NB4LE Residual Current Operated Circuit Breaker (Electronic)

1. General

1.1 Function

Personnel and fire protection: Cable and line protection against overload and short-circuits.

1.2 Selection

Rated residual operating current

IΔn = 30mA, additional protection in the case of direct contact.

RCD Type

Type A

RCD Type A is ensured for sinusoidal, alternating residual currents as well as for pulsed DC residual currents, whether they be quickly or slowly increase.

Tripping curve

B curve (3 In-5 In) protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems.

C curve (5 In-10 In) protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.

1.3 Approvals and certificates

CE/CB

1.4 Add-on devices

XF9 auxiliary contacts

S9 shunt release

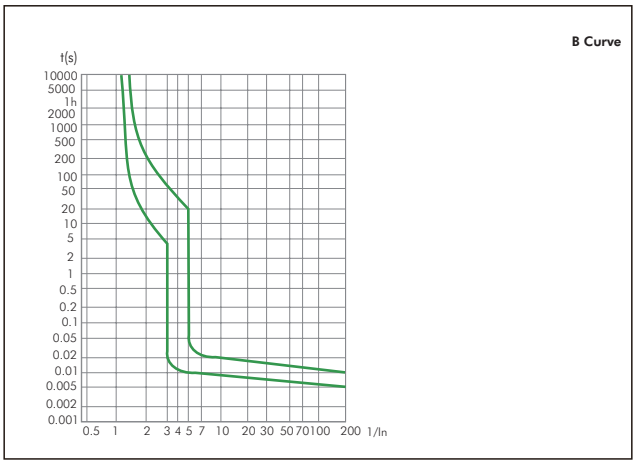
V9 under voltage release

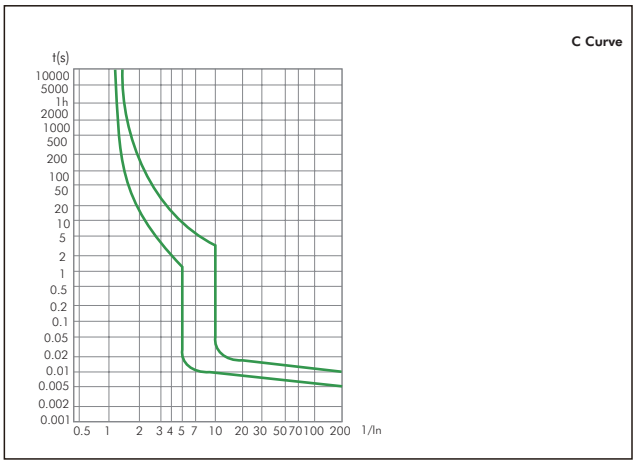
OVT-1 over voltage release

CE CB

2. Technical data

2.1 Curves





A

2.2

	Standard		IEC/EN 61009-1
Electrical features	Type (wave form of the earth leakage sensed)		A
	Thermo-magnetic release characteristic		B, C
	Rated current In	A	6, 10, 13, 16, 20, 25, 32
	Poles		2P
	Rated voltage Ue	V	230/240
	Rated sensitivity I △n	A	0.03
	Rated residual making and breaking capacity I △m	A	3,000
	Rated short-circuit capacity Icn	A	6,000
	Break time under I △n	s	≤0.1
	Rated frequency	Hz	50/60
	Rated impulse withstand voltage (1.2/50)Uimp	kV	4
	Dielectric TEST voltage at ind. Freq. for 1min	kV	2
	Insulation voltage Ui	V	500
	Pollution degree		2
Mechanical features	Electrical life		2,000
	Mechanical life		10,000
	Contact position indicator		Yes
	Protection degree		IP20
	Ambient temperature (with daily average≤35℃)	℃	-25~+70
	Storage temperature	℃	-25~+70
Installation	Terminal connection type		Cable/U-type busbar/Pin-type busbar
	Terminal size top/bottom for cable	mm^2	25
		AWG	18-3
	Terminal size top/bottom for busbar	mm^2	10
		AWG	18-8
	Tightening torque	N·m	2
		In-lbs.	18
	Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
	Connection		Bottom electrical feeding

2.3 Temperature derating

The maximum permissible current in a circuit breaker depends on the ambient temperature where the circuit breaker is placed. Ambient temperature is the temperature inside the enclosure or switchboard in which the circuit breakers are installed.

The reference temperature is 30℃

Temperature	-25℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60	70℃
Temperature compensation coefficient of rated current	1.27	1.25	1.20	1.15	1.10	1.05	1.00	0.95	0.90	0.85	0.80

3. Overall and mounting dimensions (mm)