

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

IV. Product setting:

230V 10mA
063.0A
88888.8 kWh

SET >3s
bt on
• Screen bright time S
OFF/1→500/on

SET
At 10
• Display interval delay time S
OFF/1→500

SET
Pt 10
• Power-on delay time S
OFF/1→500

SET
UH 270
• Over-voltage protection value V
230→300

SET
Uhr 265
• Over-voltage recovery value V
225→295

UHrt 30
• Over-voltage recovery delay time S
1→500

SET
UHtt 1
• Over-voltage protection action time S
0.1→30

SET
UL 170
• Under-voltage protection value V
140→210

SET
ULr 175
• Under-voltage recovery value V
145→215

SET
UHrt 30
• Under-voltage recovery delay time S
1→500

SET
ULtt 1
• Under-voltage protection action time S
0.1→30

CH 40
• Over-current protection value A
1→63/80

SET
CHrt 30
• Over-current recovery delay time S
1→500

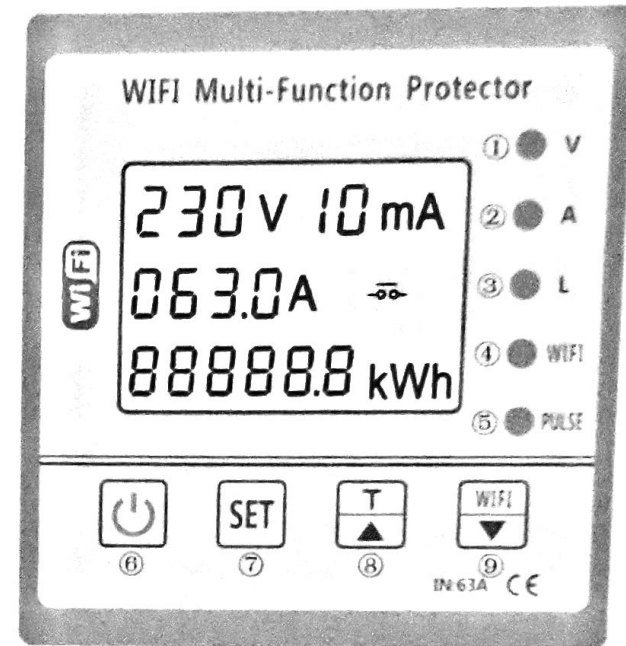
SET
CHtt 1
• Over-current protection action time S
0.1→30

SET
CC OFF
• Continuous over current faults times
1→20

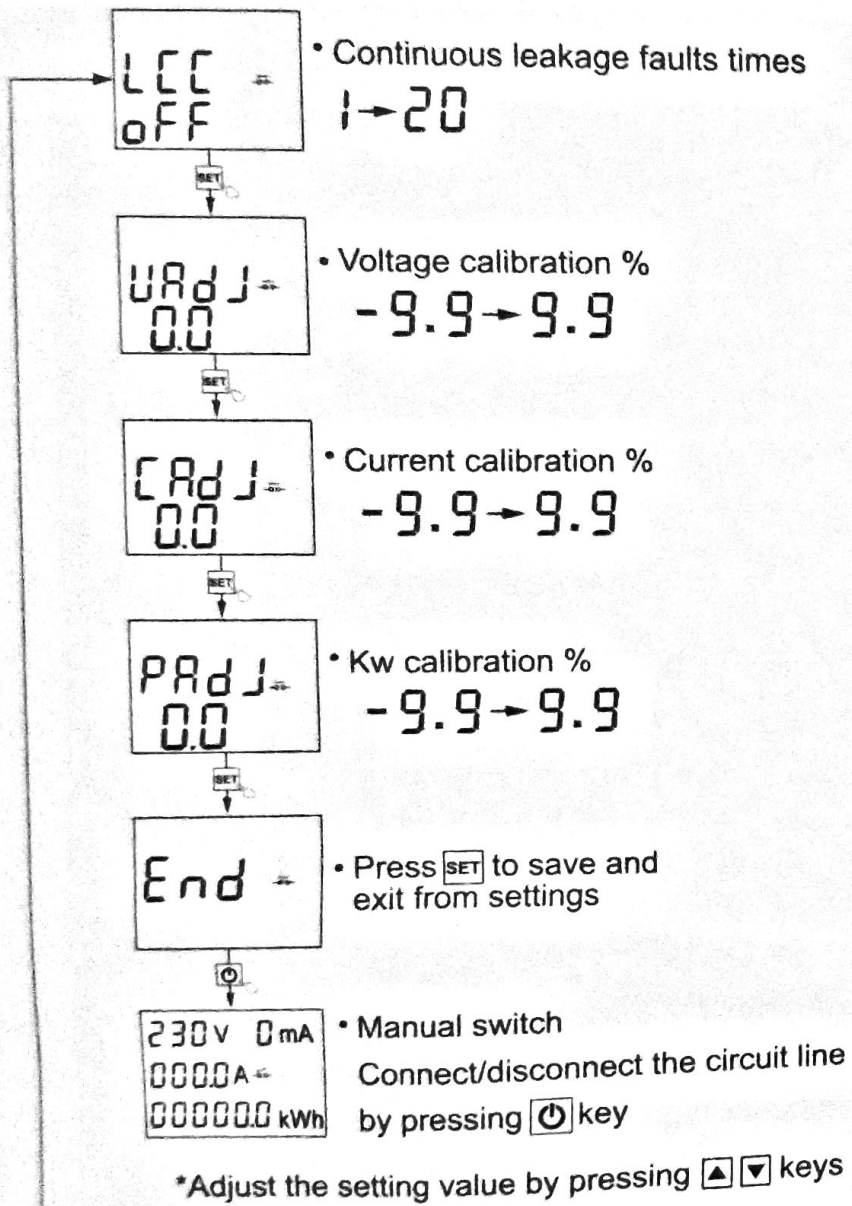
SET
LC 30
• Leakage protection value mA
10→99

SET
LCrt 30
• Leakage recovery delay time S
1→500

V. Panel indicator lamps and keys instructions

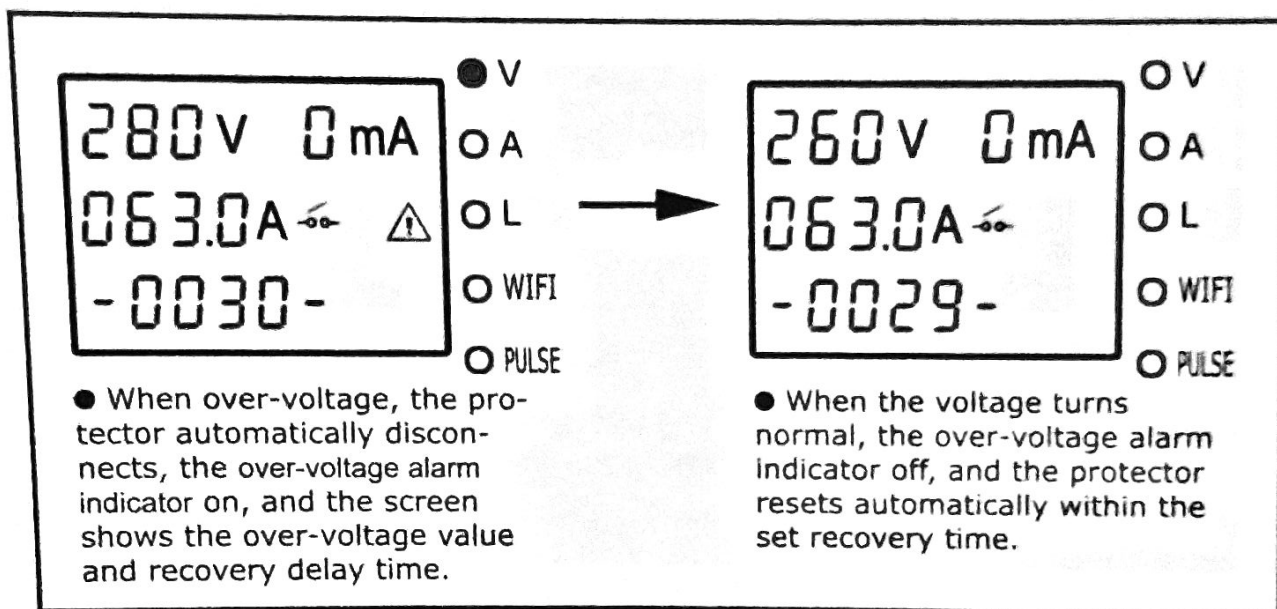


- ① Over/under voltage alarm indicator
- ② Over-current alarm indicator
- ③ Leakage alarm indicator
- ④ WIFI indicator
- ⑤ Kilo-watt hour meter pulse indicator
- ⑥ Manual switch
- ⑦ Set key: Long press for 3 seconds to enter the setting interface
- ⑧ Adjustment key +
Test key: Long press for 3 seconds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

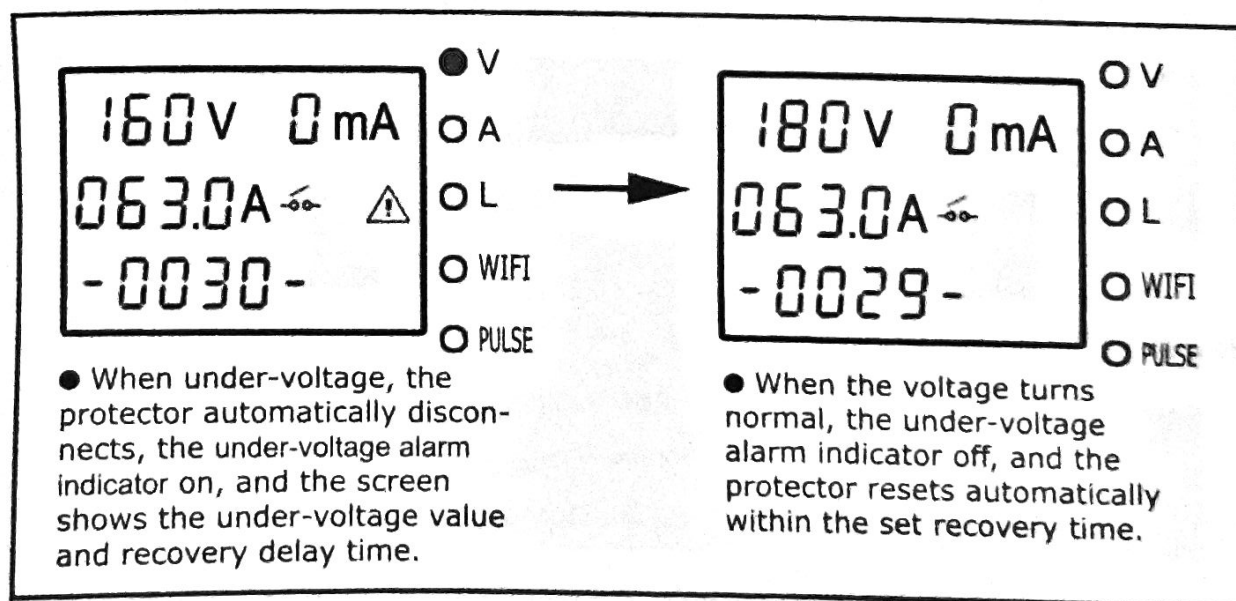


VI. Screen display description

6.1 Over voltage protection status



6.2 Under voltage protection status



6.3 Over current protection status

OV
 A
 OL
 WIFI
 PULSE

OV
 OA
 OL
 WIFI
 PULSE

- When over-current, the protector automatically disconnects, the over-current alarm indicator on, and the screen shows the over-current value and recovery delay time.
- When the current turns normal, the over-current alarm indicator off, and the protector resets automatically within the set recovery time.
- When continuous over current faults times reaches the set value, the protector will not reset automatically, it needs to be reset manually by pressing key.

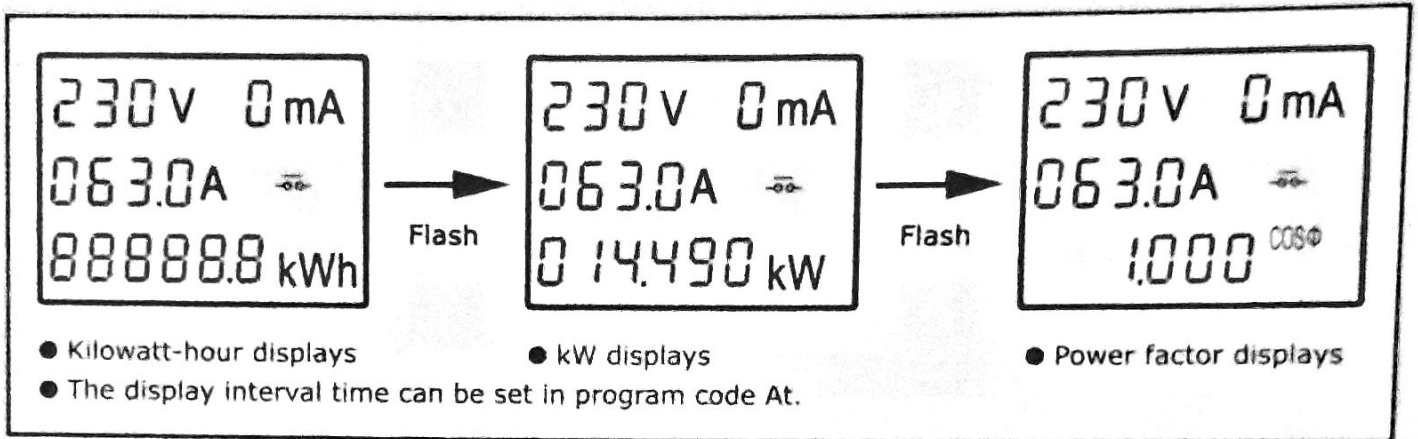
6.4 Leakage protection status

OV
 OA
 L
 WIFI
 PULSE

OV
 OA
 OL
 WIFI
 PULSE

- When leakage occurs, the protector automatically disconnects, the leakage alarm indicator on, and the screen shows the leakage value and recovery delay time.
- When the leakage disappears, the leakage alarm indicator off, and the protector resets automatically within the set recovery time.
- When continuous leakage faults times reaches the set value, the protector will not reset automatically, it needs to be reset manually by pressing key.

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



VI. Wiring diagram

