

# LCD display voltage relay GRV8-SV Instruction Manual



## General

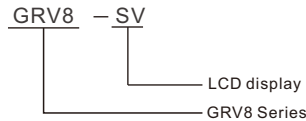
### ■Applications

- Control for connection of moving equipment(site equipment,agricultural equipent,refrigerated trucks).
- Normal/emergency power supply switching.

### ■Function Features

- Controls its own supply voltage(True RMS measurement).
- LCD display.
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- 2-MODULE,DIN rail mounting.

### ■Model and connotation



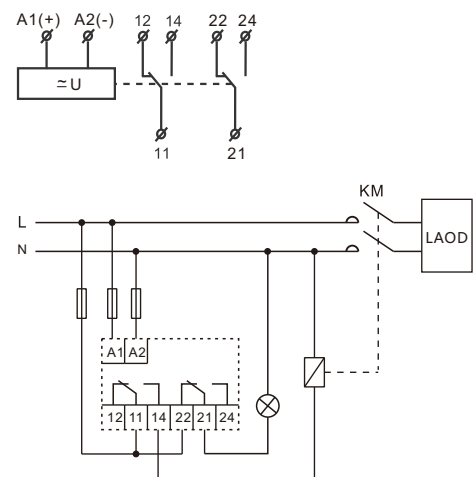
## Technical parameters

	GRV8-SV
Function	Over voltage, under voltage
Rated supply voltage	AC/DC110V...240V
Rated supply frequency	45~65Hz,0Hz
Operation voltage range	50V~350V
Burden	AC max.3VA
Over voltage operation value	65V~300V,OFF
Under voltage operation value	OFF,65V~300V
Over/under voltage action delay	0.1s~20s
Power-up delay	0.5s~300s
Reset time	0.5s~300s
Measurement error	≤1%
Output	2×SPDT
Current rating	8A/ AC1
Switching voltage	250VAC/24VDC
Electrical life(AC1)	1×10 <sup>7</sup>
Mechanical life	1×10 <sup>5</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 cathogory	III.
Pollution degree	2
Max.cable size(mm <sup>2</sup> )	solid wire max.1×2.5or 2×1.5/with sleeve max.1×2.5(AWG 12)
Tightening torque	0.4Nm
Dimensions	82×36×68mm
Weight	100g
Standards	EN 60255-1,IEC60947-5-1

## Parameter setting

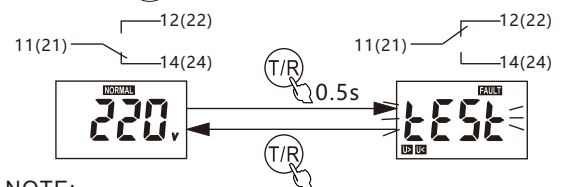
Parameter	Range	Step value	Factory settings
Over voltage value	65V~300V,OFF	1V	253V
Over voltage recovery value	60V~295V	1V	248V
Under voltage value	OFF,65V~300V	1V	187V
Under voltage recovery value	70V~305V	1V	192V
Voltage fault action time	0.1s~20s	0.1s	2s
Power on delay time	0.5s~300s	0.1s/1s	0.5s
Reset time	0.5s~300s	0.1s/1s	1s
Fault reset	ON-OFF	—	ON

## Wiring Diagram



## Operation description

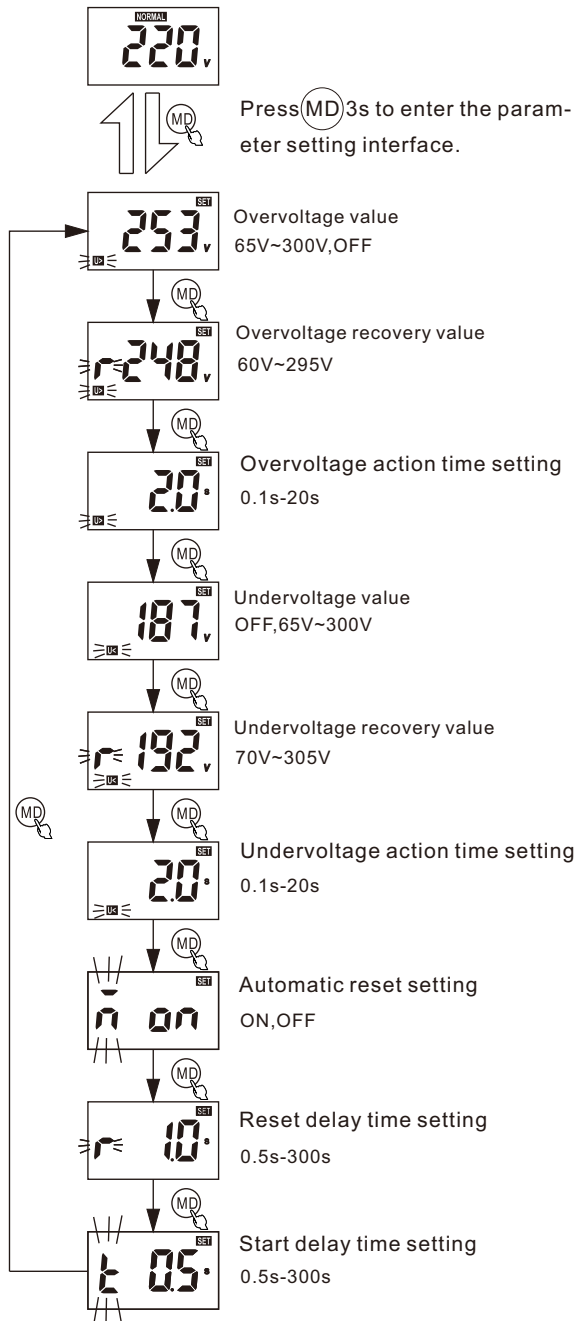
- Short press (T/R) 0.5s can test relay action.



NOTE:

Only when the power supply is normal, press the button.

● Parameter setting



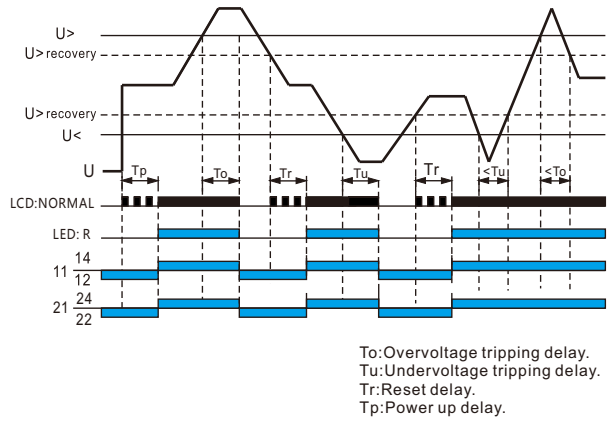
NOTE:

Short press can add and drop parameters, long

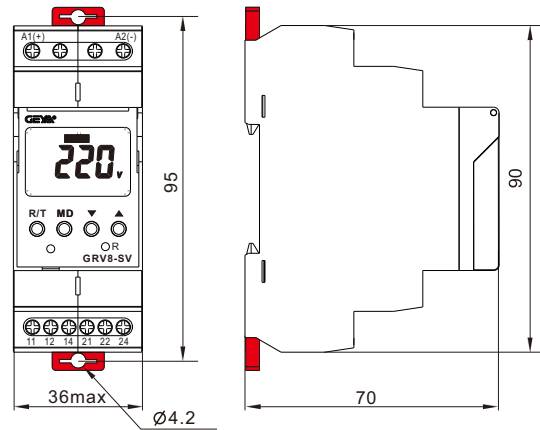
press can be quickly set. After setting parameters, press and hold the MD key for 3s to exit, and the set parameters will be saved automatically. If there is no operation key for 60 seconds, the relay will automatically exit the menu, but the changed parameters will not be saved. When the overvoltage protection or undervoltage protection functions are turned off, the menu will no longer display the action time setting process.

The overvoltage value must be at least 10V greater than the undervoltage value to avoid protection disorder. If overvoltage or undervoltage protection is turned off, it is not limited by this condition.

Functions Diagram



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 product shall comply with the appropriate safety standards.