

1 Application

- Protection against short circuit
- Protection against overload
- earth leakage
- Isolation

NDB1L-32 series residual current circuit breaker is able to protect against earth leakage faults , which is used in low voltage electrical distribution system in industry, real estate, power, telecom and construction field.

2 Picture



- 3 Model: ND B 1 L — 32 □ □ / □
- | | | | | | | | | |
|-------|-----|-------------|--------------------------|---------------|------------------------|---|---|-----------|
| | | | | | | | | |
| Nader | MCB | Design Code | Earth Leakage Protection | Framework 32A | Tripping Curve C Curve | Rated current 6A, 10A, 16A 20A, 25A, 32A, | / | Poles 1PN |

4 Main technical parameters

- Electrical parameters
 - Rated working voltage (Ue): AC230/240V(1PN)
 - Rated working frequency: 50/60Hz
 - Rated current (In): 6A, 10A, 16A, 20A, 25A, 32A
 - Breaking capacity (Icn): 4.5 kA 、 6kA(UL1053)
 - Rated residual operating current: 10mA、 30mA
 - Rated residual operating time: ≤0.1s
 - Rated residual making and breaking capacity (IΔm): 500A
 - Mechanical & electrical life: 10000 times

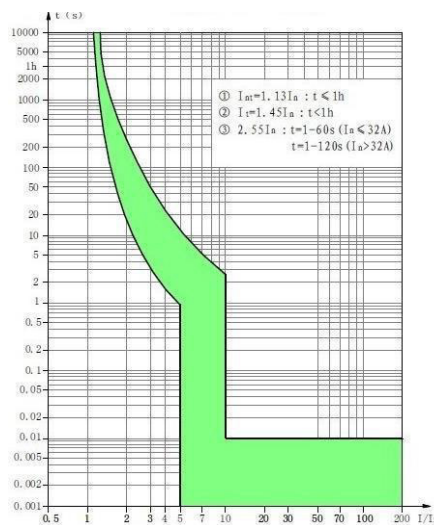
- Isolation function:
 - Overcurrent visualization
- Wiring
 - Adopt tunnel type wiring
 - Connection capability: 1mm² to 10 mm²
 - The wiring screw: M4, Rated torque : 1.2N.m
- Meet a criterion
 - GB 16917.1、IEC 61009-1、GB16917.22、IEC61009-2-2、UL1053

5 Working conditions

- Altitude ≤2000m
- Ambient temperature: -25℃~+55℃
- Storage temperature: -30℃~+70℃
- Relative air humidity ≤95%
- Pollution degree: 2

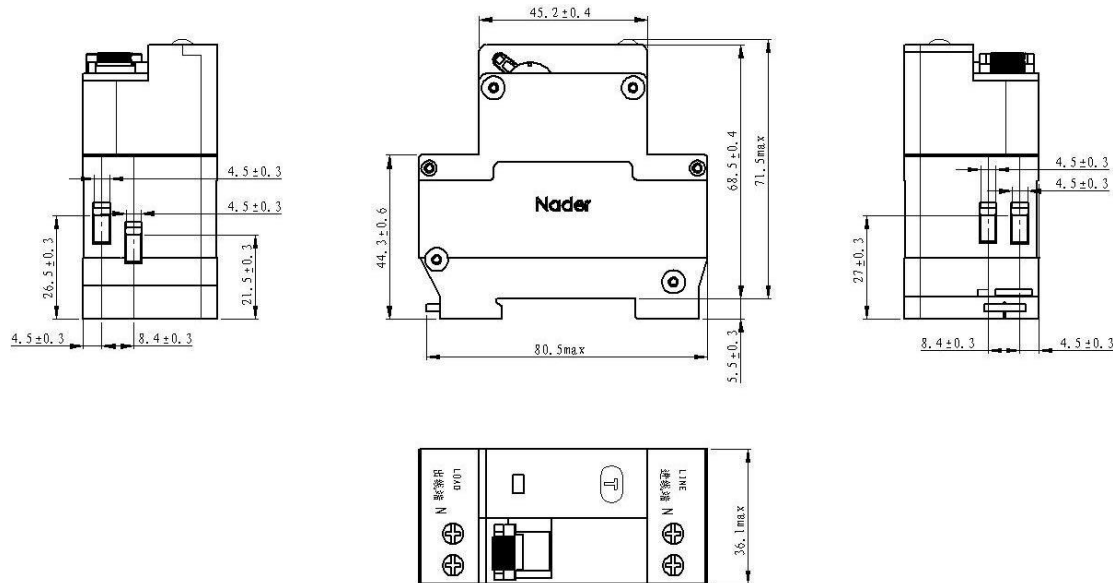
6 Tripping curves (ambient temperature 30℃)

- C curve
 - Illumination distribution system
 - Rated current: 1~32A
 - Tripping characteristic: instantaneous trip between 5I_n to 10I_n



C Curve

7 Outline dimensions and installation



8 Mounting

Modularized structure, can be easily installed in TH35mm×7.5 Standard DIN rail.

9 Packaging and storage

9.1 Maximum packing quantity

1N-pole: 6pieces in a box, 12 boxes in an overwrap carton.

9.2 The products should be stored in the warehouse where there is ventilation. The relative humidity there should not exceed 80%, and the ambient temperature there is between -30°C to +70°C. In addition, there should not be acidic, alkaline and corrosive gas in the air. The products should not be deposited more than 3 years in the above mentioned conditions since the producing date.

10 Accessories list and mounting

None



11 Notices

- 11.1 Take no responsibility for problems occurred by disassembly privately.
- 11.2 RCBO can't provide protection in the cases that touch two phase line synchronously.
- 11.3 Please don't perform insulating resistance test or voltage-withstand test on the product directly or indirectly by megohmmeter or similar test devices. If you need, we can offer validated certificate about the term.
- 11.4 When test insulating resistance of the engineering circuit, the outlet terminal (at least one line) must be disconnected to avoid the misunderstanding of the products' quality or damage of the products.
- 11.5 The power line should be connected to 'LINE', while another terminal to 'LOAD'. Don't connect contrarily. Otherwise the product will be damaged when the test button is pressed or there is earth leakage in the circuit.
- 11.6 Please make sure reliable connection to avoid fault tripping or damage of terminals caused by exceptional heat resulting from unsuitable connection.
- 11.7 Simulating test should be made once a month by pressing the test button to check whether the circuit breaker works normally. If RCBO is abnormal, it should be replaced.
- 11.8 When RCBO opens automatically, line analyzing or equipment checking should be done to find the causation of failure. Then switch on only after eliminating the malfunction.