

RCBO 1 module (18mm), RCE1



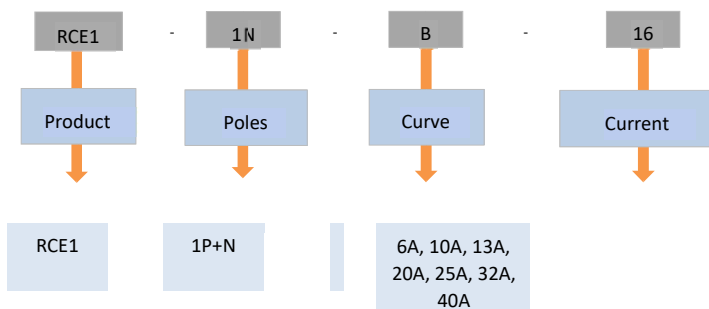
- △ According IEC61009-1
- △ Rated short circuit breaking capacity Icn 6kA
- △ 1p+n
- △ Tripping characteristics B and C
- △ Rated current up to 40Amp
- △ Rated operational voltage 230VAC
- △ Connectable with accessories
- △ Pin- type busbars connection

General information

The SEP RCE1 RCBO is a protective device against residual current, shortcircuit and overload. It is suitable to the AC circuit of 50/60Hz, the rated voltage is 230V, rated current up to 40A. It is mainly used to protect human safety from electrical shock and to prevent fire disaster caused by residual current due to damaged equipment. It also can be used in the infrequent on-and-off switching operation under the normal cases. This RCBO is mainly used in the domestic, utility and industrial applications. Due to the small design of only 18mm width it saves 50% of the space.

Type key

Example: RCE1-1NB16



Certification marks



Remarks

Despite all the efforts we take to give as well documented and correct as possible information, we can not be reliable for any damage that may occur due to a mis- typing or wrong interpretation of the given information. The sales and delivery for these products will be according our standard terms. All prices are indicative only and can be changed without advance notice. If you find any mistake in this catalogue, we would be thankful if you would let us know. This way you help us to give a better service.

Technical Data - RCE1

RCBO 1p+n (18mm), 6kA

General parameters

High limiting of short circuit current

Suitable for household, utility as well as industrial applications

Saves 50% space on RCBO with a permanent magnet principle of residual current device

RCE1 - Voltage depending tripping function

RCBO's should be tested regularly with a period of one month. This is the responsibility of the user of an installation given by law

Electrical parameters

Tested according		IEC/EN 61009
Rated operational voltage	U _e	230V AC
Maximum working voltage	U _{max}	240V AC
Min voltage for MCB function		12V AC/DC
Min voltage for RCD function	U _{min}	40V AC
Voltage range of the test button		110 - 254VAC
Rated frequency		50/60 Hz
Rated short circuit capacity	I _{cn}	6kA
Rated service short circuit capacity	I _{cs}	6kA
Rated residual M/B capacity	I _{dm}	3 kA
Rated M/B capacity	I _m	3 kA
Poles		1p+n
Rated current	I _n	6...40 A
Rated residual current		10mA, 30mA
Sensitivity to residual current		A-type (residual AC and pulsating DC current)
Time characteristic of RCD		undelayed
Tripping characteristics		B, C
Rated impulse withstand voltage	U _{imp}	4 kV
Rated insulation voltage	U _i	500 V
Transient overvoltage category		3
Selectivity class		3
Dielectric test voltage		6 kV
Mechanical life time		10 000 operation cycles
Electrical life time		4 000 operation cycles
Max. back-up fuse		max. 125A gG
Line voltage connection		arbitrary - above or below

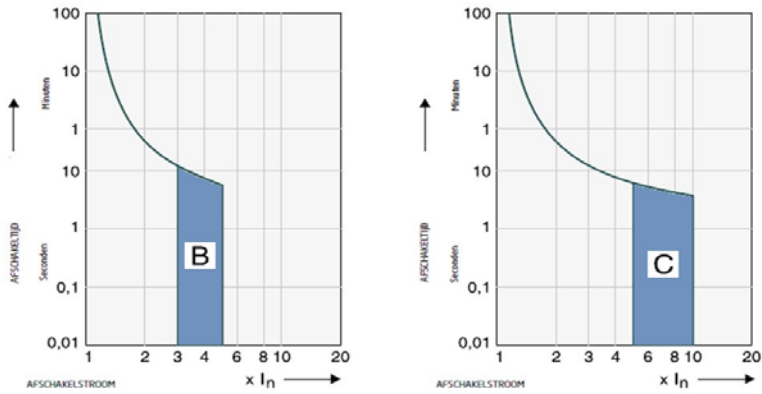
Mechanical parameters

Device width	18 mm (per pole)
Device height	89 mm
Device depth	77 mm
Mounting	easy- fastening onto 35 mm device rail (DIN)
Degree of protection (all sides)	IP40
Degree of protection (connection terminals)	IP20
Connection possibility	cable / busbar
Terminals	cage clamp terminal
Terminal capacity	10 mm ²
Fastening torque of terminals	1,2 Nm
Busbar connection	Pin
Busbar thickness	10 / 16 mm ²
Storage temperature	-25 °C + 70 °C
Reference temperature	30 °C
Ambient temperature	-25 °C + 40 °C (with daily average < 35 °C)
Installation class	III
Pollution degree	2
Weight	0,122 kg

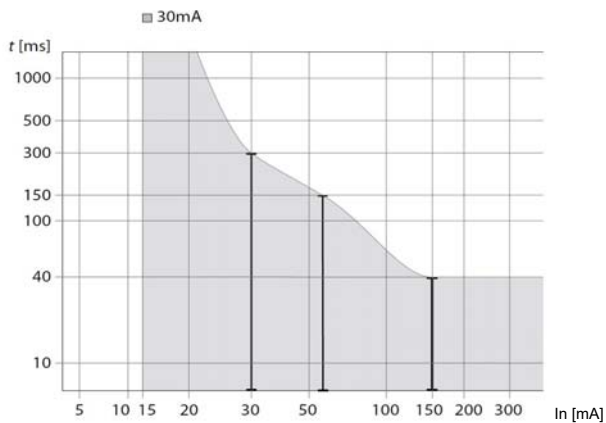
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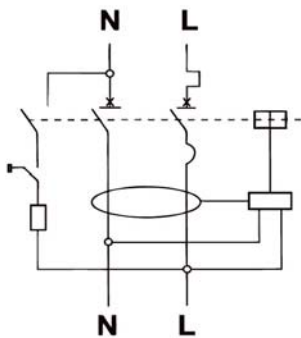
Tripping characteristics



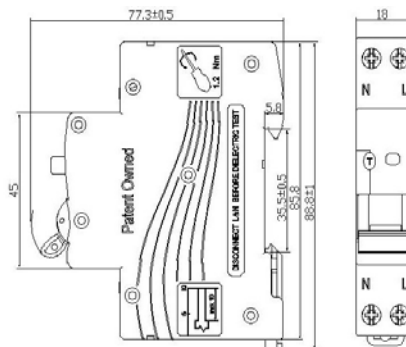
Tripping time



Wiring diagram



Dimensions



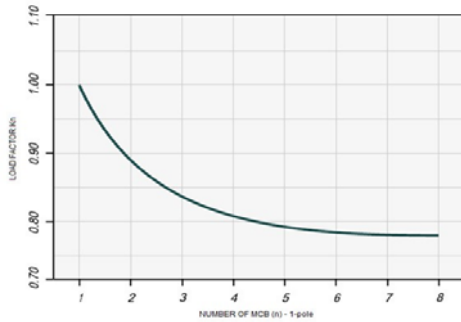
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Dependence of Tripping Characteristics on Ambient Temperature

T [°C]	In (T) [A]						
	6 A	10 A	16 A	20 A	25 A	32 A	40 A
-20	8	13.5	20	24.5	29.8	39.5	50.5
-15	7.8	13.3	19.8	24.3	29.7	39.3	50.4
-10	7.6	13	19.5	24	29.5	39	50.2
-5	7.3	12.7	19.2	23.8	29.3	38.8	50
0	7.2	12.5	19.1	23.7	29.2	38.6	48.8
5	7	12.3	18.8	23.5	29	38.4	48.6
10	6.8	12.1	18.6	23.3	28.8	38.2	48.4
15	6.6	12	18.5	23.1	28.6	38	48.1
20	6.4	11.8	18.3	22.8	28.4	37.8	47.8
25	6.2	11.5	18	22.6	28.2	37.5	47
30	6	10	16	20	25	32	40
35	6	9.9	15.7	19.7	24.6	31.5	39.2
40	5.9	9.8	15.4	19.3	24.3	31.1	38.8
45	5.8	9.8	15.1	18.8	24	30.8	38.3
50	5.7	9.6	14.9	18.5	23.8	30.1	38
55	5.6	9.5	14.7	18.2	23.5	29.5	36.5

Correction factor laterally mounted miniature circuit breakers



Correction factor (K) in mutual thermal influence of parallel mounted breakers at rated load.

Power loss

In [A]	6A	10A	16A	20A	25A	32A	40A
P [W]	1,5	1,5	3	3	3,5	5	5,5