

Mini RCBO Bi-Directional

Residual current circuit breaker with integral overcurrent protection

Product Description

- In alternative power supplies such as Solar photovoltaic (PV), generators, and energy storage systems, the possibility of bi-directional power flow must be considered with respect to protective devices.
- suitable for bi-directional power flow.
- IET wiring regulations for electrical installations BS7671



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overcurrent protection

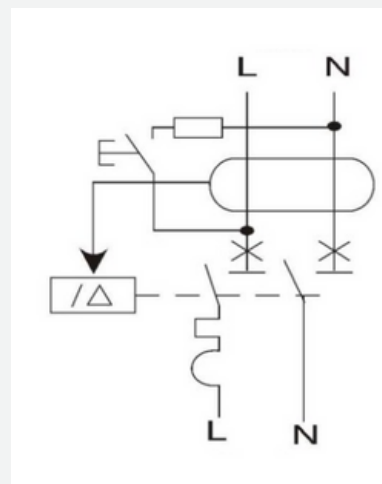
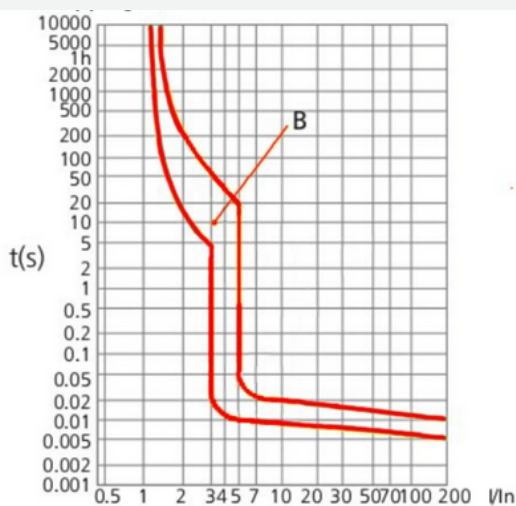
Mini RCBO Bi-Directional



The main technical parameters

Product name	RCBO
Standards	IEC61009-1
Certificate	CE, UKCA
Electrical characteristics	
Number of poles	1P+N
Rated frequency (Hz)	50/60
Frame current (A)I _{nm}	40
Rated current (A)I _n	6,10,16,20,32,40
Rated voltage (V)	AC230
Rated insulation voltage (V)U _i	500
Rated impulse withstand voltage (kV)U _{imp}	4
Rated short-circuit breaking capacity (kA)I _{cs}	6
Rated short-circuit breaking capacity (kA)I _{cn}	6
Instantaneous trip characteristics	B,C
Trip form	Thermal, magnetic and Leakage trip
Pollution level	2
Rated residual action current (mA)	30
Max. breaking time at the rated residual current	0.1s
Wave form of earth leakage sensed	AC/A
Mechanical properties	
Electrical life	4000
Mechanical life	10000
Protection grade	IP20
Indicator window	Contact status indication
Normal operation conditions and installation characteristics	
Storage temperature	-35°C ~+70°C
Installation site altitude	≤ 2000m
Terminals	Fixed with screw
Maximum wiring capacity	In 16mm ² Out 6mm ²
Maximum limit torque Nm	3.5
Installation category	Class II , III
Installation method	35mm standard rail
Incoming method	Upper and lower

Tripping characteristics and Dimensions



Testing of the Installation

- After completion of the installation, it is essential that it is tested in accordance with the latest edition of the IET wiring regulations for electrical installations (BS7671)
- Test equipment manufacturers instructions should be referred to in order to establish the correct procedure for testing type A devices.
- RCBOs with a switched neutral pole DO NOT require the blue neutral flying lead or the final circuit conductors to be disconnected during insulation resistance testing.
- Insulation testing should be conducted at the top L-N terminals with the device in the OFF position

Test Parameter (AC setting)		Result
0.5x I Δ n		RCBO will not trip
1.0x I Δ n	0 & 180°	RCBO must trip within 300ms
5.0x I Δ n	0 & 180°	RCBO must trip within 40ms

Maintenance

The RCBO should be tested on a regular basis by pressing the TEST button (T) in accordance with the latest edition of the IET wiring regulations for electrical installations (BS7671)