

## Description

A range of flush mounting metal enclosure Consumer Units with either 10, 12 or 16 out-going ways, with rear cable entry and plain edges on the top and side walls.

The high integrity consumer units can have a maximum of 2 ways for MCBs and RCBOs, and two RCDs to protect the remaining circuits.



## Safety Instructions

- All products must be installed by a competent/qualified person in accordance with all relevant regulations and legislation, including the current editions of the Building Regulations and BS 7671, the IET Wiring Regulations.
- The total current supplied by the Consumer Unit must not exceed the rating of the Main Switch or the incoming supply.
- This Consumer Unit is suitable for use indoors only and is rated at IP 2X
- Only DETA devices (MCBs, RCDs etc.) should be installed into DETA Consumer Units.
- All unused out-going ways must have a blank fitted.
- Before fitting the front cover, check that all terminations are tight, including factory made connections.
- Ensure all busbar shields are fitted.
- Ambient temperature
  - The MCBs are calibrated to meet the 30°C calibration temperature requirements of BS EN 60898.
  - At other temperatures the following rating factors should be used:
 

60°C	0.85	20°C	1.00	0°C	1.15
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- Thermal-magnetic MCBs that are adjacent to each other should be continuously loaded at or approaching their nominal rating when mounted in enclosures. If MCBs are to be continuously loaded, it is recommended that a factor of 0.6 is applied to its nominal rating.

## Installation

- Remove the front cover.
- Remove knockouts to facilitate cable entry as required, and insert grommets.
- Mount and fix the enclosure base securely using wall plugs and screws as appropriate through either the rear of the back or the side walls
- When mounting the base, the front edge of the base must flush with the wall surface – the flanges on the top and bottom edges will act as guide.
- Route the meter tails into the enclosure to terminate in the Main Switch.
- Feed circuit cables through the knockouts as required.
- Populate the Consumer Unit with the MCBs as required. The highest rating MCBs should be closest to the Main Switch or RCD that feed them.
- Fit the live busbar in to either the Main Switch or RCD and the MCBs. The busbar may need cutting and shortening to less MCBs than it is made for. Fit the live busbar shield.
- Cut, dress and terminate the circuit cables, making sure the neutral and earth conductors are terminated in the corresponding circuit number terminals. Earth conductors should be appropriately sleeved.
- Check that all terminations are tight, including factory made connections.
- Fit the blanks to the front cover and fit the front cover.
- Attach the circuit identification and warning labels.
- Test the installation in accordance with the latest edition of the IET Wiring Regulations (BS 7671). It is important that the RCD operation times and test buttons are tested, as well as verification that the earth loop impedance requires are met.

Check the tightness of all terminals, including factory made terminations, as follows:

Device	Max. Cable Capacity	Recommended Tightening Torque
Main Switch / RCD	35mm <sup>2</sup>	2.5 Nm
MCB	16mm <sup>2</sup>	2.0 Nm
RCBO	16mm <sup>2</sup>	2.0 Nm
Earth & Neutral	16mm <sup>2</sup>	2.0 Nm

### Lid Barrel Lock

It is possible to lock the lid closed to prevent circuits being switched on whilst other trades are working within the plot.

- To do this, a barrel lock needs fittings by removing the screw and locking lever, remove the nut, insert the lock through the hole and replace the nut, locking lever and screw.
- Once the installation is completed, the lock should be removed and the blanking cap should be fitted.



## Enclosure Dimensions

### Back Box Dimensions

Enclosure Size	Height*	Width	Depth
16 Module	230mm	336mm	88mm
18 Module	230mm	372mm	88mm
22 Module	230mm	446mm	88mm

\* Excluding flanges

### Front Cover Dimensions

Enclosure Size	Height	Width	Depth
16 Module	252mm	341mm	8mm
18 Module	252mm	377mm	8mm
22 Module	252mm	449mm	8mm

## Knockouts

Enclosure Size	Top and Bottom Walls	Side Wall	Rear Wall
16 Module	4 x Ø20mm 2 x Ø25mm 2 x Ø32mm	1 x Ø20mm 1 x Ø25mm 1 x Ø32mm	2 x Ø50mm x 100mm oval
18 Module	5 x Ø20mm 2 x Ø25mm 2 x Ø32mm	1 x Ø20mm 1 x Ø25mm 1 x Ø32mm	2 x Ø50mm x 100mm oval
22 Module	7 x Ø20mm 2 x Ø25mm 2 x Ø32mm	1 x Ø20mm 1 x Ø25mm 1 x Ø32mm	3 x Ø50mm x 100mm oval

## User Information

### RCD / RCBO Testing

- The RCD and RCBO (if fitted) should be tested regularly. To test, press the Test button and the switch should flip to the off position.
- To reset, push the switch to the on position.

### Resetting the Devices (Trip Switches)

- The 'trip switches' will operate if a fault has occurred. To reset, push the switch into the on position.
- If the fault is still present, the switch will not stay in the on position. If this happens, a competent person or electrician will need to inspect the installation.

## Product Specification

Voltage	220 – 240V 50Hz	Compliance	Enclosure: BS EN 61439-3
Current	100A max.		Main Switch: BS EN 60947-3
MCB Short Circuit Breaking Capacity	6kA		RCD: BS EN 61008-1 MCB: BS EN 60898-1 RCBO: BS EN 61009-1