

Smart solutions for electrical distribution in residential and commercial applications





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- **Hydraulic and electrical solutions** that enable machines to deliver more productivity without wasting power
- **Aerospace solutions** that make aircraft lighter, safer and less costly to operate, and help airports operate more efficiently
- **Vehicle drivetrain and powertrain solutions** that deliver more power to cars, trucks and buses, while reducing fuel consumption and emissions

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

With 2015 sales of \$20.9 billion, Eaton has approximately 100,000 employees around the world and sells products in more than 175 countries.

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Powering Business Worldwide

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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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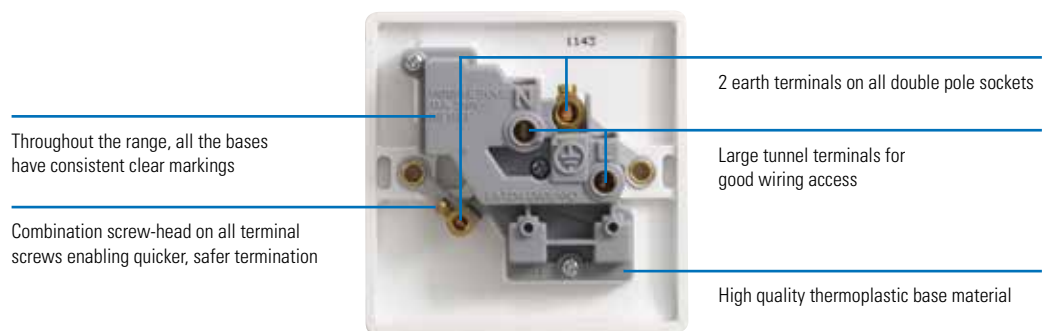
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RF BUILDING AUTOMATION AND CONTROLS

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PREMERA white moulded range

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



PREMERA mix modular range





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
BM BLACK MATT	26
SB SATIN BRONZE	62
SV SILVER METALLIC	65
SS STAINLESS STEEL	70
GL GOLD METALLIC	77
HP HIGHLY POLISHED	82
PB POLISHED BRASS	83
WH 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

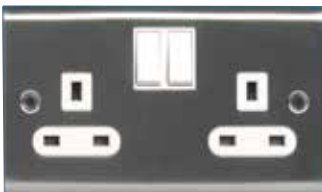
Determine the colour of the wall then decorate.

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

Wall mounted range (contd)

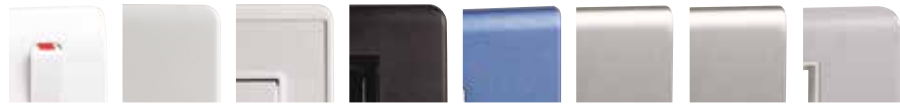
Description	PREMERA range	COPA c/w cover	COPA interior	COPA black interior	COPA decorative plates ¹⁾	COPA metal plates ²⁾	COPA fix stainless steel	XTRA surface metal
13A switched sockets – double pole, outboard rockers								
13A 2G DP 2E terminals	P632	C632WH	C632	C632B	CP632 ¹⁾	CM632 ²⁾	B632SS	X632MG
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	–	–	–	–	–	–	–
13A switched sockets – double pole, non-standard								
13A 1G DP 2E terminals	P651	C651WH	–	C651B	CP621 ¹⁾	CM621 ²⁾	B651SS	X651MG
13A 2G DP 2E terminals – outboard rockers	P652	C652WH	–	–	CP632 ¹⁾	CM632 ²⁾	B652SS	X652MG
13A 2G DP 2E terminals – outboard red rockers	P652RR	–	–	–	–	–	–	–
13A switched sockets – double pole, outboard rockers, clean earth								
13A 2G with 2E terminals	P672	–	–	–	–	–	–	–
13A switched socket - outboard rockers with USB charger outlets								
13A 2G with 2 x USB charger outlets	P692	C692WH	C692B	CP692 ¹⁾	CM692 ²⁾	–	–	–
13A RCD socket								
13A 2G RCD 30mA – passive	P686	–	–	–	–	–	–	X686MG
13A unswitched sockets								
13A 1G	P111	C111WH	C111A	C111BA	CP111 ¹⁾	CM111 ²⁾	B111SS	X111MG
13A 2G	P112	C112WH	–	C112B	CP112 ¹⁾	CM112 ²⁾	B112SS	X112MG
15A switched sockets								
15A 1G	P415	C415WH	–	C415B	CP415 ¹⁾	CM415 ²⁾	–	X415MG
Shaver supply unit								
Dual voltage 230V/115V AC	P370	C370WH	C370	C370B	CP370 ¹⁾	CM370 ²⁾	B370SS	–
13A connection units – double pole switched with optional cable outlets								
13A connection unit	P221	C221WH	C221	C221B	CP221 ¹⁾	CM221 ²⁾	B221SS	X221MG
13A connection unit – grey cover	P221GY	–	C221	–	CP221 ¹⁾	–	–	–
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	–	–	–	CP221WMMWH	–	–	–
13A connection unit fitted with 3A fuse	P223	–	–	–	–	–	–	–
13A connection units – double pole switched + neon with optional cable outlets								
13A connection unit	P221N	C221NWH	C221N	C221NB	CP221N ¹⁾	CM221N ²⁾	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 ¹⁾	COPA metal plates ²⁾	COPA fix stainless steel	XTRA surface metal
13A connection units – unswitched with optional cable outlets								
13A connection unit	P220	C220WH	C220	C220B	CP220 ¹⁾	CM220 ²⁾	B220SS	X220MG
13A connection unit + red fuse drawer	P220RR	–	–	–	–	–	–	X220RRMG
13A connection unit fitted with 3A fuse	P224	–	–	–	–	–	–	–
13A connection units – unswitched + neon with optional cable outlets								
13A connection unit	P220N	C220NWH	C220N	C220NB	CP220N ¹⁾	CM220N ²⁾	B220NSS	X220NMG
13A connection unit fitted with 3A fuse	P223N	–	–	–	–	–	–	–
20A double pole switches with optional cable outlet								
20A switch	P401	C401WH	C401	C401B	CP401 ¹⁾	CM401 ²⁾	B401SS	X401MG
20A switch marked 'water heater'	P403	C403WH	–	–	–	CM403 ²⁾	–	–
20A double pole switches + neon with optional cable outlets								
20A switch	P401N	C401NWH	C401N	C401NB	CP401N ¹⁾	CM401N ²⁾	B401NSS	X401NMG
20A switch marked 'water heater'	P403N	C403NWH	–	–	CP403N ¹⁾	CM403N ²⁾	B403NSS	–
20A switch marked 'air conditioner'	P404N	–	–	–	–	–	–	–
45A double pole switches – cooker control units								
45A DP cooker control unit	P425	C425WH	C425	C425B	CP425 ¹⁾	CM425 ²⁾	–	–
45A DP cooker control unit + neon	P425N	C425NWH	C425N	C425NB	CP425N ¹⁾	CM425N ²⁾	B425NSS	–
50A double pole switches – 2 gang plate size								
50A DP switch	P421	–	–	–	–	–	–	X421MG
50A DP switch + neon	P421N	C421NWH	C421N	C421NB	CP421N ¹⁾	CM421N ²⁾	B421NSS	X421NMG
50A DP switch marked 'cooker'	P423	–	–	–	–	–	–	–
50A DP switch + neon marked 'cooker'	P423N	–	–	–	CP423N ¹⁾	CM423N ²⁾	–	–
50A DP switch + neon marked 'air conditioner'	P424N	–	–	–	CP424N ¹⁾	CM424N ²⁾	–	–
50A double pole switches – 1 gang plate size								
50A DP switch + neon	P422N	C422NWH	C422N	C422NB	CP422N ¹⁾	CM422N ²⁾	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	–	–	–	–	–	–	–
Cable/cooker outlet/cable outlet adaptor plate								
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	–	–	–	–	–	–	–
Phone outlets								
1G telephone outlet master	P360	C360WH	C360	C360B	CP360 ¹⁾	CM360 ²⁾	–	X360MG
1G telephone outlet secondary	P361	C361WH	C361	C361B	CP360 ¹⁾	CM360 ²⁾	–	X361MG
1G american telephone outlet RJ11	P362	–	C362	C362B	CP360 ¹⁾	CM360 ²⁾	–	–
Data outlets								
1G RJ45 CAT 6 outlet interior	–	C363WH	C363	C363B	CP360 ¹⁾	CM360 ²⁾	–	–
Communication outlets								
1G TV co-axial	P351	C351WH	C351	C351B	CP351 ¹⁾	CM351 ²⁾	B351SS	–
1G TV co-axial dual clamp	P351D	–	–	–	–	–	–	–
2G TV co-axial outlet	P352	C352WH	–	–	CP352 ¹⁾	CM352 ²⁾	–	–
1G TV/FM isolated co-axial	P353	C353WH	–	–	CP351 ¹⁾	CM351 ²⁾	–	–
2G TV/FM diplexer co-axial	P354	C354WH	C354	–	CP352 ¹⁾	CM352 ²⁾	–	–
1G satellite	P355	C355WH	C355	C355B	CP351 ¹⁾	CM351 ²⁾	–	–
2G TV/satellite	P356	C356WH	–	C356B	CP352 ¹⁾	CM352 ²⁾	–	–
2G TV/radio	P357	–	–	–	–	–	–	–
1G TV/radio/satellite return	–	C359WH	–	–	CP359 ¹⁾	CM359 ²⁾	–	–
Blank plates								
1G blank plate	P391	C391WH	C391	C391	CP391 ¹⁾	CM391 ²⁾	B391SS	X391MG
2G blank plate	P392	C392WH	C392	C392	CP392 ¹⁾	CM392 ²⁾	B392SS	X392MG

Wall mounted range (contd)



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

¹⁾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

²⁾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 0.75mm² or 1.00mm² 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 4.00mm² 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 4.00mm² 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

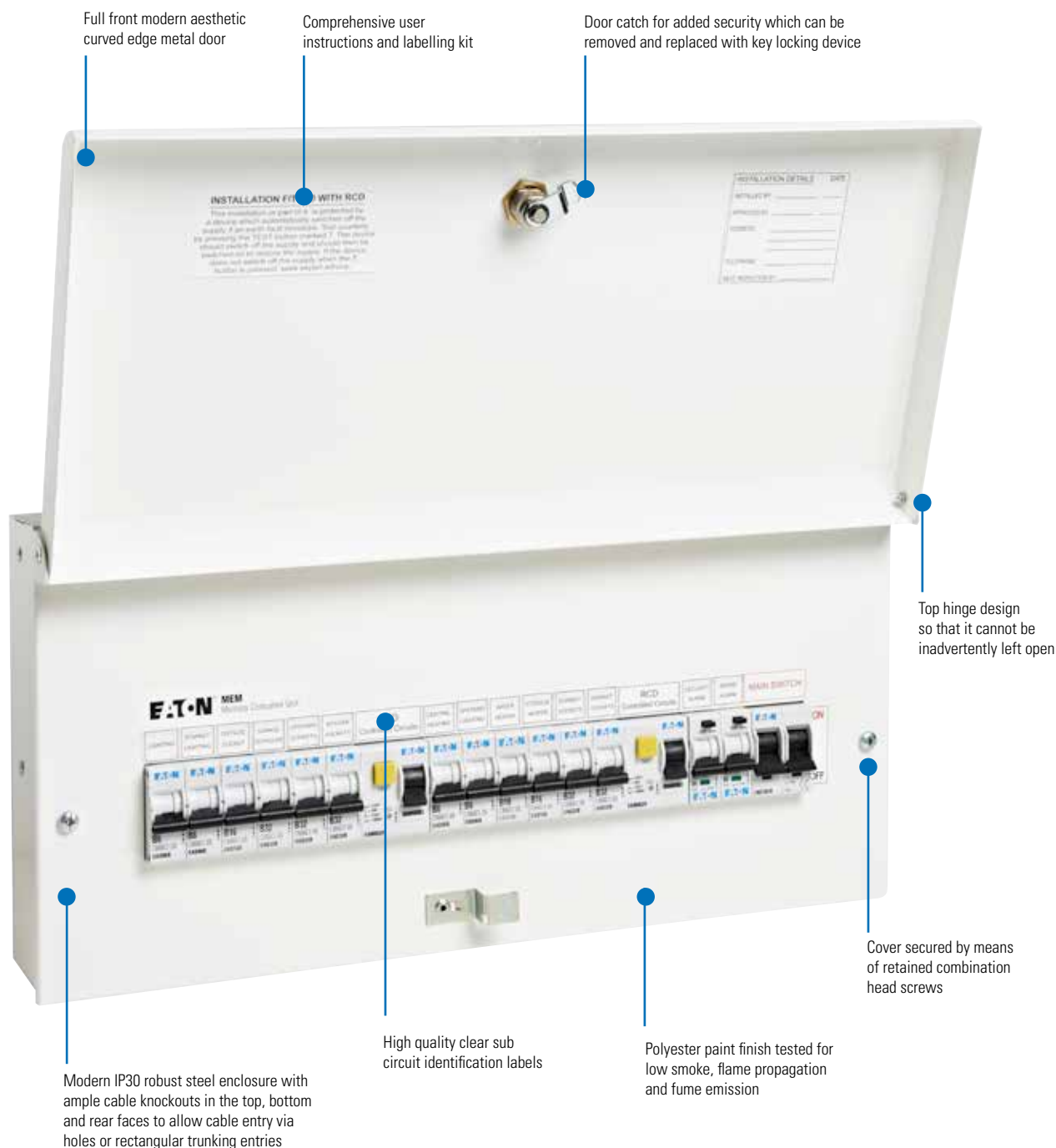
- Full compliance with BS EN 61439-3.
- Full metal enclosure to meet requirements of BS7671 Amendment 3 regulation 421.1.201.
- Sturdy steel enclosure with ample cable entry knockouts to accommodate cable entry from top, bottom or rear face of the enclosure.
- Multiple large apertures in rear face of 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.

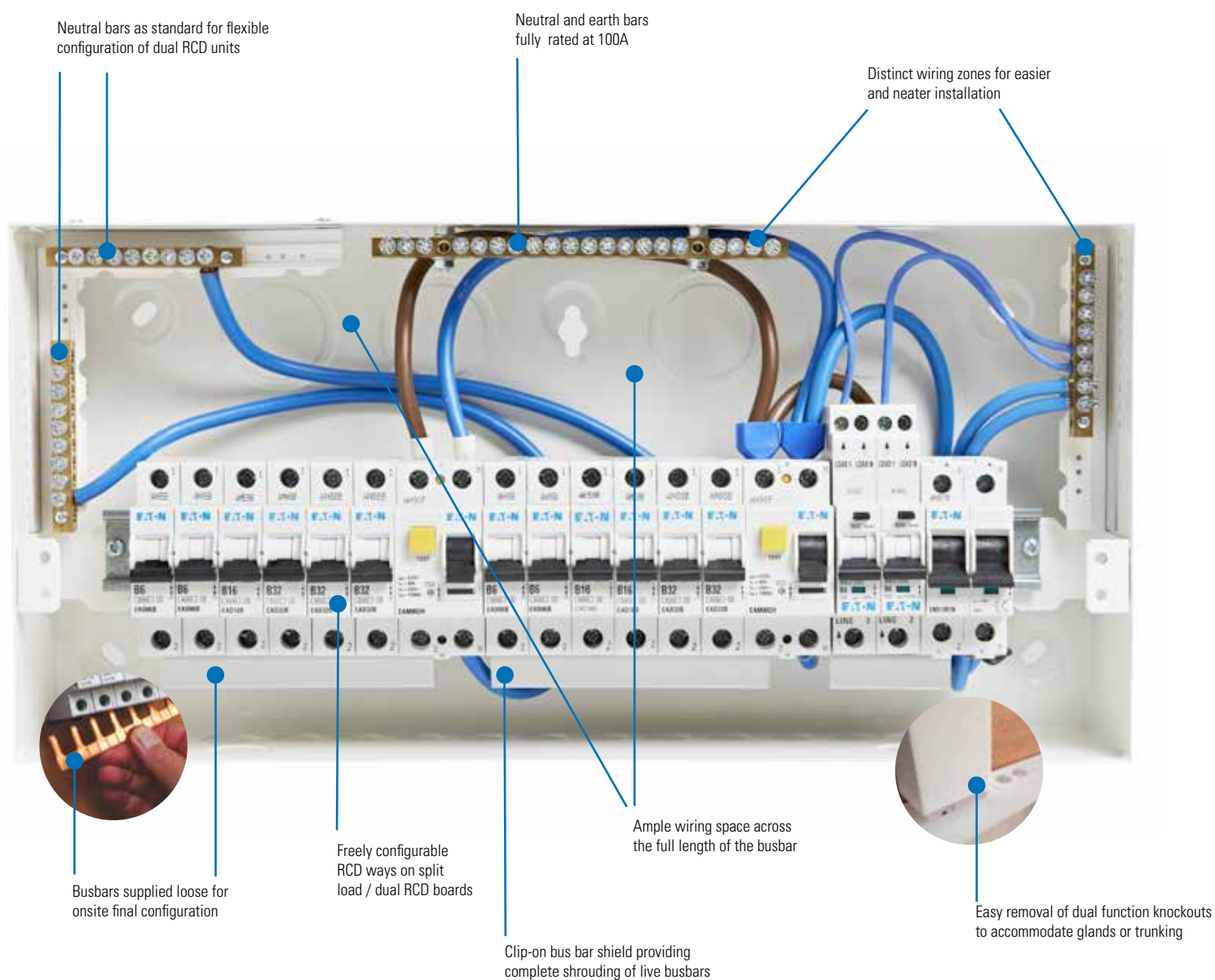


Memera full metal consumer unit – External features and benefits



- 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"> – Upstairs sockets – Downstairs sockets – Kitchen sockets – Cooker outlet with integral 13A socket outlet – Plus any other sockets rated up to 20A including garage sockets 	30mA RCD
701.411.3.3	All electrical circuits in a room with a fixed bath or shower	<ul style="list-style-type: none"> – Shower circuit – Lighting circuit – Heating circuit – Ventilation circuit – Shaver socket – Socket outlets 	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	All concealed wiring <ul style="list-style-type: none"> – Socket outlets – Lighting circuits – Smoke alarm – Burglar alarm 	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.

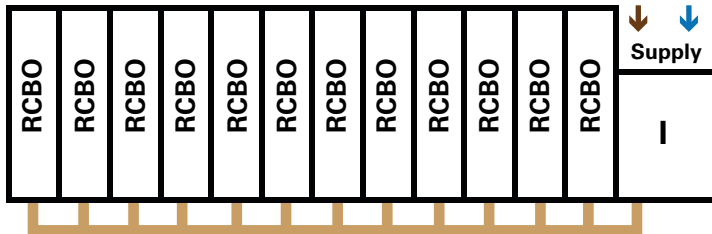
However, the most comprehensive and effective solution, and one that is guaranteed to fully meet the requirements of the regulations is to equip each and every circuit with its own individual 30mA RCBO.

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.

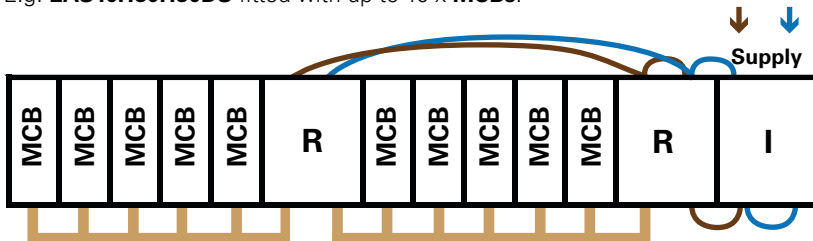
Consumer unit solutions

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.

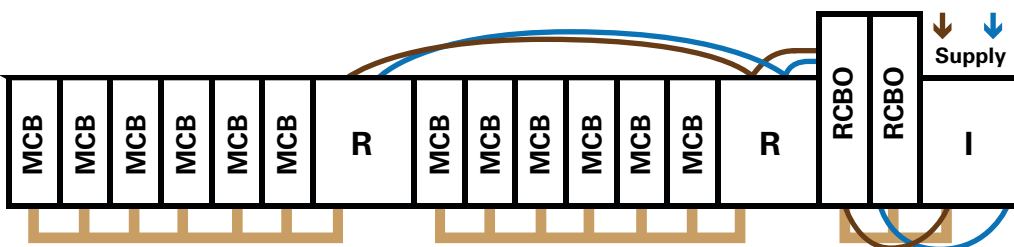
The most comprehensive solution would be to provide individual RCBO protection on each and every outgoing circuit from a consumer unit. Hence the use of a consumer unit such as a 12 way isolator controlled board. E.g. **EAS12S** fitted with up to 12 x **RCBOs**.



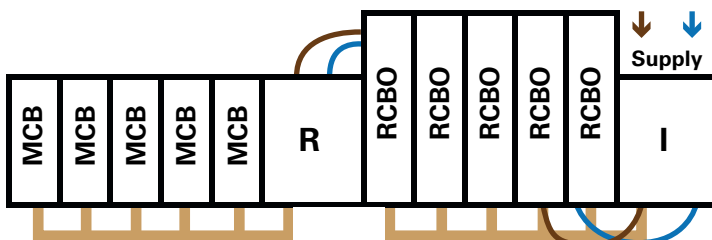
The next level down would be to provide an isolator controlled dual RCD consumer unit feeding two RCD board sections. E.g. **EAS10H80H80DS** fitted with up to 10 x **MCBs**.



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 mm²

**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, DCF¹⁾ or GPS signal reception²⁾
- 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.

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

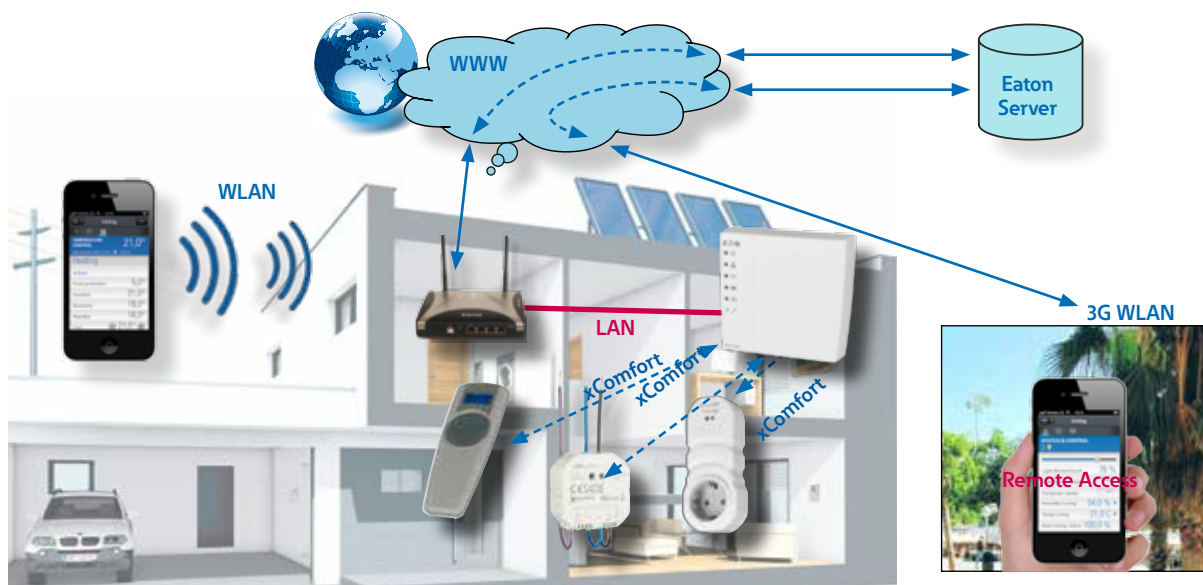
The system also does away with unsightly cables, as all the switches are wireless and can be placed virtually anywhere, they can indeed also be replaced by hand held remote control units. Operation of the xComfort system can also be triggered by means of its inbuilt time-switch programs that can start 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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Dimmer switches 30

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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 1.5mm² 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 1.5mm² conductors. Suitable for surface mounting.
- Time delay.

Description	Eaton list number
16A hotel switch	P450

P9131

**Push on/push off action dimmers**

- To BSEN 60669-1.

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

P9551

**Non-european rotary dimmers**

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

P611



13A single pole switched sockets

- To BS 1363: Part 2.
- Terminals capable of accepting up to 3 x 4mm² or 2 x 6mm² 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 4mm² or 2 x 6mm² 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 4mm² or 2 x 6mm² 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 4mm² or 2 x 6mm² 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 2.5mm² 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 2.5mm² 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

P401N

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

- To BSEN 60669-1.
- Supply terminals accept 3 x 2.5mm² conductors. Load terminals accept 2 x 2.5mm² conductors.
- P212 adaptor plate for use with bottom entry cable outlet.

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

P425N

**45A double pole cooker control unit**

- To BS 4177.

Description	Eaton list number
45A DP cooker control unit	P425
45A DP cooker control unit + neon	P425N

P421N

**50A double pole switches**

- To BSEN 60669-1.

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

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

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

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



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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RF SWITCHES AND ACTUATORS

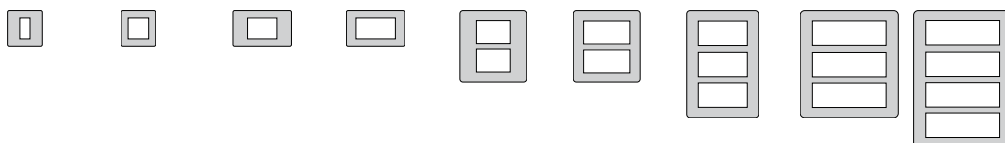
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Actuators	50

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BACK BOXES

Surface and flush	51
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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	P901	P902	P903	P904	P906	P908	P912	C918 + CP918WH	C924 + CP924WH
PREMERA grey	P901GY	P902GY	P903GY	P904GY	P906GY	P908GY	–	–	–
COPA c/w white cover	C901WH	C902WH	C903WH	C904WH	–	–	–	–	–
COPA interior	C901	C902	C903	C904	C906	C908	C912	C918	C924
COPA interior black	C901B	C902B	C903B	C904B	C906B	C908B	C912B	C918B	C924B
COPA plastic covers ¹⁾	CP901*	CP902*	CP903*	CP904*	CP906*	CP908*	CP912*	CP918*	CP924*
COPA metal covers ²⁾	CM901*	CM902*	CM903*	CM904*	CM906*	CM908*	CM912*	CM918*	CM924*
COPA fix plates – SS	B901SS	B902SS	B903SS	B904SS	B906SS*	B908SS*	B912SS*	B918SS*	B924SS*
XTRA surface range	X901MG	X902MG	X903MG	X904MG	X906MG	X908MG	X912MG	X918MG	X924MG
Back boxes									
Flush boxes – Metal	35mm deep	35mm deep	35mm deep	35mm deep	F8342	F8342	F8343	F8344	F8345
Surface metal boxes for Xtra plates									
– with knockouts	FM8340	FM8340	FM8341	FM8341	F8342	F8342	F8343	F8344	F8345
– without knockouts	FM8349	FM8349	FM8350	FM8350	F8351	F8351	F8352	–	–
Surface moulded boxes	F4501	F4501	F4502	F4502	–	–	–	–	–

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

*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
PREMERA									
Eaton list number:	P901	P902	P903	P904	P906	P908	P912	–	–
	P901GY	P902GY	P903GY	P904GY	P906GY	P908GY	–	–	–
Plate dimensions:	86 x 86mm	86 x 86mm	146 x 86mm	146 x 86mm	146 x 150mm	146 x 150mm	146 x 210mm	–	–
COPA interiors									
Eaton list number:	C901	C902	C903	C904	C906	C908	C912	C918	C924
	C901B	C902B	C903B	C904B	C906B	C908B	C912B	C918B	C924B
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
COPA & COPA fix plates									
Eaton list number:	C901WH	C902WH	C903WH	C904WH	–	–	–	–	–
	CP901¹⁾	CP902¹⁾	CP903¹⁾	CP904¹⁾	CP906¹⁾	CP908¹⁾	CP912¹⁾	CP918¹⁾	CP924¹⁾
	CM901²⁾	CM902²⁾	CM903²⁾	CM904²⁾	CM906²⁾	CM908²⁾	CM912²⁾	CM918²⁾	CM924²⁾
	B901SS	B902SS	B903SS	B904SS	B906SS	B908SS	B912SS	B918SS	B924SS
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
Xtra plates									
Eaton list number:	X901MG	X902MG	X903MG	X904MG	X906MG	X908MG	X912MG	X918MG	X924MG
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

¹⁾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

²⁾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

F9004



10A switches

- To BSEN60669-1.

Description

Description	Eaton list number		
	White module	Black module	Red rocker
10A 1 way	F9000	—	—
10A 2 way	F9001	F9001B	—
10A 2 way push to make	F9004	F9004B	—

F9021RR



20A switches

- To BSEN60669-1.

Description

Description	Eaton list number		
	White module	Black module	Red rocker
20A 1 way	F9020	F9020B	—
20A 2 way	F9021	F9021B	F9021RR
20A intermediate switch	F9022	F9022B	—

F9023



20A double pole switches

- To BSEN60669-1.

Description

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

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'	F9023BO	—	—
20A double pole marked 'cooker hood'	F9023CH	—	—
20A double pole marked 'dishwasher'	F9023DW	—	—
20A double pole marked 'extract fan'	F9023EF	—	—
20A double pole marked 'fridge freezer'	F9023FF	—	—
20A double pole marked 'fridge'	F9023FG	—	—
20A double pole marked 'freezer'	F9023FZ	—	—
20A double pole marked 'hob'	F9023HB	—	—
20A double pole marked 'hob hood'	F9023HH	—	—
20A double pole marked 'light'	F9023LI	—	—
20A double pole marked 'microwave'	F9023MW	—	—
20A double pole marked 'oven'	F9023OV	—	—
20A double pole marked 'plinth heater'	F9023PH	—	—
20A double pole marked 'tumble dryer'	F9023TD	—	—
20A double pole marked 'towel rail'	F9023TR	—	—
20A double pole marked 'washer dryer'	F9023WDR	—	—
20A double pole marked 'water heater'	F9023WH	—	—
20A double pole marked 'washing machine'	F9023WM	—	—

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	F9025	F9025B	–

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'	F9025BO	–	–
20A double pole + neon marked 'cooker hood'	F9025CH	–	–
20A double pole + neon marked 'dishwasher'	F9025DW	–	–
20A double pole + neon marked 'extract fan'	F9025EF	–	–
20A double pole + neon marked 'fridge freezer'	F9025FF	–	–
20A double pole + neon marked 'fridge'	F9025FG	–	–
20A double pole + neon marked 'hob'	F9025HB	–	–
20A double pole + neon marked 'heater'	F9025HE	–	–
20A double pole + neon marked 'microwave'	F9025MW	–	–
20A double pole + neon marked 'plinth heater'	F9025PH	–	–
20A double pole + neon marked 'tumble dryer'	F9025TD	–	–
20A double pole + neon marked 'washer dryer'	F9025WDR	–	–
20A double pole + neon marked 'water heater'	F9025WH	–	–
20A double pole + neon marked 'wachine machine'	F9025WM	–	–

F9032

**16A twin switches**

- To BSEN60669-1.

Description

	Eaton list number		
	White module	Black module	Red rocker
16A 1 way twin switch module	F9032	–	–

F9201B



10A broad rocker switches

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

Description

Description	Eaton list number		
	White module	Black module	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

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

F9063



F9072

**Ancillary items**

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

¹⁾ To BS5733

F9064

**Dimmer modules**

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

¹⁾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 ¹⁾	F9306	F9306B
13A 3 pin socket module 2 earth terminals ²⁾	F9313	F9313B
13A 3 pin non standard socket 2 earth terminals	F9314	F9314B
15A 3 pin shuttered socket ¹⁾	F9315	F9315B
16A Schuko socket ³⁾	F9317	F9317B
15A 3 pin 127v SASO socket ⁴⁾	F9318	F9318B

¹⁾ To BS546

²⁾ To BS1363 Part 2

³⁾ To IEC60884-1

⁴⁾ To BS5733:2010

F3784



Communication modules

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

¹⁾To BS5733

F9401



Premera xComfort RF switch modules

- See xComfort section for more information.

Description

Eaton list number White module

xComfort RF module surface mounting plate (will accept any CP902 type of plate – not supplied)	F9400
xComfort 1G RF switch module	F9401
xComfort 2G RF switch module	F9402
xComfort 4G RF switch module	F9404

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

xComfort 8A SP switching actuator	CSAU-01/02
xComfort 250W dimming actuator	CDAU-01/02

F8344



Grid boxes

- To BS5733.

Description

Eaton list number

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

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	P715
1G 16A 2W switch + neon IP66	P721
2G 16A 2W switch + neon IP66	P722
1G 20A DP + neon IP66	P741
2G 20A DP switch + neon IP66	P742

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	P761
2G IP66 enclosure	P762

P771



IP56 switch socket

Description	Eaton list number
13A 1G switched socket IP56	P771



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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5.6

COMMUNICATION OUTLETS

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Communication outlets 64

5.7

PREMERA MIX MODULE PLATES

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C012

**10A switches**

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

CM012SS



C012 + CM012SS

**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	C011WH	C011	C011B	CP011⁽¹⁾	CM011⁽²⁾	CP011WH
10A 2G 1 way	C012WH	C012	C012B	CP012⁽¹⁾	CM012⁽²⁾	CP012WH
10A 3G 1 way	C013WH	C013	C013B	CP013⁽¹⁾	CM013⁽²⁾	CP013WH
10A 4G 1 way	C014WH	C014	C014B	CP014⁽¹⁾	CM014⁽²⁾	CP014WH
10A 1G 1 way retractive switch with light symbol	C015LWH	C015	C015B	CP015L⁽¹⁾	CM015L⁽²⁾	CP015LWH
10A 1G 1 way retractive switch with bellpush symbol	C015WH	C015	C015B	CP015⁽¹⁾	CM015⁽²⁾	CP015WH
10A intermediate switch	C017WH	C017	C017B	CP011⁽¹⁾	CM011⁽²⁾	CP011WH
10A 1G 2 way	C021WH	C021	C021B	CP011⁽¹⁾	CM011⁽²⁾	CP011WH
10A 2G 2 way	C022WH	C022	C022B	CP012⁽¹⁾	CM012⁽²⁾	CP012WH
10A 3G 2 way	C023WH	C023	C023B	CP013⁽¹⁾	CM013⁽²⁾	CP013WH
10A 4G 2 way	C024WH	C024	C024B	CP014⁽¹⁾	CM014⁽²⁾	CP014WH
10A 6G 2 way	C026WH	C026	C026B	CP026⁽¹⁾	CM026⁽²⁾	CP026WH

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	C032WH	C032	—	CP013⁽¹⁾	CM013⁽²⁾	CP013WH
10A 1G 2 way broad switch	C041WH	C041	C041B	CP013⁽¹⁾	CM013⁽²⁾	CP013WH
10A 1G 1 way broad switch bellpush	C045WH	—	C045B	—	CM045⁽²⁾	—
10A intermediate broad switch	C047WH	—	C047B	CP013⁽¹⁾	CM013⁽²⁾	CP013WH
10A 3 pole broad rocker fan isolator	C048WH	C048	C048B	CP048⁽¹⁾	CM048⁽²⁾	CP048WH
10A 3 pole broad rocker isolator	C049WH	C048	C048B	—	CM049⁽²⁾	—

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	C9131WH	—	CP9131⁽¹⁾	CM9131⁽²⁾	CP9131WH
250W 2G 2 way	C9132WH	C9132	CP9132⁽¹⁾	CM9132⁽²⁾	CP9132WH
400W 1G 2 way	C9141WH	—	CP9131⁽¹⁾	CM9131⁽²⁾	CP9131WH
1000W 1G 2way – 2 gang size coverplate	C9111WH	—	CP9111⁽¹⁾	CM9111⁽²⁾	CP9111WH

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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

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	C9551WH	C9551	CP9131¹⁾	CM9131²⁾	CP9131WH
500W 2G 1 way	C9552WH	C9552	CP9132¹⁾	CM9132²⁾	CP9132WH
500W 1G 1 way fan controller	C9751WH	–	CP9131¹⁾	CM9131²⁾	CP9131WH
1000W 1G 1way	C9511WH	C9511	CP9131¹⁾	CM9131²⁾	CP9131WH

A9900PB

**Alternative dimmer knobs**

Description	Eaton list number
Dimmer knob – highly polished	A9900HP
Dimmer knob – polished brass	A9900PB
Dimmer knob – stainless steel	A9900SS

A9900SS

**¹⁾Plastic covers available in the following finishes**

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

²⁾Metal plates available in the following finishes

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

C622WH

**13A switched socket outlets**

- To BS 1363: Part 2.
- Minimum back box depth = 25mm.
- Terminals capable of accepting up to 3 x 4mm² or 2 x 6mm² conductors.
- Double pole with 2 earth terminals

Description	Eaton list number White interior c/w white cover	White interior	Black interior	Decorative plate option ¹⁾	Metallic plate option ²⁾	White cover
13A 1G DP switched socket 2E term	C621WH	C621	C621B	CP621¹⁾	CM621²⁾	CP621WH
13A 1G DP switched socket 2E term + neon	C621NWH	C621N	C621NB	—	CM621N²⁾	—
13A 2G DP switched socket 2E term	C622WH	C622	C622B	CP622¹⁾	CM622²⁾	CP622WH
13A 2G DP switched socket 2E term + neon	C622NWH	C622N	C622NB	—	CM622N²⁾	—
13A 2G DP switched socket 2E term	C622WH	C622	C622B	CP622¹⁾	CM622²⁾	CP622WH
13A 2G DP switched socket 2E term outboard rockers	C632WH	C632	C632B	CP632¹⁾	CM632²⁾	CP632WH
13A 1G DP switched socket 2E term non standard	C651WH	—	C651B	CP621¹⁾	CM621²⁾	CP621WH
13A 2G DP switched socket 2E term non standard	C652WH	—	—	CP632¹⁾	CM632²⁾	CP652WH

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 White interior c/w white cover	White interior	Black interior	Decorative plate option ¹⁾	Metallic plate option ²⁾	White cover
13A 2G with 2 x USB charger outlets	C692WH	—	C692B	CP692¹⁾	CM692²⁾	—

C111WHa

**13A unswitched socket outlets**

- To BS 1363: Part 2.
- Minimum back box depth = 25mm.
- Terminals capable of accepting up to 3 x 4mm² or 2 x 6mm² conductors.
- CP and CM coverplate on C111 item all end with an 'a'

Description	Eaton list number White interior c/w white cover	White interior	Black interior	Decorative plate option ¹⁾	Metallic plate option ²⁾	White cover
13A 1G unswitched socket	C111WHa	C111a	C111ba	CP111¹⁾	CM111²⁾	CP111WHa
13A 2G unswitched socket	C112WH	—	C112B	CP112¹⁾	CM112²⁾	CP112WH

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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

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 4mm² or 2 x 6mm² 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	C415WH	—	C415B	CP415¹⁾	CM415²⁾	CP415WH

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	C370WH	C370	C370B	CP370¹⁾	CM370²⁾	CP370WH

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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

C221NWH

**13A fused connection units**

- To BS 1363: Part 4.
- Minimum back box depth = 25mm.
- Terminals capable of accepting up to 3 x 4mm² or 2 x 6mm² 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	C220WH	C220	C220B	CP220¹⁾	CM220²⁾	CP220WH
13A fused connection unit + neon	C220NWH	C220N	C220NB	CP220N¹⁾	CM220N²⁾	CP220NWH
13A fused switched connection unit	C221WH	C221	C221B	CP221¹⁾	CM221²⁾	CP221WH
13A fused switched connection unit 'refrigerator'	—	C221	—	—	—	CP221RWH
13A fused switched connection unit 'washing machine'	—	C221	—	—	—	CP221WMWH
13A fused switched connection unit + neon	C221NWH	C221N	C221NB	CP221N	CM221N	CP221NWH
13A fused switched connection unit + neon 'refrigerator'	—	C221N	C221NB	CP221NR¹⁾	—	CP221NRWH
13A fused switched connection unit + neon 'washing machine'—	—	C221N	C221NB	CP221NWM¹⁾	—	CP221NWMWH

C212

**Adaptor plate**

Description	Eaton list number
Cable outlet adaptor plate	C212

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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

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

C422NWH



50A switches

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

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

C425NWH



45A switches

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

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

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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

CP392SV

**Blank plates**

- Minimum back box depth = 16mm.

Description

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	C391WH	C391	—	CP391¹⁾	CM391²⁾	CP391WH
2G blank plate	C392WH	C392	—	CP392¹⁾	CM392²⁾	CP392WH

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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

5.6

COPA clip-on plate accessory range

Communication outlets

C362



Telephone outlets

- 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
1G telephone outlet master	C360WH	C360	C360B	CP360⁽¹⁾	CM360⁽²⁾	CP360WH
1G telephone outlet secondary	C361WH	C361	C361B	CP360⁽¹⁾	CM360⁽²⁾	CP360WH
1G telephone outlet RJ11	–	C362	C362B	CP360⁽¹⁾	CM360⁽²⁾	CP360WH
1G RJ45 CAT 6 outlet	C363WH	C363	C363B	CP360⁽¹⁾	CM360⁽²⁾	CP360WH

C351B



TV co-axial outlets

- To BS3041-2.
- 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
1G TV co-axial outlet	C351WH	C351	C351B	CP351⁽¹⁾	CM351⁽²⁾	CP351WH
2G TV co-axial outlet	C352WH	–	–	CP352⁽¹⁾	CM352⁽²⁾	CP352WH

CP351GL



C351B + CP351GL



C353WH



TV/FM/radio and satellite outlets

- To BS 6312: 2.2.
- 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
1G TV/FM isolated co-axial outlet	C353WH	–	–	CP351⁽¹⁾	CM351⁽²⁾	CP351WH
2G TV/FM diplexer co-axial outlet	C354WH	C354	–	CP352⁽¹⁾	CM352⁽²⁾	CP352WH
1G Satellite outlet	C355WH	C355	C355B	CP351⁽¹⁾	CM351⁽²⁾	CP351WH
2G TV/Satellite outlet	C356WH	–	C356B	CP352⁽¹⁾	CM352⁽²⁾	CP352WH

¹Plastic covers available in the following finishes

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

²Metal plates available in the following finishes

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

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 ³⁾	White interior ³⁾	Black interior ³⁾	Decorative plate option ⁴⁾	Metallic plate option ⁴⁾	White cover ⁴⁾
1 module plate	C901WH	C901	C901B	CP901¹⁾	CM901²⁾	CP901WH
2 module plate	C902WH	C902	C902B	CP902¹⁾	CM902²⁾	CP902WH
3 module plate	C903WH	C903	C903B	CP903¹⁾	CM903²⁾	CP903WH
4 module plate	C904WH	C904	C904B	CP904¹⁾	CM904²⁾	CP904WH
6 module plate	C906WH	C906	C906B	CP906¹⁾	CM906²⁾	CP906WH
8 module plate	C908WH	C908	C908B	CP908¹⁾	CM908²⁾	CP908WH
12 module plate	–	C912	C912B	CP912¹⁾	CM912²⁾	CP912WH
18 module plate	–	C918	C918B	CP918¹⁾	CM918²⁾	CP918WH
24 module plate	–	C924	C924B	CP924¹⁾	CM924²⁾	CP924WH

³⁾ Supplied with mounting frames/earth bars⁴⁾ Covers only**PREMERA mix plate dimensions**

	1 gang	2 gang	3 gang	4 gang	6 gang	8 gang	12 gang	18 gang	24 gang
PREMERA									
Eaton list number:	P901	P902	P903	P904	P906	P908	P912	–	–
	P901GY	P902GY	P903GY	P904GY	P906GY	P908GY	–	–	–
Plate dimensions:	86 x 86mm	86 x 86mm	146 x 86mm	146 x 86mm	146 x 150mm	146 x 150mm	146 x 210mm	–	–
COPA interiors									
Eaton list number:	C901	C902	C903	C904	C906	C908	C912	C918	C924
	C901B	C902B	C903B	C904B	C906B	C908B	C912B	C918B	C924B
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
COPA & COPA fix plates									
Eaton list number:	C901WH	C902WH	C903WH	C904WH	–	–	–	–	–
	CP901¹⁾	CP902¹⁾	CP903¹⁾	CP904¹⁾	CP906¹⁾	CP908¹⁾	CP912¹⁾	CP918¹⁾	CP924¹⁾
	CM901²⁾	CM902²⁾	CM903²⁾	CM904²⁾	CM906²⁾	CM908²⁾	CM912²⁾	CM918²⁾	CM924²⁾
	B901SS	B902SS	B903SS	B904SS	B906SS	B908SS	B912SS	B918SS	B924SS
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
Xtra plates									
Eaton list number:	X901MG	X902MG	X903MG	X904MG	X906MG	X908MG	X912MG	X918MG	X924MG
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

¹⁾Plastic covers available in the following finishes

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

²⁾Metal plates available in the following finishes

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



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	B621SS
13A 2G DP switched socket 2E terminals	B622SS
13A 1G DP switched socket 2E terminals + neon	B621NSS
13A 2G DP switched socket 2E terminals + neon	B622NSS

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	B621RRSS
13A 2G DP switched socket 2E terminals – red rockers	B622RRSS

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	B632SS
---	---------------

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	B651SS
13A 2G DP switched socket 2E terminals – non-standard outboard rockers	B652SS

B111SS

**13A unswitched sockets**

- To BS1363 Part 2.

Description**Eaton list number**
Stainless steel

13A 1G unswitched socket	B111SS
13A 2G unswitched socket	B112SS

B370SS

**Shaver socket**

- To BSEN61558-2-5.

Description**Eaton list number**
Stainless steel

Shaver socket dual voltage 230V 115AC	B370SS
---------------------------------------	---------------

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	B401NSS
20A DP switch	B401SS
20A DP switch + neon marked 'water heater'	B403NSS

B422NSS

**45A/50A switches****Description****Eaton list number**
Stainless steel

50A DP switch + neon – 2 gang plate size	B421NSS¹⁾
50A DP switch + neon	B422NSS¹⁾
45A DP cooker control unit + neon	B425NSS²⁾
50A DP switch + neon marked 'cooker'	B426NSS¹⁾

¹⁾ To BSEN60669-1.²⁾ 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**

1 module cover plate c/w mounting frame	B901SS
2 module cover plate c/w mounting frame	B902SS
3 module cover plate c/w mounting frame	B903SS
4 module cover plate c/w mounting frame	B904SS
6 module cover plate (2 banks)	B906SS
8 module cover plate (2 banks)	B908SS
12 module cover plate (3 banks)	B912SS
18 module cover plate (3 banks)	B918SS
24 module cover plate (4 banks)	B924SS



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.

7.1

SWITCHES

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7.2

SOCKET OUTLETS

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7.3

FUSED CONNECTION UNITS

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7.4

PREMERA MIX MODULE PLATES AND BLANK PLATES

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Blank plates	80

X022MG

**10A switches**

- To BSEN 60669-1.
- Supplied with M3.5 fixing screws. Each terminal is capable of accepting up to 3 x 1.5mm² 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	X021MG
10A 2G 2 way	X022MG
10A 3G 2 way	X023MG
10A 1G intermediate	X017MG

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 1.5mm² 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	X048MG
10A broad fan isolator	X049MG

X401NMG

**20A double pole switches**

- To BSEN 60669-1.
- Supply terminals accept 3 x 2.5mm² conductors. Load terminals accept 2 x 2.5mm² conductors.

Description	Eaton list number
20A DP switch	X401MG
20A DP switch + neon	X401NMG

X421NMG

**50A double pole switch**

- To BSEN 60669-1.

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

X111MG



13A unswitched socket outlets

- To BS 1363:Part 2.
- Terminals capable of accepting up to 3 x 4mm² or 2 x 6mm² 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 4mm² or 2 x 6mm² 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	Eaton list number
15A 1G switched socket	X415MG

X220MG



13A fused connection units – unswitched

- To BS 1363: Part 4: 1995.
- Live and neutral terminals accept 2 x 4mm² cables.

Description	Eaton list number
13A unswitched connection unit	X220MG
13A unswitched connection unit + neon	X220NMG

X221MG



13A fused connection units

- To BS 1363: Part 4: 1995.
- Live and neutral terminals accept 2 x 4mm².

Description	Eaton list number
13A switched connection unit	X221MG
13A switched connection unit + neon	X221NMG

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 2.5mm² 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	X220RRMG
13A DP switched connection unit – red rocker	X221RRMG
13A DP switched connection unit – red rocker + neon	X221NRRMG

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	X901MG
2G module coverplate c/w earth bar	X902MG
3G module coverplate c/w earth bar	X903MG
4G module coverplate c/w earth bar	X904MG
6G module coverplate c/w mounting frame	X906MG
8G module coverplate c/w mounting frame	X908MG
12G module coverplate c/w mounting frame	X912MG
18G module coverplate c/w mounting frame	X918MG
24G module coverplate c/w mounting frame	X924MG

X391MG



Blank plates

Description	Eaton list number
1G blank plate	X391MG
2G blank plate	X392MG



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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8.4 CEILING SWITCHES

Ceiling switches	85
------------------------	----

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 1.5mm² 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 1.5mm² conductors.

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



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.

9.1 LSC PLUG-IN LIGHTING SYSTEM

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9.2 LDU SYSTEM

6G/8G/10G/12G LDU multi-outlet boxes.....	90
3 pin and 4 pin plugs.....	90

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 4.0mm² 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)

F85013 pin assembly c/w 2 mtrs 0.75mm² HR (heat resistant) cable**F8570**3 pin assembly c/w 2 mtrs 1.00mm² HR (heat resistant) cable**F8571**3 pin assembly c/w 3 mtrs 0.75mm² HR (heat resistant) cable**F8572**3 pin assembly c/w 3 mtrs 1.00mm² HR (heat resistant) cable**F8573**3 pin assembly c/w 2 mtrs 0.75mm² LSF (low smoke and fume) cable**F8580**3 pin assembly c/w 2 mtrs 1.00mm² LSF (low smoke and fume) cable**F8581**3 pin assembly c/w 3 mtrs 0.75mm² LSF (low smoke and fume) cable**F8582**3 pin assembly c/w 3 mtrs 1.00mm² LSF (low smoke and fume) cable**F8583**3 pin assembly c/w 1 mtr 1.00mm² LSF (low smoke and fume) cable**F8584**

F8502

**LSC ceiling outlet**

- To BS 6972: 1988 and BS 7001: 1988.
- Large outlet terminals will take up to 2 x 4.0mm² cable.
- Flush mounting box for F8502 is a standard BESA circular box (27mm deep).

Description**Eaton list number**

3 pin LSC ceiling outlet

F8502

F8540

**3 pin system LSC plug**

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

Description**Eaton list number**

3 pin LSC re-wireable plug

F8540

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

F8534

Ceiling rose cover – red

F8635

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.
- Outlet terminals will accept 2 x 4.0mm² incoming cables.
- Heat resisting cable attached is to BS 6141.
- Fixing centres 50.8mm.

F8671



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 ² HR (heat resistant) cable	F8670
4 pin assembly c/w 2 mtrs 1.00mm ² HR (heat resistant) cable	F8671
4 pin assembly c/w 3 mtrs 1.00mm ² HR (heat resistant) cable	F8672
4 pin assembly c/w 2 mtrs 1.00mm ² LSF (low smoke and fume) cable	F8681
4 pin assembly c/w 3 mtrs 1.00mm ² LSF (low smoke and fume) cable	F8682
4 pin assembly c/w 1 mtr 1.00mm ² 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 2.5mm² 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	LDU6
8G LSC outlet unit – 4 pin	LDU8
10G LSC outlet unit – 4 pin	LDU10
12G LSC outlet unit – 4 pin	LDU12

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

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



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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10.4	COMFORT MODE OVERVIEW AND COMPONENTS	98-100

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 values, 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

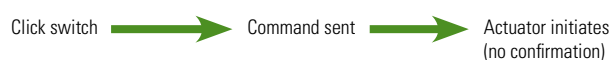
This is ideal for straightforward installations. The functions of the devices can be assigned by just activating the programming key and the corresponding push-button, a simple procedure that requires no complicated tools – all that is needed is a small screwdriver.

Three simple steps

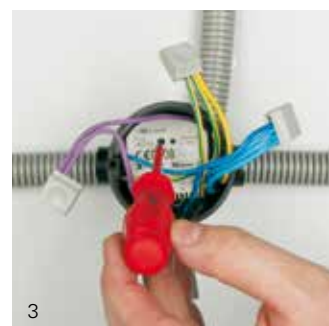
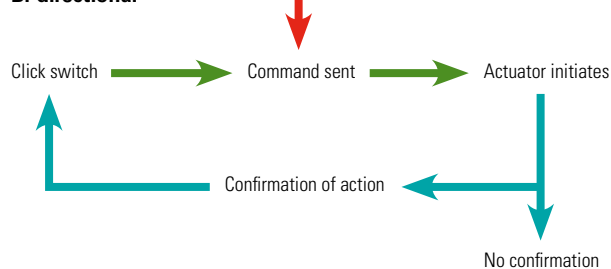
1. Press the configuration button on the actuator with a screwdriver for less than 0.5 seconds. Actuator enters teaching mode. LED in the actuator is on.
2. Press the selected pushbutton for less than 0.5 sec. The LED in the assigned actuator flashes twice for confirmation.
3. Press the configuration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

Uni-directional



Bi-directional



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.

F9404



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

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	CSAU-01/01-10
10A/230VAC Local input	CSAU-01/01-10I
10A/230VAC Local input + energy measurement	CSAU-01/01-10IE

RF switching actuator 16A

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

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-01/01

**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	CDAE-01/01
250W/230VAC (pre set dimming range 20–99%)	CDAE-01/02
250W (pre set dimming range 0–55%)	CDAE-01/03

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	CDAP-01/13

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	CJAU-01/02

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)	CHSZ-01/05

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)	CHSZ-02/02

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	CHSZ-12/03

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	CHSZ-12/04

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	CBMA-02/01

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	CMMZ-00/09

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

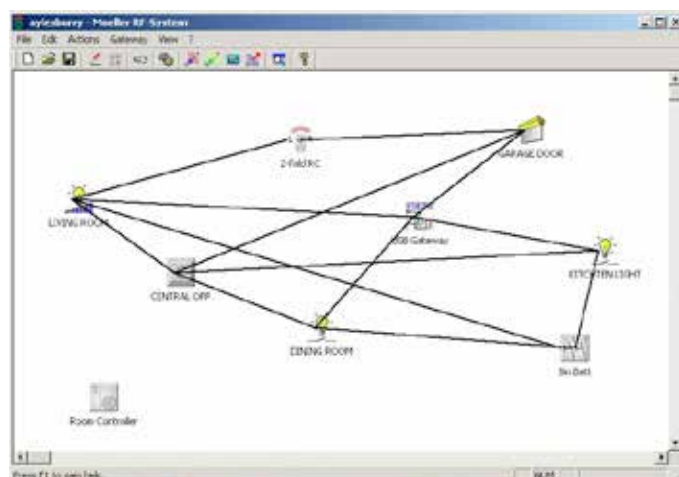
Comfort mode overview – using MRF software

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

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

CHCA-00/01

**Control & communication****Description****Eaton list number**

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



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	-	-	-	-	EAS10DDS
179441	16 way metal consumer unit dual tariff 2 x 100A	16	100	-	-	-	-	EAS16DDS

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	-	-	-	-	EAS10DDSF
179486	16 way metal consumer unit dual tariff 2 x 100A flush	16	100	-	-	-	-	EAS16DDSF

EASDL



Accessories

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

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	IKA-1/4-ST-UV
DIN rail enclosure 6 module	Transparent door & N/PE	Moulded	6	65	IKA-1/6-ST-UV
DIN rail enclosure 8 module	Transparent door & N/PE	Moulded	8	65	IKA-1/8-ST-UV

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	AN2
DIN rail enclosure 2 module	Fitted 100A SPSN isolator	Moulded	2	40	AN2D
DIN rail enclosure 2 module	Sealable access with earth bar	Moulded	2	40	AN25
Service isolator 2 module	Fitted 100A SPSN isolator	Moulded	2	40	AN2EBD¹⁾
Service isolator 4 module	Sealable front access	Moulded	4	40	AN4EBS¹⁾

¹⁾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	EAN2SEBD
DIN rail enclosure 4 module	Sealable terminal access	Metal	4	30	EAN4SEBD
Service Isolator 2 module	Fitted 100A SPSN isolator	Metal	2	30	EAN2SEBD1001N

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	EAM162V
EAM 16A 2 Pole RCCB 30mA	16	30	EAM162H
EAM 25A 2 Pole RCCB 30mA	25	30	EAM252H
EAM 40A 2 Pole RCCB 30mA	40	30	EAM402H
EAM 63A 2 Pole RCCB 30mA	63	30	EAM632H
EAM 80A 2 Pole RCCB 30mA	80	30	EAM802H
EAM 80A 2 Pole RCCB 30mA reversed pole	80	30	EAM802RH
EAM 100A 2 Pole RCCB 30mA	100	30	EAM1002H
EAM 100A 2 Pole RCCB 30mA reversed pole	100	30	EAM1002RH

EAM252M

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

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

EAM802M

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

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

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	EAD06BH30C
EAD 10A 6kA type B SP 30mA RCBO	10	B	30	EAD10BH30C
EAD 16A 6kA type B SP 30mA RCBO	16	B	30	EAD16BH30C
EAD 20A 6kA type B SP 30mA RCBO	20	B	30	EAD20BH30C
EAD 25A 6kA type B SP 30mA RCBO	25	B	30	EAD25BH30C
EAD 32A 6kA type B SP 30mA RCBO	32	B	30	EAD32BH30C
EAD 40A 6kA type B SP 30mA RCBO	40	B	30	EAD40BH30C
EAD 45A 6kA type B SP 30mA RCBO	45	B	30	EAD45BH30C

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	EAD06CH30C
EAD 10A 6kA type C SP 30mA RCBO	10	C	30	EAD10CH30C
EAD 16A 6kA type C SP 30mA RCBO	16	C	30	EAD16CH30C
EAD 20A 6kA type C SP 30mA RCBO	20	C	30	EAD20CH30C
EAD 25A 6kA type C SP 30mA RCBO	25	C	30	EAD25CH30C
EAD 32A 6kA type C SP 30mA RCBO	32	C	30	EAD32CH30C
EAD 40A 6kA type C SP 30mA RCBO	40	C	30	EAD40CH30C
EAD 45A 6kA type C SP 30mA RCBO	45	C	30	EAD45CH30C

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	TSSD1CO

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	TSSD1NO

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	TSQD1CO

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 y rs	15 min.	17.5 mm	167388	1	TSQD1NO

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	TSQW1CO

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	TSDW1CO

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	TSDW1COMIN

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	TSDW1CODG

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	TSDW1COA

TSDW2C0



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	TSDW2C0

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	TLE

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

CR2504024



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
Contactors	63	230	220	54	2 NO	CR6320230
Contactors	63	230	220	54	4 NO	CR6340230

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
Contactors	20	230	18	2 NO	CRM2020230A
Contactors	25	230	36	4 NO	CRM2540230A

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	CRA611
Auxiliary	6	9	2 NO	CRA620

CRC63

**Terminal covers (sealable)**

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

CRS

**Spacer / blanking module**

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

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	Z-S230/S
Impulse relay	16	230	1P	18	1 NO / 1 NC	Z-S230/S0

TR-G3/8

**Transformers**

Description	Volts	Amps	Width (mm)	Module	Eaton list number
Bell Transformer 2 module	4/8	1.0	36	2	TR-G3/8
	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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12.2 **CIRCA TECHNICAL DATA**

Ceiling roses and pendants specifications/BC3 lamp information 119

12.3 **XCOMFORT TECHNICAL DATA**

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12.5 **SWITCH AND PROTECTION DEVICES DIMENSIONS AND DATA**

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12.6 **CONTROL AND SWITCHING DEVICES DIMENSIONS AND DATA**

Analogue timers 132–133

Digital timers 134–135

Staircase timers 136–137

Contactors 138–142

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 4mm² or 2 x 6mm² 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 ²	1.0mm ²
1.5mm ²	1.0mm ²
2.5mm ²	1.5mm ²
4.0mm ²	1.5mm ²
6.0mm ²	2.5mm ²
10.0mm ²	4.0mm ²

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 mm² or 2 x 6mm² 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.

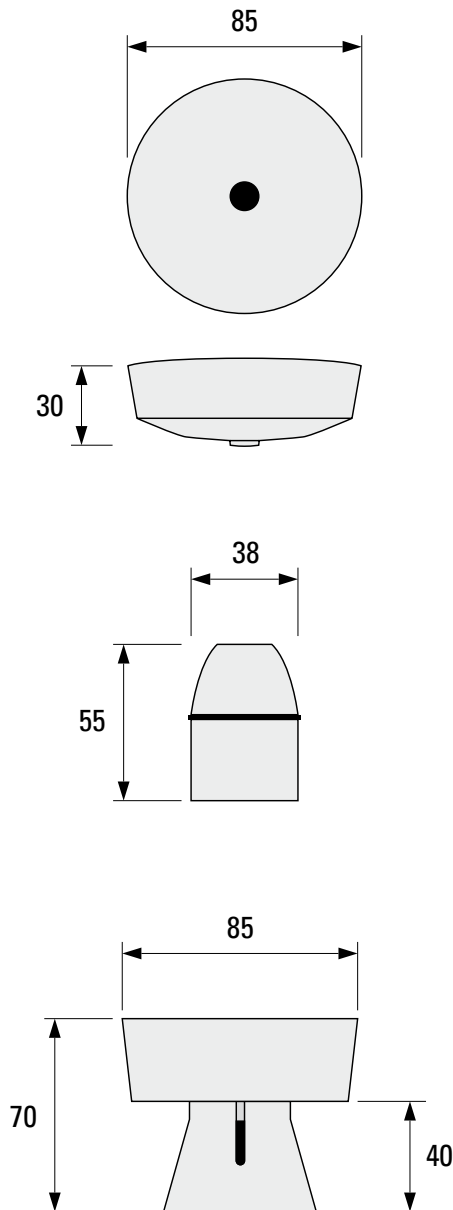
45A and 50A switches

- 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 ²	1.5mm ²	2.5mm ²	4.0mm ²	6.0mm ²	10.0mm ²
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 1.0mm², 2 x 1.5mm²
- 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 1.0mm², 3 x 1.5mm², 1 x 1.5mm²
 - Ambient operating temperature -5°C to +40°C
- Ceiling switches.
 - Terminal capacity: 3 x 1.5mm² 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

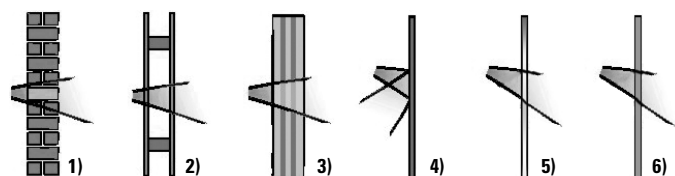
Wired type 50 46 27

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



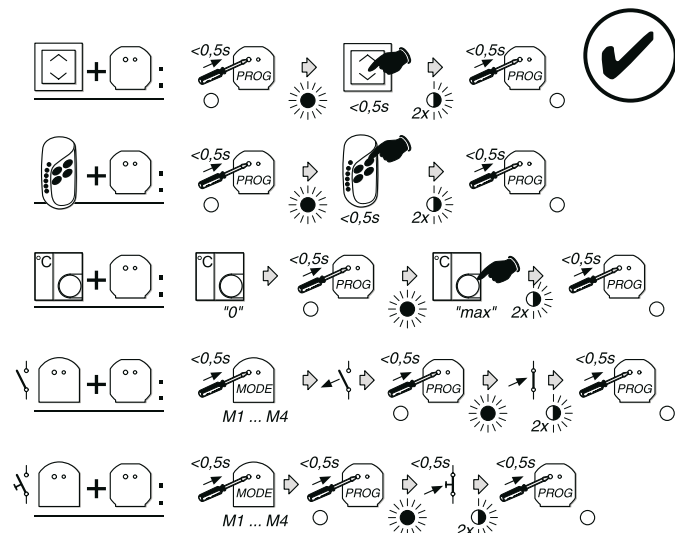
RF System Basic Mode Card

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	

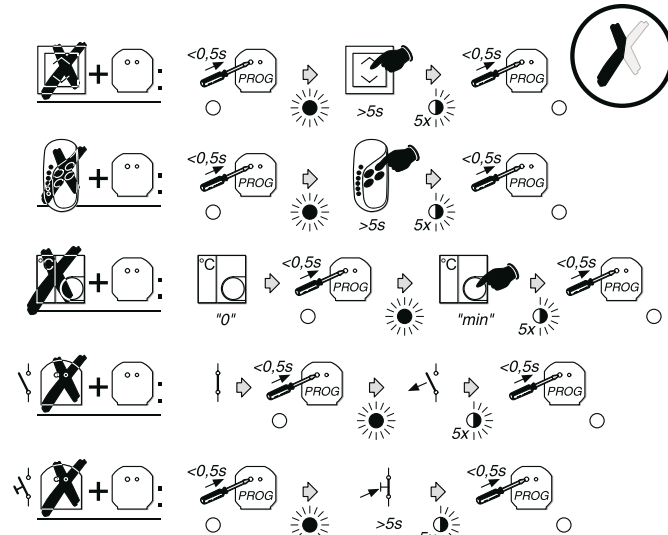
- 1) Brick-type wall approx. 60–90%
- 2) Wood and wood frames with sandwich-type plaster board approx. 80–95%
- 3) Concrete with steel reinforcement approx. 20–60%
- 4) Metal walls approx. 0–10%
- 5) Ordinary glass approx. 70–90%. Insulating glass (metalized) approx. 30–60%
- 6) Synthetic material approx.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

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

Allocate functions



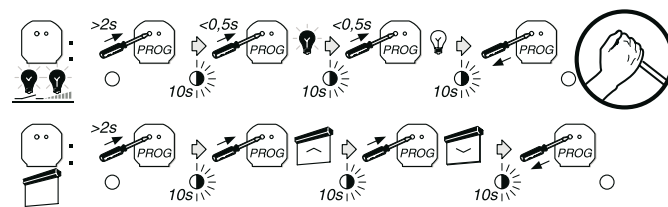
Delete individual sensors

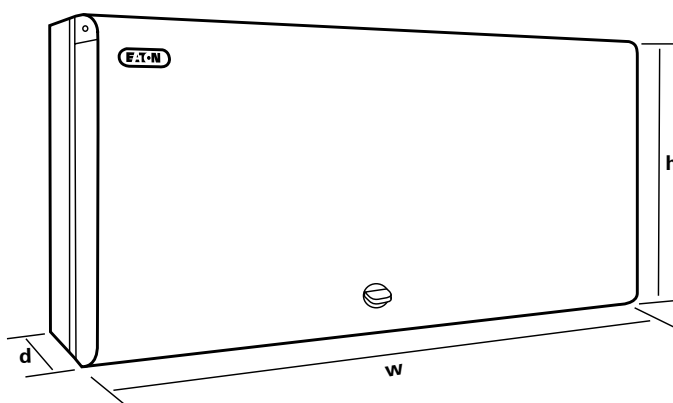


Totally delete an actuator



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	EAS2S
179408	6 way metal consumer unit 100A isolator	251	223	113	EAS6S
179409	10 way metal consumer unit 100A isolator	323	223	113	EAS10S
179410	12 way metal consumer unit 100A isolator	358	223	113	EAS12S
179411	14 way metal consumer unit 100A isolator	394	223	113	EAS14S
179412	18 way metal consumer unit 100A isolator	464	223	113	EAS18S
183294	20 way metal consumer unit 2-pole isolator	499	223	113	EAS20S
179413	26 way metal consumer unit 100A isolator	358	420	113	EAS26S
179414	38 way metal consumer unit 100A isolator	464	420	113	EAS38S

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	EAS2H40S
179416	2 way metal consumer unit 63A 30mA RCD	179	223	113	EAS2H63S
179417	6 way metal consumer unit 63A 30mA RCD	251	223	113	EAS6H63S
179418	6 way metal consumer unit 80A 30mA RCD	251	223	113	EAS6H80S
179419	6 way metal consumer unit 100A 30mA RCD	251	223	113	EAS6H100S
179420	10 way metal consumer unit 100A 30mA RCD	323	223	113	EAS10H100S
179421	12 way metal consumer unit 100A 30mA RCD	394	223	113	EAS12H100S
179422	18 way metal consumer unit 100A 30mA RCD	464	223	113	EAS18H100S
183295	20 way metal consumer unit 100A 30mA RCD	499	223	113	EAS20H100S

Split load full metalclad surface mounting consumer units

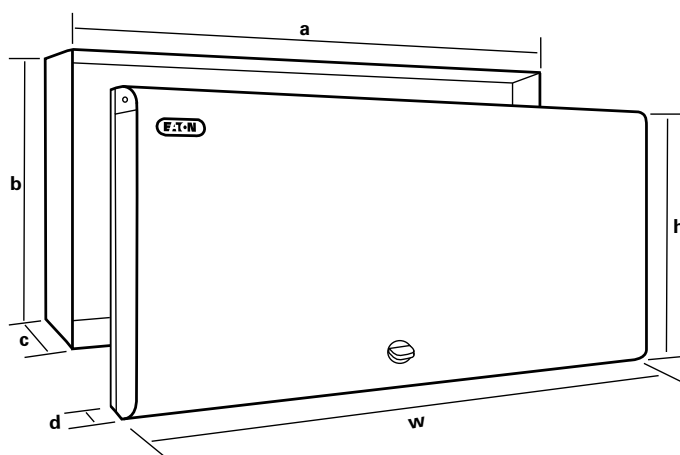
Material	Description	Dimensions (mm)			Eaton list number
		w	h	d	
179423	8 way metal consumer unit 63A 30mA split load	323	223	113	EAS8H63DS
179424	8 way metal consumer unit 80A 30mA split load	323	223	113	EAS8H80DS
179425	10 way metal consumer unit 63A 30mA split load	358	223	113	EAS10H63DS
179426	10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

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

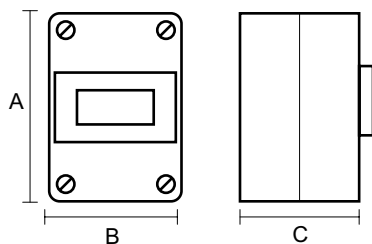
Dual RCD full metalclad flush mounting consumer units

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

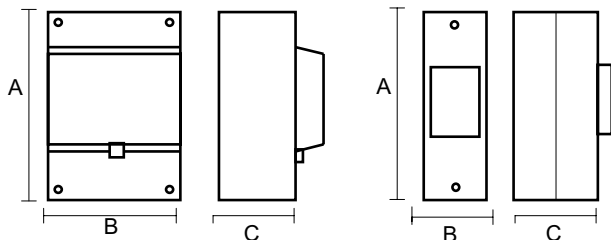
Material	Description	Front dimensions			Rear dimensions			Eaton list number
		w (mm)	h (mm)	d (mm)	a (mm)	b (mm)	c (mm)	
179485	10 way metal consumer unit dual tariff 2 x 100A Flush	398	265	36	350	220	80	EAS10DDSF
179486	16 way metal consumer unit dual tariff 2 x 100A Flush	504	265	36	456	220	80	EAS16DDSF

Enclosures, dimensional drawings IP65

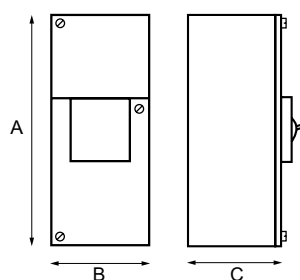


Eaton list number	Description of modules	Finish	Number	IP rating	Dimensions mm		
					A	B	C
IKA-1/4-ST-UV	DIN rail enclosure 4 module	Moulded	4	65	231	166	113
IKA-1/6-ST-UV	DIN rail enclosure 6 module	Moulded	6	65	231	202	113
IKA-1/8-ST-UV	DIN rail enclosure 8 module	Moulded	8	65	231	238	118

Enclosures dimensions IP40



Eaton list number	Description	Finish	Number of modules	IP rating	Dimensions mm		
					A	B	C
AN2	DIN rail enclosure 4 module	Moulded	2	40	135	40	65
AN2D	DIN rail enclosure 6 module	Moulded	2	40	135	40	65
AN25	DIN rail enclosure 8 module	Moulded	2	40	135	50	65
AN2EBD	DIN rail enclosure 6 module	Moulded	2	40	135	40	65
AN4EBLS	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
EAN2SEBD	DIN rail enclosure 2 module	Metal	2	30	194	70	83
EAN2SEBD1001N	Service Isolator 2 module	Metal	2	30	194	79	83
EAN4SEBD	DIN rail enclosure 4 module	Metal	4	30	194	115	83

Consumer units and enclosures technical data

	Earth	Neutral	Isolator	RCCB	RCBO		MCB
Connection type	Pinch screw	Pinch screw	Box clamp	Box clamp	Box clamp	Box clamp	Box clamp
Screw type	Combination	Combination	Combination	Combination	Combination	Combination	Combination
Size	M5	M5	M6	M5	M5	M4	M5
Min cable size	1mm ²	1mm ²	2.5mm ²	1mm ²	1mm ²	1mm ²	1mm ²
Max cable size	16mm ²	16mm ²	50mm ²	35mm ²	25mm ²	16mm ²	25mm ²
Recommended torque	Note 1	Note 1	2.5Nm	2.0Nm	2.0Nm	1.2Nm	2.0Nm
Maximum torque	Note 1	Note 1	5.0Nm	2.4Nm	2.4Nm	1.5Nm	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 25mm².

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.

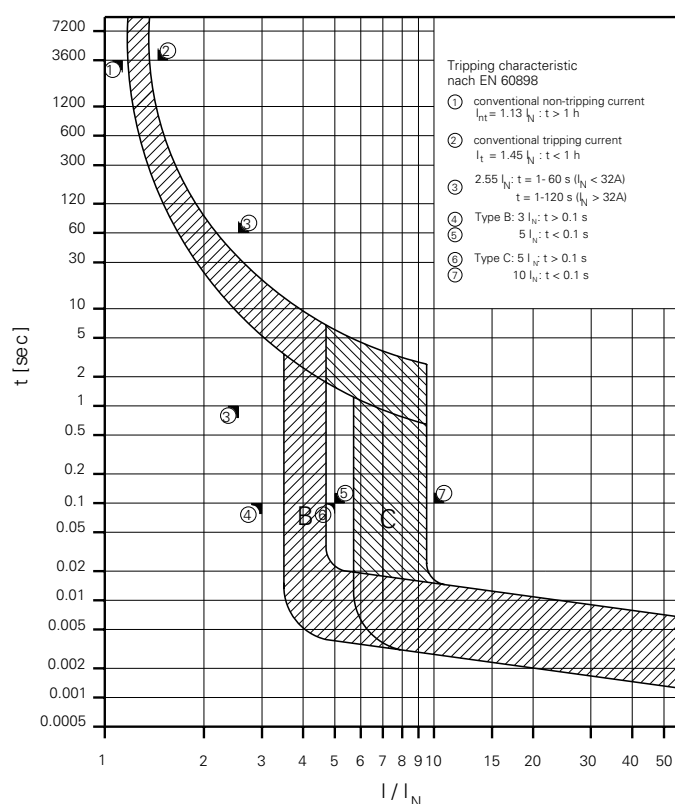
IEC/EN 60898 Type	Instantaneous Trip Current (x I _n)	Typical Application	Eaton 6kA MCB Type
B	3 to 5	Domestic	EAD B
C	5 to 10	Commercial Light Industrial	EAD C
D	10 to 20	General Industrial	—

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.

Tripping characteristic type B and C



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_o 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

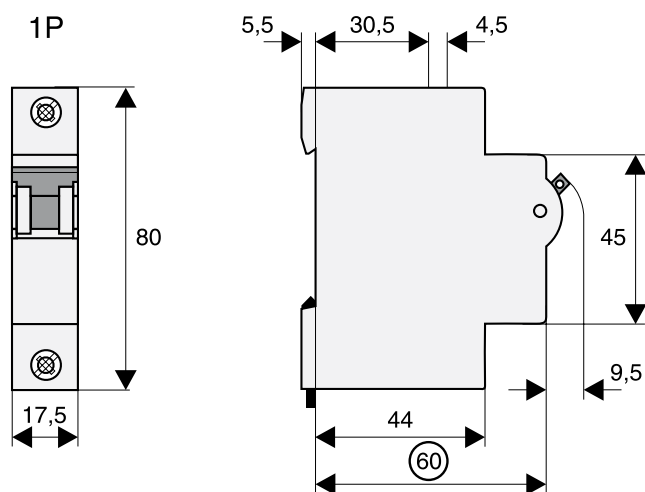
Note: A minimum Voltage factor C_{min} = 0.95 has been introduced to take account of variations in supply voltage depending on time, place and transformer settings etc., in accordance with Electricity Safety, Quality and Continuity regulations 2002.

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

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	-	-

6kA MCB dimensional drawings



6kA MCB technical data

Product standard	IEC/EN 60898
No of poles	1P
Mechanical specification	
Device width	17.7mm
Terminal type	Box clamp
Terminal capacity	1 – 25mm ²
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	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
Tripping characteristic	
Instantaneous tripping current I _{mt}	Type B: 3 I _n < I _{mt} < 5 I _n Type C: 5 I _n < I _{mt} < 10 I _n
Conventional non tripping current	I _{nt} = 1.13 I _n
Conventional tripping current	I _t = 1.45 I _n
Ref/calibration temp	40° C
Number of operating cycles elec	>4000
Number of operating cycles mech	>20000

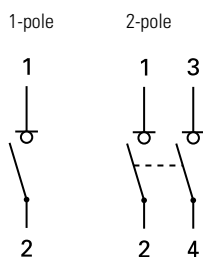
Main load disconnecter switch (Isolators)

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 mm², 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

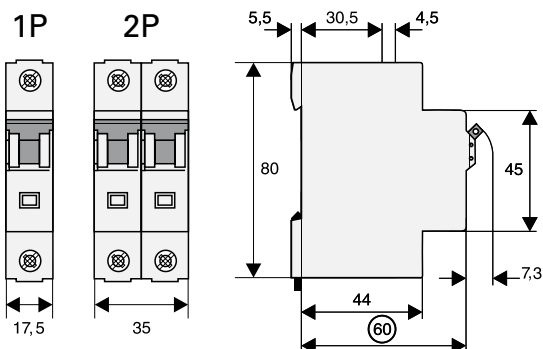
Device width	
1p	17.7mm
2p	35mm
Terminal type	Box clamp
Terminal capacity	2.5 – 50mm ²
Terminal screw	M6 combination
Terminal torque recommended	2.5Nm - max 5.0Nm
Mounting	DIN rail
Degree of protection	IP 10
Positive contact indication	Yes (Red/Green)

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 I _{cw}	2kA
Rated short circuit making I _{cm}	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 35mm².

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.

RCBO – 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.

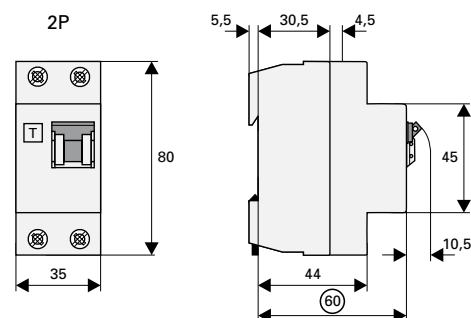
30mA – Provides a high degree of protection against electric shock due to direct and indirect contact. A 30mA RCD will trip within 40mS when a fault current of 150mA is detected.

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 ²
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

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 16mm².

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

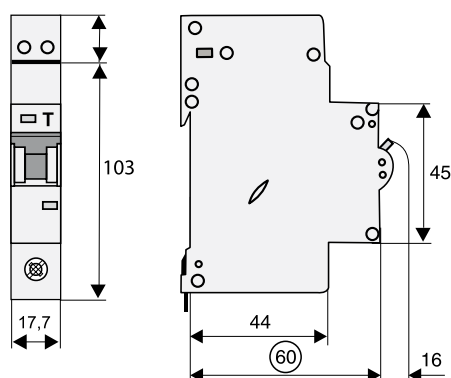
Device width	17.7 mm
Terminal type	Box clamp
Mounting	DIN rail
Degree of protection	IP 20
Positive contact indication	Yes (red/green)

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_{mt}	Type B: $3 I_n < I_{mt} < 5 I_n$
	Type C: $5 I_n < I_{mt} < 10 I_n$
Conventional non tripping current I_{nt}	$1.13 I_n$
Conventional tripping current I_t	$1.45 I_n$
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

RCBOs dimensions (mm)

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

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

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

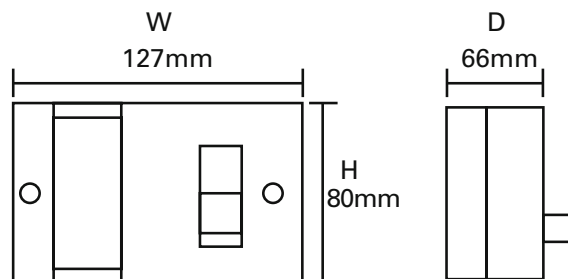
Rated current and fuse details

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
General					
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
Switching contact(s)					
Type of switching contact	1 x C0	1 x N0	1 x C0	1 x C0	1 x N0
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
Programming features					
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 ¹⁾	On, Off, Auto	On, Off, Auto	On, Off, Auto	On, Off, Auto	On, Off, Auto
Switching status indication	x	x	x	x	x
Dimensions and weight					
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
Terminals					
Terminal screw size	M3.5	M3.5	M3.5	M3.5	M3.5

¹⁾ Remark

ON = Permanent ON

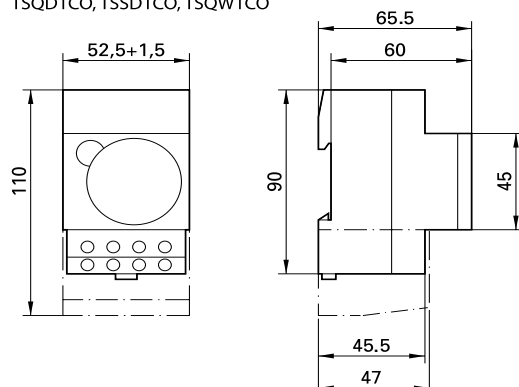
OFF = Permanent OFF

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

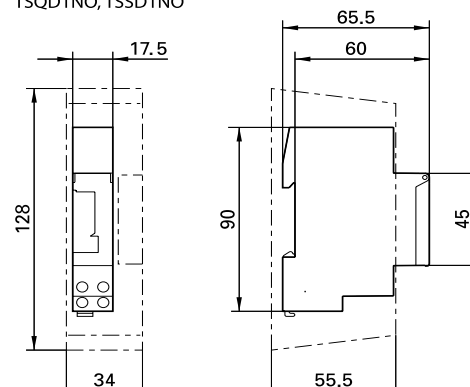
Auto = According program

Analogue daily and weekly timers - dimensional drawings

TSQD1CO, TSSD1CO, TSQW1CO

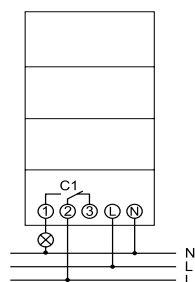


TSQD1NO, TSSD1NO

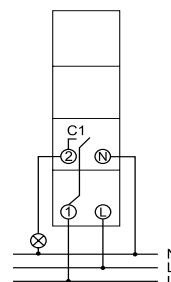


Analogue daily and weekly time switches - wiring diagrams

TSQD1CO, TSSD1CO, TSQW1CO



TSQD1NO, TSSD1NO



Digital timers - week programme

	TSDW1C0	TSDW1COMIN	TSDW2C0	TSDW1C0A	TSDW1C0DG
General					
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 ¹⁾	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
Switching contact(s)					
Type of switching contact	1 x C0	1 x C0	2 x C0	1 x C0	1 x C0
Switching capacity at 250 V~, cos φ = 1	16 A	16 A	16 A	16 A	16 A
Switching capacity bij 250 V~, cos φ = 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
Programming features					
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 ²⁾	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
Dimensions and weight					
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
Terminals					
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:

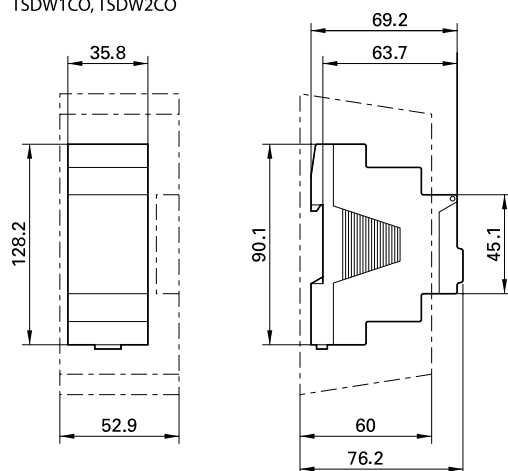
ON = Permanent ON

OFF = Permanent OFF

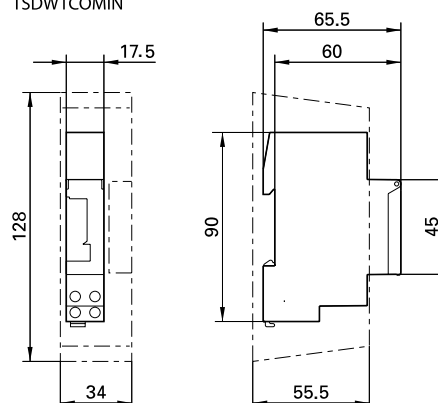
Auto = According Programme

Digital weekly time switches - dimensional drawings

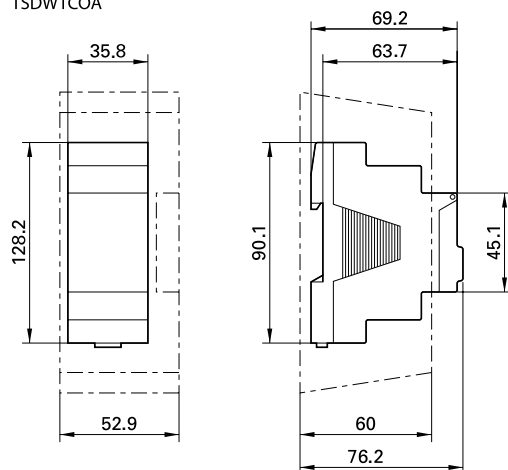
TSDW1CO, TSDW2CO



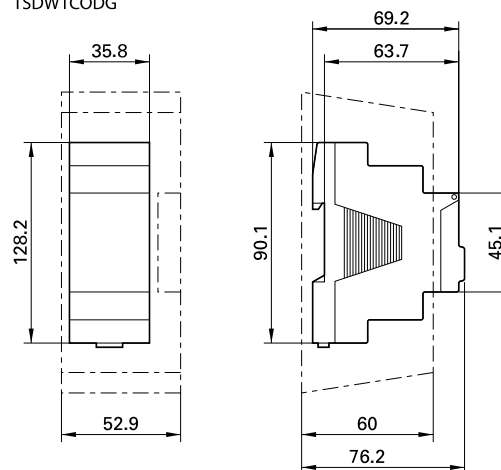
TSDW1COMIN



TSDW1COA

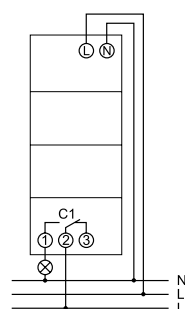


TSDW1CODG

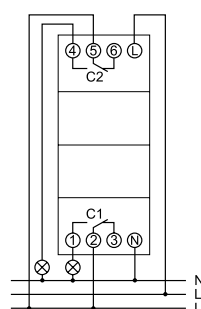


Digital weekly timers - wiring diagrams

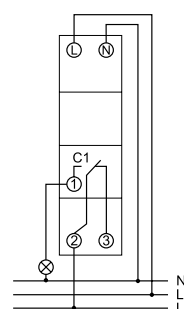
TSDW1CO



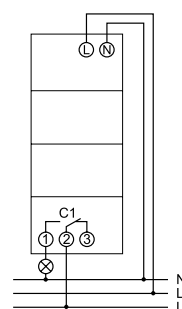
TSDW2CO



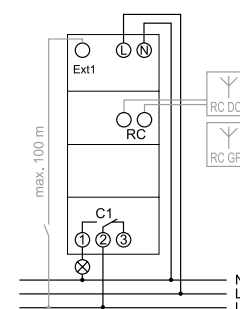
TSDW1COMIN



TSDW1COA



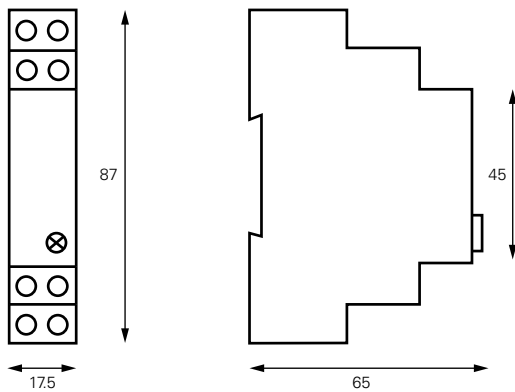
TSDW1CODG



Staircase timer

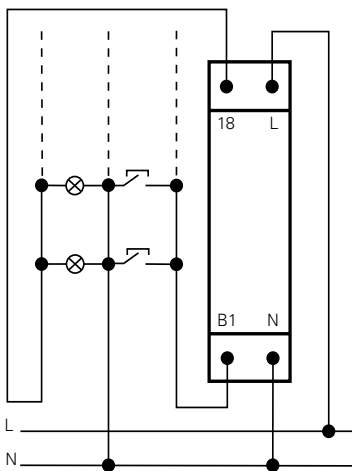
Staircase Timer	TLE
General	
Nominal operating voltage	230 Vac
Frequency	50 - 60 Hz
Power consumption	6 VA (0.8W)
Time setting	0.5 – 15 min.
Mechanical endurance (switching cycles)	> 30 x 10 ⁶
Electrical endurance (switching cycles)	> 10 x 10 ⁵
Temperature range	-25 °C - +55 °C
Switching contact(s)	
Type of switching contact	1 x NO (not potential free)
Switching capacity at 250 Vac, cos ϕ =1	16 A
Switching capacity for lighting :	
Incandescent	2000 W
Fluorescent	1000 W
Compact fluorescent	500 W
Features	
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
Dimensions	
Number of modules	1 module
Width	17.5 mm
Height	87 mm
Depth	60 mm
Terminals	
Terminal capacity	0.5 - 4.00 ² mm
Maximum torque	0.8 Nm

Staircase timer - dimensional drawing

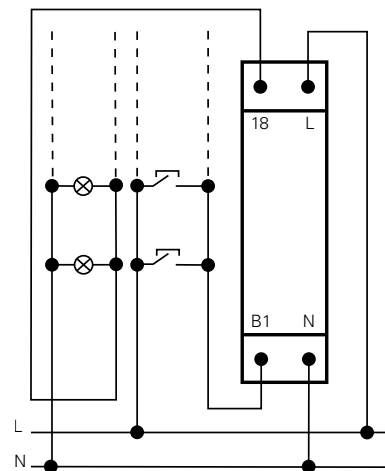


Staircase timer TLE - example wiring diagrams

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

**Contactors type CR - technical data**

Products	Contactors				Aux. contact
Rating	20 A	25 A	40 A	63 A	6A
General					
Standards	IEC 60947-4-1, IEC 61095				IEC 60947-5-1
Nominal operating voltage 1-phase U _e 1-ph.	230 V	230 V	230 V	230 V	230 V
Nominal operating voltage 3-phase U _e 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
Contact rating					
Rated insulation voltage U _i	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 _{imp}	4 kV	4 kV	4 kV	4 kV	4 kV
Rated thermal current I _{th}	20 A	25 A	40 A	63 A	6 A
AC1 / AC7a Rated operational current I _e	20 A	25 A	40 A	63 A	-
AC1 / AC7a Operational power rating at U _e = 230 Vac P _{max}	4 kW	9 kW	16 kW	24 kW	-
AC1 / AC7a Operational power rating at U _e = 400 Vac P _{max}	16 kW	26 kW	40 kW	-	-
AC3 / AC7b Operational power rating at U _e = 230 Vac P _{max}	1,3 kW (*1)	2,2 kW	5,5 kW	8,5 kW	-
AC3 / AC7b Operational power rating at U _e = 400 Vac P _{max}	4 kW	11 kW	15 kW	-	-
DC1 Rated thermal current at U _e = 24 Vdc I _e	20 A	25 A	40 A	63 A	-
DC1 Rated thermal current at U _e = 110 Vdc I _e	1A	2A	4A	4A	-
DC1 Rated thermal current at U _e = 220 Vdc I _e	0,5 A	0,5 A	0,8 A	0,8 A	-
DC1 Rated thermal current at U _e = 24 Vdc (2-poles in series) I _e	20 A	25 A	40 A	63 A	-
DC1 Rated thermal current at U _e = 110 Vdc (2-poles in series) I _e	3 A	4 A	10 A	10 A	-
DC1 Rated thermal current at U _e = 220 Vdc (2-poles in series) I _e	1,5 A	1,5 A	6 A	6 A	-
DC1 Rated thermal current at U _e = 24 Vdc (3-poles in series)	-	25 A	40 A	63 A	-
DC1 Rated thermal current at U _e = 110 Vdc (3-poles in series)	-	6:00 AM	30 A	35 A	-
DC1 Rated thermal current at U _e = 220 Vdc (3-poles in series)	-	2,5 A	20 A	30 A	-
Electrical endurance					
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 _n	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
Operating coil (for combined ac/dc types only – CR.....)					
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	-
Operating coil (for ac types only – CR.....A)					
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
Dimensions					
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
Terminals for main & auxiliary contacts					
Terminal capacity – fine stranded wire	1.....6 mm ²	1.....6 mm ²	1.....16 mm ²	1.....16 mm ²	1....2,5 mm ²
Terminal capacity – solid wire	1.....10 mm ²	1.....10 mm ²	1.....25 mm ²	1.....25 mm ²	1....2,5 mm ²
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
Terminals for operating coils					
Terminal capacity – fine stranded wire	1.....2,5 mm ²	1.....2,5 mm ²	1.....2,5 mm ²	1.....2,5 mm ²	
Terminal capacity – solid wire	1.....2,5 mm ²	1.....2,5 mm ²	1.....2,5 mm ²	1.....2,5 mm ²	
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) CR 20	CR 25	CR 40	CR 63	Maximum number of fittings per contactor type
Incandescent lamp					
	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
Energy saving lamp					
	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) CR 20	CR 25	CR 40	CR 63	Maximum number of fittings per contactor type
Fluorescent lamp – conventional supply					
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 (capacitive)	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
Fluorescent lamp – HF electronic					
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
Compact fluorescent lamp					
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
High pressure mercury vapour lamp					
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
Halogen metal vapour lamp					
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) CR 20	CR 25	CR 40	CR 63	Maximum number of fittings per contactor type
Low pressure sodium vapour lamp					
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
High pressure sodium vapour lamp					
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

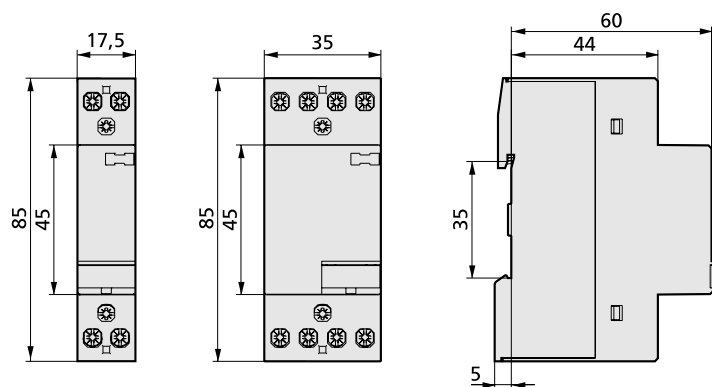
General remarks:

- 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.)

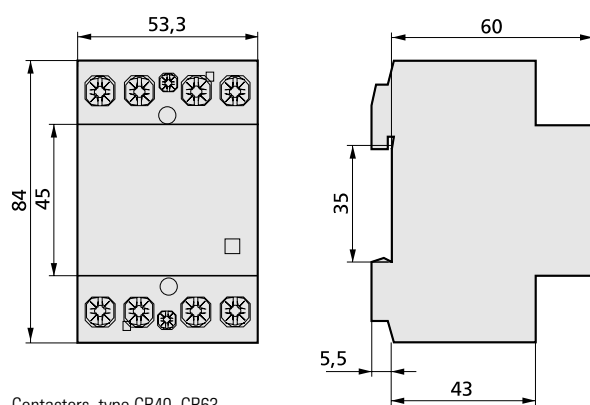
12.6

Technical data

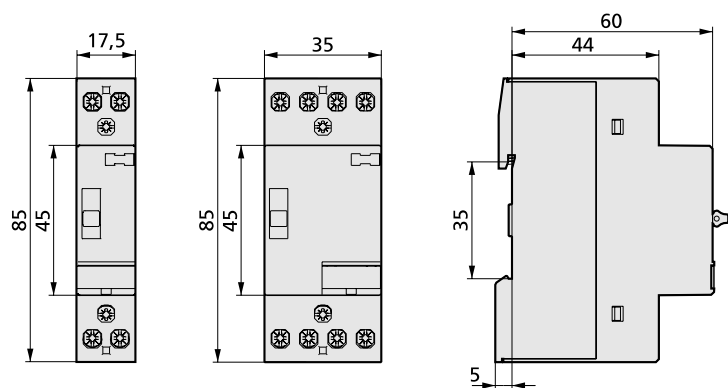
Control and switching devices dimensions and data



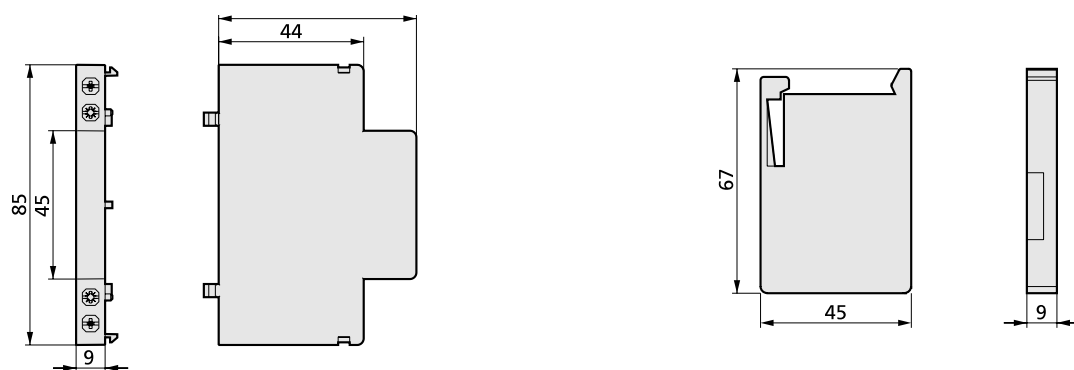
Contactors, type CR20, CR25



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
B426NSS.....	12, 71	C221B.....	11, 61	C901.....	13, 41, 65	CM045*.....	10, 57
B621NSS.....	10, 69	C221N.....	11, 61	C901B.....	13, 41, 65	CM048*.....	10, 57
B621RRSS.....	10, 69	C221NB.....	11, 61	C901WH.....	13, 41, 65	CM049*.....	10, 57
B621SS.....	10, 69	C221NWH.....	11, 61	C902.....	13, 41, 65	CM111*.....	11, 59
B622NSS.....	10, 69	C221WH.....	11, 61	C902B.....	13, 41, 65	CM112*.....	11, 59
B622RRSS.....	10, 69	C351.....	12, 64	C902WH.....	13, 41, 65	CM220*.....	12, 61
B622SS.....	10, 69	C351B.....	12, 64	C903.....	13, 41, 65	CM220N*.....	12, 61
B632SS.....	11, 69	C351WH.....	12, 64	C903B.....	13, 41, 65	CM221*.....	11, 61
B651SS.....	11, 69	C352WH.....	12, 64	C903WH.....	13, 41, 65	CM221N*.....	11, 61
B652SS.....	11, 69	C353WH.....	12, 64	C904.....	13, 41, 65	CM351*.....	12, 64
B901SS.....	13, 41, 74	C354.....	12, 64	C904B.....	13, 41, 65	CM352*.....	12, 64
B902SS.....	13, 41, 74	C354WH.....	12, 64	C904WH.....	13, 41, 65	CM360*.....	12, 64
B903SS.....	13, 41, 74	C355.....	12, 64	C906.....	13, 41, 65	CM370*.....	11, 60
B904SS.....	13, 41, 74	C355B.....	12, 64	C906B.....	13, 41, 65	CM391*.....	12, 63
B906SS.....	13, 41, 74	C355WH.....	12, 64	C908.....	13, 41, 65	CM392*.....	12, 63
B908SS.....	13, 41, 74	C356B.....	12, 64	C908B.....	13, 41, 65	CM401*.....	12, 62
B912SS.....	13, 41, 74	C356WH.....	12, 64	C9111WH.....	10, 57	CM401N*.....	12, 62
B918SS.....	13, 41, 74	C359WH.....	12, 64	C912.....	13, 41, 65	CM403*.....	12, 62
B924SS.....	13, 41, 74	C360.....	12, 64	C912B.....	13, 41, 65	CM403N*.....	12, 62
C011.....	10, 57	C360B.....	12, 64	C9131WH.....	10, 57	CM415*.....	11, 60
C011B.....	10, 57	C360WH.....	12, 64	C9132.....	10, 57	CM421N*.....	12, 62
C011WH.....	10, 57	C361.....	12, 64	C9132WH.....	10, 57	CM422N*.....	12, 62
C012B.....	10, 57	C361B.....	12, 64	C9141WH.....	10, 57	CM423N*.....	12, 62
C012WH.....	10, 57	C361WH.....	12, 64	C918.....	13, 38, 41, 65	CM424N*.....	12, 62
C013.....	10, 57	C362.....	12, 64	C918B.....	13, 41, 65	CM425*.....	12, 62
C013B.....	10, 57	C362B.....	12, 64	C924.....	13, 38, 41	CM425N*.....	12, 62
C013WH.....	10, 57	C363.....	12, 64	C924B.....	13, 41, 65	CM621*.....	10, 59
C014.....	10, 57	C363B.....	12, 64	C9511.....	10, 58	CM621N*.....	10, 59
C014B.....	10, 57	C363WH.....	12, 64	C9511WH.....	10, 58	CM622*.....	10, 59
C014WH.....	10, 57	C370.....	11, 60	C9551.....	10, 58	CM622N*.....	10, 59
C015.....	10, 57	C370B.....	11, 60	C9551WH.....	10, 58	CM632*.....	11, 59
C015B.....	10, 57	C370WH.....	11, 60	C9552.....	10, 58	CM692*.....	11, 59
C015LWH.....	10, 57	C391.....	12, 63	C9552WH.....	10, 58	CM901*.....	13, 41, 65
C015WH.....	10, 57	C391WH.....	12, 63	C9751WH.....	10, 58	CM902*.....	13, 41, 65
C017.....	10, 57	C392.....	12, 63	CAAE-01/01.....	98	CM903*.....	13, 41, 65
C017B.....	10, 57	C392WH.....	12, 63	CAAE-01/02.....	98	CM904*.....	13, 41, 65
C017WH.....	10, 57	C401.....	12, 62	CAEE-02/01.....	99	CM906*.....	13, 41, 65
C021.....	10, 57	C401B.....	12, 62	CBEU-02/01.....	98	CM908*.....	13, 41, 65
C021B.....	10, 57	C401N.....	12, 62	CBEU-02/02.....	98	CM9111*.....	10, 57
C021WH.....	10, 57	C401NB.....	12, 62	CBMA-02/01.....	97	CM912*.....	13, 41, 65
C022.....	10, 57	C401NWH.....	12, 62	CBTZ-00/01.....	94	CM9131*.....	10, 57, 58
C022B.....	10, 57	C401WH.....	12, 62	CCIA-02/01.....	100	CM9132*.....	10, 57, 58
C022WH.....	10, 57	C403NWH.....	12, 62	CCIA-03/01.....	100	CM918*.....	13, 41, 65
C023.....	10, 57	C403WH.....	12, 62	CDAE-01/01.....	96	CM924*.....	13, 41, 65

* Shown without plate finish suffix

CMMZ-00/08.....	99	CR4040230.....	114, 138-142	EAD50C.....	108	EAS24H80DS.....	102, 122
CMMZ-00/09.....	97	CR6320230.....	115, 138-142	EAD63B.....	108	EAS24H80DSF.....	104, 123
CMMZ-00/13.....	99	CR6340230.....	115, 138-142	EAD63C.....	108	EAS26S.....	102, 122
CMMZ-00/30.....	100	CRA611.....	115, 138-142	EAM1002H.....	109	EAS26SF.....	104, 123
CMMZ-00/33.....	100	CRA620.....	115, 138-142	EAM1002L.....	109	EAS2H40S.....	102, 122
CMMZ-00/36.....	100	CRC20.....	115	EAM1002M.....	109	EAS2H40SF.....	104, 123
CMMZ-00/37.....	100	CRC25.....	115	EAM1002MT.....	109, 105	EAS2H63S.....	102, 122
CP011*.....	10, 57	CRC63.....	115	EAM1002RH.....	109	EAS2H63SF.....	104, 123
CP012*.....	10, 57	CRCA-00/04.....	100	EAM1002RL.....	109	EAS2S.....	102, 122
CP013*.....	10, 57	CRCA-00/05.....	100	EAM1002RM.....	109	EAS2SF.....	104, 123
CP014*.....	10, 57	CRM2020230A.....	115, 138-142	EAM162H.....	109	EAS34H80H63DS.....	102, 122
CP015*.....	10, 57	CRM2540230A.....	115, 138-142	EAM162V.....	109	EAS34H80H63DSF.....	104, 124
CP015L*.....	10, 57	CRMA-00/03.....	100	EAM252H.....	109	EAS34H80H80DS.....	102, 122
CP026*.....	10, 57	CRMA-00/07.....	100	EAM252M.....	109	EAS34H80H80DSF.....	104, 124
CP048*.....	10, 57	CROU-00/01-S.....	100	EAM402H.....	109	EAS36H80DS.....	102, 122
CP111*.....	11, 59	CROU-00/01-SL.....	100	EAM402M.....	109	EAS36H80DSF.....	104, 123
CP112*.....	11, 59	CRS.....	115	EAM632H.....	109	EAS38S.....	102, 122
CP220*.....	12, 61	CSAP-01/03.....	95	EAM632M.....	109	EAS38SF.....	104, 123
CP220N*.....	12, 61	CSAU-01/01-10.....	94	EAM802H.....	109	EAS6H100S.....	102, 122
CP221*.....	11, 61	CSAU-01/01-10I.....	94	EAM802L.....	109	EAS6H100SF.....	104, 123
CP221N*.....	11, 61	CSAU-01/01-10IE.....	94	EAM802M.....	109	EAS6H63S.....	102, 122
CP221NR*.....	11, 61	CSAU-01/01-16.....	94	EAM802RH.....	109	EAS6H63SF.....	104, 123
CP221NWM*.....	11, 61	CSAU-01/01-16I.....	94	EAM802RL.....	109	EAS6H80S.....	102, 122
CP221R*.....	11, 61	CSAU-01/01-16IE.....	94	EAN2SEBD.....	107, 125	EAS6H80SF.....	104, 123
CP221WM*.....	11, 61	CSAU-01/02.....	95	EAN2SEBD1001N.....	107, 125	EAS6S.....	102, 122
CP351*.....	12, 64	CSAU-01/03.....	95	EAN4SEBD.....	107, 125	EAS6SF.....	104, 123
CP352*.....	12, 64	CSEZ-01/01.....	99	EAS10DDS.....	103, 122	EAS8H63DS.....	102, 122
CP360*.....	12, 64	CSEZ-01/06.....	99	EAS10DDSF.....	105, 124	EAS8H63DSF.....	104, 123
CP370*.....	11, 60	CSEZ-01/07.....	99	EAS10H100S.....	102, 122	EAS8H80DS.....	102, 122
CP391*.....	12, 63	CSEZ-01/14.....	99	EAS10H100SF.....	104, 123	EAS8H80DSF.....	104, 123
CP392*.....	12, 63	CSEZ-01/15.....	99	EAS10H63DS.....	102, 122	EASDL.....	105
CP401*.....	12, 62	CSEZ-01/16.....	99	EAS10H63DSF.....	104, 123	EASTKEB32.....	105
CP401N*.....	12, 62	CSEZ-01/17.....	99	EAS10H63H63DS.....	102, 122	EASTKEB40.....	105
CP403*.....	62	CSEZ-01/18.....	99	EAS10H63H63DSF.....	104, 124	EASTKEP32.....	105
CP403N*.....	12, 62	CSEZ-01/19.....	99	EAS10H80DS.....	102, 122	EASTKEP40.....	105
CP415*.....	11, 60	CSEZ-01/24.....	99	EAS10H80DSF.....	104, 123	EB-Z/SE/01/03.....	99
CP421N*.....	12, 62	CSEZ-01/25.....	99	EAS10H80H63DS.....	102, 122	EB-Z/SE/01/04.....	99
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CP621N*.....	10, 59	EAD02C.....	108	EAS12H100S.....	102, 122	EMS1002.....	108
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CP632*.....	11, 59	EAD06B.....	108	EAS12SF.....	104, 123	F1091.....	82
CP692*.....	11, 59	EAD06BH30C.....	109	EAS14H63H63DS.....	102, 122	F1200.....	82
CP901*.....	13, 41, 65	EAD06C.....	108	EAS14H63H63DSF.....	104, 124	F1250.....	82
CP902*.....	13, 41, 65	EAD06CH30C.....	109	EAS14H80H63DS.....	102, 122	F1260.....	84
CP903*.....	13, 41, 65	EAD10B.....	108	EAS14H80H63DSF.....	104, 124	F1261.....	84
CP904*.....	13, 41, 65	EAD10BH30C.....	109	EAS14H80H80DS.....	102, 122	F1263.....	84
CP906*.....	13, 41, 65	EAD10C.....	108	EAS14H80H80DSF.....	104, 124	F1264.....	84
CP908*.....	13, 41, 65	EAD10CH30C.....	109	EAS14S.....	102, 122	F1267.....	84, 119
CP9111*.....	10, 57	EAD13B.....	108	EAS14SF.....	104, 123	F1340.....	85
CP912*.....	13, 41, 65	EAD13C.....	108	EAS16DDS.....	103, 122	F1350.....	85
CP9131*.....	10, 57, 58	EAD16B.....	108	EAS16DDSF.....	105, 124	F1350PC.....	85
CP9132*.....	10, 57, 58	EAD16BH30C.....	109	EAS16H63H63DS.....	102, 122	F1351.....	85
CP918*.....	13, 41, 65	EAD16C.....	108	EAS16H63H63DSF.....	104, 124	F1450.....	83
CP924*.....	13, 41, 65	EAD16CH30C.....	109	EAS16H80DS.....	102, 122	F1451.....	83
CR2002230.....	114, 138-142	EAD20B.....	108	EAS16H80DSF.....	104, 123	F1491.....	83
CR2002230A.....	114, 138-142	EAD20BH30C.....	109	EAS16H80H63DS.....	102, 122	F3368.....	37, 77
CR2011230.....	114, 138-142	EAD20C.....	108	EAS16H80H63DSF.....	104, 124	F3780.....	49
CR2011230A.....	114, 138-142	EAD20CH30C.....	109	EAS16H80H80DS.....	102, 122	F3780B.....	49
CR2020230.....	114, 138-142	EAD25B.....	108	EAS16H80H80DSF.....	104, 124	F3781.....	49
CR2020230A.....	114, 138-142	EAD25BH30C.....	109	EAS18H100S.....	102, 122	F3782.....	49
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CR2477N.....	98	EAD25CH30C.....	109	EAS18H80DS.....	102, 122	F3783B.....	49
CR2504230.....	114, 138-142	EAD32B.....	108	EAS18H80DSF.....	104, 123	F3784.....	49
CR2504230A.....	114, 138-142	EAD32BH30C.....	109	EAS18S.....	102, 122	F3784B.....	49
CR2522230.....	114, 138-142	EAD32C.....	108	EAS18SF.....	104, 123	F3785.....	49
CR2522230A.....	114, 138-142	EAD32CH30C.....	109	EAS20H100S.....	102, 122	F3786.....	49
CR2530230.....	114, 138-142	EAD40B.....	108	EAS20H100SF.....	104, 123	F3787.....	49
CR2530230A.....	114, 138-142	EAD40BH30C.....	109	EAS20S.....	102, 122	F3787B.....	49
CR2540230.....	114, 138-142	EAD40C.....	108	EAS20SF.....	104, 123	F3790.....	49
CR2540230A.....	114, 138-142	EAD40CH30C.....	109	EAS22H80H63DS.....	102, 122	F3790B.....	49
CR4002230.....	114, 138-142	EAD45BH30C.....	109	EAS22H80H63DSF.....	104, 124	F4500.....	37
CR4020230.....	114, 138-142	EAD45CH30C.....	109	EAS22H80H80DS.....	102, 122	F4501.....	37, 41
CR4030230.....	114, 138-142	EAD50B.....	108	EAS22H80H80DSF.....	104, 124	F4502.....	37, 41

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F4510.....	37	F9025CH.....	43	F9313B.....	48	P221NWM.....	11, 33
F4511.....	37	F9025DW.....	43	F9314.....	48	P221R.....	11, 33
F4530.....	32, 37	F9025EF.....	43	F9314B.....	48	P221RR.....	11, 33
F4570.....	37, 85	F9025FF.....	43	F9315.....	48	P221WVM.....	11, 33
F5002.....	82	F9025FG.....	43	F9315B.....	48	P223.....	11, 33
F5006.....	82	F9025HB.....	43	F9317.....	48	P223N.....	12, 33
F5099.....	37	F9025HE.....	43	F9317B.....	48	P224.....	12, 33
F8342.....	41, 51, 80	F9025MW.....	43	F9318.....	48	P345.....	12, 35
F8343.....	41, 51, 80	F9025PH.....	43	F9318B.....	48	P351.....	12, 36
F8344.....	41, 51, 80	F9025TD.....	43	F9400.....	50, 94	P351D.....	12, 36
F8345.....	41, 51, 80	F9025WDR.....	43	F9401.....	50, 94	P352.....	12, 36
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F8352.....	41, 51	F9025WM.....	43	F9404.....	50, 94	P354.....	12, 36
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F8502.....	88	F9026B.....	45	FL351.....	90	P356.....	12, 36
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F8540.....	88	F9026EL.....	45	FL451.....	90	P360.....	12, 36
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