

# RCCB 25...125 A B type 30 mA, 300 mA and 500 mA instantaneous, 300 mA



## Description

### B type $\sim \Delta n \text{ ---}$

The RCCB B type residual current circuit-breakers provide specific protection of three-phase installations and people even in the presence of DC fault currents on the network generated by:

- Three-phase controllers and variable speed drives
- Three-phase battery chargers and inverters
- Three-phase backed-up power supplies

They are a requirement for three-phase supplied applications, when class I equipment installed downstream from the RCCB are likely to produce DC component fault currents (pure DC fault)  $\sim \Delta n \text{ ---}$ .

They include and also guarantee protection against fault currents:

- Sinusoidal AC residual currents  $\sim$  (AC type)
- Pulsed DC residual currents  $\sim \Delta n$  (A type)

They can be adapted, without exception, to all the application cases defined in standards IEC 60364 and EN 50178.

The B type RCCB combination with variable speed drives of the Telemecanique brand has been successfully tested and validated.



## Instantaneous

It ensures instantaneous tripping (without time delay).

## Selective

It ensures total discrimination with a non-selective RCD placed downstream.

## Technical data

Compliance with standards	IEC 61008, EN 61008, VDE 0664
Voltage rating	230/400 V AC, +10%, -15%
Frequency rating	50 Hz
Current rating (In)	25, 40, 63, 80 or 125 A
Making and breaking capacity, rated residual current (I $\Delta$ m = Im) as per standard IEC 61008	10 In with 500 A minimum
Protected against nuisance tripping due to transient overvoltages (lightning stroke, device switching on the network, etc.)	
Level of immunity in 8/20 $\mu$ s wave	250 A for instantaneous 3 kA for 
Tripping time	I $\Delta$ n: $\leq$ 300 ms 5I $\Delta$ n: $\leq$ 40 ms
Short-circuit current withstand (I $\Delta$ c = Inc)	See the circuit breaker or fuse coordination table with B type RCCB
Number of operating cycles (O-C)	Mechanical: > 5 000 Electrical: > 2 000
Releases with fixed sensitivities for all ratings	Instantaneous release Selective release  : allows total vertical discrimination with the 30 mA RCDs placed downstream
Test button	Checks proper operation of the tripping mechanism Working range: 185...440 V AC
Indication of RCCB status	By 3-position toggle and mechanical indicator on the front face: closed (red indicator) tripped on fault (red indicator) open (green indicator) By OFsp auxiliary switch (optional)
Tropicalisation	Treatment 2 (relative humidity 95% at 55°C)
Operating temperature	-25°C to +40°C
Storage temperature	-40°C to +60°C
Weight (g)	500
Degree of protection	IP40 on front face IP20 at terminals
Connection by tunnel terminal	Flexible or rigid cable: 1 x 1.5 to 50 mm <sup>2</sup> or 2 x 1.5 to 16 mm <sup>2</sup>