

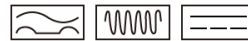


RESIDUAL CURRENT CIRCUIT BREAKER (RCCB) Type B

RKB

IEC/EN 61008
IEC/EN 62423

Type B



Technical data

Rated current (In): 40A, 63A
Rated voltage (Un): 230/400VAC
Rated impulse voltage (Uimp): 4kV
Rated cond. short circuit current (Isc): 10kA
Rated making and breaking capacity: 800A
Rated frequency: 50/60Hz
Frequency response range: 0-1000Hz
Rated residual operating current: 30mA, 300mA
Max. Break times: ≤ 0,04s
Earth Leakage Protection type B
Number of poles: 2P, 4P
Terminal capacity (S): 1-35mm ²
Tightening torque: 3.0 Nm
Dimensions: 4 modules (71mm)
Weight: 425g
Protection degree: IP20
Ambient temperature: -25°C ... +40°C
Storage temperature: -30°C ... +60°C
Standards: IEC/EN 61008, IEC/EN 62423

Functions and features

Residual Current Circuit Breaker type B for detection of alternating leakage current up to 1kHz, pulsating current and continuous pure current.

Tripping is ensured as for type A and in addition for smooth DC residual currents, residual DC currents which may result from rectifying circuits and high frequency AC residual currents.

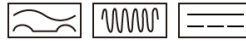
Protection in the event of continuous fault current on three-phase networks generated by: controllers and variable speed drives, battery charges and inverters, backed-up power supplies.

Items



Poles	In	Rated residual operating current	Item
2P	40 A	30mA	RKB 2P 40A 30mA
		300mA	RKB 2P 40A 300mA
	63 A	30mA	RKB 2P 63A 30mA
		300mA	RKB 2P 63A 300mA
4P	40 A	30mA	RKB 4P 40A 30mA
		300mA	RKB 4P 40A 300mA
	63 A	30mA	RKB 4P 63A 30mA
		300mA	RKB 4P 63A 300mA

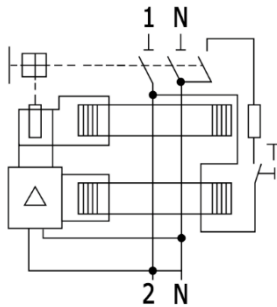
**RESIDUAL CURRENT
CIRCUIT BREAKER (RCCB) Type B**



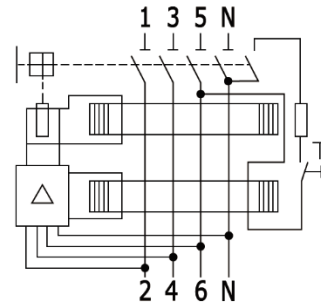
RKB

Diagrams

2P:



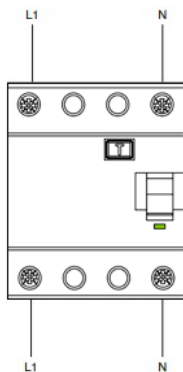
4P:



Conections

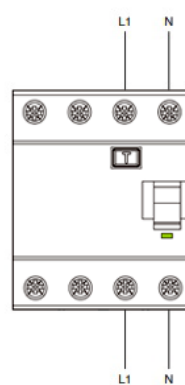
2P:

Single-phase 230V

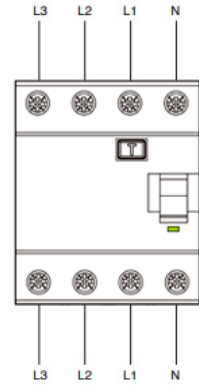


4P:

Single-phase (2P) 230V

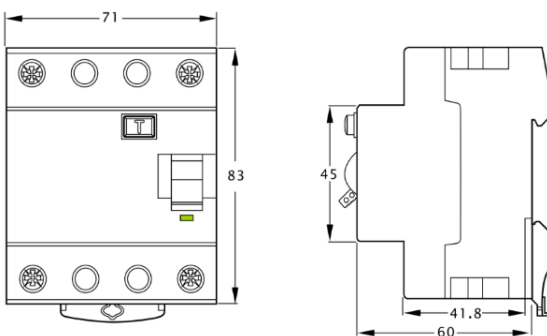


Three phase+N 400V

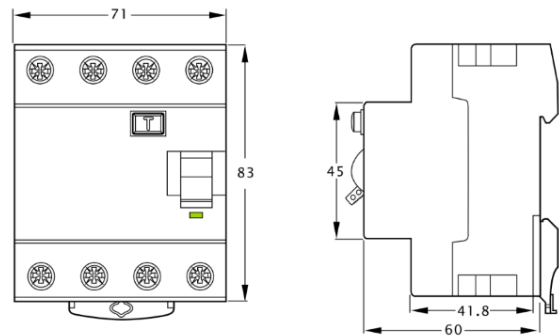


Dimensions (mm)

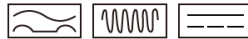
2P:



4P:



RESIDUAL CURRENT CIRCUIT BREAKER (RCCB) Type B



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Tripping curves

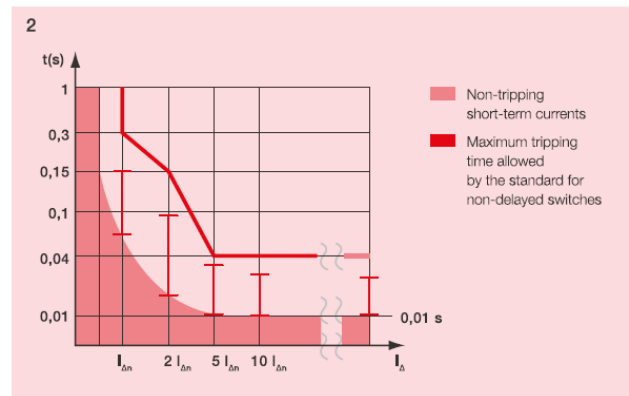
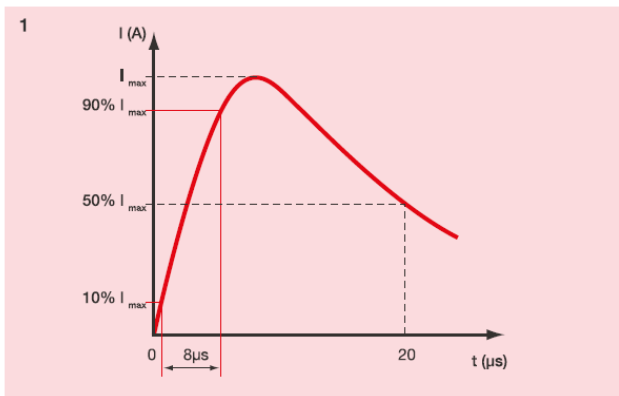
Immunity to nuisance tripping:

Type B residual current devices must successfully pass further severe tests to prove their immunity to unwanted tripping it as below:

severe tests such as:

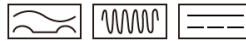
- 8/20 μ s impulse up to 3000 A (s. fig. 1);
- 10 ms impulse up to $10 I_{\Delta n}$ (s. fig. 2).

These tests emulate the conditions that an RCD must withstand in case of overvoltages or leakages due to EMC filters or electronic loads. Type B and devices can be considered suitable for all difficult applications, not only in terms of protection, but of operational continuity as well.



1 Impulse 8/20 μ s | 2 Insensitivity to short-term residual currents

RESIDUAL CURRENT CIRCUIT BREAKER (RCCB) Type B

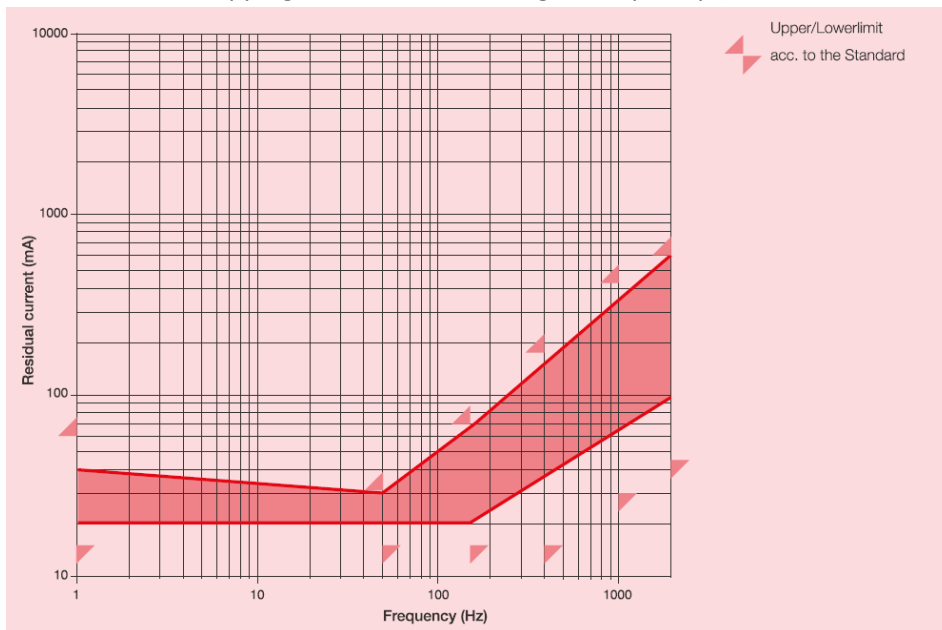


RKB

Tripping curves

Technical details:

Residual current tripping thresholds according to frequency (30 mA)



Power loss values

	In [A]	Power Loss [W]
RKB 2P	40	6
	63	9
RKB 4P	40	13
	63	20

Temperature derating

	40A	63A
40°C	40	63
45°C	40	63
50°C	40	40
55°C	40	40
60°C	25	25

Note: please make sure that these values are not exceeded and that any upstream thermal overload protection switches off in time.