

Consumer Unit Installation Instructions / Data Sheet



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100A(125A) Switch connector (Main switch) Consumer Units Description



The distribution equipment and consumer units designed by Excel Group LTD is designed comply with the requirements of BS EN 61439-3 and the current Edition Wiring Regulations of BS 7671 IET Wiring Regulations. With multiple configurations and ranges for customer installations

Standard

Device	Standard
Consumer Unit	BS EN 61439-3
Main Switch	BS EN 60947-3
RCD	BS EN 61008-1
MCB	BS EN 60898-1
RCBO	BS EN 61009-1
SPD	BS EN 61643-11

Safety

All Products must be installed by a suitably competent electrician, giving consideration to their intended use and in accordance with the current edition of BS7671(IET Wiring Regulations).

The total load supplied by this unit must not exceed the rating of the main switch or RCD. The total load of the MCBs may exceed this value where appropriate diversity is applied. The Electricity at Work regulations and the Health and Safety at Work Act shall be complied with. Install in the horizontal plane only.

Ambient Temperature: The MCBs fitted to this unit are calibrated at 30°C in accord with calibration temperature requirements of EN60898. At other temperatures, the following rating factors should be used. 60°C: 0.85 20°C: 1.0 0°C: 1.15

Adjacent Thermal Magnetic MCBs should not be continuously loaded at their nominal rated currents or approach their nominal rated currents when mounted in enclosures. It is recommended that a 60% de-rating factor be applied to the MCBs nominal rated current where it is intended to load the MCB continuously.



Torque Setting

Device	Max Cable Capacity(mm2)	Recommended Torque (Nm)
Main Switch	35	2.5
RCD/RCCB	35	2.5
MCB	16	2
RCBO	6	2/1.2
Earth and Neutral Terminals	16	2

Warning

Before connecting to the power, check all connections (include factory made connections) are Torqued according to Torque Setting, Loose connections can cause fires!

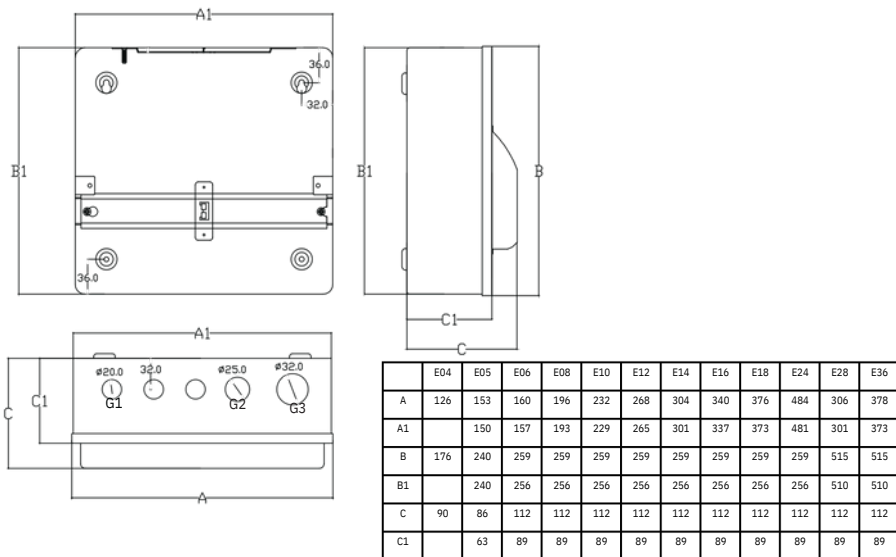
Technical Specifications

Operating Voltage (Ue)	230V
Rated Insulation Voltage (Ui)	400V
Rated Conditional Short Circuit Current (Icc)	16KA
Rated Impulse Withstand Voltage (Uimp)	4KV
Rated Current (In A)	Up to 100A (except 4 module consumer unit is 63A)
Operating Frequency	50Hz
IK rating	IK05
IP rating	IP 4X on top and IP 2XC on sides and bottom
Rated current of outgoing circuits (Inc)	MCB: 6A-63A; RCBO:6A-50A; RCD:63A and 100A type A
Pollution Degree	2
Usage	Domestic, Indoor use only

Product Options

Part No.	Description
E04	4 Ways Consumer Unit Enclosure
E05	5 Ways Consumer Unit Enclosure
E06	6 Ways Consumer Unit Enclosure
E08	8 Ways Consumer Unit Enclosure
E10	10 Ways Consumer Unit Enclosure
E12	12 Ways Consumer Unit Enclosure
E14	14 Ways Consumer Unit Enclosure
E16	16 Ways Consumer Unit Enclosure
E18	18 Ways Consumer Unit Enclosure
E22	22 Ways Consumer Unit Enclosure
E24	24 Ways Consumer Unit Enclosure
E28	28 Ways Consumer Unit Enclosure
E36	36 Ways Consumer Unit Enclosure

➤ Dimensions



➤ Installation

1. Remove front cover by opening lid and unscrewing the two fixing screws.
 2. Remove minimum appropriate knockouts from top, bottom, sides, or back of the enclosure. Use glands to secure the incoming cables, or grommet strip on the back knockouts to protect cables.
 3. Fix base to wall using screws and wall plugs as appropriate, use keyhole slots to hang in position and ensure level (spirit level) and other fixing holes to secure firmly. Bring cables installation entry method shall, as far as is reasonably practicable, maintain the fire containment of the enclosure.
 4. Route main incoming cables to the desired position, tighten the main incoming terminals securely.
- Note:** Ensure all connections are secured and terminal screws are fully tightened as per the label inside the enclosure.
5. The MCB/RCBO should be fitted onto the Din Rail ideally with the largest rating next to the incoming device, and/or protective RCD. Cut, dress circuit conductors and connect all incoming cables as required. Control devices such as Timers, Modular Contactors, and Transformers can be fitted to this unit. The incoming supply for these devices should be fed from an MCB and not direct from the busbar.

Warning

Ensure all connections are secured and terminal screws are fully tightened as per the label inside the enclosure or torqued as table.

6. Busbar is provided for the maximum number of outgoing devices which can be fitted. Busbar can be cut to the appropriate lengths if required.

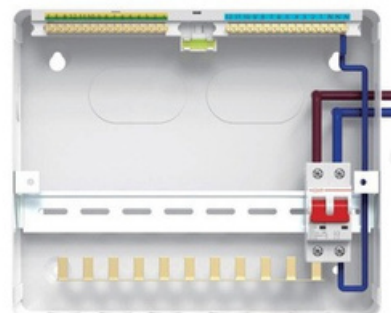
7. Each neutral and earth connection must correspond numerically to its outgoing way. Blanks are available to cover spare ways.

8. After completing the installation, remove the integrated spirit level from the enclosure and ensure the lid is replaced back on the base and tighten the fixing screws.

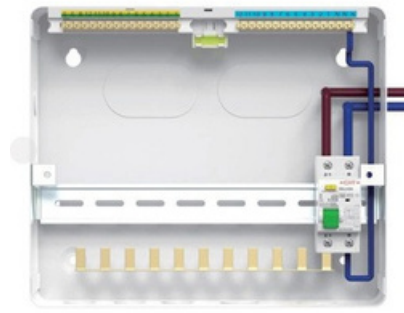
9. Clearly mark all circuits using the provided Labels sheet.

10. Test in accordance with current IET wiring regulations (BS7671), after completion of installation, hand this document and labels sheet to the end user.

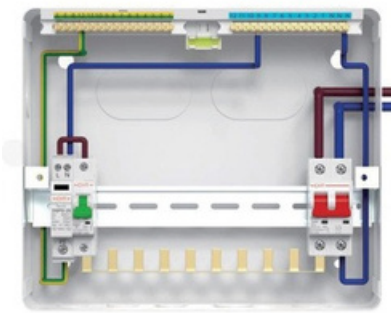
MAIN SWITCH INCOMER



RCD INCOMER



MAIN SWITCH and SPD



DUAL RCD / HIGH INTEGRITY

