be painted or otherwise coated.

PERFORMANCE

IMPACT	
MINIMUM STORAGE TEMPERATURE	-5°C
MINIMUM INSTALLATION TEMPERATURE	-5°C
MAXIMUM APPLICATION TEMPERATURE	+60°C

FIRE PERFORMANCE

The PVCu materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 50085-1: 2005. Extrusion material has achieved classification 1Y in accordance with BS 476- 7. Moulding material has achieved 650°C glow wire rating in accordance with BS EN 60695-2-11: 2001.

THERMAL PROPERTIES

Prestige 3D trunking is designed to accommodate local thermal expansion. Fitting instructions explain the procedure required to deal with the differential movement at the interface with the building fabric. Linear Expansion: 4mm over every 3000mm with a temperature rise of 25°C.

CHEMICAL RESISTANCE

The PVCu materials used are non-corrosive and not affected by seawater. It has excellent resistance to mineral acids, alkalis and detergents, good resistance to alcohols, but is liable to attack from solvents such as ketones, aromatics and hydrocarbons. See PVCu Chemical Resistance table on Page 611 for more information.

ELECTRICAL

PRESTIGE 3D TRUNKING IS NON-CONDUCTIVE	
DIELECTRIC STRENGTH	40 kV/mm in DBP
	17 kV/mm in tx oil
RESISTIVITY	1014 Ω cm

BIOLOGICAL

Prestige 3D trunking is resistant to vermin and termites.

WORKABILITY

Prestige 3D trunking is lightweight and can readily be cut and drilled to suit installation needs with hand tools.

DURABILITY

Prestige 3D trunking is stable and will maintain its performance characteristics in accordance with the terms and conditions described above.

MAINTENANCE

Clip-on covers with optional screw fix and interchangeable accessories provide continuous accessibility for rewiring, extensions and modifications to an installation. Covers and accessories can be cleaned with water and household detergent. The surface can be decorated with commercial paints if required. *Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request.



Description

Prestige 3D is the new three compartment dado, skirting and compact trunking from MK that satisfies the growing data demands of cable management installations. As well as providing greater depth for larger cable capacity, Prestige 3D is rich in new features, offering installation benefits and improved cable management. Prestige 3D is Cat 5e, 6 and 7 compliant, with the new Data Sweep, Flat Angles and Tees, all allowing continuous cable capacity.

FEATURES

- Greater trunking depth, increased data and power cable capacity, accepts 45mm deep back boxes
- Patented Cat 5e, 6 and 7 compliant Data Sweep, with no loss of capacity and without the need for bulbous, protruding corner covers
- Cat 5e, 6 and 7 compliant moulded flexible Internal and External Corners, moulded Flat Angles and Tees
- Divider Knockouts, making wiring easier and faster with no drilling or cutting
- Patented two stage Hinge Lids enables cables to be supported by the trunking cover during installation, and makes retro-installation of additional cables more simple
- All extrusions manufactured from 100% recycled material*

Prestige Antibac Blue

An antibacterial cable management solution for power and data distribution in environments where hygiene is a priority.

Prestige Compact

A Dado system which has a smaller footprint and offers a solution for confined locations, such as between radiators and window sills.

* Based on 2014 consumption

For a full range of corresponding products, see pages 290-303 in the product selector.

Prestige 3D Technical – Dado & Skirting

Data Trunking System

Dimensions (mm)

Profiles

Compartment CSA mm²

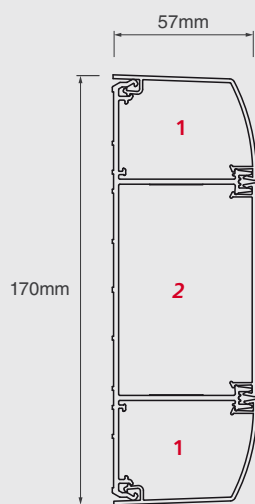
- 1 = 1763
- 2 = 3828
- 3 = 1952

Assembly

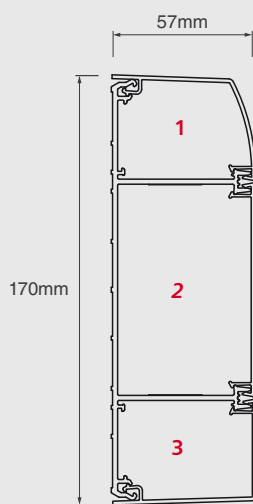
Dado = 1.58 kg/m
Skirting = 1.60 kg/m

Wall Thickness

VP100 = 1.7mm
VP110 = 1.7mm
VP115 = 1.7mm
VP180 = 2.0mm



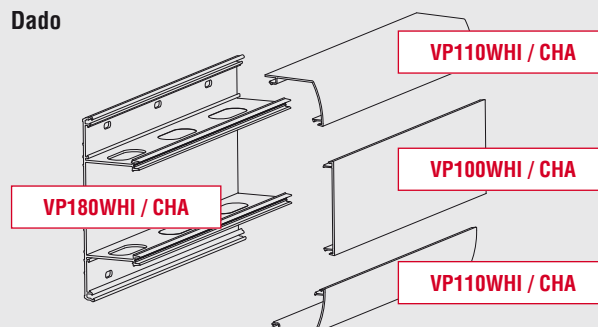
Dado



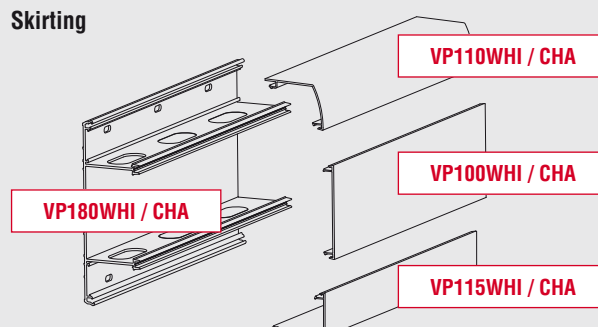
Skirting

Component Selection Guide

Dado



Skirting



CABLE CAPACITY										
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 2		COMPARTMENT 2 WITH 45MM DEEP BOX		COMPARTMENT 3	
			FULL TERM CSA (MM²)							
			1763		3828		610		1952	
			TERM AT 45% FILL (MM²)							
			793		1722		274		878	
POWER CABLES			NUMBER OF CABLES AT 45% FILL							
PVC stranded	1.5mm²	8.6	92		200		31		102	
	2.5mm²	12.6	62		136		21		69	
	4mm²	16.6	47		103		16		52	
	6mm²	21.2	37		81		12		41	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	26	58	57	126	9	20	29	64
Cat 5E STP	6.0mm dia.	36.0	22	48	47	106	7	16	24	54
Cat 6 UTP	6.5mm dia.	42.2	18	41	40	90	6	14	20	46
Cat 6 STP	7.0mm dia.	49.0	16	35	35	78	5	12	17	39
Cat6a	8.0mm dia	64.0	12	27	26	59	4	9	13	30
Cat 7	8.0mm dia	64.0	12	27	26	59	4	9	13	30

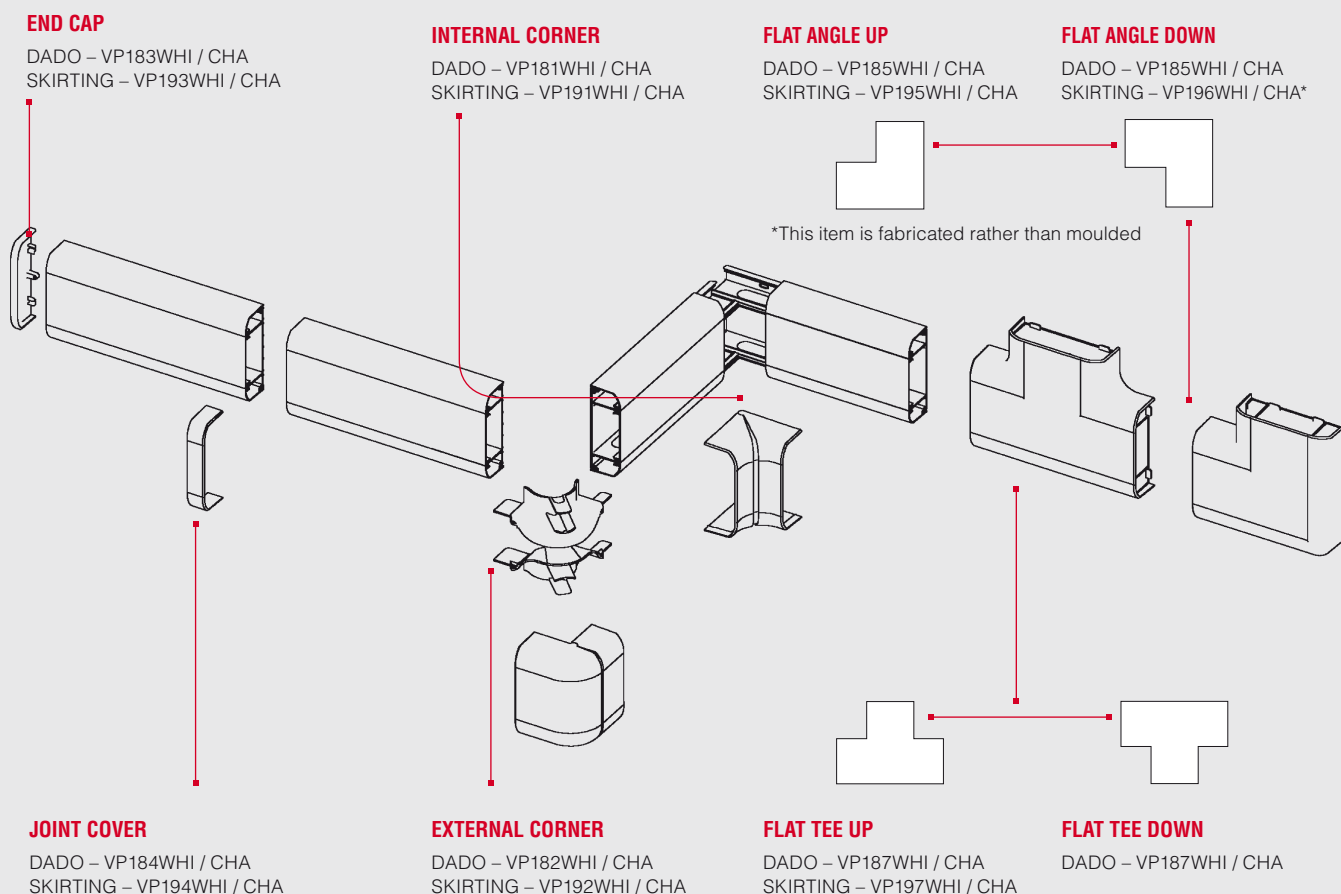
Prestige 3D Technical – Dado & Skirting

mkelectric.co.uk

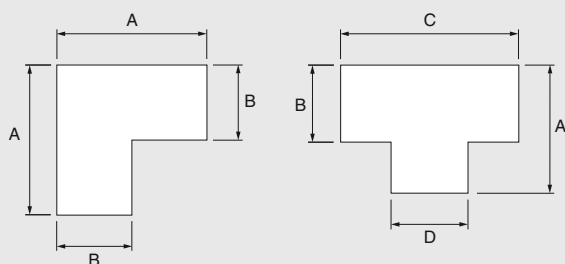


Data Trunking System

Component Selection Guide



Flat Angles and Tees



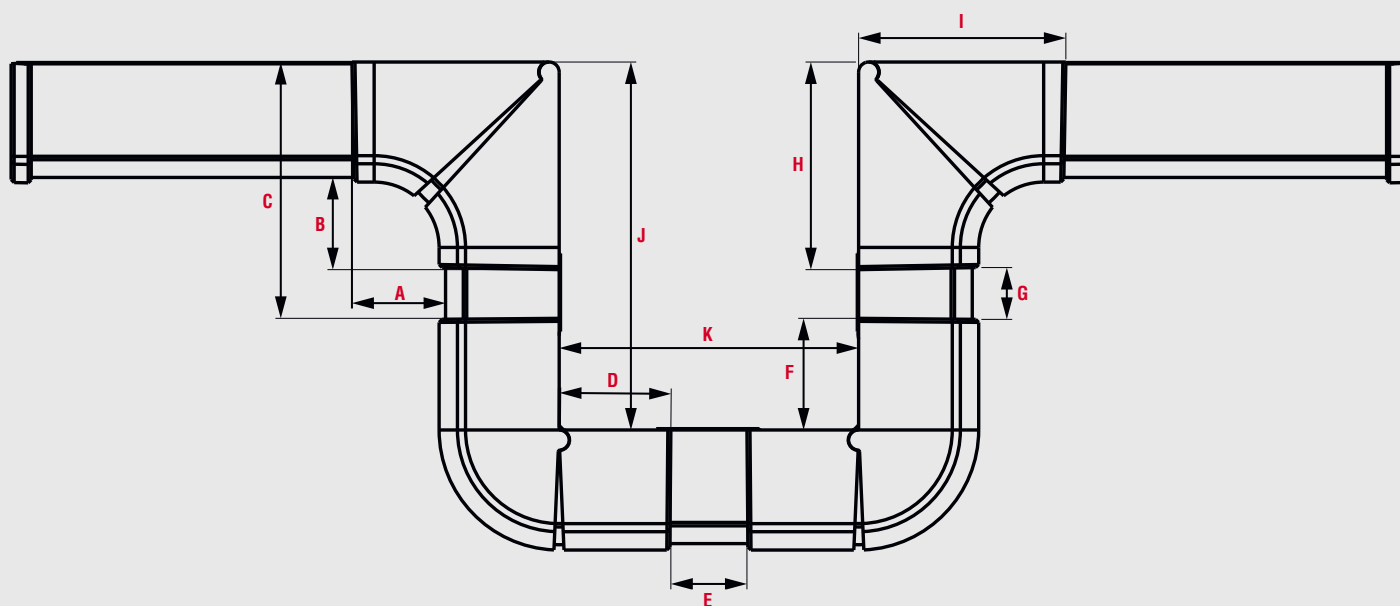
FLAT ANGLES AND TEES DIMENSIONS (MM)

LIST NO	DESCRIPTION	A	B	C	D
VP185WHI / CHA	Flat Angle	218mm	170mm		
VP187WHI / CHA	Flat Tee	202mm	170mm	235mm	170mm
VP195WHI / CHA	Flat Angle Up	218mm	170mm		
VP196WHI / CHA	Flat Angle Down	270mm	170mm		
VP197WHI / CHA	Flat Tee Up	202mm	170mm	235mm	170mm

Prestige 3D Technical – Dado & Skirting

Installing Prestige 3D

Figure shows minimum distance required for installing around corners



MINIMUM DISTANCE BETWEEN CORNERS (MM)										
A	B	C	D	E	F	G	H	I	J	K
47	47	128	56	35	56	24	104	104	184	147

Prestige 3D Technical – Antibac Blue

Prestige 3D Antibac Blue Installation

When planning the installation establish the layout of your system, paying particular attention to:

- **Direction Changes**
- **Feed Positions**
- **Component Spacing**

The carrier components are not treated with the antibacterial additive. As such these must always be fixed onto a surface where they will not be touched once the installation is complete.

During the installation of Prestige 3D Antibac Blue no special treatment of the product is required. There is no need for an installer to wear sterile gloves, use sterile tools or undertake special training.

Once installed, the Prestige 3D Antibac Blue system carries a 10 year guarantee, the same as all MK Cable Management products, giving both the installer and specifier confidence and peace of mind. The unique addition of a fluorescent additive gives further confidence, clearly identifying the product as Prestige 3D Antibac Blue. A bright blue glow under UV light indicates the antibacterial additive is present, a dull purple glow under UV light indicates standard PVCu.

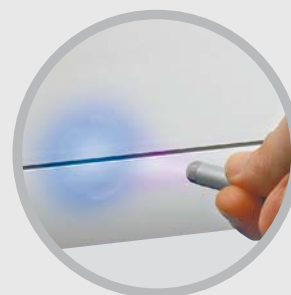
When maintaining the product after installation, no special treatment is required. The antibacterial additive depends on intimate contact between surfaces of the trunking and the user, so any barriers such as dirt or grime will reduce or negate the antibacterial effect. However, the exterior of the trunking can be cleaned very simply using a damp cloth with a mild detergent, which must be thoroughly wiped off. Alternatively the trunking can also be cleaned using Ultraviolet light. Prestige 3D Antibac Blue is not intended to replace standard cleaning regimes. It is an additional protection which can only operate efficiently if the surfaces are kept free of dirt and grime. Before hand-over to the client the entire trunking run must be thoroughly cleaned as described in the product installation guide.

Prestige 3D Antibac Blue product and packaging is recyclable. At the end of its useful life it should be recycled where facilities exist.

The additive used in Prestige 3D Antibac Blue is registered with the Environmental Protection Agency (EPA) and is compliant with the European Biocidal Products Directive (BPD).



Prestige 3D Antibac Blue



Prestige 3D Antibac Blue is easily distinguishable from standard Prestige 3D, it has a different protective film and has a unique patented fluorescence under UV light which glows bright blue.



Technical Hotline
+44 (0)1268 563720

Prestige 3D Technical – Compact

Data Trunking System

Standards and Approvals

The Prestige 3D Compact System is manufactured in accordance with the requirements of BS EN 50085-1:2005 and BS 4662:2006. Copies of test certificates are available upon request. The system complies with all the relevant requirements of BS 7671:2008. MK has been awarded ISO 9002 accreditation.

TECHNICAL SPECIFICATION

CE MARKING

All relevant MK products in this brochure are CE marked, confirmation that they meet the EMC and LV directives.

MANUFACTURE

All trunking components are manufactured from PVCu.

APPEARANCE

Prestige 3D is manufactured in white. The trunking surface can be painted, if required, after installation.

PERFORMANCE

IMPACT	
MINIMUM STORAGE TEMPERATURE	-5°C
MINIMUM INSTALLATION TEMPERATURE	-5°C
MAXIMUM APPLICATION TEMPERATURE	+60°C

FIRE PERFORMANCE

The PVCu materials used in the manufacture of MK products are non-flame propagating in accordance with BS EN 50085-1:2005. Extrusion material has achieved classification 1Y in accordance with BS 476-7. Moulding material has achieved 650°C glow wire rating in accordance with BS EN 60695-2-11:2001.

THERMAL PROPERTIES

Prestige 3D Compact trunking is designed to accommodate local thermal expansion. Fitting instructions explain the procedure required to deal with the differential movement at the interface with the building fabric. Linear Expansion: 4mm over every 3000mm with a temperature rise of 25°C.

CHEMICAL RESISTANCE

The PVCu materials used are non-corrosive and not affected by seawater. It has excellent resistance to mineral acids, alkalis and detergents, good resistance to alcohols, but is liable to attack from solvents such as ketones, aromatics and hydrocarbons. See PVCu Chemical Resistance table on Page 611 for more information.

ELECTRICAL

PRESTIGE 3D TRUNKING IS NON-CONDUCTIVE	
DIELECTRIC STRENGTH	40 kV/mm in DBP
	17 kV/mm in tx oil
RESISTIVITY	1014 Ω cm

BIOLOGICAL

Prestige 3D Compact trunking is resistant to vermin and termites.

WORKABILITY

Prestige 3D Compact trunking is lightweight and can readily be cut and drilled to suit installation needs with hand tools.

DURABILITY

Prestige 3D Compact trunking is stable and will maintain its performance characteristics in accordance with the terms and conditions described above.

MAINTENANCE

Clip-on covers with optional screw fix and interchangeable accessories provide continuous accessibility for rewiring, extensions and modifications to an installation. Covers and accessories can be cleaned with water and household detergent. The surface can be decorated with commercial paints if required.* Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request.



Description

Prestige 3D Compact satisfies the growing data demands in more confined locations. Prestige 3D Compact has a smaller footprint than Prestige Plus and Prestige 3D and is rich in features, offering installation benefits and improved data cable management. The new concept uses the full trunking depth with a sliding open box (frame) principal to ease power and data connections. Prestige 3D Compact trunking is capable of being installed to Cat 5e, 6 and 7 data cable installation requirements, and the depth is more conducive to data accessories.

The centre compartment is intended for accessory mounting only. Power and data cables are to be run in the outer compartments

FEATURES

- Unique 'open box' mounting frames combined with divider knockouts to provide unhindered tool-free cable entry
- Patented Cat 5e, 6 and 7 compliant Data Sweep, with no loss of capacity and without the need for bulbous, protruding corner covers
- Cat 5e, 6 and 7 compliant moulded flexible Internal and External Corners, moulded Flat Angles and Tees
- Divider Knockouts, making wiring easier and faster with no drilling or cutting
- Patented two stage Hinge Lids enables cables to be supported by the trunking cover during installation, and makes retro-installation of additional cables more simple
- Pre-punched bases
- Attractive easy to fit single piece covers for flat angle and flat tee
- Curved outer covers that complement MK Logic Plus accessories
- All extrusions manufactured from 100% recycled material*

* Based on 2014 consumption

For a full range of corresponding products, see pages 305-310 in the product selector.

Prestige 3D Technical – Compact

Data Trunking System

mkelectric.co.uk



Dimensions (mm)

PROFILES

Compartment CSA mm²

1 = 742

2 = 1431

*(X) = 3035

ASSEMBLY

Dado = 1.20 Kg/m

Extended Dado = 1.35 Kg/m

WALL THICKNESS

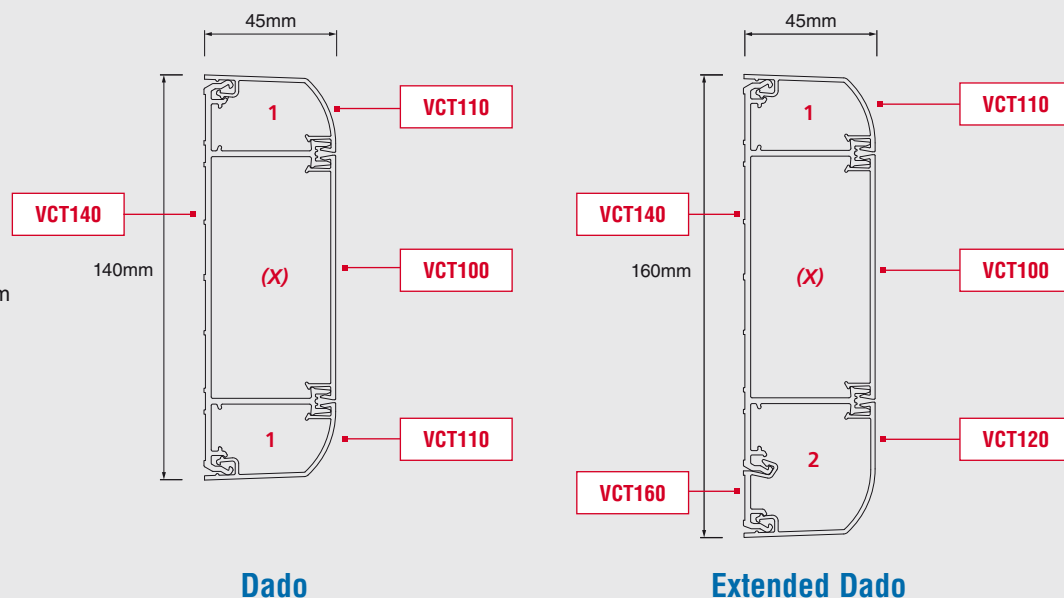
VCT100 = 1.7mm

VCT110 = 1.7mm

VCT120 = 1.7mm

VCT140 = 2.0mm

VCT160 = 2.0mm



Dado

Extended Dado

CABLE CAPACITY								
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 2		COMPARTMENT (X)	
			FULL TERM CSA (MM²)					
			742		1431		3035	
			TERM AT 45% FILL (MM²)					
			333		643		1365	
POWER CABLES			NUMBER OF CABLES AT 45% FILL					
PVC stranded	1.5mm²	8.6	38		74		158	
	2.5mm²	12.6	26		51		108	
	4mm²	16.6	20		38		82	
	6mm²	21.2	15		30		64	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)					
			A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	11	24	21	47	45	100
Cat 5E STP	6.0mm dia.	36.0	9	20	17	39	37	84
Cat 6 UTP	6.5mm dia.	42.2	7	17	15	33	32	71
Cat 6 STP	7.0mm dia.	49.0	6	15	13	29	27	61
Cat 7	8.0mm dia	64.0	5	11	10	22	21	47

* Compartment (X) dimensions and capacity are given as guide only for instances where trunking is used for cable routing e.g. vertical drops/risers.



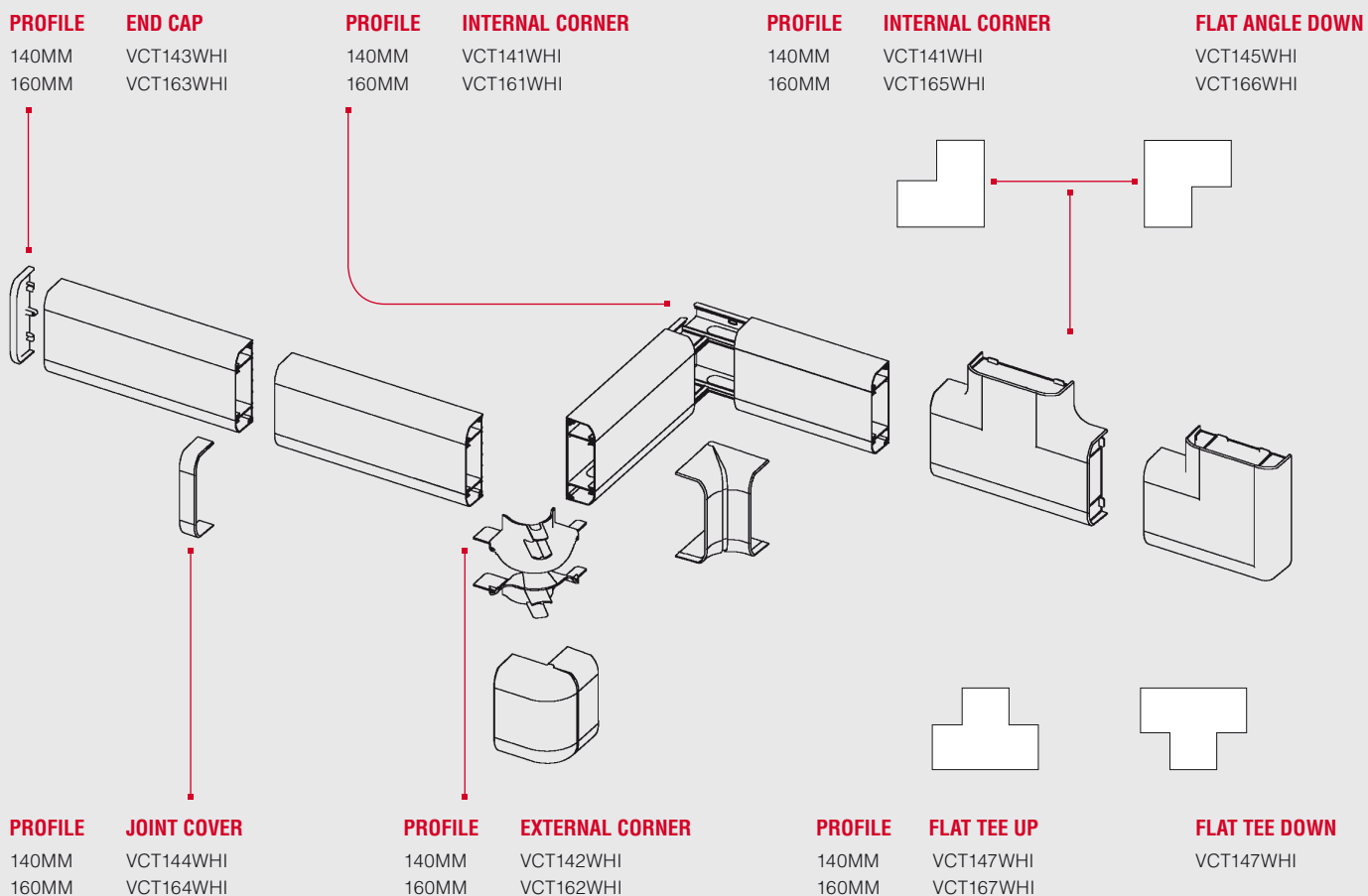
Technical Hotline
+44 (0)1268 563720

Prestige 3D Technical – Compact

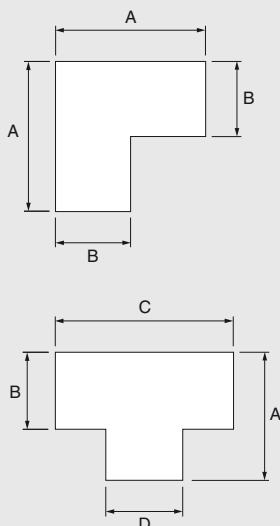
CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Data Trunking System

Component Selection Guide



Flat Angles and Tees



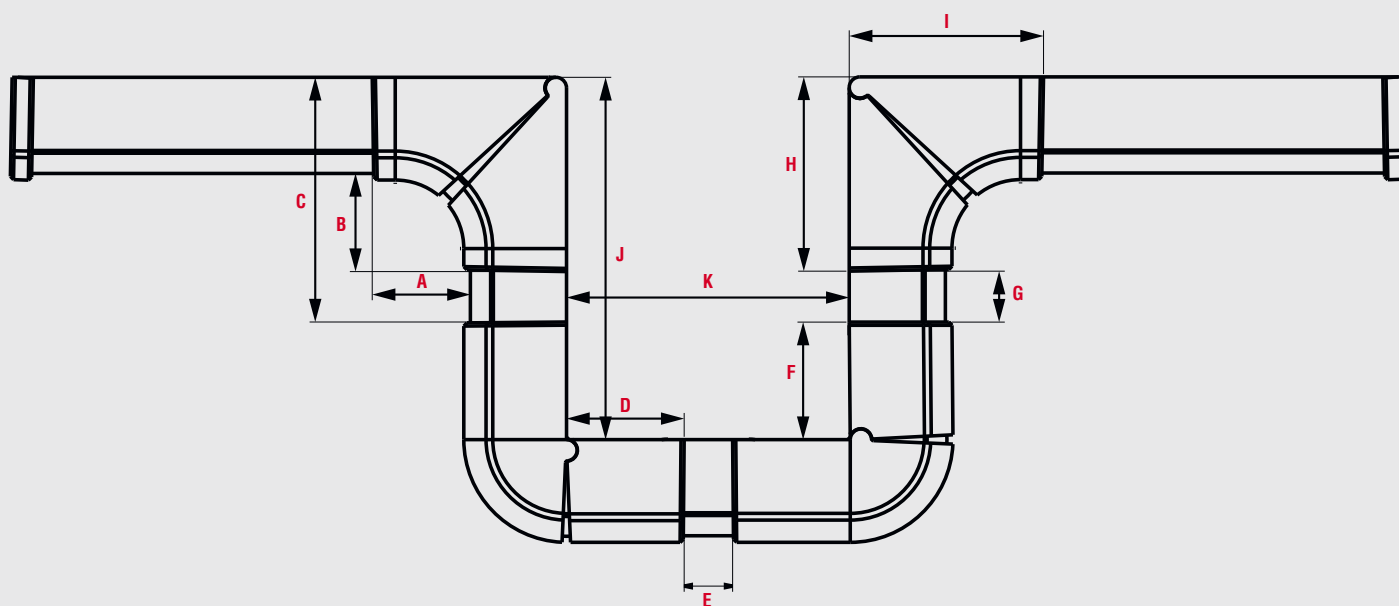
FABRICATED ANGLES AND TEES DIMENSIONS (MM)

LIST NO	DESCRIPTION	A	B	C	D
VCT145WHI	Flat Angle 140 (Dado)	190mm	140mm		
VCT147WHI	Flat Tee 140 (Dado)	200mm	140mm	235mm	140mm
VCT165WHI	Flat Angle – Up 160 (Extended Dado)	215mm	160mm		
VCT166WHI	Flat Angle – Down 160 (Extended Dado)	215mm	160mm		
VCT167WHI	Flat Tee – Up 160 (Extended Dado)	220mm	160mm	235mm	140mm

Prestige 3D Technical – Compact

Installing Prestige 3D Compact

Figure shows minimum distance required for installing around corners

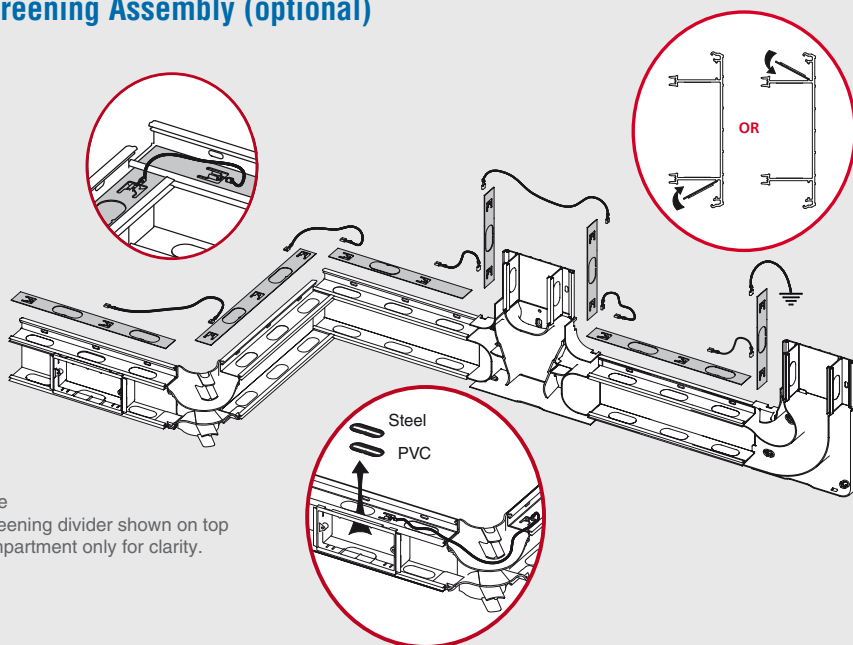


MINIMUM DISTANCE BETWEEN CORNERS (MM)

A	B	C	D	E	F	G	H	I	J	K
47	47	116	56	35	56	24	92	92	172	147

Data Trunking System

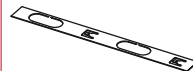
Screening Assembly (optional)



Note
Screening divider shown on top
compartment only for clarity.

PRODUCT IDENTIFICATION

VP30 / VCT30
Screening Divider
1.5m (steel)



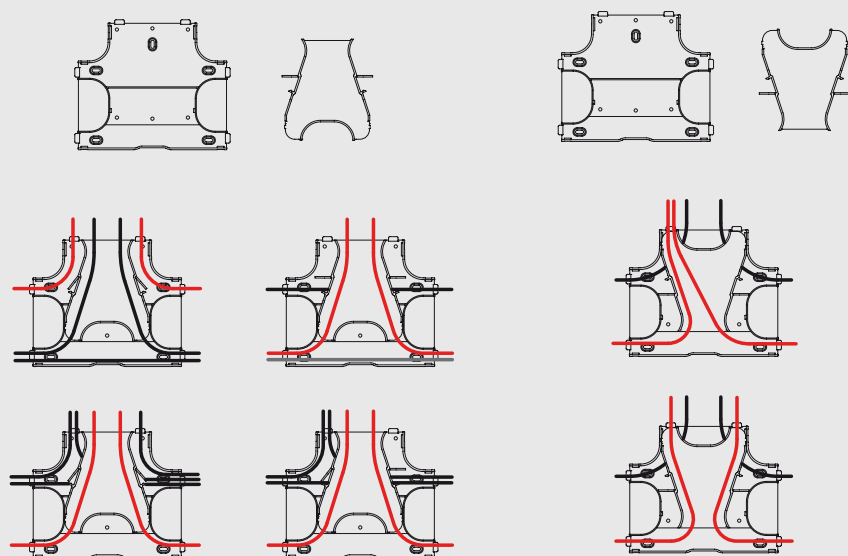
VX31
Screening Cable
300mm



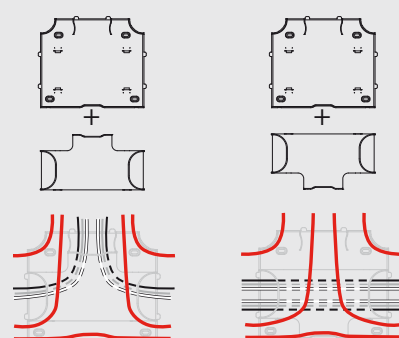
Flat Tee Bridge

The Flat Tee's bridge can be fitted in two positions increasing the versatility of cable runs whilst maintaining the correct separation and Cat 5e, 6 and 7 compatibility.

PRESTIGE COMPACT



PRESTIGE 3D DADO AND SKIRTING





PRODUCT APPLICATION

PRESTIGE 3D DADO CABLE MANAGEMENT

Prestige 3D Dado Cable Management installed with Part M Compliant Graphite Logic Plus Socket Outlets with Outboard Rockers, alongside USB Outlets for convenient charging of mobile phones and other portable devices.

This system is an ideal specification for a project with high sustainability credentials. Prestige 3D extrusions are manufactured from 100% recycled content* and the whole system is made in the UK. Logic Plus Socket Outlets are also made in the UK offering a much reduced carbon footprint when compared to some imported products.

To find out more visit www.mkelectric.co.uk

*Based on 2014 Consumption

Prestige 2Com Technical

Data Trunking System

Standards and Approvals

The Prestige 2com trunking is a symmetrical two compartment system offering a Cat 7 flexible solution to routing data cabling whilst maintaining a slow bend radius of 50mm, with a separate compartment for power cables.

The trunking is normally surface mounted at dado or skirting height but may also be used vertically. The covers are of the snap-on type with the option of screw fixing for added security against vandalism. Special accessories include adaptors for connection to the full range of MK Ega Mini Trunking.

TECHNICAL SPECIFICATION

MATERIALS

All components are manufactured from PVCu. Carriers, covers and cable dividers are extruded. Carrier couplers, corner carriers, stop ends and accessory boxes are formed by injection moulding.

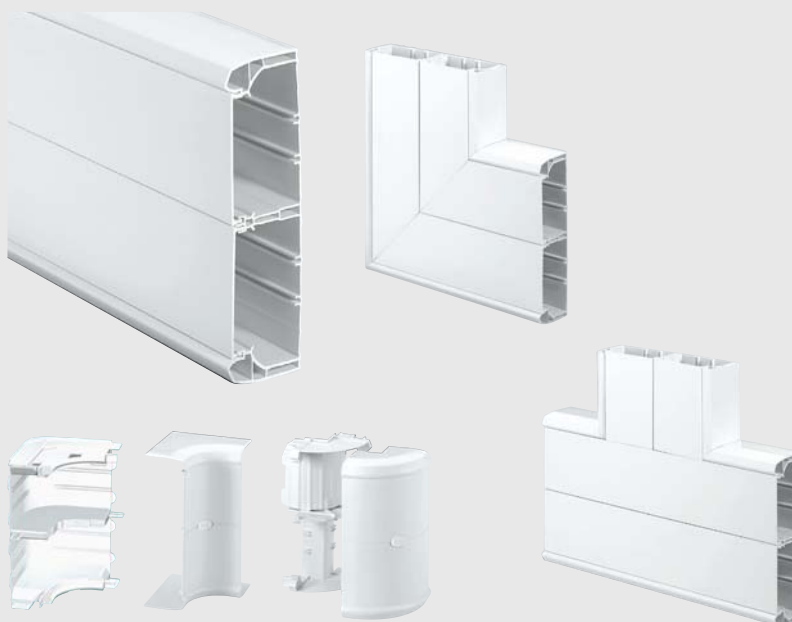
COLOURS

The system is available in a standard white colour.

OUTLETS

The system is designed to accommodate the complementary range of Logic Plus switches and sockets. Other MK wiring devices may also be used.

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request.



Description

The Prestige 2com trunking is a symmetrical two compartment system offering a Cat 7 flexible solution to routing data cabling whilst maintaining a slow bend radius of 50mm, with a separate compartment for power cables. The trunking is normally surface mounted at dado or skirting height but may also be used vertically. The covers are of the snap-on type with the option of screw fixing for added security against vandalism. Special accessories include adaptors for connection to the full range of MK Ega Mini Trunking.

FEATURES

- System bend radius 50mm
Exceeds Cat 5e, 6 and 7 data cable requirements
- Attractive styling complementary to Logic Plus
- Aesthetic one piece fitting covers with carriers
- Two equal compartments – maximises wiring compartment capacity
- Accessory mounting in either or both compartments – giving flexibility/versatility
- Unobtrusive screw fixing covers to maximise security against tampering
- Ease of installation – butt jointed construction, no mitring required
- Economical – cost effective 3 components (2 x lids, 1 base)
- Suitable for skirting or dado mounting
- Pre-drilled base – ease/speed of installation
- Accommodates matching MK and other BS switches and sockets
- Interfaces with MK Premier, Ega Industrial and Ega Mini Trunking and Conduit Systems
- Strong PVCu sections are resistant to impact
- Manufactured to high precision standards
- Full range of components, spares and accessories
- Mounting frames for LJU6C and Euro data outlets – cost effective, minimum space requirement (for mounting in SELV compartment only)s
- All extrusions manufactured from 100% recycled material*

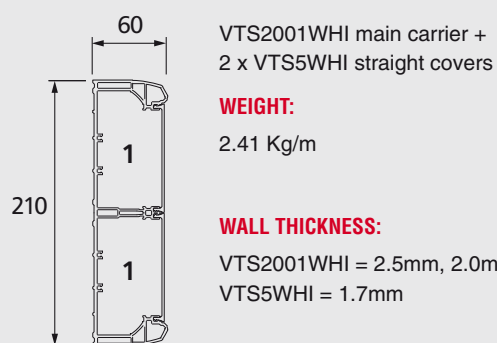
* Based on 2014 consumption

For a full range of corresponding products, see pages 311-316 in the product selector.

Prestige 2Com Technical

Data Trunking System

Dimensions (mm)

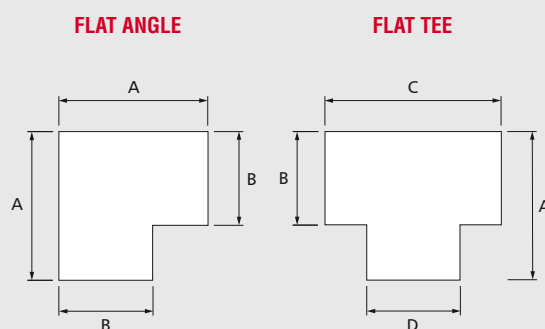


Cable Capacity										
Type of Conductor	Size	Cable Factor	Compartment 1		Compartment 1 with 25mm Back Box		Compartment 1 with 35mm Back Box		Compartment 1 Ext Corner 50mm Data Bend	
			Full Term CSA 100% Fill (MM²)							
			4466		2236		1633		3132	
			Term at 45% Fill (MM²)							
2009		1006		734		1409				
Power Cables			Number of Cables at 45% Fill							
PVC stranded	1.5mm²	8.6	233		116		85		163	
	2.5mm²	12.6	159		79		58		111	
	4mm²	16.6	121		60		44		84	
	6mm²	21.2	94		47		34		66	
Data Cables			Number of Cables at 45% Fill (A) and Full Capacity (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	66	147	33	74	24	54	46	103
Cat 5E STP	6.0mm dia.	36.0	55	124	27	62	20	45	39	87
Cat 6 UTP	6.5mm dia.	42.2	47	105	23	52	17	38	33	74
Cat 6 STP	7.0mm dia.	49.0	41	91	20	45	14	33	28	63
Cat7	8.0mm dia.	64	12	27	26	59	4	9	13	30

COMPONENTS

Flat Angles and Tees

These components are fabricated sections and space must be allowed for their inclusion in runs of trunking. All other components snap on over standard trunking profiles.



FLAT ANGLES DIMENSIONS (MM)

LIST NO	DESCRIPTION	A	B	C	D
VTS2012WHI	Flat angle	310	210		
VTS2014WHI	Flat T details	310	210	410	210



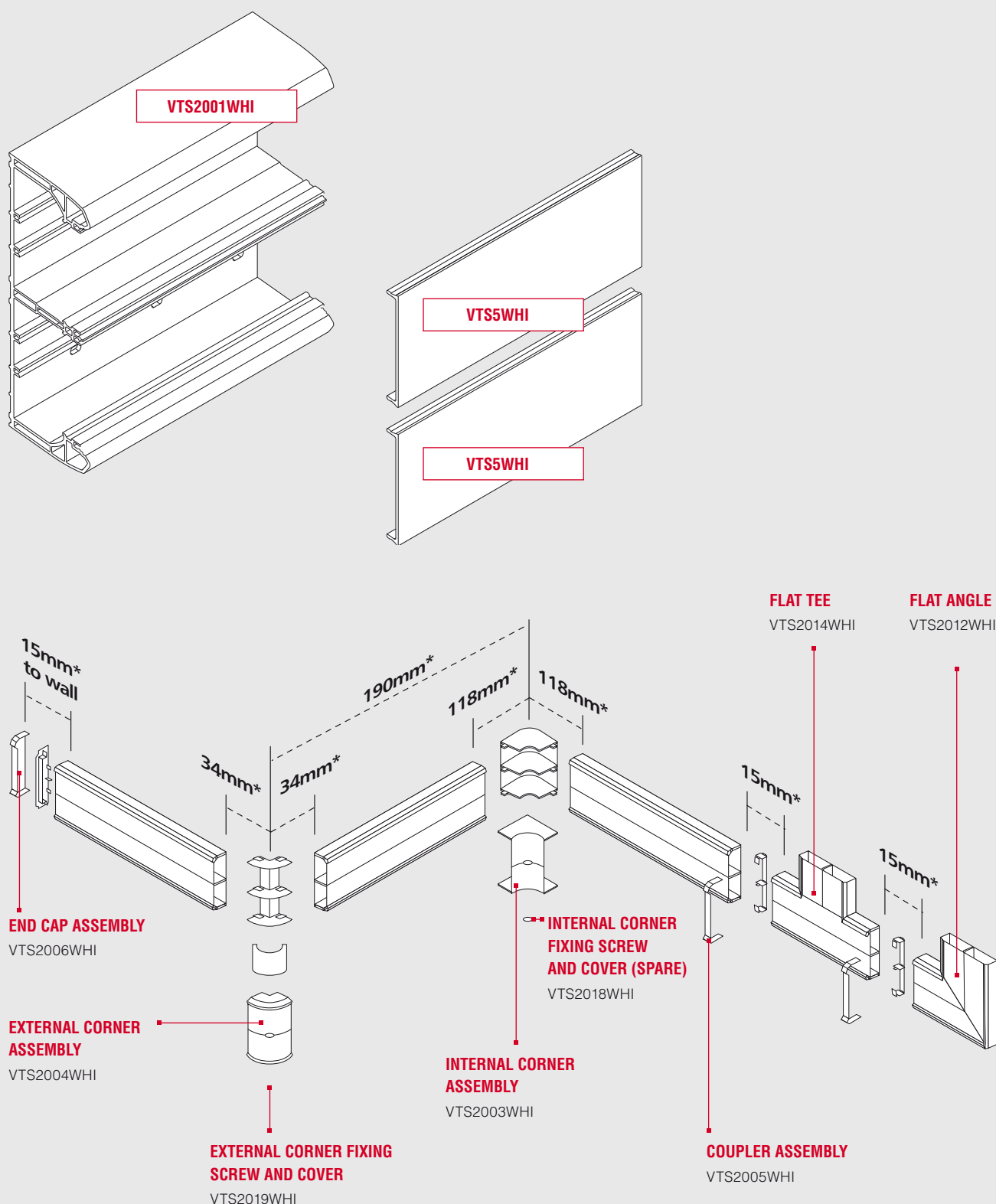
Technical Hotline
+44 (0)1268 563720

Prestige 2Com Technical

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Data Trunking System

Component Selection Guide



* Minimum distance

Prestige 2Com Technical

Data Trunking System

Installation Guide

GENERAL INSTALLATION GUIDELINES

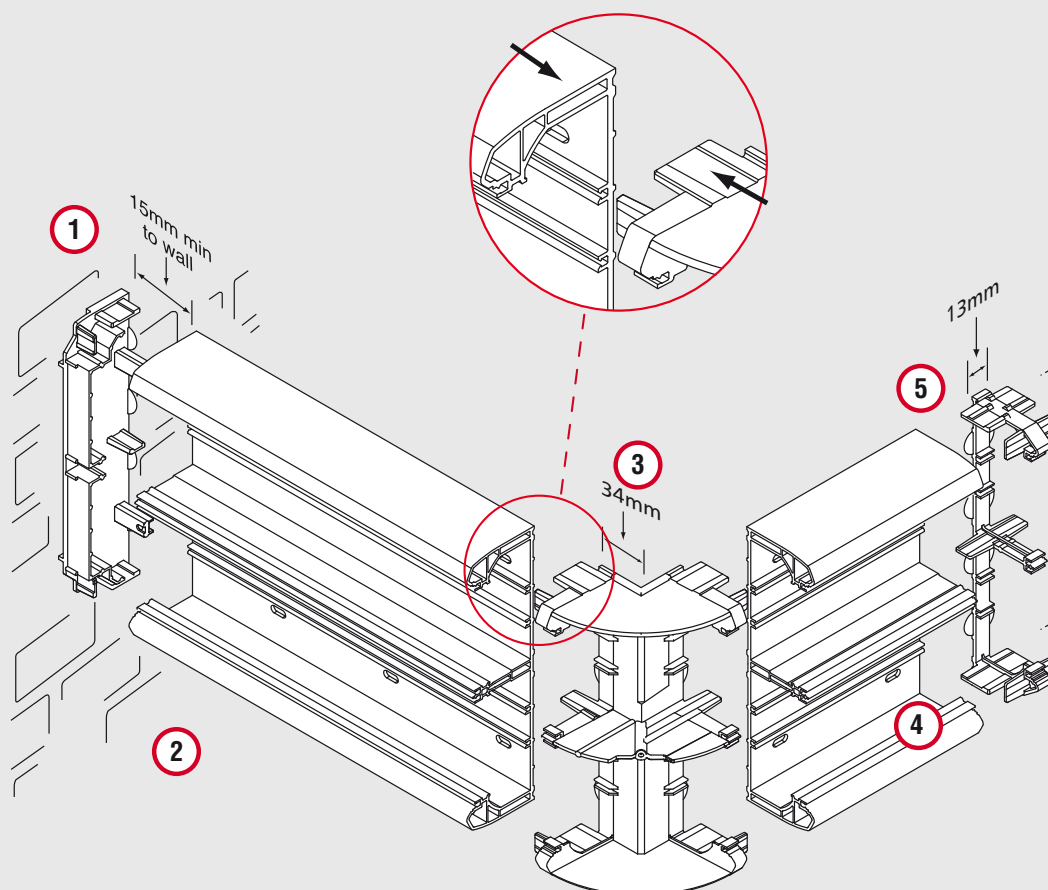
TOOLS AND SUNDRIES REQUIRED FOR INSTALLATION:

1. Fine toothed tenon saw or a hacksaw with a 32 – 26 TPI blade for cutting the trunking, or preferably a circular saw with a 350mm diameter fine tungsten tipped blade (100T approx.)
2. All purpose knife or fine file for trimming of trunking
3. Spirit level, Plumb Bob and chalk line
4. A range of screwdrivers (flat or cross point) to suit fixing screws and Earth Carrier Connectors
5. A 5.5mm Ø drill bit and No.8 Round head or Pan head screws with suitable washers to secure the trunking.
6. Soft faced mallet to aid lid fitting

Planning the Installation

It is important to spend some time planning the installation, before starting. Time spent on planning the layout at this stage can avoid mistakes later on. The installation is designed for a non-conductive substrate, if you have any queries please contact: MK Technical Sales Service Department. Telephone 01268 563720.

1. Surface to which the trunking is to be installed should be flat and prepared for decorating.
2. Establish the layout of the trunking run with particular attention to the following: -
 - a. Changes in direction of the trunking.
 - b. The position of any feeds to or from the system.
 - c. The position of any connections with existing trunking/wiring systems.
 - d. Allow for minimum distances between corners, couplers, screw fixings, angles and tees (please see individual technical sections for details).
 - e. When installing at skirting level, ensure room is also allowed for future floor coverings to be fitted below trunking.



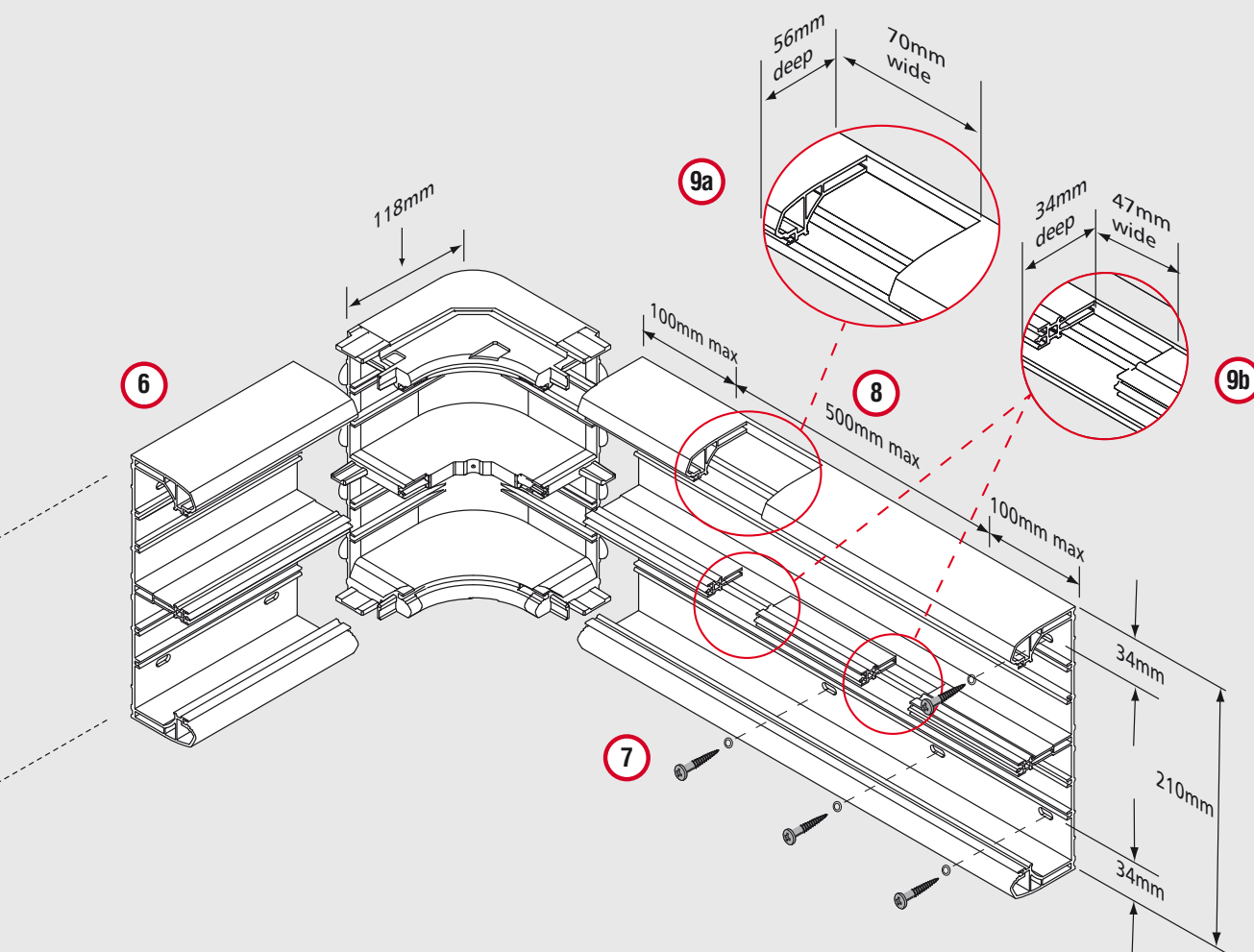
Prestige 2Com Technical

Data Trunking System

General Notes

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

- 1 Drill Holes in supporting walls prior to fixing
- 2 When mounting at skirting level allowance should be made for thickness of floor finish
- 3 Start Installation at a corner position
- 4 Debur all carrier cut ends
- 5 Carrier couplers must be placed at all junctions between carriers
- 6 Leave a gap of 5mm for expansion in long runs
- 7 Fixings require washers and No. 8 Round or Pan head screws
- 8 Fixings to be at 500mm centres and also at points within 100mm of each end
- 9 Cut trunking to allow for mini trunking / conduit (9a) and box adaptor crossover bridge (9b).

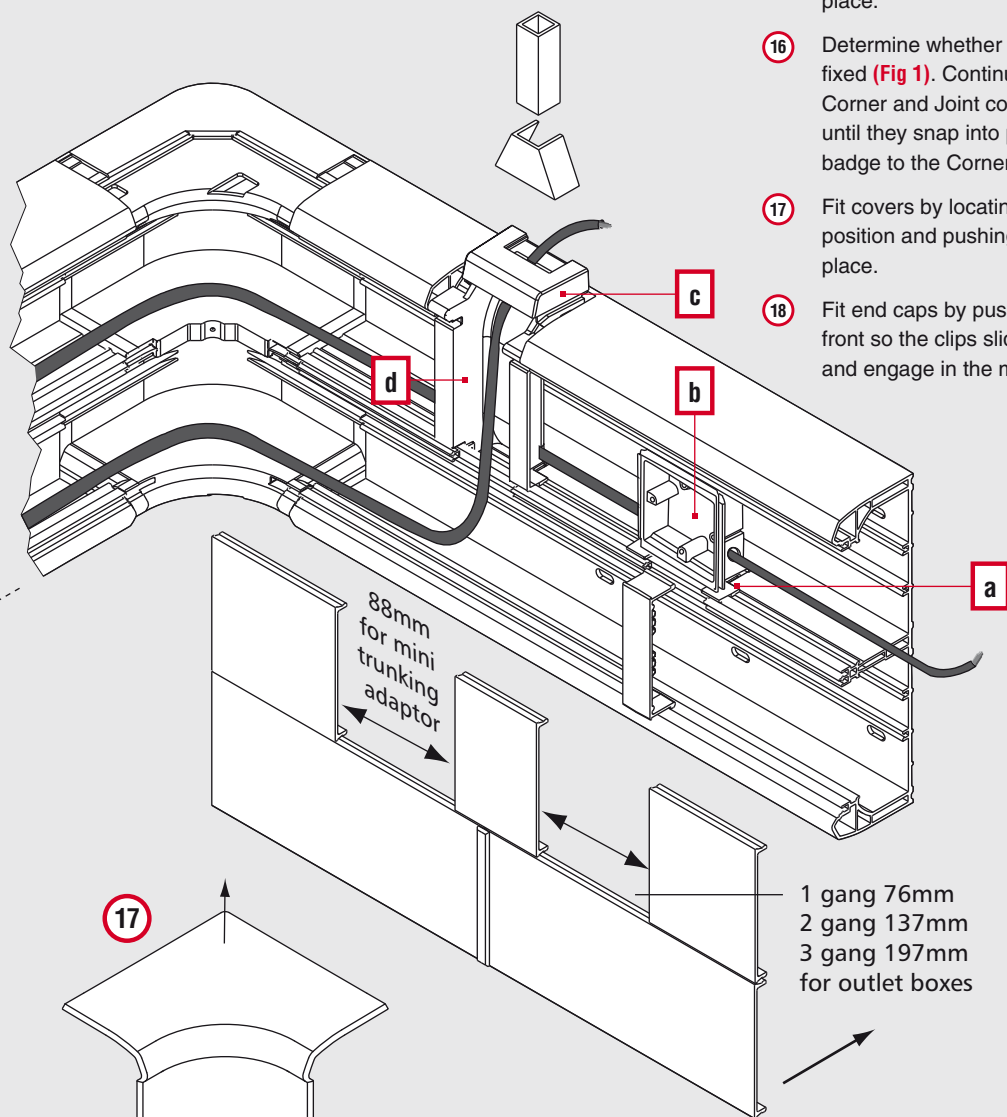


Installation Guide Continued

-
- 18** External Corner Radius (into the Data/Telecom compartment)
- 12** Power Cables
- 13** Data / Communication cables
- 14** Mark position where mains entry is required
- 10**
- 14**
- 15**
- 12**
- 13**
- Centre**
- e**
- 17**
- 16**
- Trunking Covers to be cut 8-10mm shorter than Trunking Base
- 13mm for joint cover

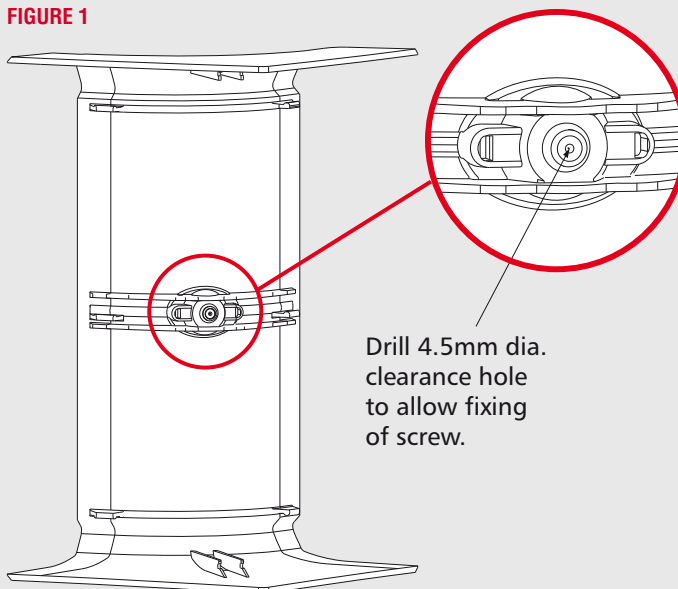
Prestige 2Com Technical

Data Trunking System



- 15 Fit covers by locating them correctly into position and pushing them firmly to snap in place.
- 16 Determine whether corners need to be screw fixed (Fig 1). Continue to locate correctly the Corner and Joint covers and push them firmly until they snap into place. Fit the appropriate badge to the Corner Covers.
- 17 Fit covers by locating them correctly into position and pushing them firmly to snap in place.
- 18 Fit end caps by pushing them on from the front so the clips slide behind the retainers and engage in the main carrier.

FIGURE 1



Prestige Poles and Posts Technical

Standards and Approvals

Prestige Power Post and Power Poles are manufactured in accordance with the requirements of BS 4678 Part 4.

All systems comply with all relevant requirements of BS 7671:2008.

TECHNICAL SPECIFICATION

MATERIALS

Aluminium AW 6060.

Complying with BS EN 573 and BS EN 755.

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Description

POWER POST

MK Power Post provides a means to supply multi-services to work stations as an alternative to, or in conjunction with services outlet boxes. They fit neatly under desks and provide up to ten accessory outlets for any combination of power, telecommunications and data services.

Power Posts have a natural anodised aluminium body and are available with PVCu covers in a choice of charcoal or white, or white powder coated aluminium body with white PVCu cover. It is recommended that Power Posts are fitted with MK accessories which have thin profile front plates and are available in co-ordinating colours.

When used in conjunction with Interact or Cablelink Plus Screeded Floor systems, Power Posts provide even greater flexibility in cable distribution.

POWER POLE

MK Power Pole, similar in construction to the Power Post, is a multi-compartment system segregating power, data and telecom circuits and can accommodate a complete range of accessories including fire alarm manual call points.

It is suitable for both suspended and solid ceiling applications.

Prestige Power Poles can be easily cut to size on site and are equipped with a jacking facility to assist installation and ensure secure location.



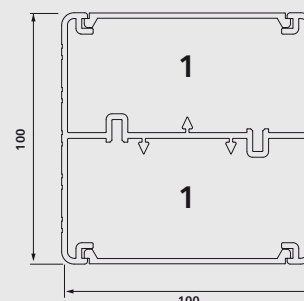
* Based on 2008 consumption



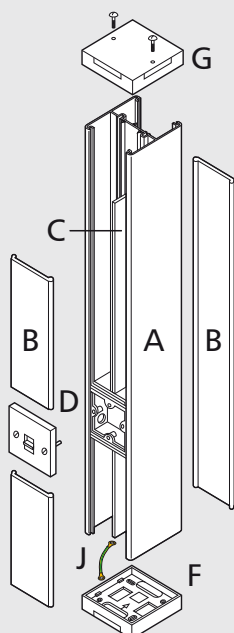
PRESTIGE POLE AND POST CABLE CAPACITY

TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 1 WITH PPC20 BACKBOX	
			Full Term CSA 100% Fill (MM²)			
			4196		1625	
			TERM AT 45% FILL (MM²)			
			1888		731	
POWER CABLES			NUMBER OF CABLES AT 45% FILL			
PVC stranded	1.5mm²	8.6	219		85	
	2.5mm²	12.6	149		58	
	4mm²	16.6	113		44	
	6mm²	21.2	89		34	
DATA CABLES			Number of Cables at 45% Fill (a) and Full Capacity (b)			
			A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	62	138	24	53
Cat 5E STP	6.0mm dia.	36.0	52	116	20	45
Cat 6 UTP	6.5mm dia.	42.2	44	99	17	38
Cat 6 STP	7.0mm dia.	49.0	38	85	14	33

Dimensions (mm)



Prestige Poles and Posts Technical

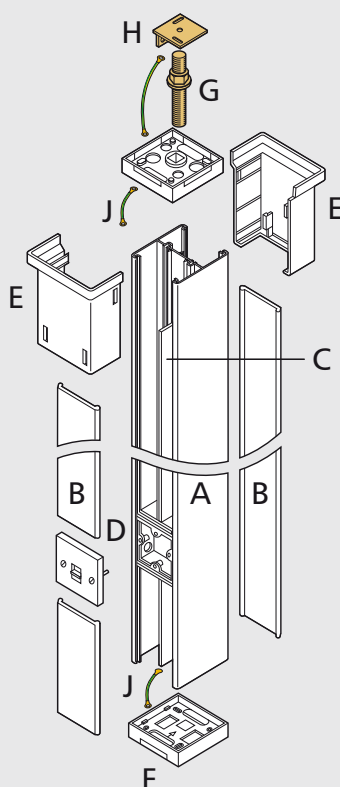


Power Post Assembly

DIMENSIONS		
LIST NO	SIZE (OVERALL) MM	WEIGHT KG (EACH)
PPT650	650 x 100 x 100	3.32

PART	DESCRIPTION	QTY.
A	Power Post Body (650mm long)	1
B	Cover Section (650mm long)	2*
C	Dividing Strip (not supplied)	
D	Outlet Box Assembly	5
E	SELOK Pins (not shown)	4
F	End Load Plate	1
G	Top Cover + Screws	1
J	Earth Link Strap	1

*Four cover sections are supplied with PPT650ALM – 2 x White & 2 x Charcoal



Power Pole Assembly

DIMENSIONS		
LIST NO	SIZE (OVERALL) MM	WEIGHT KG (EACH)
PPA100	3600 x 100 x 100	15.0

PART	DESCRIPTION	QTY.
A	Power Pole Body 3.6m long	1
B	Cover Section 3.6m long	2*
C	Dividing Strip 3.0m long	2
D	Outlet Box Assembly	6
E	Top End Collar	1
F	End Load Plates	2
G	Jacking Screw Assembly	1
H	Jack Locating Plate	1
J	Earth Link Strap	3

*Four cover sections are supplied with PPT100ALM – 2 x White & 2 x Charcoal

Installation

Power Poles and Power Posts are supplied as complete kits as per list and are to be assembled as described in the appropriate Installation Instruction booklet.

Additional accessory boxes are available, List No. PPC20WHI.

Additional Dividing strip is available, List No. PPC10WHI.

Powerlink Plus Technical

mkelectric.co.uk



Skirting and Dado Trunking System

TECHNICAL SPECIFICATION

ELECTRICAL

VOLTAGE RATING

63A, 250V a.c.

VOLTAGE DROP

L to N = 3.47 mV/A/metre run

L to E = 3.47 mV/A/metre run

N to E = 3.47 mV/A/metre run

EARTH FAULT LOOP IMPEDANCE

L to E = 3.47 mΩ/m run.

CONDITIONAL SHORT CIRCUIT RATING

(Fuse links BS 88 – 100A and BS 1361 100A).

Prospective current 16.5 KA

Mechanical withstand 10.0 KA peak min

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS476: part 7 and has achieved a Class 1Y

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Tested to BS EN 61534-1:2011 &

BS EN 61534-21:2006

FEATURES

- Wide variety of visually and physically compatible mains and ELV outlets
- Complete segregation between mains and ELV
- Stylish and elegant appearance
- Easy to assemble, extend and modify
- Durable and impact resistant
- Attractive styling
- Suitable for skirting or dado mounting
- 3 compartment trunking
- Manufactured to high precision standards
- All extrusions manufactured from 100% recycled material*



Description

Powerlink Plus is a trunking distribution system which contains within its profile a 63A single phase set of busbars and facilities for carrying telecommunications and data services cables.

Co-ordinated within the system is a wide variety of electrical and extra low voltage (ELV) outlets.

On the mains side these include specially designed sockets, both switched and unswitched, nonstandard switchsockets, switches, connection units and, via a simple interface, facilities for mounting all standard MK outlets.

ELV outlets include a master telephone socket outlet, an isolated co-axial socket outlet, "handset" telephone linejack outlet, computer sockets, a blank box and cover to accommodate other ELV requirements and, via a simple interface, facilities for mounting all single gang, standard MK ELV outlets. Also available are BNC type, LJU6C/RJ45 outlets, Euro Outlets and a blank to accommodate other ELV requirements. Incorporates a 'Stay-set' mechanism and is mains failure proof, ie it will function under all the normal conditions expected of an RCD and will not trip in the event of a power cut. This makes it suitable for use with freezers or in inaccessible or unmanned locations.



*Based on 2014 consumption

For a full range of corresponding products,
see pages 321-331 in the product selector.

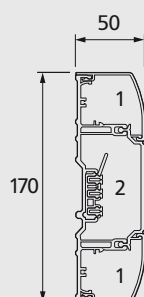
Powerlink Plus Technical

Skirting and Dado Trunking System

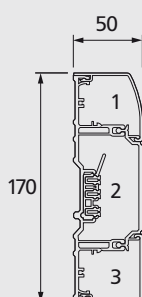
Dimensions (mm)

The dado trunking is divided into three compartments. Two identical outer compartments are mainly for ELV cables with a third central compartment containing the busbars with a cableway above.

CROSS SECTION THROUGH DADO TRUNKING



CROSS SECTION THROUGH SKIRTING AND DADO TRUNKING



WALL THICKNESS

Trunking base	2.4mm
Centre compartment cover	2.5mm
Curved cover	1.5mm

WEIGHT (KG)

TYPE		NUMBER OF COMPARTMENTS WITH SCREENING	
		1	2
Dado trunking without busbar (K1903)	2.4	3.0	3.6
Dado trunking with busbar (K1963)	3.0	3.6	4.2

POWERLINK PLUS CABLE CAPACITY

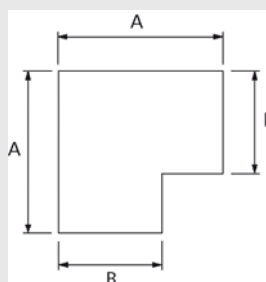
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1 (CURVED)		COMPARTMENT 2 (WITH BUSBAR)		COMPARTMENT 2 (WITH BUSBAR)		COMPARTMENT 3 (SQUARE)	
			Full Term CSA 100% Fill (MM²)							
			943		2968		2528		1044	
			TERM AT 45% FILL (MM²)							
			424		1335		1137		469	
POWER CABLES			NUMBER OF CABLES AT 45% FILL							
PVC stranded	1.5mm²	8.6	49		155		132		54	
	2.5mm²	12.6	33		105		90		37	
	4mm²	16.6	25		80		68		28	
	6mm²	21.2	20		62		53		22	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	14	31	44	98	0	0	15	34
Cat 6 UTP	6.5mm dia.	42.2	10	22	31	70	0	0	11	24
Cat 6 STP	7.0mm dia.	49.0	8	19	27	60	0	0	9	21

Powerlink Plus Technical

Skirting and Dado Trunking System

Components

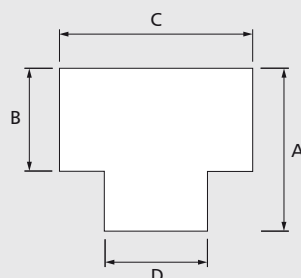
These components are fabricated sections and space must be allowed for their inclusion in runs of trunking. All other components snap on over standard trunking profiles.



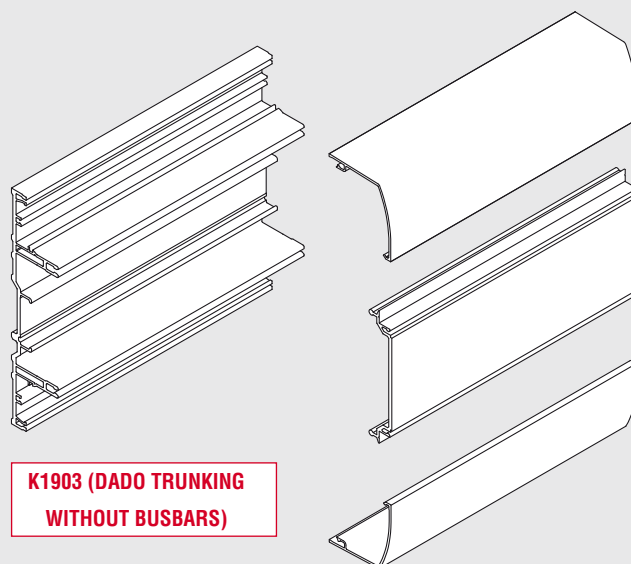
DIMENSIONS (MM)		
FLAT ANGLE	A	B
DADO	270	170
SKIRTING	270	170

Flat Angles and Tees

These components are fabricated sections and space must be allowed for their inclusion in runs of trunking. All other components snap on over standard trunking profiles.



DIMENSIONS (MM)		
FLAT TEE	A	B
DADO	270	170



**K1903 (DADO TRUNKING
WITHOUT BUSBARS)**



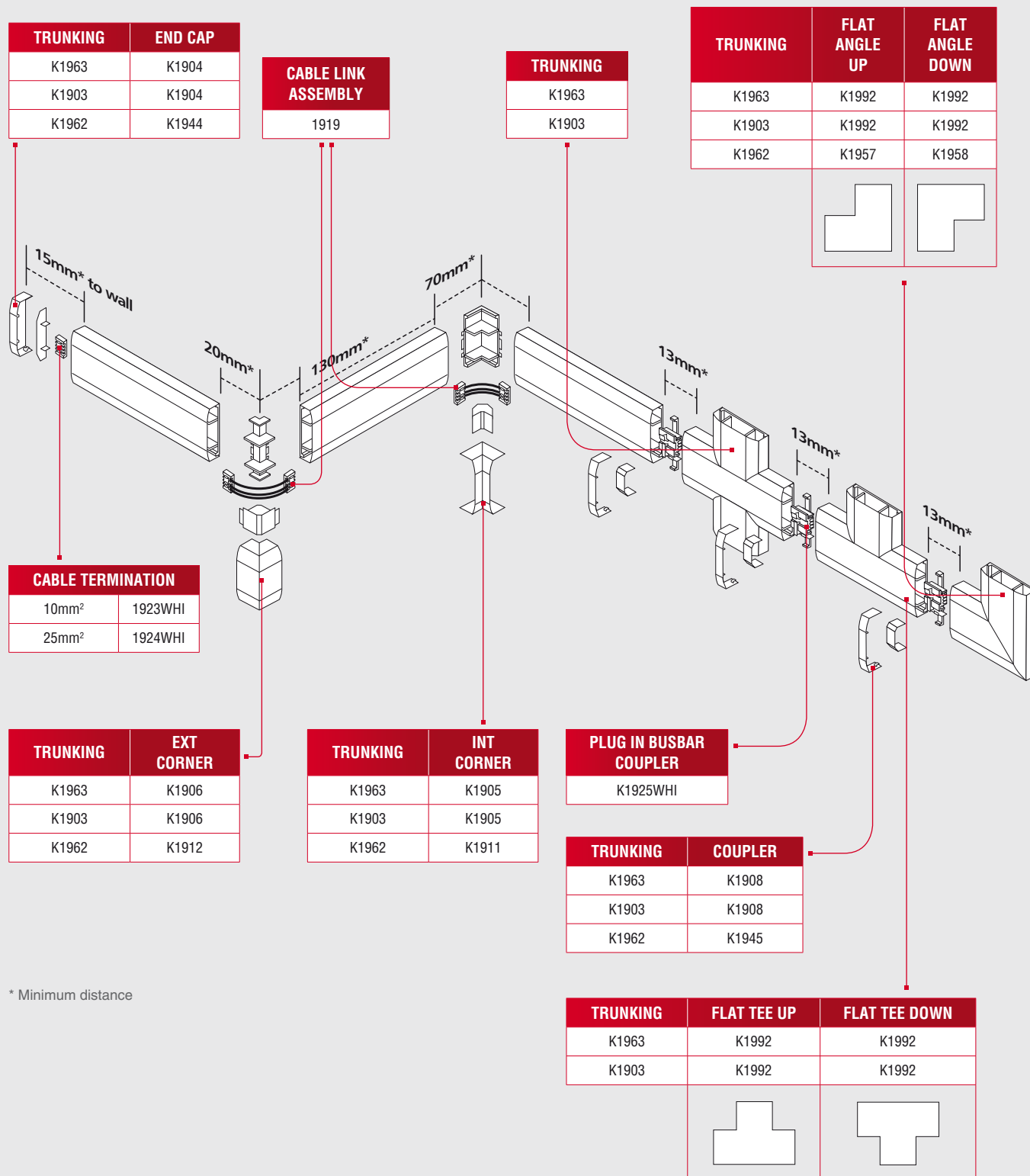
Technical Hotline
+44 (0)1268 563720

Powerlink Plus Technical

CABLE MANAGEMENT
PERIMETER AND
DISTRIBUTION

Skirting and Dado Trunking System

Component Selection Guide



Powerlink Plus Technical

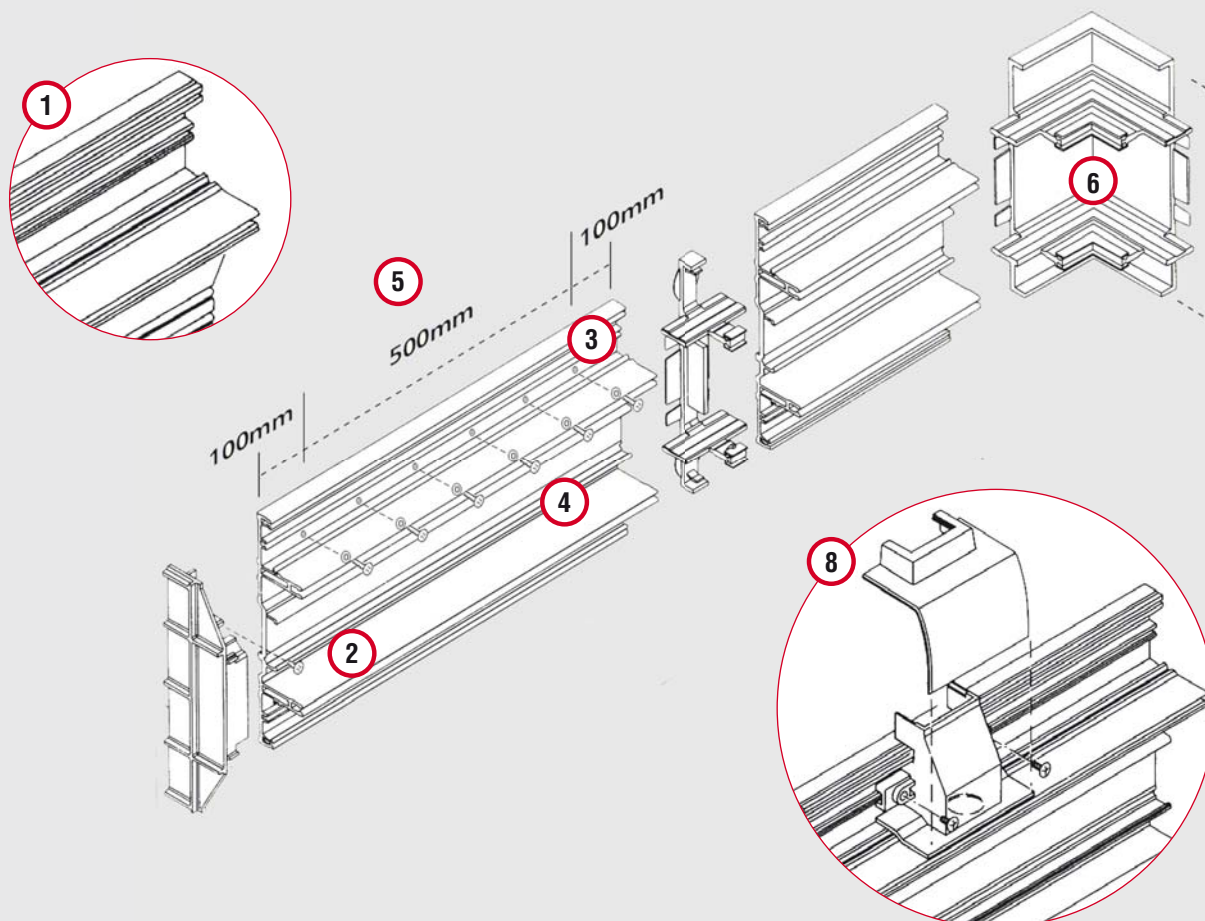
Skirting and Dado Trunking System

Installation Guide

GENERAL NOTES

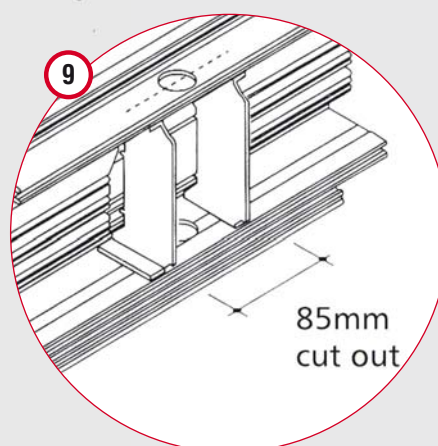
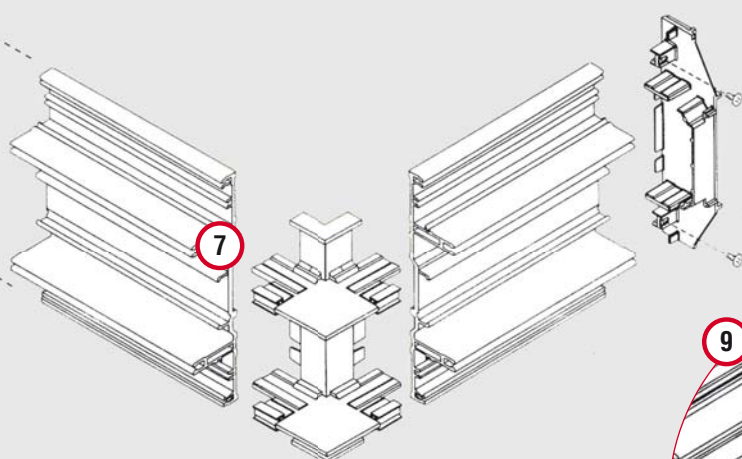
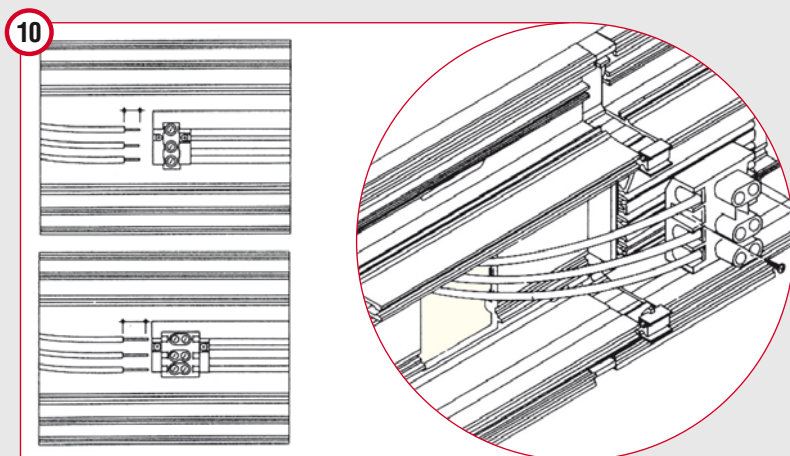
Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

- ① Surface track accommodates 63 amp busbar with an integral duct directly above mains.
- ② Data and Telecom cables.
- ③ Pre cut slots and circular holes at 100mm centres permit fixing holes to be drilled and a wallplug with screw inserted after the surface track has been positioned.
- ④ When fixing trunking use bushes provided and No. 8 wood screws.
- ⑤ Ensure trunking base is secured within 100mm from the end and a maximum of 500mm apart on either side along the length.
- ⑥ Check levels frequently – particularly at corners.
- ⑦ Debur all cut ends using a file or a sharp knife.
- ⑧ For mini trunking adaptors drill a 20mm diameter hole through the wall of the centre compartment using drill guide. Insert the tunnel and fix with two screws provided.
- ⑨ Bridging busbar compartment – if required to take cables from top compartment to bottom or vice versa – drill holes to align with top and bottom holes of the centre compartment. Cut out 85mm from the busbar at the required position. Install cable link (1919) to the busbar and snap fit cable crossing barrier (K1937CHA) over cables.
- ⑩ Commence installation at cable entry position. Route cables into the central section, wire in to the selected cable termination and plug into adjacent busbar and secure with screws supplied.



Powerlink Plus Technical

Skirting and Dado Trunking System

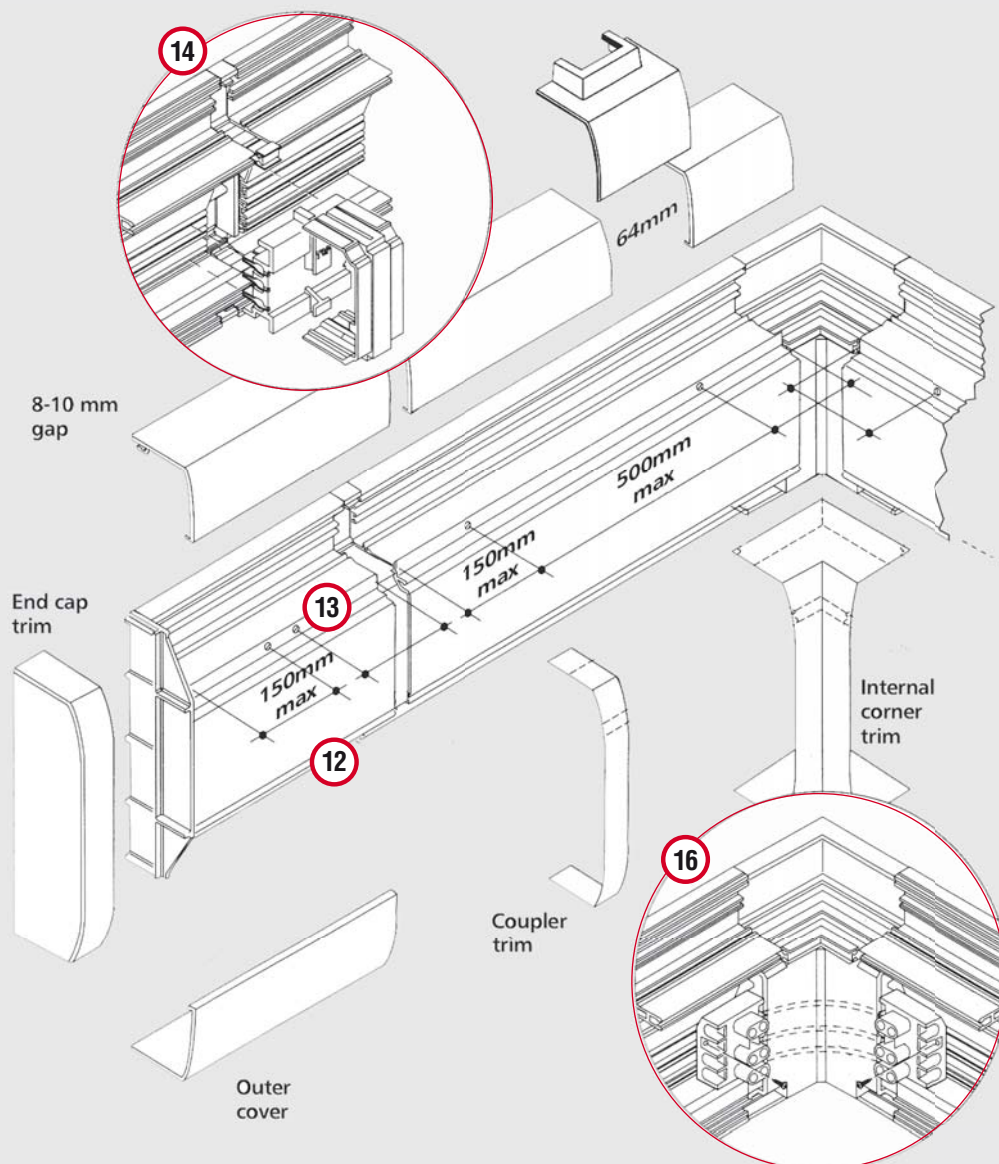


Powerlink Plus Technical

Skirting and Dado Trunking System

Installation Guide Continued

- 12** Cut central cover to length to fit exactly between the exposed frontplates of accessories. At coupling positions leave expansion gaps by cutting the central cover to the same length as the trunking base.
- 13** Secure centre covers to the main base with the screws provided every 500mm max, top and bottom and within 150mm of accessories and fittings.
- 14** At the junction of two adjacent lengths of trunking busbar plug in the coupler to maintain electrical continuity. It is fitted over a protector in the coupler carrier.
- 15** Data / Telecoms Devices – Secure enclosure box over centre compartment with screws supplied. Run cabling into enclosure and terminate onto outlet on frontplate. Secure front cover to enclosure box with screws provided.
- 16** Internal and external corners – Connect the lengths of busbar using the cable link assembly (1919) and secure trunking using the screws provided.



Powerlink Plus Technical

Skirting and Dado Trunking System

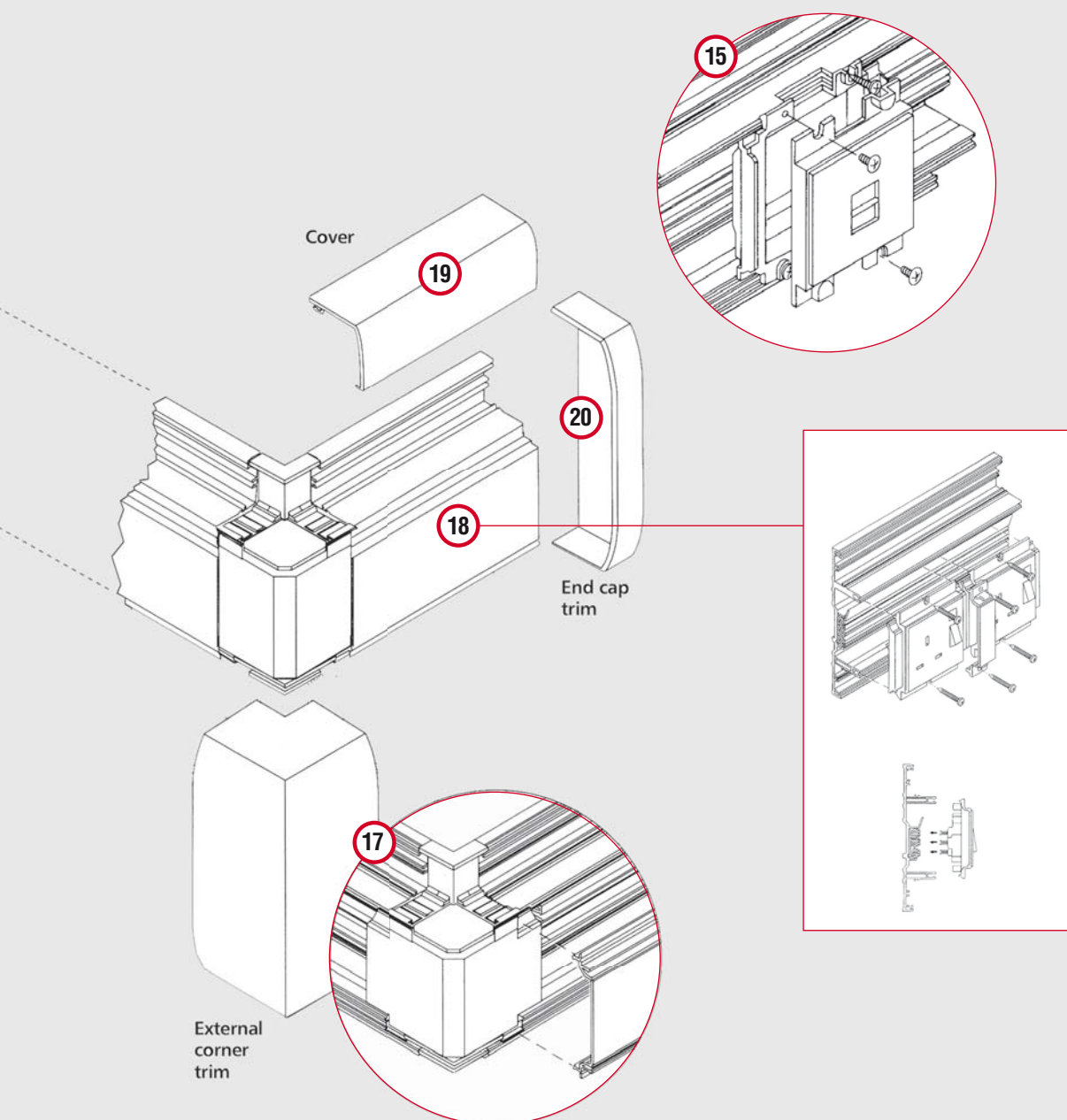
- 17** Moulded corner and coupler shields should be fitted before fitting any covers. They are secured by the central covers overlapping each side of the component and do not require additional fixing.

- 18** Powerlink Plus Sockets – Plug the socket onto the busbars in the required region ensuring that the socket clips fully locate firmly on to their corresponding busbars. Secure with screws provided. Note – do not tamper with busbar clips.

Plug on connection units – Connect the load conductors which are either routed through the centre compartment of the trunking or enter through the flex outlet. Plug connection unit onto busbar where required and secure as described above.

- 19** Outer Covers – For central covers and end cap retainers, leave a gap of 8-10mm and snap fit onto trunking.

- 20** Snap fit end caps then other trims after fitting all central and outer covers.



Bench and Shelf Trunking

TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C.

IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



FEATURES

- Available in a single or double configuration
- May be fitted either direct to the work surface or inverted above the working area
- Cable segregation is provided by two separate compartments with the facility to further subdivide the main compartment by means of a clip-in cable divider
- Single profiles may be converted to a back to back double assembly. A onepiece centre lid and double end caps complete the coupling
- Prefabricated internal and external corners
- Coupler sets for greater strength and protection
- Bench units are also available to match the system
- All extrusions manufactured from 100% recycled material*

Description

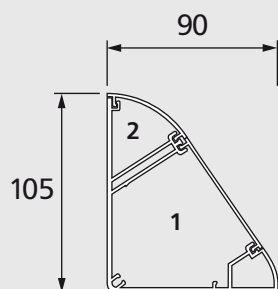
Pinnacle is an angular bench trunking system ideally suited for distributing LV electrical and communication services in laboratories, schools, workshops and other applications where the service contacts are mounted on or above desks and benches.



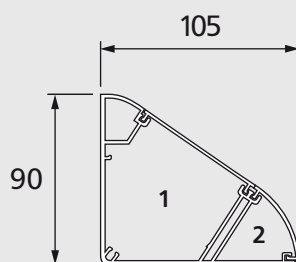
* Based on 2014 consumption

Bench and Shelf Trunking

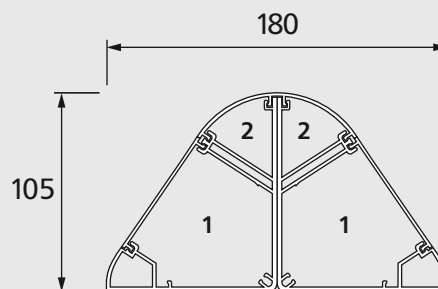
Dimensions (mm)



VERSION 1 PTS

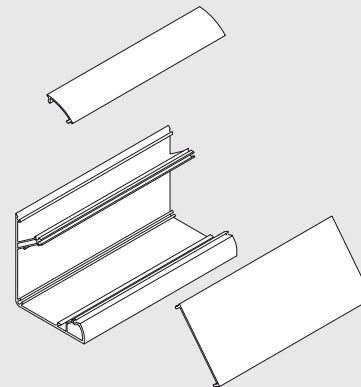


VERSION 2 PTS



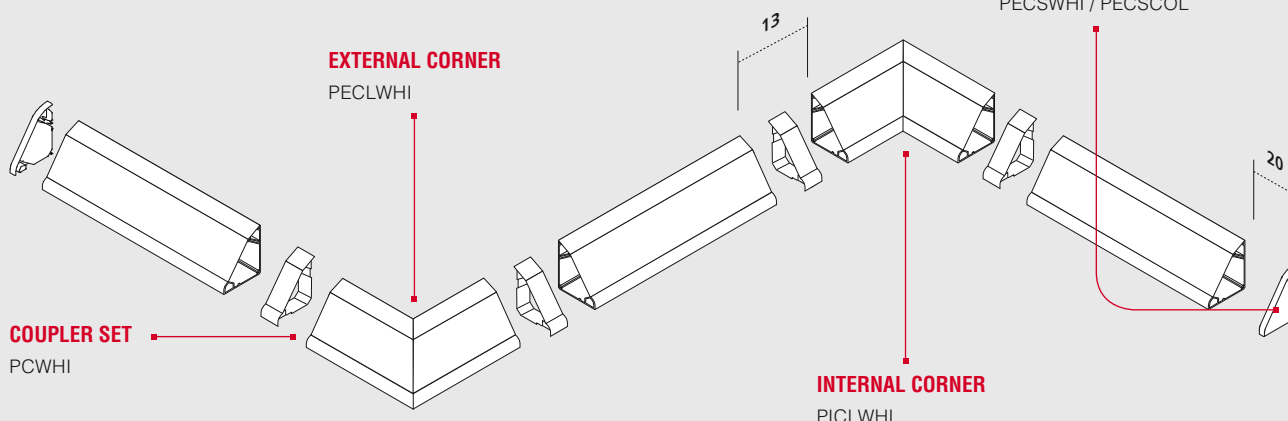
VERSION 3 PTD

POWERLINK PLUS CABLE CAPACITY										
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	COMPARTMENT 1		COMPARTMENT 1 WITH 25MM BACKBOX		COMPARTMENT 1 WITH 35MM BACKBOX		COMPARTMENT 1	
			Full Term CSA 100% Fill (MM²)							
			4510		2499		1857		460	
			TERM AT 45% FILL (MM²)							
			2029		1124		835		207	
POWER CABLES			NUMBER OF CABLES AT 45% FILL							
PVC stranded	1.5mm²	8.6	235		130		97		24	
	2.5mm²	12.6	161		89		66		16	
	4mm²	16.6	122		67		50		12	
	6mm²	21.2	95		53		39		9	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)							
			A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	67	149	37	82	27	61	6	15
Cat 5E STP	6.0mm dia.	36.0	56	125	31	69	23	51	5	12
Cat 6 UTP	6.5mm dia.	42.2	48	106	26	59	19	44	4	10
Cat 6 STP	7.0mm dia.	49.0	41	92	22	51	17	37	4	9



PTS3WHI

END CAPS
PECSWHI / PECSOL



Installation Guide

GENERAL NOTES

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

INCOMING SUPPLY CABLES

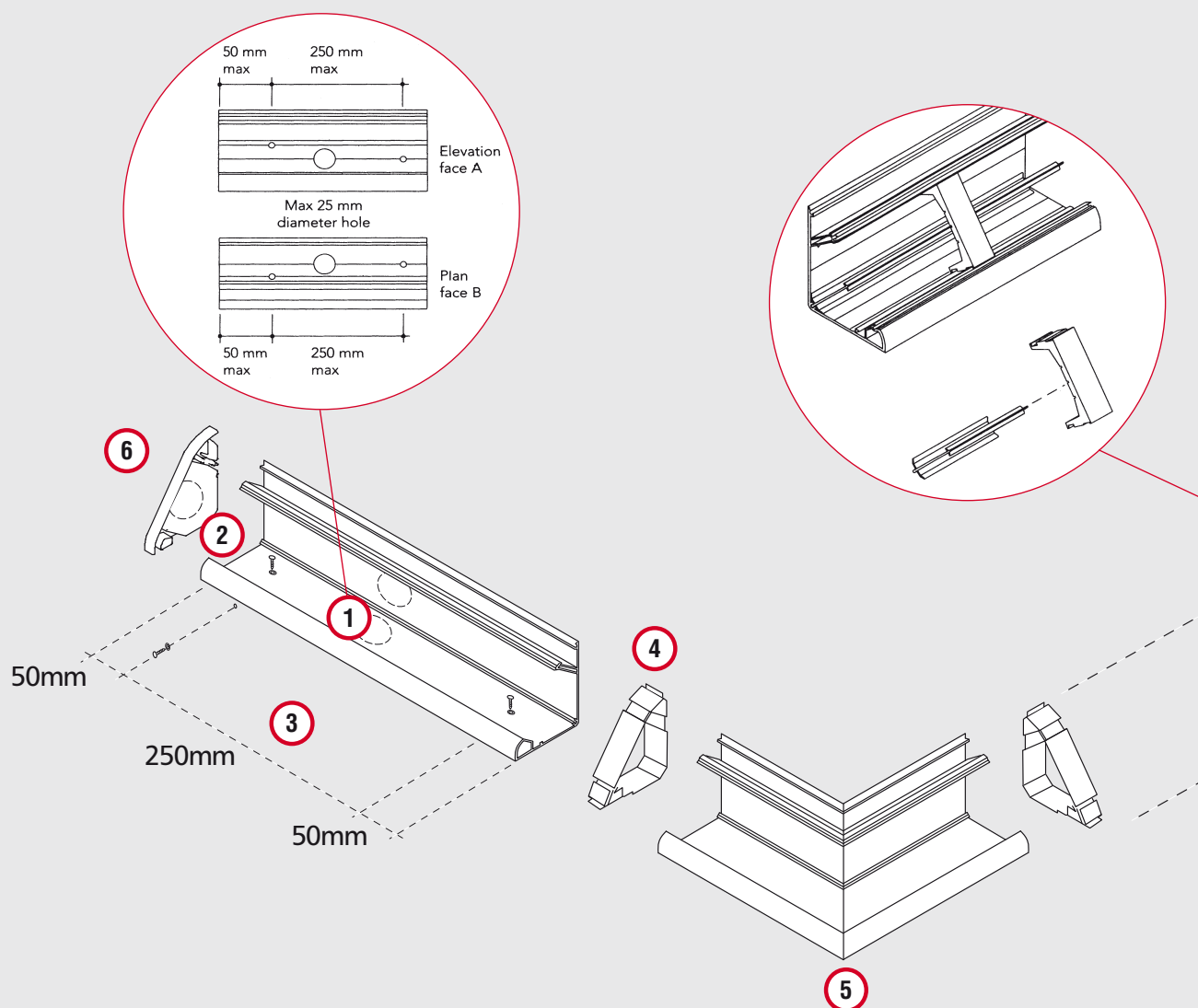
- ① Establish location of incoming cable supplies. Entry into the trunking can be from the back, base or end caps and is achieved by drilling up to a 25mm hole using the drill base centres in the trunking and inserting a conduit gland.
- ② Holes of 20mm can be drilled into the end caps for access to the large compartment using one of a series of moulded drill centres.

FIXING

- ③ Trunking requires fixing at staggered centres, 250mm maximum along the length with the first and last fixing not more than 50mm from the end of each length. Drill trunking with 6mm holes using drill guides and fix with pan or round

head screws and washers (Note: Tighten screws firmly and back off slightly to allow for movement). For double trunking installation fix both bases this way.

- ④ Couplers – Always use a trunking coupler and cover at the junction between each length and at corners to maintain IP4X Classification. To fix push the coupler carrier onto the end of the free trunking length. Slide up to fixed trunking and push home.
- ⑤ Internal and External Corners – Remove covers. Push a coupler onto each end and assemble to trunking. Position trunking and corner. Check that the internal corner base fits snugly into the corner. Fix trunking base as previously described.
- ⑥ End caps – Having located the length of trunking and cut if required push fit the end cap firmly onto the trunking ensuring that it is butted up tight. Note: where greater retention is required use MK adhesive EW PLUS to bond the end cap to the trunking base only. Avoid adhesive contact with covers.



- 7 Cable Retainer without central divider installed.

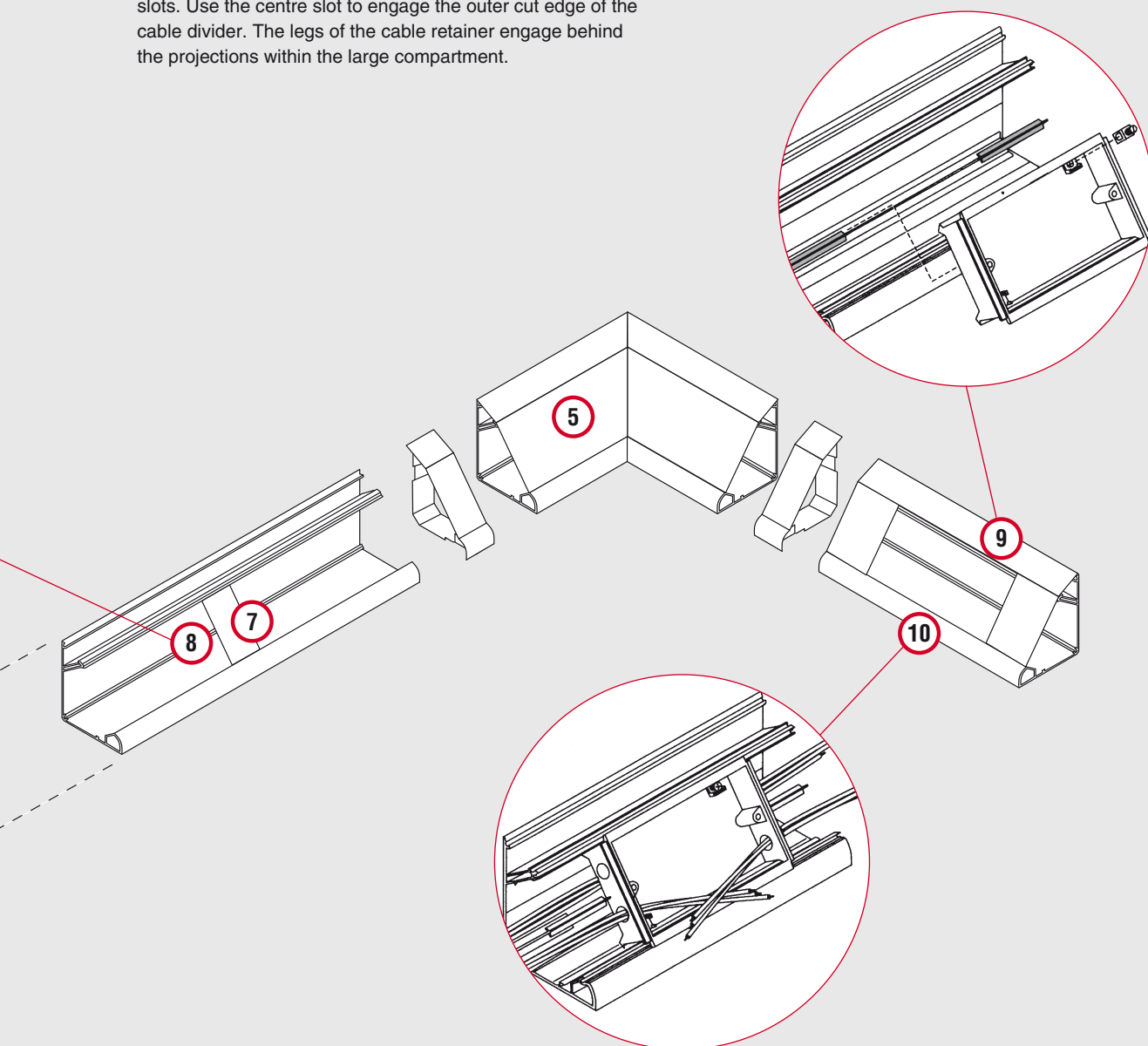
- 8 The divider and cable retainer interlock should be installed together whenever the divider is used.

Divider – To achieve the correct fit a portion of the divider needs to be removed prior to fitting. The divider is formed with a series of depth gauge lines to assist when cutting. These also serve to determine the correct cut out when using outlet boxes. Having prepared the cut outs as required push fit the divider into the preformed groove in the internal corner of the trunking.

Cable Retainer – Incorporate as many cable retainers as required to provide restraint and support for cables. This is particularly critical when trunking is mounted overhead in a downward facing position. These should be no more than 600mm centres maximum and within 100mm of an end or corner. The cable retainer is supplied with a series of shallow slots. Use the centre slot to engage the outer cut edge of the cable divider. The legs of the cable retainer engage behind the projections within the large compartment.

- 9 Determine location of outlets and select correct depth box. Remove knockouts to suit cable entry. Push fit brass terminal (K3716) if required into the aperture in the base of the box.

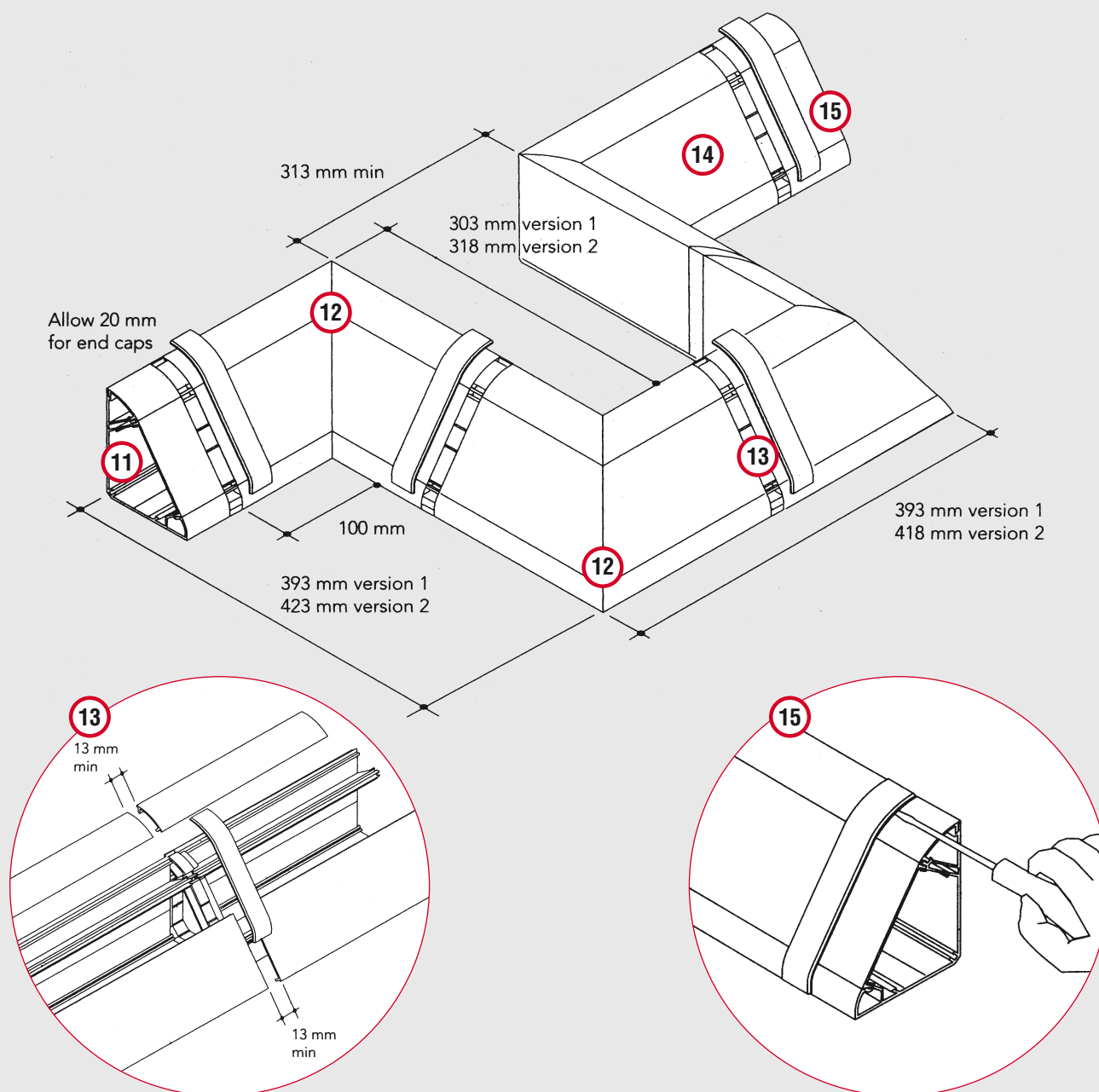
- 10 Drill the large compartment walls using the drill guide groove to allow cables to feed when supplying from small compartment. Press and clip box into the trunking body engaging the rear projections. Note: Where dividers are installed they need to be reduced to accommodate the selected depth box. Adjacent boxes should not be more than 25mm apart.



Pinnacle Technical

COVERS

- 11 Slide cover under end cap where required before locating correctly in position. Pushing firmly snap into place. The top cover in the double (back to back) trunking locks the two trunking bodies together.
- 12 Internal and external corner covers should be installed with couplers. Leave a gap of 13mm at the junction between corner cover and the trunking covers to allow fitting of coupler covers. Correctly position and snap firmly into place.
- 13 At joint couplers, overlap the coupler carrier flanges with the lids. The gap left between the covers will allow for the fitting of joint covers. Having satisfactorily installed all trunking covers firmly push fit the coupler covers into place overlapping all the cover completely.
- 14 Removal – Main compartment cover removal is readily achieved if a wiring accessory or coupler is present. Remove the accessory and exerting pressure to the underside of the cover with the head of a flat screwdriver to initiate disengagement, peel the cover back.
- 15 When no accessory is available remove a moulded coupler cover by placing the head of a small flat screwdriver at the junction with the trunking cover and lever outwards slowly disengaging the cover moulding. When levering off coupler covers protect trunking faces from damage. When the coupler cover is removed initiate clip disengagement of trunking covers and peel back.



Integrated Trunking

TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



FEATURES

- Wide range of integrated components maximise versatility in application
- Simple, clean lines
- Easy to assemble and install
- Data bend option 32mm radius
- High impact resistance and durability
- Tapered joints provide complete protection at junctions masking cut ends
- Clip on covers provide continuous access for wiring modifications
- All extrusions manufactured from 100% recycled material*

Description

Premier is an integrated PVCu trunking system for general cable distribution. A comprehensive range of tees, angles and junctions make a very wide range of configurations possible and the system can be wall or ceiling mounted.

6 trunking sizes are available (see dimensions overleaf) offering the user distribution solutions, from incoming mains to the most remote power, telecom or data outlet.

Cable segregation (see figure 1) Each trunking profile incorporates a series of preformed locators which accept clip-in dividers for cable segregation. Clip-in components are provided for retaining cables within each compartment prior to trunking lids being fitted.

FINISH

Premier lid components are decoratively textured in contrasting linear patterns giving a subtle 'striped' effect.

All other components are in white with a semi matt finish.

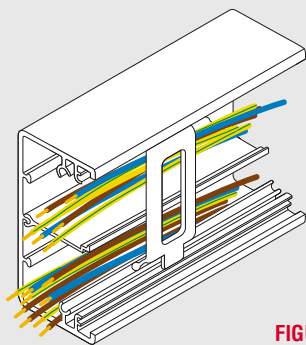


FIGURE 1

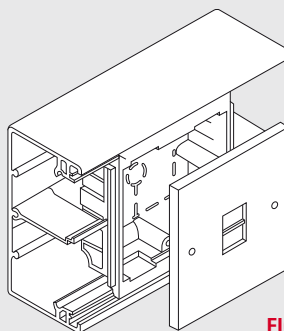


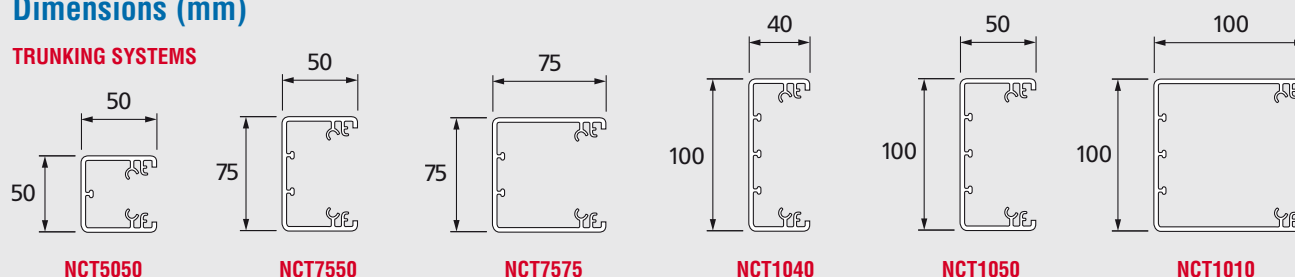
FIGURE 2

* Based on 2014 consumption

Integrated Trunking

Dimensions (mm)

TRUNKING SYSTEMS



PREMIER CABLE CAPACITY																										
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	NCT5050		NCT7550		NCT7575		NCT1040		NCT1050		NCT1010		NCT1040 WITH 25MM BACKBOX		NCT1050 WITH 25MM BACKBOX		NCT1050 WITH 35MM BACKBOX		NCT1010 WITH 25MM BACKBOX		NCT1010 WITH 35MM BACKBOX			
			Full Term CSA 100% Fill (MM²)																							
			1881		3039		4754		3091		4041		8725		1081		1866		1224		6550		5908			
			TERM AT 45% FILL (MM²)																							
		846		1367		2139		1390		1818		3926		486		839		550		2947		2658				
POWER CABLES			NUMBER OF CABLES AT 45% FILL																							
PVC stranded	1.5mm²	8.6	98		158		248		161		211		456		56		97		63		342		309			
	2.5mm²	12.6	67		108		169		110		144		311		38		66		43		233		210			
	4mm²	16.6	50		82		128		83		109		236		29		50		33		177		160			
	6mm²	21.2	39		64		100		65		85		185		22		39		25		139		125			
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)																							
			A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
Cat 5E UTP	5.5mm dia.	30.2	28	62	45	100	70	157	46	102	60	133	130	288	16	35	27	61	18	40	97	216	88	195		
Cat 5E STP	6.0mm dia.	36.0	23	52	37	84	59	132	38	85	50	112	109	242	13	30	23	51	15	34	81	181	73	164		
Cat 6 UTP	6.5mm dia.	42.2	20	44	32	72	50	112	32	73	43	95	93	206	11	25	19	44	13	29	69	155	62	140		
Cat 6 STP	7.0mm dia.	49.0	17	38	27	62	43	97	28	63	37	82	80	178	9	22	17	38	11	24	60	133	54	120		

Applications

The Premier system is ideal for use in factories, workshops, schools, portable accommodation and general commercial buildings where integration of cable distribution with accessory mounting facility is desirable.

Generally systems can be used as follows:

50 x 50, 75 x 50 and 75 x 75mm – general cable distribution.

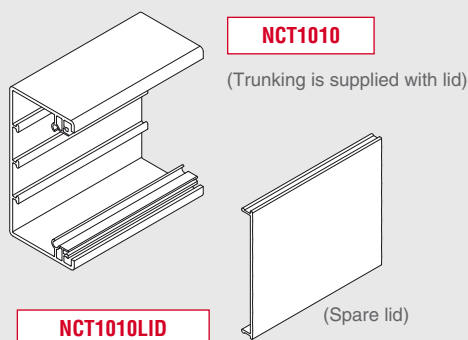
100 x 40 and 100 x 50mm – where mounting accessories are also required.

100 x 100mm – where mounting accessories and/or generous cable distribution is required.

ACCESSORIES

	FOR USE WITH	LIST NO.
ONE GANG ACCESSORY BOX AND FRAME	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring 25mm deep box NCT1050/NCT1010 for power and ELV outlets requiring 35mm deep box	VTS6025
	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring extra deep accessory space	VTS6035
		VTS6000
TWO GANG ACCESSORY BOX AND FRAME	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring 25mm deep box NCT1050/NCT1010 for power and ELV outlets requiring 35mm deep box	VTS7025
	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring extra deep accessory space	VTS7035
		VTS7000
THREE GANG ACCESSORY BOX	NCT1040, NCT1050, NCT1010 for power and ELV outlets requiring 28mm deep box	VTS8028
MINI TRUNKING ADAPTOR	Integrates Premier with YEA1, YEA2, YEA3 CMA1, CMA3, CMA4 Mini trunking fittings	NYT100

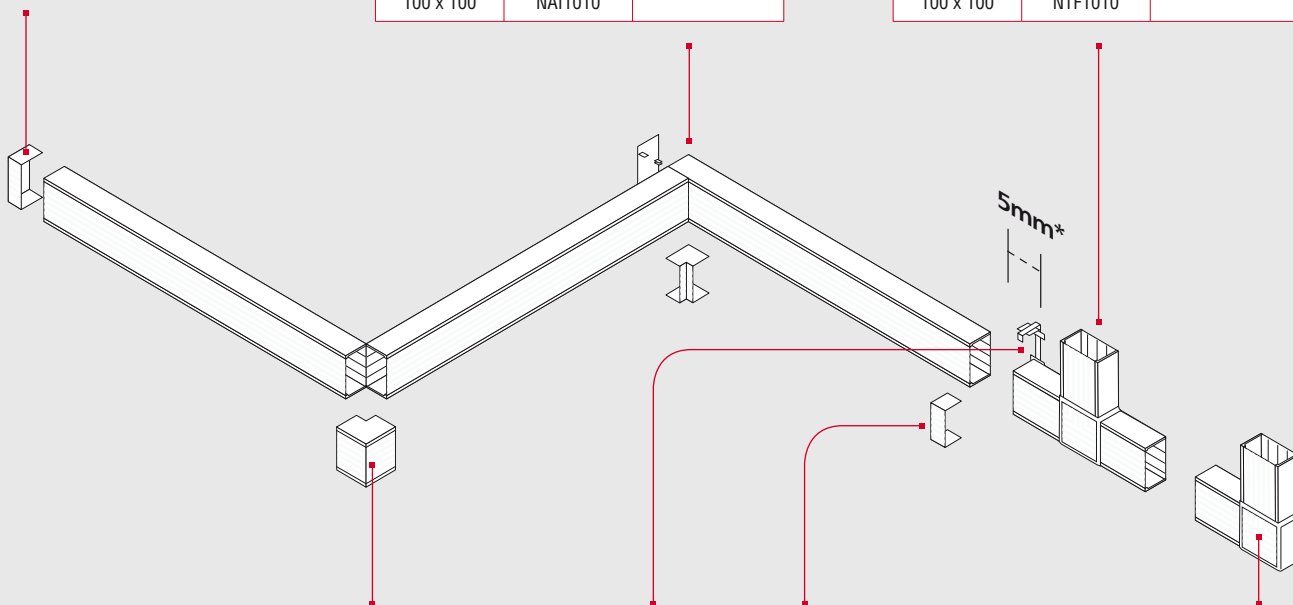
Integrated Trunking



PROFILE	END CAP
50 x 50	NEP5050
75 x 50	NEP7550
75 x 75	NEP7575
100 x 40	NEP1040
100 x 50	NEP1050
100 x 100	NEP1010

PROFILE	INT CORNER	WITH DATA CORNER
50 x 50	NAI5050	
75 x 50	NAI7550	
75 x 75	NAI7575	
100 x 40	NAI1040	
100 x 50	NAI1050	NDAI1050
100 x 100	NAI1010	

PROFILE	FLAT TEE	WITH DATA CORNER
50 x 50	NTF5050	
75 x 50	NTF7550	
75 x 75	NTF7575	
100 x 40	NTF1040	
100 x 50	NTF1050	NDTF1050
100 x 100	NTF1010	



PROFILE	EXT CORNER	WITH DATA CORNER
50 x 50	NAE5050	
75 x 50	NAE7550	
75 x 75	NAE7575	
100 x 40	NAE1040	
100 x 50	NAE1050	NDAE1050
100 x 100	NAE1010	

PROFILE	INT COUPLER	JOINT COVER
50 x 50	NCI5050	NJC5050
75 x 50	NCI7550	NJC7550
75 x 75	NCI7575	NJC7575
100 x 40	NCI1040	NJC1040
100 x 50	NCI1050	NJC1050
100 x 100	NCI1010	NJC1010

PROFILE	FLAT ANGLE	WITH DATA CORNER
50 x 50	NAF5050	
75 x 50	NAF7550	
75 x 75	NAF7575	
100 x 40	NAF1040	
100 x 50	NAF1050	NDAF1050
100 x 100	NAF1010	

Note: Diagram shows profile 1050

* Minimum distance

Integrated Trunking

Installation Guide

GENERAL NOTES

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

- ① It may be advantageous to fit stop ends to trunking prior to installation. Where stop end could be subjected to lateral force the mounting clip should be solvent welded to the rail.
- ② Drill Trunking with oversized holes in positions and at maximum centre shown.
- ③ Fix with dome head screws and fibre or rubber washers. Allow for expansion movement when tightening screws and between joints.

- ④ Internal coupler should be used to ensure correct alignment. Clip the coupler to the end of the free trunking length, offer up to the fixed trunking and slide home.

- ⑤ Minimum dimensions:

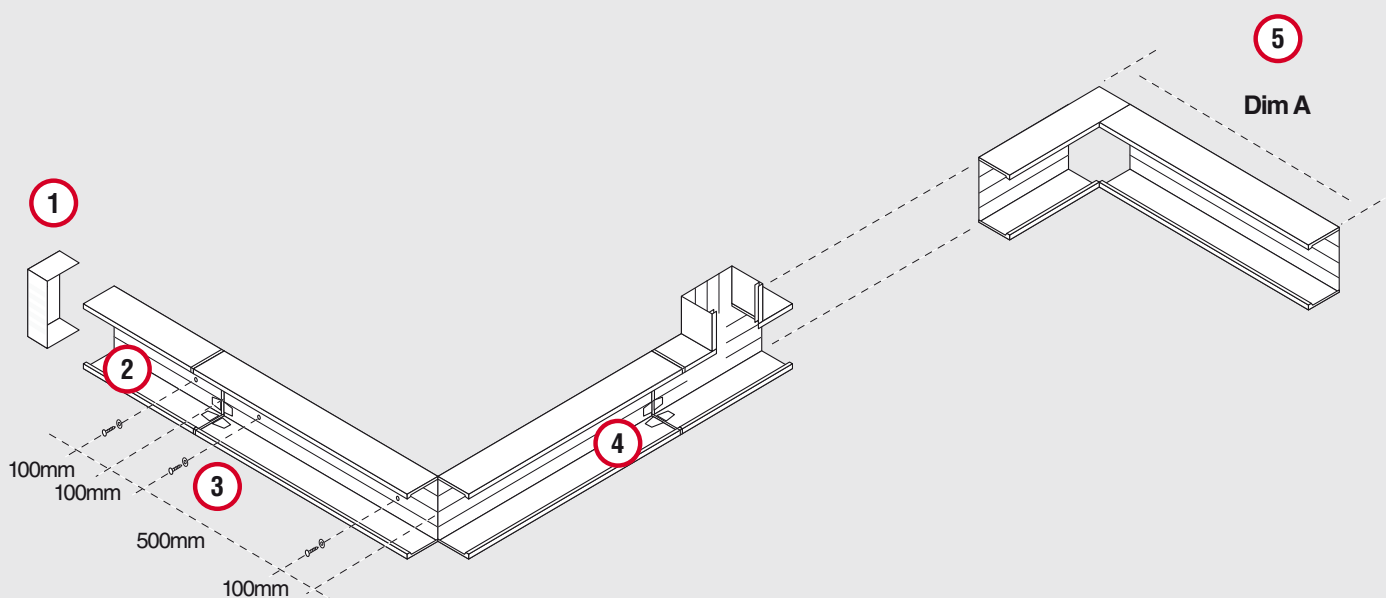
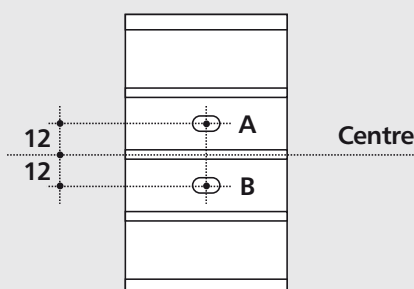
Trunking size mm	Dimension A (mm)
50 x 50	100
75 x 50	100
75 x 75	130
100 x 40	90
100 x 50	100
100 x 100	210

Fixing Centres (2)

For 50mm wide trunking use hole A.

For 100mm wide trunking use holes A and B.

For 75mm wide trunking drill single fixing on the centre line.



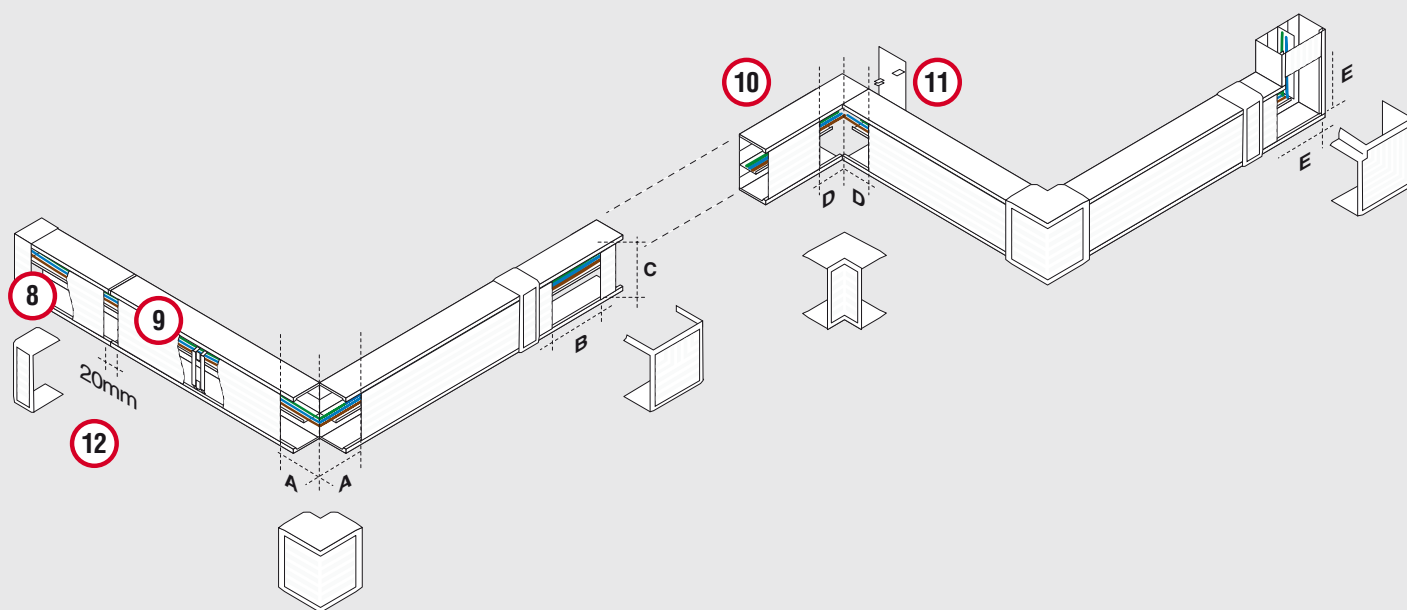
Integrated Trunking

Installation Guide Continued

- ⑧ Clip in cable dividers prior to cabling. Divider clip fits to the tee bar mounting rail extruded on the trunking base. To correctly fit divider, the extension foot of the female clip profile is mounted below the tee bar for horizontal runs, and to the right hand side of vertical runs.
- ⑨ Cable retainers clip into the semi-circular grooves extruded within the trunking profile. Retainers should be installed at 750mm maximum centres on straight runs or within 100mm of each end, corner or change of plane.
- ⑩ Internal corners – measure distance into corner and cut trunking length 2mm short.
- ⑪ Wall plates should be used to maintain enclosure function of trunking.
- ⑫ Leave a gap of 20mm to allow fitting of joint cover moulding.

AT INTERNAL CORNERS, EXTERNAL CORNERS, FLAT ANGLES AND FLAT TEES, LEAVE GAPS BETWEEN LIDS AND THE END TRUNKING BODY AS SHOWN BELOW:

		50X50	75X50	75X75	100X40	100X50	100X100
EXTERNAL CORNER	A	62	62	87	52	62	140
FLAT TEE	B	74	99	99	124	124	124
	C	65	90	90	115	115	115
INTERNAL CORNER	D	62	62	87	52	62	140
FLAT ANGLE	E	66	90	90	115	115	140



Trunking

TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

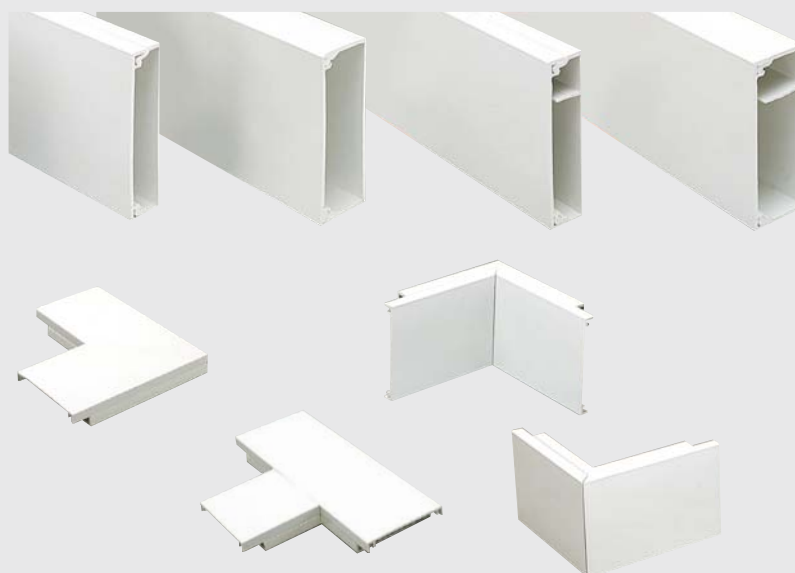
IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



FEATURES

- 2 sizes with one or two compartments
- Easy to add sockets and outlets once installed
- Wall or ceiling mounting possible
- Wide range of integrated components maximises versatility of application
- Unobtrusive and neat
- Easy to assemble and install
- Durable and impact resistant to Heavy Classification BS 4678 Part 4
- All extrusions manufactured from 100% recycled material*

Description

Norwich trunking is available in two depths with one or two compartments for wall or ceiling mounting.

The standard version is 40mm deep with a 25mm deep option, where lack of space makes the projection critical. Accessory mounting frames are located within the trunking, providing a visually co-ordinated system with the facility to relocate and extend accessory outlet positions as required.

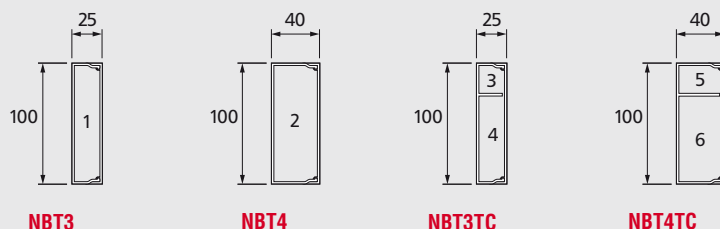
The system is widely used in schools, offices and commercial installations because of its durability and the ability to retrofit extra sockets and outlets as required.

Material: PVCu **Colour:** White only

* Based on 2014 consumption

Trunking

Dimensions (mm)



NBT3

NBT4

NBT3TC

NBT4TC

Premier Cable Capacity														
Type of Conductor	Size	Cable Factor	NBT3 (1)		NBT3TC (3)		NBT3TC (4)		NBT4 (2)		NBT4TC (5)		NBT4TC (6)	
			Full Term CSA 100% Fill (MM²)											
			1805		384		1383		3230		706		2455	
			Term at 45% Fill (MM²)											
			812		172		622		1453		317		1104	
Power Cables			Number of Cables at 45% Fill											
PVC stranded	1.5mm²	8.6	94		20		72		168		36		128	
	2.5mm²	12.6	64		13		49		115		25		87	
	4mm²	16.6	48		10		37		87		19		66	
	6mm²	21.2	38		8		29		68		14		52	
Data Cables			Number of Cables at 45% Fill (A) and Full Capacity (B)											
			A	B	A	B	A	B	A	B	A	B	A	B
Cat 5E UTP	5.5mm dia.	30.2	26	59	5	12	20	45	48	106	10	23	36	81
Cat 5E STP	6.0mm dia.	36.0	22	50	4	10	17	38	40	89	8	19	30	68
Cat 6 UTP	6.5mm dia.	42.2	19	42	4	9	14	32	34	76	7	16	26	58
Cat 6 STP	7.0mm dia.	49.0	16	36	3	7	12	28	29	65	6	14	22	50

Note: NBT3 & NBT3TC are not deemed suitable for terminating Cat6 cabling.

Components

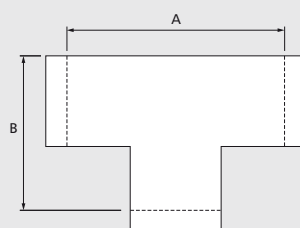
The four components shown opposite are fabricated sections and space must be allowed for inclusion in runs of trunking. All other components snap on over standard trunking profiles.

LIST NO.	COMPONENT DIMENSIONS			
	A	B	C	D
NBT3	240	170	125	125
NBT4	240	170	140	140

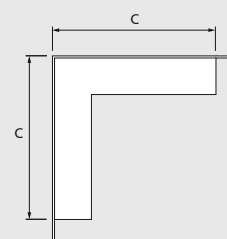
The four components shown below are fabricated sections and space must be allowed for inclusion in runs of trunking.

All other components snap on over standard trunking profiles.

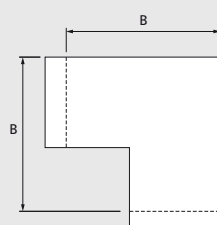
FLAT TEE



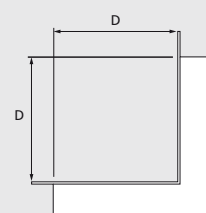
EXTERNAL CORNER



FLAT ANGLE



INTERNAL CORNER



Trunking

Installation Guide

General notes

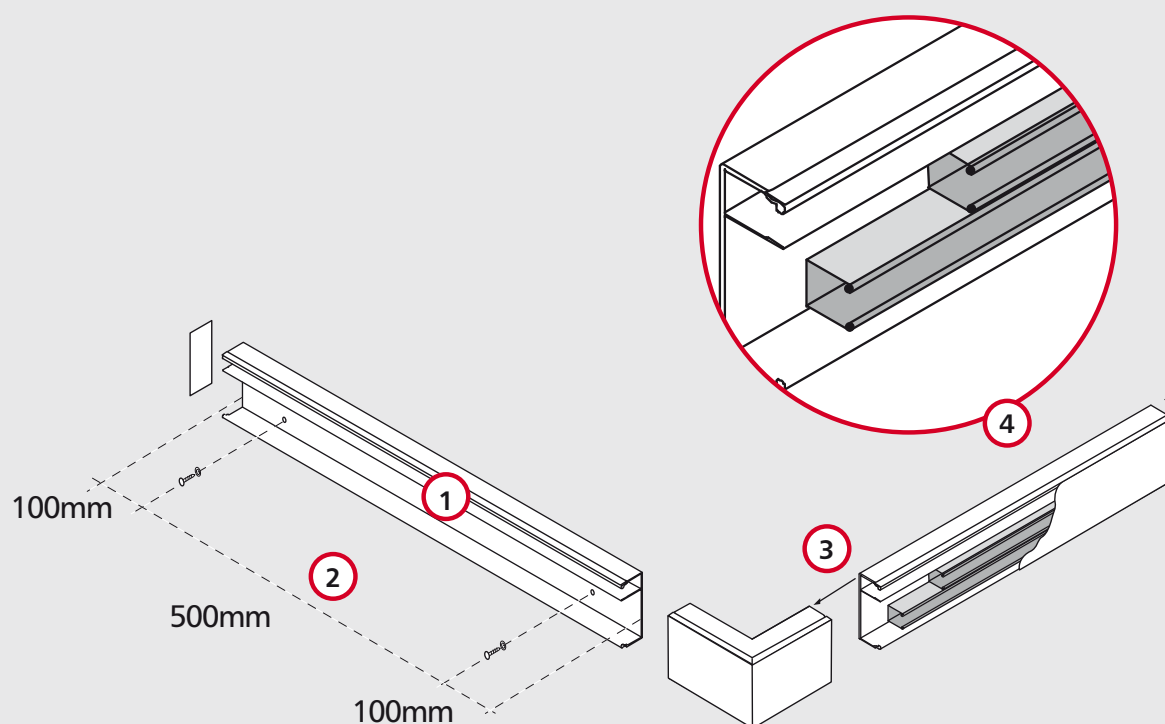
Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

Fixing

- 1 Cut and fix the continuous carrier at not more than 500mm centres along its entire length and not more than 100mm from the end of a run, and at intersection with other systems.
- 2 Locate and secure, with a minimum of two screws, the carrier for flat angles, external angles, internal angles and flat tees.
- 3 Close butt to the carrier using internal couplers – see 5.

Cable segregation

- 4 Further segregation within the single or two compartment trunking can be achieved during or following the installation by inserting the appropriate size of Mini-trunking sections. Fit the socket insertion units, install the conductors and cable runs and draw the conductors through. Fix the clip on cover using the back up couplers at the intersections.
- 5 The couplers can also serve as cable retaining straps prior to the cover being fitted. Stagger the joints in the cover with the joints in the carrier and offset by 50mm. Bond the end stop to the main trunking using Egaweld PLUS solvent weld



Trunking

Junction with Mini-trunking

- ⑥ Locate the position of the junction. Drill the carrier with the correct sized hole to accommodate the number of cables required. Position the correct UEA/-adaptor using a short length of compatible Mini-trunking as a guide.

The trunking should stop 6mm from the face of the Norwich trunking to allow the adaptor to fit tight. Bond the adaptor to the Norwich trunking using Egaweld PLUS solvent weld

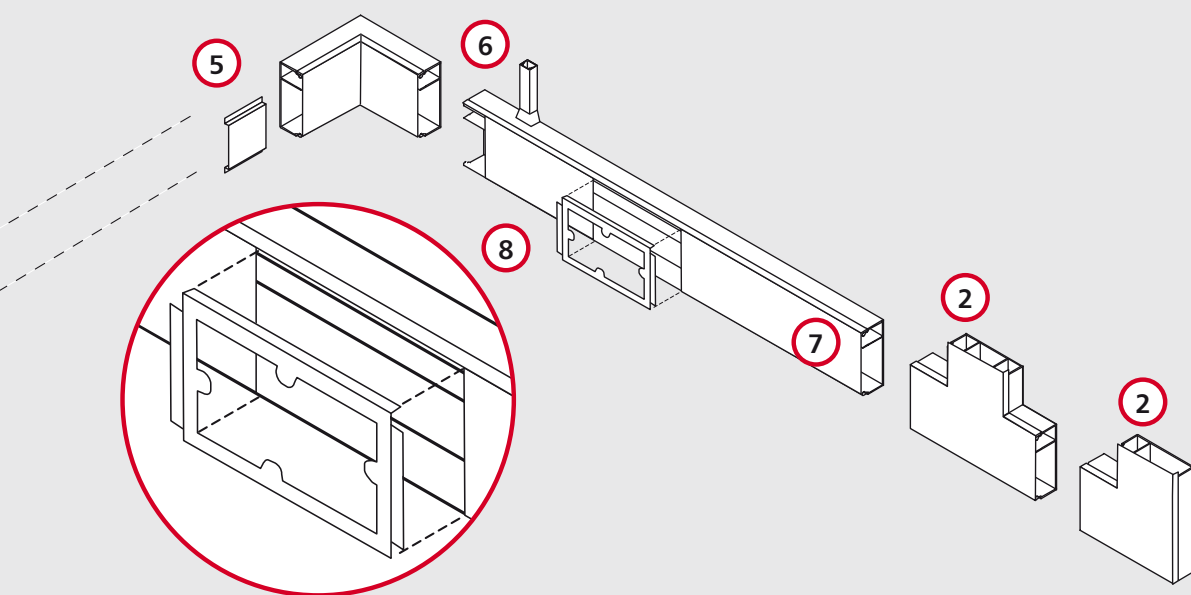
Remove the temporary trunking guide and proceed with the installation.

Cover

- ⑦ Covers simply clip onto base.

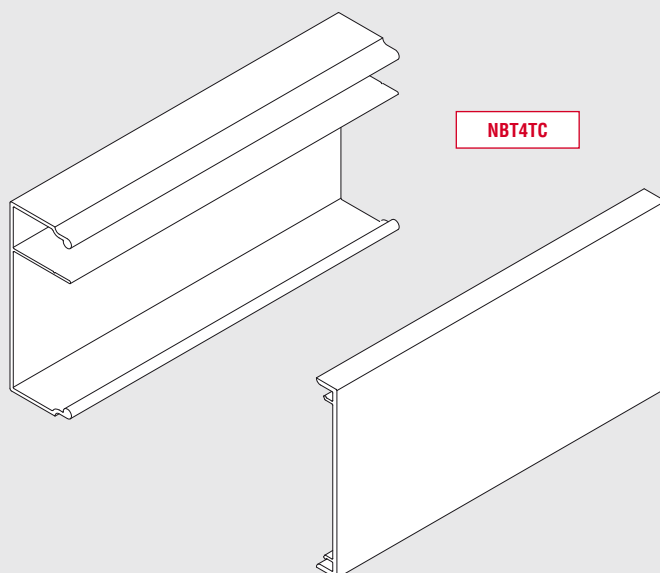
Accessories

- ⑧ The 'clip on' accessory mounting frames will accept most standard one and two gang socket plates and socket mounting with back box enables telephone circuitry to be segregated from other services.



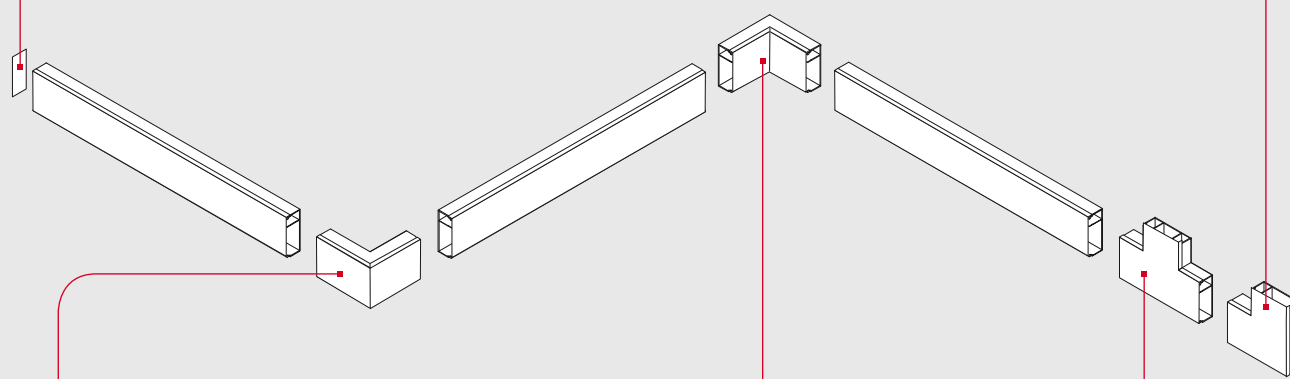
Trunking

Component Selection Guide



PROFILE	END CAP
100 x 25mm (NBT3 & NBT3TC)	NEP3
100 x 40mm (NBT4 & NBT4TC)	NEP4

PROFILE	FLAT ANGLE
SINGLE	
100 x 25mm (NBT3)	NAF3
100 x 40mm (NBT4)	NAF4
TWIN – COMPARTMENT TO OUTSIDE	
100 x 25mm (NBT3TC)	NAF3TC
100 x 40mm (NBT4TC)	NAF4TC
TWIN – COMPARTMENT TO INSIDE	
100 x 25mm (NBT3TC)	NAF3TCSI
100 x 40mm (NBT4TC)	NAF4TCSI



PROFILE	EXT CORNER
100 x 25mm (NBT3)	NAE3
100 x 40mm (NBT4)	NAE4
100 x 25mm (NBT3TC)	NAE3TC
100 x 40mm (NBT4TC)	NAE4TC

PROFILE	INT CORNER
100 x 25mm (NBT3)	NAI3
100 x 40mm (NBT4)	NAI4
100 x 25mm (NBT3TC)	NAI3TC
100 x 40mm (NBT4TC)	NAI4TC

PROFILE	FLAT TEE
100 x 25mm (NBT3)	NTF3
100 x 40mm (NBT4)	NTF4
100 x 25mm (NBT3TC)	NTF3TC
100 x 40mm (NBT4TC)	NTF4TC



PRODUCT APPLICATION

ECHO SWITCH (TRANSMITTER)

Echo™ is an innovative range of entirely wireless, batteryless and self-powered switches and controls. Being wireless offers fantastic benefits, including instant installation and location flexibility. This reduces disruption and cost as there is no need to channel walls and run switching cables.



Ega Industrial Technical

Industrial Trunking

mkelectric.co.uk



TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

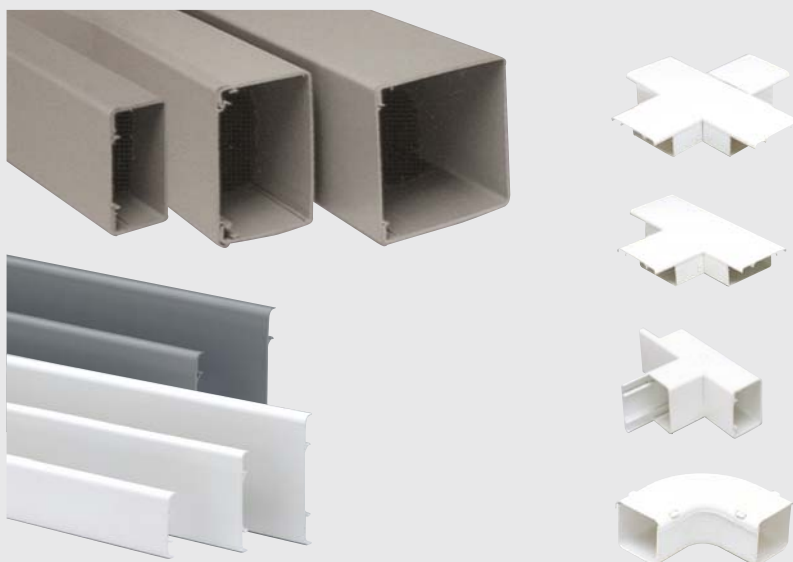
IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS 4678-4:1982 available on request



Features

- Wide range of trunking sizes and capacity
- Wide range of integrated components maximises versatility of application
- Available in white or grey
- Extremely durable and impact resistant to Heavy Classification BS 4678, Part 4
- Easy to assemble and install
- All trunking fittings are supplied plain without couplings to avoid wastage
- External couplings strengthen the trunking and internal coupling pieces
- All extrusions manufactured from 100% recycled material*

Specified sizes, pages 346-347.

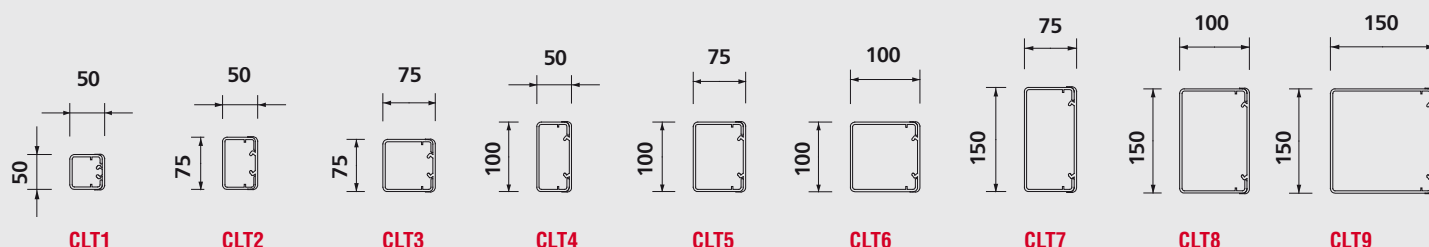
Description

Ega Industrial trunking is a PVCu heavy duty system available in white or grey, used extensively for industrial wiring purposes. It is available in a large variety of sizes and has found wide acceptance throughout the world. Its durability, safety and strength are well proven.

Nine basic sizes are available ranging from 50 x 50 mm to 150 x 150 mm complete with a comprehensive variety of fittings. The trunkings have a simple clip on cover which positively locates when hand pressure is applied and enables fast, efficient installation.

* Based on 2014 consumption

Industrial Trunking



EGA INDUSTRIAL CABLE CAPACITY																				
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	CLT1		CLT2		CLT3		CLT4		CLT5		CLT6		CLT7		CLT8		CLT9	
			Full Term CSA 100% Fill (mm²)																	
			2130	3312	5117	4408	6841	9270	10446	14175	21566									
			Term at 45% Fill (mm²)																	
958	1490	2302	1983	3078	4171	4700	6378	9704												
Power Cables			Number of Cables at 45% Fill																	
PVC Stranded	1.5mm²	8.6	111	173	267	230	357	485	546	741	1128									
	2.5mm²	12.6	76	118	182	157	244	331	373	506	770									
	4mm²	16.6	57	89	138	119	185	251	283	384	584									
	6mm²	21.2	45	70	108	93	145	196	221	300	457									
Data Cables			Number of Cables at 45% fill (a) and Full Capacity (b)																	
			a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b	a	b
Cat5E UTP	5.5mm dia.	30.2	31	70	49	109	76	169	65	145	101	226	138	306	155	345	211	469	321	714
Cat5E STP	6.0mm dia.	36.0	26	59	41	92	63	142	55	122	85	190	115	257	130	290	177	393	269	599
Cat6 UTP	6.5mm dia.	42.2	22	50	35	78	54	121	46	104	72	162	98	219	111	247	151	335	229	511
Cat6 STP	7.0mm dia.	49.0	19	43	30	67	46	104	40	89	62	139	85	189	95	213	130	289	198	440

Ega Industrial Technical

Industrial Trunking

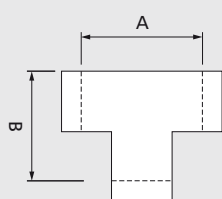
mkelectric.co.uk



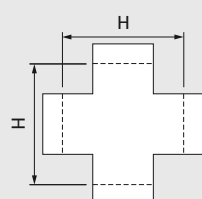
Components

The following components are fabricated sections and space must be allowed for inclusion in runs of trunking. All other components fit over standard trunking profiles.

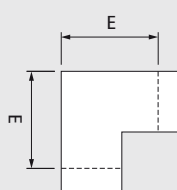
FLAT TEE (FTF)



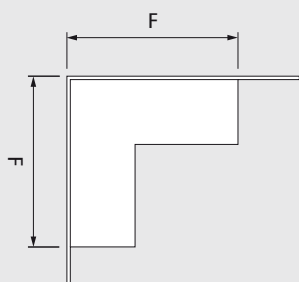
FLAT CROSS (FCU)



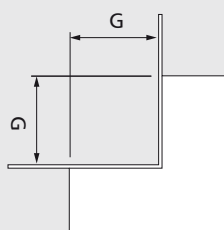
FLAT ANGLE (FAF)



INTERNAL CORNER (FAI)



EXTERNAL CORNER (FAE)

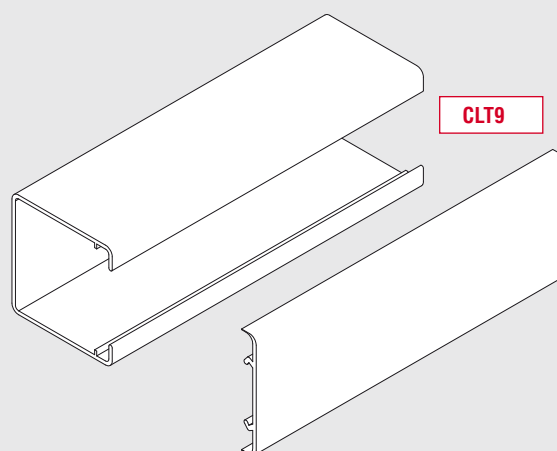


Dimensions

LIST. NO.	COMPONENTS DIMENSIONS (mm)					
CLT/	A	B	E	F	G	H
CLT1	*100	*90	*80	*125	*65	*100
CLT2	*150	*115	115	110	60	*150
CLT3	*150	*115	*115	150	75	*150
CLT4	220	160	160	110	60	220
CLT5	250	175	175	150	75	250
CLT6	250	175	175	175	75	250
CLT7	330	240	240	165	90	330
CLT8	380	265	265	215	115	380
CLT9	380	265	265	265	115	380

* indicates moulded items

Component Selection Guide



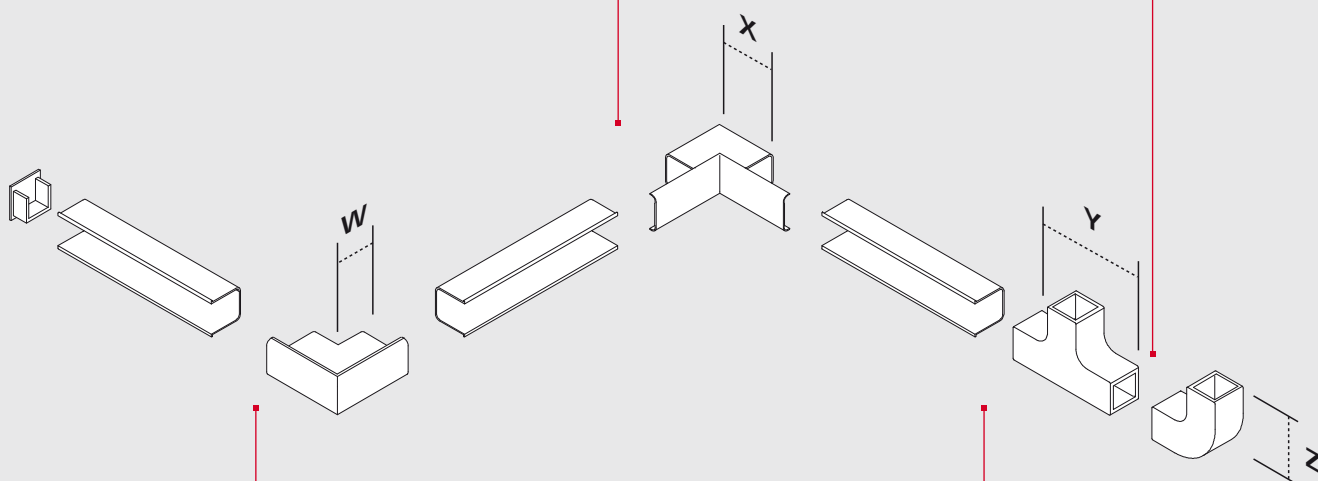
Industrial Trunking

Component Selection Guide

PROFILE	END CAP
CLT1	TEP1
CLT2	TEP2
CLT3	TEP3
CLT4	TEP4
CLT5	TEP5
CLT6	TEP6
CLT7	TEP7
CLT8	TEP8
CLT9	TEP9

PROFILE	INT CORNER	X (mm)
CLT1	FAI1	125
CLT2	FAI2	110
CLT3	FAI3	150
CLT4	FAI4	110
CLT5	FAI5	150
CLT6	FAI6	175
CLT7	FAI7	165
CLT8	FAI8	215
CLT9	FAI9	265

PROFILE	FLAT ANGLE		Z (mm)
	MOULDED	FABRICATED	
CLT1	FAF1		125
CLT2	FAF2		110
CLT3	FAF3		150
CLT4		FAF4	110
CLT5		FAF5	150
CLT6		FAF6	175
CLT7		FAF7	165
CLT8		FAF8	215
CLT9		FAF9	265



PROFILE	EXT CORNER	W (mm)
CLT1	FAE1	65
CLT2	FAE2	60
CLT3	FAE3	75
CLT4	FAE4	60
CLT5	FAE5	75
CLT6	FAE6	75
CLT7	FAE7	90
CLT8	FAE8	115
CLT9	FAE9	115

PROFILE	FLAT TEE		Y (mm)
	MOULDED	FABRICATED	
CLT1	FTF1		170
CLT2	FTF2		170
CLT3	FTF3		225
CLT4		FTF4	170
CLT5		FTF5	225
CLT6		FTF6	250
CLT7		FTF7	255
CLT8		FTF8	330
CLT9		FTF9	380

Ega Industrial Technical

Industrial Trunking

Installation Guide

General notes

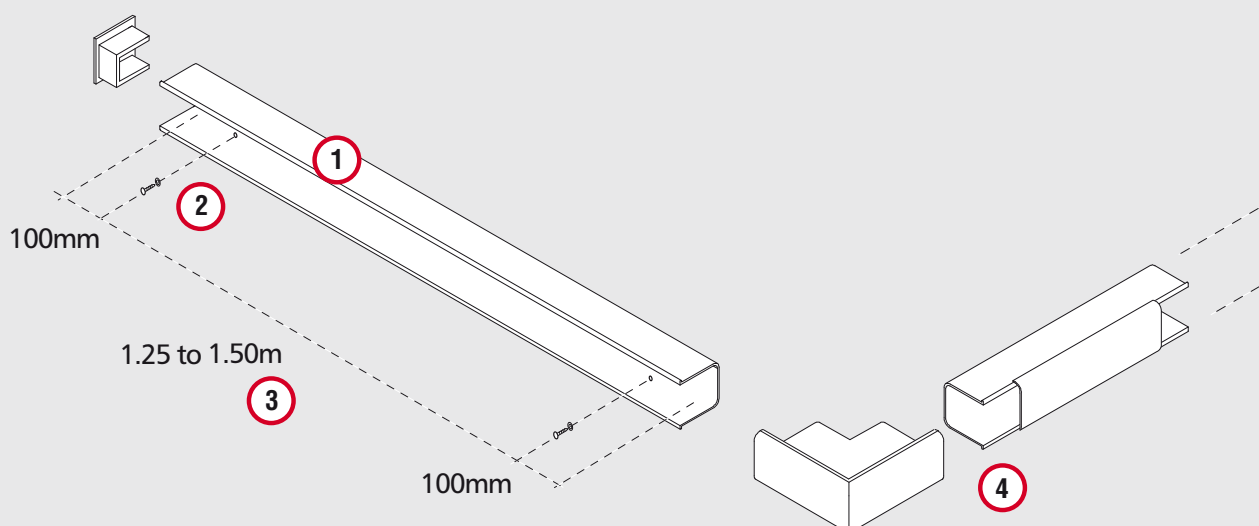
Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

Fixing

- ① Fix trunking with screws. It is essential that the hole in the trunking is considerably oversized to allow for expansion.
- ② Washers should be used under the head of the screw. The screw should not be tightened to its full extent to allow for movement.
- ③ For suspended trunking it is advisable to provide fixings every 1.25 m to 1.5 m and a maximum of 100mm either side of coupling.
- ④ Trunking and lid joints should be staggered to increase the strength of couplings.

Fixing lids

- ⑤ Fix lid by sliding it onto the trunking at one end, aligning it to the run of trunking and then curving the cover at the same time as pressing the continuous clip into the trunking gap.
- ⑥ To remove lid grasp the trunking firmly at one end and pull in peeling motion so that the cover is gradually freed along its whole length.

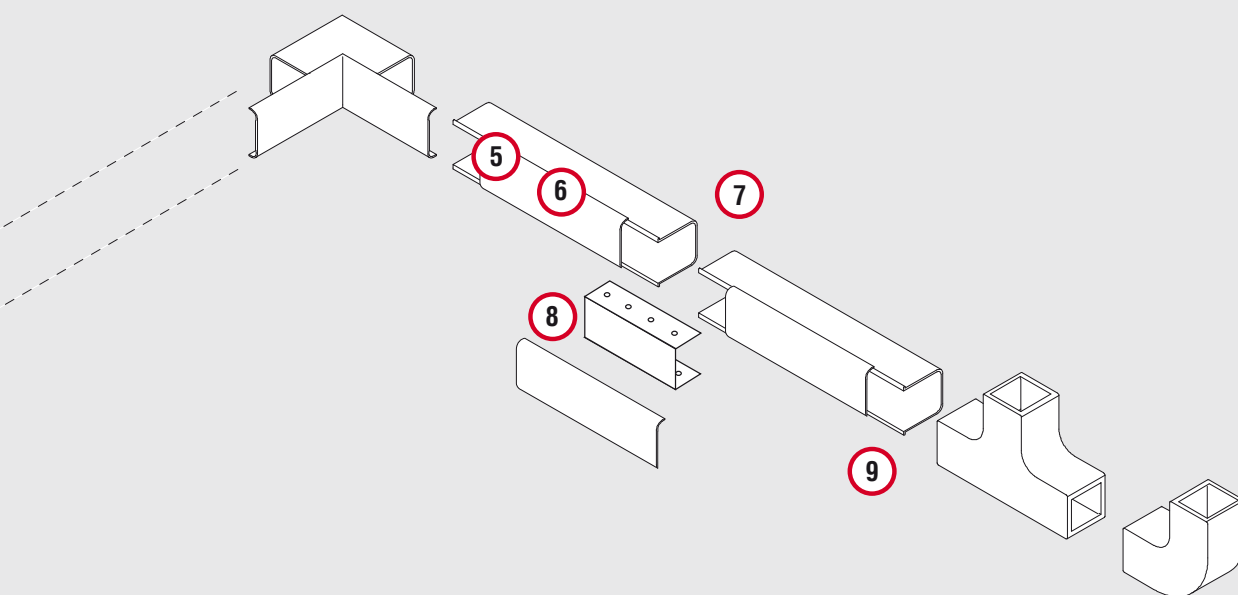


Ega Industrial Technical

Industrial Trunking

Joining fittings

- ⑦ Drill trunking with a 7.2mm drill. Bridge pieces are available for retaining the cable in the trunking and the special corrugated shape allows them to be used as a support for dividing fillets required within the trunking.
- ⑧ External couplings are fitted by means of the special plastic rivet (ref: TPR/1). To connect couplings to trunking the trunking must be drilled centrally, size 7.2mm, and the rivet inserted.
- ⑨ Economical joints can be made using a vinyl adhesive tape especially where added strength is obtained by the lid and trunking being joined in different positions. The joint created is weather resistant and is ideal for surface installation and in conditions of wide temperature variations.



Ega Cornice Technical

Cornice Trunking

mkelectric.co.uk



TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

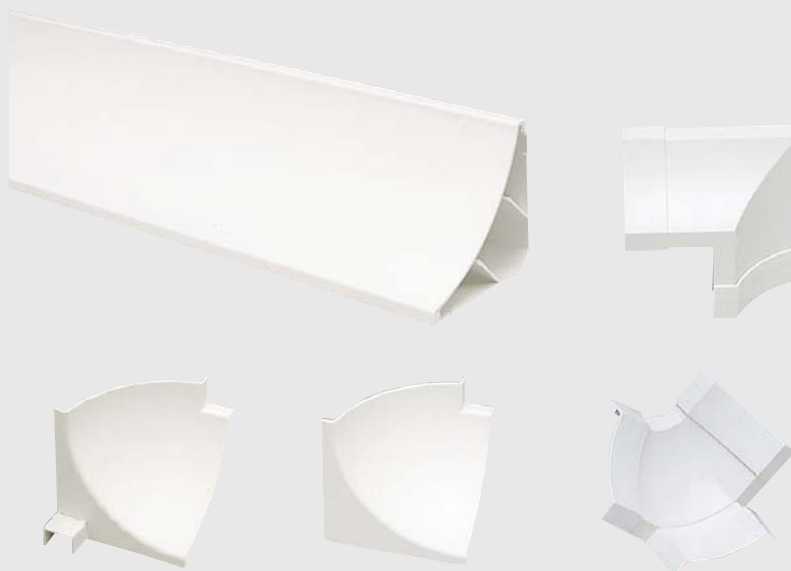
IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request



Features

- Two trunking profiles
- Wide range of integrated components maximises versatility of application
- Fully compatible with Ega Mini Trunking systems
- Neat and unobtrusive
- Accessories designed to overlap edge of trunking cover, hiding joint line
- Easy to assemble and install
- Durable and impact resistant to Medium Classification BS 4678 Part 4
- All extrusions manufactured from 100% recycled material*

Description

Ega Standard and Compact Cornice Trunking Systems are manufactured from PVCu. They are designed to be mounted on interior surfaces, at the interface of wall and ceiling for the protection of electrical cables.

Standard trunking consists of a base, containing three separate compartments, and a common cover. Compact trunking has a single compartment.

Both types are compatible with Ega Mini Trunking.

The smaller, single compartment trunking is ideal for domestic rewires, whereas the larger three compartment trunking is best suited to commercial and sheltered housing applications.

Various types of services can be accommodated, such as mains wiring, lighting circuits, alarm warden call systems and data.

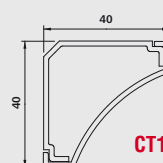
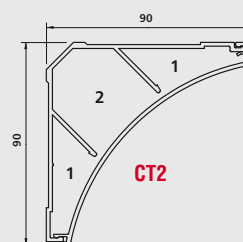
The system is available in a standard white colour.

* Based on 2014 consumption

Ega Cornice Technical

EGA CORNICE CABLE CAPACITY								
TYPE OF CONDUCTOR	SIZE	CABLE FACTOR	CT1		CT2 CMPT 1		CT2 CMPT 2	
			Full Term CSA 100% Fill (mm²)					
			755		636		1441	
			Term at 45% Fill (mm²)					
			339		286		648	
Power Cables			Number of Cables at 45% Fill					
PVC Stranded	1.5mm²	8.6	39		33		75	
	2.5mm²	12.6	26		22		51	
	4mm²	16.6	20		17		39	
	6mm²	21.2	15		13		30	
Data Cables			No. of Cables at 45% Fill (a) and Full Capacity (b)					
			a	b	a	b	a	b
Cat5E UTP	5.5mm dia.	30.2	11	25	9	21	21	47
Cat5E STP	6.0mm dia.	36.0	9	20	7	17	18	40
Cat6 UTP	6.5mm dia.	42.2	8	17	6	15	15	34
Cat6 STP	7.0mm dia.	49.0	6	15	5	12	13	29

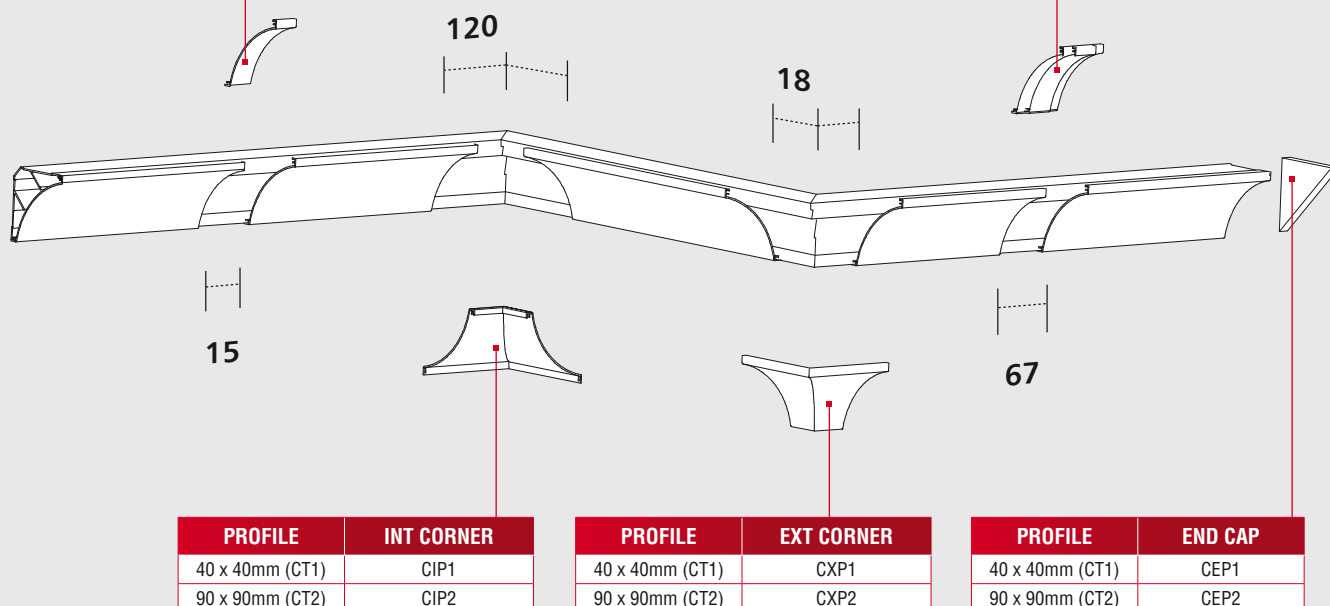
Dimensions (mm)



Component Selection Guide (dimensions in mm)

PROFILE	JOINT COVER
40 x 40mm (CT1)	CJC1
90 x 90mm (CT2)	CJC2

PROFILE	MINI TRUNKING ADAPTOR
40 x 40mm (CT1)	CA1
90 x 90mm (CT2)	CA2



PROFILE	INT CORNER
40 x 40mm (CT1)	CIP1
90 x 90mm (CT2)	CIP2

PROFILE	EXT CORNER
40 x 40mm (CT1)	CXP1
90 x 90mm (CT2)	CXP2

PROFILE	END CAP
40 x 40mm (CT1)	CEP1
90 x 90mm (CT2)	CEP2

Ega Cornice Technical

Cornice Trunking

Installation Guide

General notes

Prior to installation strike a line of trunking using a plumb and chalk line for vertical, and spirit levels for horizontal runs.

① Installation

- a** Separate the cover from the backing. Measure the walls and cut trunking base to length making due allowance for external corner mitres. Fix base to wall/ceiling using woodscrews or bolts, with large washers. Oversized holes must be drilled to allow for expansion.
- b** The base should be fixed to both wall and ceiling at 500mm intervals giving a staggered arrangement

② Spurs

- a** Spurs from the main Cornice trunking across ceilings or down walls are made using a Mini Trunking Adaptor (CA1 for Compact or CA2 for Standard) in conjunction with the appropriately sized Mini Trunking spout adaptor.
- b** In Standard Cornice, the cable retaining strap enables cables to be segregated from other services used in conjunction with a mini trunking adaptor. A hole of 25mm or less must be drilled and the cable should be looped through the aperture as shown. A cable retraining strap is also available for Compact Cornice.

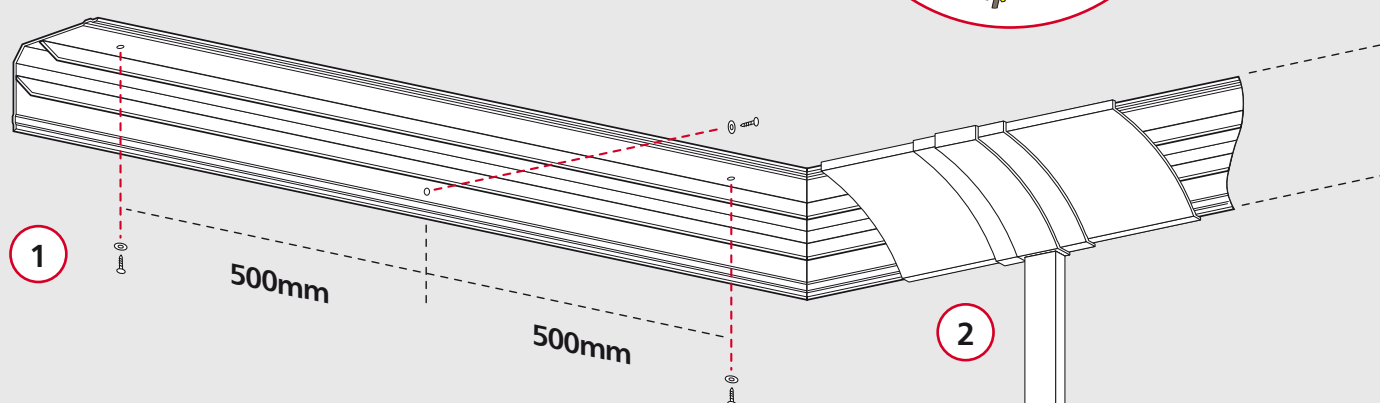
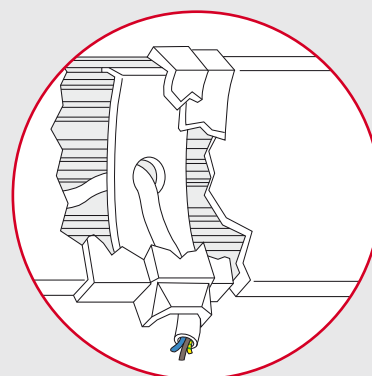
Locate ceiling and wall spur then mark base to indicate the

end of the lid run. Fit Ega Mini Trunking as appropriate using the relevant Mini Trunking spout adaptor (YEA). Install wiring using retaining strap(s) as necessary.

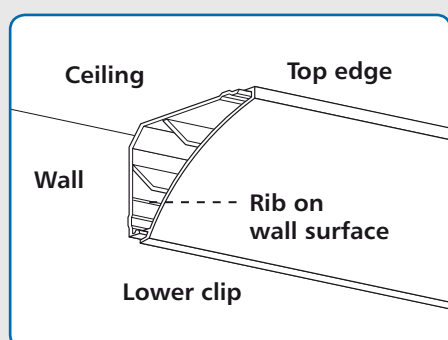
③ Corners and Accessories

- a** Mitre base to ensure moulded accessories fit. Cut lid square having made suitable allowance for the width of the accessories and the overlap required to fit under joint covers.
- b** All fittings clip onto an exposed section of the trunking base. Allow suitable gaps in trunking lid.

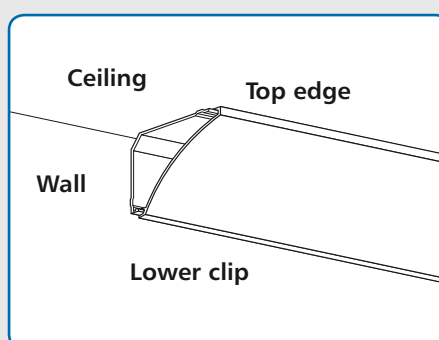
Mark the base with position and width of the accessories and cut the lid the appropriate length, taking due notice of the gap allowances. (Standard Cornice shown).



Standard Cornice



Compact Cornice



Ega Cornice Technical

4 Covers

Installation – Locate the top edge, adjacent to the ceiling, with upper back clip.

The lower clip is then fitted by exerting pressure against the front face, pushing towards the wall (Standard Cornice Shown).

Removal – Gain access to the interior of the trunking. Remove one of the accessory mouldings and carefully insert screwdriver, under the top edge and lever forward so as to disengage clip.

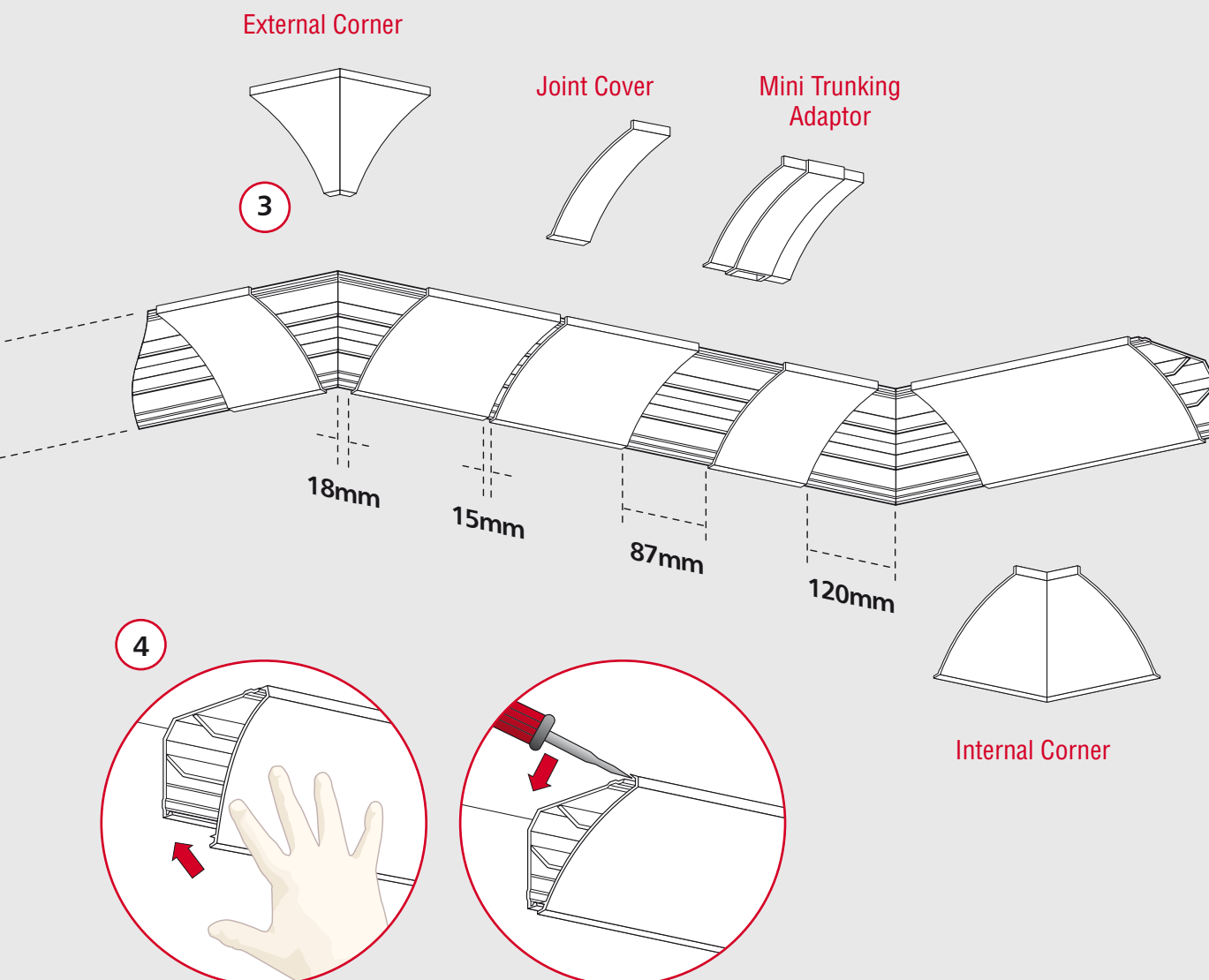
In restricted spaces, engage a hook behind the ceiling edge of the cover, and pull forward to disengage.

The lower clip is then disengaged in the same way.

Notes

Jointing – Where gaps occur, a gap of 5mm must be left between base sections to allow for expansion. The cover must overlap this joint by a minimum of 50mm.

Finishing – In circumstances where the wall or ceiling is uneven, a flexible sealer or mastic can be used to fill any gaps which occur along the edge of the trunking. Relief finishes, such as Artex, must be smoothed down with a spatula, for a width of 25mm minimum, along the line of the trunking in order to enable cover removal.



Egatube Conduit

Technical

mkelectric.co.uk



Conduit and fittings

TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C

IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 61389-1:2008 and BS EN 61386-21:2004 available on request

521.11.201 WIRING SYSTEMS IN ESCAPE ROUTES

Conduit systems – MK recommends the usage of standard metallic saddles and bars when using conduit in escape routes

Trunking systems – MK recommends the use of existing metallic cable retention systems when using trunking in escape routes

FEATURES

- Wide range of sections and sizes
- Oval, round and corrugated sections are compatible
- Simple and fast installation
- Very wide range of components maximises versatility of application
- Very durable and impact resistant
- 2 grades of round conduit to suit various site conditions
- All extrusions manufactured from 100% recycled material*



Description

Egatube high impact PVCu conduit offers a cost effective solution for both new and refurbishment contracts.

The conduit is available in oval sections (6 sizes), in 2 grades of round section (6 sizes of each) and as a flexible corrugated version (3 sizes).

The wide range of fittings and ancillary products means that almost any installation can be specified for with confidence.

Egatube conduits are light in weight, the smaller sizes can be bent cold and they can easily be cut using a hacksaw or Egasnips. This means that installation can be 50% quicker than using steel. Repairs and alterations are also simpler and quicker to make.

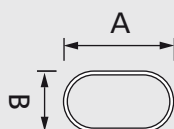
* Based on 2014 consumption

Egatube Conduit Technical

Conduit and fittings

Dimensions (mm)

OVAL SECTION CONDUIT (REF EOC)



Oval conduit is mainly used for switch drops and general domestic installations in both buried and surface installations. Manufactured in accordance with requirements of BS 4607 Part 5 and BS EN 50085 Part 1 and Part 2-1.

LIST. NO.	SIZE mm		WALL THICKNESS mm	WEIGHT KG/M	CROSS SECTION AREA mm ²
	A	B			
EOC1	13	8	0.9	0.036	60
EOC2	16	10	0.9	0.049	103
EOC3	22.5	11	0.9	0.084	172
EOC4	29	11	1.0	0.097	225
EOC5	29	16	1.0	0.125	336
EOC6	23	14	0.8	0.081	238

Standard length 3 metres.

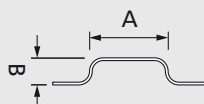
FLEXIBLE CONDUIT (REF EF)

Suitable for connection of vibrating equipment or to provide tight bends for interconnecting conduits. Can be surface mounted or cast in concrete and can be used with standard conduit fittings. Manufactured in accordance with BS EN 61386-1.

LIST. NO.	DIAMETER mm	WEIGHT KG/M	CROSS SECTION AREA mm ²
EF1	16	0.05	107
EF2	20	0.064	189
EF3	25	0.094	308

Standard lengths 50 metre coils.

RECTANGULAR CHANNELLING (REF REC)

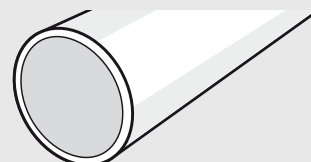


Used for switch drops and general domestic installations mainly in carcass situations.

LIST. NO.	SIZE mm		WALL THICKNESS mm	WEIGHT KG/M
	A	B		
REC1	12.5	8	0.9	0.047
REC2	25	8	0.9	0.051
REC3	38	9.5	0.9	0.069

Standard length 2 metres.

ROUND SECTION HEAVY GAUGE HIGH IMPACT CONDUIT (REF. HIP)



This is acknowledged to be the finest PVCu conduit available and is designed to withstand the most arduous site conditions and extremes of weather.

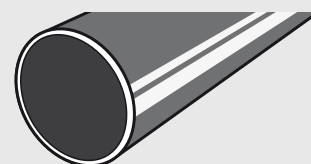
Temperature range -5°C to +60°C.

Complies with BS EN 61386 Part 1 Heavy Impact.

LIST. NO.	OUTSIDE DIAMETER mm	WALL THICKNESS mm	WEIGHT KG/M	CROSS SECTION AREA mm ²
HIP1	16	1.7	0.102	121
HIP2	20	1.8	0.150	209
HIP3	25	1.9	0.205	350
HIP4	32	2.5	0.322	573
HIP5	38	2.5	0.394	859
HIP6	50	3.1	0.684	1506

Standard length 3 metres.

ROUND SECTION LIGHT GAUGE HIGH IMPACT CONDUIT (REF. HLG)



Suitable for applications where heavy compressive strength is not required. The high impact characteristic combined with the lighter gauge provides excellent physical properties for flush and surface applications.

Temperature range -5°C to +60°C.

Complies with BS EN 61386 Part 1 Medium Impact.

LIST. NO.	OUTSIDE DIAMETER mm	WALL THICKNESS mm	WEIGHT KG/M	CROSS SECTION AREA mm ²
HLG1	16	1.1	0.076	143
HLG2	20	1.3	0.102	237
HLG3	25	1.5	0.170	376
HLG4	32	1.5	0.214	654
HLG5	38	1.5	0.259	954
HLG6	50	1.9	0.417	1676

Standard length 3 metres.

Egatube Conduit Technical

Conduit and fittings

Cable Capacities of Conduit

17th Edition of the IET Wiring Regulations Selection and Erection of Wiring Systems

The 17th Edition of the Wiring Regulations, Chapter 52 'Selection and Erection of Wiring Systems', describes methods to provide a means of compliance with Regulation 522-8.

The number of cables drawn into or laid in an enclosure of a wiring system shall be such that no damage is caused to the cables or to the enclosure during their installation.

The method employs a unit system, each cable size being allocated a factor. The sum of all factors for the cables intended to be run in the same enclosure is compared against the factors given for conduit in order to determine the size of the conduit necessary to accommodate those cables.

Types of run

It has been found necessary, for conduit, to distinguish between:-

1. Straight runs not exceeding 3 metres in length, and
2. Straight runs exceeding 3 metres, or runs of any length incorporating bends or sets

The term "bend" signifies a British Standard 90° bend, and one double set is equivalent to one bend.

For case 1, each conduit size is represented by only one factor. For case 2, each conduit size has a variable factor which is dependent on the length of run and the number of bends or sets. For a particular size of cable the factor allocated to it for case 1 is not the same as for case 2.

Variable factors

A number of variable factors affect any attempt to arrive at a standard method of assessing the capacity of conduit.

Some of these are:

- reasonable care (of drawing-in)
- acceptable use of the space available
- tolerance in cable sizes
- tolerance in conduit

The following tables can only give guidance as to the maximum number of cables which should be drawn in. The sizes should ensure an easy pull with low risk of damage to the cables.

Only the ease of drawing-in is taken into account. The electrical effects of grouping is not. As the number of circuits increases the current carrying capacity of the cable decreases. Cable sizes have to be increased with consequent increase in cost of cable and conduit.

Single-core PVC insulated cables in straight runs of conduit not exceeding 3 metres in length.

- For each cable it is intended to use, obtain the term from Table A1.
- Add the cable terms together and compare the total with the conduit terms given in Table A2.
- The conduit size which will satisfactorily accommodate the cables is that size having a factor equal to or exceeding the sum of the cable factors

Single-core PVC insulated cables in straight runs of conduit exceeding 3 metres in length or in runs of any length incorporating bends or sets.

- For each cable it is intended to use, obtain the appropriate terms from Table A3.
- Add all the cable terms so obtained and compare with the conduit terms given in Table A4, taking into account the length of run it is intended to use and the number of bends and sets in that run.
- The conduit size which will satisfactorily accommodate the cables is that size having a terms equal to or exceeding the sum of the cable terms.

Egatube Conduit Technical

Conduit and fittings

TABLE A1

CABLE TERMS FOR SHORT STRAIGHT RUNS

TYPE OF CONDUCTOR	CONDUCTOR CROSS-SECTIONAL AREA (mm ²)	TERM
Solid	1	22
	1.5	27
	2.5	39
Stranded	1.5	31
	2.5	43
	4	58
	6	88
	10	146
	16	202
	25	385

TABLE A2

CONDUIT TERMS FOR SHORT STRAIGHT RUNS

CONDUIT DIA (mm)	TERM
16	290
20	460
25	800
32	1400
38	1900
50	3500

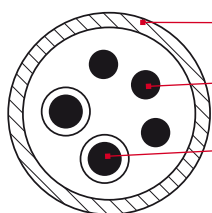
TABLE A3

CABLE TERMS FOR LONG STRAIGHT RUNS, OR RUNS INCORPORATE BENDS

TYPE OF CONDUCTOR	CONDUCTOR CROSS-SECTIONAL AREA (mm ²)	TERM
Solid or Stranded Conductor	1	16
Solid or Stranded Conductor	1.5	22
Solid or Stranded Conductor	2.5	30
Solid or Stranded Conductor	4	43
Solid or Stranded Conductor	6	58
Solid or Stranded Conductor	10	105
Solid or Stranded Conductor	16	145
Solid or Stranded Conductor	25	217

CAPACITY EXAMPLE

NUMBER OF CABLES FOR A 3.0 METRE RUN WITH THREE BENDS



CONDUIT 20mm dia.
(Term 182) Table A4

CABLE SOLID 2.5mm² (3 qty)
(Term 30) Table A3

CABLE STRANDED 4.0mm² (2 qty)
(Term 43) Table A3

Term total – (30+30+30)+(43+43) = 176

The conduit size is satisfactory (Term 182) to accommodate the cables shown (Term 176).

TABLE A4

CONDUIT TERMS FOR LONG STRAIGHT RUNS, OR RUNS INCORPORATING BENDS

LENGTH OF RUN (M)	CONDUIT DIA mm															
	16	20	25	32	16	20	25	32	16	20	25	32	16	20	25	32
	STRAIGHT				ONE BEND				TWO BENDS				THREE BENDS			
1	COVERED BY TABLES A1 AND A2				188	303	543	947	177	286	514	900	158	256	463	818
1.5					182	294	528	923	167	270	487	857	143	233	422	750
2					177	286	514	900	158	256	463	818	130	213	388	692
2.5					171	278	500	878	150	244	442	783	120	196	358	643
3					167	270	487	857	143	233	422	750	111	182	333	600
3.5	179	290	521	911	162	263	475	837	136	222	404	720	103	169	311	563
4	177	286	514	900	158	256	463	818	130	213	388	692	97	159	292	529
4.5	174	282	507	889	154	250	452	800	125	204	373	667	91	149	275	500
5	171	278	500	878	150	244	442	783	120	196	358	643	86	141	260	474
6	167	270	487	857	143	233	422	750	111	182	333	600				
7	162	263	475	837	136	222	404	720	103	169	311	563				
8	158	256	463	818	130	213	388	692	97	159	292	529				
9	154	250	452	800	125	204	373	667	91	149	275	500				
10	150	244	442	783	120	196	358	643	86	141	260	474				

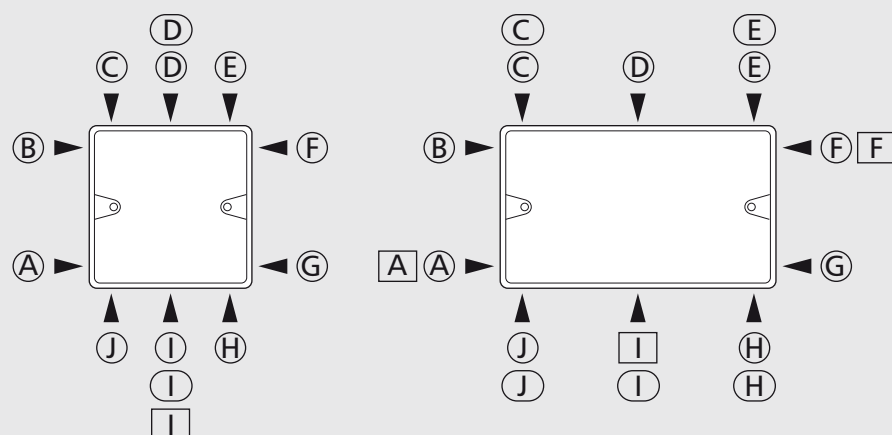
Egatube Conduit Technical

Conduit and fittings

Boxes

This table breaks down box specifications showing gang, entry points, cut outs and corner types.

LIST NO.	MOUNTING	GANG	ENTRY TYPE RECTANGULAR	ROUND	OVAL	CUT-OUTS IN BACK	CORNER
ESU61	flush	1	–	–	DI	1	–
ESU81	flush	1	–	ABCEFGHJ	–	–	–
ESU8ML	flush	1	–	ABCEFGHJ	–	1	–
ESU82ML	flush	2	–	ABCDEFGHJ	I	2	–
ESU92ML	flush	2	–	BCDEFGHJ	I	2	–
ESU9ML	flush	1	–	BCEGHJ	–	1	–
ESU241	surface	1	I	D	–	2	round
ESU242	surface	2	AFI	D	–	2	round
ESU261	surface	1	–	D	–	1	square
ESU262	surface	2	–	D	–	–	square
ESU281	surface	1	–	I	–	1	square
ESU282	surface	2	I	D	–	1	square



Egatube Conduit Technical

Conduit and fittings

Fixing

Egatube round conduit is fixed in the normal way with saddles or clips. (Various types of saddles are available). The distance between saddles should not exceed that stated in the following table, or less in hot temperatures.

NOMINAL CONDUIT SIZE (mm)	MAXIMUM DISTANCE BETWEEN SUPPORTS (M)	
	HORIZONTAL	VERTICAL
Not exceeding 16	0.75	1.00
Exceeding 16 but not exceeding 25	1.5	1.75
Exceeding 25 but not exceeding 40	1.75	2.00
Exceeding 40	2.00	2.00

It is recommended that all boxes be fixed first wherever practicable, using the two fixing holes provided in circular boxes. Lines may then be struck for the saddle run and the saddles should be fixed 225mm on either side of bend or boxes. The tubing may then be 'sprung' into the box spouts. It will be noted that the saddles are designed to be a sliding fit on the conduit and it is important to see that all fixings should be sliding fits (see Expansion).

Expansion

A rise in temperature of 25°C would cause an increase of 5mm in a 3 metre length of conduit. This may be ignored in flush work where the tube is bonded to the concrete or plaster.

In surface work, however, precautions must be taken or expansion will cause the tube to bow, although where bends and sets are close together these take up any expansion. Where long straight runs occur in conditions of varying temperatures, care must be taken to overcome problems by using expansion couplers. These are couplers of double normal length with a shoulder formed 19mm from one end. Conduit is secured into this end of about 75mm long which is a sliding fit over the other conduit. The other conduit is inserted about 50mm into the coupler leaving it free to move 25mm in either direction, which is ample for even the greatest extremes of temperature. For straight runs it is advisable to use an expansion coupling every 6 metres.

Adhesives

Egaweld Plus

Waterproof for making watertight joints between PVC conduit, trunking and fittings.

A statement regarding COSHH regulations is available on the MK website – www.mkelectric.co.uk

Light fittings

When considering the use of totally enclosed lighting fittings, remember that the IET Wiring Regulations restrict the use of PVCu boxes to loads of 3 kg and a temperature of 60°C. When conditions in excess of these figures are anticipated, the use of either the heat resistant boxes or conduit boxes suffixed 'EL' are recommended.

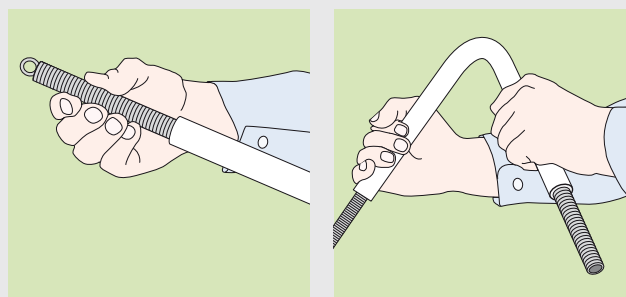
The "EL" conduit boxes will support a load of up to 10 kgs at 60°C.

Fittings

A wide range of fittings are available, see Product Selector for details.

Bending

To bend circular conduit, insert the appropriate spring. The spring has an "eye" formed on one end, to which a cord should be attached in order to withdraw the spring. The bend is then made by hand. Twice the angle required should be bent and the tube then allowed to ease back to the desired position. Do not attempt to force the bend back with the spring inserted, as this action will damage the spring. When withdrawing the spring it is suggested that it be twisted in an anti-clockwise direction thus reducing the diameter of the spring and providing easy withdrawal. It is important to use the correct size spring. In cold weather it may be necessary to warm the tube slightly at the point where the bend is to be made. Always saddle the tubing as quickly as possible after bending.



Ega Mini Trunking Technical

Ega Mini, Communication and Red Alert Trunking

Standards and Approvals

EGA mini-trunking systems are manufactured in accordance with the requirements of BS EN 50085-1 and BS 4678 Part 4 and achieve medium impact classification.

Red Alert mini-trunking complies with the following:

BS 5839 Fire detection and alarm systems in buildings (if used with fire product, ie. cables, cables must still be secured with metal securing clips **inside** trunking or trunking held with metal clip **around** trunking to comply with BS 5839 Part 1).

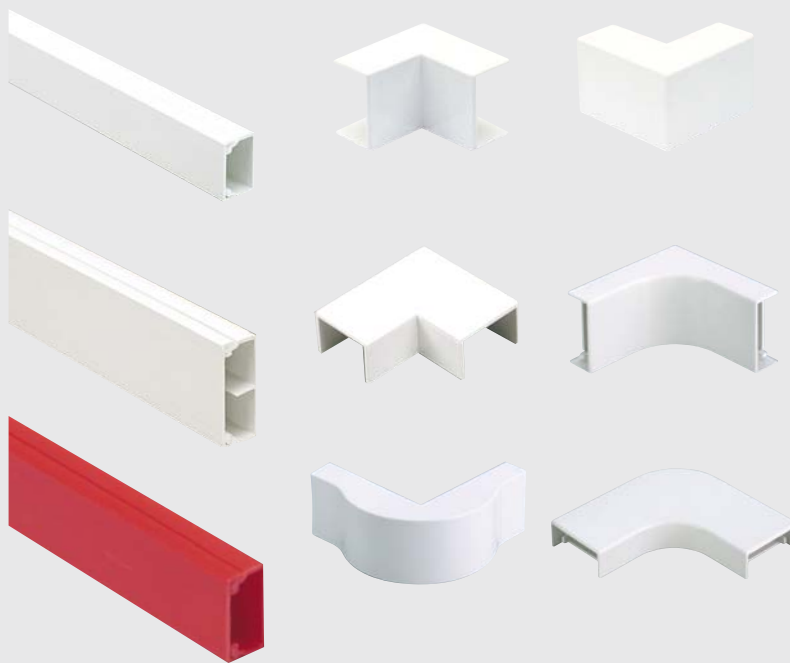
BS 4662 Boxes for the enclosure of electrical accessories BS EN 50085-1 and BS 4678 Part 4 Cable trunking made of insulating material.

All systems comply with all relevant requirements of the latest Edition of the IET Wiring Regulations.

Ega Mini Trunking systems are Class 1Y for spread of flame when tested in accordance with BS 476 Part 7.

521.200 Wiring systems in escape routes.

Trunking systems – MK recommends the use of existing metallic cable retention systems when using trunking in escape routes.



TECHNICAL SPECIFICATION

MATERIALS

PVCu materials used in the manufacture of MK products are self extinguishing non-flame propagating in accordance with BS 4678 Part 4.

Extrusion material has been tested by a UKAS accredited laboratory in accordance with the requirements of BS 476 Part 7 and has achieved a Class 1Y.

Moulding material has been tested by a UKAS accredited laboratory and conforms with IEC 695-2-1 at a severity of 650°C.

IET WIRING REGULATIONS

Designed and manufactured to comply in all respects with BS 7671:2008 (IET Wiring Regulations 17th Edition: 2008)

QUALITY ASSURANCE

The system is manufactured to BS EN ISO 9001

Classifications to BS EN 50085-1:2005 and BS EN 50085-2-1:2006 available on request

FEATURES

- Wide range of trunking profiles
- Red Alert profile for alarm circuits
- Wide range of integrated components maximises versatility of application
- Unobtrusive and neat
- Easy to assemble and install
- Durable and impact resistant to Medium Classification BS EN 50085-1 and BS 4678 Part 4
- Communication trunking for voice and data
- Speedfix options allow fast installation
- All extrusions manufactured from 100% recycled material*

* Based on 2014 consumption

Ega Mini Trunking Technical

Ega Mini, Communication and Red Alert Trunking

Description

A range of trunking systems designed for cable distribution in new or refurbishment projects in the domestic and commercial sectors.



Red Alert

Available in red, simplifies alarm circuit identification and is specifically designed for use with light duty mineral insulated cables.



Communication trunkings

Designed to take smaller diameter telecommunications and data cabling. There are three sizes available and the systems are complete with a range of fittings.



Speedfix trunkings

These are self-adhesive profiles used to distribute data and voice cabling.

All systems are compatible and have simple clip on lids which positively locate when hand pressure is applied.

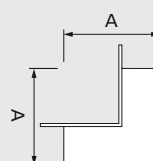


Circular boxes

These are designed to accept standard ceiling roses, pull switches and plug-in lighting fittings. The base incorporates an earth terminal facility (order terminal separately). Red Alert bases are supplied with earth terminal. 50.8 mm fixing centres and M4 Pillar inserts. Load suspension 3 kg @ 60°C max.

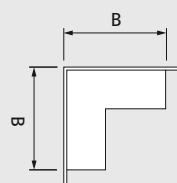
Components

The four components shown below are fabricated sections and space must be allowed for inclusion in runs of trunking. All other components snap on over standard trunking profiles.



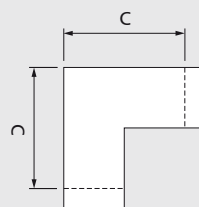
EXTERNAL CORNER (90°) YAE

LIST NO	A
YAE7	80mm



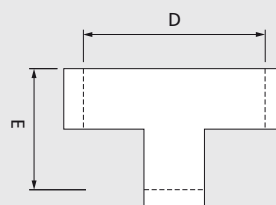
INTERNAL CORNER (90°) YAI

LIST NO	B
YAI7	50mm



FLAT ANGLE (90°) YAF

LIST NO	C
YAF7	100mm



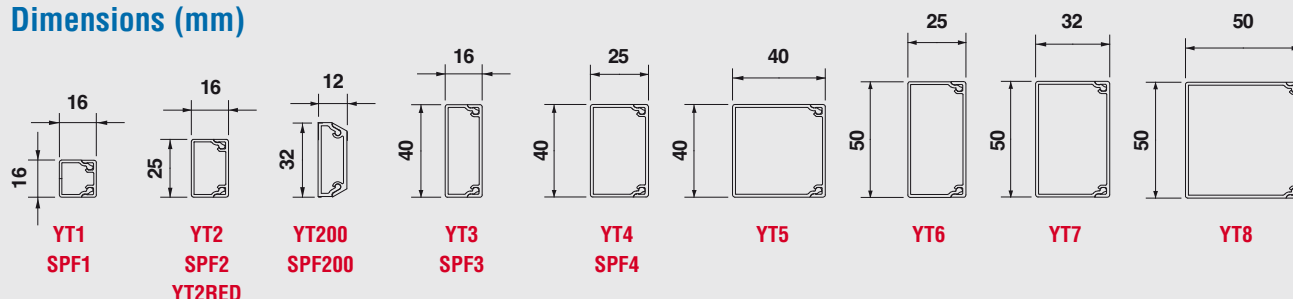
FLAT TEE (90°) YTF

LIST NO	D	E
YTF7	150mm	100mm

Ega Mini Trunking Technical

Ega Mini, Communication and Red Alert Trunking

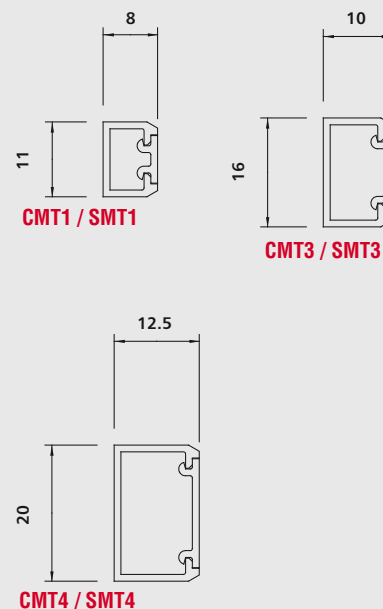
Dimensions (mm)



EGA MINI AND RED ALERT CABLE CAPACITY																								
TYPE OF CONDUCTOR	SIZE FACTOR	CABLE	YT1 / SPF1	YT2 / SPF2 YT2RED	YT200 / SPF200	YT3 / SPF3	ZT3 (each cmt)	YT4 / SPF4	ZT4 (each cmt)	YT5	YT6	YT7	YT8											
			FULL TERM CSA 100% FILL (mm²)																					
			154	276	234	458	224	795	387	1312	948	1273	2037											
			TERM AT 45% FILL (mm²)																					
			69	124	105	206	100	357	174	590	426	572	916											
POWER CABLES			NUMBER OF CABLES AT 45% FILL																					
PVC	1.5mm²	8.6	8	14	12	23	11	41	20	68	49	66	106											
Stranded	2.5mm²	12.6	5	9	8	16	7	28	13	46	33	45	72											
	4mm²	16.6	4	7	6	12	6	21	10	35	25	34	55											
	6mm²	21.2	3	5	4	9	4	16	8	27	20	26	43											
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)																					
			A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B		
Cat5E UTP	5.5mm dia.	30.2	2	5	4	9	3	7	6	15	3	7	11	26	5	12	19	43	14	31	18	42	30	67
Cat5E STP	6.0mm dia.	36.0	1	4	3	7	2	6	5	12	2	6	9	22	4	10	16	36	11	26	15	35	25	56
Cat6 UTP	6.5mm dia.	42.2	1	3	2	6	2	5	4	10	2	5	8	18	4	9	13	31	10	22	13	30	21	48
Cat6 STP	7.0mm dia.	49.0	1	3	2	5	2	4	4	9	2	4	7	16	3	7	12	26	8	19	11	25	18	41

EGA COMMUNICATION CABLE CAPACITY								
TYPE OF CONDUCTOR	SIZE FACTOR	CABLE	CMT1 / SMT1		CMT3 / SMT3		CMT4 / SMT4	
			FULL TERM CSA 100% FILL (mm²)					
			44		102		156	
			TERM AT 45% FILL (mm²)					
19		45		70				
POWER CABLES			NUMBER OF CABLES AT 45% FILL					
PVC	1.5mm²	8.6	8.6		5		8	
Stranded	2.5mm²	12.6	1		3		5	
	4mm²	16.6	1		2		4	
	6mm²	21.2	0		2		3	
DATA CABLES			NUMBER OF CABLES AT 45% FILL (A) AND FULL CAPACITY (B)					
			A	B	A	B	A	B
Cat5E UTP	5.5mm dia.	30.2	0	1	1	3	2	5
Cat5E STP	6.0mm dia.	36.0	0	1	1	2	1	4
Cat6 UTP	6.5mm dia.	42.2	0	1	1	2	1	3
Cat6 STP	7.0mm dia.	49.0	0	0	0	2	1	3

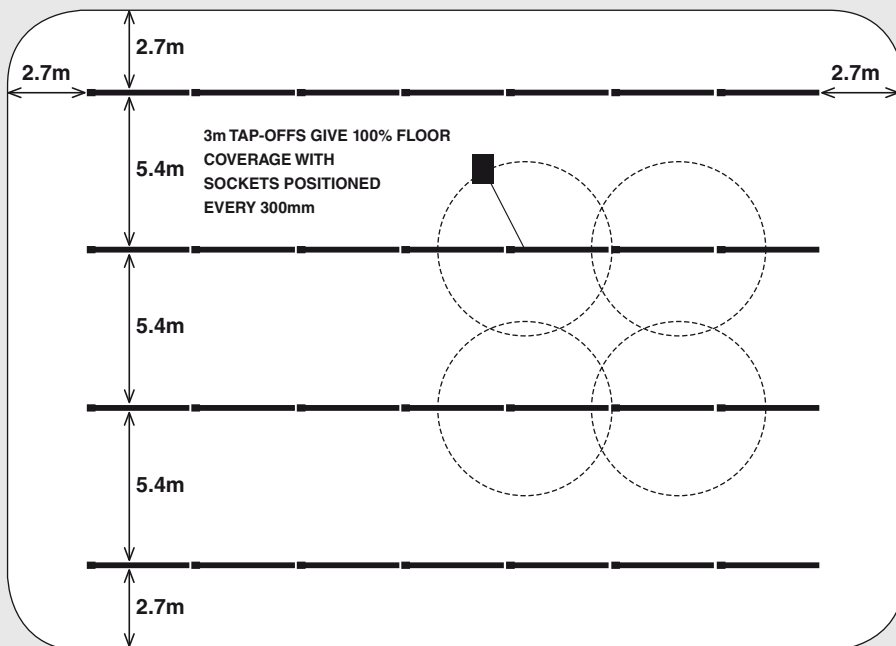
Dimensions (mm)



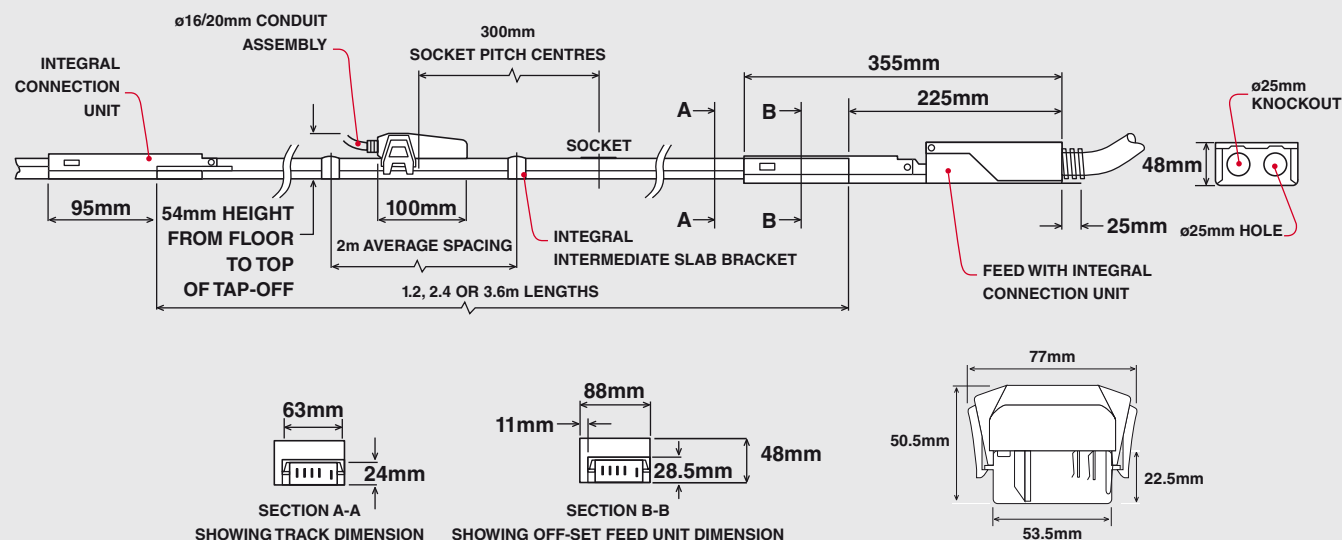
Interact Underfloor Technical

Interact Underfloor Power

Typical Floor Layout



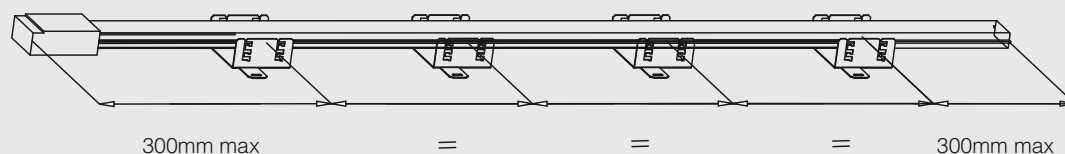
Dimensions



Elevating fixing brackets should be positioned within 300mm from either end of a track run and either side of all joints.

Minimum support requirement:

- 3.6 metre length = 4 brackets equally spaced
- 2.4 metre length = 3 brackets equally spaced
- 1.2 metre length = 2 brackets equally spaced



Interact Underfloor Technical

Interact Underfloor Power

Standards and Approvals

Underfloor 63A – complies with BS EN 61534:2011

Manufactured within ISO 9000-9002 environment.

TECHNICAL SPECIFICATION		
ELECTRICAL SPECIFICATION	63A	
Rated Current	63	A
Rated Voltage	480	V
Frequency	50/60	Hz
Conditional Short Circuit Rating	16	kA
Resistance per Copper Conductor (At ambient temperature 20°C)	1.3	mΩ/m
Impedance per Copper Conductor (At ambient temperature 20°C)	1.3	mΩ/m
VOLT DROPS (FULL LOAD, CONCENTRATED AT ONE END) (LINE + NEUTRAL)		
Powertrack	2.9	mV/A/m
Feed Unit	0.6	mV/A
Tap-off Connection	1.6	mV/A
+ 4mm ² Cable	10	mV/A/m
+ 2.5mm ² Cable	18	mV/A/m
Joint	0.6	mV/A
Flexible interlink Unit	0.8	mV/A
+ 10mm ² Cable	4.0	mV/A/m
EARTH FAULT LOOP IMPEDANCE		
Line Conductor	1.5	mΩ/m
EARTH		
– Case	1.0	mΩ/m
– Copper	1.5	mΩ/m
– Copper + Case	0.75	mΩ/m
Feed Unit (Line + Earth)	0.6	mΩ
Tap-off Connection (Line + Earth)	3.1	mΩ
+ 4mm ² Cable R1 + R2	10	mΩ/m
+ 2.5mm ² Cable R1 + R2	18	mΩ/m
Joint (Line + Earth)	0.6	mΩ
Flexible Interlink Unit (Line + Earth)	0.8	mΩ
+ 10mm ² Cable R1 + R2	3.7	mΩ/m

3m tap off is actually 2.7/2.8m fully stretched, shortened by 0.1 - 0.2m of slack to ensure it remains flexible when wired to a module.

MECHANICAL DATA	63A	
Max. No. of Copper Conductors	5	
Conductor Cross Section Area (Nominal)	14.4	mm ²
Powertrack Casing Copper Equivalent (Where Casing is Protective Earth)	14.5	mm ²
Cable Termination Capacity	16	mm ²
Tap-off Cable 32A	4.0	mm ²
Tap-off Cable 13A	2.5	mm ²
Tap-off Conduit Sizes	16/20	Ømm
Flexible Interlink Cable	10	mm ²
Flexible Interlink Conduit	25	Ømm
Integral Feed Conduit Entry	1 x 25	Ømm
Feed Conduit Entry	2 x 25	Ømm
IP Rating	4X	
MATERIALS SPECIFICATION		
Powertrack Casing, Feeds and Brackets	Galvanised Steel	
Conductors	High Conductivity Copper	
Dust cover		
Powertrack Insulators	63A – Polyamide and polyester	
	Polycarbonate Sockets / Tap-off	
	Plug / Joint	
Mouldings	Polycarbonate	
Shutter	Acetal	
Tap-off/Interlink Flexible Conduit	Galvanised Steel	
Tap-off Cable (Singles in Conduit)	LSF cable to BS 7211 (PVC Cable to BS 6004 available on request)	
Tap-off Cable (Multi-core)	Multi-core cable to BS 6500 & BS 7211 LSF cable standard (PVC cable available on request)	
TAP-OFF PINS		
– Line, Neutral & Copper Earth	Copper and Phosphorous Bronze, tin plated	
– Casing Earth	Brass, tin plated	
Flexible Interlink Cable	10mm ² cable to BS 6231	

Cablelink Plus Modular Floorbox

Standards and Approvals

The Cablelink Plus Modular floorbox supports compliance with the latest edition of the IET Wiring Regulations (BS 7671) and to BS EN 50085 Part 1 and BS EN 50085 Part 2-2.

TECHNICAL SPECIFICATION

MATERIALS

PLASTIC COMPONENTS

Manufactured from UL94 V2 rated nylon.

METAL COMPONENTS

Manufactured from pre-galvanised steel.

Accessory plates are powdercoated or colour coated.

RAL COLOURS

Grey (GRY) = RAL 7011

Feature benefits

- Tested to EN 50085-2-2 to accept 5000N load
- Quick release blades ensure a fast and simple installation
- Designed to support Cat 6 & Cat 7 structured cabling systems
- Self closing lid in accordance with IEC 61534-22
- Wide range of power and data accessories available to meet all requirements
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition Wiring Regulations
- 5 year guarantee

Installation

Cablelink Plus Modular boxes should not be installed in the following situations:

- Where protruding electrical cables are likely to cause a safety hazard
- In passageways, especially where trolleys or other vehicles may be used
- On escape routes, as this may impede the evacuation of the occupants from the building
- Where the cleaning methods employed result in the formation of pools of liquid or soaking of the floor surface
- Desks, chairs, shelving, filing cabinets should not be positioned on the floorbox as this will interfere with opening the lid

Load Testing

Load Testing of floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

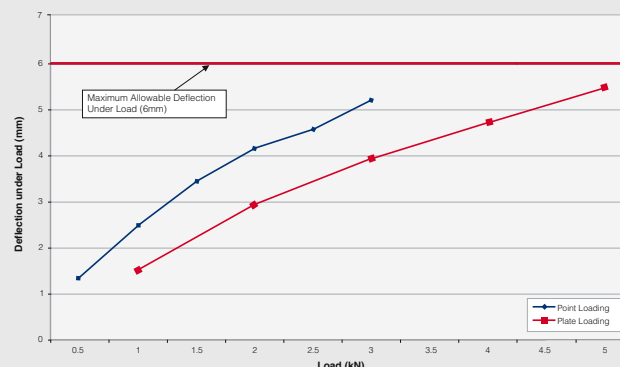
The floorboxes have been tested to and comply with the loading requirements of BS EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes - one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate hand trucks / trolleys and heavier larger loads. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm. The loading position is the centre of the lid.

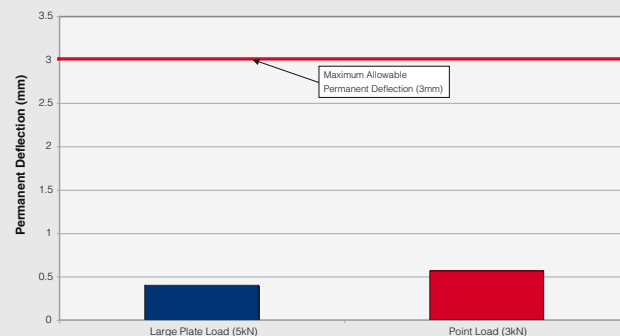
The Lid Deflection (loading) graph shows that the maximum point loading classification achieved is 3kN and the maximum large plate loading classification achieved is 5kN.

The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 3kN is 0.55mm and large plate loading at 5kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm.

Lid Deflection – Cablelink Plus 265 x 265mm Frame Assembly



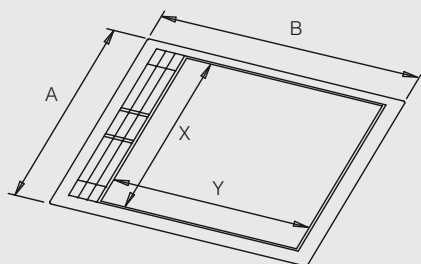
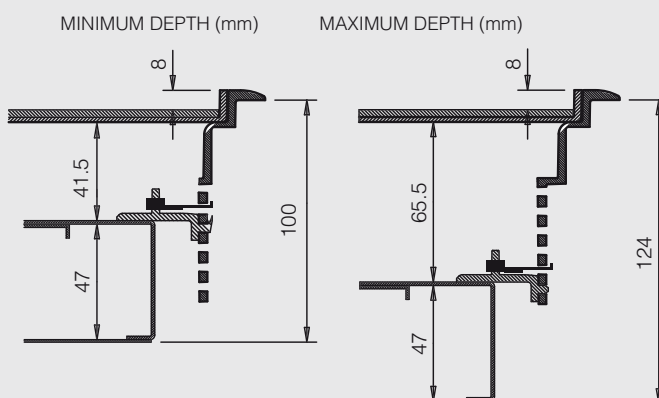
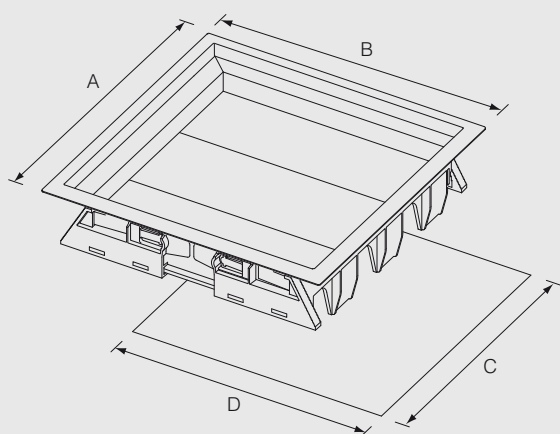
Permanent Deflection After Removal of Load – Cablelink Plus 265 x 265mm Frame



Cablelink Plus Modular Technical

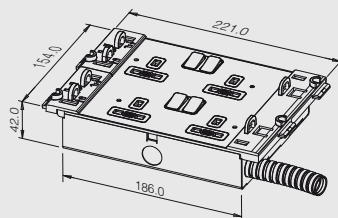
Cablelink Plus Modular Floorbox

Floorbox: Tile and Frame and Floor Tile Cut-Out Dimensions for 3 and 4 Modules Box

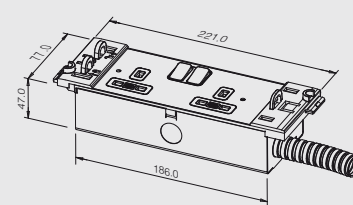


Cablelink Plus Module Dimensions

CRM11750



CRM11730



DIMENSIONS (mm)		
	3 MODULE	4 MODULE
A	287	362
B	287	287
C*	266	341
D*	266	266

* Tile cut out general tolerance = +1.5mm.

The table below shows the sizes required for the carpet lid infill for the Cablelink Plus Modular floorboxes.

	265X265mm		340x265mm	
	X	Y	X	Y
Carpet Infill (mm)	251	219	326	219

Knockouts

	END KNOCKOUT (CONDUIT ENTRY)		SIDE KNOCKOUT (INTERLINK)
	20mm	25mm	20mm
Power	2	—	2
Non-Power	1	1	2
6 x LJU6C Only (CRM21301)	—	2	2

Cat 6 and Cat 7 Compatibility

With the introduction of Cat 6 and Cat 7 data cabling the orientation and depth of many data outlets has changed resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses. As a result MK has introduced 45mm wiring space for the Cablelink Plus floorbox systems (as well as for the Prestige 3D wall trunking system). This easily accommodates the longer Cat 6 and Cat 7 data outlets and leaves sufficient space for the data cable to run underneath it.

Cablelink Plus Modular Floorbox

Installing Modules into the Cablelink Plus Modular Floorbox

To install a module into the Cablelink Plus Modular floorbox, firstly ensure the sliding bracket is pushed towards the centre of the module.

① Lower the opposite end into the box and push the tab firmly into the slot in the ladder at the height the module should be positioned.

The other end is then lowered down so that the tab on the sliding bracket is level with the same slot on the other side of the frame.

② Holding the module with the built in handles, the sliding bracket is then pushed outwards so that the tab engages with the correct slot.

A screw is then used to fix the sliding bracket in place.

Fix the retaining clips to each end of each module and frame.

The module is now secure. The procedure is reversed in order to remove a module.



Dual Earth Sockets and High integrity Earthing†

Modern offices, schools, universities, laboratories etc, are heavy users of IT, computing and electronic equipment. As most of this equipment is fitted with a filter mechanism to protect data and data transmission against RFI and power surges, small earth leakages emanating from this equipment introduces a current onto the Circuit Protective Conductor (CPC) effectively turning this into a functional earth.

Should the CPC be broken, any equipment downstream of the break is no longer connected to earth. If a fault now occurs in this equipment, the CPC could rise to the mains potential and the fault transferred to other equipment on the circuit. The implicit risks to equipment, data and most importantly users in this situation are dealt with in the 17th Edition of the IET Wiring Regulations†, and have led MK Electric to introduce Dual Earth Sockets.

Dual Earth Sockets allow the designer and installer to maintain the earth integrity of the system, in accordance with the 17th Edition of the IET Wiring Regulations† is intended to maintain at all times the CPC to ensure safety.

Clean Earth Sockets

Clean Earth Sockets allow the designer and installer to introduce a protective conductor connecting sensitive equipment i.e. a computer, directly to the main earth.

This reduces the possibility of 'noise' occurring on the protective conductor through induced voltages from other equipment, and hence can have benefits in maintaining data and data transmission integrity.

Earthing on Data modules for Modular Raised

Earthing studs are provided on all Unserved data modules to enable a reliable connection to earth to be made. Earthing Kit CX-10 is recommended for use to ensure the earthing cable is connected correctly.

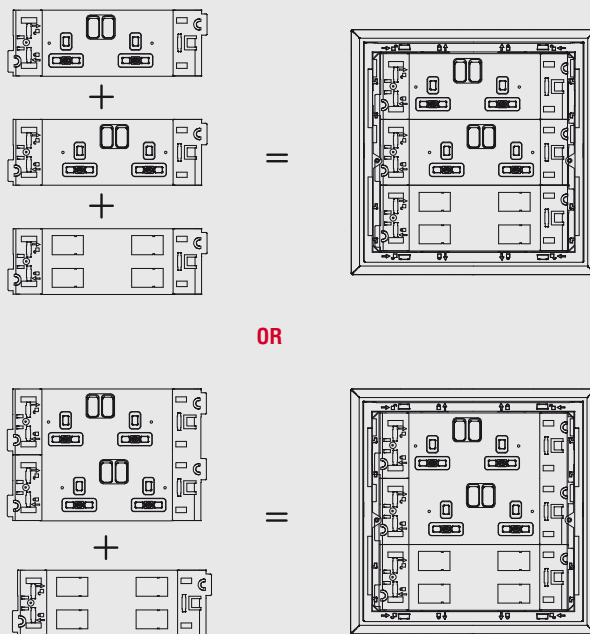
† In the 17th Edition of the IEE Wiring Regulations, these requirements are found in Regulation 543.7.

Cablelink Plus Modular Technical

Serviced Power Modules

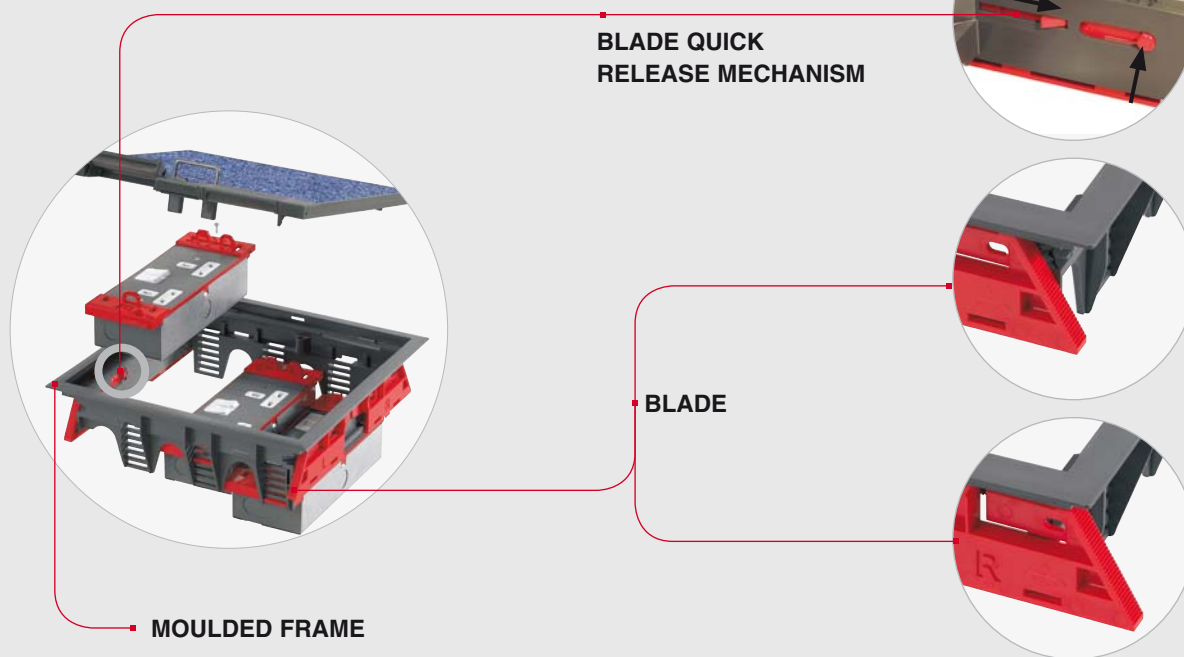
- Modules are available Left Hand and Right Hand to achieve a 'staggered' arrangement
- 'Staggered' arrangement ensures strain relief clearance for moulded plug tops
- Add 'RH' suffix for Right Hand Module, e.g CRM11730RH
- When four socket outlets are required, order CRM11750 'staggered' arrangement is built in

3 Compartment Boxes



Installing Cablelink Plus Modular Floorbox – Blades

- Quick release blades to secure firmly in position for a "fit and forget" installation
- No tools required for faster installation
- Self adjusting blades – ensures floorbox remains secure throughout service life
- Fixes to floor thicknesses of 15-50mm



Cablelink Plus Single Pan Technical

Cablelink Plus Single Pan

Standards and Approvals

The Cablelink Plus Single Pan Box supports compliance with the latest edition of the IET Wiring Regulations (BS 7671) and to BS EN 50085 Part 1 and EN 50085 Part 2-2.

Additionally the floorboxes also comply with IEC 60670 Parts 1 and 23.

TECHNICAL SPECIFICATION

MATERIALS

PLASTIC COMPONENTS

Manufactured from UL94 V2 rated nylon.

METAL COMPONENTS

Manufactured from pre-galvanised steel.

Accessory plates are powdercoated or colour coated.

RAL COLOURS

Grey (GRY) = RAL 7011

Feature benefits

- Tested to BS EN 50085-2-2 to accept 5000N load
- Designed to support Cat 6 and Cat 7 structured cabling systems
- 70mm pan depth has been designed for those applications with shallow voids
- Self closing lid in accordance with IEC 61534-22
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition Wiring Regulations
- 5 year guarantee

Installation

Cablelink Plus Single Pan boxes should not be installed in the following situations:

- Where protruding electrical cables are likely to cause a safety hazard
- In passageways, especially where trolleys or other vehicles may be used
- On escape routes, as this may impede the evacuation of the occupants from the building
- Where the cleaning methods employed result in the formation of pools of liquid or soaking of the floor surface
- Desks, chairs, shelving, filing cabinets should not be positioned on the floorbox as this will interfere with opening the lid

Cat 6 and Cat 7 Compatibility

With the introduction of Cat 6 and Cat 7 data cabling the orientation and depth of many data outlets has changed resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses. As a result MK has introduced 45mm wiring space for the Cablelink Plus floorbox systems (as well as for the Prestige 3D wall trunking system.) This easily accommodates the longer Cat 6 and Cat 7 data outlets and leaves sufficient space for the data cable to run underneath it.

Load Testing

Load Testing of Floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

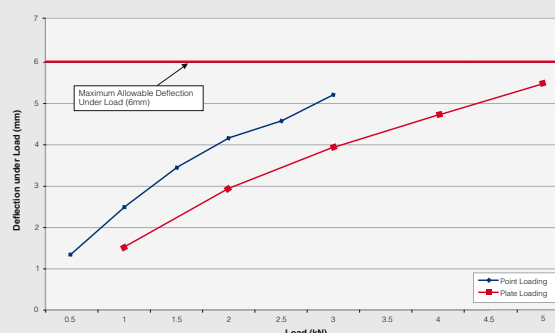
The floorboxes have been tested to and comply with the loading requirements of EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes – one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate fork trucks and heavier larger loads for example. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm.

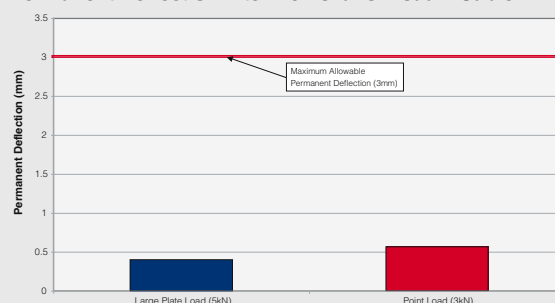
The Lid Deflection (loading) graph shows that the maximum point loading classification achieved is 3kN and the maximum large plate loading classification achieved is 5kN.

The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 3kN is 0.55mm and large plate loading at 5kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm. The loading position is the centre of the lid.

Lid Deflection – Cablelink Plus 265x265mm Frame Assembly



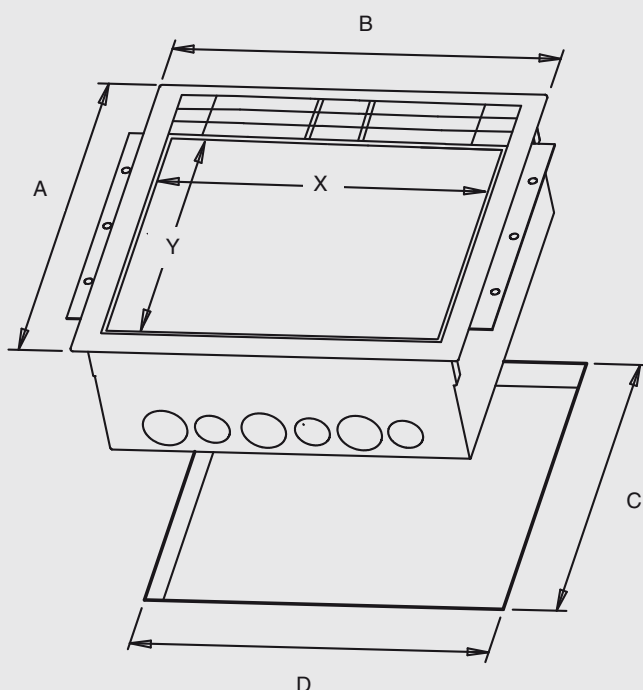
Permanent Deflection After Removal of Load – Cablelink Plus 265x265mm Frame



Cablelink Plus Single Pan Technical

Cablelink Plus Single Pan

Floorbox: Tile and Frame and Floor Tile Cut-Out Dimensions



DIMENSIONS (mm)			
	CRB100	CRB265	CRB340
A	130	287	287
B	222	287	362
C*	115	275	275
D*	206	272	350

* General tolerance = +1.5mm.

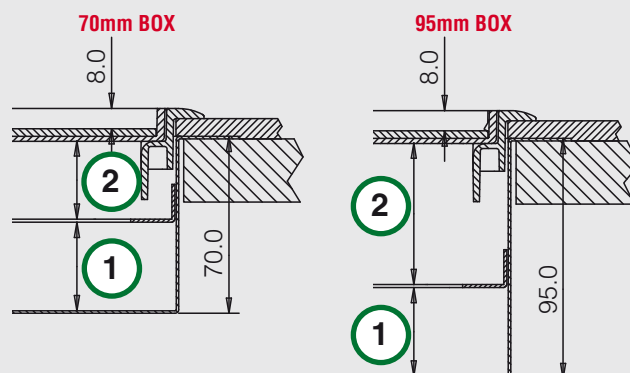
The table below shows the sizes required for the carpet lid infill for the Cablelink Plus Single Pan Floorboxes.

DIMENSIONS (mm)				
	CRB100		CRB265	
	X	Y	X	Y
Carpet Infill	93	152	251	219

Knockouts

1 compartment box is supplied with 20 and 25mm knockouts.
3 and 4 compartment box is supplied with 2 x 20mm, 1 x 25mm, 1 x 32mm knockouts respectively, per compartment.

† In the 17th Edition of the IET Wiring Regulations, these requirements are found in Regulation 543.7.

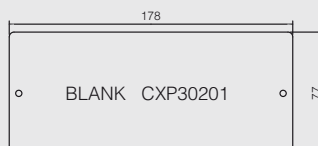


- ① Wiring Space. Please see table below for dimensions.
② This dimension assumes a floor covering thickness of 8.0mm. A thinner covering will reduce this dimension accordingly.

Plug Top Clearances

DIMENSIONS (mm)		70mm BOX	95mm BOX
1	Wiring Space	35	45
2	Plug Top Clearance	31	46

Plate Dimensions (mm)



Dual Earth Sockets and High integrity Earthing†

Modern offices, schools, universities, laboratories etc, are heavy users of IT, computing and electronic equipment. As most of this equipment is fitted with a filter mechanism to protect data and data transmission against RFI and power surges, small earth leakages emanating from this equipment introduces a current onto the Circuit Protective Conductor (CPC) effectively turning this into a functional earth.

Should the CPC be broken, any equipment downstream of the break is no longer connected to earth. If a fault now occurs in this equipment, the CPC could rise to the mains potential and the fault transferred to other equipment on the circuit. The implicit risks to equipment, data and most importantly users in this situation are dealt with in the 17th Edition of the IET Wiring Regulations, and have led MK Electric to introduce Dual Earth Sockets.

Dual Earth Sockets allow the designer and installer to maintain the earth integrity of the system, in accordance with the 17th Edition of the IET Wiring Regulations is intended to maintain at all times the CPC to ensure safety.

Clean Earth Sockets

Clean Earth Sockets allow the designer & installer to introduce a protective conductor connecting sensitive equipment i.e. a computer, directly to the main earth.

This reduces the possibility of 'noise' occurring on the protective conductor through induced voltages from other equipment, and hence can have benefits in maintaining data and data transmission integrity.



Technical Hotline
+44 (0)1268 563720

Grommets Technical

RAISED
FLOOR SYSTEMS

Grommets

FEATURE BENEFITS

- Rotary and split lid variations available to meet all requirements
- One touch self-adjusting mechanism for a fast, simple and secure installation
- Available in 5" and 8", grey for flexibility of use
- 5 year guarantee

GROMMET TECHNICAL DIMENSIONS

LIST NO.	DESCRIPTION	DIAMETER	OVERALL DEPTH	FLOOR TILE	CUT-OUT	KNOCKOUT	ACCESSORY CUT-OUT
GR500	Simple Access Grommet	142mm	50mm	All	127mm (+/-1mm)		
GR510	Secure Access Grommet	142mm	60mm	30 – 50mm	127mm (+/-1.5mm)		
GR100	Split Lid Grommet	142mm	60mm	30 – 50mm	127mm (+/-1.5mm)		
GR200	Power Grommet BS 1363 MK SSO	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)	20mm x 3	
GR201	Power Grommet MK Non-Std SSO	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)	20mm x 3	
GR5050	50mm x 50mm Accessory Grommet	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)		50mm x 50mm Euro frame fitted
GR800	2 x LJU6C Grommet	142mm	85mm	30 – 50mm	127mm (+/-1.5mm)		36.7mm x 22.2mm
GR850	Simple Access Grommet	233mm	85mm	30 – 50mm	209mm (+/-1.5mm)		
GR855	Secure Access Grommet	233mm	85mm	30 – 50mm	209mm (+/-1.5mm)		

For a full range of corresponding products,
see pages 391-394 in the product selector.

DeskPod™ Technical

mkelectric.co.uk



DeskPod™

Standards and Approvals

The DeskPod™ range is designed & tested to BS 5733 (General requirements for electrical accessories). The sockets are designed and tested to BS 1363 Part 2 (Specification for 13A switched and unswitched socket-outlets).

DeskPod™ is designed to be used in electrical installations to BS 7671 and, with certain restrictions, in installations complying with BS 6396. Further information regarding BS 6396 is given below.

BS 6396:2002: Electrical systems in office furniture and office screens – specification
MK can supply desk modules that may be used in installations complying to BS 6396.

TECHNICAL SPECIFICATION

MATERIALS

MAIN HOUSING

Anodised aluminium extrusion.

MOULDINGS

High impact, flame retardant grade of polycarbonate.

INTERNAL WIRING

Single cables insulated in low smoke, low fume grade of material to BS 7211.

POWER LEADS

Multicore flexible cable to BS 6500. Insulation PVC (low smoke and fume available on request).

FEATURE BENEFITS

- Custom designed and versatile to suit all requirements
- Choice of factory fitted sockets
- Ease of installation – available with pre-wired tap-offs
- Breadth and flexibility of range to suit all specifications
- Manufactured from anodised aluminium and polycarbonate – chemical, colour fade, impact resistant and flame retardant
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition Wiring Regulations
- 5 year guarantee

3.15A and 5A

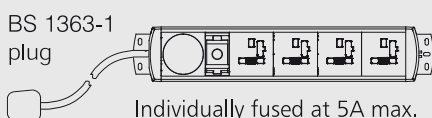
3.15A & 5A fuses 5x20mm to BS EN 60127-2:2003 time lag, high breaking current

General

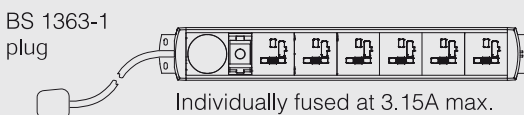
The following restrictions are placed on these desk modules:

- Maximum current rating = 13A and maximum voltage rating = 250V ac
- The supply cord must connect to the permanent electrical installation via a standard 13A plug to BS 1363-1
- All sockets, connected to a single supply, must be protected as follows:

Up to 4 sockets



Up to 6 sockets



- No more than six sockets can be connected to a single supply
- No single item of equipment having a rated voltage greater than 250V and rated current greater than 5A must be connected to the desk module
- The desk module must be connected to an electrical supply that has a protective (Earth) conductor

The completed installation must be inspected and tested for:

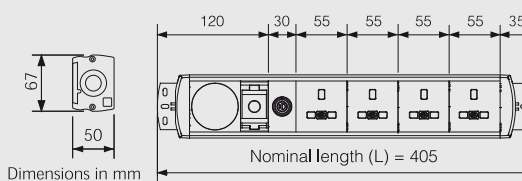
- Continuity and polarity of the conductors
- Insulation resistance
- Earth continuity

Details of the tests are given in the installation instructions. These tests must be carried out whenever the system is reconfigured.

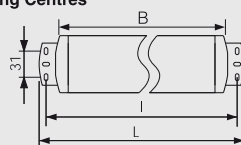
It is recommended that the installation is periodically maintained, inspected and tested. For full details of the requirements for the rest of the installation refer to BS 6396.

Dimensions

The nominal length of each configuration can be estimated using the dimensions shown in the custom design section of this brochure. eg: Part number DP P4010.



Fixing Centres



Bracket retracted (B)/Screw fixing pitch (L)
= Nominal length (L) - 17mm
(Bracket extended)

E.g. DP P4010 = 405 - 17mm = 388mm

For a full range of corresponding products,
see pages 395-401 in the product selector.

Onix Plus™ Floorboxes

Standards and Approvals

These products are designed to withstand heavier than normal traffic loading as found in office buildings. The Onix Plus™ range supports compliance with the requirements of the 17th Edition of the IET Wiring Regulations (BS 7671) and to BS EN 50085 Part 1 and EN 50085-2-2. Additionally the floorboxes also comply with IEC 60670 Parts 1 and 23.

TECHNICAL SPECIFICATION

MATERIALS

BOX LID AND FRAMES

Lid, load plate and frame manufactured in stainless steel. Cord Outlet mouldings are manufactured from a UL94 V2 rated nylon.

POWER GROMMET

Service outlet is die cast aluminium, brass or nickel plated brass. The base unit is pre-galvanised steel. Plastic parts are polycarbonate.

RAL COLOURS

Grey (GRY) = RAL 7011
Beige (BEG) = RAL 1019

FEATURE BENEFITS

- Wet washable and IP44 when not in use
- Tested to EN 50085-2-2 to accept 10,000N load (5,000N load for Onix Plus Grommet)
- Selection of lid recess depths available, allowing for various floor depths
- Designed to support Cat 6 structured cabling systems
- Wide range of power and data accessories available to meet all requirements
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance with the 17th Edition of the IET Wiring Regulations (BS 7671)
- 5 year guarantee

Wet Wash Test

The plain lid and the centre Snorkel outlet lids have an Ingress Protection rating of IP44, according to BS EN 60529:1992

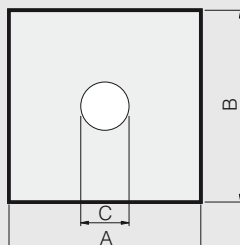
Centre Cord Outlet Restrictions

This applies to the Snorkel Cord Outlet lid.

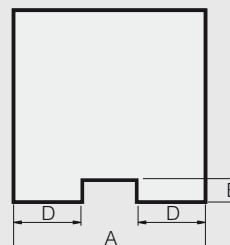
For a full range of corresponding products, see pages 403-411 in the product selector.

* The Snorkel cord outlet cannot be used in depths less than 100mm.

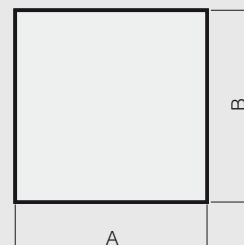
CENTRE CORD OUTLET



EDGE CORD OUTLET



BLANK LID



Lid Recess Dimensions

The dimensions in the table provide the sizes for the floor covering insert for the lid.

DIMENSION (mm)					
BOX SIZE	A	B	C	D	E
200x200mm	183	183	102	31	45
265x265mm	248	248	102	63	45
340x340mm	323	323	102	101	45

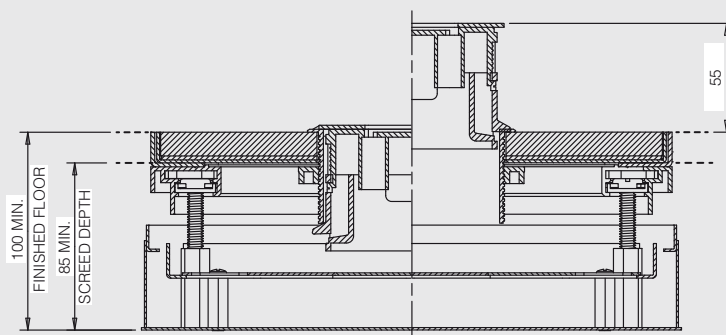
Note: Due to the weight of the lid and floor covering, a tile lifter, not the cord outlets, should be used to lift these lids.

Screed Depth Table – for Snorkel Lid with Flush Accessories

WIRING SPACE (mm)	FLOOR TILE THICKNESS – INCLUDING ADHESIVE (mm)	MINIMUM SCREED DEPTH (mm)	MINIMUM FINISHED FLOOR DEPTH (mm)
25	15	85	100
25	20	80	100
25	25	75	100
25	30	70	100
35	15	95	110
35	20	90	110
35	25	85	110
35	30	80	110
45	15	105	120
45	20	105	120
45	25	95	120
45	30	90	120

- Decide Wiring Space required: 25mm, 35mm or 45mm
- Decided Floor Tile Thickness. (This must align with the lid depth choice)
- Read across to determine the minimum screed depth and subsequent finish floor thickness

Note: When using the wave plate (CXP20215 / CXPC20215) or ST fibre plate (CXP20500 / CXPC20500) the minimum screed depth and minimum finished floor depth must be increased by 15mm. This will result in restrictions when utilising a 45mm wiring space.



Onix Plus™ Floorboxes and Power Grommets

Load Testing

Load Testing of Floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

The floorboxes have been tested to and comply with the loading requirements of BS EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

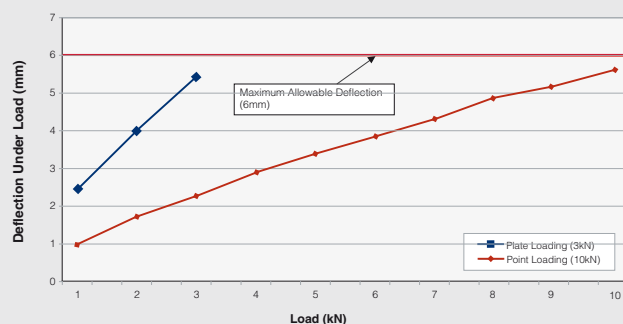
There are two loading criteria for the floorboxes – one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate fork trucks and heavier larger loads for example. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm. The loading position is the centre of the lid.

The Lid Deflection (loading) graph shows that the maximum test wheel loading classification achieved is 3kN and the maximum large plate loading classification achieved is 10kN.

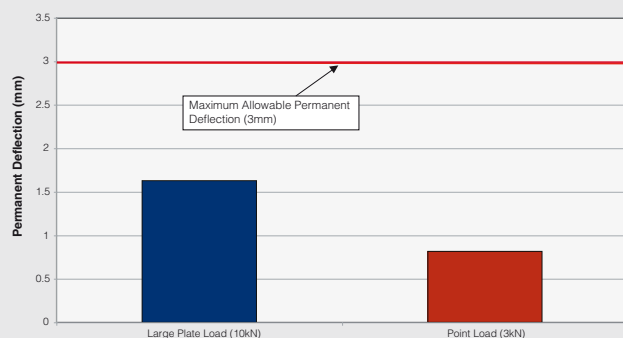
The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 3kN is 0.8mm and large plate loading at 10kN is 1.65mm. This is well within the maximum allowable deflection of 3.0mm.

Note: This test data specifically refers to the 265 x 265mm sized cord outlet box assembly. The other floorbox sizes also comply with the required test criteria. Declarations of conformity are available on request for the entire range.

Lid Deflection – Onix Plus Cord Outlet Lid 265x265mm



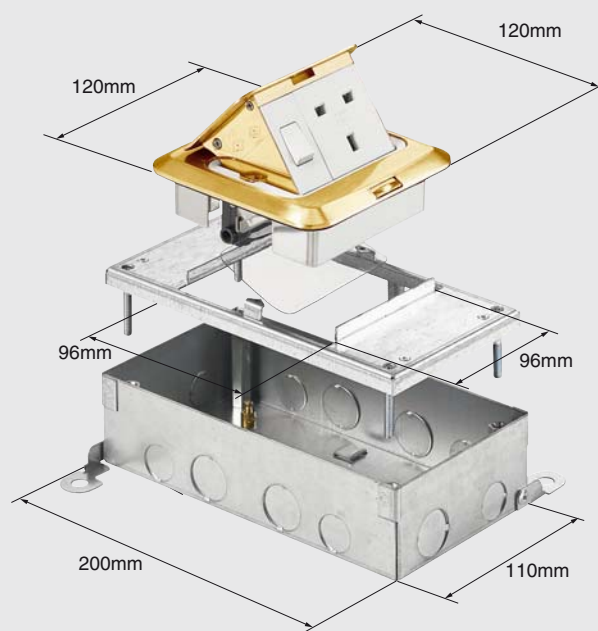
Permanent Deflection After Removal of Load – Onix Plus 265x265mm Cord Cap Lid



Metal Power Grommet Dimensions

The Metal Power Grommet is designed to be used in conjunction with the Screed Base Unit, part number NXGB100-1 or NXGB100X-1, depending on the depth of the screed.

Onix Grommets are designed to be IP44 rated when the lid is closed, allowing the floor to be washed.

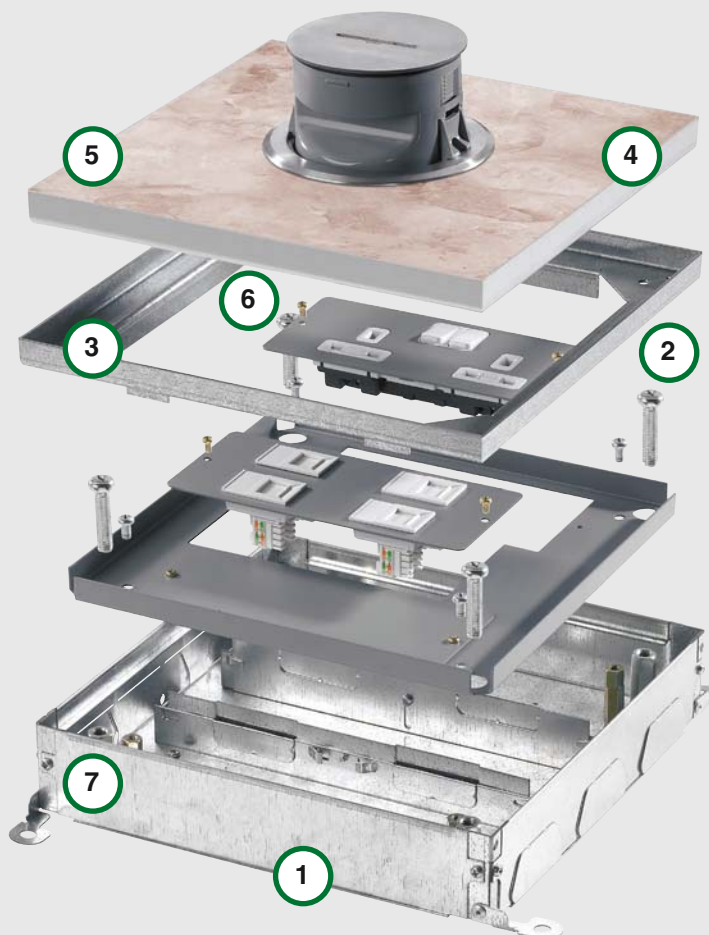


BASE UNIT	NXGB100-1	NXGB100X-1
Screed Depth (mm)	55-80mm	80-110mm

Onix Plus™ Floorboxes and Power Grommets

Installation of Snorkel Lid

- ① The base unit is fixed to the slab and the ducts or conduits are fed into the base using the appropriate side entry plate.
- ② The disposable screed cover is fitted to prevent the ingress of screed through the top. All areas of the box which may be susceptible to screed ingress should be sealed.
- ③ The Lid frame should be assembled and fitted after the disposable screed lid has been removed and the gasket can now be fitted.
- ④ The lid is supplied with an earth lead and must be bonded to earth for all power applications. As the lid is only installed when the floor covering is laid there is less chance the surface finish of the lid will be damaged.
- ⑤ A floor covering insert is required for the lid recess. The dimensions for the insert are given in the Lid Recess Dimensions section see page 685.
- ⑥ Sealing compounds are required for products that are for use in wet wash environments.
- ⑦ The bases are supplied with 35mm wiring space, but with the option to reduce to 25mm or increase to 45mm with the Cuba-1 height adjustment kit.



How to Install the Gasket



Identify the gaskets

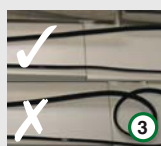
The wider gasket is used in the

frame and the narrower gasket is used on the lid. The gaskets are designed to sit next to one another, not one on top of the other.

② Ensure gasket is clean

Ensure both lid and frame are dry, clean and free from oily deposits and debris such as grout and screed.

If replacing the gaskets ensure all traces of existing gasket and adhesive have been removed. An alcohol wipe will aid the removal of the adhesive backing.



Ensure gasket is straight

The gasket must have

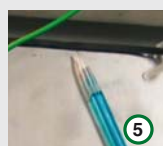
no twists in it. Any twists will result in the gasket not fitting and functioning correctly.



Fitting lid gasket

Start the lid gasket on the underside of

the lid as close to the outer edge as possible, approximately half way along the length. Ensure the gasket runs underneath the Earth bonding cable. Do not run the gasket past the first corner at this stage.



Identify the gaskets

Butt the other end of the gasket to

the start to ensure a good join. This also ensures the gasket is not stretched unduly.

Continue fitting the gasket around the edge of the lid keeping the corners as close to 90° as possible, until complete.



Fitting frame gasket

Start the frame gasket

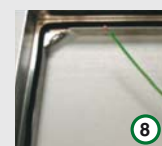
as close to the inner edge as possible, approximately half way along the length. Ensure the gasket runs underneath the Earth bonding cable. Do not run the gasket past the first corner at this stage.



Fitting frame gasket

Butt the end of the gasket

to the start to ensure a good join. This also ensures the gasket is not stretched unduly.



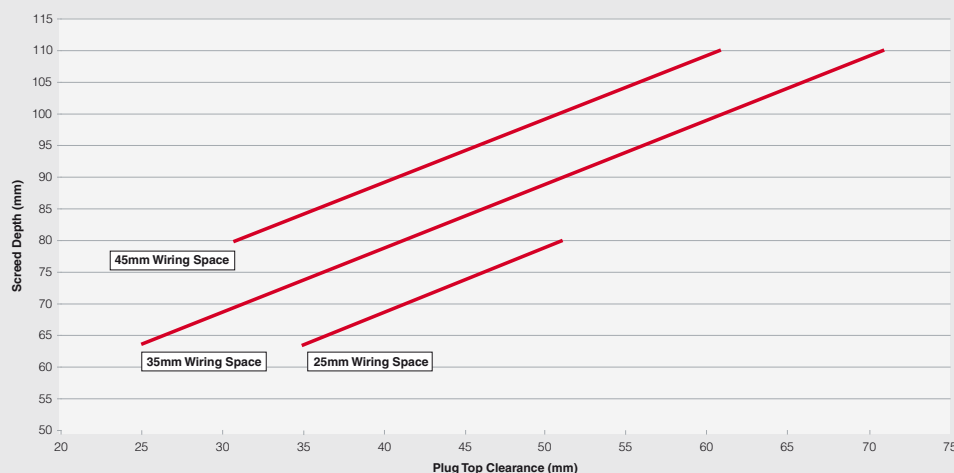
Fitting frame gasket

Continue fitting gasket

around the inner edge of the frame, ensuring the gasket runs to the outside of the screw hole, until complete.

Onix Plus™ Floorboxes and Power Grommets

Screed Depth – 25mm, 35mm and 45mm Wiring Space



Installation of Metal Power Grommets

- The Screed Base Unit, is laid onto the concrete slab. There are two Screed Bases available depending on the screed depth.
 - Screed depth between 55mm and 80mm use **NXGB100-1**
 - Screed depth between 80mm and 110mm use **NXGB100X-1**

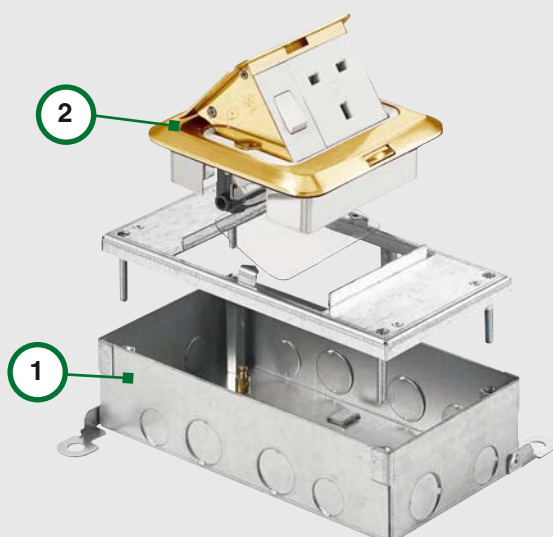
A metal plate supplied with the Screed Base Unit to keep the screed out of the interior of the box.

After screeding the mounting plate is fitted and the floor covering is laid.

Cat 6 Compatibility

With Cat 6 data cabling the orientation and depth of many data outlets has changed, resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses. 45mm wiring space for the Cablelink Plus floorbox system is available.

- The grommet top is installed after the floor covering is laid. The lid is simply screwed into position until tight with the floor.



Cablelink Plus Screed Technical

Cablelink Plus Screed System

Standards and Approvals

Cablelink Plus Screed System range complies with the relevant requirements of the latest edition of 17th Edition of the IET Wiring Regulation (BS 7671) and to BS EN 50085 Part 1 and BS EN 50085 Part 2-2. Additionally the floorboxes also comply with IEC 60670 Parts 1 and 23. The metal used complies to the requirements of BS EN 10327:2004

FEATURE BENEFITS

- Tested to BS EN 50085-2-2 to accept 5000N load
- The system incorporates numerous design features to ensure a fast and simple installation
- Designed to support Cat 6 & Cat 6A structured cabling systems
- Suitable for screeded depth from 55mm to 110mm (Height adjustment kits and floor coverings must be used)
- Minimum finished floor thickness (including carpet, tile etc) is 74mm, with a 35mm wiring space. Can be reduced to 64mm if a 25mm wiring space can be utilised. (A CUBA-1 adjustment kit must be used)
- Floorboxes are IP2X rated in accordance with BS EN 50085-1
- Choice of 1, 2, 3 or 4 compartment floorboxes
- Self Closing lid in accordance with IEC 61534-22
- Wide range of power and data accessories available to meet all requirements
- PVCu ducting manufactured from 100% recycled material*
- Quality, reliability and safety come as standard
- Provision of RCD protection supports compliance to the 17th Edition of the IET Wiring Regulation (BS 7671)
- 5 year guarantee

TOP TIPS

- Distance between two junction boxes must not exceed 6 metres
- **Service Outlet Boxes** – fixed only on branch ducts and not on header ducts. Fixing service boxes on the header ducts affects cable capacity and constricts the header
- **Workstations** – locate over Service Outlet Boxes so that it does not interfere with normal office traffic

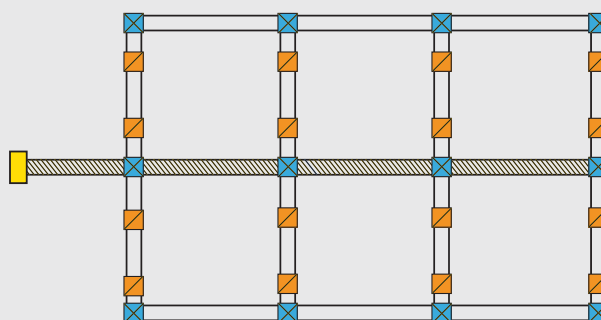
Layout

In order that the installation may exhibit the desired flexibility, the ducting is usually laid out on either a Grid, Fishbone or a Comb Pattern of single, double or triple runs.

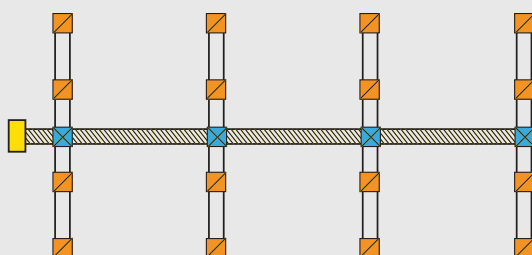
A **Grid Pattern** is widely used in areas where the occupants require the highest degree of flexibility in reorganising work areas. Capacity can be increased by returning individual ring mains through different runs of duct which in itself allows easier installation.

The **Fishbone Pattern** is ideal for a medium sized area where lesser boxes are required.

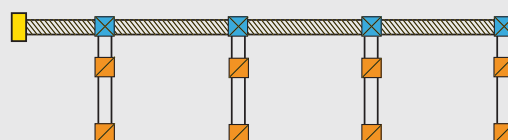
The **Comb Pattern** is the most economical way of installation where least duct is used. The comb pattern is suited for medium to small office areas.








Grid pattern



Fishbone pattern



Comb pattern

- | | |
|---|---|
|  Header Runs |  Universal Junction Box |
|  Service Outlet Box |  Branch Runs |
|  Vertical Access Box | |

For a full range of corresponding products,
see pages 413-424 in the product selector.

Cablelink Plus Screed Technical

Cablelink Plus Screed System

Cable Capacity Guide

The cable factor table below is based on the 17th Edition of the IET Wiring Regulation (BS 7671) and must be regarded only as a guideline. Care should be taken in selecting adequate trunking sections taking into consideration the number and size of cables involved and construction of the junction box. It is recommended that the initial design of trunking installations include adequate provision for future wiring. To determine the size of the trunking required, multiply the quantities of each size of conductor and appropriate factor from Table A and compare the total with the capacity unit figure in the appropriate Table B.

TABLE A – CABLE FACTORS

CABLE TYPE	CSA	CABLE FACTOR
POWER CABLES		
PVC Stranded	1.5mm ²	8.6
	2.5mm ²	12.6
	4mm ²	16.6
	6mm ²	21.2
	10mm ²	35.3
	16mm ²	47.8
Twin & Earth	25mm ²	73.9
	2.5mm ²	86
	4mm ²	99
DATA CABLES		
Cat 5E UTP	5.5mm dia	30.2
Cat 5E STP	6.0mm dia	36
Cat 6 UTP	6.5mm dia	42.2
Cat 6 STP	7.0mm dia	49
Cat 6A	8.0mm dia	64

Sample calculation

To estimate the total number of cables that can be accommodated with a 100 x 38mm ducting:

Step 1 Pick the factor from Table B corresponding to 100 x 38 = 1563

Step 2 Select the size of the cable that needs to be pulled through the trunking and its corresponding factor from Table A e.g. 4mm² stranded = 16.6

Step 3 No. of cables = Value from (Table B / Table A)
e.g. 1563/16.6 = 94 Cables.

TOP TIPS

- The number and location of boxes will depend on the end user requirements
- If the furniture layout is available, a floor box should be considered for each workstation or desk
- If the final furniture layout is not available as a general guide the minimum recommended distribution is one floor box for every 10m², and the maximum being one floor box per 4m²

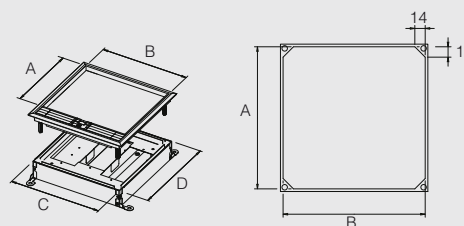
TABLE B – METAL SCREED DUCTING CABLING CAPACITY

SIZE (MM)	COMPARTMENT SIZE	CAPACITY 100%	CAPACITY (45% FILL)
100 x 38	100 x 38 (1 comp)	3474	1563
225 x 38	112 x 25 (2 comp) 75 x 38 (3 comp)	3940 2613	1773 1176
250 x 38	13 x 38 (3 comp)	2909	1309
275 x 38	91 x 38 (3 comp)	3206	1443
300 x 38	100 x 38 (1 comp)	3503	1576

Cablelink Plus Screed System ducting complies with BS EN 50085-1:2005 and BS EN 50085-2-2:2008.

The above table gives the available capacity units on 45% factor, applied to the internal wiring area.

Carpet Cut out Dimensions



The table below shows the sizes required for the carpet lid infill and carpet tile cut out for the Cablelink Plus Screed Floorboxes.

LID LIST NUMBER	CARPET LID INFILL DIMENSIONS (mm)		BASE LIST NUMBER	BOX CARPET CUT OUT DIMENSIONS (mm)	
	A	B		C	D
CXL100	152	93	CUB100	100	100
CXL265	219	251	CUB265	265	265
CXL340	219	326	CUB340	340	340
CUJL200	188	188	CUJ200	200	200
CUJL265	253	253	CUJ265	265	265
CUJL240	328	328	CUJ240	340	340

DUCTING CABLE CAPACITY – DATA CABLES

DUCTING CAPACITY mm²	60MM DUCTING		90MM DUCTING	
	1025		2300	
NOMINAL CABLE DIAMETER mm²	NUMBER OF CABLES			
	60mm DUCTING		90mm DUCTING	
	@50%	@75%	@50%	@75%
5.5	17	25	38	57
6	14	21	32	48
6.5	12	18	27	41
7	10	15	23	35
8	8	12	17	26



Technical Hotline
+44 (0)1268 563720

Cablelink Plus Screed Technical

Cablelink Plus Screed System

Cablelink Plus Screed Service Box

Materials	UL94 V2 rated nylon, Pre-galvanised steel.
Strength	The floor outlet boxes are capable of resisting minor accidental loading when rigidly supported under the outer rim of the cover frame.
Fire	The outer casing of the floor outlet box is manufactured from metal and is non-combustible. The 8mm recess frame and lid assembly is made from UL94 V2 rated nylon the 12mm recess frame and lid assembly is manufactured from metal and is non corrosive.
Chemical resistance	Non corrosive.
Water absorption	The floor outlet boxes are for use in situations where the cleaning method used does not result in the formation of pools of liquid or soaking of the floor surface.
Degree of protection	Enclosure classification of IP2X when installed in accordance with the instructions set out in the installation guide.

Ambient Temperature Range

	MINIMUM	MAXIMUM
Handling and storage	-5°C	60°C
During installation	-5°C	60°C
Operating	-5°C	40°C

Average not to exceed 35°C in any 24 hour period.

RAL Colours

Grey (GRY) = RAL 7011

PVCu Ducting and Accessories:

Manufacture	Duct straight lengths are extruded from 100% recycled PVCu. Fittings are formed by injection moulding*.
Appearance	All PVCu duct and accessories are normally smooth, matt white finish.
Strength	Heavy gauge, medium impact resistance under normal conditions.
Fire	Non flame propagating. Class 1 spread of flame.
Chemical resistance	Non-corrosive and not affected by sea water. Excellent resistance to mineral acids, alkalis and detergents but liable to attack from solvents such as alcohol, ketones, aromatics and hydrocarbons.
Vermin	Resistant to vermin and termites.
Thermal	Lower and upper limit of range of ambient temperature from -5°C to 60°C. All products are designed to accommodate local thermal expansion and fitting instructions cover differential movement at the interface with the building fabric. Thermal expansion co-efficient: $5.5 \times 10^{-5}/^{\circ}\text{C}$.
Electrical	Duct is non-conductive. Dielectric strength: 40kV/mm in DBP 17kV/mm in tx oil. Volume resistivity: $>1014 \Omega\text{cm}$.
Durability	The product is stable within the terms and conditions described above and will maintain its performance characteristics.
Workability	The duct is light weight and can be readily cut with hand tools. Short lengths can be readily incorporated and there is low wastage of material. Components and joints can be solvent welded together where necessary.

Metal Duct and Accessories

Material	Pre-galvanised sheet steel.
Standard thickness	1.2mm. Standard 1mm available on request.
Standard length	2.44 metres.
No. of compartments	1, 2 or 3 compartments.
Standard depth	38mm (Different depths are available on request).

Couplers have to be ordered separately.

Pre-cut lengths can be arranged, subject to price confirmation and availability.

* based on 2014 consumption

Cablelink Plus Screed Technical

Cablelink Plus Screed System

Installation Guide for Underfloor Duct System

The structural floor slabs on which the underfloor ducts and boxes are to be laid must be reasonably level and smooth. Humps and protruding cement must be levelled to ensure the ducts being laid will maintain the minimum screed thickness of 25mm over the ducts. It is recommended that a layer of green screed be laid on the structural slab beneath the underfloor ducts to prevent air gaps and vacuum while screeding.

① The floor slab where junction and service outlet boxes are to be laid should be marked out. The appropriate duct entry plates should be fastened to the boxes.

Ducts should be laid in straight lines between points of junction boxes and parallel to known base lines on each floor. Changes in direction of ducts should be made with junction boxes.

Use steel fixing clips to secure the ducts on to the floor slab prior to screeding. The intervals between two saddles should not exceed a maximum of 2 metres.

All joints in ducts and terminations of ducts in junction boxes / vertical access boxes should be made water tight with approved type sealing compound. Precaution should be exercised during construction to prevent damage to the ducts system and to ensure that the ducts and vertical boxes are free of water, dirt, debris or any other obstruction which may impede and / or damage the cables during pulling in.

② Junction and service outlet boxes should be properly covered with the disposable lids and taped to ensure no cement gets into the boxes during screeding.

After screeding the disposable screed cover is removed and the cable installation can begin.

③ If extra space is required under the accessory mounting tray then height adjuster kits can be used. The cables can now be installed and the services terminated.

Note: The bases are supplied with 35mm wiring space, with the option to reduce to 25mm or increase to 45mm with a height adjustment kit – part number CUBA-1 see page 417.

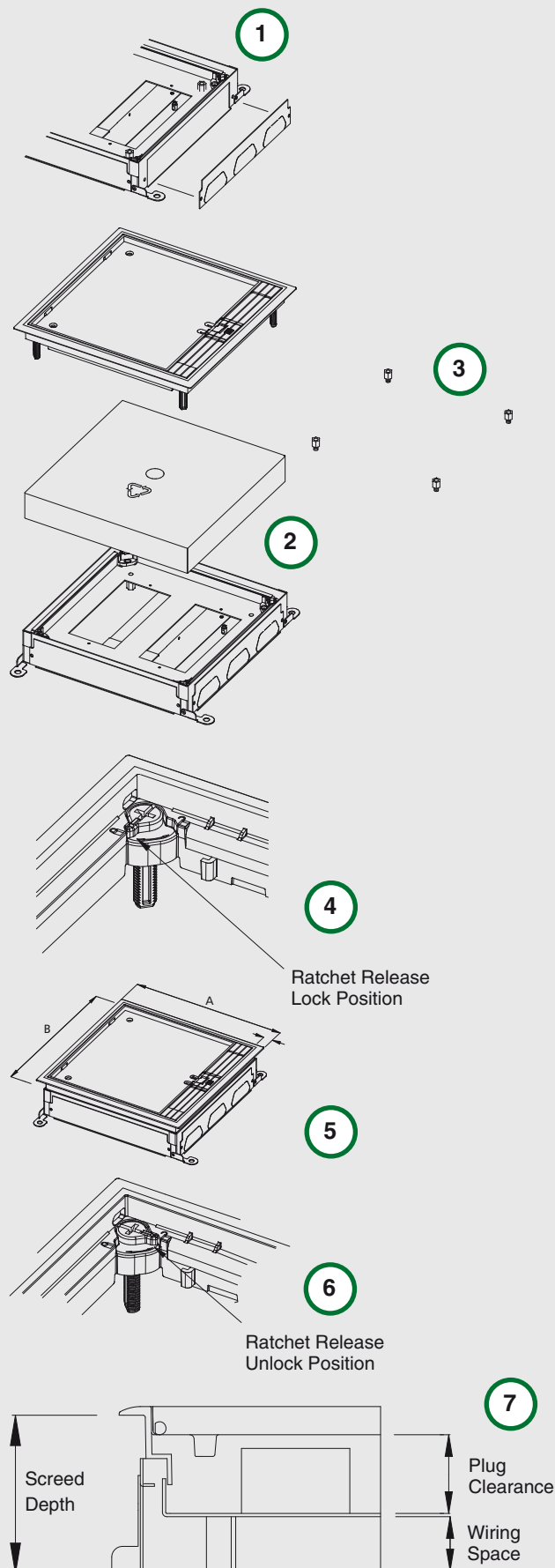
④ The frame and lid assembly can now be fitted. Ensure the ratchet release is set to the lock position and align these with the ratchets in the accessory tray.

⑤ Apply gentle pressure until the frame is securely seated in the box and against the finished floor e.g. carpet or vinyl.

⑥ If the frame and lid assembly requires to be removed or rotated to ease cable egress then the ratchet releases should be rotated to the unlock position and the frame can be lifted out of the floorbox. The assembly can then be rotated and fixed as before.

Note: The lid should be completely removed from the frame before attempting to release the frame.

⑦ Attention must be paid to ensure there is both sufficient wiring depth and plug top clearance for the particular cables / plugs being used in each installation.

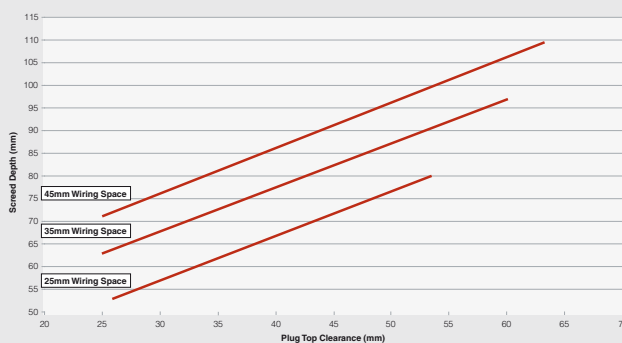


Cablelink Plus Screed Technical

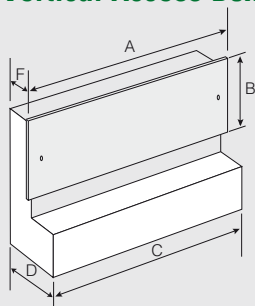
Cablelink Plus Screed System

Screed Depth – 25mm, 35mm and 45mm Wiring Space

This graph enables the specifier / installer to determine which depth the screed (plus floor covering) must be in order to achieve a certain accessory wiring space and plug top clearance within the floorbox. For example if the specifier requires a 35mm standard wiring depth and a 45mm plug top clearance then the graph shows that an 82mm screed (plus 8mm non-compressible floor covering) depth is required. Alternatively, if the depth is fixed, at 90mm for example, then by having a 45mm wiring space the resulting plug top clearance will be 43mm. If additional plug top clearance is required then the wiring depth can be reduced to 35mm or even 25mm providing a plug top clearance of 53mm or 63mm respectively. Care must be taken to ensure there is sufficient wiring depth and plug top clearance for each individual installation. All these dimensions are based upon the floor covering being 8mm thick when fully compressed. If the floor covering is thicker or thinner then the screed depth must be reduced or increased as appropriate. When no floor covering is to be used the minimum screed depth with a 25mm wiring space is 64mm. For screed depths greater than 105mm, service boxes are provided with fixed wiring spaces of 75mm, 100mm, 125mm and 150mm respectively.



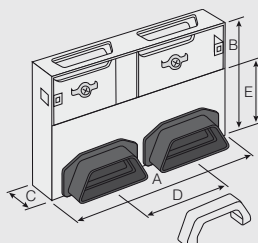
Vertical Access Boxes: Metal Ducting



LIST NUMBER	TO SUIT BOX	COVER PLATE DIMS	
		A (mm)	B (mm)
FLUSH COVER PLATE (SUPPLIED A STANDARD)			
n/a	CUV265	265	90
n/a	CUV340	340	90
OVERLAPPING COVER PLATE			
CUVP265	CUV265	285	100
CUVP340	CUV340	360	100

LIST NUMBER	BOX DIMENSIONS (mm)			
	C	D	E	F
CUV265	265	85	50	200
CUV340	340	85	50	200

Vertical Access Boxes: PVC Ducting



LIST NUMBER	TYPE	DIMENSIONS (mm)				
		A	B	C	D	E
SHALLOW ACCESS						
SF88152	Twin	260	170	50	110	100
SF88153	Triple	370	170	50	110	100
FULL ACCESS						
SF88172	Twin	260	270	50	110	100
SF88173	Triple	370	270	50	110	100

Cover Plates

LIST NUMBER	TYPE	DIMS (mm)		LIST NUMBER	TYPE	DIMS (mm)	
		A	B			A	B
OVERLAPPING SHALLOW ACCESS				FLUSH SHALLOW ACCESS			
SF88180	Twin	280	80	SF88176	Twin	260	70
SF88181	Triple	390	80	SF88177	Triple	370	70
OVERLAPPING FULL ACCESS				FLUSH FULL ACCESS			
SF88188	Twin	280	180	SF88184	Twin	260	170
SF88189	Triple	390	180	SF88185	Triple	370	170

Cablelink Plus Screed Technical

Cablelink Plus Screed System

Load Testing

Load Testing of Floorboxes to BS EN 50085 Part 2-2 (Clauses 10.5.103 and 10.5.104).

The floorboxes have been tested to and comply with the loading requirements of BS EN 50085 Part 2-2 (Cable trunking systems and cable ducting systems for electrical installations Part 2-2: Particular requirements for cable trunking systems and cable ducting systems intended for mounting underfloor, flushfloor, or onfloor).

There are two loading criteria for the floorboxes - one with a point loading to replicate foot traffic for example, and the other, with a large plate to replicate fork trucks and heavier larger loads for example. For both loading criteria the maximum allowable deflection under load is 6mm and the maximum permanent deflection after the load has been removed is 3mm.

The Lid Deflection (loading) graph shows that the maximum point loading classification achieved is 3kN and the maximum large plate loading classification achieved is 5kN.

The Permanent Deflection graph shows the permanent deflection from the test wheel loading at 2kN is 0.3mm and large plate loading at 5kN is 0.4mm. This is well within the maximum allowable deflection of 3.0mm.

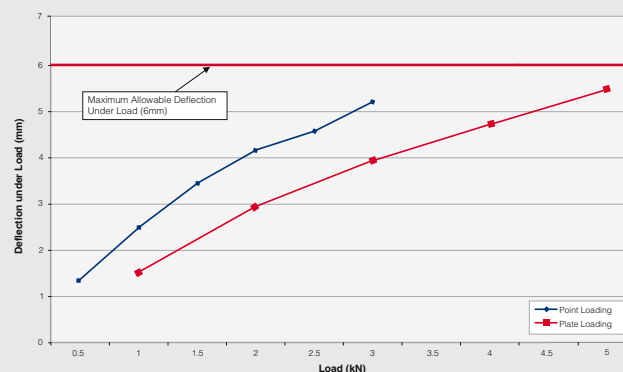
Note: This test data specifically refers to the 265 x 265mm sized floorbox frame assembly. The other floorbox sizes also comply with the required test criteria. Declarations of conformity are available on request for the entire range.

Cat 6 Compatibility

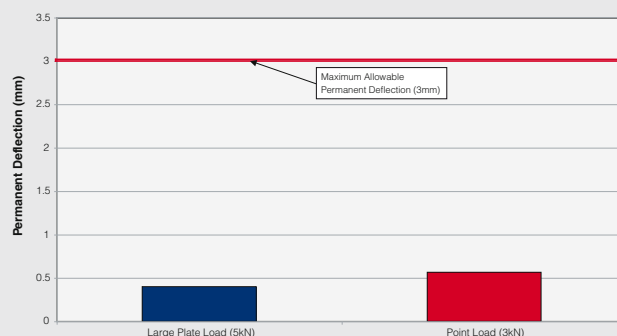
With Cat 6 & Cat 6A data cabling the orientation and depth of many data outlets has changed resulting in the need for greater backbox depths and wiring space to accommodate these longer data outlet. No longer is a 35mm wiring space sufficient to ensure data terminations can be made to the manufacturer's recommendations to prevent transmission losses.

45mm wiring space for the Cablelink Plus floorbox system is available. This easily accommodates the longer Cat 6 & Cat 6A data outlets and leaves sufficient space for the data cable to run underneath it.

Lid Deflection – Cablelink Plus 265 x 265mm Frame Assembly



Permanent Deflection After Removal of Load – Cablelink Plus 265 x 265mm Frame



LIST NO.	STD PACK	PAGE
B		
BET1	50	357
BET2	50	357
BMB2WHI	50	352
C		
CA1WHI	10	348
CA2WHI	10	348
CAL22WHI	1	348
CAL23WHI	1	349
CAR22WHI	1	349
CAR23WHI	1	349
CCP53BLK	1	239
CCP133PBLK	1	239
CCP153BLK	1	239
CEA2WHI	50	352
CEP1WHI	10	349
CEP2WHI	10	349
CI1WHI	10	349
CIP1WHI	10	349
CIP2WHI	10	349
CJC1WHI	10	349
CJC2WHI	10	349
CLT1	12m	346
CLT2	12m	346
CLT3	12m	346
CLT4	12m	346
CLT5	6m	346
CLT6	6m	346
CLT7	6m	346
CLT8	3m	346
CLT9	3m	346
CLT50LID	12m	347
CLT75LID	12m	347
CLT100LID	12m	347
CLT150LID	12m	347
CMA1WHI	25	370
CMA3WHI	25	370
CMA4WHI	25	370
CMT1D1WHI	60m	370
CMT1WHI	60m	370
CMT3WHI	60m	370

LIST NO.	STD PACK	PAGE
CMT4WHI	60m	370
CO3WHI	50	359
CO4WHI	50	359
CRB100UK-1GRY*	1	394
CRB100UK-1GRY**	1	385
CRB100UK-70-1GRY**	1	385
CRB265UK-3GRY*	1	385
CRB265UK-70-3GRY*	1	385
CRB340UK-4GRY*	1	385
CRB340UK-70-4GRY*	1	385
CRM321W	1	381
CRM333W	1	381
CRM334	1	381
CRM334W	1	381
CRM336	1	381
CRM336W	1	381
CRM431W	1	381
CRM434	1	381
CRM434W	1	381
CRM444	1	381
CRM444W	1	381
CRM11720	1	379
CRM11730*	1	379
CRM11730CE*	1	379
CRM11730NS*	1	379
CRM11730NSCE	1	379
CRM11731*	1	379
CRM11735*	1	379
CRM11735CE	1	379
CRM11750	1	379
CRM11750CE	1	379
CRM11750NS	1	379
CRM11750NSCE	1	379
CRM11751	1	379
CRM21117	1	380
CRM21201	1	380
CRM21215*	1	380
CRM21301	1	380
CRM21500	1	380
CRM31201	1	380
CRM31501	1	380

LIST NO.	STD PACK	PAGE
CRMB265-3GRY	1	379
CRMB340-4GRY	1	379
CRP100-RCD	1	386, 394
CRP101	1	386, 394
CRP121	1	386, 394
CRP321W	1	386
CRP333	1	386
CRP333W	1	386
CRP334	1	386
CRP334W	1	386
CRP336	1	386
CRP336W	1	386
CRP421W	1	386
CRP434	1	386
CRP434W	1	386
CRP444	1	386
CRP444W	1	386
CRXKEY	2	380, 385
CST1WHI	25	349
CST2WHI	10	349
CT1WHI	30m	348
CT2WHI	12m	348
CUB100UK-1	1	417, 424
CUB100XUK-1	1	417, 424
CUB200UK-2	1	417, 424
CUB200XUK-2	1	417, 424
CUB265UK-3	1	417, 424
CUB265XUK-3	1	417, 424
CUB340UK-4	1	417, 424
CUB340XUK-4	1	417, 424
CUBA-1	1	411, 417
CUBP200-01	1	411, 417, 419, 422, 424
CUBP200-02	1	411, 417, 419, 422, 424
CUBP200-03	1	411, 417, 419, 422, 424
CUBP200-04	1	411, 417, 419, 422, 424
CUBP200-08	1	411, 417, 419, 422
CUBP265-01	1	411, 417, 419, 422, 424
CUBP265-02	1	411, 417, 419, 422, 424
CUBP265-03	1	411, 417, 419, 422, 424

Index

LIST NO.	STD PACK	PAGE
CUBP265-04	1	411, 417, 419, 422, 424
CUBP265-08	1	411, 417, 419, 422, 424
CUBP340-01	1	411, 417, 419, 422, 424
CUBP340-02	1	411, 417, 419, 422, 424
CUBP340-03	1	411, 417, 419, 422, 424
CUBP340-04	1	411, 417, 419, 422, 424
CUBP340-08	1	411, 417, 419, 422, 424
CUD100-38-1	1	422
CUD225-38-2	1	422
CUD225-38-3	1	422
CUD250-38-3	1	422
CUD275-38-3	1	422
CUD300-38-3	1	422
CUDF100-38	1	422
CUDF225-38	1	422
CUDF250-38	1	422
CUDF275-38	1	422
CUDF300-38	1	422
CUDJ100-38	1	422
CUDJ225-38	1	422
CUDJ250-38	1	422
CUDJ275-38	1	422
CUDJ300-38	1	422
CUFC60-2	10	421
CUFC60-3	10	421
CUJ200UK	1	419, 424
CUJ200XUK	1	419, 424
CUJ265UK	1	424
CUJ265XUK	1	419, 424
CUJ340XUK	1	419
CUJL200-12	1	424
CUJL200-12GRY	1	419
CUJL200-8	1	424
CUJL200-8GRY	1	419
CUJL200X-12	1	424
CUJL200X-12GRY	1	419
CUJL200X-8	1	424
CUJL200X-8GRY	1	419
CUJL265-12	1	424
CUJL265-12GRY	1	419

LIST NO.	STD PACK	PAGE
CUJL265-8	1	424
CUJL265-8GRY	1	419
CUJL265X-12	1	424
CUJL265X-12GRY	1	419
CUJL265X-8	1	424
CUJL265X-8GRY	1	419
CUJL340-12	1	424
CUJL340-12GRY	1	419
CUJL340-8	1	424
CUJL340-8GRY	1	419
CUJL340X-12	1	424
CUJL340X-8	1	424
CUJL340X-8GRY	1	419
CUV265	1	424
CUV265UK-2	1	420
CUV340UK-3	1	420
CUVP265	1	420, 424
CUVP340	1	420
CX-01	10	380
CX-02	5	380, 385
CX-03GRY	10	385
CX-04GRY	1	380
CX-10	10	380, 411
CXL100-8GRY	1	417, 424
CXL200-12GRY	1	417
CXL200-8GRY	1	424
CXL200-8GRY*	1	417
CXL265-12GRY	1	417
CXL265-8GRY	1	424
CXL265-8GRY*	1	417
CXL340-8GRY	1	424
CXL340-8GRY*	1	417
CXL340X-12GRY	1	417
CXP1WHI	10	349
CXP2WHI	10	349
CXP10720	1	385, 423
CXP10730*	1	423
CXP10730NS*	1	385, 411, 423
CXP10731*	1	385, 411, 423
CXP10731NS	1	385
CXP10731NS*	1	411, 423

LIST NO.	STD PACK	PAGE
CXP10735*	1	385, 411, 423
CXP10740	1	385, 411, 423
CXP10745	1	385
CXP10760	1	385, 411, 423
CXP20106	1	423
CXP20107*	1	423
CXP20200	1	394, 411
CXP20201*	1	385, 394, 411, 423
CXP20205	1	385, 394, 411, 423
CXP20215	1	385, 394, 411, 423
CXP20301	1	385, 394, 411, 423
CXP20500	1	385, 394, 411, 423
CXP30201	1	385, 394, 411, 423
CXP30501	1	385, 394, 411, 423
CXP30502	1	385, 411, 423
CXP30503	1	385, 423
CXPC10730*	1	411, 423
CXPC10730NS*	1	411
CXPC10731*	1	411, 423
CXPC10731NS*	1	411, 423
CXPC10735	1	411, 423
CXPC10745*	1	411, 423
CXPC20201*	1	411, 423
CXPC20215	1	411
CXPC20500	1	411
CXPC30201	1	411, 423

D

LIST NO.	STD PACK	PAGE
DPC1120	1	400
DPC1130	1	400
DPC1150	1	400
DPC1320	1	400
DPC1330	1	400
DPC1350	1	400
DPC2205	1	400
DPC2210	1	400
DPC3305	1	400
DPC3310	1	400
DPC4405	1	400
DPC4410	1	400
DPC5505	1	400

LIST NO.	STD PACK	PAGE
DPC5510	1	400
DRA10	1	357
DRA20	1	357
E		
EBF2BLK	100	353
EBF3BLK	100	353
ECC2	50	351
ECC3	50	351
ECG2*	100	352
ECG3BLK	50	352
ECL2	100	353
ECL3	100	353
ECL4	50	353
ECL5	25	353
ECL6	25	353
ECR12	10	354
ECR12EL*	10	354
ECT1	1	357
EDC1	25	357
EEB1BLK	5	356
EEC1BLK	25	351
EEC2	100	351
EEC3	50	351
EEC4	10	351
EEC5	10	351
EEC6	10	351
EER3	25	357
EER5	25	357
EER6	25	357
EER7	25	357
EER8	25	357
EER9	25	357
EF1WHI	50m Coil	360
EF2WHI	50m Coil	360
EF3WHI	50m Coil	360
EFA2	100	352
EFA3	50	352
EFA4	25	352
EFA5	25	352

LIST NO.	STD PACK	PAGE
EFA6	10	352
EGF5WHI	10	347
EHL2GRY	100	353
EHL3GRY	100	353
EIB2	25	352
EIB3	25	352
EIE2	25	352
EIT2	25	352
EIT3	25	352
EL1	100	356
EL2	50	356
EL3	50	356
ELS2	1	353
ELS3	1	353
EMA2	100	352
EMA3	50	352
EMA4	25	352
EMA5	25	352
EMA6	10	352
ENB2	25	350
ENB3	10	350
EOC1WHI	150m	359
EOC2WHI	150m	359
EOC3WHI	150m	359
EOC4WHI	150m	359
EOC5WHI	150m	359
EOC6WHI	150m	359
EP2	100	353
EP2S	100	353
EP3	100	353
EP3S	100	353
EQB2	25	353
EQB3	25	353
EQE2	25	352
EQS2	100	351
EQS3	100	351
EQT2	25	352
EQT3	25	352
ER1	50	353
ER2	50	353
ER5WH	10	353

LIST NO.	STD PACK	PAGE
ES2	100	351
ES3	100	351
ESB1	50	351
ESB2	100	351
ESB3	100	351
ESB4	50	351
ESB5	25	351
ESB6	25	351
ESC1	50	351
ESC2	100	351
ESC3	50	351
ESC4	50	351
ESC5	25	351
ESC6	20	351
ESS2	1	353
ESS3	1	353
ESU8MLWHI	25	358
ESU9MLWHI	25	358
ESU61WHI	25	358
ESU81WHI	25	358
ESU82MLWHI	10	358
ESU92MLWHI	10	358
ESU231WHI	25	365
ESU241WHI	25	358
ESU242WHI	10	358
ESU261WHI	25	358
ESU262WHI	10	358
ESU281WHI	25	358
ESU282WHI	10	358
ESU501RED	5	369
ESU501WHI	5	369
ESU503RED	5	369
ESU503WHI	5	369
ESU2211WHI	25	365
ESU2223WHI	10	365
ESU2311WHI	25	365
ESU2323WHI	10	365
ESU2512WHI	25	365
ESU2523WHI	10	365
ESU2713WHI	10	365
ESU2721WHI	10	365

Index

LIST NO.	STD PACK	PAGE
ESU3511WHI	25	365
ESU3523WHI	10	365
ESU4423WHI	5	365
ESU32125WHI	10	365
ESU32140WHI	10	365
ESU32225WHI	10	365
ESU32240WHI	10	365
ESUUSB17WHI	5	365
ESUUSB19WHI	5	365
ESUUSB22WHI	5	365
ESUUSB53WHI	5	365
EWPLUS	1	357
EXL135BLK	1	237
EXL135WHI	1	237
EXL136BLK	1	237
EXL136WHI	1	237
EXL137BLK	1	237
EXL137WHI	1	237

F

FAB1WHI	50	360
FAB2WHI	50	360
FAB3WHI	50	360
FAE1*	1	347
FAE2*	1	347
FAE3*	1	347
FAE4*	1	347
FAE5*	1	347
FAE6*	1	347
FAE7*	1	347
FAE8*	1	347
FAE9*	1	347
FAF1	1	347
FAF2	1	347
FAF3	1	347
FAF4	1	347
FAF5	1	347
FAF6	1	347
FAF7	1	347
FAF8	1	347
FAF9	1	347
FAI1*	1	347

LIST NO.	STD PACK	PAGE
FAI2*	1	347
FAI3*	1	347
FAI4*	1	347
FAI5*	1	347
FAI6*	1	347
FAI7*	1	347
FAI8*	1	347
FAI9*	1	347
FC133BLK	10	238
FC133ORG	10	238
FC133WHI	10	238
FC153BLK	10	238
FC4134BLK	1	238
FC4134WHI	1	238
FC4135BLK	1	238
FC4135WHI	1	238
FC4136BLK	1	238
FC4136WHI	1	238
FCT133BLK	10	238
FCT133ORG	10	238
FCT133WHI	10	238
FTF1	1	346
FTF2	1	346
FTF3	1	346
FTF4	1	346
FTF5	1	346
FTF6	1	346
FTF7	1	346
FTF8	1	346
FTF9	1	346

G

GR100GRY	1	393
GR200GRY	1	393
GR201GRY	1	393
GR205GRY	1	393
GR500GRY	1	393
GR510GRY	1	393
GR800GRY	1	393
GR850GRY	1	394
GR855GRY	1	394
GR5050GRY	1	393

LIST NO.	STD PACK	PAGE
HIP1	90m	351
HIP2	90m	351
HIP3	90m	351
HIP4	30m	351
HIP5BLK	30m	351
HIP6BLK	30m	351
HLG1WHI	90m	351
HLG2WHI	90m	351
HLG3WHI	90m	351
HLG4WHI	30m	351
HLG5WHI	30m	351
HLG6WHI	30m	351

I

IFUB61233GRN	1	375
IFUB61233GRY	1	375
IFUB61234RED	1	375
IFUB62433GRN	1	375
IFUB62433GRY	1	375
IFUB62434RED	1	375
IFUB63633GRN	1	375
IFUB63633GRY	1	375
IFUB63634RED	1	375

K100-K999

K14S42506ABST9	100	222
K14S42506BRST9	100	222
K14S42506DBZT9	100	222
K14S42506LBKT9	100	222
K14S42506LIVT9	100	222
K14S42506NIPT9	100	222
K14S42506PBRT9	100	222
K14S42506TCOT9	100	222
K14S42506WHIT9	100	222
K170BLK	10	49, 128, 166, 233
K170WHI	10	49, 128, 166, 233
K172ALM	5	232
K172BRC	1	184
K172BSS	5	184
K172PCR	5	184
K172SAG	1	184
K172WHI	10	49



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K180BLK	10	96, 126, 164
K180SBP	10	96
K180SCW	10	96
K180SNS	10	96
K180WHI	10	49, 126, 164, 232
K181ALM	5	230
K181BRC	1	184
K181BSS	5	184
K181PCR	5	184
K181SAG	1	184
K181WHI	10	46
K182ALM	5	230
K182BRC	1	184
K182BSS	5	184
K182GRA	10	46
K182PCR	5	184
K182SAG	1	184
K182WHI	10	46
K184ALM	1	230
K184BRC	1	184
K184BSS	5	184
K184GRA	10	46
K184PCR	5	184
K184SAG	1	184
K184WHI	10	46
K185WHI	10	46
K186BLK	10	49, 126, 164, 232
K186WHI	10	49, 126, 164, 232
K188BLK	10	49, 96, 126, 164, 232
K188SBP	10	96
K188SCW	10	96
K188SNS	10	96
K188WHI	10	49, 126, 164, 232
K330GRA	10	40
K330WHI	10	40
K337KOWHI	10	40
K337WHI	10	40
K370D1WHI	10	40
K370GRA	10	40
K370WHI	10	40
K377WHI	10	40

LIST NO.	STD PACK	PAGE
K385WHI	1	40
K422WHI	10	50
K427WHI	10	50
K600	10	222
K601	10	222
K602	10	222
K603	10	222
K604	10	222
K605	10	222
K606	10	222
K607	10	222
K608	10	222
K609	10	222
K610	10	222
K612	10	222
K630	10	222
K700WHI	1	39
K701WHI	1	39
K703BSS	1	178
K706WHI	1	39
K732BRC	1	172
K732BSS	5	172
K733BRC	1	172
K733BSS	5	172
K770WHI	10	38
K771WHI	10	38
K772WHI	10	38
K780WHI	10	38
K781RED	5	38
K781WHI	5	38
K829ALM	5	214, 234
K830ALM	5	214, 234
K841ALM	5	227
K842ALM	5	227
K843ALM	5	227
K848ALM	5	227
K850ALM	5	227
K863	5	211, 217
K897ALM	10	214, 234
K897WHI	5	234
K899ALM	10	214, 234
K899WHI	10	234

LIST NO.	STD PACK	PAGE
K931BRC	1	174
K931BSS	5	174
K931PCR	1	174
K932ALM	5	229
K941BRC	1	174
K941BSS	1	174
K941KOBSS	1	175
K941PCR	1	174
K941SAG	1	174
K942D5ALM	5	228
K948BRC	1	176
K948BSS	5	176
K948PCR	1	176
K948SAG	1	176
K954ALM	5	229
K958BRC	1	176
K958BSS	1	176
K961BRC	1	175
K961BSS	1	175
K961D6BRC	1	175
K961D6BSS	1	175
K961D6SAG	1	175
K961PCR	1	175
K961SAG	1	175
K962D6ALM	1	228
K963KOALM	1	228
K971BRC	1	175
K971BSS	1	175
K971BSS	5	175
K971D6BRC	5	175
K971D6BSS	5	175
K971PCR	1	175
K971SAG	1	175
K972ALM	5	229
K972D6ALM	1	229
K978BRC	1	176
K978BSS	1	176
K978PCR	1	176
K978SAG	1	176
K983ALM	5	229
K986ALM	5	229
K989ALM	5	229

Index

LIST NO.	STD PACK	PAGE
K1000-9999		
K1000WHI	1	34
K1030WHI	10	40
K1040KOWHI	10	40
K1040WHI	10	40
K1060D1WHI	10	40
K1060WHI	10	40
K1070D1WHI	10	40
K1070WHI	10	40
K1090WHI	10	46
K1161WHI	10	55
K1163WHI	10	55
K1170WHI	10	55
K1171WHI	10	55
K1172WHI	10	56
K1180WHI	10	55
K1181WHI	10	55
K1186WHI	10	56
K1189WHI	10	56
K1246D1RED	5	37
K1246D1WHI	5	37
K1246WHI	5	37
K1247ALM	5	227
K1247D6ALM	1	227
K1248ALM	1	227
K1248D6ALM	1	227
K1257D1WHI	10	37
K1257WHI	10	37
K1258BRC	1	171
K1258BSS	5	171
K1259BRC	1	171
K1259BSS	5	171
K1400	1	210
K1401M	1	210
K1401S	1	210
K1402M	1	210
K1402S	1	210
K1501WHILV	1	45
K1511WHI	1	45
K1521WHILV	1	45
K1522WHILV	1	45

LIST NO.	STD PACK	PAGE
K1523WHILV	1	45
K1524WHILV	1	45
K1531WHI	1	45
K1532BRC	1	180
K1532BRCLV	1	181
K1532BSS	1	180
K1532BSSLV	1	181
K1532PCR	1	180
K1532PCRLV	1	181
K1532SAG	1	180
K1532SAGLV	1	181
K1532WHI	1	45
K1533BRC	1	180
K1533BSS	1	180
K1533PCR	1	180
K1533SAG	1	180
K1533WHI	1	45
K1534BRC	1	180
K1534BSS	1	180
K1534PCR	1	180
K1534SAG	1	180
K1534WHI	1	45
K1535WHI	1	45
K1536BRCLV	1	181
K1536BSSLV	1	181
K1536PCRLV	1	181
K1536SAGLV	1	181
K1541WHI	1	45
K1551BRC	1	180
K1551BRCLV	1	181
K1551BSS	1	180
K1551BSSLV	1	181
K1551PCR	1	180
K1551PCRLV	1	181
K1551SAG	1	180
K1551SAGLV	1	181
K1552BRC	1	180
K1552BRCLV	1	181
K1552BSS	1	180
K1552BSSLV	1	181
K1552PCR	1	180

LIST NO.	STD PACK	PAGE
K1552PCRLV	1	181
K1552SAG	1	180
K1552SAGLV	1	181
K1561WHI	1	45
K1631WHI	1	45
K1641WHI	1	45
K1661WHI	1	45
K1800WHI	1	36, 171
K1800WHI	5	36, 171
K1816WHI	1	36
K1826WHI	1	36
K1903WHI	3m	324
K1904CHA	1	325
K1904WHI	1	325
K1905WHI	1	325
K1906WHI	1	325
K1908WHI	5	324
K1911WHI*	1	325
K1912WHI*	1	325
K1925WHI	10	330
K1926WHI	10	327
K1932WHI	15m	327
K1935WHI	15m	327
K1936WHI	15m	327
K1944WHI	1	325
K1945WHI	5	324
K1949WHI	1	327
K1957WHI*	1	326
K1958WHI*	1	326
K1962WHI	3m	324
K1963WHI	3m	324
K1972WHI	1	326
K1973WHI	1	326
K1992WHI	1	326
K1992WHI*	1	326
K2000	1	39-40
K2025WHI	5	216
K2031WHI	10	216
K2051WHI	10	54
K2056WHI	5	54
K2061WHI	5	216

LIST NO.	STD PACK	PAGE
K2062WHI	5	216
K2131WHI	5	216
K2132WHI	5	216
K2133WHI	10	216
K2134WHI	10	216
K2140WHI	10	215, 206
K2142WHI	5	215, 206
K2151WHI	10	61, 215
K2152WHI	5	215
K2153WHI	10	215
K2158BRC	1	173
K2158BSS	1	173
K2160WHI	10	61, 215
K2161WHI	5	215
K2172WHI	5	216
K2181WHI	10	215, 206
K2183WHI	5	206, 215
K2183WHI	10	206
K2185WHI	5	215
K2200	10	214
K2202	5	214
K2211ALM	5	206, 211, 217
K2212ALM	5	206, 211, 217
K2213ALM	5	206, 211, 217
K2214ALM	5	206, 211, 217
K2240BRC	1	178
K2240BSS	1	178
K2251WHI	10	38
K2252WHI	5	38
K2271ALM	5	228
K2272ALM	5	228
K2435ALM	1	226
K2446ALM	5	226
K2446D6ALM	1	226
K2448BRC	1	170
K2448BSS	5	170
K2448PCR	1	170
K2448SAG	1	170
K2458BRC	1	169
K2458BSS	5	169
K2458PCR	1	169

LIST NO.	STD PACK	PAGE
K2458SAG	1	169
K2476CEWHI	10	35
K2476D1RED	10	35
K2476D1WHI	10	35
K2476GRA	10	35
K2476WHI	10	35
K2477ALM	5	226
K2477D6ALM	1	226
K2493WHI	10	37
K2647WHI	5	34
K2657D1RED	5	34
K2657GRA	10	34
K2657WHI	10	34
K2737WHI	5	34
K2740WHI	1	37, 212
K2741WHI	1	37, 212
K2746CED1RED	10	35
K2746CEWHI	10	35
K2746D1RED	10	35
K2746D1WHI	10	35
K2746D2WHI	10	35
K2746GRA	10	35
K2746WHI	10	35
K2747D1RED	5	34
K2747D1WHI	5	34
K2747WHI	50	34
K2757D1RED	5	34
K2757D1WHI	10	34
K2757GRA	10	34
K2757WHI	10	34
K2826BRC	1	171
K2826BSS	1	171
K2857ALM	1	230
K2859ALM	1	230
K2871ALM	1	227
K2873ALM	5	227
K2881BRC	1	171
K2881BSS	5	171
K2881PCR	5	171
K2881SAG	1	171
K2883BRC	1	172

LIST NO.	STD PACK	PAGE
K2883BSS	5	172
K2883PCR	5	172
K2883SAG	1	172
K2891WHI	10	37
K2893WHI	10	37
K2943BRC	1	170
K2943BSS	1	170
K2943D5ALM	1	226
K2943D5WHI	1	226
K2943PCR	1	170
K2945ALM	5	226
K2946ALM	5	226
K2946D5ALM	1	226
K2946D6ALM	1	226
K2947BRC	1	170
K2947BSS	5	170
K2947CEBLU	5	173
K2947CEBRC	1	171
K2947CEBSS	5	171
K2947D6BRC	1	170
K2947D6BSS	5	170
K2947PCR	1	170
K2947SAG	1	170
K2948BRC	1	169
K2948BSS	5	169
K2948D6BRC	1	169
K2948D6BSS	5	169
K2948PCR	1	169
K2948SAG	1	169
K2949BRC	1	173
K2949BSS	1	173
K2958BLU	1	173
K2958BRC	1	169
K2958BSS	10	169
K2958PCR	1	169
K2958SAG	1	169
K2977ALM	5	226
K2977D5ALM	1	226
K2977D6ALM	1	226
K3012WHI	10	230
K3041	5	43

Index

LIST NO.	STD PACK	PAGE
K3042WHI	1	228
K3042WHI	10	228
K3045WHI	5	226
K3046WHI	5	226
K3054WHI	10	229
K3062WHI	10	228
K3072WHI	10	229
K3077WHI	10	226
K3086WHI	10	229
K3091WHI	10	229
K3092WHI	10	229
K3131WHI	5	54
K3182WHI	1	231
K3184WHI	1	231
K3191D1WHI	5	54
K3191WHI	5	54
K3192D1WHI	5	54
K3192WHI	5	54
K3212WHI	10	59
K3220WHI	10	59
K3230WHI	10	59
K3232WHI	10	59
K3233WHI	5	59
K3240WHI	10	59
K3242LSF	10	59
K3242WHI	10	59
K3243LSF	5	59
K3243WHI	5	59
K3329BRC	1	182
K3329BSS	5	182
K3329PCR	1	182
K3329SAG	1	182
K3330BRC	1	182
K3330BSS	10	182
K3330PCR	1	182
K3330SAG	1	182
K3369ALM	5	214, 234
K3369WHI	5	234
K3390ALM	5	214, 234
K3390WHI	5	234
K3431BRC	1	186

LIST NO.	STD PACK	PAGE
K3431BSS	10	186
K3431PCR	1	186
K3431SAG	1	186
K3432BRC	1	186
K3432BSS	10	186
K3432PCR	1	186
K3432SAG	1	186
K3433BRC	1	186
K3433BSS	5	186
K3433PCR	1	186
K3433SAG	1	186
K3434BRC	1	187
K3434BSS	5	187
K3434PCR	1	187
K3434SAG	1	187
K3436BRC	1	187
K3436BSS	1	187
K3436PCR	1	187
K3436SAG	1	187
K3438BRC	1	187
K3438BSS	1	187
K3438PCR	1	187
K3438SAG	1	187
K3439BRC	1	188
K3439BSS	1	188
K3439PCR	1	188
K3439SAG	1	188
K3442BRC	1	188
K3442BSS	1	188
K3442PCR	1	188
K3442SAG	1	188
K3448BRC	1	188
K3448BSS	1	188
K3448PCR	1	188
K3448SAG	1	188
K3454BRC	1	188
K3454BSS	1	188
K3454PCR	1	188
K3454SAG	1	188
K3491ALM	10	206, 234
K3491WHI	10	234

LIST NO.	STD PACK	PAGE
K3492ALM	10	206, 234
K3492WHI	10	234
K3493ALM	5	206, 234
K3493WHI	5	234
K3494ALM	5	206, 234
K3494WHI	5	234
K3496ALM	1	206, 234
K3498ALM	1	207, 234
K3499ALM	1	207, 234
K3502ALM	1	207, 234
K3508ALM	1	207, 234
K3514ALM	1	207, 234
K3520WHI	10	52
K3521WHI	10	52
K3522WHI	10	52
K3523WHI	10	52
K3525D1WHI	10	52
K3525WHI	10	52
K3540WHI	10	50
K3550WHI	1	50
K3551WHI	5	50
K3552DABWHI	1	50
K3552WHI	5	50
K3553DABWHI	1	50
K3553WHI	5	50
K3554DABWHI	1	50
K3555WHI	1	50
K3557WHI	1	51
K3560DABWHI	1	51
K3561DABWHI	1	51
K3561WHI	5	51
K3562WHI	5	51
K3563DABWHI	1	51
K3563WHI	5	51
K3564DABWHI	1	51
K3565DABWHI	1	51
K3566DABWHI	1	51
K3580BRC	1	182
K3580BSS	5	182
K3580PCR	1	182
K3580SAG	1	182

LIST NO.	STD PACK	PAGE
K3581BRC	1	182
K3581BSS	5	182
K3581PCR	1	182
K3581SAG	1	182
K3582BRC	1	182
K3582BSS	5	182
K3582PCR	1	182
K3582SAG	1	182
K3585BRC	1	183
K3585BSS	1	183
K3585PCR	1	183
K3585SAG	1	183
K3591ALM	5	229
K3592ALM	5	229
K3593ALM	5	229
K3631GRA	10	52, 206
K3631WHI	10	52, 206
K3632GRA	10	52
K3632WHI	10	52, 206
K3633GRA	10	52, 206
K3633WHI	10	52, 206
K3633WHI/GRA	10	206
K3634GRA	10	52, 206
K3634WHI	10	52, 206
K3636GRA	1	52, 206
K3636WHI	1	52, 206
K3638GRA	1	52
K3638WHI	1	52, 207
K3639WHI	1	52, 207
K3701	10	206
K3702	10	206
K3703	10	206-7
K3704	10	206-7
K3706	10	207
K3708ZIC	10	207
K3716	100	221, 316, 337, 343
K3781ALM	5	230
K3782ALM	5	230
K3786ALM	1	28, 235
K3786WHI	1	28, 235
K3787ALM	1	28, 235

LIST NO.	STD PACK	PAGE
K3787WHI	1	28, 235
K3825WHI	10	46
K3827WHI	10	46
K3828WHI	10	46
K4000WHI	10	119, 157, 205
K4001WHI	10	119, 157, 205
K4030	1	66
K4031	1	66
K4047	1	65
K4058	1	66
K4098	1	66
K4150WHI	10	39
K4152WHI	5	39
K4204	1	62
K4206	1	62
K4208	1	62
K4210	1	62
K4214WHI	10	60
K4220WHI	10	60
K4230WHI	10	60
K4232WHR	10	60
K4233WHR	5	60
K4240WHR	10	60
K4242LSF	10	60
K4242WHR	10	60
K4243LSF	5	60
K4243WHR	5	60
K4499ABSB	1	118, 156
K4499BLK	1	204
K4499BRC*	1	118, 156
K4499BSS*	1	118, 156
K4499DBZB	1	118, 156
K4499LBKB	1	118, 156
K4499LBS*	1	118, 156
K4499LIVW	1	118, 156
K4499PBR*	1	118, 156
K4499POC*	1	118, 156
K4499SAG*	1	118, 156
K4499TCOB	1	118, 156
K4499TIRB*	1	118, 156
K4499WHI	1	118, 156, 204

LIST NO.	STD PACK	PAGE
K4500BLKLV	1	204
K4500BRCLV*	1	118, 156
K4500BSSLV*	1	118, 156
K4500DBZBLV	1	118, 156
K4500LBKBL	1	118, 156
K4500LBSLV*	1	118, 156
K4500LIVWL	1	118, 156
K4500PBRLV*	1	118, 156
K4500POCLV*	1	118, 156
K4500SAGLV*	1	118, 156
K4500TIRBLV*	1	118, 156
K4500WHILV	1	204
K4500WHIWL	1	118, 156
K4501BLKLV	1	204
K4501BRCLV*	1	118, 156
K4501BSSLV*	1	118, 156
K4501DBZBLV	1	118, 156
K4501LBKBL	1	118, 156
K4501LBSLV*	1	118, 156
K4501LIVWL	1	118, 156
K4501PBRLV*	1	118, 156
K4501POCLV*	1	118, 156
K4501SAGLV*	1	118, 156
K4501TCOBLV	1	118, 156
K4501TIRBLV*	1	118, 156
K4501WHILV	1	204
K4501WHIWL	1	118, 156
K4511ABSB	1	118, 156
K4511BLKLV	1	204
K4511BRCLV*	1	118, 156
K4511BSSLV*	1	118, 156
K4511DBZBLV	1	118, 156
K4511LBKBL	1	118, 156
K4511LBSLV*	1	118, 156
K4511LIVWL	1	118, 156
K4511PBRLV*	1	118, 156
K4511POCLV*	1	118, 156
K4511SAGLV*	1	118, 156
K4511TCOBLV	1	118, 156
K4511TIRBLV*	1	118, 156
K4511WHILV	1	204

Index

LIST NO.	STD PACK	PAGE
K5411WHIW	1	118, 156
K4520BLK	10	205
K4520WHI	10	119, 157, 205
K4521BLK	10	119, 157, 205
K4521WHI	10	119, 157, 205
K4671BRC	1	178
K4671BSS	5	178
K4671PCR	1	178
K4671SAG	1	178
K4672BRC	1	179
K4672BSS	1	179
K4672PCR	1	179
K4672SAG	1	179
K4673BRC	1	179
K4673BSS	5	179
K4673PCR	1	179
K4673SAG	1	179
K4710P	1	31
K4761BRC	1	179
K4761BSS	5	179
K4761PCR	1	179
K4761SAG	1	179
K4762BRC	1	179
K4762BSS	5	179
K4762PCR	1	179
K4762SAG	1	179
K4766BRC	1	27
K4766BSS	1	27
K4766PCR	1	27
K4766SAG	1	27
K4767BRC	1	27
K4767BSS	1	27
K4767PCR	1	27
K4767SAG	1	27
K4780WHI	1	44
K4781GRA	10	44
K4781WHI	10	44
K4782GRA	10	44
K4782WHI	10	44
K4783WHI	10	44
K4785GRA	10	44

LIST NO.	STD PACK	PAGE
K4785WHI	10	44
K4786GRA	1	26
K4786WHI	1	26
K4787WHI	10	44
K4788WHI	10	44
K4789GRA	1	26
K4789WHI	1	26
K4817WHI	10	50
K4836AMB	10	117, 155, 203
K4836GRN	10	117, 155, 204
K4836RED	10	117, 155, 203
K4841WHI	5	44
K4842WHI	5	44
K4848BWHI	5	44
K4848PWHI	5	44
K4857WHI	1	39
K4858	10	39, 179, 230
K4859WHI	10	39
K4860BRC	1	179
K4860BSS	1	179
K4860PCR	1	179
K4860SAG	1	179
K4867WHI	10	44
K4868WHI	10	44
K4870D2WHI	10	43
K4870GRA	10	43
K4870WHI	10	43
K4871D2WHI	10	43
K4871GRA	10	43
K4871WHI	10	43
K4872D2WHI	10	43
K4872GRA	10	43
K4872WHI	10	43
K4873D2WHI	10	43
K4873WHI	10	43
K4874D2WHI	5	43
K4874WHI	5	43
K4875D2WHI	10	43
K4875WHI	10	43
K4876WHI	10	43
K4878BWHI	10	43

LIST NO.	STD PACK	PAGE
K4878PWHI	10	43
K4879WHI	5	43
K4880ABSB	1	110, 148
K4880BLK	10	190
K4880BRC*	1	110, 148
K4880BSS*	1	110, 148
K4880DBZB	1	110, 148
K4880GRA	10	190
K4880LBKB	1	110, 148
K4880LBS*	1	110, 148
K4880LIVW	1	110, 148
K4880PBR	1	110, 148
K4880POC*	1	110, 148
K4880SAG*	1	110, 148
K4880TCOB	1	110, 148
K4880TIRB	1	110, 148
K4880WHI	10	110, 148, 190
K4881ABSB	1	110, 149
K4881BLK	10	190
K4881BRC*	1	110, 149
K4881BSS*	1	110, 149
K4881DBZB	1	110, 149
K4881GRA	10	190
K4881LBKB	1	110, 149
K4881LBS*	1	110, 149
K4881LIVW	1	110, 149
K4881PBR	1	110, 149
K4881POC*	1	110, 149
K4881SAG*	1	110, 149
K4881TCOB	1	110, 149
K4881TIRB	1	110, 149
K4881WHI	10	110, 149, 190
K4882ABSB	1	110, 149
K4882BLK	1	190
K4882BRC*	1	110, 149
K4882BSS*	1	110, 149
K4882DBZB	1	110, 149
K4882GRA	10	190
K4882LBKB	1	110, 149
K4882LBS*	1	110, 149
K4882LIVW	1	110, 149

LIST NO.	STD PACK	PAGE
K4882PBR	1	110, 149
K4882POC*	1	110, 149
K4882SAG*	1	110, 149
K4882TCOB	1	110, 149
K4882TIRB	1	110, 149
K4882WHI	10	110, 149, 190
K4885BLK	1	191
K4885BLK	10	190
K4885BRC*	1	111, 149
K4885BSS*	1	111, 149
K4885BWHI	1	111, 149, 191
K4885DBZB	1	111, 149
K4885LBKB	1	111, 149
K4885LBS*	1	111, 149
K4885LIVW	1	111, 149
K4885PBLK	1	112, 150, 191
K4885PBR*	1	111, 149
K4885POC*	1	111, 149
K4885PWHI	10	112, 150, 191
K4885RED	1	111, 149, 190
K4885REDB	1	111, 149, 190
K4885SAG*	1	111, 149
K4885TCOB	1	111, 149
K4885TIRB	1	111, 149
K4885WHI	10	111, 149, 190
K4886BLK	10	119, 157, 205
K4886WHI	10	119, 157, 205
K4889AMB	10	117, 155, 203
K4889GRN	10	117, 155, 203
K4889RED	10	117, 155, 203
K4889REDB	1	117, 155, 203
K4890BLK	10	120, 158, 205
K4890KQBLK	10	120, 158, 205
K4890KOWHI	10	120, 158, 205
K4890WHI	10	120, 158, 205
K4891ABSB	1	112, 150
K4891BLK	10	191
K4891BRC*	1	112, 150
K4891BSS*	1	112, 150
K4891DBZB	1	112, 150
K4891GRA	10	191

LIST NO.	STD PACK	PAGE
K4891LBKB	1	112, 150
K4891LBS*	1	112, 150
K4891LIVW	1	112, 150
K4891PBR*	1	112, 150
K4891POC*	1	112, 150
K4891SAG*	1	112, 150
K4891TCOB	1	112, 150
K4891TIRB	1	112, 150
K4891WHI	10	112, 150, 191
K4892ABSB	1	113, 151
K4892BLK	10	192
K4892BRC*	1	113, 151
K4892BSS*	1	113, 151
K4892DBZB	1	113, 151
K4892LBKB	1	113, 151
K4892LBLK	1	113, 151, 192
K4892LBS*	1	113, 151
K4892LIVW	1	113, 151
K4892LWHI	10	113, 151, 192
K4892PBR*	1	113, 151
K4892POC*	1	113, 151
K4892RED	10	113, 151, 192
K4892REDB	1	192
K4892REDB	10	113, 151, 192
K4892SAG*	1	113, 151
K4892TCOB	1	113, 151
K4892TIRB	1	113, 151
K4892WHI	10	113, 151, 192
K4893ABSB	1	114, 152
K4893BLK	10	193
K4893BRC*	1	114, 152
K4893BSS*	1	114, 152
K4893DBZB	1	114, 152
K4893LBKB	1	114, 152
K4893LBS*	1	114, 152
K4893LIVW	1	114, 152
K4893PBR*	1	114, 152
K4893POC*	1	114, 152
K4893RED	10	114, 152, 193
K4893REDB	10	114, 152, 193
K4893SAG*	1	114, 152

LIST NO.	STD PACK	PAGE
K4893TCOB	1	114, 152
K4893TIRB	1	114, 152
K4893WHI	1	114, 152, 193
K4894BLK	1	116, 154, 202
K4894WHI	10	116, 154, 202
K4896ABSB	1	114, 152
K4896BLK	10	193
K4896BRBLK	1	194
K4896BRC*	1	114, 152
K4896BRWHI	1	194
K4896BSS*	1	114, 152
K4896CHBLK	1	195
K4896CHWHI	1	195
K4896CMBLK	1	201
K4896CMWHI	1	201
K4896DBZB	1	114, 152
K4896DWBLK	1	194
K4896DWWHI	1	194
K4896FFBLK	1	196
K4896FFWHI	1	196
K4896FGBLK	1	195
K4896FGWHI	1	195
K4896FNBLK	1	195
K4896FNWHI	1	195
K4896FZBLK	1	196
K4896FZWHI	1	196
K4896GRA	10	193
K4896HBLK	1	199
K4896HBWHI	1	199
K4896HRBLK	1	198
K4896HRWHI	1	198
K4896HBLK	1	199
K4896IHWHI	1	199
K4896LBKB	1	114, 152
K4896LBS*	1	114, 152
K4896LIVW	1	114, 152
K4896MWBLK	1	198
K4896MWWHI	1	198
K4896NBLK	1	114, 152, 193
K4896NBRBL	1	194
K4896NBRBLK	1	194

Index

LIST NO.	STD PACK	PAGE
K4896NBRWH	1	194
K4896NBRWHI	1	194
K4896NCHBL	1	195
K4896NCHBLK	1	195
K4896NCHWH	1	195
K4896NCHWHI	1	195
K4896NCMBL	1	201
K4896NCMBLK	1	201
K4896NCMWH	1	201
K4896NCMWHI	1	201
K4896NDWBL	1	194
K4896NDWBLK	1	194
K4896NDWWH	1	194
K4896NDWWHI	1	194
K4896NFFBL	1	196
K4896NFFBLK	1	196
K4896NFFWH	1	196
K4896NFFWHI	1	196
K4896NFGBL	1	196
K4896NFGBLK	1	196
K4896NFGWH	1	196
K4896NFGWHI	1	196
K4896NFNBL	1	195
K4896NFNBLK	1	195
K4896NFNWH	1	195
K4896NFNWHI	1	195
K4896NFZBL	1	196
K4896NFZBLK	1	196
K4896NFZWHI	1	196
K4896NGRA	1	193
K4896NHBBL	1	199
K4896NHBBLK	1	199
K4896NHBWH	1	199
K4896NHBWHI	1	199
K4896NHRBL	1	199
K4896NHRBLK	1	199
K4896NHRWH	1	199
K4896NHRWHI	1	199
K4896NIHWH	1	200
K4896NIHWHI	1	200
K4896NMWBL	1	198
K4896NMWBLK	1	198

LIST NO.	STD PACK	PAGE
K4896NMWWH	1	198
K4896NMWWHI	1	198
K4896NOVBL	1	199
K4896NOVBLK	1	199
K4896NOVWH	1	199
K4896NOVWHI	1	199
K4896NPHWH	1	200
K4896NPHWHI	1	200
K4896NTDBL	1	197
K4896NTDBLK	1	197
K4896NTDWH	1	197
K4896NTDWHI	1	197
K4896NWCBL	1	201
K4896NWCBLK	1	201
K4896NWCWH	1	201
K4896NWCWHI	1	201
K4896NWDWHI	1	201
K4896NWDABLK	1	201
K4896NWDWHI	1	201
K4896NWDABLK	1	201
K4896NWDWHI	1	197
K4896NWDBLK	1	197
K4896NWRWHI	1	198
K4896NWRBLK	1	198
K4896NWHI	1	114, 152, 193
K4896NWLBLK	1	200
K4896NWLWHI	1	200
K4896NWMBLK	1	197
K4896NWMWHI	1	197
K4896OVBLK	1	199
K4896OVWHI	1	199
K4896PBR*	1	114, 152
K4896PHBLK	1	200
K4896PHWHI	1	200
K4896POC*	1	114, 152
K4896RED	10	115, 153, 194
K4896REDB	1	194
K4896REDB	10	115, 153, 194
K4896SAG*	1	114, 152
K4896TCOB	1	114, 152
K4896TDBLK	1	197

LIST NO.	STD PACK	PAGE
K4896TDWHI	1	197
K4896TIRB	1	114, 152
K4896WBLK	10	115, 119, 153, 157, 193
K4896WCBLK	1	201
K4896WCWHI	1	201
K4896WDABLK	1	201
K4896WDAWHI	1	201
K4896WDBLK	1	197
K4896WDRBLK	1	198
K4896WDRWHI	1	198
K4896WDWHI	1	197
K4896WHI	1	114, 152, 193
K4896WLBK	1	200
K4896WLWHI	1	200
K4896WMBLK	1	197
K4896WMWHI	1	197
K4896WWHI	10	115, 153, 193
K4898BLK	1	116, 154, 202
K4898ELBLK	1	116, 154, 202
K4898ELWHI	10	116, 154, 202
K4898WHI	10	116, 154, 202
K4899ABSB	1	113, 151
K4899BLK	10	192
K4899BRC*	1	113, 151
K4899BSS*	1	113, 151
K4899DBZB	1	113, 151
K4899LBKB	1	113, 151
K4899LBS*	1	113, 151
K4899LIVW	1	113, 151
K4899PBR*	1	113, 151
K4899POC*	1	113, 151
K4899RED	10	114, 152, 193
K4899REDB	1	193
K4899REDB	10	114, 152, 193
K4899SAG*	1	113, 151
K4899TCOB	1	113, 151
K4899TIRB	1	113, 151
K4899WHI	10	113, 151, 192
K4900ABSB	1	112, 150
K4900BLK	10	191
K4900BRC*	1	112, 150



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K4900BSS*	1	112, 150
K4900LBKB	1	112, 150
K4900LBS*	1	112, 150
K4900LIVW	10	112, 150
K4900PBR*	1	112, 150
K4900POC*	1	112, 150
K4900SAG*	1	112, 150
K4900TCOB	1	112, 150
K4900TIRB	1	112, 150
K4900WHI	10	112, 150, 191
K4910ABSB	1	112, 150
K4910BLK	10	191
K4910BRC*	1	112, 150
K4910BSS*	1	112, 150
K4910LBKB	1	112, 150
K4910LBS*	1	112, 150
K4910LIVW	1	112, 150
K4910PBR*	1	112, 150
K4910POC*	1	112, 150
K4910RED	10	191
K4910REDB	1	112, 150, 191
K4910SAG*	1	112, 150
K4910TIRB	1	112, 150
K4910WHI	10	112, 150, 191
K4915BLK	10	113, 151, 192
K4915RED	10	113, 151, 192
K4915REDB	1	113, 151, 192
K4915WHI	10	113, 151, 192
K4917BLK	1	116, 154, 202
K4917ELWHI	10	116, 154, 202
K4917WHI	10	116, 154, 202
K4918BLK	10	116, 154, 203
K4918WHI	10	116, 154, 203
K4981ABSB	1	110, 149
K4981BLK	10	190
K4981BRC*	1	110, 149
K4981BSS*	1	110, 149
K4981DBZB	1	110, 149
K4981LBKB	1	110, 149
K4981LBS*	1	110, 149
K4981LIVW	1	110, 149

LIST NO.	STD PACK	PAGE
K4981PBR	1	110, 149
K4981POC*	1	110, 149
K4981SAG*	1	110, 149
K4981TCOB	1	110, 149
K4981TIRB	1	110, 149
K4981WHI	10	110, 149, 190
K5001WHI	1	42
K5011WHI	1	42
K5012WHI	1	41
K5015	1	65
K5016	1	65
K5017	1	65
K5030F	1	65
K5030SM	1	65
K5033WHI	1	46
K5040F	1	65
K5040SM	1	65
K5040WHI	1	42
K5041WHI	1	42
K5045WHI	10	42
K5060WHI	1	42
K5061WHI	1	42
K5105GRA	1	41
K5105WHI	1	41
K5106BRC	1	177
K5106BSS	1	177
K5106PCR	1	177
K5106SAG	1	177
K5114BRC	1	178
K5114BSS	1	178
K5114PCR	1	178
K5114SAG	1	178
K5116ALM	1	230
K5205WHI	1	41
K5207WHI	10	41
K5208WHI	10	41
K5212ALM	5	230
K5213BRC	1	177
K5213BSS	1	177
K5215CKWHI	1	41
K5215SHWHI	1	41

LIST NO.	STD PACK	PAGE
K5215WHI	1	41
K5230ALM	1	230
K5230WHI	1	41
K5232ALM	1	230
K5233BRC	1	177
K5233BSS	1	177
K5233D6BRC	1	177
K5233D6BSS	1	177
K5233PCR	1	177
K5233SAG	1	177
K5236BRC	1	177
K5236BSS	1	177
K5236PCR	1	177
K5236SAG	1	177
K5240ALM	1	230
K5242ALM	5	230
K5250BRC	1	177
K5250BSS	1	177
K5250PCR	1	177
K5250SAG	1	177
K5252ALM	1	229
K5261BRC	1	178
K5261BSS	1	178
K5261PCR	1	178
K5261SAG	1	178
K5400WHI	1	214
K5403WHI	10	41
K5412L	1	31
K5417R	1	28
K5420R	1	30
K5421	1	28
K5423D1WHI	10	41
K5423WHI	10	41
K5423WHWHI	10	41
K5427S	1	30
K5431R	1	29
K5432R	1	29
K5433R	1	29
K5436R	1	29
K5437R	1	29
K5511s	1	286

Index

LIST NO.	STD PACK	PAGE
K5545sMAG	10	286
K5563s	5	286
K5565s	5	286
K5567s	5	286
K5568s	5	286
K5590s	1	286
K5593s	1	286
K5597s	5	286
K5599s	5	286
K5604SMAG	1	278
K5604SMET	1	275
K5608SMAG	1	278
K5608SMET	1	275
K5612SMAG	1	278
K5612SMET	1	275
K5616SMAG	1	278
K5616SMET	1	275
K5621SMAG	1	278
K5621SMET	1	275
K5662SMET	1	276
K5666SMET	1	276
K5681SMET	1	276
K5682SMET	1	276
K5683SMET	1	276
K5684SMET	1	276
K5685SMET	1	276
K5686SMET	1	276
K5687SMAG	1	278
K5687SMET	1	276
K5688SMET	1	276
K5689SMET	1	276
K5704SMET	1	275
K5708SMET	1	275
K5712SMET	1	275
K5716SMET	1	275
K5721SMET	1	275
K5744CALU	1	24
K5744CBLK	1	24
K5744CWHI	1	24
K5745BLK	5	49, 127, 165, 233

LIST NO.	STD PACK	PAGE
K5745WHI	5	49, 127, 165, 233
K5746BLK	5	49, 127, 165, 233
K5746SBLK	5	49, 127, 165, 233
K5746SWHI	5	49, 127, 165, 233
K5746WHI	5	49, 127, 165, 233
K5756	1	31
K5776ALU	1	25
K5776BLK	1	25
K5776GLAA	1	25
K5776GLAB	1	25
K5776GLAG	1	25
K5776GLAGA	1	25
K5776WHI	1	25
K5779ALU	1	25
K5779BLK	1	25
K5779GLAA	1	25
K5779GLAB	1	25
K5779GLAG	1	25
K5779GLAGA	1	25
K5779WHI	1	25
K5786ALU	1	24
K5786BLK	1	24
K5786WHI	1	24
K5787WHI	5	49, 127, 165, 233
K5789ALU	1	24
K5789BLK	1	24
K5789WHI	1	24
K5801WHI	5	123, 161, 232
K5804sD1MAG	1	286
K5805BLK	5	48, 96, 126, 164
K5805SBP	5	96
K5805SCW	5	96
K5805SNS	5	96
K5805WHI	5	48, 126, 164
K5806BLK	5	48, 96, 126, 164
K5806SBP	5	96
K5806SCW	5	96
K5806SNS	5	96
K5806WHI	5	48, 126, 164
K5807BLK	5	48, 95, 125, 163

LIST NO.	STD PACK	PAGE
K5807SBP	10	95
K5807SCW	10	95
K5807SNS	10	95
K5807WHI	5	48, 125, 163
K5808sD1MAG	1	286
K5809BLK	5	96
K5809SBP	5	96
K5809SCW	5	96
K5809SNS	5	96
K5812sD1MAG	1	286
K5816sD1MAG	1	286
K5820BLK	5	47, 93, 123, 161, 232, 247
K5820SBP	5	93
K5820SCW	5	93
K5820SNS	5	93
K5820WHI	5	47, 123, 161, 232, 247
K5821BLK	5	47, 93, 123, 161, 232, 247
K5821SBP	5	93
K5821SCW	5	93
K5821sD1MAG	1	286
K5821SNS	5	93
K5821WHI	5	47, 123, 161, 232, 247
K5830BLK	1	46
K5830BLK	10	46, 95, 121, 159, 185, 231
K5830SBP	10	95
K5830SCW	10	95
K5830SNS	10	95
K5830WHI	1	46
K5830WHI	10	121, 159, 185, 231
K5831BLK	10	46, 95, 121, 159, 185, 231
K5831SBP	10	95
K5831SCW	10	95
K5831SNS	10	95
K5831WHI	10	46, 121, 159, 185, 231
K5832BLK	10	46, 95, 121, 159, 185, 231
K5832SBP	10	95
K5832SCW	10	95
K5832SNS	10	95
K5832WHI	10	46, 121, 159, 185, 231



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K5833BLK	10	46, 95, 121, 159, 185, 231
K5833SBP	10	95
K5833SCW	10	95
K5833SNS	10	95
K5833WHI	10	46, 121, 159, 185, 231
K5834BLK	10	46, 121, 159, 185, 231
K5834WHI	10	46, 121, 159, 185, 231
K5837BLK	1	46, 96, 122, 160, 186, 231
K5837SCW	1	96
K5837WHI	1	46, 122, 160, 186, 231
K5844WHI	5	47, 123, 161, 231, 248
K5845BLK	5	47, 123, 161, 231
K5845WHI	5	47, 123, 161, 231
K5846BLK	5	47, 93, 122, 160, 231
K5846SBLK	5	47, 122, 160, 231
K5846SBP	5	93
K5846SCW	5	93
K5846SNS	5	93
K5846SWHI	5	47, 122, 160, 231
K5846WHI	5	47, 122, 160, 231
K5850BLK	5	48, 93, 124, 162
K5850SBP	5	93
K5850SCW	5	93
K5850SNS	5	93
K5850WHI	5	48, 124, 162
K5851BLK	5	48, 94, 124, 162
K5851SBP	5	94
K5851SCW	5	94
K5851SNS	5	94
K5851WHI	5	48, 124, 162
K5852BLK	5	48, 124, 162
K5852DABBLK	5	48, 94, 125, 163
K5852DABSB	5	94
K5852DABSC	5	94
K5852DABSN	5	94
K5852DABWHI	5	48, 125, 163
K5852WHI	5	48, 124, 162
K5853BLK	5	48, 125, 163

LIST NO.	STD PACK	PAGE
K5853DABBLK	5	48, 94, 125, 163
K5853DABSB	5	94
K5853DABSC	5	94
K5853DABSN	5	94
K5853DABWHI	5	48, 125, 163
K5853WHI	5	48, 125, 163
K5854DABBLK	5	48, 94, 125, 163
K5854DABSB	5	94
K5854DABSC	5	94
K5854DABSN	5	94
K5854DABWHI	5	48, 125, 163
K5855BLK	5	48, 94, 124, 162
K5855SBP	5	94
K5855SCW	5	94
K5855SNS	5	94
K5855WHI	5	48, 124, 162
K5864WHI	5	47, 122, 160, 231
K5887BLK	5	47, 93, 122, 160, 231, 248
K5887SBP	5	93
K5887SCW	5	93
K5887SNS	5	93
K5887WHI	5	47, 122, 160, 231, 248
K6060SMET	1	286
K6061SMET	1	286
K6062SMET	1	286
K6102ALM	1	227, 289
K6231ALM	1	227, 289
K6231WHI	1	36, 289
K6233ALM	1	227, 289
K6233WHI	1	36, 289
K6300WHI	1	36, 289
K6301BRC	1	172, 289
K6301BSS	1	172, 289
K6301PCR	1	172, 289
K6301SAG	1	172, 289
K6302ALM	1	227, 289
K6303WHI	1	36, 289
K6304BRC	1	172, 289
K6304BSS	1	172, 289
K6305ALM	1	227

LIST NO.	STD PACK	PAGE
K6550SMET	1	277
K6551SMET	1	277
K6552SMET	1	277
K6725	1	252
K6725YEL	1	252
K6816	5	251
K6816YEL	5	251
K6825	5	251
K6825YEL	5	251
K6840	1	252
K6840YEL	1	252
K6863	1	252
K6863YEL	1	252
K7663SMET	1	277
K7664SMET	1	277
K7665SMET	1	277
K7666SMET	1	277
K7673SMET	1	277
K7678SMET	1	277
K8041s	10	286
K8821ALM	10	206
K8822ALM	5	206
K8822ALM	10	206
K8823ALM	1	206
K8823ALM	5	207
K8825ALM	1	207
K8826ALM	1	207
K8827ALM	1	207
K8891ALM	10	206
K8892ALM	5	206
K8893ALM	5	206
K8895ALM	1	207
K8898ALM	1	207
K8900ALM	1	207
K8901ALM	5	206
K8902ALM	5	206
K9000YEL	1	256
K9001BLU	1	258
K9006BLU	1	258
K9007RED	1	260
K9014BLU	1	258
K9015RED	1	260

Index

LIST NO.	STD PACK	PAGE
K9023YEL	1	256
K9024BLU	1	258
K9025RED	1	260
K9026RED	1	260
K9032YEL	1	256
K9033BLU	1	258
K9036BLU	1	258
K9037RED	1	260
K9044BLU	1	258
K9045RED	1	260
K9053YEL	1	256
K9054BLU	1	258
K9055RED	1	260
K9056RED	1	260
K9063BLU	1	258
K9066RED	1	260
K9071RED	1	260
K9081BLU	1	258
K9082BLU	1	258
K9083BLU	1	258
K9100YEL	1	256
K9101BLU	1	258
K9106BLU	1	258
K9107RED	1	260
K9114BLU	1	258
K9115RED	1	260
K9123YEL	1	256
K9124BLU	1	258
K9125RED	1	260
K9126RED	1	260
K9132YEL	1	256
K9133BLU	1	258
K9136BLU	1	258
K9137RED	1	260
K9143BLU	1	258
K9144RED	1	260
K9155YEL	1	256
K9156BLU	1	258
K9157RED	1	260
K9158RED	1	260
K9165RED	1	260
K9170RED	1	260

LIST NO.	STD PACK	PAGE
K9172BLU	1	258
K9193YEL	1	256
K9194BLU	1	258
K9200YEL	1	256
K9201BLU	1	258
K9206BLU	1	258
K9207RED	1	260
K9214BLU	1	258
K9215RED	1	260
K9232YEL	1	256
K9233BLU	1	258
K9236BLU	1	258
K9237RED	1	260
K9240BLU	1	258
K9241RED	1	260
K9265RED	1	260
K9269RED	1	260
K9274BLU	1	258
K9282RED	1	260
K9292RED	1	260
K9298BLU	1	258
K9306BLU	1	259
K9400YEL	1	256, 432
K9401BLU	1	258, 432
K9407RED	1	260
K9432RED	1	260
K9432YEL	1	256
K9433BLU	1	258
K9437RED	1	260
K9445RED	1	260
K9470RED	1	260
K9472BLU	1	258
K9601BLU	1	259
K9607BLU	1	259
K9633BLU	1	259
K9639BLU	1	259
K9665RED	1	261
K9701BLU	1	259
K9733BLU	1	259
K9761YEL	1	256
K9762BLU	1	258

LIST NO.	STD PACK	PAGE
K9763RED	1	260
K9764RED	1	260
K9765RED	1	260
K9766RED	1	260
K9771BLU	1	259
K9774BLU	1	259
K9802YEL	1	256
K9842RED	1	260
K9852RED	1	260
K9856BLU	1	258
K9857BLU	1	258
K9858RED	1	260
K9859RED	1	260

K10000-K99999

K13024BLU	1	258
K13054BLU	1	258
K13232YEL	1	256
K13300YEL	1	256
K13301BLU	1	258
K13303YEL	1	256
K13309YEL	1	266
K13311RED	1	266
K13312RED	1	266
K13315RED	1	260
K13323YEL	1	256
K13333BLU	1	258
K13342YEL	1	266
K13343BLU	1	266
K13344RED	1	266
K13345RED	1	266
K13346YEL	1	267
K13348BLU	1	267
K13349BLU	1	267
K13351RED	1	267
K13352RED	1	267
K13413YEL	1	266
K13415RED	1	266
K13416RED	1	266
K13434RED	1	266
K13471ABSB	1	141
K13471BRC*	1	141

LIST NO.	STD PACK	PAGE
K13471BSS*	1	141
K13471DBZB	1	141
K13471LBKB	1	141
K13471LBS*	1	141
K13471LIVW	1	141
K13471PBR*	1	141
K13471POC*	1	141
K13471SAG*	1	141
K13471TCOB	1	141
K13471TIRB	1	141
K13471WHIW	1	141
K13472ABSB	1	141
K13472BRC*	1	141
K13472BSS*	1	141
K13472DBZB	1	141
K13472LBKB	1	141
K13472LBS*	1	141
K13472LIVW	1	141
K13472PBR*	1	141
K13472POC*	1	141
K13472SAG*	1	141
K13472TCOB	1	141
K13472TIRB	1	141
K13472WHIW	1	141
K13476ABSB	1	27
K13476BRC*	1	27
K13476BSS*	1	27
K13476DBZB	1	27
K13476LBKB	1	27
K13476LBS*	1	27
K13476LIVW	1	27
K13476PBR*	1	27
K13476POC*	1	27
K13476SAG*	1	27
K13476TCOB	1	27
K13476TIRB	1	27
K13476WHIW	1	27
K13477ABSB	1	27
K13477BRC*	1	27
K13477BSS*	1	27
K13477DBZB	1	27

LIST NO.	STD PACK	PAGE
K13477LBKB	1	27
K13477LBS*	1	27
K13477LIVW	1	27
K13477PBR*	1	27
K13477POC*	1	27
K13477SAG*	1	27
K13477TCOB	1	27
K13477TIRB	1	27
K13477WHIW	1	27
K13607RED	1	261
K13625RED	1	260
K13632YEL	1	257
K13637RED	1	261
K13653YEL	1	257
K13655RED	1	260
K13713YEL	1	267
K13716RED	1	267
K13733BLU	1	267
K14100ABSB	1	134
K14100BRC*	1	134
K14100BSS*	1	134
K14100DBZB	1	134
K14100LBKB	1	134
K14100LBS*	1	134
K14100LIVW	1	134
K14100PBR	1	134
K14100POC*	1	134
K14100SAG*	1	134
K14100TCOB	1	134
K14100TIRB	1	134
K14100WHIW	1	134
K14101	1	212
K14102	1	212
K14114ABSB	1	142
K14114BRC*	1	142
K14114BSS*	1	142
K14114DBZB	1	142
K14114LBKB	1	142
K14114LBS*	1	142
K14114LIVW	1	142
K14114PBR*	1	142

LIST NO.	STD PACK	PAGE
K14114POC*	1	142
K14114SAG*	1	142
K14114TCOB	1	142
K14114TIRB	1	142
K14114WHIW	1	142
K14172ABSB	1	127, 165
K14172BRC*	1	127, 165
K14172BSS*	1	127, 165
K14172DBZB	1	127, 165
K14172LBKB	1	127, 165
K14172LBS*	1	127, 165
K14172LIVW	1	127, 165
K14172PBRB	1	127, 165
K14172POC*	1	127, 165
K14172SAG*	1	127, 165
K14172TCOB	1	127, 165
K14172TIRB	1	127, 165
K14172WHIW	1	127, 165
K14181ABS	1	158
K14181BRC	1	158
K14181BSS	1	158
K14181DBZ	1	158
K14181LBKB	1	158
K14181LBS	1	158
K14181LIV	1	158
K14181PBR	1	158
K14181POC	1	158
K14181SAG	1	158
K14181TCO	1	158
K14181TIR	1	158
K14181WHI	1	158
K14182ABS	1	158
K14182BRC	1	158
K14182BSS	1	158
K14182DBZ	1	158
K14182LBKB	1	158
K14182LBS	1	158
K14182LIV	1	158
K14182PBR	1	158
K14182POC	1	158
K14182SAG	1	158

Index

LIST NO.	STD PACK	PAGE
K14182TCO	1	158
K14182TIR	1	158
K14182WHI	1	158
K14184ABS	1	158
K14184BRC	1	158
K14184BSS	1	158
K14184DBZ	1	158
K14184LBK	1	158
K14184LBS	1	158
K14184LIV	1	158
K14184PBR	1	158
K14184POC	1	158
K14184SAG	1	158
K14184TCO	1	158
K14184TIR	1	158
K14184WHI	1	158
K14200ABSB	1	134
K14200BRC*	1	134
K14200BSS*	1	134
K14200DBZB	1	134
K14200LBKB	1	134
K14200LBS*	1	134
K14200LIVW	1	134
K14200PBR	1	134
K14200POC*	1	134
K14200SAG*	1	134
K14200TCOB	1	134
K14200TIRB	1	134
K14200WHIW	1	134
K14201	1	212
K14202	1	212
K14205ABSB	1	134
K14205BRC*	1	134
K14205BSS*	1	134
K14205DBZB	1	134
K14205LBKB	1	134
K14205LBS*	1	134
K14205LIVW	1	134
K14205PBR	1	134
K14205POC*	1	134
K14205SAG*	1	134

LIST NO.	STD PACK	PAGE
K14205TCOB	1	134
K14205TIRB	1	134
K14205WHIW	1	134
K14206	1	212
K14207	1	212
K14208ABSB	1	135
K14208BRC*	1	135
K14208BSS*	1	135
K14208DBZB	1	135
K14208LBKB	1	135
K14208LBS*	1	135
K14208LIVW	1	135
K14208PBR*	1	135
K14208POC*	1	135
K14208SAG*	1	135
K14208TCOB	1	135
K14208TIRB	1	135
K14208WHIW	1	135
K14209ABSB	1	135
K14209BRC*	1	135
K14209BSS*	1	135
K14209DBZB	1	135
K14209LBKB	1	135
K14209LBS*	1	135
K14209LIVW	1	135
K14209PBR*	1	135
K14209POC*	1	135
K14209SAG*	1	135
K14209TCOB	1	135
K14209TIRB	1	135
K14209WHIW	1	135
K14210ABSB	1	135
K14210BRC*	1	135
K14210BSS*	1	135
K14210DBZB	1	135
K14210LBKB	1	135
K14210LBS*	1	135
K14210LIVW	1	135
K14210PBR*	1	135
K14210POC*	1	135
K14210SAG*	1	135

LIST NO.	STD PACK	PAGE
K14210TCOB	1	135
K14210TIRB	1	135
K14210WHIW	1	135
K14216ABSB	1	135
K14216BRC*	1	135
K14216BSS*	1	135
K14216DBZB	1	135
K14216LBKB	1	135
K14216LBS*	1	135
K14216LIVW	1	135
K14216PBR*	1	135
K14216POC*	1	135
K14216SAG*	1	135
K14216TCOB	1	135
K14216TIRB	1	135
K14216WHIW	1	135
K14217ABSB	1	135
K14217BRC*	1	135
K14217BSS*	1	135
K14217DBZB	1	135
K14217LBKB	1	135
K14217LBS*	1	135
K14217LIVW	1	135
K14217PBR*	1	135
K14217POC*	1	135
K14217SAG*	1	135
K14217TCOB	1	135
K14217TIRB	1	135
K14217WHIW	1	135
K14246ABSB	1	133
K14246BRC*	1	133
K14246BSS*	1	133
K14246DBZB	1	133
K14246LBKB	1	133
K14246LBS*	1	133
K14246LIVW	1	133
K14246PBR*	1	133
K14246POC*	1	133
K14246SAG*	1	133
K14246TCOB	1	133
K14246TIRB	1	133

LIST NO.	STD PACK	PAGE
K14246WHIW	1	133
K14268ABSB	1	132
K14268BRC*	1	132
K14268BSS*	1	132
K14268DBZB	1	132
K14268LBKB	1	132
K14268LBS*	1	132
K14268LIVW	1	132
K14268PBR*	1	132
K14268POC*	1	132
K14268SAG*	1	132
K14268TCOB	1	132
K14268TIRB	1	132
K14268WHIW	1	132
K14301ABS	1	143
K14301BRC	1	143
K14301BSS	1	143
K14301DBZ	1	143
K14301LBK	1	143
K14301LBS	1	143
K14301LIV	1	143
K14301PBR	1	143
K14301POC	1	143
K14301SAG	1	143
K14301TCO	1	143
K14301TIR	1	143
K14301WHI	1	143
K14302ABS	1	143
K14302BRC	1	143
K14302BSS	1	143
K14302DBZ	1	143
K14302LBK	1	143
K14302LBS	1	143
K14302LIV	1	143
K14302PBR	1	143
K14302POC	1	143
K14302SAG	1	143
K14302TCO	1	143
K14302TIR	1	143
K14302WHI	1	143
K14305ABSB	1	142

LIST NO.	STD PACK	PAGE
K14305BRC*	1	142
K14305BSS*	1	142
K14305DBZB	1	142
K14305LBKB	1	142
K14305LBS*	1	142
K14305LIVW	1	142
K14305PBR*	1	142
K14305POC*	1	142
K14305SAG*	1	142
K14305TCOB	1	142
K14305TIRB	1	142
K14305WHIW	1	142
K14329ABS	1	166
K14329BRC	1	166
K14329BSS	1	166
K14329DBZ	1	166
K14329LBK	1	166
K14329LBS	1	166
K14329LIV	1	166
K14329PBR	1	166
K14329POC	1	166
K14329SAG	1	166
K14329TCO	1	166
K14329TIR	1	166
K14329WHI	1	166
K14330ABS	1	166
K14330BRC	1	166
K14330BSS	1	166
K14330DBZ	1	166
K14330LBK	1	166
K14330LBS	1	166
K14330LIV	1	166
K14330PBR	1	166
K14330POC	1	166
K14330SAG	1	166
K14330TCO	1	166
K14330TIR	1	166
K14330WHI	1	166
K14331ABS	1	145
K14331BRC	1	145
K14331BSS	1	145

LIST NO.	STD PACK	PAGE
K14331DBZ	1	145
K14331LBK	1	145
K14331LBS	1	145
K14331LIV	1	145
K14331PBR	1	145
K14331POC	1	145
K14331SAG	1	145
K14331TCO	1	145
K14331TIR	1	145
K14331WHI	1	145
K14332ABS	1	145
K14332BRC	1	145
K14332BSS	1	145
K14332DBZ	1	145
K14332LBK	1	145
K14332LBS	1	145
K14332LIV	1	145
K14332PBR	1	145
K14332POC	1	145
K14332SAG	1	145
K14332TCO	1	145
K14332TIR	1	145
K14333ABS	1	146
K14333BRC	1	146
K14333BSS	1	146
K14333DBZ	1	146
K14333LBK	1	146
K14333LBS	1	146
K14333LIV	1	146
K14333PBR	1	146
K14333POC	1	146
K14333SAG	1	146
K14333TCO	1	146
K14333TIR	1	146
K14333WHI	1	146
K14334ABS	1	146
K14334BRC	1	146
K14334BSS	1	146
K14334DBZ	1	146
K14334LBK	1	146
K14334LBS	1	146

Index

LIST NO.	STD PACK	PAGE
K14334LIV	1	146
K14334PBR	1	146
K14334POC	1	146
K14334SAG	1	146
K14334TCO	1	146
K14334TIR	1	146
K14334WHI	1	146
K14336BSS*	1	142
K14343ABSB	1	132
K14343BRC*	1	132
K14343BSS*	1	132
K14343DBZB	1	132
K14343LBKB	1	132
K14343LBS*	1	132
K14343LIVW	1	132
K14343PBR*	1	132
K14343POC*	1	132
K14343SAG*	1	132
K14343TCOB	1	132
K14343TIRB	1	132
K14343WHIW	1	132
K14345ABSB	1	133
K14345BRC*	1	133
K14345BSS*	1	133
K14345DBZB	1	133
K14345LBKB	1	133
K14345LBS*	1	133
K14345LIVW	1	133
K14345PBR*	1	133
K14345POC*	1	133
K14345SAG*	1	133
K14345TCOB	1	133
K14345TIRB	1	133
K14345WHIW	1	133
K14346ABS	1	146
K14346BRC	1	146
K14346BSS	1	146
K14346DBZ	1	146
K14346LBK	1	146
K14346LBS	1	146
K14346LIV	1	146
K14346PBR	1	146

LIST NO.	STD PACK	PAGE
K14346POC	1	146
K14346SAG	1	146
K14346TCO	1	146
K14346TIR	1	146
K14346WHI	1	146
K14347ABSB	1	132
K14347BRC*	1	132
K14347BSS*	1	132
K14347DBZB	1	132
K14347LBKB	1	132
K14347LBS*	1	132
K14347LIVW	1	132
K14347PBR*	1	132
K14347POC*	1	132
K14347SAG*	1	132
K14347TCOB	1	132
K14347TIRB	1	132
K14347WHIW	1	132
K14348ABS	1	146
K14348BRC	1	146
K14348BSS	1	146
K14348DBZ	1	146
K14348LBK	1	146
K14348LBS	1	146
K14348LIV	1	146
K14348PBR	1	146
K14348POC	1	146
K14348SAG	1	146
K14348TCO	1	146
K14348TIR	1	146
K14348WHI	1	146
K14349ABS	1	146
K14349BRC	1	146
K14349BSS	1	146
K14349DBZ	1	146
K14349LBK	1	146
K14349LBS	1	146
K14349LIV	1	146
K14349PBR	1	146
K14349POC	1	146
K14349SAG	1	146
K14349TCO	1	146

LIST NO.	STD PACK	PAGE
K14349TIR	1	146
K14349WHI	1	146
K14352ABS	1	147
K14352BRC	1	147
K14352BSS	1	147
K14352DBZ	1	147
K14352LBK	1	147
K14352LBS	1	147
K14352LIV	1	147
K14352PBR	1	147
K14352POC	1	147
K14352SAG	1	147
K14352TCO	1	147
K14352TIR	1	147
K14352WHI	1	147
K14354ABS	1	147
K14354BRC	1	147
K14354BSS	1	147
K14354DBZ	1	147
K14354LBK	1	147
K14354LBS	1	147
K14354LIV	1	147
K14354PBR	1	147
K14354POC	1	147
K14354SAG	1	147
K14354TCO	1	147
K14354TIR	1	147
K14354WHI	1	147
K14355ABSB	1	138
K14355BRC*	1	138
K14355BSS*	1	138
K14355DBZB	1	138
K14355LBKB	1	138
K14355LBS*	1	138
K14355LIVW	1	138
K14355PBR	1	138
K14355POC*	1	138
K14355SAG*	1	138
K14355TCOB	1	138
K14355TIRB	1	138
K14355WHIW	1	138
K14357ABSB	1	132

LIST NO.	STD PACK	PAGE
K14357BRC*	1	132
K14357BSS*	1	132
K14357DBZB	1	132
K14357LBKB	1	132
K14357LBS*	1	132
K14357LIVW	1	132
K14357PBR*	1	132
K14357POC*	1	132
K14357SAG*	1	132
K14357TCOB	1	132
K14357TIRB	1	132
K14357WHIW	1	132
K14358ABS	1	147
K14358BRC	1	147
K14358BSS	1	147
K14358DBZ	1	147
K14358LBK	1	147
K14358LBS	1	147
K14358LIV	1	147
K14358PBR	1	147
K14358POC	1	147
K14358SAG	1	147
K14358TCO	1	147
K14358TIR	1	147
K14358WHI	1	147
K14361ABSB	1	142
K14361BRC*	1	142
K14361BSS*	1	142
K14361DBZB	1	142
K14361LBKB	1	142
K14361LBS*	1	142
K14361LIVW	1	142
K14361PBR*	1	142
K14361POC*	1	142
K14361SAG*	1	142
K14361TCOB	1	142
K14361TIRB	1	142
K14361WHIW	1	142
K14371ABSB	1	141
K14371BRC*	1	141
K14371BSS*	1	141
K14371DBZB	1	141

LIST NO.	STD PACK	PAGE
K14371LBKB	1	141
K14371LBS*	1	141
K14371LIVW	1	141
K14371PBR*	1	141
K14371POC*	1	141
K14371SAG*	1	141
K14371TCOB	1	141
K14371TIRB	1	141
K14371WHIW	1	141
K14372ABSB	1	141
K14372BRC*	1	141
K14372BSS*	1	141
K14372DBZB	1	141
K14372LBKB	1	141
K14372LBS*	1	141
K14372LIVW	1	141
K14372PBR*	1	141
K14372POC*	1	141
K14372SAG*	1	141
K14372TCOB	1	141
K14372TIRB	1	141
K14372WHIW	1	141
K14373ABSB	1	141
K14373BRC*	1	141
K14373BSS*	1	141
K14373DBZB	1	141
K14373LBKB	1	141
K14373LBS*	1	141
K14373LIVW	1	141
K14373PBR*	1	141
K14373POC*	1	141
K14373SAG*	1	141
K14373TCOB	1	141
K14373TIRB	1	141
K14373WHIW	1	141
K14378BSS*	1	138
K14379BSS*	1	138
K14380ABSB	1	136
K14380BRC*	1	136
K14380BSS*	1	136
K14380DBZB	1	136
K14380LBKB	1	136

LIST NO.	STD PACK	PAGE
K14380LBS*	1	136
K14380LIVW	1	136
K14380PBR*	1	136
K14380POC*	1	136
K14380SAG*	1	136
K14380TCOB	1	136
K14380TIRB	1	136
K14380WHIW	1	136
K14381ABSB	1	136
K14381BRC*	1	136
K14381BSS*	1	136
K14381DBZB	1	136
K14381LBKB	1	136
K14381LBS*	1	136
K14381LIVW	1	136
K14381PBR*	1	136
K14381POC*	1	136
K14381SAG*	1	136
K14381TCOB	1	136
K14381TIRB	1	136
K14381WHIW	1	136
K14382ABSB	1	133
K14382BRC*	1	133
K14382BSS*	1	133
K14382DBZB	1	133
K14382LBKB*	1	133
K14382LBS*	1	133
K14382LIVW	1	133
K14382PBR*	1	133
K14382POC*	1	133
K14382SAG*	1	133
K14382TCOB	1	133
K14382TIRB	1	133
K14382WHIW	1	133
K14383ABSB	1	133
K14383BRC*	1	133
K14383BSS*	1	133
K14383DBZB	1	133
K14383LBKB	1	133
K14383LBS*	1	133
K14383LIVW	1	133
K14383PBR*	1	133

Index

LIST NO.	STD PACK	PAGE
K14383POC*	1	133
K14383SAG*	1	133
K14383TCOB	1	133
K14383TIRB	1	133
K14383WHIW	1	133
K14401ABS	1	147
K14401BRC	1	147
K14401BSS	1	147
K14401DBZ	1	147
K14401LBK	1	147
K14401LBS	1	147
K14401LIV	1	147
K14401PBR	1	147
K14401POC	1	147
K14401SAG	1	147
K14401TCO	1	147
K14401TIR	1	147
K14401WHI	1	147
K14431ABS	1	144
K14431BRC	1	144
K14431BSS	1	144
K14431DBZ	1	144
K14431LBK	1	144
K14431LBS	1	144
K14431LIV	1	144
K14431PBR	1	144
K14431POC	1	144
K14431SAG	1	144
K14431TCO	1	144
K14431TIR	1	144
K14431WHI	1	144
K14432ABS	1	144
K14432BRC	1	144
K14432BSS	1	144
K14432DBZ	1	144
K14432LBK	1	144
K14432LBS	1	144
K14432LIV	1	144
K14432PBR	1	144
K14432POC	1	144
K14432SAG	1	144
K14432TCO	1	144

LIST NO.	STD PACK	PAGE
K14432TIR	1	144
K14432WHI	1	144
K14433ABS	1	144
K14433BRC	1	144
K14433BSS	1	144
K14433DBZ	1	144
K14433LBK	1	144
K14433LBS	1	144
K14433LIV	1	144
K14433PBR	1	144
K14433POC	1	144
K14433SAG	1	144
K14433TCO	1	144
K14433TIR	1	144
K14433WHI	1	144
K14434ABS	1	144
K14434BRC	1	144
K14434BSS	1	144
K14434DBZ	1	144
K14434LBK	1	144
K14434LBS	1	144
K14434LIV	1	144
K14434PBR	1	144
K14434POC	1	144
K14434SAG	1	144
K14434TCO	1	144
K14434TIR	1	144
K14434WHI	1	144
K14521ABS	1	143
K14521BRC	1	143
K14521BSS	1	143
K14521DBZ	1	143
K14521LBK	1	143
K14521LBS	1	143
K14521LIV	1	143
K14521PBR	1	143
K14521POC	1	143
K14521SAG	1	143
K14521TCO	1	143
K14521TIR	1	143
K14521WHI	1	143
K14522ABS	1	143

LIST NO.	STD PACK	PAGE
K14522BRC	1	143
K14522BSS	1	143
K14522DBZ	1	143
K14522LBK	1	143
K14522LBS	1	143
K14522LIV	1	143
K14522PBR	1	143
K14522POC	1	143
K14522SAG	1	143
K14522TCO	1	143
K14522TIR	1	143
K14522WHI	1	143
K14647ABSB	1	133
K14647BRC*	1	133
K14647BSS*	1	133
K14647DBZB	1	133
K14647LBKB	1	133
K14647LBS*	1	133
K14647LIVW	1	133
K14647PBR*	1	133
K14647POC*	1	133
K14647SAG*	1	133
K14647TCOB	1	133
K14647TIRB	1	133
K14647WHIW	1	133
K14657ABSB	1	132
K14657BRC*	1	132
K14657BSS*	1	132
K14657DBZB	1	132
K14657LBKB	1	132
K14657LBS*	1	132
K14657LIVW	1	132
K14657PBR*	1	132
K14657POC*	1	132
K14657SAG*	1	132
K14657TCOB	1	132
K14657TIRB	1	132
K14657WHIW	1	132
K14701	10	147
K14702	10	147
K14703	10	148
K14704	10	148



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K14706	10	148
K14709ABSB	1	138
K14709BRC*	1	138
K14709BSS*	1	138
K14709DBZB	1	138
K14709LBKB	1	138
K14709LBS*	1	138
K14709LIVW	1	138
K14709PBR	1	138
K14709POC*	1	138
K14709SAG*	1	138
K14709TCOB	1	138
K14709TIRB	1	138
K14709WHIW	1	138
K14710ABSB	1	138
K14710BRC*	1	138
K14710BSS*	1	138
K14710DBZB	1	138
K14710LBKB	1	138
K14710LBS*	1	138
K14710LIVW	1	138
K14710PBR	1	138
K14710POC*	1	138
K14710SAG*	1	138
K14710TCOB	1	138
K14710TIRB	1	138
K14710WHIW	1	138
K14780ABSB	1	136
K14780BRC*	1	136
K14780BSS*	1	136
K14780DBZB	1	136
K14780LBKB	1	136
K14780LBS*	1	136
K14780LIVW	1	136
K14780PBR*	1	136
K14780POC*	1	136
K14780SAG*	1	136
K14780TCOB	1	136
K14780TIRB	1	136
K14780WHIW	1	136
K14781ABSB	1	136
K14781BRC*	1	136

LIST NO.	STD PACK	PAGE
K14781BSS*	1	136
K14781DBZB	1	136
K14781LBKB	1	136
K14781LBS*	1	136
K14781LIVW	1	136
K14781PBR*	1	136
K14781POC*	1	136
K14781SAG*	1	136
K14781TCOB	1	136
K14781TIRB	1	136
K14781WHIW	1	136
K14790ABS	1	137
K14790BRC	1	137
K14790BSS	1	137
K14790DBZ	1	137
K14790LBK	1	137
K14790LBS	1	137
K14790LIV	1	137
K14790PBR	1	137
K14790POC	1	137
K14790SAG	1	137
K14790TCO	1	137
K14790TIR	1	137
K14790WHI	1	137
K14791ABS	1	137
K14791BRC	1	137
K14791BSS	1	137
K14791DBZ	1	137
K14791LBK	1	137
K14791LBS	1	137
K14791LIV	1	137
K14791PBR	1	137
K14791POC	1	137
K14791SAG	1	137
K14791TCO	1	137
K14791TIR	1	137
K14791WHI	1	137
K14801	10	148
K14859ABSB	1	142
K14859BRC*	1	142
K14859BSS*	1	142
K14859DBZB	1	142

LIST NO.	STD PACK	PAGE
K14859LBKB	1	142
K14859LBS*	1	142
K14859LIVW	1	142
K14859PBR*	1	142
K14859POC*	1	142
K14859SAG*	1	142
K14859TCOB	1	142
K14859TIRB	1	142
K14859WHIW	1	142
K14891ABS	1	145
K14891BRC	1	145
K14891BSS	1	145
K14891DBZ	1	145
K14891LBK	1	145
K14891LBS	1	145
K14891LIV	1	145
K14891PBR	1	145
K14891POC	1	145
K14891SAG	1	145
K14891TCO	1	145
K14891TIR	1	145
K14891WHI	1	145
K14892ABS	1	145
K14892BRC	1	145
K14892BSS	1	145
K14892DBZ	1	145
K14892LBK	1	145
K14892LBS	1	145
K14892LIV	1	145
K14892PBR	1	145
K14892POC	1	145
K14892SAG	1	145
K14892TCO	1	145
K14892TIR	1	145
K14892WHI	1	145
K14893ABS	1	145
K14893BRC	1	145
K14893BSS	1	145
K14893DBZ	1	145
K14893LBK	1	145
K14893LBS	1	145

Index

LIST NO.	STD PACK	PAGE
K14893LIV	1	145
K14893PBR	1	145
K14893POC	1	145
K14893SAG	1	145
K14893TCO	1	145
K14893TIR	1	145
K14893WHI	1	145
K14896ABS	1	145
K14896BRC	1	145
K14896BSS	1	145
K14896DBZ	1	145
K14896LBK	1	145
K14896LBS	1	145
K14896LIV	1	145
K14896PBR	1	145
K14896POC	1	145
K14896SAG	1	145
K14896TCO	1	145
K14896TIR	1	145
K14896WHI	1	145
K14931ABSB	1	139
K14931BRC*	1	139
K14931BSS*	1	139
K14931DBZB	1	139
K14931LBKB	1	139
K14931LBS*	1	139
K14931LIVW	1	139
K14931PBR*	1	139
K14931POC*	1	139
K14931SAG*	1	139
K14931TCOB	1	139
K14931TIRB	1	139
K14931WHIW	1	139
K14941ABSB	1	139
K14941BRC*	1	139
K14941BSS*	1	139
K14941DBZB	1	139
K14941LBKB	1	139
K14941LBS*	1	139
K14941LIVW	1	139
K14941PBR*	1	139
K14941POC*	1	139

LIST NO.	STD PACK	PAGE
K14941SAG*	1	139
K14941TCOB	1	139
K14941TIRB	1	139
K14941WHIW	1	139
K14948ABSB	1	140
K14948BRC*	1	140
K14948BSS*	1	140
K14948DBZB	1	140
K14948LBKB	1	140
K14948LBS*	1	140
K14948LIVW	1	140
K14948PBR*	1	140
K14948POC*	1	140
K14948SAG*	1	140
K14948TCOB	1	140
K14948TIRB	1	140
K14948WHIW	1	140
K14958ABSB	1	140
K14958BRC*	1	140
K14958BSS*	1	140
K14958DBZB	1	140
K14958LBKB	1	140
K14958LBS*	1	140
K14958LIVW	1	140
K14958PBR*	1	140
K14958POC*	1	140
K14958SAG*	1	140
K14958TCOB	1	140
K14958TIRB	1	140
K14958WHIW	1	140
K14961ABSB	1	139
K14961BRC*	1	139
K14961BSS*	1	139
K14961DBZB	1	139
K14961LBKB	1	139
K14961LBS*	1	139
K14961LIVW	1	139
K14961PBR*	1	139
K14961POC*	1	139
K14961SAG*	1	139
K14961TCOB	1	139
K14961TIRB	1	139

LIST NO.	STD PACK	PAGE
K14961WHIW	1	139
K14971ABSB	1	139
K14971BRC*	1	139
K14971BSS*	1	139
K14971DBZB	1	139
K14971LBKB	1	139
K14971LBS*	1	139
K14971LIVW	1	139
K14971PBR*	1	139
K14971POC*	1	139
K14971SAG*	1	139
K14971TCOB	1	139
K14971TIRB	1	139
K14971WHIW	1	139
K14978ABSB	1	140
K14978BRC*	1	140
K14978BSS*	1	140
K14978DBZB	1	140
K14978LBKB	1	140
K14978LBS*	1	140
K14978LIVW	1	140
K14978PBR*	1	140
K14978POC*	1	140
K14978SAG*	1	140
K14978TCOB	1	140
K14978TIRB	1	140
K14978WHIW	1	140
K14989ABSB	1	140
K14989BRC*	1	140
K14989BSS*	1	140
K14989DBZB	1	140
K14989LBKB	1	140
K14989LBS*	1	140
K14989LIVW	1	140
K14989PBR*	1	140
K14989POC*	1	140
K14989SAG*	1	140
K14989TCOB	1	140
K14989TIRB	1	140
K14989WHIW	1	140
K23471ABSB	1	106
K23471BRC	1	106

LIST NO.	STD PACK	PAGE
K23471BSS	1	106
K23471DBZB	1	106
K23471LBKB	1	106
K23471LBS	1	106
K23471LIVW	1	106
K23471PBR	1	106
K23471POC	1	106
K23471SAG	1	106
K23471TCOB	1	106
K23471TIRB	1	106
K23471WHIW	1	106
K23472ABSB	1	106
K23472BRC	1	106
K23472BSS	1	106
K23472DBZB	1	106
K23472LBKB	1	106
K23472LBS	1	106
K23472LIVW	1	106
K23472PBR	1	106
K23472POC	1	106
K23472SAG	1	106
K23472TCOB	1	106
K23472TIRB	1	106
K23472WHIW	1	106
K23473ABSB	1	106
K23473BRC	1	106
K23473BSS	1	106
K23473DBZB	1	106
K23473LBKB	1	106
K23473LBS	1	106
K23473LIVW	1	106
K23473PBR	1	106
K23473POC	1	106
K23473SAG	1	106
K23473TCOB	1	106
K23473TIRB	1	106
K23473WHIW	1	106
K23476ABSB	1	26
K23476BRC*	1	26
K23476BSS*	1	26
K23476DBZB	1	26
K23476LBKB	1	26

LIST NO.	STD PACK	PAGE
K23476LBS*	1	26
K23476LIVW	1	26
K23476PBR*	1	26
K23476POC*	1	26
K23476SAG*	1	26
K23476TCOB	1	26
K23476TIRB	1	26
K23476WHIW	1	26
K23477ABSB	1	26
K23477BRC*	1	26
K23477BSS*	1	26
K23477DBZB	1	26
K23477LBKB	1	26
K23477LBS*	1	26
K23477LIVW	1	26
K23477PBR*	1	26
K23477POC*	1	26
K23477SAG*	1	26
K23477TCOB	1	26
K23477TIRB	1	26
K23477WHIW	1	26
K24181ABS	1	120
K24181BRC	1	120
K24181BSS	1	120
K24181DBZ	1	120
K24181LBK	1	120
K24181LBS	1	120
K24181LIV	1	120
K24181PBR	1	120
K24181POC	1	120
K24181SAG	1	120
K24181TCO	1	120
K24181TIR	1	120
K24181WHI	1	120
K24182ABS	1	120
K24182BRC	1	120
K24182BSS	1	120
K24182DBZ	1	120
K24182LBK	1	120
K24182LBS	1	120
K24182LIV	1	120
K24182PBR	1	120

LIST NO.	STD PACK	PAGE
K24182POC	1	120
K24182SAG	1	120
K24182TCO	1	120
K24182TIR	1	120
K24182WHI	1	120
K24184ABS	1	120
K24184BRC	1	120
K24184BSS	1	120
K24184DBZ	1	120
K24184LBK	1	120
K24184LBS	1	120
K24184LIV	1	120
K24184PBR	1	120
K24184POC	1	120
K24184SAG	1	120
K24184TCO	1	120
K24184TIR	1	120
K24184WHI	1	120
K24206ABSB	1	101
K24206BRC	1	101
K24206BSS	1	101
K24206DBZB	1	101
K24206LBKB	1	101
K24206LBS	1	101
K24206LIVW	1	101
K24206PBR	1	101
K24206POC	1	101
K24206SAG	1	101
K24206TCOB	1	101
K24206TIRB	1	101
K24206WHIW	1	101
K24207ABSB	1	101
K24207BRC	1	101
K24207BSS	1	101
K24207DBZB	1	101
K24207LBKB	1	101
K24207LBS	1	101
K24207LIVW	1	101
K24207PBR	1	101
K24207POC	1	101
K24207SAG	1	101

Index

LIST NO.	STD PACK	PAGE
K24207TCOB	1	101
K24207TIRB	1	101
K24207WHIW	1	101
K24208ABSB	1	102
K24208BRC	1	102
K24208BSS	1	102
K24208DBZB	1	102
K24208LBKB	1	102
K24208LBS	1	102
K24208LIVW	1	102
K24208PBR	1	102
K24208POC	1	102
K24208SAG	1	102
K24208TCOB	1	102
K24208TIRB	1	102
K24208WHIW	1	102
K24209ABS	1	102
K24209BRC	1	102
K24209BSS	1	102
K24209DBZ	1	102
K24209LBK	1	102
K24209LBS	1	102
K24209LIV	1	102
K24209PBR	1	102
K24209POC	1	102
K24209SAG	1	102
K24209TCO	1	102
K24209TIR	1	102
K24209WHI	1	102
K24210ABS	1	102
K24210BRC	1	102
K24210BSS	1	102
K24210DBZ	1	102
K24210LBK	1	102
K24210LBS	1	102
K24210LIV	1	102
K24210PBR	1	102
K24210POC	1	102
K24210SAG	1	102
K24210TCO	1	102
K24210TIR	1	102
K24210WHI	1	102

LIST NO.	STD PACK	PAGE
K24301ABS	1	107
K24301BRC	1	107
K24301BSS	1	107
K24301DBZ	1	107
K24301LBK	1	107
K24301LBS	1	107
K24301LIV	1	107
K24301PBR	1	107
K24301POC	1	107
K24301SAG	1	107
K24301TCO	1	107
K24301TIR	1	107
K24301WHI	1	107
K24305ABSB	1	106
K24305BRC	1	106
K24305BSS	1	106
K24305DBZB	1	106
K24305LBKB	1	106
K24305LBS	1	106
K24305LIVW	1	106
K24305PBR	1	106
K24305POC	1	106
K24305SAG	1	106
K24305TCOB	1	106
K24305TIRB	1	106
K24305WHIW	1	106
K24329ABS	1	128
K24329BRC	1	128
K24329BSS	1	128
K24329DBZ	1	128
K24329LBK	1	128
K24329LBS	1	128
K24329LIV	1	128
K24329PBR	1	128
K24329POC	1	128
K24329SAG	1	128
K24329TCO	1	128
K24329TIR	1	128
K24329WHI	1	128
K24330ABS	1	128
K24330BRC	1	128
K24330BSS	1	128

LIST NO.	STD PACK	PAGE
K24330DBZ	1	128
K24330LBK	1	128
K24330LBS	1	128
K24330LIV	1	128
K24330PBR	1	128
K24330POC	1	128
K24330SAG	1	128
K24330TCO	1	128
K24330TIR	1	128
K24330WHI	1	128
K24331ABS	1	108
K24331BRC	1	108
K24331BSS	1	108
K24331DBZ	1	108
K24331LBK	1	108
K24331LBS	1	108
K24331LIV	1	108
K24331PBR	1	108
K24331POC	1	108
K24331SAG	1	108
K24331TCO	1	108
K24331TIR	1	108
K24331WHI	1	108
K24332ABS	1	108
K24332BRC	1	108
K24332BSS	1	108
K24332DBZ	1	108
K24332LBK	1	108
K24332LBS	1	108
K24332LIV	1	108
K24332PBR	1	108
K24332POC	1	108
K24332SAG	1	108
K24332TCO	1	108
K24332TIR	1	108
K24332WHI	1	108
K24333ABS	1	109
K24333BRC	1	109
K24333BSS	1	109
K24333DBZ	1	109
K24333LBK	1	109
K24333LBS	1	109



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K24333LIV	1	109
K24333PBR	1	109
K24333POC	1	109
K24333SAG	1	109
K24333TCO	1	109
K24333TIR	1	109
K24333WHI	1	109
K24334ABS	1	109
K24334BRC	1	109
K24334BSS	1	109
K24334DBZ	1	109
K24334LBK	1	109
K24334LBS	1	109
K24334LIV	1	109
K24334PBR	1	109
K24334POC	1	109
K24334SAG	1	109
K24334TCO	1	109
K24334TIR	1	109
K24334WHI	1	109
K24336ABSB	1	107
K24336BRC	1	107
K24336BSS	1	107
K24336DBZB	1	107
K24336LBKB	1	107
K24336LBS	1	107
K24336LIVW	1	107
K24336PBR	1	107
K24336POC	1	107
K24336SAG	1	107
K24336TCOB	1	107
K24336TIRB	1	107
K24336WHIW	1	107
K24343ABSB	1	100
K24343BRC	1	100
K24343BSS	1	100
K24343DBZB	1	100
K24343LBKB	1	100
K24343LBS	1	100
K24343LIVW	1	100
K24343PBR	1	100
K24343POC	1	100

LIST NO.	STD PACK	PAGE
K24343SAG	1	100
K24343TCOB	1	100
K24343TIRB	1	100
K24343WHIW	1	100
K24346ABS	1	109
K24346BRC	1	109
K24346BSS	1	109
K24346DBZ	1	109
K24346LBK	1	109
K24346LBS	1	109
K24346LIV	1	109
K24346PBR	1	109
K24346POC	1	109
K24346SAG	1	109
K24346TCO	1	109
K24346TIR	1	109
K24346WHI	1	109
K24347ABSB	1	100
K24347BRC	1	100
K24347BSS	1	100
K24347DBZB	1	100
K24347LBKB	1	100
K24347LBS	1	100
K24347LIVW	1	100
K24347PBR	1	100
K24347POC	1	100
K24347SAG	1	100
K24347TCOB	1	100
K24347TIRB	1	100
K24347WHIW	1	100
K24348ABS	1	109
K24348BRC	1	109
K24348BSS	1	109
K24348DBZ	1	109
K24348LBK	1	109
K24348LBS	1	109
K24348LIV	1	109
K24348PBR	1	109
K24348POC	1	109
K24348SAG	1	109
K24348TCO	1	109
K24348TIR	1	109

LIST NO.	STD PACK	PAGE
K24348WHI	1	109
K24357ABSB	1	100
K24357BRC	1	100
K24357BSS	1	100
K24357DBZB	1	100
K24357LBKB	1	100
K24357LBS	1	100
K24357LIVW	1	100
K24357PBR	1	100
K24357POC	1	100
K24357SAG	1	100
K24357TCOB	1	100
K24357TIRB	1	100
K24357WHIW	1	100
K24371ABSB	1	105
K24371BRC	1	105
K24371BSS	1	105
K24371DBZB	1	105
K24371LBKB	1	105
K24371LBS	1	105
K24371LIVW	1	105
K24371PBR	1	105
K24371POC	1	105
K24371SAG	1	105
K24371TCOB	1	105
K24371TIRB	1	105
K24371WHIW	1	105
K24372ABSB	1	105
K24372BRC	1	105
K24372BSS	1	105
K24372DBZB	1	105
K24372LBKB	1	105
K24372LBS	1	105
K24372LIVW	1	105
K24372PBR	1	105
K24372POC	1	105
K24372SAG	1	105
K24372TCOB	1	105
K24372TIRB	1	105
K24372WHIW	1	105
K24373ABSB	1	105
K24373BRC	1	105

Index

LIST NO.	STD PACK	PAGE
K24373BSS	1	105
K24373DBZB	1	105
K24373LBKB	1	105
K24373LBS	1	105
K24373LIVW	1	105
K24373PBR	1	105
K24373POC	1	105
K24373SAG	1	105
K24373TCOB	1	105
K24373TIRB	1	105
K24373WHIW	1	105
K24381ABSB	1	103
K24381BRC	1	103
K24381BSS	1	103
K24381DBZB	1	103
K24381LBKB	1	103
K24381LBS	1	103
K24381LIVW	1	103
K24381PBR	1	103
K24381POC	1	103
K24381SAG	1	103
K24381TCOB	1	103
K24381TIRB	1	103
K24381WHIW	1	103
K24382ABSB	1	101
K24382BRC	1	101
K24382BSS	1	101
K24382DBZB	1	101
K24382LBKB	1	101
K24382LBS	1	101
K24382LIVW	1	101
K24382PBR	1	101
K24382POC	1	101
K24382SAG	1	101
K24382TCOB	1	101
K24382TIRB	1	101
K24382WHIW	1	101
K24383ABSB	1	101
K24383BRC	1	101
K24383BSS	1	101
K24383DBZB	1	101
K24383LBKB	1	101

LIST NO.	STD PACK	PAGE
K24383LBS	1	101
K24383LIVW	1	101
K24383PBR	1	101
K24383POC	1	101
K24383SAG	1	101
K24383TCOB	1	101
K24383TIRB	1	101
K24383WHIW	1	101
K24521ABS	1	108
K24521BRC	1	108
K24521BSS	1	108
K24521DBZ	1	108
K24521LBK	1	108
K24521LBS	1	108
K24521LIV	1	108
K24521PBR	1	108
K24521POC	1	108
K24521SAG	1	108
K24521TCO	1	108
K24521TIR	1	108
K24521WHI	1	108
K24522ABS	1	108
K24522BRC	1	108
K24522BSS	1	108
K24522DBZ	1	108
K24522LBK	1	108
K24522LBS	1	108
K24522LIV	1	108
K24522PBR	1	108
K24522POC	1	108
K24522SAG	1	108
K24522TCO	1	108
K24522TIR	1	108
K24522WHI	1	108
K24647ABSB	1	100
K24647BRC	1	100
K24647BSS	1	100
K24647DBZB	1	100
K24647LBKB	1	100
K24647LBS	1	100
K24647LIVW	1	100
K24647PBR	1	100

LIST NO.	STD PACK	PAGE
K24647POC	1	100
K24647SAG	1	100
K24647TCOB	1	100
K24647TIRB	1	100
K24647WHIW	1	100
K24657ABSB	1	100
K24657BRC	1	100
K24657BSS	1	100
K24657DBZB	1	100
K24657LBKB	1	100
K24657LBS	1	100
K24657LIVW	1	100
K24657PBR	1	100
K24657POC	1	100
K24657SAG	1	100
K24657TCOB	1	100
K24657TIRB	1	100
K24657WHIW	1	100
K24709ABSB	1	103
K24709BRC	1	103
K24709BSS	1	103
K24709DBZB	1	103
K24709LBKB	1	103
K24709LBS	1	103
K24709LIVW	1	103
K24709PBR	1	103
K24709POC	1	103
K24709SAG	1	103
K24709TCOB	1	103
K24709TIRB	1	103
K24709WHIW	1	103
K24780ABSB	1	103
K24780BRC	1	103
K24780BSS	1	103
K24780DBZB	1	103
K24780LBKB	1	103
K24780LBS	1	103
K24780LIVW	1	103
K24780PBR	1	103
K24780POC	1	103
K24780SAG	1	103
K24780TCOB	1	103



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K24780TIRB	1	103
K24780WHIW	1	103
K24781ABSB	1	103
K24781BRC	1	103
K24781BSS	1	103
K24781DBZB	1	103
K24781LBKB	1	103
K24781LBS	1	103
K24781LIVW	1	103
K24781PBR	1	103
K24781POC	1	103
K24781SAG	1	103
K24781TCOB	1	103
K24781TIRB	1	103
K24781WHIW	1	103
K24859ABSB	1	107
K24859BRC	1	107
K24859BSS	1	107
K24859DBZB	1	107
K24859LBKB	1	107
K24859LBS	1	107
K24859LIVW	1	107
K24859PBR	1	107
K24859POC	1	107
K24859SAG	1	107
K24859TCOB	1	107
K24859TIRB	1	107
K24859WHIW	1	107
K24941ABSB	1	104
K24941BRC	1	104
K24941BSS	1	104
K24941DBZB	1	104
K24941LBKB	1	104
K24941LBS	1	104
K24941LIVW	1	104
K24941PBR	1	104
K24941POC	1	104
K24941SAG	1	104
K24941TCOB	1	104
K24941TIRB	1	104
K24941WHIW	1	104
K24958ABSB	1	104

LIST NO.	STD PACK	PAGE
K24958BRC	1	104
K24958BSS	1	104
K24958DBZB	1	104
K24958LBKB	1	104
K24958LBS	1	104
K24958LIVW	1	104
K24958PBR	1	104
K24958POC	1	104
K24958SAG	1	104
K24958TCOB	1	104
K24958TIRB	1	104
K24958WHIW	1	104
K24961ABSB	1	104
K24961BRC	1	104
K24961BSS	1	104
K24961DBZB	1	104
K24961LBKB	1	104
K24961LBS	1	104
K24961LIVW	1	104
K24961PBR	1	104
K24961POC	1	104
K24961SAG	1	104
K24961TCOB	1	104
K24961TIRB	1	104
K24961WHIW	1	104
K24971ABSB	1	104
K24971BRC	1	104
K24971BSS	1	104
K24971DBZB	1	104
K24971LBKB	1	104
K24971LBS	1	104
K24971LIVW	1	104
K24971PBR	1	104
K24971POC	1	104
K24971SAG	1	104
K24971TCOB	1	104
K24971TIRB	1	104
K24971WHIW	1	104
K24978ABSB	1	105
K24978BRC	1	105
K24978BSS	1	105
K24978DBZB	1	105

LIST NO.	STD PACK	PAGE
K24978LBKB	1	105
K24978LBS	1	105
K24978LIVW	1	105
K24978PBR	1	105
K24978POC	1	105
K24978SAG	1	105
K24978TCOB	1	105
K24978TIRB	1	105
K24978WHIW	1	105
K33885DNDGIW	1	92
K33885DNDGPO	1	92
K33885DNDGPJ	1	92
K33885DNDGPS	1	92
K33885DNDMBB	1	92
K33885DNDMBS	1	92
K33885DNDMCI	1	92
K33885DNDMSP	1	92
K33885DNDMST	1	92
K33885DNDNBO	1	92
K33885DNDNCH	1	92
K33885DNDNOH	1	92
K33885DNDNDW	1	92
K33885DNDNBP	1	92
K33885DNDSCW	1	92
K33885DNDSNS	1	92
K33900DNDGIW	1	92
K33900DNDGPO	1	92
K33900DNDGPJ	1	92
K33900DNDGPS	1	92
K33900DNDMBB	1	92
K33900DNDMBS	1	92
K33900DNDMCI	1	92
K33900DNDMST	1	92
K33900DNDMSP	1	92
K33900DNDNBO	1	92
K33900DNDNCH	1	92
K33900DNDNDH	1	92
K33900DNDNDW	1	92
K33900DNDNBP	1	92
K33900DNDSCW	1	92
K33900DNDSNS	1	92
K34100GIW	1	78

Index

LIST NO.	STD PACK	PAGE
K34100GPJ	1	78
K34100GPO	1	78
K34100GPS	1	78
K34100MBB	1	78
K34100MBS	1	78
K34100MCI	1	78
K34100MSP	1	78
K34100MST	1	78
K34100NBO	1	78
K34100NCH	1	78
K34100NDH	1	78
K34100NDW	1	78
K34100SBP	1	78
K34100SCW	1	78
K34100SNS	1	78
K34101GIW	1	79
K34101GPJ	1	79
K34101GPO	1	79
K34101GPS	1	79
K34101MBB	1	79
K34101MBS	1	79
K34101MCI	1	79
K34101MSP	1	79
K34101MST	1	79
K34101NBO	1	79
K34101NCH	1	79
K34101NDH	1	79
K34101NDW	1	79
K34101SBP	1	79
K34101SCW	1	79
K34101SNS	1	79
K34102GIW	1	79
K34102GPJ	1	79
K34102GPO	1	79
K34102GPS	1	79
K34102MBB	1	79
K34102MBS	1	79
K34102MCI	1	79
K34102MSP	1	79
K34102MST	1	79
K34102NBO	1	79
K34102NCH	1	79

LIST NO.	STD PACK	PAGE
K34102NDH	1	79
K34102NDW	1	79
K34102SBP	1	79
K34102SCW	1	79
K34102SNS	1	79
K34103GIW	1	79
K34103GPJ	1	79
K34103GPO	1	79
K34103GPS	1	79
K34103MBB	1	79
K34103MBS	1	79
K34103MCI	1	79
K34103MSP	1	79
K34103MST	1	79
K34103NBO	1	79
K34103NCH	1	79
K34103NDH	1	79
K34103NDW	1	79
K34103SBP	1	79
K34103SCW	1	79
K34103SNS	1	79
K34104GIW	1	79
K34104GPJ	1	79
K34104GPO	1	79
K34104GPS	1	79
K34104MBB	1	79
K34104MBS	1	79
K34104MCI	1	79
K34104MSP	1	79
K34104MST	1	79
K34104NBO	1	79
K34104NCH	1	79
K34104NDH	1	79
K34104NDW	1	79
K34104SBP	1	79
K34104SCW	1	79
K34104SNS	1	79
K34105GIW	1	80
K34105GPJ	1	80
K34105GPO	1	80
K34105GPS	1	80
K34105MBB	1	80

LIST NO.	STD PACK	PAGE
K34105MBS	1	80
K34105MCI	1	80
K34105MSP	1	80
K34105MST	1	80
K34105NBO	1	80
K34105NCH	1	80
K34105NDH	1	80
K34105NDW	1	80
K34105SBP	1	80
K34105SCW	1	80
K34105SNS	1	80
K34206GIW	1	74
K34206GPJ	1	74
K34206GPO	1	74
K34206GPS	1	74
K34206MBB	1	74
K34206MBS	1	74
K34206MCI	1	74
K34206MSP	1	74
K34206MST	1	74
K34206NBO	1	74
K34206NCH	1	74
K34206NDH	1	74
K34206NDW	1	74
K34206SBP	1	74
K34206SCW	1	74
K34206SNS	1	74
K34207GIW	1	74
K34207GPJ	1	74
K34207GPO	1	74
K34207GPS	1	74
K34207MBB	1	74
K34207MBS	1	74
K34207MCI	1	74
K34207MSP	1	74
K34207MST	1	74
K34207NBO	1	74
K34207NCH	1	74
K34207NDH	1	74
K34207NDW	1	74
K34207SBP	1	74
K34207SCW	1	74

LIST NO.	STD PACK	PAGE
K34207SNS	1	74
K34208GIW	1	74
K34208GPJ	1	74
K34208GPO	1	74
K34208GPS	1	74
K34208MBB	1	74
K34208MBS	1	74
K34208MCI	1	74
K34208MSP	1	74
K34208MST	1	74
K34208NBO	1	74
K34208NCH	1	74
K34208NDH	1	74
K34208NDW	1	74
K34208SBP	1	74
K34208SCW	1	74
K34208SNS	1	74
K34209GIW	1	75
K34209GPJ	1	75
K34209GPO	1	75
K34209GPS	1	75
K34209MBB	1	75
K34209MBS	1	75
K34209MCI	1	75
K34209MSP	1	75
K34209MST	1	75
K34209NBO	1	75
K34209NCH	1	75
K34209NDH	1	75
K34209NDW	1	75
K34209SBP	1	75
K34209SCW	1	75
K34209SNS	1	75
K34210GIW	1	75
K34210GPJ	1	75
K34210GPO	1	75
K34210GPS	1	75
K34210MBB	1	75
K34210MBS	1	75
K34210MCI	1	75
K34210MSP	1	75
K34210MST	1	75

LIST NO.	STD PACK	PAGE
K34210NBO	1	75
K34210NCH	1	75
K34210NDH	1	75
K34210NDW	1	75
K34210SBP	1	75
K34210SCW	1	75
K34210SNS	1	75
K34301GIW	1	80
K34301GPJ	1	80
K34301GPO	1	80
K34301GPS	1	80
K34301MBB	1	80
K34301MBS	1	80
K34301MCI	1	80
K34301MSP	1	80
K34301MST	1	80
K34301NBO	1	80
K34301NCH	1	80
K34301NDH	1	80
K34301NDW	1	80
K34301SBP	1	80
K34301SCW	1	80
K34301SNS	1	80
K34305GIW	1	76
K34305GPJ	1	76
K34305GPO	1	76
K34305GPS	1	76
K34305MBB	1	76
K34305MBS	1	76
K34305MCI	1	76
K34305MSP	1	76
K34305MST	1	76
K34305NBO	1	76
K34305NCH	1	76
K34305NDH	1	76
K34305NDW	1	76
K34305SBP	1	76
K34305SCW	1	76
K34305SNS	1	76
K34329GIW	1	97
K34329GPJ	1	97
K34329GPO	1	97

LIST NO.	STD PACK	PAGE
K34329GPS	1	97
K34329MBB	1	97
K34329MBS	1	97
K34329MCI	1	97
K34329MSP	1	97
K34329MST	1	97
K34329NBO	1	97
K34329NCH	1	97
K34329NDH	1	97
K34329NDW	1	97
K34329SBP	1	97
K34329SCW	1	97
K34329SNS	1	97
K34330GIW	1	97
K34330GPJ	1	97
K34330GPO	1	97
K34330GPS	1	97
K34330MBB	1	97
K34330MBS	1	97
K34330MCI	1	97
K34330MSP	1	97
K34330MST	1	97
K34330NBO	1	97
K34330NCH	1	97
K34330NDH	1	97
K34330NDW	1	97
K34330SBP	1	97
K34330SCW	1	97
K34330SNS	1	97
K34337CKGIW	1	77
K34337CKGPJ	1	77
K34337CKGPO	1	77
K34337CKGPS	1	77
K34337CKMBB	1	77
K34337CKMBS	1	77
K34337CKMCI	1	77
K34337CKMSP	1	77
K34337CKMST	1	77
K34337CKNBO	1	77
K34337CKNCH	1	77
K34337CKNDH	1	77
K34337CKNDW	1	77

Index

LIST NO.	STD PACK	PAGE
K34337CKSBP	1	77
K34337CKSCW	1	77
K34337CKSNS	1	77
K34337GIW	1	77
K34337GPJ	1	77
K34337GPO	1	77
K34337GPS	1	77
K34337MBB	1	77
K34337MBS	1	77
K34337MCI	1	77
K34337MSP	1	77
K34337MST	1	77
K34337NBO	1	77
K34337NCH	1	77
K34337NCKGI	1	77
K34337NCKGP	1	77
K34337NCKMB	1	77
K34337NCKMC	1	77
K34337NCKMS	1	77
K34337NCKNB	1	77
K34337NCKNC	1	77
K34337NCKND	1	77
K34337NCKSB	1	77
K34337NCKSC	1	77
K34337NCKSN	1	77
K34337NDH	1	77
K34337NDW	1	77
K34337NGIW	1	77
K34337NGPJ	1	77
K34337NGPO	1	77
K34337NGPS	1	77
K34337NMBS	1	77
K34337NMCI	1	77
K34337NMSP	1	77
K34337NMST	1	77
K34337NNBO	1	77
K34337NNCH	1	77
K34337NNDH	1	77
K34337NNDW	1	77
K34337NSBP	1	77
K34337NSCW	1	77

LIST NO.	STD PACK	PAGE
K34337SNS	1	77
K34337SBP	1	77
K34337SCW	1	77
K34337SNS	1	77
K34343GIW	1	73
K34343GPJ	1	73
K34343GPO	1	73
K34343GPS	1	73
K34343MBB	1	73
K34343MBS	1	73
K34343MCI	1	73
K34343MSP	1	73
K34343MST	1	73
K34343NBO	1	73
K34343NCH	1	73
K34343NDH	1	73
K34343NDW	1	73
K34343SBP	1	73
K34343SCW	1	73
K34343SNS	1	73
K34347GIW	1	72
K34347GPJ	1	72
K34347GPO	1	72
K34347GPS	1	72
K34347MBB	1	72
K34347MBS	1	72
K34347MCI	1	72
K34347MSP	1	72
K34347MST	1	72
K34347NBO	1	72
K34347NCH	1	72
K34347NDH	1	72
K34347NDW	1	72
K34347NGIW	1	72
K34347NGPJ	1	72
K34347NGPO	1	72
K34347NGPS	1	72
K34347NMBS	1	72
K34347NMCI	1	72
K34347NMSP	1	72
K34347NMST	1	72

LIST NO.	STD PACK	PAGE
K34347NNBO	1	72
K34347NNCH	1	72
K34347NNDH	1	72
K34347NNDW	1	72
K34347NSBP	1	72
K34347NSCW	1	72
K34347SNS	1	72
K34347SBP	1	72
K34347SCW	1	72
K34347SNS	1	72
K34357GIW	1	72
K34357GPJ	1	72
K34357GPO	1	72
K34357GPS	1	72
K34357MBB	1	72
K34357MBS	1	72
K34357MCI	1	72
K34357MSP	1	72
K34357MST	1	72
K34357NBO	1	72
K34357NCH	1	72
K34357NDH	1	72
K34357NDW	1	72
K34357NGIW	1	72
K34357NGPJ	1	72
K34357NGPO	1	72
K34357NGPS	1	72
K34357NMBS	1	72
K34357NMCI	1	72
K34357NMSP	1	72
K34357NMST	1	72
K34357NNBO	1	72
K34357NNCH	1	72
K34357NNDH	1	72
K34357NNDW	1	72
K34357NSBP	1	72
K34357NSCW	1	72
K34357SNS	1	72
K34357SBP	1	72
K34357SCW	1	72
K34357SNS	1	72



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K34370GIW	1	78
K34370GPJ	1	78
K34370GPO	1	78
K34370GPS	1	78
K34370MBB	1	78
K34370MBS	1	78
K34370MCI	1	78
K34370MSP	1	78
K34370MST	1	78
K34370NBO	1	78
K34370NCH	1	78
K34370NDH	1	78
K34370NDW	1	78
K34370SBP	1	78
K34370SCW	1	78
K34370SNS	1	78
K34371GIW	1	78
K34371GPJ	1	78
K34371GPO	1	78
K34371GPS	1	78
K34371MBB	1	78
K34371MBS	1	78
K34371MCI	1	78
K34371MSP	1	78
K34371MST	1	78
K34371NBO	1	78
K34371NCH	1	78
K34371NDH	1	78
K34371NDW	1	78
K34371SBP	1	78
K34371SCW	1	78
K34371SNS	1	78
K34372GIW	1	78
K34372GPJ	1	78
K34372GPO	1	78
K34372GPS	1	78
K34372MBB	1	78
K34372MBS	1	78
K34372MCI	1	78
K34372MSP	1	78
K34372MST	1	78
K34372NBO	1	78

LIST NO.	STD PACK	PAGE
K34372NCH	1	78
K34372NDH	1	78
K34372NDW	1	78
K34372SBP	1	78
K34372SCW	1	78
K34372SNS	1	78
K34373GIW	1	92
K34373GPJ	1	92
K34373GPO	1	92
K34373GPS	1	92
K34373MBB	1	92
K34373MBS	1	92
K34373MCI	1	92
K34373MSP	1	92
K34373MST	1	92
K34373NBO	1	92
K34373NCH	1	92
K34373NDH	1	92
K34373NDW	1	92
K34373SBP	1	92
K34373SCW	1	92
K34373SNS	1	92
K34382GIW	1	73
K34382GPJ	1	73
K34382GPO	1	73
K34382GPS	1	73
K34382MBS	1	73
K34382MCI	1	73
K34382MSP	1	73
K34382MST	1	73
K34382NBO	1	73
K34382NCH	1	73
K34382NDH	1	73
K34382NDW	1	73
K34382SBP	1	73
K34382SCW	1	73
K34382SNS	1	73
K34499GIW	1	80
K34499GPJ	1	80
K34499GPO	1	80
K34499GPS	1	80
K34499MBB	1	80

LIST NO.	STD PACK	PAGE
K34499MBS	1	80
K34499MCI	1	80
K34499MSP	1	80
K34499MST	1	80
K34499NBO	1	80
K34499NCH	1	80
K34499NDH	1	80
K34499NDW	1	80
K34499SBP	1	80
K34499SCW	1	80
K34499SNS	1	80
K34522GIW	1	80
K34522GPJ	1	80
K34522GPO	1	80
K34522GPS	1	80
K34522MBB	1	80
K34522MBS	1	80
K34522MCI	1	80
K34522MSP	1	80
K34522MST	1	80
K34522NBO	1	80
K34522NCH	1	80
K34522NDH	1	80
K34522NDW	1	80
K34522SBP	1	80
K34522SCW	1	80
K34522SNS	1	80
K34547GIW	1	72
K34547GPJ	1	72
K34547GPO	1	72
K34547GPS	1	72
K34547MBB	1	72
K34547MBS	1	72
K34547MCI	1	72
K34547MSP	1	72
K34547MST	1	72
K34547NBO	1	72
K34547NCH	1	72
K34547NDH	1	72
K34547NDW	1	72
K34547NGIW	1	73
K34547NGPJ	1	73

Index

LIST NO.	STD PACK	PAGE
K34547NGPO	1	73
K34547NGPS	1	73
K34547NMBB	1	73
K34547NMBS	1	73
K34547NMCI	1	73
K34547NMSP	1	73
K34547NMST	1	73
K34547NNBO	1	73
K34547NNCH	1	73
K34547NNDH	1	73
K34547NNDW	1	73
K34547NSBP	1	73
K34547NSCW	1	73
K34547NSNS	1	73
K34547SBP	1	72
K34547SCW	1	72
K34547SNS	1	72
K34709GIW	1	75
K34709GPJ	1	75
K34709GPO	1	75
K34709GPS	1	75
K34709MBB	1	75
K34709MBS	1	75
K34709MCI	1	75
K34709MSP	1	75
K34709MST	1	75
K34709NBO	1	75
K34709NCH	1	75
K34709NDH	1	75
K34709NDW	1	75
K34709SBP	1	75
K34709SCW	1	75
K34709SNS	1	75
K34780GIW	1	73
K34780GPJ	1	73
K34780GPO	1	73
K34780GPS	1	73
K34780MBB	1	73
K34780MBS	1	73
K34780MCI	1	73
K34780MSP	1	73
K34780MST	1	73

LIST NO.	STD PACK	PAGE
K34780NBO	1	73
K34780NCH	1	73
K34780NDH	1	73
K34780NDW	1	73
K34780SBP	1	73
K34780SCW	1	73
K34780SNS	1	73
K34859GIW	1	77
K34859GPJ	1	77
K34859GPO	1	77
K34859GPS	1	77
K34859MBB	1	77
K34859MBS	1	77
K34859MCI	1	77
K34859MSP	1	77
K34859MST	1	77
K34859NBO	1	77
K34859NCH	1	77
K34859NDH	1	77
K34859NDW	1	77
K34859SBP	1	77
K34859SCW	1	77
K34859SNS	1	77
K34880BLK	1	89
K34880SBP	1	89
K34880SCW	1	89
K34880SNS	1	89
K34881BLK	1	81
K34881NBLK	1	81
K34881NSBP	1	81
K34881NSCW	1	81
K34881NSNS	1	81
K34881SBP	1	81
K34881SCW	1	81
K34881SNS	1	81
K34882BLK	1	82
K34882NBLK	1	82
K34882NSBP	1	82
K34882NSCW	1	82
K34882NSNS	1	82
K34882SBP	1	82
K34882SCW	1	82

LIST NO.	STD PACK	PAGE
K34882SNS	1	82
K34885BBLK	1	84
K34885BLK	1	84
K34885BSBP	1	84
K34885BSCW	1	84
K34885BSNS	1	84
K34885SBP	1	84
K34885SCW	1	84
K34885SNS	1	84
K34890BLK	1	89
K34890SBP	1	89
K34890SCW	1	89
K34890SNS	1	89
K34891BLK	1	85
K34891NBLK	1	85
K34891NSBP	1	85
K34891NSCW	1	85
K34891NSNS	1	85
K34891SBP	1	85
K34891SCW	1	85
K34891SNS	1	85
K34892BLK	1	86
K34892NBLK	1	86
K34892NSBP	1	86
K34892NSCW	1	86
K34892NSNS	1	86
K34892SBP	1	86
K34892SCW	1	86
K34892SNS	1	86
K34894BLK	1	87
K34894NBLK	1	87
K34894NSBP	1	87
K34894NSCW	1	87
K34894NSNS	1	87
K34894SBP	1	87
K34894SCW	1	87
K34894SNS	1	87
K34896BLK	1	88
K34896NBLK	1	88
K34896NSBP	1	88
K34896NSCW	1	88
K34896NSNS	1	88



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K34896SBP	1	88
K34896SCW	1	88
K34896SNS	1	88
K34900BLK	1	85
K34900SBP	1	85
K34900SCW	1	85
K34900SNS	1	85
K34901BLK	1	85
K34901SBP	1	85
K34901SCW	1	85
K34901SNS	1	85
K34910BLK	1	83
K34910SBP	1	83
K34910SCW	1	83
K34910SNS	1	83
K34911BLK	1	83
K34911SBP	1	83
K34911SCW	1	83
K34911SNS	1	83
K34941GIW	1	76
K34941GPJ	1	76
K34941GPO	1	76
K34941GPS	1	76
K34941MBB	1	76
K34941MBS	1	76
K34941MCI	1	76
K34941MSP	1	76
K34941MST	1	76
K34941NBO	1	76
K34941NCH	1	76
K34941NDH	1	76
K34941NDW	1	76
K34941SBP	1	76
K34941SCW	1	76
K34941SNS	1	76
K34971GIW	1	76
K34971GPJ	1	76
K34971GPO	1	76
K34971GPS	1	76
K34971MBB	1	76
K34971MBS	1	76
K34971MCI	1	76

LIST NO.	STD PACK	PAGE
K34971MSP	1	76
K34971MST	1	76
K34971NBO	1	76
K34971NCH	1	76
K34971NDH	1	76
K34971NDW	1	76
K34971SBP	1	76
K34971SCW	1	76
K34971SNS	1	76
K34978GIW	1	76
K34978GPJ	1	76
K34978GPO	1	76
K34978GPS	1	76
K34978MBB	1	76
K34978MBS	1	76
K34337CKNCH	1	77
K34337CKNDH	1	77
K34337CKNDW	1	77
K34337CKSBP	1	77
K34337CKSCW	1	77
K34337CKSNS	1	77
K34337GIW	1	77
K34337GPJ	1	77
K34337GPO	1	77
K34337GPS	1	77
K34337MBB	1	77
K34337MBS	1	77
K34337MCI	1	77
K34337MSP	1	77
K34337MST	1	77
K34337NBO	1	77
K34337NCH	1	77
K34337NCKGI	1	77
K34337NCKGP	1	77
K34337NCKMB	1	77
K34337NCKMC	1	77
K34337NCKMS	1	77
K34337NCKNB	1	77
K34337NCKNC	1	77
K34337NCKND	1	77
K34337NCKSB	1	77
K34337NCKSC	1	77

LIST NO.	STD PACK	PAGE
K34337NCKSN	1	77
K34337NDH	1	77
K34337NDW	1	77
K34337NGIW	1	77
K34337NGPJ	1	77
K34337NGPO	1	77
K34337NGPS	1	77
K34337NMBB	1	77
K34337NMBS	1	77
K34337NMCI	1	77
K34337NMSP	1	77
K34337NMST	1	77
K34337NNBO	1	77
K34337NNCH	1	77
K34337NNDH	1	77
K34337NNDW	1	77
K34337NSBP	1	77
K34337NSCW	1	77
K34337NSNS	1	77
K34337SBP	1	77
K34337SCW	1	77
K34337SNS	1	77
K34343GIW	1	73
K34343GPJ	1	73
K34343GPO	1	73
K34343GPS	1	73
K34343MBB	1	73
K34343MBS	1	73
K34343MCI	1	73
K34343MSP	1	73
K34343MST	1	73
K34343NBO	1	73
K34343NCH	1	73
K34343NDH	1	73
K34343NDW	1	73
K34343SBP	1	73
K34343SCW	1	73
K34343SNS	1	73
K34347GIW	1	72
K34347GPJ	1	72
K34347GPO	1	72
K34347GPS	1	72

Index

LIST NO.	STD PACK	PAGE
K34347MBB	1	72
K34347MBS	1	72
K34347MCI	1	72
K34347MSP	1	72
K34347MST	1	72
K34347NBO	1	72
K34347NCH	1	72
K34347NDH	1	72
K34347NDW	1	72
K34347NGIW	1	72
K34347NGPJ	1	72
K34347NGPO	1	72
K34347NGPS	1	72
K34347NMBB	1	72
K34347NMBS	1	72
K34347NMCI	1	72
K34347NMSP	1	72
K34347NMST	1	72
K34347NNBO	1	72
K34347NNCH	1	72
K34347NNDH	1	72
K34347NNDW	1	72
K34347NSBP	1	72
K34347NSCW	1	72
K34347NSNS	1	72
K34347SBP	1	72
K34347SCW	1	72
K34347SNS	1	72
K34357GIW	1	72
K34357GPJ	1	72
K34357GPO	1	72
K34357GPS	1	72
K34357MBB	1	72
K34357MBS	1	72
K34357MCI	1	72
K34357MSP	1	72
K34357MST	1	72
K34357NBO	1	72
K34357NCH	1	72
K34357NDH	1	72
K34357NDW	1	72
K34357NGIW	1	72

LIST NO.	STD PACK	PAGE
K34357NGPJ	1	72
K34357NGPO	1	72
K34357NGPS	1	72
K34357NMBB	1	72
K34357NMBS	1	72
K34357NMCI	1	72
K34357NMSP	1	72
K34357NMST	1	72
K34357NNBO	1	72
K34357NNCH	1	72
K34357NNDH	1	72
K34357NNDW	1	72
K34357NSBP	1	72
K34357NSCW	1	72
K34357NSNS	1	72
K34357SBP	1	72
K34357SCW	1	72
K34357SNS	1	72
K34370GIW	1	78
K34370GPJ	1	78
K34370GPO	1	78
K34370GPS	1	78
K34370MBB	1	78
K34370MBS	1	78
K34370MCI	1	78
K34370MSP	1	78
K34370MST	1	78
K34370NBO	1	78
K34370NCH	1	78
K34370NDH	1	78
K34370NDW	1	78
K34370SBP	1	78
K34370SCW	1	78
K34370SNS	1	78
K34371GIW	1	78
K34371GPJ	1	78
K34371GPO	1	78
K34371GPS	1	78
K34371MBB	1	78
K34371MBS	1	78
K34371MCI	1	78
K34371MSP	1	78

LIST NO.	STD PACK	PAGE
K34371MST	1	78
K34371NBO	1	78
K34371NCH	1	78
K34371NDH	1	78
K34371NDW	1	78
K34371SBP	1	78
K34371SCW	1	78
K34371SNS	1	78
K34372GIW	1	78
K34372GPJ	1	78
K34372GPO	1	78
K34372GPS	1	78
K34372MBB	1	78
K34372MBS	1	78
K34372MCI	1	78
K34372MSP	1	78
K34372MST	1	78
K34372NBO	1	78
K34372NCH	1	78
K34372NDH	1	78
K34372NDW	1	78
K34372SBP	1	78
K34372SCW	1	78
K34372SNS	1	78
K34373GIW	1	92
K34373GPJ	1	92
K34373GPO	1	92
K34373GPS	1	92
K34373MBB	1	92
K34373MBS	1	92
K34373MCI	1	92
K34373MSP	1	92
K34373MST	1	92
K34373NBO	1	92
K34373NCH	1	92
K34373NDH	1	92
K34373NDW	1	92
K34373SBP	1	92
K34373SCW	1	92
K34373SNS	1	92
K34382GIW	1	73
K34382GPJ	1	73



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K34382GPO	1	73
K34382GPS	1	73
K34382MBS	1	73
K34382MCI	1	73
K34382MSP	1	73
K34382MST	1	73
K34382NBO	1	73
K34382NCH	1	73
K34382NDH	1	73
K34382NDW	1	73
K34382SBP	1	73
K34382SCW	1	73
K34382SNS	1	73
K34499GIW	1	80
K34499GPJ	1	80
K34499GPO	1	80
K34499GPS	1	80
K34499MBB	1	80
K34499MBS	1	80
K34499MCI	1	80
K34499MSP	1	80
K34499MST	1	80
K34499NBO	1	80
K34499NCH	1	80
K34499NDH	1	80
K34499NDW	1	80
K34499SBP	1	80
K34499SCW	1	80
K34499SNS	1	80
K34522GIW	1	80
K34522GPJ	1	80
K34522GPO	1	80
K34522GPS	1	80
K34522MBB	1	80
K34522MBS	1	80
K34522MCI	1	80
K34522MSP	1	80
K34522MST	1	80
K34522NBO	1	80
K34522NCH	1	80
K34522NDH	1	80

LIST NO.	STD PACK	PAGE
K34522NDW	1	80
K34522SBP	1	80
K34522SCW	1	80
K34522SNS	1	80
K34547GIW	1	72
K34547GPJ	1	72
K34547GPO	1	72
K34547GPS	1	72
K34547MBB	1	72
K34547MBS	1	72
K34547MCI	1	72
K34547MSP	1	72
K34547MST	1	72
K34547NBO	1	72
K34547NCH	1	72
K34547NDH	1	72
K34547NDW	1	72
K34547NGIW	1	73
K34547NGPJ	1	73
K34547NGPO	1	73
K34547NGPS	1	73
K34547NMBB	1	73
K34547NMBS	1	73
K34547NMCI	1	73
K34547NMSP	1	73
K34547NMST	1	73
K34547NNBO	1	73
K34547NNCH	1	73
K34547NNDH	1	73
K34547NNDW	1	73
K34547NSBP	1	73
K34547NSCW	1	73
K34547NSNS	1	73
K34547SBP	1	72
K34547SCW	1	72
K34547SNS	1	72
K34709GIW	1	75
K34709GPJ	1	75
K34709GPO	1	75
K34709GPS	1	75
K34709MBB	1	75

LIST NO.	STD PACK	PAGE
K34709MBS	1	75
K34709MCI	1	75
K34709MSP	1	75
K34709MST	1	75
K34709NBO	1	75
K34709NCH	1	75
K34709NDH	1	75
K34709NDW	1	75
K34709SBP	1	75
K34709SCW	1	75
K34709SNS	1	75
K34780GIW	1	73
K34780GPJ	1	73
K34780GPO	1	73
K34780GPS	1	73
K34780MBB	1	73
K34780MBS	1	73
K34780MCI	1	73
K34780MSP	1	73
K34780MST	1	73
K34780NBO	1	73
K34780NCH	1	73
K34780NDH	1	73
K34780NDW	1	73
K34780SBP	1	73
K34780SCW	1	73
K34780SNS	1	73
K34859GIW	1	77
K34859GPJ	1	77
K34859GPO	1	77
K34859GPS	1	77
K34859MBB	1	77
K34859MBS	1	77
K34859MCI	1	77
K34859MSP	1	77
K34859MST	1	77
K34859NBO	1	77
K34859NCH	1	77
K34859NDH	1	77
K34859NDW	1	77
K34859SBP	1	77

Index

LIST NO.	STD PACK	PAGE
K34859SCW	1	77
K34859SNS	1	77
K34880BLK	1	89
K34880SBP	1	89
K34880SCW	1	89
K34880SNS	1	89
K34881BLK	1	81
K34881NBLK	1	81
K34881NSBP	1	81
K34881NSCW	1	81
K34881NSNS	1	81
K34881SBP	1	81
K34881SCW	1	81
K34881SNS	1	81
K34882BLK	1	82
K34882NBLK	1	82
K34882NSBP	1	82
K34882NSCW	1	82
K34882NSNS	1	82
K34882SBP	1	82
K34882SCW	1	82
K34882SNS	1	82
K34885BBLK	1	84
K34885BLK	1	84
K34885BSBP	1	84
K34885BSCW	1	84
K34885BSNS	1	84
K34885SBP	1	84
K34885SCW	1	84
K34885SNS	1	84
K34890BLK	1	89
K34890SBP	1	89
K34890SCW	1	89
K34890SNS	1	89
K34891BLK	1	85
K34891NBLK	1	85
K34891NSBP	1	85
K34891NSCW	1	85
K34891NSNS	1	85
K34891SBP	1	85
K34891SCW	1	85
K34891SNS	1	85

LIST NO.	STD PACK	PAGE
K34892BLK	1	86
K34892NBLK	1	86
K34892NSBP	1	86
K34892NSCW	1	86
K34892NSNS	1	86
K34892SBP	1	86
K34892SCW	1	86
K34892SNS	1	86
K34894BLK	1	87
K34894NBLK	1	87
K34894NSBP	1	87
K34894NSCW	1	87
K34894NSNS	1	87
K34894SBP	1	87
K34894SCW	1	87
K34894SNS	1	87
K34896BLK	1	88
K34896NBLK	1	88
K34896NSBP	1	88
K34896NSCW	1	88
K34896NSNS	1	88
K34896SBP	1	88
K34896SCW	1	88
K34896SNS	1	88
K34900BLK	1	85
K34900SBP	1	85
K34900SCW	1	85
K34900SNS	1	85
K34901BLK	1	85
K34901SBP	1	85
K34901SCW	1	85
K34901SNS	1	85
K34910BLK	1	83
K34910SBP	1	83
K34910SCW	1	83
K34910SNS	1	83
K34911BLK	1	83
K34911SBP	1	83
K34911SCW	1	83
K34911SNS	1	83
K34941GIW	1	76
K34941GPJ	1	76

LIST NO.	STD PACK	PAGE
K34941GPO	1	76
K34941GPS	1	76
K34941MBB	1	76
K34941MBS	1	76
K34941MCI	1	76
K34941MSP	1	76
K34941MST	1	76
K34941NBO	1	76
K34941NCH	1	76
K34941NDH	1	76
K34941NDW	1	76
K34941SBP	1	76
K34941SCW	1	76
K34941SNS	1	76
K34971GIW	1	76
K34971GPJ	1	76
K34971GPO	1	76
K34971GPS	1	76
K34971MBB	1	76
K34971MBS	1	76
K34971MCI	1	76
K34971MSP	1	76
K34971MST	1	76
K34971NBO	1	76
K34971NCH	1	76
K34971NDH	1	76
K34971NDW	1	76
K34971SBP	1	76
K34971SCW	1	76
K34971SNS	1	76
K34978GIW	1	76
K34978GPJ	1	76
K34978GPO	1	76
K34978GPS	1	76
K34978MBB	1	76
K34978MBS	1	76
K34978MCI	1	76
K34978MSP	1	76
K34978MST	1	76
K34978NBO	1	76
K34978NCH	1	76
K34978NDH	1	76



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K34978NDW	1	76
K34978SBP	1	76
K34978SCW	1	76
K34978SNS	1	76
K34981BLK	1	82
K34981NBLK	1	82
K34981NSBP	1	82
K34981NSCW	1	82
K34981NSNS	1	82
K34981SBP	1	82
K34981SCW	1	82
K34981SNS	1	82
K34982BLK	1	83
K34982NBLK	1	83
K34982NSBP	1	83
K34982NSCW	1	83
K34982NSNS	1	83
K34982SBP	1	83
K34982SCW	1	83
K34982SNS	1	83
K34985BBLK	1	84
K34985BLK	1	84
K34985BSBP	1	84
K34985BSCW	1	84
K34985BSNS	1	84
K34985SBP	1	84
K34985SCW	1	84
K34985SNS	1	84
K34991BLK	1	86
K34991NBLK	1	86
K34991NSBP	1	86
K34991NSCW	1	86
K34991NSNS	1	86
K34991SBP	1	86
K34991SCW	1	86
K34991SNS	1	86
K34992BLK	1	87
K34992NBLK	1	87, 89
K34992NSBP	1	87, 89
K34992NSCW	1	87, 89
K34992NSNS	1	87, 89
K34992SBP	1	87

LIST NO.	STD PACK	PAGE
K34992SCW	1	87
K34992SNS	1	87
K34993BLK	1	85
K34993SBP	1	85
K34993SCW	1	85
K34993SNS	1	85
K34994NBLK	1	88
K34994NSBP	1	88
K34994NSCW	1	88
K34994NSNS	1	88
K34996BLK	1	88
K34996SBP	1	88
K34996SCW	1	88
K34996SNS	1	88
K35111GIW	1	90
K35111GPJ	1	90
K35111GPO	1	90
K35111GPS	1	90
K35111MBB	1	90
K35111MBS	1	90
K35111MCI	1	90
K35111MSP	1	90
K35111MST	1	90
K35111NBO	1	90
K35111NCH	1	90
K35111NDH	1	90
K35111NDW	1	90
K35111SBP	1	90
K35111SCW	1	90
K35111SNS	1	90
K35112GIW	1	90
K35112GPJ	1	90
K35112GPO	1	90
K35112GPS	1	90
K35112MBB	1	90
K35112MBS	1	90
K35112MCI	1	90
K35112MSP	1	90
K35112MST	1	90
K35112NBO	1	90
K35112NCH	1	90
K35112NDH	1	90

LIST NO.	STD PACK	PAGE
K35112NDW	1	90
K35112SBP	1	90
K35112SCW	1	90
K35112SNS	1	90
K35114GIW	1	90
K35114GPJ	1	90
K35114GPO	1	90
K35114GPS	1	90
K35114MBB	1	90
K35114MBS	1	90
K35114MCI	1	90
K35114MSP	1	90
K35114MST	1	90
K35114NBO	1	90
K35114NCH	1	90
K35114NDH	1	90
K35114NDW	1	90
K35114SBP	1	90
K35114SCW	1	90
K35114SNS	1	90
K35131GIW	1	80
K35131GPJ	1	80
K35131GPO	1	80
K35131GPS	1	80
K35131MBB	1	80
K35131MBS	1	80
K35131MCI	1	80
K35131MSP	1	80
K35131MST	1	80
K35131NBO	1	80
K35131NCH	1	80
K35131NDH	1	80
K35131NDW	1	80
K35131SBP	1	80
K35131SCW	1	80
K35131SNS	1	80
K35132GIW	1	81
K35132GPJ	1	81
K35132GPO	1	81
K35132GPS	1	81
K35132MBB	1	81
K35132MBS	1	81

Index

LIST NO.	STD PACK	PAGE
K35132MCI	1	81
K35132MSP	1	81
K35132MST	1	81
K35132NBO	1	81
K35132NCH	1	81
K35132NDH	1	81
K35132NDW	1	81
K35132SBP	1	81
K35132SCW	1	81
K35132SNS	1	81
K35133GIW	1	81
K35133GPJ	1	81
K35133GPO	1	81
K35133GPS	1	81
K35133MBB	1	81
K35133MBS	1	81
K35133MCI	1	81
K35133MSP	1	81
K35133MST	1	81
K35133NBO	1	81
K35133NCH	1	81
K35133NDH	1	81
K35133NDW	1	81
K35133SBP	1	81
K35133SCW	1	81
K35133SNS	1	81
K35134GIW	1	81
K35134GPJ	1	81
K35134GPO	1	81
K35134GPS	1	81
K35134MBB	1	81
K35134MBS	1	81
K35134MCI	1	81
K35134MSP	1	81
K35134MST	1	81
K35134NBO	1	81
K35134NCH	1	81
K35134NDH	1	81
K35134NDW	1	81
K35134SBP	1	81
K35134SCW	1	81
K35134SNS	1	81

LIST NO.	STD PACK	PAGE
K35201GIW	1	92
K35201GPJ	1	92
K35201GPO	1	92
K35201GPS	1	92
K35201MBB	1	92
K35201MBS	1	92
K35201MCI	1	92
K35201MSP	1	92
K35201MST	1	92
K35201NBO	1	92
K35201NCH	1	92
K35201NDH	1	92
K35201NDW	1	92
K35201SBP	1	92
K35201SCW	1	92
K35201SNS	1	92
K35202GIW	1	92
K35202GPJ	1	92
K35202GPO	1	92
K35202GPS	1	92
K35202MBB	1	92
K35202MBS	1	92
K35202MCI	1	92
K35202MSP	1	92
K35202MST	1	92
K35202NBO	1	92
K35202NCH	1	92
K35202NDH	1	92
K35202NDW	1	92
K35202SBP	1	92
K35202SCW	1	92
K35202SNS	1	92
K35203GIW	1	92
K35203GPJ	1	92
K35203GPO	1	92
K35203GPS	1	92
K35203MBB	1	92
K35203MBS	1	92
K35203MCI	1	92
K35203MSP	1	92
K35203MST	1	92
K35203NBO	1	92

LIST NO.	STD PACK	PAGE
K35203NCH	1	92
K35203NDH	1	92
K35203NDW	1	92
K35203SBP	1	92
K35203SCW	1	92
K35203SNS	1	92
K35206GIW	1	91
K35206GPJ	1	91
K35206GPO	1	91
K35206GPS	1	91
K35206MBB	1	91
K35206MBS	1	91
K35206MCI	1	91
K35206MSP	1	91
K35206MST	1	91
K35206NBO	1	91
K35206NCH	1	91
K35206NDH	1	91
K35206NDW	1	91
K35206SBP	1	91
K35206SCW	1	91
K35206SNS	1	91
K35207GIW	1	91
K35207GPJ	1	91
K35207GPO	1	91
K35207GPS	1	91
K35207MBB	1	91
K35207MBS	1	91
K35207MCI	1	91
K35207MSP	1	91
K35207MST	1	91
K35207NBO	1	91
K35207NCH	1	91
K35207NDH	1	91
K35207NDW	1	91
K35207SBP	1	91
K35207SCW	1	91
K35207SNS	1	91
K35208GIW	1	90
K35208GPJ	1	90
K35208GPO	1	90
K35208GPS	1	90



Technical Hotline
+44 (0)1268 563720

Index

LIST NO.	STD PACK	PAGE
K35208MBB	1	90
K35208MBS	1	90
K35208MCI	1	90
K35208MSP	1	90
K35208MST	1	90
K35208NBO	1	90
K35208NCH	1	90
K35208NDH	1	90
K35208NDW	1	90
K35208SBP	1	90
K35208SCW	1	90
K35208SNS	1	90
K35209GIW	1	91
K35209GPJ	1	91
K35209GPO	1	91
K35209GPS	1	91
K35209MBB	1	91
K35209MBS	1	91
K35209MCI	1	91
K35209MSP	1	91
K35209MST	1	91
K35209NBO	1	91
K35209NCH	1	91
K35209NDH	1	91
K35209NDW	1	91
K35209SBP	1	91
K35209SCW	1	91
K35209SNS	1	91
K55000BLK	1	31, 249
K55000GRY	1	31, 249
K55000WHI	1	31, 249
K55400BLK	1	28, 249
K55400GRY	1	28, 249
K55400WHI	1	28, 249
K55406BLK	1	28, 249
K55406GRY	1	28, 249
K55406WHI	1	28, 249
K56231BLK	1	245, 289
K56231GRY	1	245, 289
K56231WHI	1	245, 289
K56233BLK	1	245, 289
K56233GRY	1	245, 289

LIST NO.	STD PACK	PAGE
K56233WHI	1	245, 289
K56301BLK	1	245, 289
K56301GRY	1	245, 289
K56301WHI	1	245, 289
K56400BLK	1	246
K56400GRY	1	246
K56400WHI	1	246
K56401BLK	1	246
K56401GRY	1	246
K56401WHI	1	246
K56402BLK	1	246
K56402GRY	1	246
K56402WHI	1	246
K56406BLK	1	246
K56406GRY	1	246
K56406WHI	1	246
K56407BLK	1	246
K56407GRY	1	246
K56407WHI	1	246
K56408BLK	1	246
K56408GRY	1	246
K56408WHI	1	246
K56409BLK	1	246
K56409GRY	1	246
K56409WHI	1	246
K56410BLK	1	246
K56410GRY	1	246
K56410WHI	1	246
K56414BLK	1	246
K56414GRY	1	246
K56414WHI	1	246
K56420BLK	1	247
K56420GRY	1	247
K56420WHI	1	247
K56421BLK	1	247
K56421GRY	1	247
K56421WHI	1	247
K56422BLK	1	247
K56422GRY	1	247
K56422WHI	1	247
K56423BLK	1	247
K56423GRY	1	247

LIST NO.	STD PACK	PAGE
K56423WHI	1	247
K56425BLK	1	246
K56425GRY	1	246
K56425WHI	1	246
K56480BLK	1	245
K56480GRY	1	245
K56480WHI	1	245
K56481BLK	1	245
K56481GRY	1	245
K56481WHI	1	245
K56482BLK	1	245
K56482GRY	1	245
K56482WHI	1	245
K56483BLK	1	245
K56483GRY	1	245
K56483WHI	1	245
K56485BLK	1	245
K56485GRY	1	245
K56485WHI	1	245
K56486BLK	1	245
K56486GRY	1	245
K56486WHI	1	245
K56487BLK	1	245
K56487GRY	1	245
K56487WHI	1	245
K56488BLK	1	245
K56488GRY	1	245
K56488WHI	1	245
K56500GRY	1	248
K56500WHI	1	248
K56501GRY	1	248
K56501WHI	1	248
K56502GRY	1	248
K56502WHI	1	248
K56503GRY	1	248
K56503WHI	1	248
K56506BLK	1	248
K56506GRY	1	248
K56506WHI	1	248
K73143YEL	1	266
K73173YEL	1	266
K73174BLU	1	266

Index

LIST NO.	STD PACK	PAGE
K73310BLU	1	266
K73353RED	1	267
K73414BLU	1	266
K73435RED	1	266
K73463BLU	1	266
K73465RED	1	266
K73600YEL	1	257
K73601BLU	1	259
K73615RED	1	261
K73623YEL	1	257
K73624BLU	1	259
K73626RED	1	260
K73633BLU	1	259
K73641RED	1	261
K73643RED	1	261
K73654BLU	1	259
K73656RED	1	260
K73658RED	1	260
K73714BLU	1	267
K73718YEL	1	267
K73735RED	1	267

KA – KZ

KAX26s	10	286
KPAD	1	31

L

LB42053	1	428
LB42054	1	428
LB42055	1	428
LB42056	1	428
LB42056GRY	1	428
LB44053	1	428
LB44054	1	428
LB44055	1	428
LB44056	1	428
LB44056GRY	1	428
LCP102BLK	10	239
LCP102ORG	10	239
LCP102PBLK	10	239
LCP102PORG	10	239
LCP102SBLK	10	239
LCP102SORG	10	239

LCP103BLK	10	239
LCP103PBLK	10	239
LCP103PWHI	10	239
LCP103SBLK	10	239
LCP103SWHI	10	239
LCP103WHI	10	239
LF43	1	428
LF43 LH	1	428
LF44	1	428
LF44 LH	1	428
LF45	1	428
LF45 LH	1	428
LF46	1	428
LF46 LH	1	428
LF46GRY	1	428
LF46GRY LH	1	428
LI4310	1	428
LI4330	1	428
LI4410	1	428
LI4430	1	428
LI4510	1	428
LI4530	1	428
LI4610	1	428
LI4610GRY	1	428
LI4630	1	428
LI4630GRY	1	428
LJU6C	1	399
LNB1WHI	25	351
LNB2WHI	100	351
LNB3WHI	50	351
LNB4WHI	50	351
LNB5WHI	25	351
LNB6WHI	25	351
LT11601C	1	429
LT11601GRY	1	429
LT11602C	1	429
LT11603C	1	429
LT11621C	1	429
LT11622C	1	429
LT11623C	1	429
LT11625GRY	1	429
LT12501C	1	429

LT12501GRY	1	429
LT12502C	1	429
LT12503C	1	429
LT12504C	1	429
LT12505C	1	429
LT12506C	1	429
LT12521C	1	429
LT12522C	1	429
LT12523C	1	429
LT12525GRY	1	429
LT12526GRY	1	429
LT31601C	1	429
LT31601GRY	1	429
LT31602C	1	429
LT31603C	1	429
LT31621C	1	429
LT31622C	1	429
LT31623C	1	429
LT31625GRY	1	429
LT32501C	1	429
LT32501GRY	1	429
LT32502C	1	429
LT32503C	1	429
LT32504C	1	429
LT32505C	1	429
LT32506C	1	429
LT32521C	1	429
LT32522C	1	429
LT32523C	1	429
LT32525GRY	1	429
LT32526GRY	1	429
LT51601C	1	429
LT51601GRY	1	429
LT51602C	1	429
LT51603C	1	429
LT51621C	1	429
LT51622C	1	429
LT51623C	1	429
LT51625GRY	1	429
LT52501C	1	429
LT52501GRY	1	429
LT52502C	1	429

LIST NO.	STD PACK	PAGE
LT52503C	1	429
LT52504C	1	429
LT52505C	1	429
LT52521C	1	429
LT52522C	1	429
LT52523C	1	429
LT52525GRY	1	429
LT52526GRY	1	429

M

M4X10SS	100	356
M4413	1	253
M4414	1	253
M4417	1	253
M4418	1	253
MAB1	5	356
MAB2	5	356
MAB3	5	356
MAB4	5	356
MAB5	5	356
MAB6	5	356
MAB7	2	356
MEC2	100	351
MEC3	50	351
MEC4WHI	25	351
MK9933	1	248, 253, 262
MK9934	5	262
MK9937	5	262
MPB2	100	353
MPB3	100	353

N

NAE3TCWHI	1	345
NAE3WHI	1	345
NAE4TCWHI	1	345
NAE4WHI	1	345
NAE1010WHI*	1	340
NAE1040WHI	2	340
NAE1050WHI	2	340
NAE5050WHI	2	340
NAE7550WHI	2	340
NAE7575WHI	2	340
NAF3TCSIWHI	1	345

NAF3TCWHI	1	345
NAF3WHI	1	345
NAF4TCSIWHI	1	345
NAF4TCWHI	1	345
NAF4WHI	1	345
NAF1010WHI*	1	341
NAF1040WHI	2	341
NAF1050WHI	2	341
NAF5050WHI	2	341
NAF7550WHI	2	341
NAF7575WHI	2	341
NAI3TCWHI	1	345
NAI3WHI	1	345
NAI4TCWHI	1	345
NAI4WHI	1	345
NAI1010WHI*	1	340
NAI1040WHI	2	340
NAI1050WHI	2	340
NAI5050WHI	2	340
NAI7550WHI	2	340
NAI7575WHI	2	340
NBP50WHI	10	341
NBP75WHI	10	341
NBP100WHI	10	341
NBT3TCWHI	12m	344
NBT3WHI	12m	344
NBT4TCWHI	12m	344
NBT4WHI	12m	344
NBT100LIDWHI	12m	345
NCI3WHI	10	345
NCI4WHI	10	345
NCI1010WHI	5	340
NCI1040WHI	5	340
NCI1050WHI	5	340
NCI5050WHI	5	340
NCI7550WHI	5	340
NCI7575WHI	5	340
NCT50LIDWHI	12m	340
NCT75LIDWHI	12m	340
NCT100LIDWHI	12m	340
NCT1010D1*	8m	340

NCT1010WHI	12m	340
NCT1040D1*	8m	340
NCT1040WHI	12m	340
NCT1050D1*	8m	340
NCT1050WHI	12m	340
NCT5050D1WHI*	12m	340
NCT5050WHI	12m	340
NCT7550D1*	12m	340
NCT7550WHI	12m	340
NCT7575D1*	8m	340
NCT7575WHI	12m	340
NCU1010WHI	1	342
NCU1040WHI	1	342
NCU1050WHI	1	342
NCU5050WHI	1	342
NCU7550WHI	1	342
NCU7575WHI	1	342
NDAE1050WHI	2	340
NDAF1050WHI	2	341
NDAI1050WHI	2	340
NDTF1050WHI	2	341
NEP3WHI	10	344
NEP4WHI	10	344
NEP1010WHI	5	341
NEP1040WHI	5	341
NEP1050WHI	5	341
NEP5050WHI	5	341
NEP7550WHI	5	341
NEP7575WHI	5	341
NFC1010WHI	1	342
NFC1040WHI	1	342
NFC1050WHI	1	342
NFC5050WHI	1	342
NFC7550WHI	1	342
NFC7575WHI	1	342
NJC1010WHI	5	341
NJC1040WHI	5	341
NJC1050WHI	5	341
NJC5050WHI	10	341
NJC7550WHI	10	341
NJC7575WHI	10	341
NMD5050WHI	2	341

Index

LIST NO.	STD PACK	PAGE
NS01TWHI	5	345
NS01WHI	10	345
NS02WHI	5	345
NSP100WHI	10	342
NTF3TCWHI	1	344
NTF3WHI	1	344
NTF4TCWHI	1	344
NTF4WHI	1	344
NTF1010WHI*	1	341
NTF1040WHI	2	341
NTF1050WHI	2	341
NTF5050WHI	2	341
NTF7550WHI	2	341
NTF7575WHI	2	341
NVS40WHI	36m	341
NVS50WHI	36m	341
NVS75WHI	36m	341
NVS100WHI	36m	341
NWP1040WHI	5	342
NWP1050WHI	5	342
NWP5050WHI	5	342
NWP7550WHI	5	342
NWP7575WHI	5	342
NXB200UK-2	1	407
NXB265UK-3	1	407
NXB265XUK-3	1	405, 407
NXB340UK-4	1	407
NXB340XUK-4	1	405, 407
NXGB100X-1	1	410
NXGCBRD	1	410
NXGCBRP	1	410
NXGCNID	1	410
NXGCNIP	1	410
NXJ200UK	1	405, 407
NXJ200XUK	1	405, 407
NXJ265XUK	1	405, 407
NXJ340UK	1	405, 407
NXJ340XUK	1	405, 407
NXLB200-15	1	408
NXLB200-20	1	408
NXLB200-25	1	408

LIST NO.	STD PACK	PAGE
NXLB200-30	1	408
NXLB200X-15	1	408
NXLB200X-20	1	408
NXLB200X-25	1	408
NXLB200X-30	1	408
NXLB265-15	1	408
NXLB265-20	1	408
NXLB265-25	1	408
NXLB265-30	1	408
NXLB265X-15	1	408
NXLB265X-20	1	408
NXLB265X-25	1	408
NXLB265X-30	1	408
NXLB340-15	1	408
NXLB340-20	1	408
NXLB340-25	1	408
NXLB340-30	1	408
NXLB340X-15	1	408
NXLB340X-20	1	408
NXLB340X-25	1	408
NXLB340X-30	1	408
NXLC-01BEG	1	408, 411
NXLC200-15	1	407
NXLC200-20	1	407
NXLC200-25	1	407
NXLC200-30	1	407
NXLC200X-15	1	407
NXLC200X-20	1	407
NXLC200X-25	1	407
NXLC200X-30	1	407
NXLC265-15	1	407
NXLC265-20	1	407
NXLC265-25	1	407
NXLC265-30	1	407
NXLC265X-15	1	407
NXLC265X-20	1	407
NXLC265X-25	1	407
NXLC265X-30	1	407
NXLC340-15	1	407
NXLC340-20	1	407
NXLC340-25	1	407

LIST NO.	STD PACK	PAGE
NXLC340-30	1	407
NXLC340X-15	1	407
NXLC340X-20	1	407
NXLC340X-25	1	407
NXLC340X-30	1	407
NXLS200X-15	1	405
NXLS200X-20	1	405
NXLS200X-25	1	405
NXLS200X-30	1	405
NXLS265X-15	1	405
NXLS265X-20	1	405
NXLS265X-25	1	405
NXLS265X-30	1	405
NXLS340X-15	1	405
NXLS340X-20	1	405
NXLS340X-25	1	405
NXLS340X-30	1	405

O

OA3WHI	50	359
OS2WHI	100	359
OS3WHI	100	359
OS4WHI	100	359

P

P53BLK	10	239
P153BLK	10	239
PBUD1WHI	1	336
PBUD2WHI	1	336
PBUD3WHI	1	336
PBUS1WHI	1	336
PBUS2WHI	1	336
PBUS3WHI	1	336
PBUS21WHI	1	336
PCCD2WHI	10m	337
PCCS2WHI	20m	337
PCWHI	10	334
PD2WHI	20m	335
PECDWHI	5	334
PECHWHI	1	335
PECSWHI	10	334
PF133BLK	10	239
PF133ORG	10	239

LIST NO.	STD PACK	PAGE
PF133WHI	10	239
PICHWHI	1	335
PICLWHI	1	335
PPA100ALM	1	318
PPA100LIDWHI	2	319
PPA100WHI	1	318
PPC10WHI	3m	319
PPC20WHI	1	319
PPC40WHI	1	319
PPC50WHI	1	319
PPC60CHA	10	319
PPC60WHI	1	319
PPCMHCHA	1	319
PPCMHWHI	1	319
PPK1WHI	1	319
PPT650ALM	1	318
PPT650WHI	1	318
PSC2WHI	20m	337
PTS2WHI	4m	334
PTS3WHI	6m	334

Q

QFB/IG1	20	61
QFB1WHI	20	61, 216
QFB2WHI	10	216

R

REC1WHI	150m	360
REC2WHI	150m	360
REC3WHI	150m	360

S

SIC	100	371
SMB2BLK	50	367
SMB3BLK	50	367
SMB4BLK	50	367
SMB5BLK	25	367
SMB6BLK	25	367
SMT1D1WHI	60m	384
SMT1WHI	60m	384
SMT3D1WHI	60m	384
SMT3WHI	60m	384
SMT4D1WHI	60m	384
SMT4WHI	60m	384

SPF1D1WHI	60m	376
SPF1WHI	60m	376
SPF2D1WHI	60m	376
SPF2WHI	30m	376
SPF3D1WHI	32m	376
SPF3WHI	30m	376
SPF4WHI	30m	376
SB100	1	389
SB200	1	389
SB300	1	389
SB400	1	389
SB9001	1	389
SB9002	1	389
SB9003	1	389
SB9004	1	389
SB9006	1	389
SF88100	1	421
SF88105	5	421
SF88106	5	421
SF88107	5	421
SF88116	10	421
SF88117	10	421
SF88142	1	421
SF88143	1	421
SF88144	1	421
SF88145	1	421
SF88150	1	421
SF88152	1	420, 424
SF88153	1	420
SF88172	1	420, 424
SF88173	1	420, 424
SF88176	1	420, 424
SF88177	1	420
SF88180	1	420, 424
SF88181	1	420
SF88184	1	420, 424
SF88185	1	420, 424
SF88188	1	420, 424
SF88189	1	420, 424
SF88200	1	421
SF88206	5	421

SF88246	1	421
SF88247	1	421
SF88248	1	421
SF88249	1	421
SIC	100	357
SM34900A0	1	432
SM34900C0	1	432
SM34901A0	1	432
SM42449	1	432
SM49004	1	432
SM49005	1	432
SM49006	1	432
SM49007	1	432
SM49008	1	432
SM49009	1	432
SM49010	1	432
SM49011	1	432
SM49012	1	432
SM49013	1	432
SM49018	1	432
SM49019	1	432
SM910101	1	432
SM937895	1	432
SM980911	1	432
SM980922	1	432
SMB2BLK	50	353
SMB3BLK	50	353
SMB4BLK	50	353
SMB5BLK	25	353
SMB6BLK	25	353
SMCHAIN5	1	432
SMT1D1WHI	60m	370
SMT1WHI	60m	370
SMT3D1WHI	60m	370
SMT3WHI	60m	370
SMT4D1WHI	60m	370
SMT4WHI	60m	370
SPF1D1WHI	60m	362
SPF1WHI	60m	362
SPF2D1WHI	60m	362
SPF2WHI	30m	362

Index

LIST NO.	STD PACK	PAGE
SPF3D1WHI	32m	362
SPF3WHI	30m	362
SPF4WHI	30m	362

T

TCE6	5	347
TCE7*	1	347
TCE8*	1	347
TCE9*	1	347
TCI1	10	347
TCI2	10	347
TCE6	5	347
TCE7*	1	347
TCE8*	1	347
TCE9*	1	347
TCI1	10	347
TCI2	10	347
TCI3	5	347
TCI4	5	347
TCI5	5	347
TCI6	5	347
TEP1	10	347
TEP2	10	347
TEP3	5	347
TEP4	5	347
TEP5	5	347
TEP6	5	347
TEP7*	1	347
TEP8*	1	347
TEP9*	1	347
TPR1GRY	200	347
TPR1WHI	200	347

U

UB61233GRN	1	374
UB61233GRY	1	374
UB61235GRN	1	374
UB61236DUO	1	374
UB62433GRN	1	374
UB62433GRY	1	374
UB62435GRN	1	374
UB62436DUO	1	374
UB63633GRN	1	374

UB63633GRY	1	374
UB63635GRN	1	374
UB63636DUO	1	374
UEA2WHI	25	364
UEA3WHI	25	364
UF63GRN	1	375
UF63GRNLH	1	375
UF63GRY	1	375
UF63GRYLH	1	375
UF64RED	1	375
UF64REDLH	1	375
UF65GRN	1	375
UF65GRNLH	1	375
UF66DUO	1	375
UF66DUOLH	1	375
UI6312GRN	1	375
UI6312GRY	1	375
UI6324GRN	1	375
UI6324GRY	1	375
UI6336GRN	1	375
UI6336GRY	1	375
UI6412RED	1	375
UI6424RED	1	375
UI6436RED	1	375
UI6512GRN	1	375
UI6524GRN	1	375
UI6536GRN	1	375
UI6612DUO	1	375
UI6624DUO	1	375
UI6636DUO	1	375
UK1	1	376
UK2E	1	429
UK3	1	376
UK4	1	429
UK5*	1	376
UK5F*	1	376
UKDC	1	376, 429
UT31301	1	401
UT31301C	1	376, 401
UT31302	1	401
UT31302C	1	376, 401

UT31304	1	376, 401
UT31304C	1	376, 401
UT31310	1	376, 401
UT31310C	1	376, 401
UT31311	1	376, 401
UT31311C	1	376, 401
UT33201	1	376, 401
UT33201+++	1	376
UT33202	1	401
UT33202+++	1	376
UT33204	1	401
UT33204+++	1	376
UT33205	1	376, 401
UT33206	1	376, 401
UT33210	1	376, 401
UT33211	1	376, 401
UT51301	1	376
UT51301C	1	376, 401
UT51302	1	376, 401
UT51302C	1	376, 401
UT51304	1	376, 401
UT51304C	1	376, 401
UT51310	1	376, 401
UT51310C	1	376, 401
UT51311	1	376, 401
UT51311C	1	376, 401
UT53201	1	376, 401
UT53201+++	1	376
UT53202	1	401
UT53202+++	1	376
UT53204	1	401
UT53204+++	1	376
UT53205	1	376, 401
UT53206	1	376, 401
UT53210	1	376, 401
UT53211	1	376, 401

V

VCT25WHI	10	310
VCT30*	15m	310
VCT35WHI	1	310
VCT100WHI	308	

LIST NO.	STD PACK	PAGE
VCT105WHI	50	310
VCT110WHI	30m	308
VCT120WHI	15m	308
VCT121WHI	25	310
VCT122WHI	10	310
VCT140WHI	6m	308
VCT141WHI	2	309
VCT142WHI	1	309
VCT143WHI	2	309
VCT144WHI	2	309
VCT145WHI	2	309
VCT147WHI	1	309
VCT148WHI	10	310
VCT160WHI	15m	308
VCT161WHI	2	309
VCT162WHI	2	309
VCT163WHI	2	309
VCT164WHI	5	309
VCT165WHI	2	309
VCT166WHI	2	309
VCT167WHI	1	309
VP30**	15m	296
VP35WHI	1	296
VP100WHI	294	294
VP105WHI	50	296, 303
VP110WHI	30m	294
VP115WHI	30m	294
VP121WHI	25	296, 303
VP122WHI	10	296, 303
VP123WHI	5	296, 303
VP129CHA	50	296
VP129WHI	50	296
VP131CHA	25	296
VP131WHI	25	296, 303
VP132CHA	10	296
VP132WHI	10	296, 303
VP180WHI	6m	294, 302
VP181WHI	2	294
VP182WHI	2	295
VP183WHI	2	295
VP184WHI	5	295

LIST NO.	STD PACK	PAGE
VP185WHI	1	295
VP187WHI	1	295
VP188WHI	10	295
VP191WHI	2	294
VP192WHI	2	295
VP193WHI	2	295
VP194WHI	5	295
VP197WHI	1	295
VPAB100WHI	6m	302
VPAB110WHI	30m	302
VPAB115WHI	30m	302
VPAB129WHI**	50	303
VPAB181WHI	2	302
VPAB182WHI	2	302
VPAB183WHI	2	302
VPAB184WHI	25	303
VPAB185WHI	1	303
VPAB187WHI	1	303
VPAB191WHI	2	302
VPAB192WHI	2	302
VPAB193WHI	2	302
VPAB194WHI	2	303
VPAB195WHI	1	303
VPAB196WHI	1	303
VPAB197WHI	1	303
VTS5D1WHI	20m	314
VTS5WHI	30m	314
VTS11WHI	10	327, 335
VTS12WHI	10	327
VTS25SWHI	10	314, 337
VTS50WHI	30m	315
VTS1000	20	296, 310
VTS2001D1WHI	4m	314
VTS2001WHI	6m	314
VTS2003WHI	1	315
VTS2004WHI	1	315
VTS2005WHI	2	314
VTS2006WHI	2	315
VTS2009WHI	1	315
VTS2010WHI	10	314
VTS2011WHI	10	314

LIST NO.	STD PACK	PAGE
VTS2012WHI	1	315
VTS2014WHI	1	315
VTS2018WHI	10	315
VTS2019WHI	10	315
VTS2081WHI	10	314
VTS2084WHI	10	314
VTS2090WHI	10	314
VTS4545RWHI	10	316
VTS4545WHI	10	316
VTS6000WHI	10	315, 337, 342
VTS6025WHI	25	316, 337, 343
VTS6035WHI	25	316, 337, 343
VTS7000WHI	5	315, 337, 342
VTS7025WH	10	316
VTS7025WHI	10	337, 343
VTS7035WHI	10	316, 337, 343
VTS8028WHI	5	316, 337, 343
VTS8035	5	343
VTS8035	10	316, 337
VTSAB1000WHI	20	303
VTSKMH1WHI	1	337, 343
VX31	10	296, 303, 310
VX40BLU	20	296, 310
VX40CHA	20	296, 310
VX41BLU	10	296, 310
VX41CHA	10	296, 310
VXAB40CHA*	20	303
VXAB41CHA*	10	303
X		
XC2WHI	100	359
XC3WHI	100	359
XC4WHI	100	359
Y		
YA12WHI	20	363
YA12WHI OR CHA	20	363
YA13WHI	5	363
YA14WHI OR CHA	5	363
YA15WHI	5	363
YA16WHI	5	363
YA17WHI*	5	363
YA18WHI	5	363

Index

LIST NO.	STD PACK	PAGE
YA1200WHI	20	363
YAE1WHI	20	363, 368
YAE2RED	20	368
YAE2WHI	20	363, 368
YAE2WHI OR CHA	20	363
YAE3WHI	5	363, 368
YAE4WHI OR CHA	5	363
YAE5WHI	5	363
YAE6WHI	5	363
YAE7WHI*	5	363
YAE8WHI	5	363
YAE200WHI	20	363, 368
YAF1WHI	20	363, 368
YAF2RED	20	368
YAF2WHI	20	368
YAF2WHI OR CHA	20	363
YAF3WHI	5	363, 368
YAF4WHI OR CHA	5	363
YAF5WHI	5	363
YAF6WHI	5	363
YAF6WHI*	5	363
YAF7WHI*	5	363
YAF8WHI	5	363
YAF200WHI	20	363, 368
YAI1WHI	20	363, 368
YAI2RED	20	368
YAI2WHI	20	368
YAI3WHI	20	368
YAI200WHI	20	368
YC1WHI	20	362, 368
YC2RED	20	368
YC2WHI	20	362, 368
YC3WHI	10	362, 368
YC4WHI	10	362
YC5WHI	10	362
YC8WHI	10	362
YC200WHI	20	362, 368
YCR1ELWHI	10	364
YCR502RED	5	369
YCR502WHI	5	369
YCR1001ELWHI	10	370
YCR1002ELWHI	10	370

LIST NO.	STD PACK	PAGE
YDA13WHI	10	363
YDAE3WHI	5	363
YDAF3WHI	10	363
YDTF3WHI	10	363
YEA1WHI	25	364, 369
YEA2RED	25	369
YEA2WHI	25	364, 369
YEA3WHI	25	364, 369
YEA200WHI	25	369
YEP1WHI	20	363, 368
YEP2RED	20	368
YEP2WHI	20	363, 368
YEP2WHI OR CHA	20	363
YEP3WHI	20	363, 368
YEP4WHI OR CHA	20	363
YEP5WHI	20	363
YEP6WHI	10	363
YEP7WHI	10	363
YEP8WHI	10	363
YEP200WHI	20	363, 368
YST21WHI	10	364, 368
YST22RED	20	368
YST22WHI	10	364
YST22WHI	20	368
YT1D1WHI	60m	362
YT1WHI	90m	362, 368
YT2CHA	30m	362
YT2D1WHI	60m	362
YT2RED	30m	368
YT2WHI	90m	362, 368
YT3D1WHI	32m	362
YT3WHI	45m	362, 368
YT4CHA	30m	362
YT4D1WHI	32m	362
YT4WHI	45m	362
YT5D1WHI	32m	362
YT5WHI	45m	362
YT6D1WHI	32m	362
YT6WHI	30m	362
YT7D1WHI	32m	362
YT7WHI	30m	362
YT8WHI	12m	362

LIST NO.	STD PACK	PAGE
YT200D1WHI	32m	362
YT200WHI	30m	362, 368
YTF1WHI	20	363, 368
YTF3WHI	5	363, 368
YTF4WHI OR CHA	5	363
YTF5WHI	5	363
YTF6WHI	5	363
YTF21WHI	20	363, 368
YTF22RED	20	368
YTF22WHI	20	368
YTF22WHI OR CHA	20	363
YTF42WHI OR CHA	5	363
YTF200WHI	20	363, 368

Z

ZT3WHI	30m	362
ZT4D1WHI	32m	362
ZT4WHI	30m	362

01-99

2ECR1	20	354
2ECR13	20	354
2ECR13BLK	25	61
2ECR13WHI	25	61
2ECR14	20	355
2ECR15	20	355
2ECR17	20	354
2ECR18	20	354
2ECR1BLK	25	61
2ECR1ELWHI*	20	354
2ECR1WHI	25	61
2ECR2	20	354
2ECR25BLK	10	356
2ECR3	20	354
2ECR3BLK	25	61
2ECR3WHI	25	61
2ECR4	20	355
2ECR5	20	355
2ECR5EL*	20	355
2ECR6	20	355
2ECR6EL*	20	355
2ECR7	20	354

LIST NO.	STD PACK	PAGE
2ECR8	20	354
2ECR8BLK	10	61
2ECR8WHI	10	61
3ECR14	10	355
3ECR15	10	355
3ECR2	10	354
3ECR3	10	354
3ECR4	10	355
3ECR5	10	355
3ECR6	10	355

100-999

400NAT	10	50
502WHI	10	241
505WHI	10	241
515WHI	10	241
641WHI	10	241
643WHI	10	241
644ZIC	10	223, 240
645NIP	100	223, 240
646CHA	10	240
646WHI	10	240
647WHI	10	240
655BLK	10	240
655D8RED	10	240
655D8WHI	10	240
655RED	10	240
655WHI	10	240
690WHI	5	241
692WHI	5	241
696WHI	5	241
698PPK	10	241
734WHI	10	218
735WHI	10	218
740BRC	1	174
740BSS	10	174
740SAG	5	174
741BRC	1	174
741BSS	5	174
742BRC	1	174
744WHI	1	237
790BRC	1	183

790BSS	1	183
790SAG	1	183
791BRC	1	183
791BSS	1	183
2ECR8WHI	10	61
3ECR14	10	355
3ECR15	10	355
3ECR2	10	354
3ECR3	10	354
3ECR4	10	355
3ECR5	10	355
3ECR6	10	355
400NAT	10	50
502WHI	10	241
505WHI	10	241
515WHI	10	241
641WHI	10	241
643WHI	10	241
644ZIC	10	223, 240
645NIP	100	223, 240
646CHA	10	240
646WHI	10	240
647WHI	10	240
655BLK	10	240
655D8RED	10	240
655D8WHI	10	240
655RED	10	240
655WHI	10	240
690WHI	5	241
692WHI	5	241
696WHI	5	241
698PPK	10	241
734WHI	10	218
735WHI	10	218
740BRC	1	174
740BSS	10	174
740SAG	5	174
741BRC	1	174
741BSS	5	174
742BRC	1	174
744WHI	1	237

790BRC	1	183
790BSS	1	183
790SAG	1	183
791BRC	1	183
791BSS	1	183
791SAG	1	183
795BRC	1	183
795BSS	1	183
795SAG	1	183
796BRC	1	183
796BSS	1	183
796SAG	1	183
800ZIC	20	221
821ALM	10	206
822ALM	5	206
822ALM	10	206
823ALM	5	206-7
825ALM	5	207
853ZIC	1	212
854ZIC	1	212
857ZIC	1	212
858ZIC	1	212
861ZIC	10	61, 211, 217
862ZIC	5	211, 217
866ZIC	10	211, 217
867ZIC	1	212
868ZIC	1	213
869ZIC	1	213
870ZIC	1	213
877ZIC	10	211, 217
878ZIC	5	211, 217
886ZIC	5	211, 217
887ZIC	5	214
888ZIC	10	214
891ALM	10	206
892ALM	5	206
893ALM	5	206-7
895ALM	1	207
898ALM	1	207
900ALM	1	207
913WHI	5	221

Index

LIST NO.	STD PACK	PAGE
914WHI	5	221
995WHI	10	219
1100BLK	10	221
1130WHI	10	220
1131WHI	10	220
1132WHI	10	220
1133WHI	10	220
1146WHI	10	56
1149WHI	10	56
1150WHI	10	56
1152WHI	10	56
1154WHI	10	56
1174WHI	10	56
1909WHI	10	331
1919	5	330
1922ALM	5	327
1923WHI	10	330
1924WHI	10	330
1928GLV	10	330
1930WHI	10	331
1933WHI	3m	331
1934WHI	15m	327
1942WHI	5	329
1943WHI	5	329
1946WHI	5	330
1947WHI	5	330
1950WHI	5	328
1951WHI	5	328
1952WHI	5	328
1953WHI	5	328
1955WHI	5	328
1956WHI	5	328
1970WHI	5	329
1971WHI	5	329
1976WHI	5	330
1978WHI	5	330
1986WHI	5	330
1995WHI	5	329
1998	5	330
1999WHI	5	329

LIST NO.	STD PACK	PAGE
2000-2999		
2001ALM	5	213
2002ALM	5	213
2003ALM	5	213
2004ALM	5	213
2031WHI	10	216
2120WHI	10	215
2140WHI	10	216
2180WHI	10	215
2181WHI	10	215
2182WHI	5	215
2183WHI	5	215
2211ALM	5	211
2212ALM	5	211
2213ALM	5	211
2214ALM	5	211
2531WHI	5	218
2949WHI	5	218
2959WHI	10	218
3000-3999		
3151WHI	5	54
3164WHI	5	54
3190RCWHI	5	54
3369ALM	5	214
3370ALM	10	214
3390ALM	10	214
3400ZIC	10	223
3405ZIC	10	223
3710	100	221
3714	100	221
3840ZIC	10	221
3891ZIC	5	207
3895ZIC	5	207
3921ZIC	10	61, 214, 217
4000-4999		
4352SSABST9	100	222
4352SSBRST9	100	222
4352SSDBZT9	100	222
4352SSLBKT9	100	222
4352SSLIVT9	100	222
4352SSNIPT9	100	222

LIST NO.	STD PACK	PAGE
4352SSPBRT9	100	222
4352SSCOT9	100	222
4352SSIRT9	100	222
4352SSWHIT9	100	222
4700WHI	10	219
4724WHI	10	219
5000-5999		
5114WHI	1	219
5115WHI	1	219
5116WHI	1	219
5120ALM	1	214
5144SS000T9	1	221
5268ALM	1	214
5500s	5	278
5544s	5	286
5560s	5	278
5562s	1	286
5640s	1	283
5650s	1	286
5660s	1	283
5903s	10	279
5906s	10	279
5910s	10	279
5916s	10	279
5920s	10	279
5925s	10	279
5932s	10	279
5940s	10	279
5945s	10	279
5950s	10	279
6000-6999		
6216s	1	283
6220s	1	284
6240s	1	283
6263s	1	284
6363s	1	284
6420s	1	284
6425s	1	283
6440s	1	283
6463s	1	284
6630s	1	283

LIST NO.	STD PACK	PAGE
6640s	1	284
6720s	1	284
6810	10	253
6813	10	253
6814	10	253
6817	10	253
6818	10	253
6819	10	253
6980s		283

7000-7999

7179PS	10	221
7240s	1	284
7263s	1	284
7440s	1	284
7463s	1	284
7560s	1	281
7580s	1	281
7660s	1	281
7680s	1	281
7816s	1	280
7832s	1	281
7840s	1	281
7860s	1	281
7880s	1	281
7932s	1	280
7933s	1	280
7934s	1	280
7935s	1	280
7936s	1	280
7937s	1	280
7938s	1	280
7939s	1	280

8000-8999

8329SSWHIT9	10	54
8703s	10	279
8706s	10	279
8710s	10	279
8716s	10	279
8720s	10	279
8725s	10	279
8732s	10	279

LIST NO.	STD PACK	PAGE
8740s	10	279
8750s	10	279
8763s	10	279
8932s	1	280
8933s	1	280
8934s	1	280
8935s	1	280
8936s	1	280

9000-9999

9420SSD1	10	54
9420SST9	1	54
9936	5	262
9960BLK	1	262
9966BLK	1	262
9967BLK	1	262

10000-99999

11130BRMA	100	223
11130NIPMA	100	223
11135BRMA	100	223
11135BRMB	100	223
11135BRSM	100	223
11135BRSMG	100	223
11135BRSMN	100	223
11135NIPMA	100	223
11135NIPMB	100	223
11135NIPME	100	223
11135NIPMG	100	223
11135NIPMN	100	223
11430BRMA	100	223
11430NIPMA	100	223
11435BRSM	100	223
11435BRSMJ	100	223
11435NIPME	100	223
11435NIPMJ	100	223
11817PS	100	331
11827PS	100	331
12024SLT9	10	330
17270SS	10	221
40533PLWHIT9	1	45
43066SSABST9	100	100
43066SSBRST9	100	222

LIST NO.	STD PACK	PAGE
43066SSDBZT9	100	222
43066SSLBKT9	100	222
43066SSLVIT9	100	222
43066SSNIPT9	100	222
43066SSPBRT9	100	222
43066SSCOT9	100	222
43066SSTIRT9	100	222
43066SSWHIT9	100	222
48370SSABST9	100	223
48370SSBRST9	100	223
48370SSDBZT9	100	223
48370SSLBKT9	100	223
48370SSLVIT9	100	223
48370SSNIPT9	100	223
48370SSPBRT9	100	223
48370SSCOT9	100	223
48370SSTIRT9	100	223
48370SSWHIT9	100	223
56460GRY	5	248
56460WHI	5	248
56461BLK	5	248
56461WHI	5	248
56462BLK	5	248
56462WHI	5	248
56463BLK	5	248
56463WHI	5	248
56464BLK	5	248
56464WHI	5	248
56500GRY	1	248
56502GRY	1	248
56881BLK	10	247
56882BLK	10	247
56883BLK	10	247
56889RED	10	247
56890GRN	5	248
56891BLK	10	247
56892BLK	10	247
56893BLK	10	247
56896BLK	10	247
64603WHI	10	240
65503WHI	10	240



EX-OR

RANGE INTRODUCTION

Ex-Or lighting management systems offers lighting controls for all applications and includes presence detection, lighting management, architectural dimming and scene-setting, and emergency lighting testing.

Ex-Or Systems help customers achieve energy savings, reduce fuel bills, and create an optimum environment for staff or visitors.

EX-OR MLS DIGITAL – NETWORKED MANAGED LIGHTING SYSTEM

MLS Digital offers a flexible, user-responsive, building-wide control solution via a network of communicating detectors, either integrated within individual luminaires or mounted remotely to control groups of lights.

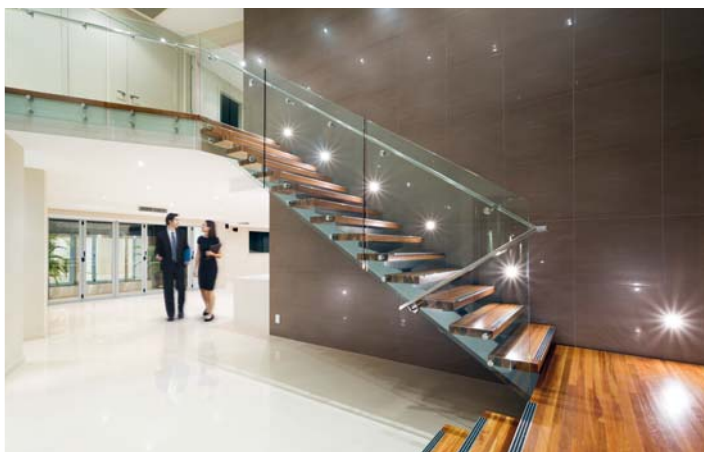
FEATURES & BENEFITS

MAXIMISES CUSTOMERS' ENERGY SAVINGS

ZONED LIGHTING FOR ENHANCED CONVENIENCE AND VISUAL COMFORT

STRAIGHTFORWARD INSTALLATION AND SIMPLE COMMISSIONING

FLEXIBILITY TO ACCOMMODATE CHANGES IN LAYOUT OR USAGE WITHOUT ALTERING WIRING





EX-OR LIGHTSPOT HD – STAND-ALONE LIGHTING CONTROL BY PRESENCE DETECTION AND DAYLIGHT HARVESTING

Ex-Or LightSpot HD controls are designed to save energy by ensuring that lights are never left burning needlessly in an area that has been vacated or where there is already enough natural light. Savings of 40% to 60% are usually made in office applications but they can be as high as 70% and more in areas such as warehouses.

FEATURES & BENEFITS

EFFECTIVE ENVIRONMENTAL AND MONEY-SAVING SOLUTION

HIGH DEFINITION LENSES AND PERFORMANCE OPTICS PROVIDE CLASS LEADING SENSITIVITY

EASY TO INSTALL, EASY TO COMMISSION AND EASY TO USE.

EX-OR CONNECT – LIGHTING CONTROL MODULES AND PLUG-IN CONNECTION CENTRES

Ex-Or Connect offers plug-in simplicity via a range of purpose-designed connection centres with varying degrees of sophistication. MLS Connect Digital can also incorporate FailSafe emergency lighting testing.

FEATURES & BENEFITS

QUICKER AND EASIER INSTALLATION FOR TIME AND COST SAVINGS

ELIMINATION OF WIRING FAULTS AS PRE-WIRED LUMINAIRES AND DETECTORS ARE DELIVERED DIRECT TO SITE

FLEXIBILITY AS LUMINAIRES AND DETECTORS CAN BE CHANGED OR RE-POSITIONED WITHOUT MAJOR DISRUPTION



EX-OR SCENESELECT – ARCHITECTURAL SCENE-SETTING AND DIMMING SYSTEM

Ex-Or SceneSelect allows the user to create and recall custom pre-set scenes. Once the lighting is set up in the area for an activity, the combination of lighting levels is saved as a pre-set scene and the user can fade between different pre-sets at the touch of a button.

FEATURES & BENEFITS

FLEXIBILITY IN DESIGN

INCREASED LAMP LIFE AND ENERGY SAVINGS

EASE OF INSTALLATION AND CONFIGURATION





HONEYWELL DOORBELLS

RANGE INTRODUCTION

Honeywell doorbells represent the next generation in technology for the home – doorbells that not only adapt to suit your home, but have the capability to grow with your family as needs and habits evolve.

By taking Friedland's 60 year heritage of creating the best doorbells in the world, and adding Honeywell's expertise and track record in innovation, we've designed a range of truly revolutionary doorbells from the ground up that are not only stunning and incredibly reliable, but also completely change the definition of what a doorbell is capable of.

Honeywell doorbells are different because of their intuitive design and flexibility. They grow with your family, adapting to your home and lifestyle through a range of clever, customisable features so you're always able to control how you use them.

FEATURES & BENEFITS

PLUG IN DOORBELLS

PORTABLE DOORBELLS

HOME & GARDEN KITS

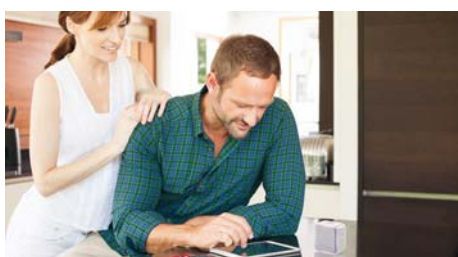
FRONT & BACK DOOR KITS





Never miss a visitor or delivery

- ✓ Portable doorbells can be taken with you anywhere around the home and garden
- ✓ Wireless range of up to 200m means your doorbell will always work, wherever you place it
- ✓ Link two doorbells together to boost the wireless range from 200m up to 400m



Visual alerts

- ✓ The unique halo light and LED strobe features provide visual alerts – great in loud environments, when sleep or mute mode is activated
- ✓ Customisable halo light with 7 colours to choose from
- ✓ Nightlight mode guides your way in the dark with a soft comforting glow



Disturbance free

- ✓ Sleep mode mutes the sound for 3, 6, 9 or 12 hours, so you can relax free of any disturbance
- ✓ Use mute mode to silence the doorbell until you turn the sound back on again
- ✓ Easily adjust the volume to suit your family or mood



Compact size, rich sound

- ✓ Crystal clear sound quality that can be heard throughout the home and garden
- ✓ A maximum volume of 90dB gives an audible range of up to 100m
- ✓ Choose from up to 8 melodies
- ✓ Customise with your own melodies



Revolutionary design

- ✓ Compact size and stunning design seamlessly fits in with your décor
- ✓ Neutral colours of white and grey complement any room
- ✓ The USB charging feature means you can still charge your phone or tablet without unplugging your doorbell



Peace of mind

- ✓ Connect alarm accessories to your doorbell with Honeywell ActivLink™, to build a simple home alarm system for your family
- ✓ LED confidence light clearly indicates that your doorbell push is working
- ✓ Press three times quickly, and our secret knock function plays a different melody, so you know if it's a family member or friend at the door

HONEYWELL HEATING CONTROLS

RANGE INTRODUCTION

Honeywell domestic heating and combustion controls offer you the ultimate flexibility in time, temperature, gas and water control.

Our product range is designed to provide the homeowner with the best in comfort, energy and health solutions and lifestyle through a range of clever, customisable features so you're always able to control how you use them.



Time Control

A series of one and two channel time controllers with independent heating and hot water control and three switching times per channel per day for up to seven days programming on some models



Room Temperature Control

We provide an extensive range of room temperature control devices, so whether your requirement is for room thermostats, thermostatic radiator valves, frost thermostats or pipe and cylinder thermostats, Honeywell has the solution for you.



Connected Heating Control

We offer a full range of heating control products that can be controlled via a smartphone or tablet.



Multi Zone Heating Control

The evohome multi-zone heating system allows the control of up to 12 heating zones and hot water.



Combined Time & Temperature Control

7 day or 1 day combined time and temperature control of domestic heating systems is possible with our range of programmable thermostats



Flow Control

We provide products that control the flow of water in both domestic and commercial heating systems but also products that control both pressure and temperature in potable water circulation systems.



Technical Hotline
+44 (0)1268 563720

PRODUCT GUARANTEE

The Company undertakes to replace or repair Products at its discretion should they become defective within the following periods:

PRODUCT GUARANTEE	
MK ELECTRO / MECHANICAL	20 YEARS
ELEMENTS ELECTRO / MECHANICAL	20 YEARS
ELEMENTS ELECTRONIC	5 YEARS
MK SENSORS	2 YEARS
USB INTEGRATED SOCKET	5 YEARS
ECHO	2 YEARS
COMMANDO	10 YEARS
MK ELECTRONIC	10 YEARS
CIRCUIT PROTECTION	10 YEARS
POWER DISTRIBUTION SYSTEMS	5 YEARS
CABLE MANAGEMENT	10 YEARS

Solely as a result of faulty materials and or workmanship. Understandably if the product has not been installed or maintained in accordance with the Company's instructions, has not been used appropriately or if any attempt has been made to rectify, dismantle or alter the product in any way the Guarantee will be invalidated.

This Guarantee states the Company's entire liability. It does not extend to cover consequential loss or damage or installation costs arising from the defective product. This Guarantee does not restrict or infringe the normal statutory or other rights of the consumer.

Customer Service Tel +44 (0)1268 563404
Customer Service Fax +44 (0)1268 563405
www.mkelectric.co.uk



Statement of Intent

The sale of non UK wiring devices within British Standard territories is not prohibited but, as a responsible UK manufacturer MK Electric has a duty to ensure that such products are installed safely and correctly.

As non UK products fall outside of the standards specified within the wiring regulations, additional measures need to be taken to ensure a safe and suitable installation is completed.

BS7671 IEE Wiring Regulations 17th Edition Amendment 3 (Part 5) provides guidance on how installers are to sign off installation of non UK products for total compliance.

Within the catalogue, non UK products are clearly identified in blue text at the end of the product description as exemplified below:

Socket Outlets

127V

FLUSH

15 AMP

(NON UK)



At the point of order, customers will be prompted to complete a mandatory form and no products will be sold until the information requested has been provided. This form can be obtained by visiting www.mkelectric.co.uk or by emailing mkorderenquiries@honeywell.com

For any further assistance please contact the Technical Sales & Service Department on **01268 563720**.

Abbreviation Key

ABBREVIATIONS USED IN THIS CATALOGUE

17ED	17th Edition	M	Master (High Power Dimmer)
ABS	Antique Brass	MAG	Magnolia
ALM	Aluminium	MBB	Metallic Brushed Bronze
ALMW	Painted White Aluminium	MBS	Metallic Brushed Steel
ALU	Aluminium	MCI	Metallic Cast Iron
AMB	Amber	MET	Metal
B	Black Inserts	MSP	Metallic Satin Platinum
BLK	Black	MST	Metallic Satin Titanium
BLU	Blue	MW	Microwave
BR	Boiler	N	Neon
BRC	Brushed Chrome	NBO	Natural British Oak
BRO	Brown	NCH	Natural Cream Hide
BRS	Brass (Ancillary Products Only)	NDH	Natural Dark Hide
BSS	Brushed Stainless Steel	NDW	Natural Dark Wenge
CE	Clean Earth	NIP	Nickle Plated
CH	Cooker Hood	ORG	Orange
CK	Marked 'Cooker'	OV	Oven
CLR	Clear	P	Marked 'Press'
CM	Coffee Machine	PBR	Polished Brass
DAB	Digital Audio Broadcast	PBZ	Polished Bronze (Ancillary Products only)
DBZ	Desert Bronze	PCR	Polished Chrome
DW	Dishwasher	PH	Plinth Heater
EL	Marked 'EMG LTG' (Grid Plus Only)	POC	Polished Chrome
FF	Fridge Freezer	RED	Red
FG	Fridge	S	Slave (High Power Dimmer)
FN	Fan	SAG	Satin Gold
FZ	Freezer	SBP	Synthetic Beach Pebble
GIW	Glass Effect Ice White	SCW	Synthetic Chalk White
GLAA	Glass, Aluminium	SNS	Synthetic Natural Stone
GLAB	Glass, Black	SH	Marked 'Shower'
GLAG	Glass, Green	TCO	Textured Copper
GLAGA	Glass, Grooved Aluminium	TD	Tumble Dryer
GPJ	Glass Effect Polished Jade	TIR	Textured Iron
GPO	Glass Effect Polished Onyx	W	With Window
GPS	Glass Effect Polished Stone	W	White Inserts
GRA	Graphite	WC	Wine Cooler
GRY	Grey	WD	Waste Disposal
HB	Hob	WDA	Warming Drawer
HR	Heater	WDR	Washer Dryer
IG	Intumescent Gasket	WH	Water Heater
IH	Immersion Heater	WHI	White
KO	Tamperproof Screw	WHI	Porcelain White (Decorative Only)
L	Neon Locator / Luminous	WL	Worktop Lighting
LBK	Lustrous Black	WM	Washing Machine
LBS	Lacquered Brushed Steel	YEL	Yellow
LIV	Lustrous Ivory	ZIC	Zinc Plated LV
LSF	Low Smoke and Fume		
LV	Low Voltage		

1 Standard Carton Quantities are indicated by the number in the box after all product descriptions eg:

K2747WHI 1
2 GANG

Standard Conditions of Sale

All previous issues are cancelled.

General

The "Seller" means Novar ED&S Limited.

The "Buyer" means the person, firm or company to whom the Seller supplies the Goods.

All quotations are given and all orders are accepted on these terms, replace and supersede any other terms wherever appearing, and override and exclude any other terms stipulated or incorporated or referred to by the Buyer, whether in the order or in any negotiations, and any course of dealing established between the Seller, and the Buyer. All orders hereafter made by the Buyer shall be deemed to be made subject to these terms.

Acceptance of Orders

No contract for the sale of goods ("the Goods") shall be concluded until either the Seller sends or otherwise communicates to the Buyer its acceptance of the Buyer's order or on the delivery to the Buyer of the Goods, whichever is the earlier. The Buyer acknowledges that there are no representations outside these terms that have induced the Buyer to enter into the contract (which expression shall include any contract of which these terms form part) and save as provided herein, these terms shall constitute the entire understanding between the parties for the sale of the Goods. No modification of these terms shall be effective unless made by an express written agreement between the parties. The signing by the Seller of any of the Buyer's documentation shall not imply any modification of these terms.

Illustrations, Descriptive Matter and Dimensions

All descriptions and illustrations contained in catalogues, price lists and advertisements or otherwise communicated to the Buyer are intended merely to present a general idea of the Goods described therein, and nothing contained in any of them shall form any part of the contract.

Designs

The Seller's policy is one of continuous improvement. The right to change designs at any time without notice is reserved.

Samples

Notwithstanding that a sample of the Goods may have been exhibited to and inspected by the Buyer, it is hereby agreed that such sample was so exhibited and inspected solely to enable the Buyer to judge for himself the quality of the bulk and not so as to constitute a sale by sample. The Buyer shall take the Goods at his own risk as to their corresponding with the said sample or as to their quality condition or sufficiency for any purpose.

Prices

All prices listed or quoted are provisional only and are subject to alteration without prior notice, and prices charged will be those current at the time of despatch of the Goods.

Delivery

All delivery dates are estimates only and the time of delivery shall not be of the essence of the contract. In no circumstances shall the Seller be liable to compensate the Buyer in damages or otherwise for non-delivery or late delivery of the Goods or any of them for whatever reason or for any loss consequential or otherwise arising there from. The Seller reserves the right to make partial deliveries and to allocate available supplies amongst customers in time of shortage. The Seller shall be entitled to deliver the Goods in one or more consignments unless otherwise expressly agreed. For UK sales, delivery shall be deemed to take place when the Goods are despatched from the Seller's premises. The Seller shall not be liable for any loss of any kind to the Buyer arising from any damage to the Goods occurring after the risk has been passed to the Buyer however caused, nor shall any liability of the Buyer to the Seller be diminished or extinguished by reason of such loss.

Carriage and Packing

Packing materials are in most instances non-returnable. The Seller will pay packing and carriage on all orders having a nett value of £250 (exc.VAT) or over and the Goods will be consigned by carrier at goods rate. Orders instructing despatch by other means will be subject to a packing and carriage charge to cover additional cost. Orders of less than £250 (exc.VAT) nett value will be consigned by parcel post up to 5kg in weight, otherwise goods will be consigned by carrier at goods rate.

A packing and carriage charge will be made for all such orders at the rate of £50 (exc.VAT).

Instructions and Labels

The Buyer shall ensure that labels, names, reference numbers and marks on the Goods and packing materials and cases are not removed altered or covered whilst the Goods are in his possession and shall not remove any label or plaque affixed to the Goods referring any user thereof to the Seller's or any other party's instructions and/or recommendations for use. If any item comprised in the Goods is resold by the Buyer the Buyer shall bring to the attention of his purchaser all instructions and/or recommendations for use packed with the Goods or which the Seller has otherwise notified to the Buyer.

Damage or Loss in Transit

When the price quoted includes delivery, the Seller shall repair or replace free of charge goods damaged in transit or not delivered in accordance with the advice note, provided that in the event of damage or shortage, written notification giving details of such damage or shortage must be sent to the Seller within 7 days of receipt, and in the event of non-delivery must be sent to the Seller within 14 days of the date shown on the advice note. Order number, advice note and date of despatch are required, and in the event of failure to give notice within the aforementioned period, the Goods will be deemed to be in all respects as invoiced.

Returns

Goods supplied in accordance with the Buyer's orders cannot be accepted for return without the Seller's written consent. If such consent is given an administration charge will be made. Returned Goods must be sent carriage free and at the Buyer's risk and will only be accepted if packed in the original carton which in the Seller's opinion is in a saleable condition. Only Goods of current design will be accepted for return.

Payments

For UK and Republic of Ireland sales, payment is due before the end of the month following despatch. Value Added Tax for UK sales is payable and is calculated on the cash discounted value of each invoice. If the Seller shall allow provisional credit in respect of any part of the Goods it shall be without prejudice to its rights to refuse to give up possession of any other part of the Goods except against payment: and the whole of the price of all goods bought or agreed to be bought by the Buyer shall fall due and payable without demand immediately on the happening of any of the following events:-

- (a) failure by the Buyer to pay any sum due to the Seller within 14 days of the due date for payment;
 - (b) commencement of the winding up of the Buyer;
 - (c) any act, event or occurrence entitling any creditor of the Buyer to petition for the bankruptcy of the Buyer;
 - (d) appointment of a receiver of any asset of the Buyer, or the levying of any distress or execution or any asset of the Buyer.
- The failure of the Buyer to pay any part of the price of the Goods in due time shall entitle the Seller to treat such failure as a repudiation of the whole contract by the Buyer and to recover damages for such breach of contract.

Interest on all sums due shall run at the rate of 2 per cent per annum over the base lending rate of Barclays Bank plc until payment is received before as well as after any judgement therefore.

Liability

These terms set out the Seller's entire liability in respect of the Goods and the Seller's liability under these terms shall be in lieu and to the exclusion of all other warranties, conditions, terms and liabilities expressed or implied statutory or otherwise in respect of the quality or the fitness for any particular purpose of the Goods or otherwise (notwithstanding any advice or representation to the Buyer, all liability in respect of which howsoever arising, is expressly excluded) except any implied by law which by law cannot be excluded. Save as provided in these terms and except as aforesaid the Seller shall not be under any liability, whether in contract, tort (including negligence) or otherwise, in respect of defects in the Goods or failure to correspond to specification or sample or for any injury, damage or loss resulting from such defects or failure or from any work done in connection therewith. The Seller shall be under no liability to any purchaser of the Goods from the Buyer. In any event the Seller's liability (if any) whether in contract, tort or otherwise in respect of any defect in the Goods, or for any breach of this Agreement or of any duty owed to the Buyer in connection herewith, shall be further limited in the aggregate to the price of the Goods in question. Nothing in these terms shall restrict the Seller's liability for death or personal injury caused by the Seller's negligence.

Indemnity

The Buyer shall indemnify the Seller in respect of all damage injury or loss occurring to any person or property and against all actions, suits, claims, demands, charges or expenses in connection therewith arising from the condition or use of the Goods in the event and to the extent that the damage injury or loss shall have been occasioned partly or wholly by the carelessness of the Buyer and his servants or agents or by any breach by the Buyer of its obligations to the Seller hereunder.

U.K. and Republic of Ireland Sales

For UK and Republic of Ireland sales risk of loss or damage to the Goods shall pass to the Buyer at the time of delivery. The property in the Goods shall not pass to the Buyer until: all sums due or owing to the Seller by the Buyer on any account have been paid. The whole of the price shall not be treated as paid until any cheque, bill of exchange or other instrument of payment given by the Buyer has been met on presentation or otherwise honoured in accordance with its terms. The Seller may sue for the whole of the price at any time after it has become payable.

Until such time as the property in the Goods passes to the Buyer, the Buyer shall hold the Goods on a fiduciary basis as bailee of the Seller and shall keep the Goods separate from those of the Buyer and third parties and properly stored, protected, insured and identified as the Seller's property, but the Buyer shall be entitled to resell and use the Goods in the ordinary course of its business for the account of the Seller. Until property in Goods passes from the Seller, the entire proceeds of sale or otherwise of the Goods shall be held in trust for the Seller and shall not be mixed with any other money or paid into any overdrawn bank account and shall be at all material times identified as the Seller's money. Until such time as property in Goods passes from the Seller the Buyer shall upon request deliver up such of the Goods as have not ceased to be in existence, or resold to the Seller. If the Buyer fails to do so the Seller may enter upon any premises owned, occupied or controlled by the Buyer where the Goods are situated and repossess the Goods. The Buyer shall not pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Seller. Without prejudice to the other rights of the Seller, if the Buyer does so all sums whatever owing by the Buyer to the Seller shall forthwith become due and payable.

Export

All orders are accepted subject to a minimum value of £500. All Goods will be supplied and invoiced in multiples of carton quantities only. The basis of the prices quoted will be FOB as defined in Incoterms 2000 Edition, at a UK port which may be nominated by the Seller, or such other basis as may seem appropriate to the Seller in the circumstances.

Payment unless otherwise agreed must be by irrevocable letter of credit confirmed by an established UK bank satisfactory to the Seller. The Seller has separate standard terms and conditions which apply to export sales, and a copy will be supplied to the export buyers.

NOVAR ED&S Patents and Registered Designs

Many of the products offered for sale by the Seller are covered by UK and foreign patents or other intellectual property rights. It is not feasible to mark each component or product with the appropriate patent numbers, but any relevant and reasonable enquiries will be dealt with on application, subject to reimbursement of the Seller's out of pocket expenses. The Seller also has rights in a number of names and trade marks, registered and unregistered. The Seller will take all necessary legal action in any part of the world against any party found to be manufacturing, selling or otherwise dealing with any article which infringes the Seller's patents, trade marks or other similar intellectual property rights.

Force Majeure

Neither party shall be liable to the other for any failure or delay in the performance of any obligation hereunder as a result of strikes, lockouts, trade disputes, breakdown of plants, accident or other cause whatsoever beyond the reasonable control of the Seller or the Buyer respectively.

Legal Construction

The contract shall be governed by and interpreted in accordance with English Law, and the Buyer submits to the jurisdiction of the Courts in England but the Seller may enforce the contract in any court of competent jurisdiction. A person who is not a party to the contract shall have no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any of its terms.

Assignment

The Buyer shall not assign any benefit under the contract without the consent in writing of the Seller, which may if given be on such terms as to guarantee or indemnify or otherwise as the Seller thinks fit.

Health and Safety at Work etc. Act 1974.

Statement to purchasers and prospective purchasers

1. Section 6* of this Act provides that manufacturers, designers, importers or suppliers of articles for use at work have a duty to ensure, so far as is reasonably practicable, that the article will be safe and without risk to health at all times when it is being set, used, cleaned or maintained by a person at work. An absence of safety or risk to health is to be disregarded insofar as the case in or in relation to which it arises is shown to be one the occurrence of which could not reasonably be foreseen and in determining whether any such duty as aforementioned has been performed regard shall be had to any relevant information or advice which has been provided by the manufacturer, designer, importer or supplier.
2. Having regard to these provisions the following is given as a guide to the information which is readily available to you, in order that the obligations of all concerned may be met as fully as is reasonably practicable. This information relates to those products detailed in the Seller's catalogue(s) or associated literature.
3. Information on the design, construction and installation of the Seller's products to ensure that so far as is reasonably practicable they are safe and without risk to health when properly used may be found in:
 - Regulations for Electrical Equipment of Buildings (published by the Institution of Electrical Engineers)
 - Catalogues and product leaflets of the Seller.
 - Or may be obtained by specific request to the Seller.
4. It is important that the products concerned should be installed, commissioned and maintained by, or under the supervision of competent persons in accordance with good engineering practice and
 - The Regulations for the Electrical Equipment of Buildings
 - Codes of Practice
 - Statutory Requirements
 - Any instructions specifically advised by the Seller and where appropriate, with particular reference to information marked on the product.
5. In accordance with the provisions of the Act, the Buyer is therefore requested to take such steps as are necessary to ensure that any appropriate information relevant to the Seller's products is made available by you to anyone concerned.

* As amended by section 36 of the Consumer Protection Act 1987.

Novar ED&S Limited,
The Arnold Centre,
Paycocke Road,
Basildon,
Essex
SS14 3EA

MK Trade Mark.

Registered in Great Britain and other countries 'MK' are the initials of 'Mully-Kontakt' - a name coined to signify 'many points of contact' the salient feature of our pioneer spring-grip socket patented in 1919.



Copyright MK Electric Limited 2016.

Standard Conditions of sale are subject to change, visit www.mkelectric.co.uk for the latest version.

MK Electric Catalogue Rangefinder

Product Range	Range	Technical Data
Wiring Devices		
Albany Plus	167-188	441-484
Ancillary Products	218-223	N/A
Aspect	98-128	441-484
Boxes	211-217	N/A
Ceiling Accessories	53-56	492-494
Commando Combination Units	264-267	569-573
Commando Modular Combi	268-269	N/A
Commando Plugs and Sockets	254-263	556-568
Commando Safetyswitch	250-253	554-555
Duraplug	236-239	538-540
Echo	21-31	437-440
Edge	130-166	441-484
Elements	70-97	497-525
Grid Plus	189-207	526-532
High Power Dimmer	208-210	534-536
Link	58-62	495-496
Logic Plus	32-52	441-484
Masterseal Plus	242-249	542-553
Metalclad Plus	224-235	441-484
Plugs and Adaptors	240-241	541
Sensors	63-66	485-491
Circuit Protection		
Sentry	271-286	576-604
Sentrysocket	288-289	606-607
Cable Management		
Ega Mini	361-365	672-674
Egatube	346-360	656-671
Norwich	344-345	650-654
Pinnacle	332-337	640-644
Poles & Posts	318-319	630-631
Powerlink Plus	321-331	632-639
Premier	338-343	645-649
Prestige 2Com	311-316	623-629
Prestige 3D	290-310	612-621
Red Alert	366-370	672-674
Power Distribution Systems		
Cablelink Plus Modular	377-381	677-680
Cablelink Plus Single Pan Box	383-386	681-682
Cablelink Plus Screed	413-424	689-694
DeskPod	395-401	684
Grommets	391-394	683
Hangmann	430-432	N/A
Interact	371-376	675-676
Interact Overhead	425-429	695-696
Onix	403-411	685-688
Slab Boxes	387-390	N/A



MK Electric UK

The Arnold Centre, Paycocke Road,
Basildon, Essex, SS14 3EA,
United Kingdom
Customer Service Tel +44 (0) 1268 563404
Customer Service Fax +44 (0) 1268 563405
E-mail mkorderenquiries@honeywell.com

Technical

Tech Helpline Tel 01268 563720
Tech E-mail mk.technical@honeywell.com

Ireland

Sales Tel 01 4296530
Sales Fax 01 4296501
E-mail mkorders@honeywell.com
www.mkelectric.co.uk



Reference: UKMK003-0116-EN
January 2016
© 2016 Honeywell International Inc.