



### 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.

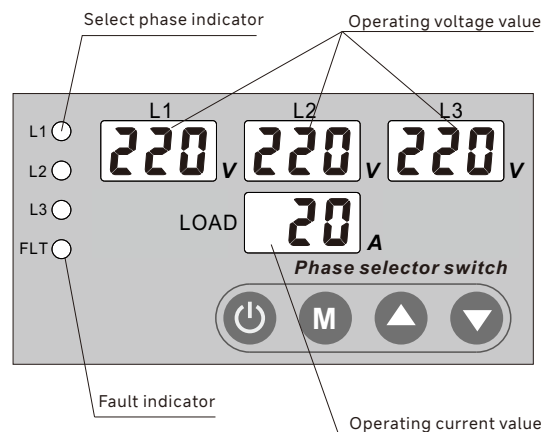
#### ■ Model and connotation

GPS8 -16  
 Design number  
 GPS8 Series

### 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                              |
| 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 |

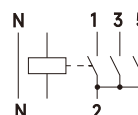
| LED status | LED:FLT ○                         |
|------------|-----------------------------------|
| —          | Voltage is normal                 |
| ■          | L1, L2, L3 voltage are all faulty |

### Factory settings

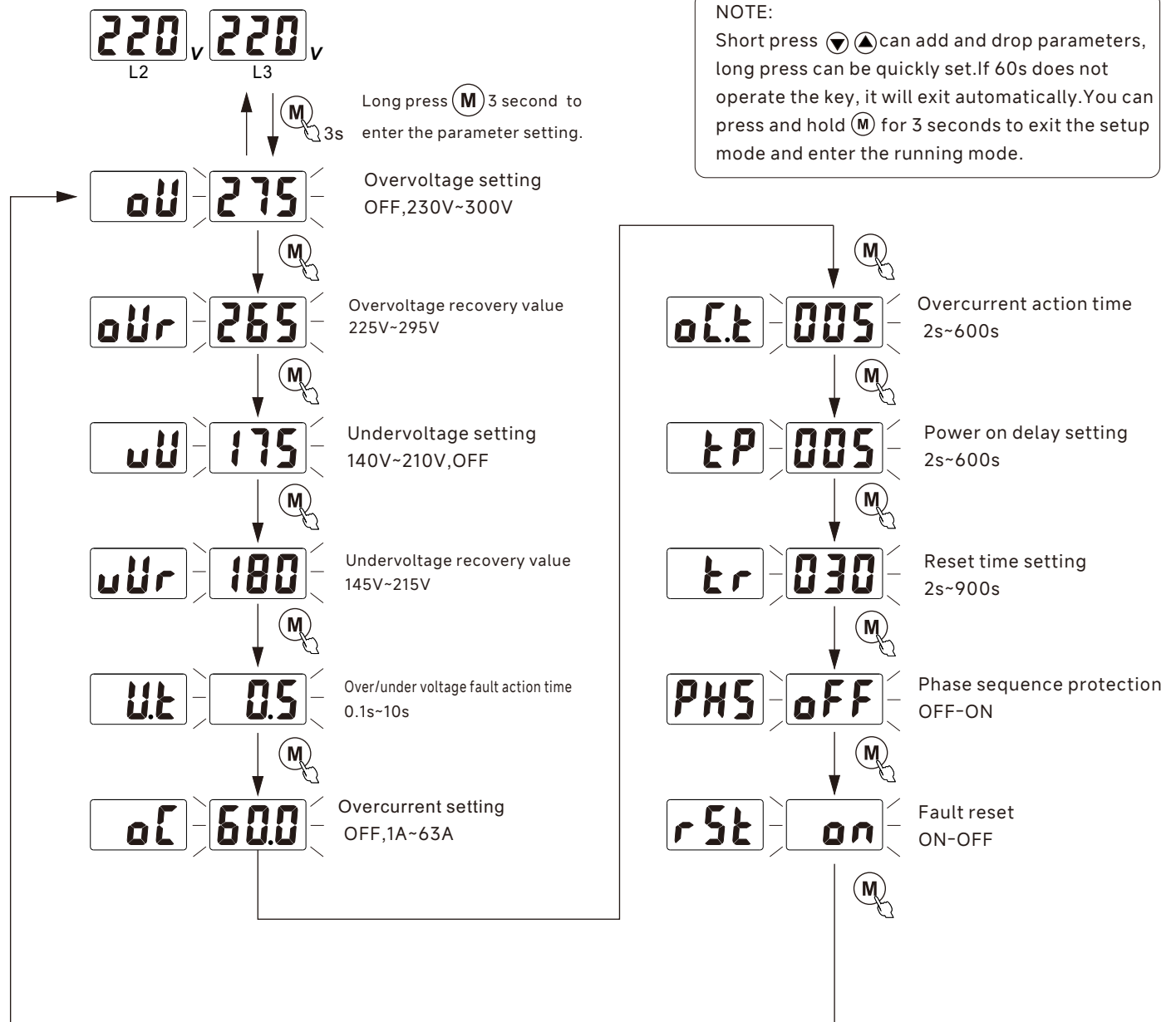
| Parameter                    | Range         | Step value | Factory settings |
|------------------------------|---------------|------------|------------------|
| Over voltage value           | OFF,230V~300V | 1V         | 275V             |
| Over voltage recovery value  | 225V~295V     | 1V         | 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              |
| 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

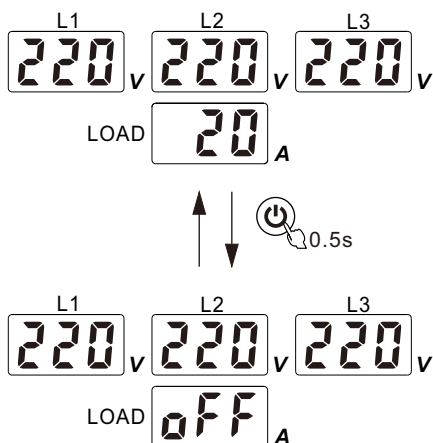


## Parameter setting



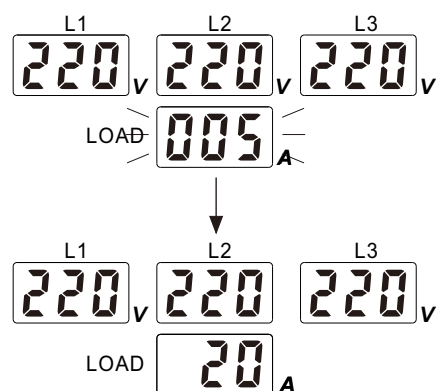
## Open and close manually

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



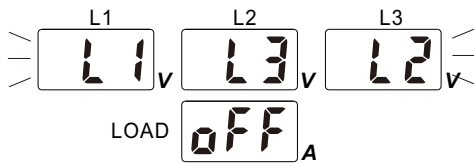
## Power-on and reset delay

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

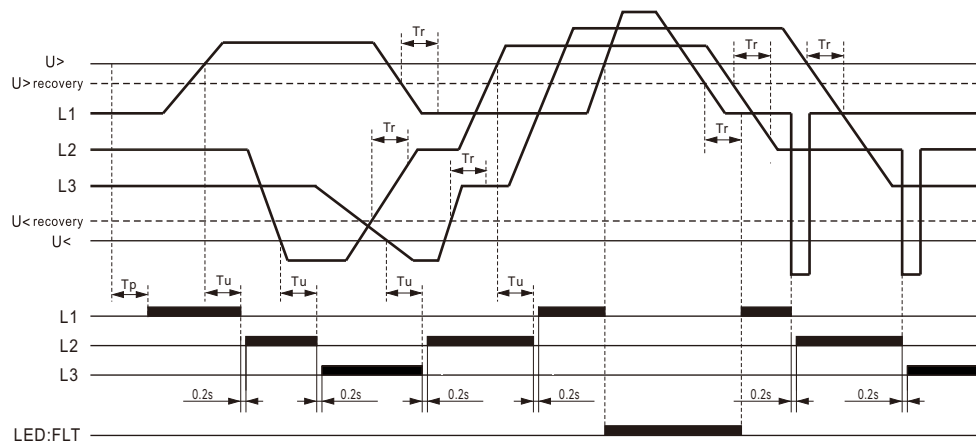
When the phase sequence protection function is turned on, the error of phase sequence access will be prompted as shown in the following figure.



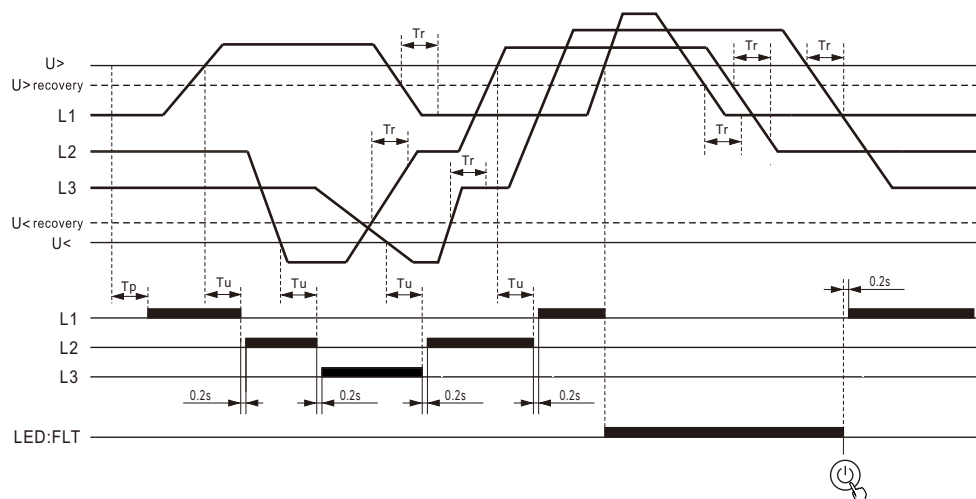
## Functions Diagram

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.

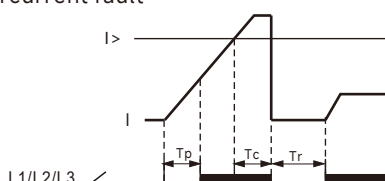
When the fault reset function is turned on, the functional diagram is as follows:



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

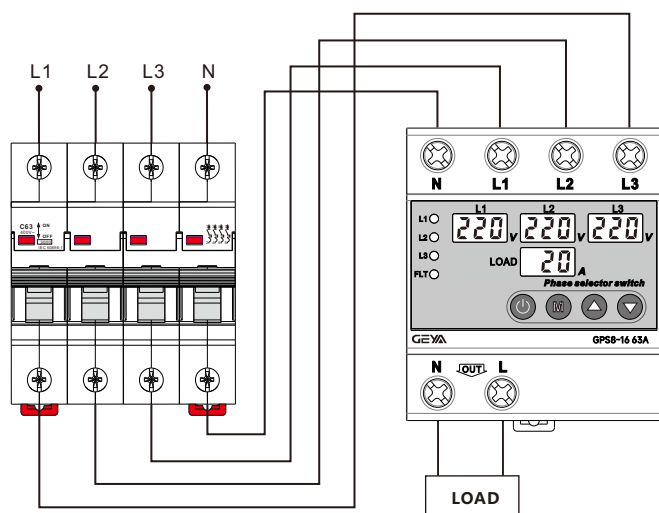


### Overcurrent fault



$T_p$ : 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)

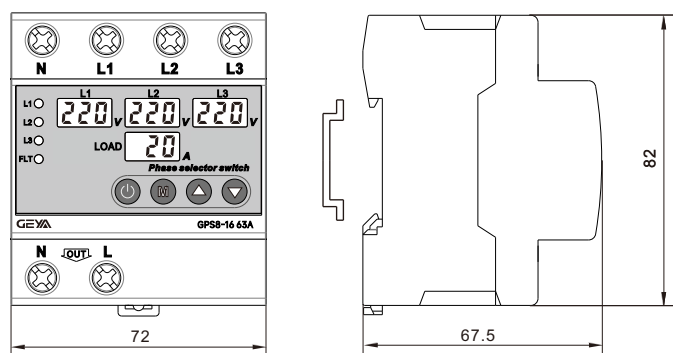
## Example



### 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.