

Voltage / Current Protector GPS8-09 Instruction Manual



General

■ Applications

-Overvoltage, undervoltage, overcurrent and leakage protection for household equipment, while displaying frequency, power factor, power, and electricity consumption;

■ Function Features

-Overvoltage, undervoltage, overcurrent, and leakage protection.
-Special metering chips are used to detect voltage, current, electricity consumption and power.
-Double bus wiring design stronger ability.
-Over / under voltage value and over-current value can be set.
-Self reset after fault.
-Large color screen display.
-DIN rail mounting.

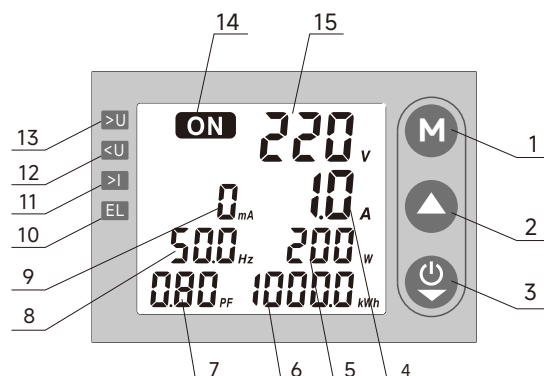
■ Model and connotation

GPS8 - 09 □
Incoming line mode
U:upper incoming line
D:lower incoming line
Design number
GPS8 Series

Technical parameters

	GPS8-09
Function	Over voltage, under voltage and over current
Rated supply voltage	AC220V(L-N)
Rated supply frequency	45~65Hz
Operation voltage range	80V~400V(L-N)
Rated operational current	32A,40A,50A,63A,80A (AC1)
Burden	AC max.3VA
Over voltage operation value	OFF,230V~300V
Under voltage operation value	140V~210V,OFF
Over/under voltage action delay	0.1s~10s
Over current operation value	1~32A,40A,50A,63A,80A
Over current action delay	2s~600s
Leakage current value	OFF,10mA~400mA
Leakage reclosing count	OFF,1~20,ON
Power-up delay	2s~600s
Reset time	2s~900s
Measurement error	≤1%
Electrical life(AC1)	1×10 ⁴
Mechanical life	1×10 ⁶
Operating temperature	-20°C ~ +60°C
Storage temperature	-35°C ~ +75°C
Mounting/DIN rail	Din rail EN/IEC 60715
Protection degree	IP40 for front panel/IP20 terminals
Operating position	any
Overvoltage category	III.
Pollution degree	2
Dimensions	82×36×68mm
Weight	205g

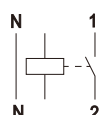
Panel Diagram



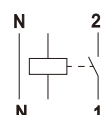
1	Press and hold the setting key for 3 seconds to enter the setting. After modifying the setting, press and hold for 3 seconds to save the setting.
2	Used to increase the value when setting parameters.
3	1.Used to reduce the value when setting parameters. 2.After exiting the setting, it can be used to manually turn on or off the load. 3.If the automatic fault reset function is turned off, this button can be used for manual reset when the fault occurs.
4	Current value
5	Power
6	Electricity consumption
7	Power factor
8	Frequency
9	Leakage current
10	Leakage fault indication
11	Overcurrent fault indication
12	Overvoltage fault indication
13	Undervoltage fault indication
14	ON/OFF status indication
15	Voltage value

Wiring Diagram

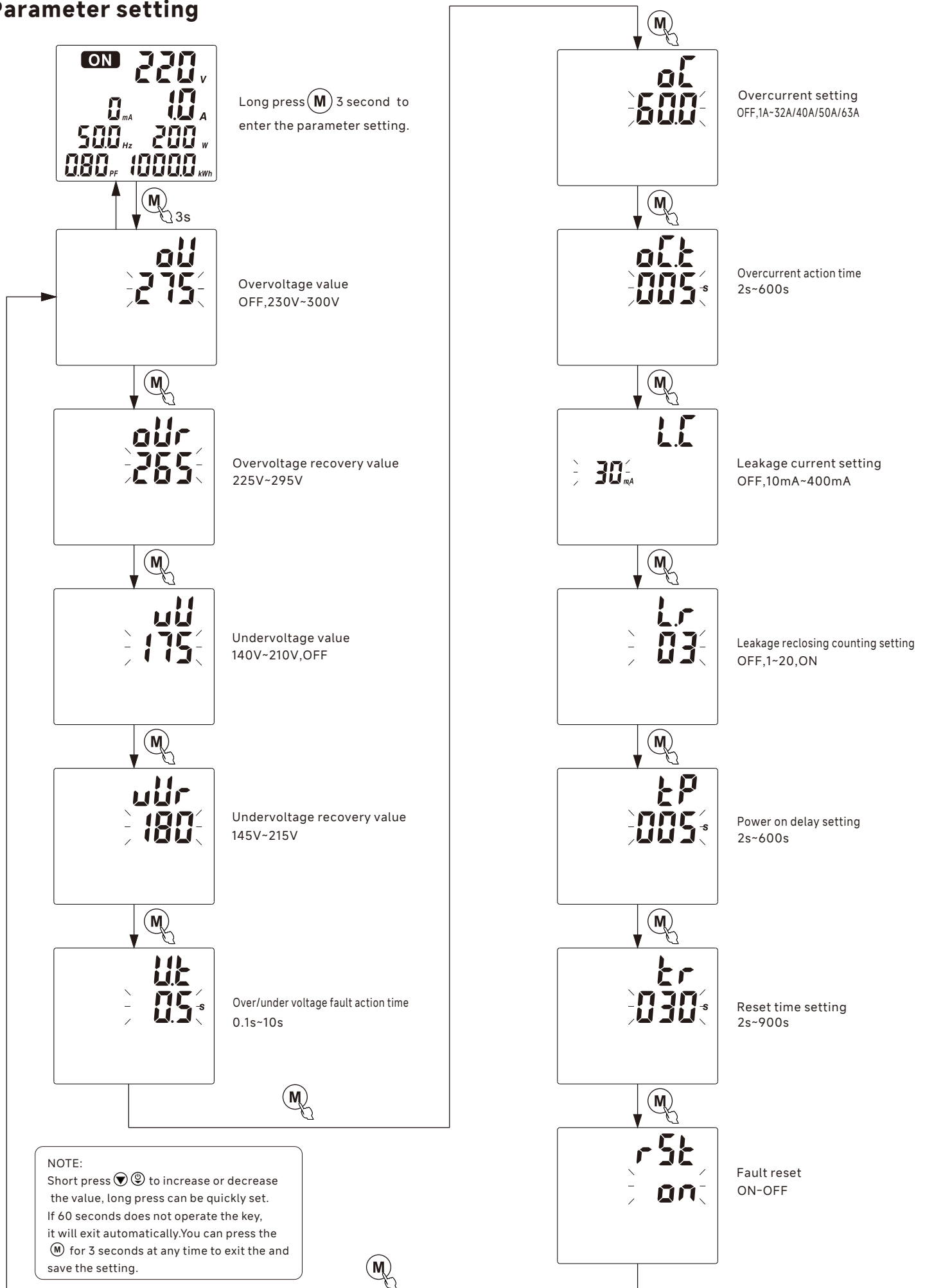
GPS8-09U



GPS8-09D





Parameter setting



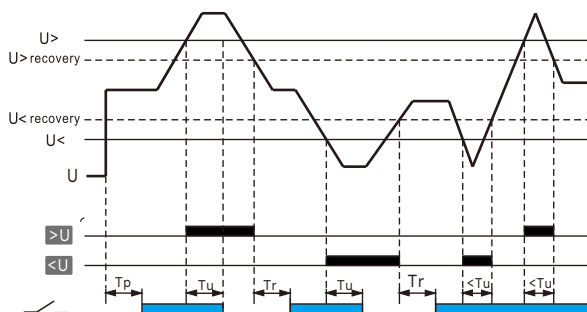
Factory settings

Parameter	Range	Step value	Factory settings
Over voltage value	OFF,230V~300V	1V	275V
Over voltage recovery value	225V~295V	1V	265V
Under voltage value	140V~210V,OFF	1V	175V
Under voltage recovery value	145V~215V	1V	180V
Voltage fault action time	0.1s~10s	0.1s	0.5s
Over current value	OFF,1A~32/40/50/63A/80A	0.1A	32A/40/50/63A
Over current action delay	2s~600s	1s	5s
Leakage current	OFF,10mA~400mA	1mA	30mA
Leakage reclosing count	OFF,1~20,ON	1	3
Power on delay time	2s~600s	1s	5s
Reset time	2s~900s	1s	30s
Fault reset	ON-OFF	—	ON

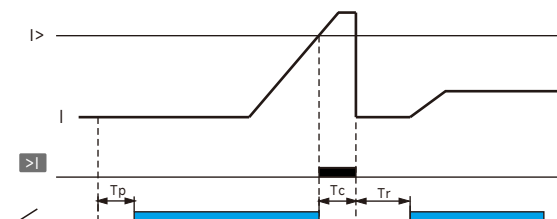
NOTE:

In the power off state, press and hold  +  , and then power on again to restore the factory settings.

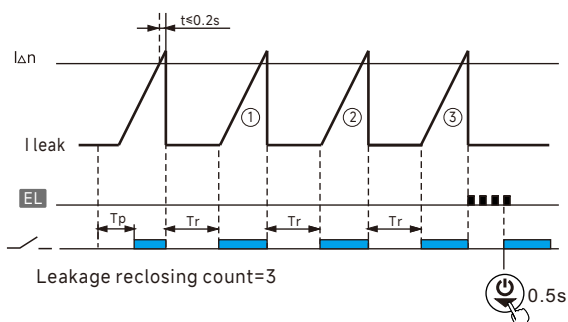
Functions Diagram



When an overvoltage/undervoltage fault occurs, the protector will turn off. When the voltage returns to normal, the protector will return on after the reset time (T_r) and the overvoltage/undervoltage value can be set.



When the current value exceeds the set current value and lasts for T_c time, the protector will off and start resetting with a delay (T_r). After the reset time is up, it will on again.



When the leakage current of the circuit exceeds the set leakage current, the protector will turn off. You can turn off the leakage protection function by setting it. The protector will reset according to the set reclosing count. If the count is exceeded, the protector will not reclose and will be indicated by the leakage current indicator light. You can reset it by pressing the ON/OFF button. The reclosing count of the protector can be set to ON to permanently activate the reclosing function.

T_p : Power-up delay(2~600s)

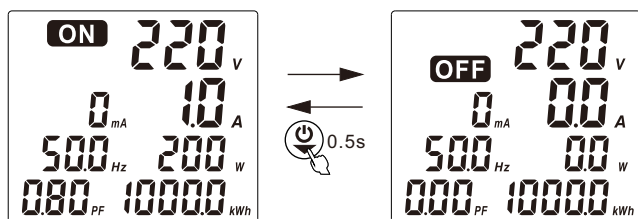
T_r : Reset delay time(2~900s)

T_u : Over/under voltage fault action time(0.1~10s)

T_c : Overcurrent fault action time(2~600s)

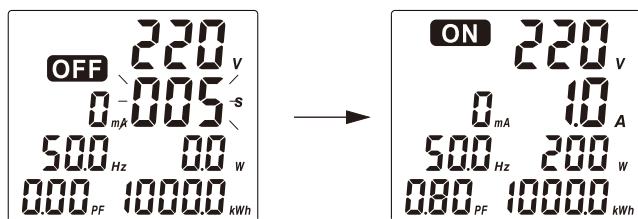
Open and close manually

Under normal operation, the load can be switched on or off manually by pressing the power key for 0.5 seconds.

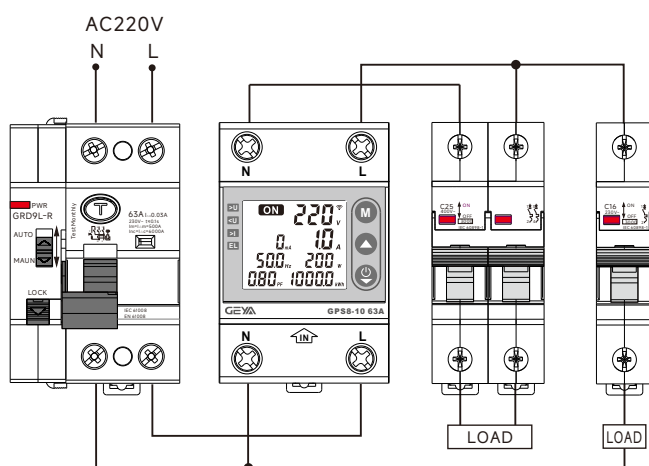


Power-on and reset delay

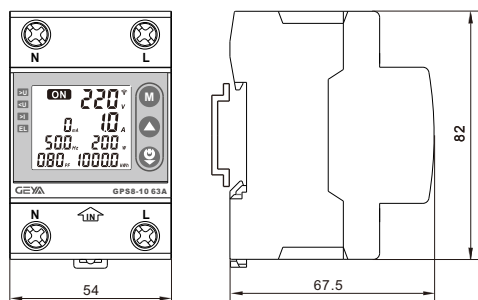
During the power-on and fault reset of the product, the product will count down and display according to the set delay time, and will enter the running state when the countdown ends.



Example



Dimensions(mm)



This product does not have isolation function.
Please disconnect the superior MCB during
maintenance!!!



Disposal of Electrical Waste
All electrical waste should be
disposed of in compliance with
current WEEE regulations.



Caution

The products must be installed by qualified electricians. All and
any electrical connections of the time relay shall comply with
the appropriate safety standards.