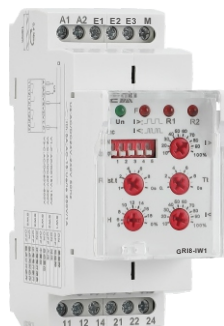


# Mornitoring current relay GRI8-IW

## Instruction Manual



### General

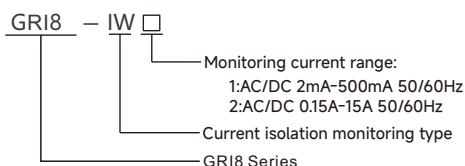
#### ■Applications

-Used for overcurrent and undercurrent protection of electrical equipment.

#### ■Function Features

- True RMS measurement with high measurement accuracy.
- Overcurrent and undercurrent selection monitoring or simultaneous monitoring.
- The output contact is normally open or normally closed and can be set.
- Two sets of contact outputs, which can act separately and independently.
- 36mm wide, 35mm clamp rail installation.

#### ■Model and connotation

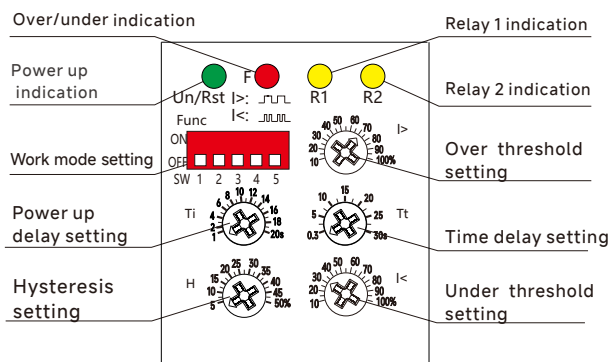


### Technical parameters

|                                   | GRI8-IW1                                                    | GRI8-IW2               |
|-----------------------------------|-------------------------------------------------------------|------------------------|
| Function                          | Monitoring current                                          |                        |
| Supply terminals                  | A1,A2                                                       |                        |
| Rated supply voltage              | AC/DC24-240V 50/60Hz                                        |                        |
| Monitoring current input terminal | E1,E2,E3,M                                                  |                        |
| Monitoring current range          | AC/DC2mA-500mA 50/60Hz                                      | AC/DC0.15A-15A 50/60Hz |
| Rated insulation voltage          | 500V                                                        |                        |
| Hysteresis                        | Only over or under:5%-50%adjustable;Over and under:fixed 5% |                        |
| Supply indication                 | Green LED                                                   |                        |
| Measurement error                 | ≤5%                                                         |                        |
| Time delay                        | 0.3s-30s                                                    |                        |
| Power up delay/Reset time         | 1s-20s                                                      |                        |
| knob setting accuracy             | 10%                                                         |                        |
| Output                            | 2×SPDT                                                      |                        |
| Current rating                    | 5A/AC1                                                      |                        |
| Switching voltage                 | 250VAC/24VDC                                                |                        |
| Min.breaking capacity DC          | 500mW                                                       |                        |
| Output indication                 | Yellow LED                                                  |                        |
| Mechanical life                   | 5×10 <sup>6</sup>                                           |                        |
| Electrical life(AC1)              | 5×10 <sup>4</sup>                                           |                        |
| Operating temperature             | -20℃ to +55℃ (-4°F to 131°F)                                |                        |
| Storage temperature               | -35℃ to +75℃ (-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 catgory               | 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)  |                        |
| Dimensions                        | 90mm×36mm×70mm                                              |                        |
| Weight                            | 100g                                                        |                        |
| Standards                         | EN/IEC60947-5-1                                             |                        |

| Model    | Input terminal | Input monitoring current range | Input resistance | Overload capacity                                         |
|----------|----------------|--------------------------------|------------------|-----------------------------------------------------------|
| GRI8-IW1 | E1-M           | AC/DC2mA-20mA 50/60Hz          | 5Ω               | Continuous input at 120% of maximum input.<br>1 s at 150% |
|          | E2-M           | AC/DC10mA-100mA 50/60Hz        | 1Ω               |                                                           |
|          | E3-M           | AC/DC50mA-500mA 50/60Hz        | 0.2Ω             |                                                           |
| GRI8-IW2 | E1-M           | AC/DC0.15A-1.5A 50/60Hz        | 0.05Ω            |                                                           |
|          | E2-M           | AC/DC0.5A-5A 50/60Hz           | 0.015Ω           |                                                           |
|          | E3-M           | AC/DC1.5A-15A 50/60Hz          | 0.005Ω           |                                                           |

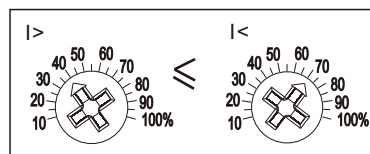
### Panel Diagram



#### Switch settings

|     |     |                                                                                                  |
|-----|-----|--------------------------------------------------------------------------------------------------|
| SW1 | ON  | Over or under                                                                                    |
|     | OFF | Over and under                                                                                   |
| SW2 | ON  | Only over (Valid when SW1=ON)                                                                    |
|     | OFF | Only under (Valid when SW1=ON)                                                                   |
| SW3 | ON  | Locking after over/under protection                                                              |
|     | OFF | Auto-reset after over/under protection                                                           |
| SW4 | ON  | 11/-14/21-14 Normal closed                                                                       |
|     | OFF | 11-14/21-14 Normal open                                                                          |
| SW5 | ON  | Relay 1 and relay 2 operate simultaneously (This mode is defaulted when SW1=ON)                  |
|     | OFF | Relay 1 and relay 2 operate separately Valid when SW1=OFF, R1(11,12,14)-Over, R2(21,22,24)-Under |

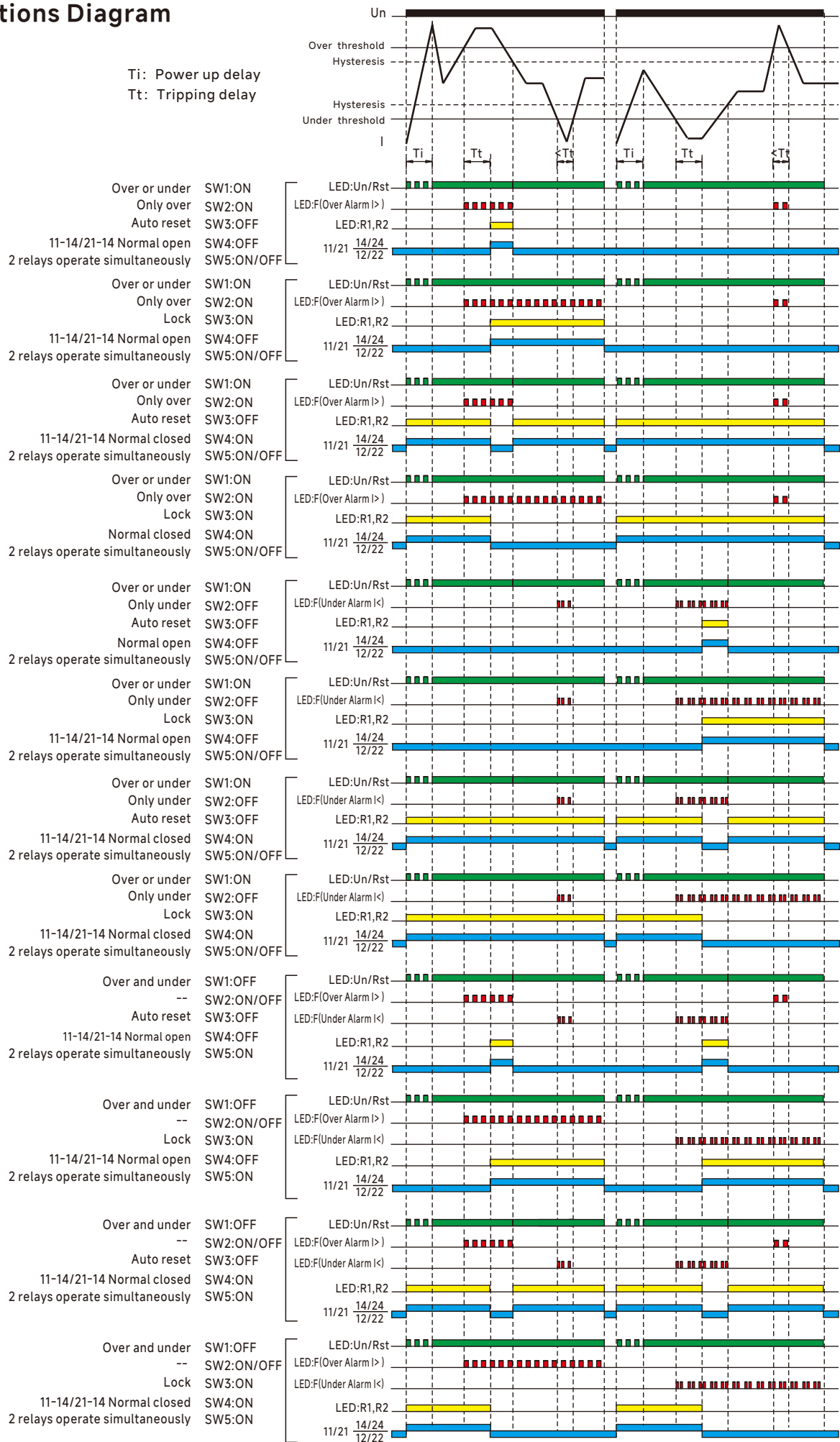
#### ●Error setting while over and under mode

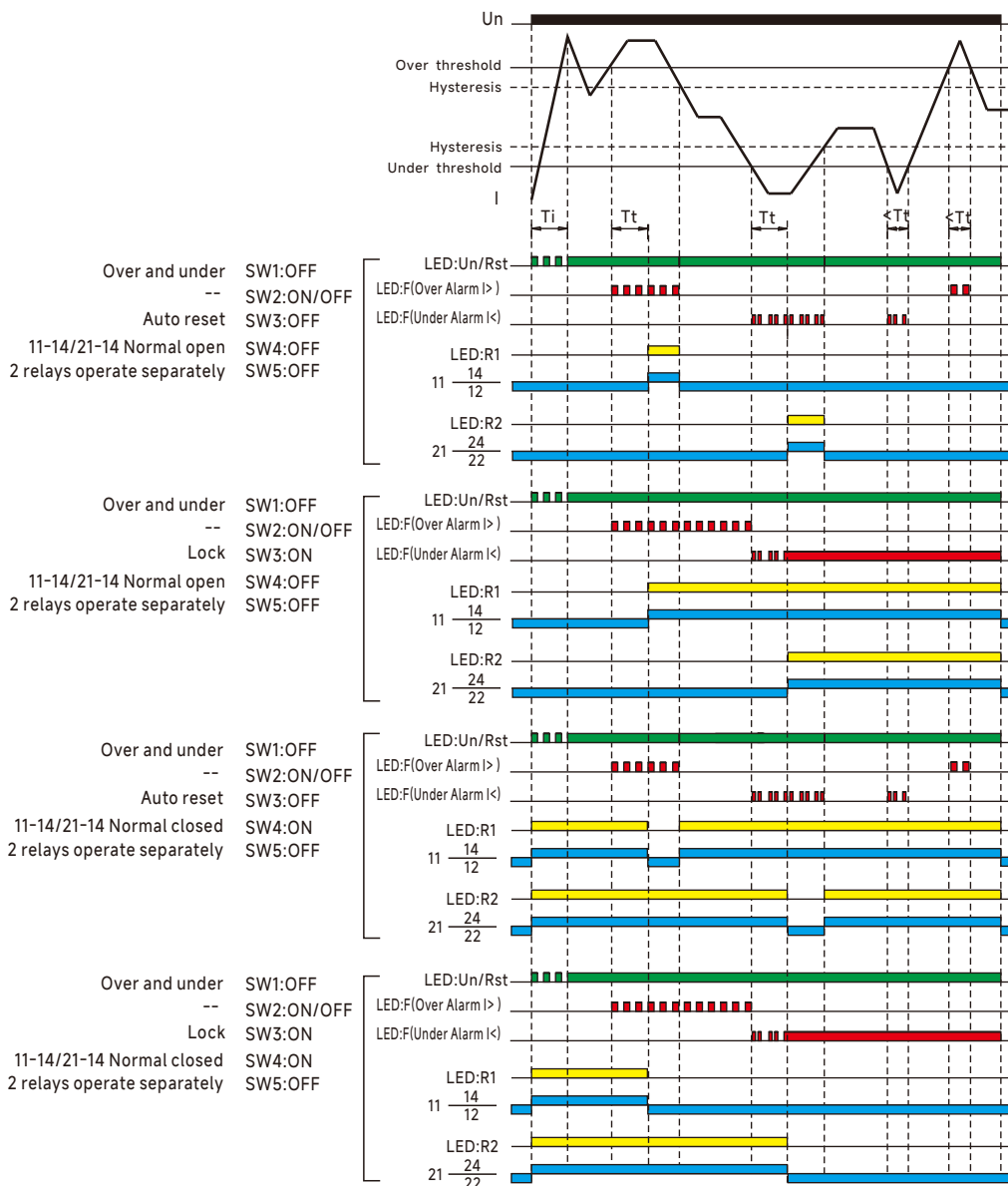


When the under setting value is greater than the over setting value, the indicator lights Un/Rest and F flash simultaneously, and the relay contacts are reset. When the under setting value is less than the over setting value, the indicator light and the relay are restored.

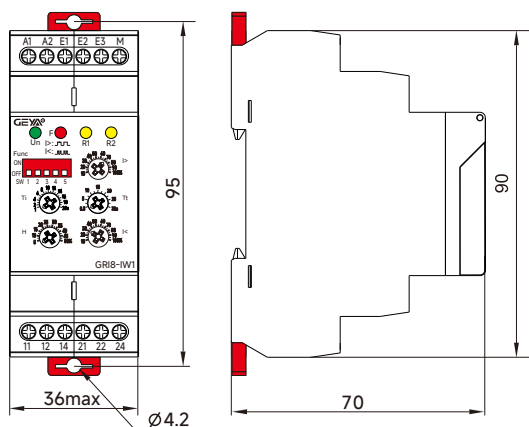
# Functions Diagram

Ti: Power up delay  
Tt: Tripping delay

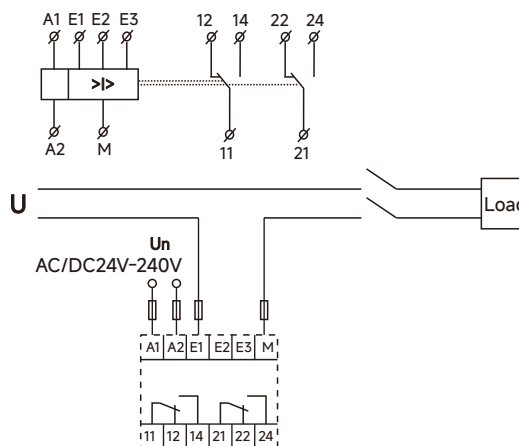




## Dimensions(mm)



## Wiring Diagram



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.