



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.

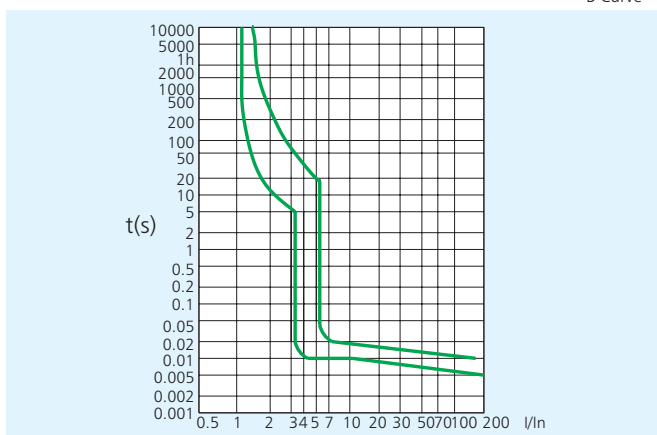
1.2 Detailed certificates information, please refer to Certificates Table on P153.



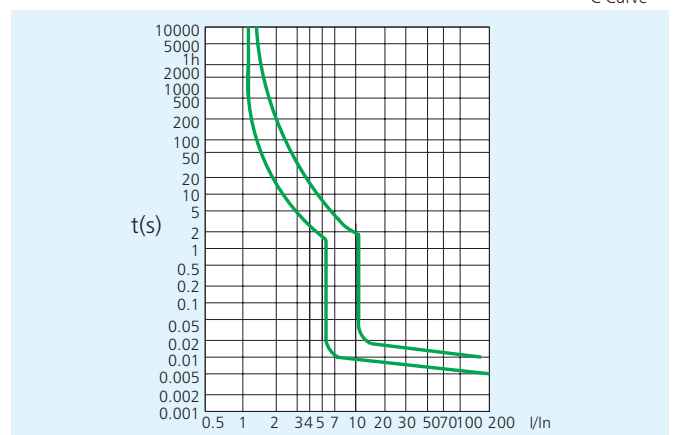
3. Technical characteristics

Curves

B Curve



C Curve



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 $I\Delta n$	A	0.03
	Rated residual making and breaking capacity $I\Delta m$	A	500
	Rated short-circuit capacity I_{cn}	A	6,000
	Break time under $I\Delta n$	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		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 P65 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	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

 Ambient temperature: $-5^\circ\text{C} \sim +40^\circ\text{C}$, special utilization please refer to the table below.

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)

