

# JXL1-125 Series



1P+N



3P+N

## Security Warning

- This product must be installed professionally.
- Operation with wet hands is strictly prohibited in case of electric shock hazard
- The products don't have the dust-proof function with protection class IP20, please install in a sealed box when they are used in a dusty environment.
- The product can't protect the risk of electric shock that caused by two lines contact protection circuit meantime.
- Residual current protection features is tested and adjusted by the manufacturer, users can not the product at random during usage.
- When installing, inlet wire connect from above side, outlet wire connect from below side. Polyphase circuit wiring should pay attention to the phase sequence. tighten the screws after wires into connection hole, the torque of Tighten the conductor at least 2.5N·m to make the wire shall not loose, pull out, bare copper wire head can't dew outside the terminal.
- RCCB must not be wetted of soaked by rain, snow or water during transportation, storage and usage.

## Application

- Main usage  
JXL1-125 residual current operated circuit-breaker conformity with the standard IEC61008-1. It can be used in the circuits of AC 50/ 60HZ, rated voltage up to 415V, rated current up to 125A for protection of personal electric shock hazard and electric equipment and for unfrequent switch over of circuits under normal conditions.
- Application scope  
Suitable for used at industry, commercial building, residential house and other similar place.

## Normal Operation Conditions

- Ambient air temperature  
Ambient air temperature ranges from  $-5^{\circ}\text{C}$  to  $40^{\circ}\text{C}$ , not exceeding  $35^{\circ}\text{C}$  averagely in 24 hours.
- Location: installation location can not exceed 2000 meters above sea level
- Installation Pollution Grade : grade.
- Air conditions  
Relative humidity in the installation place can not exceed 50% when the air reaches the highest temperature  $40^{\circ}\text{C}$ , the average minimum temperature when it is the wettest can not exceed  $25^{\circ}\text{C}$ . Relative humidity not exceed 90%.
- Installing categories: Class III
- Installation Conditions  
Magnetic field outside the installation place can not exceed 5 times of the site of terrestrial magnetism in all direction. Normally speaking, RCCB should be mounted vertically. There should be no notable impact and vibration in the installation place.  
Mounted by TH35-7.5 standard rail track
- Connection  
It can be connected with screws, the torque of tighten the conductor is 2.5N·m
- Connecting wire  
Choose according to table 1

table1

Rated current $I_n$ (A)	Nominal cross-section of wire(mm)
63	16
80	25
100	35
125	50

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## Main Technical Parameters

- Classification
  - According to number of poles 1P+N,3P+N
  - According to type of instantaneous release AC type, A type

Poles	1P+N,3P+N
Rated voltage $U_n$ (V)	1P+N/240, 3P+N/415
Rated current $I_n$ (A)	63,80,100,125
Case class rated current $I_{nm}$ (A)	125
Rated residual action current $I\Delta_n$ (A)	0.03,0.1,0.3
Rated residual non-action current $I\Delta_{no}$ (A)	0.03,0.1,0.3
Rated making/breaking capacity $I\Delta_m$ (A)	630
Rated limited short-circuit current $I_{nc}$ (A)	6000
Rated limited residual short-circuit current $I\Delta_c$ (A)	6000
Rated residual current breaking time	See table 2

Table 2

$I_n$ (A)	$I\Delta_n$ (A)	The switch-off time (s) when residual current ( $I_n$ ) is equal to at the following corresponding value		
63,80,100,125	0.03,0.1,0.3	$I\Delta_n$ (A)	$2I\Delta_n$ (A)	$5I\Delta_n$ (A)
		0.3	0.15	0.04

- Mechanical/Electric lifetime (times)
  - Electric lifetime (times):2000,  $\cos \phi = 0.85 \sim 9$
  - Mechanical life (times):2000
  - Operating frequency:120times/hour

- Rated insulation impulse withstand voltage

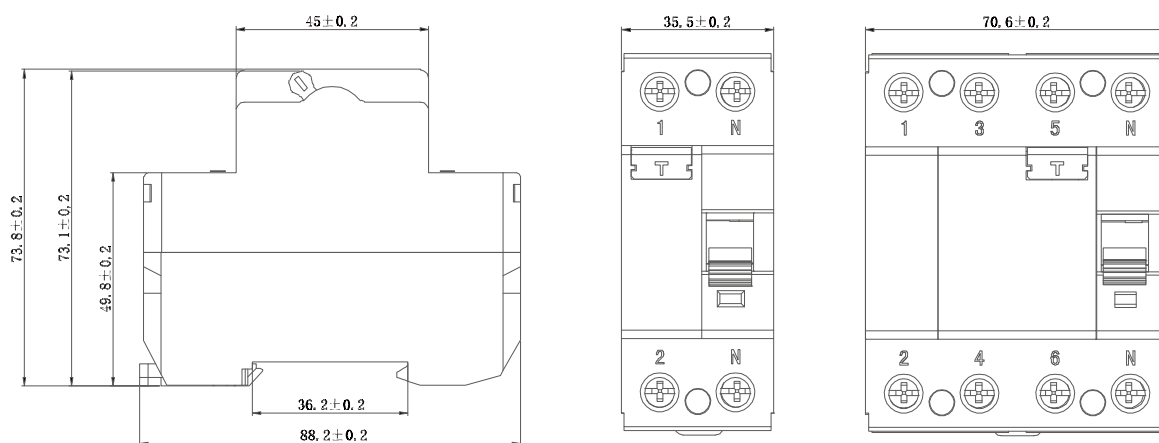
When poles are connected to each other, the peak value of the impulse withstand-voltage between each poles and the neutral pole is 6000V;

When each pole is connected to the neutral pole, the peak value of the impulse withstand-voltage between poles and the metal support is 8000V;

- The product can withstand peak impulse current of 200A and peak surge over-voltage  $2.5U_n$ , and under such a situation, the protection switch can act correctly without mis-operation.

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## Outline and Mounting Dimension (mm)



## Installation and Maintenance

### Installation

- Confirm the marks of the RCCB and the operating conditions is matched before Installation
- Mounted on rail track, push up the retainer to make the RCCB fixed on the rail track. When need to remove the RCCB, just pull down the retainer.
- When the handle moving up and displaying symbol ION, the circuit is connected. When the handle moving down and displaying symbol I.OFF, the circuit is disconnected.
- Manual operation with the RCCB several times to confirm its flexible and reliable before power on.
- Test the button of the RCCB several times to confirm its flexible and reliable after power on.

### Maintenance

- After running for a period of time, the RCCB should be inspected monthly, press the test button in power on state to confirm the residual current protective properties is reliable or not.
- RCCB must not be wetted of soaked by rain, snow or water during transportation, storage and usage.

## The Common Faults and Treatment

Common faults	The main reason analysis	Processing
Handle not closed	Big residual current exist in the circuit	Check the circuit, to exclude leakage fault, then run again
Switch action frequency	Residual current among the action scope of the circuit	Check the circuit, to exclude leakage fault, then run again or choose RCCB with bigger rated current
The RCCB no action when press the test button	Terminals with bad contact or quality problem	Tighten the screws or just replace a new one
Terminals overtemperature	Terminals not tightened or the cross-section of wire is small	Tighten the screws or just replace a wire with suitable cross-section