Earth Leakage Relay GRLE8-01
Instruction Manual

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General

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

■ Function Features
-A type true RMS measurement..
-ZCT detection.
-User selectable trip time delay,leakage current levels.
-Test and Reset via front/remote.
-1×SPDT relay output.
-DIN rail mounting.

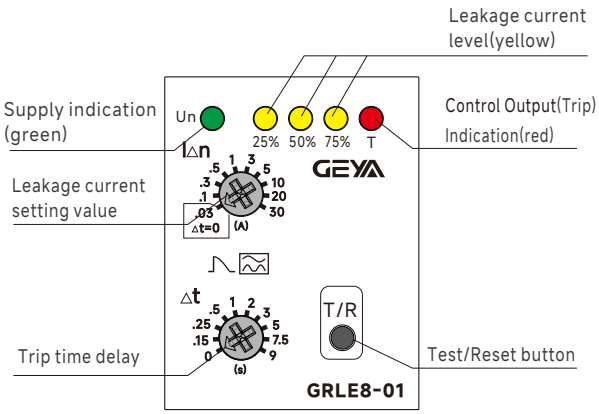
■Model and connotation

GRLE8 – 01 /□
- Rated control supply voltage: A265:AC85V-265V
- Design Number
- GRLE8 Series

Technical parameters

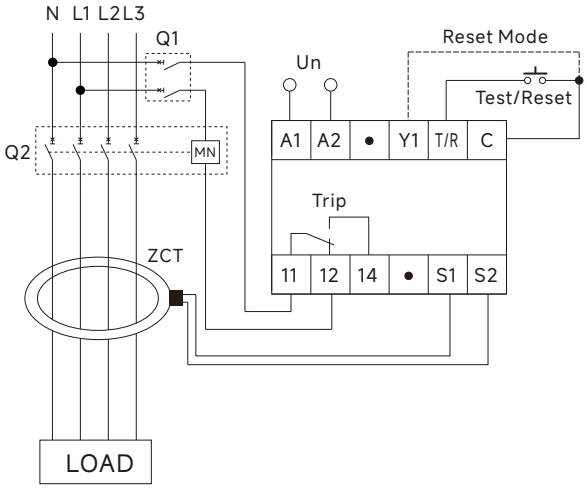
	GRLE8-01
Function	Earth leakage Relay
Supply terminals	A1-A2
Voltage range	AC85-265V 50/60Hz
Burden	3VA
Operation range	30,100,300,500mA and 1,3,5,10,20,30A
Trip level limits	85% of setvalue
Trip time delay	0,0.15,0.25,0.5,1,2,3,5,7.5,9sec NA when leakage level set 30mA
Reset time	~2sec
Response time	≤30ms（if trip current≥5×I△n）
	≤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 Time：±5% of set time±50ms
Reset mode	Manual/Auto reset
Output	1×SPDT
Current rating	10A/AC1
Switching voltage	250VAC/24VDC
Min.breaking capacity DC	500mW
Mechanical life	1×10^7
Electrical life(AC1)	1×10^5
Operating temperature	-20℃~+55℃
Storage temperature	-35℃~+75℃
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)	1×2.5mm^2 or 2×1.5mm^2 0.4N·m
Dimensions	90mm×36mm×64mm
Weight	98g
Standards	IEC 60947-2

Panel Diagram

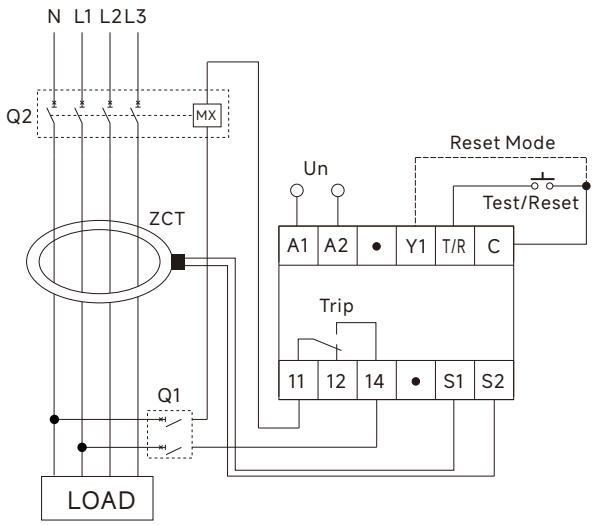


Wiring diagram

Cabling with MN(MCCB with UV trip coil)



Cabling with MX(MCCB with shunt trip coil)

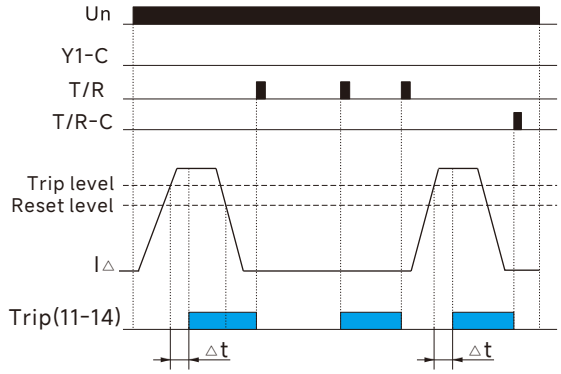


NOTE:
1.Disconnect Y1-C, operate in manual reset mode,short circuit Y1 and C, operate in auto reset mode.
2.The cable connecting ZCT and the product should use shielded cable or twisted pair cable (≥ 1m).
3.The cable for remote control of "Test/Reset" should be ≤ 10m.

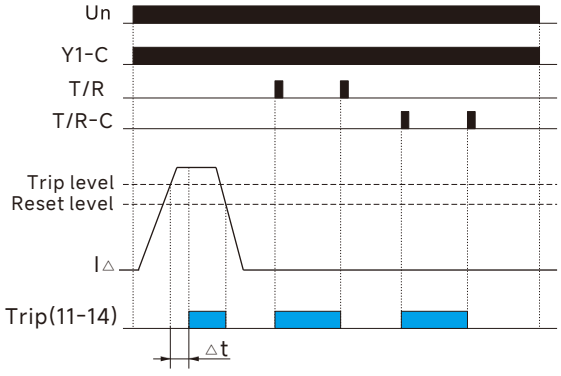
Function

1. Function diagram

Disconnect Y1-C, operate in manual reset mode.

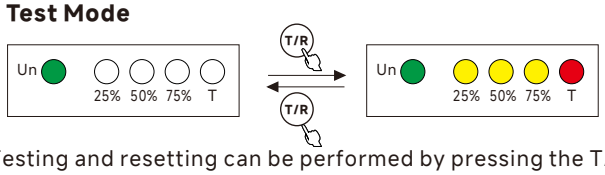


Short circuit Y1 and C, operate in auto reset mode.



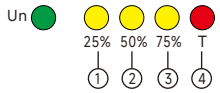
NOTE:
1.If leakage current ≥ 5 times the setvalue, the relay trips instantaneously irrespective of trip time delay.
2.When I△n is set to 30mA, △t is forced to be 0.

2. Test Mode



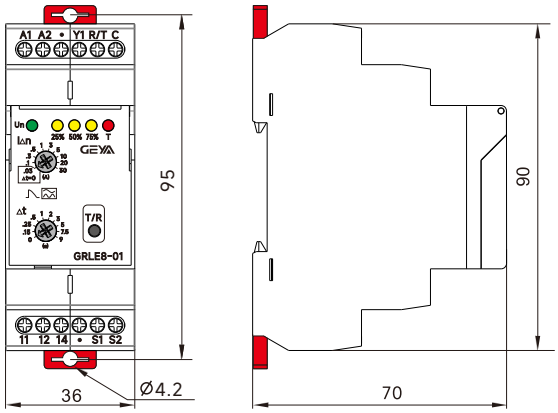
Testing and resetting can be performed by pressing the T/R button (or by short circuiting the T/R and C terminals for remote testing and resetting).

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 ①②③④are continuously blinking.

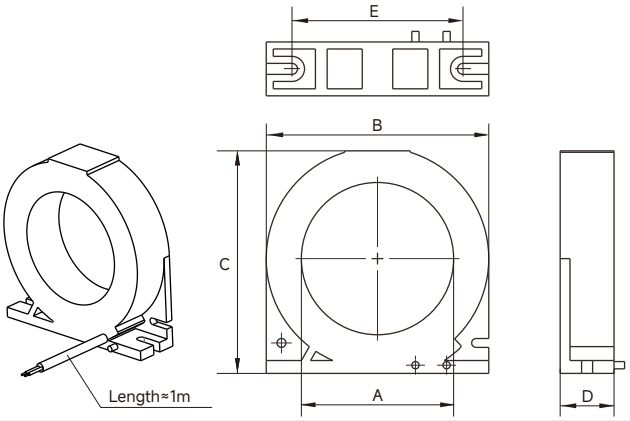
Dimensions(mm)



Accessory

TYPE	Dimensions(mm)				
	A	B	C	D	E
ZCT26AL	Ø26	51	45.6	18	39.5
ZCT45AL	Ø45	75	75.5	25.5	61
ZCT63AL	Ø63	96	100	25	76
ZCT80AL	Ø80	120	126	25	100
ZCT100AL	Ø100	140	146	25	118
ZCT150AL	Ø150	200	205	30	170
ZCT200AL	Ø200	240	247	40	210

NOTE:
1.ZCT need to purchase separately.
2.Please refer to ZCT datasheet for detailed technical parameters.



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.