

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

## 1. General

#### 1.1 Selection

#### Rated residual operating current

 $l\Delta n=10mA_{\rm \star}$  30 mA\_ 100 mA\_ 300mA: 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 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.

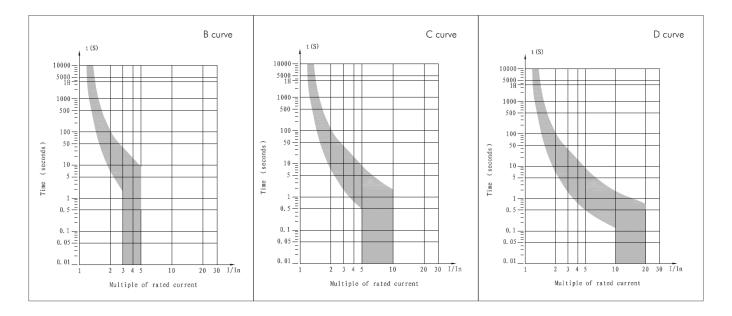
D curve (10-20 In) protection and control of the circuits against overloads and short-circuits; Suitable for systems with high inductive load and large impulse current

1.2 Approvals and certificates CE/ SAA/ SEMKO/ CB.



#### 2.Technical data

#### 2.1 curves



2.2

	Standard		IEC/EN 61009-1				
	Type (waveform of the earth leakage sensed)		A, AC				
	Thermo-magnetic release characteristic		B, C, D				
	Rated current In	A	6, 10, 13, 16, 20, 25, 32, 40, 50, 63				
	Poles		3P+N				
	Rated voltage Ue	V	400/415				
	Rated sensitivity I ^ n	А	0.01, 0.03, 0.1, 0.3				
Electrical	Rated residual making and breaking capacity I ${\vartriangle}$ m	A	6000				
features	Rated short-circuit capacity Icn	A	10000				
	Break time under I $ riangle$ n	KV	≤0.1				
	Rated frequency		50/60				
	Rated impulse withstand voltage (1.2/50)Uimp		4,000				
	Dielectric TEST voltage at ind. Freq. for 1 min		2				
	Insulation voltage Ui		500				
	Pollution degree		2				
	Electrical life		2,000				
	Mechanical life		2,000				
	Contact position indicator		Yes				
Mechanical features	Protection degree		IP20				
iediores	Ambient temperature (with daily average≤35℃ )	°C	-5+40				
	Storage temperation	°C	-25+70				
	Terminal connection type		Cable/U-type busbar/Pin-type busbar				
	Terminal size top/bottom for cable		25				
Installation		mm <sup>2</sup>	18-3				
	Terminal size top/bottom for busbar	AWG	16				
		mm <sup>2</sup>	18-5				
	Tightening torque	AWG	2				
	ginening lorque	N∙m	18				
	Mounting	In-Ibs.	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 $30^\circ\!\text{C}$

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

