




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 buttons via front / remote
- LCD with backlight
- DIN Rail Mount

Size: 35mm (Width)

Certifications:  RoHS

Technical Specifications

Display

Display	Liquid Crystal Display with backlight
Digits	3

Input Specifications

Functions	
Measurements	Earth Leakage current monitoring (via external CBCT)
Time Settings	Power ON delay, Trip time delay, Recovery timer delay
Alarm Indications	Pre - warning alarm, Trip, CBCT error
Latching	Selectable
Reset	Auto / Manual (Selectable)
Electrical Connection	
Auxiliary Supply	
Supply Voltage (Factory set)	230V AC, 110V AC, 12-24V DC, $\pm 15\%$
Frequency	45 - 65Hz
VA Rating	3VA max
Current Rating	
Measuring Range (RMS Value)	4mA-30A, 45-65Hz
Trip Settings	
Leakage Current	10mA - 30A
Pre Alarm	50 - 100% of Leakage Current Setting
Trip Time Settings	
Power ON Delay	0.5 - 99.9sec
Trip Time Delay	0 - 99.9sec
Recovery Time Delay	0 - 99.9sec
Response Time	< 30ms (if trip current $\geq 5 \times$ set value) < 50ms (if trip current $\geq 1 \times$ set value)
Hysteresis	
Hysteresis	5 - 40% of set value
Resolution	
Current	0.1mA, 1mA, 0.01A, 0.1A (Depends on trip setting)
Accuracy	
Current	$\pm 5\%$ of Setting
Time Setting Accuracy	$\pm 5\%$ of setting + 100ms

Output Specifications

No. of Relays	2
Type of output (Relay1)	1C/O (SPDT)
Type of output (Relay2)	1C/O (SPDT)
Relay Rating	NO : 5A, 250V AC NC : 3A, 250V AC

LED Indication

LED1 (Red)	Relay (Continuously ON after trip)
LED2 (Red)	Pre - Alarm (Continuously ON during pre alarm condition)
Note - LED1 and LED2 blinks during CBCT error	

Environmental Specifications

Ambient Temperature	Operating Temperature: 0°C to 50°C Storage Temperature : -20°C to +70°C
Humidity (non-condensing)	95% RH
Pollution Degree	2
Degree of protection	IP50 Faceplate IP30 Housing IP20 Terminals

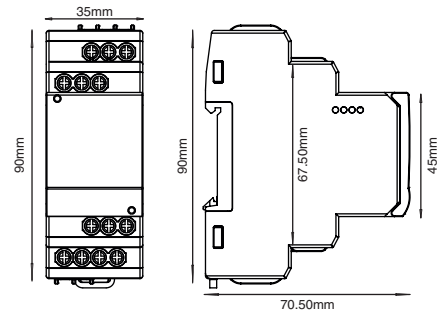
Mechanical Specifications

No. of Push Buttons	3
Size	35mm width
Mounting	Din Rail Mount
Weight	217 g
Conductor cross section (Solid)	1 x (0.5 to 4) Sq mm
Conductor cross section sleeved (Stranded)	2 x (0.5 to 1.5) Sq mm 1 x (0.5 to 2.5) Sq mm
Screw tightening torque	0.5 Nm

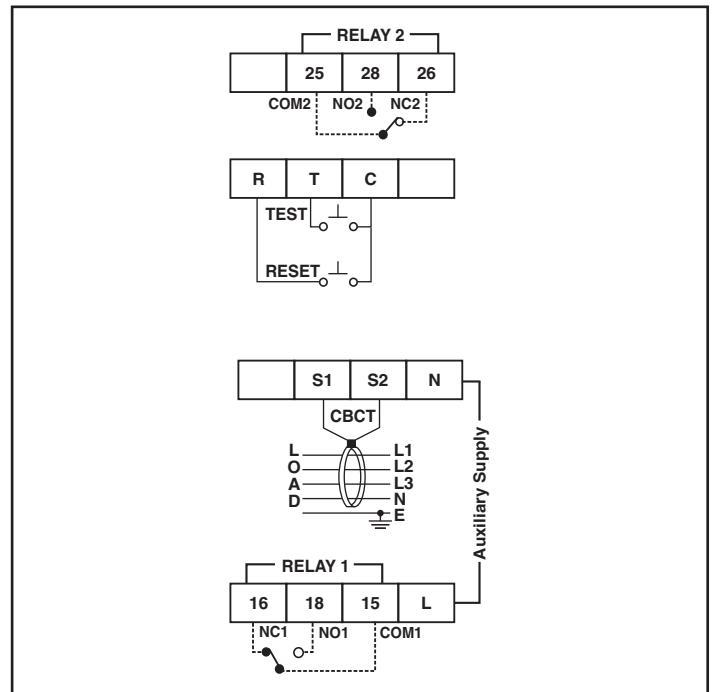
EMC

Electromagnetic compatibility	IEC 62020
ESD Immunity: IEC 61000-4-2	Level 3, 8 kV / air discharge, 6 kV contact discharge
Surge Immunity: IEC 61000-4-5	Tr/Th 1.2/50 us, 4 kV Common mode, 2 kV differential mode
Radiated Susceptibility: IEC 61000-4-3	3 V/m (80 MHz to 1000 MHz)
Conducted Susceptibility: IEC 61000-4-6	0.15 MHz to 80 MHz, Z = 150 ohm, 3 V for $I_n \geq 30$ mA 1 V for $I_n < 30$ mA
Voltage Dips and Interruption: IEC 61000-4-11	Dips: 0% residual voltage / 1 cycle (Crit B.), 40% residual voltage / 10 cycles 50 Hz / 12 cycles 60 Hz (Crit C) 70% residual voltage / 25 cycles 50 Hz / 30 cycles 60 Hz (Crit C) Interruptions: 0% residual voltage / 250 cycles 50 Hz / 300 cycles 60 Hz (Crit C)
Conducted Emissions	CISPR-11 & IEC 61000-6-3
Radiated Emissions	CISPR-22
Electrical Fast Transient: IEC 61000-4-4	Level 4

Dimensions



Terminal Connections



Ordering Information

Part No.	Supply Voltage	Certification
		CE RoHS
900ELR-2-230V-CE	230V AC	Yes
900ELR-2-230V	230V AC	-
900ELR-2-110V-CE	110V AC	Yes
900ELR-2-110V	110V AC	-

Accessories

Part No.	ID	Turns Ratio
CBCT - 35 - 1	35mm	1000:1
CBCT - 70 - 1	70mm	1000:1
CBCT - 120 - 1	120mm	1000:1