

ELR SERIES EARTH LEAKEGE RELAY

FEEDER PROTECTION AND CONTROL



Introduction

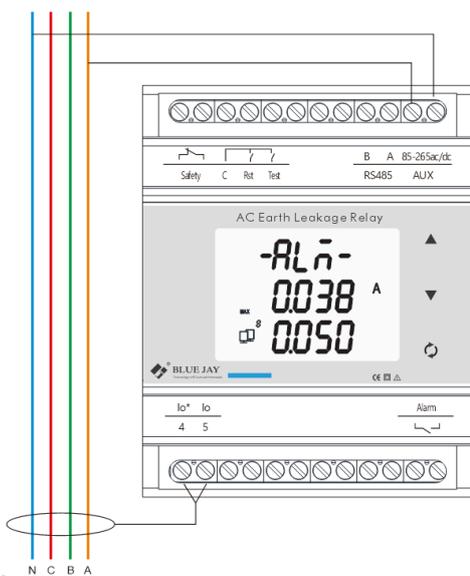
The ELR Earth Leakage Relay enhances electrical safety by continuously monitoring leakage current with advanced residual current transformer. When leakage current exceeds the preset threshold, it instantly triggers an alarm for early fault detection.

Featuring an alarm hold function, it retains the alarm signal until reset, simplifying fault diagnosis. Ideal for preventing equipment damage, reducing downtime, and ensuring personnel safety, the ELR Series provides reliable and efficient protection for your power system.

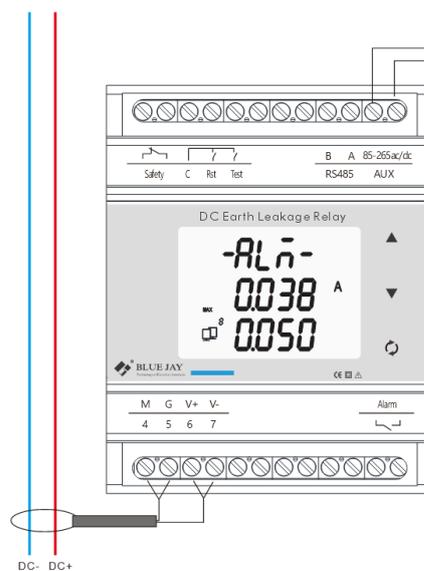
Ordering Information

Model	Description
ELR-4MA	<ul style="list-style-type: none"> Use for AC measurement Compatible with Residual current transformer Adjustable alarm threshold 30mA-3A.
ELR-4MD	<ul style="list-style-type: none"> Use for DC measurement Compatible with Hall effect current transformer Adjustable alarm threshold 30mA-3A.

Wiring Method



ELR-4MA



ELR-4MD

Main Features

- Digital measured value display via LCD display;
- Current transformer connection monitoring;
- Internal/external test/reset button;
- One separate alarm output relays;
- Adjustable trip levels and time delay;
- Standard 35mm din rail mounting;
- 30mA-3A adjustable response values;

Application

- Smart grid system;
- Medium and low voltage systems;
- Commercial and residential buildings;
- Utilities and power distribution systems;
- Motor control panels and switchboards;
- DC system leakage current measurement;
- Industrial control system (PLC, SCADA, DCS).

Technical Characteristics

Parameter	ELR-4MA	ELR-4MD
Auxiliary power supply	85-265Vac/dc	
Power consumption	≤4VA	
Frequency	50/60Hz, Accuracy ±0.01Hz	
Leakage current alarm threshold	30mA-3A, can be set	
Time delay	50ms-10sec, can set as need.	
I/O capacity		
Digital input	2* DI for reset/ test, NC dry contact, Ri<500Ω turns on, Ri>100kΩ turns off	
Digital output	1* relay NO for safety; 1* relay NC for alarm; Load capacity: 5A@250VAC	
Others		
Communication	RS-485 MODBUS-RTU	
Display	LCD with backlit	
Withstand voltage	2.5KV 1min	
Insulation	Input, output, power supply to shell >5MΩ	
Storage environment	-40~70°C	
Working environment	-25~55°C Altitude ≤2500m, 0~95%RH, non-condensing, non-corrosive gas	