

Installation Instructions

These instructions are intended for use by qualified electricians. This unit must be installed by a qualified electrician, in accordance with the current edition of the IEE Regulations for Electrical Installations (BS7671 Requirements for Electrical Installations).

This Consumer Unit & devices complies with the following standards:

- Consumer Units BS EN 60439-3 - Conditional prospective short circuit at 16kA rms at 240V, power factor 0.6.
- Switch disconnectors BS EN 60947-3.
- Residual Current Circuit Breakers (RCCB) BS EN 61008
- Residual current operated circuit breaker with integral overload. (RCBO) BS EN 61009
- Miniature Circuit Breakers (MCB) BS EN 60898

Installation Notes

Cable entry facilities:

Metalclad units are provided with knockouts for standard 20, 25, and 32mm conduit and large rear knockouts (fig 1.)

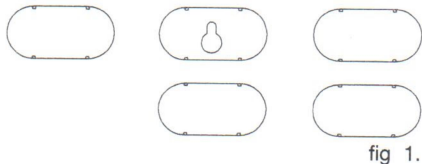


fig 1.

Insulated units are provided with breakouts for standard mini trunking (fig 2.)

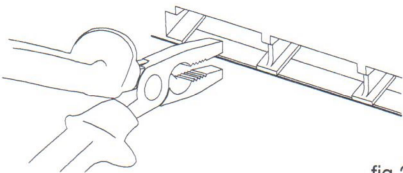


fig 2.

Rear cable entries should be scored along the weak point with a sharp knife, and tapped sharply to remove (fig 3.)

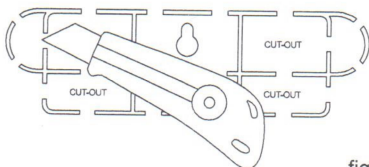


fig 3.

Guidance Notes

The total load must not exceed the rating of the incoming device.

Each neutral and earth connection must correspond numerically to its outgoing way. Additional blanks (ref. VAS01) are available to cover spare ways.

A pack is provided to label this consumer unit, please consult us for spares or replacements. An 'Operating Instruction leaflet is provided overleaf. This leaflet should be left for the end user.

Consumer Units incorporating RCDs in TT installations should be of an all-insulated or class II construction. Otherwise, additional precautions need to be taken to prevent faults to earth on the supply side of the RCD (as per BS7671 regulation 531-04-01)

Fitting Hager MCBs and RCBOs

1. Isolate the electrical supply from the consumer unit.
2. Remove the front cover, by turning the two fasteners 90 degrees.
3. Fully slacken the lower terminal of the device.
4. Fully open the bottom device clip (fig 4.)

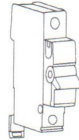


fig 4.

5. Locate the device onto the din rail, and busbar. Ensure that the busbar tooth is within the device terminal cage.
6. Close the bottom device clip.
7. While holding the device firmly onto the busbar, fully tighten the lower terminal screw.
8. After fitting all outgoing devices and connecting all outgoing cables, please check the tightness of all cable connections. This should include all factory made connections, which may have loosened during installation or transit.

Insulated Unit - Removing and replacing the top wall for top surface cabling (IP4X using foam inserts; 1mm² - 10mm² conductors BS6004)

1. Press in with index finger on one end release clip while pressing in with thumb on the inner release clip repeat on the other and lifting the wall away from the unit (fig 5.)

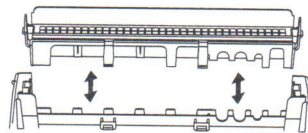


fig 5.

2. After fixing the unit, to replace and reseal, place one of the foam seal strips in the underside of the wall feature and the other in the base (behind the cables). Locate the wall and press down. Additional fixing points are provided.

Max outgoing top entry cable size 10mm² CSA.

Max incoming Main tails top entry cable size 25mm CSA.

If larger cables are needed, then enter from any other cable entry point other than top.

Metal Unit - Removing and replacing the terminal rail for cabling

3. Pull and lift the terminal bar support away from the unit (fig 6.) resting the rail supported by the earth strap.

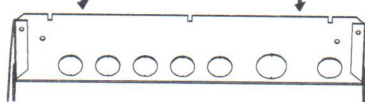
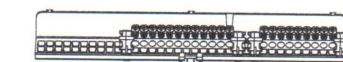


fig 6.

4. After fixing conduit/ cable glands, locate the rail support and press down.

Note: In transit it is possible that some connections on this consumer unit may have slackened. Please ensure that all connections (that are not factory sealed, or have a label over them) have been correctly torqued in accordance with the appropriate standards for devices, and for other connections at least 2Nm should be applied.

Warranty

All hager products benefit from a heavy investment in research and development, and from rigorous quality control procedures at all stages of manufacture.

A warranty period of 24 months is offered on hager products, from the date of manufacture, relating to any material, or manufacture defect. Providing that:

After inspection by the hager quality control department, the product has been found to be installed in a manner, which is in accordance with the BS 7671, and accepted practice at the time of installation.

The correct procedure for return of goods has been followed.

A full written explanation of the defect is included when returning the goods.

The product should be returned via the installer and the supplier (wholesaler).

IP ratings

Metal: IP3X with door closed;

Insulated: IP3X door closed and insulated top wall (IP4x top wall only)

IP2XC with door open, and full compliment of devices / blanks fitted.

The classification for the service condition, where all external cable entries are satisfactorily sealed to prevent insertion of a rigid steel rod of 2.5mm diameter in accordance with BS EN 60529

Performance characteristics

Limits of operation:

Ue = 240V, a.c.

Ui = 300V, a.c.

In = 63A (max) outgoing, rated frequency: 50Hz,

Icc = conditional prospective short circuit 16kA at 240V, 50Hz, Pf 0.6.

Classification: Environment B

Maximum outgoing circuit = 63A 1P MCB/ 45A RCBO

Protection of persons: indirect contact via protective circuit (metal enclosure), direct contact enclosure.

- Pollution degree 2 (with hager outgoing devices installed)
- Suitable for indoors use only
- Suitable for the following earthing systems = TN-S, TT, TNC-S.
- For dimensional information and weights please consult the manufacturers catalogue.
- All connections are classified as - Type F
- Please consult Hager for applications where this consumer unit will be flush mounted in a hollow / cavity wall.

Hager Ltd.

Unit M2, Furry Park Industrial Estate, Swords Road, Santry, Dublin 9, Ireland

Tel: 028 9077 3310

Fax: 028 9073 3572

User instructions

Your property has been equipped with a Hager consumer unit. This unit and its associated hager protective devices will offer the highest level of protection for your family and home.

A range of possible protective devices may be installed in your consumer unit, including Miniature Circuit Breakers (MCBs), Residual Current Circuit Breakers (RCCBs), combined MCB/RCDs (RCBOs), or Fuse carriers.

MCBs and fuses are safety devices designed to operate in the event that a circuit or appliance demands too much current.

RCCBs are also safety devices but are designed to protect against fault currents flowing to earth, and these reduce the risk of fire and electric shock. RCBOs combine the operation of both the MCB and RCCB. Access the devices by opening the door.

RCCBs and RCBOs should be tested every 3 months. Press the TEST or T button. The device should trip (go to the OFF position). If it trips, reset the device by pushing the toggle to the up (ON) position. If it does not trip call a qualified electrician.

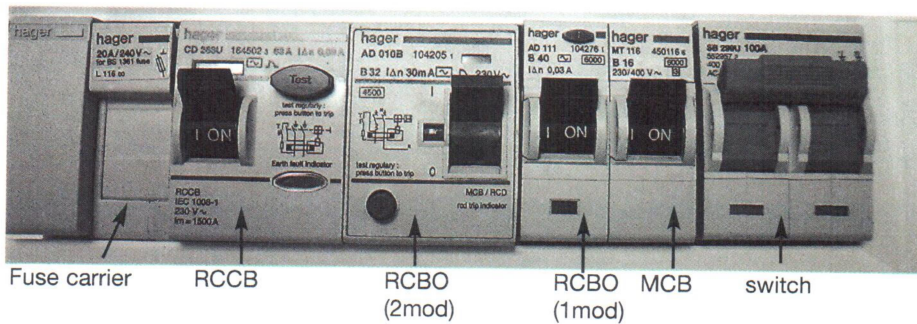
Only qualified electricians should remove the front cover

If any of the protective devices have tripped please follow the flow diagram below.

If in doubt always consult a qualified electrician

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* Important note: Fuse carriers must not be opened or closed with the main switch in the ON position.

