



NB3LE Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)

1. General

1.1 General rules for choosing RCBO:

a. Rated residual operating current
 $I_{\Delta n} = 30 \text{ mA}$: additional protection in the case of direct contact

b. Tripping class

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

c. 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 Detailed certificates information, please refer to Certificates Table on P151.

2. Ordering Information

NB3LE Curve B; 6KA; AC Type

★ NB3LE, 1P+N



In (A)	Un (V)	I Δ n (mA)	Code
6	240	30	984636
10	240	30	984637
13	240	30	984638
16	240	30	984639
20	240	30	984640
25	240	30	984641
32	240	30	984642

NB3LE Curve C; 6KA; AC Type

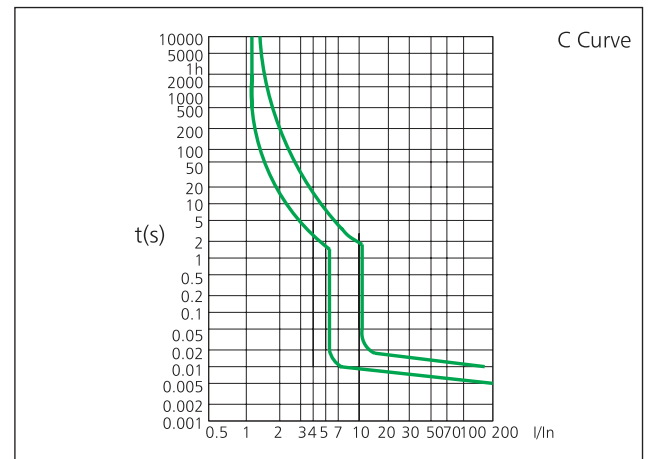
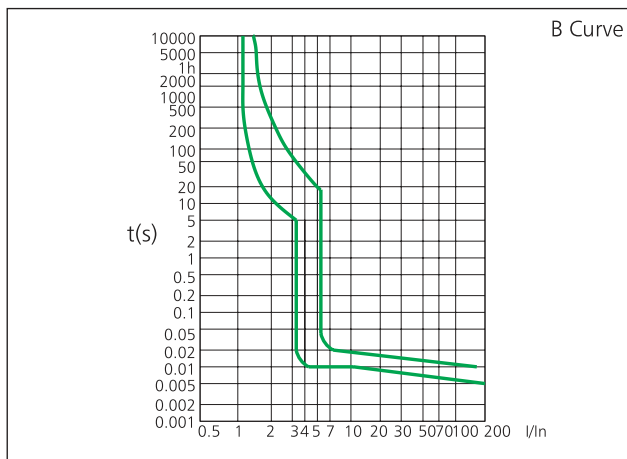
★ NB3LE, 1P+N



In (A)	Un (V)	I Δ n (mA)	Code
6	240	30	984643
10	240	30	984644
13	240	30	984645
16	240	30	984646
20	240	30	984647
25	240	30	984648
32	240	30	984649

3. Technical characteristics

3.1 Curves



3.2		Standard	IEC/EN 61009-1
Electrical features	Type (wave form of the earth leakage sensed)		AC
	Thermo-magnetic release characteristic		B, C
	Rated current I _n	A	6, 10, 16, 20, 25, 32
	Poles		1P+N
	Rated voltage U _e	V	240
	Rated sensitivity I Δ n	A	0.03
	Rated residual making and breaking capacity I Δ m	A	500
	Rated short-circuit capacity I _{cn}	A	6,000
	Break time under I Δ n	s	≤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	
Mechanical life			2,000
Contact position indicator			Yes
Protection degree			IP20
Ambient temperature (with daily average ≤35°C)		°C	-5...+40 (Special application please refer to P55 for temperature compensation correction)
Storage temperature	°C	-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	16
		AWG	18-5
	Tightening torque	N*m	2
		In-lbs.	18
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device	
Connection		From top	

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 Ambient temperature: -5°C~+40°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)

