NBH8LE Residual Current Operated Circuit Breaker with over-current protection (Electronic)

1. General

1.1 Function

Personnel and fire protection
Cable and line protection against overload and short-circuits.

1.2 Selection

IΔn = 30 mA: additional protection in the case of direct contact.
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.
AC class – Tripping is ensured for sinusoidal, alternating currents, whether they be quickly applied or slowly increase.

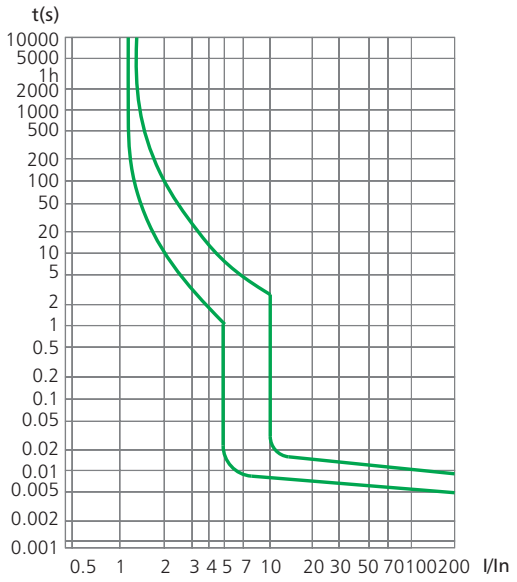
1.3 Approvals and certificates

Detailed information, please refer to Certificates Table on the last page.

2. Technical data

2.1 Curves

C Curve



2.2

	Standard		IEC/EN 61009-1
Electrical features	Type (wave form of the earth leakage sensed)		AC
	Thermo-magnetic release characteristic		C
	Rated current In	A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40
	Poles		1P+N
	Rated voltage Ue	V	230
	Rated sensitivity I△n	A	0.03
	Rated residual making and breaking capacity I△m	A	500
	Rated short-circuit capacity Icn	A	4,500
	Break time under I△n	s	≤0.1
	Rated frequency	Hz	50/60
	Rated impulse withstand voltage (1.2/50)Uimp	V	4,000
	Dielectric TEST voltage at ind. Freq. for 1min	kV	2
	Insulation voltage Ui	V	300
	Pollution degree		2
Mechanical features	Electrical life		4,000
	Mechanical life		20,000
	Contact position indicator		Yes
	Protection degree		IP20
	Ambient temperature (with daily average≤35℃)	℃	-5...+40
	Storage temperature	℃	-25...+70
Installation	Terminal connection type		Cable/Pin-type busbar
	Terminal size top/bottom for cable	mm^2	16
		AWG	18-5
	Terminal size top/bottom for busbar	mm^2	10
		AWG	18-8
	Tightening torque	N·m	2
		In-lbs.	11
	Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
	Connection		From top

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℃

Temperature	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃
Temperature compensation coefficient	1.20	1.15	1.10	1.05	1.00	0.95	0.90	0.85

3. Overall and mounting dimensions (mm)