RLE8 – 02 /□
- Rated control supply voltage — A265:AC85V-265V
- Design number
- RLE8 Series



### Applications

- Used for monitoring and measuring residual current in single-phase/three-phase power systems.

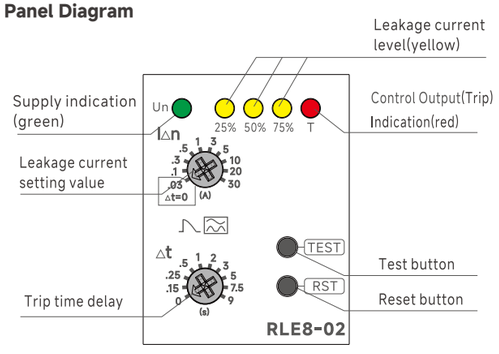
### Feature

- A type true RMS measurement.
- ZCT detection.
- User selectable trip time delay,leakage current levels.
- Test and Reset via front/remote.
- 2xSPDT relay output.
- DIN rail mounting.

### Technical parameters

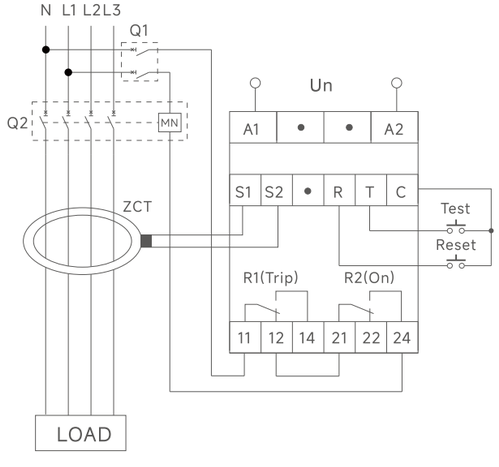
| | RLE8-02 |
|---|---|
| Function | Earth leakage Relay |
| Supply terminals | A1-A2 |
| Voltage range | AC85-265V 50/60Hz |
| Burden | 3VA |
| Operation range | 30,100,300,500mA and 1,3,5,10,20,30A |
| Trip level limits | 85% of setvalue |
| Trip time delay | 0,0.15,0.25,0.5,1,2,3,5,7.5,9sec<br>NA when leakage level set 30mA |
| Reset time | ~2sec |
| Response time | ≤30ms（if trip current≥5×I△n）<br>≤50ms（if trip current=1×I△n） |
| Reset value | 85% of trip level |
| ZCT detection | absent or short |
| Accuracy | Trip：±5% of set trip current<br>Time：±5% of set time±50ms |
| Reset mode | Manual reset |
| Output | 2×SPDT |
| Current rating | 10A/AC1 |
| Switching voltage | 250VAC/24VDC |
| Min. breaking capacity DC | 500mW |
| Mechanical life | $1\times10^7$ |
| Electrical life(AC1) | $1\times10^5$ |
| Operating temperature | -20°C~+55°C |
| Storage temperature | -35°C~+75°C |
| Humidity | Up to 95% RH(non-condensing) |
| Mounting/DIN rail | Din rail EN/IEC 60715 |
| Protection degree | IP20 |
| Operating position | any |
| Overvoltage cathegory | III |
| Pollution degree | 2 |
| Max. cable size($mm^2$) | 1×2.5$mm^2$ 或 2×1.5$mm^2$ 0.4N·m |
| Dimensions | 90mm×36mm×64mm |
| Weight | 115g |
| Standards | IEC 60947-2 |

### Panel Diagram




### Wiring diagram

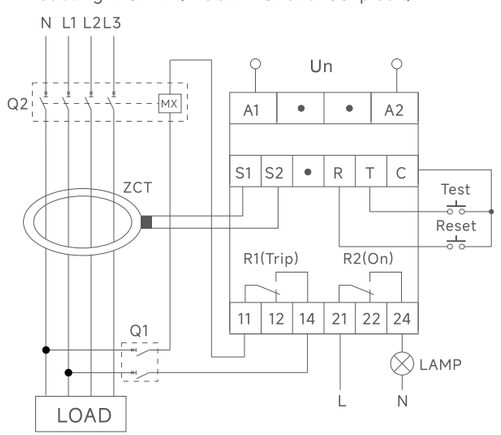
Cabling with MN(MCCB with UV trip coil)







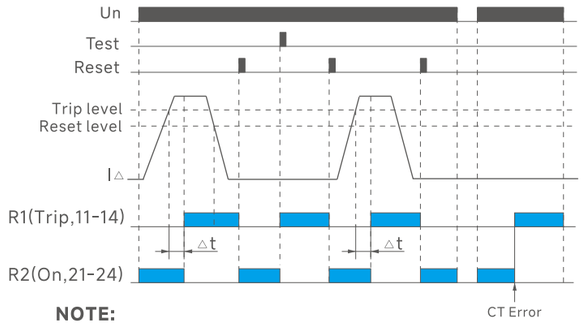

Cabling with MX(MCCB with shunt trip coil)




NOTE:
1.The cable connecting ZCT and the product should use shielded cable or twisted pair cable (≥ 1m).
2.The cable for remote control of "Test" and "Reset" should be ≤ 10m.

### Function

1.Function diagram

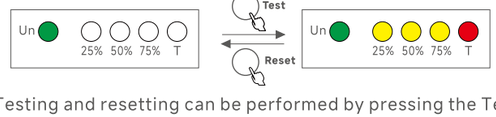



**NOTE:**

1.If leakage current > 5 times the setvalue, the relay trips instantaneously irrespective of trip time delay.
2.When I△n is set to 30mA, △t is forced to be 0.

When a leakage occurs and trips, the "trip" relay(R1) will energise and lock, and can be de-energise through the reset button or R-C.Apply power, the green "Un" LED will illuminate and the "on" relay(R2) will energise. The "on" relay(R2) will de-energise if:
a. the fault current level exceeds the set trip level (IAn)
b. there is a failure of the connection between the relay and CT.
c. the supply to the unit is removed.
d. In testing state.
e. the relay fails internally.

2. Test Mode




Testing and resetting can be performed by pressing the Test/Reset button (or by short circuiting the T/R and C terminals for remote testing and resetting).

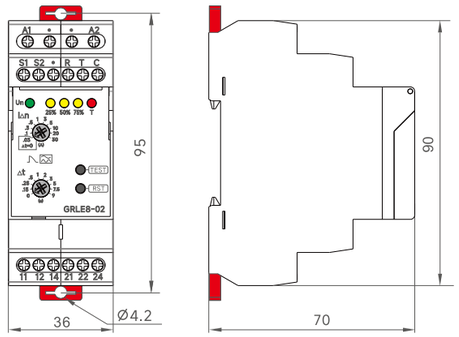
3. LED status indication




① For leakage current level >25%,LED Continuously ON.
② For leakage current level>50%,LED Continuously ON.
③ For leakage current level >75%,LED Continuously ON.
④ Control Output(Trip) Indication.

At ZCT error condition,LED ① ② ③ ④ are continuously blinking.

### Dimensions(mm)




### Accessory

| TYPE | Imax | Dimensions(mm) | | | | | Weight (kg) |
|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | |
| CT26AL | 63A | Ø26 | 51 | 45.6 | 18 | 39.5 | 0.063 |
| CT45AL | 100A | Ø45 | 75 | 75.5 | 25.5 | 61 | 0.144 |
| CT63AL | 225A | Ø63 | 96 | 100 | 25 | 76 | 0.190 |
| CT80AL | 400A | Ø80 | 120 | 126 | 25 | 100 | 0.397 |
| CT100AL | 630A | Ø100 | 140 | 146 | 25 | 118 | 0.583 |
| CT150AL | 1000A | Ø150 | 200 | 205 | 30 | 170 | 0.895 |
| CT200AL | 1250A | Ø200 | 240 | 247 | 40 | 210 | 1.2 |

NOTE:
1.ZCT need to purchase separately.
2.Please refer to ZCT datasheet for detailed technical parameters.
3.If you need ZCT in other shapes, please contact us.

