

Usage Manual



R3 Series Tuya APP Wifi Smart MCB

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Thank you for choosing R3 series Smart Circuit Breaker Instructions.
Please read this manual before installation, operation and maintenance.

WIFI EQUIPMENT DISTRIBUTION NETWORK

APP download

- You can search for the "Tuya Smart" APP through the Android application market or the App Store and download and install it.
- One-click login with mobile number.

Device binding and unbinding

- Click the "+" button in the upper right corner of the APP to enter the add device interface.
- After the device is powered on for 10 seconds, short press the device distribution button until the indicator light flashes.
- After the mobile phone is connected to the WIFI signal (the 5G network needs to be switched to 2.4G).

Automatically connect on the APP adding device interface

- After entering the Wi-Fi password, click Next and wait for the connection to succeed.

MATTER NEEDING ATTENTION

1. Make sure the device is powered on when binding.
2. Make sure to enter the distribution network state when binding.
3. Make sure the network signal is 2.4GHz when binding.

ZIGBEE EQUIPMENT DISTRIBUTION NETWORK

APP download

- Use the Android application market or App Store to search for the "Tuya Smart" APP by downloading and installing it.
- One-click login with mobile number.

Device binding and unbinding

- Click the "+" button in the upper right corner of the APP to enter the add device interface.
- Add the ZIGBEE gateway first on the device adding interface, and select the corresponding ZIGBEE gateway.
- After the mobile phone is connected to the WIFI signal (the 5G network needs to be switched to 2.4G).

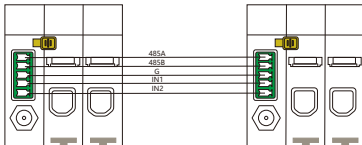
Automatically connect on the APP adding device interface

- After entering the Wi-Fi password, click Next and wait for the connection to succeed. Go back to the home page and click ZIGBEE gateway to select add self-device.
- After the device is powered on for 10 seconds, short press the device distribution button until the indicator light flashes.
- Wait for the device to automatically connect successfully.

MATTER NEEDING ATTENTION

1. Make sure the device is powered on when binding.
2. Make sure to enter the distribution network state when binding.

485 Dry Contact Equipment Distribution Network



● Dry Contact Control Instructions

Dry contact 1 has a signal, IN1 and G are shorted, and the product is closed.

Dry contact 2 has a signal, IN2 and G are shorted, and the product is opened.



Dangers and Warnings

This equipment can only be installed by professionals, and the manufacturer will not bear any responsibility for failures caused by failure to comply with the instructions in this manual.



Risk of electric shock, burns or explosion

- Equipment should only be installed and maintained by qualified personnel.
- Before doing any work on the equipment, isolate the voltage input from the power supply and short-circuit the secondary windings of all current transformers.
- Use a suitable voltage detection device to confirm that the voltage has been cut off.
- Return all mechanical parts, doors and covers to their original positions before energizing the unit.
- The equipment should provide the correct rated voltage in use.
- Failure to heed these precautions could result in serious injury.

● **Product description**

R3 smart switch is a building electrical terminal power distribution device developed by ETEK ELECTRICAL TECHNOLOGY CO.,LTD for smart and safe power consumption and energy management systems. This product is an IoT intelligent circuit breaker, which uses electronic technology to control the normal operation of traditional circuit breakers. It has remote opening and Closing control, local mode selecti on, timing opening and closing settings, etc.

● **Main functions**

- Remote control: remote opening and closing, timing tasks.
- Local control: local opening and closing, mode selection.
- Short circuit protection: automatic tripping in case of short circuit fault.
- Networking module function: Built-in networking module WIFI, realize remote control on APP side through network transmission.
- Independent power supply (the gateway function will be added later).

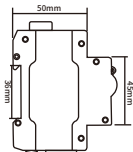
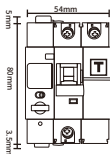
● Main technical parameters

Model	R3				
Series	1P+N	1P	2P	3P	4P
Rate current	10A、16A、25A、32A、40A				
Rate current (1P+N)	10A、16A、25A、32A、40A、50A、63A				
Rated working voltage and frequency	220/230VAC 50Hz			380/400VAC 50Hz	
Breaking capacity	6KA				
Tripping type	C、D				
Standbypower	<3W				
Trippingtime	≤0.1S				
Short-circuit time	≤0.04S				
Executivestandard	GB/T16917.1-2014(1P+N) GB/T10963.1-2020(1P、2P、3P、4P)				
Control mode	Manualautomaticcontrol				
Communication method	WIFI、ZIGBEE、485、Dry contact				
Installation site requirement	The altitude of the installation site is not more than 3000m				
Temperature requirement	Ambient air temperature -20℃~+70℃				

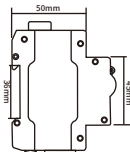
● **Installation matters**

- When operating and installing, please be sure to do it under the condition of power failure to ensure personal safety.
- When operating and installing, please be sure to be operated by professionals.
- This product only needs to be connected to the zero fire ground wire, please connect it correctly according to the logo or wiring diagram.
- Wiring is strictly in accordance with the requirements of the logo or wiring diagram, and the position of the zero and live wires cannot be changed, otherwise the equipment will not work or be damaged.
- After the first pairing and binding of the product is completed, other mobile phones will no longer be able to bind it. If multiple people are required to operate, you can authorize others to use it through the sharing function.
- The product should be installed in an environment with protective measures such as waterproof, moisture-proof, and sunscreen.
- The product should work in areas covered by 4G/wi signals while avoiding signal interference.

● Product size and wiring method



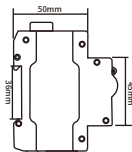
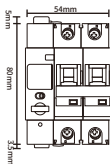
1P+N



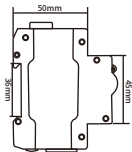
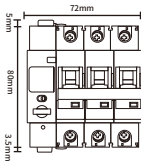
1P



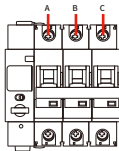
● Product size and wiring method



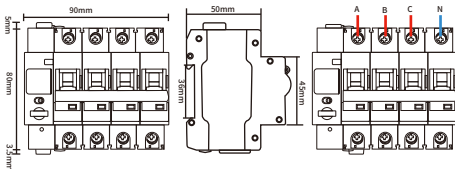
2P



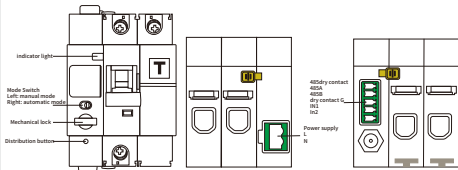
3P



● Product size and wiring method



● Description of product interface



● Description of Device Indicators

● WIFI, ZIGBEE device indicator light description

Green light is always on	Connect to cloud server
Green light flashes for 100ms	Mechanism failure
Green light flashes on for 100ms and off for 900ms	Mechanical locking
Green light flashes for 500ms	Configuration network
Green light flashes for 5000m	Connect to router

● 485 dry contact device indicator light description

Steady red light	Automatic mode tripping
Red light flashing for 100ms	Auto mode - Motor reset failed
Red light flashes for 100ms	Cycle closing failure
Red light flashing for 500ms	Automatic mode overvoltage and undervoltage trip
Green light is always on	Automatic mode closing
Steady green light	Remote opening, signal opening
Green light flashes for 100ms	Automatic mode-closing
steady orange light is always on	Manual mode
Orange light is always on	Manual mode - open
Orange light is always on	Manual mode - closing

FAQ

The device cannot be closed remotely

- ① Check whether the remote lock is turned on in the APP.
- ② Whether to open manually, first manually close and then operate on the APP, can you close and open?
- ③ Whether the safety lock is pulled out.

485 Device cannot communicate, send opening/closing command, no action

Please ensure that the device is in normal operation, and then check whether A and B of the RS485 line are reversed, whether the communication baud rate is set correctly, and whether there is any abnormality in the communication connection.

Operation without feedback

- ① Check whether the product terminals have been tightened.
- ② Check the APP settings, notification type and whether the message notification is enabled.

After power on, the indicator light does not light up

Check whether the power interface is reversed, whether the switching power supply output has power.

● **Product Warranty**

- For all new devices sold to users, within one year from the date of sale to users, free quality assurance will be implemented for failures caused by design, material and process defects.

If it is determined that the product meets the above warranty conditions, the supplier will repair and replace it free of charge.

The supplier may ask the user to send the device back to the manufacturer to confirm whether the device is covered by the free warranty and to repair the device.

● **The problems of the following devices are not covered by the free warranty:**

- Damage caused by improper installation, use, storage.
- Abnormal operating and application conditions beyond those specified for the product.
- Devices that have been repaired by organizations or persons not authorized by the company.
- Devices beyond the free warranty period.