

Product Specification of NDB1-40

(IPD-ENG-DEV-T20 A1 2016-09-23)

Product Name: Miniature Circuit Breaker

Product type: NDB1-40

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1、Application Scope

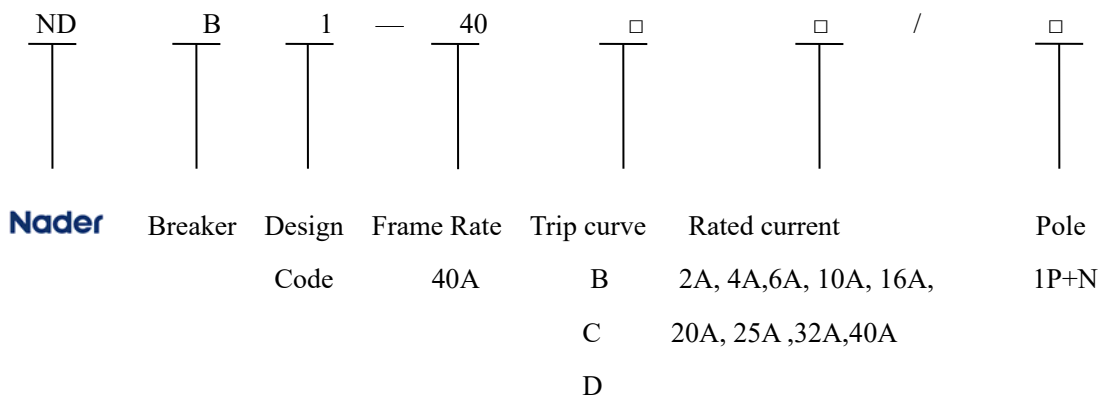
- Short -circuit protection
- Over-load protection
- Control
- Isolation

NDB1-40 dedicated to the low voltage power distribution system of industrial, buildings, energy, communications and infrastructure. The MCB can cut off phase and neutral lines at the same time, whereas the neutral line should not provide protection.

2、Product Pictures



3、Model and implication



4、Technical Parameters

- Electrical parameters
 - Rated working Voltage : AC230V/240V
 - Rated Frequency : 50/60Hz

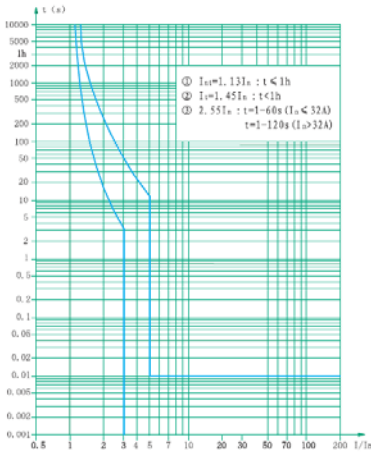
- Rated Current: 2A, 4A, 6A, 10A, 16A, 20A, 25A, 32A, 40A
- Rated Breaking Capacity: 6kA
- Impulse Withstand Voltage: 4kV
- Instantaneous Tripping Characteristic: B、C、D
- Mechanical and Electrical life:
 - Mechanical Life : 20000 times
 - Electrical Life : 10000 times
- Isolation function
 - Practical breaking instructions
 - View window within the green identification said contact in the off position
- Wiring
 - The wiring capacity: 1 ~ 10mm² conducting wire
 - Terminal screw: M4; Maximum ultimate torque: 1.2N.m
- Protection Degree
 - IP20
- Tripping curve
 - B type curve
 - Protection of short circuit current small load
 - tripping characteristic : The instantaneous tripping range 3I_n ~ 5I_n
 - C type curve
 - Protect normal load and distribution wire cable
 - tripping characteristic : The instantaneous tripping range 5I_n ~ 10I_n
 - D type curve
 - Protect starting current big impact load (Such as motor, transformer)
 - tripping characteristic : The instantaneous tripping rang 10I_n ~ 14I_n

5、Standard Working Condition

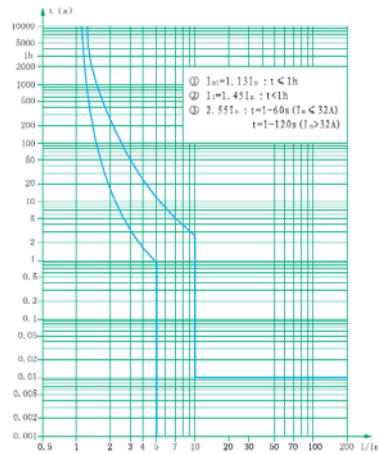
- Ambient temperature: -40℃ ~ +70℃
- Heat and humidity resistance: The relative air humidity ≤95% at the temperature of +55℃
- Altitude: ≤2000m
- Pollution degree: 2
- Free from obvious vibration or shock

6、Tripping characteristic

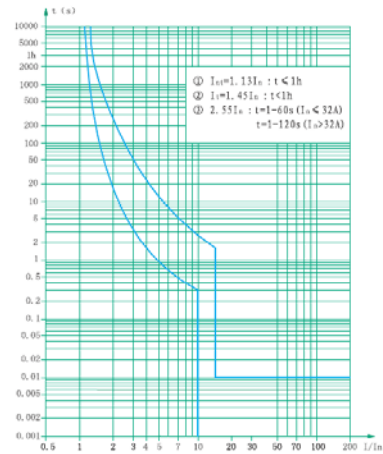
Type B (3~5) In



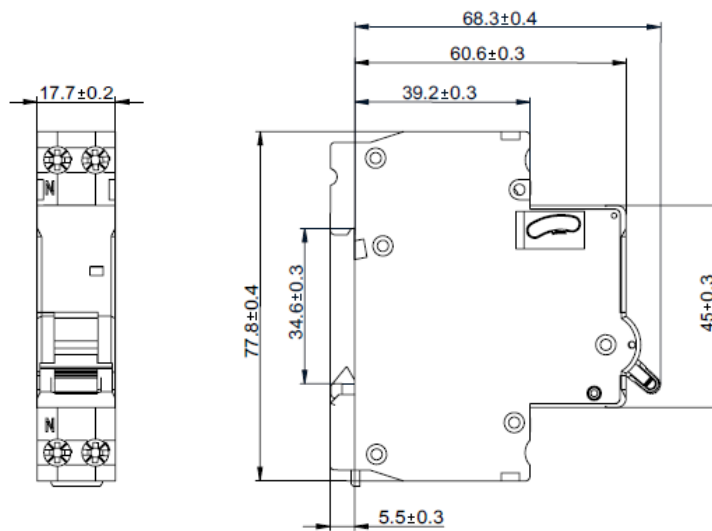
Type C (5~10) In



Type D (10~14) In



7、Shape dimension & Dimension



8、Mounting Method

Modular construction , can be installed in TH35mm x 7.5 standard guide rail.

9、Packaging and storage

Quantity:12PC/box , Packing boxes of products should be stored in the air circulation and relative humidity is not more than 80% and the temperature is not higher than + 80 °C , Not less than - 40 °C in the air around without acid, alkali or other corrosive gases stored in the warehouse. In the above conditions, the storage period since the production date not more than three years.

10、Accessory

- OF1Auxiliary Contact Be installed to the left side of NDB1-40 MCB to indicate the tripping status of the breaker.
- SD1Alarm Contact Be installed to the left side of NDB1-40 MCB to indicate the fault tripping status of the breaker.
- MX+OF1Shunt Release Be installed to the left side of NDB1-40 MCB , remotely controls the breaker opening and indicates the breaker tripping status.
- GQ1AOver&Under Voltage Tripping Device Be installed to the left side of NDB1-40 MCB , used for circuit of work voltage less than AV230V,which has defensive function such as over-voltage protection (G1A), low-voltage protection (Q1A), over&low-voltage protection (GQ1A) ,at the same time,no-tripping when power down ;
- FF1Double Auxiliary Contact Be installed to the left side of NDB1-40 MCB to indicate the tripping status of the breaker
- FS1 Auxiliary and Alarm Contact Be installed to the left side of NDB1-40 MCB to indicate the fault tripping status of the breaker.

11、Environmental Protection Requirements

Comply with the requirements of RoHS directives.

12、Notes

- 1、The user should responsible for the quality problem caused by taking the products apart or adjust the tripping parameters without permission.
- 2、Touch the uninsulated bare part is not allowed when breaker is in energized state.
- 3、The user should responsible for the quality problem caused by debugging the peculiarity of the MCB arbitrarily.
- 4、Make sure reliable connection to prevent the abnormal heating of terminals. That can cause fault operation of breakers or terminal damage.
- 5、Please remove the cover before installation , details please refer to 《OF1、SD1、MX+OF1 GQ1A、FF1 和 FS1 Product Specification》 .