

560*177mm

VII.Screen display description

When powered on normally, press **[A]** key to switch the display of parameter data in the second row.

220V 220V 220V
030mA 0460kW h

• Frequency display

220V 220V 220V
030mA 09600

• Modbus RTU communication baud rate display

220V 220V 220V
030mA 0051kVarh

• Reactive energy display

220V 220V 220V
030mA 1050kW

• Power display

220V 220V 220V
030mA 00081kVar

• Reactive power display

220V 220V 220V
030mA 001000

• ??? display

220V 220V 220V
030mA 0001

• Modbus RTU communication address display

When powered on normally, press **[V]** key to switch the display of parameter data in the first row.

220V 220V 220V
030mA 0460kW h

• Voltage display

010A 009A 009A
030mA 0472kW h

• Current display

022kW 019kW 020kW
030mA 0472kW h

• Power display

kVar kVar kVar
000 000 001
030mA 0472kW h

• Reactive power display

099PF 099PF 099PF
030mA 0472kW h

• Power factor display

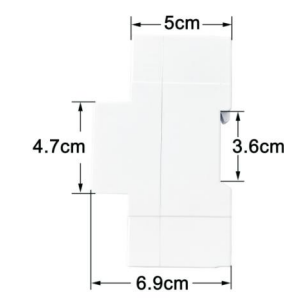
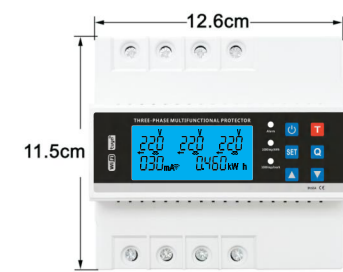
500Hz 500Hz 500Hz
030mA 0472kW h

• Frequency display

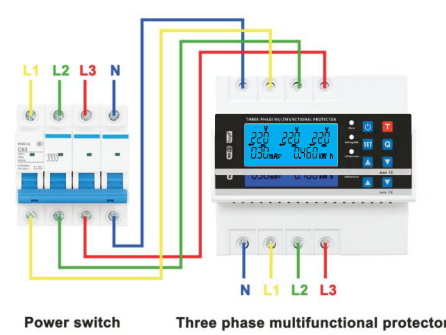
020 020 020
030mA 0472kW h

• Temperature display

VIII.Product dimension



IX.Wiring diagram

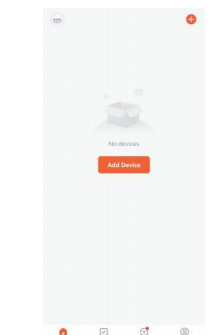


XI.Protector networking steps

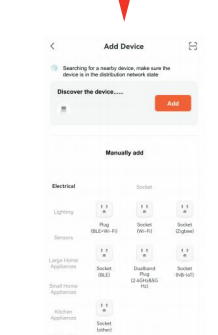
Protector networking steps



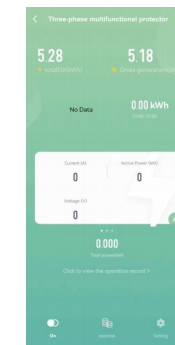
Scan QR code or search "tuya" in App Store and download the APP



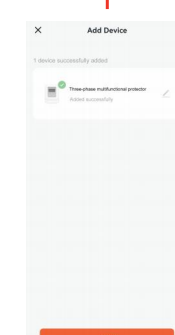
Click Add Device to start adding protector



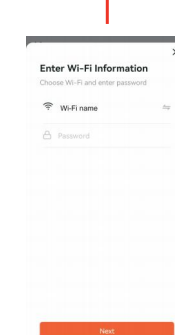
Discover the protector and click Add



Enter the mobile phone operation interface



The protector is added successfully



Enter Wi-Fi password to connect to the network

Three-phase multifunctional protector

Instruction Manual



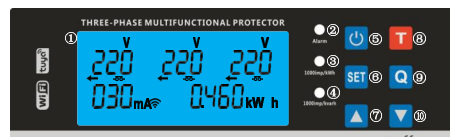
I. Application

Three-phase multifunctional protector is an intelligent protector integrated with over-voltage protector, under-voltage protector, over-current protector, leakage protector, power overload protector and temperature protector. In case of over-voltage fault, under-voltage fault, over-current fault, leakage, power overload or high temperature in line, this product can instantly power off to prevent electrical equipment from being burnt. The protection values of this product can all be set up by yourself and can be adjusted on the basis of local practical condition.

II. Product features

- 2.1 In case of over-voltage fault, under-voltage fault, over-current fault, leakage, power overload or high temperature in three phase line, the product can power off the line and can automatically restore connecting the line over a time delay after voltage or current of the line is recovered to normal condition.
- 2.2 In case of transient over voltage in line, the product can protect the equipment from false operation.
- 2.3 In case that the line subjects to unstable voltage or sudden power-off and power-on due to loosened connection and other fault, the product will disconnect the line.
- 2.4 When fault voltage of the line reaches the peak, the product itself will not be damaged.
- 2.5 The protector can display voltage, current, kilowatt, kVar, power factor, frequency, temperature, kilowatt-hour and kVarh.

III. Product setting

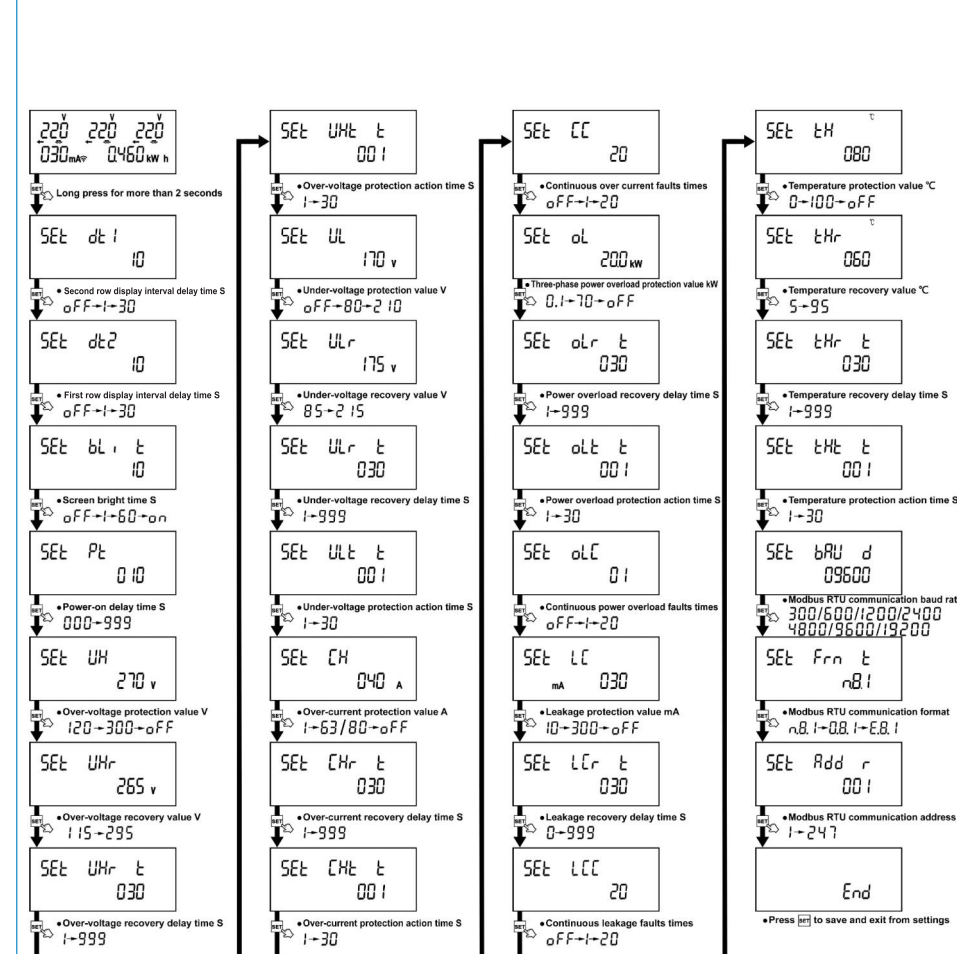


- ① LCD screen
- ② Alarm indicator
- ③ Kilowatt-hour meter pulse indicator
- ④ Kilovar-hour meter pulse indicator
- ⑤ Manual switch
- ⑥ Set key: Long press for 2 seconds to enter the setting interface
- ⑦ Adjustment key +
Long press for 2 seconds to configure the WiFi
Short press to switch the second row of data
- ⑧ Test key: Long press for 2 seconds to test the leakage
- ⑨ Query key: Short press to query event
Press **[Q]** and **[T]** keys together to query parameter setting
- ⑩ Adjustment key -
Short press to switch the first row of data

IV. Main technical parameters

Function	Technical Parameter
Input voltage	AC 80-300V
Over-voltage protection value	120-300V default 270V
Under-voltage protection value	80-210V default 170V
Over-current protection value	63A-1-63A default 40A 80A-1-80A default 60A
Temperature protection value	0-100℃ default 80℃
Leakage protection value	10-300mA default 30mA
Recovery delay time	1-999s default 30s
Display interval delay time	1-30s default 10s
Screen bright time	1-60s default 10s
Modbus RTU communication format	n.8.1/0.8.1/E.8.1
Power consumption	≤2W
Power-on delay time	0-999s default 10s
Over-voltage recovery value	115-295V default 265V
Under-voltage recovery value	85-215V default 175V
Over-current recovery value	0.5-62.5A
	0.5-79.5A
Temperature recovery value	5-95℃ default 80℃
Power overload protection value	0.1-70KW default 20KW
Protection action time	1-30s default 1s
Modbus RTU communication baud rate	300/600/1200/2400/ 4800/9600/19200 bps
Modbus RTU communication address	1-247 default 1
Electrical and mechanical life	≥10000cycles

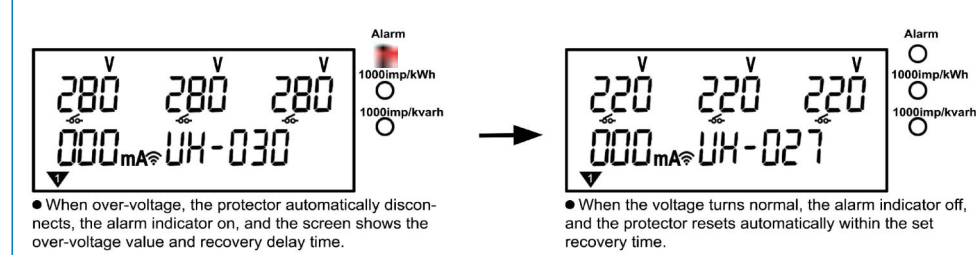
V. Product setting



1. Adjust the setting value by pressing **[A]** **[V]** keys.
2. OFF means turning off this function.
3. During the setting process, it is unnecessary to press to the last step, but long press **[A]** key to save the change.

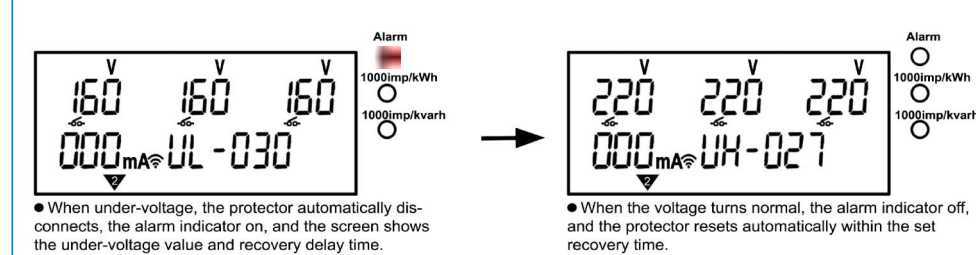
VI. Protection display description

Over voltage protection status



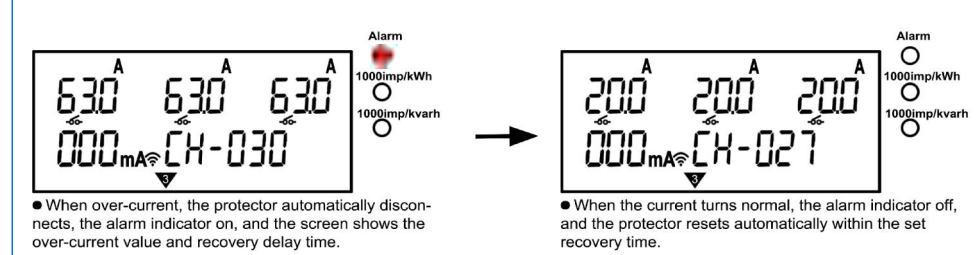
- When over-voltage, the protector automatically disconnects, the alarm indicator on, and the screen shows the over-voltage value and recovery delay time.
- When the voltage turns normal, the alarm indicator off, and the protector resets automatically within the set recovery time.

Under voltage protection status



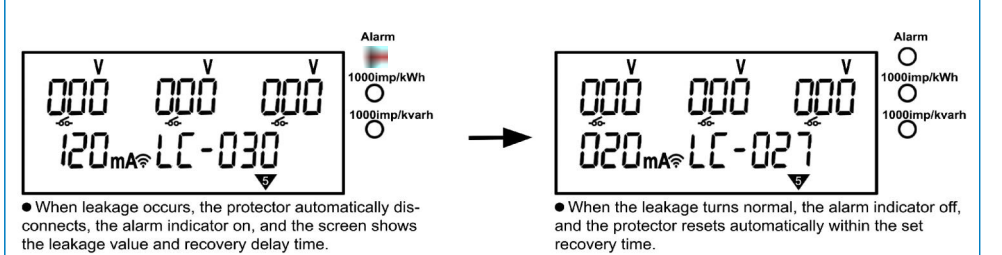
- When under-voltage, the protector automatically disconnects, the alarm indicator on, and the screen shows the under-voltage value and recovery delay time.
- When the voltage turns normal, the alarm indicator off, and the protector resets automatically within the set recovery time.

Over current protection status



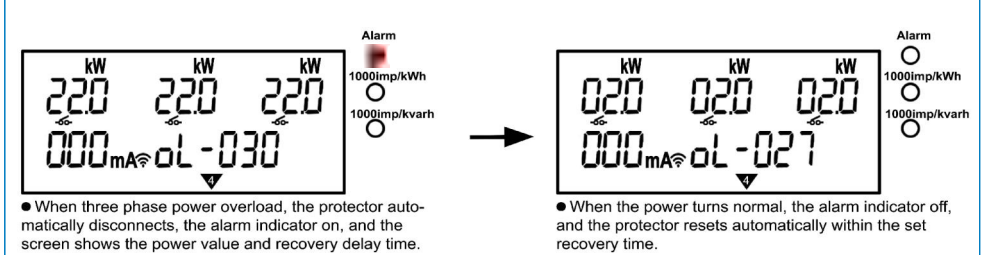
- When over-current, the protector automatically disconnects, the alarm indicator on, and the screen shows the over-current value and recovery delay time.
- When the current turns normal, the alarm indicator off, and the protector resets automatically within the set recovery time.

Leakage protection status



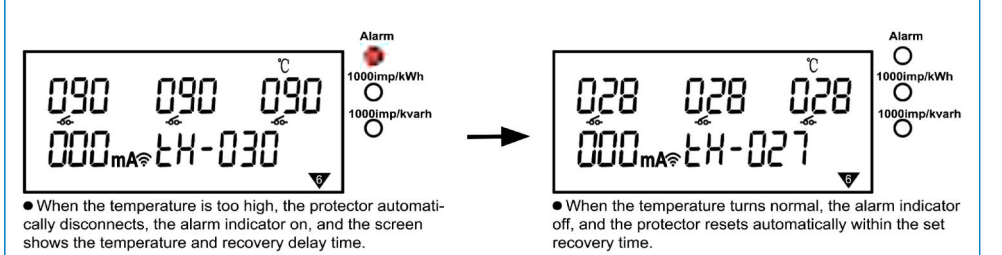
- When leakage occurs, the protector automatically disconnects, the alarm indicator on, and the screen shows the leakage value and recovery delay time.
- When the leakage turns normal, the alarm indicator off, and the protector resets automatically within the set recovery time.

Three phase power overload protection status



- When three phase power overload, the protector automatically disconnects, the alarm indicator on, and the screen shows the power value and recovery delay time.
- When the power turns normal, the alarm indicator off, and the protector resets automatically within the set recovery time.

Temperature protection status



- When the temperature is too high, the protector automatically disconnects, the alarm indicator on, and the screen shows the temperature and recovery delay time.
- When the temperature turns normal, the alarm indicator off, and the protector resets automatically within the set recovery time.