NB3LEG Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)

1. General

1.1 Selection

Rated residual operating current

IΔn ≤ 30 mA: additional protection in the case of direct contact.

Tripping class

AC class – Tripping is ensured for sinusoidal, alternating currents, whether they be quickly applied or slowly increase.

A class

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

Tripping curve

B curve (3-5 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 (5-10 In) protection and control of the circuits against

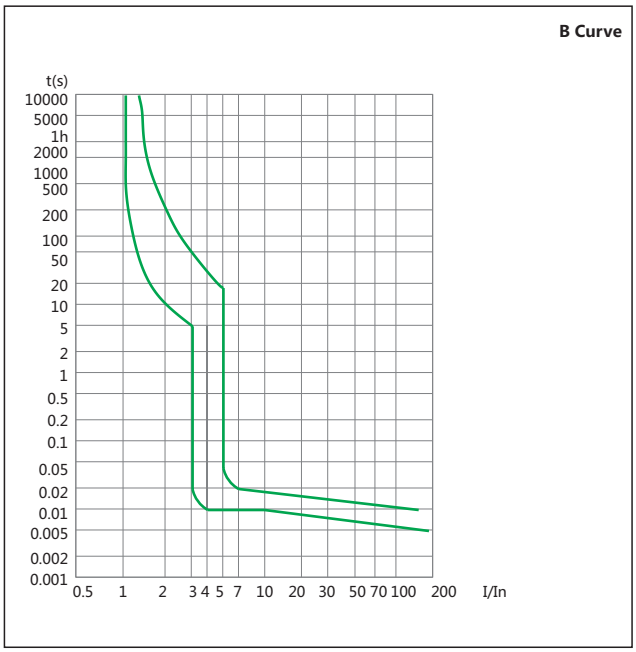
overloads and short-circuits; protection for resistive and inductive loads with low inrush current.

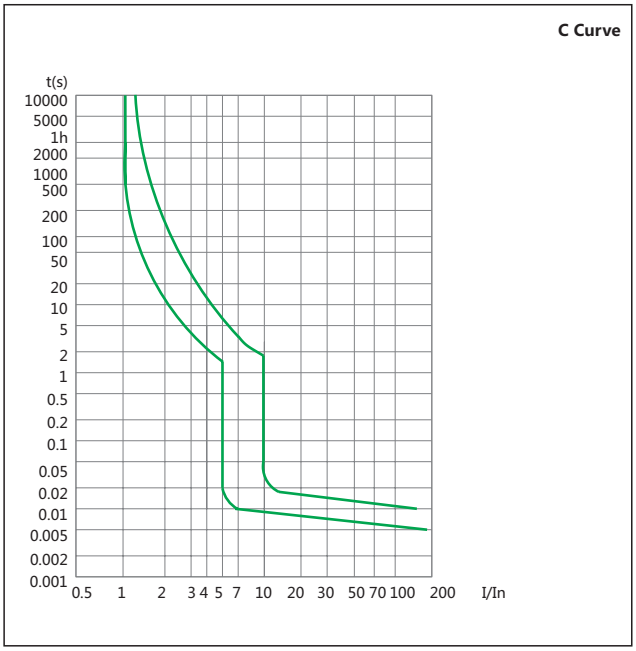
1.2 Approvals and certificates

Detailed information, please refer to Certificates Table on the last page.

2. Technical data

2.1 Curves





A

2.2

	Standard		BS EN61009-1
Electrical features	Type (wave form of the earth leakage sensed)		AC, A
	Thermo-magnetic release characteristic		B, C
	Rated current In	A	6, 10, 13, 16, 20, 25, 32 , 40
	Poles		1P+N
	Rated voltage Ue	V	240V AC
	Rated sensitivity I△n	A	0.01 , 0.03
	Rated residual making and breaking capacity I△m	A	3000
	Rated short-circuit capacity Icn	A	6,000
	Break time under I△n	s	≤0.1
	Rated frequency	Hz	50
	Rated impulse withstand voltage (1.2/50)Uimp	V	4,000
	Dielectric TEST voltage at ind. Freq. for 1min	kV	2
	Insulation voltage Ui		500
	Pollution degree		2
Mechanical features	Electrical life		2,000
	Mechanical life		2,000
	Contact position indicator		Yes
	Protection degree		IP20
	Ambient temperature (with daily average≤35℃)	℃	-5...+40
	Storage temperature	℃	-25...+70
Installation	Terminal connection type		Cable/U-type busbar/Pin-type busbar
	Terminal size top/bottom for cable	mm^2	16
		AWG	18-5
	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		From top

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℃** Ambient temperature: -5℃~+40℃.

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

3. Overall and mounting dimensions (mm)