

Installation instructions,

Meter Cabinet Consumer Units
Metal Cased
Flexible Consumer Units
230 / 240V a.c. BSEN61439-3



IMPORTANT INFORMATION

This unit should be installed by a qualified competent person in accordance with all relevant legislation and regulations including building regulations and wiring regulations BS7671. If in doubt contact a qualified competent person.

- · Turn off all power supplying this equipment before working on or inside the equipment.
- Always use a properly rated volt-sensing device to confirm the power is off.
- · Replace all devices, doors and covers before turning on the power to this equipment.
- To avoid ingress of swarf and similar material, always remove gland plates to allow cutting/slotting for cable entries. Failure to follow these instructions could result in serious injury or death.

DO NOT USE POWER TOOL SCREWDRIVERS ON ELECTRICAL CONNECTIONS



The consumer unit must be de-rated as follows: - Max. 100% rating, continuous load (in excess of 1 hour) 90% of incomer rating. A diversity factor of 90% should be applied to all RCDs.

Enclosure Mounting

- This product is suitable for mounting within a meter cabinet only and is rated at IP2XC.
- Remove appropriate KO's, cover and outer cable shroud from the enclosure. Note, the top gland plate can be removed for ease of KO removal
- The unit must be mounted with the gland plate facing upwards.
- Mount the unit into its installation position, Both 'L' brackets provided must be fitted in positions 'a' OR 'b', see Fig 1.1. When installed the base of both 'L' brackets should sit flush against the enclosure back wall in order to support the unit. Assess which 'L' bracket position (a OR b) best suits the installation and which bracket fixing holes should be used (the depth of the bracket fixing can be adjusted using the various bracket holes). Remove the unit from the installation.
- Remove the appropriate 'L' bracket fixing blanks from positions 'a'
 OR 'b' (4 per bracket) by drilling or knocking out from the inside of
 the unit. The baseplate should be removed to aid the 'L' bracket
 installation.
- Use the following fasteners provided to attach each 'L' bracket to the box: 4 x M5 screws, 4 x M5 nuts and 8 x M5 serrated washers, See Fig. 1.1.
- Mount the unit into its installation position. Secure the wing fixings first using M6 fixings. Both 'L' brackets should then be screw-fixed with M6 size screws (not supplied) to the cabinet back wall. See Fig. 1.2
- Check the unit is securely mounted.

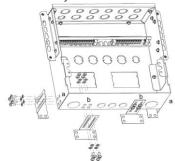


Fig. 1.1

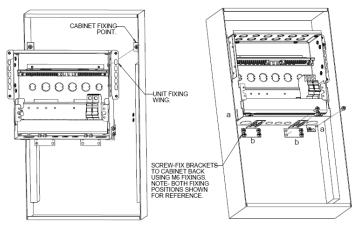


Fig. 1.2

Fit Circuit Breakers / RCBO's

Only Crabtree Loadstar 6MS range MCBs and 6FSR/6FSNR range RCBOs must be used within the AM3 skeleton Loadstar range of units.

Fasten all circuit breakers directly onto the DIN rail.

Cut busbar(s)

Cut busbars to suit the required number of circuit breakers / RCBO's

IMPORTANT: For split load, Dual RCD or High Integrity units cut all busbars to achieve the required split(s).

Note:

The user is advised to cut off any unused ways from the end(s) of busbar(s)

Replacement busbars can be purchased, if required.



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Check with your retailer, wholesaler or local authority for recycling advice.



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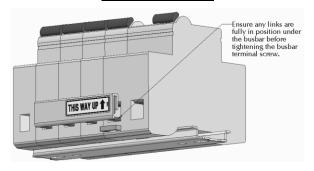
Install busbar(s)

Undo the bottom terminal screws on all devices, and the live terminal of the isolator and/or RCD(s). Insert the busbar(s) into the terminal cages with the identified cranked end located within the isolator / RCD live terminal cage. Ensure the busbar is fully inserted above any cable links and where applicable within the top section of any protective devices (MCB(s)/RCBO(s)). Tighten all terminal screws starting with the isolator / RCD

Check the tightness of all screw connections, including factory made connections (see table).

Device	Max. Cable Capacity	Recommended tightening torque
Main Switch / RCD	50mm ²	2.3Nm
MCB	25mm ²	2.3Nm
Standard RCBO	Outgoing connection - 16mm ²	2.0Nm
	Busbar connection	2.5Nm
Miniature RCBO	Outgoing connection - 16mm ²	2.0Nm
	Busbar connection	2.5Nm
Earth & neutral terminals	16mm²	1.7Nm

Use No.2 Pozidrive bit



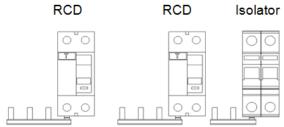
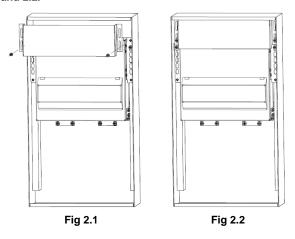


Illustration of a typical busbar fitting arrangement for a High Integrity unit

Replacement of Covers

Fit the front cover. The outer cable shroud should be fitted after the front cover is fitted. The shroud is screwed directly to the unit fixing wings. The shroud can be adjusted vertically to ensure all cables entering the top gland plate are shrouded. See Fig. 2.1. and 2.2.



Circuit identification for split load units

The circuit identification label on the front of a split load unit shows the minimum number of ways, which can be protected by the RCD(s). More ways can be shown as protected by overlabelling with the continuation label supplied inside the unit.

Testing and Commissioning

Before the consumer unit and the installation of which it forms a part are commissioned they must be tested, in accordance with the requirements of the current edition of Requirements for Electrical Installations (BS 7671) published jointly by the British Standards Institute and the Institution of Engineering and Technology.



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Waste electrical products should not be disposed of with household waste. Please recycle where waste disposal facilities exist.

Check with your retailer, wholesaler or local authority for recycling advice.

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