



NB3LEU-63 Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)

1. General

1.1 Selection

Rated residual operating current

$I_{\Delta n} = 10\text{mA}, 30\text{mA}, 100\text{mA}, 300\text{mA}$: 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 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.

D curve ($10-20 I_n$) protection and control of the circuits against overloads and short-circuits; Suitable for systems with high inductive load and large impulse current

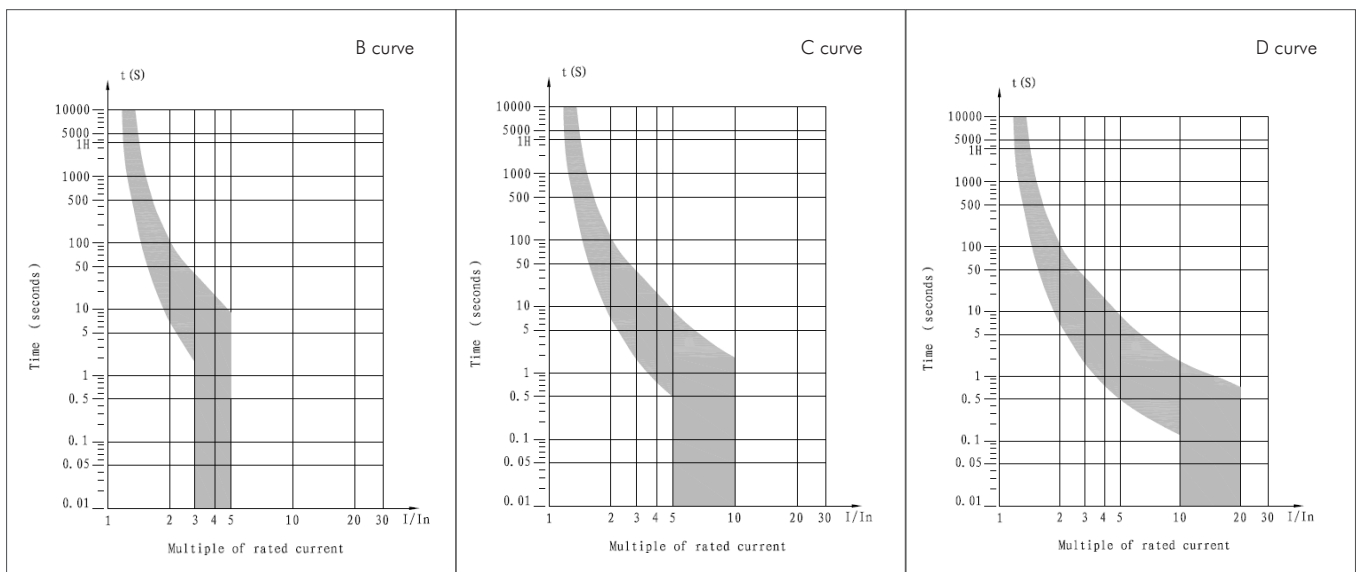
1.2 Approvals and certificates

CE/ SAA/ SEMKO/ CB.



2. Technical data

2.1 curves



2.2

	Standard		IEC/EN 61009-1
Electrical features	Type (waveform of the earth leakage sensed)		A, AC
	Thermo-magnetic release characteristic		B, C, D
	Rated current I _n	A	6, 10, 13, 16, 20, 25, 32, 40, 50, 63
	Poles		3P+N
	Rated voltage U _e	V	400/415
	Rated sensitivity I _{Δn}	A	0.01, 0.03, 0.1, 0.3
	Rated residual making and breaking capacity I _{Δm}	A	6000
	Rated short-circuit capacity I _{cn}	A	10000
	Break time under I _{Δn}	KV	≤0.1
	Rated frequency		50/60
	Rated impulse withstand voltage (1.2/50)U _{imp}		4,000
	Dielectric TEST voltage at ind. Freq. for 1 min		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 ≤35°C)	°C	-5...+40
	Storage temperature	°C	-25...+70
Installation	Terminal connection type		Cable/U-type busbar/Pin-type busbar
	Terminal size top/bottom for cable		25
		mm ²	18-3
	Terminal size top/bottom for busbar	AWG	16
		mm ²	18-5
	Tightening torque	AWG	2
		N·m	18
Mounting	In-lbs.	On DIN rail EN 60715 (35mm) by means of fast clip device	
Connection		From bottom	

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°C

Temperature	-25°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
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	0.83

2. Overall and mounting dimensions (mm)

