



## NB3LEU-A Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)

### 1. General

#### 1.1 Selection

##### Rated residual operating current

$I_{\Delta n} = 30 \text{ mA}$ :

additional protection in the case of direct contact.

##### Tripping class

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

##### Tripping curve

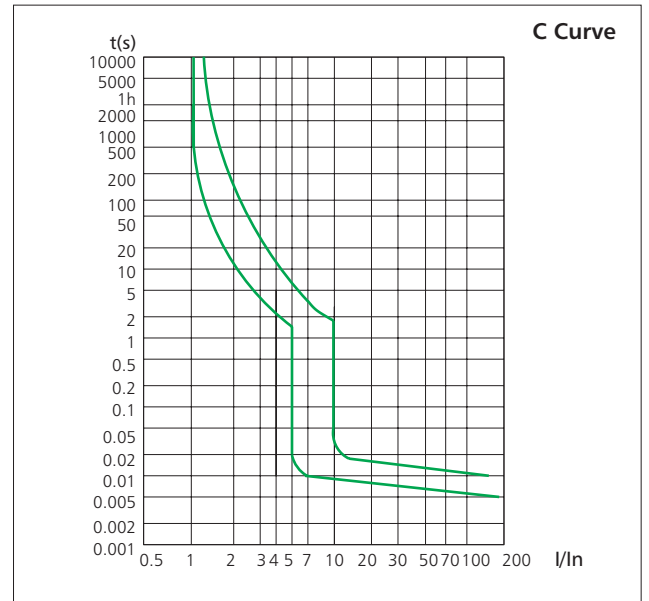
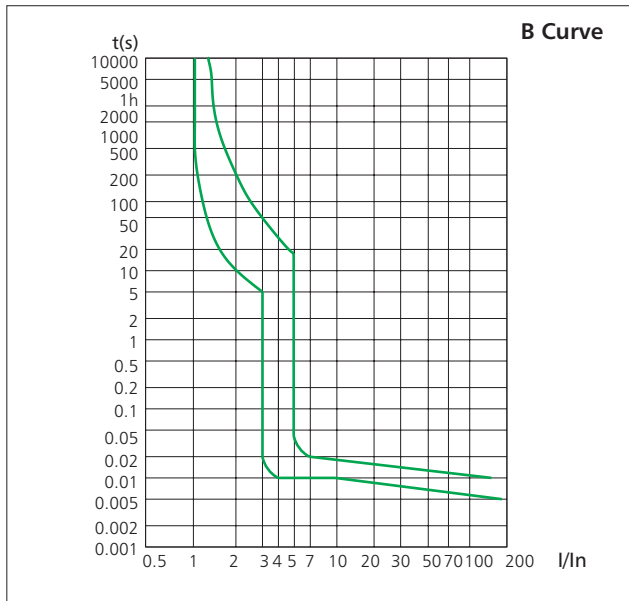
B curve (3-5  $I_n$ ) protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems.

C curve (5-10  $I_n$ ) 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.

3. Technical data



3.2

	Standard		IEC/EN 61009-1
Electrical features	Type (wave form of the earth leakage sensed)		A
	Thermo-magnetic release characteristic		B, C
	Rated current $I_n$	A	6, 10, 16, 20, 25, 32, 40
	Poles		1P+N
	Rated voltage $U_e$	V	240
	Rated sensitivity $I_{\Delta n}$	A	0.03
	Rated residual making and breaking capacity $I_{\Delta m}$	A	500
	Rated short-circuit capacity $I_{cn}$	A	10,000
	Break time under $I_{\Delta n}$	s	$\leq 0.1$
	Rated frequency	Hz	50/60
	Rated impulse withstand voltage (1.2/50) $U_{imp}$	V	4,000
	Dielectric TEST voltage at ind. Freq. for 1min	kV	2
	Insulation voltage $U_i$		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 $\leq 35^\circ\text{C}$ )	$^\circ\text{C}$	-5...+40 (Special application please refer to P55 for temperature compensation correction)
	Storage temperature	$^\circ\text{C}$	-25...+70
Installation	Terminal connection type		Cable/U-type busbar/Pin-type busbar
	Terminal size top/bottom for cable	$\text{mm}^2$	16
		AWG	18-5
	Terminal size top/bottom for busbar	$\text{mm}^2$	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 bottom	

3.3 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°C**

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

4. Overall and mounting dimensions (mm)

