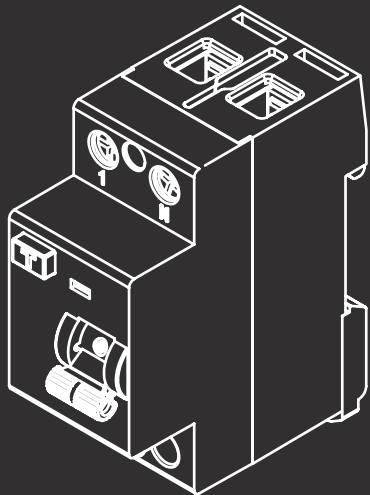




PCIL011-V1

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PROTEUS
®

RCDs

INSTALLATION INSTRUCTIONS

POWERUP

INSTALLATION INSTRUCTIONS FOR RESIDUAL CURRENT DEVICES (BS EN 61008 RCD / RCCB / ELCB)

The RCD must be installed by competent personnel in accordance with current electrical engineering codes of practice, I.E.E. regulations for electrical equipment, building statutory requirements and any special instructions issued by the manufacturer.

2 MOD 2 POLE - 'Line in' Terminal 1 and 'Neutral in' Terminal N (Line side) (ELECTRONIC)

4 MOD 4 POLE - Red' Term. 1, 'Yellow' Term. 3, 'Blue' Term. 5 and 'Black Neutral' Term. N (Alternatively 'Brown Term.1, Black Term.3, Grey Term.5 and Blue Neutral Term. N in accordance with changes in colour identification of fixed wiring as per BS7671) If using a 3-phase, 3-wire system (i.e. no Neutral) no external resistor is required. When using a 4 pole RCD as a 2 pole device, use terminals 'Line' 5 + 6 and 'Neutral' N + N. Note for 'Test Button' to operate connect an external link (~1mm² CSA) between terminal 3 and N(top).

TERMINAL CAPACITY

2 module 2 pole electronic RCDs upto 100A accept 1x50mm².
All 4 module RCDs up to 100A accept 1x35mm²

CONDITIONS FOR CORRECT USE

- The RCD must be installed in a suitable enclosure.
- The installation and appliances connected to the system must be adequately earthed in accordance with the I.E.E regulations.
- The RCD MUST be protected against the effects of SHORT CIRCUITS and OVERLOADS by a fuse or MCCB/MCB on the supply side.
- The RCD DOES NOT give protection on the load side against SHORT CIRCUITS or OVERLOADS. The load conductors MUST be protected by individual fuses or MCBs.
- The earth conductor MUST NOT pass through the RCD.
- All line and neutral conductors to be protected must pass through the RCD.
- There must be NO connection between neutral conductor and earth on the load side of the RCD.
- The tripping sensitivity (mA) of the RCD must relate to the earth loop impedance of the circuit (refer to the table in the I.E.E wiring regulations).

INSTALLATION TEST

The earth loop impedance of the circuit must be checked after TEST: installation to ensure compliance with the I.E.E regulation. After installation it is recommended that the insulation resistance of the circuit is tested using a 500V insulation tester. The result must comply with the value prescribed in the current edition of the I.E.E wiring regulations for electrical installations.

CAUTION

The 2 module 2 pole electronic RCD contains control circuitry which will give false readings if subjected to insulation (Megger) or other high voltage tests. It is essential that the RCD is disconnected from the circuit before such tests begin. This instruction is in accordance with the requirements of the IEE wiring regulations. The RCD must then be tested.

RCD TEST

Ensure supply is 'ON' and that the RCD is switched 'ON'. Press the 'Test Button' or the button marked 'T' and the RCD should trip out instantaneously. (Pressing the test button simulates an earth fault condition).

The test should be carried out frequently (i.e. at least once per quarter), if the RCD should fail to operate as described, then contact your electrical contractor / housing authority as applicable) It should be noted that the test button only checks the RCDs mechanical function using a tripping current greater than its rating and NOT the integrity of the earthing system.

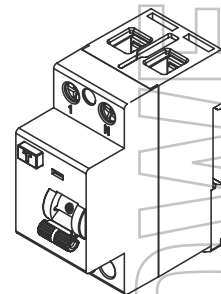
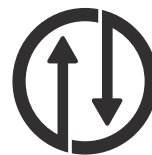
RCD PROTECTION

Most RCDs will protect against pure AC fault currents, however the Proteus electronic 2 module 2 pole versions will give additional protection against pulsating DC fault currents.

The use to which this product is put and its place of installation are outside the manufacturers control, hence particular care should be taken to follow the instructions given here and to ensure their continued availability in conjunction with the use of the product. No responsibility can be accepted by the manufacturer if these instructions are disregarded.

BIDIRECTIONAL

This RCD is bidirectional and allows current to flow through the device in either direction, suitable for use with Battery Storage, Solar PV and (Vehicle-to-grid) V2G/EV applications.



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