



DZ47L | **NAVIGATOR**
Residual Current Operated Circuit-Breaker | **Series**
User Manual



Please carefully read this User Manual before installing and operating the product, and keep this manual properly for future reference

Safety Notice

Please carefully read this instruction before the installation, operation, run, maintenance, and inspection, and follow the contents of the instruction to properly install and operate this product.



Danger:

- Do not operate the residual current operated circuit breaker with your wet hands;
- Do not touch the energized parts during operation;
- Make sure that the product is deenergized during the maintenance and service;
- Do not use the short circuit method for product testing;

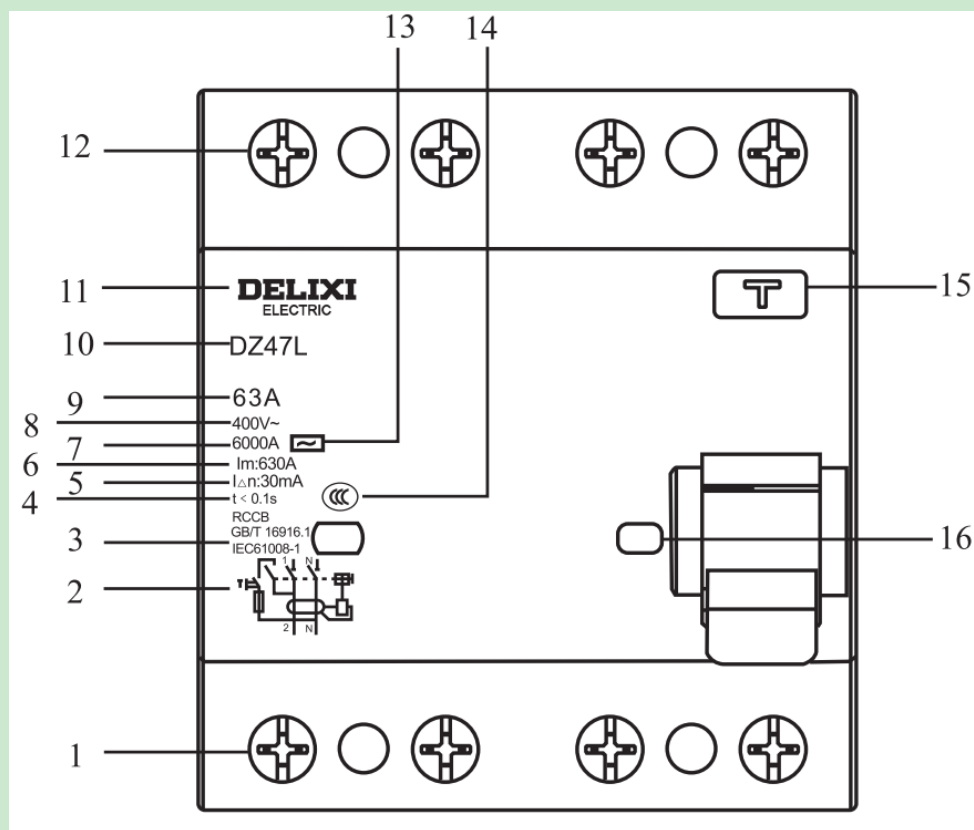


Caution:

- The installation, maintenance and service shall be performed by the qualified professional;
- Various characteristics of product have been set in factory and cannot be removed or adjusted without permission during operation;
- Please confirm that the rated voltage, rated current, residual trip current, frequency and characteristics of the product meet the operating requirements before use;
- This product provides the protection for the electric leakage fault only occurred at the load end;
- The electric leakage protection is not available for less wiring or wrong wiring connection;
- If found damage or abnormal sound when unpacking, please stop the operation immediately and contact the supplier;
- When scrapping the product, please dispose the product waste properly. Thanks for your cooperation.

About DZ47L Residual Current Operated Circuit Breaker

● Panel Introduction



Legends:

- 1 Load end
- 2 Wiring diagram
- 3 Standard: GB/T 16916.1/IEC 61008-1
- 4 Operating time: $t < 0.1s$
- 5 Rated residual operating current $I_{\Delta n}$: 30mA, 100mA, 300mA
- 6 Rated making and breaking capacity I_m : $I_n < 63A$, 500A; $I_n \geq 63A$, $10I_n$
- 7 Rated limit short circuit current $I_{\Delta c}$: 6000A
- 8 Rated voltage: 230V/2P, 400V/4P
- 9 Rated current: 63 type: 10A, 16A, 20A, 25A, 32A, 40A, 63A;
100 type: 80A, 100A;
- 10 Product model: DZ47L-63, DZ47L-100
- 11 Company Logo
- 12 Power end
- 13 Operating characteristics: AC type or A type
- 14 Certification symbol: 3C
- 15 Test button
- 16 Indicator: Red (power on), green (power off)

Normal Operation, Installation and Transport Conditions

● Normal Operation and Installation Conditions

- (1) The ambient air temperature does not exceed +40°C and is not below -5°C, and the average value within 24 hours does not exceed +35°C;
- (2) The altitude of the installation site does not exceed 2000m;
- (3) The relative humidity of the atmosphere does not exceed 50% at the highest ambient temperature +40°C, and a higher relative humidity is allowed at lower temperatures, such as 90% at 20°C. Protective measures shall be taken for condensation occasionally occurred due to temperature changes.
- (4) The installation position shall be vertical, and the inclination angle at each direction shall not exceed 10°;
- (5) Installed at a place where there is no impact, vibration, and rain or snow erosion;
- (6) Pollution level: Level 2 or level 3;
- (7) Installation category: Class II, Class III;
- (8) Protection grade: IP20 (IP40 if installed in a power distribution box, a power distribution cabinet or tank).

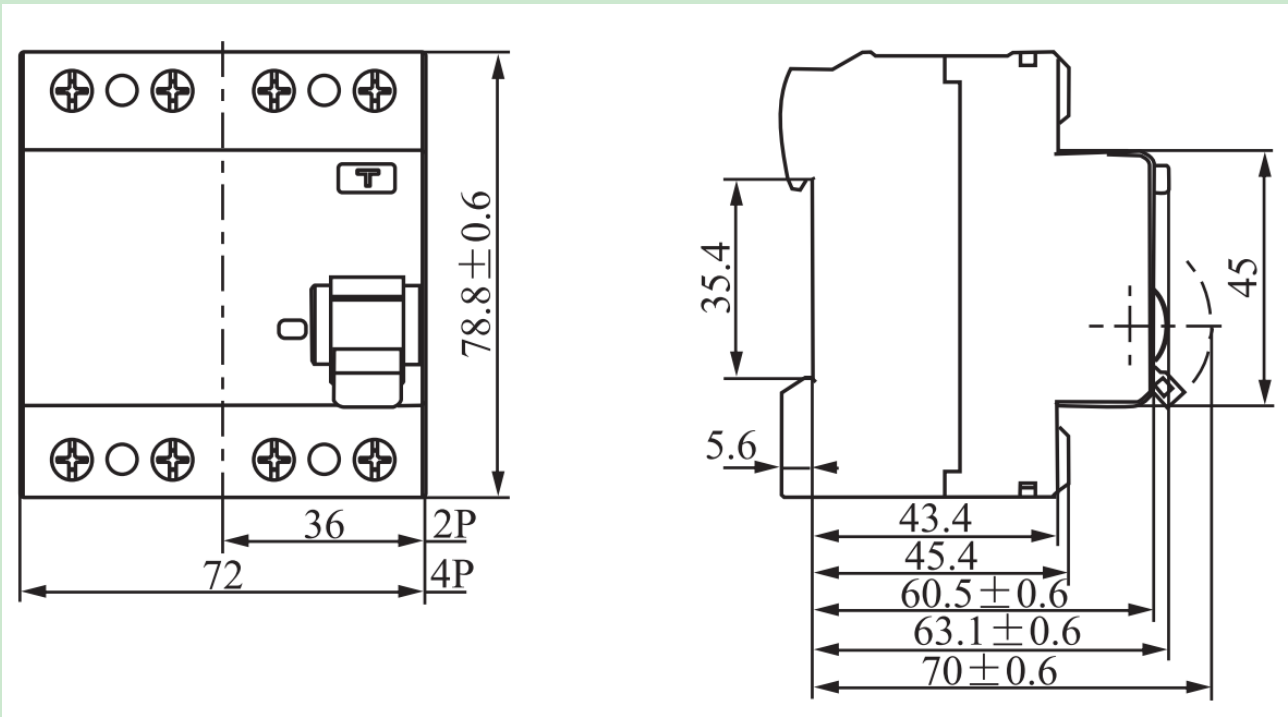
● Normal Storage and Transport Conditions

- (1) Temperature: -25°C~+55°C;
- (2) Relative humidity: ≤95%;
- (3) During the transport, please handle the product gently, and do not upside it down, and prevent the product from harsh collision;

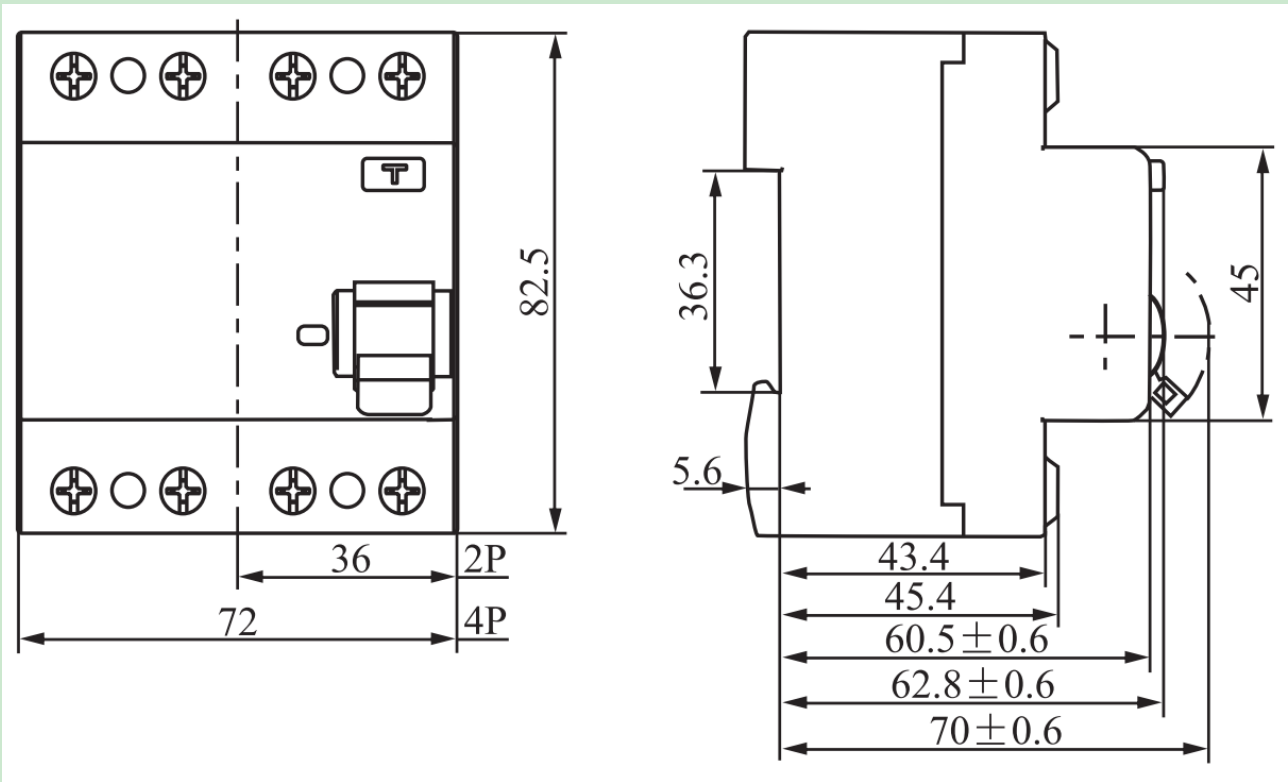
Install Product

- This series of residual current operated circuit breaker is of the rail mounted type, suitable for TH35-7.5 steel mounting rail;
- Outline and Installation Dimensions

DZ47L-63:



DZ47L-100:



Debugging and Operation

- Before installing the residual current operated circuit breaker,
 - (1) check whether the technical parameters on the nameplate meet the operation requirements;
 - (2) power on and off the product three times for reliable operation or blockage.
- Before installing the residual current operated circuit breaker,
 - (1) Connect the “N” port to the zero line, and connect other unmarked ports to the live line.
 - (2) The cross sectional area of the recommended connecting wire is consistent with the rated current of the product to ensure normal operation of the product. For detailed information, refer to Table 1.

Table 1 Rated current and cross-sectional area of the connecting wire

Rated current A	10	16, 20	25, 32	40	63	80	100
Sectional area of wire mm ²	1.5	2.5	6	10	16	25	35

- After installing the residual current operated circuit breaker:
 - (1) Test the circuit breaker three times with test button, and check it for reliable operation;
 - (2) Turn on and off the switch three times under load, and check it for misoperation.

Maintenance and Service

- The maintenance and service shall be performed by the qualified professional;
- The product must not be de-energized during the maintenance and service;
- The maintenance and service shall be conducted once a year under the normal operation conditions (press the test button once a month). The maintenance contents are listed in Table 3.

Table 2 Maintenance and Service

Item	Content
Appearance	No dust or condensation; clean if necessary No damage No color changes on the housing or wiring terminal
Wiring terminal connection	Tighten it according to the tightening torque 2.0N.m without looseness
Handle ON/OFF operation	It shall be operated flexibly

Company Commitment

Under the condition that users follow the use and storage conditions and the product are well sealed, within 36 months from the production date, our company will provide repair and replacement service free of charge for any damage or abnormal operation due to poor manufacture quality. A paid repair will be provided if the warranty period expires. For any damage due to one of the following situations, a paid repair will be given even if within the warranty period:

- (1) Improper operation, maintenance, or storage;
- (2) Modified without permission or improper repair;
- (3) Damage due to falling off or caused during installation after purchase;
- (4) Force majeure such as earthquakes, fires, lightning strikes, abnormal voltages, and secondary disasters;

If you have any question, please contact the dealer or our company's customer service department.



Certificate

DELIXI ELECTRIC LTD

Name: Residual Current Operated Circuit Breaker

Model: DZ47L

This product passes the inspection and is allowed to be shipped.

Standard: GB/T 16916.1

Inspector: Check 06

Production date: See label on inner box