



### General

#### ■Applications

-Equipped with overvoltage/undervoltage and overcurrent protection functions, it automatically selects the phase with normal voltage to supply power to the load.

#### ■Function Features

- Voltage / current(True RMS)monitoring and protection.
- Over / under voltage value and over-current value can be set.
- Digital display voltage, current value, fault status can be displayed by LED.
- DIN rail mounting.

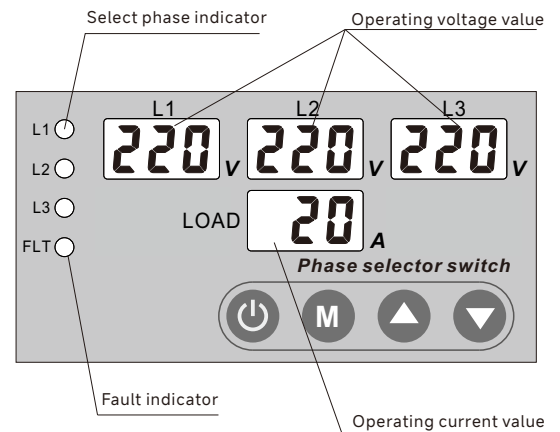
#### ■Model and connotation



### Technical parameters

	GPS8-16
Function	Phase selector switch
Rated supply voltage	AC220V(L1,L2,L3-N)
Rated supply frequency	45-65Hz
Operation voltage range	80V~400V(L1,L2,L3-N)
Rated operational current	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	1A~63A,80A
Over current action delay	2s~600s
Power-up delay	2~600s
Reset time	2~900s
Measurement error	≤1%
Electrical life(AC1)	1×10 <sup>4</sup>
Mechanical life	1×10 <sup>6</sup>
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	82×72×68mm
Weight	320g

### Panel Diagram



	1.It can be used to manually turn on or off the load.
	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.
	Used to increase the value when setting parameters.
	Used to reduce the value when setting parameters.

LED status	LED:L1/L2/L3
	This phase is not selected
	This phase has been selected
	Voltage fault recovery delay in progress

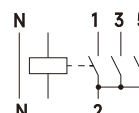
LED status	LED:FLT
	Voltage is normal
	L1, L2, L3 voltage are all faulty
	Contact disconnection fault

### Factory settings

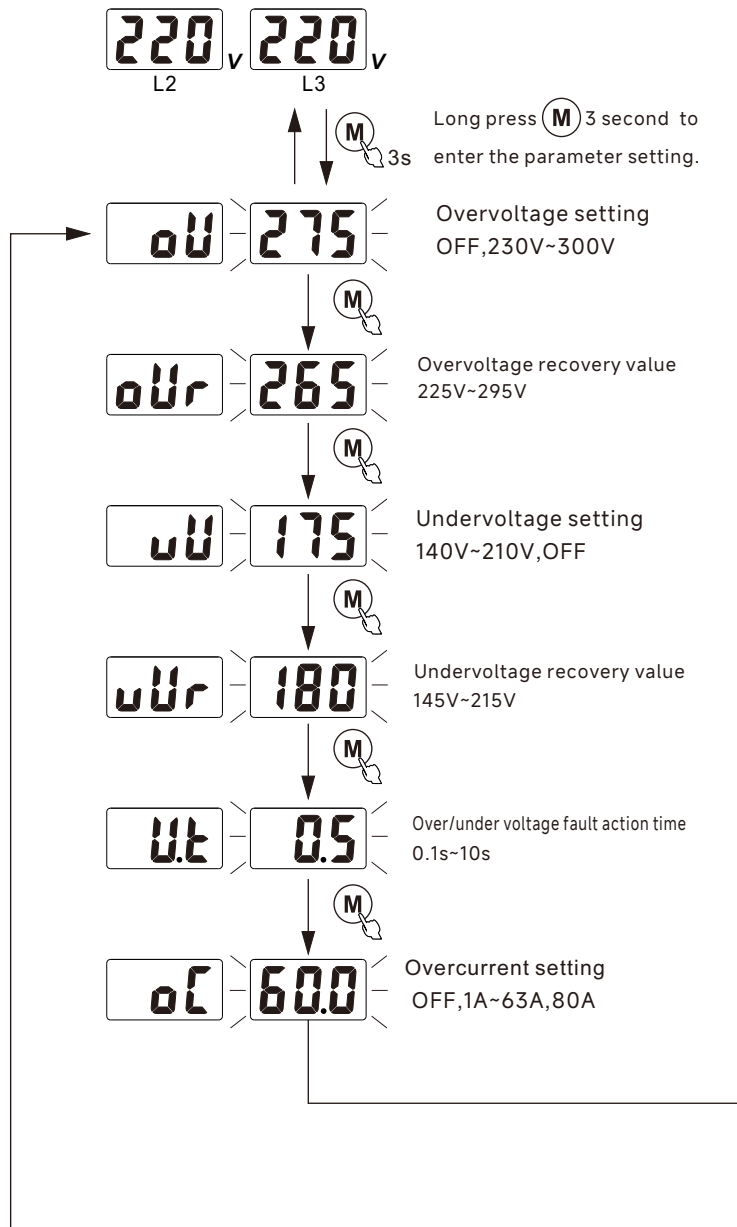
Parameter	Range	Step value	Factory settings
Over voltage value	OFF,230V~300V	1V	275V
Over voltage recovery value	225V~295V	1V	265V
Under voltage value	140V~210V,OFF	1V	175V
Under voltage recovery value	145V~215V	1V	180V
Voltage fault action time	0.1s~10s	0.1s	0.5s
Over current value	OFF,1A~63A	0.1A	60A,80A
Over current action delay	2s~600s	1s	5s
Power on delay time	2s~600s	1s	5s
Reset time	2s~900s	1s	30s
Phase sequence protection	OFF-ON	—	OFF
Fault reset	ON-OFF	—	ON

### Wiring Diagram

GPS8-16

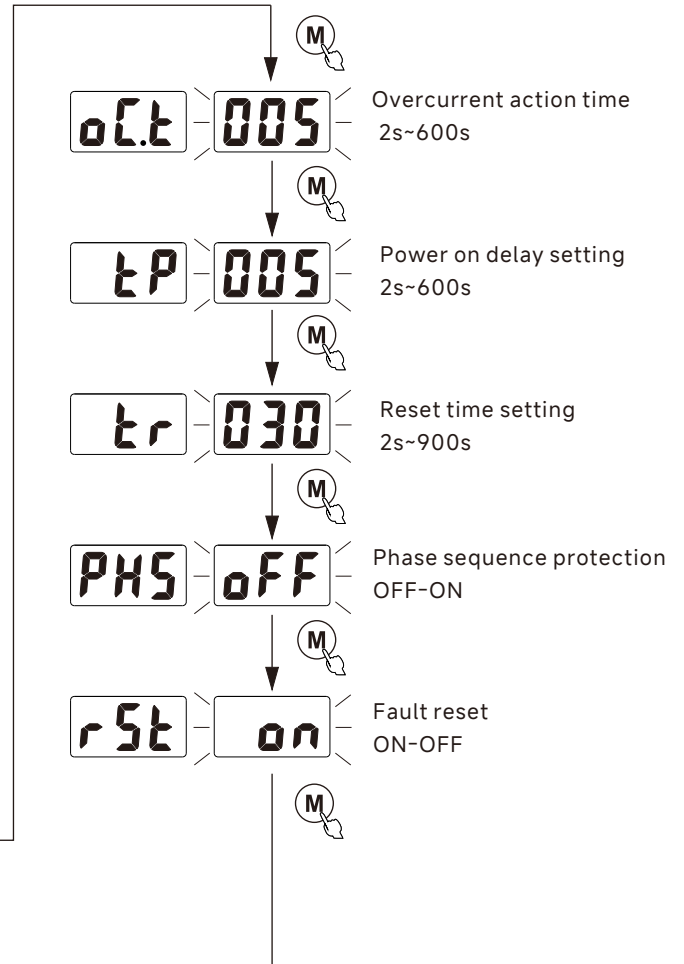


## Parameter setting



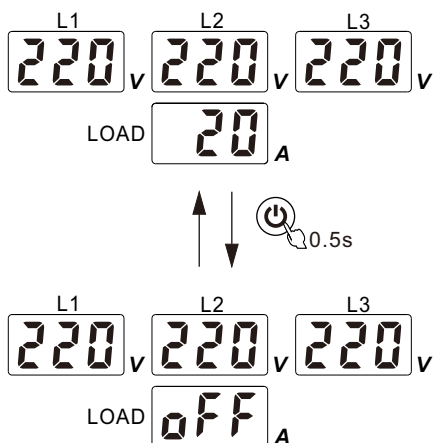
### NOTE:

Short press **▼** **▲** can add and drop parameters, long press can be quickly set. If 60s does not operate the key, it will exit automatically. You can press and hold **M** for 3 seconds to exit the setup mode and enter the running mode.



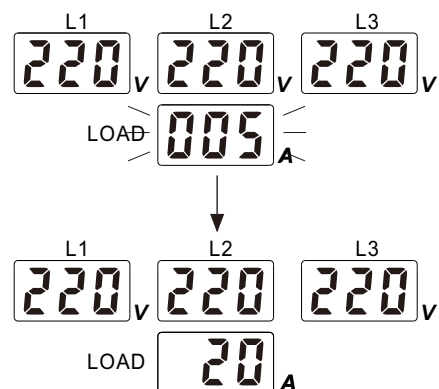
## Open and close manually

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



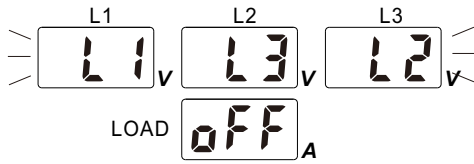
## Power-on and reset delay

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.



## Phase sequence fault

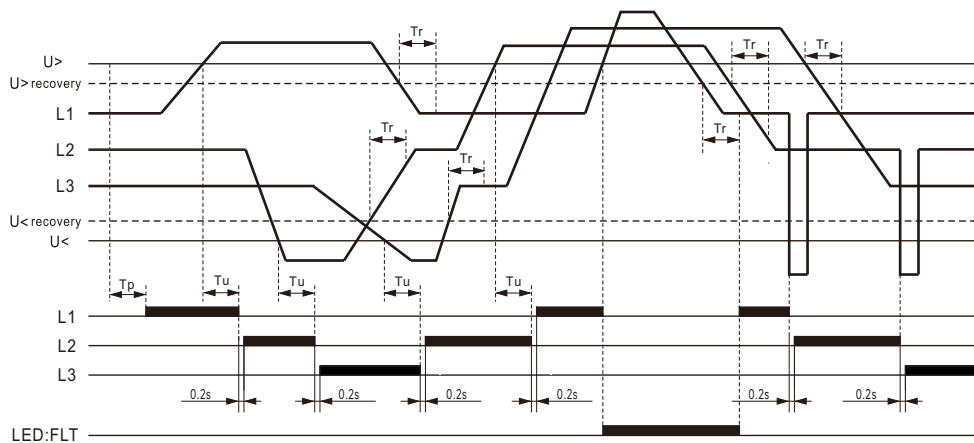
When the phase sequence protection function is turned on, the error of phase sequence access will be prompted as shown in the following figure.



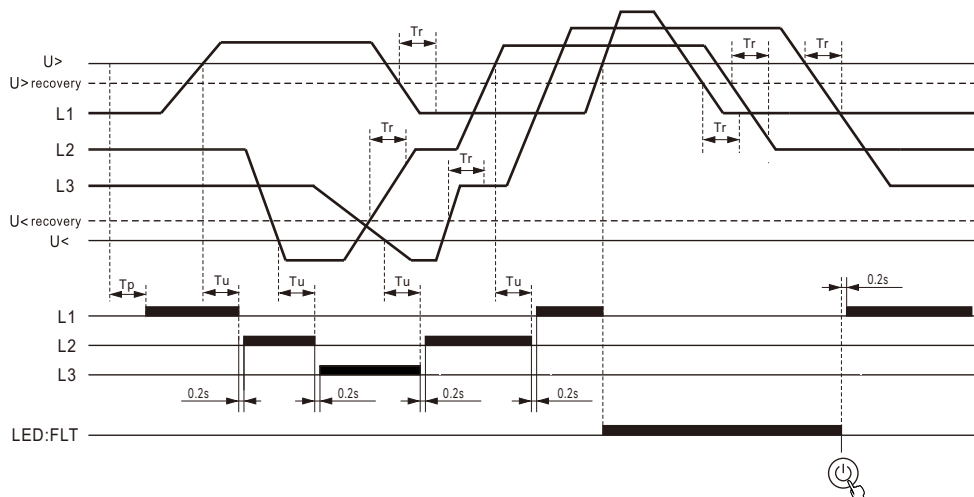
## Functions Diagram

The input of this product is L1, L2, L3, N, and the output is L, N. The product will automatically select the phase output with normal voltage. When one of the phases experiences a voltage fault, it will automatically switch to the phase with normal voltage. If all three phases of the voltage fail, the fault indicator light will light up.

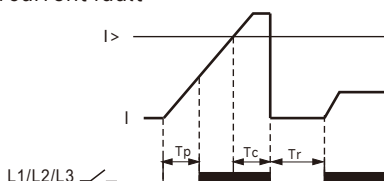
When the fault reset function is turned on, the functional diagram is as follows:



When the fault reset function is turned off, the functional diagram is as follows:

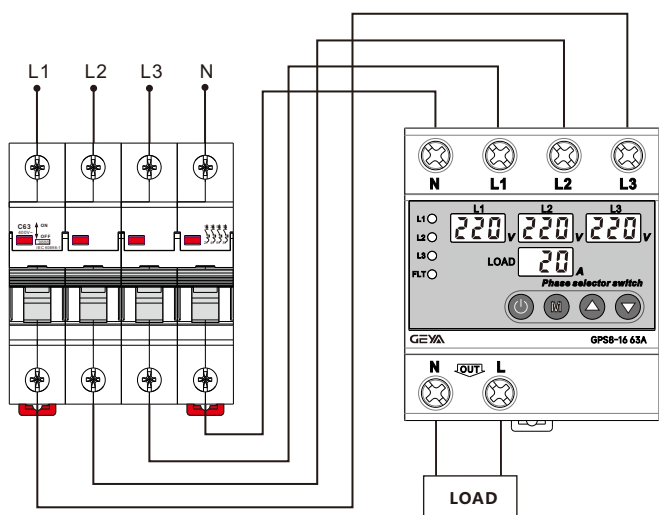


### Overcurrent fault



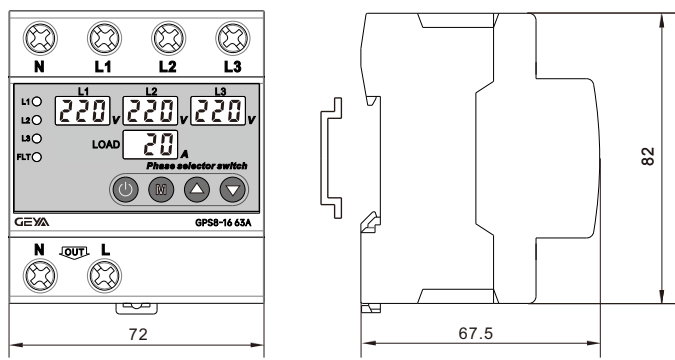
- $T_p$ : Power-up delay(2~600s)
- $T_r$ : Reset delay time(2~900s)
- $T_u$ : Over/under voltage fault action time(0.1~10s)
- $T_c$ : Overcurrent fault action time(2~600s)

## Example



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

## Dimensions(mm)



**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.