

NB1-63 Series

MINIATURE CIRCUIT BREAKERS

Color-coded contact position indicator provides visual indication of the device status and insulation function

Magnetic trip elements provide Type B, C and D trip characteristics (IEC and EN 60898), while bimetallic element protects against slight overload

Line and load-side terminals accept bus bar connections for reduced costs and more efficient installation

Breaking capacity up to 10,000A

Trip-free mechanism prevents device override

Flame-retardant, heat-resistant, impact-proof material

Heat dissipation gap provides better cooling

Captive terminal screws

Extendable DIN-rail holder for easy installation

FEATURES

APPLICATION

For protection of circuits from over-load and short-circuit; and for infrequent making and breaking of circuits under normal operating conditions

CURRENT and VOLTAGE RATINGS

AC: up to 63A, 230/400VAC, 50/60Hz
DC: up to 63A, 110/125VDC

STANDARDS

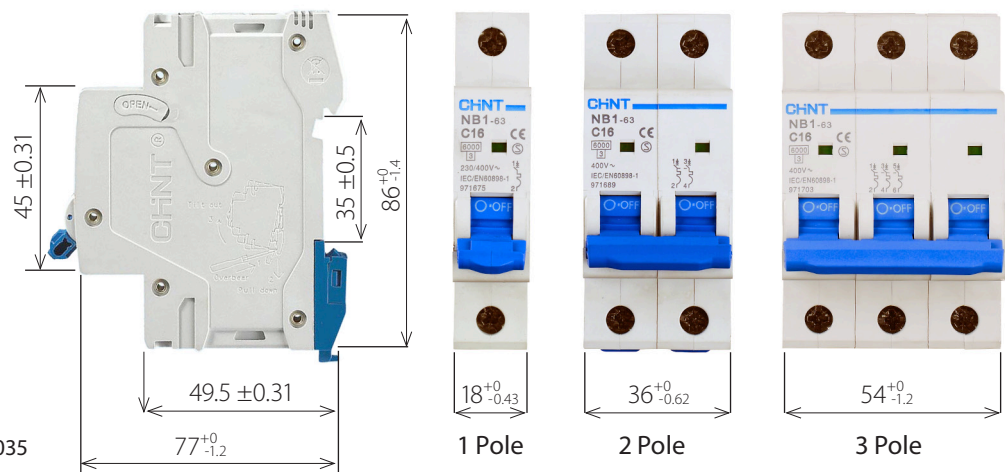
UL1077, CSA, IEC/EN 60898, CV, ESC, FIMKO, KEMA, SEMKO, VDE, UKREST, PDT, RCC

DERATING FACTORS for AMBIENT TEMPERATURE

60°C	x 0.85
55°C	x 0.875
50°C	x 0.9
40°C	x 0.95
30°C	x 1.00
20°C	x 1.05
10°C	x 1.10
0°C	x 1.15
-10°C	x 1.20

When several simultaneously-operating circuit breakers are mounted side-by-side in a small enclosure, the temperature rise inside the enclosure causes a reduction in current rating. In this case, an additional downrating factor of 0.8 is required, *as well as* the ambient temperature derating factor.

DIMENSIONS in mm



TRIMAX
Circuit Protectors

A division of Pelco Component Technologies

2747 Route 20 East, Cazenovia, NY 13035
315-655-8476 ■ www.trimaxcb.com
fax: 315-655-3862

NB1-63 Series

MINIATURE CIRCUIT BREAKERS		IEC/CN 60898-1	IEC/CN 60947-2	UL1077	UL1077
ELECTRICAL FEATURES	Amps rated current In	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63			
	Poles	1P, 2P, 3P	1P, 2P, 3P	1P, 2P, 3P	1P, 2P
	Rated voltage Ue	240/415VAC	240/415VAC	277/480VAC	110/125VDC
	Insulation voltage Ui	500 Volts			
	Rated frequency	50/60Hz			DC
	Rated breaking capacity	6kA/10kA	6kAmps	5kAmps	10kAmps
	Energy limiting class	3			
	Rated impulse withstand voltage(1.2/50) Uimp	6kVolts			
	Dielectric test voltage at ind. Freq. for 1 min	2kVolts			
	Power loss per pole	Rated current Amps			Max power loss per pole Watts
1, 2, 3, 4, 6, 10			2		
13, 16, 20, 25, 32			3.5		
MECHANICAL FEATURES	40, 50, 63			5	
	Electrical life	8000 Cycles			
	Mechanical life	20,000 Cycles			
	Contact position indicator	Yes			
	Protection degree	IP20			
	Reference temperature for setting of thermal element	30°C			
	Ambient temperature (with daily average ≤35°)	-5°C to +40°C See Temperature Derating Table and Note			
Storage temperature	-25°C to +70°C				
INSTALLATION	Terminal connection type	Cable / U-type Busbar / Pin-type Busbar			
	Terminal size top/bottom for cable	25mm ² / 18-3AWG			
	Terminal size top/bottom for busbar	25mm ² / 18-3AWG			
	Tightening torque	2 Nm / 22 in-lbs			
	Mounting	DIN rail EN60715 (35mm) by Fast Clip device			
	Connection	from top and bottom			

Contact Trimax directly for technical support, engineering assistance and to create the part number for your specific needs.



OPTIONS SELECTION

Series	Curve Type	Amperage Rating	Number of Poles	AC or DC
NB1-63 Miniature Circuit Breakers DIN rail	B	010 1A	1 2 3 DC available in 2-pole only	230/400VAC 110/125 VDC
	C	020 2A		
	D	030 3A		
		040 4A		
		060 6A		
		100 10A		
		130 13A		
		160 16A		
		200 20A		
		250 25A		
		320 32A		
		400 40A		
	500 50A			
	630 63A			

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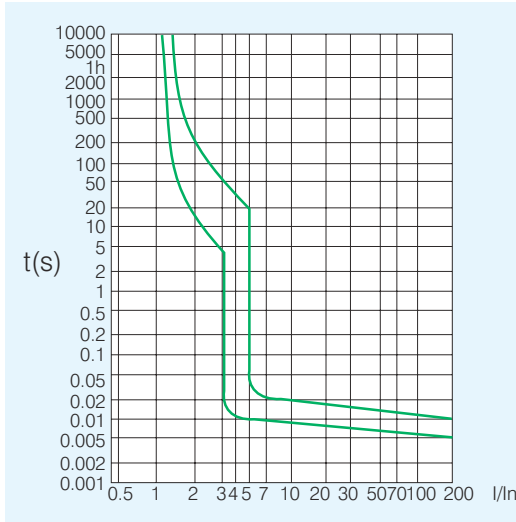
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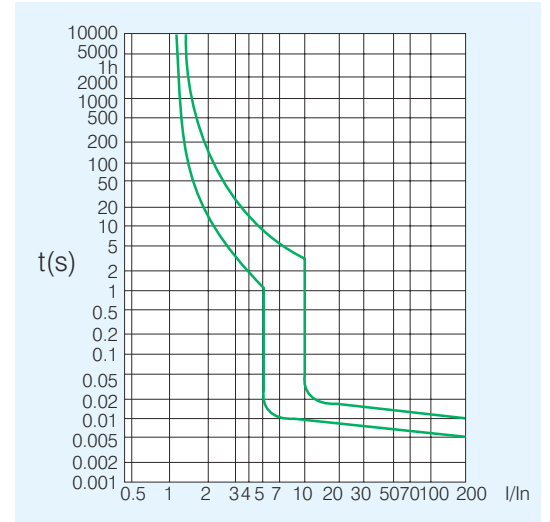
**MINIATURE
CIRCUIT
BREAKERS
DIN RAIL
MOUNTING**



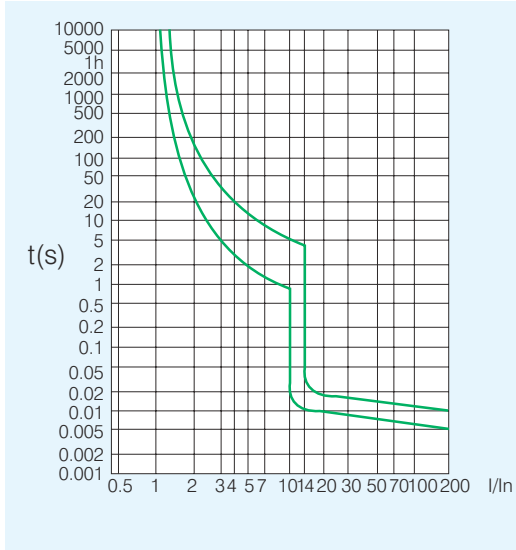
AC OPERATION B CURVE



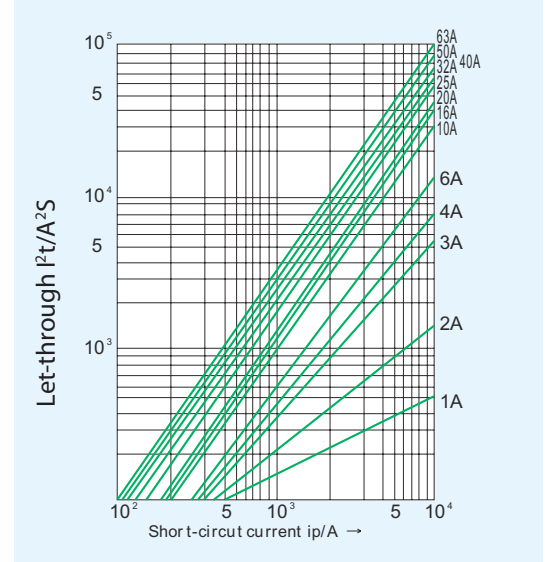
AC OPERATION C CURVE



AC OPERATION D CURVE

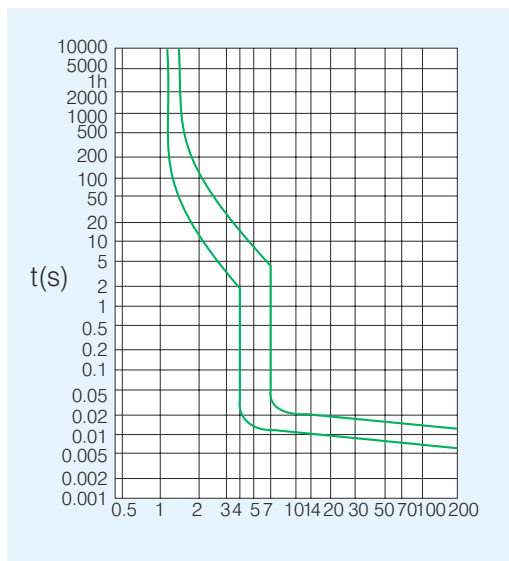


I²T / A²S

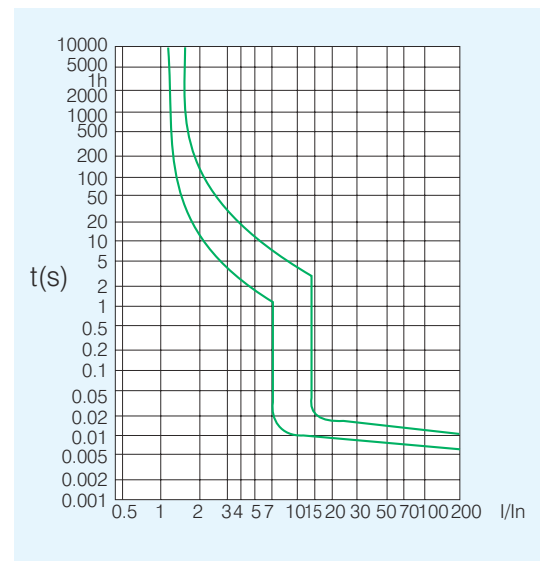


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DC OPERATION B CURVE



DC OPERATION C CURVE



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