



2010

wiring accessories  
cable management  
domestic circuit protection





Acknowledged as one of Britain's leading manufacturers of wiring accessories and circuit protection equipment. Crabtree's diverse product range is renowned for its outstanding quality and excellent value for money. Specified worldwide, Crabtree products are designed to satisfy the needs of specifiers, wholesalers, contractors and end-users in domestic, commercial and industrial markets alike.

# Crabtree



Crabtree's reputation for pioneering new concepts in the electrical industry – right from the acclaimed Lincoln Switch in 1919 to the launch of the Starbreaker Modular Circuit Protection System, and Platinum low profile & flat plate wiring accessories, put us at the forefront of manufacturing technology. It is this insight into our customers' needs, together with the technical expertise to turn innovative ideas into top quality products that has made Crabtree a market leader.

**Left**

Electrium's purpose built Commercial Centre in Cannock, Staffordshire

Crabtree is part of Electrium, one of the UK's largest electrical groups, which has offices and manufacturing sites in the UK, India, China and the Middle East.

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All Crabtree products comply with the applicable British Standard specification and should be installed by suitably qualified personnel in accordance with the requirements of relevant legislation, regulations (including IEE Wiring Regulations) and the accepted practice in the industry.

The products listed or described in this publication may be protected by one or more patents, and/or registered designs and/or applications. A full list of patents registered designs and applications may be obtained from the company secretary of Electrium Limited.



# CAPITAL

## POWER & CONTROL

Capital power and control accessories are fully design co-ordinated to offer consistent styling and inherent safety features across a broad range of applications.

The range of socket outlets, fused connection units and switches is complemented by products which cater for specific applications such as cooker control units, shaver units, fan control switches and shower control switches.



Wide concave rockers are easy to operate.

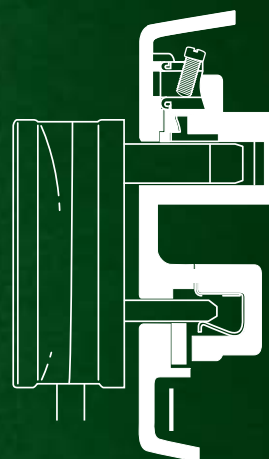


Two earth terminals are fitted as standard to the Switched Single and Twin Socket.



Unique labyrinth switch design minimises visible arc flash and prevents front access to live parts.

Positive drive switch action prevents balancing between the 'on' and 'off' position and gives reliable indication of the contact position.



Shutter mechanism is operated by earth pin of plug.





### 13A SWITCHED SOCKET OUTLETS

BS 1363	PACK	QTY
1 gang SP	10	<b>4304</b>
1 gang DP	10	<b>4304/D</b>
1 gang DP fitted with neon indicator	10	<b>4304/3D</b>
2 gang SP	5	<b>4306</b>
2 gang DP	5	<b>4306/D</b>
2 gang DP fitted with neon indicator	5	<b>4306/3D</b>

<b>Dimensions</b>	1 gang 86mm x 86mm 2 gang 146mm x 86mm
<b>Mounting boxes</b>	1 gang 9047 surface, SB655 flush galv. or SB619 dry lining 2 gang 9048 surface, SB665 flush galv. or SB629 dry lining

- Large capacity terminals for easy wiring.
- Shallow back projection for ease of installation in a 25mm deep box.
- Fitted with two Earth terminals for use where compliance with BS7671: 2008 regulation 543-7 (IEE wiring Regulations).



### 13A SWITCHED SOCKET OUTBOARD ROCKERS

BS 1363	PACK	QTY
2 gang DP outboard rockers	5	<b>4307</b>
2 gang DP outboard rockers with neon indicator	5	<b>4307/3</b>

<b>Dimensions</b>	2 gang 146mm x 86mm
<b>Mounting boxes</b>	2 gang 9048 surface, SB665 flush galv. or SB629 dry lining

- Large capacity terminals for easy wiring.
- Shallow back projection for ease of installation in a 25mm deep box.
- Fitted with two Earth terminals for use where compliance with BS7671: 2008 regulation 543-7 (IEE wiring Regulations).



### 13A UNSWITCHED SOCKET OUTLETS

BS 1363	PACK	QTY
1 gang unswitched	10	<b>7255</b>
2 gang unswitched	5	<b>7257</b>

<b>Dimensions</b>	1 gang 86mm x 86mm 2 gang 146mm x 86mm
<b>Mounting boxes</b>	1 gang 9047 surface, SB655 flush galv. or SB619 dry lining 2 gang 9048 surface, SB665 flush galv. or SB629 dry lining

- Complete with 1 Earth Terminal.

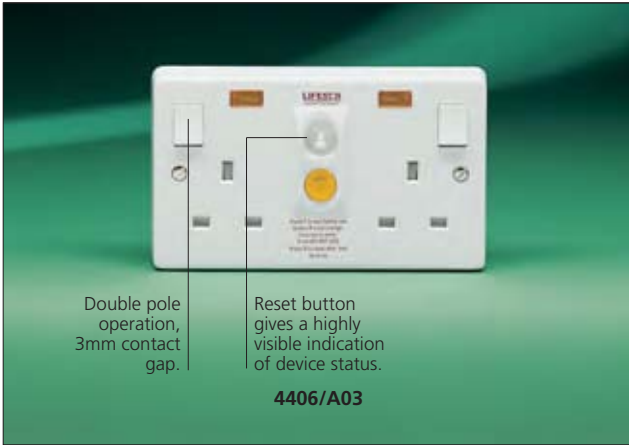


### 13A FUSED CONNECTION UNITS

BS 1363	PACK	QTY
DP Switched	10	<b>4827</b>
DP Switched with neon indicator	10	<b>4827/3</b>
Unswitched	10	<b>4828</b>
Unswitched with neon indicator	10	<b>4828/3</b>

<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9047 surface, SB655 flush galv. or SB619 dry lining

- Fitted with knock-out position in bottom edge of plate for use with or without cord outlet. Suitable for flexible cord up to 10mm outside diameter.
- Fused on the line side with a 13A fuse link.
- Fuse marked to BS1362. For spare fuse links see page 8.
- With fuse removed, carrier may be padlocked for extra on site 'maintenance' safety.
- Suitable padlock see page 143.
- Shallow back projection for ease of installation in a 25mm deep box.



### 13A SAFETY SOCKET WITH RCD PROTECTION

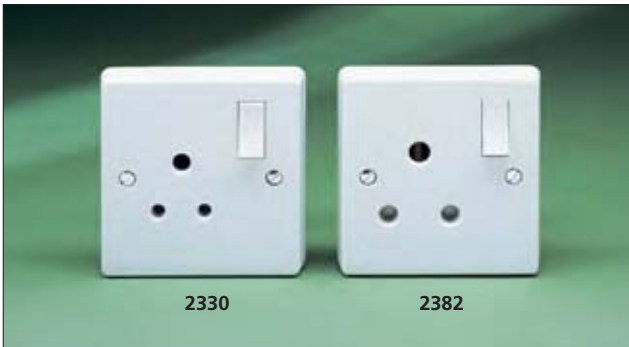
BS 7288	PACK QTY	
2 gang switched with neon indicator 30mA tripping current	1	<b>4406/A03</b>

**Dimensions** 146mm x 86mm  
**Mounting boxes** 9048 surface, SB665 flush galv. or SB629 dry lining

See page 159 for further information.

Can be installed to replace any 2 gang size socket outlet on 25mm deep box.

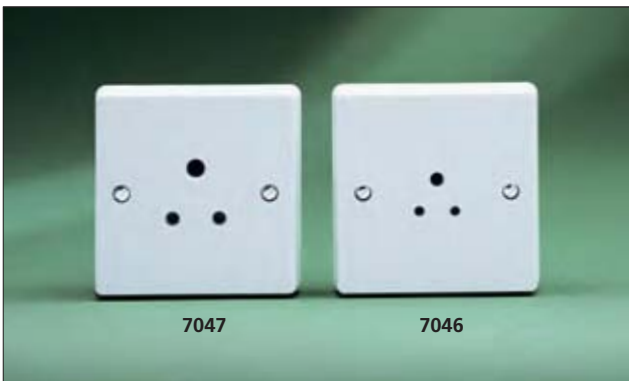
All available with two earth terminals to enable installation to comply with BS7671: 2008 regulation 543-7 (IEE wiring Regulations).



### 5A, 15A SWITCHED SOCKET OUTLETS

BS 546	PACK QTY	
5A Shuttered SP	10	<b>2330</b>
15A Shuttered SP	10	<b>2382</b>

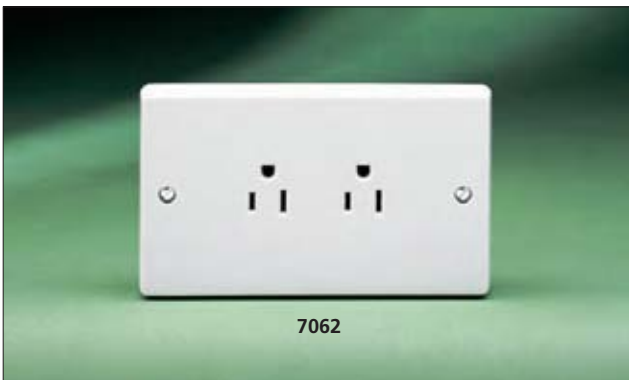
**Dimensions** 86mm x 86mm  
**Mounting boxes** 2330 – 9047 surface, SB655 flush galv. or SB619 dry lining  
 2382 – 9041 surface, SB615 flush galv. or SB619 dry lining



### 2A, 5A, SOCKET OUTLETS

BS 546 WHERE APPLICABLE	PACK QTY	
2A Unswitched shuttered	10	<b>7046</b>
5A Unswitched shuttered	10	<b>7047</b>

**Dimensions** 86mm x 86mm  
**Mounting boxes** 7044, 7046, 7047–9047 surface, SB655 flush galv. or SB619 dry lining

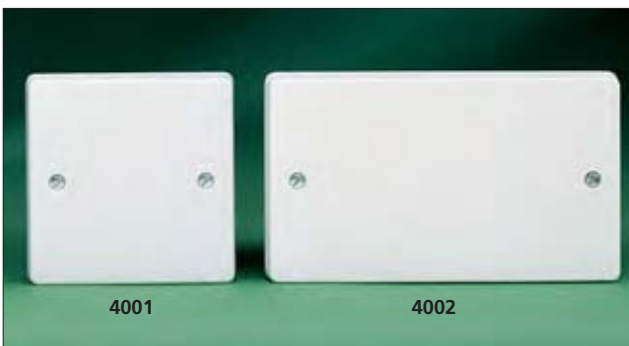


### 15A 125V AMERICAN STANDARD SOCKET OUTLETS

NEMA CONFIGURATION 5-15	PACK QTY	
2 gang Horizontal	5	<b>7062</b>

**Dimensions** 2 gang 86mm x 146mm  
**Mounting boxes** 2 gang 9048 surface, SB665 flush galv. or SB629 dry lining

Tunnel Type termination accepts 6.0mm<sup>2</sup> cable (7062).



### BLANKING PLATES

BS 5733 WHERE APPLICABLE	PACK QTY	
1 gang	20	<b>4001</b>
2 gang	20	<b>4002</b>
1 gang architrave	20	<b>4003</b>
2 gang architrave	20	<b>4004</b>

**Dimensions** 1 gang 86mm x 86mm, 2 gang 146mm x 86mm  
 1 gang architrave 33mm x 86mm  
 2 gang architrave 33mm x 146mm

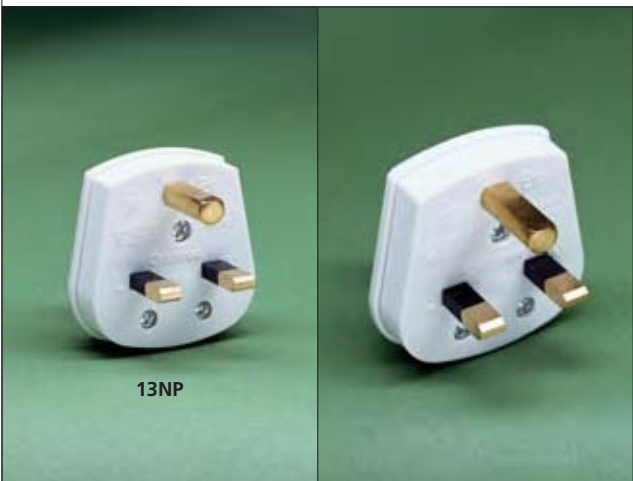


7222/WH

## 13A FUSED RESILIENT PLUGS

BS 1363/A	PACK QTY	
Fused at 13A – White	10	<b>7222/WH</b>

Live and neutral pins have moulded nylon sleeves for safety.  
Cover in rubber material. Base in nylon.  
Fitted with fuse-link marked to BS 1362, List No. **6920/13**, see below.



13NP

## 13A NON-INTERCHANGEABLE PLUGS

	PACK QTY	
Fused at 13A – White	10	<b>13NP</b>

Only for use with **Britmac non-standard floor box sockets**



7011

7111

7211

## 2A, 5A, 15A PLUGS

BS 546	PACK QTY	
2A	10	<b>7011</b>
5A	10	<b>7111</b>
15A	10	<b>7211</b>

Moulded from white thermoset plastic.  
Live and neutral pins have moulded nylon sleeves for safety.  
Round pin plugs are not fused.



6920/3

6920/5

6920/13

## FUSE LINKS

	PACK QTY	
3A Red	100	<b>6920/3</b>
5A Black	100	<b>6920/5*</b>
13A Brown	100	<b>6920/13</b>

Type tested to BS 1362 and ASTA certified.

\* Price and delivery on application.





4018

### 3A CARD SWITCH

BS 5733	PACK QTY	
3A Card Switch	5	<b>4018</b>

<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	SB655 flush galv. or SB619 dry lining

Controls energy consumption in installations such as hotels by ensuring that appliances are not left on when rooms are unoccupied.

The switch is operated by a door entry card and controls the supply to a room via a suitably rated contactor.

Will accept door entry cards up to 86mm x 54mm x 1mm.

Mounting box must be minimum 25mm in depth.

Fitted with neon for illumination through Card Switch entry see page 170.



4017

4017/1

### 6A TP CONTROL SWITCHES

BS EN 60669-1 BS EN 60947-3	PACK QTY	
6A Three pole isolating switch marked with isolator symbol	5	<b>4017</b>

6A Three pole isolating switch marked with isolator and fan symbol	5	<b>4017/1</b>
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<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9043 surface, SB623 flush galv. or SB619 dry lining

Provides local isolation of fans with or without timers whilst the rest of the circuit remains live. Enables repair or routine maintenance of fans.

240V only.

For full details of compliance with BS EN 60947-3 see Technical Data page 165.



4015

4015/31

### 20A DP CONTROL SWITCHES

BS EN 60669-1	PACK QTY	
20A DP Control Switch	10	<b>4015</b>

Fitted with neon indicator	10	<b>4015/3</b>
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Fitted with neon indicator and marked 'water heater'	10	<b>4015/31</b>
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<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9047 surface, SB655 flush galv. or SB619 dry lining

Fitted with knock out position in bottom edge of plate for use with or without cord outlet.

Cord outlet suitable for flexible cord up to 10mm outside diameter.

Two earthing terminals are fitted to the switches.



4013/3

### 32A DP CONTROL SWITCH

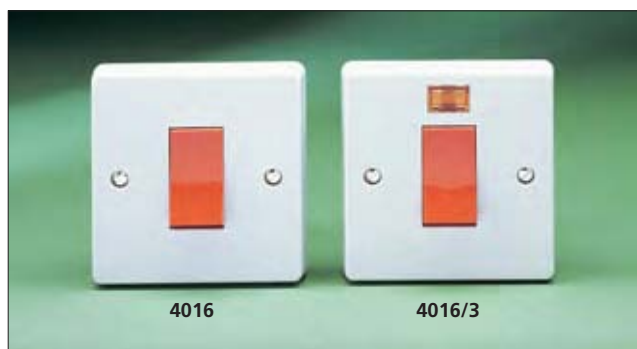
BS EN 60669-1	PACK QTY	
Fitted with neon indicator	10	<b>4013/3</b>

<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9041 surface, SB615 flush galv. or SB619 dry lining

Fitted with knock-out position in bottom edge of plate for use with or without cord outlet.

Cord outlet suitable for flexible cord up to 10mm outside diameter.

Two earthing terminals are fitted to the switches.



4016

4016/3

### 45A DP CONTROL SWITCHES

BS EN 60669-1	PACK QTY	
45A DP Control Switch	5	<b>4016</b>

With neon indicator	5	<b>4016/3</b>
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<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9041 surface, SB615 flush galv. or SB619 dry lining

Dual Screw Terminal.



4521/31

## 45A DP 'SLIM LINE' COOKER CONTROL UNITS

BS 4177 & BS 1363	PACK QTY	
45A DP main switch and 13A switch socket outlet. Faceplate marked 'cooker'	1	<b>4521/1</b>
45A DP main switch and 13A switch socket with neon indicators. Faceplate marked 'cooker'	1	<b>4521/31</b>

**Dimensions** 146mm x 86mm  
**Mounting boxes** 9054 surface, SB625 flush galv. or SB629 dry lining

- Same plate size as standard twin socket.
- Large capacity tunnel terminals on live and neutral take up to 10mm<sup>2</sup> cable.
- Two earth terminals are fitted.
- Separate double pole switching for both cooker and socket outlet.



4520/31

## 45A DP COOKER CONTROL UNITS

BS 4177 & BS 1363	PACK QTY	
45A DP main switch and 13A switch socket outlet. Faceplate marked 'cooker'	1	<b>4520/1</b>
45A DP main switch and 13A switch socket with neon indicators. Faceplate marked 'cooker'	1	<b>4520/31</b>

**Dimensions** 168mm x 114mm  
**Mounting boxes** 9052 surface or 9338/GV flush



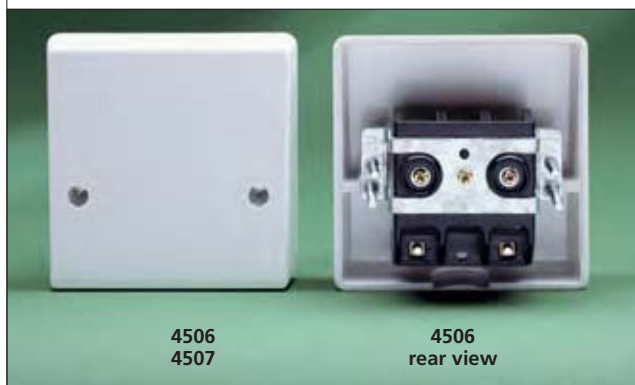
4523/3

## 50A DP COOKER CONTROL UNITS

	PACK QTY	
Faceplate marked 'cooker'	1	<b>4523</b>
Faceplate marked 'cooker' and fitted with neon indicator	1	<b>4523/3</b>
Blank Faceplate	1	<b>4211/BLANK</b>

**Dimensions** 165mm x 178mm  
**Mounting boxes** For 'retro fit' applications – allows use of original flush box

- Durable white powder coated metal faceplate.



4506  
4507

4506  
rear view

## 45A CABLE OUTLETS

BS 5733	PACK QTY	
With terminals and cable clamp Terminals will accept 2 x 10mm <sup>2</sup> cable	10	<b>4506</b>
With cable clamp Cable clamp will accept 1 x 16mm <sup>2</sup> through cable	10	<b>4507</b>

**Dimensions** 86mm x 86mm  
**Mounting boxes** 9041 surface, SB615 flush galv. or SB632 dry lining

*Cable knock-out in cover prevents access to terminals before outgoing cable is fitted.*



4500

## 50A DP CONTROL SWITCHES

BS EN 60669-1	PACK QTY	
50A DP Control Switch	5	<b>4500</b>
Faceplate marked 'cooker'	5	<b>4500/1</b>
Fitted with neon indicator	5	<b>4500/3</b>
Faceplate marked 'cooker' and fitted with neon indicator	5	<b>4500/31</b>

**Dimensions** 86mm x 146mm  
**Mounting boxes** 9040 surface, SB625 flush galv. or SB629 dry lining

BS EN 60947-3 rating 240V 50A category of duty AC22.



4075

rear view

## 20A CORD OUTLET

BS 5733	PACK QTY	
With cable clamp	10	<b>4075</b>
<b>Dimensions</b>	86mm x 86mm	
<b>Mounting boxes</b>	9047 surface, SB655 flush galv. or SB619 dry lining	

Outgoing cable 2.5mm<sup>2</sup> max with 11mm diameter max outer sheath.



4304/WH/RD

4827/RD

## RED ROCKERS

For applications where essential supply systems are in use, sockets and fused connection units with red rockers are available to order. These are ideal for use in hospitals, computer installations, etc.

To order add suffix to List No.  
 ie 4306 with red rockers = 4306/WH/RD.  
 4304 with red rockers = 4304/WH/RD.  
 4827 with red rockers = 4827/RD.  
 4307 with red rockers = 4307/RD.

All the above come complete with two Earth terminals for use where compliance with BS7671: 2008 regulation 543-7 (IEE wiring regulations).

For Rockergrid switches with Red rockers see Rockergrid section page 86.

For products with a Red Frontplate and Red Rocker please see selection in the Antimicrobial section (page 28).





## PRODUCT MARKING SERVICE

A wide range of markings can be added to 13A fused connection units and double pole control switches. The majority of these markings are consistent in style, colour and position with the standard Tampo-printed 'water heater' marking on List No.4015/31. All of the markings offer the same high level of durability.

To order any of the markings listed below, add suffix to List No. ie 4827 marked 'fridge freezer' = 4827/FF.

MARKING	SUFFIX	MARKING	SUFFIX
air conditioner	<b>AC</b>	humidity vent	<b>HV</b>
alarm	<b>AL</b>	intruder alarm	<b>IA</b>
appliance	<b>APP</b>	immersion heater	<b>IH</b>
bathroom	<b>BA</b>	infra red sauna	<b>IRS</b>
bell transformer	<b>BE</b>	jacuzzi	<b>JA</b>
bathroom extract fan	<b>BEF</b>	kitchen extract fan	<b>KEF</b>
bathroom heater	<b>BH</b>	light	<b>LG</b>
boiler	<b>BO</b>	lift	<b>LI</b>
boiler supply	<b>BOS</b>	loft light	<b>LL</b>
boost	<b>BST</b>	microwave	<b>MW</b>
British Telecom	<b>BT</b>	night immersion	<b>NI</b>
caravan	<b>CA</b>	off peak	<b>OFFP</b>
CCTV	<b>CCTV</b>	outside light	<b>OL</b>
central heating	<b>CH</b>	on peak	<b>ONP</b>
cooker	<b>CK</b>	oven	<b>OV</b>
cupboard light	<b>CL</b>	pelmet light	<b>PEL</b>
convector heater	<b>CNH</b>	plinth heater	<b>PLH</b>
day boost	<b>DB</b>	panel heater	<b>PH</b>
detector	<b>DE</b>	refrigerator	<b>RF</b>
downflow heater	<b>DH</b>	security alarm	<b>SA</b>
door bell	<b>DO</b>	socket below	<b>SB</b>
dish washer	<b>DW</b>	smoke detector	<b>SD</b>
dryer	<b>DY</b>	security equipment	<b>SE</b>
emergency circuit	<b>EC</b>	saniflo	<b>SF</b>
extractor fan	<b>EF</b>	shower	<b>SH</b>
extractor hood	<b>EH</b>	security light	<b>SL</b>
fire alarm	<b>FA</b>	shower pump	<b>SP</b>
for cleaners use only	<b>FCO</b>	storage heater	<b>ST</b>
fan coil unit	<b>FCU</b>	steam cabinet	<b>STC</b>
feature fire	<b>FE</b>	stair lift	<b>STL</b>
fridge/freezer	<b>FF</b>	tanning cabinet	<b>TC</b>
fan heater	<b>FH</b>	tumble dryer	<b>TD</b>
fire	<b>FI</b>	towel rail	<b>TR</b>
fan	<b>FN</b>	traditional sauna	<b>TS</b>
fridge	<b>FR</b>	TV amplifier	<b>TVA</b>
freezer	<b>FZ</b>	underfloor heating	<b>UH</b>
gas ignition	<b>GI</b>	underlights	<b>UL</b>
garden shed	<b>GS</b>	vent fan	<b>VF</b>
hand dryer	<b>HA</b>	water heater	<b>WA</b>
hob	<b>HB</b>	water cooler	<b>WC</b>
cooker hood	<b>HD</b>	waste disposal	<b>WD</b>
heating	<b>HG</b>	washing machine	<b>WM</b>
hair dryer	<b>HI</b>	washer	<b>WS</b>
heating isolator	<b>HS</b>		
heater	<b>HT</b>		

These popular markings are offered on a fast track service in the standard wiring accessories colour. For price and delivery information on other markings not listed above, contact our Technical Services Department.



## SHAVER SUPPLY UNIT

BS EN 61558-2-5		PACK QTY	
input	240V 50Hz	1	<b>2400</b>
output	{ 115V 50Hz 240V 50Hz		

<b>Dimensions</b>	86mm x 146mm
<b>Mounting boxes</b>	9053 surface, SB628 flush galv. or SB631 dry lining

Complies with the requirements of the IEE Wiring Regulations (BS 7671) for use in rooms containing a fixed bath or shower.



## LIGHT & SHAVER UNIT

BS EN 61558-2-5, BS 4533-102.1		PACK QTY	
input	240V 50Hz	Unswitched	1
output {	115V 50Hz		2402/E
	240V 50Hz		
60W 284mm tungsten lamp			

<b>Dimensions</b>	492mm x 59mm x 70mm
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Complies with the requirements of the IEE Wiring Regulations (BS 7671) for use in rooms containing a fixed bath or shower.



### LIGHT & SHAVER UNIT

- Tough, impact resistant, all-moulded construction.
- Diffuser is removed complete with lamp fitting to facilitate safer lamp changes.
- 60W lamp can be switched independently by a separate pull switch.
- Moulded back-plate may be used as a template.
- The transformer incorporated in this product has an isolating 20VA loading and outputs of 230V & 115V.
- Suitable for use for 'Mains shavers only'.
- Incorporates an automatic thermistor protection device.
- Accepts most standard British, Continental, American and Australian 2 pin plugs.
- Pull switch operates both lamp and socket.



## 16A CEILING SWITCHES

BS EN 60669-1		PACK QTY	
2 way SP		10	<b>2161</b>
1 way DP with neon indicator		10	<b>2163</b>

<b>Dimensions</b>	68.5mm diameter x 42.5mm
<b>Mounting boxes</b>	Integral pattress for surface mounting. Can be mounted to a small circular conduit box.

Two way switch may be wired as one way.  
Standard pull cord/acorn is 1.5m long, in white.  
Fully rated for fluorescent or inductive loads.  
Suitable for use with 16mm x 16mm mini-trunking.



## 50A CEILING SWITCHES

BS EN 60669-1		PACK QTY	
1 way DP with neon and mechanical indicator		1	<b>2167</b>

<b>Mounting boxes</b>	Integral pattress for surface mounting. Can be mounted to a large circular conduit box.
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Complies with the requirements of the IEE Wiring Regulations (BS 7671) for use as an isolating device.  
Terminals will accept up to 10mm<sup>2</sup> cable.  
Standard pull cord/acorn is 1.5m long, in white.  
Suitable for use with 25mm x 16mm trunking.  
Rated for non-inductive loads only.

For 6A ceiling switches see Capital Lighting section, page 17.

# CAPITAL

## LIGHTING CONTROL

The extensive Capital lighting range of plate switches and ceiling accessories combines modern styling with advanced safety design features.

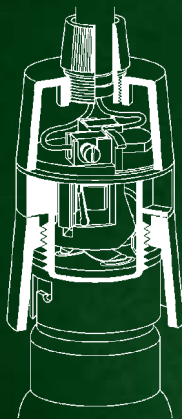
The standard range of ceiling accessories now offers a competitive alternative to the safety range.

The new compact fluorescent lampholder allows domestic dwellings to have some form of energy efficient lighting.

Wide concave rockers are easy to operate. Unique Labyrinth Switch design minimises visible arc flash and prevents front access to live parts



Design of the Safety lampholder body is common to both pendant and batten lampholders. This ensures that the lamp must be fully inserted before the lampholder contacts become 'live'.





# MINDER

## PIR SENSORS

Minder passive infra red sensors (PIR) allow for the automatic control of lighting and other equipment.



Minder PIR Sensor.



Energy saving – Provides power only when movement is detected.

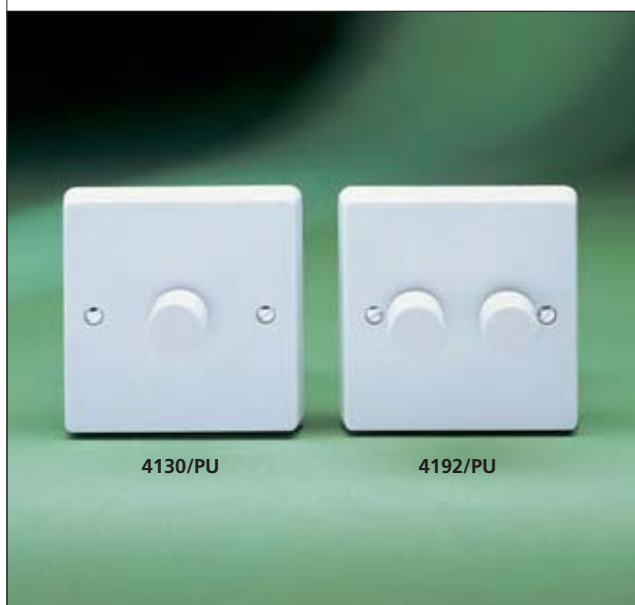


Courtesy – Automatic illumination of doorways to welcome visitors.



Security – Automatic lighting control to deter intruders.





## 10AX PLATE SWITCHES

BS EN 60669-1	PACK QTY	
1 gang 1 way SP	10	<b>4070</b>
1 gang 2 way SP	10	<b>4170</b>
1 gang 1 way DP	10	<b>4171</b>
2 gang 2 way SP	10	<b>4172</b>
3 gang 2 way SP	10	<b>4173</b>
4 gang 2 way SP	5	<b>4174</b>
1 gang intermediate	10	<b>4175</b>
6 gang 2 way SP	5	<b>4176</b>

**Dimensions** 1-3 gang 86mm x 86mm  
4-6 gang 146mm x 86mm

**Mounting boxes** 1-3 gang 9043 surface, SB623 flush galv. or SB619 dry lining  
4-6 gang 9048/1 surface, SB665 flush galv. or SB629 dry lining

*Two way switches can be wired as one way.*

*Fully rated for fluorescent or inductive loads.*

- All 86mm x 86mm switches will flush mount with seek light shown on page 35.

## 10A RETRACTIVE SWITCHES

BS EN 60669-1	PACK QTY	
1 gang 1 way SP marked with bell symbol	10	<b>4096/B</b>
1 gang 2 way SP marked with bell symbol	10	<b>4096/2WB</b>
1 gang 2 way SP marked 'press'	10	<b>4096/P</b>
1 gang 2 way SP marked 'press' with Red Rocker	10	<b>4096/P/RD</b>
1 gang 2 way SP	10	<b>4096/NM</b>
1 gang 2 way SP marked 'press to exit' in Green	10	<b>4096/G/PE</b>

**Dimensions** 86mm x 86mm

**Mounting boxes** 9043 surface, SB623 flush galv. or SB619 dry lining

- All 86mm x 86mm switches will flush mount with seek light shown on page 35.
- Can be wired for normally open (N/O) or normally closed (N/C) circuits.

## DIMMER SWITCHES

BS EN 55014 BS EN 60669-2-1		
ROTARY MODULES	PACK QTY	
1 gang 250W - Push on/off	10	<b>4130/PU</b>
2 gang 250W - Push on/off	10	<b>4132/PU</b>
1 gang 400W - Push on/off	10	<b>4190/PU</b>
2 gang 400W - Push on/off	10	<b>4192/PU</b>

**Dimensions** 1-2 gang 86mm x 86mm  
Minimum installation depth 35mm

- Suitable for Tungsten filament lamps.
- 2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.



## 10A 'CORINTHIAN' PLATE SWITCHES

BS EN 60669-1	PACK	QTY
10AX 1 gang 2 way SP	10	<b>5170</b>
10AX 2 gang 2 way SP	10	<b>5172</b>
10AX 3 gang 2 way SP	10	<b>5173</b>
20AX 1 gang intermediate	10	<b>5175</b>
10A 1 gang retractive marked 'Press'	10	<b>5177</b>
20AX 1 gang DP	10	<b>5176</b>

**Dimensions** 86mm x 86mm  
**Mounting boxes** 9047 surface, SB623 flush galv. or SB619 dry lining

Intermediate switches require a 29mm back box.

Fully rated for fluorescent or inductive loads.

- Clip-on trim conceals fixing screws.
- Extra wide rocker makes Corinthian ideal for use in sheltered housing installations.



## 6A CEILING SWITCHES

BS EN 60669-1	PACK	QTY
1 way SP	10	<b>2041</b>
2 way SP	10	<b>2141</b>
Retractive SP	10	<b>2147</b>

**Dimensions** 68.5mm dia x 42.5mm  
**Mounting boxes** Complete with pattress for surface mounting.  
 Can be mounted to small circular conduit box.

Two way switch can be wired as one way.

Retractive switch can be wired for normally open (N/O) or normally closed (N/C) circuits.

Standard pull cord/acorn is 1.5m long in white.

Retractive pull cord/acorn is 2m long in red.

Fully rated for fluorescent or inductive loads.

Variations to retractive switch are available to order.

For 16A & 50A ceiling switches see Capital Power & Control section, page 13.



## 10AX ARCHITRAVE SWITCHES

BS EN 60669-1	PACK	QTY
1 gang retractive SP marked with bell symbol	10	<b>4097/B</b>
1 gang retractive SP marked 'press'	10	<b>4097/P</b>
1 gang 2 way SP	10	<b>4177</b>
2 gang 2 way SP	10	<b>4178</b>
1 gang 1 way DP	10	<b>4179</b>
1 gang intermediate	10	<b>4180</b>

**Dimensions** 1 gang 32mm x 86mm  
 2 gang 32mm x 146mm

**Mounting boxes** 1 gang **4005** surface or **9257** flush  
 2 gang **4006** surface or **9258** flush

Two way switches can be wired as one way.

Fully rated for fluorescent or inductive loads.

Retractive switches can be wired for normally open (N/O) or normally closed (N/C) circuits.

Retractive switches are 10A rated.



## SHAVER SUPPLY UNIT

BS EN 61558-2-5	PACK	QTY
input 240V 50Hz output { 115V 50Hz 240V 50Hz	1	<b>2400</b>

## LIGHT & SHAVER UNIT

BS EN 61558-2-5, BS 4533-102.1	PACK	QTY
input 240V 50Hz Unswitched	1	<b>2402/E</b>
output { 115V 50Hz 240V 50Hz		
60W 284mm tungsten lamp		

For more information on the Shaver Unit see page 13.



5850

## SAFETY PENDANT LAMP HOLDERS

BS EN 61184, T2 RATING	PACK QTY	
Safety pendant lampholder	20	<b>5850</b>

Fixed terminals on pendant lampholder accept 1.0mm cable.

- 'Wipe clean' contacts avoid lamp seizure to pins making for safe and easy lamp replacement.
- Cord grip on pendant lampholder prevents strain on the terminal wiring.



5851

5801

## SAFETY BATTEN LAMP HOLDERS

BS EN 61184, T2 RATING	PACK QTY	
Safety batten lampholder	1	<b>5851</b>
Home office shield	50	<b>5801</b>

Batten lampholder has terminals for live, neutral, loop in and protective earth.

Fixing centres 50.8mm.

Fixed terminal strip on batten lampholder accepts 1.5mm cable.

Home office shield supplied with the safety batten lampholder.

Base diameter 92mm.

- 'Wipe clean' contacts avoid lamp seizure to pins making for safe and easy lamp replacement.



5855

## SAFETY PENDANT SETS

BS67 BS EN 61184, T2 RATING	PACK QTY	
With 6" cord	10	<b>5855</b>
With 9" cord	10	<b>5855/9</b>
With 12" cord	10	<b>5855/12</b>

Comprises safety ceiling rose (List No. **5860**) and safety pendant lampholder (List No. **5850**), supplied with appropriate length of heat resistant 0.75mm<sup>2</sup> twin core circular cord to BS 6141 for service loads up to 2.5kg.



5856

## SAFETY HEAVY DUTY PENDANT SET

BS67 BS EN 61184, T2 RATING	PACK QTY	
With 6" cord	10	<b>5856</b>

Comprises heavy duty ceiling rose (List No. **5861**) and safety pendant lampholder (List No. **5850**), supplied with appropriate length of heat resistant 0.75mm<sup>2</sup> twin core circular cord to BS 6141 for service loads up to 2.5kg.



5855/S

## SAFETY LAMP HOLDER PENDANT SET

BS67 BS EN 61184, T2 RATING	PACK QTY	
With 6" cord	10	<b>5855/S</b>
With 9" cord	10	<b>5855/S9</b>
With 12" cord	10	<b>5855/S12</b>

Comprises standard ceiling rose (List No. **3443**) and safety pendant lampholder (List No. **5850**), supplied with appropriate length of heat resistant 0.75mm<sup>2</sup> twin core circular cord to BS 6141 for service loads up to 2.5kg.



## LOW ENERGY LAMPHOLDERS

10/13W LOW ENERGY LAMPHOLDERS FOR 4 PIN CFLs  
PACK QTY

6" pendant set with compact fluorescent lampholder	1	<b>3450/LECFL</b>
Compact fluorescent batten lampholder	1	<b>5870/LECFL</b>

- Lampshade requires 42mm diameter.
- Will accept 10/13W G24q1 or 18W G24q2, 4 pin plug in lamp (not supplied).
- See page 173 for Technical details.



## SAFETY CEILING ROSE

BS 67  
PACK QTY

Safety ceiling rose	10	<b>5860</b>
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*Terminals for live, neutral, loop in and protective earth.*  
*Fixed terminal strip accepts 1.5mm cable.*  
*For service loads up to 2.5kg.*  
*Fixing centres 50.8mm.*  
*Base diameter 92mm.*  
*Cord grip prevents strain on the terminal wiring.*



## HEAVY DUTY CEILING ROSE

BS 67  
PACK QTY

Heavy duty ceiling rose	10	<b>5861</b>
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*Terminals for live, neutral, loop in and protective earth.*  
*Base diameter 81mm.*

- Two screw cover fixing giving strong secure fixing and automatic earthing of decorative luminaires.
- 15kg load capacity.
- Integral pattress for surface mounting.
- Can be mounted on circular conduit box.



## STANDARD CEILING ROSE

BS 67  
PACK QTY

Ceiling rose with integral terminal block	10	<b>3443</b>
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- Terminals accept up to 1.5mm<sup>2</sup> cable.
- Separate earth terminals with 6mm<sup>2</sup> capacity.
- 50.8mm fixing centres.
- 3 sets of knockouts.



## STANDARD CEILING HALO

PACK QTY

Ceiling Halo	10	<b>3443/HALO</b>
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*The Ceiling Rose Halo gives a neat finish should the ceiling be damaged.*

- Outside diameter 120mm.





## STANDARD STRAIGHT BATTEN LAMPHOLDERS

BS EN 61184, T2 RATING	PACK QTY	
Batten lampholder, 3 terminal direct wiring with short skirt	10	<b>3410</b>
Batten lampholder, integral terminal block with short skirt	10	<b>3420</b>
Batten lampholder, integral terminal block with Home Office skirt	10	<b>3422</b>
Replacement standard short skirt	50	<b>3401</b>
<b>Dimensions</b>	<b>3410</b> - 64.2mm Dia <b>3420, 3422</b> - 89mm Dia	

- 50.8mm fixing centres.
- Non-rising terminals.
- Non-stick skirt.
- 3 sets of knockouts are supplied on units with integral terminal block.
- 3420, 3422 fitted with heat resistant tails.

## STANDARD ANGLE BATTEN LAMPHOLDERS

BS EN 61184, T2 RATING	PACK QTY	
Angle batten lampholder, separate 4 way terminal block with Home Office skirt	10	<b>3432</b>
<ul style="list-style-type: none"> <li>• Lampholder is fitted with heat-resistant tails.</li> <li>• Supplied with integral backplate.</li> <li>• 50.8mm fixing centres.</li> <li>• Non-rising terminals.</li> <li>• Non-rising skirt.</li> </ul>		

## STANDARD PENDANT SETS & LAMPHOLDERS

BS 67 & BS EN 61184, T2 RATING	PACK QTY	
Pendant lampholder, T2 rating with spring plungers	10	<b>3442</b>
Pendant set with 6" cord	10	<b>3450</b>
Pendant set with 9" cord	10	<b>3450/9</b>

*Pendant sets comprise ceiling rose (List No 3443) and pendant lampholder (List No. 3442), supplied with appropriate length of heat resistant 0.75mm<sup>2</sup> twin core circular cord.*

- Lampholder is constructed from one-piece thermoplastic interior.

## STANDARD JUNCTION BOXES

BS 6220	PACK QTY	
20A 4 terminal junction box, white	10	<b>3462/WH</b>
20A 4 terminal junction box, black	10	<b>3462/BK</b>
30A 3 terminal junction box, white	10	<b>3463/WH</b>
30A 3 terminal junction box, black	10	<b>3463/BK</b>

- Slotted pillar-type terminals accept a maximum 4 x 4.0mm<sup>2</sup> (30A) or 4 x 1.5mm<sup>2</sup> (20A) twin and earth cables.
- Shutters on cover close any entry holes not in use.
- Clear symbols indicate which entries are open and closed.



## MINDER 90°, 220° & 280° SENSORS

IP55	PACK QTY	
Passive infrared motion detector which switches consumers through a timing element when sources of heat move within its range.		
Minder 90 Deg PIR sensor, no remote control, surveillance range 12M frontal, 6M lateral	1	<b>6853</b>
Minder 220 Deg PIR sensor, c/w remote control, surveillance range 16M frontal & lateral	1	<b>6845</b>
Minder 280 Deg PIR sensor, c/w remote control, surveillance range 16M frontal & lateral	1	<b>6846</b>
<b>Dimensions</b>	102mm x 102mm x 182mm	

- Minder 90° and 220° can be swivelled vertically +90° -40°
- Sensor head can be swivelled horizontally +/- 65°
- Can be wall or ceiling mounted
- Minder 90° and 220° offer rear-field "anti-creep" protection
- Maximum Switching current 16AX

## MINDER SECURITY 220° SENSOR

IP55		PACK QTY
Minder Security 220 Deg PIR sensor, c/w remote control,surveillance range 16M frontal & lateral		1 <b>6849</b>
<b>Dimensions</b>	102mm x 102mm x 182mm	

- Minder 220° can be swivelled vertically +90° -40°
- Sensor head can be swivelled horizontally +/- 65°
- Can be wall or ceiling mounted
- Minder 220° offers rear-field "anti-creep" protection
- Maximum Switching current 16AX

Full technical information - see page 168.

## ANCILLIARY ITEMS

	PACK QTY	
Corner mounting bracket	1	<b>6887</b>
Manual remote control	1	<b>6841</b>
Service Manual remote control	1	<b>6842</b>

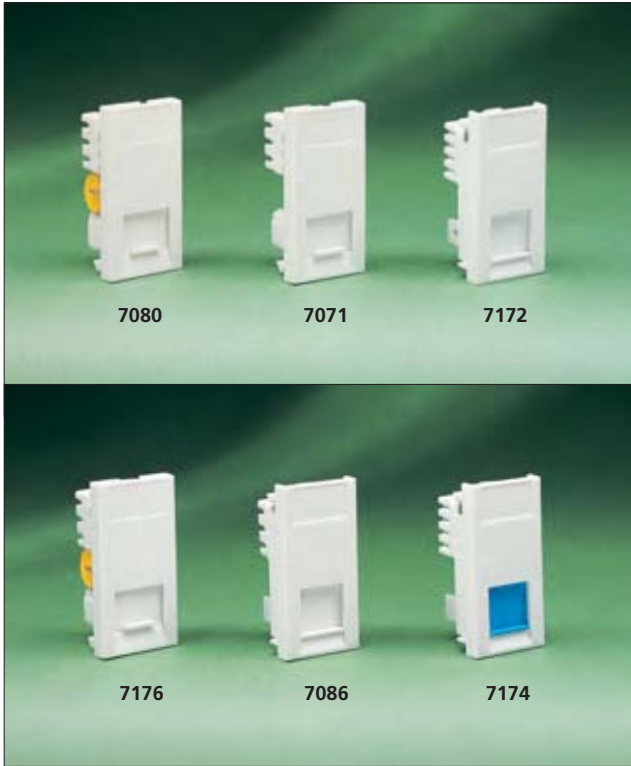
# DATAPAK

Crabtree's Datapak range compliments the complete Capital and Platinum range of products.

The range consists of a wide variety of Communications, Data and co-axial outlets.







## COMMUNICATION MODULES

	PACK QTY	
BT Master Voice	25	<b>7080</b>
BT Master Voice, Left Handed	25	<b>7080/LH</b>
BT secondary Voice, 6 wire	25	<b>7071</b>
RJ45 (single) module, 8 wire – Category 5e	25	<b>7172</b>
RJ45 (single) module, 8 wire – Category 6	25	<b>7177</b>
RJ45 ISDN terminated	25	<b>7174</b>
RJ11/12	25	<b>7086</b>
PABX Voice	25	<b>7176</b>
RJ45 (Twin) module	25	<b>7173</b>

**Dimensions** 25mm x 50mm (1 Module)

Also available in Black - Add suffix **BK** to list No.

ie: BT Master in Black = 7080/**BK**.



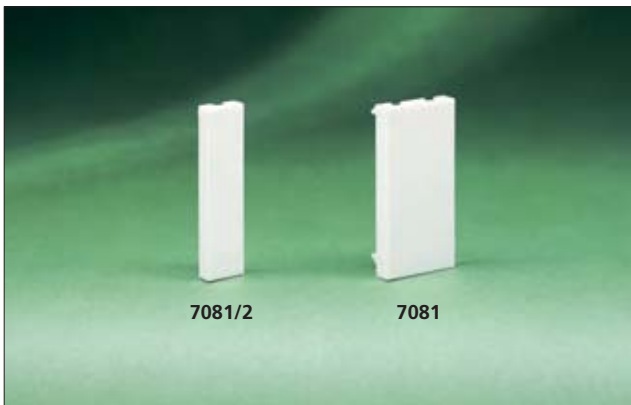
## DATA AND CO-AXIAL MODULES

	PACK QTY	
BNC single module with 75 Ohm crimp connector	25	<b>7074</b>
TV outlet (male)	25	<b>7065</b>
TV outlet (female)	25	<b>7067</b>
F type Satellite	25	<b>7069</b>
Triplex Unit (TV, FM, Sat)	25	<b>7063</b>
Quadplexer with TV return (TV, TV return, FM, Sat1 & Sat 2)	10	<b>7064</b>
Quadplexer (TV, FM, Sat1 & Sat 2)	10	<b>7066</b>
TV outlet screened, return	25	<b>7060</b>
Phono (Female)	25	<b>7087</b>

Also available in Black - Add suffix **BK** to list No.

ie: triplex unit in black = 7063/**BK**.

**Dimensions** 25mm x 50mm (1 Module)  
(except 7063, 7066 – 50mm x 50mm  
& 7064 – 75mm x 50mm)



## BLANK MODULES & ACCESSORIES

	PACK QTY	
1/2 module size	25	<b>7081/2</b>
1 module size	25	<b>7081</b>
2 module size	10	<b>7082</b>
IDC Tool	20	<b>6915</b>
IDC Crimp Tool	1	<b>7915</b>

Also available in Black - Add suffix **BK** to list No. ie: 1 module blank in black = 7081/**BK**.

**Dimensions** 7081/2 12.5mm x 50mm  
7081 25mm x 50mm

See page 172 for further Technical details.





## MOUNTING PLATES CAPITAL

BS 5733 WHERE APPLICABLE	PACK QTY	
2 module moulded	10	<b>7091</b>
4 module moulded	10	<b>7094</b>
1 module metal plate (fitted with grid)	5	<b>8091/_ _</b>
2 module metal plate (fitted with grid)	5	<b>8092/_ _</b>
4 module metal plate (fitted with grid)	5	<b>8094/_ _</b>

**Dimensions** 86mm x 86mm, 1 & 2 module  
86mm x 146mm, 4 module

**Mounting boxes** 7091, 8091\*, 8092\*,  
9041 surface, SB615 flush galv. or SB619 dry lining  
7094, 8094\*,  
9040 surface, SB625 flush galv. or SB629 dry lining

\* Metal plates complete with mounting grid and available in Satin Chrome (**SC**),  
Bronze (**BZ**), Highly Polished Chrome (**HPC**) and Polished Brass (**PB**) finishes.



## MOUNTING GRIDS – SEPARATE SALE

	PACK QTY	
2 module grid	10	<b>8092/1</b>
4 module grid	10	<b>8094/1</b>

Separate sale grids enable communications modules to be mounted in OEMs own decorative plates.

Supplied complete with earthing tag.



## MOUNTING PLATES PLATINUM LOW PROFILE

BS 5733 WHERE APPLICABLE	PACK QTY	
2 module	10	<b>7507/_ _</b>
4 module	10	<b>7509/_ _</b>

**Dimensions** 2 module 88mm x 88mm, 4 module 88mm x 148mm

Finishes available are: Satin Chrome (**SC**) Highly Polished Chrome (**HPC**)  
& Polished Brass (**PB**).

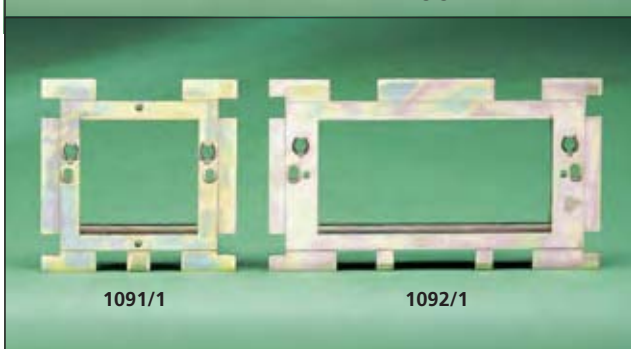


## MOUNTING PLATES PLATINUM FLAT PLATE

BS 5733 WHERE APPLICABLE	PACK QTY	
2 module	10	<b>8507/_ _</b>
4 module	10	<b>8509/_ _</b>

**Dimensions** 2 module 86mm x 86mm, 4 module 86mm x 146mm

Finishes available are: Stainless Steel (**SS**) Polished Stainless Steel (**PSS**)  
& Polished Brass (**PB**).



## MOUNTING PLATES PLATINUM GRID

	PACK QTY	
2 module	10	<b>1091/1</b>
4 module	10	<b>1092/1</b>

Supplied complete with earth terminal.



## MOUNTING PLATES LJU6C

	PACK QTY	
Mounting Plate 1 x LJU6C 1G	10	<b>7LJ61</b>
Mounting Plate 2 x LJU6C 1G	10	<b>7LJ62</b>
Mounting Plate 4 x LJU6C 2G	5	<b>7LJ64</b>

**Dimensions** 1 Gang 86mm x 86mm  
2 Gang 86mm x 146mm

**Mounting boxes** 9047 surface, SB655 flush galv. or SB619 dry lining

*LJU6C cutout Dimensions 36.6mm x 22.2mm*



## CO-AXIAL SOCKET OUTLETS-DIRECT CONNECTION

BS 3041 WHERE APPLICABLE	PACK QTY	
1 way direct connection	10	<b>7265</b>
2 way direct connection	10	<b>7266</b>

**Dimensions** 86mm x 86mm

**Mounting boxes** 9047 surface, SB655 flush galv. or SB619 dry lining



## CO-AXIAL SOCKET OUTLETS-ISOLATED

BS 3041 WHERE APPLICABLE	PACK QTY	
1 way isolated UHF, VHF	10	<b>7267</b>
2 way isolated UHF, VHF	10	<b>7268</b>

**Dimensions** 86mm x 86mm

**Mounting boxes** 9047 surface, SB655 flush galv. or SB619 dry lining

*Isolated UHF, VHF socket outlets for network systems (group aerials & sockets).*

*Isolated units only suitable on installations with earth bond.*



## TELEPHONE SOCKET OUTLETS

BS 7671	PACK QTY	
IDC tool	20	<b>6915</b>
Single master	10	<b>7283</b>
Single secondary	10	<b>7284</b>
RJ11 Telephone socket	10	<b>7286</b>
Dual outlet adaptor	10	<b>7288</b>

**Dimensions** 86mm x 86mm

**Mounting boxes** 9047 surface, SB655 flush galv. or SB619 dry lining

*BT approved by the Department for Trade and Industry.*





# ANTI MICROBIAL

Crabtree have partnered with BioCote® to introduce a range of wiring accessories which offer a second level of protection against microbial cross-contamination.

The active ingredients used in BioCote® products are incorporated during the manufacturing process and are therefore present and active for the life of the product.

Infection control is becoming increasingly important within healthcare environments, the target being the prevention of Hospital Acquired Infections (HAIs).

BS ISO 22196:2007 Plastics measurement of antibacterial activity on plastic surfaces.





### 13A SWITCHED SOCKET OUTLETS

BS 1363	PACK QTY
13A 1 gang DP socket	10 <b>AM4304/D</b>
13A 2 gang DP socket	5 <b>AM4306/D</b>
13A 2 gang DP socket, Outboard Rockers	5 <b>AM4307</b>

- All Switched Sockets come complete with two Earth terminals.



### 13A SOCKET OUTLETS COLOURED

BS 1363	PACK QTY
13A 1 gang DP switched socket Green Rocker	10 <b>AM4304/D/GRN</b>
13A 1 gang DP switched socket all RED	10 <b>AM4304/RED</b>
13A 1 gang DP switched socket all BLUE	5 <b>AM4304/DCE/BLUE*</b>
13A 2 gang DP switched socket all RED	5 <b>AM4306/RED</b>
13A 2 gang DP switched socket all BLUE outboard rocker	5 <b>AM4307/DCE/BLUE*</b>
13A 1 gang unswitched socket all BLUE	10 <b>AM7255/CE/BLUE*</b>
13A 2 gang unswitched socket all BLUE	5 <b>AM7257/CE/BLUE*</b>

- All Switched Sockets come complete with two Earth terminals.
- Clean Earth sockets come with two isolated earth terminals.
- \* Blue Sockets available Summer 2010



### 13A FUSED CONNECTION UNITS

BS 1363	PACK QTY
13A DP switched Fused Connection Unit	10 <b>AM4827</b>
13A DP switch FCU + neon	10 <b>AM4827/3</b>
13A Un-switched Fused Connection Unit	10 <b>AM4828</b>
13A Un-switched FCU + neon	10 <b>AM4828/3</b>
13A DP switched FCU all RED	10 <b>AM4827/RED</b>
13A Un-switched FCU all RED	10 <b>AM4828/RED</b>

- Fitted with knock-out position in bottom edge of plate for use with or without cord outlet. Suitable for flexible cord up to 10mm outside diameter.
- Fused on the line side with a 13A fuse link.
- Fuse ASTA certified and marked to BS1362. For spare fuse links see page 8.



### 10AX & 20AX CONTROL SWITCHES

BSEN 60669-1	PACK QTY
20A DP switch	10 <b>AM4015</b>
20A DP switch + neon	10 <b>AM4015/3</b>
10AX 2 way 1 gang switch Flush	10 <b>AM4170</b>
10AX 2 way 2 gang switch Flush	10 <b>AM4172</b>
10AX Intermediate 1 gang switch Flush	10 <b>AM4175</b>

For Technical information on Crabtree Anti Microbial See page 174.



AM4314/1

AM4316/1

### 13A SOCKET INTERIORS

BS 1363	PACK QTY	
13A 1 gang SP switched socket	10	<b>AM4314/1</b>
13A 1 gang DP switched socket	10	<b>AM4314/1D</b>
13A 2 gang SP switched socket	5	<b>AM4316/1</b>
13A 2 gang SP switched socket c/w neon	5	<b>AM4316/13</b>
13A 2 gang DP switched socket	5	<b>AM4316/1D</b>
13A 2 gang DP switched socket o'board rocker	5	<b>AM4317/1</b>
2A 3 pin unswitched socket shuttered	10	<b>AM8075/1</b>

- All Switched Sockets come complete with two earth terminals.



AM4317/1RED

AM4317/1BLUE/CE

### 13A SOCKET INTERIORS - COLOURED

BS 1363	PACK QTY	
13A 2 gang SP switched socket Red Rocker	5	<b>AM4316/1RD</b>
13A 2 gang DP switched socket Red Rocker	5	<b>AM4316/1D/RD</b>

### 13A SOCKET INTERIORS - OUTBOARD ROCKER

13A 2 gang DP switched socket all RED	5	<b>AM4317/1RED</b>
13A 2 gang DP switched socket all Blue Clean Earth	5	<b>AM4317/1BLUE/CE</b>

### 13A UNSWITCHED SOCKET INTERIORS

13A 2 gang unswitched socket all RED twin earth	5	<b>AM8257/1RED/TE</b>
13A 2 gang unswitched socket all BLUE Clean Earth	5	<b>AM8257/1BLUE/CE</b>

- All Switched Sockets come complete with two earth terminals.
- Clean Earth sockets come with two isolated earth terminals.



AM4450

AM4460

AM4552

AM4461

### ROCKERGRID SWITCHES

BS EN 60669-1	PACK QTY	
10AX 1 way	10	<b>AM4430</b>
Fuse unit fitted 13A ASTA certified fuse link	10	<b>AM4436</b>
20AX 1 way	10	<b>AM4450</b>
20AX DP	10	<b>AM4460</b>
20AX DP with Red Rocker	10	<b>AM4460RD</b>
20AX DP complete with key	10	<b>AM4461</b>
10A retractive	10	<b>AM4489</b>
Indicator - Red	10	<b>AM4491</b>
Blanking component	10	<b>AM4492</b>
20AX 2 way	10	<b>AM4550</b>
20AX 2 way and off	10	<b>AM4552</b>
20AX Retractive 2 way and off	10	<b>AM4553</b>

### ROCKERGRID PLATES

	PACK QTY	
Rockergrid Moulded Plate 1 gang	20	<b>AM5571</b>
Rockergrid Moulded Plate 2 gang	20	<b>AM5572</b>
Rockergrid Moulded Plate 3 gang	10	<b>AM5573</b>
Rockergrid Moulded Plate 4 gang	10	<b>AM5574</b>

- Grid Yokes not supplied with moulded plates see page 87 for selection.



AM5571

AM5574

For Technical information on Crabtree Anti Microbial See page 174.

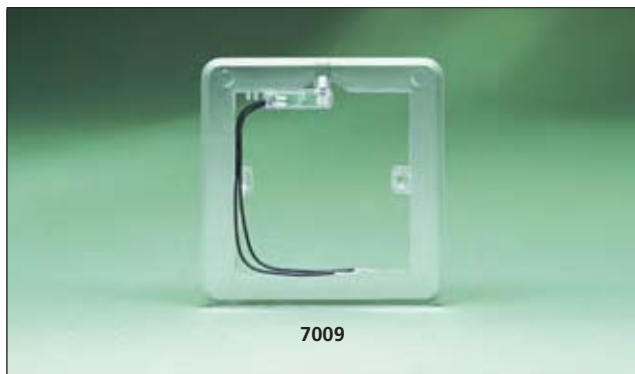






The Crabtree Seek Light as shown assists in the location of the light switches in the dark. Seek light comes on when the switch is turned off. Seek light fits all Crabtree 1 gang switches. The circuit has been designed to reduce the pulse effect of the LED light and give a constant light source.





7009

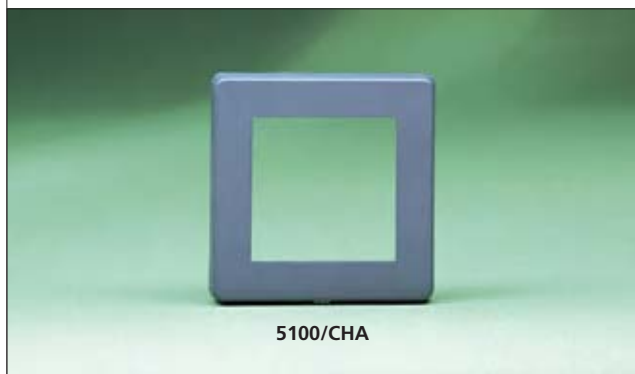
## SEEK LIGHT

LED Seek/Night Light

**7009**

- Fits all Crabtree 1 Gang in size light switch plates including the Capital moulded and metal plates, Corinthian, Rockergrid, Platinum white moulded, Low profile & Flat plate.
- The seek light comes on when the switch is turned off.
- The seek light requires a filament type bulb to operate correctly.

**Dimensions** 94mm x 94mm



5100/CHA

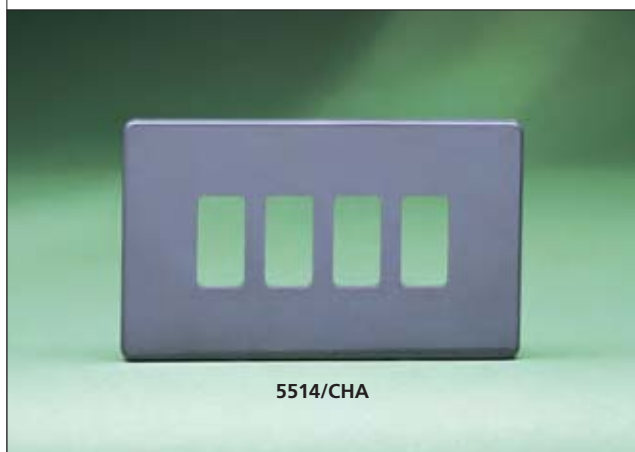
## CORINTHIAN - RAL 7024

Corinthian Surround plate

**5100/CHA**

- Fits all Corinthian Switches
- 5170 - 10AX 1 Gang 2 way SP
- 5172 - 10AX 2 Gang 2 way SP
- 5173 - 10AX 3 Gang 2 way SP
- 5175 - 20AX Intermediate
- 5177 - 10AX 1 Gang Retractive

**Dimensions** 86mm x 86mm



5514/CHA

## GRID PLATES - RAL 7024

1 Gang Plate for Platinum Grid	<b>5511/CHA</b>
2 Gang Plate for Platinum Grid	<b>5512/CHA</b>
3 Gang Plate for Platinum Grid	<b>5513/CHA</b>
4 Gang Plate for Platinum Grid	<b>5514/CHA</b>

## GRID YOKES

1 Gang Platinum Grid	<b>1901</b>
2 Gang Platinum Grid	<b>1902</b>
3 Gang Platinum Grid	<b>1903</b>
4 Gang Platinum Grid	<b>1904</b>

**Dimensions** 1 Gang 91mm x 91mm  
2 Gang 151mm x 91mm



4430/CHA 4530/CHA 4489/CHA

## 10AX GRID SWITCHES - RAL 7024

	BS EN 60669-1
10AX 1 way Grid Switch	<b>4430/CHA</b>
10AX 2 way Grid Switch	<b>4530/CHA</b>
10A Retractive Grid Switch	<b>4489/CHA</b>



4450/CHA 4550/CHA 4460/CHA 4535/CHA

## 20AX GRID SWITCHES - RAL 7024

	BS EN 60669-1
20AX 1 way Grid Switch	<b>4450/CHA</b>
20AX 2 way Grid Switch	<b>4550/CHA</b>
20AX DP Grid Switch	<b>4460/CHA</b>
20AX Intermediate Switch	<b>4535/CHA</b>

For Complete range of Rockergrid switches in white please see page 86.

## REPLACING A FACE PLATE



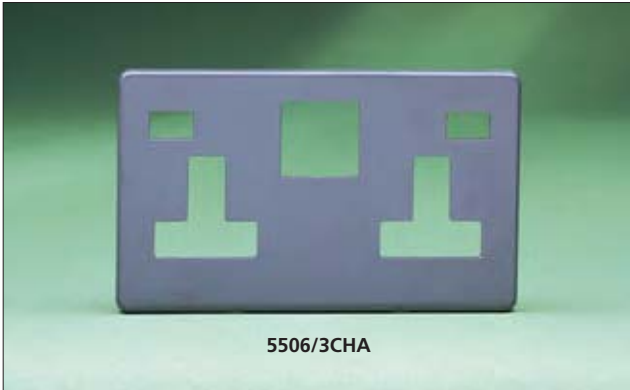
Select the wiring accessory front plate to be replaced.



Remove the existing front plate using a flat bladed screwdriver.



Checking it is correctly located push new plate into position.



5506/3CHA

### SOCKETS - RAL 7024

1 Gang 13A DP Switched Socket Front Plate **5504/CHA**  
for use with Platinum 7314/WH

1 Gang 13A DP Switched Socket with neon Front Plate **5504/3CHA**  
for use with Platinum 7314/3WH

2 Gang 13A DP Switched Socket Front Plate **5506/CHA**  
for use with Platinum 7316/WH

2 Gang 13A DP Switched Socket with neon Front Plate **5506/3CHA**  
for use with Platinum 7316/3WH

**Dimensions** 1 Gang 91mm x 91mm  
2 Gang 151mm x 91mm



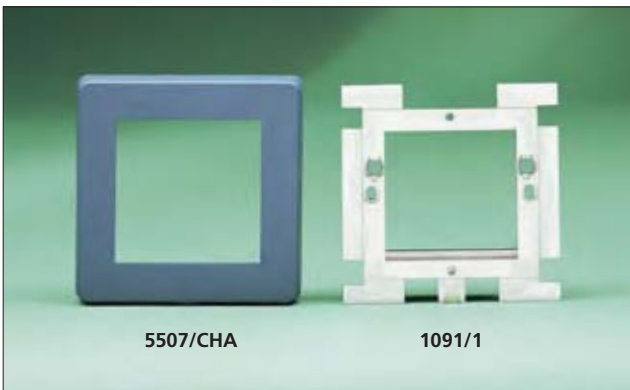
5501/CHA

### LIGHT SWITCHES - RAL 7024

10AX 1 Gang Switch Plate **5501/CHA**  
for use with Platinum 1 Gang 2 way Switch 7170/WH  
for use with Platinum 1 Gang Intermediate Switch 7175/WH

10AX 2 Gang Switch Plate **5502/CHA**  
for use with Platinum 2 Gang 2 way Switch 7172/WH

**Dimensions** 1 Gang 91mm x 91mm



5507/CHA

1091/1

### COMMUNICATION PLATE - RAL 7024

2 Euro Module 1 Gang Communication Plate **5507/CHA**  
2 Euro Module 1 Gang Communication Frame **1091/1**

4 Euro Module 2 Gang Communication Plate **5509/CHA**  
4 Euro Module 2 Gang Communication Frame **1092/1**

**Dimensions** 1 Gang 91mm x 91mm  
2 Gang 151mm x 91mm



7067

7063

7069

### COMMUNICATION MODULES

RJ45 Cat 5e Euro Module **7172**

TV Outlet (male) **7065**

TV Outlet (female) **7067**

F Type Satellite Euro Module **7069**

Triplex unit (TV, FM, Sat) **7063**

Blank 1 Module **7081**

Blank 1/2 Module **7081/2**

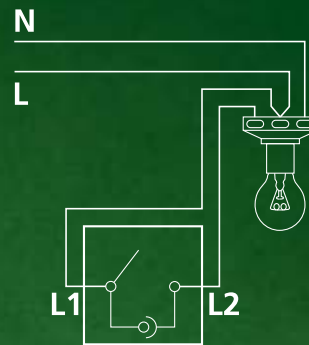
**Dimensions** 25 x 50mm (1 Module)  
(except 7063 - 50mm x 50mm)

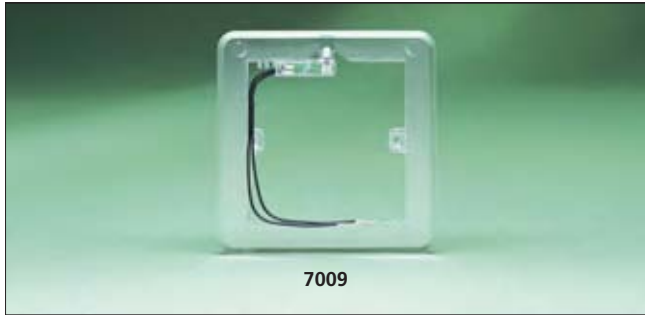
For other Communication Modules please refer to page 23.

# SEEKLIGHT

The new Crabtree Seeklight assists in the location of light switches in the dark.

It fits all Crabtree one gang size switch plates including Capital moulded & metal plates, Corinthian, Rockergrid, and Platinum white moulded, low profile & Flat plate.





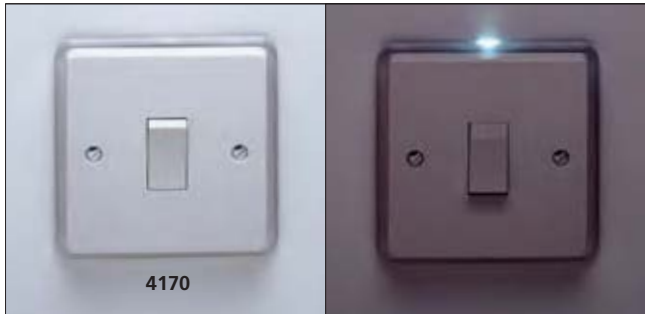
7009

## SEEKLIGHT

Seeklight will only illuminate when light control is off on a single pole circuit. On a Double pole circuit the Seeklight will be permanently on. The light is an LED type, which has had a circuit board designed to reduce the pulse effect and give a constant light source. The Seeklight requires a filament type bulb to operate correctly.

PACK QTY

SEEKLIGHT	10	<b>7009</b>
-----------	----	-------------



4170

## CAPITAL MOULDED SWITCHES

The above Seeklight will fit the following plates:

1 gang 1 way 10AX SP	<b>4070</b>
1 gang 2 way 10AX SP	<b>4170</b>
1 gang 1 way 10AX DP	<b>4171</b>
2 gang 2 way 10AX SP	<b>4172</b>
3 gang 12 way 10AX SP	<b>4173</b>
1 gang Intermediate	<b>4175</b>



5170

## CAPITAL CORINTHIAN SWITCHES

The above Seeklight will fit the following plates:

1 gang 2 way 10AX SP	<b>5170</b>
2 gang 2 way 10AX SP	<b>5172</b>
3 gang 2 way 10AX SP	<b>5173</b>
1 gang Intermediate 20AX	<b>5175</b>
1 gang 2 way 10AX DP	<b>5176</b>
1 gang retractive 10A	<b>5177</b>

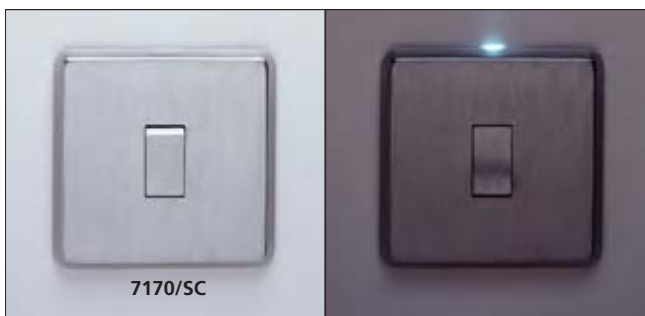


6170/SC

## CAPITAL METAL PLATE SWITCHES

The above Seeklight will fit the following plates:

1 gang 2 way 10AX SP	<b>6170/_ _</b>
2 gang 2 way 10AX SP	<b>6172/_ _</b>
3 gang 2 way 10AX SP	<b>6173/_ _</b>
1 gang Intermediate 20AX	<b>6175/_ _</b>
1 gang retractive 10A	<b>6096/_ _</b>



7170/SC

## PLATINUM LOW PROFILE & FLAT PLATE SWITCHES

The above Seeklight will fit the following plates:

1 gang 2 way 10AX SP	<b>7170/_ _</b> or <b>8170/_ _</b>
2 gang 2 way 10AX SP	<b>7172/_ _</b> or <b>8172/_ _</b>
3 gang 2 way 10AX SP	<b>7173/_ _</b> or <b>8173/_ _</b>
1 gang Intermediate 20AX	<b>7175/_ _</b>
1 gang retractive 10A	<b>1096/1_ _</b> & <b>7501/_ _</b>



5571

## ROCKERGRID MODULAR SYSTEM

The above Seeklight will fit the following plates:

1 gang grid front plate moulded	<b>5571</b>
1 gang grid front plate metal finish	<b>6571/_ _</b>
2 gang grid front plate moulded	<b>5572</b>
2 gang grid front plate metal finish	<b>6572/_ _</b>

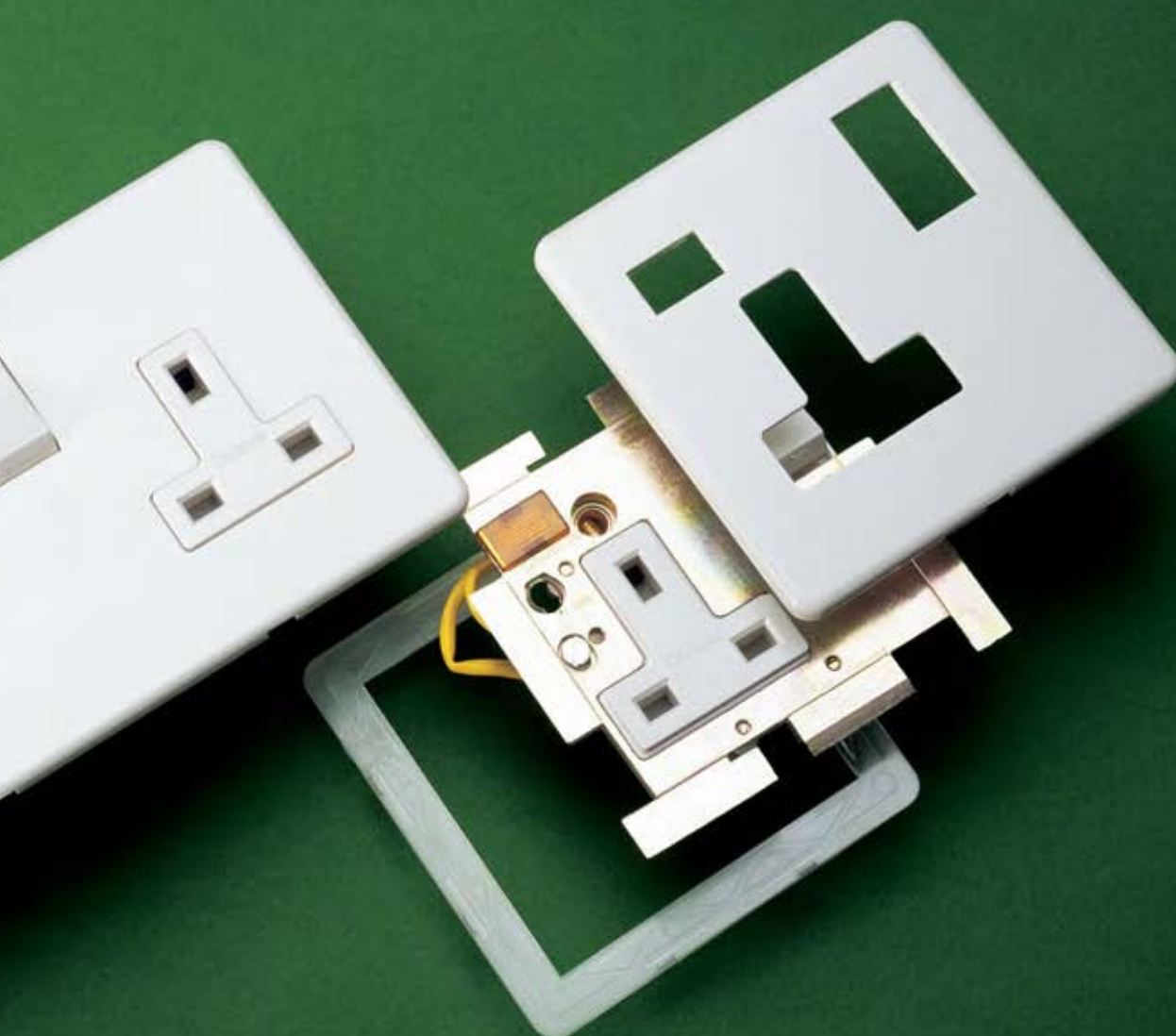
Please see technical wiring diagrams on page 169.





### Platinum White Moulded

Crabtree Platinum White Moulded is a new addition to the already extensive range of Platinum Low Profile Wiring Accessories. A wide selection of Power, Control and Lighting accessories are now available in 'Screwless' Low Profile.



The front plate can be easily removed by using a flat bladed screwdriver. The Screwdriver should be inserted between the notch on the front plate and the ramp on the support frame.



The plate should now be gently eased away from the support frame.



Decoration can be safely completed without damage to the Wiring Accessory.



The front plate is easily clipped back into position on the clear plastic frame, surrounding the interior.



If required, the Platinum white moulded range can be upgraded by using standard Platinum low profile plates.



Three finishes are available: Satin Chrome, Polished Brass, and Highly Polished Chrome.



SOCKETS		BS1363
1 Gang 13A DP Switched Socket twin earth	<b>7314/WH</b>	
1 Gang 13A DP Switched Socket + neon twin earth	<b>7314/3WH</b>	
2 Gang 13A DP Switched Socket twin earth	<b>7316/WH</b>	
2 Gang 13A DP Switched Socket + neon twin earth	<b>7316/3WH</b>	
1 Gang 15A Round pin switched Socket	<b>7272/WH</b>	
1 Gang 5A Round pin Unswitched Socket	<b>7340/WH</b>	
<b>Dimensions</b>	1 gang 91 x 91mm 2 gang 151 x 91mm	
<b>Installation Box depth</b>	35mm	

FUSED CONNECTION UNIT		BS1363
13A DP Switched FCU	<b>7832/WH</b>	
13A DP Switched FCU + neon	<b>7832/3WH</b>	
<b>Dimensions</b>	1 gang 91 x 91mm	
<b>Installation Box depth</b>	35mm	

CONTROL SWITCHES		
<b>6A TP ISOLATOR SWITCH</b>	BS EN60669-1, BS EN60947-3	
6A Three Pole isolating switch marked	<b>7017/WH</b>	
<b>20A DP CONTROL SWITCH</b>	BS EN60669-1	
20A DP Switch	<b>7011/WH</b>	
20A DP Switch + neon	<b>7011/3WH</b>	
<b>32A DP CONTROL SWITCH</b>	BS EN60669-1	
32A DP Switch	<b>7012/WH</b>	
32A DP Switch + neon	<b>7012/3WH</b>	
<b>45A DP CONTROL SWITCH</b>	BS EN60669-1	
45A DP Switch	<b>7015/WH</b>	
45A DP Switch + neon	<b>7015/3WH</b>	
<b>45A COOKER CONTROL UNIT</b>	BS 4177 & BS1363	
45A 2 Gang Cooker Control Unit	<b>7521/WH</b>	
<b>Dimensions</b>	1 gang 91 x 91mm 2 gang 151 x 91mm	

LIGHT SWITCHES		BS EN60669-1
10AX 1 Gang 2 Way plate Switch	<b>7170/WH</b>	
10AX 2 Gang 2 Way plate Switch	<b>7172/WH</b>	
10AX 3 Gang 2 Way plate Switch	<b>7173/WH</b>	
10AX 1 Gang Intermediate plate Switch	<b>7175/WH</b>	

DIMMERS		BS EN55014, BS EN60669-2-1
400W Dimmer 1 Gang 2 Way	<b>7400/D1WH*</b>	
400W Dimmer 2 Gang 2 Way	<b>7400/D2WH*</b>	
<b>Dimensions</b>	1 gang 91 x 91mm	
<b>Installation Box depth</b>	switches 1 & 2 gang 16mm, 3 gang 25mm	
<b>Installation Box depth</b>	dimmers 40mm	

\* Suitable for mains voltage GLS.  
2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.





<b>DUAL SHAVER SOCKET</b>	BS EN61558-2-5
Shaver supply unit 240V	<b>7411/WH</b>
<b>DATA ACCESSORIES</b>	BS 3041
Single Coaxial direct connection	<b>7765/WH</b>
Single BT Secondary	<b>7783/WH</b>
Single BT Master	<b>7784/WH</b>
<b>BLANK PLATES</b>	BS 5733
1 Gang Blank plate	<b>1091/1 + 5575/WH</b>
2 Gang Blank plate	<b>1092/1 + 5577/WH</b>
<b>Dimensions</b>	1 gang 91 x 91mm 2 gang 151 x 91mm

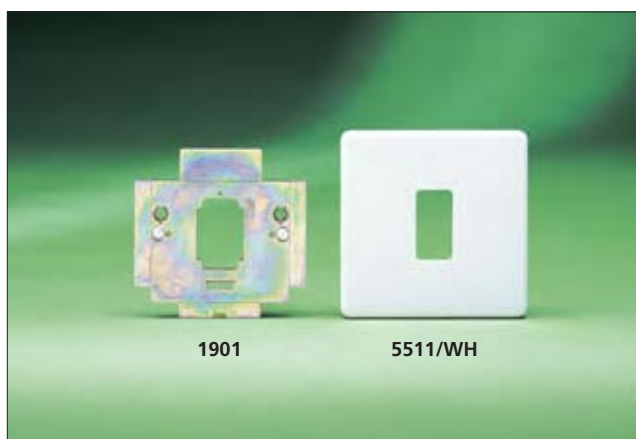


<b>COMMUNICATION PLATE</b>	
2 Euro Module 1 Gang Communication Plate	<b>1091/1 + 5507/WH</b>
4 Euro Module 2 Gang Communication Plate	<b>1092/1 + 5509/WH</b>
<b>Dimensions</b>	1 gang 91 x 91mm 2 gang 151 x 91mm
<b>Installation Box depth</b>	35mm



<b>COMMUNICATION MODULES</b>	
BT Master Euro Module	<b>7080</b>
RJ45 Cat 5e Euro Module	<b>7172</b>
TV Outlet (male)	<b>7065</b>
TV Outlet (female)	<b>7067</b>
F Type Satellite Euro Module	<b>7069</b>
Triplex unit (TV, FM, Sat)	<b>7063</b>
Blank 1 Module	<b>7081</b>
Blank 1/2 Module	<b>7081/2</b>
<b>Dimensions</b>	25 x 50mm (1 Module) (except 7063 - 50mm x 50mm)

For other Communication Modules please refer to Page 23.



<b>GRID PLATES</b>	
1 Gang Plate for Rockergrid	<b>5511/WH</b>
2 Gang Plate for Rockergrid	<b>5512/WH</b>
3 Gang Plate for Rockergrid	<b>5513/WH</b>
4 Gang Plate for Rockergrid	<b>5514/WH</b>
<b>GRID YOKES</b>	
1 Gang Grid	<b>1901</b>
2 Gang Grid	<b>1902</b>
3 Gang Grid	<b>1903</b>
4 Gang Grid	<b>1904</b>
<b>Dimensions</b>	1-2 gang 91 x 91mm 3-4 gang 151 x 91mm



<b>GRID SWITCHES</b>	BS EN60669-1
Grid Switch 10AX 1 Way	<b>4430</b>
Grid Switch 10AX 2 Way	<b>4530</b>
Grid Switch 10A Retractive	<b>4489</b>
Grid Switch 20AX 1 Way	<b>4450</b>
Grid Switch 20AX 2 Way	<b>4550</b>
Grid Switch 20AX Double Pole	<b>4460</b>
Grid Switch 20AX Intermediate	<b>4535</b>
<b>Installation Box depth</b>	35mm

For other Rockergrid products please refer to Page 86.





5504/3WH

5506/WH

## WHITE PLASTIC PLATES ONLY

### SOCKET PLATES

1 Gang DP Switched Socket	5504/WH
1 Gang DP Switched Socket + neon	5504/3WH
2 Gang DP Switched Socket	5506/WH
2 Gang DP Switched Socket + neon	5506/3WH
1 Gang 15A Switched Socket	5515/WH
1 Gang 5A Unswitched Socket	7579/WH

Comes Complete with clear plate frame.



5508/WH

5508/3WH

### FUSED CONNECTION UNIT PLATES

13A DP Switched FCU	5508/WH
13A DP Switched FCU + neon	5508/3WH

Comes Complete with clear plate frame.



5505/WH

5545/WH

### CONTROL SWITCH PLATES

6AX Three Pole Isolating Switch marked	5505/WH
20A DP Switch	5520/WH
20A DP Switch + neon	5520/3WH
32A DP Switch	5532/WH
32A DP Switch + neon	5532/3WH
45A DP Switch	5545/WH
45A DP Switch + neon	5545/3WH
45A 2 Gang Cooker Control Unit	5546/WH

Comes Complete with clear plate frame.



5503/WH

5562/WH

### LIGHT SWITCH PLATES

10AX 1 Gang 2 Way Plate Switch	5501/WH
10AX 2 Gang 2 Way Plate Switch	5502/WH
10AX 3 Gang 2 Way Plate Switch	5503/WH

### DIMMER PLATES

1 Gang Dimmer Plate	5561/WH
2 Gang Dimmer Plate	5562/WH

Comes Complete with clear plate frame.



5510/WH

5565/WH

### OTHER ACCESSORIES

Shaver Supply Unit	5510/WH
2 module 1 Gang Communication Plate	5507/WH
4 module 2 Gang Communication Plate	5509/WH
Co-axial	5565/WH
BT Master & Slave	5583/WH
1 Gang Blank Plate	5575/WH
2 Gang Blank Plate	5577/WH
1 Gang clear plastic frame	5543
2 Gang clear plastic frame	5544

Comes Complete with clear plate frame.

## UPGRADE FROM WHITE PLASTIC TO METAL PLATE



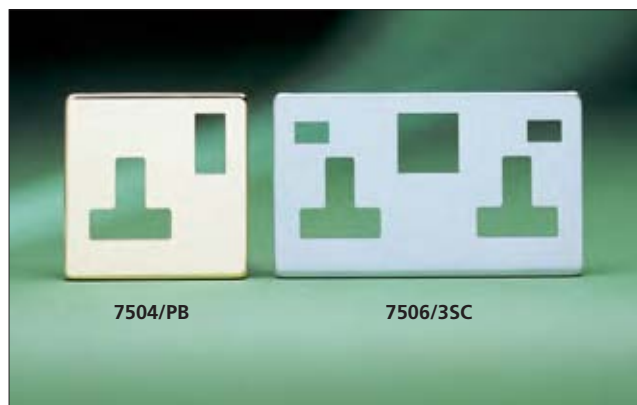
Platinum white moulded range can be upgraded to metal Platinum plates.



The plate should be gently eased away from the support frame.



The replacement front plate simply clips back onto the support frame.

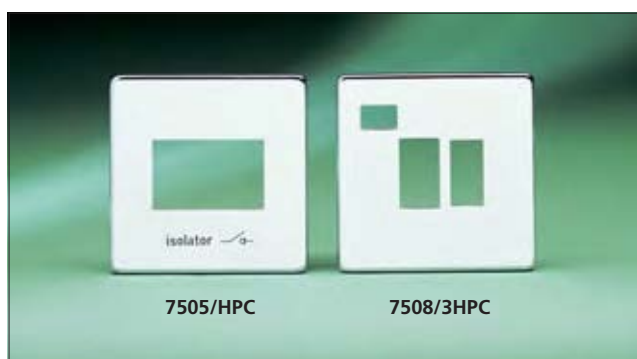


### SOCKET PLATES

1 Gang DP Switched Socket Twin Earth	<b>7504/</b> __
1 Gang DP Switched Socket + neon Twin Earth	<b>7504/3</b> __
2 Gang DP Switched Socket Twin Earth	<b>7506/</b> __
2 Gang DP Switched Socket + neon Twin Earth	<b>7506/3</b> __
1 Gang 15A Round pin Socket	<b>7515/</b> __
1 Gang 5A Unswitched Socket	<b>7579/</b> __

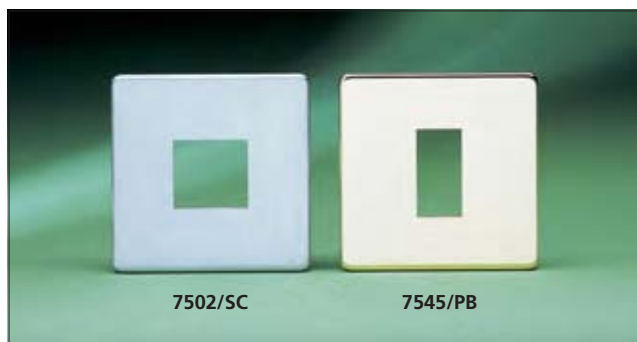
### FUSED CONNECTION UNIT PLATES

13A DP Switched FCU	<b>7508/</b> __
13A DP Switched FCU + neon	<b>7508/3</b> __



### CONTROL SWITCH PLATES

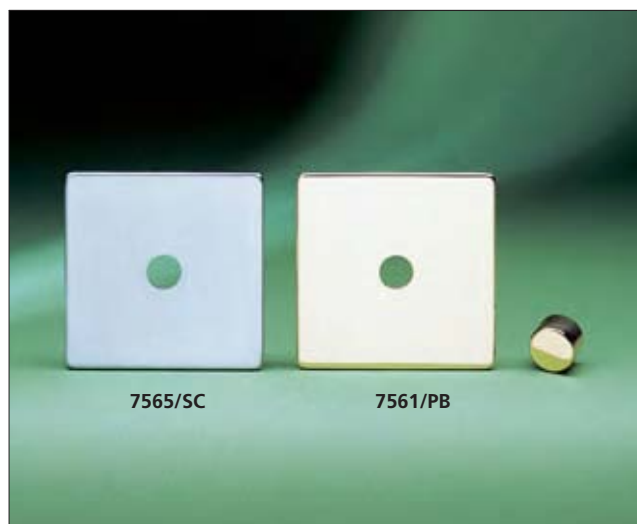
6AX Three Pole Isolating Switch marked	<b>7505/</b> __
20A DP Switch	<b>7520/</b> __
20A DP Switch + neon	<b>7520/3</b> __
32A DP Switch	<b>7532/</b> __
32A DP Switch + neon	<b>7532/3</b> __
45A DP Switch	<b>7545/</b> __
45A DP Switch + neon	<b>7545/3</b> __
45A 2 Gang Cooker Control Unit	<b>7546/</b> __



### LIGHT SWITCH PLATES

10AX 1 Gang 2 Way Plate Switch	<b>7501/</b> __
10AX 2 Gang 2 Way Plate Switch	<b>7502/</b> __
10AX 3 Gang 2 Way Plate Switch	<b>7503/</b> __

<b>Plate Dimensions</b>	1 gang 88 x 88mm
	2 gang 148 x 88mm



### OTHER ACCESSORIES

Shaver Supply Unit	<b>7510/</b> __
2 module 1 Gang Communication Plate	<b>7507/</b> __
4 module 2 Gang Communication Plate	<b>7509/</b> __
1 Gang Plate	<b>7575/</b> __
2 Gang Plate	<b>7577/</b> __
1 Gang Plate for Rockergrid	<b>7511/</b> __
2 Gang Plate for Rockergrid	<b>7512/</b> __
3 Gang Plate for Rockergrid	<b>7513/</b> __
4 Gang Plate for Rockergrid	<b>7514/</b> __
1 Gang Dimmer Plate	<b>7561/</b> __
2 Gang Dimmer Plate	<b>7562/</b> __
1 Gang Plate for BT Master & Secondary	<b>7583/</b> __
2 Gang Plate for Coax	<b>7565/</b> __

Indicate the finish you require by adding Suffix to List No. Satin Chrome (SC), Highly Polished Chrome (HPC), and Polished Brass (PB),



Wide Concave rockers are easy to operate



Positive drive switch action prevents balancing between the 'on' and 'off' position and gives reliable indication of the contact position



# PLATINUM

An extensive range of power, control and lighting accessories, available in a range of high quality metal finishes as either screw-fit flat plate or clip-on screwless low profile plate.

With no compromises between style and function, the Platinum range is slim, stylish and packed with solid Crabtree engineering.



Satin Chrome



Polished Chrome



Black Nickel



Polished Brass

Screwless  
Low Profile



Stainless Steel



Polished Stainless Steel



Polished Brass

Flat Plate





## COMPLETE ASSEMBLIES LOW PROFILE

### FINISHES AVAILABLE

#### SC/WH-

Satin Chrome  
White interior

#### HPC-

Highly Polished Chrome  
Black interior

#### PB-

Polished Brass  
Black interior

#### BKN-

Black Nickel  
Black interior

- Indicate the finish you require by adding Suffix to List No.  
ie: 13A 2 gang DP Switched Socket in Black Nickel = **7316/BKN**
- Fully assembled products come complete with display packaging
- Will not fit a 2 gang dual back box



### 13A SWITCHED SOCKET OUTLET

BS1363

1 gang DP Switched Socket	<b>7314/_ _</b>
1 gang DP Switched Socket with Neon	<b>7314/3_ _</b>
2 gang DP Switched Socket	<b>7316/_ _</b>
2 gang DP Switched Socket with Neon	<b>7316/3_ _</b>

**Dimensions** 1 gang 88mm x 88mm  
2 gang 148mm x 88mm

**Installation Box depth** 35mm

- All sockets are supplied as dual Earth



### 13A FUSED CONNECTION UNIT

BS1363

DP Switched	<b>7832/_ _</b>
DP Switched with Neon	<b>7832/3_ _</b>

**Dimensions** 88mm x 88mm

**Installation Box depth** 35mm

### 3A CARD SWITCH

BS5733

3A card Switch	<b>7018/_ _</b>
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**Dimensions** 88mm x 88mm

**Installation Box depth** 25mm  
See page 170 for more information



### 10AX PLATE SWITCH

BS EN 60669-1

1 gang 2 way	<b>7170/_ _</b>
2 gang 2 way	<b>7172/_ _</b>
3 gang 2 way	<b>7173/_ _</b>
1 gang Intermediate	<b>7175/_ _</b>

**Installation Box depth** 1 & 2 gang 16mm, 3 gang 25mm

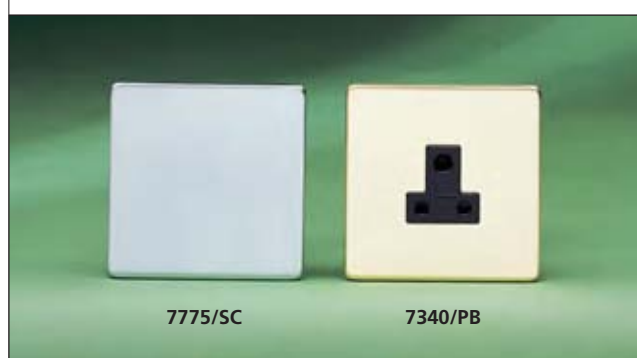
### TOGGLE SWITCHES

BS EN 60669-1

1 gang 2 way	<b>7T70/_ _</b>
2 gang 2 way	<b>7T72/_ _</b>

**Dimensions** 88mm x 88mm

**Installation Box depth** 35mm



### BLANK PLATES

BS5733

Single Blank complete with grid	<b>7775/_ _</b>
Twin Blank complete with grid	<b>7777/_ _</b>

**Dimensions** 1 gang 88mm x 88mm  
2 gang 148mm x 88mm

### 5A ROUND PIN SOCKET

5A Round Pin Unswitched Socket	<b>7340/_ _</b>
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**Dimensions** 88mm x 88mm

**Installation Box depth** 35mm



7250/D1SC

7400/D2HPC

## COMPLETE ASSEMBLIES LOW PROFILE

### DIMMER-ROTARY

BS EN 55014, BS EN 60669-2-1

250W 1 gang 2 way	7250/D1_ _
250W 2 gang 2 way	7250/D2_ _
250W 3 gang 2 way	7250/D3_ _
400W 1 gang 2 way	7400/D1_ _
400W 2 gang 2 way	7400/D2_ _

**Dimensions** 1 & 2 gang 88mm x 88mm

**Installation Box depth** 40mm

Suitable for mains voltage GLS;  
2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.



7400/TD1BKN

7400/RD1PB

### DIMMER-TOUCH

BS EN 55015, BS EN 60669-2

400W 1 gang 1 way	7400/TD1_ _
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### DIMMER-REMOTE

BS EN 55015, BS EN 60669-2

400W 1 gang 1 way	7400/RD1_ _
-------------------	-------------

**Dimensions** 1 & 2 gang 88mm x 88mm

**Installation Box depth** 40mm

Suitable for mains voltage GLS;  
GU10 or similar HiSpot halogen bulbs up to the rating on the rear of the product.



7011/3SC

7521/3HPC

## CONTROL SWITCHES

### 6A TP ISOLATOR SWITCH

BS EN 60947-3, BS EN 60669-1

6A Triple Pole Fan Isolator	7017/_ _
-----------------------------	----------

### 20A DP CONTROL SWITCH

BS EN 60669-1

20A DP Control Switch	7011/_ _
-----------------------	----------

20A DP Control Switch with Neon	7011/3_ _
---------------------------------	-----------

### 45A DP CONTROL SWITCH

BS EN 60669-1

45A 1 gang DP Control Switch	7015/_ _
------------------------------	----------

45A 1 gang DP Control Switch with Neon	7015/3_ _
--	-----------

45A 1 gang DP Control Switch with Neon Mounted on 2 gang vertical plate	7016/3_ _
--	-----------

### 45A COOKER CONTROL UNIT

BS 4177 & BS1363

45A Cooker Control Unit	7521/_ _
-------------------------	----------

45A Cooker Control Unit with Neon	7521/3_ _
-----------------------------------	-----------

### DUAL SHAVER SOCKET

BS EN 61558-2-5

Dual Shaver Socket	7411/_ _
--------------------	----------

**Dimensions** 1 gang 88mm x 88mm  
2 gang 148mm x 88mm



7016/3SC

7015/3BKN



7765/HPC

7783/SC/WH

## COMMUNICATION ACCESSORIES

BS 3041

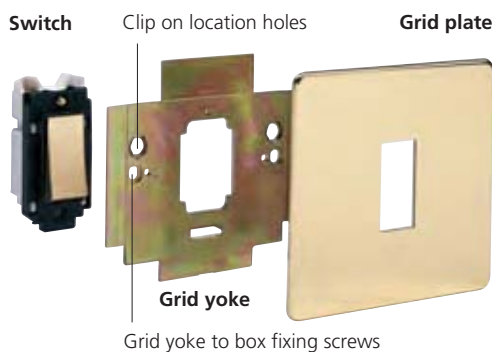
Single Co-axial	7765/_ _
-----------------	----------

BT Secondary Socket	7783/_ _
---------------------	----------

BT Master Socket	7784/_ _
------------------	----------

**Dimensions** 1 gang 88mm x 88mm

## PLATINUM GRID



Complete Assembly

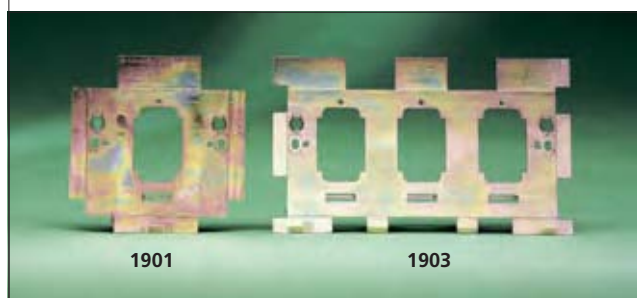


### GRID PLATES - LOW PROFILE

Plate for 1 gang grid	7711/_ _
Plate for 2 gang grid	7712/_ _
Plate for 3 gang grid	7713/_ _
Plate for 4 gang grid	7714/_ _
Plate for 6 gang grid	7716/_ _
Plate for 8 gang grid	7718/_ _

<b>Dimensions</b>	1-2 gang 88mm x 88mm
	3-4 gang 148mm x 88mm
	6-8 gang 148mm x 148mm

All the following plates are available in Satin Chrome (SC), Polished Brass (PB) and Highly Polished Chrome (HPC)



### GRID YOKES

1 gang Yoke	1901
2 gang Yoke	1902
3 gang Yoke	1903
4 gang Yoke	1904
6 gang Yoke	1906
8 gang Yoke	1908



### GRID SWITCHES - NO OUTER TRIM

BS EN 60669-1

10AX 1 way	4430/7_ _
10AX 2 way	4530/7_ _
10A Retractive	4489/7_ _
10A Retractive-Bell symbol	4490/7_ _
10A Retractive 2 way and Off	4553/7_ _
20AX 1 way	4450/7_ _
20AX 2 way	4550/7_ _
20AX Double Pole	4460/7_ _
20AX Intermediate	4535/7_ _
20AX 2 way & Off	4552/7_ _

All the following Switches are available in Satin Chrome (SC), Highly Polished Chrome (HPC), Polished Brass (PB).

Installation Box depth 35mm



### GRID KEY SWITCHES - NO OUTER TRIM

BS EN 60669-1

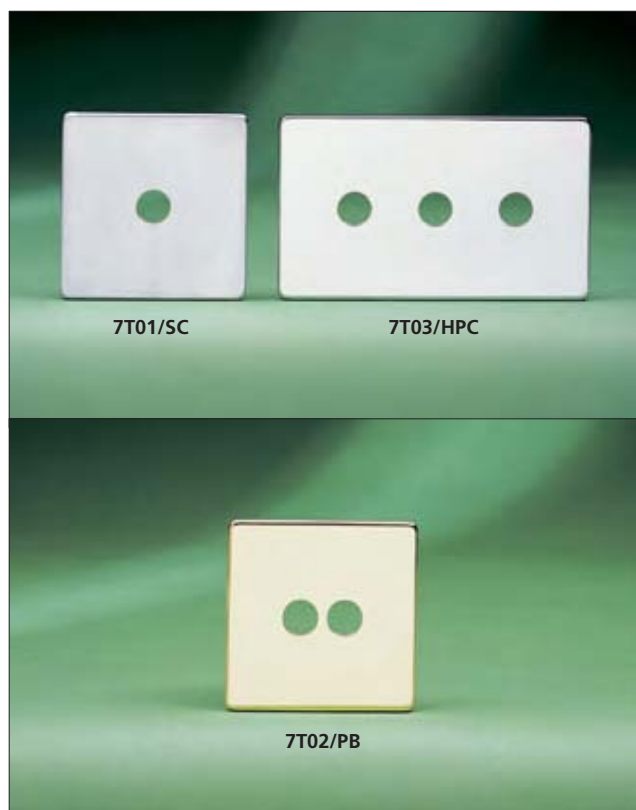
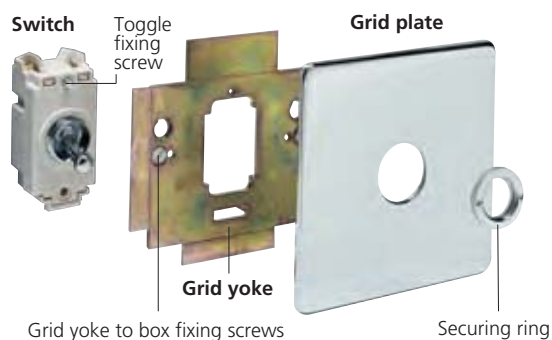
20AX 1 way Grid Key Switch	4451/7/WH *
20AX 2 way Grid Key Switch	4551/7/WH *
20AX DP 1 way Grid Key Switch	4461/7/WH *

\* For Key Switches marked 'Emergency Light Test' Please add 'ELT' to the List No. eg. 4451/7/WH/ELT

• For Key Switches with a black front moulding, please remove the /WH from the List No. eg. 4451/7.



## LOW PROFILE TOGGLE SWITCHES AND PLATES



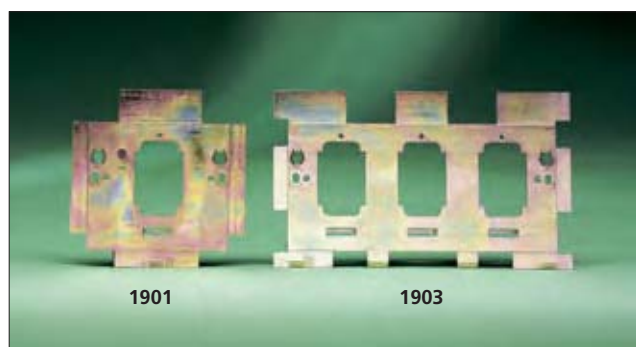
### TOGGLE PLATES-LOW PROFILE

Plate for 1 gang grid	7T01/_ _
Plate for 2 gang grid	7T02/_ _
Plate for 3 gang grid	7T03/_ _
Plate for 4 gang grid	7T04/_ _

<b>Dimensions</b>	1-2 gang 88mm x 88mm
	3-4 gang 148mm x 88mm

All the following plates are available in Satin Chrome (**SC**), Polished Brass (**PB**) and Highly Polished Chrome (**HPC**)

All plates come complete with toggle securing ring in appropriate finish



### GRID YOKES

1 gang Yoke	1901
2 gang Yoke	1902
3 gang Yoke	1903
4 gang Yoke	1904



### TOGGLE SWITCHES

BS EN 60669-1

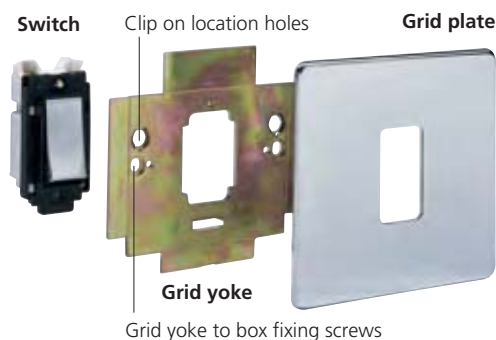
10AX 2 way Single Pole	5430/_ _
20AX 2 way Single Pole	5550/_ _
20AX 2 way and off Single Pole	5552/_ _

All the following switches are available in Satin Chrome (**SC**), Highly Polished Chrome (**HPC**), Polished Brass (**PB**)

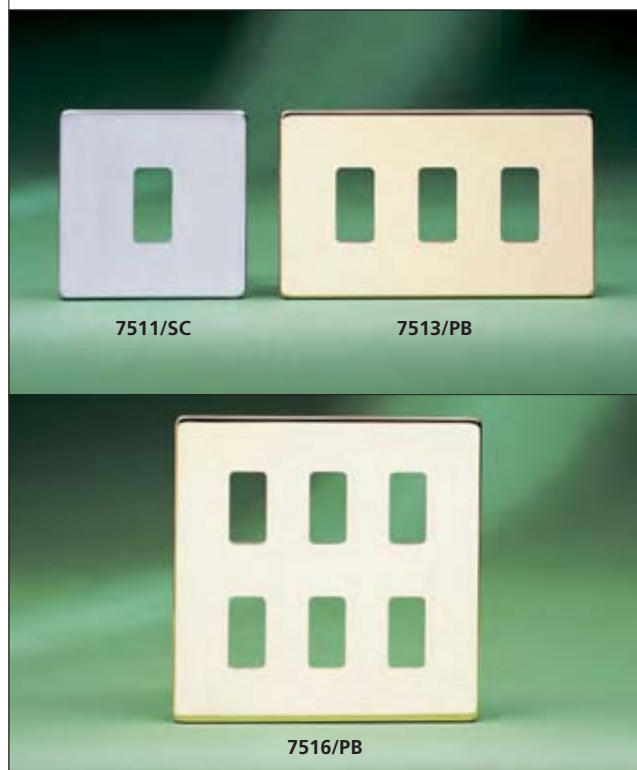
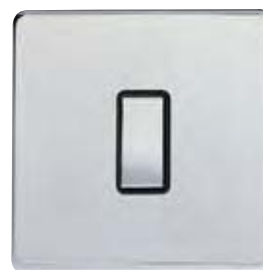
**Installation Box depth** 35mm

One fixing key supplied per pack of 10

## ROCKERGRID FOR PLATINUM RANGE



Complete Assembly

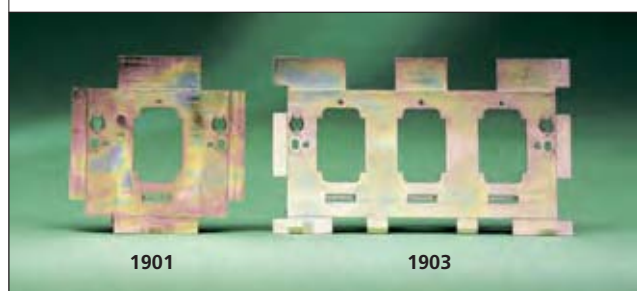


## GRID PLATES - LOW PROFILE

Plate for 1 gang grid	7511/_ _
Plate for 2 gang grid	7512/_ _
Plate for 3 gang grid	7513/_ _
Plate for 4 gang grid	7514/_ _
Plate for 6 gang grid	7516/_ _
Plate for 8 gang grid	7518/_ _

<b>Dimensions</b>	1-2 gang 88mm x 88mm
	3-4 gang 148mm x 88mm
	6-8 gang 148mm x 148mm

All the following plates are available in Satin Chrome (SC), Polished Brass (PB) and Highly Polished Chrome (HPC)



## GRID YOKES

1 gang Yoke	1901
2 gang Yoke	1902
3 gang Yoke	1903
4 gang Yoke	1904
6 gang Yoke	1906
8 gang Yoke	1908



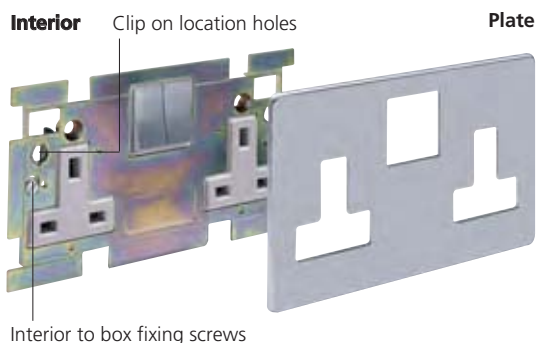
## GRID SWITCHES

10AX 1 way	4430/6_ _
10AX 2 way	4530/6_ _
10A Retractive	4489/6_ _
20AX 1 way	4450/6_ _
20AX 2 way	4550/6_ _
20AX double Pole	4460/6_ _
20AX intermediate	4535/6_ _
20A 2 way & Off	4552/6_ _

All the following Switches are available in Satin Chrome (SC/WH), Highly Polished Chrome (HPC), and Polished Brass (PB).

Installation Box depth 35mm

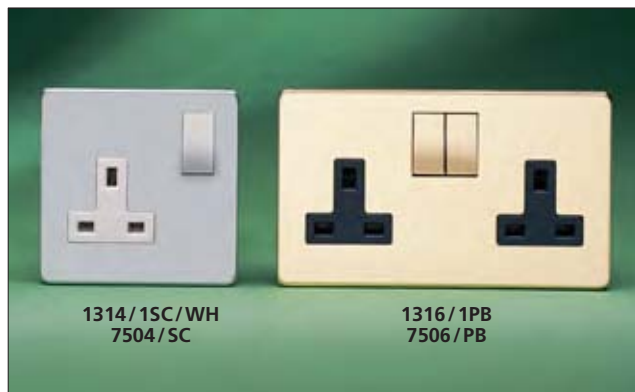
The full range of Rockergrid items are shown on pages 86 & 87 and will fit onto all the above plates.



## SECOND FIX LOW PROFILE

Finishes	Standard	Made to Order
	<b>HPC</b> - Highly Polished Chrome - Black moulded insert	<b>HPC/WH</b> - Highly Polished Chrome - White moulded insert
	<b>SC/WH</b> - Satin Chrome - White moulded insert	<b>SC</b> - Satin Chrome - Black moulded insert
	<b>PB</b> - Polished Brass - Black moulded insert	<b>PB/WH</b> - Polished Brass - White moulded insert

- Indicate the finish you require by adding suffix to List No.  
ie: 13A 2 gang DP Switched Socket Interior in Satin Chrome = **1316/1SC/WH**  
2 gang Switched Socket Plate in Satin Chrome = **7506/SC**
- All interiors are supplied with appropriate fixing grids
- Will not fit a 2 gang dual back box



### 13A SWITCHED SOCKET

BS 1363

1 gang DP Switched Socket	Interior	<b>1314/1</b> __
	Plate	<b>7504/</b> __
1 gang DP Switched Socket with Neon	Interior	<b>1314/13</b> __
	Plate	<b>7504/3</b> __
2 gang DP Switched Socket	Interior	<b>1316/1</b> __
	Plate	<b>7506/</b> __
2 gang DP Switched Socket with Neons	Interior	<b>1316/13</b> __
	Plate	<b>7506/3</b> __

**Dimensions** 1 gang 88mm x 88mm 2 gang 88mm x 148mm

**Installation Box depth** 35mm

- All sockets are supplied as dual earth.



### 13A FUSED CONNECTION UNIT

BS 1363

13A Switched Fuse connection unit	Interior	<b>1832/1</b> __
	Plate	<b>7508/</b> __
13A Switched Fuse connection unit with Neon	Interior	<b>1832/13</b> __
	Plate	<b>7508/3</b> __
13A Switched FCU with cord outlet	Interior	<b>1837/1</b> __
	Plate	<b>7533/</b> __
13A Switched FCU with cord outlet & Neon	Interior	<b>1837/13</b> __
	Plate	<b>7533/3</b> __

**Dimensions** 1 gang 88mm x 88mm **Installation Box depth** 35mm



### 15A ROUND PIN SWITCHED SOCKET

BS 546

15A round pin Switched Socket	Interior	<b>1272/1</b> __
	Plate	<b>7515/</b> __

**Dimensions** 1 gang 88mm x 88mm

**Installation Box depth** 35mm

### 5A UNSWITCHED SOCKET

BS 546

5A round pin Unswitched Socket	Interior	<b>1340/1*</b>
	Plate	<b>7579/</b> __

**Dimensions** 1 gang 88mm x 88mm

**Installation Box depth** 35mm

\*Black moulded insert as standard. If required with white moulded insert add /WH.



### 2A UNSWITCHED SOCKET

BS 546

2A round pin unswitched socket	Interior	<b>1075/1*</b>
	Plate	<b>7560/</b> __

**Dimensions** 1 gang 88mm x 88mm

**Installation Box depth** 35mm

\*Black moulded insert as standard. If required with white moulded insert add /WH.

### 6A TP ISOLATOR SWITCH

BS EN60669-1, BS EN60947-3

6A Triple Pole Isolator Switch	Interior	<b>1017/1</b> __
	Plate	<b>7505/</b> __

**Dimensions** 1 gang 88mm x 88mm

**Installation Box depth** 35mm





## LOW PROFILE

BS EN 60669-1

### 10AX PLATE SWITCH

1 gang 2 way 10AX Switch	Interior Plate	<b>1170/1</b> _ _ <b>7501/</b> _ _
1 gang 1 way 10A Retractive Switch	Interior Plate	<b>1096/1</b> _ _ <b>7501/</b> _ _
1 gang Intermediate Switch	Interior Plate	<b>1175/1</b> _ _ <b>7501/</b> _ _
2 gang 2 way 10AX Switch	Interior Plate	<b>1172/1</b> _ _ <b>7502/</b> _ _
3 gang 2 way 10AX Switch	Interior Plate	<b>1173/1</b> _ _ <b>7503/</b> _ _

**Dimensions** 1 gang 88mm x 88mm

**Installation Box depth** 16mm 1 & 2 gang, 25mm 3 gang



### DIMMER-ROTARY

BS EN 55014, BS EN 60669-2-1

250W 1 gang 2 way	<b>7250/D1</b> _ _
250W 2 gang 2 way	<b>7250/D2</b> _ _
250W 3 gang 2 way	<b>7250/D3</b> _ _
400W 1 gang 2 way	<b>7400/D1</b> _ _
400W 2 gang 2 way	<b>7400/D2</b> _ _

2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.



### DIMMER-TOUCH

BS EN 55015, BS EN 60669-2

400W 1 gang 1 way	<b>7400/TD1</b> _ _
-------------------	---------------------

### DIMMER-REMOTE

BS EN 55015, BS EN 60669-2

400W 1 gang 1 way	<b>7400/RD1</b> _ _
-------------------	---------------------

**Dimensions** 1 & 2 gang 88mm x 88mm **Installation Box depth** 40mm

Suitable for mains voltage GLS; GU10 or similar HiSpot halogen bulbs up to the rating on the rear of the product.



### 20A DP CONTROL SWITCH

BS EN60669-1

20A DP Control Switch	Interior Plate	<b>1011/1</b> _ _ <b>7520/</b> _ _
20A DP Control Switch with Neon	Interior Plate	<b>1011/13</b> _ _ <b>7520/3</b> _ _

### 32A DP CONTROL SWITCH

BS EN60669-1

32A DP Control Switch	Interior Plate	<b>1012/1</b> _ _ <b>7532/</b> _ _
32A DP Control Switch with Neon	Interior Plate	<b>1012/13</b> _ _ <b>7532/3</b> _ _

### 45A DP CONTROL SWITCH

BS EN60669-1

45A DP Control Switch	Interior Plate	<b>1512/1</b> _ _ <b>7545/</b> _ _
45A DP Control Switch with Neon	Interior Plate	<b>1512/13</b> _ _ <b>7545/3</b> _ _

**Dimensions** 1 gang 88mm x 88mm

**Installation Box depth** 35mm



### 45A DP COOKER CONTROL UNIT

BS 4177 & BS1363

Cooker control unit	Interior Plate	<b>1522/1</b> _ _ <b>7546/</b> _ _
Cooker control unit with neon	Interior Plate	<b>1522/13</b> _ _ <b>7546/3</b> _ _

**Dimensions** 88mm x 148mm

**Installation Box depth** 35mm





## LOW PROFILE

### SHAVER SUPPLY UNIT

BS EN 61558-2-5

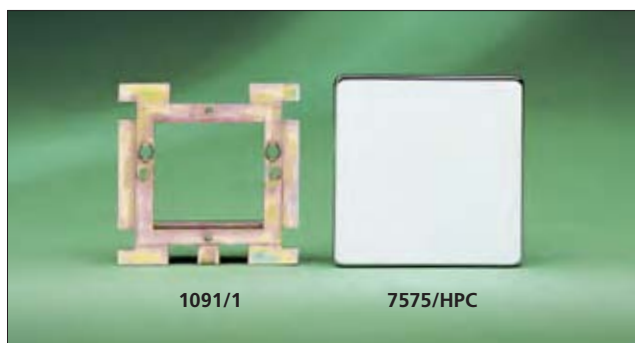
Shaver Supply Unit

Interior Plate **1410/1\***  
**7510/\_ \_**

**Dimensions** 88mm x 148mm

**Installation Box depth** 55mm

\* Black moulded insert as standard, if required with white moulded insert add /WH



### BLANK PLATES

BS 5733

1 gang Blank Plate

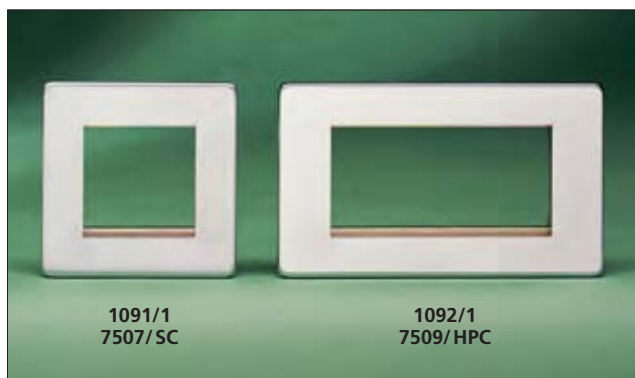
Grid Plate **1091/1**  
**7575/\_ \_**

2 gang Blank Plate

Grid Plate **1092/1**  
**7577/\_ \_**

**Dimensions** 1 gang 88mm x 88mm 2 gang 88mm x 148mm

**Installation Box depth** 35mm



### COMMUNICATION PLATES

1 gang Communication Module Frame

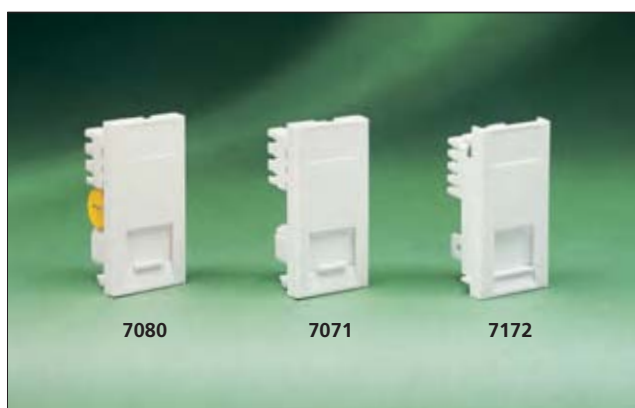
Grid Plate **1091/1**  
**7507/\_ \_**

2 gang Communication Module Frame

Grid Plate **1092/1**  
**7509/\_ \_**

**Dimensions** 1 gang 88mm x 88mm 2 gang 88mm x 148mm

**Installation Box depth** 35mm



### COMMUNICATION MODULES

PACK QTY

BT Master Voice	25	<b>7080</b>
BT secondary Voice, 6 wire	25	<b>7071</b>
RJ45 (single) module, 8 wire – Category 5e	25	<b>7172</b>
RJ45 ISDN terminated	25	<b>7174</b>

### DATA AND CO-AXIAL MODULES

TV outlet (male)	25	<b>7065</b>
TV outlet (female)	25	<b>7067</b>
F type Satellite	25	<b>7069</b>
Triplex Unit (TV, FM, Sat)	25	<b>7063</b>
TV outlet screened, return	25	<b>7060</b>
Phono (Female)	25	<b>7087</b>

### BLANK MODULES & ACCESSORIES

1/2 module size	25	<b>7081/2</b>
1 module size	25	<b>7081</b>

**Dimensions** 25mm x 50mm (1 Module)

(except 7063 – 50mm x 50mm)

7081/2 12.5mm x 50mm

7081 25mm x 50mm

Add **BK** for Black - ie: **7172/BK**

A full selection of communication modules is shown on Page 23.





## COMPLETE ASSEMBLIES FLAT PLATE

FINISHES AVAILABLE

**PB-**  
Polished Brass  
Black interior

**SS/WH-**  
Stainless Steel  
White interior

**PSS-**  
Polished Stainless Steel  
Black interior

- Fully assembled products come complete with display packaging
- Indicate the finish you require by adding suffix to List No.  
ie: 13A 2 gang DP Switched Socket in Stainless Steel = **8316/SS/WH**



### 13A SWITCHED SOCKET OUTLET

BS1363

FLAT PLATE

1 gang DP Switched Socket

**8314/\_ \_**

2 gang DP Switched Socket

**8316/\_ \_**

**Dimensions** 1 gang 86mm x 86mm  
2 gang 146mm x 86mm

**Installation Box depth** 35mm



### 13A FUSED CONNECTION UNIT

BS1363

FLAT PLATE

DP Switched

**8832/\_ \_**

DP Switched with Neon

**8832/3\_ \_**

**Dimensions** 86mm x 86mm

**Installation Box depth** 35mm



### 10AX PLATE SWITCH

BS EN 60669-1

FLAT PLATE

1 gang 2 way

**8170/\_ \_**

2 gang 2 way

**8172/\_ \_**

3 gang 2 way

**8173/\_ \_**

**Dimensions** 86mm x 86mm

**Installation Box depth** 1 & 2 gang 16mm, 3 gang 25mm



### 20A DP CONTROL SWITCH

BS EN 60669-1

FLAT PLATE

20A DP Control Switch

**8011/\_ \_**

20A DP Control Sw + Neon

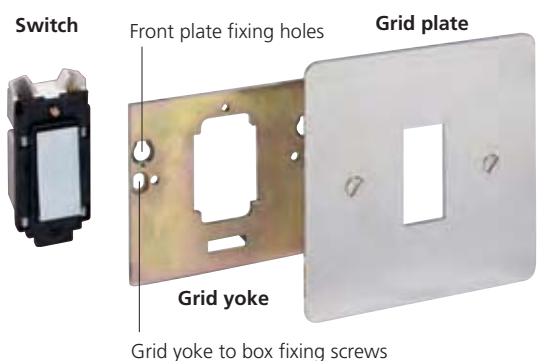
**8011/3\_ \_**

**Dimensions** 86mm x 86mm

**Installation Box depth** 35mm



## PLATINUM GRID



Complete Assembly

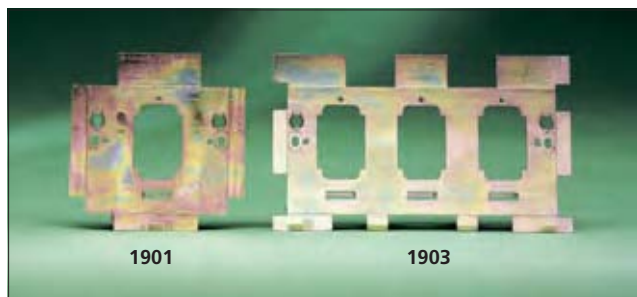


### GRID PLATE - FLAT PLATE

Plate for 1 gang grid	<b>8711/_ _</b>
Plate for 2 gang grid	<b>8712/_ _</b>
Plate for 3 gang grid	<b>8713/_ _</b>
Plate for 4 gang grid	<b>8714/_ _</b>
Plate for 6 gang grid	<b>8716/_ _</b>
Plate for 8 gang grid	<b>8718/_ _</b>

<b>Dimensions</b>	1-2 gang 86mm x 86mm
	3-4 gang 146mm x 86mm
	6-8 gang 146mm x 146mm

All the following plates are available in Stainless Steel (**SS**), Polished Brass (**PB**) and Polished Stainless Steel (**PSS**)



### GRID YOKES

1 gang Yoke	<b>1901</b>
2 gang Yoke	<b>1902</b>
3 gang Yoke	<b>1903</b>
4 gang Yoke	<b>1904</b>
6 gang Yoke	<b>1906</b>
8 gang Yoke	<b>1908</b>

When mounting grid yokes for use with the flat plate remove the outer fixing ears



### GRID SWITCHES - NO OUTER TRIM

BS EN 60669-1

10AX 1 way	<b>4430/7 _ _</b>
10AX 2 way	<b>4530/7 _ _</b>
10A Retractive	<b>4489/7 _ _</b>
10A Retractive-Bell symbol	<b>4490/7 _ _</b>
10A Retractive 2 way and Off	<b>4553/7 _ _</b>
20AX 1 way	<b>4450/7 _ _</b>
20AX 2 way	<b>4550/7 _ _</b>
20AX Double Pole	<b>4460/7 _ _</b>
20AX Intermediate	<b>4535/7 _ _</b>
20AX 2 way & Off	<b>4552/7 _ _</b>

All the following Switches are available in Polished Brass (**PB**), Stainless Steel (**SS**), and Polished Stainless Steel (**PSS**)

Installation Box depth 35mm



### GRID KEY SWITCHES - NO OUTER TRIM

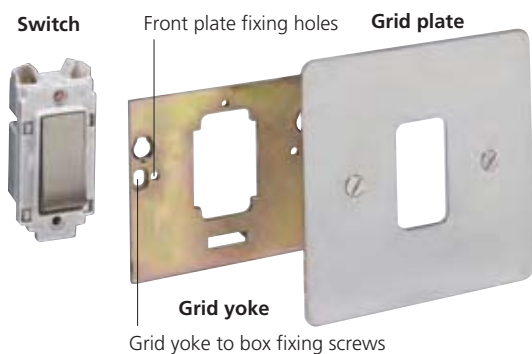
BS EN 60669-1

20AX 1 way Grid Key Switch	<b>4451/7/WH*</b>
20AX 2 way Grid Key Switch	<b>4551/7/WH*</b>
20AX DP 1 way Grid Key Switch	<b>4461/7/WH*</b>

\* For Key Switches marked 'Emergency Light Test' Please add '**ELT**' to the List No. eg. **4451/7/WH/ELT**

• For Key Switches with a black front moulding, please remove the /WH from the List No. eg. **4451/7**.

## ROCKERGRID FOR PLATINUM RANGE



Complete Assembly

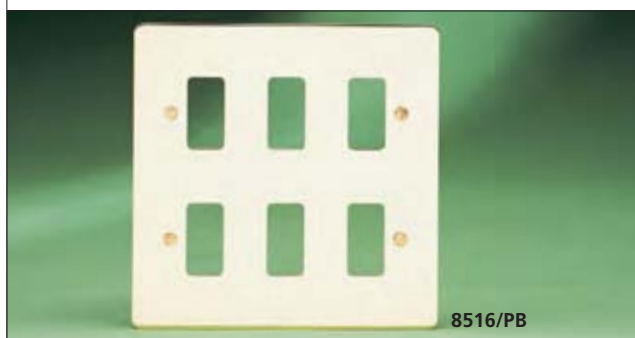


### GRID PLATES - FLAT PLATE

Plate for 1 gang grid	8511/_ _
Plate for 2 gang grid	8512/_ _
Plate for 3 gang grid	8513/_ _
Plate for 4 gang grid	8514/_ _
Plate for 6 gang grid	8516/_ _
Plate for 8 gang grid	8518/_ _

<b>Dimensions</b>	1-2 gang 86mm x 86mm
	3-4 gang 146mm x 86mm
	6-8 gang 146mm x 146mm

All the following plates are available in Stainless Steel (**SS**), Polished Brass (**PB**) and Polished Stainless Steel (**PSS**)



### GRID YOKES

1 gang Yoke	1901
2 gang Yoke	1902
3 gang Yoke	1903
4 gang Yoke	1904
6 gang Yoke	1906
8 gang Yoke	1908

When mounting Grid yokes for use with the Flat plate, remove the outer fixing ears



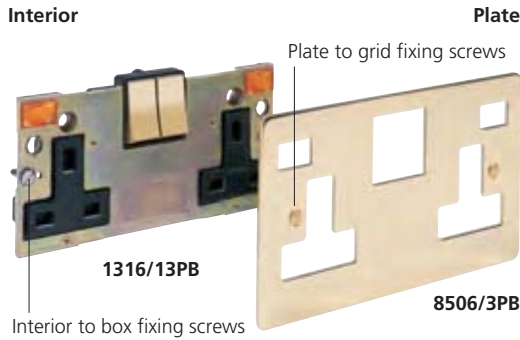
### GRID SWITCHES BS EN 60669-1

10AX 1 way	4430/6_ _
10AX 2 way	4530/6_ _
10A Retractive	4489/6_ _
20AX 1 way	4450/6_ _
20AX 2 way	4550/6_ _
20AX double Pole	4460/6_ _
20AX intermediate	4535/6_ _
20A 2 way & Off	4552/6_ _

All the following Switches are available in Stainless Steel (**SS/WH**), Polished Brass (**PB**), and Polished Stainless Steel (**PSS**)

**Installation Box depth** 35mm

The full range of Rockergrid items are shown on pages 86 & 87 and will fit onto all the above plates.



## SECOND FIX FLAT PLATE

- Standard Finishes:
  - PSS** - Polished Stainless Steel
  - Black moulded insert
  - SS/WH** - Stainless Steel
  - White moulded insert
  - PB** - Polished Brass
  - Black moulded insert
- Indicate the finish you require by adding suffix to List No.  
 ie 13A 2 gang DP Switched Socket Interior + Neon in Polished Brass = **1316/13PB**  
 2 gang Switched Socket Plate + Neon in Polished Brass = **8506/3PB**
- All interiors are supplied with appropriate fixing grids



## 13A SWITCHED SOCKET

BS 1363

1 gang DP switched socket	Interior Plate	<b>1314/1_ _</b> <b>8504/_ _</b>
1 gang DP switched socket with neon	Interior Plate	<b>1314/13_ _</b> <b>8504/3_ _</b>
2 gang DP switched socket	Interior Plate	<b>1316/1_ _</b> <b>8506/_ _</b>
2 gang DP switched socket with neons	Interior Plate	<b>1316/13_ _</b> <b>8506/3_ _</b>

**Dimensions** 1 gang 86mm x 86mm, 2 gang 86mm x 146mm

**Installation Box depth** 35mm



## 13A FUSED CONNECTION UNIT

BS 1363

13A switched fuse connection unit	Interior Plate	<b>1832/1_ _</b> <b>8508/_ _</b>
13A switched fuse connection unit with neon	Interior Plate	<b>1832/13_ _</b> <b>8508/3_ _</b>
13A switched FCU with cord outlet	Interior Plate	<b>1837/1_ _</b> <b>8533/_ _</b>
13A switched FCU with cord outlet & neon	Interior Plate	<b>1837/13_ _</b> <b>8533/3_ _</b>

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 35mm



## 15A ROUND PIN SWITCHED SOCKET

BS 546

15A round pin switched socket	Interior Plate	<b>1272/1_</b> <b>8515/_ _</b>
-------------------------------	----------------	-----------------------------------

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 35mm

## 5A UNSWITCHED SOCKET

BS 546

5A round pin unswitched socket	Interior Plate	<b>1340/1*</b> <b>8579/_ _</b>
--------------------------------	----------------	-----------------------------------

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 35mm

\* Black moulded insert as standard, if required with White moulded insert add /WH



## 2A UNSWITCHED SOCKET

BS 546

2A round pin unswitched socket	Interior Plate	<b>1075/1*</b> <b>8560/_ _</b>
--------------------------------	----------------	-----------------------------------

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 35mm

\* Black moulded insert as standard, if required with White moulded insert add /WH

## 6A TP ISOLATOR SWITCH

BS EN 60669-1, BS EN 60947-3

6A triple pole isolator switch	Interior Plate	<b>1017/1_ _</b> <b>8505/_ _</b>
--------------------------------	----------------	-------------------------------------

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 35mm





## FLAT PLATE

BS EN 60669-1

### 10AX PLATE SWITCH

1 gang 2 way 10AX switch	Interior Plate	<b>1170/1</b> __ <b>8501/</b> __
1 gang 1 way 10A retractive switch	Interior Plate	<b>1096/1</b> __ <b>8501/</b> __
2 gang 2 way 10AX switch	Interior Plate	<b>1172/1</b> __ <b>8502/</b> __
3 gang 2 way 10AX switch	Interior Plate	<b>1173/1</b> __ <b>8503/</b> __

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 16mm 1 & 2 gang, 25mm 3 gang



### DIMMER-ROTARY

BS EN 55015, BS EN 60669-2-1

250W 1 gang	<b>8250/D1</b> __
250W 2 gang	<b>8250/D2</b> __
400W 1 gang	<b>8400/D1</b> __
400W 2 gang	<b>8400/D2</b> __

Suitable for Tungsten Loads.

**Dimensions** 1 & 2 gang 86mm x 86mm

**Installation Box depth** 40mm

2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.



### 20A DP CONTROL SWITCH

BS EN 60669-1

20A DP control switch	Interior Plate	<b>1011/1</b> __ <b>8520/</b> __
20A DP control switch with neon	Interior Plate	<b>1011/13</b> __ <b>8520/3</b> __

### 32A DP CONTROL SWITCH

BS EN 60669-1

32A DP control switch	Interior Plate	<b>1012/1</b> __ <b>8532/</b> __
32A DP control switch with neon	Interior Plate	<b>1012/13</b> __ <b>8532/3</b> __



### 45A DP CONTROL SWITCH

BS EN 60669-1

45A DP control switch	Interior Plate	<b>1512/1</b> __ <b>8545/</b> __
45A DP control switch with neon	Interior Plate	<b>1512/13</b> __ <b>8545/3</b> __

**Dimensions** 1 gang 86mm x 86mm

**Installation Box depth** 35mm



### 45A DP COOKER CONTROL UNIT

BS 4177 & BS1363

Cooker control unit	Interior Plate	<b>1522/1</b> __ <b>8546/</b> __
Cooker control unit with neons	Interior Plate	<b>1522/13</b> __ <b>8546/3</b> __

**Dimensions** 86mm x 146mm

**Installation Box depth** 35mm



1410/1  
8510/SS

## LOW PROFILE

### SHAVER SUPPLY UNIT

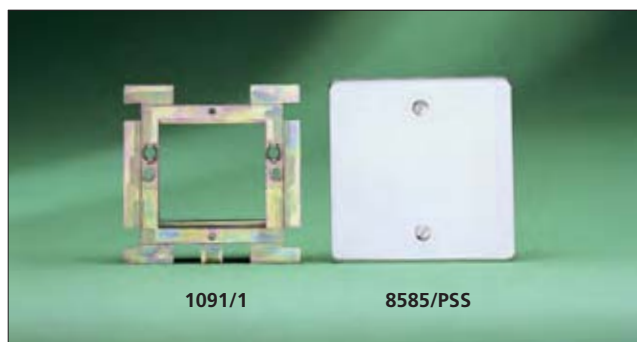
BS EN 61558-2-5

Shaver Supply Unit	Interior Plate	<b>1410/1*</b> <b>8510/_ _</b>
--------------------	----------------	-----------------------------------

**Dimensions** 88mm x 148mm

**Installation Box depth** 55mm

\* Black moulded insert as standard, if required with white moulded insert add /WH



1091/1

8585/PSS

### BLANK PLATES

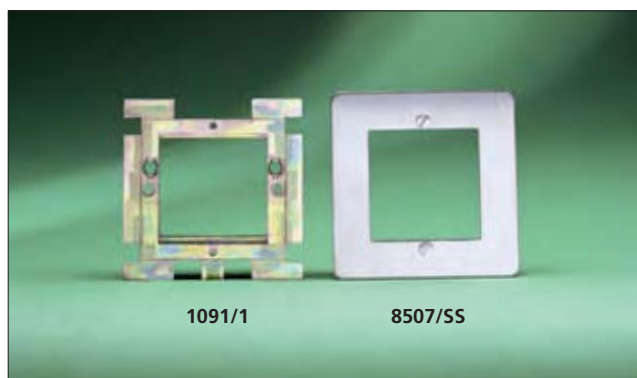
BS 5733

1 gang Blank Plate	Grid Plate	<b>1091/1</b> <b>8585/_ _</b>
--------------------	------------	----------------------------------

2 gang Blank Plate	Grid Plate	<b>1092/1</b> <b>8577/_ _</b>
--------------------	------------	----------------------------------

**Dimensions** 1 gang 88mm x 88mm  
2 gang 88mm x 148mm

**Installation Box depth** 35mm  
1091/1 with outer fixing ears removed



1091/1

8507/SS

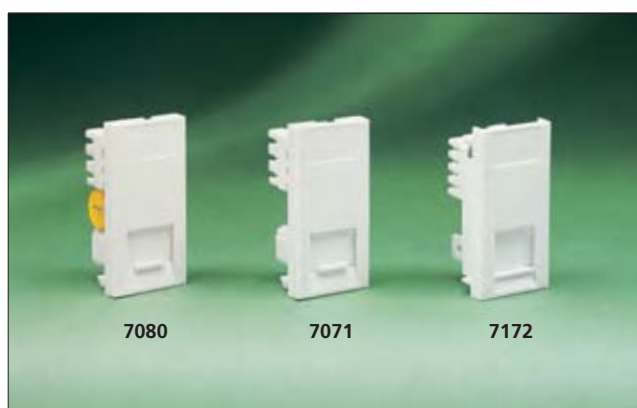
### COMMUNICATION PLATES

1 gang Communication Module Frame	Grid Plate	<b>1091/1</b> <b>8507/_ _</b>
-----------------------------------	------------	----------------------------------

2 gang Communication Module Frame	Grid Plate	<b>1092/1</b> <b>8509/_ _</b>
-----------------------------------	------------	----------------------------------

**Dimensions** 1 gang 88mm x 88mm  
2 gang 88mm x 148mm

**Installation Box depth** 35mm  
1091/1 with outer fixing ears removed



7080

7071

7172

### COMMUNICATION MODULES

	PACK QTY	
BT Master Voice	25	<b>7080</b>
BT secondary Voice, 6 wire	25	<b>7071</b>
RJ45 (single) module, 8 wire – Category 5e	25	<b>7172</b>
RJ45 ISDN terminated	25	<b>7174</b>

### DATA AND CO-AXIAL MODULES

TV outlet (male)	25	<b>7065</b>
TV outlet (female)	25	<b>7067</b>
F type Satellite	25	<b>7069</b>
Triplex Unit (TV, FM, Sat)	25	<b>7063</b>
TV outlet screened, return	25	<b>7060</b>
Phono (Female)	25	<b>7087</b>

### BLANK MODULES & ACCESSORIES

1/2 module size	25	<b>7081/2</b>
1 module size	25	<b>7081</b>

**Dimensions** 25mm x 50mm (1 Module)  
(except 7063 – 50mm x 50mm)

7081/2 12.5mm x 50mm

7081 25mm x 50mm

Add **BK** for Black - ie: **7172/BK**

A full selection of communication modules is shown on Page 23.



7069

7065

7067



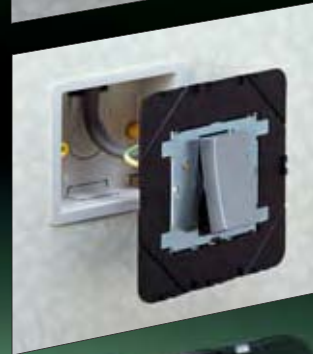




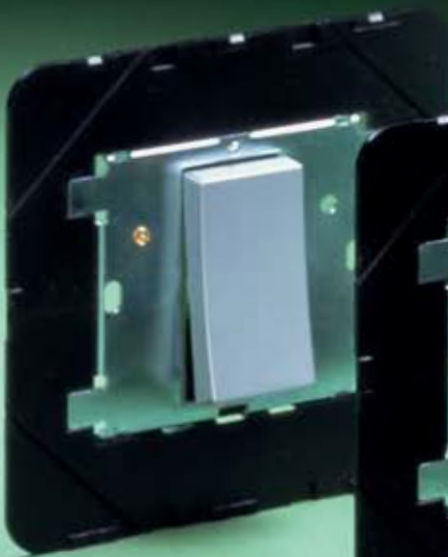
Existing Wiring Accessory  
being replaced.



Choice of 3 different moulded finishes  
available, silver, black or white.



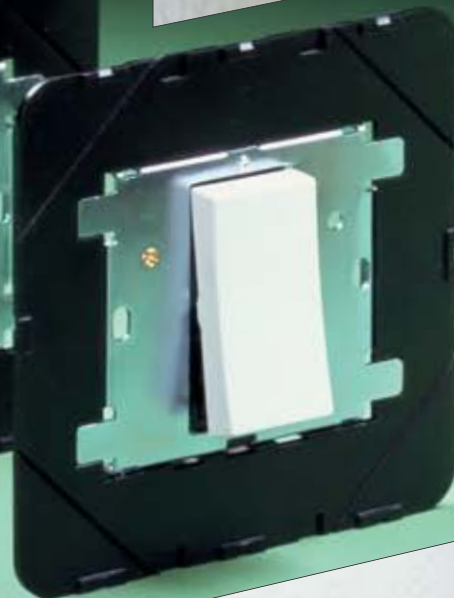
Silver



Black



White



New Fascia plate of your choice snaps  
into place. This can be easily removed  
by use of a flat bladed screwdriver.



New Fascia plate secured in position,  
see alternative finishes overleaf





Inspiration comes  
easy when its as  
simple as this...



Go on... Transform



# Transform

## The choice is yours...

### INTERIORS

#### POWER & CONTROL

Module size

13A 1 Gang DP Switched Socket Interior

2

13A 2 Gang DP Switched Socket Interior

4

13A 1 Gang Unswitched Socket Interior

2

13A Switched Fused Connection Unit Interior, c/w neon

2

6A Triple Pole Fan Isolator Interior

2

20A DP Switch Interior, c/w neon

1

45A DP Switch Interior, c/w neon

2

45A DP Cooker Control Unit Interior, c/w neon

4

115V/230V Shaver Socket Interior

4

#### LIGHTING CONTROL

10AX 1 Gang 2 way Switch Interior

1

10AX 2 Gang 2 way Switch Interior

2

10AX 3 Gang 2 way Switch Interior

2

10AX 1 Gang Intermediate Switch Interior

1

250W 1 Gang Dimmer Switch

1 G Dimmer

250W 2 Gang Dimmer Switch

2 G Dimmer

400W LV/Mains 1 Way Touch Dimmer

2

400W LV/Mains 1 Way Remote Dimmer

2

#### COMMUNICATION

BT Secondary Interior

2

Co-axial Socket Interior

2



White Moulded



Satin Chrome



Antique Copper

#### FRONT PLATES

1 Module

3001/WH

3001/SC

3001/AC

2 Module

3002/WH

3002/SC

3002/AC

4 Module

3004/WH

3004/SC

3004/AC

1 Gang Dimmer

3005/WH

3005/SC

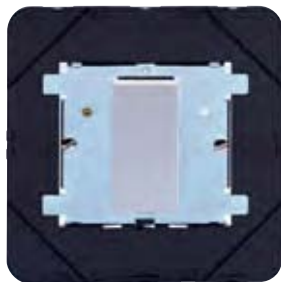
3005/AC

2 Gang Dimmer

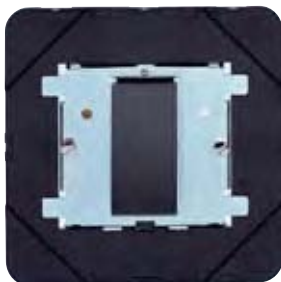
3006/WH

3006/SC

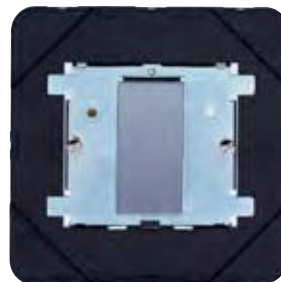
3006/AC



White



Black



Silver Effect

3304/1WH	3304/1BK	3304/1MC
3306/1WH	3306/1BK	3306/1MC
3255/1WH	3255/1BK	3255/1MC
3827/13WH	3827/13BK	3827/13MC
3017/1WH	3017/1BK	3017/1MC
3015/13WH	3015/13BK	3015/13MC
3016/13WH	3016/13BK	3016/13MC
3521/13WH	3521/13BK	3521/13MC
3400/1WH	3400/1BK	3400/1MC
3170/1WH	3170/1BK	3170/1MC
3171/1WH	3171/1BK	3171/1MC
3173/1WH	3173/1BK	3173/1MC
3175/1WH	3175/1BK	3175/1MC
3130/PU/1WH	3130/PU/1BK	3130/PU/1MC
3132/PU/1WH	3132/PU/1BK	3132/PU/1MC
3400TD/1WH	3400TD/1BK	3400TD/1MC
3400RD/1WH	3400RD/1BK	3400RD/1MC
3824/1WH	3824/1BK	3824/1MC
3265/1WH	3265/1BK	3265/1MC



Polished Chrome



Black Nickel



Light Oak



Dark Oak

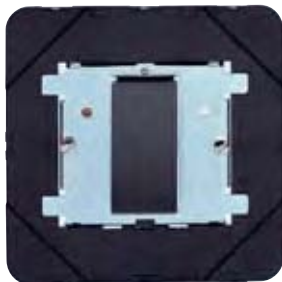


Glass



Mirrored Glass

3001/HPC	3001/BKN	3001/LO	3001/DO	3001/GL	3001/MR
3002/HPC	3002/BKN	3002/LO	3002/DO	3002/GL	3002/MR
3004/HPC	3004/BKN	3004/LO	3004/DO	3004/GL	3004/MR
3005/HPC	3005/BKN	3005/LO	3005/DO	3005/GL	3005/MR
3006/HPC	3006/BKN	3006/LO	3006/DO	3006/GL	3006/MR



## TRANSFORM INTERIORS ONLY

Wiring Accessory Interiors are available in the following finishes.

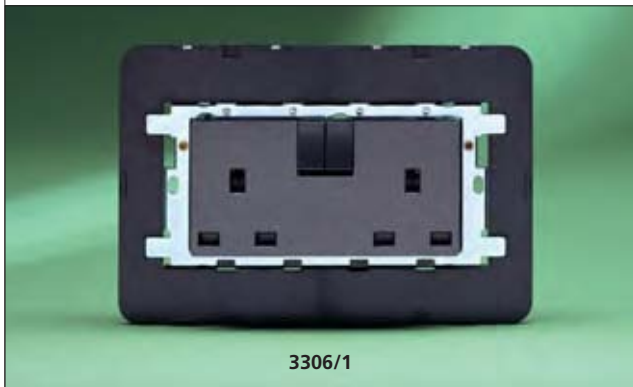
Indicate the finish you require by adding suffix to List No.

ie: 13A 1 Gang DP Switched Socket Interior in white = **3170/1WH**

**WH** - White Interior

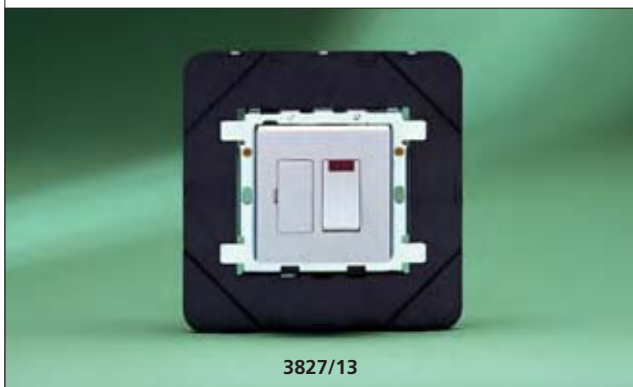
**BK** - Black Interior

**MC** - Silver effect Interior



### 13A SOCKET OUTLETS

BS 1363	Module size	List No.
13A 1 Gang DP Switched Socket Interior	2	<b>3304/1_ _</b>
13A 2 Gang DP Switched Socket Interior	4	<b>3306/1_ _</b>
13A Single Unswitched Socket Interior	2	<b>3255/1_ _</b>
<b>Dimensions</b> 1 gang 122mm x 122mm 2 gang 172mm x 122mm		
<b>Installation Box Depth</b> 35mm		



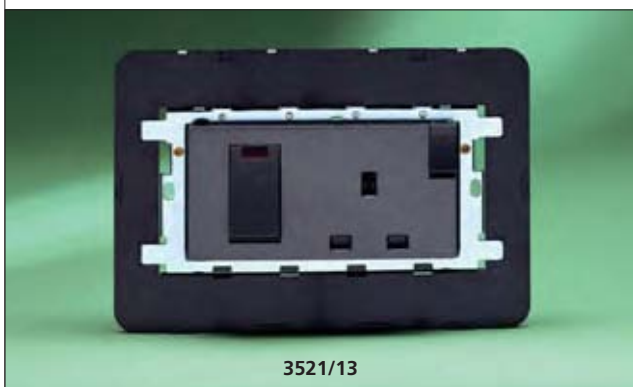
### 13A FUSED CONNECTION UNIT

BS 1363	Module size	List No.
13A Switched FCU with Neon Interior	2	<b>3827/13_ _</b>
<b>Dimensions</b> 1 gang 122mm x 122mm		
<b>Installation Box Depth</b> 35mm		



### CONTROL SWITCHES

BSEN 60669-1, BSEN 60947-3	Module size	List No.
6A Triple Pole Fan Isolator Interior	2	<b>3017/1_ _</b>
BSEN 60669-1	Module size	List No.
20A DP Switch with Neon Interior	1	<b>3015/13_ _</b>
45A DP Switch with Neon Interior	2	<b>3016/13_ _</b>
<b>Dimensions</b> 1 gang 122mm x 122mm		
<b>Installation Box Depth</b> 35mm		



### COOKER CONTROL UNIT

BS4177 & BS 1363	Module size	List No.
Cooker Control Unit with Neon Interior	4	<b>3521/13_ _</b>
<b>Dimensions</b> 2 gang 172mm x 122mm		
<b>Installation Box Depth</b> 45mm		





3170/1WH

## 10AX PLATE SWITCH

BS EN 60669-1	Module size	List No.
10AX 1 Gang 2 way Switch Interior	1	<b>3170/1_ _</b>
10AX 2 Gang 2 way Switch interior	2	<b>3171/1_ _</b>
10AX 3 Gang 2 way Switch interior	2	<b>3173/1_ _</b>
10AX 1 Gang Intermediate Switch Interior	1	<b>3175/1_ _</b>
<b>Dimensions</b> 1 gang 122mm x 122mm		
<b>Installation Box Depth</b> 16mm		



3130/PU/1MC

## DIMMER

BS EN 55014 & BS EN 60669-2-1	Module size	List No.
250W 1 Gang Dimmer Switch Interior	1 G Dimmer	<b>3130/PU/1_ _</b>
250W 2 Gang Dimmer Switch Interior	2 G Dimmer	<b>3132/PU/1_ _</b>
<b>Dimensions</b> 1 gang 122mm x 122mm		
<b>Installation Box Depth</b> 35mm		

Suitable for mains voltage GLS:

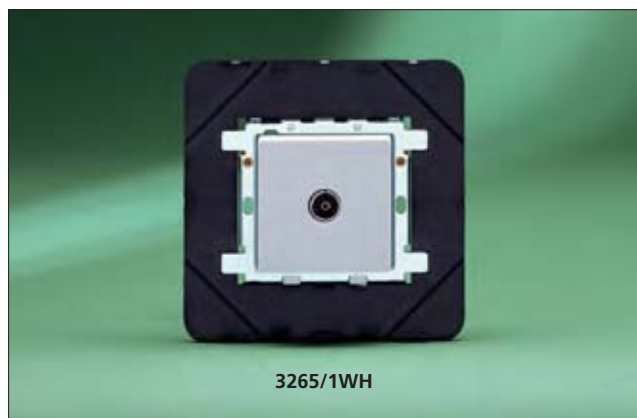
**GU10 or similar Hispot halogen bulbs up to the rating on the rear of the product.**  
**2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.**



3400/1BK

## SHAVER SUPPLY UNIT

BS EN 61558-2-5	Module size	List No.
115/230V Shaver Socket Interior	4	<b>3400/1_ _</b>
<b>Dimensions</b> 1 gang 172mm x 122mm		
<b>Installation Box Depth</b> 55mm		



3265/1WH

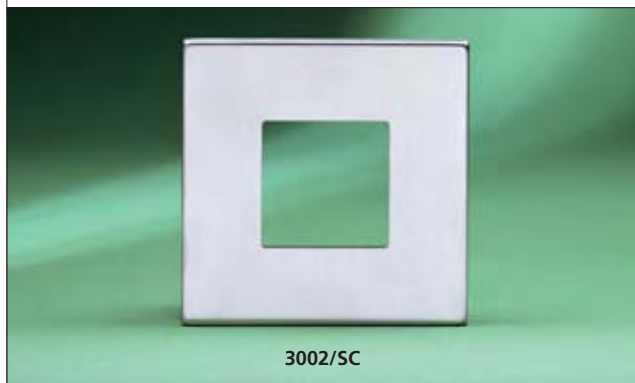
## COMMUNICATION ACCESSORIES

BS 3041 Where applicable	Module size	List No.
BT Secondary Interior	2	<b>3824/1_ _</b>
Co-axial Socket Interior	2	<b>3265/1_ _</b>
<b>Dimensions</b> 2 gang 122mm x 122mm		
<b>Installation Box Depth</b> 30mm		



## TRANSFORM FRONT PLATES ONLY WHITE MOULDED

	List No.
1 Module	<b>3001/WH</b>
2 Module	<b>3002/WH</b>
4 Module	<b>3004/WH</b>
1 Gang Dimmer	<b>3005/WH</b>
2 Gang Dimmer	<b>3006/WH</b>



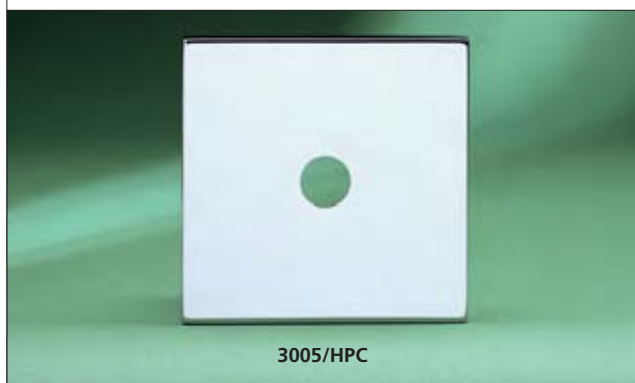
## SATIN CHROME

	List No.
1 Module	<b>3001/SC</b>
2 Module	<b>3002/SC</b>
4 Module	<b>3004/SC</b>
1 Gang Dimmer	<b>3005/SC</b>
2 Gang Dimmer	<b>3006/SC</b>



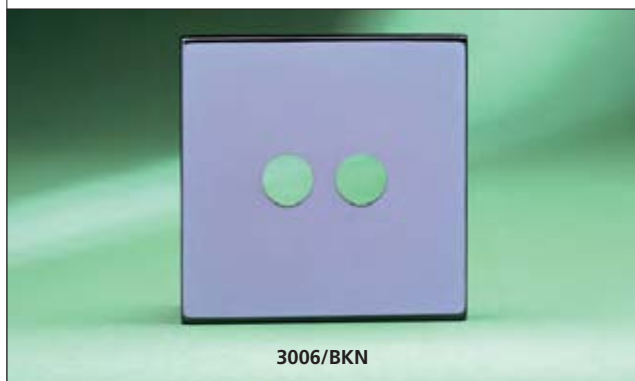
## ANTIQUE COPPER

	List No.
1 Module	<b>3001/AC</b>
2 Module	<b>3002/AC</b>
4 Module	<b>3004/AC</b>
1 Gang Dimmer	<b>3005/AC</b>
2 Gang Dimmer	<b>3006/AC</b>



## POLISHED CHROME

	List No.
1 Module	<b>3001/HPC</b>
2 Module	<b>3002/HPC</b>
4 Module	<b>3004/HPC</b>
1 Gang Dimmer	<b>3005/HPC</b>
2 Gang Dimmer	<b>3006/HPC</b>



## BLACK NICKEL

	List No.
1 Module	<b>3001/BKN</b>
2 Module	<b>3002/BKN</b>
4 Module	<b>3004/BKN</b>
1 Gang Dimmer	<b>3005/BKN</b>
2 Gang Dimmer	<b>3006/BKN</b>



## TRANSFORM FRONT PLATES ONLY LIGHT OAK

	List No.
1 Module	<b>3001/LO</b>
2 Module	<b>3002/LO</b>
4 Module	<b>3004/LO</b>
1 Gang Dimmer	<b>3005/LO</b>
2 Gang Dimmer	<b>3006/LO</b>



## DARK OAK

	List No.
1 Module	<b>3001/DO</b>
2 Module	<b>3002/DO</b>
4 Module	<b>3004/DO</b>
1 Gang Dimmer	<b>3005/DO</b>
2 Gang Dimmer	<b>3006/DO</b>



## GLASS

	List No.
1 Module	<b>3001/GL</b>
2 Module	<b>3002/GL</b>
4 Module	<b>3004/GL</b>
1 Gang Dimmer	<b>3005/GL</b>
2 Gang Dimmer	<b>3006/GL</b>



## MIRRORED GLASS

	List No.
1 Module	<b>3001/MR</b>
2 Module	<b>3002/MR</b>
4 Module	<b>3004/MR</b>
1 Gang Dimmer	<b>3005/MR</b>
2 Gang Dimmer	<b>3006/MR</b>



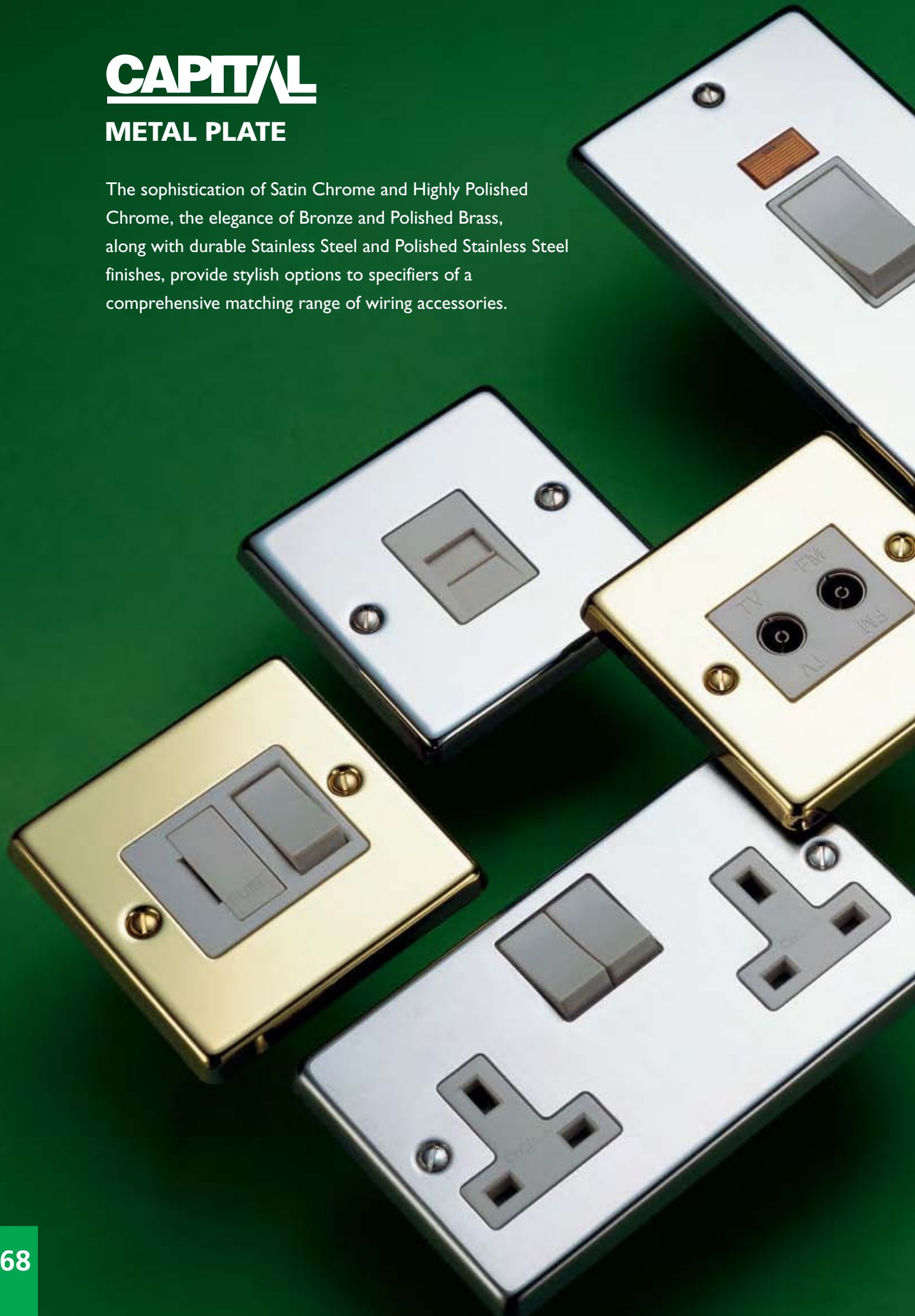
## DIMENSIONS

1 Module	122 x 122mm
2 Module	122 x 122mm
4 Module	172 x 122mm
1 Gang Dimmer	122 x 122mm
2 Gang Dimmer	122 x 122mm

# CAPITAL

## METAL PLATE

The sophistication of Satin Chrome and Highly Polished Chrome, the elegance of Bronze and Polished Brass, along with durable Stainless Steel and Polished Stainless Steel finishes, provide stylish options to specifiers of a comprehensive matching range of wiring accessories.







## CAPITAL METAL PLATE



Polished Stainless Steel



Satin Chrome



Polished Brass



Stainless Steel



Highly Polished Chrome

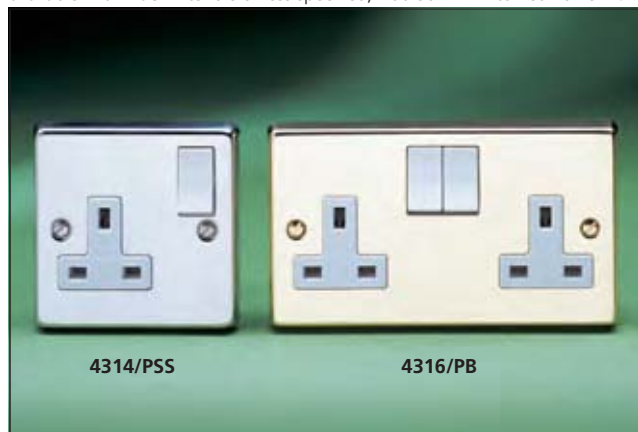


Bronze



Unique labyrinth switch design minimises visible arc flash and prevents front access to live parts whilst wide concave rockers are easy to operate.

All the following list numbers are available in Satin Chrome (SC), Bronze (BZ), Highly Polished Chrome (HPC), Polished Brass (PB), Stainless Steel (SS) and Polished Stainless Steel (PSS). Indicate the finish you require by adding suffix to List No. ie: 4314 – 1 gang switch socket in Bronze = 4314/BZ. Products are also available with Black interiors unless specified, Add Suffix **BK** to List No. ie: 4316/SC 13A 2 gang Switched Socket in Satin Chrome with Black interior = 4316/SCBK.



### 13A FLUSH SOCKET OUTLETS

BS 1363	PACK	QTY
1 gang SP switched	10	<b>4314/_ _</b>
2 gang SP switched	5	<b>4316/_ _</b>
1 gang SP switched fitted with neon indicator	10	<b>4314/3 _</b>
2 gang SP switched fitted with neon indicator	5	<b>4316/3 _</b>
<b>Dimensions</b> 1 gang 86mm x 86mm 2 gang 146mm x 86mm		
<b>Mounting boxes</b> 1 gang 9221/BG surface, SB615 flush galv. or SB619 dry lining 2 gang 9223/BG surface, SB625 flush galv. or SB629 dry lining		

Double pole switched versions are available to order – Add suffix **D** to List No.  
ie: Double pole 4314/BZ = 4314/DBZ.

- All switched sockets are Dual Earth.



### 13A FLUSH SOCKET OUTLETS WITH METAL ROCKERS

BS 1363	PACK	QTY
1 gang SP switched	10	<b>4314/_ _/6</b>
2 gang SP switched	5	<b>4316/_ _/6</b>
1 gang SP switched fitted with neon indicator	10	<b>4314/3 _/6</b>
2 gang SP switched fitted with neon indicator	5	<b>4316/3 _/6</b>
<b>Dimensions</b> 1 gang 86mm x 86mm 2 gang 146mm x 86mm		
<b>Mounting boxes</b> 1 gang 9221/BG surface, SB615 flush galv. or SB619 dry lining 2 gang 9223/BG surface, SB625 flush galv. or SB629 dry lining		

Double Pole switched versions available to order - Add suffix **D** to List No.-  
ie: Double Pole 4316/3SC/6 = 4316/3DSC/6.

For Black Interior, Add Suffix **BK** to List No. ie: 4314/SCBK/6.

- All switched sockets are Dual Earth.



### 13A FLUSH FUSED CONNECTION UNITS

BS 1363	PACK	QTY
Unswitched	10	<b>4831/_ _</b>
Unswitched with neon	10	<b>4831/3 _</b>
DP switched	10	<b>4832/_ _</b>
DP switched with neon indicator	10	<b>4832/3 _</b>
Unswitched with cord outlet	10	<b>4836/_ _</b>
DP switched with cord outlet	10	<b>4837/_ _</b>
DP switched with cord outlet and neon indicator	10	<b>4837/3 _</b>
<b>Dimensions</b> 86mm x 86mm		
<b>Mounting boxes</b> 9221/BG surface, SB615 flush galv. or SB619 dry lining		

All fused connection units:

Fused on the line side with 13A fuse link ASTA certified and marked to BS 1362.

For spare fuse links see page 8.

Cord outlet suitable for flexible cord up to 10mm outside diameter.

Two earthing terminals are fitted to the unit.



### 13A FLUSH FUSED CONNECTION UNITS WITH METAL ROCKER

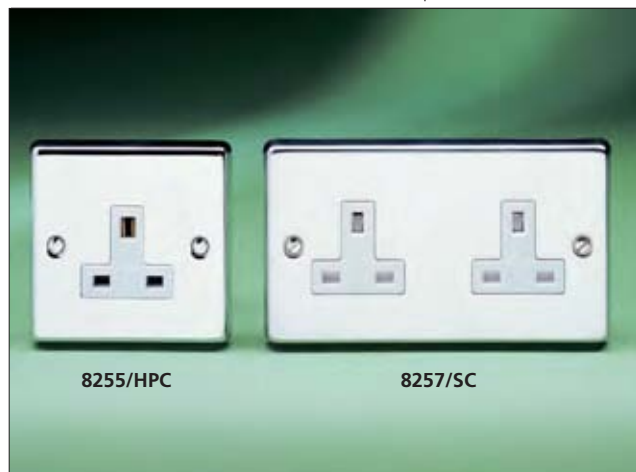
BS 1363	PACK	QTY
DP switched	10	<b>4832/_ _/6</b>
DP switched with neon indicator	10	<b>4832/3 _/6</b>
DP switched with cord outlet	10	<b>4837/_ _/6</b>
DP switched with cord outlet & neon indicator	10	<b>4837/3 _/6</b>
<b>Dimensions</b> 86mm x 86mm		
<b>Mounting boxes</b> 9221/BG surface, SB615 flush galv. or SB619 dry lining		

For Black Interior, Add Suffix **BK** to List No. ie: 4832/3SCBK/6.

For full specification details of finishes see Technical Data page 173.

All the following list numbers are available in Satin Chrome (SC), Bronze (BZ), Highly Polished Chrome (HPC), Polished Brass (PB), Stainless Steel (SS), and Polished Stainless Steel (PSS). Indicate the finish you require by adding suffix to list No. ie 2340 – 5A 3 pin switched in Satin Chrome = 2340/SC.

Products are also available with Black interior unless specified. Add suffix **BK** to List No. ie 2340/SC 5A 3 pin switched socket with Black interior = 2340/SC/BK.



### 13A UNSWITCHED SOCKET OUTLET

BS 1363	PACK QTY	
1 gang unswitched	10	<b>8255/_ _</b>
2 gang unswitched	5	<b>8257/_ _</b>
<b>Dimensions</b>	1 gang 86mm x 86mm 2 gang 146mm x 86mm	
<b>Mounting boxes</b>	1 gang 9221/BG surface, SB615 flush galv. or SB619 dry lining 2 gang 9223/BG surface, SB625 flush galv. or SB629 dry lining	



### 13A HINGED FLOOR SOCKET

BS 1363	PACK QTY	
1 gang unswitched	1	<b>8256/_ _</b>
<b>Dimensions</b>	83mm x 89mm	
<b>Mounting boxes</b>	SB615 flush galvanised.	

Available in Satin Chrome (SC), Highly Polished Chrome (HPC), and Polished Brass (PB).  
Not available with Black Interior.



### 5A & 15A SWITCHED FLUSH SOCKET OUTLETS

BS 546	PACK QTY	
5A 3 pin switched socket	10	<b>2340/_ _ *</b>
15A 3 pin switched socket	10	<b>2372/_ _ #</b>
<b>Dimensions</b>	86mm x 86mm	
<b>Mounting boxes</b>	9221/BG surface, SB615 flush galv. or SB619 dry lining	

\* Available with black inserts, Add suffix **BK** to List No. ie 2340/SCBK.

# Not available with Black Interior.



### 2A UNSWITCHED FLUSH SOCKET OUTLETS

	PACK QTY	
2A 3 pin unswitched socket	10	<b>8075/_ _ #</b>
<b>Dimensions</b>	86mm x 86mm	
<b>Mounting boxes</b>	9221/BG surface, SB615 flush galv. or SB619 dry lining	

# Not available with Black Interior.

For full specification details of finishes see Technical Data page 173.



All the following list numbers are available in Satin Chrome (**SC**), Bronze (**BZ**), Highly Polished Chrome (**HPC**), Polished Brass (**PB**), Stainless Steel (**SS**), and Polished Stainless Steel (**PSS**). Indicate the finish you require by adding suffix to List No. ie 6170 - 1 gang Plate Switch in Bronze = 6170/**BZ**. Products are also available with Black interiors, Add suffix **BK** to List No. ie 6170 - 1 gang 2 way Plate Switch in Satin Chrome with Black interior = 6170/**SCBK**.



## 10AX PLATE SWITCHES

BS EN 60669-1	PACK QTY	
1 gang 2 way	10	<b>6170/_ _</b>
2 gang 2 way	10	<b>6172/_ _</b>
3 gang 2 way	10	<b>6173/_ _</b>
1 gang Intermediate	10	<b>6175/_ _</b>
1 gang retractive (press) 10A	10	<b>6096/_ _</b>

**Dimensions** 86mm x 86mm  
**Mounting boxes** 9043 surface, SB623 flush galv. or SB619 dry lining

*Two way switches can be wired as one way.  
 Fully rated for fluorescent or inductive loads. (Except 6096, 10A only)  
 Retractive switch can be wired for normally open (N/O) or normally closed (N/C) circuits.  
 Seeklight facility available, see page 34 for details.*



## DIMMER SWITCHES - FLUSH

BS EN 60669-2-1	PACK QTY	
1 gang Dimmer 250W	1	<b>1250W/_ _</b>
1 gang Dimmer 400W	1	<b>1400W/_ _</b>
2 gang Dimmer 250W	1	<b>2250W/_ _</b>
2 gang Dimmer 400W	1	<b>2400W/_ _</b>

Suitable for tungsten mains voltage & GU10 or similar HiSpot halogen bulb.  
**Dimensions** 1-2 gang 86mm x 86mm  
**Mounting boxes** 1-2 gang 9221/BG surface, SB615 flush galv. or SB619 dry lining  
 2 x 400W dimmer modules on a 1 gang plate should have a combined rating of 500W maximum.



## 10A CORINTHIAN METALISED PLATE SWITCH

BS EN 60669-1	PACK QTY	
10AX 1 gang 2 way SP	10	<b>5170/_ _</b>
10AX 2 gang 2 way SP	10	<b>5172/_ _</b>
10AX 3 gang 2 way SP	10	<b>5173/_ _</b>
20AX 1 gang Intermediate	10	<b>5175/_ _</b>
10AX 1 gang retractive Press	10	<b>5177/_ _</b>

**Dimensions** 86mm x 86mm  
**Mounting boxes** 9047 Surface, SB623 Flush galv. or SB619 dry lining.

Only available in Highly Polished Chrome (**HPC**).  
 Not available in Black.



## 3A CARD SWITCH

	PACK QTY	
3A Card Switch	5	<b>4018/_ _</b>

**Dimensions** 86mm x 86mm  
**Mounting boxes** SB655 flush galv. or SB619 dry lining

*Controls energy consumption in installations such as hotels by ensuring that appliances are not left on when rooms are unoccupied.*

*The switch is operated by a door entry card and controls the supply to a room via a suitably rated contactor.*

*Will accept door entry cards up to 86mm x 54mm x 1mm.*

*Mounting Box must be minimum 25mm in depth.*

*Fitted with neon for illumination through card switch entry. See page 170.*



All the following list numbers are available in Satin Chrome (SC), Bronze (BZ), Highly Polished Chrome (HPC), Polished Brass (PB), Stainless Steel (SS), and Polished Stainless Steel (PSS). Indicate the finish you require by adding suffix to List No. ie 4011 - 20A DP Control Switch in Satin Chrome = 4011/SC. Products are also available with Black interiors, Add suffix BK to List No. ie 4011/SC - 20A DP Control Switch in Satin Chrome with Black interior = 4011/SCBK.



### 6A TP CONTROL SWITCH

BS EN 60669-1 BS EN 60947-3	PACK	QTY
6A Three Pole Isolating switch	10	<b>6017/_ _</b>

*Provides local isolation of Fans with or without timers, whilst the rest of the circuit remains live.*

*Enables repair or routine maintenance of Fans. 240V only.*

<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9043 surface, SB623 flush galv. or SB619 dry lining

*For Technical details see page 165.*

*Not available with Black Interior.*



### SHAVER SUPPLY UNIT

BS EN 61558-2-5	PACK	QTY
240V 50Hz input 115V 50Hz } output 230V 50Hz }	1	<b>2411/_ _</b>

<b>Dimensions</b>	86mm x 146mm
<b>Mounting boxes</b>	9053 surface, SB628 flush galv. or SB631 dry lining

*Not available with Black Interior*



### 20A DP CONTROL SWITCHES

BS EN 60669-1	PACK	QTY
DP switch	10	<b>4011/_ _</b>
DP switch with neon indicator	10	<b>4011/3 _ _</b>
DP switch with neon indicator marked 'Water Heater'	10	<b>4011/31 _ _</b>
DP switch with neon indicator and cord outlet	10	<b>4014/3 _ _</b>

<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9047 surface, SB655 flush galv. or SB619 dry lining

*Cord outlet suitable for flexible cord up to 10mm outside diameter.*



### 32A DP CONTROL SWITCH

BS EN 60669-1	PACK	QTY
DP switch with neon indicator	10	<b>4012/3 _ _</b>

<b>Dimensions</b>	86mm x 86mm
<b>Mounting boxes</b>	9041 surface, SB615 flush galv. or SB619 dry lining

*Two earthing terminals are fitted to the switches.*

All the following list numbers are available in Satin Chrome (SC), Bronze (BZ), Highly Polished Chrome (HPC), Polished Brass (PB), Stainless Steel (SS), and Polished Stainless Steel (PSS). Indicate the finish you require by adding suffix to List No. ie 4522/3 - Cooker Switch in Bronze = 4522/3BZ. Products are also available with Black interiors, Add suffix BK to List No. ie 4522/3SC - Cooker Control Switch in Satin Chrome with Black interior = 4522/3SCBK.



4416/A03BZ

### 13A SAFETY SOCKETS – RCD PROTECTION

BS 7288	PACK QTY
---------	----------

#### FLUSH

2 gang switched with neon indicator 30mA tripping current	1	4416/A03_ _
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<b>Dimensions</b>	146mm x 86mm
<b>Mounting boxes</b>	9048 surface, SB665 flush galv. or SB629 dry lining

See page 159 for further information.

- Large capacity terminals for easy wiring.
- Shallow back projection for ease of installation in a 25mm deep box.
- Fitted with two Earth terminals for use where compliance with BS7671: 2008 regulation 544-7 (IEE wiring Regulations).
- Not available with black insert



4522/3SC

### 45A DP SLIM LINE COOKER CONTROL UNIT

BS 4177 & BS 1363	PACK QTY
-------------------	----------

45A DP main switch and 13A Switched socket outlet Faceplate marked 'COOKER'	1	4522/3_ _
---	---	-----------

<b>Dimensions</b>	146mm x 86mm
<b>Mounting boxes</b>	9054 surface, SB625 flush galv. or SB629 dry lining

- Same plate size as standard twin socket.
- Large capacity tunnel terminals on live and neutral take up to 10mm<sup>2</sup> cable.
- Two earth terminals are fitted.
- Separate double pole switching for both cooker and socket.



4512/3HPC

### 50A DP CONTROL SWITCHES

BS EN 60669-1	PACK QTY
---------------	----------

DP switch	5	4512/_ _
-----------	---	----------

DP switch with neon indicator	5	4512/3_ _
-------------------------------	---	-----------

<b>Dimensions</b>	86mm x 146mm
<b>Mounting boxes</b>	9040 surface, SB625 flush galv. or SB629 dry lining

BS EN 60947-3 rating 240V 50A category of duty AC22.

For associated cable outlets see page 10.

For Black Interior, Add Suffix BK to List No. ie: 4512/3SCBK.



2167/BKN

### METAL CAPPED 50A CEILING SWITCHES

BS EN 60669-1	PACK QTY
---------------	----------

1 way DP with neon and mechanical indicator	1	2167/_ _
--	---	----------

<b>Mounting boxes</b>	Integral pattress for surface mounting. Can be mounted to a large circular conduit box.
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Complies with the requirements of the IEE Wiring Regulations (BS 7671) for use as an isolating device.

Terminals will accept up to 10mm<sup>2</sup> cable.

Standard pull cord/acorn is 1.5m long, in white.

Suitable for use with 25mm x 16mm trunking.

Rated for non-inductive loads only.

Available in the following finishes: Satin Chrome (SC), Polished Brass (PB), Highly Polished Chrome (HPC) & Black Nickel (BKN).

All the following list numbers are available in Satin Chrome (**SC**), Bronze (**BZ**), Highly Polished Chrome (**HPC**), Stainless Steel (**SS**) and Polished Stainless Steel (**PSS**). Indicate the finish you require by adding suffix to List No. ie 8265 – Co-axial socket in Bronze = 8265/**BZ**.



4318/SC

## MULTI MEDIA PLATE

		PACK QTY
Multi Media Plate	1	<b>4318/_ _</b>
The plate comprises 2 Dual Earth, Double pole, twin switched sockets and has provision for up to six Euro modules.		
The following finishes are available, please add suffix to List No. Satin Chrome ( <b>SC</b> ), Stainless Steel ( <b>SS</b> ), Polished Brass ( <b>PB</b> ), Highly Polished Chrome ( <b>HPC</b> ) and White ( <b>WH</b> ).		
<b>Dimensions</b>	267mm x 207mm	
<b>Mounting boxes</b>	Deep - 254mm x 194mm x 56mm - 9226/BG	
	Shallow - 253mm x 193mm x 35mm - 9228/BG	
See Page 104 for more details		



8092/BZ  
fitted with modules

8092/SC  
fitted with modules

## COMMUNICATIONS PLATES

BS 5733 WHERE APPLICABLE	PACK QTY	
1 module metal plate (fitted with grid)	5	<b>8091/_ _</b>
2 module metal plate (fitted with grid)	5	<b>8092/_ _</b>
4 module metal plate (fitted with grid)	5	<b>8094/_ _</b>
<b>Dimensions</b>	86mm x 86mm, 1 & 2 module	
	86mm x 146mm, 4 module	
<b>Mounting boxes</b>	8091*, 8092*-9041 surface, SB615 flush galv. or SB619 dry lining	
	8094*-9040 surface, SB625 flush galv. or SB629 dry lining	

The metal plates listed above accept any of the Datapak range of modules.  
See page 23 for full product selection details.



7080

7071

7172



7069

7065

7067



7074

7063

7069

## COMMUNICATION MODULES

	PACK QTY	
BT Master Voice	25	<b>7080</b>
BT Master Voice, Left Handed	25	<b>7080/LH</b>
BT secondary Voice, 6 wire	25	<b>7071</b>
RJ45 (single) module, 8 wire – Category 5e	25	<b>7172</b>

## DATA AND CO-AXIAL MODULES

BNC single module with 75 Ohm crimp connector	25	<b>7074</b>
TV outlet (male)	25	<b>7065</b>
TV outlet (female)	25	<b>7067</b>
F type Satellite	25	<b>7069</b>
Triplex Unit (TV, FM, Sat)	25	<b>7063</b>
Quadplexer with TV return (TV, TV Return, FM, Sat 1 & Sat 2)	10	<b>7064</b>
TV outlet screened, return	25	<b>7060</b>
Phono (Female)	25	<b>7087</b>

## BLANK MODULES & ACCESSORIES

1/2 module size	25	<b>7081/2</b>
1 module size	25	<b>7081</b>
IDC Tool	20	<b>6915</b>
IDC Crimp Tool	1	<b>7915</b>

Also available in Black - Add suffix **BK** to List No. ie: triplex unit in Black = 7063/**BK**.

**Dimensions** 25mm x 50mm, (1 module) (except 7063 - 50mm x 50mm & 7064 - 75mm x 50mm)

For full specification details of finishes see Technical Data page 172.

All the following list numbers are available in Satin Chrome (**SC**), Bronze (**BZ**), Highly Polished Chrome (**HPC**), Polished Brass (**PB**) Stainless Steel (**SS**) and Polished Stainless Steel (**PSS**). Indicate the finish you require by adding suffix to List No. ie 8265 Co-axial socket in Bronze = 8265/**BZ**.



## TELEPHONE PLATES

BS 7671	PACK QTY	
Telephone Master	10	<b>8283/</b> __
Telephone Secondary	10	<b>8284/</b> __

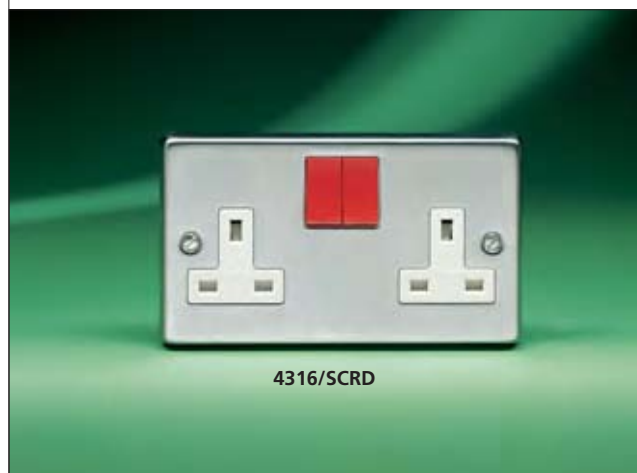
**Dimensions** 86mm x 86mm  
**Mounting boxes** 9047 surface, SB655 flush galv. or SB619 dry lining



## CO-AXIAL SOCKET OUTLETS

BS 3041 WHERE APPLICABLE	PACK QTY	
1 way direct connection	10	<b>8265/</b> __
2 way direct connection	10	<b>8266/</b> __
1 way isolated UHF, VHF	1	<b>8267/</b> __
2 way isolated UHF, VHF	1	<b>8268/</b> __

**Dimensions** 86mm x 86mm  
**Mounting boxes** 9047 surface, SB655 flush galv. or SB619 dry lining  
*Isolated units only suitable on installations with earth bond.*



## RED ROCKERS

For applications where essential supply systems are in use, sockets and fused connection units with red rockers are available to order. These are ideal for use in hospitals, computer installations, etc.  
 To order, add suffix to List No.  
 ie 4316/SC with red rockers = 4316/SC/**RD**.

*For Rockergrid switches with red rockers see Rockergrid section page 86-87.*



## BLANKING PLATES

BS 5733 WHERE APPLICABLE	PACK QTY	
1 gang	20	<b>6575/</b> __
2 gang	20	<b>6577/</b> __

**Dimensions** 1 gang 86mm x 86mm  
 2 gang 146mm x 86mm

*For full specification details of finishes see Technical Data page 173.*





## PRODUCT MARKING SERVICE

A wide range of markings can be added to 13A fused connection units and double pole control switches. The majority of these markings are consistent in style, colour and position with the standard Tampo-printed 'water heater' marking on List No.4011/31\_ \_\_. All of the markings offer the same high level of durability.

To order any of the markings listed below, add suffix to List No. ie 4832/**SC** marked 'fridge freezer' = 4832/**SC/FF**.

MARKING	SUFFIX	MARKING	SUFFIX
air conditioner	<b>AC</b>	cooker hood	<b>HD</b>
alarm	<b>AL</b>	heating	<b>HG</b>
bathroom	<b>BA</b>	hair dryer	<b>HI</b>
bell transformer	<b>BE</b>	heating isolator	<b>HS</b>
bathroom extract fan	<b>BEF</b>	heater	<b>HT</b>
bathroom heater	<b>BH</b>	immersion heater	<b>IH</b>
boiler	<b>BO</b>	kitchen extract fan	<b>KEF</b>
boiler supply	<b>BOS</b>	light	<b>LG</b>
boost	<b>BST</b>	lift	<b>LI</b>
British Telecom	<b>BT</b>	loft light	<b>LL</b>
caravan	<b>CA</b>	microwave	<b>MW</b>
CCTV	<b>CCTV</b>	night immersion	<b>NI</b>
central heating	<b>CH</b>	off peak	<b>OFFP</b>
cooker	<b>CK</b>	outside light	<b>OL</b>
cupboard light	<b>CL</b>	on peak	<b>ONP</b>
convector heater	<b>CNH</b>	oven	<b>OV</b>
day boost	<b>DB</b>	pelmet light	<b>PEL</b>
detector	<b>DE</b>	plinth heater	<b>PLH</b>
downflow heater	<b>DH</b>	refrigerator	<b>RF</b>
door bell	<b>DO</b>	security alarm	<b>SA</b>
dish washer	<b>DW</b>	smoke detector	<b>SD</b>
dryer	<b>DY</b>	security equipment	<b>SE</b>
emergency circuit	<b>EC</b>	shower	<b>SH</b>
extractor fan	<b>EF</b>	security light	<b>SL</b>
extractor hood	<b>EH</b>	shower pump	<b>SP</b>
fire alarm	<b>FA</b>	storage heater	<b>ST</b>
for cleaners use only	<b>FCO</b>	steam cabinet	<b>STC</b>
fan coil unit	<b>FCU</b>	tumble dryer	<b>TD</b>
feature fire	<b>FE</b>	towel rail	<b>TR</b>
fridge/freezer	<b>FF</b>	TV amplifier	<b>TVA</b>
fan heater	<b>FH</b>	underfloor heating	<b>UH</b>
fire	<b>FI</b>	vent fan	<b>VF</b>
fan	<b>FN</b>	water heater	<b>WA</b>
fridge	<b>FR</b>	water cooler	<b>WC</b>
freezer	<b>FZ</b>	waste disposal	<b>WD</b>
gas ignition	<b>GI</b>	washing machine	<b>WM</b>
hand dryer	<b>HA</b>	washer	<b>WS</b>
hob	<b>HB</b>		

*These popular markings are offered on a fast track service in the standard wiring accessories colour. For price and delivery information on other markings not listed above, contact our Technical Services Department.*

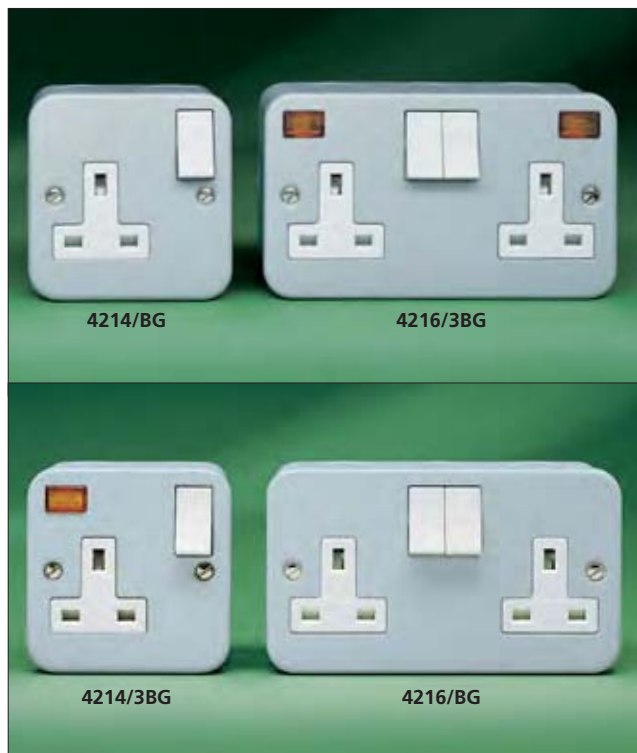
# **CAPITAL**

## **METALCLAD**

In tough conditions the sturdily built Capital Metalclad range is ideal for use in industry, commerce and the home.



- Tough durable finish which is resistant to premature ageing, discolouration and corrosion.
- Finishing process is highly automated and controlled to ensure a consistent level of performance.
- Production line tested for quality of gloss finish and uniform coverage of coating.



### 13A SWITCHED SOCKET OUTLETS

BS 1363	PACK QTY	
1 gang SP	10	<b>4214/BG</b>
2 gang SP	5	<b>4216/BG</b>
1 gang SP with neon indicator	10	<b>4214/3BG</b>
2 gang SP with neon indicator	5	<b>4216/3BG</b>

<b>Dimensions</b>	1 gang 86.7mm x 86.7mm x 44mm
	2 gang 143.9mm x 86.9mm x 44mm

For sockets with plain boxes – Add suffix **P** to List No.  
 eg 4216/BG with plain box = 4216/**PBG**.  
 Double pole available to order – Add suffix **D** to List No.  
 eg Double pole 4216/BG = 4216/**DBG**.  
 • All switched sockets are Dual Earth.



### 13A UNSWITCHED SOCKET OUTLETS

BS 1363	PACK QTY	
1 gang unswitched	10	<b>9685/BG</b>
2 gang unswitched	5	<b>9687/BG</b>

<b>Dimensions</b>	1 gang 86.7mm x 86.7mm x 44mm
	2 gang 143.9mm x 86.9mm x 44mm

For sockets with plain boxes – Add suffix **P** to List No.  
 eg 4216/BG with plain box = 4216/**PBG**.



### 13A FUSED CONNECTION UNITS

BS 1363 WHERE APPLICABLE	PACK QTY	
Unswitched	10	<b>4841/BG</b>
Unswitched with neon indicator	10	<b>4841/3BG</b>
DP switched	10	<b>4842/BG</b>
DP switched with neon indicator	10	<b>4842/3BG</b>
Unswitched with cord outlet	10	<b>4846/BG</b>
DP switched with cord outlet	10	<b>4847/BG</b>
DP switched with cord outlet and neon indicator	10	<b>4847/3BG</b>

<b>Dimensions</b>	86.7mm x 86.7mm x 44mm
-------------------	------------------------

For fused connection units with plain boxes – Add suffix **P** to List No.  
 eg 4842/BG with plain box = 4842/**PBG**.  
 Fused on the line side with a 13A fuse link ASTA certified and marked to BS 1362.  
 For spare fuse links see page 8.  
 Cord outlets suitable for flexible cord up to 10mm outside diameter.  
 Two earthing terminals are fitted to the unit.

For full specification details of finishes see Technical Data page 173.





4416/A03BG



4426/A03BG

### 13A SAFETY SOCKET WITH RCD PROTECTION

BS 7288	PACK QTY	
2 gang switched with neon indicator 30mA tripping current <b>flush mounting</b>	1	<b>4416/A03BG</b>
2 gang switched with neon indicator 30mA tripping current <b>surface mounting</b>	1	<b>4426/A03BG</b>
<b>Dimensions</b>	Flush –146mm x 86mm Surface –142mm x 82mm x 44mm	
<b>Mounting boxes</b>	4414 & 4416 series 9223/BG surface, SB665 flush galv or SB629 dry lining	

For boxes less knockouts see page 104. For further information see page 159.

- Large capacity terminals for easy wiring
- Shallow back projection for ease of installation in a 25mm deep box
- Fitted with two earth terminals for use where compliance with BS7671: 2008 regulation 543-7 (IEE Wiring Regulations)



2240/BG

2272/BG

### 5A, 15A SWITCHED SOCKET OUTLETS

BS 546	PACK QTY	
5A shuttered SP	10	<b>2240/BG</b>
15A shuttered SP	10	<b>2272/BG</b>
<b>Dimensions</b>	86.7mm x 86.7mm x 44mm	

For boxes less knockouts see page 104.



4581/BG

4583/BG

### 10AX SWITCHES

BS EN 60669-1	PACK QTY	
10AX 1 gang 2 way	10	<b>4581/BG</b>
10AX 2 gang 2 way	10	<b>4582/BG</b>
10AX 3 gang 2 way	10	<b>4583/BG</b>
<b>Dimensions</b>	86.7mm x 86.7mm x 44mm	



4020/3BG

4021/3BG

### 20A DP CONTROL SWITCHES

BS EN 60669-1	PACK QTY	
DP Switch with neon indicator	10	<b>4020/3BG</b>
DP Switch with neon indicator and cord outlet	10	<b>4021/3BG</b>
<b>Dimensions</b>	86.7mm x 86.7mm x 44mm	

Cord outlet suitable for flexible cord up to 10mm outside diameter.

Surface box fitted with earth terminal.

For switches with plain boxes add suffix **P** to List No. ie 4020/3BG with plain box = 4020/3**PBG**.



4512/BG

4512/3BG

### 50A DP CONTROL SWITCHES

BS EN 60669-1	PACK QTY	
DP Switch	10	<b>4512/BG</b>
DP Switch with neon indicator	10	<b>4512/3BG</b>
<b>Dimensions</b>	142mm x 82mm x 42mm	

BS EN 60947-3 rating 240V 50A category of duty AC22.

For full specification details of finishes see Technical Data page 173.





4587/BG

## 6A TP CONTROL SWITCHES

BS EN 60669-1, BS EN60947-3		PACK QTY
10A Three Pole Isolating Switch	10	<b>4587/BG</b>
<i>Provides local isolation of fans with or without timers whilst the rest of the circuit remains live. Enables repair or routine maintenance of fans. 240V only.</i>		
<b>Dimensions</b>	86.7mm x 86.7mm x 44mm	
<i>For full details of compliance with BS EN 60947-3 see Technical Data page 165.</i>		



1932

## TRIPLE POLE & NEUTRAL 415V, 50HZ AC

		PACK QTY
32A with Switched Neutral, for surface mounting	1	<b>1932</b>
32A with Switched Neutral, for flush mounting	1	<b>1932/F</b>
● Terminal capacity 10mm.		
<b>Dimensions</b>	133mm x 114mm x 61mm	



4216/BG/RD

## RED ROCKERS

For applications where essential supply systems are in use, sockets and fused connection units with red rockers are available to order. These are ideal for use in hospitals, computer installations, etc.

PART No.	PACK QTY
Single switched socket	10 <b>4214/BG/RD</b>
Twin switched socket	5 <b>4216/BG/RD</b>

*For Rockergrid switches with red rockers see Rockergrid section page 86.*

- All switched sockets are Dual Earth.



3899BG

3809BG

## BLANKING PLATES FOR SURFACE REPLACEMENT BOXES

PART No.	PACK QTY
For List No 9214/BG	5 <b>3809BG</b>
For List No 9211/BG	10 <b>3899BG</b>
<b>Dimensions</b>	1 gang 86.7mm x 86.7mm 2 gang 143.9mm x 86.9mm

*For full specification details of finishes see Technical Data page 173.*

# ROCKERGRID

## MODULAR SYSTEM

Rockergrid provides the design versatility of a modular switch range whilst incorporating Capital styling and safety features which benefit the user and installer alike.





Polished Brass



Satin Chrome



Highly Polished Chrome



Polished  
Stainless Steel



Bronze



White



Birch Grey








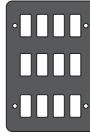


- Unique labyrinth switch design minimises visible arc flash and prevents front access to live parts.
- Positive drive switch action prevents balancing between the 'on' and 'off' position and gives reliable indication of the contact position.
- Silver alloy contacts for longer life and low contact resistance.







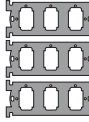
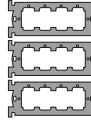


# SELECTION TABLE









## PLATES

Gang	       							
	1	2	3	4	6	8	9	12
<b>Surface</b> BIRCH GREY Engraved 'Water Heater'	6581/BG 6581/1BG	6582/BG 6582/1BG	6583/BG	6584/BG	6586/BG	6588/BG	6589/BG	6580/BG
<b>Flush</b> MOULDED WHITE	5571	5572	5573	5574	5576			
WHITE METAL						6578/WH	6579/WH	6570/WH
BRONZE Engraved 'Water Heater'	6571/BZ 6571/1BZ	6572/BZ 6572/1BZ	6573/BZ	6574/BZ	6576/BZ	6578/BZ	6579/BZ	6570/BZ
SATIN CHROME Engraved 'Water Heater'	6571/SC 6571/1SC	6572/SC 6572/1SC	6573/SC	6574/SC	6576/SC	6578/SC	6579/SC	6570/SC
HIGHLY POLISHED CHROME	6571/HPC	6572/HPC	6573/HPC	6574/HPC	6576/HPC	6578/HPC	6579/HPC	6570/HPC
POLISHED STAINLESS STEEL	6571/PSS	6572/PSS	6573/PSS	6574/PSS	6576/PSS	6578/PSS	6579/PSS	6570/PSS
POLISHED BRASS	6571/PB	6572/PB	6573/PB	6574/PB	6576/PB	6578/PB	6579/PB	6570/PB

## GRIDS

Flush or surface	       							
	6901	6902	6903	6904	2 x 6903	2 x 6904	3 x 6903	3 x 6904

## BOXES

Flush or surface	       							
	9201/BG	9201/PBG	9203/BG	9203/PBG	9206/BG	9206/PBG	9209/BG	9209/PBG
with knock-outs	9201/BG	9201/PBG	9203/BG	9203/PBG	9206/BG	9206/PBG	9209/BG	9209/PBG
without knock-outs	9201/PBG	9201/PBG	9203/PBG	9203/PBG	9206/PBG	9206/PBG	9209/PBG	9209/PBG
<b>Flush only</b>	SB615	SB615	SB625	SB625				

## ASSEMBLY



**1 Install box and enter cables.**

- Boxes, grids & switches common to flush & surface installations.



**2 Remove 'ears' from grid for surface installations.**

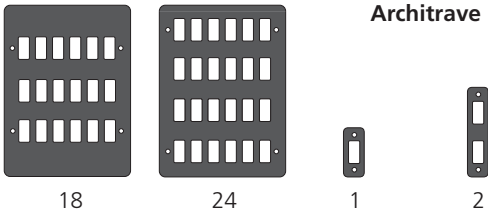
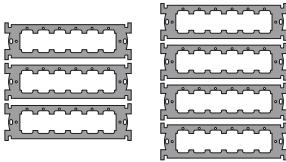
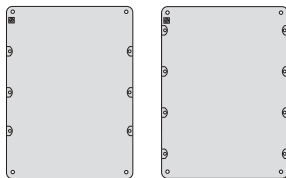
- When Flush mounting do not remove 'ears'.



**3 Fix switches into grid.**

- Single screw switch fixing.
- Fingerproof shrouding around terminals.



<div>  </div>			
6580/18BG	6580/24BG		
6570/18WH	6570/24WH	6591/WH	6592/WH
6570/18BZ	6570/24BZ	6591/BZ	6592/BZ
6570/18SC	6570/24SC	6591/SC	6592/SC
6570/18HPC	6570/24HPC	6591/HPC	6592/HPC
6570/18PSS	6570/24PSS	6591/PSS	6592/PSS
6570/18PB	6570/24PB	6591/PB	6592/PB
<div>  </div>			
3 x 6906	4 x 6906	1367	1368
<div>  </div>		Supplied fitted to architrave plate	
9209/18BG	9209/24BG		
9209/18PBG	9209/24PBG		
		9341/GV	9342/GV

\* Metal rocker finishes: Satin Chrome (**SC/WH**), Bronze (**BZ**), Polished Brass (**PB**), Highly Polished Chrome (**HPC**), Polished Stainless Steel (**PSS**) and Stainless Steel (**SS/WH**).

## SWITCHES

		ROCKER	
		MOULDED	METAL
10AX	1 way	<b>4430</b>	<b>4430/6_ _ *</b>
10AX	2 way	<b>4530</b>	<b>4530/6_ _ *</b>
10A	Retractive	<b>4489</b>	<b>4489/6_ _ *</b>
10A	Retractive marked with bell symbol	<b>4490</b>	<b>4490/6_ _ *</b>
10A	Retractive 2 way and off	<b>4553</b>	<b>4553/6_ _ *</b>
20AX	1 way	<b>4450</b>	<b>4450/6_ _ *</b>
20AX	1 way key switch c/w key	<b>4451</b>	
20AX	2 way	<b>4550</b>	<b>4550/6_ _ *</b>
20AX	2 way key switch c/w key	<b>4551</b>	
20AX	2 way and off	<b>4552</b>	<b>4552/6_ _</b>
20AX	Intermediate	<b>4535</b>	<b>4535/6_ _ *</b>
20AX	Double pole	<b>4460</b>	<b>4460/6_ _ *</b>
20AX	Double pole marked 'ON'	<b>4469</b>	
20AX	Double pole key switch c/w key	<b>4461</b>	

Switches are available in Black (BK) eg: 4460/BK, 4460/6PBBK

## ACCESSORIES

Cord outlet	<b>4435</b>
13A fused connection unit	<b>4436</b>
Neon indicator (Red)	<b>4491</b>
Neon indicator (Green)	<b>4493</b>
Neon indicator (Amber)	<b>4494</b>
Socket outlet 2.5–16A	<b>4499†</b>
Blanking component	<b>4492</b>
Spare key	<b>6940</b> (Metal)

Accessories are available in Black (BK) eg: 4436/BK

† Available for export use only.

Switch modules:

- Tough impact-resistant thermoplastic moulded construction.
- Metal plate switch modules incorporate double insulation.
- Suitable for panel mounting and OEM applications.
- IP66 protected Rockergrid switch enclosures are available, see Weatherseal section page 77.



**4 Connect wires to relevant switches & earth terminals.**

- Large capacity, easy-to-wire terminals.
- Diagrammatic marking on rear of switch.



**5 Fix wired switch/grid assembly into box.**

- Automatic grid alignment with horizontal adjustment.



**6 Fix face plate onto grid.**

- Robust impact resistant construction, high quality moulded & metal parts.



## 10AX SWITCHES – MOULDED ROCKER

BS EN 60669-1	PACK QTY	
1 way SP	10	<b>4430</b>
2 way SP	10	<b>4530</b>
Retractive 10A	10	<b>4489</b>
Retractive – bell symbol 10A	10	<b>4490</b>
Retractive 2 way and off 10A	10	<b>4553</b>

Available as made to order in Black (**BK**) eg: 4530/**BK**

Fully rated for fluorescent and inductive loads (except List No. **4553**, **4490** & **4489**).

**4490** Retractive switch can be wired for normally open (N/O) or normally closed (N/C) circuits. (except List No. **4553**)



## 20AX SWITCHES – MOULDED ROCKER

BS EN 60669-1	PACK QTY	
1 way	10	<b>4450</b>
1 way complete with key	10	<b>4451</b>
1 way with key marked "Emergency Lighting Test"	10	<b>4451/ELT</b>
Double Pole	10	<b>4460</b>
Various markings - See page 89	10	<b>4460/_ _</b>
DP complete with key	10	<b>4461</b>
DP with key marked "Emergency Lighting Test"	10	<b>4461/ELT</b>
DP marked 'ON'	10	<b>4469</b>
Intermediate	10	<b>4535</b>
2 way	10	<b>4550</b>
2 way complete with key	10	<b>4551</b>
2 way with key marked "Emergency Lighting Test"	10	<b>4551/ELT</b>
2 way and off	10	<b>4552</b>
Spare key	10	<b>6940</b>

Available as made to order in Black (**BK**) eg: 4550/**BK**



## ACCESSORIES – MOULDED

BS 5733 WHERE APPLICABLE	PACK QTY	
Cord outlet – 10mm diameter aperture, complete with earthing terminal and cable clamp	10	<b>4435</b>
Fuse unit fitted with 13A ASTA certified fuse link	10	<b>4436</b>
Indicator – Red	10	<b>4491</b>
Blanking component	10	<b>4492</b>
Indicator – Green	10	<b>4493</b>
Indicator – Amber	10	<b>4494</b>

Available as made to order in Black (**BK**)



## OTHER SWITCH VARIATIONS

The following modules are available with black mouldings.

Black rockers	<b>4430/BK</b>	<b>4491/BK</b>		
	<b>4450/BK</b>	<b>4493/BK</b>		
	<b>4490/BK</b>	<b>4550/BK</b>		
Red rockers	<b>4430/RD</b>	<b>4530/RD</b>	<b>4450/RD</b>	<b>4535/RD</b>
	<b>4460/RD</b>	<b>4550/RD</b>	<b>4490/RD</b>	

For panel cut-out details see dimensions on page 189.

All the following metal plate switches are available with Satin Chrome (**SC/WH**), Bronze (**BZ**), High Polished Chrome (**HPC**) Polished Brass (**PB**) Polished Stainless Steel (**PSS**) and Stainless Steel (**SS/WH**) rockers. Indicate the finish you require by adding the suffix to List No. eg 4430/6 with Bronze rocker = 4430/6**BZ**.



## 10AX SWITCHES – METAL PLATE ROCKER

BS EN 60669-1	PACK	QTY
1 way	10	<b>4430/6</b> _ _
Retractive 10A	10	<b>4489/6</b> _ _
Retractive 2 way and off 10A	10	<b>4553/6</b> _ _
2 way	10	<b>4530/6</b> _ _

Available with White moulding Trim eg: 4530/6SC/WH

Available with Black moulding Trim eg: 4530/6SC

Fully rated for fluorescent and inductive loads (except List No. **4489/6** \_ \_ & **4553/6** \_ \_).

Retractive switches can be wired for normally open (N/O) or normally closed (N/C) circuits.



## 20AX SWITCHES – METAL PLATE ROCKER

BS EN 60669-1	PACK	QTY
1 way	10	<b>4450/6</b> _ _
Double Pole	10	<b>4460/6</b> _ _
Intermediate	10	<b>4535/6</b> _ _
2 way	10	<b>4550/6</b> _ _
2 way and off	10	<b>4552/6</b> _ _

Available with White moulding Trim eg: 4530/6SC/WH

Available with Black moulding Trim eg: 4530/6SC

Fully rated for fluorescent and inductive loads.



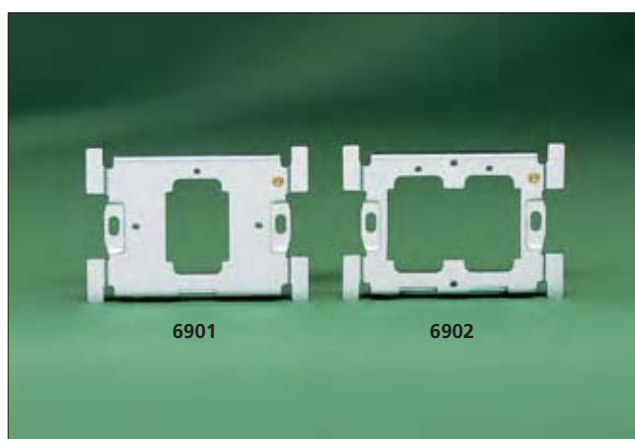
## GRID DIMMERS

BS EN 60669-2-1, BS EN 55015	PACK	QTY
250W White	10	<b>4425</b>
250W Black	10	<b>4425/BK</b>
400W White	10	<b>4440</b>
400W Black	10	<b>4440/BK</b>

## ILLUMINATED GRID DIMMERS

250W White	10	<b>4425/BL</b>
250W Black	10	<b>4425/BKBL</b>
400W White	10	<b>4440/BL</b>
400W Black	10	<b>4440/BKBL</b>

- For Technical details of grid dimmers & Illuminated grid dimmers see page 170.
- Dimensions on page 191.



## GRIDS

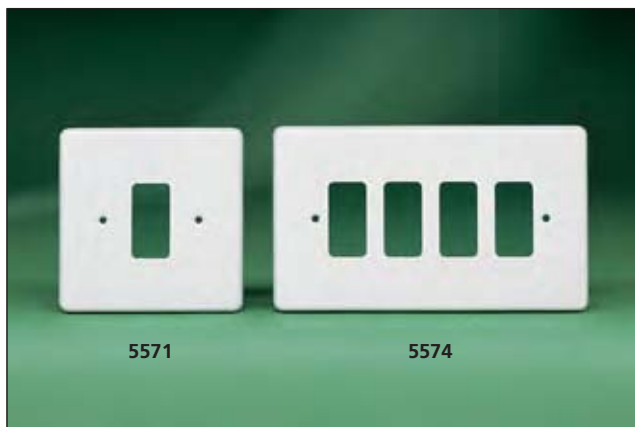
1 gang	20	<b>6901</b>
2 gang	20	<b>6902</b>
3 gang	10	<b>6903</b>
4 gang	10	<b>6904</b>
6 gang	10	<b>6906</b>

**Dimensions**      1–2 gang 81mm x 58mm      3–4 gang 141mm x 58mm  
6 gang 202mm x 58mm

When required for surface mounting assemblies, the fixing ears should be removed or bent inwards at 90°.

Complete with earth terminal.

For full specification details of finishes see Technical Data page 173.



## FLUSH MOULDED PLATES

	PACK QTY	
1 gang	20	<b>5571</b>
2 gang	20	<b>5572</b>
3 gang	10	<b>5573</b>
4 gang	10	<b>5574</b>
6 gang	1	<b>5576</b>

**Dimensions** 1–2 gang 86mm x 86mm  
3–4 gang 146mm x 86mm  
6 gang 147mm x 147mm



## FLUSH METAL PLATES

	PACK QTY	
1 gang	20	<b>6571/_ _</b>
1 gang faceplate printed 'water heater'	20	<b>6571/1_ _</b>
2 gang	20	<b>6572/_ _</b>
2 gang faceplate printed 'water heater'	20	<b>6572/1_ _</b>
3 gang	10	<b>6573/_ _</b>
4 gang	10	<b>6574/_ _</b>
6 gang	1	<b>6576/_ _</b>
8 gang	1	<b>6578/_ _ *</b>
9 gang	1	<b>6579/_ _ *</b>
12 gang	1	<b>6570/_ _ *</b>
18 gang	1	<b>6570/18_ _ *</b>
24 gang	1	<b>6570/24_ _ *</b>
1 gang architrave complete with grid	10	<b>6591/_ _ *</b>
2 gang architrave complete with grid	10	<b>6592/_ _ *</b>

**Dimensions** 1–2 gang 86mm x 86mm 18 gang 207mm x 267mm  
3–4 gang 146mm x 86mm 24 gang 207mm x 267mm  
6–8 gang 147mm x 147mm 1 gang architrave 35mm x 86mm  
9–12 gang 147mm x 207mm 2 gang architrave 35mm x 146mm

Add to List No. – **BZ** for Bronze finish, **SC** for Satin Chrome finish, **HPC** for Highly Polished Chrome finish, **PB** for Polished Brass finish, **PSS** for Polished Stainless Steel finish.

\*Available in White Finish. Add **WH** to List No.



## SURFACE METALCLAD PLATES

	PACK QTY	
1 gang	20	<b>6581/BG</b>
1 gang faceplate printed 'water heater'	20	<b>6581/1BG</b>
2 gang	20	<b>6582/BG</b>
2 gang faceplate printed 'water heater'	20	<b>6582/1BG</b>
3 gang	10	<b>6583/BG</b>
4 gang	10	<b>6584/BG</b>
6 gang	1	<b>6586/BG</b>
8 gang	1	<b>6588/BG</b>
9 gang	1	<b>6589/BG</b>
12 gang	1	<b>6580/BG</b>
18 gang	1	<b>6580/18BG</b>
24 gang	1	<b>6580/24BG</b>

**Dimensions** 1–2 gang 77mm x 77mm 9–12 gang 137mm x 197mm  
3–4 gang 137mm x 77mm 18 gang 197mm x 257mm  
6–8 gang 137mm x 137mm 24 gang 197mm x 257mm





## BOXES

	PACK QTY	
1 and 2 gang surface or flush	10	<b>9201/BG</b>
3 and 4 gang surface or flush	5	<b>9203/BG</b>
6 and 8 gang surface or flush	1	<b>9206/BG</b>
9 and 12 gang surface or flush	1	<b>9209/BG</b>
18 gang surface or flush	1	<b>9209/18BG</b>
24 gang surface or flush	1	<b>9209/24BG</b>
1 gang architrave flush only	10	<b>9341/GV</b>
2 gang architrave flush only	10	<b>9342/GV</b>

**Dimensions** 9201/BG 73mm x 73mm x 40mm  
 9203/BG 133mm x 73mm x 40mm  
 9206/BG 133mm x 133mm x 40mm  
 9209/BG 133mm x 194mm x 40mm  
 9209/18BG 194mm x 254mm x 56mm  
 9209/24BG 194mm x 254mm x 56mm  
 9341/GV 27mm x 70mm x 35mm  
 9342/GV 27mm x 130mm x 35mm

16mm knock-outs in 1 and 2 gang box and architrave boxes.

20mm and 25mm knock-outs in 3-24 gang boxes.

Note: BG boxes fitted with earth terminal. Spare earth terminal (List No. 6989) see page 104.



## BOXES LESS KNOCKOUTS

	PACK QTY	
1 and 2 gang surface or flush	10	<b>9201/PBG</b>
3 and 4 gang surface or flush	5	<b>9203/PBG</b>
6 and 8 gang surface or flush	1	<b>9206/PBG</b>
9 and 12 gang surface or flush	1	<b>9209/PBG</b>
18 gang surface or flush	1	<b>9209/18PBG</b>
24 gang surface or flush	1	<b>9209/24PBG</b>

**Dimensions** 9201/PBG 73mm x 73mm x 40mm  
 9203/PBG 133mm x 73mm x 40mm  
 9206/PBG 133mm x 133mm x 40mm  
 9209/PBG 133mm x 194mm x 40mm  
 9209/18PBG 194mm x 254mm x 56mm  
 9209/24PBG 194mm x 254mm x 56mm

Note: BG boxes fitted with earth terminal. Spare earth terminal (List No. 6989) see page 104.



## 20AX DOUBLE POLE SWITCH MARKING

"boiler"	<b>4460/BO</b>	"cooker hood"	<b>4460/HD</b>
"dishwasher"	<b>4460/DW</b>	"extractor fan"	<b>4460/EF</b>
"fridge"	<b>4460/FR</b>	"freezer"	<b>4460/FZ</b>
"fridge freezer"	<b>4460/FF</b>	"hob"	<b>4460/HB</b>
"heating system"	<b>4460/HT</b>	"microwave"	<b>4460/MW</b>
"tumble dryer"	<b>4460/TD</b>	"waste disposal"	<b>4460/WD</b>
"washer dryer"	<b>4460/WDR</b>	"washing machine"	<b>4460/WM</b>
"water heater"	<b>4460/WA</b>		

- can be used with 13A fuse units to build bespoke kitchen/utility room control panel.

All of the above are supplied in pack quantities of 10.

For full specification details of finishes see Technical Data page 173.

For panel cut out detail, see dimensions on page 189.





# WEATHERSEAL

## WATER & DUST PROTECTED

Water and dust protected to IP56,  
Weatherseal is ideal for all environments.

Especially suitable for use in the garden, workshop or Industry as the robustly designed socket outlets retain their IP56 rating when used with a moulded on 13A plug which is standard fitment on many power tools and appliances.

- Socket outlets retain their IP56 rating when used with any standard 13A plug.
- 1 gang, 2 gang and retractive surface switches all retain their IP56 rating even when in use.
- Communication enclosures will accept Euro modules featured in the Datapak range.



- Socket lid is automatically retained in the open position, enabling the plug to be easily inserted. A simple push down until the fixing click is heard is all that is necessary to create a water-proof seal, safeguarding your family and home.



SWITCHES		
IP56 BSEN 60669-1	PACK QTY	
20AX 1 gang 2 way switch	1	9700
20AX 2 gang 2 way switch	1	9702
20A Retractive switch marked 'Press'	1	9703
Dimensions	1 gang 96mm (Height) x 96mm (Width) x 70mm (Depth)	
Supplied as ready assembled units, with two earth terminals in the back box		
Knockouts - 1 gang 4x 20mm Dia, one on each edge		



13A SOCKETS		
IP56 BS1363	PACK QTY	
1 gang Unswitched Socket	1	9704
2 gang DP Switched Socket c/w twin earth terminals	1	9706
Dimensions	1 gang 126mm (Height) x 96mm (Width) x 81mm (Depth) 2 gang 143mm (Height) x 164mm (Width) x 81mm (Depth)	
The Sockets retain their IP56 rating when used with any standard 13A plug, including flexed plugs		
Supplied as ready assembled units, with two earth terminals in the back box		
Knockouts - 1 gang 4x 20mm Dia, one on each edge 2 gang 6x 20mm Dia, two on the top and bottom, and one on each side		



13A SAFETY SOCKETS WITH RCD PROTECTION		
IP56 BS7288	PACK QTY	
2 gang DP Switched SRCD c/w neon indicator	1	9708
Dimensions	2 gang 143mm (Height) x 164mm (Width) x 81mm (Depth)	
30mA tripping current		
Socket complete with twin earth terminals		
RCD sockets are all passive control electromechanical operation and will not trip on loss of mains supply		
The Sockets retain their IP56 rating when used with any standard 13A plug, including flexed plugs		
Supplied as ready assembled units, with two earth terminals in the back box		
Knockouts - 2 gang 6x 20mm Dia, two on the top and bottom, and one on each side		
See page 159 for further information.		



13A SWITCHED FCU		
IP56 BS1363	PACK QTY	
13A 1 gang Switched FCU c/w cord outlet	1	9707
Dimensions	1 gang 126mm (Height) x 96mm (Width) x 81mm (Depth)	
Fused on the line side with a 13A fuse to BS1362		
Cord outlet on the front plate is suitable for flexible cord up to 10mm outside diameter		
Supplied as ready assembled units, with two earth terminals in the back box		
Knockouts - Knockouts - 1 gang 4x 20mm Dia, one on each edge		





## EURO DATA ENCLOSURE

IP56	PACK QTY
1 gang 2 euro module enclosure	1 <b>9722</b>
2 gang 4 euro module enclosure	1 <b>9724</b>
<b>Dimensions</b>	1 gang 126mm (Height) x 96mm (Width) x 81mm (Depth) 2 gang 143mm (Height) x 164mm (Width) x 81mm (Depth)

The Sockets retain their IP56 rating when in use providing the lid is closed fully  
Supplied as ready assembled units, with two earth terminals in the back box

Knockouts - 1 gang 4x 20mm Dia, one on each edge

2 gang 6x 20mm Dia, two on the top and bottom, and one on each side



## DATA AND CO-AXIAL MODULES

	PACK QTY
BNC single module with 75 Ohm crimp connector	25 <b>7074</b>
TV outlet (male)	25 <b>7065</b>
TV outlet (female)	25 <b>7067</b>
F type satellite	25 <b>7069</b>
Triplex Unit (TV, FM, Sat)	25 <b>7063</b>
TV outlet screened, return	25 <b>7060</b>
Phono (female)	25 <b>7087</b>
Quadplexer (TV, FM, Sat 1 & Sat 2)	10 <b>7066</b>
Quadplexer with TV return (TV, TV return, FM, Sat 1 & Sat 2)	10 <b>7064</b>

Also available in Black - Add suffix **BK** to list No.

ie: Triplex unit in black = 7063/BK.

**Dimensions** 25mm x 50mm (1 Module)  
(except 7063 & 7066 - 50mm x 50mm)  
(except 7064 - 75mm x 50mm 3 Module)

## COMMUNICATION MODULES

	PACK QTY
BT Master Voice	25 <b>7080</b>
BT Master Voice, Left Handed	25 <b>7080/LH</b>
BT Secondary Voice, 6 wire	25 <b>7071</b>
RJ45 (single) module, 8 wire - Category 5e	25 <b>7172</b>
RJ45 ISDN terminated	25 <b>7174</b>
RJ11/12	25 <b>7086</b>
PABX Voice	25 <b>7176</b>
RJ45 (Twin) module	25 <b>7173</b>
1/2 module size	25 <b>7081/2</b>
1 module size	25 <b>7081</b>
2 module size	10 <b>7082</b>

Also available in Black - Add suffix **BK** to list No.

ie: BT Master in black = 7080/BK.

**Dimensions** 25mm x 50mm (1 Module)



The individual switches and sockets listed on this page are supplied as ready assembled units on shallow enclosures. The switched socket combination unit and RCD protected socket outlets are pre-wired and supplied as ready assembled units on appropriate enclosures.



## 10A SURFACE SWITCHES

BS 3676 BS 5490 IP66		PACK QTY
<b>9561</b>	1 gang 1 way	4
<b>9562</b>	2 gang 1 way	2
<b>Dimensions</b>	1 gang 101mm x 101mm x 76mm	
	2 gang 197mm x 101mm x 76mm	

Padlock off facility provided. See page 143 for suitable padlock.  
Terminals accepted 2.5mm<sup>2</sup> cable.



## 13A PLUGS, SURFACE SOCKETS & COMBINATION UNITS

		PACK QTY
<b>9565</b>	Single socket outlet	4
<b>9567</b>	Switched socket combination	2
<b>Dimensions</b>	1 gang size 101mm x 101mm x 76mm	
	2 gang size 197mm x 101mm x 76mm	

Sockets incorporate transparent flap which automatically snaps shut when the plug is withdrawn.  
Terminals accept maximum 10mm<sup>2</sup> cable.



## RCD PROTECTED 13A SOCKETS

SOCKET BS 1363 RCD BS EN 61008		PACK QTY
<b>9571</b>	40A 30mA RCD protecting one 13A socket	1
<b>9572</b>	40A 30mA RCD protecting two 13A sockets	1
<b>Dimensions</b>	3 gang size 296mm x 102mm x 104mm	
	4 gang size 199mm x 199mm x 104mm	

Sockets incorporate transparent flap which automatically snaps shut when the plug is withdrawn.  
RCD terminals accept 25mm<sup>2</sup> cable.  
RCD is Type AC operation.



## RCD PROTECTED 16A 240V SOCKET

SOCKET BS 4343 RCD BS EN 61008		PACK QTY
<b>9579</b>	40A 30mA RCD protecting 16A 2P + E 240V splashproof socket	1

RCD terminals accept 25mm<sup>2</sup> cable.  
RCD is Type AC operation.  
Common to 110V and 240V BS 4343 splashproof sockets IP44 protection is maintained when plug is inserted. IP66 is maintained when cover flap is closed.

Polycarbonate is a highly durable material which is ideal for use in most environments, however seek advice before installing in environments where chemicals or harsh cleaners are likely to be used.

## MODULAR SELECTION

The popular items listed on the page opposite in ready-assembled form can also be built up from separate modules to allow greater stock flexibility, whilst additional separate switch, socket and cover modules with enclosures up to 6 gang size enable the installer to provide high IP-rated combinations to suit individual applications.



9567 or 9567/L + 9562/ES



9566/E + 9569/L + 9561/2L + 9567/L + 9570/2 + 224/030  
Multi-gang enclosures enable any combination

The table below lists the modular equivalents to the popular items supplied as ready assembled units.

READY-ASSEMBLED UNITS		MODULAR EQUIVALENT SELECTION		
DESCRIPTION	LIST No	COVER MODULE(S)	ENCLOSURE	RCD
10A switch – 1 gang 1 way	<b>9561</b>	<b>9561/1L</b>	<b>9561/ES</b>	–
10A switch – 2 gang 1 way	<b>9562</b>	<b>9561/1L x 2</b>	<b>9562/ES</b>	–
13A single socket outlet	<b>9565</b>	<b>9565/L</b>	<b>9561/ES</b>	–
13A switched socket	<b>9567</b>	<b>9567/L</b>	<b>9562/ES</b>	–
13A single socket with 40A 30mA RCD	<b>9571</b>	<b>9570/2 + 9565/L</b>	<b>9563/E</b>	<b>224/030</b>
13A twin socket with 40A 30mA RCD	<b>9572</b>	<b>9570/2 x 1 + 9565/L x 2</b>	<b>9564/E</b>	<b>224/030</b>
16A 2P + E 240V socket – BS 4343	<b>9579</b>	<b>9570/2 + 9569/L</b>	<b>9563/E</b>	<b>224/030</b>

The table below lists module selection details for some additional popular combinations.

DESCRIPTION	COVER MODULE(S)	ENCLOSURE	RCD
13A twin socket outlet with single switch	<b>9565/L x 2 + 9561/DL</b>	<b>9563/E</b>	–
13A twin-switched socket outlet	<b>9567/L x 2</b>	<b>9564/E</b>	–
13A single-switched socket with 40A 30mA RCD	<b>9570/2 x 1 + 9567/L</b>	<b>9564/E</b>	<b>224/030</b>

## SWITCH MODULES

		PACK QTY
<b>9561/1L</b>	10A 1 way switch	4
<b>9561/DL</b>	20A DP switch	4
<b>9573/L</b>	32A TP switch	4
<b>9573/RL</b>	32A TP switch – yellow/red	4

Can be assembled in shallow enclosures.



9573/L

9561/2L

9573/RL

## 13A SOCKET MODULES

		PACK QTY
<b>9565/L</b>	13A single unswitched socket	8
<b>9567/L</b>	13A switch/socket combination	2

Can be assembled in shallow enclosures.



9565/L

9567/L





9569/L

9591/L

9593/L

## SOCKET MODULES

		PACK QTY
BS 4343		
<b>9569/L</b>	16A 2P + E 240V splashproof socket	4
<b>9591/L</b>	16A 2P + E 110V splashproof socket	4
<b>9593/L</b>	16A 3PN + E 415V splashproof socket	4

Should be assembled in deep enclosures.

IP44 protection is maintained when plug is inserted, on 110V and 240V sockets.

IP66 is maintained when plug is inserted, on 415V sockets.



9581/RG

9582/RG

## ROCKERGRID COVER MODULES

		PACK QTY
<b>9581/RG</b>	1 gang	4
<b>9582/RG</b>	2 gang	4

- Suitable for any Rockergrid module.
- Rockergrid modules fix directly into moulded-in grid with single screw fixing.
- Enables a wide range of switch variations in IP66 rated enclosures.
- Can be used to provide 2 gang switching option where space is insufficient for standard Weatherseal module.



Rear view

The selection table below lists some of the popular IP66 combinations which can be assembled from the Weatherseal and Rockergrid ranges.

## MODULE SELECTION

DESCRIPTION	ROCKERGRID module(s)	WEATHERSEAL cover module	WEATHERSEAL enclosure
10AX 2 gang 1 way switch – single module size	<b>4430 x 2</b>	<b>9582/RG</b>	<b>9561/ES</b>
10AX retractive switch	<b>4489</b>	<b>9581/RG</b>	<b>9561/ES</b>
13A switched FCU	<b>4460 + 4436</b>	<b>9582/RG</b>	<b>9561/ES</b>
13A unswitched FCU + neon	<b>4436 + 4494</b>	<b>9582/RG</b>	<b>9561/ES</b>
20A intermediate switch	<b>4535</b>	<b>9581/RG</b>	<b>9561/ES</b>
20A DP switch + neon	<b>4460 + 4494</b>	<b>9582/RG</b>	<b>9561/ES</b>
20A DP key switch	<b>4461</b>	<b>9581/RG</b>	<b>9561/ES</b>
20A 2 gang 1 way switch – single module size	<b>4450 x 2</b>	<b>9582/RG</b>	<b>9561/ES</b>

See page 86 for full range of Rockergrid switches.

## RCD COVER MODULE

		PACK QTY
<b>9570/2</b>	2 gang RCD cover with neon assembly and RCD mounting cradle	2

Should be assembled in deep enclosures.

- Suitable for any 2 module RCD from the Lifestar range – see page 158.

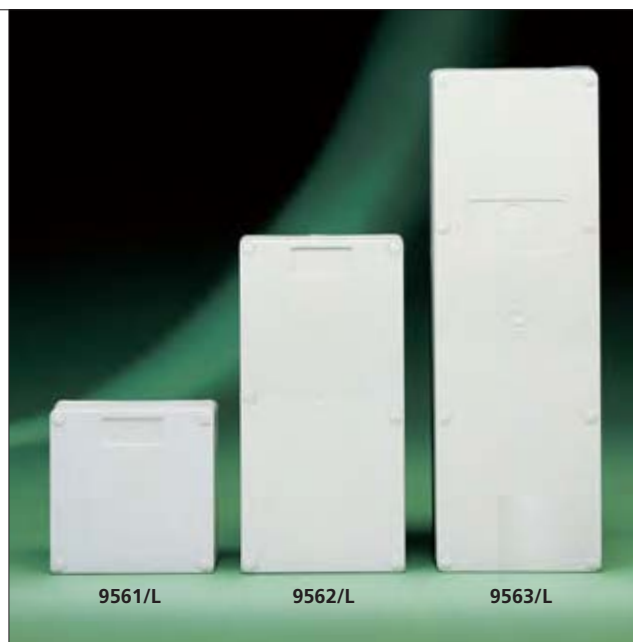


9570/2

RCD mounting cradle shown in deep enclosure

## BLANK COVER MODULES

		PACK QTY
9561/L	1 gang blank cover	8
9562/L	2 gang blank cover	4
9563/L	3 gang blank cover	3



## ENCLOSURES

		PACK QTY
9561/E	1 gang	4
9561/ES	1 gang shallow	8
9562/E	2 gang	2
9562/ES	2 gang shallow	4
9563/E	3 gang	3
9564/E	4 gang	1
9566/E	6 gang	1

Dimensions (mm)	H	W	D	H	W	D
1 gang enclosure	103	102	63	3 gang enclosure	296	102 x 63
1 gang shallow enclosure	101	101	40	4 gang enclosure	199	199 x 63
2 gang enclosure	198	102	63	6 gang enclosure	296	199 x 63
2 gang shallow enclosure	197	101	40			

SOCKET	REAR KNOCK-OUTS	SIDE CONDUIT ENTRIES	32/25 REDUCER	25/20 REDUCER	DIVIDER	BRIDGE
9561/E	1x32/25	1x25, 1x32	1	1	-	-
9561, 9565 9561/ES	1x25/20	2x25	-	1	-	-
9562/E†	1x25, 1x32	1x25, 1x32	1	1	-	1
9562, 9567 9562/ES	2x25/20	2x25	-	1	-	1
9563/E*	2x25, 1x32	1x25, 1x32	1	1	-	2
9564/E*	2x25 1x32, 1x40	2x25, 4x32	1	1	2	2
9566/E*	2x25 2x32, 2x40	2x25, 4x32	1	1	4	3

\* Also supplied with 1 neutral & 1 earth connector. † Also supplied with 1 earth connector.

To maintain IP66 rating, cover all fixing screws with caps provided.

Seal bridge/divider slots with suitable silicon sealant.

Check all conduit entry points are tight before use.

Threaded conduit entries can be fitted to all popular metal and moulded metric conduit using a variety of proprietary adaptors (less locking ring), reducers, and adhesive where appropriate.



Polycarbonate is a highly durable material which is ideal for use in most environments, however seek advice before installing in environments where chemicals or harsh cleaners are likely to be used.

## INTERIORS & PANEL MOUNTING

Interiors and panel mounting products, which complement the extensive Capital and Rockergrid ranges, are available to suit many applications.

The Capital range of Switched Sockets and Fused Control Units are available with metal capped rockers.

Most Capital Products can also be supplied in black as standard – ideal for brassware manufacturers.







### 13A SWITCHED SOCKET OUTLETS

	PACK QTY	
1 gang SP	10	<b>4314/1</b>
2 gang SP	5	<b>4316/1</b>
1 gang SP complete with neon and lens	10	<b>4314/13</b>
2 gang SP complete with neon and lens	5	<b>4316/13</b>

Black mouldings also available – Add suffix **BK** to List No.  
Double pole switching also available to order – Add suffix **D** to List No.  
eg 4314/1 switched in Black = 4314/1**DBK**

- Supplied Complete with two earth terminals



### 13A UNSWITCHED SOCKET OUTLETS

	PACK QTY	
1 gang unswitched	10	<b>8255/1</b>
2 gang unswitched	5	<b>8257/1</b>
1 gang round socket with side entry terminals and north/south fixings	10	<b>7259*</b>

The 7259 panel mounting socket is suitable for use in any panel or trunking material up to 2.5mm thickness and can be incorporated into a minimum overall internal depth of only 22.5mm.

Black mouldings also available, Add Suffix **BK** to List No. eg 8255/1**BK**.

\* Not available in Black.



### FUSED CONNECTION UNITS

	PACK QTY	
13A unswitched	10	<b>4831/1</b>
13A DP switched	10	<b>4832/1</b>
13A DP switched complete with neon and lens	10	<b>4832/13</b>
13A unswitched with cord outlet	10	<b>4836/1</b>
13A DP switched with cord outlet	10	<b>4837/1</b>
13A DP switched with cord outlet complete with neon and lens	10	<b>4837/13</b>

Black interiors also available – Add suffix **BK** to List No. eg 4832/1 switched in Black = 4832/1**BK**



### 13A SAFETY SOCKET WITH RCD PROTECTION

	PACK QTY	
BS 7288		
2 gang switched with neon indicator 30mA tripping current	1	<b>4416/A103</b>

See page 159 for further information.

- Supplied Complete with two earth terminals

For panel cut-out details see pages 188, 189 & 190.



4314/16/SC

4316/16BK/PB

## METAL CAPPED ROCKERS 13A SWITCHED SOCKET OUTLETS

	PACK QTY	
1 gang SP	10	<b>4314/16/_ _</b>
2 gang SP	5	<b>4316/16/_ _</b>
1 gang SP complete with neon and lens	10	<b>4314/136/_ _</b>
2 gang SP complete with neon and lens	5	<b>4316/136/_ _</b>

Black mouldings also available – Add suffix **BK** to List No.

Double pole switching also available to order – Add suffix **D** to List No.

eg 4314/1 switched = 4314/16**DBK/SC**

Finishes available are: Satin Chrome (**SC**), Bronze (**BZ**), Polished Brass (**PB**), Highly Polished Chrome (**HPC**) & Stainless Steel (**SS**).

● Supplied Complete with two earth terminals



4831/13

4832/16BK/PB

## METAL CAPPED ROCKERS FUSED CONNECTION UNITS

	PACK QTY	
13A DP switched	10	<b>4832/16/_ _</b>
13A DP switched complete with neon and lens	10	<b>4832/136/_ _</b>
13A DP switched with cord outlet	10	<b>4837/16/_ _</b>
13A DP switched with cord outlet complete with neon and lens	10	<b>4837/136/_ _</b>

Black interiors also available – Add suffix **BK** to List No.

Finishes available are: Satin Chrome (**SC**), Bronze (**BZ**), Polished Brass (**PB**), Highly Polished Chrome (**HPC**) & Stainless Steel (**SS**).



8075/1

2240/1

## 2A, 5A ROUND PIN SOCKET OUTLETS

	PACK QTY	
5A shuttered SP	10	<b>2240/1*</b>
2A 3 pin unswitched shuttered	10	<b>8075/1*</b>

\* Black mouldings also available – Add suffix **BK** to List No.



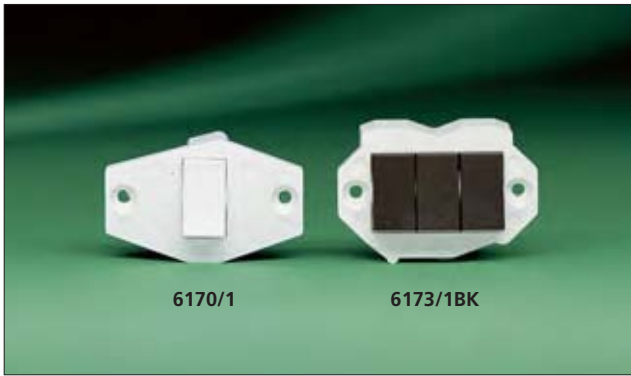
4522/1

## 45A DP 'SLIMLINE' COOKER CONTROL UNITS

	PACK QTY	
45A DP main switch and 13A switch socket outlet	5	<b>4522/1</b>
45A DP main switch and 13A switch socket outlet with neon indicators	5	<b>4522/13</b>

Black interiors also available – Add suffix **BK** to List No.

For panel cut-out details see page 188, 189 & 190.



## 10AX SWITCHES

	PACK QTY	
1 gang retractive marked 'press'	10	<b>6096/1</b>
1 gang 2 way	10	<b>6170/1</b>
2 gang 2 way	10	<b>6172/1</b>
3 gang 2 way	10	<b>6173/1</b>
4 gang 2 way	10	<b>6174/1</b>
1 gang intermediate	10	<b>6175/1</b>

Interiors with Black rockers available – Add suffix **BK** to List No.



## 20A/32A DP SWITCHES

	PACK QTY	
20A DP	10	<b>4011/1</b>
20A DP complete with neon and lens	10	<b>4011/13</b>
32A DP	10	<b>4012/1</b>
32A DP complete with neon and lens	10	<b>4012/13</b>

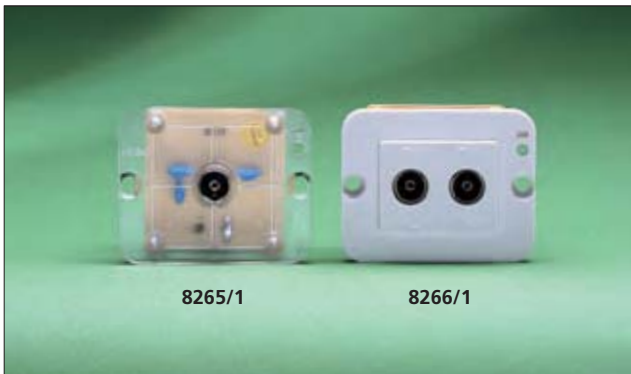
Interiors with Black rockers available – Add suffix **BK** to List No.



## 50A DP SWITCHES

	PACK QTY	
50A DP	10	<b>4512/1</b>
50A DP with neon indicator	10	<b>4512/13</b>

Black interiors also available – Add suffix **BK** to List No.



## CO-AXIAL SOCKET OUTLETS

	PACK QTY	
1 way direct connection	1	<b>8265/1</b>
2 way direct connection	1	<b>8266/1</b>
1 way isolated VHF, UHF	1	<b>8267/1</b>
2 way isolated VHF, UHF	1	<b>8268/1</b>

Isolated units only suitable on installations with earth bond.



## TELEPHONE OUTLETS

	PACK QTY	
Master	10	<b>8283/1</b>
Secondary	10	<b>8284/1</b>

Black interiors also available – Add suffix **BK** to List No.  
Supplied with loose earth terminal.

For panel cut-out details see pages 188, 189 & 190.



# INSTALLATION BOXES & SERVICE ITEMS

The comprehensive range of white moulded patresses offers a facility to surface mount Capital wiring accessories





## SURFACE MOULDED BOXES FOR CAPITAL WIRING ACCESSORIES

BS 5733	PACK	QTY
<b>20mm deep</b>		
For Capital single gang moulded architrave switches Will accept 16mm x 16mm mini-trunking	10	<b>4005</b>
<b>Dimensions</b> 33mm x 87mm x 20mm		
For Capital double gang moulded architrave switches Will accept 16mm x 16mm mini-trunking	10	<b>4006</b>
<b>Dimensions</b> 33mm x 147mm x 20mm		
<b>34mm deep</b>		
For 50A Capital switches and Rockergrid 3 and 4 gang moulded assemblies Fitted with cable clamp	5	<b>9040*</b>
<b>Dimensions</b> 87mm x 147mm x 34mm		
<b>44mm deep</b>		
For 15A socket outlets, 32A DP switches and Rockergrid 1 and 2 gang moulded assemblies	10	<b>9041</b>
<b>Dimensions</b> 87mm x 87mm x 44mm		
<b>20mm deep</b>		
With earth terminal For 10AX Capital moulded and metalplate,	10	<b>9043</b>
<b>Dimensions</b> 87mm x 87mm x 20mm		
<b>29mm deep</b>		
Dual box for two single gang size accessories Fixed dividing barrier with knockouts	5	<b>9044*</b>
<b>Dimensions</b> 174mm x 87mm x 29mm		
For single gang size moulded accessories	10	<b>9047</b>
<b>Dimensions</b> 87mm x 87mm x 29mm		
For double gang size moulded accessories	5	<b>9048*</b>
<b>Dimensions</b> 147mm x 87mm x 29mm		
With earth terminal For Capital 4 to 6 gang switches	5	<b>9048/1*</b>
<b>Dimensions</b> 147mm x 87mm x 29mm		
<b>32mm deep Skirting Backbox</b>		
Multipurpose box for single gang size accessories	5	<b>9049*</b>
<b>Dimensions</b> 88mm x 165mm x 32mm		
Multipurpose box for double gang size accessories	2	<b>9050*</b>
<b>Dimensions</b> 148mm x 165mm x 32mm		
<b>45mm deep</b>		
For 45A cooker control units Fitted with cable clamp	1	<b>9052*</b>
<b>Dimensions</b> 169mm x 115mm x 45mm		
<b>49mm deep</b>		
For shaver supply unit Will accept 25mm x 16mm mini-trunking	5	<b>9053*</b>
<b>Dimensions</b> 87mm x 147mm x 49mm		
<b>45mm deep</b>		
For slimline cooker control units Will accept 25mm x 16mm mini-trunking Fitted with cable clamp	5	<b>9054*</b>
<b>Dimensions</b> 89mm x 147mm x 45mm		
<b>20mm deep</b>		
2 gang Surface conversion patresses Converts 1 gang Flush box to 2 gang Surface	5	<b>9406</b>
<b>Dimensions</b> 147mm x 87mm x 20mm		

\* Can be secured to flush mounting steel boxes having 60.3mm accessory fitting centres



9211/BG

9214/BG



9228/BG



9221/PBG

9223/BG



6988

6989

## REPLACEMENT STEEL BOXES FOR CAPITAL SURFACE WIRING ACCESSORIES

BS 5733	PACK QTY	
<b>43mm deep</b> 20mm knockouts Replacement box for 5, 13 and 15A single gang size <b>surface</b> accessories	10	<b>9211/BG</b>
As above less knockouts	10	<b>9211/PBG</b>
<b>Dimensions</b> 82.3mm x 82.3mm x 41.6mm		
<b>43mm deep</b> 20mm knockouts Replacement box for 13A gang size <b>surface</b> accessories	5	<b>9214/BG</b>
As above less knockouts	5	<b>9214/PBG</b>
<b>Dimensions</b> 139.5mm x 82.6mm x 41.5mm		

## MULTI MEDIA PLATE BACK BOX

<b>56mm deep</b> 20/25mm knockouts Multi media plate back box	1	<b>9226/BG</b>
<b>Dimensions</b> 254mm x 194mm x 56mm		
<b>35mm deep</b> 20mm knockouts Multi media plate back box	1	<b>9228/BG</b>
<b>Dimensions</b> 253mm x 193mm x 35mm		

## COOKER CONTROL UNIT BACK BOX

Use with 4520/1 or 4520/31	1	<b>9338/GV</b>
<b>Dimensions</b> 155mm x 101mm x 42mm		

## SURFACE STEEL BOXES FOR CAPITAL FLUSH WIRING ACCESSORIES

BS EN 60669-1	PACK QTY	
<b>36mm deep</b> With 20mm knockouts For surface mounting single gang size <b>flush</b> accessories	10	<b>9221/BG</b>
As above less knockouts	10	<b>9221/PBG</b>
<b>Dimensions</b> 86mm x 86mm x 36mm		
<b>36mm deep</b> With 20mm knockouts For surface mounting double gang size <b>flush</b> accessories	5	<b>9223/BG</b>
As above less knockouts	5	<b>9223/PBG</b>
<b>Dimensions</b> 146mm x 86mm x 36mm		

## SPARE EARTH TERMINALS

Brass (for use with 4 lug metal box)	100	<b>6988</b>
Brass	100	<b>6989</b>





## ACCESSORY FIXING SCREWS M3.5mm

PACK QTY			
Platinum long fixing screw 50mm	100	<b>735050</b>	
20mm long (vandal resistant)	100	<b>735009/*/VR</b>	
25mm long (vandal resistant)	100	<b>735010/*/VR</b>	
30mm long (vandal resistant)	100	<b>735011/*/VR</b>	
25mm long	<b>735010*</b>	20mm long	100 <b>735032</b>
30mm long	<b>735011*</b>	23mm long	100 <b>735038</b>
50mm long	<b>735012*</b>	25mm long	100 <b>735033</b>
40mm long	<b>735013*</b>	30mm long	100 <b>735023</b>

\* Add finish required i.e.735010SC.



## SUNDRY SCREWS & SPACERS

PACK QTY			
Rockergrid switch to grid	100	<b>706124</b>	
Capital 50A switch to grid & grid to box <b>4950/BG</b> series	100	<b>735006/ZP</b>	
Rockergrid grid to box	100	<b>735007</b>	
Capital plate to box on <b>4214</b> & <b>4216</b> ranges	100	<b>735008/*</b>	
Rockergrid plate to grid	100	<b>705094/*</b>	
Rockergrid plate to grid (vandal-resistant)	100	<b>705094/*/VR</b>	
Screwdriver for Rockergrid VR screws	1	<b>6913</b>	

\*All screws are available to match the appropriate Capital Metal Plate and Rockergrid finishes.



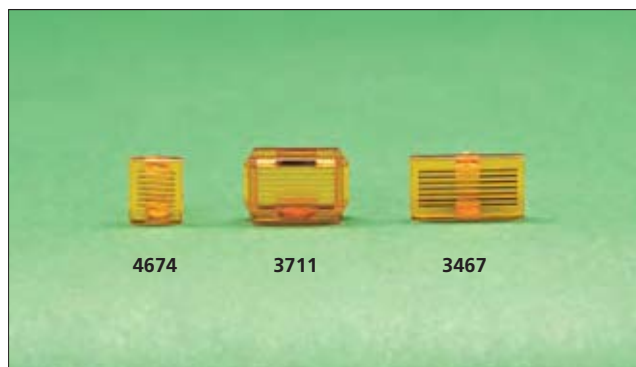
## CAPITAL CEILING SWITCH ACCESSORY ITEMS

1.5m long white pull cord and acorn	<b>6900</b>
2m long red pull cord and acorn	<b>6900/1RD</b>
2m long white pull cord with red acorn	<b>6900/1WH</b>
100m ball of white pull cord	<b>6900/2</b>
100m ball of red pull cord	<b>6900/2RD</b>
Ceiling switch acorn red	<b>7410/RD</b>
Ceiling switch acorn white	<b>7410/WH</b>



## CAPITAL NEON INDICATORS

For 13A moulded & metal plate sockets, 13A fuse connection units, 20A, 32A, 45A capital switches	<b>3713</b>
For 13A safetysockets & slimline cooker control units	<b>100215</b>



## CAPITAL NEON LENSES

For all 50A DP switches & large plate cooker control unit (larger lens) & 32A TP & N switches	<b>3467</b>
For 13A moulded & metal plate sockets, fuse connection units, 20A capital switches & slimline cooker control unit (smaller lens)	<b>3711</b>
For slimline cooker control unit (large lens) & capital 45A switches	<b>3767</b>
For 50A ceiling switch & large plate cooker control unit (smaller lens)	<b>4674</b>

# LUMINAIRE SUPPORT COUPLERS

Crabtree luminaire support couplers, LSCs, provide flexibility and versatility to meet the demands of many domestic, commercial and industrial lighting applications.

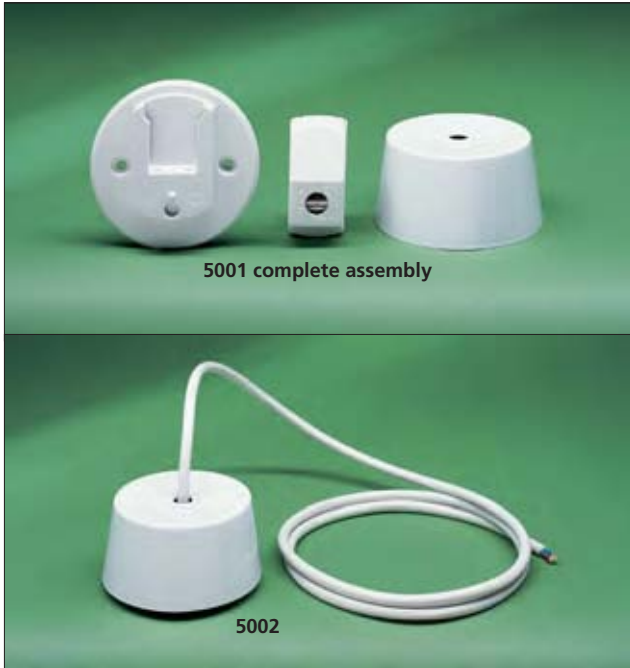
The range conforms to BS 7001 and BS 5733 and provides an effective plug-in connection with arrangements including 3 and 4 pin versions.



Ceiling assembly cover secures to outlet with assembly offering either standard or safety lampholder options

Ceiling outlet can be easily assembled to pattern and plug provides a simple plug in connection





### CEILING ASSEMBLIES 3 PIN

Description	List No
3 pin	<b>5001</b>
3 pin with 2m 1.0mm <sup>2</sup> Heat Resistant (HR) cable	<b>5002</b>
3 pin with 2m 1.0mm <sup>2</sup> Low Smoke (LSF) cable	<b>5017</b>
3 pin with 3m 1.0mm <sup>2</sup> Heat Resistant (HR) cable	<b>5002/3</b>
3 pin with 3m 1.0mm <sup>2</sup> Low Smoke (LSF) cable	<b>5017/3</b>
3 pin with 5m 1.0mm <sup>2</sup> Heat Resistant (HR) cable	<b>5002/5</b>
3 pin with 5m 1.0mm <sup>2</sup> Low Smoke (LSF) cable	<b>5017/5</b>

- Ceiling assemblies supplied as outlet, LSC plug and cover.
- Other lengths and cable options available upon request.



### CEILING ASSEMBLIES 4 PIN

Description	List No
4 pin	<b>5009</b>
4 pin with 2m 1.0mm <sup>2</sup> Heat Resistant (HR) cable	<b>5018</b>
4 pin with 2m 1.0mm <sup>2</sup> Low Smoke (LSF) cable	<b>5019</b>
4 pin with 3m 1.0mm <sup>2</sup> Heat Resistant (HR) cable	<b>5018/3</b>
4 pin with 3m 1.0mm <sup>2</sup> Low Smoke (LSF) cable	<b>5019/3</b>
4 pin with 5m 1.0mm <sup>2</sup> Heat Resistant (HR) cable	<b>5018/5</b>
Cover only for LSC ceiling assembly	<b>5001/CVR</b>

### PENDANT SETS

Description	List No
Surface mounting pattress	<b>5005</b>



### LSC PLUGS

Description	List No
3 pin	<b>5006</b>
4 pin (with red cover)	<b>5010</b>

- Cable clamp to grip outer cable insulation for maximum support.
- 4 pin LSC plug has a red cover as standard.
- Prewired versions are available, please contact Technical Services.



### CEILING OUTLETS & INTERIORS

Description	List No
3 pin ceiling outlet	<b>5003</b>
4 pin ceiling outlet	<b>5011</b>

For further details of pattress see Technical page 172.



# LUMINAIRE DISTRIBUTION BOXES

The LSC Interiors are mounted in a combination of 6, 8 and 10 outlet configurations contained within a steel fabricated enclosure to provide a Luminaire Distribution Box, LDB.

- Internal connections are made to a terminal block for ease of wiring
- Sufficient side and rear knockouts allow entries for cable or conduit
- Raised mounting feet allow for installation on uneven surfaces





5021/4

#### 4 PIN LUMINAIRE DISTRIBUTION BOXES

Description	List No
4 pin 6 way	<b>5020/4</b>
4 pin 8 way	<b>5021/4</b>
4 pin 10 way	<b>5022/4</b>



5020/4



5010

5006

#### LSC PLUGS

Description	List No
3 pin	<b>5006</b>
3 pin C/W 2m HR cable	<b>5006/2</b>
3 pin C/W 3m HR cable	<b>5006/3</b>
3 pin C/W 4m HR cable	<b>5006/4</b>
4 pin (with red cover)	<b>5010</b>
4 pin C/W 2m HR cable	<b>5010/2</b>
4 pin C/W 3m HR cable	<b>5010/3</b>
4 pin C/W 4m HR cable	<b>5010/4</b>

- Cable clamp to grip outer cable insulation for maximum support.
- 4 pin LSC plug has a red cover as standard.
- 3 pin LSC plugs can be installed into all LSC interiors.
- Different lengths & types of cable are available please contact Technical Services.

*For Dimensions see page 191.*





# WARWICK

PVC modular trunking range which can be mounted at either Dado or Skirting level, available in 2 different sizes (50mm x 170mm) or (50mm x 212mm).

## QUICK GUIDE TO FIVE PVC PROFILES

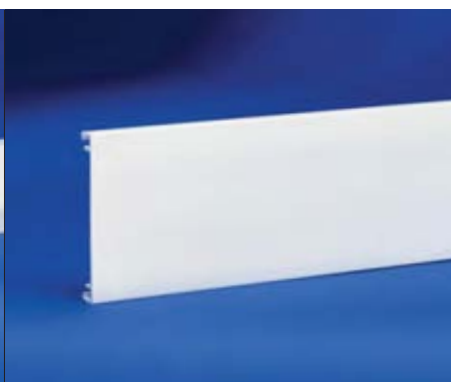
	WARWICK 1 Ref No	WARWICK 2 Ref No	WARWICK 3 Ref No	WARWICK 4 Ref No	WARWICK 5 Ref No
Trunking Pack	<b>BCL1</b>	<b>BCL2</b>	<b>BCL3</b>	<b>BCL4</b>	<b>BCL5</b>
Internal Bend	<b>BCL1/IB</b>	<b>BCL2/IB</b>	<b>BCL3/IB</b>	<b>BCL4/IB</b>	<b>BCL5/IB</b>
External Bend	<b>BCL1/EB</b>	<b>BCL2/EB</b>	<b>BCL3/EB</b>	<b>BCL4/EB</b>	<b>BCL5/EB</b>
Flat Angle 90° (Downward)	<b>BCL1/FAD</b>	<b>BCL2/FAD</b>	<b>BCL3/FAD</b>	<b>BCL4/FAD</b>	<b>BCL5/FAD</b>
Flat Angle 90° (Upward)	–	<b>BCL2/FAU</b>	–	<b>BCL4/FAU</b>	<b>BCL5/FAU</b>
Flat Tee (Downward)	<b>BCL1/FTD</b>	<b>BCL2/FTD</b>	<b>BCL3/FTD</b>	<b>BCL4/FTD</b>	<b>BCL5/FTD</b>
Flat Tee (Upward)	–	<b>BCL2/FTU</b>	–	<b>BCL4/FTU</b>	<b>BCL5/FTU</b>
Stop End - Left	<b>BCL1/SEL</b>	<b>BCL2/SEL</b>	<b>BCL3/SEL</b>	<b>BCL4/SEL</b>	<b>BCL5/SEL</b>
Stop End - Right	–	<b>BCL2/SER</b>	–	<b>BCL4/SER</b>	<b>BCL5/SER</b>
Coupler Pack	<b>BCL1/CP</b>	<b>BCL2/CP</b>	<b>BCL3/CP</b>	<b>BCL4/CP</b>	<b>BCL5/CP</b>
Standard Cable Retainer	<b>BCL/SCR</b>	<b>BCL/SCR</b>	<b>BCL/SCR</b>	<b>BCL/SCR</b>	<b>BCL/SCR</b>
Square Cable Retainer	–	<b>BCL/SQCR</b>	<b>BCL/SQCR</b>	<b>BCL/SQCR</b>	<b>BCL/SQCR</b>
Single Gang Accessory Box - 30mm deep	<b>BCL/SGB</b>	<b>BCL/SGB</b>	<b>BCL/SGB</b>	<b>BCL/SGB</b>	<b>BCL/SGB</b>
Twin Gang Accessory Box - 30mm deep	<b>BCL/TGB</b>	<b>BCL/TGB</b>	<b>BCL/TGB</b>	<b>BCL/TGB</b>	<b>BCL/TGB</b>



**ANGLED COVER SECTION**

Pack Quantity 5 x 3m

**BCL/ACS**



**MAIN COVER**

Pack Quantity 5 x 3m

**BCL/MC**



**SQUARE COVER SECTION**

Pack Quantity 5 x 3m

**BCL/SCS**



**BASE EXTENSION**

Pack Quantity 5 x 3m

**BCL/BE**



**VERTICAL MOUNT ADAPTOR PLATE**

Pack Quantity 1

**BCL/ADPL**

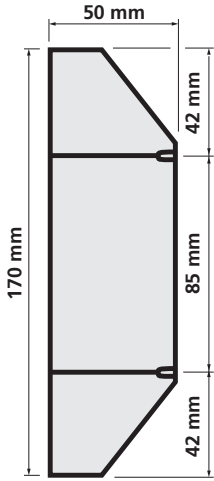


**RCD HOUSING**

Pack Quantity 1  
(RCD not Included)

**BCL/RCD**

For Technical information see page 175. Dimensions see page 192.



- Profile assembly includes:
- Base Section
  - 2 x Angled Covers
  - 1 x Main Cover
- Overall Size: • 170mm x 50mm



**TRUNKING PACK**  
Pack Quantity 1 x 3m lengths

**BCL1**



**INTERNAL BEND**  
Pack Quantity 1

**BCL1/IB**



**EXTERNAL BEND**  
Pack Quantity 1

**BCL1/EB**



**FLAT ANGLE**  
Pack Quantity 1

**BCL1/FAD**



**FLAT TEE**  
Pack Quantity 1

**BCL1/FTD**



**STOP END**  
Pack Quantity 1

**BCL1/SEL**



**COUPLER PACK**  
Pack Quantity 1

**BCL1/CP**



**SINGLE GANG ACCESSORY BOX**  
Pack Quantity 10  
30mm deep

**BCL/SGB**

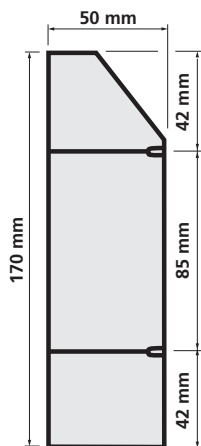


**TWIN GANG ACCESSORY BOX**  
Pack Quantity 5  
30mm deep

**BCL/TGB**

For Technical information see page 175. Dimensions see page 192.





- Profile assembly includes:
- Base Section
  - 1 x Angled Cover
  - 1 x Main Cover
  - 1 x Square Cover
- Overall Size: • 170mm x 50mm



### TRUNKING PACK

Pack Quantity 1 x 3m lengths

**BCL2**



### INTERNAL BEND

Pack Quantity 1

**BCL2/IB**



### EXTERNAL BEND

Pack Quantity 1

**BCL2/EB**



### FLAT ANGLE (DOWNWARD)

Pack Quantity 1

**BCL2/FAD**



### FLAT ANGLE (UPWARD)

Pack Quantity 1

**BCL2/FAU**



### FLAT TEE (UPWARD)

Pack Quantity 1

**BCL2/FTU**



### FLAT TEE (DOWNWARD)

Pack Quantity 1

**BCL2/FTD**



### STOP END (LEFT)

Pack Quantity 1

**BCL2/SEL**



### STOP END (RIGHT)

Pack Quantity 1

**BCL2/SER**



### COUPLER PACK

Pack Quantity 1

**BCL2/CP**



### SQUARE CABLE RETAINER

Pack Quantity 10  
**BCL/SQCR**



### SINGLE GANG ACCESSORY BOX

Pack Quantity 10

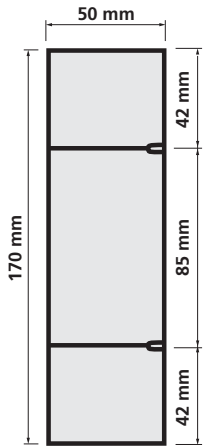
**BCL/SGB**



### TWIN GANG ACCESSORY BOX

Pack Quantity 5

**BCL/TGB**



- Profile assembly includes:
- Base Section
  - 2 x Square Covers
  - 1 x Main Cover

Overall Size: • 170mm x 50mm



**TRUNKING PACK**

Pack Quantity 1 x 3m lengths

**BCL3**



**INTERNAL BEND**

Pack Quantity

**BCL3/IB**



**EXTERNAL BEND**

Pack Quantity 1

**BCL3/EB**



**FLAT ANGLE**

Pack Quantity 1

**BCL3/FAD**



**FLAT TEE**

Pack Quantity 1

**BCL3/FTD**



**STOP END**

Pack Quantity 1

**BCL3/SEL**



**COUPLER PACK**

Pack Quantity 1

**BCL3/CP**



**SQUARE CABLE RETAINER**

Pack Quantity 10

**BCL/SQCR**



**SINGLE GANG ACCESSORY BOX**

Pack Quantity 10

**BCL/SGB**

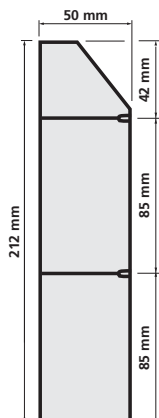


**TWIN GANG ACCESSORY BOX**

Pack Quantity 5

**BCL/TGB**

For Technical information see page 175. Dimensions see page 192.



- Profile assembly includes:
- Base Section
  - 1 x Base Extension
  - 1 x Angled Cover
  - 2 x Main Covers
- Overall Size: • 212mm x 50mm



**TRUNKING PACK**

Pack Quantity 1 x 3m lengths

**BCL4**



**INTERNAL BEND**

Pack Quantity 1

**BCL4/IB**



**EXTERNAL BEND**

Pack Quantity 1

**BCL4/EB**



**FLAT ANGLE (DOWNWARD)**

Pack Quantity 1

**BCL4/FAD**



**FLAT ANGLE (UPWARD)**

Pack Quantity 1

**BCL4/FAU**



**FLAT TEE (DOWNWARD)**

Pack Quantity 1

**BCL4/FTD**



**FLAT TEE (UPWARD)**

Pack Quantity 1

**BCL4/FTU**



**STOP END (LEFT)**

Pack Quantity 1

**BCL4/SEL**



**STOP END (RIGHT)**

Pack Quantity 1

**BCL4/SER**



**COUPLER PACK**

Pack Quantity 1

**BCL4/CP**



**SINGLE GANG ACCESSORY BOX**

Pack Quantity 10

**BCL/SGB**



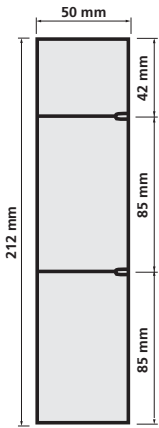
**TWIN GANG ACCESSORY BOX**

Pack Quantity 5

**BCL/TGB**

For Technical information see page 175. Dimensions see page 192.





- Profile assembly includes:
- Base Section
  - 1 x Base Extension
  - 1 x Square Cover
  - 2 x Main Covers
- Overall Size: • 212mm x 50mm



**TRUNKING PACK**

Pack Quantity 1 x 3m lengths

**BCL5**



**INTERNAL BEND**

Pack Quantity 1

**BCL5/IB**



**EXTERNAL BEND**

Pack Quantity 1

**BCL5/EB**



**FLAT ANGLE (DOWNWARD)**

Pack Quantity 1

**BCL5/FAD**



**FLAT ANGLE (UPWARD)**

Pack Quantity 1

**BCL5/FAU**



**FLAT TEE (DOWNWARD)**

Pack Quantity 1

**BCL5/FTD**



**FLAT TEE (UPWARD)**

Pack Quantity 1

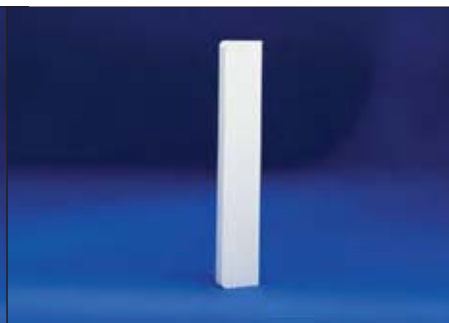
**BCL5/FTU**



**STOP END (LEFT)**

Pack Quantity 1

**BCL5/SEL**



**STOP END (RIGHT)**

Pack Quantity 1

**BCL5/SER**



**COUPLER PACK**

Pack Quantity 1

**BCL5/CP**



**SQUARE CABLE RETAINER**

Pack Quantity 10

**BCL/SQCR**



**SINGLE GANG ACCESSORY BOX**

30mm Deep Pack Quantity 10 **BCL/SGB**



**TWIN GANG ACCESSORY BOX**

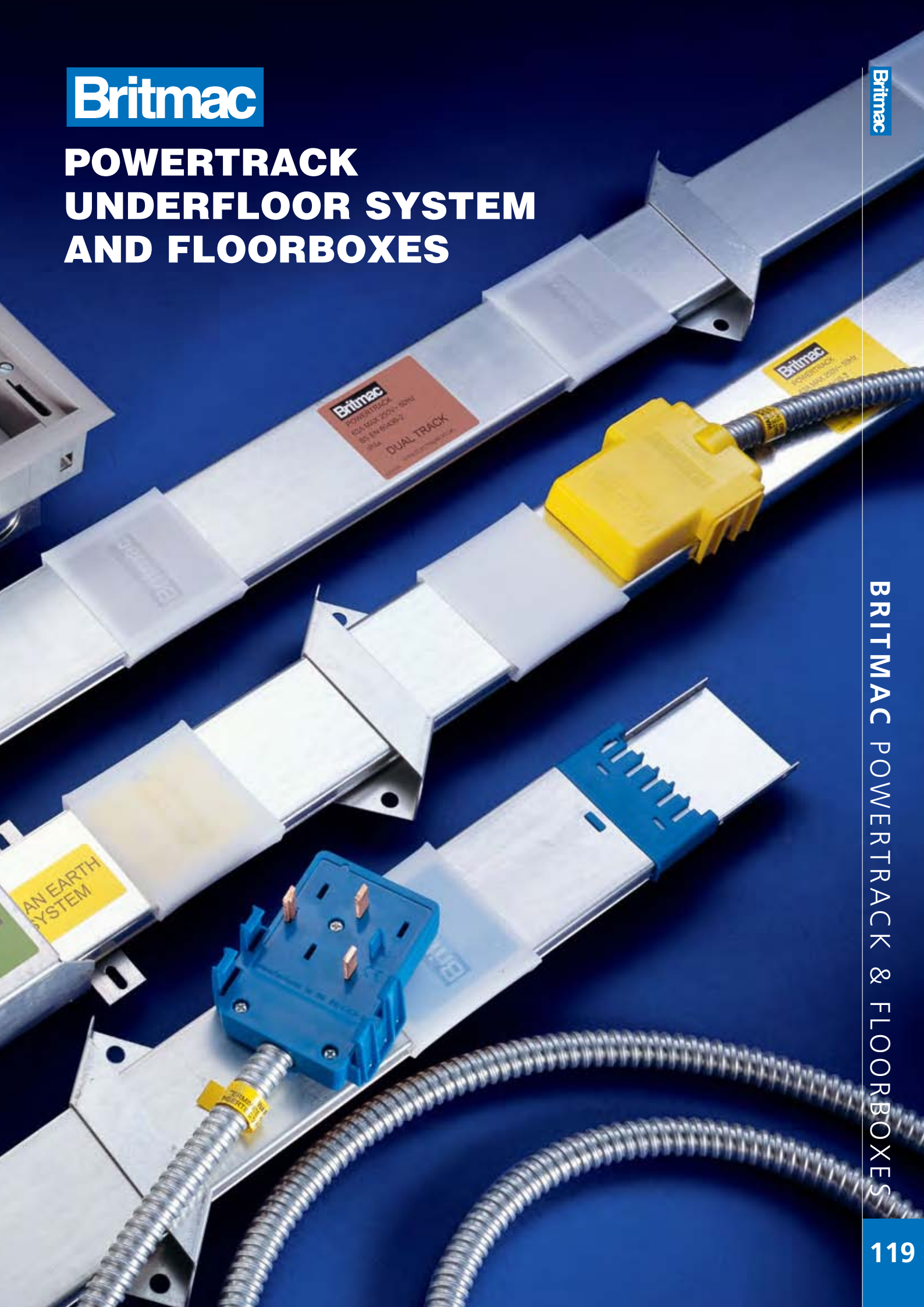
30mm Deep Pack Quantity 5 **BCL/TGB**





**Britmac**

# POWERTRACK UNDERFLOOR SYSTEM AND FLOORBOXES



Britmac

BRITMAC POWERTRACK & FLOORBOXES



## POWER TRACK UNDERFLOOR SYSTEM

The Britmac underfloor power track system has undergone some radical changes to meet the ever increasing power requirements of the workplace. The system consists of a series of fully enclosed single phase busbar module units and is designed to be assembled directly onto the floor slab of a cavity floor installation using the integral floor fixing brackets. The track modules have a simple and quick push fit connection allowing for rapid on site assembly. The modules are available as standard 2P+E, Clean Earth 2P+E+CE and dual system 4P+E+CE. The system has been designed with minimal parts to assist the contractor fitting out on site.

- Direct to floor assembly
- Universal cable feeder unit
- Standard Earth 2P+E - Blue
- Clean Earth 2P+E+CE - Yellow
- Dual system 4P+E+CE - Brown



The Power track module is a 63A single phase busbar unit with the facility to accept a tap-off unit every 300mm, this allows the removal or addition of tap off units without the need to isolate the complete system. The system has been designed with the electrical contractor in mind, where speed and ease of installation are paramount, with push fit connectors on both the track connections and feed units. There is a keying system on the track end which operates the shutter mechanism and allows correct location.



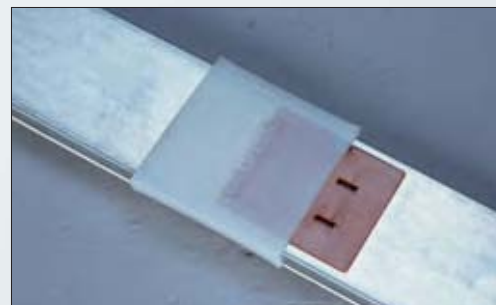
The modules come in standard lengths, all compatible with standard floor modules and cavity floor trunking sizes. Each length comes complete with an innovative method of track fixing. The fixing bracket simply swivels out to enable solid fixing to the floor screed.



The standard tap off units comprises a 32A unfused plug fitted with flexible metal conduit. Where lengths longer than 3m are required, a fused tap off unit is fitted and wired with the appropriate length of cable. All tap offs have a keying system which ensures that the correct tap off is fitted

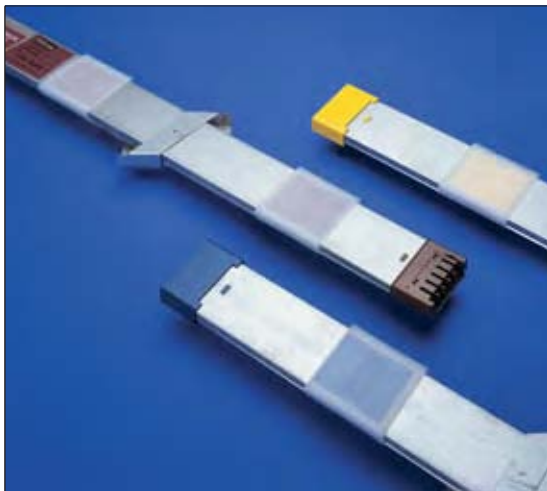


Transparent dust covers are provided to enable easy recognition of the system installed. The dust cover slides along the track length to enable tap off plug insertion.



- Push fit
- Colour coded
- 50mm minimum clearance height
- Non interchangeable pin configuration
- Pre-wired tap off unit
- Complies with BS 7671: 2008 regulation 543.7





## UNDERFLOOR POWER TRACK MODULES

Track Length	Standard	Clean Earth	Dual Track
1200mm	<b>UPT12</b>	<b>UPT12TE</b>	<b>UPT12DE</b>
2400mm	<b>UPT24</b>	<b>UPT24TE</b>	<b>UPT24DE</b>
3600mm	<b>UPT36</b>	<b>UPT36TE</b>	<b>UPT36DE</b>

- Tap off socket at 300mm intervals complete with clear dust cover
- Track fixing brackets factory fitted 2 on 1.2m, 3 on 2.4m and 3 on 3.6m
- Each length comes with a shuttered interconnection and a track stop end
- Colour Coded: Blue - Standard  
Yellow - Clean Earth  
Brown - Dual Track



UPFLH

## CABLE SUPPLY FEED IN

Feed unit for standard & clean Earth system	<b>UPFLH</b>
Feed unit for Dual Track system	<b>UPFLH/DE</b>

## CABLE SUPPLY FEED ON

Universal feed unit	<b>UPFRH</b>
---------------------	--------------

- The Cable Supply feed end allows the termination of the incoming flexible cables. The generously sized terminals accept up to 16mm<sup>2</sup> cables
- 1 x 25mm diameter conduit entry hole
- Feed unit for Dual Track system has 2 x 25mm diameter conduit entry holes



UPFCTE

## FLEXIBLE CORNER UNIT

	Standard	Clean Earth	Dual Track
1 Metre Length	<b>UPFC</b>	<b>UPFCTE</b>	<b>UPFCDE</b>

- Comes complete with feed in and feed on units
- The flexible corner unit is used for angled bends or to pass around or over an obstruction. The unit comprises a 1 metre length of 25mm flexible metal conduit and the appropriate 10mm<sup>2</sup> LSF cable



UPP3TE

## 32A TAP OFF UNIT

	Standard	Clean Earth	Dual Track
3M Unfused	<b>UPP3</b>	<b>UPP3TE</b>	<b>UPP3DE</b>
5M 13A Fused	<b>UPP5F</b>	<b>UPP5FTE</b>	<b>UPP5FDE</b>

- 3.0m Unfused tap off wired with 4mm<sup>2</sup> LSF cable housed in a 16mm diameter flexible metal conduit
- 5.0m Fused tap offs incorporate a 13A Fuse and are wired with 2.5mm<sup>2</sup> LSF cable to Live and Neutral with the Earth wired using 4mm<sup>2</sup> LSF to comply with regulation 543.7
- Tap off incorporates a keying system which ensures correct insertion is always achieved



## TECHNICAL DATA UNDERFLOOR POWER TRACK MODULES

### Conditional Short Circuit Rating

#### TRACK

Short circuit protection provided by fuselinks BS-88 and BS 1361 100 amp maximum.

Prospective current 16.5kA

Mechanical withstand 10kA peak

Thermal withstand 1200A for 0.1 seconds

#### TAP-OFF UNITS

Mechanical withstand 10kA peak

Thermal withstand 1200A for 0.1 seconds

### Earth Fault Loop Impedance (measured at 1.0A)

The IEE Wiring Regulations require accurate determination of the total earth loop impedance, which must be low enough to ensure that the protective device will operate within the specified time, which for circuits incorporating socket outlets is 0.4 seconds. The values for the Britmac System for calculating the earth fault loop impedance are as follows:

Phase busbar	1.97mV/m
Earth busbar to housing	1.38mV/m
Earth busbar (Clean Earth)	1.97mV/m
Track connector	0.37mV
Supply connector	0.24mV
32A tap-off (4mm <sup>2</sup> x 3m), line	9.92mV

### Volt Drop, Combined Phase & Neutral (measured at 1.0A)

Busbar (line & neutral)	3.94mV/A/m
Track connector	0.74mV/A
Supply connector	0.48mV/A
32A tap-off (4mm <sup>2</sup> x 3m), line & earth	19.84mV/A/m

### Cable Capacity of Terminals

Supply connector 16mm<sup>2</sup> csa stranded conductor

### Construction

#### TRACK

Body extrusion

Galvanised Steel

Track base

Galvanised steel

Busbar

High conductivity copper

Degree of protection Track IP4X; In-feed housing IP3XC

#### TAP-OFF UNITS

Standard, Clean Earth and Dual Track tap-offs are non-interchangeable. All types available in fused and unfused versions.

#### 32A tap-off unit

The 32A tap-off is unfused with 3 metres of 16mm diameter flexible conduit and 4mm<sup>2</sup> cables to BS 6004:2000 which are terminated in the tap-off via welded connections.

#### Fused tap-off unit

Required where conduit lengths greater than 3 metres are used. The tap-off unit is used as standard at 13 amps and is fitted to the specified length of 16mm diameter conduit and 2.5mm<sup>2</sup> cables to BS 6004:1995 which are terminated in the tap-off via welded connections. The flexible conduit is manufactured to BSEN 50086-1

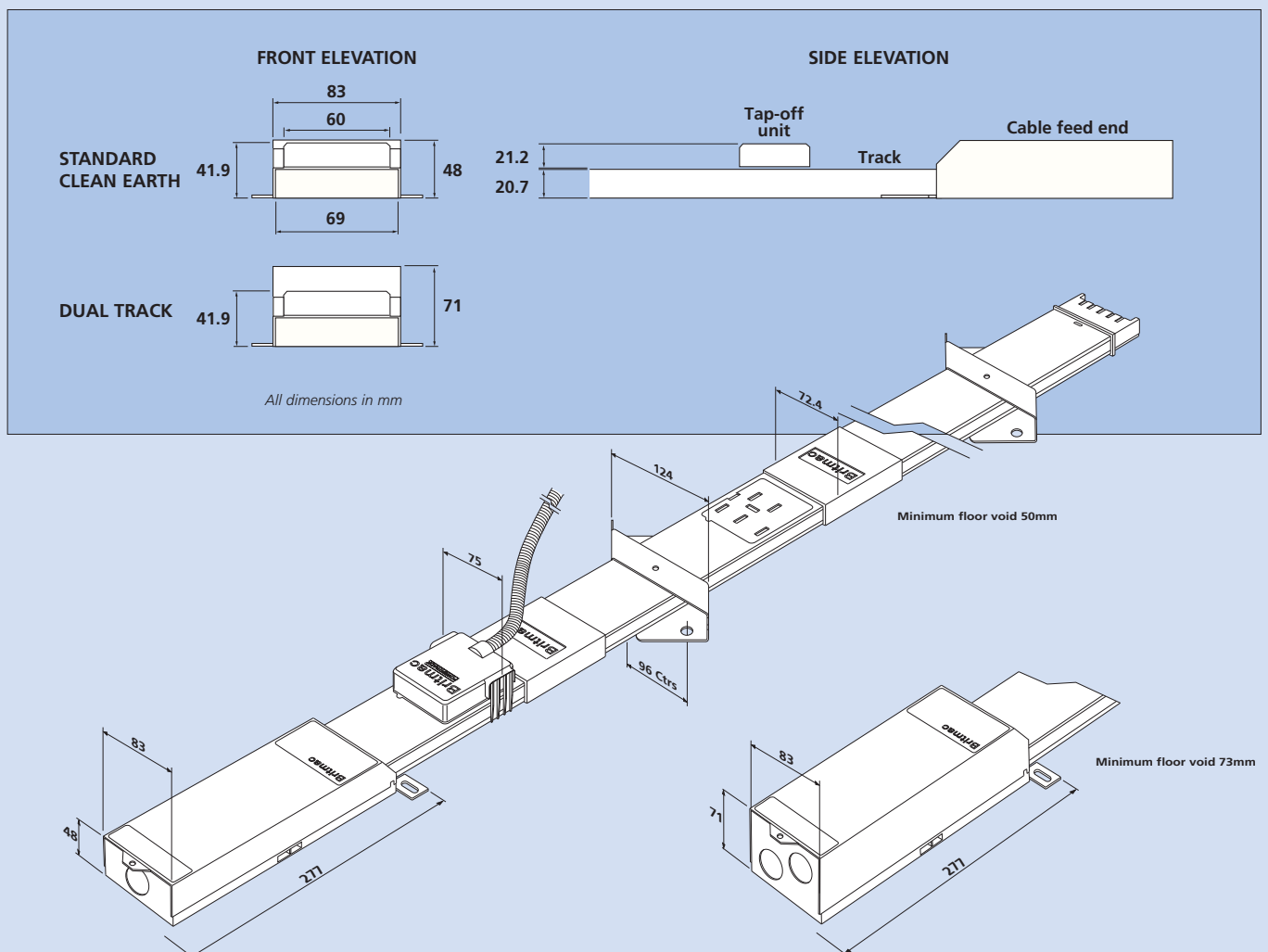
#### STANDARDS

BSEN 60439: Part 1 & Part 2.

The track system enables compliance with the latest IEE Wiring Regulations, BS 7671:2008.

#### TRACK CURRENT RATING

63 amps, 240V ac; 50Hz single phase ambient temperature 25C.



## FLOOR BOX DISTRIBUTION

The Britmac range of cable management products have been utilised in the design and installation of electrical systems in commercial and industrial projects for many years. The comprehensive fast-fit floor box provides a wide choice from which to select the most appropriate for a specific application. Units can be supplied fitted with accessories pre-wired to customers' requirements and fully factory tested in the UK prior to delivery. The products are supported by a nationwide team of Sales Engineers and Stockists.







- Large capacity cable routing guides ensure cables exit the box safely and neatly
- Lid hinge design ensures that lid will always self-close
- Snap-out facility enables the lid to be removed for access to accessory plates
  - Pre-wired saving time during site installation







### 3 COMPARTMENT FLOOR BOX & ACCESSORIES

TRIM COLOUR	LIST No
Grey	<b>GR03G</b>

- The most popular size of raised access floor box for use in commercial office applications where power, voice and data services are required.
- Utilises 87mm wide accessory plates.

For Floor Box Dimensions See page 129.



### SWITCHED 13A SOCKETS

	LIST No
13A 2 Gang switched socket TWIN EARTH	<b>GB3SS2/BG</b>
13A 2 Gang switched socket CLEAN EARTH	<b>GB3SS2CE/BG</b>
13A 2 Gang switched socket NON-STD TWIN EARTH	<b>GB3SSN2/BG</b>
13A 2 Gang switched socket NON-STD CLEAN EARTH	<b>GB3SSN2CE/BG</b>
13A 2 Gang switched safety socket 30mA	<b>GB3SRCD30/BG</b>

- Clean Earth has a normal and an isolated earth.



### UNSWITCHED 13A SOCKETS

	LIST No
13A 2 Gang unswitched socket TWIN EARTH	<b>GB3S2/BG</b>
13A 2 Gang unswitched socket CLEAN EARTH	<b>GB3S2CE/BG</b>
13A 2 Gang unswitched socket NON-STD	<b>GB3SN2/BG</b>

- Clean Earth has a normal and an isolated earth.



### DATA AND COMMUNICATIONS

	LIST No
Accessory plate 4 knockout LUJ6C/RJ45	<b>GB3J6C/BG</b>
Accessory plate to accept 6x LUJ6C/RJ45	<b>GB3J6C/6BG</b>
Accessory plate to accept 2x 1G standard accessory	<b>GB3J3/BG</b>
Accessory plate to accept 2G standard accessory	<b>GB32G/BG</b>
Blank plate	<b>GB3BP/BG</b>
Accessory plate to accept 4x Alpha	<b>GB3ALPHA/BG</b>
Accessory plate to accept 2x Euro module (Will accept 4x Crabtree communication modules 25mm x 50mm).	<b>GB3EURO/BG</b>

- All plates 87mm x 173mm.
- All accessory plates are supplied with fixing screws.





GR04G

#### 4 COMPARTMENT FLOOR BOX & ACCESORIES

TRIM COLOUR	LIST No
Grey	<b>GR04G</b>

- Compact 4 compartment unit - utilises 66mm wide accessories.
- 4 compartment units can provide an attractive and economical solution for applications, where power, voice and data systems are to be accessed, particularly where both clean and utility power outlets are required or where more than one type of data system is required.

For Floor Box Dimensions See pages 128 & 129.



GBSS2/BG GBSSN2/BG

#### SWITCHED 13A SOCKETS

	LIST No
13A 2 Gang switched socket TWIN EARTH	<b>GBSS2/BG</b>
13A 2 Gang switched socket CLEAN EARTH	<b>GBSS2CE/BG</b>
13A 2 Gang switched socket NON-STD TWIN EARTH	<b>GBSSN2/BG</b>
13A 2 Gang switched socket NON-STD CLEAN EARTH	<b>GBSSN2CE/BG</b>

- Power sockets supplied with rear entry terminals as standard.
- Clean earth have a normal and an isolated earth.
- Only two 13A 2 gang Sockets can be fitted per Floor Box, in centre compartment only.



GBJ6C/BG GBBP/BG

#### DATA AND COMMUNICATIONS

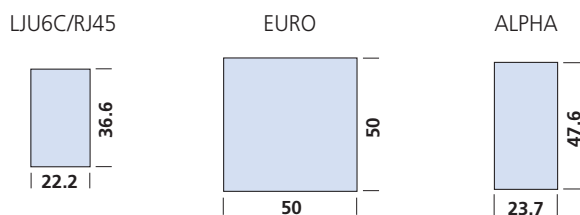
	LIST No
Plate to accept 4 LJU6C voice or 4 RJ45 data outlets	<b>GBJ6C/BG</b>
Blank plate for on-site piercing	<b>GBBP/BG</b>
Plate to accept 4x Alpha	<b>GBALPHA/BG</b>
Plate to accept 2x Euro modules (Will accept 4x Crabtree communication modules 25mm x 50mm).	<b>GBEURO/BG</b>

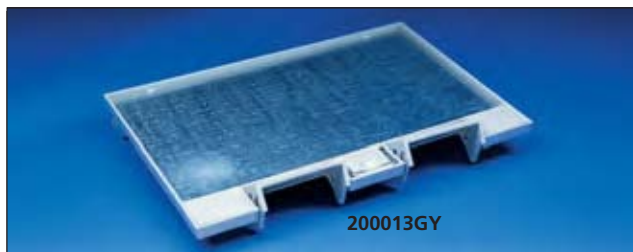
- All plates 66mm x 173mm.
  - All accessory plates are supplied with fixing screws.
- 13A accessory plates are supplied with the appropriate interior fitted.



GBEURO/BG GBALPHA/BG

#### KNOCKOUT DIMENSIONS





200013GY



98950-1/A/2



98347-1/A/2



98351-1/H/1



98496-2/E/1

## CURRENT RANGE

### GROSVENOR LID REPLACEMENT 3 & 4 GANG

Lid assembly, Grey	200013GY
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### GROSVENOR SPARES

Trim piece (plain), Grey	98950-1/A/2
--------------------------	-------------

Trim piece (handle), Grey - Complete	98347-1/A/2
--------------------------------------	-------------

Cable flap, Grey	98351-1/H/1
------------------	-------------

Cable retainer, Black	98496-2/E/1
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## FLOOR GROMMET

In the modern office environment where flexibility is vital, the BRITACCESS floor grommet can accommodate most requirements for accessing cables on flexible conduits up to cable managed desks etc.

If the requirement is for a basic access point the top element will satisfy that need. To allow a desk module to pass through from a floor void whether it be a 3 core flexible cable or a flexible conduit, the BRITACCESS grommet is suitable for the job.

### FLOOR ACCESS GROMMET

Top Grommet Only	BAG150
------------------	--------

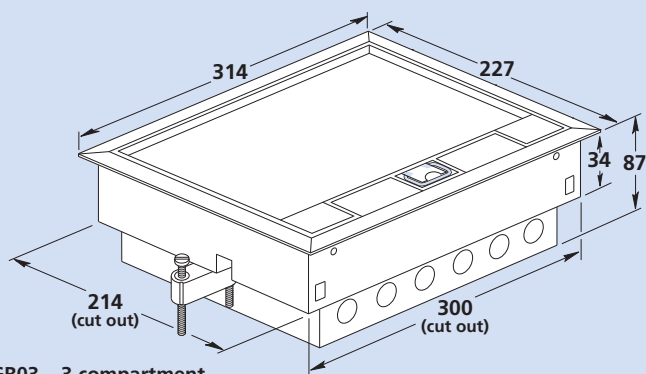
Floor Grommet c/w Switched 1G Socket & Back box	BAGSS
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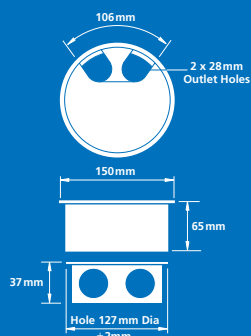




GROSVENOR 'FAST FIT' RAISED ACCESS FLOOR BOXES



GR03 - 3 compartment  
GR04 - 4 compartment



### SPECIFICATION Top Element (Grommet Only)

#### Dimensions:

O/A Diameter	150mm
Internal Diameter	120mm
Depth	65mm

<b>Material:</b>	High Impact ABS
<b>Colour:</b>	RAL 7016

## BRITMAC FLOOR DISTRIBUTION SYSTEMS

### Materials

All systems are constructed from high quality materials and are designed to meet relevant British and International Standards including the installation requirements of the IEE Wiring Regulations.

### Raised Access Floors

Throughout this catalogue the term Raised Access Floor has been used to describe any modular flooring system which is supported on adjustable pedestals providing a service void. Other names frequently used are Cavity Floor, False Floor, Platform Floor, Access Floor, Computer Floor, etc.

## GROSVENOR RAISED ACCESS FLOOR BOXES

### Floorboxes

The Grosvenor floorbox has been designed to withstand working loads of the PSA MOB PF2 PS/SPU specification for raised floors. The floorboxes listed within this catalogue are capable of accepting a very wide range of accessories fitted in any compartment. However, certain combinations do impose restrictions on positioning, due to the clashes of connectors, plug tops or the cables themselves.

### Accessories

All accessory plates are supplied complete with the appropriate thread cutting screws. Each fixing hole in the unit frames is unthreaded and deep plunged for ease of location of fixing.

The minimum plug clearance between accessory plate and underside of floor is 34mm.

### POWER (13A)

Twin Earth sockets.  
Non-standard sockets.  
Clean Earth sockets.

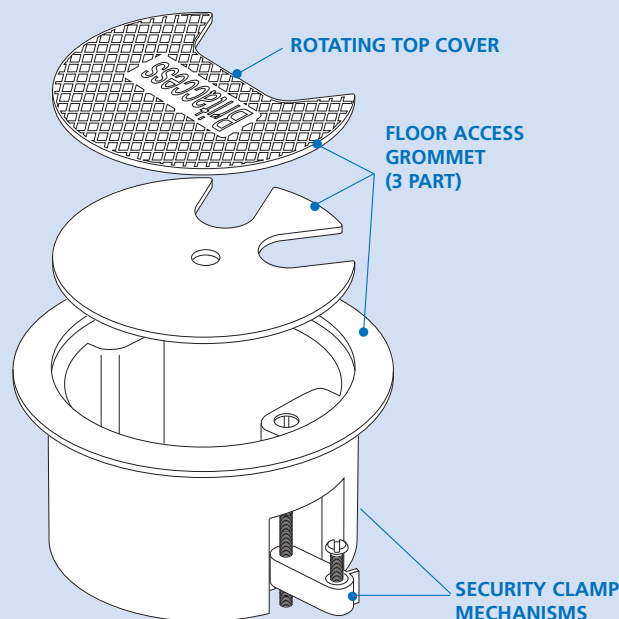
### TELEPHONE

Components for most British Telecom, Mercury and other national and international systems.

### DATA

A wide range of components to suit virtually all systems in current use. These include IBM, Wang, Phillips, ICL and many others.

All dimensions in mm Tolerance on cut-out dimensions is  $\pm 1$ mm



# STARBREAKER

## ASSEMBLED INSULATED & METALCLAD CONSUMER UNITS

Many configurations including Main Switch, Split-Load, High Integrity and Dual RCCB combined with the New range of Starbreaker MCBs and RCBOs provide installers with an option for all their domestic circuit protection requirements. Meets the requirements of BS EN 60439-3.











410/2B

## MAIN SWITCH INSULATED UNITS

MS Rating	Total MCB/ RCBO Ways	Main Switch	LIST No
40A	2	2	<b>402/2B *</b>
63A	2	2	<b>402/26B *</b>
100A	4	4	<b>404/2B</b>
100A	7	7	<b>407/2B</b>
100A	10	10	<b>410/2B</b>
100A	13	13	<b>413/2B</b>
100A	18	18	<b>418/2B</b>

RCBOs are not recommended for use within 402 units.



410/2563B

## SPLIT LOAD INSULATED UNITS 100A SWITCH 63A 30mA RCCB

MS Rating	Total Ways	Main Switch	RCCB	LIST No
100A	4	2	2	<b>404/2263B</b>
100A	7	2	5	<b>407/2263B</b>
100A	7	3	4	<b>407/2363B</b>
100A	7	4	3	<b>407/2463B</b>
100A	7	5	2	<b>407/2563B</b>
100A	10	3	7	<b>410/2363B</b>
100A	10	4	6	<b>410/2463B</b>
100A	10	5	5	<b>410/2563B</b>
100A	10	6	4	<b>410/2663B</b>
100A	10	7	3	<b>410/2763B</b>
100A	15	5	10	<b>415/2563B</b>
100A	15	6	9	<b>415/2663B</b>
100A	15	7	8	<b>415/2763B</b>
100A	15	8	7	<b>415/2863B</b>
100A	15	9	6	<b>415/2963B</b>
100A	15	10	5	<b>415/2163B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.



415/2883B

## SPLIT LOAD INSULATED UNITS 100A SWITCH 80A 30mA RCCB

MS Rating	Total Ways	Main Switch	RCCB	LIST No
100A	7	2	5	<b>407/2283B</b>
100A	7	3	4	<b>407/2383B</b>
100A	7	4	3	<b>407/2483B</b>
100A	7	5	2	<b>407/2583B</b>
100A	10	3	7	<b>410/2383B</b>
100A	10	4	6	<b>410/2483B</b>
100A	10	5	5	<b>410/2583B</b>
100A	10	6	4	<b>410/2683B</b>
100A	10	7	3	<b>410/2783B</b>
100A	12	6	6	<b>412/2683B *</b>
100A	15	5	10	<b>415/2583B</b>
100A	15	6	9	<b>415/2683B</b>
100A	15	7	8	<b>415/2783B</b>
100A	15	8	7	<b>415/2883B</b>
100A	15	9	6	<b>415/2983B</b>
100A	15	10	5	<b>415/2183B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

\* Available only as a complete assembly.

## SPLIT LOAD INSULATED UNIT 100A TIME DELAY RCCB & 63A 30mA RCCB

Incoming RCCB Rating	Total MCB Ways	RCCB 1 (100mA TD)	RCCB 2 (30mA)	LIST No
100A 100mA TD	10	5	5	<b>410/3563TDB</b>

## SPLIT LOAD INSULATED UNITS 100A TIME DELAY RCCB & 80A 30mA RCCB

Incoming RCCB Rating	Total MCB Ways	RCCB 1 (100mA TD)	RCCB 2 (30mA)	LIST No
100A 100mA TD	10	5	5	<b>410/3583TDB</b>
100A 100mA TD	15	8	7	<b>415/3883TDB</b>

For components selection & dimensions see *Starbreaker Components* page 140.



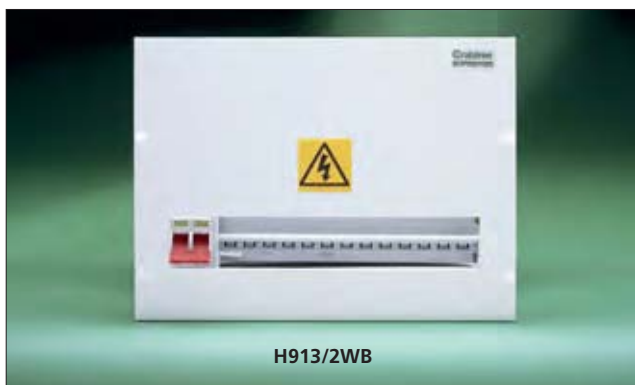
410/3583TDB



413/236565B



413/2837636B



H913/2WB



908/2834634WB

## HIGH INTEGRITY DUAL RCD INSULATED UNITS

MS Rating	Total Ways	Main Switch	RCCB 1		RCCB 2		LIST No
			63A	30mA	63A	30mA	
100A	8	2	3	3	3	3	<b>408/226363B</b>
100A	13	2	6	5	5	5	<b>413/226665B</b>
100A	13	2	7	4	4	4	<b>413/226764B</b>
100A	13	2	8	3	3	3	<b>413/226863B</b>
100A	13	3	5	5	5	5	<b>413/236565B</b>
100A	13	3	6	4	4	4	<b>413/236664B</b>
100A	13	3	7	3	3	3	<b>413/236763B</b>
100A	13	4	5	4	4	4	<b>413/246564B</b>
100A	13	4	6	3	3	3	<b>413/246663B</b>
100A	13	5	4	4	4	4	<b>413/256464B</b>
100A	13	5	5	3	3	3	<b>413/256563B</b>
100A	13	6	4	3	3	3	<b>413/266463B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

RCCB rating variations are available upon request.

MS Rating	Total Ways	Main Switch	RCCB 1		RCCB 2		LIST No
			80A	30mA	80A	30mA	
100A	9	1	4	4	4	4	<b>409/218484B *</b>
100A	9	2	4	3	3	3	<b>409/228483B *</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

\* Available only as a complete assembly.

## DUAL RCD SPLIT LOAD INSULATED UNITS

MS Rating	Total MCB		Main Switch	RCCB 1		RCCB 2		LIST No
	Ways			63A 30mA	63A 30mA			
100A	13	0		7	6		<b>413/2637636B</b>	
100A	13	0		8	5		<b>413/2638635B</b>	
100A	13	0		9	4		<b>413/2639634B</b>	

MS Rating	Total MCB		Main Switch	RCCB 1		RCCB 2		LIST No
	Ways			80A 30mA	63A 30mA			
100A	8	0		4	4	<b>408/2834634B</b>		
100A	13	0		7	6	<b>413/2837636B</b>		
100A	13	0		8	5	<b>413/2838635B</b>		
100A	13	0		9	4	<b>413/2839634B</b>		

## ASSEMBLED SPINE BACKPLATES

### MAIN SWITCH

Total MCB/		Main Switch	LIST No
MS Rating	RCBO Ways		
100A	13	13	<b>H913/2WB</b>
100A	18	18	<b>H918/2WB</b>

## SPLIT LOAD 100A SWITCH 63A 30mA RCCB

MS Rating	Total Ways	Main Switch	RCCB	LIST No
100A	10	4	6	<b>H910/2463WB</b>
100A	10	5	5	<b>H910/2563WB</b>
100A	10	6	4	<b>H910/2663WB</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

## SPLIT LOAD 100A SWITCH 80A 30mA RCCB

MS Rating	Total Ways	Main Switch	RCCB	LIST No
100A	10	4	6	<b>H910/2483WB</b>
100A	10	5	5	<b>H910/2583WB</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

Starbreaker spine backplates (H) accept both MCBs and single module RCBOs.

## DUAL RCD SPLIT LOAD

MS Rating	Total Ways	Main Switch	RCCB 1		RCCB 2		LIST No
			80A	30mA	63A	30mA	
100A	8	0	4	4	4	4	<b>908/2834634WB</b>

For components selection & dimensions see *Starbreaker Components* page 140.



404/383B

## RCD INCOMER INSULATED UNITS

RCCB Rating	Total MCB Ways	RCCB	LIST No
40A 30mA	2	2	<b>402/343B</b>
63A 30mA	2	2	<b>402/363B</b>
63A 30mA	4	4	<b>404/363B</b>
80A 30mA	4	4	<b>404/383B</b>
80A 30mA	7	7	<b>407/383B</b>
100A 30mA	7	7	<b>407/313B</b>
80A 30mA	10	10	<b>410/383B</b>
100A 30mA	10	10	<b>410/313B</b>
80A 30mA	13	13	<b>413/383B</b>
100A 30mA	13	13	<b>413/313B</b>
80A 30mA	18	18	<b>418/383B</b>
100A 30mA	18	18	<b>418/313B</b>



402/363SU

402/363GU

## RCD INCOMER INSULATED UNITS WITH MCBs

RCCB Rating	Total MCB Ways	RCCB	MCB 1(B)	MCB 2(B)	LIST No
40A 30mA	2	2	6A	32A	<b>402/343GU</b>
63A 30mA	2	2	6A	32A	<b>402/363GU</b>
63A 30mA	2	2	50A	-	<b>402/363SU</b>



411/262B

## DUAL TARIFF INSULATED UNITS

Total MCB/ RCBO Ways	Main Switch 100A Tariff 1	Main Switch 100A Tariff 2	LIST No
5	3	2	<b>405/232B</b>
8	3	5	<b>408/232B</b>
8	4	4	<b>408/242B</b>
8	5	3	<b>408/252B</b>
8	6	2	<b>408/262B</b>
11	4	7	<b>411/242B</b>
11	5	6	<b>411/252B</b>
11	6	5	<b>411/262B</b>
11	7	4	<b>411/272B</b>
11	8	3	<b>411/282B</b>
16	6	10	<b>416/262B</b>
16	7	9	<b>416/272B</b>
16	8	8	<b>416/282B</b>
16	9	7	<b>416/292B</b>
16	10	6	<b>416/212B</b>
16	11	5	<b>416/2112B</b>



408/22623B

## MULTI TARIFF INSULATED UNITS

Total MCB/ RCBO Ways	Main Switch 100A Tariff 1	Main Switch 100A Tariff 2	Main Switch 100A Tariff 3	LIST No
9	4	1	4	<b>409/242124B</b>
14	8	1	5	<b>414/282125B</b>
14	7	1	6	<b>414/272126B</b>

## SPLIT LOAD DUAL TARIFF UNITS

MS Rating	Total Ways	Main Switch	RCCB 63A 30mA	Main Switch 100A Tariff 2	LIST No
100A	8	2	3	3	<b>408/22623B</b>
100A	13	5	2	6	<b>413/25626B</b>
100A	13	3	6	4	<b>413/23624B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

MS Rating	Total MCB/ RCBO Ways	Main Switch	RCCB 80A 30mA	Main Switch 100A Tariff 2	LIST No
100A	13	3	6	4	<b>413/23824B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

For components selection & dimensions see **Starbreaker Components** page 140.





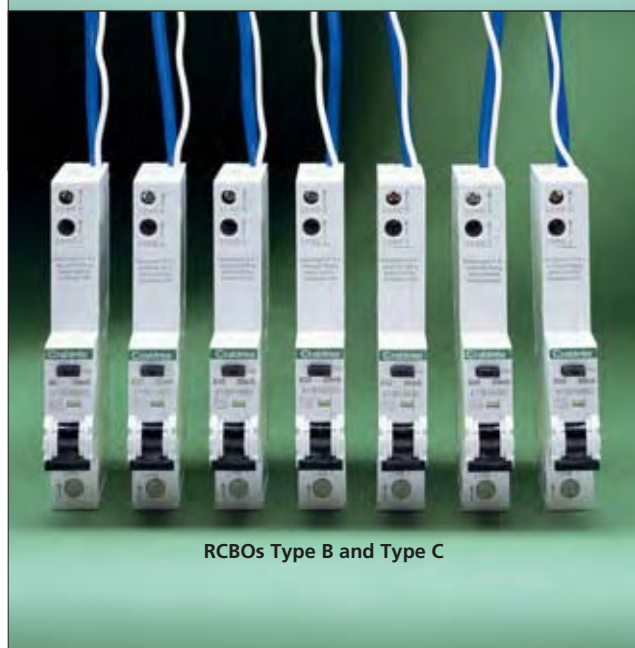
100/MI2    100/2MT    100/SP1    100/DC1    100/DC2



380/030    363/S030



61/B06    61/B10    61/B16    61/B20    61/B32    61/B40    61/B50



RCBos Type B and Type C

## MAIN INCOMING SPLIT-LOAD DEVICES

DESCRIPTION	RATING	MODULES	LIST No
Main switch disconnecter	40A DP	2	<b>40/MI2</b>
Main switch disconnecter	63A DP	2	<b>63/MI2</b>
Main switch disconnecter	100A DP	2	<b>100/MI2</b>
Main switch disconnecter	100A SP	1	<b>100/SP1</b>
Main switch disconnecter c/w tap off terminal	100A DP	2	<b>100/2MT</b>
Direct connection unit	100A DP	2	<b>100/DC2</b>
Direct connection unit	100A SP	1	<b>100/DC1</b>

- IEC 60947-3
- 50mm<sup>2</sup> terminal capacity.

## RCCBs

DESCRIPTION	RATING	RCD TYPE AC	RCD TYPE A
		LIST No	LIST No
Main incoming RCCB	25A DP, 30mA	<b>325/030</b>	<b>325/A030</b>
Main incoming RCCB	40A DP, 30mA	<b>340/030</b>	<b>340/A030</b>
Main incoming RCCB	40A DP, 100mA	<b>340/100</b>	-
Main incoming RCCB	63A DP, 30mA	<b>363/030</b>	-
Main incoming RCCB	80A DP, 30mA	<b>380/030</b>	<b>380/A030</b>
Main incoming RCCB	80A DP, 100mA	<b>380/100</b>	-
Main incoming RCCB	100A DP, 30mA	<b>310/030</b>	<b>310/A030</b>
Main incoming RCCB	100A DP, 100mA	<b>310/100</b>	-
Main incoming TD RCCB	100A DP, 100mA	<b>310/100TD</b>	-
Split-load RCCB	63A DP, 30mA	<b>363/S030</b>	<b>363/AS030</b>
Split-load RCCB	63A DP, 100mA	<b>363/S100</b>	-
Split-load RCCB	80A DP, 30mA	<b>380/S030</b>	<b>380/AS030</b>
Split-load RCCB	80A DP, 100mA	<b>380/S100</b>	<b>380/AS100</b>

- BS EN 61008.
- Electro-mechanical.
- 50mm<sup>2</sup> terminal capacity.

## MINIATURE CIRCUIT BREAKERS

RATING	MODULES	LIST No	
		Type B	Type C
6A	1	<b>61/B06</b>	<b>61/C06</b>
10A	1	<b>61/B10</b>	<b>61/C10</b>
16A	1	<b>61/B16</b>	<b>61/C16</b>
20A	1	<b>61/B20</b>	<b>61/C20</b>
32A	1	<b>61/B32</b>	<b>61/C32</b>
40A	1	<b>61/B40</b>	<b>61/C40</b>
50A	1	<b>61/B50</b>	<b>61/C50</b>

- BSEN 60898 6kA – 240V 50Hz.
- Type B classification (3–5In). Type C classification (5–10In).
- 25mm<sup>2</sup> terminal capacity.

## RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)

RATING	MODULES	LIST No	
		30mA Type B	30mA Type C
6A	1	<b>61/B10630</b>	<b>61/C10630</b>
10A	1	<b>61/B11030</b>	<b>61/C11030</b>
16A	1	<b>61/B11630</b>	<b>61/C11630</b>
20A	1	<b>61/B12030</b>	<b>61/C12030</b>
32A	1	<b>61/B13230</b>	<b>61/C13230</b>
40A	1	<b>61/B14030</b>	<b>61/C14030</b>
50A	1	<b>61/B15030</b>	<b>61/C15030</b>

- EN 61009-1, IEC61009-1.
- 230 (240)V AC 50/60 Hz.
- 16mm<sup>2</sup> terminal capacity.

### CAUTION

These devices are electronic units and should be disconnected from the supply during insulation and earth fault loop impedance testing.

## ACCESSORIES

Blanking Plate	<b>443</b>
Blanking Unit	<b>CSB1</b>
Blanking Plate twist fit	<b>CSBC</b>
MCB Padlocking Device	<b>MCBLD</b>

For Technical information see pages 178-181.



## MAIN SWITCH METAL UNITS

MS Rating	Total MCB/ RCBO Ways	Main Switch	LIST No
40A	2	2	<b>802/2B *</b>
63A	2	2	<b>802/26B *</b>
100A	4	4	<b>804/2B</b>
100A	7	7	<b>807/2B</b>
100A	10	10	<b>810/2B</b>
100A	13	13	<b>813/2B</b>
100A	18	18	<b>818/2B</b>

RCBOs are not recommended for use within 802 units.



## SPLIT LOAD METAL UNITS 100A SWITCH 63A 30mA RCCB

MS Rating	Total Ways	Main Switch	RCCB	LIST No
100A	4	2	2	<b>804/2263B</b>
100A	7	2	5	<b>807/2263B</b>
100A	7	3	4	<b>807/2363B</b>
100A	7	4	3	<b>807/2463B</b>
100A	7	5	2	<b>807/2563B</b>
100A	10	3	7	<b>810/2363B</b>
100A	10	4	6	<b>810/2463B</b>
100A	10	5	5	<b>810/2563B</b>
100A	10	6	4	<b>810/2663B</b>
100A	10	7	3	<b>810/2763B</b>
100A	15	5	10	<b>815/2563B</b>
100A	15	6	9	<b>815/2663B</b>
100A	15	7	8	<b>815/2763B</b>
100A	15	8	7	<b>815/2863B</b>
100A	15	9	6	<b>815/2963B</b>
100A	15	10	5	<b>815/2163B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.



## SPLIT LOAD METAL UNITS 100A SWITCH 80A 30mA RCCB

MS Rating	Total Ways	Main Switch	RCCB	LIST No
100A	7	2	5	<b>807/2283B</b>
100A	7	3	4	<b>807/2383B</b>
100A	7	4	3	<b>807/2483B</b>
100A	7	5	2	<b>807/2583B</b>
100A	10	3	7	<b>810/2383B</b>
100A	10	4	6	<b>810/2483B</b>
100A	10	5	5	<b>810/2583B</b>
100A	10	6	4	<b>810/2683B</b>
100A	10	7	3	<b>810/2783B</b>
100A	15	5	10	<b>815/2583B</b>
100A	15	6	9	<b>815/2683B</b>
100A	15	7	8	<b>815/2783B</b>
100A	15	8	7	<b>815/2883B</b>
100A	15	9	6	<b>815/2983B</b>
100A	15	10	5	<b>815/2183B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.



## TWO BANK SPLIT LOAD METAL UNITS

MS Rating	Total Ways	Main Switch	RCCB 80A 30mA	LIST No
100A	20	10	10	<b>820/283B</b>
100A	26	13	13	<b>826/283B</b>
100A	36	18	18	<b>836/283B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

Flush metal units available upon request.

For components selection & dimensions see **Starbreaker** Components page 140.



808/226363B

## HIGH INTEGRITY DUAL RCD METAL UNITS

MS Rating	Total Ways	Main Switch	RCCB 1		RCCB 2		LIST No
			63A	30mA	63A	30mA	
100A	8	2	3	3	3	3	<b>808/226363B</b>
100A	13	2	6	5	5	5	<b>813/226665B</b>
100A	13	2	7	4	4	4	<b>813/226764B</b>
100A	13	2	8	3	3	3	<b>813/226863B</b>
100A	13	3	5	5	5	5	<b>813/236565B</b>
100A	13	3	6	4	4	4	<b>813/236664B</b>
100A	13	3	7	3	3	3	<b>813/236763B</b>
100A	13	4	5	4	4	4	<b>813/246564B</b>
100A	13	4	6	3	3	3	<b>813/246663B</b>
100A	13	5	4	4	4	4	<b>813/256464B</b>
100A	13	5	5	3	3	3	<b>813/256563B</b>
100A	13	6	4	3	3	3	<b>813/266463B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

RCCB rating variations are available upon request.



813/2637636B

## DUAL RCD SPLIT LOAD METAL UNITS

MS Rating	Total MCB		Main Switch	RCCB 1		RCCB 2		LIST No
	Ways			63A	30mA	63A	30mA	
100A	13	0	0	7	6	6	6	<b>813/2637636B</b>
100A	13	0	0	8	5	5	5	<b>813/2638635B</b>
100A	13	0	0	9	4	4	4	<b>813/2639634B</b>



808/2834634B

## DUAL RCD SPLIT LOAD METAL UNITS

MS Rating	Total MCB		Main Switch	RCCB 1		RCCB 2		LIST No
	Ways			80A	30mA	63A	30mA	
100A	8	0	0	4	4	4	4	<b>808/2834634B</b>
100A	13	0	0	7	6	6	6	<b>813/2837636B</b>
100A	13	0	0	8	5	5	5	<b>813/2838635B</b>
100A	13	0	0	9	4	4	4	<b>813/2839634B</b>



817/26383B

## TWO BANK DUAL RCD SPLIT LOAD METAL UNITS

MS Rating	Total MCB/		Main Switch	RCCB 1		RCCB 2		LIST No
	RCBO	Ways		63A	30mA	80A	30mA	
100A	17	0	0	7	7	10	10	<b>817/26383B</b>
100A	23	0	0	10	10	13	13	<b>823/26383B</b>
100A	33	0	0	15	15	18	18	<b>833/26383B</b>

Flush metal units available upon request.

For components selection & dimensions see *Starbreaker Components* page 140.





807/383B

## RCD INCOMER METAL UNITS

RCCB Rating	Total MCB Ways	RCCB	LIST No
40A 30mA	2	2	<b>802/343B</b>
63A 30mA	2	2	<b>802/363B</b>
80A 30mA	4	4	<b>804/383B</b>
80A 30mA	7	7	<b>807/383B</b>
80A 30mA	10	10	<b>810/383B</b>
100A 30mA	10	10	<b>810/313B</b>
80A 30mA	13	13	<b>813/383B</b>
100A 30mA	13	13	<b>813/313B</b>
80A 30mA	18	18	<b>818/383B</b>
100A 30mA	18	18	<b>818/313B</b>



802/343GU

## RCD INCOMER METAL UNITS WITH MCBs

RCCB Rating	Total MCB Ways	RCCB	MCB 1(B)	MCB 2(B)	LIST No
40A 30mA	2	2	6A	32A	<b>802/343GU</b>
63A 30mA	2	2	6A	32A	<b>802/363GU</b>
63A 30mA	2	2	50A	-	<b>802/363SU</b>



811/282B

## DUAL TARIFF METAL UNITS

Total MCB/RCBO Ways	Main Switch 100A Tariff 1	Main Switch 100A Tariff 2	LIST No
5	3	2	<b>805/232B</b>
8	3	5	<b>808/232B</b>
8	4	4	<b>808/242B</b>
8	5	3	<b>808/252B</b>
8	6	2	<b>808/262B</b>
11	4	7	<b>811/242B</b>
11	5	6	<b>811/252B</b>
11	6	5	<b>811/262B</b>
11	7	4	<b>811/272B</b>
11	8	3	<b>811/282B</b>
16	6	10	<b>816/262B</b>
16	7	9	<b>816/272B</b>
16	8	8	<b>816/282B</b>
16	9	7	<b>816/292B</b>
16	10	6	<b>816/212B</b>
16	11	5	<b>816/2112B</b>



808/22623B

## MULTI TARIFF METAL UNITS

Total MCB/RCBO Ways	Main Switch 100A Tariff 1	Main Switch 100A Tariff 2	Main Switch 100A Tariff 3	LIST No
9	4	1	4	<b>809/242124B</b>
14	7	1	6	<b>814/272126B</b>
14	8	1	5	<b>814/282125B</b>

## SPLIT LOAD DUAL TARIFF METAL UNITS

MS Rating	Total Ways	Main Switch	RCCB 63A 30mA	Main Switch 100A Tariff 2	LIST No
100A	8	2	3	3	<b>808/22623B</b>
100A	13	5	2	6	<b>813/25626B</b>
100A	13	3	6	4	<b>813/23624B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

MS Rating	Total Ways	Main Switch	RCCB 80A 30mA	Main Switch 100A Tariff 2	LIST No
100A	13	3	6	4	<b>813/23824B</b>

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

Flush metal units available upon request.

For components selection & dimensions see *Starbreaker Components* page 140.



100/MI2    100/2MT    100/SP1    100/DC1    100/DC2



380/030    363/S030



61/B06    61/B10    61/B16    61/B20    61/B32    61/B40    61/B50



RCCBs Type B and Type C

## MAIN INCOMING & SPLIT-LOAD DEVICES

DESCRIPTION	RATING	MODULES	LIST No
Main switch disconnecter	40A DP	2	<b>40/MI2</b>
Main switch disconnecter	63A DP	2	<b>63/MI2</b>
Main switch disconnecter	100A DP	2	<b>100/MI2</b>
Main switch disconnecter	100A SP	1	<b>100/SP1</b>
Main switch disconnecter c/w tap off terminal	100A DP	2	<b>100/2MT</b>
Direct connection unit	100A DP	2	<b>100/DC2</b>
Direct connection unit	100A SP	1	<b>100/DC1</b>

- IEC 60947-3
- 50mm<sup>2</sup> terminal capacity.

## RCCBs

DESCRIPTION	RATING	RCD TYPE AC	RCD TYPE A
		LIST No	LIST No
Main incoming RCCB	25A DP, 30mA	<b>325/030</b>	<b>325/A030</b>
Main incoming RCCB	40A DP, 30mA	<b>340/030</b>	<b>340/A030</b>
Main incoming RCCB	40A DP, 100mA	<b>340/100</b>	-
Main incoming RCCB	63A DP, 30mA	<b>363/030</b>	-
Main incoming RCCB	80A DP, 30mA	<b>380/030</b>	<b>380/A030</b>
Main incoming RCCB	80A DP, 100mA	<b>380/100</b>	-
Main incoming RCCB	100A DP, 30mA	<b>310/030</b>	<b>310/A030</b>
Main incoming RCCB	100A DP, 100mA	<b>310/100</b>	-
Main incoming TD RCCB	100A DP, 100mA	<b>310/100TD</b>	-
Split-load RCCB	63A DP, 30mA	<b>363/S030</b>	<b>363/AS030</b>
Split-load RCCB	63A DP, 100mA	<b>363/S100</b>	-
Split-load RCCB	80A DP, 30mA	<b>380/S030</b>	<b>380/AS030</b>
Split-load RCCB	80A DP, 100mA	<b>380/S100</b>	<b>380/AS100</b>

- BS EN 61008.
- Electro-mechanical.
- 50mm<sup>2</sup> terminal capacity.

## MINIATURE CIRCUIT BREAKERS

RATING	MODULES	LIST No	
		Type B	Type C
6A	1	<b>61/B06</b>	<b>61/C06</b>
10A	1	<b>61/B10</b>	<b>61/C10</b>
16A	1	<b>61/B16</b>	<b>61/C16</b>
20A	1	<b>61/B20</b>	<b>61/C20</b>
32A	1	<b>61/B32</b>	<b>61/C32</b>
40A	1	<b>61/B40</b>	<b>61/C40</b>
50A	1	<b>61/B50</b>	<b>61/C50</b>

- BS EN 60898; 6kA – 240V 50Hz.
- Type B classification (3–5In). Type C classification (5–10In).
- 25mm<sup>2</sup> terminal capacity.

## RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)

RATING	MODULES	LIST No	
		30mA Type B	30mA Type C
6A	1	<b>61/B10630</b>	<b>61/C10630</b>
10A	1	<b>61/B11030</b>	<b>61/C11030</b>
16A	1	<b>61/B11630</b>	<b>61/C11630</b>
20A	1	<b>61/B12030</b>	<b>61/C12030</b>
32A	1	<b>61/B13230</b>	<b>61/C13230</b>
40A	1	<b>61/B14030</b>	<b>61/C14030</b>
50A	1	<b>61/B15030</b>	<b>61/C15030</b>

- EN 61009-1, IEC61009-1.
- 230 (240)V AC 50/60 Hz.
- 16mm<sup>2</sup> terminal capacity.

### CAUTION

These devices are electronic units and should be disconnected from the supply during insulation and earth fault loop impedance testing.

## ACCESSORIES

Blanking Plate	<b>443</b>
Blanking Unit	<b>CSB1</b>
Blanking Plate twist fit	<b>CSBC</b>
MCB Padlocking Device	<b>MCLD</b>

For Technical information see pages 178-181.





## COMPONENTS

The Starbreaker domestic circuit protection range was born of an innovative modular concept.

By employing a unique busbar system a balance is achieved between the conventional factory built approach and the time consuming on-site assembly of many individual components.

Starbreaker consumer units can be quickly and easily made up on site by selection of an enclosure, busbar, main incoming device and, if required, RCCBs.





415/0A



815/0A



830/2AF



H915/0W

## ENCLOSURES

The range of enclosures from 4 to 20 modules as all insulated and 4 to 40 modules as metal cased with a steel front cover, all finished in a stylish semi-matt finish.

- Type tested to BS 5486 Part 13: 1989 and BS EN 60439-3 when fully assembled.
- All enclosures are supplied ready prepared for the unique busbar to be easily fitted into place.
- Each enclosure is supplied complete with:
  - 35mm metal DIN rail.
  - Factory-fitted 16mm<sup>2</sup> flexible neutral connection.
  - Installation instructions, unique circuit identification labels and user guide.
  - 16mm<sup>2</sup> earth and neutral bar terminal assembly.
- The neutral lead fitted to all enclosures facilitates siting the main incoming device on the left hand side.
- Suitable for use with control modules.

## ALL INSULATED ENCLOSURES

	H	W	D	
4 Modular ways	160	117	102	<b>404/0A*</b>
6 Modular ways	230	190	120	<b>406/0A</b>
9 Modular ways	230	243	120	<b>409/0A</b>
12 Modular ways	230	294	120	<b>412/0A</b>
15 Modular ways	230	344	120	<b>415/0A</b>
20 Modular ways	230	439	120	<b>420/0A</b>

- Large selection of knock-outs suiting any cable routing – also readily accommodates mini-trunking.

\* Includes Busbar. RCBOs are not recommended for use within 4 mod. enclosures.

## SURFACE METAL CASED

	H	W	D	
4 Modular ways	185	130	97	<b>804/0A*</b>
6 Modular ways	261	188	122	<b>806/0A</b>
9 Modular ways	261	242	122	<b>809/0A</b>
12 Modular ways	261	292	122	<b>812/0A</b>
15 Modular ways	261	343	122	<b>815/0A</b>
20 Modular ways	261	438	122	<b>820/0A</b>
24 Modular ways 2 Bank	506	295	121	<b>824/2A</b>
30 Modular ways 2 Bank	506	345	121	<b>830/2A</b>
40 Modular ways 2 Bank	506	440	121	<b>840/2A</b>

- Raised keyhole slots for easy mounting on uneven surfaces.
- Ample wiring space.
- Adequate knock-outs in robust metal box for side or rear entry of wiring.

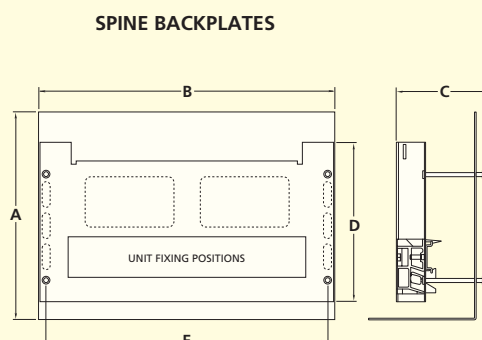
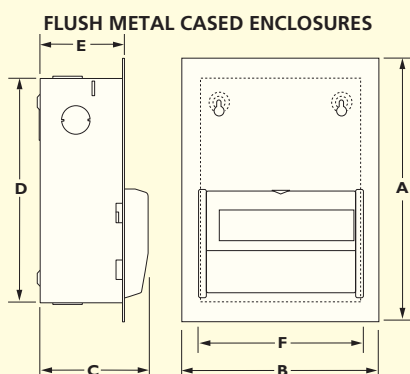
\* Includes Busbar. RCBOs are not recommended for use within 4 mod. enclosures.

## FLUSH METAL CASED

Modular size	A	B	C	D	E	F	
6	300	223	121	255	93	181.5	<b>806/0AF</b>
9	300	276	121	255	93	235	<b>809/0AF</b>
12	300	327	121	255	93	286	<b>812/0AF</b>
15	300	377	121	255	93	336	<b>815/0AF</b>
20	300	472	121	255	93	431	<b>820/0AF</b>
24	540	325	121	500	93	286	<b>824/2AF</b>
30	540	375	121	500	93	336	<b>830/2AF</b>
40	540	472	121	500	93	431	<b>840/2AF</b>

## SPINE BACKPLATE CHASSIS

Modular size	A	B	C	D	E	
15	235	335	106	180	319.5	<b>H915/0W</b>
20	235	448	105	180	435	<b>H920/0W</b>





100/MI2    100/2MT    100/SP1    100/DC1    100/DC2



380/030    363/S030



61/B06    61/B10    61/B16    61/B20    61/B32    61/B40    61/B50



RCBOs Type B and Type C

## MAIN INCOMING & SPLIT-LOAD DEVICES

DESCRIPTION	RATING	MODULES	LIST No
Main switch disconnecter	40A DP	2	<b>40/MI2</b>
Main switch disconnecter	63A DP	2	<b>63/MI2</b>
Main switch disconnecter	100A DP	2	<b>100/MI2</b>
Main switch disconnecter	100A SP	1	<b>100/SP1</b>
Main switch disconnecter c/w tap off terminal	100A DP	2	<b>100/2MT</b>
Direct connection unit	100A DP	2	<b>100/DC2</b>
Direct connection unit	100A SP	1	<b>100/DC1</b>

- IEC 60947-3
- 50mm<sup>2</sup> terminal capacity.

## RCCBs

DESCRIPTION	RATING	RCD TYPE AC	RCD TYPE A
		LIST No	LIST No
Main incoming RCCB	25A DP, 30mA	<b>325/030</b>	<b>325/A030</b>
Main incoming RCCB	40A DP, 30mA	<b>340/030</b>	<b>340/A030</b>
Main incoming RCCB	40A DP, 100mA	<b>340/100</b>	-
Main incoming RCCB	63A DP, 30mA	<b>363/030</b>	-
Main incoming RCCB	80A DP, 30mA	<b>380/030</b>	<b>380/A030</b>
Main incoming RCCB	80A DP, 100mA	<b>380/100</b>	-
Main incoming RCCB	100A DP, 30mA	<b>310/030</b>	<b>310/A030</b>
Main incoming RCCB	100A DP, 100mA	<b>310/100</b>	-
Main incoming TD RCCB	100A DP, 100mA	<b>310/100TD</b>	-
Split-load RCCB	63A DP, 30mA	<b>363/S030</b>	<b>363/AS030</b>
Split-load RCCB	63A DP, 100mA	<b>363/S100</b>	-
Split-load RCCB	80A DP, 30mA	<b>380/S030</b>	<b>380/AS030</b>
Split-load RCCB	80A DP, 100mA	<b>380/S100</b>	<b>380/AS100</b>

- BS EN 61008.
- Electro-mechanical.
- 50mm<sup>2</sup> terminal capacity.

## MINIATURE CIRCUIT BREAKERS

RATING	MODULES	LIST No	
		Type B	Type C
6A	1	<b>61/B06</b>	<b>61/C06</b>
10A	1	<b>61/B10</b>	<b>61/C10</b>
16A	1	<b>61/B16</b>	<b>61/C16</b>
20A	1	<b>61/B20</b>	<b>61/C20</b>
32A	1	<b>61/B32</b>	<b>61/C32</b>
40A	1	<b>61/B40</b>	<b>61/C40</b>
50A	1	<b>61/B50</b>	<b>61/C50</b>

- BS EN 60898; 6kA – 240V 50Hz.
- Type B classification (3–5In). Type C classification (5–10In).
- 25mm<sup>2</sup> terminal capacity.

## RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)

RATING	MODULES	LIST No	
		30mA Type B	30mA Type C
6A	1	<b>61/B10630</b>	<b>61/C10630</b>
10A	1	<b>61/B11030</b>	<b>61/C11030</b>
16A	1	<b>61/B11630</b>	<b>61/C11630</b>
20A	1	<b>61/B12030</b>	<b>61/C12030</b>
32A	1	<b>61/B13230</b>	<b>61/C13230</b>
40A	1	<b>61/B14030</b>	<b>61/C14030</b>
50A	1	<b>61/B15030</b>	<b>61/C15030</b>

- EN 61009-1, IEC61009-1.
- 230 (240)V AC 50/60 Hz.
- 16mm<sup>2</sup> terminal capacity.

### CAUTION

These devices are electronic units and should be disconnected from the supply during insulation and earth fault loop impedance testing.

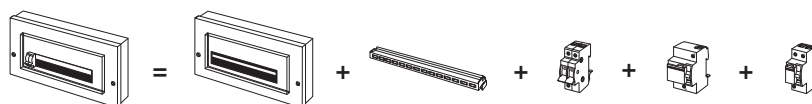
## ACCESSORIES

Blanking Plate	<b>443</b>
Blanking Unit	<b>CSB1</b>
Blanking Plate twist fit	<b>CSBC</b>
MCB Padlocking Device	<b>MCBLD</b>

For Technical information see pages 178-181.



## ALL-INSULATED



Available ways	Consumer unit List No	Surface moulded enclosure	Busbar	Main incoming device	RCCB 1	RCCB 2
2	<b>402/2B</b>	404/0A	Included	40/MI2		
2	<b>402/26B</b>	404/0A	Included	63/MI2		
4	<b>404/2B</b>	406/0A	9060	100/MI2		
7	<b>407/2B</b>	409/0A	9090	100/MI2		
10	<b>410/2B</b>	412/0A	9120	100/MI2		
13	<b>413/2B</b>	415/0A	9150	100/MI2		
18	<b>418/2B</b>	420/0A	9200	100/MI2		
2 + 2	<b>404/2263B</b>	409/0A	9530	100/MI2	363/S030	
2 + 5	<b>407/2263B</b>	412/0A	9560	100/MI2	363/S030	
3 + 4	<b>407/2363B</b>	412/0A	9650	100/MI2	363/S030	
4 + 3	<b>407/2463B</b>	412/0A	9740	100/MI2	363/S030	
5 + 2	<b>407/2563B</b>	412/0A	9830	100/MI2	363/S030	
3 + 7	<b>410/2363B</b>	415/0A	9680	100/MI2	363/S030	
4 + 6	<b>410/2463B</b>	415/0A	9770	100/MI2	363/S030	
5 + 5	<b>410/2563B</b>	415/0A	9860	100/MI2	363/S030	
6 + 4	<b>410/2663B</b>	415/0A	9950	100/MI2	363/S030	
7 + 3	<b>410/2763B</b>	415/0A	9104	100/MI2	363/S030	
5 + 10	<b>415/2563B</b>	420/0A	9811	100/MI2	363/S030	
6 + 9	<b>415/2663B</b>	420/0A	9910	100/MI2	363/S030	
7 + 8	<b>415/2763B</b>	420/0A	9109	100/MI2	363/S030	
8 + 7	<b>415/2863B</b>	420/0A	9118	100/MI2	363/S030	
9 + 6	<b>415/2963B</b>	420/0A	9127	100/MI2	363/S030	
10 + 5	<b>415/2163B</b>	420/0A	9136	100/MI2	363/S030	
2 + 5	<b>407/2283B</b>	412/0A	9560	100/MI2	380/S030	
3 + 4	<b>407/2383B</b>	412/0A	9650	100/MI2	380/S030	
4 + 3	<b>407/2483B</b>	412/0A	9740	100/MI2	380/S030	
5 + 2	<b>407/2583B</b>	412/0A	9830	100/MI2	380/S030	
3 + 7	<b>410/2383B</b>	415/0A	9680	100/MI2	380/S030	
4 + 6	<b>410/2483B</b>	415/0A	9770	100/MI2	380/S030	
5 + 5	<b>410/2583B</b>	415/0A	9860	100/MI2	380/S030	
6 + 4	<b>410/2683B</b>	415/0A	9950	100/MI2	380/S030	
7 + 3	<b>410/2783B</b>	415/0A	9104	100/MI2	380/S030	
5 + 10	<b>415/2583B</b>	420/0A	9811	100/MI2	380/S030	
6 + 9	<b>415/2683B</b>	420/0A	9910	100/MI2	380/S030	
7 + 8	<b>415/2783B</b>	420/0A	9109	100/MI2	380/S030	
8 + 7	<b>415/2883B</b>	420/0A	9118	100/MI2	380/S030	
9 + 6	<b>415/2983B</b>	420/0A	9127	100/MI2	380/S030	
10 + 5	<b>415/2183B</b>	420/0A	9136	100/MI2	380/S030	
2 + 3 + 3	<b>408/226363B</b>	415/0A	-	100/2MT	363/S030	363/030
2 + 6 + 5	<b>413/226665B</b>	420/0A	9576/ST	100/2MT	363/S030	363/030
2 + 7 + 4	<b>413/226764B</b>	420/0A	9585/ST	100/2MT	363/S030	363/030
3 + 5 + 5	<b>413/236565B</b>	420/0A	9666/ST	100/2MT	363/S030	363/030
3 + 6 + 4	<b>413/236664B</b>	420/0A	9675/ST	100/2MT	363/S030	363/030
3 + 7 + 3	<b>413/236763B</b>	420/0A	9684/ST	100/2MT	363/S030	363/030
4 + 5 + 4	<b>413/246564B</b>	420/0A	9765/ST	100/2MT	363/S030	363/030
4 + 6 + 3	<b>413/246663B</b>	420/0A	9774/ST	100/2MT	363/S030	363/030
5 + 4 + 4	<b>413/256464B</b>	420/0A	9855/ST	100/2MT	363/S030	363/030
5 + 5 + 3	<b>413/256563B</b>	420/0A	9864/ST	100/2MT	363/S030	363/030
6 + 4 + 3	<b>413/266463B</b>	420/0A	9957/ST	100/2MT	363/S030	363/030
7 + 6	<b>413/2637636B</b>	420/0A	9387/ST	100/2MT	363/S030	363/030
8 + 5	<b>413/2638635B</b>	420/0A	9396/ST	100/2MT	363/S030	363/030
9 + 4	<b>413/2639634B</b>	420/0A	9315/ST	100/2MT	363/S030	363/030



410/2B



410/2563B

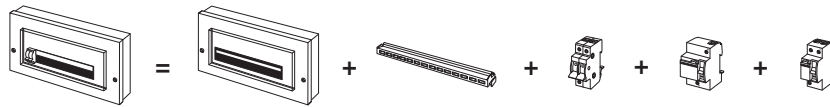


415/2883B



413/236565B

# ALL-INSULATED



Available ways	Consumer unit List No	Surface moulded enclosure	Busbar	Main incoming device	RCCB 1	RCCB 2
4 + 4	<b>408/2834634B</b>	415/0A	-	100/2MT	380/S030	363/030
7 + 6	<b>413/2837636B</b>	420/0A	9387/ST	100/2MT	380/S030	363/030
8 + 5	<b>413/2838635B</b>	420/0A	9396/ST	100/2MT	380/S030	363/030
9 + 4	<b>413/2839634B</b>	420/0A	9315/ST	100/2MT	380/S030	363/030
13	<b>H913/2WB</b>	H915/0W	9150	100/MI2		
4 + 6	<b>H910/2463WB</b>	H915/0W	9770	100/MI2	363/S030	
5 + 5	<b>H910/2563WB</b>	H915/0W	9860	100/MI2	363/S030	
6 + 4	<b>H910/2663WB</b>	H915/0W	9950	100/MI2	363/S030	
4 + 6	<b>H910/2483WB</b>	H915/0W	9770	100/MI2	380/S030	
5 + 5	<b>H910/2583WB</b>	H915/0W	9860	100/MI2	380/S030	
4 + 4	<b>908/2834634WB</b>	H915/0W	-	100/2MT	380/S030	363/S030
2	<b>402/343B</b>	404/0A	Included	340/030		
2	<b>402/363B</b>	404/0A	Included	363/030		
4	<b>404/363B</b>	406/0A	9060	363/030		
4	<b>404/383B</b>	406/0A	9060	380/030		
7	<b>407/383B</b>	409/0A	9090	380/030		
7	<b>407/313B</b>	409/0A	9090	310/030		
10	<b>410/383B</b>	412/0A	9120	380/030		
10	<b>410/313B</b>	412/0A	9120	310/030		
13	<b>413/383B</b>	415/0A	9150	380/030		
13	<b>413/313B</b>	415/0A	9150	310/030		
18	<b>418/383B</b>	420/0A	9200	380/030		
18	<b>418/313B</b>	420/0A	9200	310/030		
3 + 2	<b>405/232B</b>	409/0A	9530	100/MI2 x 2		
3 + 5	<b>408/232B</b>	412/0A	9560	100/MI2 x 2		
4 + 4	<b>408/242B</b>	412/0A	9650	100/MI2 x 2		
5 + 3	<b>408/252B</b>	412/0A	9740	100/MI2 x 2		
6 + 2	<b>408/262B</b>	412/0A	9830	100/MI2 x 2		
4 + 7	<b>411/242B</b>	415/0A	9680	100/MI2 x 2		
5 + 6	<b>411/252B</b>	415/0A	9770	100/MI2 x 2		
6 + 5	<b>411/262B</b>	415/0A	9860	100/MI2 x 2		
7 + 4	<b>411/272B</b>	415/0A	9950	100/MI2 x 2		
8 + 3	<b>411/282B</b>	415/0A	9104	100/MI2 x 2		
6 + 10	<b>416/262B</b>	420/0A	9811	100/MI2 x 2		
7 + 9	<b>416/272B</b>	420/0A	9910	100/MI2 x 2		
8 + 8	<b>416/282B</b>	420/0A	9109	100/MI2 x 2		
9 + 7	<b>416/292B</b>	420/0A	9118	100/MI2 x 2		
10 + 6	<b>416/212B</b>	420/0A	9127	100/MI2 x 2		
11 + 5	<b>416/2112B</b>	420/0A	9136	100/MI2 x 2		
4 + 1 + 4	<b>409/242124B</b>	415/0A	9414/M	100/MI2 x 3		
7 + 1 + 6	<b>414/272126B</b>	420/0A	9716/M	100/MI2 x 3		
8 + 1 + 5	<b>414/282125B</b>	420/0A	9815/M	100/MI2 x 3		
2 + 3 + 3	<b>408/22623B</b>	415/0A	9233/ST	100/MI2 x 2	363/S030	
5 + 2 + 6	<b>413/25626B</b>	420/0A	9837/ST	100/MI2 x 2	363/S030	
3 + 6 + 4	<b>413/23624B</b>	420/0A	9675/ST	100/MI2 x 2	363/S030	
3 + 6 + 4	<b>413/23824B</b>	420/0A	9675/ST	100/MI2 x 2	380/S030	



413/2837636B



H913/2WB

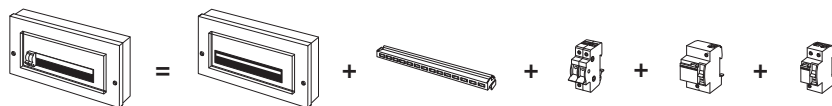


411/262B



408/22623B

## METAL CASED



810/2B



807/2363B



826/283B



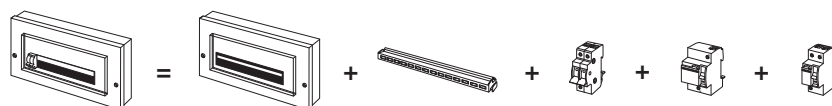
808/226363B

Available ways	Consumer unit List No	Surface metal enclosure	Busbar	Main incoming device	RCCB 1	RCCB 2
2	<b>802/2B</b>	804/0A	Included	40/MI2		
2	<b>802/26B</b>	804/0A	Included	63/MI2		
4	<b>804/2B</b>	806/0A	9060	100/MI2		
7	<b>807/2B</b>	809/0A	9090	100/MI2		
10	<b>810/2B</b>	812/0A	9120	100/MI2		
13	<b>813/2B</b>	815/0A	9150	100/MI2		
18	<b>818/2B</b>	820/0A	9200	100/MI2		
2 + 2	<b>804/2263B</b>	809/0A	9530	100/MI2	363/S030	
2 + 5	<b>807/2263B</b>	812/0A	9560	100/MI2	363/S030	
3 + 4	<b>807/2363B</b>	812/0A	9650	100/MI2	363/S030	
4 + 3	<b>807/2463B</b>	812/0A	9740	100/MI2	363/S030	
5 + 2	<b>807/2563B</b>	812/0A	9830	100/MI2	363/S030	
3 + 7	<b>810/2363B</b>	815/0A	9680	100/MI2	363/S030	
4 + 6	<b>810/2463B</b>	815/0A	9770	100/MI2	363/S030	
5 + 5	<b>810/2563B</b>	815/0A	9860	100/MI2	363/S030	
6 + 4	<b>810/2663B</b>	815/0A	9950	100/MI2	363/S030	
7 + 3	<b>810/2763B</b>	815/0A	9104	100/MI2	363/S030	
5 + 10	<b>815/2563B</b>	820/0A	9811	100/MI2	363/S030	
6 + 9	<b>815/2663B</b>	820/0A	9910	100/MI2	363/S030	
7 + 8	<b>815/2763B</b>	820/0A	9109	100/MI2	363/S030	
8 + 7	<b>815/2863B</b>	820/0A	9118	100/MI2	363/S030	
9 + 6	<b>815/2963B</b>	820/0A	9127	100/MI2	363/S030	
10 + 5	<b>815/2163B</b>	820/0A	9136	100/MI2	363/S030	
2 + 5	<b>807/2283B</b>	812/0A	9560	100/MI2	380/S030	
3 + 4	<b>807/2383B</b>	812/0A	9650	100/MI2	380/S030	
4 + 3	<b>807/2483B</b>	812/0A	9740	100/MI2	380/S030	
5 + 2	<b>807/2583B</b>	812/0A	9830	100/MI2	380/S030	
3 + 7	<b>810/2383B</b>	815/0A	9680	100/MI2	380/S030	
4 + 6	<b>810/2483B</b>	815/0A	9770	100/MI2	380/S030	
5 + 5	<b>810/2583B</b>	815/0A	9860	100/MI2	380/S030	
6 + 4	<b>810/2683B</b>	815/0A	9950	100/MI2	380/S030	
7 + 3	<b>810/2783B</b>	815/0A	9104	100/MI2	380/S030	
5 + 10	<b>815/2583B</b>	820/0A	9811	100/MI2	380/S030	
6 + 9	<b>815/2683B</b>	820/0A	9910	100/MI2	380/S030	
7 + 8	<b>815/2783B</b>	820/0A	9109	100/MI2	380/S030	
8 + 7	<b>815/2883B</b>	820/0A	9118	100/MI2	380/S030	
9 + 6	<b>815/2983B</b>	820/0A	9127	100/MI2	380/S030	
10 + 5	<b>815/2183B</b>	820/0A	9136	100/MI2	380/S030	
10 + 10	<b>820/283B</b>	824/2A	9120 X2	100/2MT	380/030	
13 + 13	<b>826/283B</b>	830/2A	9150 X2	100/2MT	380/030	
18 + 18	<b>836/283B</b>	840/2A	9200 X2	100/2MT	380/030	
2 + 3 + 3	<b>808/226363B</b>	815/0A	-	100/2MT	363/S030	363/030
2 + 6 + 5	<b>813/226665B</b>	820/0A	9576/ST	100/2MT	363/S030	363/030
2 + 7 + 4	<b>813/226764B</b>	820/0A	9585/ST	100/2MT	363/S030	363/030
3 + 5 + 5	<b>813/236565B</b>	820/0A	9666/ST	100/2MT	363/S030	363/030
3 + 6 + 4	<b>813/236664B</b>	820/0A	9675/ST	100/2MT	363/S030	363/030
3 + 7 + 3	<b>813/236763B</b>	820/0A	9684/ST	100/2MT	363/S030	363/030
4 + 5 + 4	<b>813/246564B</b>	820/0A	9765/ST	100/2MT	363/S030	363/030
4 + 6 + 3	<b>813/246663B</b>	820/0A	9774/ST	100/2MT	363/S030	363/030
5 + 4 + 4	<b>813/256464B</b>	820/0A	9855/ST	100/2MT	363/S030	363/030
5 + 5 + 3	<b>813/256563B</b>	820/0A	9864/ST	100/2MT	363/S030	363/030
6 + 4 + 3	<b>813/266463B</b>	820/0A	9957/ST	100/2MT	363/S030	363/030

Flush metal units are available upon request. Flush metal enclosures can be seen on Page 142.



# METAL CASED



Available ways	Consumer unit List No	Surface metal enclosure	Busbar	Main incoming device	RCCB 1	RCCB 2
7 + 6	<b>813/2637636B</b>	820/0A	9387/ST	100/2MT	363/S030	363/S030
8 + 5	<b>813/2638635B</b>	820/0A	9396/ST	100/2MT	363/S030	363/S030
9 + 4	<b>813/2639634B</b>	820/0A	9315/ST	100/2MT	363/S030	363/S030
4 + 4	<b>808/2834634B</b>	815/0A	-	100/2MT	380/S030	363/S030
7 + 6	<b>813/2837636B</b>	820/0A	9387/ST	100/2MT	380/S030	363/S030
8 + 5	<b>813/2838635B</b>	820/0A	9396/ST	100/2MT	380/S030	363/S030
9 + 4	<b>813/2839634B</b>	820/0A	9315/ST	100/2MT	380/S030	363/S030
7 + 10	<b>817/26383B</b>	824/2A	9380/D & 9120	100/2MT	363/S030	380/S030
10 + 13	<b>823/26383B</b>	830/2A	9311/D & 9150	100/2MT	363/S030	380/S030
15 + 8	<b>833/26383B</b>	840/2A	9316/D & 9200	100/2MT	363/S030	380/S030
2	<b>802/343B</b>	804/0A	Included	340/030		
2	<b>802/363B</b>	804/0A	Included	363/030		
4	<b>804/383B</b>	806/0A	9060	380/030		
7	<b>807/383B</b>	809/0A	9090	380/030		
10	<b>810/383B</b>	812/0A	9120	380/030		
10	<b>810/313B</b>	812/0A	9120	310/030		
13	<b>813/383B</b>	815/0A	9150	380/030		
13	<b>813/313B</b>	815/0A	9150	310/030		
18	<b>818/383B</b>	820/0A	9200	380/030		
18	<b>818/313B</b>	820/0A	9200	310/030		
3 + 2	<b>805/232B</b>	809/0A	9530	100/MI2 x 2		
3 + 5	<b>808/232B</b>	812/0A	9560	100/MI2 x 2		
4 + 4	<b>808/242B</b>	812/0A	9650	100/MI2 x 2		
5 + 3	<b>808/252B</b>	812/0A	9740	100/MI2 x 2		
6 + 2	<b>808/262B</b>	812/0A	9830	100/MI2 x 2		
4 + 7	<b>811/242B</b>	815/0A	9680	100/MI2 x 2		
5 + 6	<b>811/252B</b>	815/0A	9770	100/MI2 x 2		
6 + 5	<b>811/262B</b>	815/0A	9860	100/MI2 x 2		
7 + 4	<b>811/272B</b>	815/0A	9950	100/MI2 x 2		
8 + 3	<b>811/282B</b>	815/0A	9104	100/MI2 x 2		
6 + 10	<b>816/262B</b>	820/0A	9811	100/MI2 x 2		
7 + 9	<b>816/272B</b>	820/0A	9910	100/MI2 x 2		
8 + 8	<b>816/282B</b>	820/0A	9109	100/MI2 x 2		
9 + 7	<b>816/292B</b>	820/0A	9118	100/MI2 x 2		
10 + 6	<b>816/212B</b>	820/0A	9127	100/MI2 x 2		
11 + 5	<b>816/2112B</b>	820/0A	9136	100/MI2 x 2		
4 + 1 + 4	<b>809/242124B</b>	815/0A	9414/M	100/MI2 x 3		
7 + 1 + 6	<b>814/272126B</b>	820/0A	9716/M	100/MI2 x 3		
8 + 1 + 5	<b>814/282125B</b>	820/0A	9815/M	100/MI2 x 3		
2 + 3 + 3	<b>808/22623B</b>	815/0A	9233/ST	100/MI2 x 2	363/S030	
5 + 2 + 6	<b>813/25626B</b>	820/0A	9837/ST	100/MI2 x 2	363/S030	
3 + 6 + 4	<b>813/23624B</b>	820/0A	9675/ST	100/MI2 x 2	363/S030	
3 + 6 + 4	<b>813/23824B</b>	820/0A	9675/ST	100/MI2 x 2	380/S030	



813/2637636B



817/26383B



807/383B



811/282B

Flush metal units are available upon request. Flush metal enclosures can be seen on Page 142.

## DOMESTIC CIRCUIT PROTECTION

The inherent flexibility of Loadstar Domestic Circuit Protection enables simple on site configuration of a variety of consumer unit arrangements.





18LC14

## MAIN SWITCH UNITS

Total MCB/ RCBO Ways	MS Rating	Insulated	Metal
1	63A	<b>18LC1*</b>	
2	40A	<b>18LC2*</b>	
2	63A	<b>18LC2/63*</b>	<b>18PS2*</b>
5	100A	<b>18LC5</b>	<b>18PS5</b>
8	100A	<b>18LC8</b>	<b>18PS8</b>
11	100A	<b>18LC11</b>	<b>18PS11</b>
14	100A	<b>18LC14</b>	<b>18PS14</b>
19	100A	<b>18LC19</b>	<b>18PS19</b>

Supplied with Main Switch and Busbar.

Flush Metal versions are available upon request.

\*Single module RCBOs are not recommended for use within 1 & 2 way units.



18PRSL12

## FLEXIBLE SPLIT LOAD UNITS

Total Ways	100A Main Switch	80A 30mA RCCB	Insulated	Metal
6	2 to 4	2 to 4	<b>18LC6SL</b>	-
9	3 to 6	3 to 6	<b>18LC9SL</b>	<b>18PRSL09</b>
12	3 to 9	3 to 9	<b>18LC12SL</b>	<b>18PRSL12</b>
17	5 to 12	5 to 12	<b>18LC17SL</b>	<b>18PRSL17</b>

Supplied with Main Switch, DP RCCB and Busbar.

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

Flush Metal versions are available upon request.



18LC10HI

## FLEXIBLE HIGH INTEGRITY DUAL RCD UNITS

Total Ways	100A Main Switch	80A 30mA RCCB 1	80A 30mA RCCB 2	Insulated	Metal
10	2 to 5	2 to 5	2 to 5	<b>18LC10HI</b>	<b>18PSHI10</b>
15	2 to 9	2 to 9	2 to 9	<b>18LC15HI</b>	<b>18PSHI15</b>

Supplied with Main Switch, Two DP RCCBs and Busbar.

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

Flush Metal versions are available upon request.



18PSDR10

## FLEXIBLE DUAL RCD SPLIT LOAD UNITS

Total MCB Ways	100A Main Switch	80A 30mA RCCB 1	80A 30mA RCCB 2	Insulated	Metal
10	-	4 to 6	4 to 6	<b>18LC10DR</b>	<b>18PSDR10</b>
15	-	6 to 9	6 to 9	<b>18LC15DR</b>	<b>18PSDR15</b>

Supplied with Main Switch, Two DP RCCBs and Busbar.

Flush Metal versions are available upon request.

For dimensions see page 195.





18LC5/80/30

## RCD INCOMER UNITS

Total MCB Ways	RCCB Rating	Insulated	Metal
1	63A 30mA	<b>18LC1/63/30</b>	
2	63A 30mA	<b>18LC2/63/30</b>	<b>18PR2/63/30</b>
5	80A 30mA	<b>18LC5/80/30</b>	<b>18PR5/80/30</b>
8	80A 30mA	<b>18LC8/80/30</b>	<b>18PR8/80/30</b>
11	80A 30mA	<b>18LC11/80/30</b>	<b>18PR11/80/30</b>
14	80A 30mA	<b>18LC14/80/30</b>	<b>18PR14/80/30</b>
19	80A 30mA	<b>18LC19/80/30</b>	<b>18PR19/80/30</b>

Supplied with DP RCCB and Busbar.



18SB12SL

## ASSEMBLED SPINE BACKPLATES

### MAIN SWITCH

Total MCB / RCBO Ways	100A Main Switch	LIST No
14	14	<b>18SB14</b>

Supplied with Main Switch and Busbar.

### FLEXIBLE SPLIT LOAD

Total Ways	100A Main Switch	80A RCCB	LIST No
12	3 to 9	3 to 9	<b>18SB12SL</b>

Supplied with Main Switch, DP RCCB and Busbar.

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.



18SB10HI

### FLEXIBLE HIGH INTEGRITY DUAL RCD

Total Ways	100A Main Switch	80A RCCB 1	80A RCCB 2	LIST No
10	2 to 5	2 to 5	2 to 5	<b>18SB10HI</b>

Supplied with Main Switch, Two DP RCCBs and Busbars.

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs.

### FLEXIBLE DUAL RCD SPLIT LOAD

Total MCB Ways	100A Main Switch	80A RCCB 1	80A RCCB 2	LIST No
10	-	4 to 6	4 to 6	<b>18SB10DR</b>

Supplied with Main Switch, Two DP RCCBs and Busbars.

For dimensions see page 195.



## MINIATURE CIRCUIT BREAKERS

RATING	POLES	MODULES	LIST No	
			Type B	Type C
6A	1	1	<b>6MSB06</b>	<b>6MSC06</b>
10A	1	1	<b>6MSB10</b>	<b>6MSC10</b>
16A	1	1	<b>6MSB16</b>	<b>6MSC16</b>
20A	1	1	<b>6MSB20</b>	<b>6MSC20</b>
32A	1	1	<b>6MSB32</b>	<b>6MSC32</b>
40A	1	1	<b>6MSB40</b>	<b>6MSC40</b>
50A	1	1	<b>6MSB50</b>	<b>6MSC50</b>

- BS EN 60898; 6kA-240V 50Hz
- Type B classification (3-5 In). Type C classification (5-10In)
- 25mm<sup>2</sup> terminal capacity



## RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)

RATING	POLES	MODULES	LIST No	
			30mA Type B	30mA Type C
6A	1	1	<b>6FSR06/30B</b>	<b>6FSR06/30C</b>
10A	1	1	<b>6FSR10/30B</b>	<b>6FSR10/30C</b>
16A	1	1	<b>6FSR16/30B</b>	<b>6FSR16/30C</b>
20A	1	1	<b>6FSR20/30B</b>	<b>6FSR20/30C</b>
32A	1	1	<b>6FSR32/30B</b>	<b>6FSR32/30C</b>
40A	1	1	<b>6FSR40/30B</b>	<b>6FSR40/30C</b>
50A	1	1	<b>6FSR50/30B</b>	<b>6FSR50/30C</b>

- BS EN 61009
- 230 (240)V AC 50/60 Hz
- 16mm<sup>2</sup> terminal capacity (outgoing)



## SP & SWN RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)

RATING	POLES	MODULES	LIST No	
			30mA Type C	
6A	2	2	<b>6FSNR063/C</b>	
10A	2	2	<b>6FSNR103/C</b>	
16A	2	2	<b>6FSNR163/C</b>	
20A	2	2	<b>6FSNR203/C</b>	
32A	2	2	<b>6FSNR323/C</b>	
40A	2	2	<b>6FSNR403/C</b>	

- BS EN 61009
- 230 (240)V AC 50/60 Hz
- 16mm<sup>2</sup> terminal capacity (outgoing)

## ACCESSORIES

Description	LIST No
MCB Padlocking Device	<b>MCBLD</b>
Blanking Piece	<b>443</b>
Blanking Unit	<b>CSB1</b>
Blanking Unit twist fit	<b>CSBC</b>



## TRIPLE POLE & NEUTRAL 415V 50Hz AC

Description BS EN 60947-3	LIST No
With switched Neutral for surface mounting within a metal enclosure. 133mm x 114mm x 61mm	<b>1932</b>
With switched Neutral for flush mounting within a metal enclosure. 150mm x 125mm x 61mm	<b>1932/F</b>

## DP DOMESTIC SWITCH FUSE

Description	LIST No
DP Domestic Switch Fuse complete with 63A fuse	<b>191002/63</b>
DP Domestic Switch Fuse complete with 80A fuse	<b>191002/80</b>
DP Domestic Switch Fuse complete with 100A fuse	<b>191002/100</b>

The Crabtree Domestic Switch Fuse has a robust steel construction and is complete with a 100A Double Pole Isolator and either 63A, 80A or 100A BS88 Fuse.

Approximate dimensions: Height 305mm, Width 178mm, Depth 76mm

For Technical Information see pages 178-181





# MODULAR CONTROL DEVICES

35mm DIN rail mounting control devices including contactors, time switches and bell transformers.





## SILENT OPERATION INSTALLATION CONTACTORS

TYPE	Thermal Rating per Pole AC1(A)	Motor Rating AC3 (kW)		Pole Configuration		LIST No
		230V	400V	N/O	N/C	
CIK22	20	1.3 NO 0.75 NC	–	2 1 0	0 1 2	1 Mod [ CIK22-20 CIK22-11 CIK22-02
CIK24	25	2.2 1.3*	4	4 3 2 0	0 1 2 4	2 Mod [ CIK24-40 CIK24-31 CIK24-22 CIK24-04
CIK40	40	5.5 3.7*	11	4 3 2 0	0 1 2 4	3 Mod [ CIK40-40 CIK40-31 CIK40-22 CIK40-04
CIK63	63	8.5 5.0*	15	4 3 2 0	0 1 2 4	3 Mod [ CIK63-40 CIK63-31 CIK63-22 CIK63-04
Auxiliary Contacts (CIK40 & 63 Only)						
		230V	400V			
		AC15				
	6	4	–	–	1 2	1 0
						CHHSLA11 CHHSLA20

\* Data for single-phase power is valid for version -22

		MAXIMUM NUMBER OF LAMPS PER POLE			
TYPE		CIK22	CIK24	CIK40	CIK63
Incandescent lamps	60W	33	33	65	85
	100W	20	20	40	50
	200W	10	10	20	25
	500W	3	3	8	10
	1000W	1	1	4	5
Energy saving lamps	7W	40	50	120	160
	11W	30	40	100	140
	15W	20	30	85	115
	20W	17	22	65	85
Halogen lamps	200W	10	10	20	25
	300W	6	6	13	16
	500W	3	3	8	10
	1000W	1	1	4	5
Low pressure sodium-vapour lamps (uncompensated)	35W	7	9	23	30
	55W	7	9	23	30
	90W	4	5	14	19
	135W	3	4	10	13
	180W	3	4	10	13
High pressure sodium-vapour lamps (uncompensated)	50W	12	12	24	38
	70W	10	10	20	30
	110W	8	7	18	26
	150W	5	6	17	22
	250W	3	4	10	13
	400W	2	2	6	8
	1000W	–	1	3	3
Low pressure sodium-vapour lamps (compensated)	35W	1	1	11	16
	55W	1	1	11	16
	90W	1	1	8	12
	135W	–	–	4	7
	180W	–	–	4	7
High pressure sodium-vapour lamps (compensated)	50W	3	3	22	33
	70W	2	3	18	27
	110W	2	2	18	27
	150W	1	1	11	16
	250W	–	1	6	10
	400W	–	–	4	6
	1000W	–	–	2	3
Fluorescent lamps (uncompensated)	18W	22	24	90	140
	36W	17	20	65	95
	58W	14	17	45	70
Fluorescent lamps (compensated)	18W	7	8	48	73
	36W	7	8	48	73
	58W	4	5	31	47
Fluorescent lamps (dual fitted)	18W	2 x 30	2 x 40	2 x 100	2 x 150
	36W	2 x 17	2 x 24	2 x 65	2 x 95
	58W	2 x 10	2 x 15	2 x 40	2 x 60
Fluorescent lamps with electronic starting device AC - operation	1 x 18W	25	35	100	140
	1 x 36W	15	20	52	75
	1 x 58W	14	19	50	72
	2 x 18W	12	17	50	70
	2 x 36W	7	10	26	38
	2 x 58W	7	9	25	36

For dimensions see page 198



## DIGITAL TIMESWITCHES

DESCRIPTION	MODULES	LIST No
1 Channel Digital Timeswitch	1	<b>301/TD1</b>
1 Channel Digital Timeswitch	2	<b>302/TD1</b>
2 Channel Digital Timeswitch	2	<b>302/TD2</b>
1 Channel Digital Astro Timeswitch + plus data key facility	2	<b>402/TD1</b>
2 Channel Digital Astro Timeswitch + plus data key facility	2	<b>402/TD2</b>
1 Channel Digital Astro Timeswitch + plus data key facility	2	<b>502/TD1</b>
2 Channel Digital Astro Timeswitch + plus data key facility	2	<b>502/TD2</b>
1-7 min Staircase Timeswitch	1	<b>301/S7</b>



## SOFTWARE

DESCRIPTION	LIST No
Software	<b>USB/S</b>
Data Key	<b>4/5DK</b>
Data Key	<b>6DK</b>



## ANALOGUE TIMERS

DESCRIPTION	MODULES	LIST No
24hr Analogue Quartz	1	<b>301/TQ24</b>
24hr Analogue Quartz	3	<b>303/TQ24</b>
7 Day Analogue Quartz	3	<b>303/TQ7</b>
24hr Analogue Synchronous	1	<b>301/TS11</b>
24hr Analogue Synchronous	3	<b>303/TS24</b>



## BELL TRANSFORMER

DESCRIPTION	MODULES	LIST No
12V bell transformer	2	<b>303/B12</b>
6V bell transformer	1	<b>301/B6</b>
8V bell transformer	1	<b>301/B8</b>
12V bell transformer	1	<b>301/B12</b>

- With overload protection.

## TWILIGHT SWITCH

DESCRIPTION	MODULES	LIST No
2-2000 lux c/w sensor	3	<b>303/P2</b>

- Sensor to IP54.
- Control modules can be installed in Starbreaker enclosures either as part of the consumer unit or separately mounted.

For dimensions see page 198



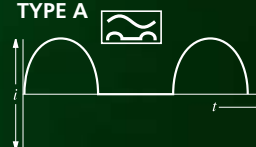


# LIFESTAR

## RESIDUAL CURRENT DEVICES

Crabtree RCDs comply fully with BS EN 61008 to Type A and Type AC classification.

TYPE A



Pulsating dc (half wave rectified) waveform



Pulsating dc (chopped) waveform



Pulsating dc (chopped) waveform with a constant dc component

TYPE AC



Normal ac waveform

Lifestar offers you the protection of Residual Current Devices (RCDs) for any industrial, commercial or domestic application. RCDs rated from 13A to 100A are available in sensitivities from 10mA to 300mA providing safe, secure protection against fire or shock risks caused by earth fault currents.




Suitable for screw fixing or DIN rail mounting. Wide range of enclosures available for separately mounting RCCBs, MCBs and RCBOs.






226/030

## 2 POLE RESIDUAL CURRENT CIRCUIT BREAKERS

TYPE AC 		SENSITIVITY		
CURRENT RATING (A)	MODULES	30mA	100mA	300mA
32	2	<b>223/030</b>	-	-
40	2	<b>224/030</b>	<b>224/100</b>	<b>224/300</b>
63	2	<b>226/030</b>	<b>226/100</b>	<b>226/300</b>
80	2	<b>228/030</b>	<b>228/100</b>	-
100	2	<b>221/030</b>	<b>221/100</b>	<b>221/300</b>


## 2 POLE TYPE AC TIME DELAY

TYPE AC 		SENSITIVITY		
CURRENT RATING (A)	MODULES	100mA		
100	2	<b>221/100TD</b>		




241/030

## 4 POLE RESIDUAL CURRENT CIRCUIT BREAKERS

TYPE AC 		SENSITIVITY		
CURRENT RATING (A)	MODULES	30mA	100mA	300mA
32	4	<b>243/030</b>	-	-
40	4	<b>244/030</b>	<b>244/100</b>	<b>244/300</b>
63	4	<b>246/030</b>	<b>246/100</b>	<b>246/300</b>
100	4	<b>241/030</b>	<b>241/100</b>	<b>241/300</b>


## 4 POLE TYPE AC TIME DELAY

TYPE AC 		SENSITIVITY		
CURRENT RATING (A)	MODULES	100mA		
100	4	<b>241/100TD</b>		




241/100TD

## 2 POLE RESIDUAL CURRENT CIRCUIT BREAKERS

TYPE A 		SENSITIVITY	
CURRENT RATING (A)	MODULES	10mA	30mA
16	2	<b>216/A010</b>	-
32	2	<b>223/A010</b>	-
40	2	-	<b>224/A030</b>
63	2	-	<b>226/A030</b>
80	2	-	<b>228/A030</b>
100	2	-	<b>221/A030</b>

## 4 POLE RESIDUAL CURRENT CIRCUIT BREAKERS

TYPE A 		SENSITIVITY	
CURRENT RATING (A)	MODULES	10mA	30mA
40	4	-	<b>244/A030</b>
63	4	-	<b>246/A030</b>
100	4	-	<b>241/A030</b>

## SP & SWN RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)

RATING	MODULES	TYPE C 30mA
6	2	<b>2FSNR063/C</b>
10	2	<b>2FSNR103/C</b>
16	2	<b>2FSNR163/C</b>
20	2	<b>2FSNR203/C</b>
32	2	<b>2FSNR323/C</b>
40	2	<b>2FSNR403/C</b>



2FSNR063/C

For dimensions see page 197



## 13A SAFETY SOCKETS WITH RCD PROTECTION

The Lifestar safety socket is available in 2 gang versions with 30mA sensitivity, enabling products to be precisely matched to specific applications. All safety sockets incorporate pulsating dc fault current protection (Type A operation).

- Double pole operation, 3mm contact gap.
- Trip free mechanism for automatic disconnection of supply.
- Enables mounting in standard 25mm deep box (moulded variant).
- Mechanical indication of contact position.
- Unique labyrinth switch design minimises visible arc flash and prevents front access to live parts.
- Surface mounted units supplied with Birch Grey mounting box.
- Interior units available for mounting into OEM equipment.
- Comply with BS 7288.
- RCD sockets are all passive in operation and will not trip on loss of mains supply.



4406/A03

### MOULDED

PACK QTY

2 gang switched with neon indicator, 30mA tripping current 1 **4406/A03**

**Dimensions** 146mm x 86mm

**Mounting boxes** 9048 surface, SB665 flush galv. or SB629 dry lining



### FLUSH METAL PLATE\*

PACK QTY

2 gang switched with neon indicator, 30mA tripping current 1 **4416/A03 \_ \***

**Dimensions** 146mm x 86mm

**Mounting boxes** 9223/BG surface, SB625 flush galv. or SB629 dry lining

\* Metal plate variants available in Satin Chrome (SC), Bronze (BZ) and Polished Stainless Steel (PSS) – Add suffix to List No. eg 4416/A03SC.  
For further specification details of finishes see page 202.



4416/A03BZ

### INTERIOR

PACK QTY

2 gang switched with neon indicator, 30mA tripping current 1 **4416/A103**

For dimensions see page 197



4416/A103

### SURFACE METALCLAD

PACK QTY

2 gang switched with neon indicator, 30mA tripping current 1 **4426/A03BG**

**Dimensions** 142mm x 82mm x 44mm



4426/A03BG

### FLUSH METALCLAD

PACK QTY

2 gang switched with neon indicator, 30mA tripping current 1 **4416/A03BG**

**Dimensions** 146mm x 86mm

**Mounting boxes** 9223/BG surface, SB625 flush galv. or SB629 dry lining



4416/A03BG

All complete with two earth terminals.

# DIN ENCLOSURES

35mm DIN rail enclosures to accept modular devices.





744/3

CBE/3

## MODULAR ENCLOSURES

### 3 MODULE

DESCRIPTION	LIST No
General purpose enclosure (IP20)	<b>744/3</b>
<ul style="list-style-type: none"> <li>• Complete with DIN rail.</li> <li>• Supplied with cut-out of 2 module size.</li> <li>• Converts to 3 module by removing half blanks.</li> </ul>	
All purpose enclosure (IP65)	<b>CBE/3</b>
<ul style="list-style-type: none"> <li>• Complete with DIN rail.</li> <li>• Features sealable cover and hinged protective cover.</li> <li>• Polycarbonate construction.</li> <li>• Accessories available.</li> <li>• Self-adhesive way label provided.</li> </ul>	

#### Note

Max cable capacity 10mm<sup>2</sup>. For increased cable sizes use 4 module enclosure List No. **CBE/4** (up to 25mm<sup>2</sup>).



744/4

844/4

### 4 MODULE

DESCRIPTION	LIST No
General purpose enclosure (IP20)	<b>744/4</b>
<ul style="list-style-type: none"> <li>• Complete with DIN rail.</li> <li>• Supplied with cut-out of 3 module size.</li> <li>• Converts to 4 module by removing half blanks.</li> </ul>	
All purpose enclosure (IP65)	<b>CBE/4</b>
<ul style="list-style-type: none"> <li>• Suitable for <b>all ratings</b>.</li> <li>• Complete with DIN rail.</li> <li>• Features sealable cover and hinged protective cover.</li> <li>• Polycarbonate construction.</li> <li>• Accessories available.</li> <li>• Self-adhesive way label provided.</li> </ul>	
Fabricated steel enclosure (IP20)	<b>844/4</b>
<ul style="list-style-type: none"> <li>• Suitable for <b>all ratings</b>.</li> <li>• Complete with DIN rail and earth terminal.</li> <li>• Supplied with blank plates for converting to 2 module opening.</li> </ul>	



CBE/BS

CBE4/EK

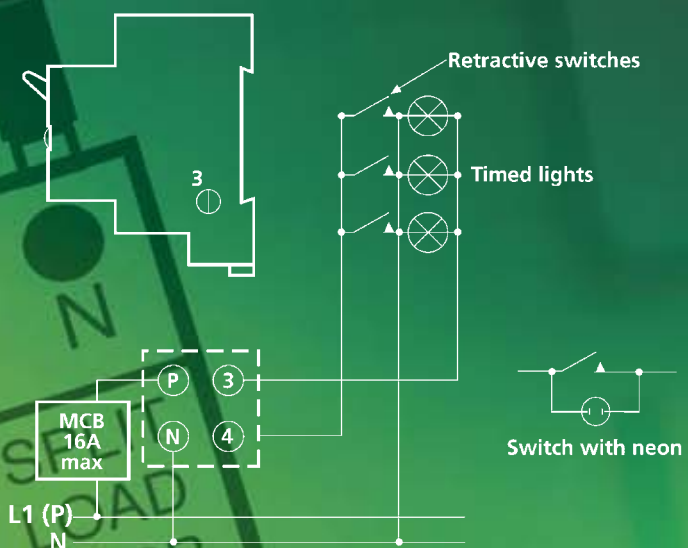
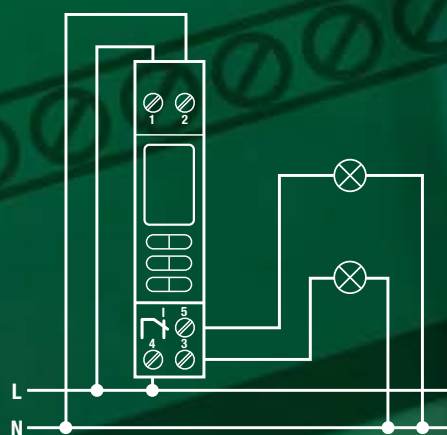
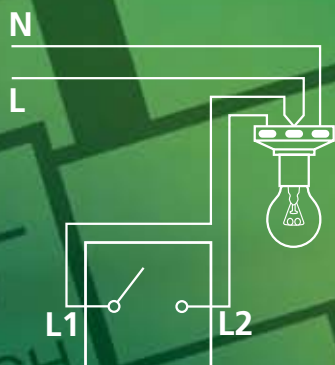
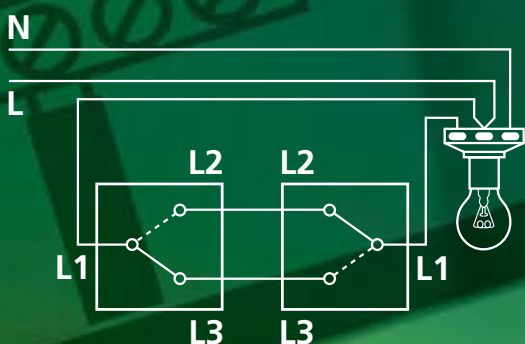
### ACCESSORIES FOR ALL PURPOSE ENCLOSURES

EARTH TERMINAL	LIST No
5 way, 3 module	<b>CBE3/EK</b>
7 way, 4 module	<b>CBE4/EK</b>
NEUTRAL TERMINAL	
5 way, 3 module	<b>CBE3/NK</b>
7 way, 4 module	<b>CBE4/NK</b>
Blanking strip	<b>CBE/BS</b>
External fixing bracket	<b>ME/FB</b>

Dimensions see page 199.



# TECHNICAL DATA



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## IP RATINGS

The IP (International Protection) rating given to an enclosure states the degree of protection it offers by means of two digits. A summary of these is shown below; for a more detailed definition, see IEC 529: 1989, BS EN 60529: 1992.

### FIRST DIGIT

Protection against solid foreign objects and access to hazardous parts

The first digit covers protection against penetration by solid objects, which includes hands and tools such as screwdrivers. At the lowest of seven levels, 0, no protection is offered, either of the equipment itself from damage by intrusion or of a person contacting live or moving parts. At the highest, 6, there shall be no entry of dust.

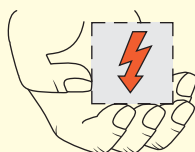
IP

0



No protection

1



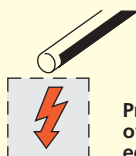
Protected against solid objects up to 50mm eg accidental touch by hands

2



Protected against solid objects up to 12mm eg fingers

3



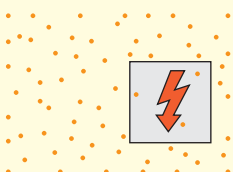
Protected against solid objects over 2.5mm eg tools and wires

4



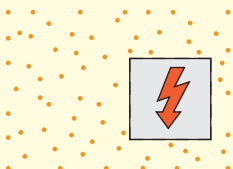
Protected against solid objects over 1mm eg tools, wires and small wires

5



Protected against dust – limited ingress, no harmful deposits

6



Totally protected against dust

### SECOND DIGIT

Protection against ingress of water

The second digit covers the degree of protection against the entry of water, on a progressive scale. For example, number 1 indicates that dripping water shall have no harmful effect, and number 6, that water projected in powerful jets against the enclosure from any direction shall have no harmful effects.

IP

0



No protection

1



Protected against vertically falling drops of water eg condensation

2



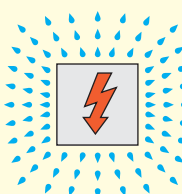
Protected against direct sprays of water up to 15° from the vertical

3



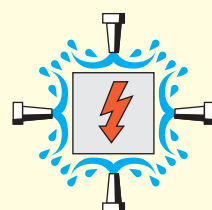
Protected against sprays of water up to 60° from the vertical

4



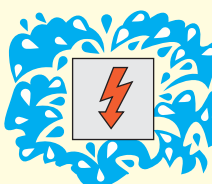
Protected against water splashed from all directions – limited ingress permitted

5



Protected against low pressure jets of water from all directions – limited ingress permitted

6



Protected against strong jets of water eg for use on ship decks – limited ingress permitted

The letter X can be used in place of the first or second digit to indicate that tests have either not been made or are not applicable.

#### NOTE

In the event of additional holes being drilled/pierced or knockouts removed, suitable measures should be taken to restore the products to the original ratings.

IEC 529, BS EN 60529 does not apply to protection against the risk of explosion or conditions such as humidity, corrosive gases, fungi or vermin.

In certain cases equipment designed to be mounted in an enclosure will contribute towards the stated IP rating (eg pushbuttons mounted in an enclosure).

Different parts of enclosures can have different degrees of protection and still conform to the standard (eg enclosures with pre-drilled conduit entry).



## WIRING ACCESSORIES – GENERAL

### BRITISH STANDARDS

An unqualified reference to the British Standards in this product catalogue indicates that the products referred to are marked with the British Standard and therefore comply in all respects with the standard stated.

Where a qualification is given against the British Standard, eg BS 3676 where applicable, this means that there is no specific standard for the product in question and it has been tested as far as possible for compliance with the standard indicated.

### TERMINAL CAPACITIES (mm<sup>2</sup>)

Product	Quantity and gauge of cable accepted by terminals
13A Capital/Platinum socket outlets 13A Capital safety sockets 13A Capital/Platinum fused conn. units	3 x 2.5mm <sup>2</sup> , 2 x 4mm <sup>2</sup> , 2 x 6mm <sup>2</sup>
13A Panel mounting socket	3 x 2.5mm <sup>2</sup> , 2 x 4mm <sup>2</sup> , 1 x 6mm <sup>2</sup>
10AX Capital/Platinum plate switches 10A Capital architrave switches	4 x 1mm <sup>2</sup> , 3 x 1.5mm <sup>2</sup> , 1 x 2.5mm <sup>2</sup>
20A Capital/Platinum DP switches 32A Capital/Platinum DP switches	3 x 2.5mm <sup>2</sup> , 2 x 4mm <sup>2</sup> , 1 x 6mm <sup>2</sup> , 1 x 10mm <sup>2</sup>
32A Capital TP & N switches 45A Capital/Platinum DP switches	2 x 6mm <sup>2</sup> , 1 x 10mm <sup>2</sup> , 1 x 16mm <sup>2</sup>
50A Capital DP switches 45A Capital/Platinum cooker control units	2 x 6mm <sup>2</sup> , 1 x 10mm <sup>2</sup> , 1 x 16mm <sup>2</sup>
Capital/Platinum shaver supply unit Capital light/shaver unit 6A Capital ceiling switches	4 x 1mm <sup>2</sup> , 3 x 1.5mm <sup>2</sup>
16A Capital ceiling switches	2 x 2.5mm <sup>2</sup> max
50A Capital ceiling switch	3 x 2.5mm <sup>2</sup> , 2 x 4mm <sup>2</sup> , 1 x 6mm <sup>2</sup> , 1 x 10mm <sup>2</sup>
Capital ceiling roses Capital safety batten lampholder	1.5mm <sup>2</sup> multiway
Capital safety pendant lampholder	1 x 1mm <sup>2</sup> flexible cable
16A Minder PIR sensor	6 x 1mm <sup>2</sup> , 4 x 1.5mm <sup>2</sup> , 2 x 2.5mm <sup>2</sup>

### 6A TP ISOLATING SWITCH

**LIST No. 4017, 4017/1, 6017/\_ \_ , 7017/\_ \_ , 1017/1\_ \_ , IN/3017/1\_ \_ & 4587/BG**

Complies fully with requirements of BS EN 60947-3 for switch disconnectors.

Rated SC making capacity	300A
Rated conditional short circuit current	6kA (when protected by Starbreaker 6A mcb)
Rated insulation voltage	300V
Rated impulse withstand voltage	2.5kV
Rated duty	Uninterrupted
Maximum switching rate	120 switch cycles per hour
Rated short time withstand current	100A for 1 second
Utilisation category	AC 23B, 6A 250V 50Hz

### A POINT ON TESTING

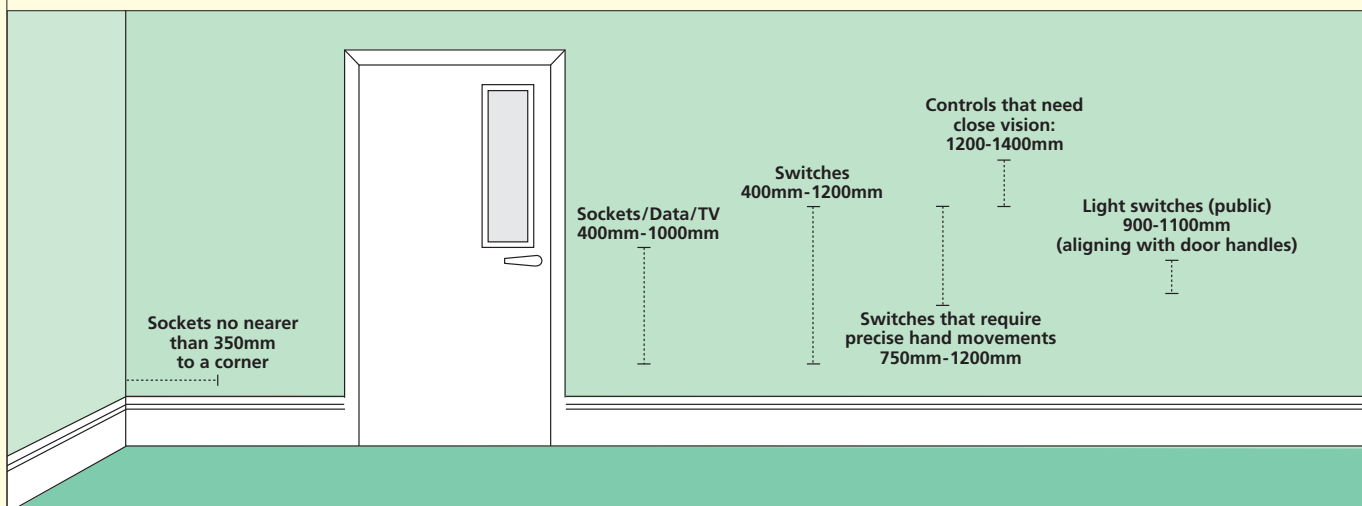
When installations incorporating electronic devices of the semi-conductor type are being tested, care must normally be taken to ensure that they are not subjected to the output voltage of an insulation tester. However, dimmer switches complying with BS 5518 will not be damaged by the application of a normal 500V insulation resistance test. In all other cases where electronic items are fitted, they should be disconnected whilst the insulation of the installation is tested. A notice, drawing attention to the fact that electronic devices are incorporated in the installation, should always be affixed at the intake position. This also applies to any neon indicators fitted.

There are a number of considerations that need to be met by the specifier or contractor of a buildings installation when covering reasonable provision for the access to and use of a buildings structure and facilities for a disabled person whether visiting, working or dwelling in them. Crabtree have continually been introducing and developing products throughout their range of wiring accessories to enable compliance with Part M.

### Part M can be split into four sections:

- Height
- Visibility
- Operation
- Freedom from obstruction

### MOUNTING HEIGHT AND POSITION



- Socket outlets, Telephone points and TV sockets are mounted at 400 - 1000mm with a preference for the lower range.
- Switches should be mounted at 400 - 1200mm unless needed at a higher level for particular appliances.
- Switches and controls that require precise hand movement (eg: Central Heating Controls) at 750 - 1200mm.
- Controls that need close vision at 1200 - 1400mm so that readings may be taken by a person sitting or standing.
- Light Switches for use by the general public align horizontally with door handles within the range 900 - 1100mm.
- Sockets no nearer than 350mm from room corners.

### DESIGN CONSIDERATIONS

- There should be a consistent relationship with the doorways and corners to reinforce the ease with which people manipulate switches and controls.
- All users should be able to locate a control, know which setting it is on and use it without inadvertently changing its setting.
- Controls that contrast with their surroundings are more convenient for the visually impaired as are light switches that are activated by a large touch pad.
- It is an advantage if individual switches on panels and multiple socket outlets are well separated, or in the form of large touch plates to avoid the incorrect selection of an adjacent control by visually impaired people and people with limited dexterity.
- The colours red and green should not be used in combination as indicators of "on" and "off" for switches and controls. It may be useful to use text or a pictogram to clarify.

### Visibility

- Front plates should contrast visually with their backgrounds.
- Mains and circuit isolator switches should indicate clearly if they are on or off.
- Switched socket outlets should indicate whether they are on.

Some may consider these requirements refer to the complete product contrasting with a wall, whilst others

may consider it is the switch that should contrast with its frontplate. The regulation states that switches, outlets and controls will satisfy requirement M1 if: front plates contrast visually with their background.

The Crabtree Seek light assists in locating light switches in the dark.

Crabtree have considered both options in their product range of Platinum, the products can either have contrasting rocker to frontplate which then could contrast with the back wall, or just contrast of frontplate and wall.

## Operation

- Light switches, which are to be used by the general public are encouraged to have large rockers at a height corresponding to the door handle, within the 900 - 1100mm range.

This would enable people with a physical disability or visual impairment to both locate and activate them easily.

The Crabtree range of electrical wiring accessories all come with a large concave rocker, with the 'Corinthian' range having an extra wide rocker.

## Freedom from obstruction

- Light switches and controls should be 'well separated' or activated by a large push pad to prevent inadvertent operation.
- The operation of switches, outlets and controls does not require the simultaneous use of both hands, except where this mode of operation is necessary for safety reasons.

Where several switches on panels are required.

In addition the Crabtree Rockergrid range provides a wide choice of switch options.

### CRABTREE PRODUCT SELECTOR



#### Corinthian

A range of wide rocker 10AX lighting switches with clip on surrounds that can be provided in alternative colours to meet a variety of LRV values.

#### Seek Light

The Crabtree Seek Light as shown above assists in the location of the light switches in the dark. Seek light comes on when the switch is turned off. Seek light fits all Crabtree 1 gang switches.

The circuit has been designed to reduce the pulse effect of the LED light and give a constant light source.



#### Rockergrid

This modular system of boxes, grids, plates and switches can be quickly and easily assembled to customers' individual specifications enabling several circuits to be controlled from a single position.

The switches are a modular design that has a large concave rocker with a barrier between to avoid inadvertent selection of adjacent controls.



#### Platinum White Moulded

A range of power, control and lighting accessories offering a low profile clip on moulded front plate.

This range can be supplied with alternative colour front plates to contrast with the moulded rocker or can be combined with the Platinum decorative plates and interiors to provide a visual contrast.

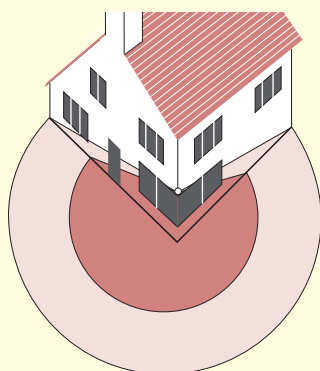
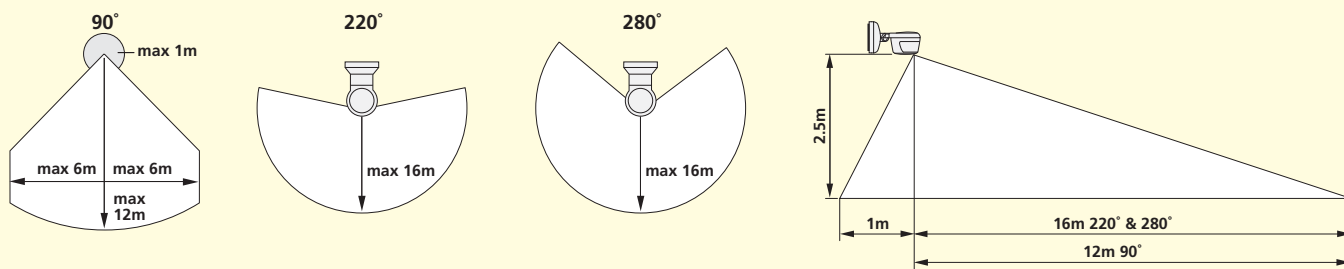
Although the product ranges mentioned aim to meet the design considerations for Part M compliance, Crabtree would be prepared to discuss any future development on a project by project basis and assist, where possible, with any other requirements.



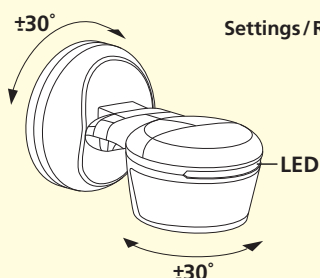
## MINDER PASSIVE INFRA RED SENSORS

The Minder is a multi-adjustable, passive infrared movement detector. People and animals radiate heat, which is invisible to the human eye (infrared range). Consequently, the recorded infrared energy pattern changes when they enter the detection zone

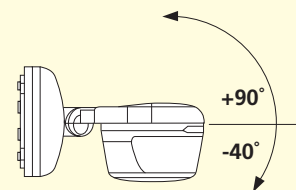
DETECTION RANGE DIAGRAMS



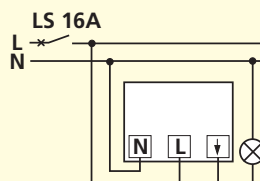
Minder 280



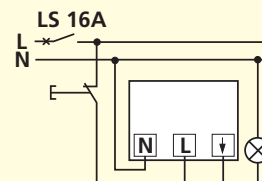
Settings/Restrictions of detection



Standard Connection



With Break Switch



### TECHNICAL DATA

	90°	220°	280°
Horizontal range of detection			
Max. frontal range	12m	16m	16m
Max. bilateral range	6m	16m	10m
Water protection	IP55	IP55	IP55
Switch off delay	1 - 3 - 5min	10 sec - 30min	10 sec - 30min
Dusk sensor, in Lux	3/15/Lux	0,5 - 300/Lux	0,5 - 300/Lux
Switching Capacity	3680 W/VA	3680 W/VA	3680 W/VA
Max switching Current	16AX	16AX	16AX
Operating Temperature	-25°C - +55°C	-25°C - +55°C	-25°C - +55°C

### INSTALLATION

The Minder functions optimally when installed lateral to walking direction. When selecting the installation site, ensure that:

- The minder is not covered by rigid or moveable objects (e.g. roofing elements, branches of tree, etc.).
- When unit is installed above, or lateral to luminaires, a minimum distance is always allowed between the unit and the luminaire, in order to prevent maloperation.
- when the unit is installed below luminaires, it is not heated up as a result of radiant heat from the luminaire.

When mounted at a height of 2.5m, the detection range is as above mentioned, though deviations in the mounting height cause changes in the detection range. In the case of special conditions at the site (e.g. rows of trees, small plot of land, proximity to road, etc.) the enclosed masking strip can be used to restrict the detection range by sticking it on the Minder lens.

### MINDER FAULT FINDING ANALYSIS

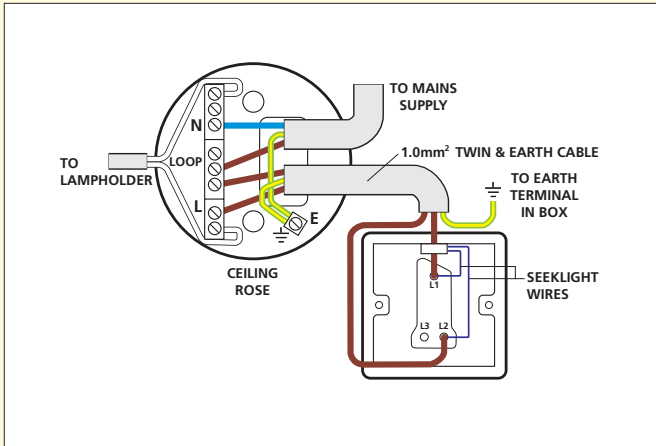
NATURE OF FAULT	REASON FOR FAULT	REMEDY
Minder does not operate	Lens covered or dirty	Check power supply, uncover and/or clean lens
Inadvertent operation of Minder	Hot air or smoke e.g. out of kitchens activate Minder	Install Minder at a different location
Lamp is permanently on	Permanent movement in the monitored area	Make sure that no heat source is in the detection zone and wait until adjusted time lapse has run down.. For control purposes, please cover the lens completely.
	Minder is bridged to manual operation by additional switch	Switch to automatic operation

## SEEKLIGHT

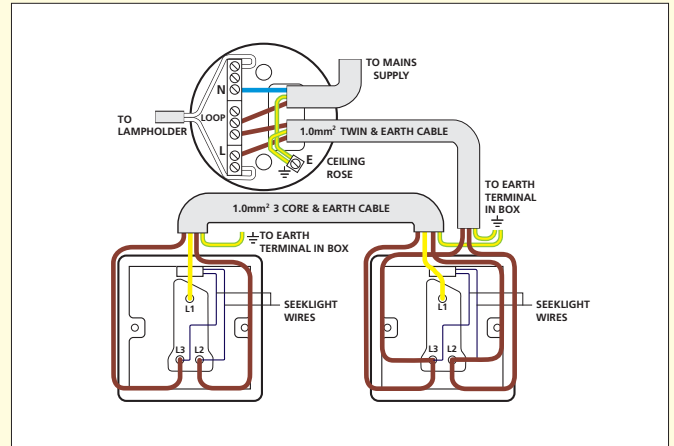
- 1 Before commencing work switch off the power supply by removing the fuse in the fuse box, or should isolate at main switch as neutral is a live conductor.
- 2 Connect seeklight wires as shown in diagrams below. Ensure terminal screws are properly tightened and no bare wire is visible. Push back unit into mounting box making sure conductors are not trapped.
- 3 Screw the unit to the mounting box.
- 4 Note: With the standard wiring configurations as described in the diagrams the Seeklight will only illuminate when the light it controls is off.
- 5 These products must be installed in accordance with the latest Building and IEE wiring regulations. If in any doubt, please contact a qualified electrician

**PLEASE NOTE** The LED 'Seeklight' must be disconnected when carrying out insulation testing to avoid a false reading

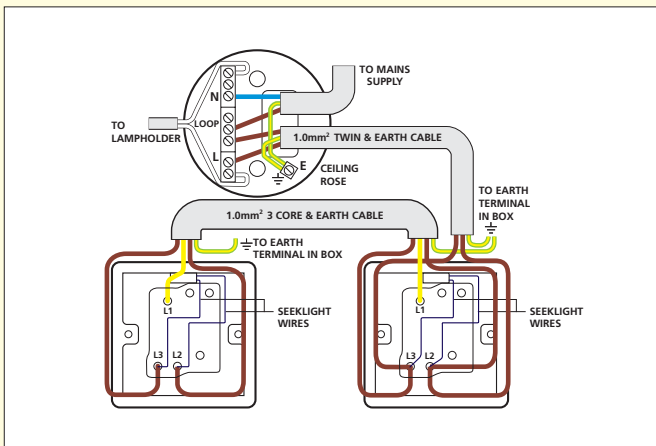
### 1 Gang 1 Way 10AX Switch with Seeklight



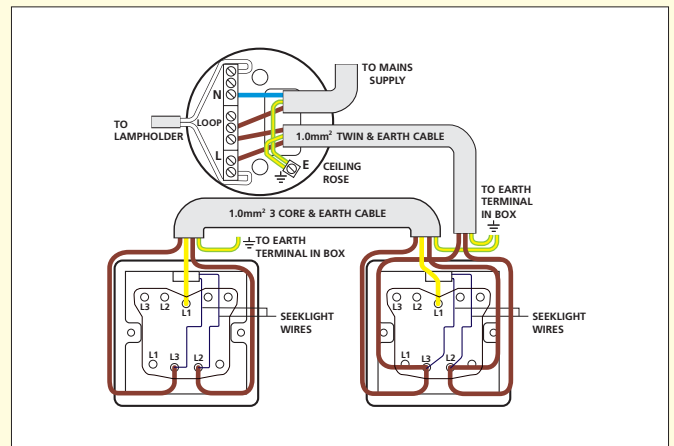
### 1 Gang 2 Way 10AX Switch with Seeklight



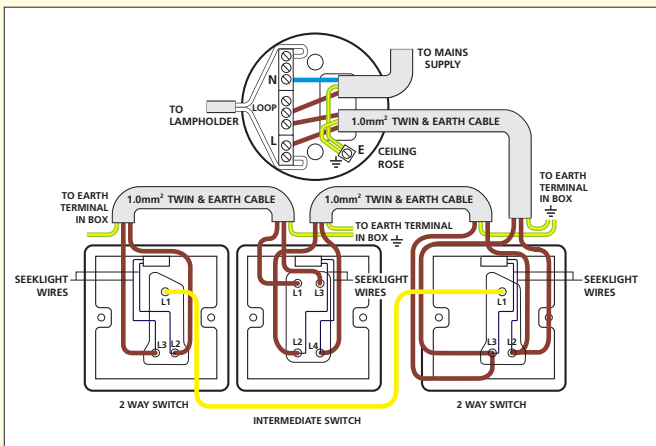
### 2 Gang 2 Way 10AX Switch with Seeklight



### 3 Gang 2 Way 10AX Switch with Seeklight



### 10AX Intermediate Switch with Seeklight



GRID DIMMER

GRID LED BACKLIGHT ILLUMINATION



LED Illumination without Dimmer knob



LED Illumination with Dimmer knob fitted



Dimmer shown fitted to Grid

SPECIFICATION AND PERFORMANCE

Model No. (2-way Push Sw)	See Page 89 for Selection
Rated Voltage /V ac	230-240V ac - 10% +6%
Supply Frequency /Hz	50Hz / 60 Hz
Rated Current /A	1.5A max.
Rated Power /W & VA	60W to 250W & 60W to 400W
Neutral Required	No
Fluorescent compatible	No
GU10 Mains Halogen compatible	Yes
LV Transformer compatible	Yes, Limited Electronic & Electromagnetic
2 Way Switch	Standard Two-Way switch for On/Off function
Turn On/Off operation style	Push On/Push Off
Dimming operation	Full rotary travel by smooth turning
Outline Dimensions	See Drawing
Standards & Approval	EN60669-2-1, EN55015, EN61547, EN61000
Special Feature	Blue LED backlight option
RoHS Compliant	Yes

ENERGY SAVING CARD SWITCH

BS 60669-12



Card switch shown illuminated. Insertion of the card turns the neon off. Ideal for helping locate card switch in hotel corridors. Available in Crabtree Capital moulded, Capital Metal Plate & Platinum Low Profile.

Controls energy consumption in installations such as hotels by ensuring that appliances are not left on when rooms are unoccupied. Mains Voltage Card Switch is operated by a door entry card and controls the supply to a room via a suitably rated contactor. Will accept door entry cards up to 86mm x 54mm x 1mm.

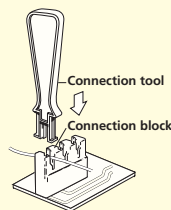


## CAPITAL TELEPHONE SOCKET OUTLETS

The Crabtree Capital range of Telephone Socket Outlets has been developed primarily for use in telephone systems using British Telecom standards. The products are similar in specification to units available from British Telecom.

### TERMINATIONS

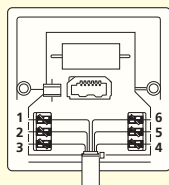
All telephone outlets should be wired in accordance with the wiring diagrams shown below. Connection of these telephone outlets is by the IDC (Insulation Displacement Connection) method allowing one or two equal size cables (0.40–0.68mm) to be terminated per connection block, using Crabtree connection tool List No.6915 as shown below.



- Allow 50mm cable 'tails' at each connection block
- Push home in direction of arrow with connection tool
- Excess cable may be trimmed using wire cutters

### WIRING COLOUR CODE

Pin number	Base colour/strip
1	Green/White
2	Blue/White
3	Orange/White
4	White/Orange
5	White/Blue
6	White/Green

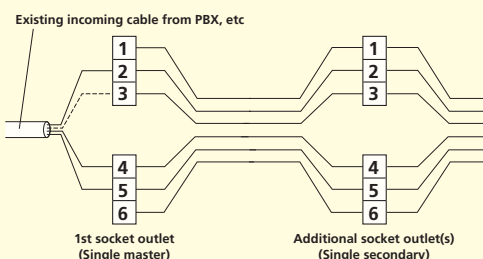


### WIRING DIAGRAMS

Example of typical connections:

- 1 Connections to 2 & 5
- 2 Earth recall (when used) connect to terminal 4
- 3 Connection to terminal 3 is not usually required

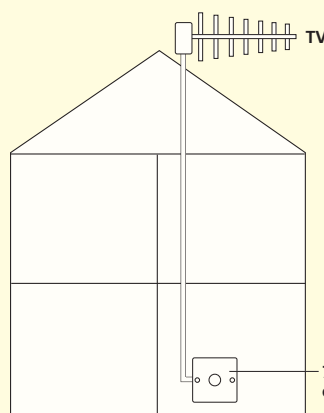
- NB** (a) Standard 4 wire cable is shown below as incoming cable. If terminals 1 and 6 (normally unused) are required, 6 wire cable may be used.
- (b) All socket outlet connections are in parallel – any number of socket outlets can be connected, but it is recommended that only a maximum of 5 telephones be used at any one time on one line.



As seen from rear

## CO-AXIAL SOCKET OUTLETS

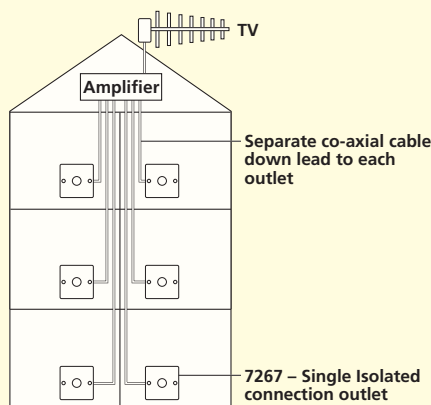
In order to comply with the latest EMC directives, all installations containing amplification systems or comprising multiple co-axial socket outlets must be fitted with appropriate earth bonding. Isolated Co-Axial Sockets are isolated 2kV.



*Note*  
If additional outlets are required, an amplifier should be used. Each outlet is then wired separately to the amplifier.

7265 – Single Direct connection outlet

Single connection outlet  
Domestic installation



Co-axial outlet installation  
Communal aerial system eg flats, hotels etc

### WARNING NOTES

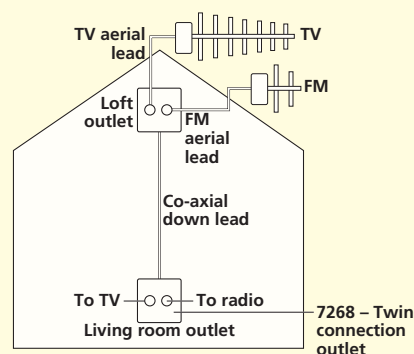
In order to comply with current Wiring Regulations, metal faceplate telephone socket outlets must be within the 'equipotential zone' of the building they are located in. Therefore an earth terminal is fitted to metal plate units which should be connected to the electrical installation's earthing system.

#### Testing

- (a) Connect cables as shown in wiring diagram
- (b) Plug in telephones
- (c) Lift receivers and check for dial tone
- (d) Make an incoming call to check bells work
- (e) If circuit does not work, disconnect and check thoroughly before reconnecting

#### Note

Unauthorised connection of telephone socket outlets to wiring owned by British Telecom is an offence. Further information concerning the requirements of a telephone system installation can be obtained from the Department of Industry or the telephone equipment supplier.



TV/FM outlet installation

TV and FM aerial connections use a twin connection outlet (7268) and one co-axial down lead. 1 Fit a co-axial connector to the TV and FM aerial cables. 2 Plug connectors into 7268 in loft. 3 Connect a co-axial cable run between back of 7268 in loft and back of 7268 in the living room, then plug TV and FM radio into front of plate.

7268 – Twin connection outlet

## LUMINAIRE SUPPORT COUPLERS



5012 rear view

### Technical details:

Terminal capacity: 4x2.5mm<sup>2</sup>, 2x4mm<sup>2</sup>, 1x6mm<sup>2</sup> per outlet terminal

Standards: BS7001

BS5733 general electrical requirements

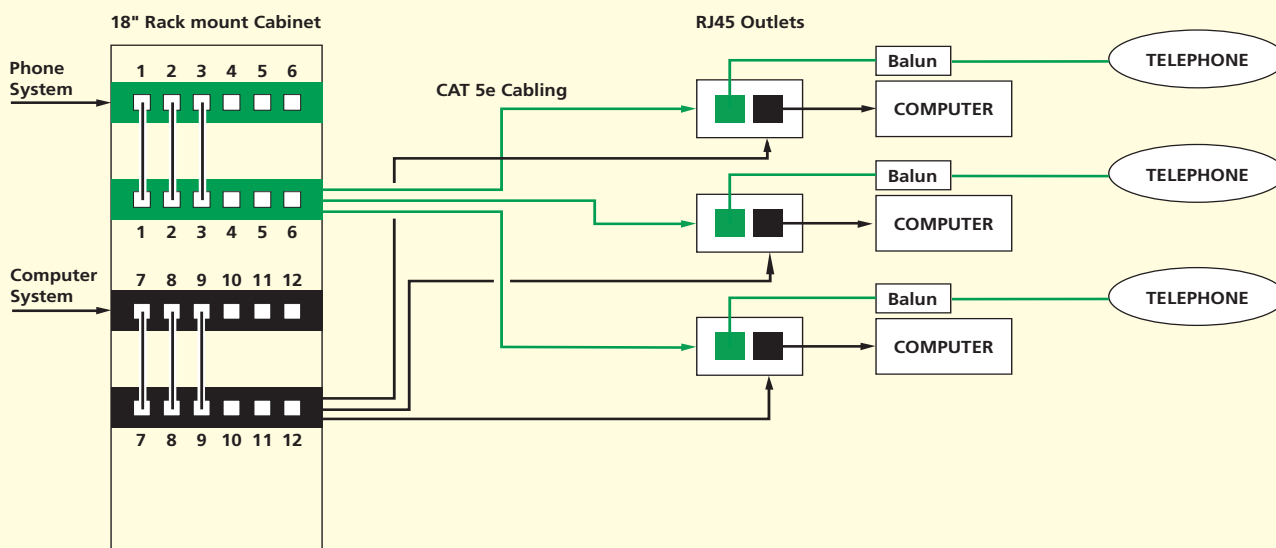
Note: BS 6972 only covers LSC's rated upto 6A 250V

Rating: max 10A 250V per socket, 16A max per distribution box

Static load: 5kg

The LSC is forming an integral part of design installations for many major projects. In new installations the specifier may choose LSCs to offer a versatile lighting system. However, in projects where refurbishment is being undertaken the LSC system is seen as an ideal cost effective solution where hard wiring may already be in place.

## DATAPAK TYPICAL USE OF PATCH PANELS, PATCH LEADS & DATA OUTLETS



### TELECOM MODULES

- Master voice module - BT 601 master
  - IDC connectors (Krone style)
  - Capacitor, lightning protection, resistor
- PABX voice module - IDC connectors
  - Capacitor, no lightning protection, (resistor optional)
- Secondary voice module - IDC connectors
- Master voice module (left handed) - BT 601 master
  - IDC connectors
  - Capacitor, lightning protection, resistor
  - Accepts left handed plug

### DATA MODULES

- RJ45 Cat 5e - IDC connector blocks
  - Colour coding - socket/cable/patch panel
  - Tie wrap facility
  - Use as socket on ISDN system, multiple sockets "daisy-chained"
- ISDN Terminated (blue shutter) - RJ45 socket with 100 ohm resistor between pins 4 & 5 and one between pins 3 & 6
  - Ratio 8:1 use
- RJ11/12 - clasified as data outlet, but used as telecom socket in Eire & USA
  - No capacitor accepts 6p6c plug (RJ12) and 6p4c plug (RJ11)

### MEDIA MODULES AND ACCESSORIES

- Triplex unit - TV/SAT/FM splitter. One cable in, carrying combined signals, splits signal back into 3 parts. Each socket is screened, reducing susceptibility to noise distortion thus improving picture reception. 50mm x 50mm (double mod size)
- TV return - screened TV module, used in conjunction with a distribution amplifier to distribute signals to other rooms
- BNC (female) - accepts BNC male plug, 50 ohm or 70 ohm, as found on co-axial data systems (RG58, Ethernet) and CCTV installations.

### BAND WIDTH/CAT

- Cat 4 - 20Mhz
- Cat 5 - 100Mhz
- Cat 5e - 160Mhz
- Cat 6 - 250Mhz

## WIRING ACCESSORIES – METAL PLATE SPECIFICATION

### CAPITAL



#### Capital Bronze (BZ)

Base metal Mild Steel

- Process
- 1 Linished and brushed
  - 2 Electrophoretically lacquered
  - 3 Stoved



#### Capital Satin Chrome (SC)

Base metal Mild Steel

- Process
- 1 Linished and brushed
  - 2 Nickel-chrome plated and lanolin wiped



#### Highly Polished Chrome (HPC)

Base metal Mild Steel

- Process
- 1 Polished plate
  - 2 Electrophoretically laquered
  - 3 Stoved



#### Capital Polished Brass (PB)

Base metal Mild Steel

- Process
- 1 Polished plate
  - 2 Electrophoretically laquered
  - 3 Stoved



#### Polished Stainless Steel (PSS)

Base metal Stainless Steel

- Process
- 1 Polished plate



#### Industrial Grey (BG)

Base metal Mild Steel

- Process
- 1 Iron phosphated
  - 2 Epoxy polyester powder coated



#### Stainless Steel (SS)

Base metal Stainless Steel

### PLATINUM LOW PROFILE



#### Satin Chrome (SC)

Base metal Mild Steel

White interior as standard



#### Polished Brass (PB)

Base metal Mild Steel

Black interior as standard



#### Highly Polished Chrome (HPC)

Base metal Mild Steel

Black interior as standard



#### Black Nickel (BKN)

Base metal Mild Steel

Black interior as standard

### PLATINUM FLAT PLATE



#### Stainless Steel (SS)

Base metal Stainless Steel

White interior as standard



#### Polished Brass (PB)

Base metal Mild Steel

Black interior as standard



#### Polished Stainless Steel (PSS)

Base metal Stainless Steel

Black interior as standard

## CFL COMPACT FLUORESCENT LAMPHOLDER

The design of the Lampholder accepts an industry standard 4 pin 10,13 and 18W G24q<sup>1</sup> and q<sup>2</sup> lamp. This reduces the power consumption, when compared to an equivalent incandescent lamp, by up to 80%.

The Lampholder is designed to European standards and has a diameter of 42mm, which is larger than the typical Lampholder which is 29mm.

A Safety feature which protects the installation will disconnect the supply to the Lampholder:-

During a lamp change, when no lamp is present, or in the case of lamp failure at the end of lamp life.

This Safety feature is reset by switching the supply to the fitting off for 10 to 15 seconds.



Crabtree wiring accessories prefixed with AM have all been independently tested to BS ISO 22196:2007, which is for the measurement of antibacterial activity on plastic surfaces.

Crabtree use Biocote technology which has undergone 25 years life cycle testing.

The Heartlands study showed a 94.5% reduction in bacteria on Crabtree products as opposed to other untreated switches/sockets.

## BIOCOTE REDUCES BACTERIA LEVELS BY OVER 95% IN WARD AT HEARTLANDS HOSPITAL

The first ever study to investigate the effectiveness of silver at reducing levels of bacteria in an environment has published its initial findings. The environmental trial compares two out-patient wards in the Heart of England NHS Foundation Trust, one at Heartlands Hospital, containing furniture and equipment with BioCote® antimicrobial protection and one containing standard, untreated items.

BioCote® protected products contain silver, a natural antimicrobial, with a high Efficacy against bacteria, mould and fungi. When micro-organisms come into contact with the silver, their ability to reproduce is inhibited and they die.

Results from the trials show that **the facility at Heartlands, which contained BioCote® protected products had 95.8% less bacteria present in the environment, than the standard ward with no BioCote® present.** The products tested in the trials included waste bins, blinds, tiles, door handles and light switches.

Initial indications show that using silver-based products in a hospital environment can lead to a reduction in bacterial colonisation, resulting in a more hygienic environment for patients. With fewer bacteria in the environment, it is logical that the risks of cross contamination are reduced and consequently the risks of patients being infected with “superbugs” such as MRSA are reduced.

In addition, the results showed that **within the facility at Heartlands, furniture and equipment with BioCote® protection harboured 92.6% less bacteria than those without protection.** These results prove that silver can complement cleaning and hygiene practices, working in-between cleans to reduce levels of bacteria on BioCote® protected equipment.

The study also showed that BioCote® protected products can help reduce bacteria counts on unprotected products within their vicinity, thus reducing the overall levels of bacteria in the complete environment. **Standard equipment and furniture which were in the ward alongside BioCote® protected products saw a 43.5% reduction in bacteria on their surfaces, than standard products in the ward without Biocote®.**

The collaboration between the Heart of England NHS Foundation Trust and BioCote Ltd began in May 2006, when Heartlands Hospital was the first in the UK to equip an out-patient facility with furniture and equipment that had BioCote antimicrobial protection. As soon as the facility had been in use for 12 months, tests began to compare the products with and without BioCote® protection and also to compare the facility to a similar ward which only contains standard hospital equipment.

To make the study as consistent as possible, both environments were out-patient wards with a similar through-flow of patients. All testing was carried out at an independent laboratory. The study has concentrated on bacteria counts on the surface of objects, in the form of Total viable count and does not identify actual organisms at this stage.

The Managing Director at BioCote Ltd comments, “We believe that this initial study in conjunction with the NHS helps to justify the use of BioCote® protected products. These initial findings indicate that the NHS should be increasing their use of BioCote® protected products to help support hygiene practices within healthcare environments, leading to reduced HCAI rates”.

With NHS Trusts facing increased pressure from The Healthcare Commission to improve hygiene standards, BioCote® protected products can complement cleaning and hand hygiene practices by lowering bacteria counts in ward environments.

## STANDARDS

Manufactured to comply with the requirements of BS4678: Part 4 (1982) and BSEN 50085-1 (1999). The Electrium group of companies is registered for assessed capability to ISO 9001:2000 & ISO 14001:2004. The WARWICK range complies with all requirements of the 17th Edition of the IEE Regulations.

### MANUFACTURE

All trunking components are manufactured from PVCu material. Base sections, covers and bus-bar base sections are extruded.

Bends, corners, stop ends, joint covers and accessory boxes are formed by injection moulding.

Flat angles and tees are factory pre-fabricated from standard profiles.

### STRENGTH

High impact resistant. The material is formulated to comply with BS4678 Part 4 (1982). Temperature classification -5 to +60°C for permanent application range.

### FINISH

Manufactured in White Semi-gloss finish.

### FIRE RESISTANCE

The PVCu used in WARWICK trunking is non-propagating and complies with the requirements of BS476 parts 5 & 7 and BS4678 Part 4.

### DEGREE OF PROTECTION

IP4X

### THERMAL PROPERTIES

Water Absorbtion – Negligible

Mineral Acids – Excellent

Detergents – Excellent

*Note:*

Some solvents such as Ketones, Aromatics and Hydrocarbons should not be used on PVC trunking

### CABLE CAPACITIES

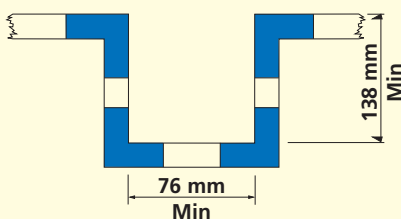
Please refer to the IEE Wiring Regulations 17th Edition

### INSTALLATION RECOMMENDATIONS

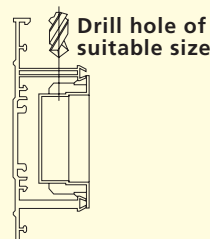
- 1) The base section and extension base (if used) should be plug and screw fixed to the wall ensuring washers are used behind the screw head for a more secure fix.
  - 2) All joints should have a 5mm gap to allow for expansion and base section corners should be mitred. The cutting of the base sections is not critical as the manufactured fittings cover the joints and overlap the trunking lids.
  - 3) For cutting it is recommended that a fine tooth tenon or hacksaw is used. Use a sharp knife or file for trimming.
  - 4) Socket and data boxes can be positioned and wiring can begin.
  - 5) On completion of all wiring, the covers, joint covers etc can be inserted.
  - 6) Finally, all power/data/telephone accessories can be wired and fixed.
- The Earth Loop Impedance Test can now be carried out.

### INSTALLATION TIPS

Installation around columns.



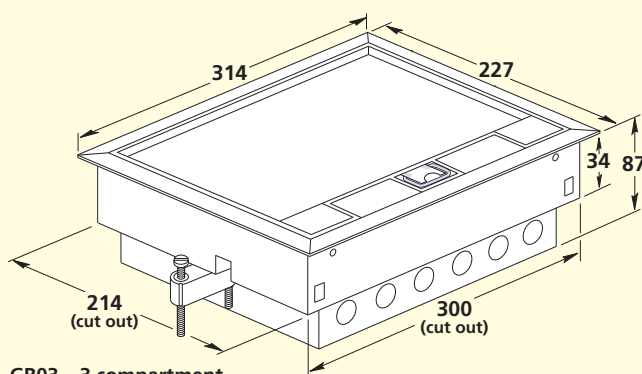
Accessory Boxes



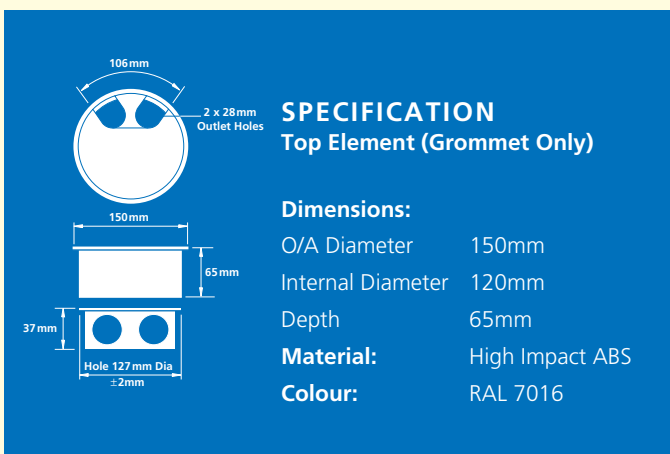
All boxes are on the same plain. Therefore, holes should be drilled from top or bottom to accommodate data and telephone cabling.



GROSVENOR 'FAST FIT' RAISED ACCESS FLOOR BOXES



GR03 – 3 compartment  
GR04 – 4 compartment



### SPECIFICATION Top Element (Grommet Only)

<b>Dimensions:</b>	
O/A Diameter	150mm
Internal Diameter	120mm
Depth	65mm
<b>Material:</b>	High Impact ABS
<b>Colour:</b>	RAL 7016

## Materials

All systems are constructed from high quality materials and are designed to meet relevant British and International Standards including the installation requirements of the IEE Wiring Regulations.

## Raised Access Floors

Throughout this catalogue the term Raised Access Floor has been used to describe any modular flooring system which is supported on adjustable pedestals providing a service void. Other names frequently used are Cavity Floor, False Floor, Platform Floor, Access Floor, Computer Floor, etc.

## GROSVENOR RAISED ACCESS FLOOR BOXES

### Floorboxes

The Grosvenor floorbox has been designed to withstand working loads of the PSA MOB PF2 PS/SPU specification for raised floors.

The floorboxes listed within this catalogue are capable of accepting a very wide range of accessories fitted in any compartment. However, certain combinations do impose restrictions on positioning, due to the clashes of connectors, plug tops or the cables themselves.

### Accessories

All accessory plates are supplied complete with the appropriate thread cutting screws. Each fixing hole in the unit frames is unthreaded and deep plunged for ease of location of fixing. The minimum plug clearance between accessory plate and underside of floor is 34mm.

#### POWER (13A)

Twin Earth sockets.  
Non-standard sockets.  
Clean Earth sockets.

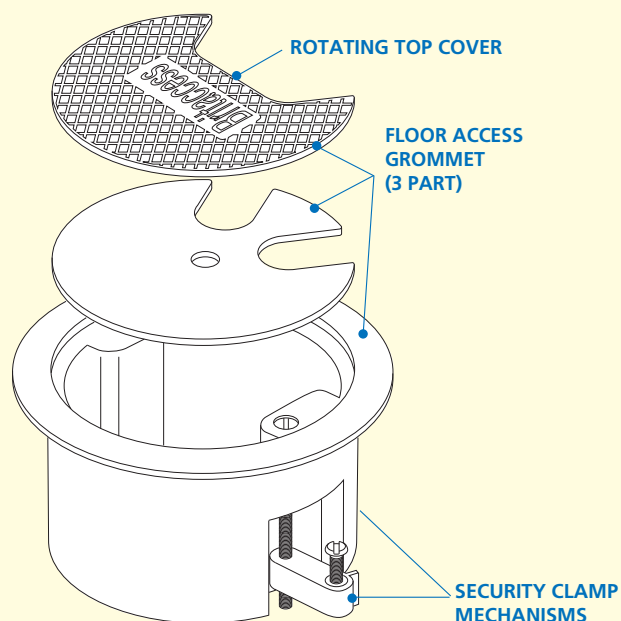
#### TELEPHONE

Components for most British Telecom, Mercury and other national and international systems.

#### DATA

A wide range of components to suit virtually all systems in current use. These include IBM, Wang, Phillips, ICL and many others.

All dimensions in mm Tolerance on cut-out dimensions is  $\pm 1$ mm





## TECHNICAL DATA UNDERFLOOR POWER TRACK MODULES

### Conditional Short Circuit Rating

#### TRACK

Short circuit protection provided by fuselinks BS-88 and BS 1361 100 amp maximum.

Prospective current 16.5kA  
Mechanical withstand 10kA peak  
Thermal withstand 1200A for 0.1 seconds

#### TAP-OFF UNITS

Mechanical withstand 10kA peak  
Thermal withstand 1200A for 0.1 seconds

### Earth Fault Loop Impedance (measured at 1.0A)

The IEE Wiring Regulations require accurate determination of the total earth loop impedance, which must be low enough to ensure that the protective device will operate within the specified time, which for circuits incorporating socket outlets is 0.4 seconds. The values for the Britmac System for calculating the earth fault loop impedance are as follows:

Phase busbar	1.97mV/m
Earth busbar to housing	1.38mV/m
Earth busbar (Clean Earth)	1.97mV/m
Track connector	0.37mV
Supply connector	0.24mV
32A tap-off (4mm <sup>2</sup> x 3m), line	9.92mV

### Volt Drop, Combined Phase & Neutral (measured at 1.0A)

Busbar (line & neutral)	3.94mV/A/m
Track connector	0.74mV/A
Supply connector	0.48mV/A
32A tap-off (4mm <sup>2</sup> x 3m), line & earth	19.84mV/A/m

### Cable Capacity of Terminals

Supply connector 16mm<sup>2</sup> csa stranded conductor

### Construction

#### TRACK

Body extrusion	Galvanised Steel
Track base	Galvanised steel
Busbar	High conductivity copper
Degree of protection	Track IP4X; In-feed housing IP3X C

#### TAP-OFF UNITS

Standard, Clean Earth and Dual Track tap-offs are non-interchangeable. All types available in fused and unfused versions.

#### 32A tap-off unit

The 32A tap-off is unfused with 3 metres of 16mm diameter flexible conduit and 4mm<sup>2</sup> cables to BS 6004:2000 which are terminated in the tap-off via welded connections.

#### Fused tap-off unit

Required where conduit lengths greater than 3 metres are used. The tap-off unit is used as standard at 13 amps and is fitted to the specified length of 16mm diameter conduit and 2.5mm<sup>2</sup> cables to BS 6004:1995 which are terminated in the tap-off via welded connections. The flexible conduit is manufactured to BSEN 50086-1

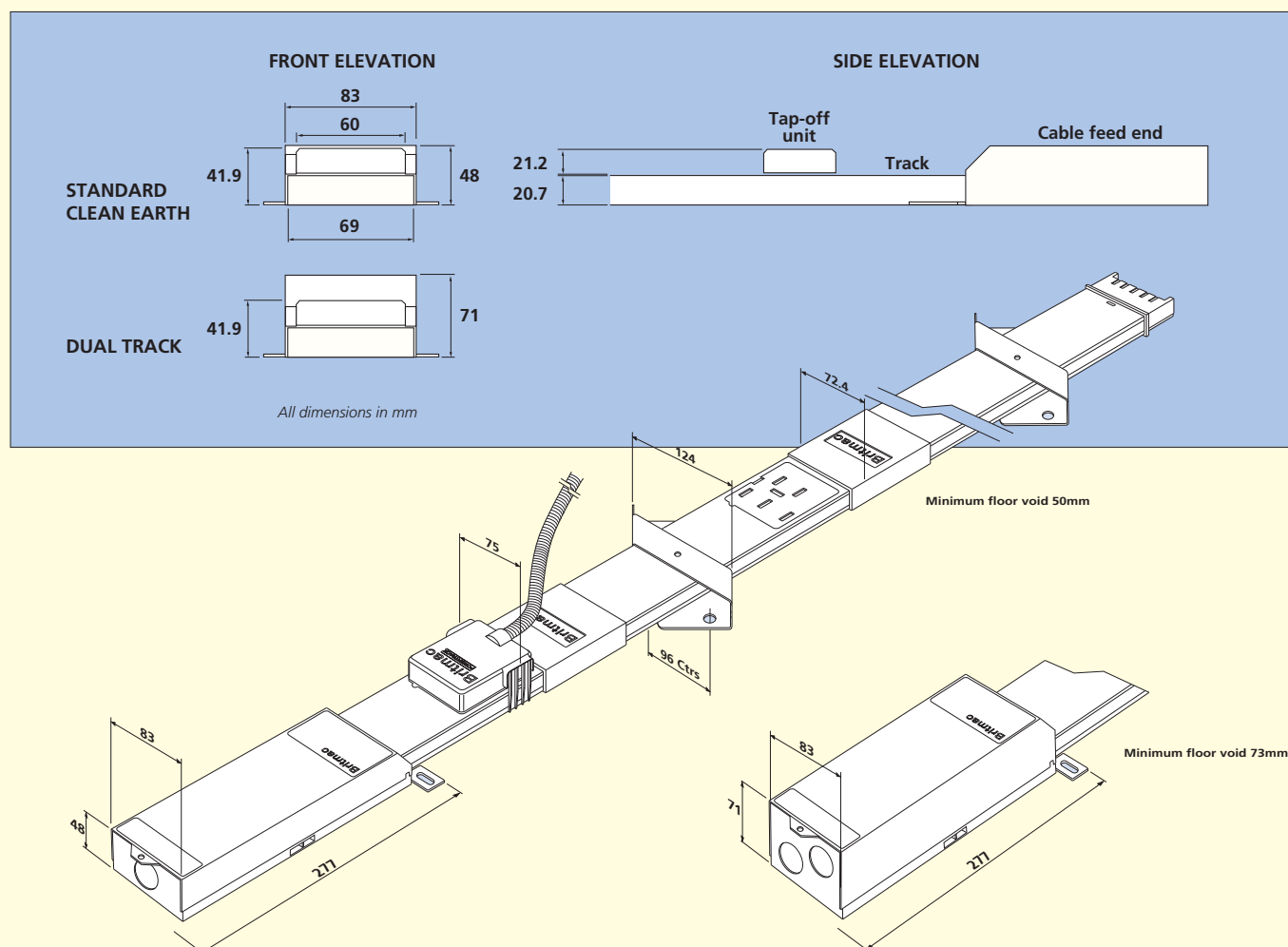
#### STANDARDS

BSEN 60439: Part 1 & Part 2.

The track system enables compliance with the latest IEE Wiring Regulations, BS 7671:2008.

#### TRACK CURRENT RATING

63 amps, 240V ac; 50Hz single phase ambient temperature 25C.



## MINIATURE CIRCUIT BREAKERS

Crabtree MCBs comply fully with BS EN 60898 and therefore enable the requirements of BS 7671 to be met.

### TYPE CLASSIFICATION

BS EN 60898 specifies different tripping characteristics for different types of MCB, depending on the level of overload current required to make the MCB trip out in less than 100 milliseconds. Crabtree MCBs within this publication are available as types B and C, enabling installation designers to choose an MCB with a characteristic closely matched to the circuit requirement.



### FAULT LEVELS

Regulation 432.1 of BS 7671 requires that a device providing protection against overload currents and fault currents shall be capable of breaking any overcurrent up to and including the prospective fault current at the point where the device is installed.

In domestic situations this could be as high as 16kA, in industrial situations it could be even higher.

According to regulation 434.5.1, the prospective fault current can be higher than the breaking capacity of the protective device if another protective device having the necessary breaking capacity is installed on the supply side. This means that MCBs can be backed up by devices of greater capacity such as HRC fuses.

When providing back-up protection, consideration must be given to discrimination. Discrimination is said to occur when the device nearest the fault operates first.

### AMBIENT TEMPERATURE CONSIDERATIONS

Starbreaker and Loadstar MCBs are calibrated to meet the requirements of BS EN 60898, 30°C Reference Calibration Temperature. At other temperatures the following rating factors should be used:

At 40°C 0.9      At 20°C 1.0      At 0°C 1.1

Adjacent thermal-magnetic MCBs should not be continuously loaded at or approaching their nominal rated currents when mounted in enclosures. It is good engineering practice to apply generous de-rating factors or make provision for adequate free air between devices. In these situations, and in common with other manufacturers, we recommend a 70% diversity factor is applied to the MCB nominal rated current where it is intended to load the MCBs continuously (in excess of 1 hour).

### OPERATING CHARACTERISTICS FOR MCBs

MCB type	BS EN 60898 type	Instantaneous trip current range	Typical application
B	B	3–5 $I_n$	Domestic
C	C	5–10 $I_n$	Commercial Light Industrial
D	D	10–20 $I_n$	General Industrial
1*	–	2.7–4 $I_n$	Domestic
2*	–	4–7 $I_n$	Commercial
3*	–	7–10 $I_n$	General Industrial

\* MCBs, type 1, 2 & 3 to BS 3871

### FAULT PROTECTION

BS 7671, formerly the IEE Wiring Regulations requires that measures are taken to protect against the risk of electric shock, which can be the result of contact with live parts.

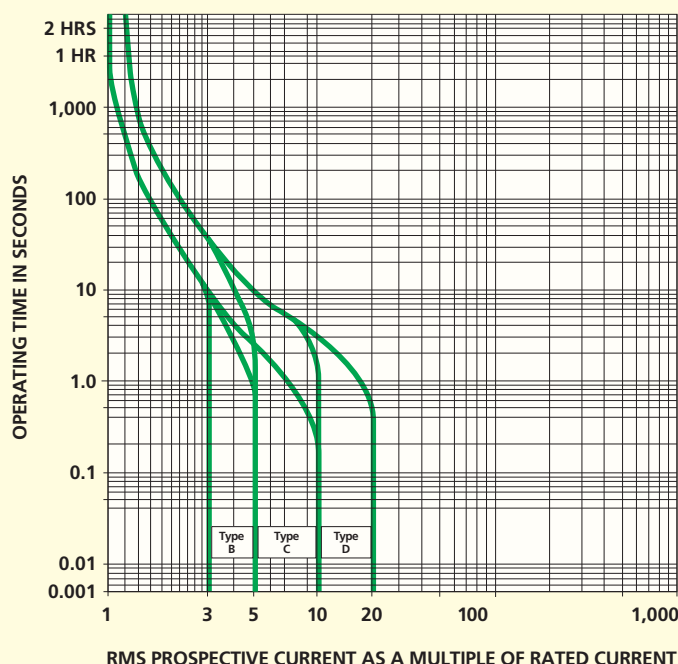
MCBs can be used in conjunction with earthed equipotential bonding to achieve disconnection times of 0.4 seconds (411.3.2.2) for final circuits not exceeding 32A and 5 seconds (411.3.2.3) for final circuits exceeding 32A (TN Systems).

### EARTH FAULT LOOP IMPEDANCES ( $Z_s$ OHMS) TO GIVE COMPLIANCE WITH BS 7671 REGULATION 411.3.2.2 AND 411.3.2.3 AT 230V

Maximum earth fault loop impedance in ohms for instantaneous operation of devices giving compliance with the 0.4 second disconnection time of Regulation 411.3.2.2 and 5 second disconnection time of Regulation 411.3.2.3.

		RATINGS						
DEVICE	BS EN	6A	10A	16A	20A	32A	40A	50A
MCB Type B	60898	7.666	4.599	2.874	2.299	1.439	1.149	0.919
MCB Type C	60898	3.829	2.299	1.439	1.149	0.719	0.569	0.459
RCBO 30mA Type B	61009	1667	1667	1667	1667	1667	1667	1667
RCBO 30mA Type C	61009	1667	1667	1667	1667	1667	1667	1667

- The values in these tables should be modified to allow for the cable temperature at time of test
- RCBO values reflect the rated residual operating current characteristics of the device (table 41.5). For the overcurrent characteristics read as related MCB values.



RMS PROSPECTIVE CURRENT AS A MULTIPLE OF RATED CURRENT

## MINIATURE CIRCUIT BREAKERS

### Technical Specifications Starbreaker & Loadstar Domestic

Standard			BSEN 60898
Tripping characteristic			B, C
Rated voltages <i>Un</i>			230/400
Operational voltage	min.	V AC/DC	24
	max.	V DC/pole	60
	max.	V AC	250
Rated short circuit capacity <i>Icn</i>		kA AC	6
Insulation coordination			
● Rated insulation voltage		V AC	250
● Degree of pollution for overvoltage category			2/III
Touch protection acc. to EN50274			Yes
Handle end position, sealable			Yes
Degree of protection acc. to EN60529			IP20
CFC silicone - free			Yes
Terminals			
● Terminal tightening torque		Nm	2.5 ... 3
Conductor cross-section			
● Solid and stranded		mm <sup>2</sup>	0.75 ... 25
● Finely stranded, with end sleeve		mm <sup>2</sup>	0.75 ... 25
Mounting position			Any
Service life on average, with rated load			20000 actuations
Ambient temperature		°C	-25 ...+45, occasionally +55, max. 95% humidity, Storage temperature: -40 ... +75

### APPLICATIONS

Single pole MCBs with Type B characteristics (3-5In) are suited for use on loads with little or no switching surges, such as occur on domestic applications. In addition, a Type B MCB will give fault risk protection at higher levels of earth loop impedance. All ratings are also available in Type C classification (5-10In). MCBs with type C characteristics are suited for use where fluorescent lighting circuits, small motors etc. may produce switching surges which would operate a type B circuit breaker.

### GENERAL CONSTRUCTION

Starbreaker and Loadstar MCBs are of the thermal-magnetic current limiting type, having a compact construction which has been achieved by not only minimising the number of parts but also the number of welded joints and connections. Critical material selection ensures reliability and durability. The MCB has an easy to operate handle with a trip-free toggle mechanism – so even when the handle is held in the 'on' position the MCB is free to trip.

### BACK-UP PROTECTION

Back-up protection is required only if the prospective short circuit current at the point of installation exceeds the breaking capacity of the MCB. When providing back-up protection consideration must be given to discrimination between the MCB and fuse.

### DISCRIMINATION

It is desirable that the protective device nearest the fault should operate first. The low energy let through of Starbreaker and Loadstar MCBs provides better discrimination with HRC fuse back-up than is given by earlier types of MCB.

### METHOD OF OPERATION

#### 1 Moderate overload conditions

Detection of moderate overload conditions is achieved by the use of a thermo-metal element which deflects in response to the current passing through it. The thermo-metal element moves against the trip bar releasing the trip mechanism.

#### 2 Short circuit conditions

When the current flowing through the MCB reaches a predetermined level, the solenoid directly pulls in the plunger which forcibly separates the contacts and simultaneously releases the trip mechanism.

### 3 Establishment of arc between fixed and moving contacts

As the moving contact moves away from the fixed contact, an arc is established. The arc runs along the arc runner to the arc chamber where it is split up between the plates and extinguished.

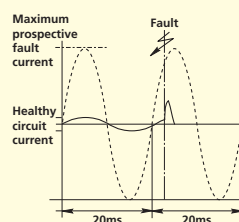
The low inertia and consequent high speed of the moving contact has a limiting effect on the flow of fault current. The rapid development of the arc, together with its accelerated extinction in the arc chamber, gives a typical operating time of 3.5–5 milliseconds.

### CURRENT LIMITING ACTION

The high speed current limiting action ensures that the MCB operates before the full prospective fault current is allowed to develop.

Under fault conditions, damage can be sustained to the installation and associated equipment due to the amount of energy that passes before the current is completely interrupted. The total energy let-through depends on the value of current and the time for which it flows, and is denoted by the symbol  $I^2t$ . The high speed current limiting action of Starbreaker and Loadstar MCBs ensures that the energy let-through and any subsequent damage is minimised. This reduced energy let-through assists greatly with both back-up and discrimination considerations.

### CURRENT LIMITING EFFECT



### $I^2t$ ENERGY LET-THROUGH

Typical values of  $I^2t$  energy let-through for Starbreaker MCBs are given in the table below:

MCB rating (A)	Total $I^2t$ let-through ( $A^2 s$ )		MCB rating (A)	Total $I^2t$ let-through ( $A^2 s$ )	
	Type B	Type C		Type B	Type C
6	10,220	14,890	32	31,760	32,470
10	17,900	18,750	40	31,760	32,470
16	22,260	23,820	50	45,160	44,270
20	22,260	32,470			

Prospective short circuit test current 6000A

### MOUNTING THE MCB

In Crabtree consumer units the MCBs are mounted on standard 35mm top hat rail to BS 5584: 1978 EN 50022 giving a projection within the Standard of 70mm. Due to the method of connection onto the busbar it is not possible to use the Starbreaker range for custom built panels.

### MAIN SWITCH

• Starbreaker	100/MI2 & 100/2MT
• Loadstar (Domestic)	100SW2
• Specification	IEC 60947-3
• Rating	100A 230V 50Hz
• Utilisation category	AC-22A
• Type	Double pole switch disconnector
• Insulation voltage	250V
• Impulse withstand voltage	4kV
• Rated duty	Continuous
• Short-time withstand current	2kA for 1 second
• Short-circuit making capacity	3.5kA (peak)
• Conditional short-circuit current	16kA when protected by 100A HRC fuse to BS 1361
• Pollution degree	3



# RESIDUAL CURRENT DEVICES (RCCBs, RCBOs and SRCDs)

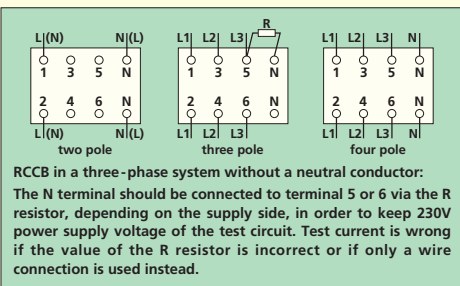
## SPECIFICATION

- BS EN 61008 RCCBs
- EN 61009-1, IEC61009-1 RCBOs
- BS 7288 SRCDs
- Range of current ratings 13–100A
- Range of sensitivities 10–300mA
- Pole configurations SP&N, DP & 4P  
DP SRCD – 230V  
2 & 3 Module DP – 230V  
4 Module 4P – 400V
- Voltage ratings 1 & 2 Module SP & N – 230V  
2 & 3 Module DP – 230V  
4 Module 4P – 400V
- Frequency rating 50Hz
- Tripping principle employed Electro-mechanical (2, 3 & 4 Module RCCBs)  
Electronic (1 & 2 Module RCBOs)

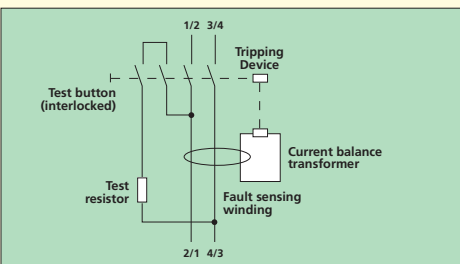


## OPERATION

The RCD employs the current balance principle which involves the supply conductors to the load (phase and neutral) being wound onto a common transformer core to form the primary windings. The secondary winding of the current transformer is then connected to the trip mechanism, either an electro-magnetic relay in the case of 2, 3 and 4 module RCCBs or an electronic relay in the case of 1 and 2 module RCBOs. Under healthy circuit conditions, the current in the phase conductor is equal to the current in the neutral and the vector sum of the current is zero. In the event of an earth fault, an amount of current will flow to earth, creating an out of balance situation in the transformer assembly. This out of balance is detected by the secondary winding of the transformer and at a pre-determined level of out of balance will activate the trip mechanism. Single phase and neutral or three phase and neutral units (suitable for 3 or 4 wire systems) are available, the latter being suitable for balanced or unbalanced 3 phase loads. The RCD trip mechanism will operate at a residual current of between 50–100% of its rated residual operating current (sensitivity).



RCD circuit diagrams (four pole)



RCD circuit diagram (two pole)

## TEST BUTTON

A test button is provided on all RCDs to enable the operation of the device to be checked. It is recommended that an RCD is tested at least quarterly. (See BS 7671 Regulation 514-12-2).

## TERMINAL CAPACITIES

Lifestar RCCBs	50mm <sup>2</sup>	Lifestar SRCDs	3 x 2.5mm <sup>2</sup> 3 x 4mm <sup>2</sup> 2 x 6mm <sup>2</sup>
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Starbreaker RCBOs 16mm<sup>2</sup>  
Loadstar RCBOs 16mm<sup>2</sup>

## APPLICATIONS

**a) Residual Current Devices (RCDs) may be required to ensure the compliance of an installation with BS 7671, formerly the IEE Wiring Regulations.**

An RCD (30mA) meeting the requirements of Regulation 415.1.1 must be used for circuits and cable installations covered by Regulation 411.3.3 (socket outlets), 522.6.6, 522.6.7, 522.6.8 (wiring systems), and 701.411.3.3 (locations containing a bath or shower). Where a high earth fault loop impedance disqualifies the use of overcurrent protection devices as a means of providing the necessary automatic disconnection in the case of a fault, an RCD may be used to satisfy the requirements of Regulation 411.3.2.2 (411.4.9). To comply with Regulation 411.5.3 the earth fault loop impedance in Ohms multiplied by the rated tripping current of the RCD in Amperes must not exceed 50(V). With the RCD having a sensitivity of 30mA, the maximum permissible earth fault loop impedance is calculated as follows:  $Z_s(\text{max}) = 50/0.03 = 1666 \text{ Ohms}$

Rated residual operating current (mA)	Maximum earth fault loop Impedance $Z_s$ Ohms $120V < U_o \leq 230$
30mA	1667
100mA	500
300mA	167

**(b) to provide a higher level of protection than that given by direct earthing, against fire or shock risks caused by earth leakage currents.**

Overcurrent protection devices cannot detect earth fault currents below their operating current. If they are the only means of earth fault protection, it is possible for sufficient earth fault current to flow undetected to constitute a fire risk.

By using an RCD, the flow of the sustained earth fault current, above the tripping current of the RCD, is prevented. The shock risk associated with these earth fault currents is also greatly reduced.

To provide complete personnel protection, a high sensitivity RCD to a Type A classification with a maximum tripping current of 30mA should be used. This is particularly important with portable appliances where there is a danger of losing earth continuity due to damage or fatigue.

Residual current devices are completely selective in their operation. They are unaffected by parallel earth paths and are thus ideally suitable for the protection of installations in modern high density dwellings or office blocks. They are virtually tamperproof and provide a predetermined level of protection. Even if earthing conditions deteriorate substantially, they will continue to provide a higher level of protection than would have been given by direct earthing.

## SENSITIVITIES

**10mA** provides the highest degree of personal protection, for use in sensitive areas such as laboratories, schools and workshops where potential hazards exist from electrical faults caused through misuse, accidental damage or failure of electrical appliances.

**30mA** provides a high degree of personal protection, satisfying the requirement of Regulation 415-1 for additional protection. (When an operating time not exceeding 40ms at 5 times rated residual operating current is proven.

**100mA** provides a high level of fire risk protection and a degree of fault protection.

**300mA** provide fire risk protection.

## TRANSIENT EARTH LEAKAGE CURRENTS

All Crabtree residual current devices incorporate a high level of immunity to tripping when subjected to transient earth leakage currents. Such transients can occur when there is a significant level of capacitance to earth as can result from cable capacitance (particularly MICC) or RF filter networks. Crabtree RCDs are therefore less susceptible to nuisance tripping due to transient earth leakage currents.

## RCDs (RCCBs, RCBOs AND SRCDs)

Technical Specifications (RCBOs)		up to 50A
Standards		EN 61009-1, IEC 61009-1
Approved acc.to		IEC/EN 61543
Rated voltages $U_n$	V AC	230(240)
Rated frequency $f_n$	Hz	50 ... 60
Rated currents $I_n$	A	6, 10, 16, 20, 32, 40, 50
Rated residual currents $I_{\Delta n}$	mA	30
Rated switching capacity	kA	6
Energy limitation class		3
Terminals/conductor cross-sections		
• Solid and stranded	mm <sup>2</sup>	0.75 ... 35
• Finely stranded, with end sleeve	mm <sup>2</sup>	0.75 ... 25
Outgoing	mm <sup>2</sup>	0.75 ... 16
Terminal tightening torque	Nm	2
Mains connection		Bottom
Mounting position		Any
Degree of protection	acc. to EN60529	IP20 with connected conductors
Touch protection	acc. to EN50274	Finger and back-of-hand safe
Service life	Test cycle acc. to IEC/EN 61009	switching cycles .10000 actuations
Storage temperature	°C	-40 ... +45
Ambient temperature	°C	-25 ... +45
Resistance to climate acc. to IEC60068-2-30		28 cycles (55°C; 95% rel. air humidity)
CFC and silicone free		Yes

## APPLICATIONS

RCBOs provide both earth fault and over current protection. The MCB element of Starbreaker and Loadstar devices are available as Type B or Type C making them suitable for domestic or light commercial applications. These Type A Voltage dependent devices are single pole with solid neutral one module wide (18mm) with a flying lead. During interruption of the neutral conductor the protective function is guaranteed when FE and PE conductors are connected. The use of Starbreaker and Loadstar 30mA RCBOs provides independent RCD protection to individual circuits offering both the degree of additional protection that may be required by Regulation 415.1 and the minimum of inconvenience following a single earth fault (Regulation 314.1).

## INSTALLATION TESTING – CAUTION

As Starbreaker and Loadstar RCBOs employ electronic components they should be disconnected when carrying out the following tests on the electrical installation:

### (a) Earth fault loop impedance test

The load terminals should be disconnected if it is intended to parallel-out the unit for test purposes.

It may incur damage if mains potential is maintained on the load terminals of this unit after the trip mechanism has operated.

### (b) Insulation test

Whilst RCBOs can withstand the effects of normal insulation testers without damage, false readings may be given on the test instrument. For this reason it is recommended that the device is disconnected during this test.

## FAULT CURRENT SENSITIVITY

Semi-conductor devices are now incorporated in equipment used throughout industry, commerce and in the home. Typically, the purpose of these semi-conductor devices is for monitoring and controlling industrial equipment eg speed controls for small motors and temperature controls, along with extensive use in computers, VDUs, printers, washing machines, etc.

As the equipment is fed from the mains electrical supply, in the event of an earth fault the presence of semi-conductors may result in the normal ac waveform being replaced by a non-sinusoidal fault current. In some cases the waveform may be rectified or chopped. These waveforms are said to contain a pulsating dc component which can either partially desensitise or totally disable a standard Type AC RCD.

International standards IEC 61008 (RCCBs) and IEC 61009 (RCBOs) divide RCDs into two performance classes:

### Type AC

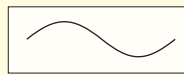
RCDs for which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly arising.

### Type A

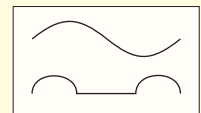
RCDs for which tripping is ensured for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly arising.

To ensure the correct level of protection, check for the following symbols:

**TYPE AC**  
normal  
ac sensitivity



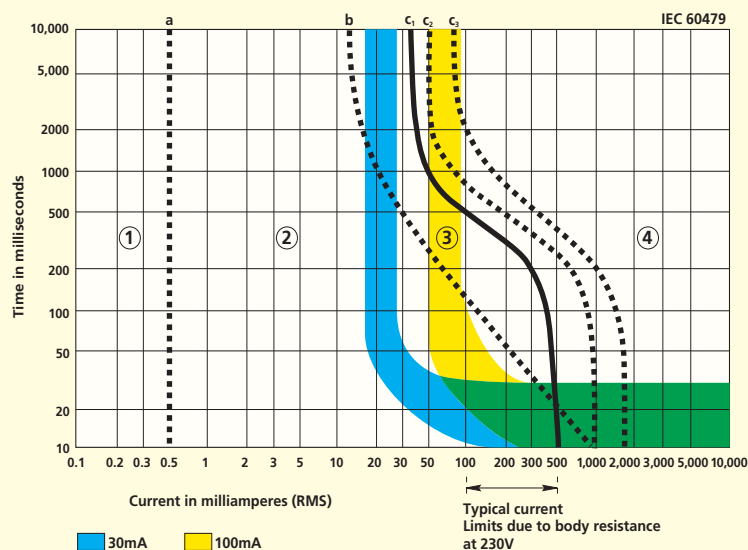
**TYPE A**  
pulsating  
dc sensitivity



Crabtree RCCBs are available as both Type AC and Type A devices.

## IEC PUBLICATION (60479) CURVES WITH CRABTREE RCD CHARACTERISTICS SUPERIMPOSED

### TIME/CURRENT ZONES OF EFFECTS OF AC CURRENT (15–100Hz) ON PERSONS



### Zone Physiological effects

- Usually no reaction effects.
- Usually no harmful physiological effects.
- Usually no organic damage to be expected. Likelihood of muscular contraction and difficulty of breathing, reversible disturbances of formation and conduction of impulses in the heart, and transient cardiac arrest without ventricular fibrillation increases with current magnitude and time.
- In addition to the effects of zone 3, probability of ventricular fibrillation increased up to 5% (Curve C2) up to 50% (Curve C3) and above 50% beyond Curve C3. Increasing with magnitude and time, pathophysiological effects such as cardiac arrest, breathing arrest and heavy burns may occur.

## REQUIREMENTS FOR ELECTRICAL INSTALLATIONS.

### SOCKET CIRCUITS 411.3.3

RCDs are now required to provide additional protection. To be recognised as providing additional protection the RCD must be rated at 30mA or less and operate within 40ms when tested at 5x rated residual operating current.

- **RCDs are now required for all general use socket outlets rated up to 20A.** Two exceptions are allowed for ;
- 1. Socket outlets used under supervision of skilled or instructed persons.
- 2. A socket outlet suitably identified for connection of a particular item of equipment.

Additional protection must be provided in the event of failure of the provision of basic protection and/or the provision of fault protection or carelessness by users of the installation. **Protection by 30mA RCD will be required for;**

- Upstairs ring circuit
- Downstairs ring circuit
- Kitchen ring circuit
- Cooker control unit c/w socket outlet

### CABLES 522.6.6 522.6.7 522.6.8

#### Regulation 522.6.6

A cable concealed in a wall or partition at less than 50mm from the surface shall;

1. Incorporate an earthed metallic covering suitable for service as the circuit CPC - **or**
2. Be enclosed in earthed conduit **or**
3. Be enclosed in trunking or ducting **or**
4. Be mechanically protected against damage from penetration by nails or screws and the like **or**
5. Be installed in the prescribed zones.

**Regulation 522.6.7** Where 522.6.6 applies and the installation is **not intended to be under the supervision of skilled or instructed persons**, cables installed in accordance with 522.6.6(5) but not having mechanical protection of 1,2,3 or 4 shall be provided with additional protection by means of a 30mA RCD.

In the majority of domestic situations cables installed beneath a plaster surface within partition walls without mechanical protection will require additional protection by **30mA RCD regardless** of their routing.

- Upstairs lighting
- Downstairs lighting
- Immersion heater
- Smoke alarm
- Burglar alarm

### Bathrooms

- **Section 7** Special installations or Locations.
- **Section 701** Locations containing a bath or shower.
- Zone 3 has been removed.
- Suitable equipment can be within 600mm of a bath, excluding 13A sockets to BS1363 which must be 3m from the edge of a bath or shower.
- Additional protection shall be provided by the use of **one or more residual current device** with a rated operating current not exceeding 30mA (701.411.3.3).
- Supplementary bonding is not required so long as any Protective Equipotential Bonding has been installed (411.3.1.2).

Additional protection must be provided by one or more 30mA RCDs.

- shower circuit
- lighting circuit
- Heating circuit
- Ventilation circuit

### Chapter 31

314.1 Requires that; Every installation shall be divided into circuits, as necessary, to:

- i. Avoid danger and minimise inconvenience in the event of a fault
- ii. Facilitate safe inspection, testing and maintenance
- iii. Take account of danger that may arise from the failure of a single circuit such as a lighting circuit
- iv. Reduce the possibility of unwanted tripping of residual current devices (RCDs) due to excessive protection conductor currents produced by equipment in normal operation.

British Standards and IEE regulations are subject to change and amendment. **This guide to Crabtree consumer units is not a substitute for the regulations which should always be used for all types of electrical installation design, and installation work.**

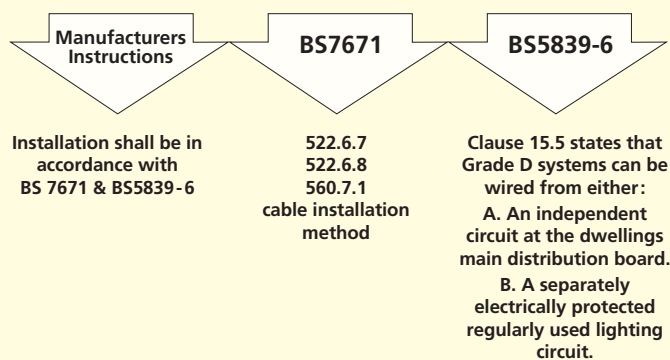
### MAINS SUPPLIES FOR SMOKE ALARMS WITHIN DOMESTIC SETTINGS

**Clause 7.1 of BS 5839-6** defines a **Grade D system** as: "A system of one or more mains-powered smoke alarms, each with an integral standby supply (The system may in addition, incorporate one or more mains-powered heat alarms each with an integral standby supply).

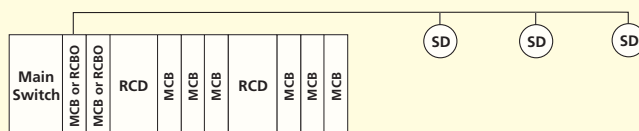
The 17th Edition of the wiring regulations do not cover every item of Electrical Equipment likely to be installed. They do not specifically mention Smoke Alarms. However:

**CHAPTER 13 REGULATION 134.1.1** states that electrical equipment shall be installed in accordance with the instructions of the manufacturer of the equipment.

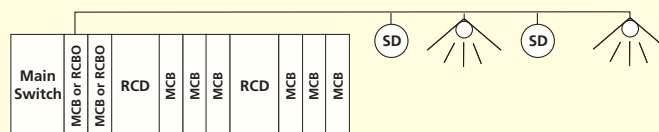
**CHAPTER 51 REGULATION 510.2** states that every item of electrical equipment shall be selected and erected so as to allow compliance with the regulations stated in this chapter and the relevant regulations in other parts of BS7671 and shall take account of manufacturers instructions.



### A.



### B.



Elements of Electrical Protection will include short circuit, overcurrent and may also include additional protection by a residual current device (30mA) for certain installation methods covered by BS7671 (522.6.7) & (522.6.8)

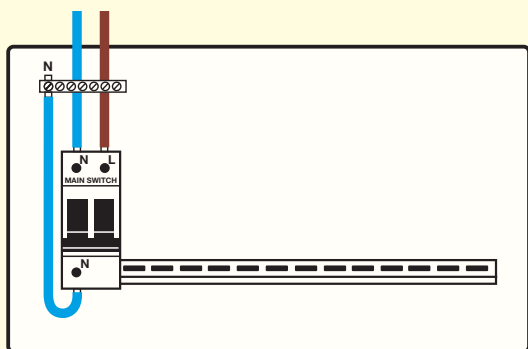
**IF ADDITIONAL PROTECTION IS REQUIRED BY BS7671 THE NEED FOR SEPARATE ELECTRICAL PROTECTION CANNOT BE MET BY DUAL RCD CONSUMER UNIT ARRANGEMENTS WHERE SINGLE RESIDUAL CURRENT DEVICES PROTECT GROUPS OF CIRCUITS.**



## STARBREAKER CONSUMER UNIT APPLICATIONS

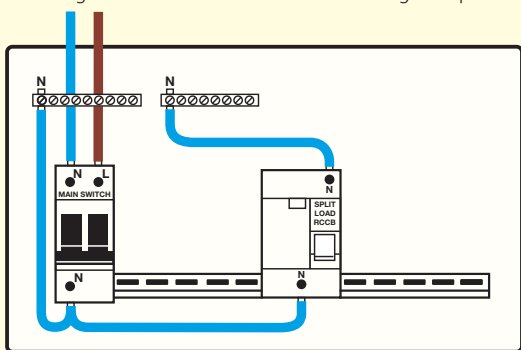
### MAIN SWITCH

This type of unit allows for the use of both MCBs & RCBOs throughout.



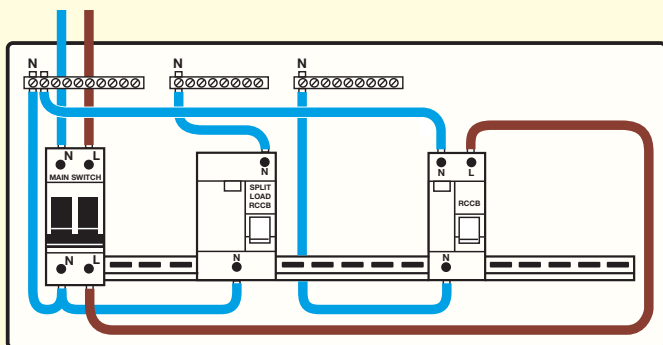
### SPLIT LOAD

A familiar arrangement allows the use of MCBs & RCBOs immediately following the Main Switch and MCBs following the Split Load RCCB.



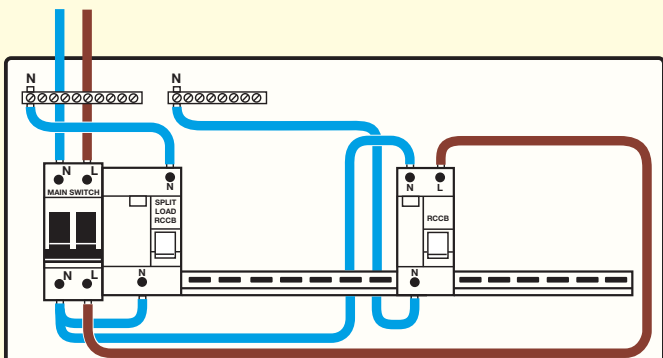
### HIGH INTEGRITY

A modern pattern which sees MCBs used between two RCCBs but retaining provision for a small number of independent MCB or RCBO circuits following the Main Switch.



### DUAL RCD

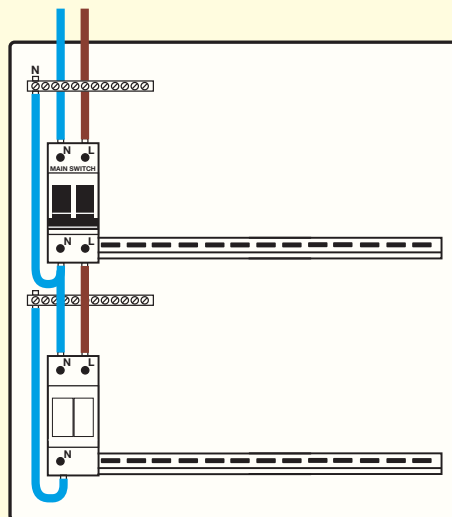
This unit utilizes MCBs throughout divided between two RCCBs. Circuit interdependence or separate electrical protection cannot be achieved here.



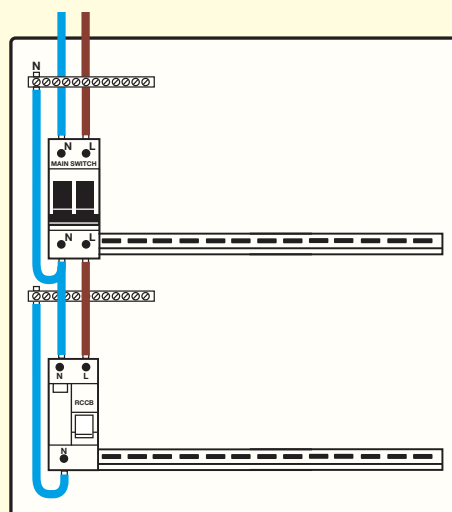
### TWO BANK

Two bank consumer units provide the facility to offer a wide range of configurations for applications which demand increased numbers of circuits. Continuity of supply between top and bottom banks (where required) can be achieved by utilizing the Main Switch with the additional terminal (100/2MT).

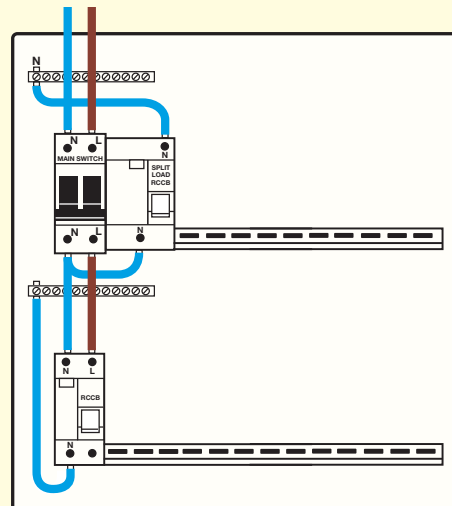
### MAIN SWITCH



### SPLIT LOAD



### DUAL RCCB



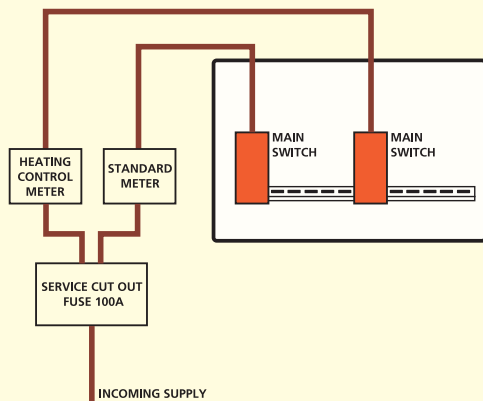
## STARBREAKER CONSUMER UNIT APPLICATIONS

The following information illustrates the methods by which consumer units can be installed into more specific applications, for example multi-tariff or dual tariff consumer units.

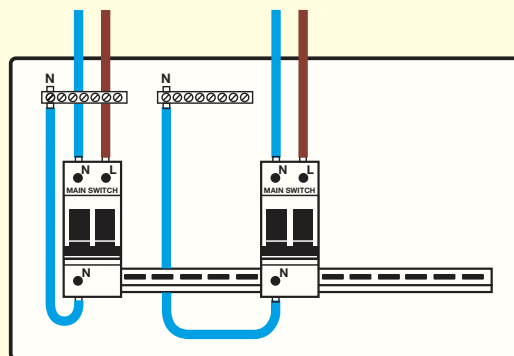
### TWIN-TARIFF

Twin-tariff combines two independent supplies typically the standard domestic supply and the supply for storage heaters. This installation can be housed within one standard enclosure thus saving space and installation time.

Supply diagram



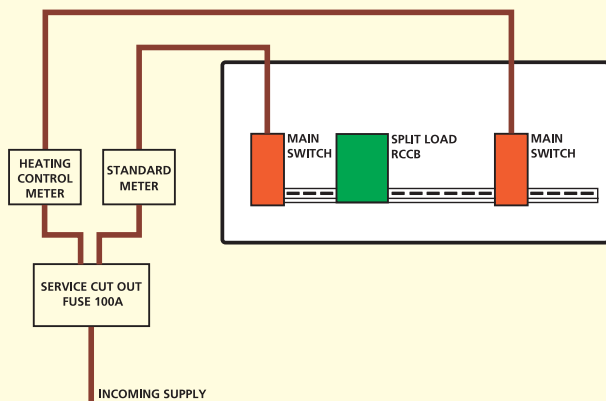
Internal wiring diagram



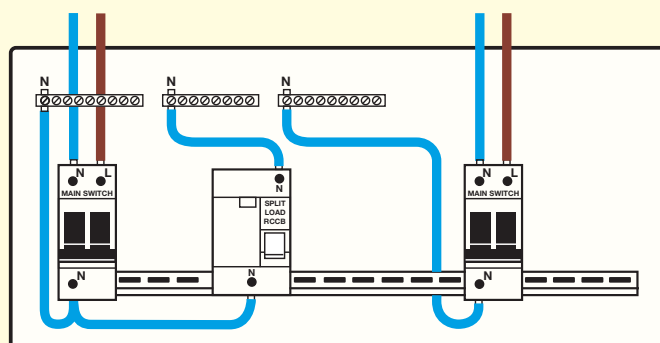
### SPLIT-LOAD DUAL-TARIFF

Combining the added safety of a split-load RCCB and the economy heating tariff into one combined unit offers an all-round saving of space and installation time.

Supply diagram



Internal wiring diagram

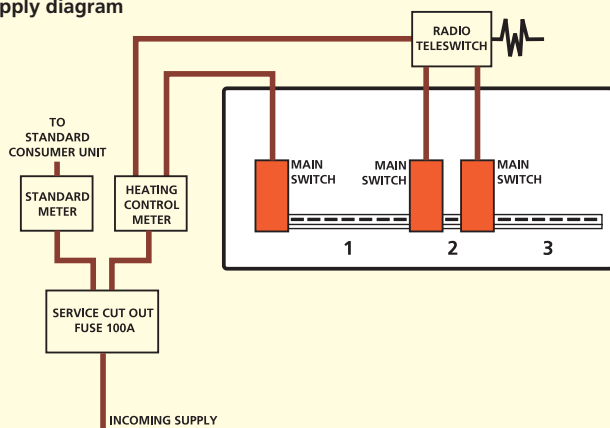


### MULTI-TARIFF

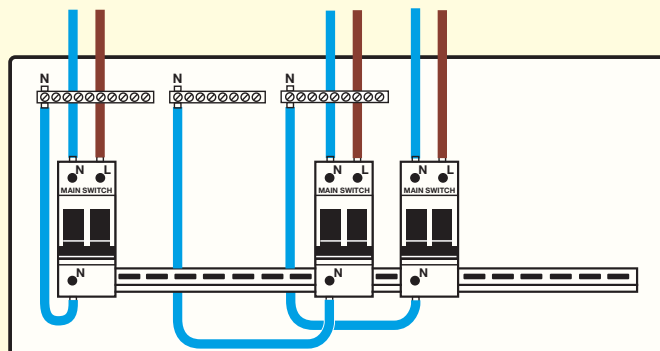
Multi-tariff heating provides 3 tariffs catering for total heating applications:

- 1 Direct heating appliances
- 2 Bottom immersion heater
- 3 Storage heating

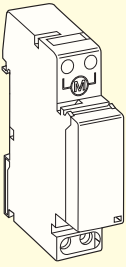
Supply diagram



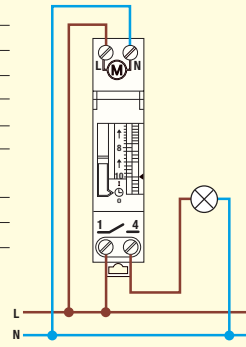
Internal wiring diagram



## 301/TS11 & 301/TQ24

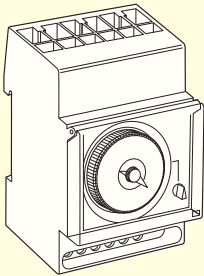


Technical Data	301/TS11	301/TQ24
Supply Voltage	230V 50Hz	230V 50/60Hz
-	-	R100h/+25°C
Power Consumption	1W	1W
Accuracy	50Hz	± 2 s/d
Switch Contacts	16A 250V ~ μ cos φ = 1	16A 250V ~ μ cos φ = 1
Terminal Capacity	Single strand 1 - 4mm <sup>2</sup> Multi strand 0.5 - 2.5mm <sup>2</sup>	Single strand 1 - 4mm <sup>2</sup> Multi strand 0.5 - 2.5mm <sup>2</sup>
Operating Temp.	-10°C to +55°C	-10°C to +55°C
Storage Temp.	-10°C to +55°C	-10°C to +60°C

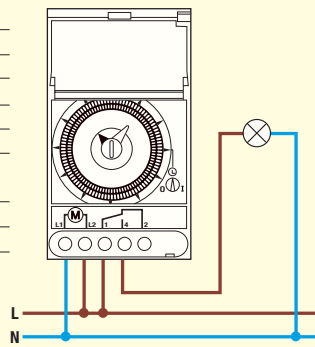


Resistive Loads	3600W
Incandescent/Halogen	1000W
Motors	1000W
E S/L V Fluorescent	100W
Mains Halogen	1000W
L V Halogen	2300W

## 303/TS24 303/TQ7 & 303/TQ24

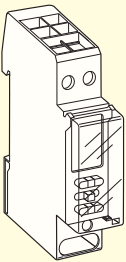


Technical Data	303/TS24	303/TQ7 303/TQ24
Supply Voltage	230V 50Hz	230V 50/60Hz
-	-	R100h/+25°C
Accuracy	50Hz	± 2 s/d
Switch Contact	16A 250V ~ μ cos φ = 1	16A 250V ~ μ cos φ = 1
Parallel compensation	C ≥ 14μF	C ≥ 14μF
Terminal Capacity	Single strand 1 - 4mm <sup>2</sup> Multi strand 0.5 - 2.5mm <sup>2</sup>	Single strand 1 - 4mm <sup>2</sup> Multi strand 0.5 - 2.5mm <sup>2</sup>
Operating Temp.	-10°C to +55°C	-10°C to +55°C
Storage Temp.	-10°C to +55°C	-10°C to +60°C



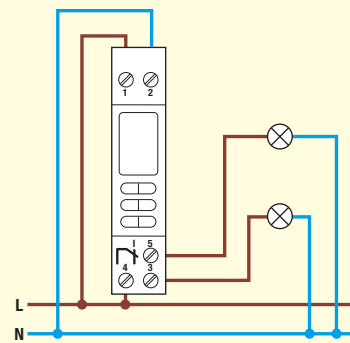
Incandescent/Halogen	1000W
Fluorescent	2500W
Motors	1000W
Mains Halogen	1000W
E S Lamps	150W
L V Halogen	150W
L V Fluorescent	150W

## 301/TD1



Technical Data	301/TD1
Supply Voltage	230V 50/60Hz
Power Consumption	ca. 1W
Contact Rating	16A 250V ~ μ cos φ = 1
Parallel compensation	not allowed
Accuracy	± 2.5 s/d
Terminal Capacity	Single strand 1 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Program pictures	8
Battery reserve	100h
Working ambient	-10°C to +55°C
Storage ambient	-10°C to +60°C

For safety, when the time switch is connected to the mains supply the contact should not be used on an isolated low voltage supply. And when the time switch is connected to the isolated voltage supply the contact should not be used on the mains supply.

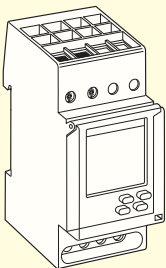


Incandescent	1000W
Halogen	1000W
Fluorescent	2500W
Mains Halogen	1000W
L V Halogen	2000W
Motors	1000W

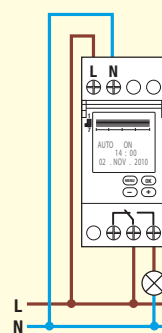
### Safety notes

This product may be installed only by a qualified electrician. Non-compliance may result in a fire hazard or electric shocks. Before installation, read the operating instructions and observe the product-specific requirements for the installation location.

## 302/TD1

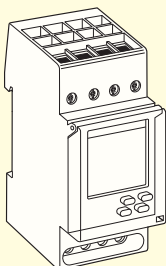


Technical Data	302/TD1
Supply Voltage	230V 50/60Hz
Effective power Consumption	Approx. 1W
Contact Rating	1 changeover contact 16A
Parallel compensation	250V ~ μ cos 60VA max. 7μF
Accuracy	± 1 s/25°C
Terminal Capacity	Single strand 1.5 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Programmes	56
Battery reserve	6 years
Working ambient	-20°C to +55°C
Storage ambient	-20°C to +60°C

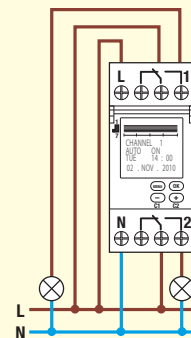


Incandescent	1800W
Halogen	1800W
Fluorescent	2300W
Mains Halogen	1800W
L V Halogen	2300W
Motors	1800W
Low Energy	100W

## 302/TD2



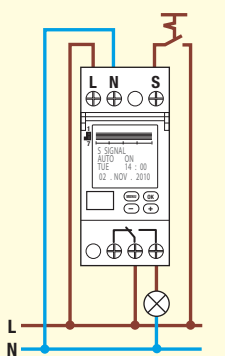
Technical Data	302/TD2
Supply Voltage	230V 50/60Hz
Effective power Consumption	Approx. 1W
Contact Rating	2 changeover contact 16A
Parallel compensation	250V ~ μ cos 60VA max. 7μF
Accuracy	± 1 s/25°C
Terminal Capacity	Single strand 1.5 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Programmes	28 per channel
Battery reserve	6 years
Working ambient	-20°C to +55°C
Storage ambient	-20°C to +60°C



Incandescent	1800W
Halogen	1800W
Fluorescent	2300W
Mains Halogen	1800W
L V Halogen	2300W
Motors	1800W
Low Energy	100W

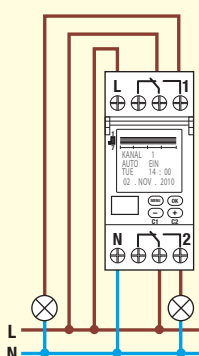


## CONTROL MODULES – GENERAL



Resistive Loads	3600W
Incandescent/Halogen	1800W
E S/L V Fluorescent	100W
Motors	1800W
Mains Halogen	1800W
L V Halogen	2300W

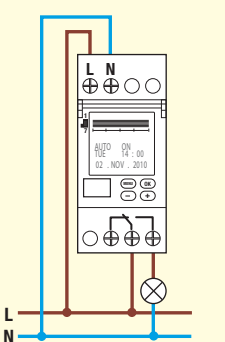
502/TD1	Technical Details
Supply Voltage	230V 50/60Hz
Power Consumption	ca.1W
Relay Output	1 changeover contact 16A 250V ~ $\mu$ cos $\varphi$ = 1
Parallel compensation	60VA max. 7 $\mu$ F
Accuracy	$\pm$ 0.2 s/day under typical installation conditions
Wire cross-section	Single strand 1.5 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Programs	28
Geographical co-ordinates	Resolution 1°
Control Cable length	Max. 20m
Control Signal	230VAC/ca. 2mA 120VAC/ca. 2mA 24VAC/ca. 2mA
Control-pulse duration	> 100ms
Delay time	0 min-23h 59 min
Battery Reserve	6 Years
Storage Temp.	-20°C to +60°C
Operating Temp.	-20°C to +55°C



Incandescent/Halogen	1800W
Mains Halogen	1800W
L V Halogen	2300W
E S Lamps	100W

402/TD2	Technical Details
Supply Voltage	230V 50/60Hz
Power Consumption	ca.1W
Relay Output	2 changeover contact 16A 250V ~ $\mu$ cos $\varphi$ = 1
Parallel compensation	60VA max. 7 $\mu$ F
Accuracy	$\pm$ 0.2 s/day under typical installation conditions
Wire cross-section	Single strand 1.5 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Programs	28 per channel
Geographical co-ordinates	Resolution 1°
Battery Reserve	6 Years
Storage Temp.	-20°C to +60°C
Operating Temp.	-20°C to +55°C

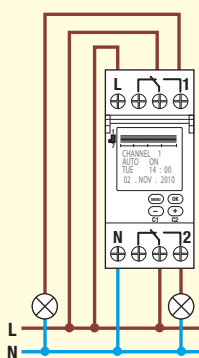
L V Fluorescent	100W
Motors	1800W
Fluorescent	2300W



Incandescent/Halogen	1800W
Mains Halogen	1800W
L V Halogen	2300W
E S Lamps	100W
L V Fluorescent	100W
Motors	1800W
Fluorescent	2300W

402/TD1	Technical Details
Supply Voltage	230V 50/60Hz
Power Consumption	ca.1W
Contact rating	1 changeover contact 16A 250V ~ $\mu$ cos $\varphi$ = 1
Parallel compensation	60VA max. 7 $\mu$ F
Accuracy	$\pm$ 0.2 s/day under typical installation conditions
Terminal capacity	Single strand 1.5 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Programs	56
Pulse start times	84 (only if pulse function is activated)
Pulse duration	1s-59 min 59 s
Battery Reserve	6 Years
Storage ambient	-20°C to +60°C
Operating ambient	-20°C to +55°C

System Requirements	USB
Windows 98 (SE), Windows 2000, Windows XP or Windows Vista	
Memory Requirements	Approx 40Mb



Resistive Loads	3600W
Incandescent/Halogen	1800W
E S/L V Fluorescent	100W
Motors	1800W
Mains Halogen	1800W
L V Halogen	2300W

502/TD2	Technical Details
Supply Voltage	230V 50/60Hz
Power Consumption	ca.1W
Contact rating	2 changeover contact 16A 250V ~ $\mu$ cos $\varphi$ = 1
Parallel compensation	60VA max. 7 $\mu$ F
Accuracy	$\pm$ 0.2 s/day under typical installation conditions
Terminal capacity	Single strand 1.5 - 4mm <sup>2</sup> Multi strand 1.5 - 2.5mm <sup>2</sup>
Programs	14 per channel
Geographical co-ordinates	Resolution 1°
Battery Reserve	6 Years
Storage ambient	-20°C to +60°C
Operating ambient	-20°C to +55°C

### STAIRCASE TIME SWITCH

Operating voltage	190–240V
Mains frequency	50–60Hz
Switching capacity	16A resistive, 2000W tungsten, 2000W fluorescent
Connection: 3-lead rising mains	4-lead rising mains
Timed, reswitchable lighting.	Timed, reswitchable lighting.
	Untimed, standard lighting switches.

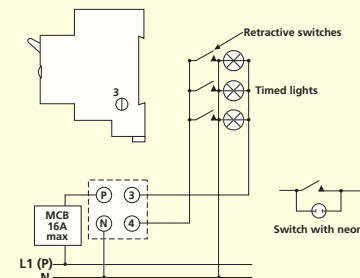
- Synchronous motor. • Time range 1–7 minutes. • Glow lamp max 50mA.
- Override switch for permanent 'on'. • Pre-selector switch for 3-4 wire connection.

### TWILIGHT SWITCH

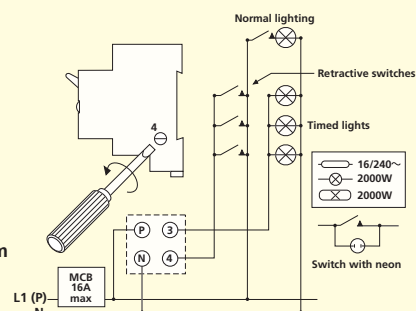
Operating voltage	190–240V
Mains frequency	45–60Hz
Power consumption	2.2VA
Contact rating resistive @ 240V	10A
Incandescent lamp load	1000W
Brightness range	2–2000 lux
Switching delay (on/off)	80 seconds approx
Switching status indication	LED (no delay)
Connection cable for light sensor	2 core cable max length 100m
Permissible ambient temp	-10 to +50°C control unit -40 to +70°C
Protection category	IP20 control unit IP54 light sensor

- Can be wired normally open or closed. • Delay 'on/off' eliminates nuisance switching.
- Selector switch for adjustment of ranges: range 1 2–35 lux; range 2 35–2000 lux.
- Connection of additional timing device will provide facility to override 'switch on' status.

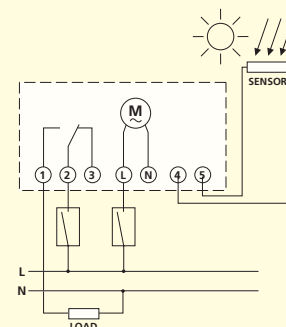
Staircase 3 wire  
Typical wiring diagram



Staircase 4 wire  
Typical wiring diagram



Twilight switch  
Typical wiring diagram



# DIMENSIONS

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WIRING ACCESSORIES	188-190
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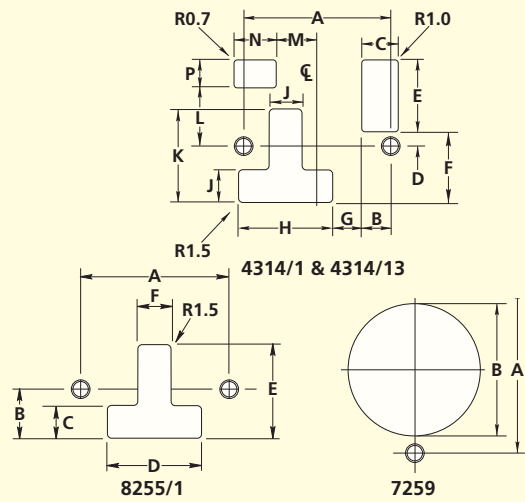
## PANEL CUT-OUT DETAILS

### CAPITAL 13A SINGLE SOCKET OUTLET INTERIORS

List No	*A	B	C	D	E	F	G	H	J	K	L	M	N	P
<b>4314/1</b>	60.3	12.0	15.4	5.7	28.6	30.4	10.8	38.8	14.2	38.4	-	-	-	-
<b>4314/13</b>	60.3	12.0	15.4	5.7	28.6	30.4	10.8	38.8	14.2	38.4	23.4	16.8	16.6	10.5
<b>7259</b>	60.3	50.0	-	-	-	-	-	-	-	-	-	-	-	-
<b>8255/1</b>	60.3	24.2	14.2	38.8	38.4	14.2	-	-	-	-	-	-	-	-

\* Fixing holes drill to accept 4mm countersunk screws.

Max panel thickness 1.6mm (except 7259 – 2.5mm).

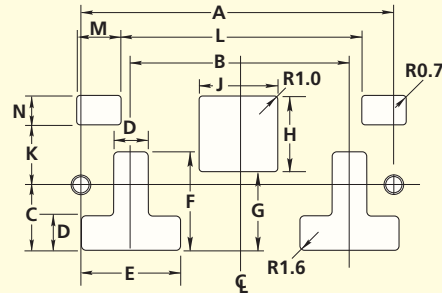


### CAPITAL 13A TWIN SOCKET OUTLET INTERIORS

List No	*A	B	C	D	E	F	G	H	J	K	L	M	N
<b>4316/1</b>	120.6	84.4	24.7	14.2	38.8	38.4	30.4	28.6	29.9	-	-	-	-
<b>4316/13</b>	120.6	84.4	24.7	14.2	38.8	38.4	30.4	28.6	29.9	23.4	94.1	16.6	10.5
<b>8257/1</b>	120.6	60.0	21.6	14.2	38.8	38.4	-	-	-	-	-	-	-
<b>8257/1 BLUE/CE</b>	120.6	60.0	21.4	13.7	38.3	37.9	-	-	-	-	-	-	-

\* Fixing holes drill to accept 4mm countersunk screws.

Max panel thickness 1.6mm.

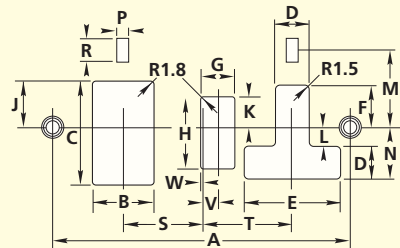


### CAPITAL 45A DP 'SLIMLINE' COOKER CONTROL UNIT INTERIORS

List No	*A	B	C	D	E	F	G	H	J	K	L	M	N
4522/1	120.6	24.9	42.7	14.0	38.6	17.1	14.2	29.5	19.2	12.6	7.1	31.75	21.1
4522/13	120.6	24.9	42.7	14.0	38.6	17.1	14.2	29.5	19.2	12.6	7.1	31.75	21.1
List No	P	R	S	T	V	W							
4522/13	4.5	9.5	31.75	36.77	6.48	0.62							

\* Fixing holes drill to accept 3.5mm countersunk screws.

Max panel thickness 1.6mm.

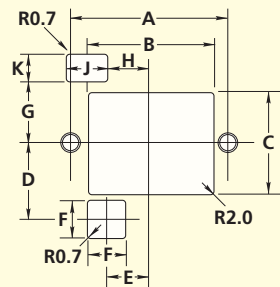


### CAPITAL 13A FUSED CONNECTION UNIT INTERIORS

List No	*A	B	C	D	E	F	G	H	J	K
<b>4831/1</b>	60.3	22.0	38.0	-	-	-	-	-	-	-
<b>4832/1</b>	60.3	48.0	38.0	-	-	-	-	-	-	-
<b>4832/13</b>	60.3	48.0	38.0	-	-	-	23.4	16.8	16.6	10.5
<b>4836/1</b>	60.3	22.0	38.0	29.0	17.0	14.0	-	-	-	-
<b>4837/1</b>	60.3	48.0	38.0	29.0	17.0	14.0	-	-	-	-
<b>4837/13</b>	60.3	48.0	38.0	29.0	17.0	14.0	23.4	16.8	16.6	10.5

\* Fixing holes drill to accept 4mm countersunk screws.

Max panel thickness 1.6mm.

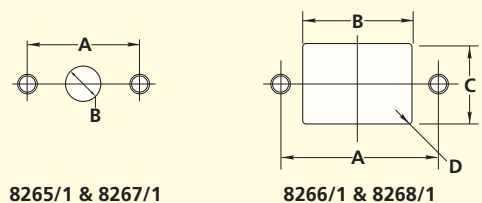


### CAPITAL CO-AXIAL OUTLETS

List No	*A	B	List No	*A	B	C	D
<b>8265/1</b>	60.3	15.0 Dia	<b>8266/1 (Old)</b>	60.3	41.0	30.0	3.0
<b>8267/1</b>	60.3	15.0 Dia	<b>8268/1 (New)</b>	60.3	42.5	33.0	2.0

\* Fixing holes drill to accept 3.5mm countersunk screws.

Max panel thickness 1.7mm.



All dimensions in mm. General tolerance  $\pm 0.13\text{mm}$ . These dimensions are a guideline only, more detailed drawings are available upon request.

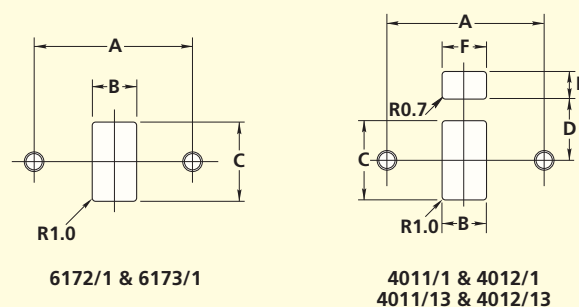
## PANEL CUT-OUT DETAILS

### CAPITAL 10AX/20A/32A SWITCH INTERIORS

List No	*A	B	C	D	E	F
<b>All 1 gang</b>	60.3	17.1	30.6			
<b>6172/1</b>	60.3	33.4	30.6			
<b>6173/1</b>	60.3	49.7	30.6			
<b>4011/1 &amp; 4012/1</b>	60.3	17.1	30.6	-	-	-
<b>4011/13 &amp; 4012/13</b>	60.3	17.1	30.6	23.7	10.5	16.6

\* Fixing holes drill to accept 4mm countersunk screws.

Max panel thickness 2.5mm.

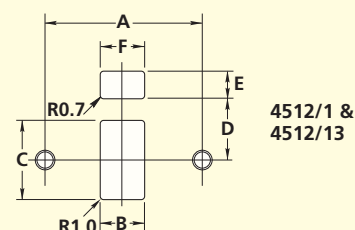


### CAPITAL 50A DP SWITCHES

List No	*A	B	C	D	E	F
<b>4512/1</b>	60.3	26.2	44.8	25.35	10.3	16.3
<b>4512/13</b>	60.3	26.2	44.8	25.35	10.3	16.3

\* Fixing holes drill to accept 3.5mm countersunk screws.

Max panel thickness 2.5mm.

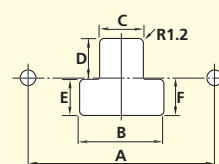


### CAPITAL 2A ROUND PIN SOCKET OUTLETS

List No	*A	B	C	D	E	F
<b>8075/1</b>	60.3	27	13.9	13.25	12.4	12.65

\* Fixing holes drill to accept 3.5mm countersunk screws.

Max panel thickness 1.6mm.

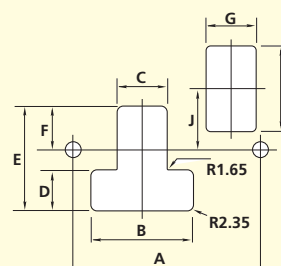


### CAPITAL 5A ROUND PIN SOCKET OUTLETS

List No	*A	B	C	D	E	F	G	H	J
<b>2240/1</b>	60.3	33.15	16	14.1	35.13	14.28	16	28.7	20

\* Fixing holes drill to accept 3.5mm countersunk screws.

Max panel thickness 1.6mm.

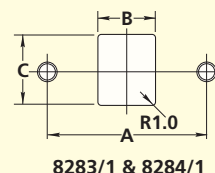


### CAPITAL TELEPHONE OUTLETS

List No	*A	B	C
<b>8283/1</b>	60.3	25.3	34.3
<b>8284/1</b>	60.3	25.3	34.3

\* Fixing holes drill to accept 3.5mm countersunk screws.

Max panel thickness 1.7mm.

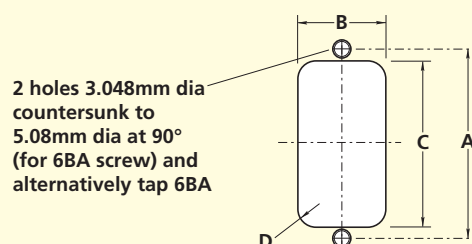


All dimensions in mm. General tolerance  $\pm 0.13$ mm. These dimensions are a guideline only, more detailed drawings are available upon request.

### ROCKERGRID PANEL CUT OUT DETAILS

For Rockergrid switches and accessories, single screw fixing to grid, second fixing hole facilitates panel mounting if required. Extra screws to order.

<b>Dimensions</b>	A = 40mm
	B = 18mm
	C = 35mm
	D = 3mm



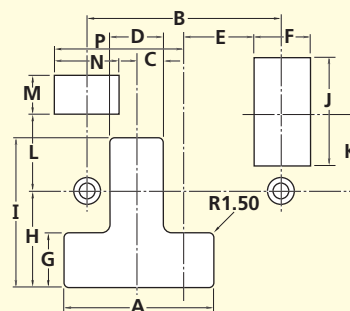
These dimensions are a guideline only, more detailed drawings are available upon request.



## PANEL CUT-OUT DETAILS

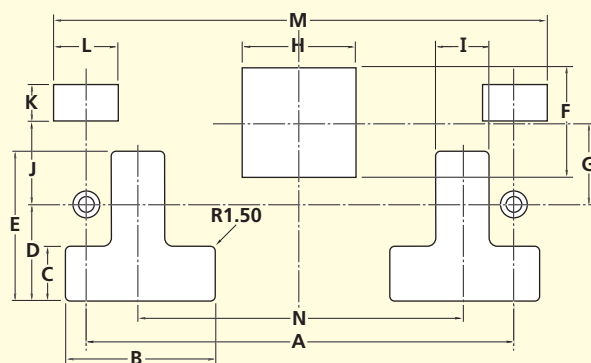
### PLATINUM 13A SINGLE SOCKET OUTLET

List No	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
<b>1314/1</b>	38.4	50.0	12.0	13.8	18.7	14.4	13.8	24.5	38.0	28.5	20.0	-	-	-	-
<b>1314/13</b>	38.4	50.0	12.0	13.8	18.7	14.4	13.8	24.5	38.0	28.5	20.0	19.65	10.30	16.30	33.15



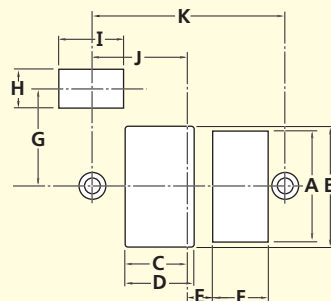
### PLATINUM 13A TWIN SOCKET OUTLET

List No	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>1316/1</b>	110	38.4	13.8	24.5	38.0	28.5	20.0	29.0	13.8	-	-	-	-	-
<b>1316/13</b>	110	38.4	13.8	24.5	38.0	28.5	20.0	29.0	13.8	20.15	10.3	16.3	127.3	84.4



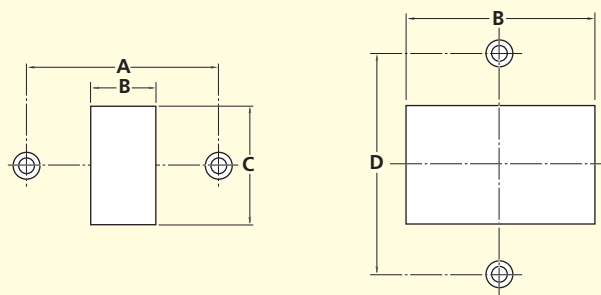
### PLATINUM 13A FUSED CONNECTION UNIT

List No	A	B	C	D	E	F	G	H	I	J	K
<b>1832/1</b>	27.7	30.5	1.50	17.75	6.20	14.60	-	-	-	-	50.0
<b>1832/13</b>	27.7	30.5	1.50	17.75	6.20	14.60	24.8	10.2	16.2	25.0	50.0



### PLATINUM 10AX SWITCH

List No	A	B	C	D
<b>1170/1</b>	50.0	16.5	30.0	-
<b>1096/1</b>	50.0	16.5	30.0	-
<b>1172/1</b>	50.0	32.8	30.0	-
<b>1173/1</b>	-	49.5	30.0	55.8



These Dimensions are a guideline only, more detailed drawings are available upon request.

## APPROXIMATE DIMENSIONS (mm)

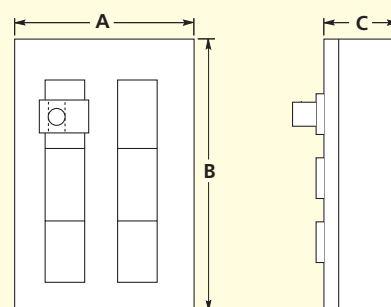
### LIGHTING DISTRIBUTION BOX (LDB)

List No	A	B	C
<b>5020/4</b>	210	245	80.6
<b>5021/4</b>	210	245	80.6
<b>5022/4</b>	208.3	292.7	80.6

All dimensions are approximate and in mm.  
Please allow for clearance of approximately 8mm  
for interior 21mm for the LSC plug when inserted.

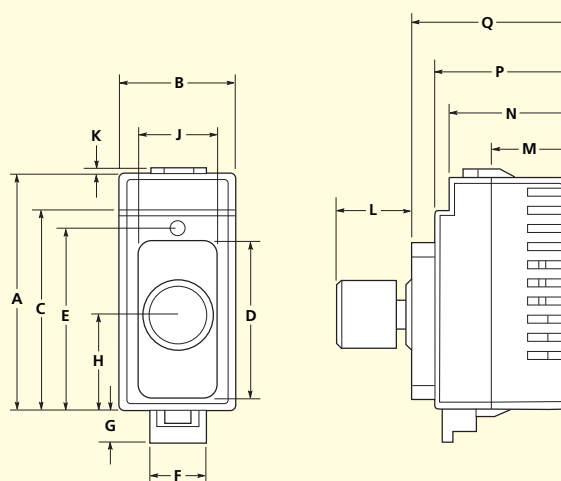
Commercial and office layouts may require frequent modification to the lighting requirements and the LDB can provide a cost effective solution when a number of units are connected through a lighting system. Light fittings can be conveniently un-plugged and re-connected into another LDB at a different point of the lighting circuit to provide optimum light and maximum flexibility.

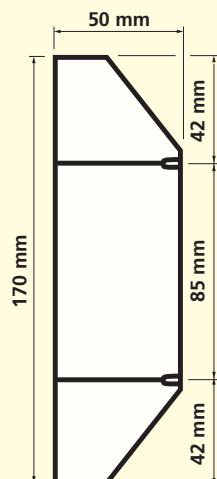
A lighting system utilising LDBs with 4 pin interiors offers an emergency light circuit at every point but allows a 3 pin LSC plug to connect to offer standard lighting.



### PUSH ON/OFF 2 WAY GRID DIMMER

A	B	C	D	E	F	G	H	J	K	L	M
52.0	25.0	44.0	34.4	40.05	12.0	7.10	21.25	17.10	1.20	16.30	17.0
N	P	Q									
26.0	29.0	34.0									





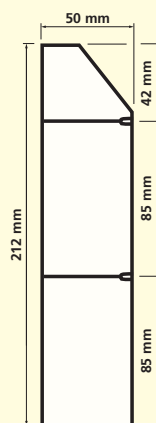
### EXTERNAL DIMENSIONS, WARWICK 1

Profile assembly includes:

- Base Unit
- 2 x Angled Covers
- 1 x Main Cover

Overall Size:

- 170mm x 50mm



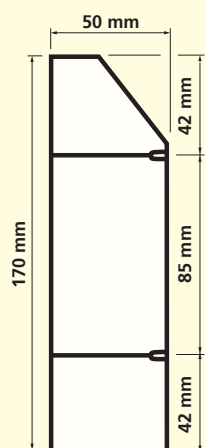
### EXTERNAL DIMENSIONS, WARWICK 4

Profile assembly includes:

- Base Unit
- 1 x Base Extension
- 1 x Angled Cover
- 2 x Main Covers

Overall Size:

- 212mm x 50mm



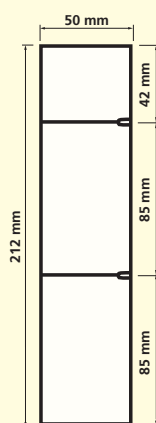
### EXTERNAL DIMENSIONS, WARWICK 2

Profile assembly includes:

- Base Unit
- 1 x Angled Cover
- 1 x Main Cover
- 1 x Square Cover

Overall Size:

- 170mm x 50mm



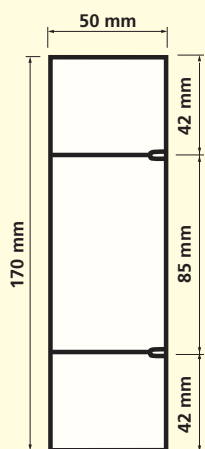
### EXTERNAL DIMENSIONS, WARWICK 5

Profile assembly includes:

- Base Unit
- 1 x Base Extension
- 1 x Angled Cover
- 2 x Main Covers

Overall Size:

- 212mm x 50mm



### EXTERNAL DIMENSIONS, WARWICK 3

Profile assembly includes:

- Base Unit
- 2 x Square Covers
- 1 x Main Cover

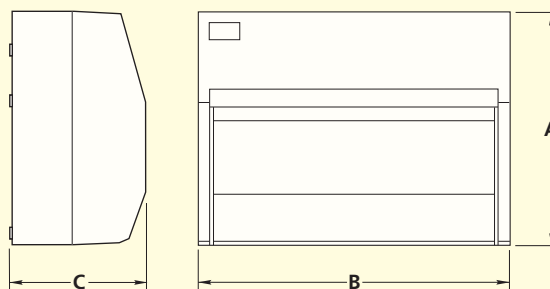
Overall Size:

- 170mm x 50mm

## APPROXIMATE DIMENSIONS (mm)

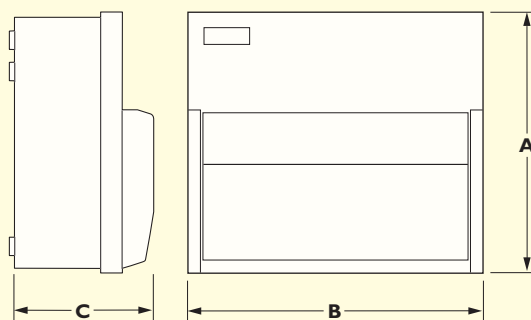
### SURFACE ALL-INSULATED ENCLOSURES

List No	A	B	C
<b>404/0A</b>	160	117	102
<b>406/0A</b>	230	190	120
<b>409/0A</b>	230	243	120
<b>412/0A</b>	230	294	120
<b>415/0A</b>	230	344	120
<b>420/0A</b>	230	439	120



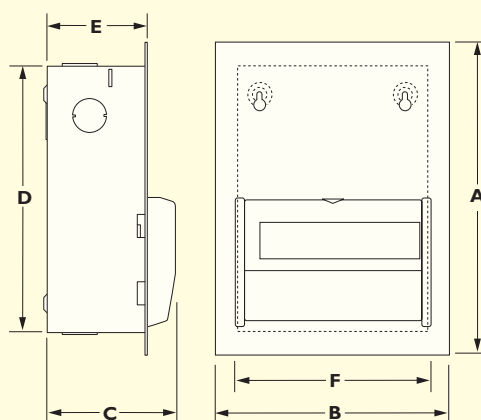
### SURFACE METAL-CASED ENCLOSURES

List No	A	B	C
<b>804/0A</b>	185	130	97
<b>806/0A</b>	261	188	122
<b>809/0A</b>	261	242	122
<b>812/0A</b>	261	292	122
<b>815/0A</b>	261	343	122
<b>820/0A</b>	261	438	122



### FLUSH METAL-CASED ENCLOSURES

List No	A	B	C	D	E	F
<b>806/0AF</b>	300	223	121	255	93	181.5
<b>809/0AF</b>	300	276	121	255	93	235
<b>812/0AF</b>	300	327	121	255	93	286
<b>815/0AF</b>	300	377	121	255	93	336
<b>820/0AF</b>	300	472	121	255	93	431
<b>824/2AF</b>	540	325	121	500	93	286
<b>830/2AF</b>	540	375	121	500	93	336
<b>840/2AF</b>	540	472	121	500	93	431

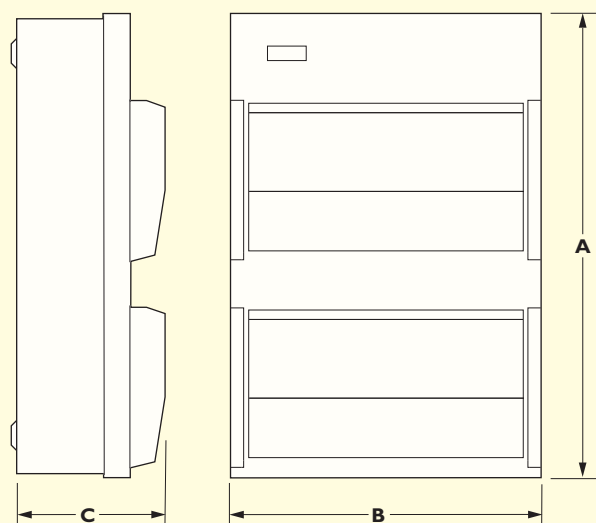




## APPROXIMATE DIMENSIONS (mm)

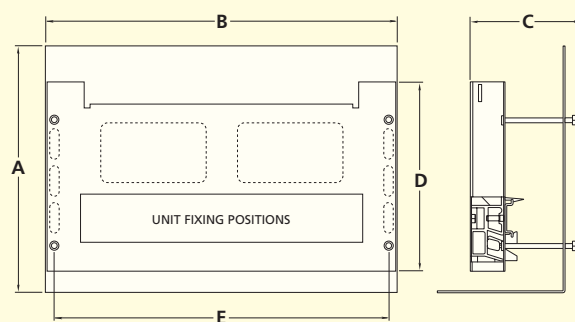
### 2 BANK SURFACE METAL CASED ENCLOSURES

List No	A	B	C
<b>824/2A</b>	506	295	121
<b>830/2A</b>	506	354	121
<b>840/2A</b>	506	440	121



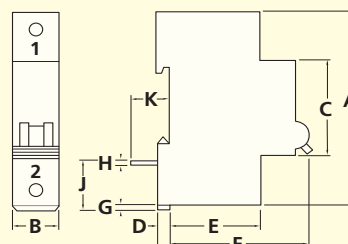
### SPINE BACKPLATE ASSEMBLIES (WHITE PVC COVER)

List No	A	B	C	D	E
<b>H915/0W</b>	235	335	106	180	319.5
<b>H920/0W</b>	235	448	105	180	435



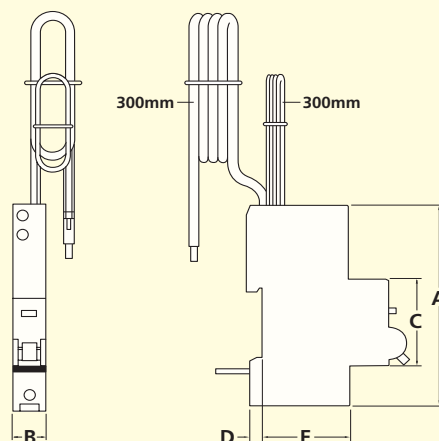
### STARBREAKER MINIATURE CIRCUIT BREAKERS

List No	A	B	C	D	E	F	G	H	J	K
<b>61/B__</b>										
<b>&amp; 61/C__</b>	90	18	45	6	44	70	3	1.5	26	16



### STARBREAKER RCBOs

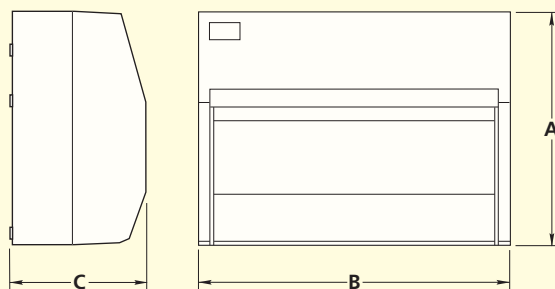
List No	A	B	C	D	E
<b>61/B1__ 30</b>					
<b>&amp; 61/C1__ 30</b>	125	17.6	45	6.2	44



## APPROXIMATE DIMENSIONS (mm)

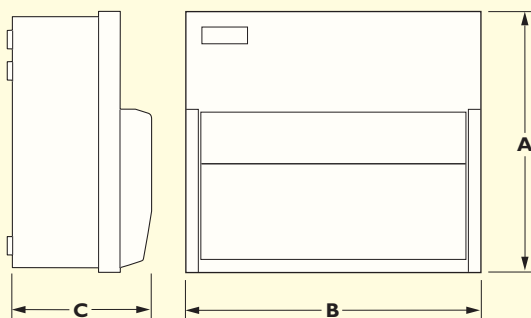
### SURFACE ALL-INSULATED ENCLOSURES

List No	A	B	C
<b>18LC2</b>	160	117	102
<b>18LC5</b>	230	190	120
<b>18LC8</b>	230	243	120
<b>18LC11</b>	230	294	120
<b>18LC14</b>	230	344	120
<b>18LC19</b>	230	439	120
<b>18LC6SL</b>	230	243	120
<b>18LC9SL</b>	230	294	120
<b>18LC12SL</b>	230	344	120
<b>18LC17SL</b>	230	439	120
<b>18LC10_ _</b>	230	344	120
<b>18LC15_ _</b>	230	439	120



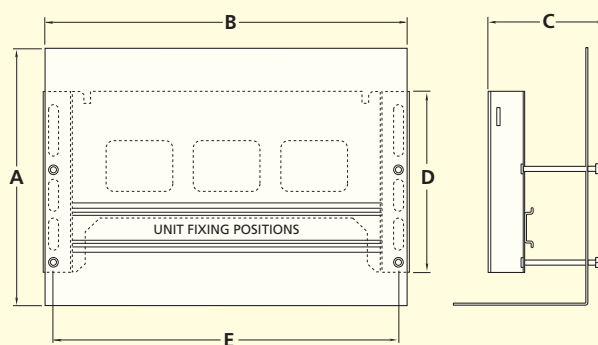
### SURFACE METAL-CASED ENCLOSURES

List No	A	B	C
<b>18P-2</b>	185	130	97
<b>18P-5</b>	261	188	122
<b>18P-8</b>	261	242	122
<b>18P-11</b>	261	292	122
<b>18P-14</b>	261	343	122
<b>18P-19</b>	261	438	122
<b>18PRSL09</b>	261	292	122
<b>18PRSL12</b>	261	343	122
<b>18PRSL17</b>	261	438	122
<b>18PS_ _ 10</b>	261	343	122
<b>18PS_ _ 15</b>	261	438	122



### SPINE BACKPLATE ASSEMBLIES (WHITE PVC COVER)

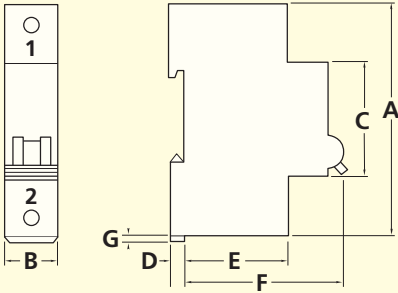
List No	A	B	C	D	E
<b>18SB_ _ _</b>	235	335	108	166	320



APPROXIMATE DIMENSIONS (mm)

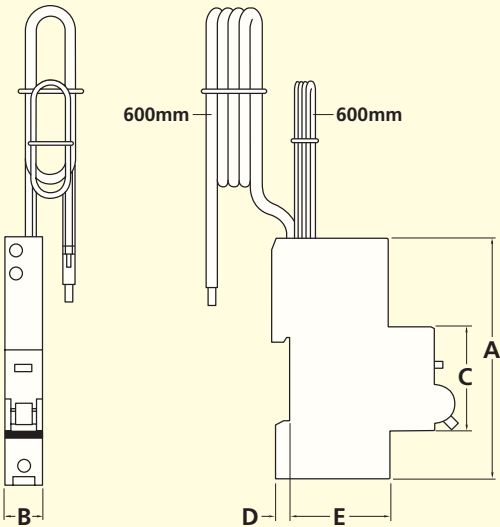
LOADSTAR MINIATURE CIRCUIT BREAKERS

List No	A	B	C	D	E	F	G
6MSB & 6MSC	90	18	45	6	44	70	3



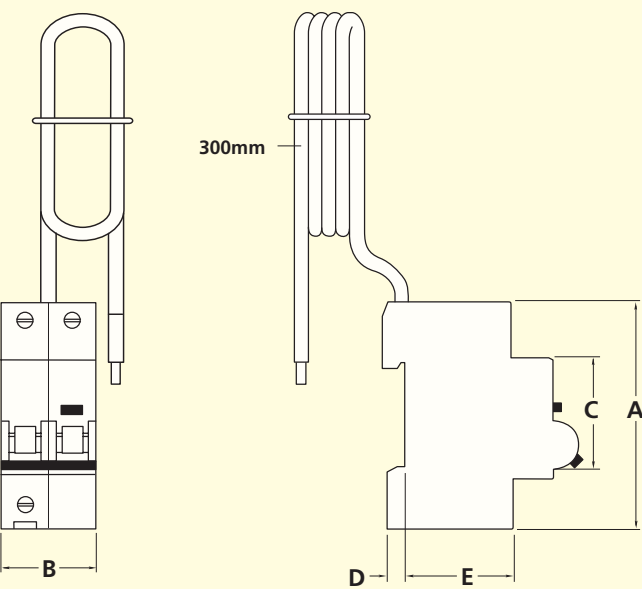
LOADSTAR RCBOs (SINGLE MODULE)

List No	A	B	C	D	E
6FSR__30B & 6FSR__30C	125	17.6	45	6.2	44



LOADSTAR RCBOs (DOUBLE MODULE)

List No	A	B	C	D	E
6FSNR__3/C	125	36	45	6.2	44

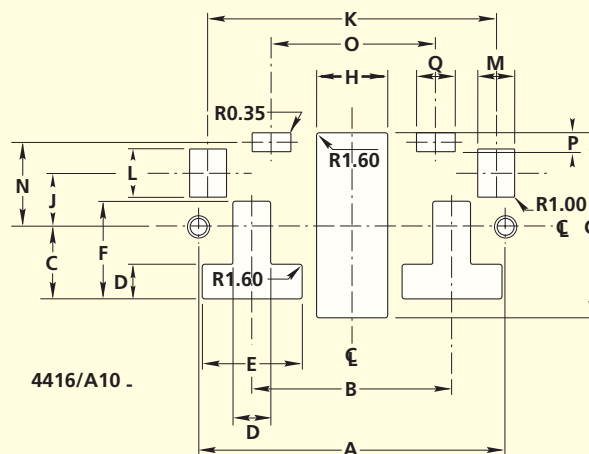


## APPROXIMATE DIMENSIONS (mm)

### 13A 2 GANG SRCD (SAFETY SOCKET)

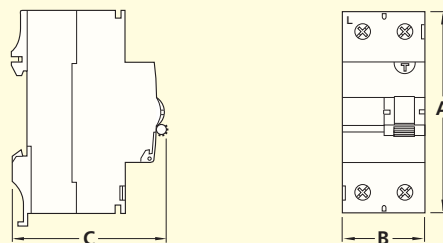
List No	A	B	C	D	E	F	G	H
4416/A10	120.6	79.5	28.45	14.2	38.8	38.4	72.8	27.3

J	K	L	M	N	O	P	Q
20.85	113.1	12.9	13.9	32.7	63.5	7.4	14.5



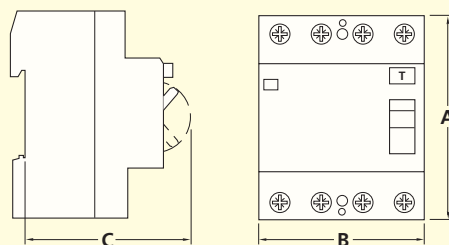
### 2 MODULE RESIDUAL CURRENT CIRCUIT BREAKERS

List No	A	B	C
223/A010			
224/ ---, 226/ ---, 228/ ---			
224/A ---, 226/A ---, 228/A ---	90	35	75



### 4 MODULE RESIDUAL CURRENT CIRCUIT BREAKERS

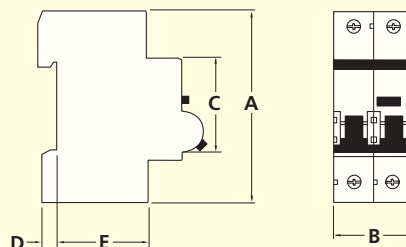
List No	A	B	C
244/ ---, 246/ ---, 241/ ---	85	70	68
244/A ---, 246/A ---, 241/A ---	90	70	75



### LIFESTAR STAND ALONE RCBO

List No	A	B	*C	D	E
2FSNR_3/C	125	36	45	6.2	44

\* Allow 4mm for dolly clearance.

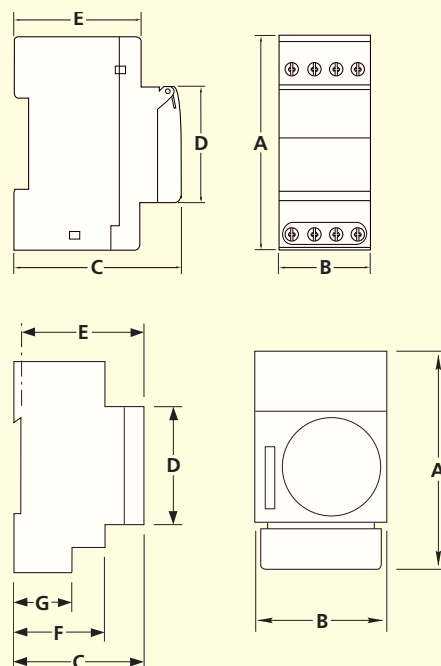




## APPROXIMATE DIMENSIONS (mm)

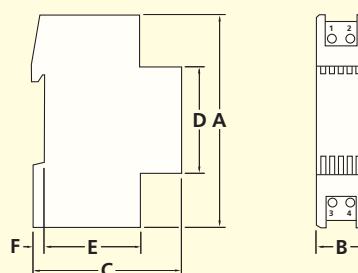
### TIME SWITCHES

LIST No	A	B	C	D	E
<b>Digital</b>					
301/TD1	86	17.5	66	45	50
302/TD1	83	36	66	45	50
302/TD2	83	36	66	45	50
402/TD1	83	36	66	45	50
402/TD2	83	36	66	45	50
502/TD1	83	36	66	45	50
502/TD2	83	36	66	45	50
<b>Analogue</b>					
301/TQ24	86	17.5	66	45	50
303/TQ24	90	53	66	45	50
303/TQ7	90	53	66	45	50
301/TS11	86	17.5	66	45	50
303/TS24	90	53	66	45	50
<b>Staircase</b>					
301/S7	84	18	70	45	42



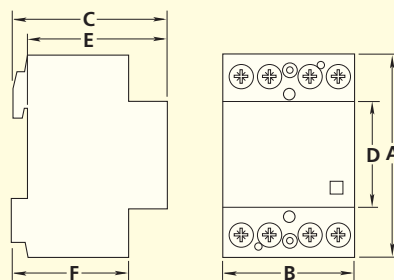
### BELL TRANSFORMERS

LIST No	A	B	C	D	E	F
301/B6, B8, & B12	90	18	64	45	44	6



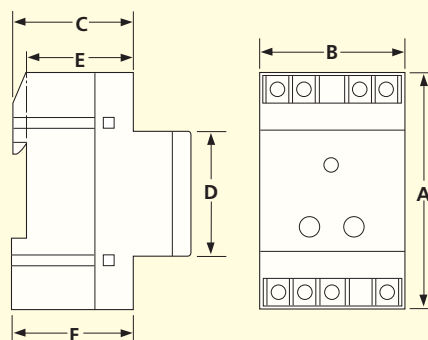
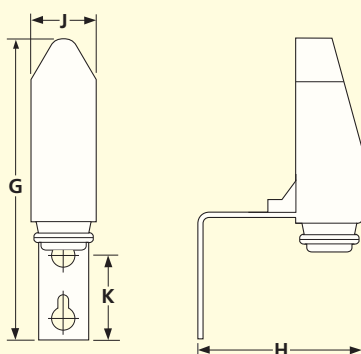
### CONTACTORS

LIST No	A	B	C	D	E	F
CIK22-20	85	17.5	65	45	60	49
CIK24-30	85	35	65	45	60	49
CIK24-40	85	35	65	45	60	49
CIK40-20	84	53	65.5	45	60	48.5
CIK40-30	84	53	65.5	45	60	48.5
CIK63-31	84	53	65.5	45	60	48.5
CIK63-40	84	53	65.5	45	60	48.5



### TWILIGHT SWITCH

LIST No	A	B	C	D	E	F	G	H	J	K	L
303/P2	86	54	66	45	60	46	116	61	27	25	-

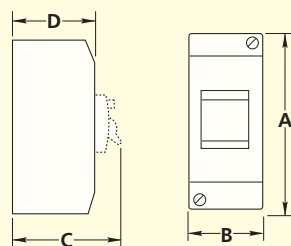


## APPROXIMATE DIMENSIONS (mm)

### 3 MODULE GENERAL PURPOSE ENCLOSURE IP20

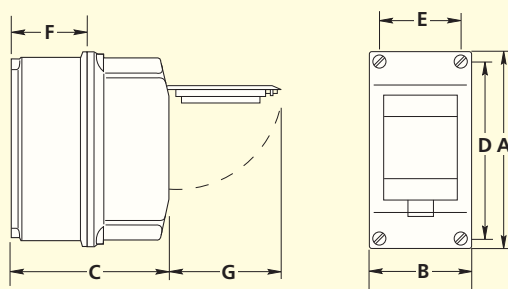
List No	A	B	*C	D
<b>744/3</b>	150	60	79	60

\* Allow 4mm for dolly clearance.



### 3 MODULE ALL-PURPOSE ENCLOSURE IP65

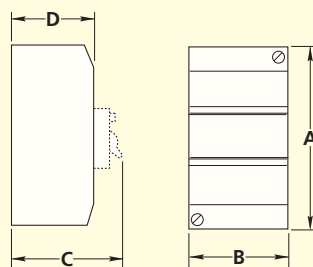
List No	A	B	C	D	E	F	G
<b>CBE3</b>	160	85	114	140	65	69	96



### 4 MODULE GENERAL PURPOSE ENCLOSURES IP20

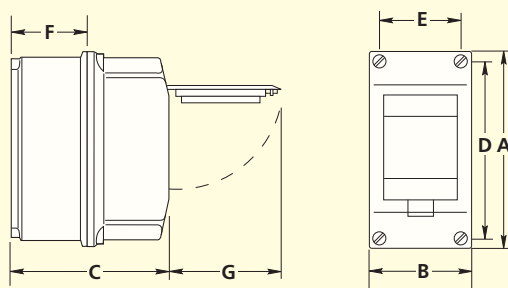
List No	A	B	*C	D
<b>744/4</b>	150	79	79	60

\* Allow 4mm for dolly clearance.



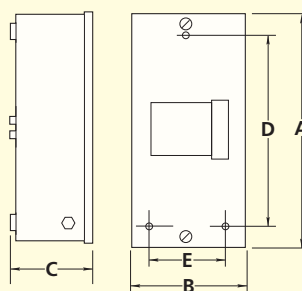
### 4 MODULE ALL-PURPOSE ENCLOSURE IP65

List No	A	B	C	D	E	F	G
<b>CBE4</b>	160	110	114	140	90	69	96



### 4 MODULE FABRICATED STEEL ENCLOSURE IP20

List No	A	B	C	D	E
<b>844/4</b>	223	112	66	184	73



*502/TD2*

*CBE3/EK*

*AM4553*

*BCL5/FTU*

# NUMERICAL INDEX

- WIRING ACCESSORIES
- CABLE MANAGEMENT
- CIRCUIT PROTECTION

*5855*

*4426/A03BG*

*61/B16* *708/383*

*7094*

*9562/ES*

*4836/BZ*

*4306*



## WIRING ACCESSORIES

100215	105	3002/DO	63, 67	3173/1MC	63	3899BG	81
1011/1__	50, 56	3002/GL	63, 67	3173/1WH	63	4001 to 4004	7
1011/13__	50, 5	3002/HPC	63, 66	3175/1__	65	4005 & 4006	103
1012/1__	50, 56	3002/LO	63, 67	3175/1BK	63	4011/_	73
1012/13__	50, 56	3002/MR	63, 67	3175/1MC	63	4011/1 & 4011/13	101
1017/1__	49, 55	3002/SC	62, 66	3175/1WH	63	4011/3__ & 4011/31	73
1075/1	49, 55	3002/WH	62, 66	3255/1__	64	4012/1 & 4012/13	101
1091/1	24, 33, 39, 51, 57	3004/1__	64	3255/1BK	63	4012/3__	73
1092/1	24, 33, 39, 51, 57	3004/AC	62, 66	3255/1MC	63	4013/3	9
1096/1__	35, 50, 56	3004/BKN	63, 66	3255/1WH	63	4014/3__	73
1170/1__	50, 56	3004/DO	63, 67	3265/1__	65	4015 to 4018	9
1172/1__ & 1173/1__	50, 56	3004/GL	63, 67	3265/1BK	63	4015/3	9
1175/1__	50	3004/HPC	63, 66	3265/1MC	63	4015/31	9
1250W/_	72	3004/LO	63, 67	3265/1WH	63	4016/3	9
1272/1__	49, 55	3004/MR	63, 67	3304/1BK	63	4017/1	9
1314/1__ & 1314/13__	49, 55	3004/SC	62, 66	3304/1MC	63	4018/_	72
1316/1__ & 1316/13__	49, 55	3004/WH	62, 66	3304/1WH	63	4020/3BG	80
1340/1	55, 49	3005/AC	62, 66	3306/1__	64	4021/3BG	80
1367/1368	85	3005/BKN	63, 66	3306/1BK	63	4070	16, 35
13NP	8	3005/DO	63, 67	3306/1MC	63	4075	11
1400W/_	72	3005/GL	63, 67	3306/1WH	63	4096/2WB	16
1410/1	51, 57	3005/HPC	63, 66	3400/1__	65	4096/B	16
1512/1__ & 1512/13__	50, 56	3005/LO	63, 67	3400/1BK	63	4096/G/PE	16
1522/1__ & 1522/13__	50, 56	3005/MR	63, 67	3400/1MC	63	4096/NM	16
1832/1__ & 1832/13__	49, 55	3005/SC	62, 66	3400/1WH	63	4096/P	16
1837/1__ & 1837/13__	49, 55	3005/WH	62, 66	3400RD/1__	65	4096/P/RD	16
1901	32, 39, 46, 47, 48, 53, 54	3006/AC	62, 66	3400RD/1BK	63	4097/B	17
1902	32, 39, 46, 47, 48, 53, 54	3006/BKN	63, 66	3400RD/1MC	63	4097/P	17
1903	32, 39, 46, 47, 48, 53, 54	3006/DO	63, 67	3400RD/1WH	63	4130/PU	16
1904	32, 39, 46, 47, 48, 53, 54	3006/GL	63, 67	3400TD/1__	65	4132/PU	16
1906	46, 48, 53, 54	3006/HPC	63, 66	3400TD/1BK	63	4170	16, 35
1908	46, 48, 53, 54	3006/LO	63, 67	3400TD/1MC	63	4171	16, 35
1932	81	3006/MR	63, 67	3400TD/1WH	63	4172	16, 35
1932/F	81	3006/SC	62, 66	3401	20	4173	16, 35
2041	17	3006/WH	62, 66	3410	20	4174	16
2141	17	3015/13__	64	3420	20	4175	16, 35
2147	17	3015/13BK	63	3422	20	4176	16
2161	13	3015/13MC	63	3432	20	4177 to 4180	17
2163	13	3015/13WH	63	3442	20	4190/PU	16
2167	13	3016/13__	64	3443	19	4192/PU	16
2167/_	74	3016/13BK	63	3443/HALO	19	4211/BLANK	10
224/030	95	3016/13MC	63	3450	20	4214/3BG	79
2240/1	100	3016/13WH	63	3450/9	20	4214/BG	79
2240/BG	80	3017/1__	64	3450/LEFCL	19	4214/BG/RD	81
2250W/_	72	3017/1BK	63	3462/BK	20	4216/3BG	79
2272/BG	80	3017/1MC	63	3462/WH	20	4216/BG	79
2330	7	3017/1WH	63	3463/BK	20	4216/BG/RD	81
2340/_	71	3130/PU/1__	65	3463/WH	20	4304	6
2372/_	71	3130/PU/1BK	63	3467	105	4304/3D	6
2382	7	3130/PU/1MC	63	3521/13__	64	4304/D	6
2400	13, 17	3130/PU/1WH	63	3521/13BK	63	4306	6
2400W/_	72	3132/PU/1__	65	3521/13MC	63	4306/3D	6
2402/E	13, 17	3132/PU/1BK	63	3521/13WH	63	4306/D	6
2411/_	73	3132/PU/1MC	63	3711	105	4307	6
3001/AC	62, 66	3132/PU/1WH	63	3713	105	4307/3	6
3001/BKN	63, 66	3170/1__	65	3767	105	4314/_	70
3001/DO	63, 67	3170/1BK	63	3809BG	81	4314/_/6	70
3001/GL	63, 67	3170/1MC	63	3824/1__	65	4314/1 to 4314/13	99
3001/HPC	63, 66	3170/1WH	63	3824/1BK	63	4314/136/_	100
3001/LO	63, 67	3171/1__	65	3824/1MC	63	4314/16/_	100
3001/MR	63, 67	3171/1BK	63	3824/1WH	63	4314/3__	70
3001/SC	62, 66	3171/1MC	63	3827/13__	64	4314/3__/6	70
3001/WH	62, 66	3171/1WH	63	3827/13BK	63	4316/_	70
3002/AC	62, 66	3173/1__	65	3827/13MC	63	4316/_/6	70
3002/BKN	63, 66	3173/1BK	63	3827/13WH	63	4316/1 to 4316/13	99

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4316/136/_ _	100	4489/6_ _	48, 54, 85, 87	4831/1	99	5504/3CHA	33
4316/16/_ _	100	4489/7_ _	46, 53	4831/3_ _	70	5504/3WH	40
4316/3_ _	70	4489/CHA	32	4832/_ _	70	5504/CHA	33
4316/3_ _/6	70	4490	85, 86	4832/_ _/6	70	5504/WH	40
4318/_ _	75	4490/6_ _	85	4832/1 & 4832/13	99	5505/WH	40
4406/A03	7	4490/7_ _	46, 53	4832/136/_ _	100	5506/3CHA	33
4416/A03_ _	74	4490/BK	86	4832/16/_ _	100	5506/3WH	40
4416/A103	99	4490/RD	86	4832/3_ _	70	5506/CHA	33
4425	87	4491	85, 86	4832/3_ _/6	70	5506/WH	39, 40
4425/BK	87	4491/BK	86	4836/_ _	70	5507/CHA	33
4425/BKBL	87	4492	85, 86	4836/1	99	5507/WH	40
4425/BL	87	4493	85, 86	4837/_ _	70	5508/3WH	40
4426/A03BG	80	4493/BK	86	4837/_ _/6	70	5508/WH	40
4430	39, 85, 86, 96	4494	85, 86, 96	4837/1 & 4837/13	99	5509/CCHA	33
4430	96	4499	85	4837/136/_ _	100	5509/WH	39, 40
4430/6_ _	48, 54, 85, 87	4500	11	4837/16/_ _	100	5510/WH	40
4430/7_ _	46, 53	4500/_ _	11	4837/3_ _	70	5511/CHA	32
4430/BK	86	4506	10	4837/3_ _/6	70	5511/WH	39
4430/CHA	32	4507	10	4841/3BG & 4841/BG	79	5512/CHA	32
4430/RD	86	4512/_ _	74	4842/3BG & 4842/BG	79	5512/WH	39
4435	85, 86	4512/1 & 4512/13	101	4846/BG	79	5513/CHA	32
4436	85, 86, 96	4512/3_ _	74	4847/3BG & 4847/BG	79	5513/WH	39
4440	87	4512/3BG	80	5001 to 5003	107	5514/CHA	32
4440/BK	87	4512/BG	80	5001/CVR	107	5514/WH	39
4440/BKBL	87	4520/1 & 4520/31	10	5002/3	107	5515/WH	40
4440/BL	87	4521/1	10	5002/5	107	5520/3WH	40
4450	39, 85, 86	4521/31	10	5005	107	5520/WH	40
4450 x 2	96	4522/1	100	5006	107, 109	5532/3WH	40
4450/6_ _	48, 54, 85, 87	4522/13	100	5006/2	109	5532/WH	40
4450/7_ _	46, 53	4522/3_ _	74	5006/3	109	5543 & 5544	40
4450/BK	86	4523	10	5006/4	109	5545/3WH	40
4450/CHA	32	4523/3	10	5009	107	5545/WH	40
4450/RD	86	4530	39, 85, 86	5010	107, 109	5546/WH	40
4451	85, 86	4530/_ _	46	5010/2	109	5550/_ _	47
4451/7/WH	46, 53	4530/6_ _	48, 54, 85, 87	5010/3	109	5552/_ _	47
4451/ELT	86	4530/7_ _	53	5010/4	109	5561/WH	40
446/A03BG	80	4530/CHA	32	5011	107	5562/WH	40
4460	39, 85, 86	4530/RD	86	5014/3	107	5565/WH	40
4460	96	4535	39, 85, 86, 96	5017/5	107	5571	35, 84, 88
4460	96	4535	85, 86, 96	5018 & 5019	107	5572	35, 84, 88
4460/_ _	86	4535/6_ _	48, 54, 85, 87	5018/3	107	5573	84, 88
4460/6_ _	48, 54, 85, 87	4535/7_ _	46, 53	5018/5	107	5574	84, 88
4460/7_ _	46, 53	4535/CHA	32	5019/3	107	5575/WH	40
4460/BO	89	4535/RD	86	5020/4	109	5576	84, 88
4460/CHA	32	4550	39, 86	5021/4	109	5577/WH	39, 40
4460/DW	89	4550/6_ _	48, 87	5022/4	109	5583/WH	40
4460/EF	89	4550/7_ _	46, 53	5100/CHA	32	5801	18
4460/FF	89	4550/BK	86	517	107	5850 & 5851	18
4460/FR	89	4550/CHA	32	5170	17, 35	5855 & 5856	18
4460/FZ	89	4550/RD	86	5170/_ _	72	5855/12	18
4460/HB	89	4551	85, 86	5172	17, 35	5855/5	18
4460/HD	89	4551/7/WH	46, 53	5172/_ _	72	5855/9	18
4460/HT	89	4551/ELT	86	5173	17, 35	5855/S12	18
4460/MW	89	4552	85, 86	5173/_ _	72	5855/S9	18
4460/RD	86	4552/6_ _	48, 54, 85, 87	5175	17, 35	5860 & 5861	19
4460/TD	89	4552/7_ _	46, 53	5175/_ _	72	5870/LEFCL	19
4460/WA	89	4553	85, 86	5176	17, 35	6017/_ _	73
4460/WD	89	4553/6_ _	85, 87	5177	17, 35	6096/_ _	35, 72
4460/WDR	89	4553/7_ _	46, 53	5177/_ _	72	6096/1	101
4460/WM	89	4581/BG to 4583/BG	80	5430/_ _	47	6170/_ _	35, 72
4461	85, 86, 96	4587/BG	81	5501/CHA	33	6170/1	101
4461/7/WH	46, 53	4674	105	5501/WH	40	6172/_ _	35, 72
4461/ELT	86	4827 & 4828	6	5502/CHA	33	6172/1	101
4463	96	4827/3 to 4828/3	6	5502/WH	40	6173/_ _	35, 72
4489	39, 85, 86, 96	4831/_ _	70	5503/WH	40	6173/1	101

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6174/1	101	6581/1BG	84, 88	7069	23, 33, 39, 51, 57, 93	7400/D2WH	38
6175/_ _	35, 72	6581/BG to 6584/BG	84, 88	70697063	75	7400/RD1_ _	45, 50
6175/1	101	6582/1BG	84, 88	7071	23, 51, 57, 93	7400/TD1_ _	45, 50
6570/_ _	88	6586/BG	84, 88	7074	23, 75, 93	7410/RD & 7410/WH	105
6570/18_ _	88	6588/BG & 6589/BG	84, 88	708	51	7411/_ _	45
6570/18BZ	85	6591/_ _	88	7080	23, 39, 57, 75, 93	7411/WH	39
6570/18HPC	85	6591/BZ	85	7080/LH	23, 75, 93	7501/_ _	35, 41, 50
6570/18PB	85	6591/HPC	85	7081	23, 33, 39, 51, 57, 75, 93	7502/_ _	41, 50
6570/18PSS	85	6591/PB	85	7081/2	23, 33, 39, 51, 57, 75, 93	7503/_ _	41, 50
6570/18SC	85	6591/PSS	85	7082	23, 9	7504/_ _	41, 49
6570/18WH	85	6591/SC	85	7086	23, 93	7504/3_ _	41, 49
6570/24_ _	88	6591/WH	85	7087	23, 51, 57, 75, 93	7505/_ _	41, 49
6570/24BZ	85	6592/_ _	88	7091	24	7506/_ _	41, 49
6570/24HPC	85	6592/BZ	85	7094	24	7506/3_ _	41, 49
6570/24PB	85	6592/HPC	85	7111	8	7507/_ _	24, 41, 51
6570/24PSS	85	6592/PB	85	7170/_ _	35, 44	7508/_ _	41
6570/24SC	85	6592/PSS	85	7170/WH	38	7508/1_ _	49
6570/24WH	85	6592/SC	85	7172	23, 33, 39, 51, 57, 75, 93	7508/3_ _	41, 49
6570/BZ	84	6592/WH	85	7172/_ _	35, 44	7509/_ _	24, 41, 51
6570/HPC	84	6841 & 6842	21	7172/WH	38	7510/_ _	41, 51
6570/PB	84	6845 & 6846	21	7173	23, 93	7511/_ _	41, 48
6570/PSS	84	6849	21	7173/_ _	35, 44	7512/_ _	41, 48
6570/SC	84	6853	21	7173/WH	38	7513/_ _	41, 48
6570/WH	84	6887	21	7174	23, 51, 57, 93	7514/_ _	41, 48
6571/_ _	35, 88	6900	105	7175/_ _	35, 44	7515/_ _	41, 49
6571/1_ _	88	6900/1RD	105	7175/WH	38	7516/_ _	48
6571/1BZ	84	6900/1WH	105	7176	23, 93	7518/_ _	48
6571/1SC	84	6900/2	105	7177	23	7520/_ _	41, 50
6571/BZ	84	6900/2RD	105	7211	8	7520/3_ _	41, 50
6571/HPC	84	6901 to 6904	84, 87	7222/WH	8	7521/_ _	45
6571/PB	84	6906	85, 87	7250/D1_ _	45, 50	7521/3_ _	45
6571/PSS	84	6913	105	7250/D2_ _	45, 50	7521/WH	38
6571/SC	84	6915	23, 25, 75	7250/D3_ _	45, 50	7532/_ _	41, 50
6572/_ _	35, 84, 88	6920/13	8	7255	6	7532/3_ _	41, 50
6573/_ _	84, 88	6920/3	8	7257	6	7533/_ _	49
6574/_ _	88	6920/5	8	7259*	99	7533/3_ _	49
6574/BZ	84	6940	85, 86	7265 to 7268	25	7545/_ _	41, 50
6574/HPC	84	6988 & 6989	104	7272/WH	38	7545/3_ _	41, 50
6574/PB	84	7009	32, 35	7283 & 7284	25	7546/_ _	41, 50
6574/PSS	84	7011	8	7286	25	7546/3_ _	50
6574/SC	84	7011/_ _	45	7288	25	7560/_ _	49
6575/_ _	76	7011/3_ _	45	7314/_ _ & 7314/3_ _	44	7561/_ _ & 7562/_ _	41
6576/_ _	88	7011/3WH	38	7314/3WH & 7314/WH	38	7562/_ _	41
6576/BZ	84	7011/WH	38	7316/_ _ & 7316/3_ _	44	7565/_ _	41
6576/HPC	84	7012/3WH	38	7316/3WH & 7316/WH	38	7575/_ _	41, 51
6576/PB	84	7012/WH	38	7340/_ _	44	7577/_ _	41, 51
6576/PSS	84	7015/_ _	45	7340/WH	38	7579/_ _	41, 49
6576/SC	84	7015/3_ _	45	735006/ZP	105	7579/WH	40
6577/_ _	76	7015/3WH	38	735007	105	7583/_ _	41
6578/_ _	88	7015/WH	38	735008/*	105	7711/_ _ to 7714/_ _	46
6578/BZ	84	7016/3_ _	45	735009/*/VR	105	7716/_ _	46
6578/HPC	84	7017/_ _	45	735010*	105	7718/_ _	46
6578/PB	84	7017/WH	38	735010/*/VR	105	7765/_ _	45
6578/PSS	84	7018/_ _	44	735011*	105	7765/WH	39
6578/SC	84	7046 & 7047	7	735011/*/VR	105	7775/_ _	44
6579/_ _	88	705094/*/VR	105	735012*	105	7777/_ _	44
6579/BZ	84	705095/*	105	735013*	105	7783/_ _	45
6579/HPC	84	7060	23, 51, 57, 75, 93	735023	105	7783/WH	39
6579/PB	84	706097	105	735032	105	7784/_ _	45
6579/PSS	84	7062	7	735033	105	7784/WH	39
6579/SC	84	7063	23, 33, 39, 51, 57, 93	735038	105	7832/_ _	44
6579/WH	84	7064	23, 75, 93	735050	105	7832/3_ _	44
6580/18BG	85, 88	7065	23, 33, 39, 51, 57, 75, 93	7400/D1_ _	45, 50	7832/3WH	38
6580/24BG	85, 88	7066	23, 93	7400/D1WH	38	7832/WH	38
6580/BG	84, 88	7067	23, 33, 39, 51, 57, 75, 93	7400/D2_ _	45, 50	7915	23, 75

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7LJ61 & 7LJ62	25	9209/24BG	85, 89
7LJ64	25	9209/24PBG	85, 89
7T01/_ _ & 7T04/_ _	47	9209/BG	84, 89
7T70/_ _	44	9209/PBG	84, 89
7T72/_ _	44	9211/BG	104
8011/_ _	52	9211/PBG	104
8011/3_ _	52	9214/BG	104
8075/_ _	71	9214/PBG	104
8075/1	100	9221/BG	104
8091/_ _ & 8092/_ _	24, 75	9221/PBG	104
8092/1	24	9223/BG	104
8094/_ _	24, 75	9223/PBG	104
8094/1	24	9226/BG	104
8250/D1_ _ & 8250/D2_ _	56	9228/BG	104
8255/_ _	71	9338/GV	104
8255/1	99	9341/GV	85, 89
8256/_ _ & 8257/_ _	71	9342/GV	85, 89
8257/1	99	9406	103
8265/_ _ to 8268/_ _	76	9561	97
8265/1 to 8268/1	101	9561 to 9562	94, 95
8283/_ _ & 8284/_ _	76	9561/1L	95
8283/1 & 8284/1	101	9561/DL	95
8314/_ _	52	9561/E	97
8316/_ _	52	9561/ES	95
8400/D1_ _ & 8400/D2_ _	56	9561/ES	96, 97
8501/_ _ to 8503/_ _	56	9561/L	97
8504/_ _ to 8506/_ _	55	9562	97
8504/3_ _	55	9562/E	97
8506/3_ _	55	9562/ES	95, 97
8507/_ _	24, 57	9562/L	97
8508/_ _ & 8508/3_ _	55	9563/E	95, 97
8509/_ _	24, 57	9563/L	97
8510/_ _	57	9564/E	95, 97
8511/_ _ to 8518/_ _	54	9565	94, 95, 97
8520/_ _ & 8520/3_ _	56	9565/L	95
8532/_ _ & 8532/3_ _	56	9566/E	97
8533/_ _ & 8533/3_ _	55	9567	94, 95, 97
8545/_ _ & 8545/3_ _	56	9567/L	95
8546/_ _ & 8546/3_ _	56	9569/L	96
8560/_ _	55	9570/2	95, 96
8577/_ _	57	9571 to 9572	94, 95
8579/_ _	55	9573/L	95
8585/_ _	57	9573/RL	95
8711/_ _ to 8718/_ _	53	9579	94, 95
8832/_ _ & 8832/3_ _	52	9581/RG	96
9040	103	9582/RG	96
9041	103	9591/L	96
9043	103	9593/L	96
9044	103	9685/BG	79
9047	103	9687/BG	79
9048	103	9700	92
9048/1	103	9702 to 9704	92
9049	103	9706 to 9708	92
9050	103	9722	93
9052	103	9724	93
9053	103	A4304/D	28
9054	103	AM4015	28
9201/BG	84, 89	AM4015/3	28
9201/PBG	84, 89	AM4170	28
9203/BG	84, 89	AM4172	28
9203/PBG	84, 89	AM4175	28
9206/BG	84, 89	AM4304/D/GRN	28
9206/PBG	84, 89	AM4304/DCE/BLUE	28
9209/18BG	85, 89	AM4304/RED	28
9209/18PBG	85, 89	AM4306/D	28

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98347-1/A/2	128
98351-1/H/1	128
98496-2/E/1	128
98950-1/A/2	128
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# CONDITIONS OF SALE OF GOODS

## HOME

### 1 Contract Terms Quotations & Orders

- 1.1 Unless other terms and conditions are expressly accepted by Electrium by means of a specific written amendment hereto signed by Electrium or a Director of Electrium the contract will be on the terms and conditions set out below ("the Contract Terms") to the exclusion of any other terms and conditions (except those implied in favour of a seller which are not inconsistent with the Contract Terms) whether or not the same are endorsed upon, delivered with or referred to in any purchase order or other document delivered or sent by the Customer to Electrium or by Electrium to the Buyer reference made by Electrium to the Customer's order, specification or like document will not be deemed to imply that any terms or conditions endorsed upon, delivered with or referred to in such order, specification or like document will have effect to the exclusion or amendment of the Contract Terms. No variation, addition or modification of the Contract Terms conditions shall be binding on Electrium unless such variation, addition or modification be agreed to in writing under the signature of a Director of Electrium.
- 1.2 Any quotation is given on the basis that no contract will come into existence until the Customer places an order pursuant thereto. Any quotation is valid for a period of 30 days only from its date provided that Electrium has not previously withdrawn it.

### 2 Price

The price of Goods supplied hereunder ("the Goods") is exclusive of VAT or any successor tax thereto unless otherwise agreed in writing. The price for the Goods shall be (unless otherwise agreed by Electrium in writing) the list price of Electrium current at the date of despatch and in the case of an order for delivery by instalments the price payable for each instalment shall be Electrium's list price current at the date of despatch for each instalment. All prices are based on standard pack sizes and quantities and Electrium reserves the right to levy an additional charge if such packs must be broken up to fulfil an order. The price of Goods is inclusive of costs of carriage to the Customer's premises in Great Britain and Northern Ireland except on individual orders having a net value calculated by reference to the Company's most recent price list of less than £200 (excluding VAT) which shall be subject to an additional charge of not less than £15.00 (excluding VAT) to cover carriage and packing. The price of Goods is based on the costs of materials, labour, sub-contracts, transport, taxes, duties and currency exchange rates ruling at the date of the quotation. Electrium reserves the right to amend the contract price to take account of any variations in these costs or the imposition of any new taxes or duties occurring from whatever cause before delivery of the Goods.

### 3 Payment

The due date for payment shall be the last day of the month following the month of despatch of Goods supplied by Electrium. Payment made before the due date for payment shall be subject to a settlement discount of 2.5% VAT is calculated on the discounted value of the invoice and is not subject to settlement discount. Interest at an annual rate of 3% per month will accrue daily and be calculated on a daily basis on overdue accounts from the date of invoice until payment. Notwithstanding any Contract Term allowing the Customer credit payment shall become due and payable to Electrium immediately upon the termination of the contract. The Customer shall not be entitled to exercise any right of set-off or lien or any similar right or claim in connection with the Goods or the price payable therefor.

### 4 Packing Materials

Packing cases and cartons will be provided free of charge by Electrium. All pallets used shall remain at all times the property of Electrium and are to be returned to Electrium on demand in good condition. Electrium reserves the right to alter the method of packing without reference to the Customer.

### 5 Damage or Loss in Transit

Electrium will not be liable in respect of any damage or discrepancy, shortage or loss in transit or any claim that the Goods delivered do not otherwise comply with the contract unless the Customer shall have informed the Company in writing, telex or facsimile as follows:

- Within three days of delivery in the event of any damage, discrepancy or shortage.
  - Within seven days of delivery in the event that the Goods do not comply with the contract,
- and
- Within twenty-one days of receipt of the Company's invoice in the event of non-delivery.

Where the Goods are accepted from the Company's carriers they shall be deemed to have been checked by the Purchaser and accepted unless the delivery receipt is signed and endorsed "unexamined" and the packing and its contents are retained for later inspection.

### 6 Delivery

The place of delivery for Goods shall be the Customer's premises or as otherwise agreed by Electrium in writing. The time of delivery will be as agreed between the parties or if no such agreement has been reached will be within a reasonable time and the Company will be entitled to make delivery by instalments. In no circumstances will Electrium be liable for loss or damage of any kind whatsoever caused directly or indirectly by any delay in the delivery of Goods, nor unless such delay exceeds 180 days will any delay entitle the Customer to terminate or rescind the contract. Notwithstanding any other Contract Term, risk in the Goods shall pass to the Buyer when the Goods are delivered to the Customer or its agent.

### 7 Title of Goods

Until Electrium has been paid in full for the Goods comprised in this and/or any other contract between the Customer and Electrium, the Customer shall hold the Goods in a fiduciary capacity as bailee for Electrium and:

- the title to, ownership of, and the property in, the Goods shall remain vested in Electrium (notwithstanding delivery of the same and parting of the risk therein to the Customer) until payment in full for all Goods comprised in this and every other contract between Electrium and the Customer has been received by Electrium.
- The Customer shall be in possession of the Goods as Electrium's bailee. If so required the Customer shall store the Goods for Electrium without charge to Electrium separate from any goods which are the property of the Customer and/or any third party and ensure that they are clearly marked and identified as belonging to Electrium.
- Electrium reserves the right to require the Customer to return the Goods and may recover and sell the same at any time. For that purpose Electrium's servants and agents together with all necessary

and appropriate transport shall be entitled to unrestricted access to the Customer's premises and any other location where the Goods are situated to take possession of the Goods and, if necessary, dismantle the Goods from any article or articles to which they may have been attached and to remove the Goods from the Customer's premises.

- Prior to the property in the Goods passing to the Customer Electrium permits the Customer to deliver the Goods to a third party pursuant to a bona fide and arms-length agreement to re-sell the Goods and allows the Customer to convert or incorporate the Goods into or mix the Goods with other goods but such liberty will cease upon the termination of the contract.
- Where Electrium is unable to determine whether any goods are Electrium's Goods the Customer shall be deemed to have sold all goods of the kind sold by Electrium to the Customer in the order in which they were invoiced to the Customer.

### 8 Descriptive Matter

Descriptive matter, illustrations, dimensions and weights issued by Electrium are to be regarded as being for guidance only and cannot be held as binding in any way. In pursuance of Electrium's policy of product improvement Electrium reserves the right to alter patterns and designs without prior notice.

### 9 Guarantee

Electrium will make good by replacement (or its option by repair) defects which under proper use appear in the Goods within a period of twelve calendar months after the Goods have been despatched, and which arise solely from faulty design, materials or workmanship provided always that defective Goods have been returned to Electrium and Electrium was notified of the defect or suspected defect immediately the same became known to the Customer. The cost of carriage on such returned Goods and the cost of re-delivery of the repaired or new Goods to be borne by Electrium. Save for the Electrium's control equipment which has been correctly repaired or modified by the use of standard parts supplied by Electrium for such purpose, Electrium excludes all liability in respect of any Goods which have been re-finished and dismantled or altered in any way or if the Goods were improperly installed or connected or if the Customer fails to observe or perform the requirements of any maintenance procedures relating to the Goods. Any Goods replaced will belong to Electrium. Any repaired or replacement Goods will be guaranteed on these terms for the unexpired portion of the twelve month period. In addition, the obligations of Electrium under this condition will not apply if the Customer is in breach of this or any other contract with Electrium. Subject to this condition, all conditions, warranties and representations, whether express or implied (by statute or otherwise) relating to the Goods are hereby excluded insofar as the same can be excluded without such exclusion being void or unenforceable.

Electrium will be under no liability under the contract for any personal injury, death, loss or damage of any kind whatsoever (other than death or personal injury resulting from Electrium's negligence) whether consequential or otherwise including but not limited to loss of profits and Electrium hereby excludes all conditions, warranties and stipulations express or implied, statutory, customary or otherwise which but for such exclusion would or might subsist in favour of the Customer except that such exclusion will not apply to any implied condition that Electrium has or will have the right to sell the Goods when the property is to pass; or when Electrium deals as a consumer (as defined in section 12 of the Unfair Contract Terms Act 1977), any implied term relating to the conformity of the Goods with their description or sample or as to their quality or fitness for a particular purpose. In no circumstances will Electrium or its employees, agents or sub-contractors be liable for any loss or damage of any kind whatsoever (other than death or personal injury resulting from Electrium's negligence) whether consequential or otherwise caused directly or indirectly by any negligence or other tortious act or breach of statutory duty on the part of Electrium or on the part of any of its employees, agents or sub-contractors in connection with or arising out of the manufacture or supply of the Goods or in connection with any statement given or made (or advice not given or made) by or on behalf of Electrium.

### 10 Patents

Electrium will indemnify the Customer against any claim of infringement of letters patent, registered design, trademark or copyright (existing at the date of the contract) arising from the use or sale of any article or materials supplied by Electrium to the Customer and against all costs and damages which the Customer may incur in any action for such infringement or for which the Customer may become liable in any such action provided always that this indemnity shall not apply to any infringement which arises in connection with any design or instruction issued or given by the Customer to Electrium or to the use of such article or material in a manner or for a purpose outside the UK or to any infringement which is due to the use of such article or material in association or combination with any other article or material not supplied by Electrium and provided also that this indemnity is conditional on the Customer making no admission in respect of such alleged infringement and giving Electrium the earliest possible notice in writing of any claim being made or action threatened or brought against the Customer and on the Customer permitting Electrium at Electrium's expense to conduct any litigation that may ensue and all negotiations for the settlement of a claim.

The Customer warrants that any design or instruction issued or given by the Customer shall not be such as will cause Electrium to infringe any letters patent, registered design, trademark or copyright in the execution of the Customer's order and the Customer agrees to indemnify and keep Electrium indemnified against all liability in the event that such warrant is found to be untrue, misleading or breached.

### 11 Advice

Advice which Electrium or its agents may give to the Customer shall be given in good faith but Electrium shall not be liable for any loss or damage arising directly or indirectly therefrom or attributable thereto unless contained in any written representation or statement issued directly by Electrium.

### 12 Safety

The Customer shall ensure that any modifications whatsoever made to the Goods supplied hereunder comply with the requirements of any applicable Safety Regulations. Plugs supplied hereunder shall be so connected as to ensure that they are safe and in full compliance with any applicable Safety Regulations. The Customer shall ensure that any kits supplied hereunder are so assembled as to ensure that the assembled product is safe and complies with the requirements of any applicable Safety Regulations. Without prejudice to the above provisions, where Electrium provides the Customer with information about the use for which Goods are designed and have been tested and about any conditions to ensure that when put to that use they would be safe and

without risk to health, the Customer shall use the Goods accordingly and comply with the said conditions. To be properly used the Goods shall be selected, installed, commissioned and maintained in accordance with good engineering practice and under the supervision of suitably qualified personnel.

### 13 Statutory and other Regulations

If the cost to Electrium of performing its obligations under any contract shall be increased or reduced by reason of making or amendment after the date of its quotation of any law or of any other order, regulation or bye-law having the force of law that shall affect the performance of Electrium's contractual obligations, the amount of such increase or reduction shall be added to or deducted from the contract price as the case may be.

### 14 Cancellation

If the Customer cancels, extends or delays or purports to cancel, extend or delay the contract or part thereof, or fails to take delivery of any Goods at the time agreed (if any) or if no time is agreed within a reasonable time, then the Customer will be liable (without prejudice to any other rights of Electrium to claim damages) to indemnify and keep indemnified Electrium against any resulting loss, damage or expense incurred by Electrium in connection with the supply or non-supply of the Goods including the cost of any material, used or intended to be used therefore and the cost of labour and other overheads including a percentage in respect of profit. If Electrium is unable (whether temporarily or permanently) to procure any services or goods necessary to enable it to supply the Goods or if the supply of the Goods is prevented or hindered by reason of any cause beyond Electrium's reasonable control which for the avoidance of doubt and without prejudice to the generality of the foregoing shall include governmental action, war, riot, civil commotion, fire, flood, epidemic, labour disputes including labour disputes involving the work force or any part thereof of Electrium, restraints or delays affecting shipping or carriers, currency restrictions and Act of God, Electrium may cancel the contract by notice in writing to the Customer so far as it relates to Goods not then supplied or work not then done and such cancellation shall not give rise to any claims by the Customer provided that the Customer shall remain liable to pay for Goods delivered prior to the date of such cancellation.

### 15 General

- The headings herein are inserted for convenience only and shall not affect the interpretation of the Contract Terms.
- Should any clause contained in the Contract Terms be held to be invalid such invalidity will not affect the validity of the remaining clauses.
- Any dispute arising out of this contract or the Contract Terms shall be referred in writing to an independent arbitrator who shall be appointed by agreement between Electrium and the Customer or in default of agreement by the President for the time being of the Institute of Electrical Engineers whose decision shall be binding on both parties.
- The formation, interpretation and operation of the contract will be subject to English Law and the Customer submits himself to the non-exclusive jurisdiction of the English Courts.
- Electrium will be entitled to assign sub-contract or sub-let the contract or any part thereof.
- Failure by Electrium to enforce any of the Contract Terms will not be construed as a waiver of any of its rights hereunder.

## EXPORT

All Contract Terms set out above apply to overseas transactions (ie sales outside the United Kingdom), where appropriate, except the following:

- 1.2 Any quotation is given on the basis that no contract will come into existence until Electrium despatches an acknowledgement of order to the Customer. Any quotation is valid for a period of 30 days only from its date provided that Electrium has not previously withdrawn it.

### 2 Price

The price of Goods includes the cost of packing for shipment FOB British Port or Airport except that orders having a net value of £500 and below shall be subject to an additional charge to cover packing and carriage. No allowance will be made in lieu of transportation if the Customer accepts delivery at the factory, container depot or at any other inland destination or provides his own transportation or where packing of a lesser standard is required.

### 3 Payment

First orders from overseas Customers should be accompanied by bank references to enable payment terms to be agreed. Unless otherwise agreed in writing, payment is due on delivery. Goods shall be deemed to have been delivered when the invoice has been presented in the United Kingdom accompanied by the appropriate documents of title.

### 16 Others

The Goods will be sold FOB British Port or Airport and the Seller will be under no obligation to give the Buyer notice as specified in Section 32(3) of the Sale of Goods Act 1979. CIF or C & F arrangements can be made if requested by the Customer, at cost, and Electrium will, on receipt of Customer's indemnity, take all reasonable steps to recover from the Underwriters any loss or damage for which they may be liable. The Customer shall be solely responsible for complying with all legislation and regulations governing the importation of the Goods into the country of destination including import and export licences and the payment of duties thereon including but not limited to customs duties and VAT. The Customer shall indemnify Electrium against all costs claims and demands arising out of any breach by the Customer of this Agreement.

## CONDITIONS OF USE

The products listed in this publication should be installed by suitably qualified personnel in accordance with the requirements of relevant legislation, regulations (including the IEE Wiring Regulations) and the accepted practice in the industry. Any further information which may be required about the use for which any specific product has been designed and tested, or about conditions of use, is available on request. In pursuance of our policy of continuing product improvement, equipment described in this publication is subject to change without notification.





# Electrium



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Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Latest details can be obtained from Crabtree.

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