

## Under voltage relay GRV8-□UV□ series Instruction Manual

### General

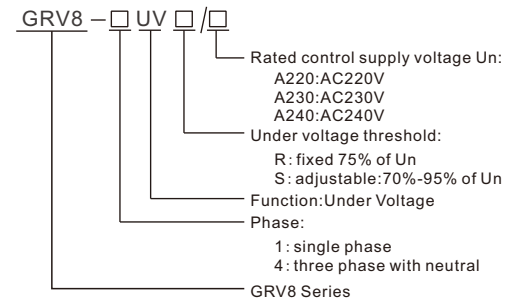
#### ■Applications

-Product is used for highly fluctuating inductive load such as Air Conditioning system inIndustrial and commercial establishments. It protects the system equipment and load from sudden under voltage fuctuations..

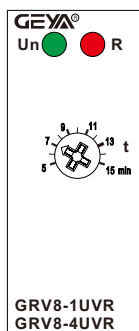
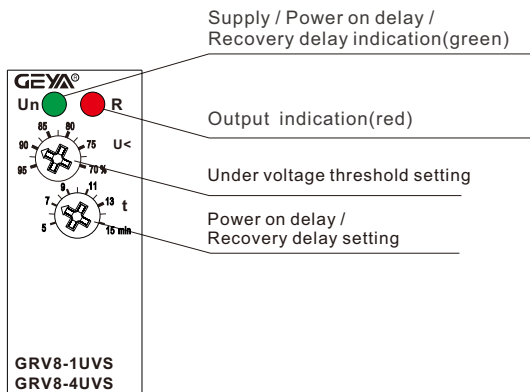
#### ■Function Features

- Controls its own supply voltage(True RMS measurement).
- Measuring frequency range:45Hz-65Hz.
- Voltage measurement accuracy<1%.
- Relay status is indicated by LED.
- 1-MODULE,DIN rail mounting.

#### ■Model and connotation



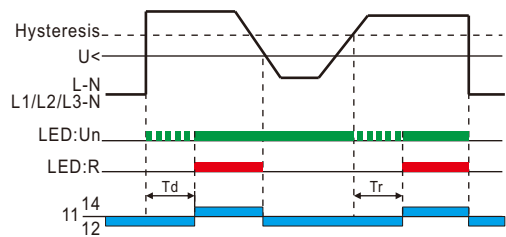
### Panel Diagram



### Technical parameters

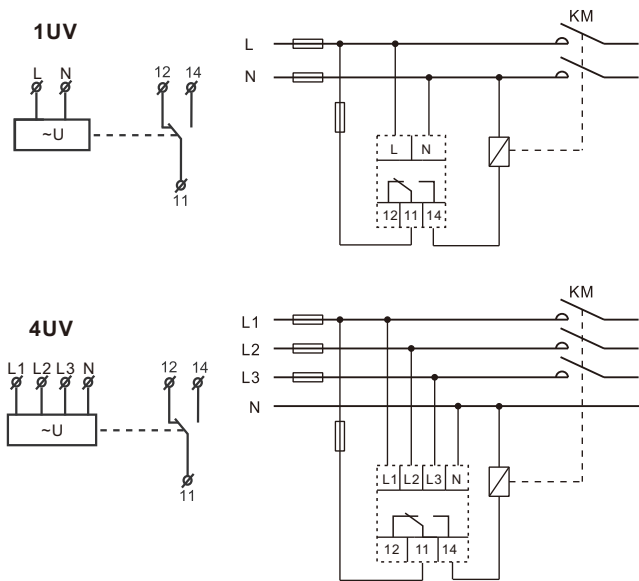
| Item                              | 1UV  | 4UV        |
|-----------------------------------|--|------------|
| Function                          | Under voltage  |            |
| Monitoring terminals              | L-N  | L1-L2-L3-N |
| Supply terminals                  | L-N  | L1-N       |
| Rated supply voltage(Un)          | 220V/230V/240V   |            |
| Rated supply frequency            | 45Hz-65Hz  |            |
| Under voltage threshold           | R:fixed 75% of Un; S:70%-95%of Un                            |            |
| Trip delay time(Tu)               | 0.1s   |            |
| Hysteresis                        | 5V   |            |
| Measurement error                 | ≤1%  |            |
| Power on delay time(Td)           | Adjustable: 5min-15min                                       |            |
| Recovery delay time(Tr)           | Adjustable: 5min-15min                                       |            |
| Konb setting accuracy             | 10% of scale value   |            |
| Supply indication                 | green LED  |            |
| Output indication                 | red LED  |            |
| Output                            | 1×SPDT   |            |
| Current rating                    | 10A/ AC1   |            |
| Switching voltage                 | 250VAC/24VDC   |            |
| Mechanical life                   | 1×10 <sup>7</sup>  |            |
| Electrical life(AC1)              | 1×10 <sup>5</sup>  |            |
| Operating temperature             | -20°C to +55°C (-4°F to 131°F)                               |            |
| Storage temperature               | -35°C to +75°C (-22°F to 158°F)                              |            |
| 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  |            |
| 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                 | 0.8Nm  |            |
| Dimensions                        | 90×18×64mm   |            |
| Weight                            | 63g,65g  |            |
| Standards                         | EN 60255-1,IEC60947-5-1                                      |            |

## Functions Diagram

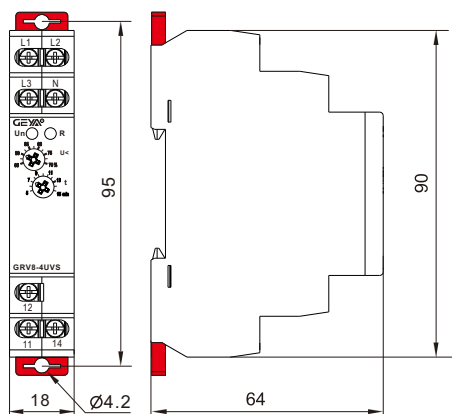


Td: Power on delay  
 Tr: Undervoltage recovery delay  
 Td = Tr

## Wiring 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.