



## Adjustable voltage, current and leakage protective device with kilowatt-hour meter



# Instruction manual

## I. Application

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

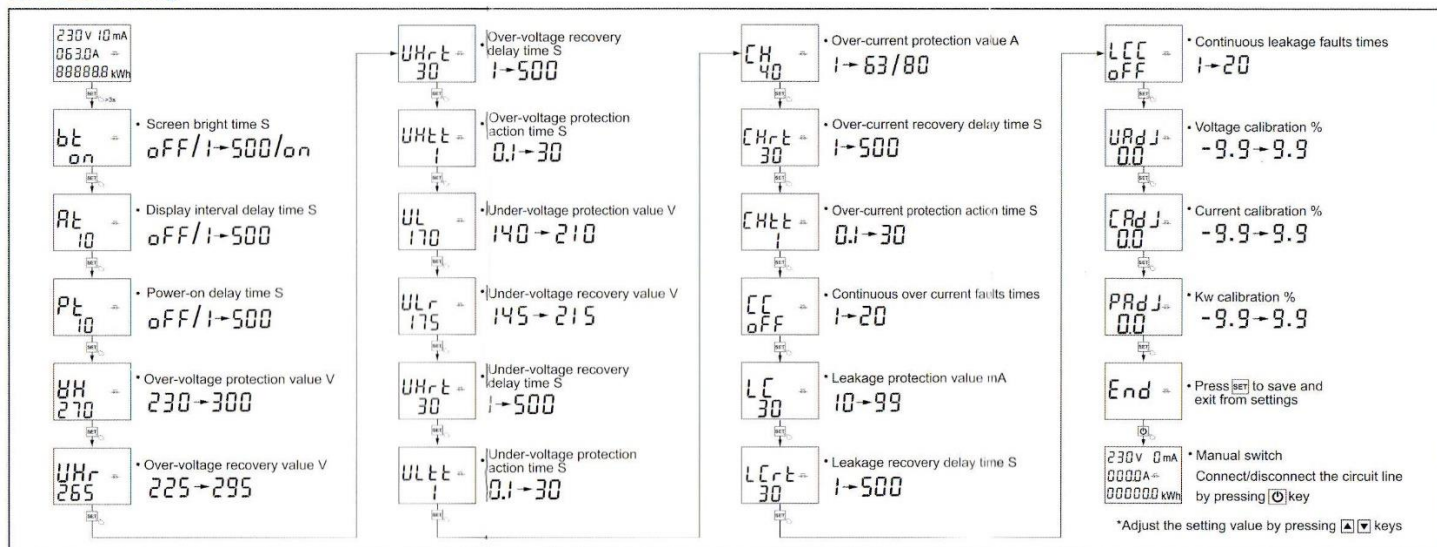
## II. Product features

- 2.1 In case of over-voltage fault, under-voltage fault, over-current fault or leakage fault in single 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 kilowatt-hour, kW and power factor.

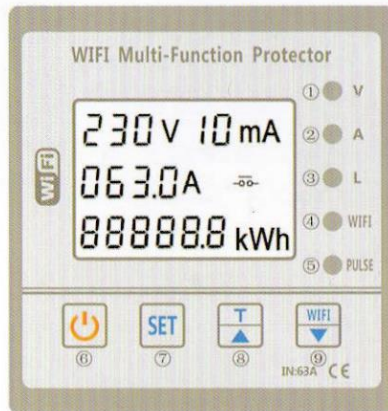
## III. Main technical parameters

| Function                           | Technical Parameter      | Function                                            | Technical Parameter       |
|------------------------------------|--------------------------|-----------------------------------------------------|---------------------------|
| Input voltage                      | AC 140–300V              | Power-on/<br>display interval<br>delay time         | 1–500s<br>default 10s     |
| Over-voltage<br>protection value   | 230–300V<br>default 270V | Over-voltage<br>recovery value                      | 225–295V<br>default 265V  |
| Under-voltage<br>protection value  | 140–210V<br>default 170V | Under-voltage<br>recovery value                     | 145–215V<br>default 175V  |
| Over-current<br>protection value   | 63A:1–63A<br>default 40A | Over-current<br>recovery value                      | 0.5–62.5A                 |
|                                    | 80A:1–80A<br>default 60A |                                                     | 0.5–79.5A                 |
| Leakage<br>protection value        | 10–99mA<br>default 30mA  | Continuous over<br>current /leakage<br>faults times | 1–20 times<br>default OFF |
| Recovery<br>delay time             | 1–500s<br>default 30s    | Action time                                         | 0.1–30s<br>default 1s     |
| Voltage/current/<br>kW calibration | –9.9–9.9%                | Power<br>consumption                                | ≤2W                       |
| Electrical and<br>mechanical life  | ≥100000cycles            | Boundary<br>dimension                               | 95 × 45 × 68MM            |

## IV. Product setting:



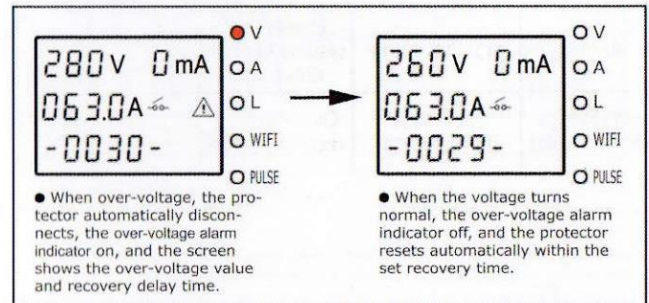
## V. Panel indicator lamps and keys instructions



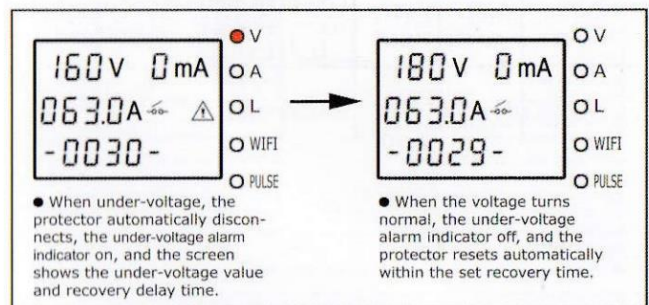
- ① Over/under voltage alarm indicator
- ② Over-current alarm indicator
- ③ Leakage alarm indicator
- ④ WIFI indicator
- ⑤ Kilo-watt hour meter pulse indicator
- ⑥ Manual switch
- ⑦ Set key: Long press for 3 seconds to enter the setting interface
- ⑧ Adjustment key +  
Test key: Long press for 3 seconds to test the leakage
- ⑨ Adjustment key -  
WIFI key: Long press for 5 seconds to configure the Wifi

## VI. Screen display description

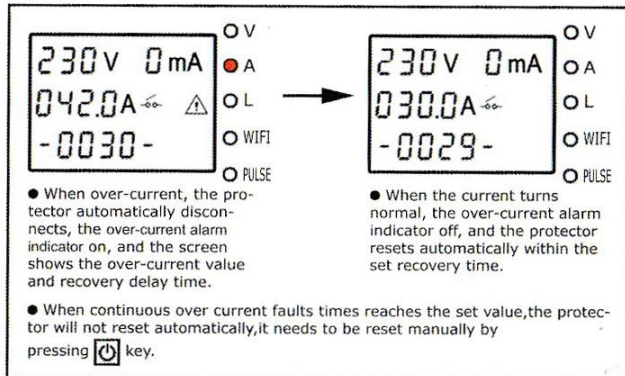
### 6.1 Over voltage protection status



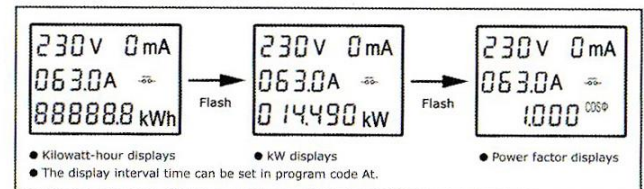
### 6.2 Under voltage protection status



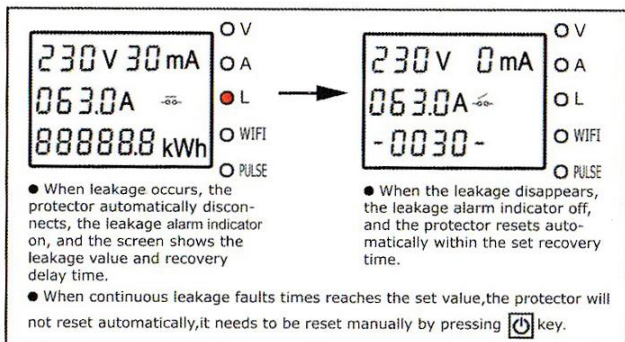
### 6.3 Over current protection status



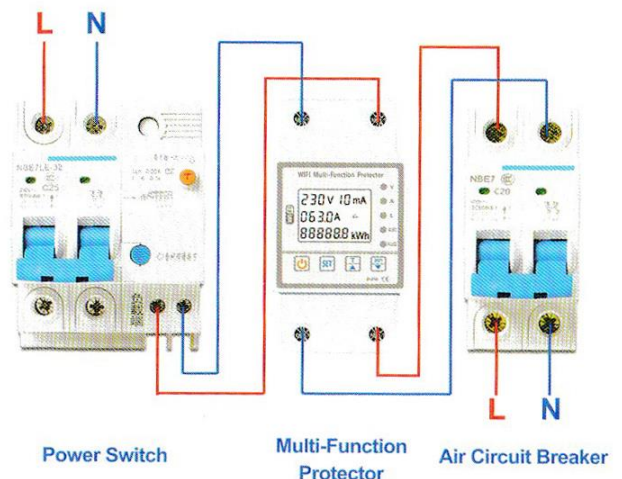
### 6.5 Kilowatt-hour, kW and power factor display by turns



### 6.4 Leakage protection status



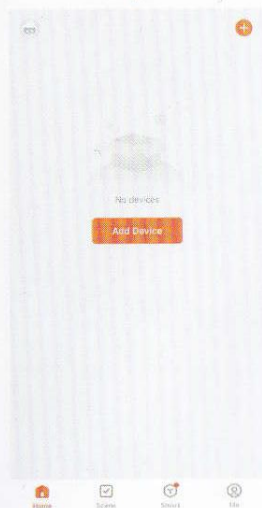
## VI. Wiring diagram



## VII.Protector networking steps



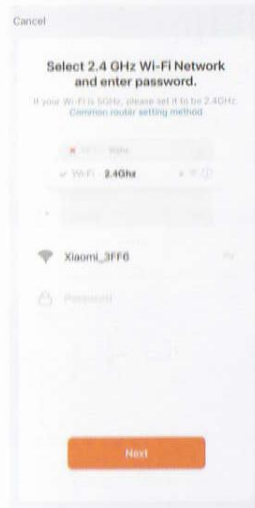
Scan QR code or search "tuya" in App Store to download APP



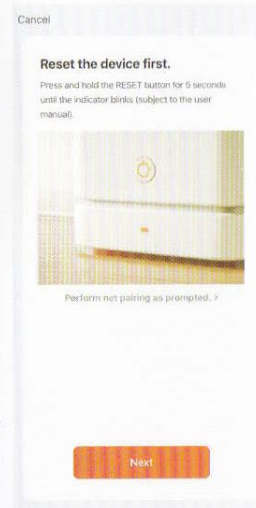
Click Add Device to start adding protector



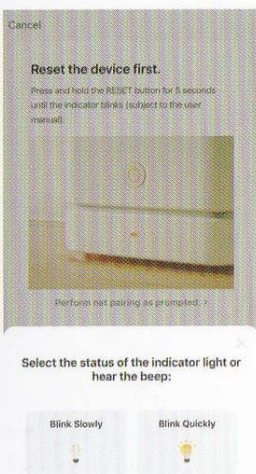
Choose Energy - Switch Module(Wi-Fi)



Enter Wi-Fi password to connect to the network



Press  key for 5 seconds to reset the protector and press Next



Select the status of the indicator light on the protector



Wait for the protector to appear and select



The protector is added successfully, then the WIFI indicator stays bright.



Enter the mobile phone operation interface