

## Smart solutions for electrical distribution in residential and commercial applications



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We provide integrated solutions that help make energy, in all its forms, more practical and accessible.

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Eaton’s comprehensive range of wiring accessories and single phase distribution solutions have been developed to meet today’s challenging electrical applications in residential and light commercial projects and applications. Through a proven competency in electrical distribution, Eaton delivers an innovative and flexible approach to aid compliance with the regulatory requirements associated with modern buildings.

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# 1.1

## Product overview PREMERA wiring accessories

### PREMERA white moulded range

PREMERA offers a new consistent range of white accessories combining good aesthetics and high quality material



High quality sturdy, thermoset material

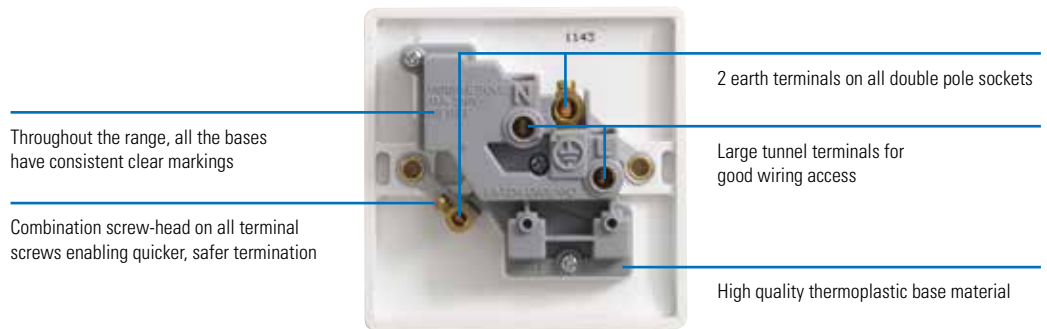
White or grey covers available enabling compliance to DDA (Disability Discrimination Act)/Part M requirements

Optional screw cap covers to add the finishing touches

New aesthetic design throughout the full range

Inherent protection against MRSA

9mm depth front plate provides adequate wiring space in the back box



Throughout the range, all the bases have consistent clear markings

2 earth terminals on all double pole sockets

Combination screw-head on all terminal screws enabling quicker, safer termination

Large tunnel terminals for good wiring access

High quality thermoplastic base material

### PREMERA mix modular range



White or grey cover plate option to enable compliance with DDA/Part M requirements

Laser marking of legends for longevity and high quality lettering

Quick, easy front loading modules - simply push and 'click' in



Optional screw cap covers to add the finishing touches

Large stylish rockers for easy operation

Plate options from 1 gang to 24 gang, in either 'screw fixed' version or 'clip on' version

Broad rocker option to meet latest DDA/Building regulations





Totally modular system incorporating;

- Power switches, standard & broad rocker options
- Power sockets in various worldwide styles
- Power indicators, fuses units, cable outlets
- Dimmer modules
- Communication modules including RJ45 Cat 6, isolated co-axial/satellite outlets, standard telephone outlets, including RJ11
- xComfort radio frequency switch modules
- 6-24 gang mounting plates comes with all the frames/mounts/screws required – just order the modules you need
- 6-24 gang mounting plates have individual removable banks for ease of installation and future changes. Banks removed via quarter turn fasteners offering quick release/fitting



### PREMERA mix combinations

Various socket options to offer a wide choice of worldwide applications;

- Standard 13A sockets BS1363
- Non standard 13A
- 5 and 15 Amp round pin
- US standard 15A 3 pin sockets
- European Schuko sockets
- Key switched socket with power indicator
- Unique key switch with integral neon indicator



## COPA clip-on plate range

Eaton's COPA range is strengthened with the introduction of the PREMERA mix range.

- Includes new modular plate options up to 24 gang
- Plates available in decorative plastic finishes and high quality metal finishes
- Plates can be affixed by either clip-on or screw on option depending on the clients' requirements



The following key aspects need to be considered to comply with Part M – Building Regulations.

Eaton's clip-on plate accessory range provides a very easy way to meet the requirements under the Electrical Installations section for switches, outlets and controls.

### Design considerations – Part M:

**4.28** Controls that **contrast visually with their surroundings are more convenient for visually impaired people**, as are light switches that are activated by a large push pad.

#### Eaton's solutions:

A range of 8 standard colours/finishes will ensure a suitable contrast is maintained between wall and plate switch/socket.

It is recommended that a 30-point difference in the light reflective value (LRV) be achieved between the two surfaces. The LRV scale runs from 0, which is a perfectly absorbing surface that could be assumed to be totally black, up to 100, which is a perfectly reflective surface that could be considered to be the perfect white.

With COPA, the switch/socket plate colour can be left to the last minute due to its simple clip-on facility. This allows for late confirmation or unknown wall colour. It also avoids any damage to the front plate during wall preparation/painting.

- Choice of 8 contrasting colour/finish plates.
- Final colour of plate can be left to the last minute and clipped on once the wall surround colour is known.

### Design considerations – Part M:

**4.28** Controls that contrast visually with their surroundings are more convenient for visually impaired people, **as are light switches that are activated by a large push pad**.

#### Eaton's solutions:

A comprehensive range of broad rocker switches with contrasting coverplates is available including:

- 1 and 2 gang large rocker 2 way switches
- Intermediate switches
- Double pole switches
- Push switches

## Light Reflective Value (LRV) plate guide

Plate finish	Approx. LRV
<b>BM</b> BLACK MATT	26
<b>SB</b> SATIN BRONZE	62
<b>SV</b> SILVER METALLIC	65
<b>SS</b> STAINLESS STEEL	70
<b>GL</b> GOLD METALLIC	77
<b>HP</b> HIGHLY POLISHED	82
<b>PB</b> POLISHED BRASS	83
<b>WH</b> WHITE	89

### Design considerations – Part M:

**4.29** It is also an advantage if individual switches on panels and on multiple socket outlets are well separated, or in the form of large touch plates, to avoid the inadvertent selection of an adjacent control by visually impaired people and individuals with limited dexterity.

#### Eaton's solutions:

Eaton offers a comprehensive range of sockets with outboard (separated) rockers. Coloured plates can be selected to provide suitable visual contrast.

### In Summary:

Eaton's clip-on plate accessory range offers simple solutions;

- Broad rocker range throughout the range finishes.
- Outboard rockers on sockets.
- Contrasting clip-on plates for all products.



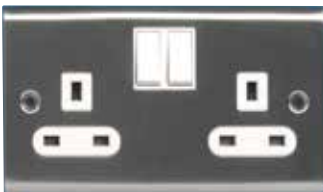
Easy installation – COPA (Clip-on Plate Accessory) range



- STEP 1**  
Fit interior electrically safe and can be tested to IET Regulations at this stage.
- STEP 2**  
Determine the colour of the wall then decorate.
- STEP 3**  
Choose finish to meet 30 point LRV criteria.



COPA – clip-on plate version



COPA fix – fixed plate version

COPA fix range

The COPA style of plate is being extended to now offer an alternative to the 'Clip on' plate by offering the same plate profile with it's stylish good looks but with a fixed plate.

COPA fix:

- offers a solution in situations where it is more desirable to have screw fixed plates. It is appreciated not every application is suitable for clip-on plates and in situations such as prisons, schools, public places, it offers the consultant a choice dependant on the clients requirements
- will also benefit from the PREMERA mix range of modular components up to 24 gang size offering many modular solutions
- available in the most popular finish, Stainless Steel

XTRA surface metalclad range

- A subtle change has been made to the front plate style to bring the range more in line with the latest plate style offered in the new look MEM® series of wiring accessories
- Will also benefit from the PREMERA mix range of modular components up to 24 gang size offering many modular solutions



PREMERA proof

- Provides an extensive range of combinations by utilising the 1 and 2 gang IP66 enclosures making a wide variety of combinations
- A new range of weatherproof accessories offering protection up to IP66





## Wall mounted range

Description	PREMERA range	COPA c/w cover	COPA interior	COPA black interior	COPA decorative plates <sup>1)</sup>	COPA metal plates <sup>2)</sup>	COPA fix stainless steel	XTRA surface metal
<b>10A switches – 1 way</b>								
10A 1G 1 way	P011	C011WH	C011	C011B	CP011 <sup>1)</sup>	CM011 <sup>2)</sup>	–	–
10A 2G 1 way	P012	C012WH	C012	C012B	CP012 <sup>1)</sup>	CM012 <sup>2)</sup>	–	–
10A 3G 1 way	P013	C013WH	C013	C013B	CP013 <sup>1)</sup>	CM013 <sup>2)</sup>	–	–
10A 4G 1 way	P014	C014WH	C014	C014B	CP014 <sup>1)</sup>	CM014 <sup>2)</sup>	–	–
10A 1G 1 way bell push	P015	C015WH	C015	C015B	CP015 <sup>1)</sup>	CM015 <sup>2)</sup>	B015SS	–
10A 1G 1 way light symbol push	P015L	C015LWH	–	–	CP015L <sup>1)</sup>	CM015L <sup>2)</sup>	–	–
10A 1G 1 way push	P015P	–	–	–	–	–	–	–
10A 1G intermediate	P017	C017WH	C017	C017B	CP011 <sup>1)</sup>	CM011 <sup>2)</sup>	B017SS	X017MG
<b>10A switches – 2 way</b>								
10A 1G 2 way	P021	C021WH	C021	C021B	CP011 <sup>1)</sup>	CM011 <sup>2)</sup>	B021SS	X021MG
10A 1G 2 way push	P021P	–	–	–	–	–	–	–
10A 2G 2 way	P022	C022WH	C022	C022B	CP012 <sup>1)</sup>	CM012 <sup>2)</sup>	B022SS	X022MG
10A 3G 2 way	P023	C023WH	C023	C023B	CP013 <sup>1)</sup>	CM013 <sup>2)</sup>	B023SS	X023MG
10A 4G 2 way	P024	C024WH	C024	C024B	CP014 <sup>1)</sup>	CM014 <sup>2)</sup>	–	–
10A 6G 2 way	P026	C026WH	C026	C026B	CP026 <sup>1)</sup>	CM026 <sup>2)</sup>	–	–
<b>10A fan isolator</b>								
10A 3-pole fan isolator + fan symbol	P048	C048WH	C048	C048B	CP048 <sup>1)</sup>	CM048 <sup>2)</sup>	B048SS	X048MG
10A 3-pole isolator	P049	C049WH	–	–	CP049 <sup>1)</sup>	CM049 <sup>2)</sup>	–	X049MG
<b>10A broad rocker switches</b>								
10A 2G 2 way half broad	P032	C032WH	C032	–	CP013 <sup>1)</sup>	CM013 <sup>2)</sup>	–	–
10A 1G 2 way broad	P041	C041WH	C041	C041B	CP013 <sup>1)</sup>	CM013 <sup>2)</sup>	–	X041MG
10A 1G 2 way broad push	P041P	–	–	–	–	–	–	–
10A 2G 2 way broad	P042	–	–	–	–	–	–	–
10A 1G 1 way broad bell push	P045	C045WH	–	C045B	CP045 <sup>1)</sup>	CM045 <sup>2)</sup>	–	–
10A 1G 1 way broad push	P045P	–	–	–	–	–	–	–
10A 1G intermediate broad	P047	C047WH	–	C047B	CP013 <sup>1)</sup>	CM013 <sup>2)</sup>	–	–
<b>16A hotel switch</b>								
16A hotel switch	P450	–	–	–	–	–	–	–
<b>Dimmers</b>								
250W 1G 2 way push universal	P9131	C9131WH	–	–	CP9131 <sup>1)</sup>	CM9131 <sup>2)</sup>	–	–
250W 2G 2 way push universal	P9132	C9132WH	–	–	CP9132 <sup>1)</sup>	CM9132 <sup>2)</sup>	–	–
400W 1G 2 way push universal	P9141	C9141WH	–	–	CP9131 <sup>1)</sup>	CM9131 <sup>2)</sup>	–	–
400W 2G 2 way push universal	P9142	–	–	–	–	–	–	–
1000W 1G 2 way push universal (2G plate size)	P9111	C9111WH	–	–	CP9111 <sup>1)</sup>	CM9111 <sup>2)</sup>	–	–
1–10V 1G 1 way analogue	P9101	–	–	–	–	–	–	–
500W 1G 1 way universal non-european	P9551	C9551WH	C9551	–	CP9131 <sup>1)</sup>	CM9131 <sup>2)</sup>	–	–
500W 2G 1 way universal non-european	P9552	C9552WH	C9552	–	CP9132 <sup>1)</sup>	CM9132 <sup>2)</sup>	–	–
1000W 1G 1 way universal non-european	P9511	C9511WH	C9511	–	CP9131 <sup>1)</sup>	CM9131 <sup>2)</sup>	–	–
60–500W fan controller non-european	P9751	C9751WH	–	–	CP9131 <sup>1)</sup>	CM9131 <sup>2)</sup>	–	–
<b>13A switched sockets – single pole</b>								
13A 1G	P611	–	–	–	–	–	–	–
13A 2G	P612	–	–	–	–	–	–	–
<b>13A switched sockets – double pole</b>								
13A 1G DP 2E terminals	P621	C621WH	C621	C621B	CP621 <sup>1)</sup>	CM621 <sup>2)</sup>	B621SS	X621MG
13A 1G DP 2E terminals – grey cover	P621GY	–	C621	–	CP621GY	–	–	–
13A 1G DP 2E terminals + neon	P621N	C621NWH	C621N	C621NB	CP621N <sup>1)</sup>	CM621N <sup>2)</sup>	B621NSS	X621NMG
13A 1G DP 2E terminals – red cover	P621RED	–	–	–	–	–	–	–
13A 1G DP 2E terminals + red rockers	P621RR	–	–	–	–	–	B621RRSS	X621RRMG
13A 2G DP 2E terminals	P622	C622WH	C622	C622B	CP622 <sup>1)</sup>	CM622 <sup>2)</sup>	B622SS	X622MG
13A 2G DP 2E terminals + neon	P622N	C622NWH	C622N	C622NB	CP622N <sup>1)</sup>	CM622N <sup>2)</sup>	B622NSS	X622NMG
13A 2G DP 2E terminals + red rockers	P622RR	–	–	–	–	–	B622RRSS	X622RRMG



Wall mounted range (contd)

Description	PREMERA range	COPA c/w cover	COPA interior	COPA black interior	COPA decorative plates <sup>1)</sup>	COPA metal plates <sup>2)</sup>	COPA fix stainless steel	XTRA surface metal
<b>13A switched sockets – double pole, outboard rockers</b>								
13A 2G DP 2E terminals	P632	C632WH	C632	C632B	CP632 <sup>1)</sup>	CM632 <sup>2)</sup>	B632SS	X632MG
13A 2G DP 2E terminals – grey cover	P632GY	–	C632	–	CP632GY	–	–	–
13A 2G DP 2E terminals – red cover	P632RED	–	–	–	–	–	–	–
13A 2G DP 2E terminals – red rockers	P632RR	–	–	–	–	–	–	X632RRMG
13A 2G DP 2E terminals + neon	P632N	–	–	–	–	–	–	–
<b>13A switched sockets – double pole, non-standard</b>								
13A 1G DP 2E terminals	P651	C651WH	–	C651B	CP621 <sup>1)</sup>	CM621 <sup>2)</sup>	B651SS	X651MG
13A 2G DP 2E terminals – outboard rockers	P652	C652WH	–	–	CP632 <sup>1)</sup>	CM632 <sup>2)</sup>	B652SS	X652MG
13A 2G DP 2E terminals – outboard red rockers	P652RR	–	–	–	–	–	–	–
<b>13A switched sockets – double pole, outboard rockers, clean earth</b>								
13A 2G with 2E terminals	P672	–	–	–	–	–	–	–
<b>13A switched socket - outboard rockers with USB charger outlets</b>								
13A 2G with 2 x USB charger outlets	P692	C692WH	C692B	CP692 <sup>1)</sup>	CM692 <sup>2)</sup>	–	–	–
<b>13A RCD socket</b>								
13A 2G RCD 30mA – passive	P686	–	–	–	–	–	–	X686MG
<b>13A unswitched sockets</b>								
13A 1G	P111	C111WHA	C111A	C111BA	CP111 <sup>1)</sup>	CM111 <sup>2)</sup>	B111SS	X111MG
13A 2G	P112	C112WH	–	C112B	CP112 <sup>1)</sup>	CM112 <sup>2)</sup>	B112SS	X112MG
<b>15A switched sockets</b>								
15A 1G	P415	C415WH	–	C415B	CP415 <sup>1)</sup>	CM415 <sup>2)</sup>	–	X415MG
<b>Shaver supply unit</b>								
Dual voltage 230V/115V AC	P370	C370WH	C370	C370B	CP370 <sup>1)</sup>	CM370 <sup>2)</sup>	B370SS	–
<b>13A connection units – double pole switched with optional cable outlets</b>								
13A connection unit	P221	C221WH	C221	C221B	CP221 <sup>1)</sup>	CM221 <sup>2)</sup>	B221SS	X221MG
13A connection unit – grey cover	P221GY	–	C221	–	CP221 <sup>1)</sup>	–	–	–
13A connection unit ‘boiler’	P221BO	–	–	–	–	–	–	–
13A connection unit ‘central heating’	P221CH	–	–	–	–	–	–	–
13A connection unit ‘cooker hood’	P221CKH	–	–	–	–	–	–	–
13A connection unit ‘dishwasher’	P221DW	–	–	–	–	–	–	–
13A connection unit ‘extract fan’	P221EF	–	–	–	–	–	–	–
13A connection unit ‘refrigerator’	P221R	–	–	–	CP221RWH	–	–	–
13A connection unit + red rocker	P221RR	–	–	–	–	–	–	X221RRMG
13A connection unit ‘washing machine’	P221WM	–	–	–	CP221WMWH	–	–	–
13A connection unit fitted with 3A fuse	P223	–	–	–	–	–	–	–
<b>13A connection units – double pole switched + neon with optional cable outlets</b>								
13A connection unit	P221N	C221NWH	C221N	C221NB	CP221N <sup>1)</sup>	CM221N <sup>2)</sup>	B221NSS	X221NMG
13A connection unit – grey cover	P221NGY	–	C221N	–	CP221NGY	–	–	–
13A connection unit ‘refrigerator’	P221NR	–	–	–	CP221NRWH	–	–	–
13A connection unit + red rocker	P221NRR	–	–	–	–	–	–	X221NRRMG
3A connection unit ‘water heater’	P221NWH	–	–	–	–	–	–	–
13A connection unit ‘washing machine’	P221NWM	–	–	–	CP221NWMWH	–	–	–



## Wall mounted range (contd)

Description	PREMERA range	COPA c/w cover	COPA interior	COPA black interior	COPA decorative plates <sup>1)</sup>	COPA metal plates <sup>2)</sup>	COPA fix stainless steel	XTRA surface metal
<b>13A connection units – unswitched with optional cable outlets</b>								
13A connection unit	P220	C220WH	C220	C220B	CP220 <sup>1)</sup>	CM220 <sup>2)</sup>	B220SS	X220MG
13A connection unit + red fuse drawer	P220RR	–	–	–	–	–	–	X220RRMG
13A connection unit fitted with 3A fuse	P224	–	–	–	–	–	–	–
<b>13A connection units – unswitched + neon with optional cable outlets</b>								
13A connection unit	P220N	C220NWH	C220N	C220NB	CP220N <sup>1)</sup>	CM220N <sup>2)</sup>	B220NSS	X220NMG
13A connection unit fitted with 3A fuse	P223N	–	–	–	–	–	–	–
<b>20A double pole switches with optional cable outlet</b>								
20A switch	P401	C401WH	C401	C401B	CP401 <sup>1)</sup>	CM401 <sup>2)</sup>	B401SS	X401MG
20A switch marked 'water heater'	P403	C403WH	–	–	–	CM403 <sup>2)</sup>	–	–
<b>20A double pole switches + neon with optional cable outlets</b>								
20A switch	P401N	C401NWH	C401N	C401NB	CP401N <sup>1)</sup>	CM401N <sup>2)</sup>	B401NSS	X401NMG
20A switch marked 'water heater'	P403N	C403NWH	–	–	CP403N <sup>1)</sup>	CM403N <sup>2)</sup>	B403NSS	–
20A switch marked 'air conditioner'	P404N	–	–	–	–	–	–	–
<b>45A double pole switches – cooker control units</b>								
45A DP cooker control unit	P425	C425WH	C425	C425B	CP425 <sup>1)</sup>	CM425 <sup>2)</sup>	–	–
45A DP cooker control unit + neon	P425N	C425NWH	C425N	C425NB	CP425N <sup>1)</sup>	CM425N <sup>2)</sup>	B425NSS	–
<b>50A double pole switches – 2 gang plate size</b>								
50A DP switch	P421	–	–	–	–	–	–	X421MG
50A DP switch + neon	P421N	C421NWH	C421N	C421NB	CP421N <sup>1)</sup>	CM421N <sup>2)</sup>	B421NSS	X421NMG
50A DP switch marked 'cooker'	P423	–	–	–	–	–	–	–
50A DP switch + neon marked 'cooker'	P423N	–	–	–	CP423N <sup>1)</sup>	CM423N <sup>2)</sup>	–	–
50A DP switch + neon marked 'air conditioner'	P424N	–	–	–	CP424N <sup>1)</sup>	CM424N <sup>2)</sup>	–	–
<b>50A double pole switches – 1 gang plate size</b>								
50A DP switch + neon	P422N	C422NWH	C422N	C422NB	CP422N <sup>1)</sup>	CM422N <sup>2)</sup>	B422NSS	–
50A DP switch + neon – grey cover	P422NGY	–	C422N	–	CP422NGY	–	–	–
50A DP switch + neon marked 'cooker'	P426N	C426NWH	–	–	–	–	B426NSS	–
50A DP switch + neon marked 'air conditioner'	P427N	–	–	–	–	–	–	–
<b>Cable/cooker outlet/cable outlet adaptor plate</b>								
20A flex outlet plate	P210	–	–	–	–	–	–	–
Cable outlet adaptor plate for 20A switch/3A fused connection unit	P212	C212	–	–	–	–	–	–
45A DP cable outlet with terminal block	P345	–	–	–	–	–	–	–
<b>Phone outlets</b>								
1G telephone outlet master	P360	C360WH	C360	C360B	CP360 <sup>1)</sup>	CM360 <sup>2)</sup>	–	X360MG
1G telephone outlet secondary	P361	C361WH	C361	C361B	CP360 <sup>1)</sup>	CM360 <sup>2)</sup>	–	X361MG
1G american telephone outlet RJ11	P362	–	C362	C362B	CP360 <sup>1)</sup>	CM360 <sup>2)</sup>	–	–
<b>Data outlets</b>								
1G RJ45 CAT 6 outlet interior	–	C363WH	C363	C363B	CP360 <sup>1)</sup>	CM360 <sup>2)</sup>	–	–
<b>Communication outlets</b>								
1G TV co-axial	P351	C351WH	C351	C351B	CP351 <sup>1)</sup>	CM351 <sup>2)</sup>	B351SS	–
1G TV co-axial dual clamp	P351D	–	–	–	–	–	–	–
2G TV co-axial outlet	P352	C352WH	–	–	CP352 <sup>1)</sup>	CM352 <sup>2)</sup>	–	–
1G TV/FM isolated co-axial	P353	C353WH	–	–	CP351 <sup>1)</sup>	CM351 <sup>2)</sup>	–	–
2G TV/FM diplexer co-axial	P354	C354WH	C354	–	CP352 <sup>1)</sup>	CM352 <sup>2)</sup>	–	–
1G satellite	P355	C355WH	C355	C355B	CP351 <sup>1)</sup>	CM351 <sup>2)</sup>	–	–
2G TV/satellite	P356	C356WH	–	C356B	CP352 <sup>1)</sup>	CM352 <sup>2)</sup>	–	–
2G TV/radio	P357	–	–	–	–	–	–	–
1G TV/radio/satellite return	–	C359WH	–	–	CP359 <sup>1)</sup>	CM359 <sup>2)</sup>	–	–
<b>Blank plates</b>								
1G blank plate	P391	C391WH	C391	C391	CP391 <sup>1)</sup>	CM391 <sup>2)</sup>	B391SS	X391MG
2G blank plate	P392	C392WH	C392	C392	CP392 <sup>1)</sup>	CM392 <sup>2)</sup>	B392SS	X392MG



Wall mounted range (contd)

Description	PREMERA range	COPA c/w cover	COPA interior	COPA black interior	COPA decorative plates <sup>1)</sup>	COPA metal plates <sup>2)</sup>	COPA fix stainless steel	XTRA surface metal
<b>Spare screw caps</b>								
Spare screw caps – PREMERA range	P999	–	–	–	–	–	–	–
<b>PREMERA mix module cover plates</b>								
1G module plate moulded	P901	C901WH	C901	C901B	CP901 <sup>1)</sup>	CM901 <sup>2)</sup>	B901SS	X901MG
2G module plate moulded	P902	C902WH	C902	C902B	CP902 <sup>1)</sup>	CM902 <sup>2)</sup>	B902SS	X902MG
3G module plate moulded	P903	C903WH	C903	C903B	CP903 <sup>1)</sup>	CM903 <sup>2)</sup>	B903SS	BX903MG
4G module plate moulded	P904	C904WH	C904	C904B	CP904 <sup>1)</sup>	CM904 <sup>2)</sup>	B904SS	X904MG
6G module plate assembly moulded	P906	–	C906	C906B	CP906 <sup>1)</sup>	CM906 <sup>2)</sup>	B906SS	X906MG
8G module plate assembly moulded	P908	–	C908	C908B	CP908 <sup>1)</sup>	CM908 <sup>2)</sup>	B908SS	X908MG
12G module plate assembly moulded	P912	–	C912	C912B	CP912 <sup>1)</sup>	CM912 <sup>2)</sup>	B912SS	X912MG
18G module plate assembly	–	–	C918	C918B	CP918 <sup>1)</sup>	CM918 <sup>2)</sup>	B918SS	X918MG
24G module plate assembly	–	–	C924	C924B	CP924 <sup>1)</sup>	CM924 <sup>2)</sup>	B924SS	X924MG
1G module plate moulded grey cover	P901GY	–	C901	–	CP901GY	–	–	–
2G module plate moulded grey cover	P902GY	–	C902	–	CP902GY	–	–	–
3G module plate moulded grey cover	P903GY	–	C903	–	CP903GY	–	–	–
4G module plate moulded grey cover	P904GY	–	C904	–	CP904GY	–	–	–
6G module plate assembly moulded grey cover	P906GY	–	C906	–	CP906GY	–	–	–
8G module plate assembly moulded grey cover	P908GY	–	C908	–	CP908GY	–	–	–

<sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	WH	CP904WH
Metallic silver	SV	CP904SV
Gold metallic	GL	CP904GL
Black matt	BM	CP904BM

<sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	SS	CM904SS
Highly polished	HP	CM904HP
Satin bronze	SB	CM904SB
Polished brass	PB	CM904PB





### CIRCA ceiling range

Lamp activated products offer a comprehensive range for applications such as schools, nurseries, children's bedrooms and public buildings where an extra degree of protection may be required.

Technical characteristics:

- T2 rated
- Full range of lampholders and battenholders
- Each item incorporates DP switching mechanism
- No live parts accessible when lamp is removed
- Tool required to access terminals



BC3 Low Energy CFL (compact fluorescent lamp) range is a dedicated lampholder range for use with low energy lamps.

This range covers the most commonly used items within the home.

Using CFLs means that the benefits of energy efficient lighting are available in the home. They are appropriate to areas where lights are left on for long periods of time such as hallways, staircases, entrances, kitchens, bedrooms and bathrooms.

The most versatile option is to use a pendant or battenholder, a direct substitute for a normal BC lampholder. There is no extra installation time and is safe and easy to do.

Why use the BC3 range?

- The range will accept standard UK size lampshades and require no adjustment.
- The house owner is not restricted to the wattage of lamp by the lampholder. The same BC3 lampholder will accept a range of wattages to suit the customers needs.
- BC3 offers a cost effective solution to the developer and contractor.
- The range of lampholders offered meets all the normal requirements for housing - pendant sets, battenholders and angled battenholders.
- Reduced wattage and heat generated by CFL means a wider choice of decorative lampshades for the home.
- Lamps are CE marked and meet latest standards – IEC 60969 and IEC 60901.
- Dedicated 3 pin 'J' slot lampholders and 3 pin BC lamp bases.



### LSC plug-in lighting system

The BS 7001 LSC (Luminaire Supporting Coupler) system is recognised as the industry standard interface, offering complete changeability with other manufacturers' products. To meet the increasing industry demand for LSF cable, Eaton now offers both 3 and 4 pin versions with low smoke and fume cable.

Both versions provide considerable benefits for the specifier, contractor and end user. Litelink represents a significant advance in the safety and ease of installation of lighting points.

- A range for all Commercial, Industrial and Domestic projects
- Designed for ease of installation
- Cable available in 1, 2 and 3m lengths with HR (Heat Resistant) and LSF (Low Smoke and Fume) options
- Pre-flexed 3 and 4 pin products with either 0.75mm<sup>2</sup> or 1.00mm<sup>2</sup> cable
- High quality, reliable, safe range of products



### 3 pin system

This version has a wide range of applications in many commercial and industrial environments. Its technical and design features are supplemented with a full range of plug, outlets, assemblies, pendants and mounting boxes. In use, it provides flexibility for the specifier, easy installation for the contractor and convenience for the end users.

- 3 pin plugs can be used safely in 4 pin outlets
- LSC pre-wired ceiling assembly with 2 or 3m of cable, ideal for suspended ceiling lighting
- Spacious easy wire plug with quick cover release screws
- Bases will take up to 2 x 4.00mm<sup>2</sup> cables



### 4 pin system

This version has been specifically designed for applications where an extra live conductor is required i.e. emergency lighting. It has all the benefits of the 3 pin system, but the auxiliary live conductor gives greater flexibility in switching capabilities. It can also be used as a time delay trigger mechanism and offers greater control over multi-lamp luminaires.

- Red plug top and cover ensures easy identification of 4 pin circuit
- The first 4 pin system to comply with BS 7001
- Large outlet terminals will take up to 2 x 4.00mm<sup>2</sup> cable
- Terminal access designed to aid cable installation on outlet and plug



### LDU Multi-outlet Box

The LDU Multi-outlet boxes utilise the LSC 'plug-in' lighting interface allowing luminaires to be plugged in, providing safety without isolation of the circuit. The LDU (Lighting Distribution Unit) incorporates LSC outlets which accept both Eaton's 3 and 4 pin plugs.

The 4 pin plug uses the fourth auxiliary socket contact for emergency lighting requirements.

- 6, 8 and 10 outlet units available
- Will accommodate 3 or 4 pin applications
- Separate back box to enable first fix with simple plug connectors for front cover
- Complies with the recognised industry interface BS 7001
- Extensive range of pre-wired plugs available in both HR (Heat Resistant) and LSF (Low Smoke and Fume) cable
- Mounting options – wall, ceiling, trunking or suspension
- Makes life easy – no need for on-site wiring of individual fittings
- Steel box for harsh environments
- Interchangeable front covers (6, 8 and 10) to enable, if required, expansion at a later date

### Memera Full Metal Consumer Units

The new range of full metal consumer units provide a suite of products to meet the requirements of BS7671:2008 17th Edition IET wiring regulations amendment 3:2015.

Regulation 421.1.201 has been introduced to contain a fire should one develop within a consumer unit, the fire igniting primarily as a result of poorly installed connections or faulty installed components. It requires that within domestic (household) premises, consumer units and similar switchgear assemblies shall comply with BS EN 61439-3 and must have their enclosure manufactured from non-combustible material. Otherwise, it should be enclosed within a cabinet or enclosure constructed of non-combustible material.

This regulation effectively requires the use of a full metal consumer unit with the complete enclosure, i.e. the base, cover and door made from steel and will ultimately affect all new and rewired installations in homes referred to as 'domestic (household) premises' which will include integral / attached garages and outbuildings in close proximity.

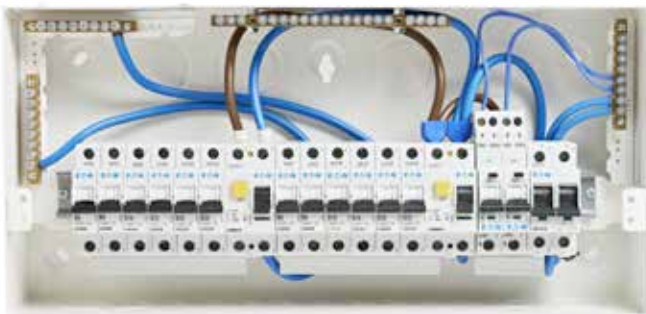
Amendment 3 published in January 2015 became effective on new and rewired installations designed after 30th June 2015, however clause 421.1.201 had the later implementation date of 1st January 2016.

### New Full Metal Consumer Unit features

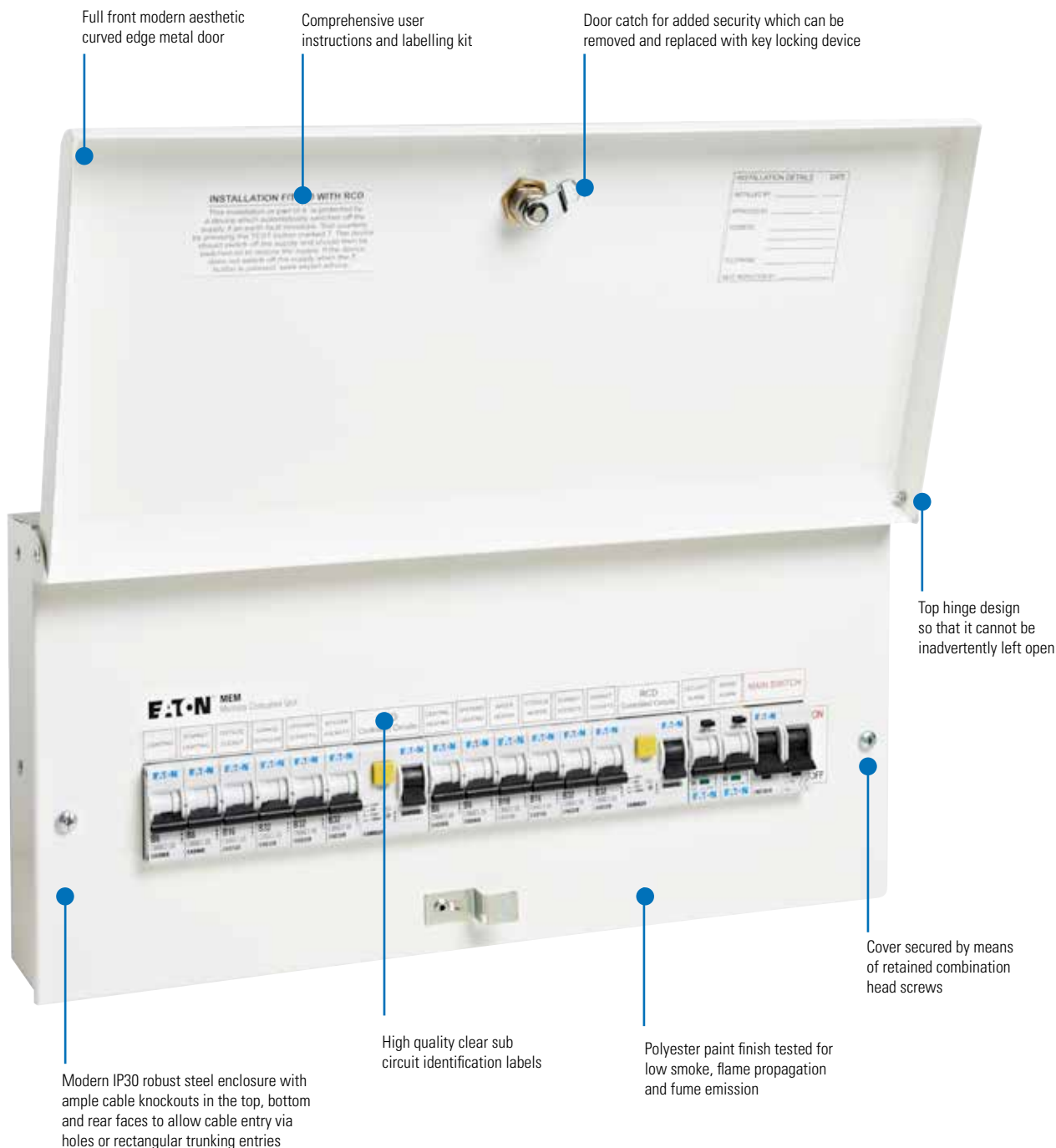
- Full compliance with BS EN 61439-3.
- Full metal enclosure to meet requirements of BS7671 Amendment 3 regulation 421.1.201.
- Sturdy steel enclosure with ample cable entry knockouts to accommodate cable entry from top, bottom or rear face of the enclosure.
- Multiple large apertures in rear face of enclosure to allow flexible cable entry from the rear.
- Dual use cable entry on top and bottom surfaces to accommodate entry via both round and rectangular knockouts.
- "Snap - able" busbars enabling easy on-site configuration.
- Dual RCCB units come with three Neutral bars as standard for High Integrity configuration.
- Comprehensive label kit to complete the installation.
- Polyester powder coat paint finish which complies with industry standards for low smoke density, flame propagation and toxic fume emission. RAL 9010 (Pure white).
- Flush mounting and twin rail variants will also be available up to 38 outgoing ways.

### Factory Built Assemblies (FBA) features

- Boards can be pre-configured in the factory with outgoing protective devices to customer requirements.
- Factory fitted devices can include command and control devices such as transformers, timers, contactors and relays as well as kWh meters complete with internal wiring as required.

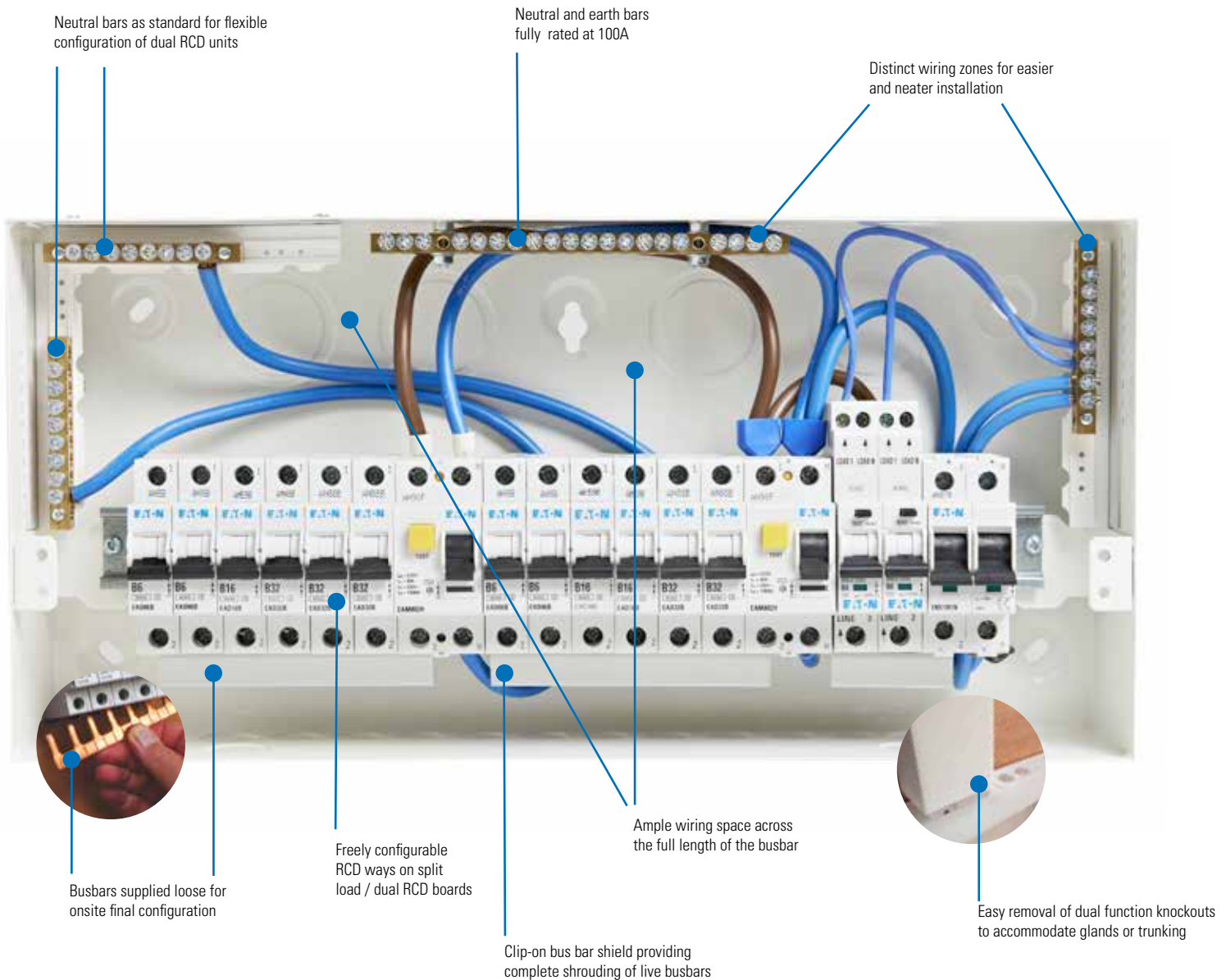


Memera full metal consumer unit – External features and benefits



- The new full metal consumer unit range with all steel enclosure, including the base, front cover and door assembly, meets the requirements of BS 7671:2008 Amendment 3:2015.
- Modern stylish appearance fully assembled with ample knockouts in steel enclosure to suit all applications. The units are delivered factory assembled and fully equipped with all main controlling devices and interconnections. All that is required is to remove and install the busbar which is secured in the rear of the unit and fit the outgoing devices.
- The new range of units are ideal for both domestic and light commercial applications where a more robust metal enclosure is needed.
- The units are available with single or multiple incoming device options as well as the various dual RCD combinations widely used to enable compliance with the 17th Edition wiring regulations.
- Manufactured to BSEN 61439-3.
- Degree of protection IP 30.

## Memera full metal consumer unit – Internal features and benefits



- The Memera consumer units use MCBs and RCBOs for final sub circuit protection and can also accommodate a wide range of command and control devices such as timers, contactors and relays.
- The split load and multiple RCD units all feature a variable split design with busbars that can be simply split on site to enable the exact configuration to be achieved.
- Multiple knockouts on top and bottom faces of the enclosure in addition to the rear provide most flexible cable entry.
- Top and bottom face knockouts accommodate 75 x 50mm trunking as well as 20mm glands / grommets
- Dual RCD units incorporating an isolator main switch and providing grouped 30mA RCD protection in two zones, can also be configured with some high integrity ways fed directly off the isolator. Ideal for protecting selected circuits with independent RCBOs.
- Full instructions and a comprehensive labelling kit enable the installation to be completed professionally with all the appropriate internal warning and circuit identification labels.



### 17th Edition regulations and consumer units

The 17th Edition of the Wiring Regulations BS7671 has introduced a number of significant changes which have impacted significantly on design and installation of consumer units. When it was first published in 2008 the most significant change introduced the much wider use of RCDs within the electrical installation, and the 3rd amendment published in 2015 now introduces a requirement for a consumer unit to have or be enclosed within a non-combustible enclosure when used in domestic (household) premises. See **Regulation 421.1.201** below.

#### Regulation 314.1 & 2

Requires that every installation shall be divided into circuits as necessary to avoid danger and minimise inconvenience, in the event of a fault. Also reducing the possibility of unwanted RCD tripping, due to excessive protective conductor currents but not due to an Earth fault. Separate circuits may be required for parts of the installation, which need to be separately controlled in such a way that they are not affected by the failure of other circuits. The appropriate subdivision should take account of any danger arising from the failure of a single circuit e.g. an RCD trip on a socket outlet causing the unwanted failure of a lighting circuit and its associated hazards.

#### Regulation 411.3.3

States that additional protection by means of a 30mA RCD is to be provided for all socket outlets with a rated current not exceeding 20A for use by ordinary persons. The only exceptions allowed are for socket outlets for use under the supervision of "skilled" or "instructed persons" e.g. some commercial / industrial locations, or a specific labelled socket provided for connection of a particular item of equipment, e.g. a freezer circuit.

#### Regulation 421.1.201

New regulation requires that within domestic (household) premises, consumer units and similar switchgear assemblies shall comply with BS EN 61439-3 and shall:

- (i) have their enclosure manufactured from non-combustible material, or
- (ii) be enclosed in a cabinet or enclosure constructed of non-combustible material.

Ferrous metal is the example given for a non-combustible material, hence the full metal consumer unit is now the standard to achieve compliance.

#### Regulation 522.6.202 & 203

Requires the use of RCDs to protect the wiring concealed in walls or partitions even where installed in previously defined "Safe Zones". These regulations effectively mean that all concealed wiring at a depth of less than 50mm from the surface requires protection by a 30mA RCD unless provided with earthed mechanical protection.

#### Regulation 701.411.3.3

In specific locations such as those containing a bath or shower there is a requirement now to provide RCD protection on all circuits, including the lighting and shower circuits.

### Application of RCDs

The 17th Edition of the IEE wiring regulations (BS7671), details the use of RCDs (Residual Current Devices) with a residual operating current not exceeding 30mA as the recognised means of providing additional protection in the event of failure of the provision for basic protection and or the provision for fault protection or carelessness by users.

Such RCDs should not be used to provide the sole means of protection and do not obviate the need to apply one or more of the recognised protective measure as detailed in the regulations.

Under the regulations an installation is required to incorporate one or more RCDs, depending upon the circumstances. Such instances include:-

- All socket outlets not exceeding 20A, but with certain exceptions. One such exception would be permitted for a specific labelled or otherwise suitably identified socket outlet for connection of a particular piece of equipment.
- Mobile equipment with a current rating not exceeding 32A for use outdoors.
- Electrical circuits installed under "Special installations and locations" as defined in Part 7 of the regulations e.g. Swimming Pools / Saunas.
- All electrical circuits, including shower and lighting circuits etc. in rooms with a fixed bath or shower e.g. bedrooms and en-suite bathrooms.

In addition to the protection requirements of the outgoing circuits / loads, the requirements of the installed cabling also must be taken into account.

Where a cable is concealed in a wall or partition at a depth of less than 50mm from the surface, even if installed in the "safe zone", if not provided with earthed mechanical protection e.g. Metal trunking or conduit, it must be provided with additional protection by means of a 30mA RCD.

Whilst it may be desirable to have one or two circuits fed via an unprotected circuit e.g. an identified / dedicated freezer circuit, the installation of the wiring may still dictate that the circuit must be RCD protected. The protection of a circuit by means of a 30mA RCD is also required where cables are concealed in walls constructed with metal stud partitions which are common in modern buildings, irrespective of the depth from the surface, unless provided with protection in the form of earthed metallic covering, trunking, conduit or other mechanical protection so as to avoid damage to the cable during installation or construction of the wall.

IEE Regulations and British Standards are subject to amendments. This Eaton guide to consumer unit solutions is not a substitute for the regulations which should always be used for all types of electrical installations and design work.

### Summary of RCD application

Regulations	Relating to	Example	Additional Protection
411.3.3	All socket outlets up to 20A rating for general use by ordinary persons	<ul style="list-style-type: none"> <li>– Upstairs sockets</li> <li>– Downstairs sockets</li> <li>– Kitchen sockets</li> <li>– Cooker outlet with integral 13A socket outlet</li> <li>– Plus any other sockets rated up to 20A including garage sockets</li> </ul>	30mA RCD
701.411.3.3	All electrical circuits in a room with a fixed bath or shower	<ul style="list-style-type: none"> <li>– Shower circuit</li> <li>– Lighting circuit</li> <li>– Heating circuit</li> <li>– Ventilation circuit</li> <li>– Shaver socket</li> <li>– Socket outlets</li> </ul>	30mA RCD
522.6.202 522.6.203	All electrical circuits buried in a wall or partition at less than 50mm and without mechanical protection	<ul style="list-style-type: none"> <li>– All concealed wiring</li> <li>– Socket outlets</li> <li>– Lighting circuits</li> <li>– Smoke alarm</li> <li>– Burglar alarm</li> </ul>	30mA RCD

### Installation design

The 17th edition wiring regulations BS7671 Amendment 3: 2015 applies to all new installations designed after 30th June 2015, and there are various options that must be considered in order to satisfy these requirements. Starting with the wiring scheme and the building design, consideration must be given to the purpose of the building, and to the persons who will be using the installation, as different regulations will be applicable, e.g. is the installation under the control of skilled or instructed persons, or ordinary persons, or perhaps the installed location contains a bath or shower. Answers to these points will start to focus in on the regulations that need to be followed.

Consideration must be given to the way cables will be fitted within the installation, either on the surface in trunking or conduit, or else concealed beneath the surface of the wall either buried within the plaster or inside the cavity of a hollow partition wall. The chosen installation methods and wiring accessories or loads being fed will also dictate whether additional protection by means of 30mA RCDs is required on those circuits or not.

The wiring regulations are open to interpretation in some areas, where reference is made to “minimise inconvenience in the event of a fault”; acceptable levels of inconvenience can be somewhat subjective.

In most circumstances the regulations now dictate that a consumer unit will be required to have two or more 30mA RCDs, enabling the load circuits to be spread over a number of RCD protected zones or outgoing ways.

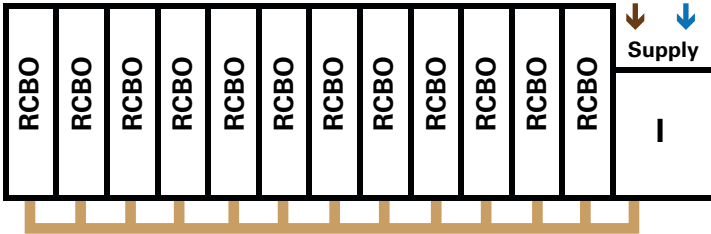
However, the most comprehensive and effective solution, and one that is guaranteed to fully meet the requirements of the regulations is to equip each and every circuit with its own individual 30mA RCBO.

The examples shown on the next page illustrate just some of the many options available, to a contractor, to achieve a 17th Edition compliant installation. Some options provide a much higher level of circuit integrity than others. The final choice of which may well be made based on this and the cost / ease of the installation.

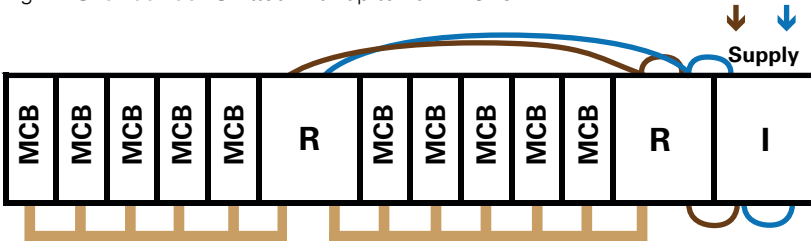
**Consumer unit solutions**

There are many ways of providing compliance with BS7671 IET wiring regulations using a new full metal unit in accordance with Regulation 421.1.201.

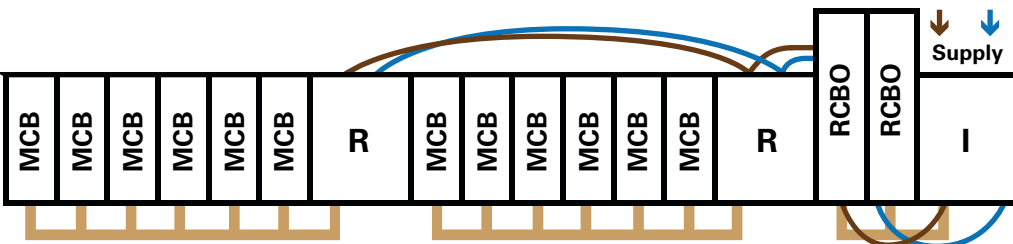
The most comprehensive solution would be to provide individual RCBO protection on each and every outgoing circuit from a consumer unit. Hence the use of a consumer unit such as a 12 way isolator controlled board. E.g. **EAS12S** fitted with up to 12 x **RCBOs**.



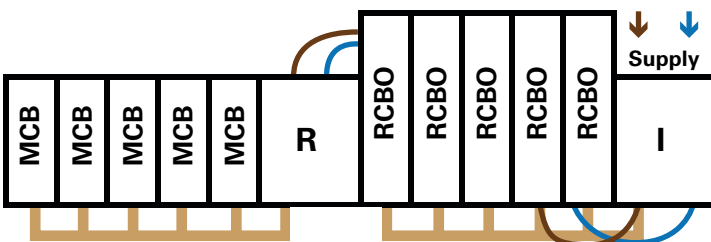
The next level down would be to provide an isolator controlled dual RCD consumer unit feeding two RCD board sections. E.g. **EAS10H80H80DS** fitted with up to 10 x **MCBs**.



A dual RCD board could also be provided with some unprotected ways controlled by the main switch to enable a supply to any individual circuits that don't require RCD protection or else require individual RCBO circuit protection. E.g. **EAS14H80H80DS** fitted with up to 14 devices which can be a mixture of **MCBs** and **RCBOs**.



A conventional split load board such as an **EAS10H80DS** could have **RCBOs** fitted to the non-protected side allowing a mixture of Group RCD protected **MCB** circuits and Individual **RCBO** protected circuits.



## Switch and protection devices

**Miniature Circuit Breakers (MCBs)**

The Eaton range of 6kA high performance Miniature Circuit Breakers (MCBs) has been designed to meet the latest UK, European and International standards, with ratings from 2A up to 63A as standard.

The Eaton 6kA miniature circuit breakers are designed and tested in accordance with IEC/EN 60898 and are available in both B and C characteristic curve as standard.

## Technical characteristics

- Modular design, DIN rail mountable, one module wide.
- Single pole MCB for commercial and residential applications.
- Rated Breaking Capacity 6kA to IEC/EN 60898
- 2–63A in both type B and C characteristics
- Positive contact indication
- Box clamp barrier to prevent incorrect cable insertion
- Calibrated at 40°C
- Can be used with both pin and comb type busbars
- Suitable for use in Eaton consumer units and a wide range of other applications

**Compact Residual Current Circuit Breakers with Overcurrent protection (RCBOs)**

The Eaton range of combined Residual Current Circuit Breakers with integral Overload protection (RCBOs), combine the highest level of protection for both people and circuits in a single module device.

The Eaton range of 6kA RCBOs are available from 6A to 45A in both B and C curve with 30mA trip sensitivity and fully comply to IEC/EN 61009

## Technical characteristics

- New compact modular design, DIN rail mountable, one module wide. Providing significant wiring space above the module.
- Single module combined MCB/RCD unit
- Solid neutral
- Positive contact indication
- Rated currents from 6–45A in both B and C characteristic
- Trip sensitivity 30mA (others available)
- Rated breaking capacity 6kA
- Test button

**Residual Current Circuit Breakers (RCCBs)**

The Eaton range of Residual Current Circuit Breakers without integral overload protection (RCCBs), provide protection solutions to a wide range of applications.

The Eaton range of double pole RCDs are available with 10mA, 30mA, 100mA and 300mA sensitivities.

## Technical characteristics

- Modular design, DIN rail mountable, two modules wide.
- Double pole RCD for commercial and residential applications
- Rated short circuit capacity 10kA with fuse back up
- Manufactured and tested to IEC/EN 61008
- Trip sensitivities 10, 30, 100 and 300mA
- Positive contact indication
- Test button

**Main load disconnect switch (isolator)**

The Eaton range of modular Isolators are available in single pole, double pole and single pole with switched neutral arrangements.

## Technical characteristics

- Compact modular design, DIN rail mountable, one or two modules wide.
- Positive contact indication
- Rated at up to 12.5kA these switches are fully tested to IEC 60947-3 for AC23 duty at 240VAC
- Terminal capacity 2.5–50 mm<sup>2</sup>

**Single pole & neutral switchfuse**

The Eaton wall mounted switchfuse **800KMF** is a fully moulded, compact wall mounted, SP&N unit rated at up to 80A, complying with EN 60947-3 for duty AC22B, 240v AC. The unit is fitted with a fully insulated pull out fuse carrier, which will accommodate HRC fuse links complying with BS 88-3 (formerly BS 1361) and rated between 45–80A.

## Control and switching devices



### Switches and Twilight Switches

Timers & Twilight Switches are applied in any residential, commercial and industrial buildings wherever automatic control is required on predefined times and/or depending on daylight intensity.

The Eaton range comprises of a wide variety of different products which include analogue Timers, digital Timers, Twilight Switches and Staircase Timers.

These Timers can either be controlled by a 50 Hz netsynchronisation, quartz control and time synchronisation or using the DCF signal or GPS antenna, which guarantees 100% accuracy at all times. Except for net-synchronised timers all units do have self power reserve to secure the time setting and program storage in case a power interruption does occur.

Dedicated computer software and memory cards are available to support the programming of our most advanced timers.

Automatic summer and winter time, holiday and random switching programs complete the functionality of our range.

Twilight Switches are supplied with a remote light sensor, which can be easily installed on the outside wall where the required light intensity threshold can be simply adjusted on the modular device itself.

### Technical characteristics (depending on type)

- Modular design.
- Analogue and digital timers.
- Time adjustment by 50 Hz net, quartz control, DCF<sup>1)</sup> or GPS signal reception<sup>2)</sup>
- Manual override switching function.
- Power reserve for all quartz and DCF or GPS driven switches.
- Remote Light Sensor for Twilight Switching.

### Benefits

- Easily programmable on front of device.
- Computer aided programming software available.
- Compact 18 mm design for restricted space opportunities.
- Separate IP40 covers are available for direct wall mounting.
- High level of accuracy.
- Automatic summer and winter time adjustment.
- Holiday & Random program settings.
- High power reserve up to 10 years.

**Notes:** 1) Automatic calculation of sunrise and sunset times throughout the year, including the possibility of astro times + / -2 hour shift.

2) The DCF-signal can only be received within a 1000 km radius.



### Contactors and impulse switches

Contactors are frequently applied for switching of lamp loads, fans or pumps in both utility as well as industrial areas.

Eaton's "CR" contactors are very specific due to the applied operating coil and the construction of the main contacts. All contactors with ac/dc coils ensure silent operation which is further enhanced by a low power consumption.

Optimal contacts and low heat dissipation guarantee a long lifetime of the contactor which is available in a wide range of characteristics.

### Technical characteristics

- Designed according to IEC 60947-4-1 and IEC 61095 standards.
- Suitable for applications in general control, heating & lighting applications.
- Available in 20, 25, 40 & 63 A ratings with up to 4-pole contacts.
- Optional add-on auxiliary contact available.
- DIN modular profile.
- Spacers available to extend lifetime (it is recommended to use 1 spacer between every 2 contactors installed).
- Day/night contactors available with manual override function.

### Benefits

- Low inrush power for all ac/dc types.
- Availability of combined ac/dc type contactors ensure silent operation.
- Contactors of ac/dc coil type are operable on both ac and dc voltage. The 20 A and 25 A versions are also available with ac coil. All combined ac/dc type versions are equipped with surge protection on the operating coil.
- Equipped with contact indication.
- Optimal quality of contacts and low heat dissipation ensure a long life time.



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**Transformers**

The Eaton bell transformer is a simple two module unit providing a dual voltage output (12V, 0.6A and 8V, 1.0A) and can be used with most commercially available door bells.



Suitable for residential and light commercial applications, Eaton's xComfort RF product range has been specifically designed to provide centralised control of all the electrical equipment in order to maximise energy savings, comfort, safety and security.

- Ideal for new construction and renovation projects
- Numerous functions available e.g. control of lights, blinds, heating, ventilation etc. including status display
- Control by wireless switches, remote control, smart phones and tablets
- Simple to install within an existing installation, no chiselling, no mess, minimal wiring
- Suitable for a wide range of applications, can easily be expanded
- Matches a wide range of wiring accessories and switches
- Little wiring required

### Control your house from the other side of the world

Installing an xComfort system with a Smart Home Controller will give you full remote access of anything electrical within the home or controlled environment, from anywhere in the world. Wireless light switches, dimmers and thermostats can be placed anywhere in the house, without having to rely on any cables to connect them up. This provides a good practical level of control enabling zoned control of heating and lighting switched by means of presence detectors, wall switches and programmed events etc. Lights can be controlled to switch on at reduced lux levels to take advantage of external light and save energy.

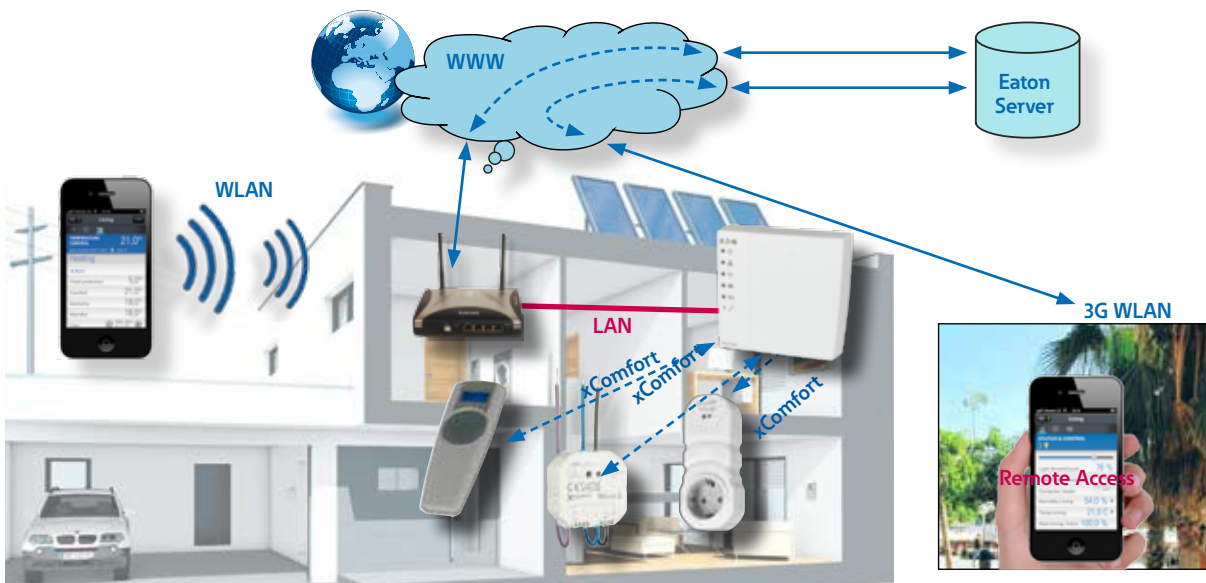
#### Master switch gives full control

The system also does away with unsightly cables, as all the switches are wireless and can be placed virtually anywhere, they can indeed also be replaced by hand held remote control units. Operation of the xComfort system can also be triggered by means of its inbuilt time-switch programs that can start and stop various electrical devices as required. That means you can wake up to a pot of freshly brewed coffee every morning, or make sure your heating and lighting is turned on just before you arrive home. Putting devices and appliances under time-switch control also provides extra security, by ensuring these devices are turned off even when you

forget to do it yourself. Simply having a master switch by the entrance can let you switch off all the lights in the house with a single press of a button, and upon return pressing the master ON may just turn on selected preprogrammed lights such as those in the hallway. The use of wireless thermostats, situated in the correct location, in each of the heating zones further ensures that the temperature is always optimal in every room in the house. The additional use of window contacts and wireless input modules will also allow xComfort to be set up so that the heating also responds and switches off when a window is opened and back on again when it is closed.

#### Control your home from your phone

If you're away from home, xComfort and the Smart Home Controller can now allow you to control all the devices in an installation through a smartphone or a web browser from anywhere in the world. The system can also alert you to events by SMS or email and you can receive a report containing important information such as a window has been opened or a sensor, such as a temperature sensor, has reached a pre-set limit, enabling you to take control remotely or confirming that xComfort is dealing with the alert locally.







The PREMERA white moulded range offers a modern aesthetically edged styled appearance whilst utilising the well established UREA material with its inherent MRSA germ protection properties ideal for kitchens, bedrooms and living rooms.

Each product is supplied with an optional screw cap facility to hide unsightly screws.

Essential supply products are offered enabling circuits to be highlighted effectively with unmistakable red rockers and fuse drawers without compromising their suiting with other standard accessories. Grey covers are offered to provide solutions to the latest Building Regulations.

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P021



### 10A switches

- To BSEN 60669-1.
- Supplied with M3.5 fixing screws and caps. Each terminal is capable of accepting up to 3 x 1.5mm<sup>2</sup> conductors. All terminals are backed off, ready to accept cable.
- X-rated for fluorescent or inductive loads.

Description	Eaton list number
10A 1G 1 way	P011
10A 2G 1 way	P012
10A 3G 1 way	P013
10A 4G 1 way	P014
10A 1 way bell push	P015
10A 1 way light symbol push	P015L
10A 1G 1 way push	P015P
10A 1G intermediate	P017
10A 1G 2 way	P021
10A 1G 2 way push	P021P
10A 2G 2 way	P022
10A 3G 2 way	P023
10A 4G 2 way	P024
10A 6G 2 way	P026

P048



### 3 Pole isolator switches

- To BSEN 60669-1.

Description	Eaton list number
10A fan isolator + fan symbol	P048
10A 3 pole isolator	P049

P041



### 10A broad rocker switches

- To BSEN 60669-1.
- Broad rocker individual modules can be removed for replacement/ maintenance. X-rated for fluorescent or inductive loads.

Description	Eaton list number
10A 2G 2 way half broad switch	P032
10A 1G 2 way broad switch	P041
10A 1G 2 way push switch	P041P
10A 2G 2 way broad switch	P042
10A 1G 1 way bell push	P045
10A 1G 1W broad switch push	P045P
10A 1G intermediate broad switch	P047

P450



### 16A hotel switch

- To BS 60669-1.
- Each terminal is capable of accepting up to 3 x 1.5mm<sup>2</sup> conductors. Suitable for surface mounting.
- Time delay.

Description	Eaton list number
16A hotel switch	P450

# 2.1

## PREMERA white moulded

### Wall switches

P9131



#### Push on/push off action dimmers

- To BSEN 60669-1.

Description	Eaton list number
250W 1G 2W push universal	<b>P9131</b>
250W 2G 2W push universal	<b>P9132</b>
400W 1G 2W push universal	<b>P9141</b>
400W 2G 2W push universal	<b>P9142</b>
1000W 1G 2W push universal (2 gang plate size)	<b>P9111</b>
1–10V 1G 1W analogue	<b>P9101</b>

P9551



#### Non-european rotary dimmers

Description	Eaton list number
500W 1G 1W universal non-european	<b>P9551</b>
500W 2G 1W universal non-european	<b>P9552</b>
1000W 1G 1W universal non-european	<b>P9511</b>
60–500W fan controller non-european	<b>P9751</b>

P611



### 13A single pole switched sockets

- To BS 1363: Part 2.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.

Description	Eaton list number
13A 1G SP switched socket	P611
13A 2G SP switched socket	P612

P622



### 13A double pole switched sockets inboard rockers

- To BS 1363: Part 2.
- 2 earth terminals and inboard rockers.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.

Description	Eaton list number
13A 1G DP switched socket	P621
13A 1G DP switched socket – grey	P621GY
13A 1G DP switched socket + neon	P621N
13A 1G DP switched socket + red rockers	P621RR
13A 1G DP switched socket red plate cover	P621RED
13A 2G DP switched socket	P622
13A 2G DP switched socket + neon	P622N
13A 2G DP switched socket + red rockers	P622RR

P632N



### 13A double pole switched sockets outboard rockers

- To BS 1363: Part 2.
- 2 earth terminals and outboard rockers.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.

Description	Eaton list number
13A 2G DP switched socket	P632
13A 2G DP switched socket – grey	P632GY
13A 2G DP switched socket + neon	P632N
13A 2G DP switched socket + red rockers	P632RR
13A 2G DP switched socket – red coverplate	P632RED

P651



### 13A 1G double pole non-standard/clean earth switched sockets

- Non-standard socket interface to BS 5733 with clean earth facility.
- 2 clean earth terminals and 2 standard earth terminals on each product.

Description	Eaton list number
13A 1G DP switched socket	P651

P652



### 13A 2G double pole non-standard/clean earth switched sockets

- Outboard rockers.
- Non-standard socket interface to BS 5733 with clean earth facility.
- 2 clean earth terminals and 2 standard earth terminals on each product.

Description	Eaton list number
13A 2G DP switched socket with 2E terminals	P652
13A 2G DP switched socket + red rockers with 2E terminals	P652RR

P672

**13A 2G double pole clean earth switched sockets**

- Outboard rockers.
- Standard socket interface to BS 1363 with clean earth facility.
- 2 clean earth terminals and 2 standard earth terminals on each product.

**Description****Eaton list number**

13A 2G DP switched socket with 2E terminals

**P672**

P692

**13A 2G switched sockets outboard rockers with USB charger outlets**

- 2.6A output split over the two USB outlets
- 2 x USB outlets complete with shutters to stop ingress of foreign bodies
- Complies to latest standards for USB sockets BS EN 62368-1:2014
- Complies with EMC standards EN55022, EN55024, EN61000-3-2/3
- 13A sockets comply with BS1363-2

**Description****Eaton list number**

13A 2G with 2 x USB charger outlets

**P692**

P686

**13A double pole RCD socket outlet – passive**

- Added protection against electrocution.
- 30mA protection.
- Passive – The contacts on the passive device remain closed when the mains supply is interrupted – this type is suitable for applications such as fridge freezers etc.
- To BS 7288

**Description****Eaton list number**

13A 2G RCD protected socket passive 30mA

**P686**

P111

**13A socket outlets**

- To BS 1363: Part 2.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- 2 earth terminals on P112.

**Description****Eaton list number**

13A 1G unswitched socket

**P111**

13A 2G unswitched socket

**P112**

P415

**15A socket outlet**

- To BS 546.

**Description****Eaton list number**

15A 1G switched socket

**P415**

P370

**Shaver supply unit**

- To BSEN 61558-2-5.
- Mounting box – **F4530** (46mm deep).

**Description****Eaton list number**

Shaver socket dual voltage 230V/110V AC

**P370**

P221N



### 13A double pole fused connection units with optional cable outlets – switched

- To BS 1363: Part 4.
- Live and Neutral accept 2 x 2.5mm<sup>2</sup> cables. Suitable for surface mounting.
- P212 adaptor plate for use with bottom entry cable outlet.

Description	Eaton list number
13A DP switched connection unit	P221
13A DP switched connection unit marked 'boiler'	P221BO
13A DP switched connection unit marked 'central heating'	P221CH
13A DP switched connection unit marked 'cooker hood'	P221CKH
13A DP switched connection unit marked 'dishwasher'	P221DW
13A DP switched connection unit – grey	P221GY
13A DP switched connection unit marked 'extract fan'	P221EF
13A DP switched connection unit marked 'refrigerator'	P221R
13A DP switched connection unit + red rocker	P221RR
13A DP switched connection unit marked 'washing machine'	P221WM
13A DP switched connection unit + neon	P221N
13A DP switched connection unit + neon – grey	P221NGY
13A DP switched connection unit + neon marked "refrigerator"	P221NR
13A DP switched connection unit + neon + red fuse drawer	P221NRR
13A DP switched connection unit + neon marked 'water heater'	P221NWH
13A DP switched connection unit + neon marked 'washing machine'	P221NWM
13A DP switched connection unit fitted with 3A fuse	P224

P220



### 13A fused connection units with optional cable outlets – unswitched

- To BS 1363: Part 4.
- Live and Neutral accept 2 x 2.5mm<sup>2</sup> cables. Suitable for surface mounting.
- P212 adaptor plate for use with bottom entry cable outlet.

Description	Eaton list number
13A unswitched connection unit	P220
13A unswitched connection unit + red fuse drawer	P220RR
13A unswitched connection unit + neon	P220N
13A unswitched connection unit fitted + 3A fuse	P223
13A unswitched connection unit + neon fitted with 3A fuse	P223N

# 2.4

## PREMERA white moulded

### Power switches

P401N



#### 20A double pole switches with optional cable outlet

- To BSEN 60669-1.
- Supply terminals accept 3 x 2.5mm<sup>2</sup> conductors. Load terminals accept 2 x 2.5mm<sup>2</sup> conductors.
- P212 adaptor plate for use with bottom entry cable outlet.

Description	Eaton list number
20A DP switch	<b>P401</b>
20A DP switch marked 'water heater'	<b>P403</b>
20A DP switch + neon	<b>P401N</b>
20A DP switch + neon marked 'water heater'	<b>P403N</b>
20A DP switch + neon marked 'air conditioner'	<b>P404N</b>

P425N



#### 45A double pole cooker control unit

- To BS 4177.

Description	Eaton list number
45A DP cooker control unit	<b>P425</b>
45A DP cooker control unit + neon	<b>P425N</b>

P421N



#### 50A double pole switches

- To BSEN 60669-1.

Description	Eaton list number
50A DP switch 2G plate	<b>P421</b>
50A DP switch + neon 2G plate	<b>P421N</b>
50A DP switch marked 'cooker' 2G plate	<b>P423</b>
50A DP switch + neon marked 'cooker' 2G plate	<b>P423N</b>
50A DP switch + neon marked 'air conditioner' 2G plate	<b>P424N</b>
50A DP switch + neon 1G plate size	<b>P422N</b>
50A DP switch + neon 1G plate size – grey	<b>P422NGY</b>
50A DP switch + neon 1G plate size marked 'cooker'	<b>P426N</b>
50A DP switch + neon 1G plate size marked 'air conditioner'	<b>P427N</b>

P345



### Cable/cooker outlet plates

- To BS 5733.

#### Description

Eaton list  
number

45A DP cable outlet with terminal block

**P345**

20A flex outlet plate

**P210**

Cable outlet adaptor plate for 20A switch/13A fused connection unit

**P212**

P212



P392



### Blank plates

#### Description

Eaton list  
number

1 gang blank plate

**P391**

2 gang blank plate

**P392**

### Accessories

#### Description

Eaton list  
number

Spare screw caps – PREMERA

**P999**



# 2.6

## PREMERA white moulded

### Communication outlets

P362



#### Telephone outlets

**Description**

**Eaton list number**

1G telephone outlet single master

**P360**

1G telephone outlet single secondary

**P361**

1G telephone outlet single RJ11

**P362**

P352



#### TV/FM co-axial outlets

- **P353** and **P354** isolated outlets for use in multi-outlet aerial systems. Suitable for full band width 40–860MHz. Single outlet TV/FM isolated co-axial socket suitable for 'T' box use with a single co-axial lead. Isolated 2 gang TV/FM diplexer socket double resistive outlet suitable for TV/FM and 'T' box use with a single co-axial down lead.

**Description**

**Eaton list number**

1G TV co-axial outlet

**P351**

1G TV co-axial outlet dual clamp

**P351D**

2G TV co-axial outlet

**P352**

1G TV/FM isolated co-axial outlet

**P353**

2G TV/FM diplexer co-axial outlet

**P354**

P356



#### TV and satellite co-axial outlets

- Suitable for full band width 40–860MHz.

**Description**

**Eaton list number**

1G SAT outlet

**P355**

2G TV/SAT outlet

**P356**

P357



#### Screened TV/FM/radio/satellite co-axial outlets

- Suitable for full band width 40-860MHz. Will accept digital IR return signal through TV point.

**Description**

**Eaton list number**

2G TV/radio outlet screened

**P357**

F4501



### Mounting boxes

Description	Eaton list number
1G pattress 16mm deep	F4500
1G pattress 28mm deep	F4501
2G pattress 28mm deep	F4502
2G conversion pattress 25mm deep	F4510
2G pattress 40mm deep with cable clamp	F4511
2G pattress 46mm deep for shaver supply unit	F4530
1G pattress 45mm deep	F4570

F3368



### Ancillary products

Description	Eaton list number
13A non-standard plug	F3368
10W connection box	F5099

# 2.8

## PREMERA white moulded

### PREMERA mix module coverplates

P903



#### Modular coverplates

- Suitable for use with PREMERA mix module range.
- Dimensions: 1–2G: 86mm x 86mm      3–4G: 86mm x 146mm      6–8G: 146mm x 150mm  
12G: 150mm x 210mm      18G: 210mm x 210mm      24G: 210mm x 270mm
- Supplied complete with mounting frames/earth straps.

Description	Eaton list number
1G module coverplate moulded c/w earth strap	<b>P901</b>
2G module coverplate moulded c/w earth strap	<b>P902</b>
3G module coverplate moulded c/w earth strap	<b>P903</b>
4G module coverplate moulded c/w earth strap	<b>P904</b>
6G module coverplate moulded c/w mounting frame	<b>P906</b>
8G module coverplate moulded c/w mounting frame	<b>P908</b>
12G module coverplate moulded c/w mounting frame	<b>P912</b>
18G module coverplate c/w mounting frame – clip-on cover	<b>C918 + CP918WH</b>
24G module coverplate c/w mounting frame – clip-on cover	<b>C924 + CP924WH</b>
1G modular coverplate moulded – grey c/w earth strap	<b>P901GY</b>
2G modular coverplate moulded – grey c/w earth strap	<b>P902GY</b>
3G modular coverplate moulded – grey c/w earth strap	<b>P903GY</b>
4G modular coverplate moulded – grey c/w earth strap	<b>P904GY</b>
6G modular coverplate assembly moulded – grey c/w mounting frame	<b>P906GY</b>
8G modular coverplate assembly moulded – grey c/w mounting frame	<b>P908GY</b>



PREMERA mix is a modular interface grid system combining the benefits of a traditional grid range, a voice and data range, power sockets, broad switches and intelligent RF switch modules.

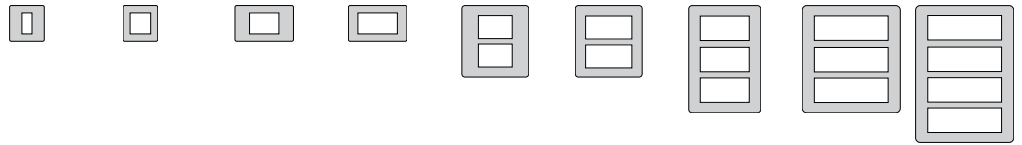
Offering up to 24 module size plates with endless combinations, PREMERA mix also includes radio frequency switching capabilities as part of Eaton's xComfort range enabling one product platform to fit all.

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## PREMERA mix specification guide



Range/finish	Eaton list number								
	1 module	2 module	3 module	4 module	6 module	8 module	12 module	18 module	24 module
PREMERA white	<b>P901</b>	<b>P902</b>	<b>P903</b>	<b>P904</b>	<b>P906</b>	<b>P908</b>	<b>P912</b>	<b>C918 + CP918WH</b>	<b>C924 + CP924WH</b>
PREMERA grey	<b>P901GY</b>	<b>P902GY</b>	<b>P903GY</b>	<b>P904GY</b>	<b>P906GY</b>	<b>P908GY</b>	–	–	–
COPA c/w white cover	<b>C901WH</b>	<b>C902WH</b>	<b>C903WH</b>	<b>C904WH</b>	–	–	–	–	–
COPA interior	<b>C901</b>	<b>C902</b>	<b>C903</b>	<b>C904</b>	<b>C906</b>	<b>C908</b>	<b>C912</b>	<b>C918</b>	<b>C924</b>
COPA interior black	<b>C901B</b>	<b>C902B</b>	<b>C903B</b>	<b>C904B</b>	<b>C906B</b>	<b>C908B</b>	<b>C912B</b>	<b>C918B</b>	<b>C924B</b>
COPA plastic covers <sup>1)</sup>	<b>CP901*</b>	<b>CP902*</b>	<b>CP903*</b>	<b>CP904*</b>	<b>CP906*</b>	<b>CP908*</b>	<b>CP912*</b>	<b>CP918*</b>	<b>CP924*</b>
COPA metal covers <sup>2)</sup>	<b>CM901*</b>	<b>CM902*</b>	<b>CM903*</b>	<b>CM904*</b>	<b>CM906*</b>	<b>CM908*</b>	<b>CM912*</b>	<b>CM918*</b>	<b>CM924*</b>
COPA fix plates – SS	<b>B901SS</b>	<b>B902SS</b>	<b>B903SS</b>	<b>B904SS</b>	<b>B906SS*</b>	<b>B908SS*</b>	<b>B912SS*</b>	<b>B918SS*</b>	<b>B924SS*</b>
XTRA surface range	<b>X901MG</b>	<b>X902MG</b>	<b>X903MG</b>	<b>X904MG</b>	<b>X906MG</b>	<b>X908MG</b>	<b>X912MG</b>	<b>X918MG</b>	<b>X924MG</b>
<b>Back boxes</b>									
Flush boxes – Metal	35mm deep	35mm deep	35mm deep	35mm deep	<b>F8342</b>	<b>F8342</b>	<b>F8343</b>	<b>F8344</b>	<b>F8345</b>
Surface metal boxes for Xtra plates									
– with knockouts	<b>FM8340</b>	<b>FM8340</b>	<b>FM8341</b>	<b>FM8341</b>	<b>F8342</b>	<b>F8342</b>	<b>F8343</b>	<b>F8344</b>	<b>F8345</b>
– without knockouts	<b>FM8349</b>	<b>FM8349</b>	<b>FM8350</b>	<b>FM8350</b>	<b>F8351</b>	<b>F8351</b>	<b>F8352</b>	–	–
Surface moulded boxes	<b>F4501</b>	<b>F4501</b>	<b>F4502</b>	<b>F4502</b>	–	–	–	–	–

Notes: Items supplied complete with all the mounting frames unless stated.

<sup>1)</sup>Covers only – need to order interior – white or black (eg **C901** or **C901B**).

## PREMERA mix plate dimensions

	1 gang	2 gang	3 gang	4 gang	6 gang	8 gang	12 gang	18 gang	24 gang
<b>PREMERA</b>									
Eaton list number:	<b>P901</b>	<b>P902</b>	<b>P903</b>	<b>P904</b>	<b>P906</b>	<b>P908</b>	<b>P912</b>	–	–
	<b>P901GY</b>	<b>P902GY</b>	<b>P903GY</b>	<b>P904GY</b>	<b>P906GY</b>	<b>P908GY</b>	–	–	–
Plate dimensions:	86 x 86mm	86 x 86mm	146 x 86mm	146 x 86mm	146 x 150mm	146 x 150mm	146 x 210mm	–	–
<b>COPA interiors</b>									
Eaton list number:	<b>C901</b>	<b>C902</b>	<b>C903</b>	<b>C904</b>	<b>C906</b>	<b>C908</b>	<b>C912</b>	<b>C918</b>	<b>C924</b>
	<b>C901B</b>	<b>C902B</b>	<b>C903B</b>	<b>C904B</b>	<b>C906B</b>	<b>C908B</b>	<b>C912B</b>	<b>C918B</b>	<b>C924B</b>
Plate dimensions:	84 x 84mm	84 x 84mm	145 x 84mm	145 x 84mm	142 x 142mm	142 x 142mm	142 x 207mm	203 x 207mm	203 x 267mm
<b>COPA &amp; COPA fix plates</b>									
Eaton list number:	<b>C901WH</b>	<b>C902WH</b>	<b>C903WH</b>	<b>C904WH</b>	–	–	–	–	–
	<b>CP901<sup>1)</sup></b>	<b>CP902<sup>1)</sup></b>	<b>CP903<sup>1)</sup></b>	<b>CP904<sup>1)</sup></b>	<b>CP906<sup>1)</sup></b>	<b>CP908<sup>1)</sup></b>	<b>CP912<sup>1)</sup></b>	<b>CP918<sup>1)</sup></b>	<b>CP924<sup>1)</sup></b>
	<b>CM901<sup>2)</sup></b>	<b>CM902<sup>2)</sup></b>	<b>CM903<sup>2)</sup></b>	<b>CM904<sup>2)</sup></b>	<b>CM906<sup>2)</sup></b>	<b>CM908<sup>2)</sup></b>	<b>CM912<sup>2)</sup></b>	<b>CM918<sup>2)</sup></b>	<b>CM924<sup>2)</sup></b>
	<b>B901SS</b>	<b>B902SS</b>	<b>B903SS</b>	<b>B904SS</b>	<b>B906SS</b>	<b>B908SS</b>	<b>B912SS</b>	<b>B918SS</b>	<b>B924SS</b>
Plate dimensions:	87 x 87mm	87 x 87mm	148 x 87mm	148 x 87mm	146 x 150mm	146 x 150mm	146 x 210mm	206 x 210mm	206 x 270mm
<b>Xtra plates</b>									
Eaton list number:	<b>X901MG</b>	<b>X902MG</b>	<b>X903MG</b>	<b>X904MG</b>	<b>X906MG</b>	<b>X908MG</b>	<b>X912MG</b>	<b>X918MG</b>	<b>X924MG</b>
Plate dimensions:	86 x 86mm	86 x 86mm	148 x 87mm	148 x 87mm	137 x 137mm	137 x 137mm	137 x 195mm	200 x 198mm	198 x 257mm

<sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP904WH</b>
Metallic silver	<b>SV</b>	<b>CP904SV</b>
Gold metallic	<b>GL</b>	<b>CP904GL</b>
Black matt	<b>BM</b>	<b>CP904BM</b>

<sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM904SS</b>
Highly polished	<b>HP</b>	<b>CM904HP</b>
Satin bronze	<b>SB</b>	<b>CM904SB</b>
Polished brass	<b>PB</b>	<b>CM904PB</b>

F9004

**10A switches**

- To BSEN60669-1.

**Description**

Description	Eaton list number		
	White module	Black module	Red rocker
10A 1 way	<b>F9000</b>	–	–
10A 2 way	<b>F9001</b>	<b>F9001B</b>	–
10A 2 way push to make	<b>F9004</b>	<b>F9004B</b>	–

F9021RR

**20A switches**

- To BSEN60669-1.

**Description**

Description	Eaton list number		
	White module	Black module	Red rocker
20A 1 way	<b>F9020</b>	<b>F9020B</b>	–
20A 2 way	<b>F9021</b>	<b>F9021B</b>	<b>F9021RR</b>
20A intermediate switch	<b>F9022</b>	<b>F9022B</b>	–

F9023

**20A double pole switches**

- To BSEN60669-1.

**Description**

Description	Eaton list number		
	White module	Black module	Red rocker
20A double pole	<b>F9023</b>	<b>F9023B</b>	<b>F9023RR</b>
20A double pole push to break	<b>F9029</b>	–	<b>F9029RR</b>
20A double pole push to make	<b>F9030</b>	<b>F9030B</b>	<b>F9030RR</b>
20A 2 way centre off	<b>F9024</b>	<b>F9024B</b>	<b>F9024RR</b>
20A 2 way centre off bias	<b>F9033</b>	<b>F9033B</b>	<b>F9033RR</b>

F9023WM

**20A double pole switches – legends**

- To BSEN60669-1.

**Description**

Description	Eaton list number		
	White module	Black module	Red rocker
20A double pole marked 'boiler'	<b>F9023BO</b>	–	–
20A double pole marked 'cooker hood'	<b>F9023CH</b>	–	–
20A double pole marked 'dishwasher'	<b>F9023DW</b>	–	–
20A double pole marked 'extract fan'	<b>F9023EF</b>	–	–
20A double pole marked 'fridge freezer'	<b>F9023FF</b>	–	–
20A double pole marked 'fridge'	<b>F9023FG</b>	–	–
20A double pole marked 'freezer'	<b>F9023FZ</b>	–	–
20A double pole marked 'hob'	<b>F9023HB</b>	–	–
20A double pole marked 'hob hood'	<b>F9023HH</b>	–	–
20A double pole marked 'light'	<b>F9023LI</b>	–	–
20A double pole marked 'microwave'	<b>F9023MW</b>	–	–
20A double pole marked 'oven'	<b>F9023OV</b>	–	–
20A double pole marked 'plinth heater'	<b>F9023PH</b>	–	–
20A double pole marked 'tumble dryer'	<b>F9023TD</b>	–	–
20A double pole marked 'towel rail'	<b>F9023TR</b>	–	–
20A double pole marked 'washer dryer'	<b>F9023WDR</b>	–	–
20A double pole marked 'water heater'	<b>F9023WH</b>	–	–
20A double pole marked 'washing machine'	<b>F9023WM</b>	–	–



F9025



### 20A double pole switches with neon

- To BSEN60669-1.

Description	Eaton list number		
	White module	Black module	Red rocker
20A double pole with indicator	<b>F9025</b>	<b>F9025B</b>	–

F9025HE



### 20A double pole switches with neon – legends

- To BSEN60669-1.

Description	Eaton list number		
	White module	Black module	Red rocker
20A double pole + neon marked 'boiler'	<b>F9025BO</b>	–	–
20A double pole + neon marked 'cooker hood'	<b>F9025CH</b>	–	–
20A double pole + neon marked 'dishwasher'	<b>F9025DW</b>	–	–
20A double pole + neon marked 'extract fan'	<b>F9025EF</b>	–	–
20A double pole + neon marked 'fridge freezer'	<b>F9025FF</b>	–	–
20A double pole + neon marked 'fridge'	<b>F9025FG</b>	–	–
20A double pole + neon marked 'hob'	<b>F9025HB</b>	–	–
20A double pole + neon marked 'heater'	<b>F9025HE</b>	–	–
20A double pole + neon marked 'microwave'	<b>F9025MW</b>	–	–
20A double pole + neon marked 'plinth heater'	<b>F9025PH</b>	–	–
20A double pole + neon marked 'tumble dryer'	<b>F9025TD</b>	–	–
20A double pole + neon marked 'washer dryer'	<b>F9025WDR</b>	–	–
20A double pole + neon marked 'water heater'	<b>F9025WH</b>	–	–
20A double pole + neon marked 'wachine machine'	<b>F9025WM</b>	–	–

F9032



### 16A twin switches

- To BSEN60669-1.

Description	Eaton list number		
	White module	Black module	Red rocker
16A 1 way twin switch module	<b>F9032</b>	–	–

F9201B

**10A broad rocker switches**

- 50mm x 50mm modules.
- To BSEN60669-1.

**Description**
**Eaton list number**  
**White module   Black module   Red rocker**

Description	Eaton list number White module	Eaton list number Black module	Eaton list number Red rocker
10A 2 way broad rocker	F9201	F9201B	–
10A 2 way broad rocker push to make	F9204	F9204B	–

F9225

**20A broad rocker switches**

- 50mm x 50mm modules.
- To BSEN60669-1.

**Description**
**Eaton list number**  
**White module   Black module   Red rocker**

Description	Eaton list number White module	Eaton list number Black module	Eaton list number Red rocker
20A 2 way broad rocker	F9221	–	–
20A intermediate broad rocker switch	F9222	–	–
20A double pole broad rocker	F9223	–	–
20A double pole broad rocker indicator	F9225	–	–
20A 2 way centre off broad rocker	F9224	–	–
20A 2 way centre off bias broad rocker	F9233	–	–

F9027RR



### 20A key switches

- To BSEN60669-1.

**Description**

Description	Eaton list number		
	White module	Black module	Red rocker
20A key switch 2 way	<b>F9026</b>	<b>F9026B</b>	–
20A key switch 2 way printed with 'emergency lighting test charge'	<b>F9026EL</b>	<b>F9026BEL</b>	–
20A key switch double pole	<b>F9027</b>	<b>F9027B</b>	<b>F9027RR</b>
20A key switch double pole printed with 'emergency lighting test charge'	<b>F9027EL</b>	<b>F9027BEL</b>	–
20A key switch double pole with indicator	<b>F9027N</b>	<b>F9027NB</b>	–
20A key switch 2 way centre off bias	<b>F9028</b>	<b>F9028B</b>	–
20A key switch intermediate	<b>F9031</b>	<b>F9031B</b>	–

# 3.4

## PREMERA mix

### Ancillary items

F9063



F9072



#### Ancillary items

Description	Eaton list number		
	White module	Black module	Red rocker
Red neon 230V	<b>F9061</b>	<b>F9061B</b>	–
Red filament lamp 24V	<b>F9061/24V</b>	–	–
Amber neon 230V	<b>F9062</b>	–	–
Amber neon 24V	<b>F9062/24V</b>	–	–
Green neon 230V	<b>F9063</b>	–	–
Green neon 24V	<b>F9063/24V</b>	–	–
13A fuse module <sup>1)</sup>	<b>F9072</b>	<b>F9072B</b>	<b>F9072RR</b>
Cable outlet 20A <sup>1)</sup>	<b>F9073</b>	<b>F9073B</b>	–
Buzzer	<b>F9076</b>	–	–
Replacement key	<b>F9099</b>	–	–
Blank <sup>1)</sup>	<b>F9060</b>	<b>F9060B</b>	–

<sup>1)</sup>To BS5733

F9064



### Dimmer modules

Description	Eaton list number	
	White module	Black module
250W dimmer universal push on/off 2 way <sup>1)</sup>	<b>F9064</b>	<b>F9064B</b>
400W dimmer universal push on/off 2 way <sup>1)</sup>	<b>F9065</b>	<b>F9065B</b>
500W dimmer (50mm x 50mm) push on/off 2 way <sup>1)</sup>	<b>F9066</b>	<b>F9066B</b>
1000W dimmer non-european (50mm x 50mm) push on/off 2 way	<b>F9077</b>	<b>F9077B</b>
1–10V dimmer push on/off 1 way <sup>1)</sup>	<b>F9078</b>	<b>F9078B</b>
60–500W fan controller – non-euro rotary 1 way	<b>F9079</b>	<b>F9079B</b>

<sup>1)</sup>To BSEN60669-2-1

F9313

**Socket modules**

- 50mm x 50mm modules.

**Description**

Description	Eaton list number	
	White module	Black module
5A 3 pin shuttered socket <sup>1)</sup>	<b>F9306</b>	<b>F9306B</b>
13A 3 pin socket module 2 earth terminals <sup>2)</sup>	<b>F9313</b>	<b>F9313B</b>
13A 3 pin non standard socket 2 earth terminals	<b>F9314</b>	<b>F9314B</b>
15A 3 pin shuttered socket <sup>1)</sup>	<b>F9315</b>	<b>F9315B</b>
16A Schuko socket <sup>3)</sup>	<b>F9317</b>	<b>F9317B</b>
15A 3 pin 127v SASO socket <sup>4)</sup>	<b>F9318</b>	<b>F9318B</b>

<sup>1)</sup>To BS546

<sup>2)</sup>To BS1363 Part 2

<sup>3)</sup>To IEC60884-1

<sup>4)</sup>To BS5733:2010

F3784



### Communication modules

Description	Eaton list number	
	White module	Black module
Single IEC co-axial (female) screened	<b>F3780</b>	<b>F3780B</b>
Single IEC co-axial (male) screened	<b>F3781</b>	-
Single satellite (female) connection screened	<b>F3782</b>	-
TV/radio/satellite/return module screened (50mm X 50mm)	<b>F3783</b>	<b>F3783B</b>
Telephone (BT secondary)	<b>F3784</b>	<b>F3784B</b>
Telephone (BT master)	<b>F3785</b>	-
RJ11 outlet	<b>F3786</b>	-
RJ45 CAT 6	<b>F3787</b>	<b>F3787B</b>
1G module blank <sup>1)</sup>	<b>F3790</b>	<b>F3790B</b>

<sup>1)</sup>To BS5733



F9401

**Premera xComfort RF switch modules**

- See xComfort section for more information.

**Description****Eaton list number  
White module**

Description	Eaton list number White module
xComfort RF module surface mounting plate (will accept any CP902 type of plate – not supplied)	<b>F9400</b>
xComfort 1G RF switch module	<b>F9401</b>
xComfort 2G RF switch module	<b>F9402</b>
xComfort 4G RF switch module	<b>F9404</b>

CSAU-01/01

**xComfort actuators: examples**

- See xComfort section for details of actuators and other RF devices for use with Premera RF switch modules.

**Description****Eaton list number  
White module**

Description	Eaton list number White module
xComfort 8A SP switching actuator	<b>CSAU-01/02</b>
xComfort 250W dimming actuator	<b>CDAU-01/02</b>

F8344



### Grid boxes

- To BS5733.

Description	Eaton list number
1 and 2 gang grid box surface	<b>FM8340</b>
3 and 4 gang grid box surface	<b>FM8341</b>
6 and 8 gang grid box flush or surface	<b>F8342</b>
12 gang grid box flush or surface	<b>F8343</b>
18G grid box flush or surface	<b>F8344</b>
24G grid box flush or surface	<b>F8345</b>
1 and 2 gang grid box no knockouts surface	<b>FM8349</b>
3 and 4 gang grid box no knockouts surface	<b>FM8350</b>
Gridswitch box 6 & 8 gang – no knockouts flush or surface	<b>F8351</b>
9 and 12 gang grid box no knockouts flush or surface	<b>F8352</b>

Note: PREMERA Mix modules/plates (1–4 gang) fit industry standard 35mm standard flush metal boxes





PREMERA proof is a range of weatherproof accessories offering IP66 protection for outdoor or more arduous environments.

The range provides extensive combinations by utilising the 1 and 2 gang IP66 enclosures whilst delivering on aesthetic appeal.

## 4.1 IP66 SWITCHES AND ENCLOSURES ..... 54

# 4.1

## PREMERA proof IP66 switches and enclosures

P722



### IP66 switches

Description	Eaton list number
1G 10A 2W bell push + neon IP66	<b>P715</b>
1G 16A 2W switch + neon IP66	<b>P721</b>
2G 16A 2W switch + neon IP66	<b>P722</b>
1G 20A DP + neon IP66	<b>P741</b>
2G 20A DP switch + neon IP66	<b>P742</b>

P762



### IP66 enclosures

- Will accept most standard PREMERA 1 gang or 2 gang products.
- Enclosures must be ordered with equivalent number of PREMERA products.

Description	Eaton list number
1G IP66 enclosure	<b>P761</b>
2G IP66 enclosure	<b>P762</b>

P771



### IP56 switch socket

Description	Eaton list number
13A 1G switched socket IP56	<b>P771</b>



COPA is Eaton's flexible 'Clip On' Plate Accessory range designed with innovative, slim and stylish 'clip-on' face plates that conceal the screw fixing holes to give a superior elegance to the finish of the product. The decorative face plates are available in a selection of styles available in both high quality decorative plastic and luxury metal finishes.

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C012



### 10A switches

- To BSEN 60669-1.
- Minimum back box depth = 25mm.

Description	Eaton list number White interior c/w white cover	White interior	Black interior	Decorative plate option	Metallic plate option	White cover
10A 1G 1 way	<b>C011WH</b>	<b>C011</b>	<b>C011B</b>	<b>CP011<sup>(1)</sup></b>	<b>CM011<sup>(2)</sup></b>	<b>CP011WH</b>
10A 2G 1 way	<b>C012WH</b>	<b>C012</b>	<b>C012B</b>	<b>CP012<sup>(1)</sup></b>	<b>CM012<sup>(2)</sup></b>	<b>CP012WH</b>
10A 3G 1 way	<b>C013WH</b>	<b>C013</b>	<b>C013B</b>	<b>CP013<sup>(1)</sup></b>	<b>CM013<sup>(2)</sup></b>	<b>CP013WH</b>
10A 4G 1 way	<b>C014WH</b>	<b>C014</b>	<b>C014B</b>	<b>CP014<sup>(1)</sup></b>	<b>CM014<sup>(2)</sup></b>	<b>CP014WH</b>
10A 1G 1 way retractive switch with light symbol	<b>C015LWH</b>	<b>C015</b>	<b>C015B</b>	<b>CP015L<sup>(1)</sup></b>	<b>CM015L<sup>(2)</sup></b>	<b>CP015LWH</b>
10A 1G 1 way retractive switch with bellpush symbol	<b>C015WH</b>	<b>C015</b>	<b>C015B</b>	<b>CP015<sup>(1)</sup></b>	<b>CM015<sup>(2)</sup></b>	<b>CP015WH</b>
10A intermediate switch	<b>C017WH</b>	<b>C017</b>	<b>C017B</b>	<b>CP011<sup>(1)</sup></b>	<b>CM011<sup>(2)</sup></b>	<b>CP011WH</b>
10A 1G 2 way	<b>C021WH</b>	<b>C021</b>	<b>C021B</b>	<b>CP011<sup>(1)</sup></b>	<b>CM011<sup>(2)</sup></b>	<b>CP011WH</b>
10A 2G 2 way	<b>C022WH</b>	<b>C022</b>	<b>C022B</b>	<b>CP012<sup>(1)</sup></b>	<b>CM012<sup>(2)</sup></b>	<b>CP012WH</b>
10A 3G 2 way	<b>C023WH</b>	<b>C023</b>	<b>C023B</b>	<b>CP013<sup>(1)</sup></b>	<b>CM013<sup>(2)</sup></b>	<b>CP013WH</b>
10A 4G 2 way	<b>C024WH</b>	<b>C024</b>	<b>C024B</b>	<b>CP014<sup>(1)</sup></b>	<b>CM014<sup>(2)</sup></b>	<b>CP014WH</b>
10A 6G 2 way	<b>C026WH</b>	<b>C026</b>	<b>C026B</b>	<b>CP026<sup>(1)</sup></b>	<b>CM026<sup>(2)</sup></b>	<b>CP026WH</b>

CM012SS



C012 + CM012SS



C041



### 10A broad rocker switches

- To BSEN 60669-1.
- Minimum back box depth = 25mm.

Description	Eaton list number White interior c/w white cover	White interior	Black interior	Decorative plate option	Metallic plate option	White cover
10A 2G 2 way half broad switch	<b>C032WH</b>	<b>C032</b>	–	<b>CP013<sup>(1)</sup></b>	<b>CM013<sup>(2)</sup></b>	<b>CP013WH</b>
10A 1G 2 way broad switch	<b>C041WH</b>	<b>C041</b>	<b>C041B</b>	<b>CP013<sup>(1)</sup></b>	<b>CM013<sup>(2)</sup></b>	<b>CP013WH</b>
10A 1G 1 way broad switch bellpush	<b>C045WH</b>	–	<b>C045B</b>	–	<b>CM045<sup>(2)</sup></b>	–
10A intermediate broad switch	<b>C047WH</b>	–	<b>C047B</b>	<b>CP013<sup>(1)</sup></b>	<b>CM013<sup>(2)</sup></b>	<b>CP013WH</b>
10A 3 pole broad rocker fan isolator	<b>C048WH</b>	<b>C048</b>	<b>C048B</b>	<b>CP048<sup>(1)</sup></b>	<b>CM048<sup>(2)</sup></b>	<b>CP048WH</b>
10A 3 pole broad rocker isolator	<b>C049WH</b>	<b>C048</b>	<b>C048B</b>	–	<b>CM049<sup>(2)</sup></b>	–

C9132WH



### Push on/push off action dimmers

- To BSEN 60669-1-1.
- Minimum back box depth = 35mm.

Description	Eaton list number White interior c/w white cover	White interior	Decorative plate option	Metallic plate option	White cover
250W 1G 2 way	<b>C9131WH</b>	–	<b>CP9131<sup>(1)</sup></b>	<b>CM9131<sup>(2)</sup></b>	<b>CP9131WH</b>
250W 2G 2 way	<b>C9132WH</b>	<b>C9132</b>	<b>CP9132<sup>(1)</sup></b>	<b>CM9132<sup>(2)</sup></b>	<b>CP9132WH</b>
400W 1G 2 way	<b>C9141WH</b>	–	<b>CP9131<sup>(1)</sup></b>	<b>CM9131<sup>(2)</sup></b>	<b>CP9131WH</b>
1000W 1G 2way – 2 gang size coverplate	<b>C9111WH</b>	–	<b>CP9111<sup>(1)</sup></b>	<b>CM9111<sup>(2)</sup></b>	<b>CP9111WH</b>

#### <sup>1</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP011WH</b>
Metallic silver	<b>SV</b>	<b>CP011SV</b>
Gold metallic	<b>GL</b>	<b>CP011GL</b>
Black matt	<b>BM</b>	<b>CP011BM</b>

#### <sup>2</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM011SS</b>
Highly polished	<b>HP</b>	<b>CM011HP</b>
Satin bronze	<b>SB</b>	<b>CM011SB</b>
Polished brass	<b>PB</b>	<b>CM011PB</b>

# 5.1

## COPA clip-on plate accessory range

### Switches

C9551WH



#### Rotary tungsten dimmers

- These dimmers are produced for **non-european countries**.
- Minimum back box depth = 35mm.

Description	Eaton list number White interior c/w white cover	White interior	Decorative plate option	Metallic plate option	White cover
500W 1G 1 way	<b>C9551WH</b>	<b>C9551</b>	<b>CP9131<sup>1)</sup></b>	<b>CM9131<sup>2)</sup></b>	<b>CP9131WH</b>
500W 2G 1 way	<b>C9552WH</b>	<b>C9552</b>	<b>CP9132<sup>1)</sup></b>	<b>CM9132<sup>2)</sup></b>	<b>CP9132WH</b>
500W 1G 1 way fan controller	<b>C9751WH</b>	–	<b>CP9131<sup>1)</sup></b>	<b>CM9131<sup>2)</sup></b>	<b>CP9131WH</b>
1000W 1G 1way	<b>C9511WH</b>	<b>C9511</b>	<b>CP9131<sup>1)</sup></b>	<b>CM9131<sup>2)</sup></b>	<b>CP9131WH</b>

A9900PB



#### Alternative dimmer knobs

Description	Eaton list number
Dimmer knob – highly polished	<b>A9900HP</b>
Dimmer knob – polished brass	<b>A9900PB</b>
Dimmer knob – stainless steel	<b>A9900SS</b>

A9900SS



#### <sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP9131WH</b>
Metallic silver	<b>SV</b>	<b>CP9131SV</b>
Gold metallic	<b>GL</b>	<b>CP9131GL</b>
Black matt	<b>BM</b>	<b>CP9131BM</b>

#### <sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM621NSS</b>
Highly polished	<b>HP</b>	<b>CM621NHP</b>
Satin bronze	<b>SB</b>	<b>CM621NSB</b>
Polished brass	<b>PB</b>	<b>CM621NPB</b>

C622WH



### 13A switched socket outlets

- To BS 1363: Part 2.
- Minimum back box depth = 25mm.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- Double pole with 2 earth terminals

Description	Eaton list number			Decorative plate option <sup>1)</sup>	Metallic plate option <sup>2)</sup>	White cover
	White interior c/w white cover	White interior	Black interior			
13A 1G DP switched socket 2E term	<b>C621WH</b>	<b>C621</b>	<b>C621B</b>	<b>CP621<sup>1)</sup></b>	<b>CM621<sup>2)</sup></b>	<b>CP621WH</b>
13A 1G DP switched socket 2E term + neon	<b>C621NWH</b>	<b>C621N</b>	<b>C621NB</b>	–	<b>CM621N<sup>2)</sup></b>	–
13A 2G DP switched socket 2E term	<b>C622WH</b>	<b>C622</b>	<b>C622B</b>	<b>CP622<sup>1)</sup></b>	<b>CM622<sup>2)</sup></b>	<b>CP622WH</b>
13A 2G DP switched socket 2E term + neon	<b>C622NWH</b>	<b>C622N</b>	<b>C622NB</b>	–	<b>CM622N<sup>2)</sup></b>	–
13A 2G DP switched socket 2E term	<b>C622WH</b>	<b>C622</b>	<b>C622B</b>	<b>CP622<sup>1)</sup></b>	<b>CM622<sup>2)</sup></b>	<b>CP622WH</b>
13A 2G DP switched socket 2E term outboard rockers	<b>C632WH</b>	<b>C632</b>	<b>C632B</b>	<b>CP632<sup>1)</sup></b>	<b>CM632<sup>2)</sup></b>	<b>CP632WH</b>
13A 1G DP switched socket 2E term non standard	<b>C651WH</b>	–	<b>C651B</b>	<b>CP621<sup>1)</sup></b>	<b>CM621<sup>2)</sup></b>	<b>CP621WH</b>
13A 2G DP switched socket 2E term non standard	<b>C652WH</b>	–	–	<b>CP632<sup>1)</sup></b>	<b>CM632<sup>2)</sup></b>	<b>CP652WH</b>

C692WH



### 13A 2G switched sockets outboard rockers with USB charger outlets

- 2.6A output split over the two USB outlets
- 2 x USB outlets complete with shutters to stop ingress of foreign bodies
- Complies to latest standards for USB sockets BS EN 62368-1:2014
- Complies with EMC standards EN55022, EN55024, EN61000-3-2/3
- 13A sockets comply with BS1363-2

Description	Eaton list number			Decorative plate option <sup>1)</sup>	Metallic plate option <sup>2)</sup>	White cover
	White interior c/w white cover	White interior	Black interior			
13A 2G with 2 x USB charger outlets	<b>C692WH</b>	–	<b>C692B</b>	<b>CP692<sup>1)</sup></b>	<b>CM692<sup>2)</sup></b>	–

C111WHa



### 13A unswitched socket outlets

- To BS 1363: Part 2.
- Minimum back box depth = 25mm.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- CP and CM coverplate on C111 item all end with an 'a'

Description	Eaton list number			Decorative plate option <sup>1)</sup>	Metallic plate option <sup>2)</sup>	White cover
	White interior c/w white cover	White interior	Black interior			
13A 1G unswitched socket	<b>C111WHa</b>	<b>C111a</b>	<b>C111ba</b>	<b>CP111<sup>1)</sup></b>	<b>CM111<sup>2)</sup></b>	<b>CP111WHa</b>
13A 2G unswitched socket	<b>C112WH</b>	–	<b>C112B</b>	<b>CP112<sup>1)</sup></b>	<b>CM112<sup>2)</sup></b>	<b>CP112WH</b>

#### <sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP621NWH</b>
Metallic silver	<b>SV</b>	<b>CP621NSV</b>
Gold metallic	<b>GL</b>	<b>CP621NGL</b>
Black matt	<b>BM</b>	<b>CP621NBM</b>

#### <sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM621NSS</b>
Highly polished	<b>HP</b>	<b>CM621NHP</b>
Satin bronze	<b>SB</b>	<b>CM621NSB</b>
Polished brass	<b>PB</b>	<b>CM621NPB</b>

# 5.2

## COPA clip-on plate accessory range

### Socket outlets

C415WH



#### 15A socket outlets

- To BS 546.
- Minimum back box depth = 35mm.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.

Description	Eaton list number			Decorative plate option	Metallic plate option	White cover
	White interior c/w white cover	White interior	Black interior			
15A 1G SP switched socket	<b>C415WH</b>	–	<b>C415B</b>	<b>CP415<sup>1)</sup></b>	<b>CM415<sup>2)</sup></b>	<b>CP415WH</b>

C370B



#### 230V/115V AC shaver socket

- To BSEN 61558-2-5.
- Minimum back box depth = 47mm.

Description	Eaton list number			Decorative plate option	Metallic plate option	White cover
	White interior c/w white cover	White interior	Black interior			
Shaver socket dual voltage	<b>C370WH</b>	<b>C370</b>	<b>C370B</b>	<b>CP370<sup>1)</sup></b>	<b>CM370<sup>2)</sup></b>	<b>CP370WH</b>

#### <sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP415WH</b>
Metallic silver	<b>SV</b>	<b>CP415SV</b>
Gold metallic	<b>GL</b>	<b>CP415GL</b>
Black matt	<b>BM</b>	<b>CP415BM</b>

#### <sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM415SS</b>
Highly polished	<b>HP</b>	<b>CM415HP</b>
Satin bronze	<b>SB</b>	<b>CM415SB</b>
Polished brass	<b>PB</b>	<b>CM415PB</b>

C221NWH



## 13A fused connection units

- To BS 1363: Part 4.
- Minimum back box depth = 25mm.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- Use **C212** for bottom entry cable outlet.

Description	Eaton list number White interior c/w white cover	White interior	Black interior	Decorative plate option	Metallic plate option	White cover
13A fused connection unit	<b>C220WH</b>	<b>C220</b>	<b>C220B</b>	<b>CP220<sup>1)</sup></b>	<b>CM220<sup>2)</sup></b>	<b>CP220WH</b>
13A fused connection unit + neon	<b>C220NWH</b>	<b>C220N</b>	<b>C220NB</b>	<b>CP220N<sup>1)</sup></b>	<b>CM220N<sup>2)</sup></b>	<b>CP220NWH</b>
13A fused switched connection unit	<b>C221WH</b>	<b>C221</b>	<b>C221B</b>	<b>CP221<sup>1)</sup></b>	<b>CM221<sup>2)</sup></b>	<b>CP221WH</b>
13A fused switched connection unit 'refrigerator'	–	<b>C221</b>	–	–	–	<b>CP221RWH</b>
13A fused switched connection unit 'washing machine'	–	<b>C221</b>	–	–	–	<b>CP221WMMWH</b>
13A fused switched connection unit + neon	<b>C221NWH</b>	<b>C221N</b>	<b>C221NB</b>	<b>CP221N</b>	<b>CM221N</b>	<b>CP221NWH</b>
13A fused switched connection unit + neon 'refrigerator'	–	<b>C221N</b>	<b>C221NB</b>	<b>CP221NR<sup>1)</sup></b>	–	<b>CP221NRWH</b>
13A fused switched connection unit + neon 'washing machine'–	–	<b>C221N</b>	<b>C221NB</b>	<b>CP221NWM<sup>1)</sup></b> –	–	<b>CP221NWMWH</b>

C212



## Adaptor plate

Description	Eaton list number
Cable outlet adaptor plate	<b>C212</b>

### <sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP220WH</b>
Metallic silver	<b>SV</b>	<b>CP220SV</b>
Gold metallic	<b>GL</b>	<b>CP220GL</b>
Black matt	<b>BM</b>	<b>CP220BM</b>

### <sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM220SS</b>
Highly polished	<b>HP</b>	<b>CM220HP</b>
Satin bronze	<b>SB</b>	<b>CM220SB</b>
Polished brass	<b>PB</b>	<b>CM220PB</b>

# 5.4

## COPA clip-on plate accessory range

### Power switches

C401NWH



#### 20A switches

- To BSEN 60669-1.
- Minimum back box depth = 25mm.
- Use cable adaptor plate C212 for bottom entry cable outlet.

Description	Eaton list number			Decorative plate option	Metallic plate option	White cover
	White interior c/w white cover	White interior	Black interior			
20A DP switch + neon	<b>C401NWH</b>	<b>C401N</b>	<b>C401NB</b>	<b>CP401N<sup>(1)</sup></b>	<b>CM401N<sup>(2)</sup></b>	<b>CP401NWH</b>
20A DP control switch	<b>C401WH</b>	<b>C401</b>	<b>C401B</b>	<b>CP401<sup>(1)</sup></b>	<b>CM401<sup>(2)</sup></b>	<b>CP401WH</b>
20A DP switch + neon marked 'water heater'	<b>C403NWH</b>	<b>C401N</b>	<b>C401NB</b>	–	<b>CM403N<sup>(2)</sup></b>	–
20A DP switch marked 'water heater'	<b>C403WH</b>	<b>C401</b>	<b>C401B</b>	<b>CP403<sup>(1)</sup></b>	<b>CM403<sup>(2)</sup></b>	<b>CP403WH</b>

C422NWH



#### 50A switches

- Minimum back box depth = 47mm.
- To BSEN 60669-1.

Description	Eaton list number			Decorative plate option	Metallic plate option	White cover
	White interior c/w white cover	White interior	Black interior			
50A DP switch + neon	<b>C421NWH</b>	<b>C421N</b>	<b>C421NB</b>	<b>CP421N<sup>(1)</sup></b>	<b>CM421N<sup>(2)</sup></b>	<b>CP421NWH</b>
50A DP switch + neon 1G plate size	<b>C422NWH</b>	<b>C422N</b>	<b>C422NB</b>	<b>CP422N<sup>(1)</sup></b>	<b>CM422N<sup>(2)</sup></b>	<b>CP422NWH</b>
50A DP switch + neon 'cooker'	–	<b>C421N</b>	<b>C421NB</b>	<b>CP423N<sup>(1)</sup></b>	<b>CM423N<sup>(2)</sup></b>	–
50A DP switch + neon 'air conditioner'	–	<b>C421N</b>	<b>C421NB</b>	–	<b>CM424N<sup>(2)</sup></b>	–

C425NWH



#### 45A switches

- Minimum back box depth = 47mm.
- To BS 4177.

Description	Eaton list number			Decorative plate option	Metallic plate option	White cover
	White interior c/w white cover	White interior	Black interior			
45A DP cooker control unit	<b>C425WH</b>	<b>C425</b>	<b>C425B</b>	<b>CP425<sup>(1)</sup></b>	<b>CM425<sup>(2)</sup></b>	<b>CP425WH</b>
45A DP cooker control unit + neon	<b>C425NWH</b>	<b>C425N</b>	<b>C425NB</b>	<b>CP425N<sup>(1)</sup></b>	<b>CM425N<sup>(2)</sup></b>	<b>CP425NWH</b>

#### <sup>1</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP401WH</b>
Metallic silver	<b>SV</b>	<b>CP401SV</b>
Gold metallic	<b>GL</b>	<b>CP401GL</b>
Black matt	<b>BM</b>	<b>CP401BM</b>

#### <sup>2</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM401SS</b>
Highly polished	<b>HP</b>	<b>CM401HP</b>
Satin bronze	<b>SB</b>	<b>CM401SB</b>
Polished brass	<b>PB</b>	<b>CM401PB</b>

CP392SV



## Blank plates

- Minimum back box depth = 16mm.

Description	Eaton list number			Decorative plate option	Metallic plate option	White cover
	White interior c/w white cover	White interior	Black interior			
1G blank plate	<b>C391WH</b>	<b>C391</b>	–	<b>CP391</b> <sup>1)</sup>	<b>CM391</b> <sup>2)</sup>	<b>CP391WH</b>
2G blank plate	<b>C392WH</b>	<b>C392</b>	–	<b>CP392</b> <sup>1)</sup>	<b>CM392</b> <sup>2)</sup>	<b>CP392WH</b>

### <sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP391WH</b>
Metallic silver	<b>SV</b>	<b>CP391SV</b>
Gold metallic	<b>GL</b>	<b>CP391GL</b>
Black matt	<b>BM</b>	<b>CP391BM</b>

### <sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM391SS</b>
Highly polished	<b>HP</b>	<b>CM391HP</b>
Satin bronze	<b>SB</b>	<b>CM391SB</b>
Polished brass	<b>PB</b>	<b>CM391PB</b>

# 5.6

## COPA clip-on plate accessory range

### Communication outlets

C362



#### Telephone outlets

- Minimum back box depth = 25mm.

##### Description

Description	Eaton list number					
	White interior c/w white cover	White interior	Black interior	Decorative plate option	Metallic plate option	White cover
1G telephone outlet master	<b>C360WH</b>	<b>C360</b>	<b>C360B</b>	<b>CP360<sup>(1)</sup></b>	<b>CM360<sup>(2)</sup></b>	<b>CP360WH</b>
1G telephone outlet secondary	<b>C361WH</b>	<b>C361</b>	<b>C361B</b>	<b>CP360<sup>(1)</sup></b>	<b>CM360<sup>(2)</sup></b>	<b>CP360WH</b>
1G telephone outlet RJ11	–	<b>C362</b>	<b>C362B</b>	<b>CP360<sup>(1)</sup></b>	<b>CM360<sup>(2)</sup></b>	<b>CP360WH</b>
1G RJ45 CAT 6 outlet	<b>C363WH</b>	<b>C363</b>	<b>C363B</b>	<b>CP360<sup>(1)</sup></b>	<b>CM360<sup>(2)</sup></b>	<b>CP360WH</b>

C351B



#### TV co-axial outlets

- To BS3041-2.
- Minimum back box depth = 25mm.

##### Description

Description	Eaton list number					
	White interior c/w white cover	White interior	Black interior	Decorative plate option	Metallic plate option	White cover
1G TV co-axial outlet	<b>C351WH</b>	<b>C351</b>	<b>C351B</b>	<b>CP351<sup>(1)</sup></b>	<b>CM351<sup>(2)</sup></b>	<b>CP351WH</b>
2G TV co-axial outlet	<b>C352WH</b>	–	–	<b>CP352<sup>(1)</sup></b>	<b>CM352<sup>(2)</sup></b>	<b>CP352WH</b>

CP351GL



C351B + CP351GL



C353WH



#### TV/FM/radio and satellite outlets

- To BS 6312: 2.2.
- Minimum back box depth = 25mm.

##### Description

Description	Eaton list number					
	White interior c/w white cover	White interior	Black interior	Decorative plate option	Metallic plate option	White cover
1G TV/FM isolated co-axial outlet	<b>C353WH</b>	–	–	<b>CP351<sup>(1)</sup></b>	<b>CM351<sup>(2)</sup></b>	<b>CP351WH</b>
2G TV/FM diplexer co-axial outlet	<b>C354WH</b>	<b>C354</b>	–	<b>CP352<sup>(1)</sup></b>	<b>CM352<sup>(2)</sup></b>	<b>CP352WH</b>
1G Satellite outlet	<b>C355WH</b>	<b>C355</b>	<b>C355B</b>	<b>CP351<sup>(1)</sup></b>	<b>CM351<sup>(2)</sup></b>	<b>CP351WH</b>
2G TV/Satellite outlet	<b>C356WH</b>	–	<b>C356B</b>	<b>CP352<sup>(1)</sup></b>	<b>CM352<sup>(2)</sup></b>	<b>CP352WH</b>

#### <sup>1</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP360WH</b>
Metallic silver	<b>SV</b>	<b>CP360SV</b>
Gold metallic	<b>GL</b>	<b>CP360GL</b>
Black matt	<b>BM</b>	<b>CP360BM</b>

#### <sup>2</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM360SS</b>
Highly polished	<b>HP</b>	<b>CM360HP</b>
Satin bronze	<b>SB</b>	<b>CM360SB</b>
Polished brass	<b>PB</b>	<b>CM360PB</b>



C903WH



### Modular plates

- Minimum back box depth = 35mm.
- For modules, please refer to PREMERA mix section – see page 39.

Description	Eaton list number White interior c/w white cover <sup>3)</sup>	White interior <sup>3)</sup>	Black interior <sup>3)</sup>	Decorative plate option <sup>4)</sup>	Metallic plate option <sup>4)</sup>	White cover <sup>4)</sup>
1 module plate	<b>C901WH</b>	<b>C901</b>	<b>C901B</b>	<b>CP901<sup>1)</sup></b>	<b>CM901<sup>2)</sup></b>	<b>CP901WH</b>
2 module plate	<b>C902WH</b>	<b>C902</b>	<b>C902B</b>	<b>CP902<sup>1)</sup></b>	<b>CM902<sup>2)</sup></b>	<b>CP902WH</b>
3 module plate	<b>C903WH</b>	<b>C903</b>	<b>C903B</b>	<b>CP903<sup>1)</sup></b>	<b>CM903<sup>2)</sup></b>	<b>CP903WH</b>
4 module plate	<b>C904WH</b>	<b>C904</b>	<b>C904B</b>	<b>CP904<sup>1)</sup></b>	<b>CM904<sup>2)</sup></b>	<b>CP904WH</b>
6 module plate	<b>C906WH</b>	<b>C906</b>	<b>C906B</b>	<b>CP906<sup>1)</sup></b>	<b>CM906<sup>2)</sup></b>	<b>CP906WH</b>
8 module plate	<b>C908WH</b>	<b>C908</b>	<b>C908B</b>	<b>CP908<sup>1)</sup></b>	<b>CM908<sup>2)</sup></b>	<b>CP908WH</b>
12 module plate	–	<b>C912</b>	<b>C912B</b>	<b>CP912<sup>1)</sup></b>	<b>CM912<sup>2)</sup></b>	<b>CP912WH</b>
18 module plate	–	<b>C918</b>	<b>C918B</b>	<b>CP918<sup>1)</sup></b>	<b>CM918<sup>2)</sup></b>	<b>CP918WH</b>
24 module plate	–	<b>C924</b>	<b>C924B</b>	<b>CP924<sup>1)</sup></b>	<b>CM924<sup>2)</sup></b>	<b>CP924WH</b>

<sup>3)</sup> Supplied with mounting frames/earth bars

<sup>4)</sup> Covers only

### PREMERA mix plate dimensions

	1 gang	2 gang	3 gang	4 gang	6 gang	8 gang	12 gang	18 gang	24 gang
<b>PREMERA</b>									
Eaton list number:	<b>P901</b>	<b>P902</b>	<b>P903</b>	<b>P904</b>	<b>P906</b>	<b>P908</b>	<b>P912</b>	–	–
	<b>P901GY</b>	<b>P902GY</b>	<b>P903GY</b>	<b>P904GY</b>	<b>P906GY</b>	<b>P908GY</b>	–	–	–
Plate dimensions:	86 x 86mm	86 x 86mm	146 x 86mm	146 x 86mm	146 x 150mm	146 x 150mm	146 x 210mm	–	–
<b>COPA interiors</b>									
Eaton list number:	<b>C901</b>	<b>C902</b>	<b>C903</b>	<b>C904</b>	<b>C906</b>	<b>C908</b>	<b>C912</b>	<b>C918</b>	<b>C924</b>
	<b>C901B</b>	<b>C902B</b>	<b>C903B</b>	<b>C904B</b>	<b>C906B</b>	<b>C908B</b>	<b>C912B</b>	<b>C918B</b>	<b>C924B</b>
Plate dimensions:	84 x 84mm	84 x 84mm	145 x 84mm	145 x 84mm	142 x 142mm	142 x 142mm	142 x 207mm	203 x 207mm	203 x 267mm
<b>COPA &amp; COPA fix plates</b>									
Eaton list number:	<b>C901WH</b>	<b>C902WH</b>	<b>C903WH</b>	<b>C904WH</b>	–	–	–	–	–
	<b>CP901<sup>1)</sup></b>	<b>CP902<sup>1)</sup></b>	<b>CP903<sup>1)</sup></b>	<b>CP904<sup>1)</sup></b>	<b>CP906<sup>1)</sup></b>	<b>CP908<sup>1)</sup></b>	<b>CP912<sup>1)</sup></b>	<b>CP918<sup>1)</sup></b>	<b>CP924<sup>1)</sup></b>
	<b>CM901<sup>2)</sup></b>	<b>CM902<sup>2)</sup></b>	<b>CM903<sup>2)</sup></b>	<b>CM904<sup>2)</sup></b>	<b>CM906<sup>2)</sup></b>	<b>CM908<sup>2)</sup></b>	<b>CM912<sup>2)</sup></b>	<b>CM918<sup>2)</sup></b>	<b>CM924<sup>2)</sup></b>
	<b>B901SS</b>	<b>B902SS</b>	<b>B903SS</b>	<b>B904SS</b>	<b>B906SS</b>	<b>B908SS</b>	<b>B912SS</b>	<b>B918SS</b>	<b>B924SS</b>
Plate dimensions:	87 x 87mm	87 x 87mm	148 x 87mm	148 x 87mm	146 x 150mm	146 x 150mm	146 x 210mm	206 x 210mm	206 x 270mm
<b>Xtra plates</b>									
Eaton list number:	<b>X901MG</b>	<b>X902MG</b>	<b>X903MG</b>	<b>X904MG</b>	<b>X906MG</b>	<b>X908MG</b>	<b>X912MG</b>	<b>X918MG</b>	<b>X924MG</b>
Plate dimensions:	86 x 86mm	86 x 86mm	148 x 87mm	148 x 87mm	137 x 137mm	137 x 137mm	137 x 195mm	200 x 198mm	198 x 257mm

### <sup>1)</sup>Plastic covers available in the following finishes

Finish	add suffix to end of part number	Example of product code
White	<b>WH</b>	<b>CP901WH</b>
Metallic silver	<b>SV</b>	<b>CP901SV</b>
Gold metallic	<b>GL</b>	<b>CP901GL</b>
Black matt	<b>BM</b>	<b>CP901BM</b>

### <sup>2)</sup>Metal plates available in the following finishes

Finish	add suffix to end of part number	Example of product code
Stainless steel	<b>SS</b>	<b>CM901SS</b>
Highly polished	<b>HP</b>	<b>CM901HP</b>
Satin bronze	<b>SB</b>	<b>CM901SB</b>
Polished brass	<b>PB</b>	<b>CM901PB</b>





The COPA style of plate has been extended to offer an alternative to the 'clip-on' plate by offering the same plate profile with it's stylish good looks but with a fixed plate, rather than just a 'clip-on' option.

COPA fix offers a solution in situations where it is more desirable to have screw fixed plates in applications such as schools and public places.

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B022SS

**10A switches**

- To BSEN60669-1.

**Description**
**Eaton list number**  
**Stainless steel**

10A 1G 1W retractive switch bell push symbol

**B015SS**

10A intermediate switch

**B017SS**

10A 1G 2W switch

**B021SS**

10A 2G 2W switch

**B022SS**

10A 3G 2W switch

**B023SS**

B048SS

**10A broad rocker switches**

- To BSEN60669-1.

**Description**
**Eaton list number**  
**Stainless steel**

10A 3-pole broad fan isolator + fan symbol

**B048SS**

B621SS



### 13A switched sockets

- To BS1363 Part 2.

Description	Eaton list number Stainless steel
13A 1G DP switched socket 2E terminals	<b>B621SS</b>
13A 2G DP switched socket 2E terminals	<b>B622SS</b>
13A 1G DP switched socket 2E terminals + neon	<b>B621NSS</b>
13A 2G DP switched socket 2E terminals + neon	<b>B622NSS</b>

B621RRSS



### 13A switched sockets – red rockers

- To BS1363 Part 2.

Description	Eaton list number Stainless steel
13A 1G DP switched socket 2E terminals – red rockers	<b>B621RRSS</b>
13A 2G DP switched socket 2E terminals – red rockers	<b>B622RRSS</b>

B632SS



### 13A switched sockets outboard rockers

- To BS1363 Part 2.

Description	Eaton list number Stainless steel
13A 2G DP switched socket 2E terminals – outboard rockers	<b>B632SS</b>

B652SS



### 13A switched sockets outboard rockers non-standard

- To BS 5733.
- With clean earth facility.

Description	Eaton list number Stainless steel
13A 1G DP switched socket 2E terminals – non-standard outboard rockers	<b>B651SS</b>
13A 2G DP switched socket 2E terminals – non-standard outboard rockers	<b>B652SS</b>

B111SS



### 13A unswitched sockets

- To BS1363 Part 2.

Description	Eaton list number Stainless steel
13A 1G unswitched socket	<b>B111SS</b>
13A 2G unswitched socket	<b>B112SS</b>

B370SS



### Shaver socket

- To BSEN61558-2-5.

Description	Eaton list number Stainless steel
Shaver socket dual voltage 230V 115AC	<b>B370SS</b>

B221NSS

**13A connection units**

- To BS1363 Part 4.
- Use **C212** for bottom entry cable outlet.

**Description**Eaton list number  
Stainless steel

13A unswitched connection unit + neon

**B220NSS**

13A unswitched connection unit

**B220SS**

13A switched fused connection unit + neon

**B221NSS**

13A switched fused connection unit

**B221SS**

B401NSS



### 20A switches

- To BSEN60669-1.
- Use **C212** for bottom entry cable outlet.

Description	Eaton list number Stainless steel
20A DP switch + neon	<b>B401NSS</b>
20A DP switch	<b>B401SS</b>
20A DP switch + neon marked 'water heater'	<b>B403NSS</b>

B422NSS



### 45A/50A switches

Description	Eaton list number Stainless steel
50A DP switch + neon – 2 gang plate size	<b>B421NSS<sup>1)</sup></b>
50A DP switch + neon	<b>B422NSS<sup>1)</sup></b>
45A DP cooker control unit + neon	<b>B425NSS<sup>2)</sup></b>
50A DP switch + neon marked 'cooker'	<b>B426NSS<sup>1)</sup></b>

<sup>1)</sup> To BSEN60669-1.

<sup>2)</sup> To BS 4177:1992 (2004).

B392SS

**Blank plates****Description****Eaton list number**  
**Stainless steel**

1G blank plate

**B391SS**

2G blank plate

**B392SS**



B351SS



### Communication outlets

**Description**

**Eaton list number**  
**Stainless steel**

1G TV co-axial outlet

**B351SS**

B902SS

**PREMERA mix module plates**

- To BS5733.
- **B906–B924** are plates only. **C906–C924** interior frames are also required.

**Description****Eaton list number  
Stainless steel**

Description	Eaton list number Stainless steel
1 module cover plate c/w mounting frame	<b>B901SS</b>
2 module cover plate c/w mounting frame	<b>B902SS</b>
3 module cover plate c/w mounting frame	<b>B903SS</b>
4 module cover plate c/w mounting frame	<b>B904SS</b>
6 module cover plate (2 banks)	<b>B906SS</b>
8 module cover plate (2 banks)	<b>B908SS</b>
12 module cover plate (3 banks)	<b>B912SS</b>
18 module cover plate (3 banks)	<b>B918SS</b>
24 module cover plate (4 banks)	<b>B924SS</b>



The perfect choice for a variety of industrial and commercial projects. The XTRA range of rugged and tough surface metalclad accessories are produced from high quality steel with an epoxy powder coating for corrosion resistance.

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X022MG



### 10A switches

- To BSEN 60669-1.
- Supplied with M3.5 fixing screws. Each terminal is capable of accepting up to 3 x 1.5mm<sup>2</sup> conductors. All terminals are backed off, ready to accept cable. X-rated for fluorescent or inductive loads.

Description	Eaton list number
10A 1G 2 way	<b>X021MG</b>
10A 2G 2 way	<b>X022MG</b>
10A 3G 2 way	<b>X023MG</b>
10A 1G intermediate	<b>X017MG</b>

X048MG



### 3 pole isolator switches

- To BSEN 60669-1.
- Supplied with M3.5 fixing screws. Each terminal is capable of accepting up to 3 x 1.5mm<sup>2</sup> conductors. All terminals are backed off, ready to accept cable. X-rated for fluorescent or inductive loads.

Description	Eaton list number
10A broad fan isolator + fan symbol	<b>X048MG</b>
10A broad fan isolator	<b>X049MG</b>

X401NMG



### 20A double pole switches

- To BSEN 60669-1.
- Supply terminals accept 3 x 2.5mm<sup>2</sup> conductors. Load terminals accept 2 x 2.5mm<sup>2</sup> conductors.

Description	Eaton list number
20A DP switch	<b>X401MG</b>
20A DP switch + neon	<b>X401NMG</b>

X421NMG



### 50A double pole switch

- To BSEN 60669-1.

Description	Eaton list number
50A DP switch + neon (2 gang size)	<b>X421NMG</b>

X111MG



### 13A unswitched socket outlets

- To BS 1363:Part 2.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.

Description	Eaton list number
13A 1G unswitched socket	X111MG
13A 2G unswitched socket	X112MG

X621MG



### 13A double pole switched sockets

- To BS 1363: Part 2.
- 2 earth terminals and inboard rockers.

Description	Eaton list number
13A 1G DP switched socket with 2E terminals	X621MG
13A 1G DP switched socket with 2E terminals + neon	X621NMG
13A 1G DP switched socket with 2E terminals + red rocker	X621RRMG
13A 2G DP switched socket with 2E terminals	X622MG
13A 2G DP switched socket with 2E terminals + neon	X622NMG
13A 2G DP switched socket with 2E terminals + red rocker	X622RRMG

X632MG



### 13A 2G double pole switched sockets outboard rockers

- To BS 1363: Part 2.
- Terminals capable of accepting up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- 2 earth terminals and outboard rockers.

Description	Eaton list number
13A 2G DP switched socket with 2E terminals	X632MG
13A 2G DP switched socket with 2E terminals + red rockers	X632RRMG

X651MG



### 13A 1G double pole non-standard/clean earth switched sockets

- Non-standard socket interface to BS 5733 with clean earth facility.

Description	Eaton list number
13A 1G DP switched socket	X651MG
Non-standard plug top	F3368

X652MG



### 13A 2G double pole non-standard/clean earth switched sockets

- Non-standard socket interface to BS 5733 with clean earth facility.
- Outboard rockers.

Description	Eaton list number
13A 2G DP switched socket with 2E terminals	X652MG

X686MG



### 13A double pole RCD socket outlet – passive

- To BS 7288.
- Added protection against electrocution.
- Passive – the contacts on the passive device remain closed when the mains supply is interrupted – this type is suitable for applications such as fridge freezers etc.

Description	Eaton list number
13A 2G RCD protected socket passive 30mA	X686MG

X415MG

**15A socket outlet**

- To BS 546.

**Description**

15A 1G switched socket

**Eaton list  
number****X415MG**

X220MG



**13A fused connection units – unswitched**

- To BS 1363: Part 4: 1995.
- Live and neutral terminals accept 2 x 4mm<sup>2</sup> cables.

Description	Eaton list number
13A unswitched connection unit	<b>X220MG</b>
13A unswitched connection unit + neon	<b>X220NMG</b>

X221MG



**13A fused connection units**

- To BS 1363: Part 4: 1995.
- Live and neutral terminals accept 2 x 4mm<sup>2</sup>.

Description	Eaton list number
13A switched connection unit	<b>X221MG</b>
13A switched connection unit + neon	<b>X221NMG</b>

X220RRMG



**13A fused connection units with red rockers/fuse drawers**

- To BS 1363: Part 4: 1995.
- Live and neutral terminals accept up to 2 x 2.5mm<sup>2</sup> cables.
- Highlights essential supply circuits where extra safety is a vital consideration.
  - Hospitals
  - Hospitals
  - Computer installations
- Circuits can be quickly and easily identified.

Description	Eaton list number
13A DP unswitched connection unit – red fuse drawer	<b>X220RRMG</b>
13A DP switched connection unit – red rocker	<b>X221RRMG</b>
13A DP switched connection unit – red rocker + neon	<b>X221NRRMG</b>

# 7.4

## XTRA surface metalclad PREMERA mix module plates and blank plates

X901MG



### Modular coverplates – surface metalclad

- Suitable for use with PREMERA mix modules – see page 39.
- Dimensions: 1G–2G: 86mm x 86mm    3G–4G: 86mm x 146mm    6G–8G: 134mm x 134mm  
9G–12G: 134mm x 195mm    18G: 195mm x 195mm    24G: 195mm x 256mm
- Surface mounting box:  
1G–2G: **FM8340**    3G–4G: **FM8341**    6G–8G: **F8342**    12G: **F8343**    (41mm deep with earth terminal).  
18G: **F8344**    24G: **F8345**    (56mm deep with earth terminal).

Description	Eaton list number
1G module coverplate c/w earth bar	<b>X901MG</b>
2G module coverplate c/w earth bar	<b>X902MG</b>
3G module coverplate c/w earth bar	<b>X903MG</b>
4G module coverplate c/w earth bar	<b>X904MG</b>
6G module coverplate c/w mounting frame	<b>X906MG</b>
8G module coverplate c/w mounting frame	<b>X908MG</b>
12G module coverplate c/w mounting frame	<b>X912MG</b>
18G module coverplate c/w mounting frame	<b>X918MG</b>
24G module coverplate c/w mounting frame	<b>X924MG</b>

X391MG



### Blank plates

Description	Eaton list number
1G blank plate	<b>X391MG</b>
2G blank plate	<b>X392MG</b>





CIRCA is a comprehensive range of white ceiling accessories, ideal for all project requirements. Tortuous path lampholders enable simple, speedier installation and pre-assembled pendant sets ensure maximum convenience.

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# 8.1

## CIRCA ceiling range

### Ceiling range

F1000



#### Lampholders

- To BSEN 61184-T2.
- 2A rated.
- Meets the T2 ratings requirements of specification which tests at 210°C lamp cap temperature.

##### Description

Eaton list  
number

Lampholder short skirt

**F1000**

F1091



#### Battenholders

- To BSEN 61184-T2

##### Description

Eaton list  
number

Batten lampholder 2T short skirt

**F1025**

Batten lampholder 3T&E HR leads home office skirt

**F1091**

F1200



#### Ceiling roses

- To BS 67
- 6A rated.
- Supplied with 332 terminal arrangement + 1 x 2 hole pillar terminal for earth conductors. Each pillar terminal will accept up to 3 x 1 x 1.5mm<sup>2</sup> conductors. Screw fixings are positioned to allow joist fixing with the central rear cable knock out accessible at the side of the joist or for use with a small circular BESA box.

##### Description

Eaton list  
number

Ceiling rose with 332 terminal block and E

**F1200**

F1250



#### Pendant set with F1000 lampholder

##### Description

Eaton list  
number

6" pendant assembly **F1000** and **F1200**

**F1250**

F5002



#### Lampholder accessories

##### Description

Eaton list  
number

Lampholder home office skirt

**F5002**

Lampholder short skirt

**F5006**

F1451



**Lamp activated pendant set**

- To BSEN 61184-T2.
- T2 rated. Plungers remain isolated until lamp is fully inserted. Live parts only accessible with tool. Incorporates switching mechanism.

**Description**

**Eaton list number**

6" lamp activated pendant set

**F1450**

9" lamp activated pendant set

**F1451**

F1491



**Lamp activated battenholders**

- To BSEN 61184-T2.
- T2 rated. Plungers remain isolated until lamp is fully inserted. Live parts only accessible with tool. Incorporates switching mechanism.
- 332 + earth terminal arrangement.

**Description**

**Eaton list number**

Lamp activated batten lampholder HR leads

**F1491**

# 8.3

## CIRCA ceiling range

### BC3 low energy range

F1260



#### BC3 low energy pendant sets

- Lampholders tested to BS 5733 and relevant parts of BSEN 61184-T2.
- Will accept standard UK 29mm diameter shade ring and require no adjustment.

Description	Eaton list number
BC3 pendant set for low energy lamps 4" drop	F1260
BC3 pendant set for low energy lamps 6" drop	F1261

F1264



#### BC3 low energy battenholders

- Lampholders tested to BS 5733 and relevant parts of BSEN 61184-T2.

Description	Eaton list number
BC3 battenholder for low energy lamps	F1263
BC3 angled battenholder for low energy lamps	F1264

F1267



#### BC3 low energy lamps

- Lamps to IEC 60969.

Description	Eaton list number
BC3 20W TT low energy CFL lamp 'warm white'	F1267

#### Product specification

Eaton list number	Lamp life (hrs)	Lumens	Lumens per Watt	Energy category
F1267	8000	1200	60	A

F1340



**Ceiling switches**

- To BSEN 60669-1.
- Dimensions: **F1340** – 86mm x 86mm, Fixing centres – 60.3mm – **F1350/F1351** – 85mm diameter.
- Mounting box: **F4570**.
- 6A ceiling switches, each terminal is capable of accepting up to 3 x 1.5mm<sup>2</sup> conductors.

Description	Eaton list number
50A DP ceiling pull switch c/w neon and flag indicator	<b>F1340</b>
6A 1 way ceiling switch	<b>F1350</b>
6A 2 way ceiling switch	<b>F1351</b>
Pull cord and acorn for <b>F1350, F1351, F1340</b>	<b>F1350PC</b>





The BS 7001 LSC (Luminaire Supporting Coupler) system is recognised as the industry standard interface, offering complete changeability with other manufacturers' products. Both the 3 and 4 pin LSC systems provide considerable benefits for the specifier, contractor and end user.

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F8501



### LSC ceiling assembly

- BS 6972: 1988 and BS 7001: 1998.
- Rated 6A with outlets capable of installation on a 16A lighting circuit.
- Coupler supports loads up to 5kg.
- Base terminals will accept 2 x 4.0mm<sup>2</sup> incoming cables.
- Heat resisting cable is to BS 6141.
- Fixing centres 50.8mm.

F8570



#### Description

#### Eaton list number

3 pin LSC ceiling assembly (ceiling outlet, plug, cover)	<b>F8501</b>
3 pin assembly c/w 2 mtrs 0.75mm <sup>2</sup> HR (heat resistant) cable	<b>F8570</b>
3 pin assembly c/w 2 mtrs 1.00mm <sup>2</sup> HR (heat resistant) cable	<b>F8571</b>
3 pin assembly c/w 3 mtrs 0.75mm <sup>2</sup> HR (heat resistant) cable	<b>F8572</b>
3 pin assembly c/w 3 mtrs 1.00mm <sup>2</sup> HR (heat resistant) cable	<b>F8573</b>
3 pin assembly c/w 2 mtrs 0.75mm <sup>2</sup> LSF (low smoke and fume) cable	<b>F8580</b>
3 pin assembly c/w 2 mtrs 1.00mm <sup>2</sup> LSF (low smoke and fume) cable	<b>F8581</b>
3 pin assembly c/w 3 mtrs 0.75mm <sup>2</sup> LSF (low smoke and fume) cable	<b>F8582</b>
3 pin assembly c/w 3 mtrs 1.00mm <sup>2</sup> LSF (low smoke and fume) cable	<b>F8583</b>
3 pin assembly c/w 1 mtr 1.00mm <sup>2</sup> LSF (low smoke and fume) cable	<b>F8584</b>

F8502



### LSC ceiling outlet

- To BS 6972: 1988 and BS 7001: 1988.
- Large outlet terminals will take up to 2 x 4.0mm<sup>2</sup> cable.
- Flush mounting box for F8502 is a standard BESA circular box (27mm deep).

#### Description

#### Eaton list number

3 pin LSC ceiling outlet	<b>F8502</b>
--------------------------	--------------

F8540



### 3 pin system LSC plug

- To BS 6972: 1988 and BS 7001: 1988.

#### Description

#### Eaton list number

3 pin LSC re-wireable plug	<b>F8540</b>
----------------------------	--------------

F8534



### Ceiling LSC covers

- Ceiling cover provide extra protection for the outlets.
- Red covers allow for easy identification of a 4 pin circuit.

#### Description

#### Eaton list number

Ceiling rose cover – white	<b>F8534</b>
Ceiling rose cover – red	<b>F8535</b>



F8602



#### 4 pin LSC ceiling outlets

- Red plug allows easy identification of a 4 pin circuit.
- Height: 46mm, diameter 85mm.
- Rated 6A with outlets capable of installation on a 16A lighting circuit.
- Coupler supports loads up to 5kg.

F8671



- Outlet terminals will accept 2 x 4.0mm<sup>2</sup> incoming cables.
- Heat resisting cable attached is to BS 6141.
- Fixing centres 50.8mm.

Description	Eaton list number
4 pin LSC ceiling assembly (ceiling outlet, plug, cover)	F8601
4 pin LSC ceiling outlet	F8602
4 pin LSC ceiling assembly with red ceiling rose cover	F8603
4 pin assembly c/w 2mtrs 0.75mm <sup>2</sup> HR (heat resistant) cable	F8670
4 pin assembly c/w 2 mtrs 1.00mm <sup>2</sup> HR (heat resistant) cable	F8671
4 pin assembly c/w 3 mtrs 1.00mm <sup>2</sup> HR (heat resistant) cable	F8672
4 pin assembly c/w 2 mtrs 1.00mm <sup>2</sup> LSF (low smoke and fume) cable	F8681
4 pin assembly c/w 3 mtrs 1.00mm <sup>2</sup> LSF (low smoke and fume) cable	F8682
4 pin assembly c/w 1 mtr 1.00mm <sup>2</sup> LSF (low smoke and fume) cable	F8684

F8641



#### 4 pin system LSC plugs

- To BS 6972: 1988 and BS 7001: 1988.

Description	Eaton list number
4 pin LSC re-wireable plug – white cover	F8641
4 pin LSC re-wireable plug – red cover	F8640

F8640



LDU6

**LDU multi-outlet boxes**

- To BS 5733.
- Large outlet terminals will take up to 2 x 2.5mm<sup>2</sup> incoming cables.
- Dimensions: 6/8 LDU Length: 255mm, width: 168mm, depth: 58mm.  
10/12 LDU Length: 255mm, width: 247mm, depth: 58mm.
- Removable links allow each row to be switched separately.

**Description****Eaton list number**

6G LSC outlet unit – 4 pin	<b>LDU6</b>
8G LSC outlet unit – 4 pin	<b>LDU8</b>
10G LSC outlet unit – 4 pin	<b>LDU10</b>
12G LSC outlet unit – 4 pin	<b>LDU12</b>

FP320

**3 pin plugs c/w cable**

- 3 pin = live, neutral and earth.

**Description****Eaton list number**

3 pin plug c/w 2 mtrs HR (heat resistant) 0.75mm <sup>2</sup> cable	<b>FP320</b>
3 pin plug c/w 3 mtrs HR (heat resistant) 0.75mm <sup>2</sup> cable	<b>FP330</b>
3 pin plug c/w 4 mtrs HR (heat resistant) 0.75mm <sup>2</sup> cable	<b>FP340</b>
3 pin plug c/w 3 mtrs HR (heat resistant) 1.00mm <sup>2</sup> cable	<b>FP331</b>
3 pin plug c/w 5 mtrs HR (heat resistant) 1.00mm <sup>2</sup> cable	<b>FP351</b>
3 pin plug c/w 3 mtrs LSF (low smoke and fume) 1.00mm <sup>2</sup> cable	<b>FL331</b>
3 pin plug c/w 5 mtrs LSF (low smoke and fume) 1.00mm <sup>2</sup> cable	<b>FL351</b>

FP421

**4 pin plugs c/w cable**

- 4 pin = live, neutral, earth and separate live connection for emergency pack equipped luminaires.

**Description****Eaton list number**

4 pin plug c/w 2 mtrs HR (heat resistant) 1.00mm <sup>2</sup> cable	<b>FP421</b>
4 pin plug c/w 3 mtrs HR (heat resistant) 1.00mm <sup>2</sup> cable	<b>FP431</b>
4 pin plug c/w 5 mtrs HR (heat resistant) 1.00mm <sup>2</sup> cable	<b>FP451</b>
4 pin plug c/w 3 mtrs LSF (low smoke and fume) 1.00mm <sup>2</sup> cable	<b>FL431</b>
4 pin plug c/w 4 mtrs LSF (low smoke and fume) 1.00mm <sup>2</sup> cable	<b>FL441</b>
4 pin plug c/w 5 mtrs LSF (low smoke and fume) 1.00mm <sup>2</sup> cable	<b>FL451</b>



Suitable for residential and light commercial applications, Eaton's xComfort RF product range has been specifically designed to provide centralised control of all the electrical equipment in order to maximise energy savings, comfort, safety and security.

- Ideal for new construction and renovation projects
- Numerous functions available e.g. control of lights, blinds, heating, ventilation etc. including status display
- Control by wireless switches, remote control, smart phones and tablets
- Simple to install within an existing installation, no chiselling, no mess, minimal wiring
- Suitable for a wide range of applications, can easily be expanded
- Matches a wide range of wiring accessories and switches
- Little wiring required

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System components include sensors, actuators and control/communication devices.



#### Switching actuator

switches lights, pumps, ventilation and heating systems, saunas, ... any electrical consumer product.



#### Shutter actuator

for controlling blinds, shutters, mixing valves, etc.



#### Dimming actuator

switches and dims lights and light environments.



#### Router

redirects information when direct transmission is not possible.



#### Temperature input unit

measures temperature and controls shading and heating.



#### Smart home controller

centrally operating and report via smart phones and tablets.



#### Room manager

the operating and display unit – easy to handle and easy to read.



#### Room controller

regulates and controls heating and shading.



#### Binary input unit

for integrating conventional switches, window contacts, and signal contacts.



#### Push-button unit

for lighting, shading, etc.



#### PIR motion sensor

controls lights depending on movement and brightness.



#### Adaptor plug

switches and dims living room fountains, aquaria, etc.



#### Remote control

controls lights, shading and other electrical consumer products.



#### Analogue actuator

controls devices such as mixers, dimmers and fluorescent lamps.



#### Analogue input

receives data from universal sensors for further processing.



#### Sensors

receive different information, with alarm option.

xComfort's flexibility and intelligence makes it a powerful tool... particularly when it comes to saving energy. All the key influences, such as interior and exterior temperatures, light levels and room occupancy, can be taken into account automatically to provide exceptionally efficient and sophisticated control over lighting, heating and air-conditioning.

As well as having a wide range of applications for commercial premises, xComfort can be used to provide a high degree of home automation, including pre-programmed lighting schemes for living areas and bedrooms, timed operation of television and lights to deter burglars, and automatic operation of window blinds.

### xComfort bi-directional technology:

Making it significantly more reliable than uni-directional communication.

#### Without battery (uni-directional)

The switch will work on a self-powered basis, only sending a signal when the switch is pushed. The actuator can receive a command, but it cannot send one back to say that the command has been obeyed. Therefore, if errors occur, or a signal is poor, there is nothing in place to ensure that the commands are always completed.

#### With battery (bi-directional)

- The switch uses the battery power to send a command to the actuator; the actuator receives the signal and carries out the command; it then sends confirmation to the switch.
- If for any reason (for instance, technical error or poor signal) the command is not received by the actuator, the intelligence of the bi-directional system allows the switch to automatically resend the command twice more within a split second.
- If the actuator has still not completed the command after three attempts, the mesh network enables other actuators within the building to route and complete the task, ensuring that all commands are always fulfilled as long as the installation was done in comfort mode.

### The xComfort system can be set up in two main ways – "basic mode" or "comfort mode":

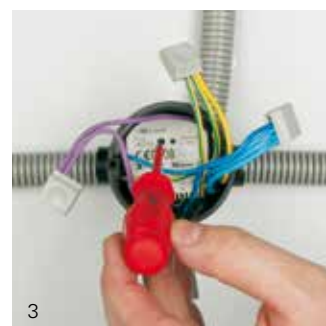
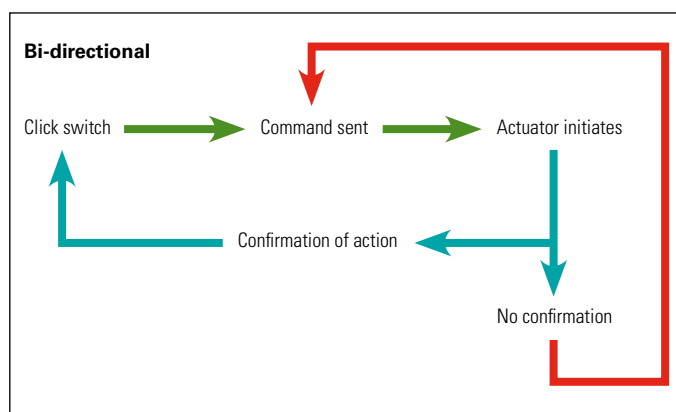
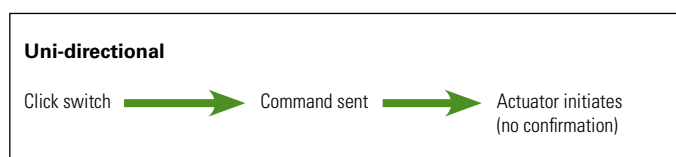
#### Basic mode

This is ideal for straightforward installations. The functions of the devices can be assigned by just activating the programming key and the corresponding push-button, a simple procedure that requires no complicated tools – all that is needed is a small screwdriver.

#### Three simple steps

1. Press the configuration button on the actuator with a screwdriver for less than 0.5 seconds. Actuator enters teaching mode. LED in the actuator is on.
2. Press the selected pushbutton for less than 0.5 sec. The LED in the assigned actuator flashes twice for confirmation.
3. Press the configuration button on the actuator with a screwdriver for less than 0.5 seconds. Actuator leaves teaching mode.

- Ideal for new construction and renovation.
- Numerous functions, such as controlling lights, blinds, heating, ventilation, etc. including status display.
- Control by wireless switch, remote control and mobile phone.
- Simple installation within an existing installation system, no chiselling, no mess, no additional wiring.
- Suitable for a wide range of applications, can easily be expanded.
- Matches a wide range of accessories and switches.
- Little wiring required.



F9401



### RF pushbuttons – 1, 2, & 4 channel

When pressed, the RF push-button sends signals to the actuators of the xComfort system. No distinction is required between a shutter, dimmer, etc. or a two-way, intermediate or shutters/blinds switch. The device is powered by a coin cell. Therefore, it can be conveniently attached (screw-mounted or glued) wherever needed. Thanks to the very flat design, NO switch or installation box is required, although may be used for convenience.

Frames are available in a wide variety of designs and finishes (see PREMERA mix section).

The battery is included in the scope of delivery.

Description	Eaton list number
1 gang PREMERA RF push button module	<b>F9401</b>
2 gang PREMERA RF push button module	<b>F9402</b>
4 gang PREMERA RF push button module	<b>F9404</b>
PREMERA surface mounting RF module plate	<b>F9400</b>
Spare battery for module 3V <b>CR2430</b>	<b>CBTZ-00/01</b>

F9404



CSAU-01/01-10



### RF switching actuator

This generation of switching actuators is characterised particularly by its small dimensions, high switching performance and extended functionality. Due to the hybrid switching technology this switching actuator can switch a variety of devices/systems such as lighting, ventilation, heating, alarm systems, etc. It can be directly controlled by switches, sensors and smart devices.

The device can easily be mounted in installation boxes for switches, branch-off boxes or standard installation boxes, or directly inside the cover of the light fixture.

- **Local input sensor 230VAC**

The extra local input sensor gives the opportunity to use the existing or any market available switch directly in combination with the actuator without the need for additional components. It can also be used with existing motion sensors. Like a standard binary input device this input can also be assigned to other devices to send switching signals.

- **Integrated energy measurement with load fault indication**

The internal internal energy sensor is used to measure and record the energy consumption of the connected load. Like a standard energy measurement sensor it can be assigned directly to a smart device like the smart home controller to monitor and manage the power (W) and energy (kWh) consumption. The additional load error detection status can be used to signal a failure of the switched load based on a load beneath the definable minimum consuming power. Please note: The device is not calibrated, it is therefore not suitable for invoicing purposes!

- **Extended status messaging (routable)**

This device supports the extended status messaging format for high status reliability and additional status information in combination with smart devices like the smart home controller.

### RF switching actuator 10A

Description	Eaton list number
10A/230VAC Basic	<b>CSAU-01/01-10</b>
10A/230VAC Local input	<b>CSAU-01/01-10I</b>
10A/230VAC Local input + energy measurement	<b>CSAU-01/01-10IE</b>

### RF switching actuator 16A

Description	Eaton list number
16A/230VAC Basic	<b>CSAU-01/01-16</b>
16A/230VAC Local input	<b>CSAU-01/01-16I</b>
16A/230VAC Local input + energy measurement	<b>CSAU-01/01-16IE</b>

#### WARNING!

#### CSAU-01/01-16, CSAU-01/01-16I, CSAU-01/01-16IE:

This device must be installed inside a mounting box (complying to EN60670) and behind an accessory or blank plate that uses at least 2 screw fixing points to secure it to the mounting box. Failure to do so could result in a fire hazard or electric shock under extreme external fault conditions.

CSAU-01/02



**RF switching actuator – potential-free**

RF receiver for switching power devices (lighting, heating, etc) rated at 8A/230VAC/24VDC – potential free 2 pole switching

Description	Eaton list number
8A/230VAC	CSAU-01/02

CSAU-01/03



**RF switching actuator – all-pole**

RF receiver for switching power devices (lighting, heating, etc) rated at 8A/230VAC – 2 pole switching

Description	Eaton list number
8A/230VAC	CSAU-01/03

CSAP-01/03



**RF switching actuator adaptor plug**

The switching actuator adaptor plug receives signals and controls devices such as floor-standing lamps, fans, audio and video appliances, living room fountains, aquaria, etc. It is mains-supplied, can be plugged into an existing wall outlet and does not require any wiring work.

Description	Eaton list number
8A/230VAC	CSAP-01/03

CDAU-01/02



**RF dimming actuator**

The dimming actuator receives signals and switches/dims incandescent lamps and electronic transformers for low-voltage halogen lamps (DO NOT USE inductive loads!).

Description	Eaton list number
250W/230VAC	CDAU-01/02

CDAU-01/04



**Smart RF dimming actuator – enclosed and flush**

This new generation of flush dimming actuators is characterised particularly by its small dimensions, robustness, reduced power consumption and extended functionality. Due to the smart dimming technology, this dimming actuator can dim a large variety of loads without flickering, flashing, LED glow or audible noise. It dims even the smallest LED load, starting from 0W and is easy to select or define a dim profile for the best performance. It is also capable of switching non-dimmable loads (On/Off). It can be directly controlled by switches, sensors and smart devices and is short circuit, overload and over temperature protected. This device can easily be mounted in installation boxes for switches, standard installation boxes, or directly inside the cover of the light fixture. Also available in enclosed format.

**• Local input sensor 230VAC**

The two extra local input sensor connections give the opportunity to use any market available push switch directly in combination with the actuator. It can be used in single or dual push switch mode. In single push switch mode the second input can be used to control a second actuator. Ideal for use with existing motion sensors. As with any standard binary input device the inputs can also be assigned to other devices for switching purposes.

**• Integrated energy measurement with load fault indication**

The internal “Energy Sensor” is used to measure and record the energy consumption of the connected load. Like a standard energy measurement sensor it can be assigned directly to a smart device like the smart home controller to monitor and manage the power (W) and energy (kWh) consumption. The additional load error detection status can be used to signal a failure of the switched load based on the load dropping beneath the definable minimum power level.

Please note: The device is not calibrated and is therefore not suitable for invoicing purposes!

**• Extended status messaging (routable)**

This device supports the extended status messaging format for high status reliability and additional status information in combination with smart devices like the smart home controller.

Description	Eaton list number
0 - 250W/230VAC Basic Enclosed	CDAE-01/04
0 - 500W/230VAC Binary input Enclosed	CDAE-01/05-I
0 - 500W/230VAC Energy measuring sensor Enclosed	CDAE-01/05-E
0 - 250W/230VAC Basic Flush	CDAU-01/04
0 - 250W/230VAC Binary input Flush	CDAU-01/04-I
0 - 250W/230VAC Energy measuring sensor Flush	CDAU-01/04-E

CDAE-01/04



CDAE-01/01

**RF dimming actuator – enclosed**

The dimming actuator receives signals and switches/dims incandescent lamps and electronic transformers for low-voltage halogen lamps (DO NOT USE inductive loads!). Power supply is from the mains. The device can be mounted directly in an intermediate ceiling. The dimming actuator is also equipped with a last-value memory.

Description	Eaton list number
40–500W/230VAC	<b>CDAE-01/01</b>
250W/230VAC (pre set dimming range 20–99%)	<b>CDAE-01/02</b>
250W (pre set dimming range 0–55%)	<b>CDAE-01/03</b>

CDAP-01/13

**RF dimming actuator adaptor plug**

The dimming actuator adaptor plug receives signals and controls and dims devices such as floor-standing lamps. It is mains-supplied, can be plugged into an existing wall outlet and does not require any wiring work.

Description	Eaton list number
40–250VA/230VAC	<b>CDAP-01/13</b>

CJAU-01/02

**RF shutters/blinds actuator**

The shutters/blinds actuator receives signals and controls drives of shutters and blinds with 230V motors featuring an integrated limit switch. This actuator also offers 2 safety functions (e.g. safety position in case of wind and/or rain, lock-out protection to make sure that the shutter or blind will not close as long as the terrace door is open). Note: Never connect several shading motors in parallel to one blinds actuator without incorporating a cut-off relay. Power is supplied from the mains.

Description	Eaton list number
6A/230VAC	<b>CJAU-01/02</b>

CHSZ-01/05

**1-channel remote control**

The remote control equipped with a 1-channel alarm transmits a signal to the actuators of the xComfort electrical installation as soon as the alarm button is pressed. The mobile device is power-supplied by a coin cell battery (CR2430). It can be assigned to the safety function of the room manager in order to set off an alarm, for example. If the remote control equipped with a 1-channel alarm is assigned to an actuator, it works in the "current-pulse mode". A LED will tell the user whether the signal has been sent, and also whether it has been correctly understood and reconfirmed. The remote control is easy to fix at the key ring, key ribbon or at a hanger clip (not included in the scope of delivery). It is also possible to use an optional magnet-type wall-fixing (110771 - to be ordered separately). Battery included in the scope of delivery.

Description	Eaton list number
1 channel (mini)	<b>CHSZ-01/05</b>

CHSZ-02/02

**2-channel remote control**

The 2-channel remote control sends signals to the xComfort system when it is operated. This mobile device is powered by a coin cell battery (CR2430). The functions can be individually assigned, with no distinction to be made between blinds control, dimming, switching etc. A LED indicates whether the signal has actually been sent, correctly interpreted and re-confirmed. The remote control can simply be fixed at the key ring (included in the scope of delivery). Optionally, wall-mounting via a magnet is possible too (CMMZ-00/11 - to be ordered separately). Battery included in the scope of delivery.

Description	Eaton list number
2 channels (mini)	<b>CHSZ-02/02</b>



CHSZ-12/03



**12-channel remote control**

The 12-channel remote control sends signals to xComfort system when it is operated. This mobile device is powered by two AAA batteries. The functions can be individually assigned, with no distinction to be made between blinds control, dimming, switching etc. Pushing the pre-selection key (1-6) once will take you to level 1 (channels 1 to 6), (short) pushing the pre-selection key (1-6) twice will take you to level 2 (channel 7-12). The two LEDs indicate the level and whether the signal has actually be sent, correctly interpreted and re-confirmed. Optionally, wall-mounting via a magnet is possible too (CMMZ-00/11 – to be ordered separately). Battery included in the scope of delivery.

Description	Eaton list number
12 channels	<b>CHSZ-12/03</b>

CHSZ-12/04



**12-channel remote control with display**

The 12-channel remote control sends signals to the convenient electrical installation system when it is operated. This mobile device is powered by two AAA batteries. The functions can be individually assigned, with no distinction to be made between blinds control, dimming, switching etc. Pushing the pre-selection key (1-6) once will take you to level 1 (channels 1 to 6), (short) pushing the pre-selection key (1-6) twice will take you to level 2 (channel 7-12). The two LEDs indicate the level and whether the signal has actually be sent, correctly interpreted and re-confirmed. Optionally, wall-mounting via a magnet is possible too (CMMZ-00/11 - to be ordered separately). Battery included in the scope of delivery.

Description	Eaton list number
12 channels with display	<b>CHSZ-12/04</b>

CBMA-02/01



**RF PIR motion sensor**

This PIR motion sensor is designed to sense movement inside a building. Power supply is provided either through two AAA-batteries (included in the scope of delivery) or through a power supply unit (CMMZ – 00/08), not included in the scope of delivery), therefore it is easy to fix (screw or glue) it wherever you need it. To make it easy for you to do setting, we provide an adjustable “mounting support” (CMMZ – 00/09). Channel A (for lighting) transmits a switching command depending on the movement that has been detected, on the brightness and on the time-setting for the light to shut off again. Channel B (for alarm functions) transmits a switching command when movement is detected, irrespective of brightness and time-setting for switch-off (channel B is activated for approx. 145 seconds). The setting for the number of impulses to be analysed before triggering an alarm or transmitting a switching command can be done for both channels at the same time. All the settings can be carried out directly on the device, with the front cover removed. A light emitting diode (LED) makes the job of setting the sensor easier.

Description	Eaton list number
110°, covers 12m when mounted at a height of h=2.2m	<b>CBMA-02/01</b>

CMMZ-00/09



**Mounting set for the motion sensor**

The mounting set for the motion sensor is used where the sensor needs to be adjusted to different directions in order to guarantee an optimal area covered by the motion sensor (CBMA-02/01). (Two fixing screws are included).

Description	Colour	Eaton list number
Mounting set	white	<b>CMMZ-00/09</b>

# 10.4 xComfort system overview

## Comfort mode overview and components

CBEU-02/01



### RF binary input unit 2 x 230VAC

The binary input unit transmits input signals e.g. from motion sensors or other signal contacts (relays, switches, pushbutton units, etc.) to the xComfort installation system. Power supply is from the mains. The device can be mounted in installation boxes for switches, branch-off boxes or standard installation boxes.

#### Description

Eaton list number

2 x 230VAC

**CBEU-02/01**

CBEU-02/02



### RF binary input unit, 2 x signal contact

The binary input unit transmits input signals e.g. from window contacts, glass breakage sensors or other signal contacts (relays, switches, pushbutton units, etc) to the convenient electrical installation system. The device is powered by a coin cell (**CR2477N**). Therefore it can be conveniently attached (screw-mounted or glued) in any place. Placing it in installation boxes for switches, branch-off boxes or standard installation boxes is also possible.

Battery included.

#### Description

Eaton list number

2 x signal contact

**CBEU-02/02**

CAAE-01/02



### RF analogue actuator 0–10VDC + 1–10VDC

The analogue actuator receives signals, switches a relay and actuates a control voltage of 1–10VDC for dimmers and electronic ballasts of fluorescent lamps. It is mains-supplied and can be incorporated into an installation box, an intermediate ceiling or directly into fluorescent lamps.

#### Description

Eaton list number

8A/230VAC, 20mA/0–10VDC

**CAAE-01/01**

8A/230VAC, 20mA/1–10VDC

**CAAE-01/02**

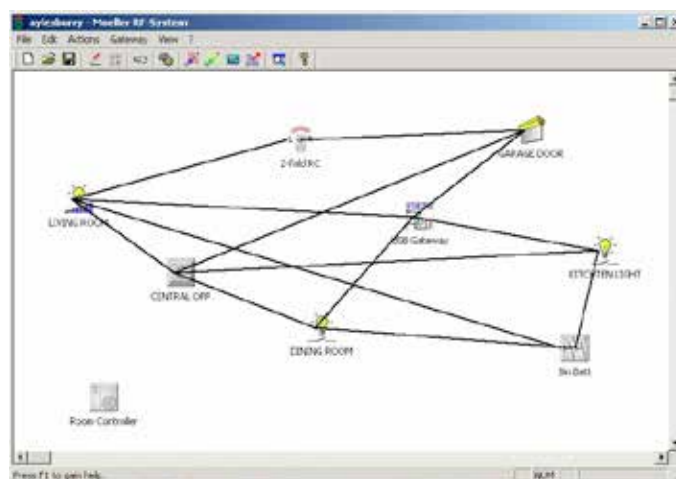
**Comfort mode overview – using MRF software**

Using an RS232 interface, the software scans for all devices within a building. Simply right clicking on any actuator can then allow access to other program and setting commands.

Once set, the pre-determined scenes, times, temperatures, light levels and commands are then loaded and the system is now programmed.

Once in this mode, the system becomes a mesh network – much more reliable than any other, as it allows the actuators to act as routers.

Comfort mode allows for much greater manipulation, maximising the system’s full potential.



**Comfort mode components**

The devices listed below can all be incorporated along with the basic mode components to form a completely integrated home automation system, providing full building control, including the control of heating, lighting, blinds/ shutters as well as energy and security functions.

All you need is a computer/laptop and the free MRF software, which is easy to understand, along with the xComfort RF configuration interface which will allow the MRF software to configure the system components via the PC or laptop.

If the system has been previously configured in “Basic mode”, the software will read all the existing functional links and display these as single lines on the screen. This configuration is then available for editing along with a host of additional settings and

features only available in “Comfort mode”. If no functions have previously been assigned to the system devices the MRF software in “Comfort mode” will allow you to assign links between devices simply by drawing lines between actuators and sensors on the screen as well as allowing the addition of unique names/identifiers to the devices and access to the internal settings function.

Central control functions can be provided by incorporating a room manager or smart home controller within the system, or else allowing external control by a GSM link or a PC or PLC via the appropriate control and communication interfaces.

Eaton systems integrators, fully trained on the application of xComfort, will be pleased to assist with the full integration of a building system.

CSEZ-01/12



**Sensors**

**Description**

**Eaton list number**

RF analogue input unit 2-channel (0-10VDC, 0-20mA, 4-20mA, PT1000)	<b>CAEE-02/01</b>
Flush mounted power supply for analogue input and impulse counting	<b>CMMZ-00/13</b>
RF energy measuring module	<b>CEMU-01/04</b>
RF energy measuring module with sensor (up to 23kW)	<b>CEMU-01/03</b>
RF energy meter adaptor plug (3 - 2990W)	<b>CEMP-01/13</b>
RF temperature input unit 2-channel	<b>CTEU-02/01</b>
Temperature sensor – range -50 to 180°C	<b>CSEZ-01/01</b>
Temperature sensor – range -50 to 200°C	<b>CSEZ-01/36</b>
Living room enclosure use with <b>CSEZ-01/01</b>	<b>CSEZ-01/24</b>
Outdoor enclosure use with <b>CSEZ-01/01</b>	<b>EB-Z/SE/01/03</b>
Fix-to-pipe unit use with <b>CSEZ-01/01</b>	<b>EB-Z/SE/01/04</b>
Window contact, normally open, surface mounted	<b>CSEZ-01/06</b>
Window contact, normally closed, surface mounted	<b>CSEZ-01/25</b>
Window contact, normally open, flush mounted	<b>CSEZ-01/07</b>
Brightness sensor - Indoor 0-10VDC (3-60.000 lux, Out 0-10VDC)	<b>CSEZ-01/14</b>
Brightness sensor - Outdoor 0-10VDC (3-60.000 lux, Out 0-10VDC)	<b>CSEZ-01/15</b>
Air quality sensor 0-10VDC	<b>CSEZ-01/16</b>
Outdoor temperature + humidity sensor (10-90%, -20 - 80°C)	<b>CSEZ-01/17</b>
Water leakage sensor 9V use with <b>CBEU-02/02</b>	<b>CSEZ-01/18</b>
Smoke detector (9V battery supplied) use with adapter module CSEZ-01/20 and <b>CBEU-02/02</b>	<b>CSEZ-01/19</b>
Power adaptor for RF PIR motion detector	<b>CMMZ-00/08</b>

CHVZ-01/03

**Actuators**

Description	Eaton list number
Mains powered radiator valve actuator 230VAC (must be used with RF switching actuator or multi heating actuator)	<b>CHVZ-01/04</b>
RF multi heating actuator (12 channels)	<b>CHAZ-01/12</b>
External receiver for the multi channel heating actuator	<b>CKOZ-00/12</b>
RF heating actuator for electrical heater panels	<b>CHAZ-01/01</b>
RF battery powered radiator valve actuator	<b>CHVZ-01/03</b>
RF radiator valve actuator adaptor set M28 x 1.5	<b>CMMZ-00/36</b>
Compact signal emitter (must be used with RF switching actuator)	<b>CSGZ-02/01</b>
Flashing light signal emitter	<b>CSGZ-01/02</b>

CHCA-00/01

**Control & communication**

Description	Eaton list number
Smart home controller (SHC)	<b>CHCA-00/01</b>
British standard adapter for SHC	<b>CMMZ-00/37</b>
RF ethernet coms interface – LAN	<b>CCIA-02/01</b>
RF ethernet coms interface – LAN power over ethernet	<b>CCIA-03/01</b>
Power adaptor – 5V mini USB	<b>CMMZ-00/33</b>
RF room controller switch/night time reduction	<b>CRCA-00/04</b>
RF room controller with night time reduction and humidity sensor	<b>CRCA-00/05</b>
RF room manager – white	<b>CRMA-00/03</b>
RF room manager – silver	<b>CRMA-00/07</b>
RF router	<b>CROU-00/01-S</b>
RF router + logic	<b>CROU-00/01-SL</b>
RF USB configuration stick	<b>CKOZ-00/13</b>
RF USB communication stick	<b>CKOZ-00/14</b>
RF RS232 communication interface	<b>CKOZ-00/03</b>
DIN rail clip for actuators	<b>CMMZ-00/30</b>



The stylish range of Memera full metal consumer units have been designed to comply with BSEN 61439-3 and BS7671 Amendment 3 IET wiring regulations. The range includes both single and dual rail units accommodating up to 38 outgoing ways in various configurations to meet all possible application needs.

Complementing the range is an extensive array of devices including MCBs, RCBOs RCDs and DIN rail mountable control and switching devices.

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See pages 121-122 for technical data and overall dimensions.

## EAS2S



## Isolator controlled full metal clad surface mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179407	2 way metal consumer unit 63A isolator	2	63	-	-	-	-	EAS2S
179408	6 way metal consumer unit 100A isolator	6	100	-	-	-	-	EAS6S
179409	10 way metal consumer unit 100A isolator	10	100	-	-	-	-	EAS10S
179410	12 way metal consumer unit 100A isolator	12	100	-	-	-	-	EAS12S
179411	14 way metal consumer unit 100A isolator	14	100	-	-	-	-	EAS14S
179412	18 way metal consumer unit 100A isolator	18	100	-	-	-	-	EAS18S
183294	20 way metal consumer unit 100A isolator	20	100	-	-	-	-	EAS20S
179413	26 way metal consumer unit 100A isolator	26	100	-	-	-	-	EAS26S
179414	38 way metal consumer unit 100A isolator	38	100	-	-	-	-	EAS38S

## EAS6H100S



## RCD controlled full metal clad surface mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179415	2 way metal consumer unit 40A 30mA RCD	2	-	40	30	-	-	EAS2H40S
179416	2 way metal consumer unit 63A 30mA RCD	2	-	63	30	-	-	EAS2H63S
179417	6 way metal consumer unit 63A 30mA RCD	6	-	63	30	-	-	EAS6H63S
179418	6 way metal consumer unit 80A 30mA RCD	6	-	80	30	-	-	EAS6H80S
179419	6 way metal consumer unit 100A 30mA RCD	6	-	90	30	-	-	EAS6H100S
179420	10 way metal consumer unit 100A 30mA RCD	10	-	90	30	-	-	EAS10H100S
179421	12 way metal consumer unit 100A 30mA RCD	12	-	90	30	-	-	EAS12H100S
179422	18 way metal consumer unit 100A 30mA RCD	18	-	90	30	-	-	EAS18H100S
183295	20 way metal consumer unit 100A 30mA RCD	20	-	90	30	-	-	EAS20H100S

## EAS8H80DS



## Split load full metal clad surface mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179423	8 way metal consumer unit 63A 30mA split load	8	100	63	30	-	-	EAS8H63DS
179424	8 way metal consumer unit 80A 30mA split load	8	100	80	30	-	-	EAS8H80DS
179425	10 way metal consumer unit 63A 30mA split load	10	100	63	30	-	-	EAS10H63DS
179426	10 way metal consumer unit 80A 30mA split load	10	100	80	30	-	-	EAS10H80DS
179427	16 way metal consumer unit 80A 30mA split load	16	100	80	30	-	-	EAS16H80DS
183296	18 way metal consumer unit 80A 30mA split load	18	100	80	30	-	-	EAS18H80DS
179428	24 way metal consumer unit 80A 30mA split load	24	100	80	30	-	-	EAS24H80DS
179429	36 way metal consumer unit 80A 30mA split load	36	100	80	30	-	-	EAS36H80DS

## EAS10H80H80DS



## Dual RCD full metal clad surface mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179430	10 way metal consumer unit dual RCD 30mA 63A + 63A	10	100	63	30	63	30	EAS10H63H63DS
179431	10 way metal consumer unit dual RCD 30mA 80A + 63A	10	100	80	30	63	30	EAS10H80H63DS
179432	10 way metal consumer unit dual RCD 30mA 80A + 80A	10	100	80	30	80	30	EAS10H80H80DS
179433	14 way metal consumer unit dual RCD 30mA 63A + 63A	14	100	63	30	63	30	EAS14H63H63DS
179434	14 way metal consumer unit dual RCD 30mA 80A + 63A	14	100	80	30	63	30	EAS14H80H63DS
179435	14 way metal consumer unit dual RCD 30mA 80A + 80A	14	100	80	30	80	30	EAS14H80H80DS
183297	16 way metal consumer unit dual RCD 30mA 63A + 63A	16	100	63	30	63	30	EAS16H63H63DS
183298	16 way metal consumer unit dual RCD 30mA 80A + 63A	16	100	80	30	63	30	EAS16H80H63DS
183299	16 way metal consumer unit dual RCD 30mA 80A + 80A	16	100	80	30	80	30	EAS16H80H80DS
179436	22 way metal consumer unit dual RCD 30mA 80A + 80A	22	100	80	30	80	30	EAS22H80H80DS
179437	22 way metal consumer unit dual RCD 30mA 80A + 63A	22	100	80	30	63	30	EAS22H80H63DS
179438	34 way metal consumer unit dual RCD 30mA 80A + 80A	34	100	80	30	80	30	EAS34H80H80DS
179439	34 way metal consumer unit dual RCD 30mA 80A + 63A	34	100	80	30	63	30	EAS34H80H63DS

EAS16H80H80DS



## Dual tariff full metal clad surface mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179440	10 way metal consumer unit dual tariff 2 x 100A	10	100	-	-	-	-	<b>EAS10DDS</b>
179441	16 way metal consumer unit dual tariff 2 x 100A	16	100	-	-	-	-	<b>EAS16DDS</b>

See pages 123-124 for technical data and overall dimensions

## EAS2SF



## Isolator controlled full metal clad flush mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179451	2 way metal consumer unit 63A isolator flush	2	63	-	-	-	-	EAS2SF
179452	6 way metal consumer unit 100A isolator flush	6	100	-	-	-	-	EAS6SF
179453	10 way metal consumer unit 100A isolator flush	10	100	-	-	-	-	EAS10SF
179454	12 way metal consumer unit 100A isolator flush	12	100	-	-	-	-	EAS12SF
179455	14 way metal consumer unit 100A isolator flush	14	100	-	-	-	-	EAS14SF
179456	18 way metal consumer unit 100A isolator flush	18	100	-	-	-	-	EAS18SF
183301	20-way metal consumer unit 2-pole isolator flush	20	100	-	-	-	-	EAS20SF
179457	26 way metal consumer unit 100A isolator flush	26	100	-	-	-	-	EAS26SF
179458	38 way metal consumer unit 100A isolator flush	38	100	-	-	-	-	EAS38SF

## EAS2H40SF



## RCD controlled full metal clad flush mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179459	2 way metal consumer unit 40A 30mA RCD flush	2	-	40	30	-	-	EAS2H40SF
179460	2 way metal consumer unit 63A 30mA RCD flush	2	-	63	30	-	-	EAS2H63SF
179461	6 way metal consumer unit 63A 30mA RCD flush	6	-	63	30	-	-	EAS6H63SF
179462	6 way metal consumer unit 80A 30mA RCD flush	6	-	80	30	-	-	EAS6H80SF
179463	6 way metal consumer unit 100A 30mA RCD flush	6	-	90	30	-	-	EAS6H100SF
179464	10 way metal consumer unit 100A 30mA RCD flush	10	-	90	30	-	-	EAS10H100SF
179465	12 way metal consumer unit 100A 30mA RCD flush	12	-	90	30	-	-	EAS12H100SF
179466	18 way metal consumer unit 100A 30mA RCD flush	18	-	90	30	-	-	EAS18H100SF
183302	20-way metal consumer unit 100a 30ma rcd flush	20	-	90	30	-	-	EAS20H100SF

## EAS8H63DSF



## Split load full metal clad flush mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179467	8 way metal consumer unit 63A 30mA split load flush	8	100	63	30	-	-	EAS8H63DSF
179468	8 way metal consumer unit 80A 30mA split load flush	8	100	80	30	-	-	EAS8H80DSF
179469	10 way metal consumer unit 63A 30mA split load flush	10	100	63	30	-	-	EAS10H63DSF
179470	10 way metal consumer unit 80A 30mA split load flush	10	100	80	30	-	-	EAS10H80DSF
179471	16 way metal consumer unit 80A 30mA split load flush	16	100	80	30	-	-	EAS16H80DSF
183303	18 way metal consumer unit 80A 30mA split load flush	18	100	80	30	-	-	EAS18H80DSF
179472	24 way metal consumer unit 80A 30mA split load flush	24	100	80	30	-	-	EAS24H80DSF
179473	36 way metal consumer unit 80A 30mA split load flush	36	100	80	30	-	-	EAS36H80DSF

## EAS10H63H63DSF



## Dual RCD full metal clad flush mounting consumer units

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179474	10 way metal consumer unit dual RCD 30mA 63A + 63A flush	10	100	63	30	63	30	EAS10H63H63DSF
179475	10 way metal consumer unit dual RCD 30mA 80A + 63A flush	10	100	80	30	63	30	EAS10H80H63DSF
179476	10 way metal consumer unit dual RCD 30mA 80A + 80A flush	10	100	80	30	80	30	EAS10H80H80DSF
179478	14 way metal consumer unit dual RCD 30mA 63A + 63A flush	14	100	63	30	63	30	EAS14H63H63DSF
179479	14 way metal consumer unit dual RCD 30mA 80A + 63A flush	14	100	80	30	63	30	EAS14H80H63DSF
179480	14 way metal consumer unit dual RCD 30mA 80A + 80A flush	14	100	80	30	80	30	EAS14H80H80DSF
183304	16 way metal consumer unit dual RCD 30mA 63A + 63A flush	16	100	63	30	63	30	EAS16H63H63DSF
183305	16 way metal consumer unit dual RCD 30mA 80A + 63A flush	16	100	80	30	63	30	EAS16H80H63DSF
183306	16 way metal consumer unit dual RCD 30mA 80A + 80A flush	16	100	80	30	80	30	EAS16H80H80DSF
179481	22 way metal consumer unit dual RCD 30mA 80A + 80A flush	22	100	80	30	80	30	EAS22H80H80DSF
179482	22 way metal consumer unit dual RCD 30mA 80A + 63A flush	22	100	80	30	63	30	EAS22H80H63DSF
179483	34 way metal consumer unit dual RCD 30mA 80A + 80A flush	34	100	80	30	80	30	EAS34H80H80DSF
179484	34 way metal consumer unit dual RCD 30mA 80A + 63A flush	34	100	80	30	63	30	EAS34H80H63DSF



EAS16DDSF



**Dual tariff full metal clad flush mounting consumer units**

Material	Description	No of ways	Isolator rating (A)	RCD 1 rating (A)	Sens. (mA)	RCD 2 Rating (A)	Sens. (mA)	Eaton list number
179485	10 way metal consumer unit dual tariff 2 x 100A flush	10	100	-	-	-	-	<b>EAS10DDSF</b>
179486	16 way metal consumer unit dual tariff 2 x 100A flush	16	100	-	-	-	-	<b>EAS16DDSF</b>

EASDL



**Accessories**

Material	Description	Eaton list number
179450	Door lock assembly	<b>EASDL</b>
176441	1 way cover blanking piece	<b>ABP1</b>
156472	1 way full module blanking piece	<b>EMBP</b>
183308	Meter tail gland kit M32 plastic 16mm <sup>2</sup> tails	<b>EASTKEP32</b>
183309	Meter tail gland kit M40 plastic 25mm <sup>2</sup> tails	<b>EASTKEP40</b>
183310	Meter tail gland kit M32 brass 16mm <sup>2</sup> tails	<b>EASTKEB32</b>
183311	Meter tail gland kit M40 brass 25mm <sup>2</sup> tails	<b>EASTKEB40</b>
N/A	100A 100mA selective TD selective RCCB incomer (maximum 90A in consumer unit)	<b>EAM1002MT</b>

# 11.2 MEMERA consumer units

Pre-configured

All standard Memera consumer units can be pre-configured as factory built assemblies for specific project applications for one time use or indeed for continued application as a customised product.



Customisation can include the following features:

- Fitting of outgoing MCB's and RCBO's
- Fitting of timers, contactors and transformers etc.
- Fitting of customised labelling and end user logos
- Fitting of surge suppression devices
- Fitting of both MID or non MID approved digital kWh meters
- Fitting of secondary 2 pole RCBO's for connection of renewable energy sources such as PV installations.
- Non-standard enclosure configurations.
- Any combination of the above features.

Typical pre-configured EAS consumer unit fitted and labelled to customer specific requirements.

Example shown – **EAS10SR** fitted with reversed pole main switch, fitted RCBOs and bespoke labelling.



Typical customised configurations are normally based upon standard boards and can be fully configured with outgoing protective devices along with timers, contactors, transformers and kWh meters etc. to meet end client requirements. The boards can be simply equipped with devices just clipped to DIN rail, for final onsite configuration by the installer, or else full fitted and wired up internally ready for final installation.

Example shown - **EAS14H80H80DS** dual RCD consumer unit fully fitted with devices and a digital MID approved kWh meter.

See page 125 for technical data and overall dimensions

IKA-1/4-ST-UV

**Enclosures moulded – IP65**

Description	Additional features	Finish	Number of modules	IP rating	Eaton list number
DIN rail enclosure 4 module	Transparent door & N/PE	Moulded	4	65	<b>IKA-1/4-ST-UV</b>
DIN rail enclosure 6 module	Transparent door & N/PE	Moulded	6	65	<b>IKA-1/6-ST-UV</b>
DIN rail enclosure 8 module	Transparent door & N/PE	Moulded	8	65	<b>IKA-1/8-ST-UV</b>

AN2EBD

**Enclosures moulded – IP40**

Description	Additional features	Finish	Number of modules	IP rating	Eaton list number
DIN rail enclosure 2 module	Sealable terminal access	Moulded	2	40	<b>AN2</b>
DIN rail enclosure 2 module	Fitted 100A SPSN isolator	Moulded	2	40	<b>AN2D</b>
DIN rail enclosure 2 module	Sealable access with earth bar	Moulded	2	40	<b>AN25</b>
Service isolator 2 module	Fitted 100A SPSN isolator	Moulded	2	40	<b>AN2EBD<sup>1)</sup></b>
Service isolator 4 module	Sealable front access	Moulded	4	40	<b>AN4EBLS<sup>1)</sup></b>

<sup>1)</sup>Independently sealable supply and load terminal covers.

EAN2SEBD

**Enclosures metal - IP30**

Description	Additional features	Finish	Number of modules	IP rating	Eaton list number
DIN rail enclosure 2 module	Sealable terminal access	Metal	2	30	<b>EAN2SEBD</b>
DIN rail enclosure 4 module	Sealable terminal access	Metal	4	30	<b>EAN4SEBD</b>
Service Isolator 2 module	Fitted 100A SPSN isolator	Metal	2	30	<b>EAN2SEBD1001N</b>

# 11.4 MEMERA consumer units

## Switch and protection devices

See pages 126-131 for technical data and overall dimensions.

EAD20B



### Miniature circuit breakers – 6kA, trip type B, 1P

Description	Rating (A)	Trip type	Short circuit rating (kA)	Pole configuration	Width (mm)	Eaton list number
MCB	2	B	6	1P	18	EAD02B
MCB	4	B	6	1P	18	EAD04B
MCB	6	B	6	1P	18	EAD06B
MCB	10	B	6	1P	18	EAD10B
MCB	13	B	6	1P	18	EAD13B
MCB	16	B	6	1P	18	EAD16B
MCB	20	B	6	1P	18	EAD20B
MCB	25	B	6	1P	18	EAD25B
MCB	32	B	6	1P	18	EAD32B
MCB	40	B	6	1P	18	EAD40B
MCB	50	B	6	1P	18	EAD50B
MCB	63	B	6	1P	18	EAD63B

EAD20C



### Miniature circuit breakers – 6kA, trip type C, 1P

Description	Rating (A)	Trip type	Short circuit rating (kA)	Pole configuration	Width (mm)	Eaton list number
MCB	2	C	6	1P	18	EAD02C
MCB	4	C	6	1P	18	EAD04C
MCB	6	C	6	1P	18	EAD06C
MCB	10	C	6	1P	18	EAD10C
MCB	13	C	6	1P	18	EAD13C
MCB	16	C	6	1P	18	EAD16C
MCB	20	C	6	1P	18	EAD20C
MCB	25	C	6	1P	18	EAD25C
MCB	32	C	6	1P	18	EAD32C
MCB	40	C	6	1P	18	EAD40C
MCB	50	C	6	1P	18	EAD50C
MCB	63	C	6	1P	18	EAD63C

EMS1001N



### Main load disconnect switch (isolator)

Description	Rating (A)	Short circuit rating (kA)	Width	Eaton list number
EMS 100A SP isolator	100	10	1 module	EMS1001
EMS 100A SPN isolator	100	10	2 module	EMS1001N
EMS 100A SPN isolator reversed pole	100	10	2 module	EMS1001NR
EMS 100A DP isolator	100	10	2 module	EMS1002

EAM632H

**RCCBs – 2-pole double module – 10mA–30mA sensitivity**

Description	Rating (A)	Sensitivity (mA)	Eaton list number
EAM 16A 2 Pole RCCB 10mA	16	10	<b>EAM162V</b>
EAM 16A 2 Pole RCCB 30mA	16	30	<b>EAM162H</b>
EAM 25A 2 Pole RCCB 30mA	25	30	<b>EAM252H</b>
EAM 40A 2 Pole RCCB 30mA	40	30	<b>EAM402H</b>
EAM 63A 2 Pole RCCB 30mA	63	30	<b>EAM632H</b>
EAM 80A 2 Pole RCCB 30mA	80	30	<b>EAM802H</b>
EAM 80A 2 Pole RCCB 30mA reversed pole	80	30	<b>EAM802RH</b>
EAM 100A 2 Pole RCCB 30mA	100	30	<b>EAM1002H</b>
EAM 100A 2 Pole RCCB 30mA reversed pole	100	30	<b>EAM1002RH</b>

EAM252M

**RCCBs – 2-pole double module – 100mA sensitivity**

Description	Rating (A)	Sensitivity (mA)	Eaton list number
EAM 25A 2 Pole RCCB 100mA	25	100	<b>EAM252M</b>
EAM 40A 2 Pole RCCB 100mA	40	100	<b>EAM402M</b>
EAM 63A 2 Pole RCCB 100mA	63	100	<b>EAM632M</b>
EAM 80A 2 Pole RCCB 100mA	80	100	<b>EAM802M</b>
EAM 100A 2 Pole RCCB 100mA	100	100	<b>EAM1002M</b>
EAM 100A 2 Pole RCCB 100mA reversed pole	100	100	<b>EAM1002RM</b>
EAM 100A 2 Pole RCCB 100mA selective time delay	100	100	<b>EAM1002MT</b>

EAM802M

**RCCBs – 2-pole double module – 300mA sensitivity**

Description	Rating (A)	Sensitivity (mA)	Eaton list number
EAM 80A 2 Pole RCCB 300mA	80	300	<b>EAM802L</b>
EAM 80A 2 Pole RCCB 300mA reversed pole	80	300	<b>EAM802RL</b>
EAM 100A 2 Pole RCCB 300mA	100	300	<b>EAM1002L</b>
EAM 100A 2 Pole RCCB 300mA reversed pole	100	300	<b>EAM1002RL</b>

EAD16BH30C

**RCBOs – compact single pole single module – trip type B – 30mA sensitivity**

Description	Rating (A)	Trip type	Sensitivity (mA)	Eaton list number
EAD 6A 6kA type B SP 30mA RCBO	6	B	30	<b>EAD06BH30C</b>
EAD 10A 6kA type B SP 30mA RCBO	10	B	30	<b>EAD10BH30C</b>
EAD 16A 6kA type B SP 30mA RCBO	16	B	30	<b>EAD16BH30C</b>
EAD 20A 6kA type B SP 30mA RCBO	20	B	30	<b>EAD20BH30C</b>
EAD 25A 6kA type B SP 30mA RCBO	25	B	30	<b>EAD25BH30C</b>
EAD 32A 6kA type B SP 30mA RCBO	32	B	30	<b>EAD32BH30C</b>
EAD 40A 6kA type B SP 30mA RCBO	40	B	30	<b>EAD40BH30C</b>
EAD 45A 6kA type B SP 30mA RCBO	45	B	30	<b>EAD45BH30C</b>

EAD16CH30C

**RCBOs – compact single pole single module – trip type C – 30mA sensitivity**

Description	Rating (A)	Trip type	Sensitivity (mA)	Eaton list number
EAD 6A 6kA type C SP 30mA RCBO	6	C	30	<b>EAD06CH30C</b>
EAD 10A 6kA type C SP 30mA RCBO	10	C	30	<b>EAD10CH30C</b>
EAD 16A 6kA type C SP 30mA RCBO	16	C	30	<b>EAD16CH30C</b>
EAD 20A 6kA type C SP 30mA RCBO	20	C	30	<b>EAD20CH30C</b>
EAD 25A 6kA type C SP 30mA RCBO	25	C	30	<b>EAD25CH30C</b>
EAD 32A 6kA type C SP 30mA RCBO	32	C	30	<b>EAD32CH30C</b>
EAD 40A 6kA type C SP 30mA RCBO	40	C	30	<b>EAD40CH30C</b>
EAD 45A 6kA type C SP 30mA RCBO	45	C	30	<b>EAD45CH30C</b>

# 11.4 MEMERA consumer units

Switch and protection devices

ASPDL

## Padlocking device



### Description

Universal device lockout attachment – fits EAD MCBs/RCBOs, EAM RCCBs and EMS isolators.

Eaton list number

**ASPDL**

800KMF

## Single pole and neutral switchfuse



### Description

80A SPN switchfuse (fuse fitted)

80A Switchfuse cable gland / spreader

Fuse rating (A)

80

–

Fuse type

BS 88-3 (BS1361)

–

Eaton list number

**800KMF**

**1MGL**

**Technical characteristics (dependant of type)**

- Supply voltage 230 V / 50 - 60 Hz (50 Hz for just synchronised versions)
- 50 Hz-mains synchronised or Quartz controlled.
- Daily or weekly programme.
- Manual override switching function.
- Compact 18mm design for restricted space opportunities.

See pages 132-133 for technical data and overall dimensions

TSSD1CO

**Analogue time switches - 50 Hz mains synchronised****Standard version**

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Day	50 Hz-net	1	CO	-	15 min.	52.5 mm	167391	1	<b>TSSD1CO</b>

TSSD1NO

**Analogue time switches - 50 Hz mains synchronised****18 mm compact design**

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Day	50 Hz-net	1	NO	-	15 min.	17.5mm	167389	1	<b>TSSD1NO</b>

TSQD1CO

**Analogue time switches - Quartz controlled****Standard version**

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Day	Quartz	1	CO	200 hrs	15 min.	52.5 mm	167390	1	<b>TSQD1CO</b>

TSQD1NO

**Analogue time switches - Quartz controlled****18 mm compact design**

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Day	Quartz	1	NO	3 yrs	15 min.	17.5 mm	167388	1	<b>TSQD1NO</b>

TSQW1CO

**Analogue weekly time switches - Quartz controlled****Standard version**

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Week	Quartz	1	CO	200 hrs	2 hrs	52.5 mm	167392	1	<b>TSQW1CO</b>

# 11.5 MEMERA consumer units

Control and switching devices

## Technical characteristics

- Operating voltage 230 V / 50 - 60 Hz.
- 1 or 2 channel.
- Quartz controlled.
- 3 to 10 year power reserve.
- Weekly programme.
- Manual ON (and depending on type OFF) switching.
- Text-oriented user guidance in display.
- Display back light (switchable).
- Compact 18mm design for restricted space.
- Automatic summer and winter adjustment.
- Holiday programme.
- Zero crossing switching relay for longer life.
- Integrated operating hour counter.
- TSDW1CO, TSDW2CO, TSDW1COA, TSDW1CODG:
- Interface for memory.

See pages 134-137 for technical data and overall dimensions

TSDW1CO



### Digital weekly time switches, 1 channel

#### Standard version

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Week	Quartz	1	CO	10 year	1 min.	35.8mm	167379	1	<b>TSDW1CO</b>

TSDW1COMIN



### Digital weekly time switches, 1 channel

#### 1TE wide version

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Week	Quartz	1	CO	3 year	1 min.	17.5mm	167383	1	<b>TSDW1COMIN</b>

TSDW1CODG



### Digital weekly time switches, 1 channel

#### Version with antenna connection

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Week	Quartz, DCF / GPS	1	CO	10 year	1 sec.	35.8 mm	167382	1	<b>TSDW1CODG</b>

TSDW1COA



### Digital weekly time switches, 1 channel

#### Astronomical

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Week	Quartz with astronomical	1	CO	10 year	1 min.	35.8 mm	167381	1	<b>TSDW1COA</b>



TSDW2CO

**Digital weekly time switches, 2 channels****Standard version**

Programme range	Type	Channels	Contact configuration	Power reserve	Min. cycling time	Width	Material	QPC	Eaton list number
Week	Quartz	2	2 x CO	10 year	1 min.	35.8 mm	167380	1	<b>TSDW2CO</b>

TLE

**Staircase timer****Standard version**

Description	Delay off time adjustment	Contact configuration	Width	Material	QPC	Eaton list number
Staircase timer basic function	0.5-15 min	1 x NO	17.5 mm	101064	1	<b>TLE</b>

See pages 138-142 for technical data and overall dimensions.

CR2011230A



### Contactors, 20 A – ac coil

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Description	Rating (A)	Coil voltage (Vac)	Coil voltage (Vdc)	Width (mm)	Contacts	Eaton list number
Contactors	20	230	–	18	1 NO + 1 NC	CR2011230A
Contactors	20	230	–	18	2 NC	CR2002230A
Contactors	20	230	–	18	2 NO	CR2020230A

CR2020024



### Contactors, 20 A – ac/dc coil

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Description	Rating (A)	Coil voltage (Vac)	Coil voltage (Vdc)	Width (mm)	Contacts	Eaton list number
Contactors	20	230	220	18	1 NO + 1 NC	CR2011230
Contactors	20	230	220	18	2 NC	CR2002230
Contactors	20	230	220	18	2 NO	CR2020230

CR2540230A



### Contactors, 25 A – ac coil

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Description	Rating (A)	Coil voltage (Vac)	Coil voltage (Vdc)	Width (mm)	Contacts	Eaton list number
Contactors	25	230	–	36	2 NO + 2 NC	CR2522230A
Contactors	25	230	–	36	3 NO	CR2530230A
Contactors	25	230	–	36	4 NC	CR2504230A
Contactors	25	230	–	36	4 NO	CR2540230A

CR2540024



### Contactors, 25 A – ac/dc coil

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Description	Rating (A)	Coil voltage (Vac)	Coil voltage (Vdc)	Width (mm)	Contacts	Eaton list number
Contactors	25	230	220	36	2 NO + 2 NC	CR2522230
Contactors	25	230	220	36	3 NO	CR2530230
Contactors	25	230	220	36	4 NC	CR2504230
Contactors	25	230	220	36	4 NO	CR2540230

CR4030024



### Contactors, 40 A – ac/dc coil

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Description	Rating (A)	Coil voltage (Vac)	Coil voltage (Vdc)	Width (mm)	Contacts	Eaton list number
Contactors	40	230	220	54	2 NC	CR4002230
Contactors	40	230	220	54	2 NO	CR4020230
Contactors	40	230	220	54	3 NO	CR4030230
Contactors	40	230	220	54	4 NO	CR4040230

CR6320230

**Contactors, 63 A – ac/dc coil**

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Description	Rating (A)	Coil voltage (Vac)	Coil voltage (Vdc)	Width (mm)	Contacts	Eaton list number
Contactor	63	230	220	54	2 NO	<b>CR6320230</b>
Contactor	63	230	220	54	4 NO	<b>CR6340230</b>

CRM2540230A

**Day/night contactors, 20–25 A – ac coil**

When several contactors are mounted it is advisable to fit a spacer / blanking module between them.

Day/night contactors do have a manual override function, which enables the user to bring the contactor in either a forced “ON” or “OFF” position. The contactor can only be brought into the forced “ON” position when it is de-energised. When the contactor is energised the operation will return into the normal/automatic position.

Description	Rating (A)	Coil voltage (Vac)	Width (mm)	Contacts	Eaton list number
Contactor	20	230	18	2 NO	<b>CRM2020230A</b>
Contactor	25	230	36	4 NO	<b>CRM2540230A</b>

CRA611

**Auxiliary contacts**

Can be connected at the right-side of the contactor.

Description	Rating (A)	Width (mm)	Contacts	Eaton list number
Auxiliary	6	9	1 NO + 1 NC	<b>CRA611</b>
Auxiliary	6	9	2 NO	<b>CRA620</b>

CRC63

**Terminal covers (sealable)**

Description	Rating (A)	Width (mm)	Eaton list number
Terminal cover	For 20	18	<b>CRC20</b>
Terminal cover	For 25	36	<b>CRC25</b>
Terminal cover	For 40/63	54	<b>CRC63</b>

CRS

**Spacer / blanking module**

Description	Mounting	Width (mm)	Eaton list number
Spacer	DIN rail	9	<b>CRS</b>
Blanking module	DIN rail	18	<b>EMBP</b>

Z-S230

**Impulse switches/relays**

Description	Rating (A)	Coil Voltage (Vac)	Poles	Width (mm)	Contacts	Eaton list number
Impulse relay	16	230	1P	18	1 NO	<b>Z-S230/S</b>
Impulse relay	16	230	1P	18	1 NO / 1 NC	<b>Z-S230/SO</b>

TR-G3/8

**Transformers**

Description	Volts	Amps	Width (mm)	Module	Eaton list number
Bell Transformer 2 module	4/8	1.0	36	2	<b>TR-G3/8</b>
	12	0.6			



With dimensional drawings and specification data, this chapter provides indepth information for all our customers on all products displayed in this product guide.

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### 10A switches

- Supplied with M3.5 fixing screws.
- Switch contact – silver/nickel.
- Shallow depth for maximum wiring space, containing back entry terminal with top and bottom access to terminal screws.
- Rocker operated, quick positive movement, enclosed to minimise dust penetration.
- All screws backed off, ready to accept cable.
- X-rated for fluorescent or inductive loads.
- Modular construction to enable individual replacement of modules.

### 13A switched sockets

- Supplied with M3.5 fixing screws.
- Switch contact – silver/nickel.
- Shutter is operated by the earth pin.
- Shallow depth for maximum wiring space with back entry tunnel terminal and top access for terminal screws.
- Terminals accept up to 3 x 4mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- Accidental penetration by “foreign bodies” through the earth aperture is prevented by the rear of the earth contacts.
- Rocker, operated either double pole or single pole switch, quick, positive movement, enclosed to minimise dust penetration.
- Suitable for use with flush or surface mounting box minimum 25mm depth.

### 20A switches

- Shallow depth, for maximum wiring space with back entry tunnel terminals.
- Separate earth terminals are provided for supply and load cable.
- Rocker operated, quick, positive movement, enclosed to minimise dust penetration.
- Switch contact surfaces – silver/nickel.
- Suitable for use with flush mounting box minimum 35mm deep and upwards.

### Flat twin and earth insulated pvc sheathed cable to BS6004: 1984 Table 5 (a)

C.S.A. of Live and Neutral conductors	C.S.A. of associated Earth conductor
1.0mm <sup>2</sup>	1.0mm <sup>2</sup>
1.5mm <sup>2</sup>	1.0mm <sup>2</sup>
2.5mm <sup>2</sup>	1.5mm <sup>2</sup>
4.0mm <sup>2</sup>	1.5mm <sup>2</sup>
6.0mm <sup>2</sup>	2.5mm <sup>2</sup>
10.0mm <sup>2</sup>	4.0mm <sup>2</sup>

#### Note:

Terminal hole capacities for earth conductors refer to the actual cross sectional area of individual earth conductors.

When using flat twin and earth insulated pvc sheathed cable in accordance with table 5 (a) of BS 6004: 1984 the size of the earth conductor is shown here.

### 13A connection units

- Supplied with M3.5 fixing screws.
- Shallow depth for maximum wiring space with back entry tunnel terminals and top and right side access for terminal screws.
- Live and Neutral terminals accept up to 3 x 4 mm<sup>2</sup> or 2 x 6mm<sup>2</sup> conductors.
- Rocker operated, double pole switched, quick positive movement, enclosed to minimise dust penetration.
- Separate earth terminals are provided for standard and hard wiring connections.
- Suitable for use with flush mounting box 25mm minimum depth.

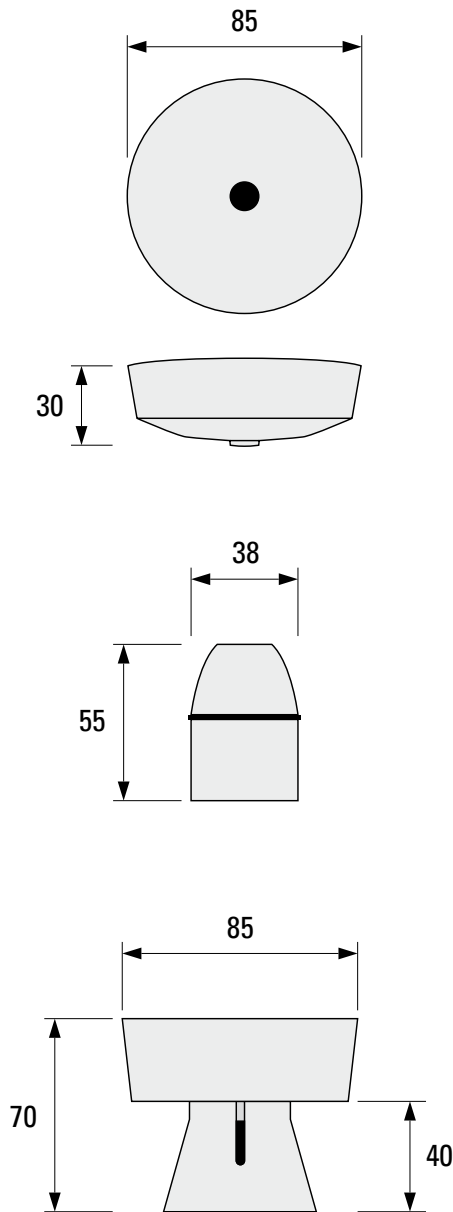
### 45A and 50A switches

- Supplied with M3.5 fixing screws.
- Shallow depth for maximum wiring space, with back entry tunnel terminals giving top and bottom access for terminal screws.
- Separate earth terminals provided for supply and load cables.
- Rocker operated, quick, positive movements, enclosed to minimise dust penetration.
- Switch contacts silver/nickel.

### Maximum number of conductors per terminal hole

Product		1.0mm <sup>2</sup>	1.5mm <sup>2</sup>	2.5mm <sup>2</sup>	4.0mm <sup>2</sup>	6.0mm <sup>2</sup>	10.0mm <sup>2</sup>
13A socket outlets	L+N	–	–	3	2	1	–
	E	–	6	3	2	1	–
RCD socket outlets	L+N	–	–	5	3	2	–
	E	–	7	3	2	1	–
15A socket outlets	L+N	–	–	3	2	1	–
	E	–	6	3	–	–	–
5A socket outlets	L+N	5	3	1	–	–	–
	E	6	3	1	–	–	–
15A 127V socket outlets	L+N	–	–	4	2	1	–
	E	–	7	3	1	–	–
10A switch range		5	3	–	–	–	–
15A switch range		–	–	1	–	–	–
250W/400W dimmer switches		4	3	1	–	–	–
20A switch range	L+N	–	–	2	2	1	–
	2 x E	–	7	3	–	–	–
13A connection units	L+N	–	–	4	3	2	–
	E	–	7	3	–	–	–
50A switches	L+N	–	–	–	2	2	1
	2 x E	–	9	5	2	–	–
45A cooker units	L+N	–	–	–	3	2	1
	2 x E	–	10	5	2	–	–
Shaver units	L+N	3	2	1	–	–	–
	E	6	4	–	–	–	–
Cooker outlet plate	2 x (L+N)	–	–	–	3	3	2
	2 x E	–	14	6	3	–	–
Surface mounting boxes, moulded		7	4	2	1	–	–
Surface mounting box for shaver unit		8	5	3	1	–	–

**Ceiling roses and pendants**



**Standards and approvals**

- Lampholders comply with BS EN 611841-T2.
- All lamp activated lampholders comply with BS 7895.
- Ceiling roses comply with BS 67.

**Technical specifications – electrical**

- Lampholders and batten lampholders.
  - Voltage rating: 250V a.c.
  - Maximum rating: 150 watts.
  - Terminal capacity: Live, neutral and earth, 3 x 1.0mm<sup>2</sup>, 2 x 1.5mm<sup>2</sup>
- Ceiling roses and base of pre-wired batten lampholders.
  - Voltage rating: 250V a.c.
  - Maximum rating: 6 amps.
  - Terminal capacity: Live, neutral and earth, 4 x 1.0mm<sup>2</sup>, 3 x 1.5mm<sup>2</sup>, 1 x 1.5mm<sup>2</sup>
  - Ambient operating temperature -5°C to +40°C
- Ceiling switches.
  - Terminal capacity: 3 x 1.5mm<sup>2</sup> conductors.
  - Maximum rating: 6 amps.

**Features**

- Lamp activated range.
- Plungers remain isolated until lamp is fully inserted.
- Live parts only accessible with tool.
- Incorporates double pole switching mechanism.
- T2 rated - meets the T2 ratings requirements of specification which test at 210°C lamp cap temperature.

**Ceiling roses.**

- Clear markings.
- Terminal layout allows cables to be cut to even length.
- Earth terminal point used for easier cable access.

**BC3 lamp information**

Eaton list number	Lamp life hours	Lumens	Lumens per watt	Energy category
F1267	8000	1200	60	A

# 12.3

## Technical data xComfort technical data

### Technical specification

#### Eaton RF software

Frequency:	868.300 MHz
Type of transmission:	Bi directional via encoded telegrams

#### Mains powered devices/actuators

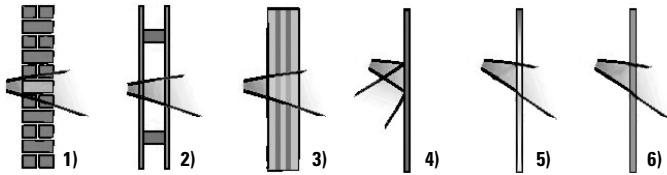
Back up protection:	By means of a type C miniature circuit breaker (MCB) rated at no more than 16A
---------------------	--

#### Switching and dimming actuators

Rated Voltage:	230VAC, 50Hz		
Protection:	IP20		
Wired connections:	1.5mm single core x 150mm		
Dimensions mm	H	W	D
Wired type	50	46	27
Enclosed type	150	34	28

#### Battery powered devices

RF Range:	Typically 30–50m = 2 walls and 1 ceiling dependent on wall thickness and material
Battery life:	Depending on usage and type of battery RF pushbutton battery – approx 10 years RF remote control battery – approx 3–5 years Room controller battery – approx 5–7 years



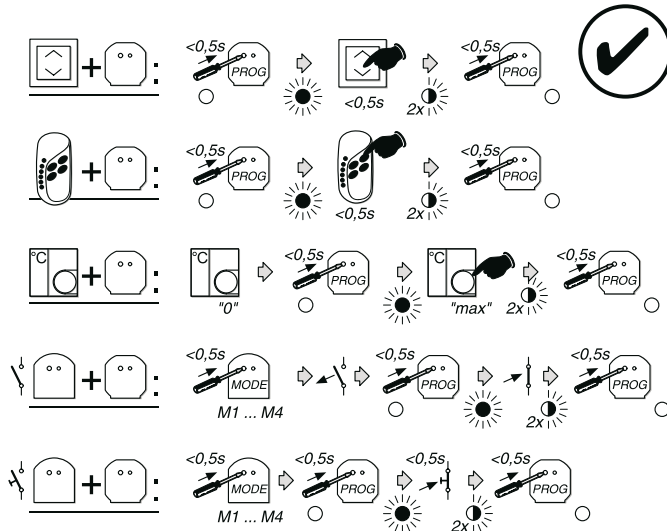
### RF System Basic Mode Card

	CTAA-01/0X CTAA-02/0X		CSAU-01/0X CSAP-01/0X
	CBEU-02/0X		CJAU-01/0X
	M1 M2 M3 M4 1x 2x 3x 4x		CDAU-01/0X CDAP-01/0X
	CRCA-00/0X		0-10V OUT CAAE-01/0X
	CHSZ-00/0X		

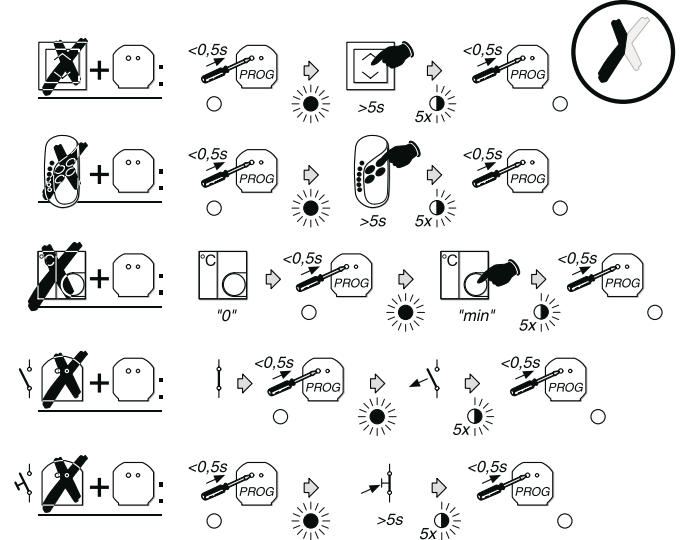
- 1) Brick-type wall approx. 60–90%
- 2) Wood and wood frames with sandwich-type plaster board approx. 80–95%
- 3) Concrete with steel reinforcement approx. 20–60%
- 4) Metal walls approx. 0–10%
- 5) Ordinary glass approx. 70–90%. Insulating glass (metalized) approx. 30 - 60%
- 6) Synthetic material approx. 80–95%

Important: The percentages given are guideline values only. They may vary subject to the respective conditions.

### Allocate functions



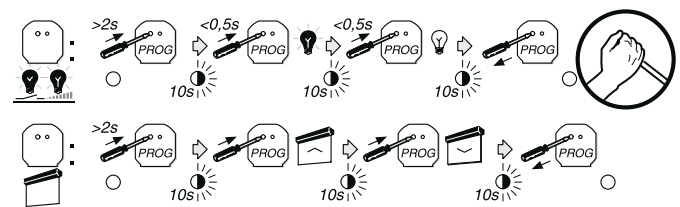
### Delete individual sensors



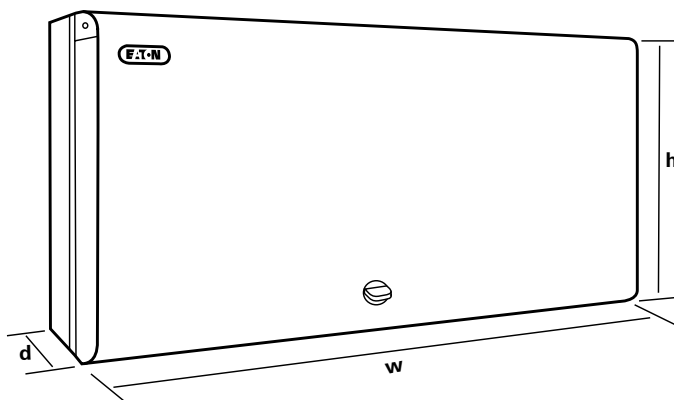
### Totally delete an actuator



### Manual operation







**Isolator controlled full metalclad surface mounting consumer units**

Material	Description	Dimensions (mm)			Eaton list number
		w	h	d	
179407	2 way metal consumer unit 63A isolator	179	223	113	<b>EAS2S</b>
179408	6 way metal consumer unit 100A isolator	251	223	113	<b>EAS6S</b>
179409	10 way metal consumer unit 100A isolator	323	223	113	<b>EAS10S</b>
179410	12 way metal consumer unit 100A isolator	358	223	113	<b>EAS12S</b>
179411	14 way metal consumer unit 100A isolator	394	223	113	<b>EAS14S</b>
179412	18 way metal consumer unit 100A isolator	464	223	113	<b>EAS18S</b>
183294	20 way metal consumer unit 2-pole isolator	499	223	113	<b>EAS20S</b>
179413	26 way metal consumer unit 100A isolator	358	420	113	<b>EAS26S</b>
179414	38 way metal consumer unit 100A isolator	464	420	113	<b>EAS38S</b>

**RCD controlled full metalclad surface mounting consumer units**

Material	Description	Dimensions (mm)			Eaton list number
		w	h	d	
179415	2 way metal consumer unit 40A 30mA RCD	179	223	113	<b>EAS2H40S</b>
179416	2 way metal consumer unit 63A 30mA RCD	179	223	113	<b>EAS2H63S</b>
179417	6 way metal consumer unit 63A 30mA RCD	251	223	113	<b>EAS6H63S</b>
179418	6 way metal consumer unit 80A 30mA RCD	251	223	113	<b>EAS6H80S</b>
179419	6 way metal consumer unit 100A 30mA RCD	251	223	113	<b>EAS6H100S</b>
179420	10 way metal consumer unit 100A 30mA RCD	323	223	113	<b>EAS10H100S</b>
179421	12 way metal consumer unit 100A 30mA RCD	394	223	113	<b>EAS12H100S</b>
179422	18 way metal consumer unit 100A 30mA RCD	464	223	113	<b>EAS18H100S</b>
183295	20 way metal consumer unit 100A 30mA RCD	499	223	113	<b>EAS20H100S</b>

**Split load full metalclad surface mounting consumer units**

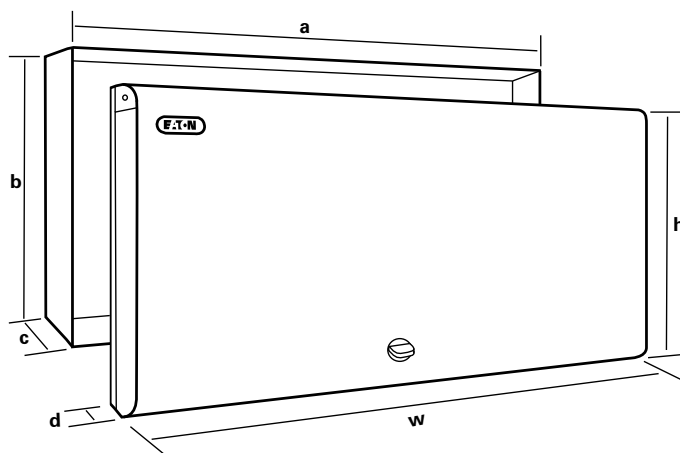
Material	Description	Dimensions (mm)			Eaton list number
		w	h	d	
179423	8 way metal consumer unit 63A 30mA split load	323	223	113	<b>EAS8H63DS</b>
179424	8 way metal consumer unit 80A 30mA split load	323	223	113	<b>EAS8H80DS</b>
179425	10 way metal consumer unit 63A 30mA split load	358	223	113	<b>EAS10H63DS</b>
179426	10 way metal consumer unit 80A 30mA split load	358	223	113	<b>EAS10H80DS</b>
179427	16 way metal consumer unit 80A 30mA split load	464	223	113	<b>EAS16H80DS</b>
183296	18 way metal consumer unit 80A 30mA split load	499	223	113	<b>EAS18H80DS</b>
179428	24 way metal consumer unit 80A 30mA split load	358	420	113	<b>EAS24H80DS</b>
179429	36 way metal consumer unit 80A 30mA split load	464	420	113	<b>EAS36H80DS</b>

**Dual RCD full metalclad surface mounting consumer units**

Material	Description	Dimensions (mm)			Eaton list number
		w	h	d	
179430	10 way metal consumer unit dual RCD 30mA 63A + 63A	394	223	113	EAS10H63H63DS
179431	10 way metal consumer unit dual RCD 30mA 80A + 63A	394	223	113	EAS10H80H63DS
179432	10 way metal consumer unit dual RCD 30mA 80A + 80A	394	223	113	EAS10H80H80DS
179433	14 way metal consumer unit dual RCD 30mA 63A + 63A	464	223	113	EAS14H63H63DS
179434	14 way metal consumer unit dual RCD 30mA 80A + 63A	464	223	113	EAS14H80H63DS
179435	14 way metal consumer unit dual RCD 30mA 80A + 80A	464	223	113	EAS14H80H80DS
183297	16 way metal consumer unit dual RCD 30mA 63A + 63A	499	223	113	EAS16H63H63DS
183298	16 way metal consumer unit dual RCD 30mA 80A + 63A	499	223	113	EAS16H80H63DS
183299	16 way metal consumer unit dual RCD 30mA 80A + 80A	499	223	113	EAS16H80H80DS
179436	22 way metal consumer unit dual RCD 30mA 80A + 80A	358	420	113	EAS22H80H80DS
179437	22 way metal consumer unit dual RCD 30mA 80A + 63A	358	420	113	EAS22H80H63DS
179438	34 way metal consumer unit dual RCD 30mA 80A + 80A	464	420	113	EAS34H80H80DS
179439	34 way metal consumer unit dual RCD 30mA 80A + 63A	464	420	113	EAS34H80H63DS

**Dual tariff full metalclad surface mounting consumer units**

Material	Description	Dimensions (mm)			Eaton list number
		w	h	d	
179440	10 way metal consumer unit dual tariff 2 x 100A	358	223	113	EAS10DDS
179441	16 way metal consumer unit dual tariff 2 x 100A	464	223	113	EAS16DDS



### Isolator controlled full metalclad flush mounting consumer units

Material	Description	Front dimensions			Rear dimensions			Eaton list number
		w (mm)	h (mm)	d (mm)	a (mm)	b (mm)	c (mm)	
179451	2 way metal consumer unit 63A isolator flush	219	265	36	171	220	80	EAS2SF
179452	6 way metal consumer unit 100A isolator flush	291	265	36	243	220	80	EAS6SF
179453	10 way metal consumer unit 100A isolator flush	363	265	36	315	220	80	EAS10SF
179454	12 way metal consumer unit 100A isolator flush	398	265	36	350	220	80	EAS12SF
179455	14 way metal consumer unit 100A isolator flush	434	265	36	386	220	80	EAS14SF
179456	18 way metal consumer unit 100A isolator flush	504	265	36	456	220	80	EAS18SF
183301	20 way metal consumer unit 2-pole isolator flush	539	265	36	491	220	80	EAS20SF
179457	26 way metal consumer unit 100A isolator flush	398	461	36	350	416	80	EAS26SF
179458	38 way metal consumer unit 100A isolator flush	504	461	36	456	416	80	EAS38SF

### RCD controlled full metalclad flush mounting consumer units

Material	Description	Front dimensions			Rear dimensions			Eaton list number
		w (mm)	h (mm)	d (mm)	a (mm)	b (mm)	c (mm)	
179459	2 way metal consumer unit 40A 30mA RCD flush	219	265	36	171	220	80	EAS2H40SF
179460	2 way metal consumer unit 63A 30mA RCD flush	219	265	36	171	220	80	EAS2H63SF
179461	6 way metal consumer unit 63A 30mA RCD flush	291	265	36	243	220	80	EAS6H63SF
179462	6 way metal consumer unit 80A 30mA RCD flush	291	265	36	243	220	80	EAS6H80SF
179463	6 way metal consumer unit 100A 30mA RCD flush	291	265	36	243	220	80	EAS6H100SF
179464	10 way metal consumer unit 100A 30mA RCD flush	363	265	36	315	220	80	EAS10H100SF
179465	12 way metal consumer unit 100A 30mA RCD flush	398	265	36	350	220	80	EAS12H100SF
179466	18 way metal consumer unit 100A 30mA RCD flush	504	265	36	456	220	80	EAS18H100SF
183302	20 way metal consumer unit 100A 30mA RCD flush	539	265	36	491	220	80	EAS20H100SF

### Split load full metalclad flush mounting consumer units

Material	Description	Front dimensions			Rear dimensions			Eaton list number
		w (mm)	h (mm)	d (mm)	a (mm)	b (mm)	c (mm)	
179467	8 way metal consumer unit 63A 30mA split load flush	363	265	36	315	220	80	EAS8H63DSF
179468	8 way metal consumer unit 80A 30mA split load flush	363	265	36	315	220	80	EAS8H80DSF
179469	10 way metal consumer unit 63A 30mA split load flush	398	265	36	350	220	80	EAS10H63DSF
179470	10 way metal consumer unit 80A 30mA split load flush	398	265	36	350	220	80	EAS10H80DSF
179471	16 way metal consumer unit 80A 30mA split load flush	504	265	36	456	220	80	EAS16H80DSF
183303	18 way metal consumer unit 80A 30mA split load flush	539	265	36	491	220	80	EAS18H80DSF
179472	24 way metal consumer unit 80A 30mA split load flush	398	461	36	350	416	80	EAS24H80DSF
179473	36 way metal consumer unit 80A 30mA split load flush	504	461	36	456	416	80	EAS36H80DSF

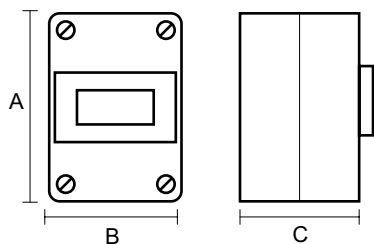
**Dual RCD full metalclad flush mounting consumer units**

Material	Description	Front dimensions			Rear dimensions			Eaton list number
		w (mm)	h (mm)	d (mm)	a (mm)	b (mm)	c (mm)	
179474	10 way metal consumer unit dual RCD 30mA 63A + 63A flush	434	265	36	386	220	80	EAS10H63H63DSF
179475	10 way metal consumer unit dual RCD 30mA 80A + 63A flush	434	265	36	386	220	80	EAS10H80H63DSF
179476	10 way metal consumer unit dual RCD 30mA 80A + 80A flush	434	265	36	386	220	80	EAS10H80H80DSF
179478	14 way metal consumer unit dual RCD 30mA 63A + 63A flush	504	265	36	456	220	80	EAS14H63H63DSF
179479	14 way metal consumer unit dual RCD 30mA 80A + 63A flush	504	265	36	456	220	80	EAS14H80H63DSF
179480	14 way metal consumer unit dual RCD 30mA 80A + 80A flush	504	265	36	456	220	80	EAS14H80H80DSF
183304	16 way metal consumer unit dual RCD 30mA 63A + 63A flush	539	265	36	491	220	80	EAS16H63H63DSF
183305	16 way metal consumer unit dual RCD 30mA 80A + 63A flush	539	265	36	491	220	80	EAS16H80H63DSF
183306	16 way metal consumer unit dual RCD 30mA 80A + 80A flush	539	265	36	491	220	80	EAS16H80H80DSF
179481	22 way metal consumer unit dual RCD 30mA 80A + 80A flush	398	461	36	350	416	80	EAS22H80H80DSF
179482	22 way metal consumer unit dual RCD 30mA 80A + 63A flush	398	461	36	350	416	80	EAS22H80H63DSF
179483	34 way metal consumer unit dual RCD 30mA 80A + 80A flush	504	461	36	456	416	80	EAS34H80H80DSF
179484	34 way metal consumer unit dual RCD 30mA 80A + 63A flush	504	461	36	456	416	80	EAS34H80H63DSF

**Dual tariff full metalclad flush mounting consumer units**

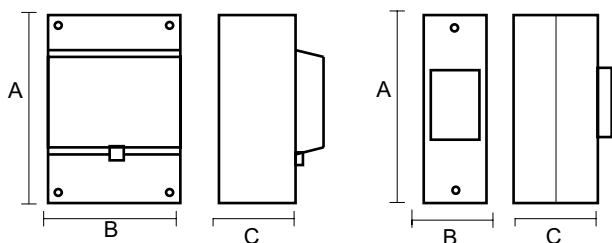
Material	Description	Front dimensions			Rear dimensions			Eaton list number
		w (mm)	h (mm)	d (mm)	a (mm)	b (mm)	c (mm)	
179485	10 way metal consumer unit dual tariff 2 x 100A Flush	398	265	36	350	220	80	EAS10DDSF
179486	16 way metal consumer unit dual tariff 2 x 100A Flush	504	265	36	456	220	80	EAS16DDSF

Enclosures, dimensional drawings IP65

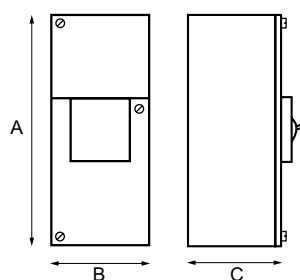


Eaton list number	Description of modules	Finish	Number	IP rating	Dimensions mm		
					A	B	C
<b>IKA-1/4-ST-UV</b>	DIN rail enclosure 4 module	Moulded	4	65	231	166	113
<b>IKA-1/6-ST-UV</b>	DIN rail enclosure 6 module	Moulded	6	65	231	202	113
<b>IKA-1/8-ST-UV</b>	DIN rail enclosure 8 module	Moulded	8	65	231	238	118

Enclosures dimensions IP40



Eaton list number	Description	Finish	Number of modules	IP rating	Dimensions mm		
					A	B	C
<b>AN2</b>	DIN rail enclosure 4 module	Moulded	2	40	135	40	65
<b>AN2D</b>	DIN rail enclosure 6 module	Moulded	2	40	135	40	65
<b>AN25</b>	DIN rail enclosure 8 module	Moulded	2	40	135	50	65
<b>AN2EBD</b>	DIN rail enclosure 6 module	Moulded	2	40	135	40	65
<b>AN4EBLS</b>	DIN rail enclosure 8 module	Moulded	4	40	135	110	88



Enclosures metal - IP30

Eaton list number	Description	Finish	Number of modules	IP rating	Dimensions mm		
					A	B	C
<b>EAN2SEBD</b>	DIN rail enclosure 2 module	Metal	2	30	194	70	83
<b>EAN2SEBD1001N</b>	Service Isolator 2 module	Metal	2	30	194	79	83
<b>EAN4SEBD</b>	DIN rail enclosure 4 module	Metal	4	30	194	115	83

Consumer units and enclosures technical data

	Earth	Neutral	Isolator	RCCB	RCBO	MCB
<b>Connection type</b>	Pinch screw	Pinch screw	Box clamp	Box clamp	Box clamp	Box clamp
<b>Screw type</b>	Combination	Combination	Combination	Combination	Combination	Combination
<b>Size</b>	M5	M5	M6	M5	M5	M5
<b>Min cable size</b>	1mm <sup>2</sup>	1mm <sup>2</sup>	2.5mm <sup>2</sup>	1mm <sup>2</sup>	1mm <sup>2</sup>	1mm <sup>2</sup>
<b>Max cable size</b>	16mm <sup>2</sup>	16mm <sup>2</sup>	50mm <sup>2</sup>	35mm <sup>2</sup>	25mm <sup>2</sup>	25mm <sup>2</sup>
<b>Recommended torque</b>	Note 1	Note 1	2.5Nm	2.0Nm	2.0Nm	2.0Nm
<b>Maximum torque</b>	Note 1	Note 1	5.0Nm	2.4Nm	2.4Nm	2.4Nm

Note: As terminal is pinch screw, the torque will depend upon cable size and type and should be sufficient to secure termination without damaging conductor strands.

#### 6kA Miniature Circuit Breakers (MCBs) technical data

Eaton's range of 6kA high performance Miniature Circuit Breakers (MCBs) are manufactured to IEC/EN 60898, meeting the latest UK, European and International standards, with ratings from 2A to 63A as standard.

DIN rail mountable and suitable for use with both pin and comb type busbar systems, Eaton's MCBs are suitable for use on 230/240 VAC systems and are calibrated for use at 40°C. These devices suite with the other modular devices including RCBOs, RCCBs and Isolators, for use within Eaton's MEM consumer units and a wide range of other applications.

The Eaton 6kA MCBs are fitted with box clamp terminals suitable for use with cables up to 25mm<sup>2</sup>.

The Eaton 6kA miniature circuit breakers are available with both B and C characteristic curves as standard. Type B MCBs are most commonly used in domestic applications, however the use of type C devices may be desirable e.g. on lighting circuits where high switching surges are involved. Type D devices are not commonly used in other than industrial applications.

IEC/EN 60898 Type	Instantaneous Trip Current (x I <sub>n</sub> )	Typical Application	Eaton 6kA MCB Type
B	3 to 5	Domestic	EAD B
C	5 to 10	Commercial Light Industrial	EAD C
D	10 to 20	General Industrial	-

**Type B:** Suitable for general, domestic and commercial installations having little or no switching surges

**Type C:** Suitable for general use in commercial or industrial applications where the greater use of fluorescent lighting and small motors can produce switching surges, which may cause nuisance tripping of type B breakers.

**Type D:** Suitable for general industrial applications where there are a lot of high inrush switching surges associated with equipment such as transformers, large motors, welding and X ray equipment.

#### Earth fault loop impedance's (Zs) to provide compliance with BS 7671

The wiring regulations BS 7671 makes specific reference to MCB types and the maximum earth loop impedance allowable to meet the required disconnection times.

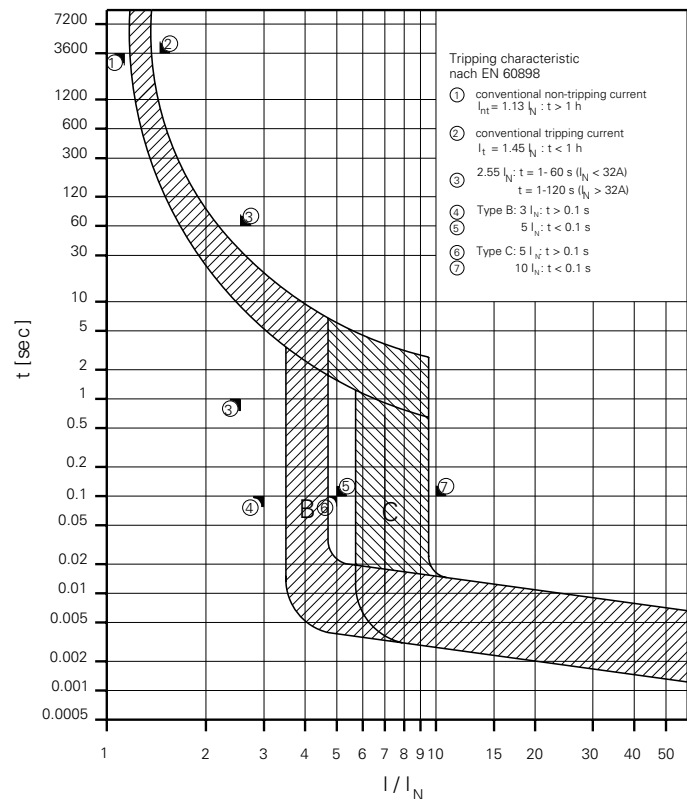
It can be seen that it is much easier to achieve adequate disconnection times with type B devices than it is with types C and indeed type D devices.

Maximum earth fault loop impedance i.e. Zs ohms for final circuits fed from Miniature Circuit Breakers MCBs or RCBOs with U<sub>o</sub> of 230V, for instantaneous operation giving compliance with 0.4s disconnection time of Reg 411.3.2.2 and 5s disconnection time of 411.3.2.3

**Table Zs Ohms**

Device	Standard	2A	4A	6A	10A	13A	16A	20A	25A	32A	40A	45A	50A	63A
Type B MCB	BS EN 60898	21.85	10.93	7.28	4.37	3.36	2.73	2.19	1.75	1.37	1.09	-	0.87	0.69
Type C MCB	BS EN 60898	10.93	5.46	3.64	2.19	1.68	1.37	1.09	0.87	0.68	0.55	-	0.44	0.35
Type B RCBO	BS EN 61009	-	-	7.28	4.37	3.36	2.73	2.19	1.75	1.37	1.09	0.97	-	-
Type C RCBO	BS EN 61009	-	-	3.64	2.19	1.68	1.37	1.09	0.87	0.68	0.55	0.48	-	-

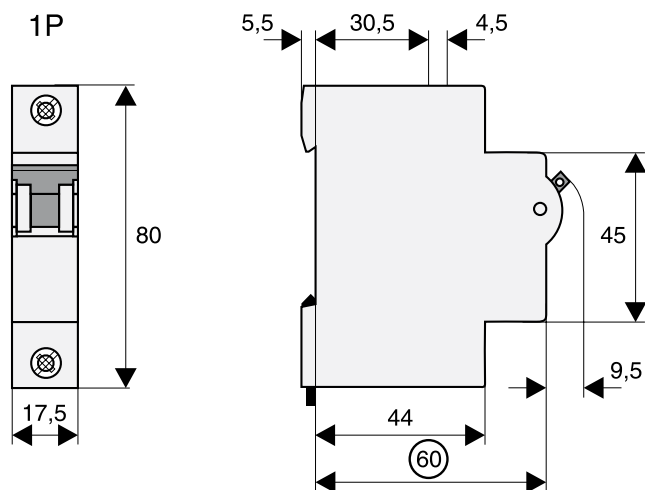
#### Tripping characteristic type B and C



**Note:** A minimum Voltage factor C<sub>min</sub> = 0.95 has been introduced to take account of variations in supply voltage depending on time, place and transformer settings etc., in accordance with Electricity Safety, Quality and Continuity regulations 2002.

The effect of this is to reduce the previous BS7671 maximum earth loop impedance Zs values by 5%.

6kA MCB dimensional drawings



6kA MCB technical data

Product standard	IEC/EN 60898
No of poles	1P
<b>Mechanical specification</b>	
Device width	17.7mm
Terminal type	Box clamp
Terminal capacity	1 – 25mm <sup>2</sup>
Terminal screw	M5 combination
Terminal torque recommended	2.0Nm - max 2.4Nm
Mounting	DIN rail
Degree of protection	IP 20
Positive contact indication	Yes (Toggle position)
<b>Electrical specification</b>	
Rated voltage	230/240 V AC
Current ratings	2, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63 A
Rated impulse and withstand voltage	4kV (1.2/50 μ sec)
Rated short circuit capacity	6kA
Selectivity class	3 to IEC/ EN 60898
<b>Tripping characteristic</b>	
Instantaneous tripping current I <sub>mt</sub>	Type B: 3 I <sub>n</sub> < I <sub>mt</sub> < 5 I <sub>n</sub> Type C: 5 I <sub>n</sub> < I <sub>mt</sub> < 10 I <sub>n</sub>
Conventional non tripping current	I <sub>nt</sub> = 1.13 I <sub>n</sub>
Conventional tripping current	I <sub>t</sub> = 1.45 I <sub>n</sub>
Ref/calibration temp	40° C
Number of operating cycles elec	>4000
Number of operating cycles mech	>20000

# 12.5

## Technical data

Switch and protection devices dimensions and data

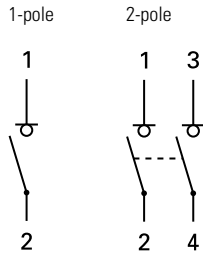
### Main load disconnecter switch (Isolators)

The Eaton range of compact modular Isolators are available in Single Pole, Double Pole and Single Pole with Switched Neutral arrangements. Manufactured and tested in accordance with IEC/EN 60947-3 to meet the latest European and International standards.

DIN rail mountable in one or 2 modules width these Isolators are available in 63A and 100A ratings. Suited with the complete range of Eaton's modular devices, providing positive contact position indication and terminal capacity up to 50 mm<sup>2</sup>, these devices are the ideal choice as a Main switch in Eaton's MEM Memera consumer units and other applications.

With rated short circuit capacity at up to 12.5kA these switches are fully rated and tested to IEC/EN 60947-3 for AC23 duty at 240VAC

### Connection diagram



### Main load disconnecter switch (Isolators) technical data

#### Specifications

Product standard	IEC/EN 60947-3
No of poles	1P, 2P, 1P+N

#### Mechanical specification

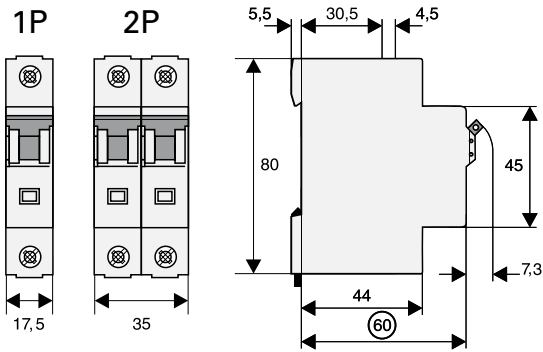
Device width	
1p	17.7mm
2p	35mm
Terminal type	Box clamp
Terminal capacity	2.5 – 50mm <sup>2</sup>
Terminal screw	M6 combination
Terminal torque recommended	2.5Nm - max 5.0Nm
Mounting	DIN rail
Degree of protection	IP 10
Positive contact indication	Yes (Red/Green)

#### Electrical specification

Rated voltage	230/240 V AC
Rated current AC23	63A, 100A (240V)
Rated peak withstand voltage	6kV
Rated insulation voltage	690V
Rated short circuit capacity	
63A	12.5kA (fuse backup 125A gG max.)
100A	6kA (fuse backup 125A gG max.)
Rated short time withstand Icw	2kA
Rated short circuit making Icm	2.8kA

#### Endurance

Number of operating cycles elec	>3000
Number of operating cycles mech	>16000





### Residual Current Circuit Breakers (RCCBs) technical data

Eaton's range of Residual Current Circuit Breakers without integral Overload protection (RCCBs), are manufactured to IEC/EN 61008 and meet the latest European and International standards.

DIN rail mountable in 2 module width these RCCBs provide protection solutions to a wide range of applications. With standard thermal ratings of 16A to 100A and trip sensitivities of 10mA, 30mA, 100mA and 300mA, these devices can be equipped with a range of modular accessories.

The Eaton RCCBs suite with the complete range of modular devices, and are for use within Eaton's MEM Memera consumer units and other applications.

These devices will accommodate cables up to 35mm<sup>2</sup>.

### Terminology

**RCD** – Residual Current Device:- This is the generic term covering a range of devices that are able to detect residual currents sometimes also referred to as earth leakage current. The residual current is measured by detecting the difference between the current flowing in the live and neutral conductors of a circuit and where the residual current is above a predefined level, the RCD will trip. RCDs are available in a range of sensitivities for different applications.

**RCCB** – Residual Current Circuit Breaker is an RCD which will cause disconnection of the electrical supply should it detect a residual current passing through the device, above a specified tripping current limit e.g. 30mA. This device does not provide over current protection and is therefore also referred to as an RCCB without integral over current protection.

**RCCBO** – Residual Current Circuit Breaker, with Overload protection, is an RCD which will cause disconnection of the electrical supply should it detect a residual current above a specified tripping current limit, combined with integral overload, overcurrent, and shortcircuit protection associated with a miniature circuit breaker.

The 17th Edition of the IEE wiring regulations BS7671 now places much greater emphasis on the use of 30mA RCDs to provide "additional protection" in many areas covered by the regulations, such as circuits feeding socket outlets and for the protection of concealed wiring.

### Trip sensitivities

**10mA** – Provides the highest degree of RCD protection in hazardous environments where supplementary protection against electric shock is required. This very high sensitivity should only be applied to final circuits where a high degree of risk exists.

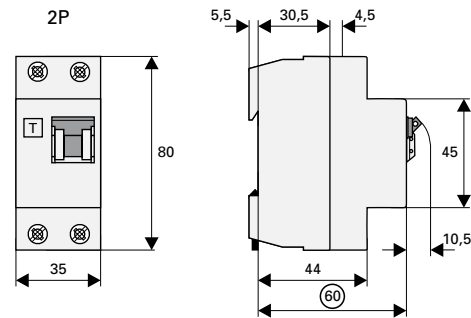
**30mA** – Provides a high degree of protection against electric shock due to direct and indirect contact. A 30mA RCD will trip within 40mS when a fault current of 150mA is detected.

This type of RCD is required to satisfy the requirements for "Additional Protection" in accordance with BS7671 (IEE wiring regs.)

**100mA** – Provides a degree of protection against electric shock resulting from indirect contact, and is generally used to protect a group of circuits as well as providing overall protection against Fire risk. Selective time delay version also available to enable selectivity with downstream 30mA RCDs connected in series.

**300mA** – Provides a lower level of RCD protection in the form of an overall protection against the risk of fire resulting from faults in electrical wiring etc.

### RCCB dimensions (mm)



### RCCB technical data

#### Specifications

Product standard	IEC/EN 61008
No of poles	2P

#### Mechanical specification

Device width	35 mm
Terminal type	Box clamp
Terminal capacity	1.5 – 35mm <sup>2</sup>
Terminal screw	M5 combination
Terminal torque recommended	2.0Nm - max 2.4Nm
Mounting	DIN rail
Degree of protection	IP 20
Positive contact indication	Yes (Toggle position)

#### Electrical specification

Rated voltage	230/240 V AC
Current ratings	16, 40, 63, 80, 100 A
Rated impulse and withstand voltage	4kV (1.2/50 μ sec)
Rated short circuit capacity	10kA
Sensitivity	AC

#### Tripping characteristic

Rated tripping currents	10, 30, 100, 300 mA
Tripping type	Instantaneous
Number of operating cycles elec	>4000
Number of operating cycles mech	>20000

# 12.5

## Technical data

Switch and protection devices dimensions and data

### Compact Residual Current Circuit Breakers – with Overload protection (RCBOs) technical data

Eaton's range of new compact Residual Current Circuit Breakers with integral Overload protection (RCBOs), are manufactured to IEC/EN 61009 and meet the latest European and International standards.

DIN rail mountable in a single module width these RCBOs provide a comprehensive protection solution to a wide range of applications. With standard current ratings from 6A to 45A, in both B and C Type characteristics and a trip sensitivity of 30mA, these devices are the ideal choice for domestic applications.

The Eaton RCBOs suite with the complete range of modular devices, and are for use within Eaton's MEM Memera consumer units and other applications.

These devices will accommodate cables up to 16mm<sup>2</sup>.

Trip Sensitivity 30mA Standard

Provides a high degree of protection against electric shock due to direct and indirect contact. A 30mA RCD will trip within 40mS when a fault current of 150mA is detected.

This type of RCD is required to satisfy the requirements for "Additional Protection" in accordance with BS7671 (IEE wiring regs.) Other sensitivities are available on request.

### RCBOs technical data

#### Specifications

Product standard	IEC/EN 61009
No of poles	1P & solid N

#### Mechanical specification

Device width	17.7 mm
Terminal type	Box clamp
Mounting	DIN rail
Degree of protection	IP 20
Positive contact indication	Yes (red/green)

#### Electrical specification

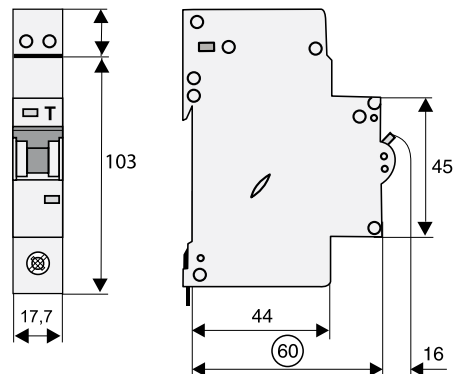
Rated voltage	230/240 V AC
Current ratings	6, 10, 16, 20, 25, 32, 40, 45A
Rated impulse and withstand voltage	4kV (1.2/50 μ sec)
Rated short circuit capacity	6kA
Sensitivity	AC

#### Tripping characteristic

Instantaneous Tripping current I <sub>mt</sub>	Type B: 3 I <sub>n</sub> < I <sub>mt</sub> < 5 I <sub>n</sub>
	Type C: 5 I <sub>n</sub> < I <sub>mt</sub> < 10 I <sub>n</sub>
Conventional non tripping current I <sub>nt</sub>	1.13 I <sub>n</sub>
Conventional tripping current I <sub>t</sub>	1.45 I <sub>n</sub>
Ref / Calibration temp	40° C
Rated residual tripping current	30mA
Residual tripping type	Instantaneous
Number of operating cycles elec	>4000
Number of operating cycles mech	>20000

	LOAD	LINE
Terminal capacity	1–16mm <sup>2</sup>	1–25mm <sup>2</sup>
Terminal screw	M4	M5
Terminal torque recommended	1.2–1.5Nm	2.0–2.5Nm

### RCBOs dimensions (mm)



### Single pole & neutral switchfuse

The **800KMF** is a fully moulded, compact wall mounted, SP&N switchfuse rated at up to 80A, complying with BS EN 60947-3 for duty AC22B, 240v AC. The unit is fitted with a fully insulated pull out fuse carrier, which will accommodate HRC fuse links complying with BS 88-3 (BS1361) and rated between 45 -80A.

### Wall mounted switch fuses technical data

#### Specification

<b>Product standard</b>	<b>IEC/EN 60947-3</b>		
No of poles	1P+N		
Rated Voltage	230/240VAC		
Terminal capacity:			
800KMF	Main terminals	25 mm <sup>2</sup>	(Maximum)
	Earth terminals	16 mm <sup>2</sup>	(Maximum)

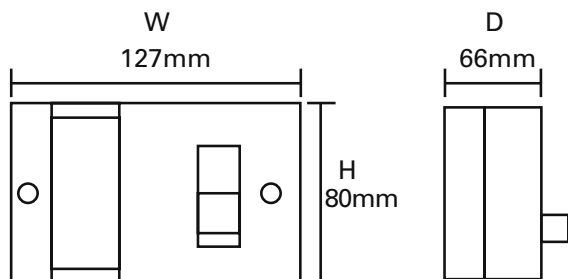
#### Rated current and fuse details

Type	Rating (A)	Class	Finish	IP rating	Fuse (A)	Standard
800KMF	80	AC22	Moulded	40	80	BS 88-3 (BS1361)

#### Replacement fuse-links

Switch	Standard	Rating (A)	Ordering reference
800KMF	BS 88-3 (BS1361)	80	804R/80KR85
800KMF	BS 88-3 (BS1361)	60	604R/60KR85
800KMF	BS 88-3 (BS1361)	50	504R/50KR85
800KMF	BS 88-3 (BS1361)	45A	454R/45KR85

### 800KMF dimensions (mm)



## Analogue time switches

	TSSD1C0	TSSD1N0	TSQW1C0	TSQD1C0	TSQD1N0
<b>General</b>					
Operating voltage	230V AC	230 V AC	110 - 230 V AC	110 - 230 V AC	230 - 240 V AC
Frequency	50 Hz	50 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Stand-by power	0.5 W	0.5 W	0.5 W	0.5 W	0.5 W
Time control	Net	Net	Quartz	Quartz	Quartz
Accuracy	acc. Net	acc. Net	± 1 sec. / day	± 1 sec. / day	± 1 sec. / day
Power reserve	-	-	200 hrs / 100 hrs at 110 V	200 hrs/ 100 hrs at 110 V	±3 days
Battery type	-	-	NiMH	NiMH	NiMH
Degree of protection (EN 60529)	IP20	IP20	IP20	IP20	IP20
Ambient temperature	-20 °C...+55 °C	-20 °C...+50 °C	-20 °C...+55 °C	-20 °C...+55 °C	-10 °C...+50 °C
Protection class (EN 60730-1)	II	II	II	II	II
<b>Switching contact(s)</b>					
Type of switching contact	1 x CO	1 x NO	1 x CO	1 x CO	1 x NO
Switching capacity at 250 V~, cos = 1	16 A	16 A	16 A	16 A	16 A
Switching capacity at 250 V~, cos = 0,6	4A	4 A	4 A	4 A	4 A
<b>Programming features</b>					
Period of program	Day	Day	Week	Day	Day
Number of channels	1	1	1	1	1
Minimum cycle time	15 min.	15 min.	2 hrs	15 min.	15 min.
Programmable	every 15 min.	every 15 min.	every 2 hrs	every 15 min.	every 15 min.
Program steps	96	96	84	96	96
Manual / Hand / Permanent switching <sup>1)</sup>	On, Off, Auto	On, Off, Auto	On, Off, Auto	On, Off, Auto	On, Off, Auto
Switching status indication	x	x	x	x	x
<b>Dimensions and weight</b>					
Number of module width	3	1	3	3	1
Dimensions width	52.5 mm	17.5 mm	52.5 mm	52.5 mm	17.5 mm
Height	90 mm	90 mm	90 mm	90 mm	90 mm
Depth	65.5 mm	65.5 mm	65.5 mm	65.5 mm	65.5 mm
Mounting	DIN-rail	DIN-rail	DIN-rail	DIN-rail	DIN-rail
<b>Terminals</b>					
Terminal screw size	M3.5	M3.5	M3.5	M3.5	M3.5

<sup>1)</sup> Remark

ON = Permanent ON

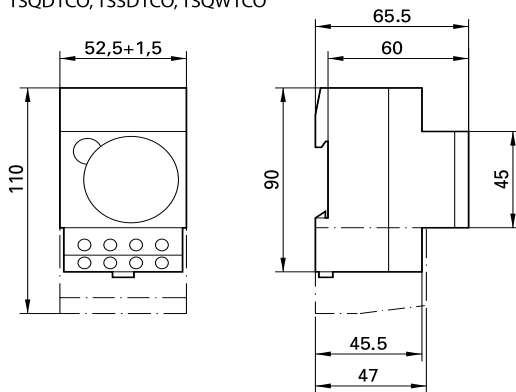
OFF = Permanent OFF

Hands = ON or OFF. valid until next program cycle overrules

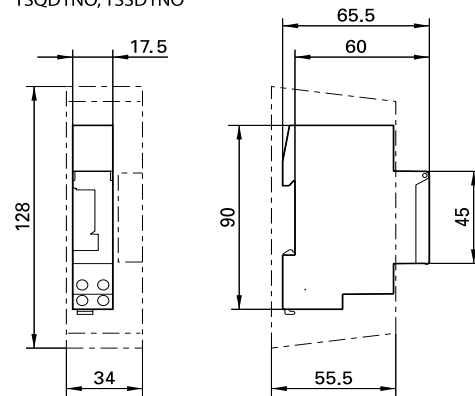
Auto = According program

**Analogue daily and weekly timers - dimensional drawings**

TSQD1CO, TSSD1CO, TSQW1CO

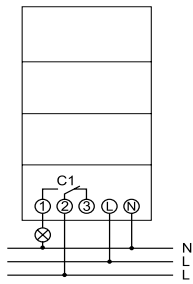


TSQD1NO, TSSD1NO

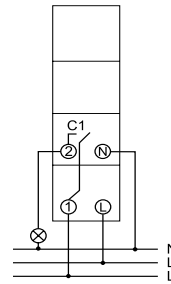


**Analogue daily and weekly time switches - wiring diagrams**

TSQD1CO, TSSD1CO, TSQW1CO



TSQD1NO, TSSD1NO



## Digital timers - week programme

	TSDW1CO	TSDW1COMIN	TSDW2CO	TSDW1COA	TSDW1CODG
<b>General</b>					
Nominal operating voltage	220 - 240 V AC	240 V AC	220 - 240 V AC	230 - 240 V AC	230 - 240 V AC
Frequency	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz	50 - 60 Hz
Stand-by power	0,8 W	0,4 W	0,8 W	0,8 W	1,4 W
Time base control <sup>1)</sup>	Quartz	Quartz	Quartz	Astro	Quartz or DCF / GPS
Accuracy	± 0,5 sec. / day	±0,5 sec. / day	± 0,5 sec. / day	± 0,5 sec. / day	± 0,5 sec. / day
Power reserve	10 year	10 year	10 year	10 year	10 year
Type of battery	Lithium	Lithium (exchangeable)	Lithium	Lithium	Lithium
Protection class (acc. EN 60529)	IP20	IP20	IP20	IP20	IP20
Permissible ambient temperature	-30 °C...+55 °C	-25 °C...+55 °C	-30 °C...+55 °C	-30 °C...+55 °C	-30 °C...+55 °C
Protection class at proper installation (acc. EN 60730-1)	II	II	II	II	II
<b>Switching contact(s)</b>					
Type of switching contact	1 x CO	1 x CO	2 x CO	1 x CO	1 x CO
Switching capacity at 250 V~, cos = 1	16 A	16 A	16 A	16 A	16 A
Switching capacity bij 250 V~, cos = 0,6	10 A	6 A	10 A	10 A	10 A
Switching capacity for lighting					
- Incandescent lamp	2600 W	1000 W	2600 W	2600 W	2600 W
- Halogen lamp	2600 W	1000 W	2600 W	2600 W	2600 W
<b>Programming features</b>					
Period of programme	Week	Week	Week	Week	Week
Number of channels	1	1	2	1	1
Minimum switching capacity	10 mA	-	10 mA	10 mA	-
Minimum cycle time	1 min.	1 min.	1 min.	1 min.	1 sec.
Maximum programming steps in memory	56	56	56	56	84
Summer / wintertime automatic (or manual on/off)	Yes	Yes	Yes	Yes	Yes
Random programme	No	No	No	No	Yes (2)
Holiday programme	Yes	Yes	Yes	Yes	Yes
Cycle programme	No	No	No	No	Yes
Astro function	No	No	No	Yes	No
Pulse switching	No	No	No	No	Yes
Manual switching <sup>2)</sup>	On, Off, Auto	On, Off, Auto	On, Off, Auto	On, Off, Auto	On, Off, Auto
LCD backlighting	Yes	-	Yes	Yes	Yes
PIN code	Yes	Yes	Yes	Yes	Yes
<b>Dimensions and weight</b>					
Number of module width	2	1	2	2	2
Dimensions	Width	35.8 mm	17.5 mm	35.8 mm	35.8 mm
	Height	90.1 mm	90 mm	90.1 mm	90.1 mm
	Depth	69.2 mm	65.5 mm	69.2 mm	69.2 mm
Mounting	DIN-rail	DIN-rail	DIN-rail	DIN-rail	DIN-rail
<b>Terminals</b>					
Terminal type	Spring	Screw	Spring	Spring	Spring

**1) Remark:**

Astro function: Automatic calculation of sunrise and sunset times

DCF / GPS: Time synchronization is possible by connecting external antenna (TSADCF of TSAGPSKIT).

**2) Remark:**

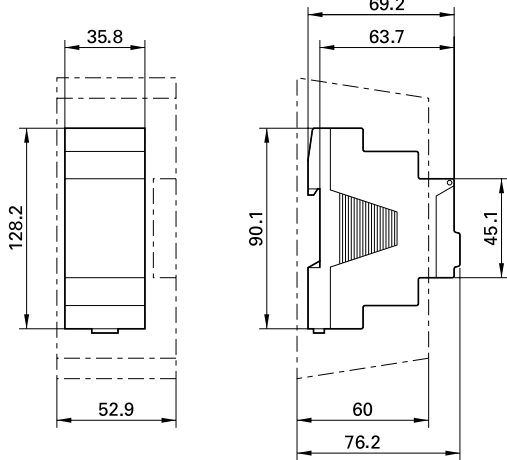
ON = Permanent ON

OFF = Permanent OFF

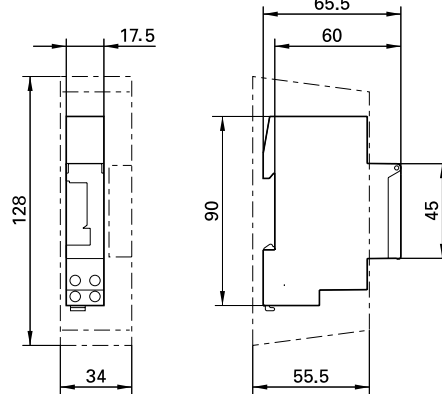
Auto = According Programme

Digital weekly time switches - dimensional drawings

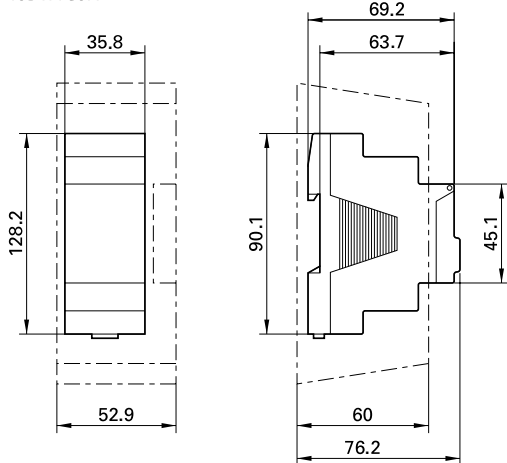
TSDW1CO, TSDW2CO



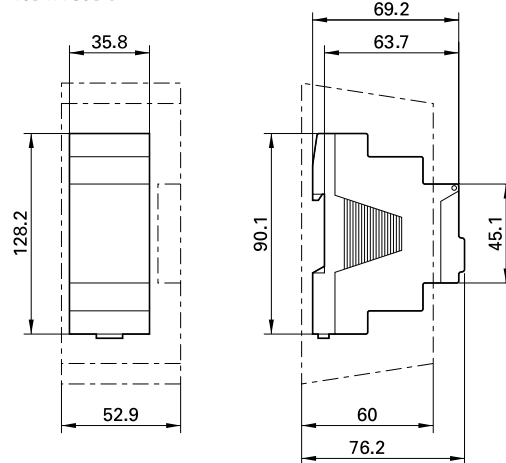
TSDW1COMIN



TSDW1COA

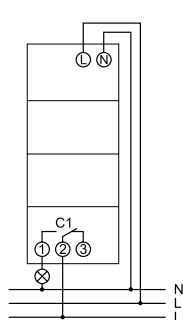


TSDW1CODG

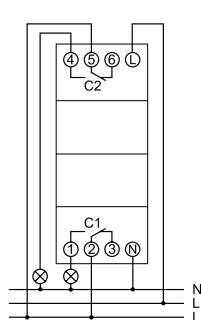


Digital weekly timers - wiring diagrams

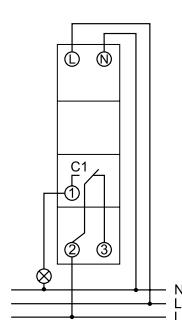
TSDW1CO



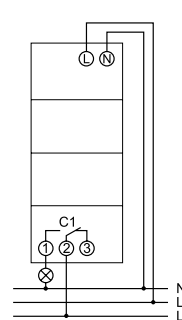
TSDW2CO



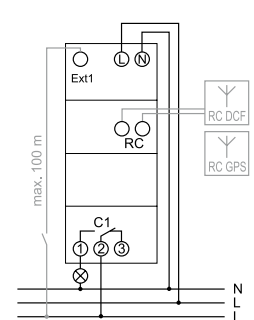
TSDW1COMIN



TSDW1COA



TSDW1CODG



# 12.6

## Technical data

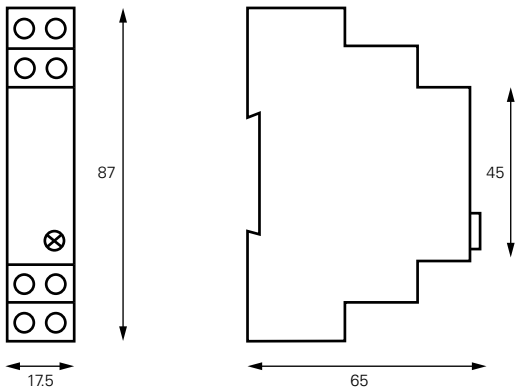
Control and switching devices dimensions and data

### Staircase timer

Staircase Timer	TLE
<b>General</b>	
Nominal operating voltage	230 Vac
Frequency	50 - 60 Hz
Power consumption	6 VA (0.8W)
Time setting	0.5 – 15 min.
Mechanical endurance (switching cycles)	> 30 x 10 <sup>6</sup>
Electrical endurance (switching cycles)	> 10 x 10 <sup>5</sup>
Temperature range	-25 °C - +55 °C
<b>Switching contact(s)</b>	
Type of switching contact	1 x NO (not potential free)
Switching capacity at 250 Vac, cos j =1	16 A
Switching capacity for lighting :	
Incandescent	2000 W
Fluorescant	1000 W
Compact fluorescent	500 W
<b>Features</b>	
Maximum load for push button illumination	100 mA
Automatic 3/4 wire detection	Yes
Permanent on function	Yes
Warning before switch off	Yes
Time extension	Yes
Pulse switching (on & off)	Yes
<b>Dimensions</b>	
Number of modules	1 module
Width	17.5 mm
Height	87 mm
Depth	60 mm
<b>Terminals</b>	
Terminal capacity	0.5 - 4.00 <sup>2</sup> mm
Maximum torque	0.8 Nm

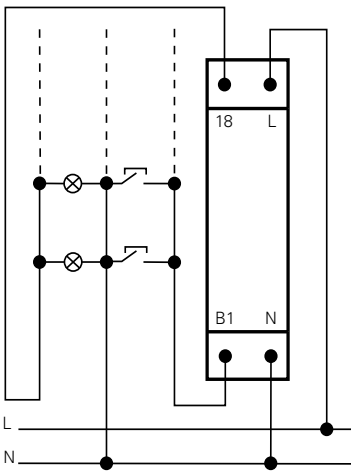


**Staircase timer - dimensional drawing**

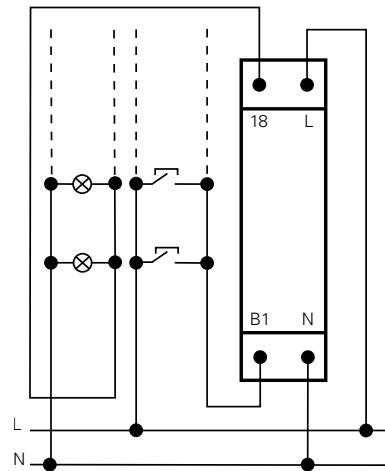


**Staircase timer TLE - example wiring diagrams**

The staircase timer can be wired utilising either the 3-wire or 4-wire configuration as shown in the wiring diagrams below.



3-wire configuration



4-wire configuration



# 12.6

## Technical data

Control and switching devices dimensions and data

### Contactors type CR - technical data

Products	Contactors				Aux. contact
Rating	20 A	25 A	40 A	63 A	6A
<b>General</b>					
Standards	IEC 60947-4-1, IEC 61095				IEC 60947-5-1
Nominal operating voltage 1-phase U <sub>e</sub> 1-ph.	230 V	230 V	230 V	230 V	230 V
Nominal operating voltage 3-phase U <sub>e</sub> 3-ph.	400 V	400 V	400 V	-	-
Overvoltage protection on coil	430 V (*5)	430 V (*5)	430 V	430 V	
Mechanical endurance (switching cycles)	3.000.000	3.000.000	3.000.000	3.000.000	3.000.000
Protection class (acc. DIN 40 050, IEC 529)	IP20	IP20	IP20	IP20	IP20
Permissible ambient temperature	-5...+55 °C	-5...+55 °C	-5...+55 °C	-5...+40 °C	-5...+55 °C
Storage temperature	-30...+80 °C	-30...+80 °C	-30...+80 °C	-30...+80 °C	-30...+80 °C
<b>Contact rating</b>					
Rated insulation voltage U <sub>i</sub>	440 V	440 V	500 V	500 V	500 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz'	50/60 Hz
Rated impulse withstand voltage U <sub>imp</sub>	4 kV	4 kV	4 kV	4 kV	4 kV
Rated thermal current I <sub>th</sub>	20 A	25 A	40 A	63 A	6 A
AC1 / AC7a Rated operational current I <sub>e</sub>	20 A	25 A	40 A	63 A	-
AC1 / AC7a Operational power rating at U <sub>e</sub> = 230 Vac P <sub>max</sub>	4 kW	9 kW	16 kW	24 kW	-
AC1 / AC7a Operational power rating at U <sub>e</sub> = 400 Vac P <sub>max</sub>	16 kW	26 kW	40 kW	-	-
AC3 / AC7b Operational power rating at U <sub>e</sub> = 230 Vac P <sub>max</sub>	1,3 kW (*1)	2,2 kW	5,5 kW	8,5 kW	-
AC3 / AC7b Operational power rating at U <sub>e</sub> = 400 Vac P <sub>max</sub>	4 kW	11 kW	15 kW	-	-
DC1 Rated thermal current at U <sub>e</sub> = 24 Vdc I <sub>e</sub>	20 A	25 A	40 A	63 A	-
DC1 Rated thermal current at U <sub>e</sub> = 110 Vdc I <sub>e</sub>	1A	2A	4A	4A	-
DC1 Rated thermal current at U <sub>e</sub> = 220 Vdc I <sub>e</sub>	0,5 A	0,5 A	0,8 A	0,8 A	-
DC1 Rated thermal current at U <sub>e</sub> = 24 Vdc (2-poles in series) I <sub>e</sub>	20 A	25 A	40 A	63 A	-
DC1 Rated thermal current at U <sub>e</sub> = 110 Vdc (2-poles in series) I <sub>e</sub>	3 A	4 A	10 A	10 A	-
DC1 Rated thermal current at U <sub>e</sub> = 220 Vdc (2-poles in series) I <sub>e</sub>	1,5 A	1,5 A	6 A	6 A	-
DC1 Rated thermal current at U <sub>e</sub> = 24 Vdc (3-poles in series)	-	25 A	40 A	63 A	-
DC1 Rated thermal current at U <sub>e</sub> = 110 Vdc (3-poles in series)	-	6:00 AM	30 A	35 A	-
DC1 Rated thermal current at U <sub>e</sub> = 220 Vdc (3-poles in series)	-	2,5 A	20 A	30 A	-
<b>Electrical endurance</b>					
Maximum operating cycles at AC1 / AC7a application	200.000 x	200.000 x	100.000 x	100.000 x	-
Maximum operating cycles at AC3 / AC7b application	300.000 x	500.000 x	150.000 x	150.000 x	-
Maximum operating cycles at AC5a application	100.000 x	100.000 x	100.000 x	100.000 x	-
Maximum operating cycles at AC5b application	100.000 x (*2)	100.000 x (*2)	100.000 x (*3)	100.000 x (*4)	-
Maximum operating cycles per hour	600 x	600 x	600 x	600 x	600 x
Power dissipation per contact at I <sub>n</sub>	1,7 W	2,2 W	4 W	8 W	-
Maximum back-up fuse	25 A gL	35 A gL	63 A gL	80 A gL	-
Rating	20 A	25 A	40 A	63 A	6 A
<b>Operating coil (for combined ac/dc types only – CR....)</b>					
Coil inrush power (for all voltage ratings)	2,5 W	3 W	5 W	5 W	-
Coil consumption (for all voltage ratings)	2,5 W	3 W	5 W	5 W	-
Closing delay	15-25 ms	15-30 ms	15-20 ms	15-20 ms	-
Opening delay	35-45 ms	50-80 ms	35-45 ms	35-45 ms	-
<b>Operating coil (for ac types only – CR....A)</b>					
Coil inrush power (for all voltage ratings)	13 W / 15 VA	17 W / 27 VA	-	-	-
Coil consumption (for all voltage ratings)	2 W / 5 VA	1 W / 2,7 VA	-	-	-
Closing delay	15 ms	15-25 ms	-	-	-
Opening delay	10 ms	35-45 ms	-	-	-

**Contactors type CR - technical data (continued)**

Products	Contactors				Aux. contact
<b>Dimensions</b>					
Width	18 mm	35 mm	54 mm	54 mm	9 mm
Height	85 mm	85 mm	85 mm	85 mm	85 mm
Depth	60 mm	60 mm	60 mm	60 mm	60 mm
<b>Terminals for main &amp; auxiliary contacts</b>					
Terminal capacity – fine stranded wire	1.....6 mm <sup>2</sup>	1.....6 mm <sup>2</sup>	1.....16 mm <sup>2</sup>	1.....16 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>
Terminal capacity – solid wire	1.....10 mm <sup>2</sup>	1.....10 mm <sup>2</sup>	1.....25 mm <sup>2</sup>	1.....25 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>
Terminal screw size	M3,5	M3,5	M5	M5	M3
Terminal screw head type (Pozidrive)	PZ Size 1	PZ Size 1	PZ Size 2	PZ Size 2	PZ Size 1
Maximum torque	1,2 Nm	1,2 Nm	2,0 Nm	2,0 Nm	0,8 Nm
<b>Terminals for operating coils</b>					
Terminal capacity – fine stranded wire	1.....2,5 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>	
Terminal capacity – solid wire	1.....2,5 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>	1.....2,5 mm <sup>2</sup>	
Terminal screw size	M3	M3	M3	M3	
Terminal screw head type (Pozidrive)	PZ Size 1	PZ Size 1	PZ Size 1	PZ Size 1	
Maximum torque	0,6 Nm	0,6 Nm	0,6 Nm	0,6 Nm	

Remarks:

\*1) Only applicable for normally open contact(s)

\*2) At 1,5 kW

\*3) At 3 kW

\*4) At 5 kW

\*5) For CR.... types only (combined ac/dc types), NOT for CR....A types

**Contactors type CR - lamp load table**

Lighting Type	Lamp load (Watt)				Maximum number of fittings per contactor type
	CR 20	CR 25	CR 40	CR 63	
<b>Incandescent lamp</b>					
	15	86	110	228	480
	25	52	72	180	290
	40	32	50	122	195
	60	21	33	86	130
	75	17	26	69	104
	100	13	20	52	78
	150	8	13	34	52
	200	6	10	26	39
	250	5	8	20	31
	300	4	6	17	26
	500	2	4	10	15
	1000	1	2	5	7
<b>Energy saving lamp</b>					
	3	42	52	83	120
	5	42	52	83	120
	7	42	52	83	120
	9	36	45	72	104
	11	33	41	65	94
	15	30	37	59	85
	20	29	36	57	82
	23	28	35	56	81

**Contactors type CR - lamp load table (continued)**

Lighting Type	Lamp load (Watt)				Maximum number of fittings per contactor type
	CR 20	CR 25	CR 40	CR 63	
<b>Fluorescent lamp – conventional supply</b>					
Single fitting – Uncompensated (inductive)	18	22	24	90	140
	24	22	24	90	140
	36	17	20	65	95
	58	14	17	45	70
Single fitting – Compensated (capacative)	18	7	8	48	73
	24	7	8	48	73
	36	7	8	48	73
	58	4	5	31	47
Double fitting – Series compensated	2 x 18	30	40	100	150
	2 x 24	24	31	78	118
	2 x 36	17	24	65	95
	2 x 58	10	14	40	60
<b>Fluorescent lamp – HF electronic</b>					
Single fitting – HF Electronic	18	25	31	49	71
	24	18	22	35	50
	36	14	17	27	39
	58	8	10	16	23
Double fitting – HF Electronic	2 x 18	12	15	24	35
	2 x 24	9	11	17	25
	2 x 36	7	8	13	19
	2 x 58	4	5	8	11
<b>Compact fluorescent lamp</b>					
Conventional supply	5	38	48	77	121
	7	27	34	54	86
	9	21	26	42	67
	11	17	21	35	55
Electronic supply	5	39	49	78	124
	7	39	49	78	124
	9	30	38	61	96
	11	25	31	50	79
<b>High pressure mercury vapour lamp</b>					
Uncompensated	50	14	18	38	55
	80	10	13	29	42
	125	7	9	20	29
	250	4	5	10	15
	400	2	3	7	10
Parallel compensated	50	4	5	31	47
	80	4	5	27	41
	125	3	4	22	33
	250	1	2	12	18
	400	1	1	9	13
<b>Halogen metal vapour lamp</b>					
Uncompensated	35	18	22	43	60
	70	10	12	23	32
	150	5	7	12	18
	250	3	4	7	10
	400	3	3	6	9
Parallel compensated	35	5	6	36	50
	70	2	3	18	25
	150	1	1	11	15
	250	-	1	6	9
	400	-	1	6	8

**Contactors type CR - lamp load table (continued)**

Lighting Type	Lamp load (Watt)				Maximum number of fittings per contactor type
	CR 20	CR 25	CR 40	CR 63	
<b>Low pressure sodium vapour lamp</b>					
Uncompensated	18	22	27	71	90
	35	7	9	23	30
	55	7	9	23	30
	90	4	5	14	19
	135	3	4	10	13
	180	3	4	10	13
Parallel compensated	18	6	7	44	66
	35	1	1	11	16
	55	1	1	11	16
	90	1	1	8	12
	135	-	-	4	7
	180	-	-	4	7
<b>High pressure sodium vapour lamp</b>					
Uncompensated	150	5	6	17	22
	250	3	4	10	13
	400	2	2	6	8
	1000	-	1	3	3
Parallel compensated	150	1	1	11	16
	250	-	1	6	10
	400	-	-	4	6
	1000	-	-	2	3

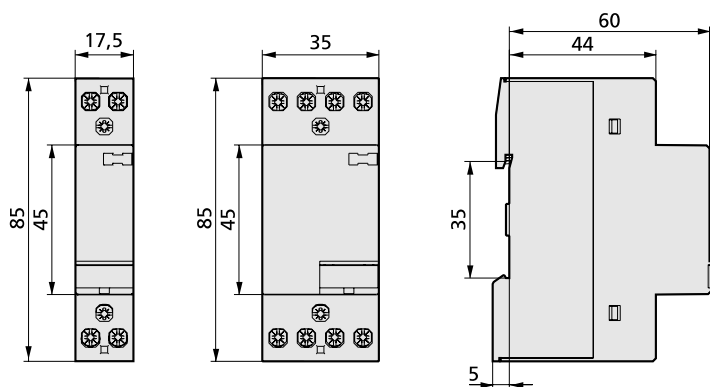
General remarks:

- 1) In case a 4-pole contactor is used (3 ph. + neutral) the above mentioned quantity of lamps need to be multiplied by 1,5 to obtain the maximum quantity of fittings for the contactor. The total quantity of fitting need to be split equally across the 3 poles.
- 2) In case multiple contactors are installed in one panel it is required to multiply the above mentioned fittings by the applicable load factor according the IEC 60439-1.
- 3) It is recommended to install one spacer between each 2 contactors installed (eg contactor, contactor, spacer, contactor, etc.)

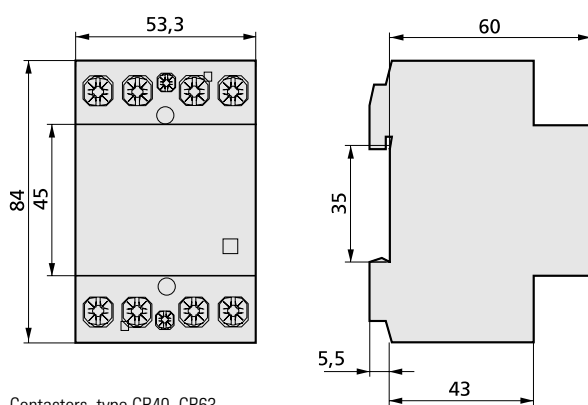
# 12.6

## Technical data

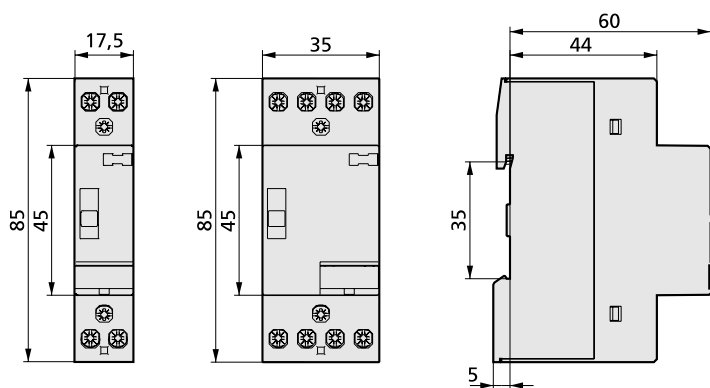
Control and switching devices dimensions and data



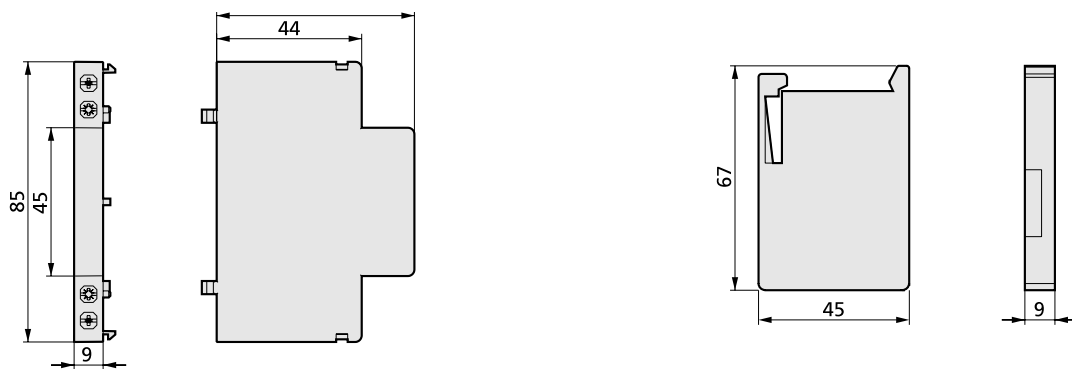
Contactors, type CR20, CR25



Contactors, type CR40, CR63



Day/Night contactors, type CRM20, CRM25



Auxiliary contact

Spacer

1MGL.....	110	C023B.....	10, 57	C415B.....	11, 60	CDAE-01/02.....	96
800KMF.....	110, 131	C023WH.....	10, 57	C415WH.....	11, 60	CDAE-01/03.....	96
A9900HP.....	58	C024.....	10, 57	C421N.....	12, 62	CDAE-01/04.....	95
A9900PB.....	58	C024B.....	10, 57	C421NB.....	12, 62	CDAE-01/05-E.....	95
A9900SS.....	58	C024WH.....	10, 57	C421NWH.....	12, 62	CDAE-01/05-I.....	95
ABP1.....	105	C026.....	10, 57	C422N.....	12, 62	CDAP-01/13.....	96
AN2.....	107, 125	C026B.....	10, 57	C422NB.....	12, 62	CDAU-01/02.....	95
AN25.....	107, 125	C026WH.....	10, 57	C422NWH.....	12, 62	CDAU-01/04.....	95
AN2D.....	107, 125	C032.....	10, 57	C425.....	12, 62	CDAU-01/04-E.....	95
AN2EBD.....	107, 125	C032WH.....	10, 57	C425B.....	12, 62	CDAU-01/04-I.....	95
AN4EBLS.....	107, 125	C041.....	10, 57	C425N.....	12, 62	CEMP-01/13.....	99
ASPD.....	110	C041B.....	10, 57	C425NB.....	12, 62	CEMU-01/03.....	99
B015SS.....	10, 68	C041WH.....	10, 57	C425NWH.....	12, 62	CEMU-01/04.....	99
B017SS.....	10, 68	C045B.....	10, 57	C425WH.....	12, 62	CHAZ-01/01.....	100
B021SS.....	10, 68	C045WH.....	10, 57	C621.....	10, 59	CHAZ-01/12.....	100
B022SS.....	10, 68	C047B.....	10, 57	C621B.....	10, 59	CHCA-00/01.....	100
B023SS.....	10, 68	C047WH.....	10, 57	C621N.....	10, 59	CHSZ-01/05.....	96
B048SS.....	10, 68	C048.....	10, 57	C621NB.....	10, 59	CHSZ-02/02.....	96
B111SS.....	11, 69	C048B.....	10, 57	C621NWH.....	10, 59	CHSZ-12/03.....	97
B112SS.....	11, 69	C048WH.....	10, 57	C621WH.....	10, 59	CHSZ-12/04.....	97
B220NSS.....	12, 70	C049WH.....	10, 57	C622.....	10, 59	CHVZ-01/03.....	100
B220SS.....	12, 70	C111a.....	11, 59	C622B.....	10, 59	CHVZ-01/04.....	100
B221NSS.....	11, 70	C111ba.....	11, 59	C622N.....	10, 59	CJAU-01/02.....	96
B221SS.....	11, 70	C111WHa.....	11, 59	C622NB.....	10, 59	CKOZ-00/13.....	100
B351SS.....	12, 73	C112B.....	11, 59	C622NWH.....	10, 59	CKOZ-00/03.....	100
B370SS.....	11, 69	C112WH.....	11, 59	C622WH.....	10, 59	CKOZ-00/12.....	100
B391SS.....	12, 72	C212.....	12, 61	C632.....	11, 59	CKOZ-00/14.....	100
B392SS.....	12, 72	C220.....	12, 61	C632B.....	11, 59	CM011*.....	10, 57
B401NSS.....	12, 71	C220B.....	12, 61	C632WH.....	11, 59	CM012*.....	10, 57
B401SS.....	12, 71	C220N.....	12, 61	C651B.....	11, 59	CM013*.....	10, 57
B403NSS.....	12, 71	C220NB.....	12, 61	C651WH.....	11, 59	CM014*.....	10, 57
B421NSS.....	12, 71	C220NWH.....	12, 61	C652WH.....	11, 59	CM015*.....	10, 57
B422NSS.....	12, 71	C220WH.....	12, 61	C692B.....	11, 59	CM015L*.....	10, 57
B425NSS.....	12, 71	C221.....	11, 61	C692WH.....	11, 59	CM026*.....	10, 57
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