Earth Leakage Relays



Features:

- ▶ 1Ø 2 Wire, 3Ø 3 Wire & 3Ø 4 Wire input
- Leakage current monitoring
- True RMS measurement
- CBCT connection monitoring
- Power ON delay, Trip time delay and Recovery time delay
- Adjustable switching hysteresis
- Two separate alarm relays with NO or NC operation selectable
- Test and reset function via front / remote
- DIN rail mount

Certifications : (€

Technical specifications

Display specifications				
Туре	Digital			
Display	Liquid crystal display with backlight			
No. of LED	2			
No. of push button	3			
LED indication chart				
Condition	'R1' LED	'R2' LED		
Nominal condition	OFF	OFF		
Fault (if programmed for relay1)	ON	ON		
Pre-Alarm	OFF	ON		
Fault (if programmed for both relay)	ON	ON		
CBCT error	Blinking	Blinking		
Input specifications				
Functions				
Measurements	Earth leakage current monitoring (via external CBCT)			
Time settings	Power ON delay, Trip time delay, Recovery time delay			
Alarm indications	Pre - warning alarm, Trip, CBCT error			
Latching	Selectable			
Reset	Auto / Manual (selectable)			
Electrical connection	1Ø - 2 wire, 3Ø - 3 wire, 3Ø - 4 wire			
Trip settings				
Leakage current	10mA - 30A			
Pre-Alarm	50 - 100% of leakage current setting			
Display current range	4mA - 30A			
Trip time settings				
Power ON delay	0.5 - 99.9 sec			
Trip time delay	0 - 99.9 sec			
Recovery time delay	0 - 99.9 sec			
Response time	< 30ms (if trip current 5 x set value) < 50ms (if trip current 1 x set value)			
Hysteresis				
Hysteresis	5 to 40%			
Resolution				
Current	0.1mA, 1mA, 0.01A, 0.1A (depends on trip setting)			

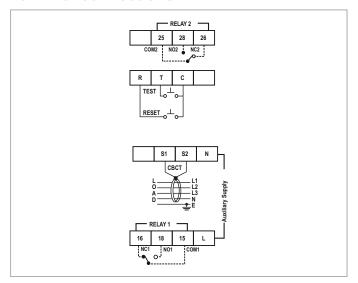


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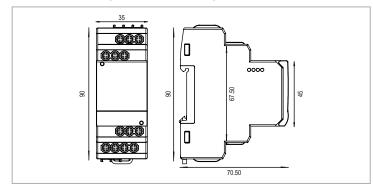
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Accuracy			
Current	±5% of setting		
Time (Recovery time delay, Trip time delay, Power ON delay)	±5% of setting ±100ms		
Output specifications			
No. of relays	2		
Type of output (relay1)	1 C/O (SPDT)		
Type of output (relay2	1 C/O (SPDT)		
Relay rating	NO / 5A @250V AC NC / 5A @250V AC		
Auxiliary supply specifications			
Supply voltage	230V / 110V AC		
Frequency	50 - 60Hz		
Power consumption	3VA max		
Environmental specifications			
Temperature	Operating temperature: 0 to +50 °C Storage temperature: -20 to +70 °C		
Humidity (non - condensing)	95% RH		
Pollution degree			
For PCB	2		
For product	3		
Degree of protection devices	IP20		
Mechanical specifications			
Mounting	DIN rail		
Weight	217 gm		
Screw tightening torque	0.5 NM		

Terminal connections



Dimensions (All are in mm)



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Compliance

Applicable EMI / EMC standards					
Product standard: IEC 60947-2					
Category	Reference standards	Testing level			
Conducted emissions	CISPR11	Class-A			
Conducted RF immunity	IEC 61000-4-6	Class-A			
Electrical fast transient	IEC 61000-4-4	Class-A			
Electrostatic discharge	IEC 61000-4-2	Class-B			
Radiated emission	CISPR11	Class-A			
Radiated susceptibility	IEC 61000-4-3	Class-A			
Surge	IEC 61000-4-5	Class-A			
High voltage test	IEC 61010-1	Clause 6.8			
Resistance to heat test	IEC 61010-1	Clause 10.5			
Single fault test	IEC 61010-1	Clause 4.4			
Temperature rise test	IEC 61010-1	Clause 10			

Ordering information

Product code	Supply voltage	Certification
900ELR-2-230V-CE	230V AC	C€
900ELR-2-110V-CE	110V AC	C€

