

10kA RCBO

Residual current circuit breaker with integral overcurrent protection

General Information

The Lewden range of circuit protection devices are designed and tested for use with Lewden branded distribution boards. This device must be installed by a qualified electrician in accordance with the latest edition of the IET wiring regulations for electrical installations BS7671

Amp rating	B trip part No	C trip Part No	Power Loss (W)
6A	RCBO10-06/30/1M/B	RCBO10-06/30/1M/C	2.00
10A	RCBO10-10/30/1M/B	RCBO10-10/30/1M/C	2.20
13A	RCBO-10-13/30/1M/B	RCBO-10-13/30/1M/C	2.30
16A	RCBO10-16/30/1M/B	RCBO10-16/30/1M/C	2.60
20A	RCBO10-20/30/1M/B	RCBO10-20/30/1M/C	2.80
25A	RCBO10-25/30/1M/B	RCBO10-25/30/1M/C	3.40
32A	RCBO10-32/30/1M/B	RCBO10-32/30/1M/C	3.60
40A	RCBO10-40/30/1M/B	RCBO10-40/30/1M/C	4.10

Technical Data				
Reference standard	IEC/EN61009-1-2			
Rated Voltage (Un)	230-240V ac			
Rated Current (In)	6-40A			
Rated Frequency (Fn)	50/60Hz			
Rated short circuit capacity	10kA			
Rated impulse withstand (Uimp)	4kV			
Tripping Characteristic	B or C			
Rated residual current (Icn)	30mA			
Туре	AC			
Neutral pole	Un-switched			
Terminals line	1-25mm² (2.5Nm)			
Terminals load	1-16mm² (1.5Nm)			
Neutral conductor length	600mm (can be cut to suit)			
Dimension	1x 18mm module			
Operating temperature	-5 to +40°c			
I [△] m	4500A			

Adjacent thermal magnetic MCBs/RCBOs should not be continuously loaded at their nominal rated currents when mounted in enclosures. We recommend a diversity factor (RDF) is applied to the MCB/RCBO nominal rated current where it is intended to load circuits continuously and simultaneously

Consumer unit ways	RDF	Consumer unit ways	RDF
1 way	1	6-9 ways	0.6
2-3 ways	0.8	10 ways +	0.5
4-5 ways	0.7		

Single module RCBOs are suitable for use in TN-S,TN-C-S, & TT * network systems.

(* when used in conjunction with a 2 pole mains isolation switch). Note that alone, they are not considered as a suitable means of isolation on systems with IT & TT earthing arrangements, where it may be necessary to disconnect the neutral connection in order to achieve safe isolation of individual circuits.

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 Para	meter	Result
0.5x I∆n		RCBO will not trip
1.0x I △n	0 & 180°	RCBO must trip within 300ms
5.0x I∆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)

What to do if an MCB/RCBO trips

Reset tripped MCB/RCBO to the ON position. If device trips again, disconnect all appliances connected to this circuit. Switch RCBO ON and safely connect appliances one at a time to identify which one trips the device.

In all cases, once the faulty appliance has been identified, do not continue to use the item until it has been checked.

If fault persists, call a qualified electrician to check the installation.

