



**LOADSTAR**

**Amendment 3  
Metal Cased  
Consumer Units &  
Meter Cabinet Units**



## CONSUMER UNITS FOR USE IN DOMESTIC HOUSEHOLD PREMISES

17th Edition Wiring Regulations Incorporating  
Amendment No. 3: 2015

### REGULATION 421.1.201

**Amendment No. 3 to BS 7671 IET Wiring Regulations prescribes that within domestic (household) premises, consumer units and similar switchgear assemblies shall have their enclosures manufactured from non combustible material, or be enclosed in a cabinet or enclosure constructed of non combustible material and comply with product standard BS EN 61439-3.**

#### What are Domestic Household Premises ?

Typical Domestic household premises would include single and multiple occupancy homes such as Houses, Bungalows, High Rise & Low Rise Flats, Apartments, Student lets, Sheltered Accommodation, Farmhouses, Houseboats, Static Homes, Home Office, attached Garages, Workshops and Detached Summerhouses etc.



#### What is Non Combustible Material ?

There are many types of non combustible material however, amendment 3 of the 17th Edition regulations provides an acceptable example as ferrous metal i.e. Steel Consumer Units.



#### What is an Enclosure ?

An enclosure means the box, cover, door, hinges, handle and any components required to maintain the integrity of the unit. The consumer unit enclosure must be manufactured from a non combustible material so as to limit the spread of fire.



#### What is Similar Switchgear ?

Similar switchgear is switchgear that is used for the same fundamental application ie. a circuit protection assembly with two pole isolator and one or more circuit protection devices, e.g. meter cabinet consumer units, MCB distribution board, garage unit or PV switchgear etc.

#### What are Cabinets ?

Typical cabinets are meter cabinets that are normally built into the fabric of the building. Loadstar all metal cased meter cabinet consumer units have complete non combustible enclosures and are designed specifically for use in meter cabinets to maintain integrity of the assembly and minimise flames escaping.



As usual good workmanship and proper materials should be applied to all installation work, consumer units must be installed to achieve IP4X on the top elevation (regulation 416.2.2) and IP2XC on all other elevations. This can be achieved by use of cable entry accessories such as consumer unit pattress or other means such as glanding.



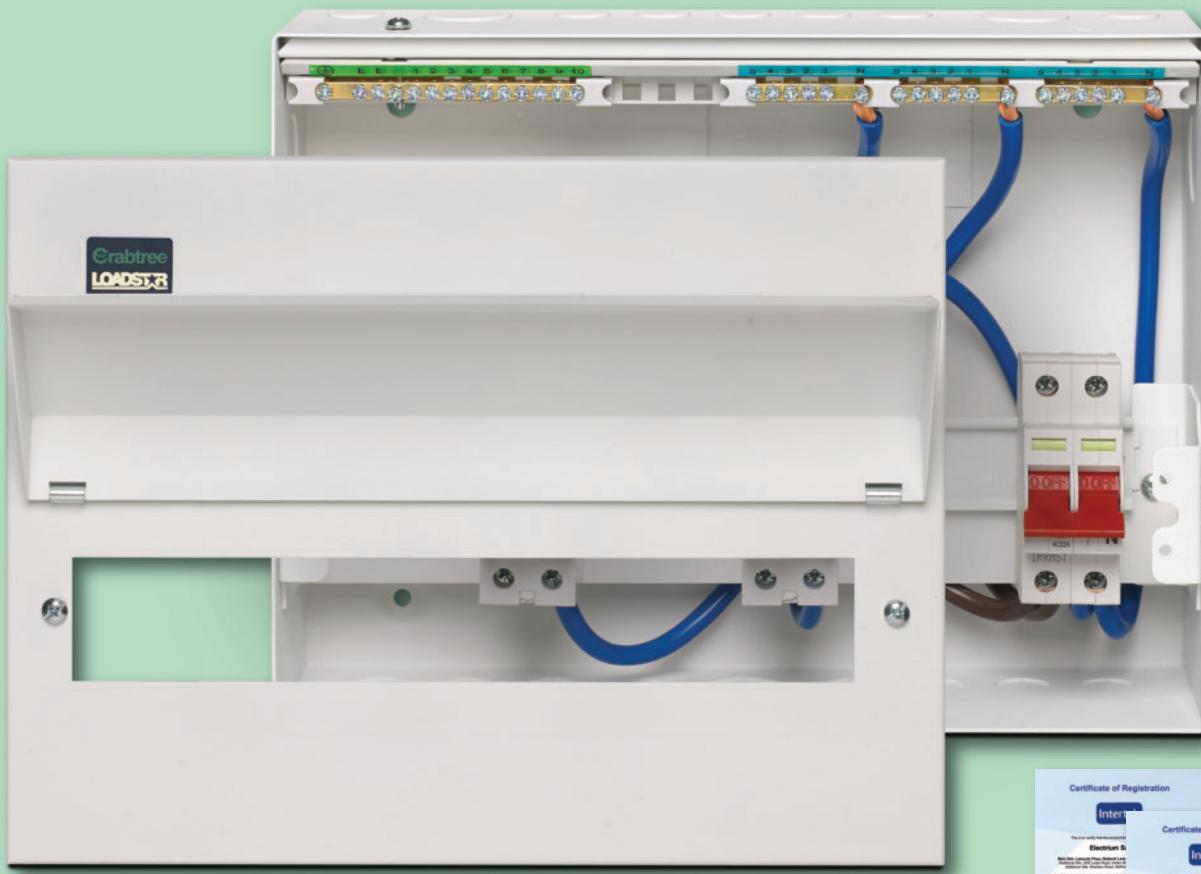
## CONSUMER UNITS FOR USE IN DOMESTIC

## HOUSEHOLD PREMISES

17th Edition Wiring Regulations Incorporating

Amendment No. 3: 2015

- Compliant with BS 7671 Amendment 3
- UKAS certified to BS EN 61439-3
- Full metal enclosure, no exposed plastic parts
- Low Smoke & Fume paint
- Self closing, stay shut door & metal hinges
- Cable entry knockouts on all sides & large square knockouts on the rear
- Mains tails cable entry grommet for supplementary insulation similar to Class II level of protection to tails
- Non combustible cover blanks for unused ways



- Extra height for added wiring space with single module RCBOs
- 80A RCCBs used within all Split Load, Dual RCD and High Integrity units
- Compact enclosure
- Raised & removable DIN rail / busbar assembly
- Main Switch, High Integrity, Split Load, Dual RCD
- Factory fitted incoming devices for reduced installation time
- RoHS compliant in excess of UK standards



18TMB



MTCG32



CRCE1 or CRCE2



INTUMESCENTS



## CONSUMER UNITS FOR USE IN DOMESTIC HOUSEHOLD PREMISES

Amendment No3 has brought about the requirement for 'all metal' non combustible enclosures for consumer units and similar switchgear. This is in addition to the requirements for additional protection, which are summarised below, within domestic household premises;

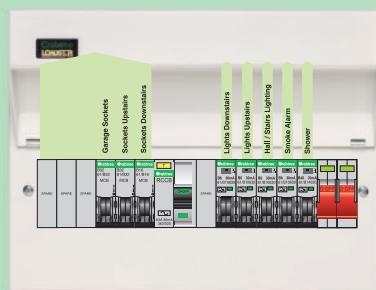
- All socket outlets should be protected by 30mA RCD\*
- All circuits serving or passing through a room with a fixed bath or shower should be protected by one or more 30mA RCDs\*\*
- All cables buried beneath the plaster surface of the wall or partition (at less than 50mm) should be protected by 30mA RCDs\*\*\*
- All cables concealed in metal stud partitions (common in new builds) should be protected by 30mA RCDs\*\*\*\*
- Installations should be divided up into circuits so as to take account of danger and inconvenience caused by a single fault - e.g. such as a lighting circuit\*\*\*\*
- Installations should be designed and arranged so as to prevent unwanted tripping of RCDs\*\*\*\*
- Safety services such as smoke alarms should be on independent circuits\*\*\*\*

REGULATIONS	RELATING TO:	EXAMPLES	ADDITIONAL PROTECTION
411.3.3*	Sockets up to a 20A rating	Upstairs Sockets Downstairs Sockets Kitchen Sockets Cooker outlet with integral 13A socket Garage Sockets <b>Plus any other sockets up to 20A rated</b>	<b>30mA RCD</b> Taking into account 314.1 **** 314.2 ****
701.411.3.3**	All Circuits serving a room containing a fixed bath or shower or circuits not serving but passing through zones 1 or 2 of a room containing a fixed bath or shower.	Shower circuit Lighting circuit Heating circuit Ventilation circuit <b>Plus Other circuits</b>	<b>30mA RCDs</b> Taking into account 314.1 **** 314.2 ****
522.6.200 series*** and 560.7.1****	All circuits buried in a wall or partition at less than 50mm and without mechanical protection	Downstairs Lighting Upstairs Lighting Immersion heater Smoke Alarms (Safety service) Burglar Alarm <b>Plus any other circuits</b>	<b>30mA RCD</b> Taking into account 314.1 **** 314.2 ****

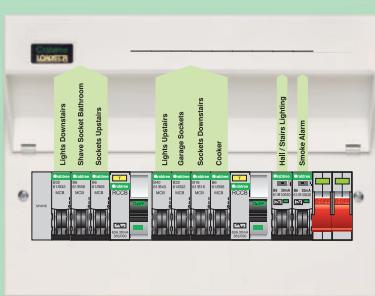
- ① Where metal consumer units are installed into TT systems protection from faults arising from the possibility of mains tails becoming loose and making contact with the metal enclosure should be provided by incorporating into the installation a 100mA time delayed (S type) RCCB.
- ② In all cases the mains tails should be protected at the point of entry into the metal enclosure by use of a mains tails gland to protect against the possibility of mechanical damage and or disturbance that could lead to tails becoming loose and making contact with the metal enclosure.



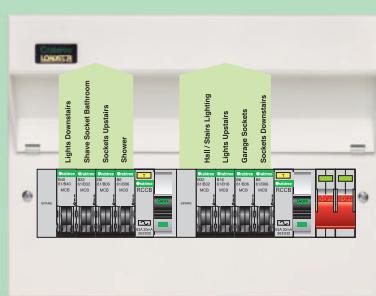
**ALL INDEPENDENT CIRCUITS**  
Full metal Main Switch unit with RCBOs



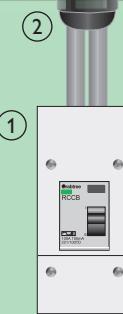
**HALF INDEPENDENT CIRCUITS**  
Full metal Split Load unit with RCBOs and MCBs



**SOME INDEPENDENT CIRCUITS**  
Full metal High Integrity unit with RCBOs and MCBs



**NO INDEPENDENT CIRCUITS**  
Full metal Dual RCD unit with MCBs



**ALL INDEPENDENT CIRCUITS**  
100mA Time Delay RCD

\* Regulation 411.3.3 socket outlets with a rated current not exceeding 20A.

\*\* Regulation 701.411.3.3 Additional protection shall be provided for all circuits serving the location and any circuits not serving but passing through zones 1 or 2 of the location by use of one or more 30mA RCD.

\*\*\* Regulations in the 522.6.200 series, cables concealed in a wall or partition at less than 50mm depth and without earthed mechanical protection e.g. conduit.

\*\*\*\* Regulation 314.1 Every installation shall be divided into circuits as necessary to avoid danger and inconvenience in the event of a fault, take account of danger that may arise from the failure of a single circuit such as a lighting circuit, reduce the possibility of unwanted tripping of RCDs etc.

\*\*\*\*\* Regulation 314.2 Separate circuits to be provided for parts of the installation that need to be separately controlled in such a way that those circuits are not affected by the failure of other circuits.

\*\*\*\*\* Regulation 560.7.1 Chapter 56 circuits for safety services shall be independent of other circuits.

In addition Chapter 51 requires designers/installers to take account of all relevant British Standards and manufacturers instructions. For example BS5839 Part 6 is the British Standard for fire detection and alarm systems in dwellings. It states that power supplies to Grade D smoke alarms should be an independent circuit at the consumer unit, or a separately electrically protected local lighting circuit.

Regulation 416.2.2 requires that the installed consumer unit achieves IP4X (1mm probe) on the top elevation. All other elevations should be to IP2XC (2.5mm probe).

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**1. Cannock Commercial Headquarters**  
Home to Sales & Marketing, Supply Chain Management, Finance & Customer Service.

**2. Wythenshawe**  
Manufacturing location for wiring accessories & domestic circuit protection with R&D, UKAS test laboratory ISO9001 production, warehouse, distribution & logistics facilities.

**3. Hindley Green**  
Manufacturing location for wiring accessories and domestic & commercial circuit protection, with R&D, UKAS test laboratory ISO9001 production facilities.



Crabtree continue to manufacture Wiring Accessories and Circuit Protection products in the UK.

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

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



18MS14

**MAIN SWITCH UNITS**

Total MCB / RCBO Ways	Main Switch Rating	LIST No
2	63A	<b>18MS2</b>
5	100A	<b>18MS5</b>
8	100A	<b>18MS8</b>
8	63A	<b>18MS8/63</b>
11	100A	<b>18MS11</b>
14	100A	<b>18MS14</b>
19	100A	<b>18MS19</b>

Supplied with Main Switch and busbar

Single Module RCBOs are not recommended for use within 2 way units



18MRS12

**FLEXIBLE SPLIT LOAD UNITS**

Total Ways	100A Main Switch	80A 30mA RCCB	LIST No
6	2 to 4	2 to 4	<b>18MRS106</b>
9	3 to 6	3 to 6	<b>18MRS109</b>
12	3 to 9	3 to 9	<b>18MRS112</b>
17	5 to 12	5 to 12	<b>18MRS117</b>

Supplied with Main Switch, DP RCCB and busbars

Both MCBs and RCBOs may be included for final circuit positions that are not protected by the resident RCCB



18MSHI10

**FLEXIBLE HIGH INTEGRITY DUAL RCD UNITS**

Total Ways	100A Main Switch	80A 30mA RCCB 1	80A 30mA RCCB 2	LIST No
10	2 to 5	2 to 5	2 to 5	<b>18MSHI10</b>
15	2 to 5	2 to 9	2 to 9	<b>18MSHI15</b>

Supplied with Main Switch, two DP RCCBs and busbars

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs



18MSDR10

**FLEXIBLE DUAL RCD SPLIT LOAD UNITS**

Total MCB Ways	100A Main Switch	80A 30mA RCCB 1	80A 30mA RCCB 2	LIST No
10	-	4 to 6	4 to 6	<b>18MSDR10</b>
15	-	6 to 9	6 to 9	<b>18MSDR15</b>

Supplied with Main Switch, two DP RCCBs and busbars

Both MCBs and RCBOs may be included for final circuit positions that are not protected by resident RCCBs

**RCD INCOMER UNITS**

**18MR14/63/30**

Total MCB Ways	RCCB Rating	LIST No
5	63A 30mA	<b>18MR5/63/30</b>
5	80A 30mA	<b>18MR5/80/30</b>
5	63A 100mA	<b>18MR5/63/100</b>
8	63A 30mA	<b>18MR8/63/30</b>
8	80A 30mA	<b>18MR8/80/30</b>
8	63A 100mA	<b>18MR8/63/100</b>
11	63A 30mA	<b>18MR11/63/30</b>
11	80A 30mA	<b>18MR11/80/30</b>
14	63A 30mA	<b>18MR14/63/30</b>
14	80A 30mA	<b>18MR14/80/30</b>

Supplied with DP RCCB and busbar

For replacement surface lid assemblies see page 7

For flush mounting kits see page 7

**ALL METAL CONSUMER UNIT PATRESES**

**MNSPE6584/4NR**

ENCLOSURE WIDTH	PATRESS DEPTH	LEFT/RIGHT ENTRY	TOP/BOTTOM ENTRY
7 Module	16mm	<b>MNSPE6670/1NR</b>	<b>MNSPE6584/1NR</b>
10 Module	16mm	<b>MNSPE6670/2NR</b>	<b>MNSPE6584/2NR</b>
13 Module	16mm	<b>MNSPE6670/3NR</b>	<b>MNSPE6584/3NR</b>
16 Module	16mm	<b>MNSPE6670/4NR</b>	<b>MNSPE6584/4NR</b>
21 Module	16mm	<b>MNSPE6670/5NR</b>	<b>MNSPE6584/5NR</b>

For use with all metal consumer units. Allows surface cable entry through rear knockouts and automatically maintains enclosure IP rating to comply with BS7671 and BSEN61439-3

● Cable entry slot may be positioned to suit

**INTUMESCENT STRIPS**


Enclosure	
7 Module	<b>CR0706FS</b>
10 Module	<b>CR1009FS</b>
13 Module	<b>CR1312FS</b>
16 Module	<b>CR1615FS</b>
21 Module	<b>CR2120FS</b>



## LOADSTAR METAL CASED SKELETON CONSUMER UNITS FOR METER CABINETS

- UKAS certified to BS EN 61439-3
- All metal enclosure, no external plastic parts
- Low Smoke & Fume paint
- Compact enclosure with adjustable front cable shroud, removable gland plates and mounting brackets
- Fixing brackets (removable) with multiple fixing points for mounting within various designs of meter cabinet
- Three models that can be mounted at 273mm, 320mm and 420mm fixing centres
- Non combustible cover blanks
- Raised & removable DIN rail / busbar assembly
- Cable entry on top, bottom and rear
- Flame retardant cable entry grommets
- Mains tails cable entry grommet / gland for supplementary insulation similar to Class II level of protection to mains tails
- Up to 14 way units, all designs Main Switch, High Integrity, Split Load, Dual RCD and Dual tariff options
- RoHS compliant in excess of UK standards

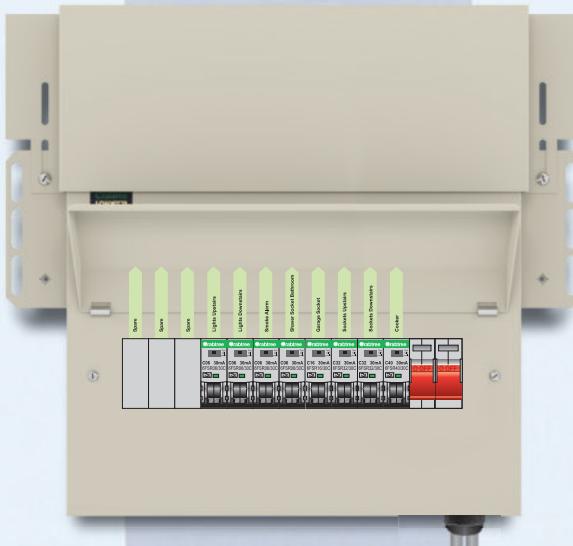


# SKELETON CONSUMER UNITS FOR USE IN DOMESTIC HOUSEHOLD PREMISES

17th Edition Wiring Regulations Including Amendment No. 3

## ALL INDEPENDENT CIRCUITS

Full metal Main Switch unit with RCBOs



## SOME INDEPENDENT CIRCUITS

Full metal High Integrity unit with RCBOs and MCBs



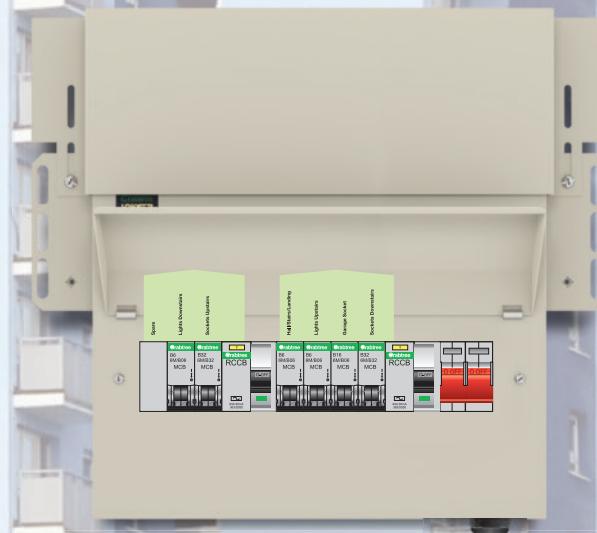
## HALF INDEPENDENT CIRCUITS

Full metal Split Load unit with RCBOs and MCBs



## NO INDEPENDENT CIRCUITS

Full metal Dual RCD unit with MCBs



## DUAL TARIFF

All RCBOs



30mA Earth leakage protection

Illustrations are of 320mm wide units (up to 11 ways) 430mm wide units (up to 14 ways) and 273mm units (8 ways) are also available



18ME08

**LOADSTAR METAL CASED SKELETON UNITS -  
273mm WIDE FIXING CENTRES**

DESCRIPTION	LIST No
<b>MAIN SWITCH METAL CASED SKELETON UNITS</b>	
Metal 8 way consumer unit 100A	<b>18ME08</b>



xxx

**LOADSTAR METAL CASED SKELETON UNITS -  
320mm WIDE FIXING CENTRES**

DESCRIPTION	LIST No
<b>MAIN SWITCH METAL CASED SKELETON UNITS</b>	
Metal 11 way consumer unit 100A	<b>18ME11</b>
<b>SPLIT LOAD METAL CASED SKELETON UNITS</b>	
Metal Split Load consumer unit 9 ways Flexible	<b>18ME9SL</b>
<b>HIGH INTEGRITY METAL CASED UNITS</b>	
7 Way High Integrity Consumer Unit Flexible	<b>18ME07HI</b>
<b>DUAL RCD METAL CASED SKELETON UNITS</b>	
Main Switch & Dual RCD Split 7 Way Flexible	<b>18ME07DR</b>
<b>DUAL TARIFF METAL CASED SKELETON UNITS</b>	
Dual Tariff 9 way Split Flexible	<b>18ME09DT</b>



xxx

**LOADSTAR METAL CASED SKELETON UNITS -  
420mm WIDE FIXING CENTRES**

DESCRIPTION	LIST No
<b>MAIN SWITCH METAL CASED SKELETON UNITS</b>	
Metal 14 way consumer unit 100A	<b>43ME14</b>
<b>SPLIT LOAD METAL CASED SKELETON UNITS</b>	
Metal Split Load consumer unit 12 ways Flexible	<b>43ME12SL</b>
<b>HIGH INTEGRITY METAL CASED UNITS</b>	
10 Way High Integrity Consumer Unit Flexible	<b>43ME10HI</b>
<b>DUAL RCD METAL CASED SKELETON UNITS</b>	
Main Switch & Dual RCD Split 10 Way Flexible	<b>43ME10DR</b>
<b>DUAL TARIFF METAL CASED SKELETON UNITS</b>	
Dual Tariff 12 way Split Flexible	<b>43ME12DT</b>

## MINIATURE CIRCUIT BREAKERS



RATING	POLES	MODULES	LIST No	
			Type B	Type C
6A	1	1	<b>6MSB06</b>	<b>6MSC06</b>
10A	1	1	<b>6MSB10</b>	<b>6MSC10</b>
16A	1	1	<b>6MSB16</b>	<b>6MSC16</b>
20A	1	1	<b>6MSB20</b>	<b>6MSC20</b>
32A	1	1	<b>6MSB32</b>	<b>6MSC32</b>
40A	1	1	<b>6MSB40</b>	<b>6MSC40</b>
50A	1	1	<b>6MSB50</b>	<b>6MSC50</b>

● BS EN 60898; 6kA-240V 50Hz

● Type B classification (3-5 In). Type C classification (5-10In)

● 25mm<sup>2</sup> terminal capacity

## RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOs)



RATING	POLES	MODULES	LIST No	
			30mA Type B	30mA Type C
6A	1	1	<b>6FSR06/30B</b>	<b>6FSR06/30C</b>
10A	1	1	<b>6FSR10/30B</b>	<b>6FSR10/30C</b>
16A	1	1	<b>6FSR16/30B</b>	<b>6FSR16/30C</b>
20A	1	1	<b>6FSR20/30B</b>	<b>6FSR20/30C</b>
32A	1	1	<b>6FSR32/30B</b>	<b>6FSR32/30C</b>
40A	1	1	<b>6FSR40/30B</b>	<b>6FSR40/30C</b>
50A	1	1	<b>6FSR50/30B</b>	<b>6FSR50/30C</b>



## SP &amp; SWN RESIDUAL CURRENT CIRCUIT BREAKER WITH OVERCURRENT PROTECTION (RCBOS)

RATING	POLES	MODULES	LIST No	
			30mA Type C	
6A	2	2	<b>6FSNR063/C</b>	
10A	2	2	<b>6FSNR103/C</b>	
16A	2	2	<b>6FSNR163/C</b>	
20A	2	2	<b>6FSNR203/C</b>	
32A	2	2	<b>6FSNR323/C</b>	
40A	2	2	<b>6FSNR403/C</b>	



## ACCESSORIES

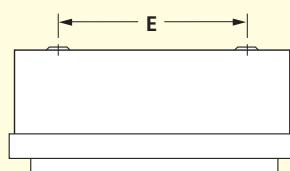
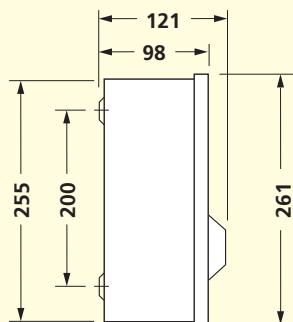
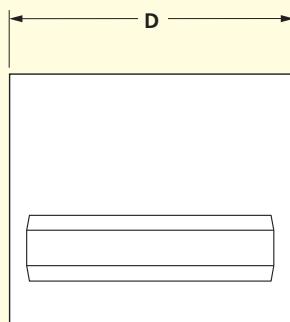
Metal Blanking Plate	<b>18TMB</b>
MCB Padlocking Device	<b>MCBLD</b>
Moulded Mains Tail Cable Gland Kit	<b>MTCG32</b>
MCB Profile Blanking Piece	<b>CSB1</b>

## MEMBRANE CABLE ENTRIES KIT (FLAME RETARDENT)

7 x 20mm & 3 x 32mm	<b>CRCE1</b>
10 x 20mm	<b>CRCE2</b>



## LOADSTAR AM3 CONSUMER UNIT DIMENSIONS



## 4 MODULE

**18MS2**

Dimensions: 185(Height) 130(Width) 104 (Depth including Lid)

## 7 MODULE

**18MS5****18MR5/63/30****18MR5/63/100****18MR5/80/30**

Dimensions: D=188mm, E=138mm

Replacement surface lid assembly

**18M7M/CLA**

Flush mounting kit

**18M07FLA**

## 10 MODULE

**18MS8****18MR8/63/30****18MS8/63****18MR8/63/100****18MR8/80/30****18MRSLO6**

Dimensions: D=241mm, E=160mm

Replacement surface lid assembly

**18M10M/CLA**

Flush mounting kit

**18M10FLA**

## 13 MODULE

**18MS11****18MR11/63/30****18MRSLO9****18MR11/80/30**

Dimensions: D=292mm, E=210mm

Replacement surface lid assembly

**18M13M/CLA**

Flush mounting kit

**18M13FLA**

## 16 MODULE

**18MS14****18MSDR10****18MRSL12****18MR14/63/30****18MSHI10****18MR14/80/30**

Dimensions: D=343mm, E=260mm

Replacement surface lid assembly

**18M16M/CLA**

Flush mounting kit

**18M16FLA**

## 21 MODULE

**18MS19****18MSHI15****18MRSL17****18MSDR15**

Dimensions: D=438mm, E=356mm

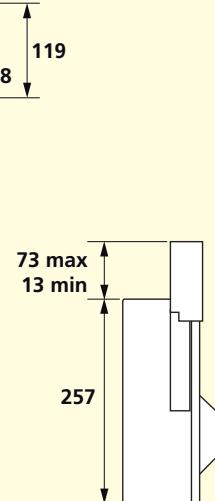
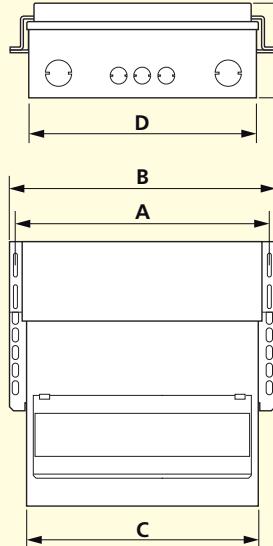
Replacement surface lid assembly

**18M21M/CLA**

Flush mounting kit

**18M21FLA**

## LOADSTAR METAL CASED SKELETON CONSUMER UNITS FOR METER CABINETS



## 10 MODULE

**18MED8**

Dimensions: A=273mm, B=289mm, C=241mm, D=235mm

## 13 MODULE

**18ME11****18ME9SL****18ME07HI****18ME07DR****18ME09DT**

Dimensions: A=328mm, B=335mm, C=292mm, D=286mm

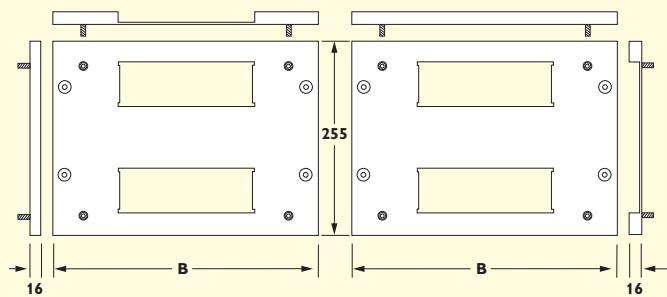
## 16 MODULE

**43ME14****43ME125L****43ME10HI****43ME10DR****43ME12DT**

Dimensions: A=430mm, B=445mm, C=343mm, D=336mm

## CONSUMER UNIT PATTRESSES

### TOP/BOTTOM CABLE ENTRY



### LEFT/RIGHT CABLE ENTRY

ENCLOSURE  
WIDTH (B)

7 Module  
10 Module  
13 Module  
16 Module  
21 Module

PATTRESS  
DEPTH

16mm  
16mm  
16mm  
16mm  
16mm

LEFT/RIGHT  
ENTRY

**MNSPE6670/1NR**  
**MNSPE6670/2NR**  
**MNSPE6670/3NR**  
**MNSPE6670/4NR**  
**MNSPE6670/5NR**

TOP/BOTTOM  
ENTRY

**MNSPE6584/1NR**  
**MNSPE6584/2NR**  
**MNSPE6584/3NR**  
**MNSPE6584/4NR**  
**MNSPE6584/5NR**

For use with Crabtree All Metal consumer units. Allows surface cable entry through rear knockouts and automatically maintains enclosure IP rating to comply with BS7671 and BSEN61439-3 and the IET onsite guide.

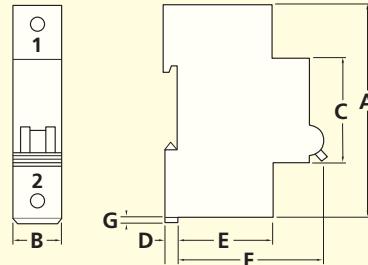
Cable entry slot line up with rear knockouts, the minimum number of knockouts only should be removed for cable entry.

Suitable for use with trunking systems.

## APPROXIMATE DIMENSIONS (mm)

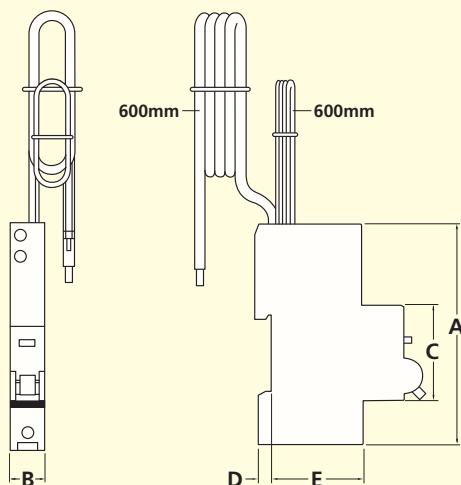
### LOADSTAR MINIATURE CIRCUIT BREAKERS

List No	A	B	C	D	E	F	G
<b>6MSB</b> <b>&amp; 6MSC</b>	90	18	45	6	44	70	3



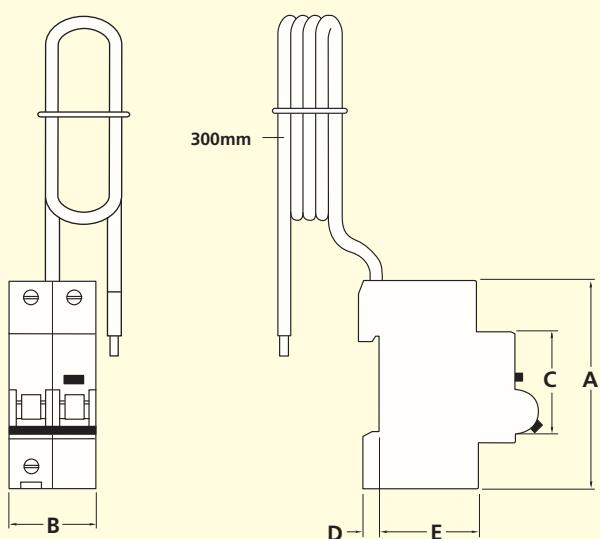
### LOADSTAR RCBOs (SINGLE MODULE)

List No	A	B	C	D	E
<b>6FSR</b> <b>_30B</b> <b>&amp; 6FSR</b> <b>_30C</b>	125	17.6	45	6.2	44



### LOADSTAR RCBOs (DOUBLE MODULE)

List No	A	B	C	D	E
<b>6FSNR</b> <b>_3/C</b>	125	36	45	6.2	44

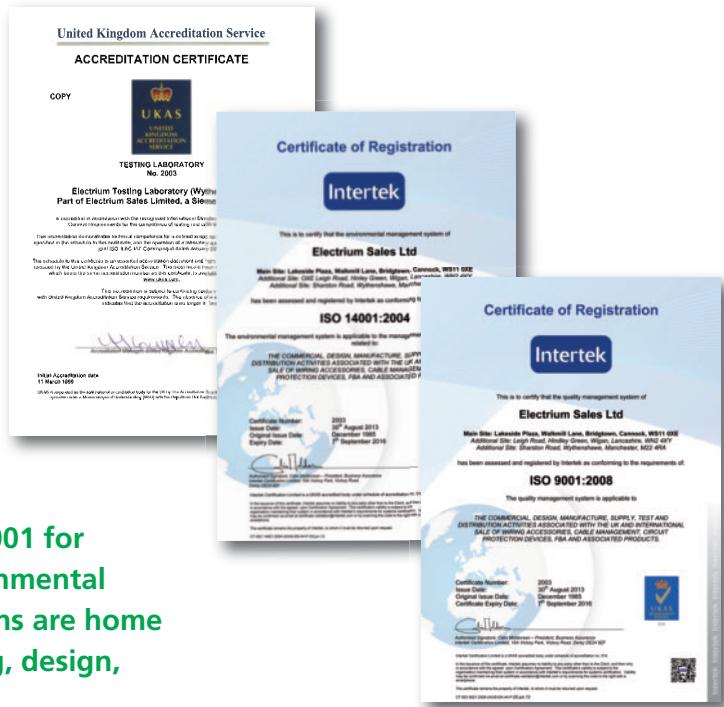






**Acknowledged as one the leading brands in the UK and in British Standard markets around the world, Crabtree offers designers & specifiers a wide range of quality products that caters for a vast array of applications including Commerce, Offices, Education, Hospitals & Health, Hotels & Leisure facilities, in fact wherever quality products are required.**

**Crabtree factories operate a series of internationally recognized standards including ISO9001 for quality, OHSAS 18001 for Health & Safety and ISO14001 for Environmental Management. The UK production locations are home to the product management, engineering, design, quality & logistics teams.**



In the UK Crabtree operates two UKAS accredited Laboratories that carry out R&D and compliance testing on all Crabtree products, these highly accredited facilities ensure that safety, quality & reliability remain consistent with UK & EU legislation regulations & Siemens internal standards, policies and practices.

Crabtree products are all designed manufactured and tested in accordance with the recognised product standards, and backed by standard & extended guarantees.

Crabtree also operates to recognised standards for product safety & sustainability, Crabtree wiring accessories are **RoHS** and **REACH** compliant often in excess of the UK market standards.

Crabtree's **WEEE** compliance process and recycling scheme ensures that the end of product life circumstances are catered for in line with UK & EU Legislation.

Recycled materials are used in product packaging, and declared into a recycling scheme locally to control environmental impacts and assure that the maximum level of recycling of materials and use of recycled materials is achieved.

As a Siemens company Crabtree also operates a zero harm scheme within all of its manufacturing, logistics & sales facilities, and is proud to have achieved a 5 star Health & Safety rating.





**Electrium**



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Although every effort has been made to ensure accuracy in the compilation of the technical detail within this publication, specifications and performance data are constantly changing. Latest details can be obtained from Crabtree.

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