

Automatic transfer switch GPS8-17

Instruction Manual



General

■ Applications

-Equipped with overvoltage and undervoltage protection function, it can be connected to two power sources and automatically switch between the main power source and the backup power source.

■ Function Features

- Voltage/Current monitoring and protection.
- Over / under voltage value can be set.
- Priority phase can be set.
- Digital display voltage, fault status can be displayed by LED.
- DIN rail mounting.

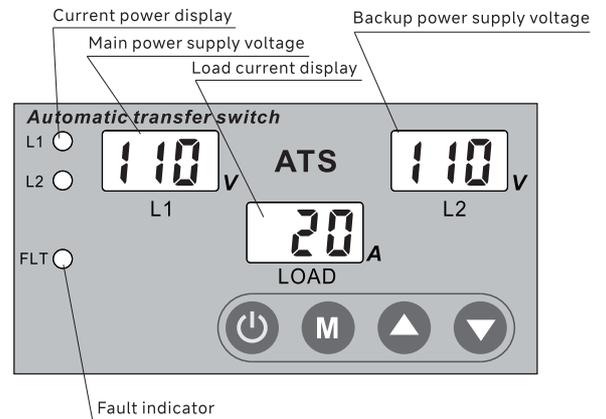
■ Model and connotation



Technical parameters

GPS8-17	
Function	Automatic transfer switch
Rated supply voltage	AC110V(L1-N1,L2-N2)
Rated supply frequency	45~65Hz
Operation voltage range	70V~400V(L1-N1,L2-N2)
Rated operational current	63A,80A (AC1)
Burden	AC max.3VA
Over voltage operation value	OFF,120V~300V
Under voltage operation value	70V~100V,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
Switching time	0~900s
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	82×72×68mm
Weight	280g

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.

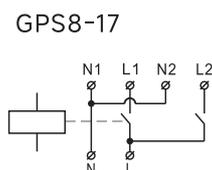
LED status	LED:L1/L2
	This phase is not selected
	This phase has been selected
	Voltage fault recovery delay in progress

LED status	LED:FLT
	Voltage is normal
	L1, L2voltage are all faulty
	Contact disconnection fault

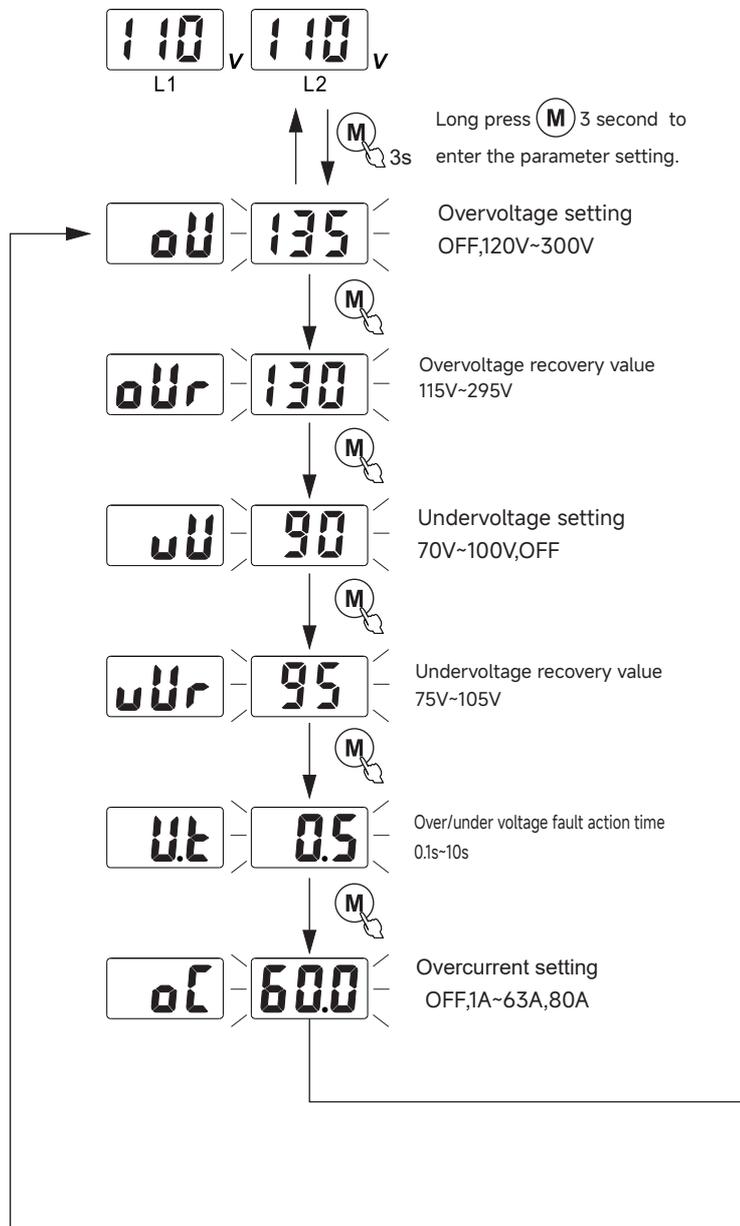
Factory settings

Parameter	Range	Step value	Factory settings
Over voltage value	OFF,120V~300V	1V	135V
Over voltage recovery value	115V~295V	1V	130V
Under voltage value	70V~100V,OFF	1V	90V
Under voltage recovery value	75V~105V	1V	95V
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	10s
Switching time	0s~900s	—	0s
Fault reset	ON-OFF	—	ON
Priority phase	L1-L2-AUTO	—	L1

Wiring Diagram

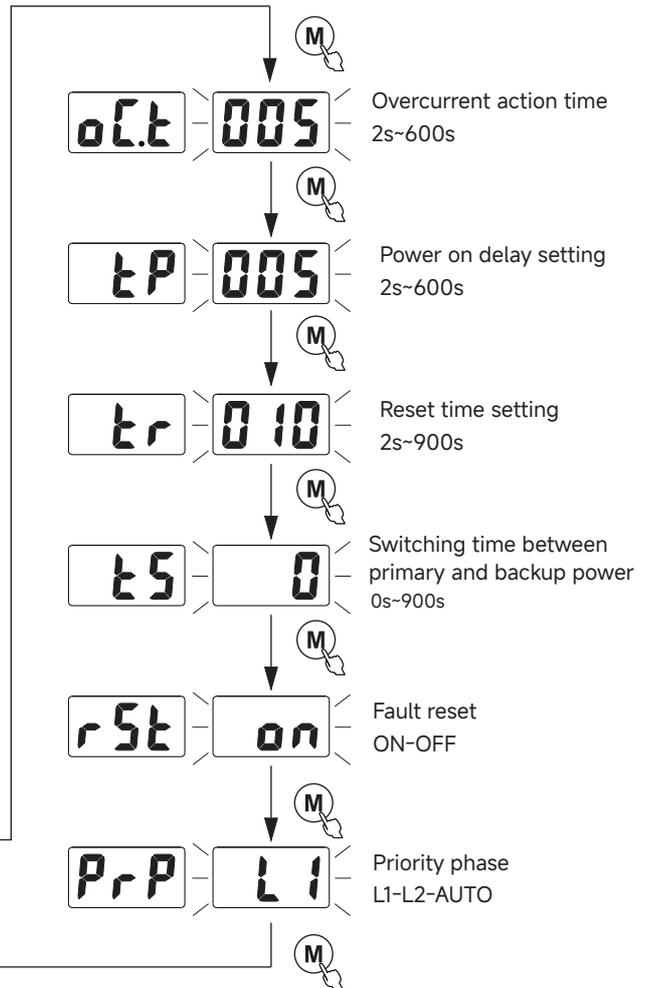


Parameter setting



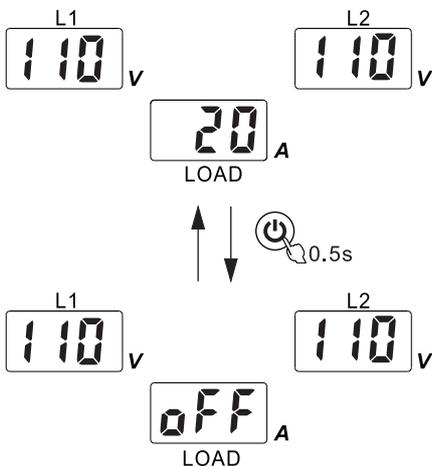
NOTE:

Short press **(M)** 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.



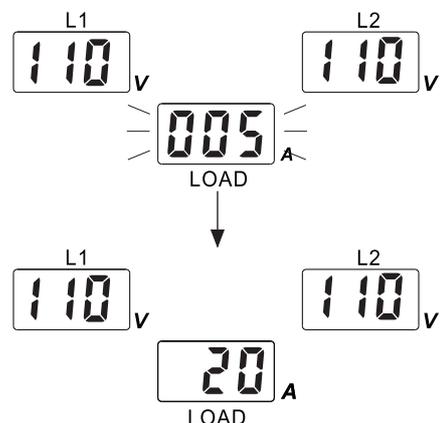
Open and close manually

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.



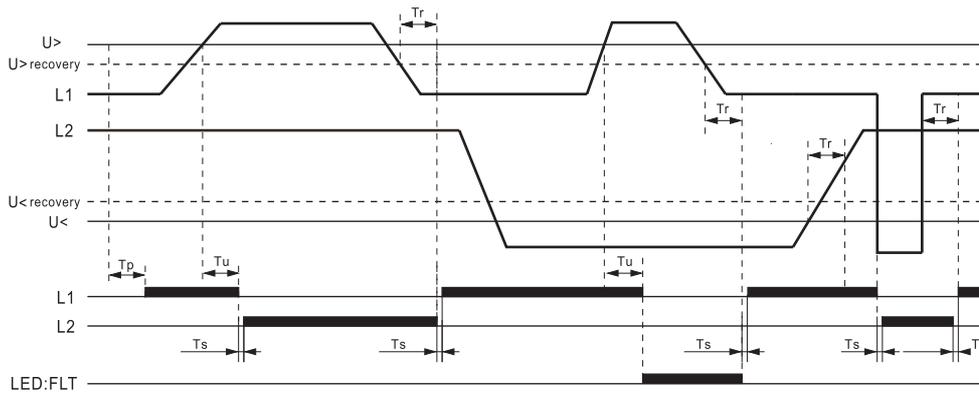
Functions Diagram

The input of this product is L1-N1, L2-N2, and the output is L-N.

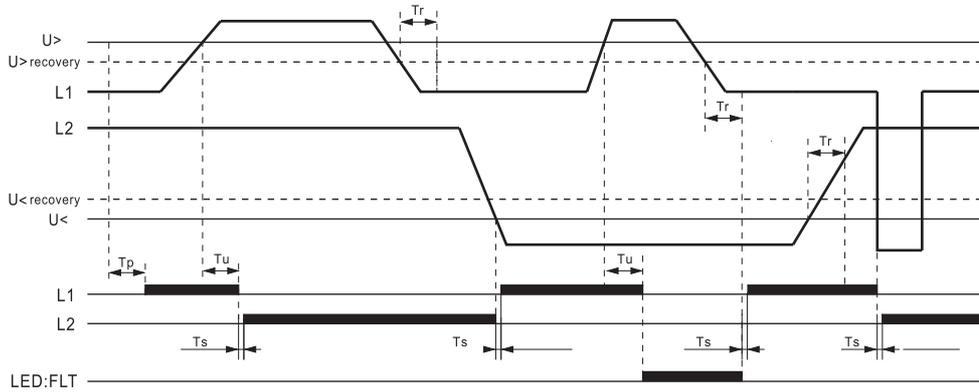
The priority phase of the product can be set, for example, if the priority phase is set to L1, the product will automatically select L1 as the input first. In any case, if only L1 is normal, it will automatically switch to L1. If the priority phase is set to AUTO, the product will automatically select the voltage normal phase as the input.

You can understand the working logic of the product through the following functional diagrams.

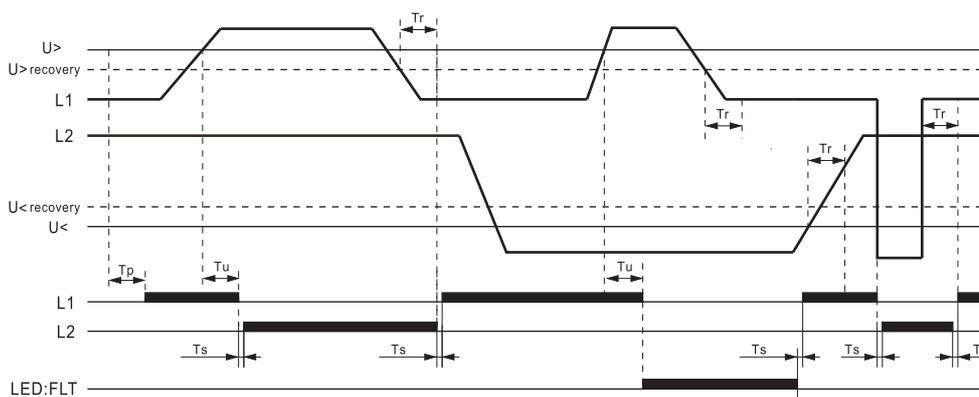
Fault reset:ON , Priority phase:L1



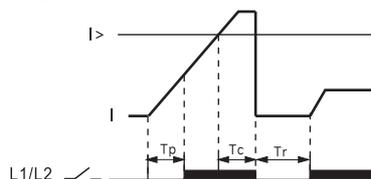
Fault reset:ON , Priority phase:AUTO



Fault reset:OFF , Priority phase:L1



Overcurrent fault

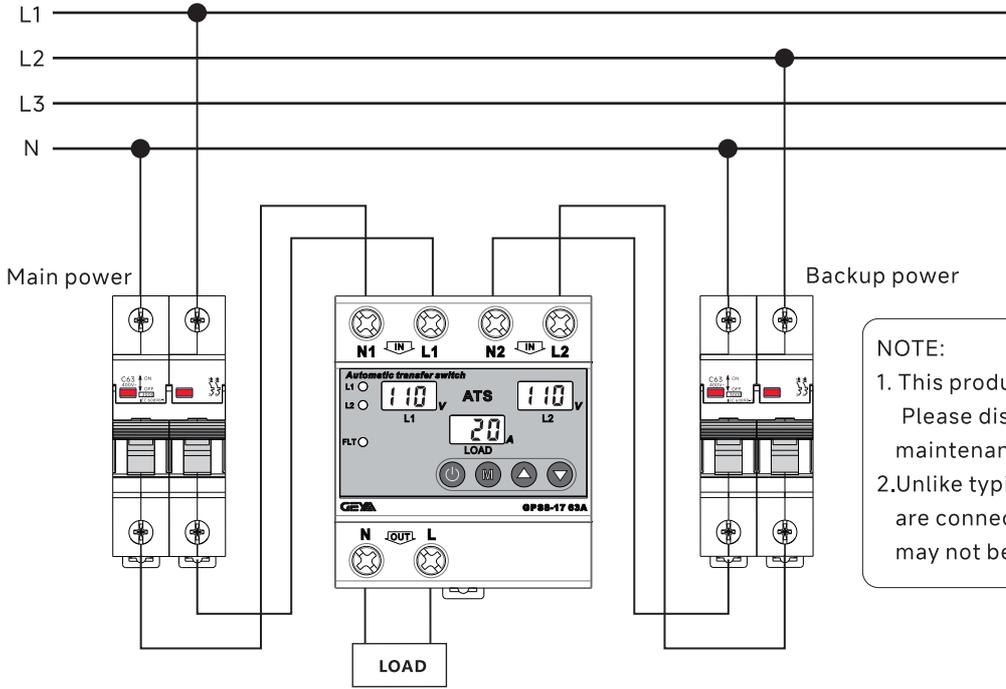


- Tp: Power-up delay(2~600s)
- Tr: Reset delay time(2~900s)
- Tu: Over/under voltage fault action time(0.1~10s)
- Tc: Overcurrent fault action time(2~600s)
- Ts: Switching time(0~900s)

NOTE:

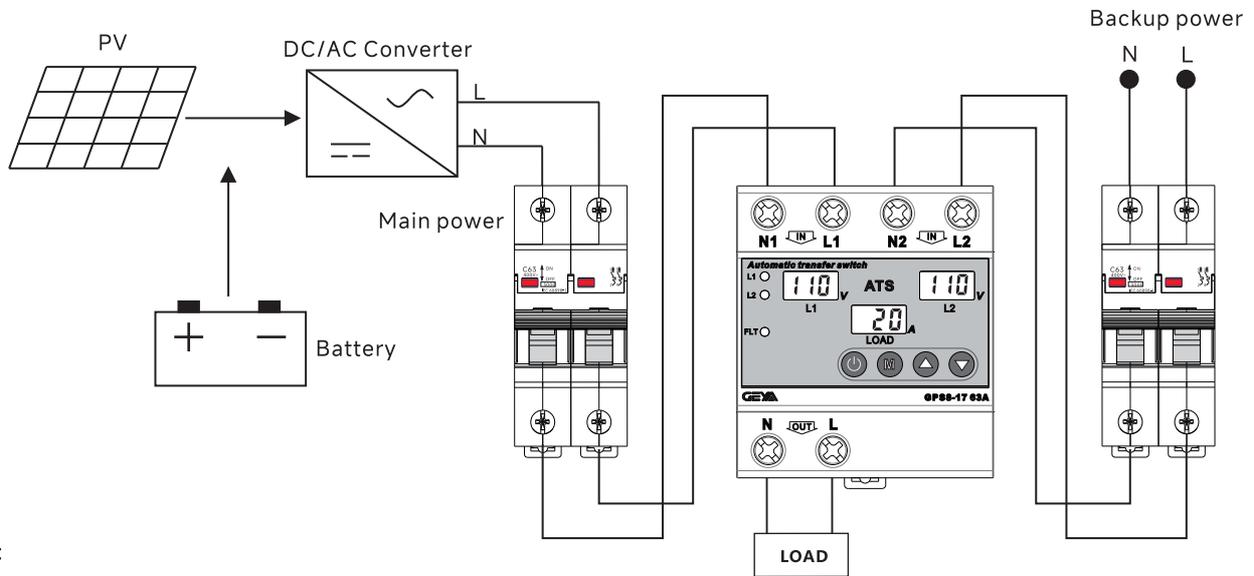
When the switching time is set to 0, the actual switching time is about 0.2 seconds.

Example



NOTE:

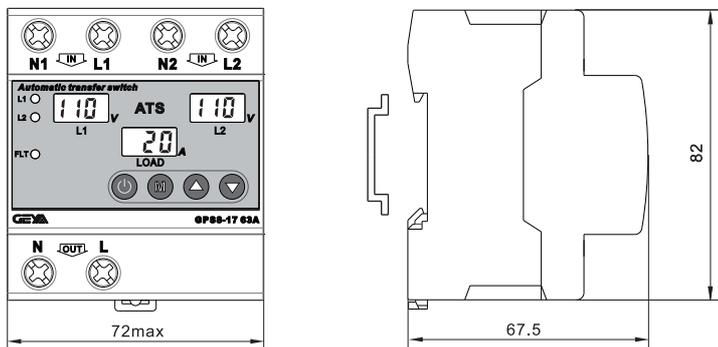
1. This product does not have isolation function. Please disconnect the superior MCB during maintenance!!!
2. Unlike typical ATS, the N1 and N2 of this product are connected. Please note this feature as it may not be applicable in some scenarios.



NOTE:

When the priority phase is set to L1, L1-N1 is the main power supply.

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.