## **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**

Type Display	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)		

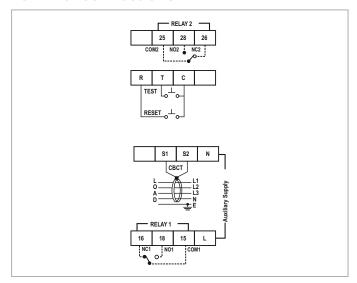


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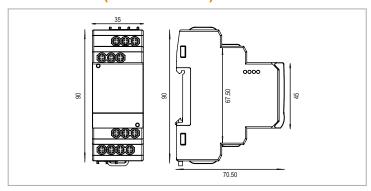
## **Earth Leakage Relays**

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€

