Earth Leakage Relays

900ELR-2

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 : CE

Technical specifications

Display specifications		
Type	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)	

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)

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	CE
900ELR-2-110V-CE	110V AC	CE