
NDB1L-32 UL Product Specification

Product Name: Residual Current Action Circuit Breaker

Product Model: NDB1L-32 UL

Date: 20220830

Revision History

Version	Revision Reason/Content	Implementation Date	Prepared by	Reviewed by	Approved by
0	First release	20191023	Xu Min	Huo Zhiqiang	Duan Hui
1	Modify the format	20220704	Xu Min	Huo Zhiqiang	Duan Hui
2	Modify the format	20220803	Xu Min	Huo Zhiqiang	Duan Hui
3	Increase authentication information	20220830	Xu Min	Huo Zhiqiang	Duan Hui

1. Application Scope and Purpose

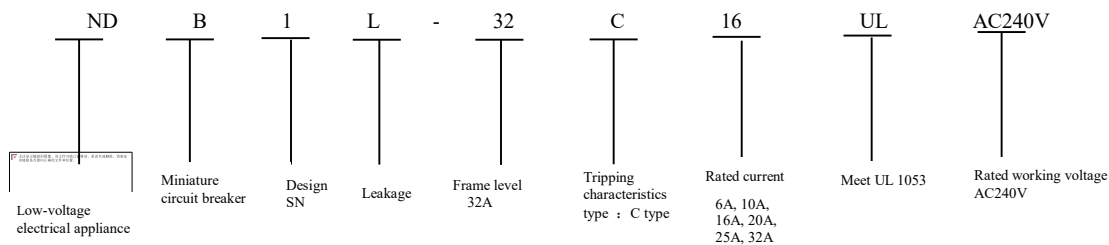
- Short-circuit protection
- Overload protection
- Current leakage
- Isolation

The NDB1L-32 UL series of residual current action circuit breakers provide the ground leakage, direct or indirect electric shock by human body and other faults protection, which are applicable to the low-voltage terminal distribution in the industry, civil buildings, energy, communication, infrastructure and other fields.

2. Picture of the Product



3. Specifications and Models Description



4. Main Technical Parameters

- Electrical parameters
 - Frequency: 60Hz
 - Rated working voltage: AC240V
 - Pole: 1P+N(One protective pole, N pole can open and close)
 - Rated impulse withstand voltage: 4kV
 - Rated insulation voltage: 440V
 - Type of the residual tripping current: Type AC
 - Instantaneous tripping characteristics: C
 - Rated working current: 6A, 10A, 16A, 20A, 25A, 32A

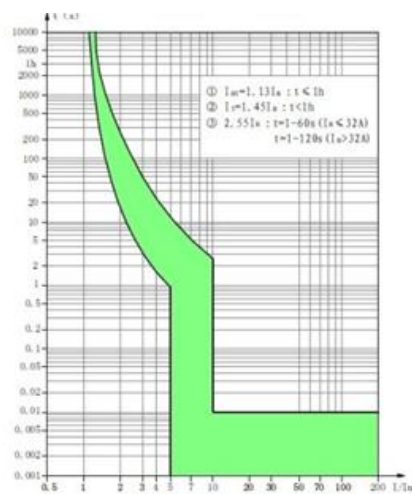
- Rated breaking capacity: 6kA
- Rated residual operating current: 30mA
- Leakage action time: Less than 0.1s under Rated residual operating current
- Mechanical life: 10,000 times
- Electrical life: 6,000 times
- Isolation function:
 - Overcurrent visualization
- Wiring
 - Adopt tunnel type wiring
 - Connection capability: 1mm² to 10 mm²
- Standards and Certificates
 - Product certificate: UL1053
 - Product certification standard: UL
- Environmental protection standard
 - Meeting RoHS requirement

5. Normal Working Environment

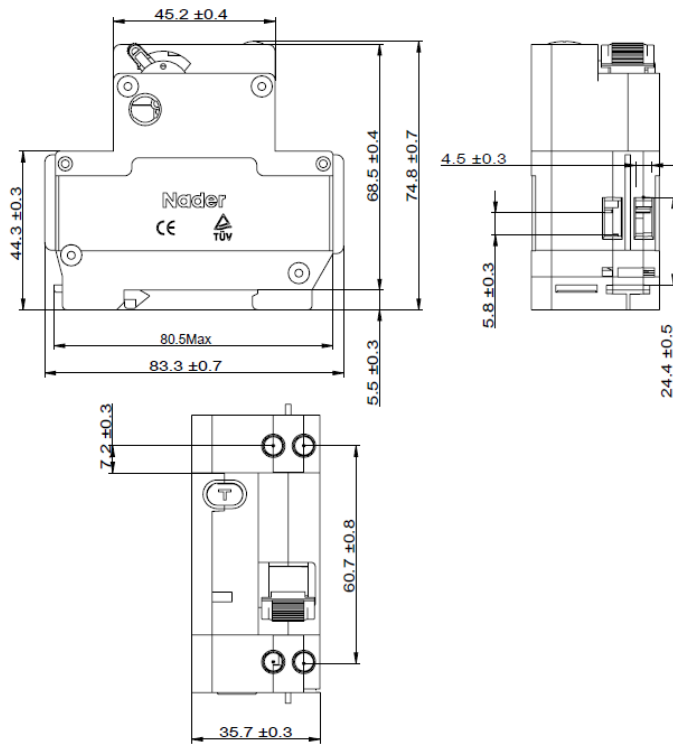
- Altitude: ≤2000m
- Ambient temperature: -25°C~+55°C
- Wet heat resistance: Capable of withstanding the effects of wet air (the humidity can not be over 60% at 55°C; the humidity is 60%-90% at 25°C)
- Pollution degree: 2

6. Tripping Characteristics

Type C (5-10) In



7. Product Outline and Installation Dimensions



8. Installation Mode

- It can be easily installed on the TH35mm×7.5 standard guide

9. Packaging and Storage

- Maximum packing quantity

◦6 pieces in a box, 72 boxes in an overwrap carton

•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 -25°C to +60°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. List of Accessories and Installation

- NA

11. Environmental Protection Requirements

- Comply with the requirements of RoHS directives

12. Precautions

- A user must be responsible for addressing a product issue that occurs because the user disassembles the product

without approval;

- It fails to provide protection for the electric shock caused due to two phases of the contacted lines to be protected;
- Do not test the insulation resistance of the product or carry out power frequency withstand voltage tests directly or indirectly with a megger or similar devices on the product so as to avoid damage to the product. If required by users, our company can provide an effective proof of the conformance test;
- In case of insulation resistance test on the project line, do not connect the product so as to avoid misunderstanding of the product quality or damage to the circuit board;
- Wiring of the leakage circuit breaker shall be done according to the up-in and down-out principle. Do not wire it wrongly. Otherwise, it may damage the product by pressing the test button again or in case of current leakage in the line;
- Wiring must be reliable to prevent the malfunction of the leakage circuit breaker or terminal burning damage due to the abnormal heat generation on the terminal;
- Carry out a monthly stimulated test on the current leakage. Namely, press the test button to make the circuit breaker act so as to test proper operation of the circuit breaker, and replace the abnormal products in a timely manner;
- For automatic disconnection of the leakage circuit breaker, analyze fault reasons for the line or equipment.