Earth Leakage Relay

ELRA2M-1-230V-CE



Features:

- Monitors true RMS earth leakage current (30mA to 30A) in 1Ø - 2 wire, 3Ø - 3 wire, 3Ø - 4 wire systems
- Leakage current (ΔI) & time delay (ΔT) adjustable
- LED Indication for measured leakage current and various user settings
- Test and Reset function via front / Remote
- CBCT open or short circuit detection
- One SPDT relay output

Certifications: CE

Technical specifications

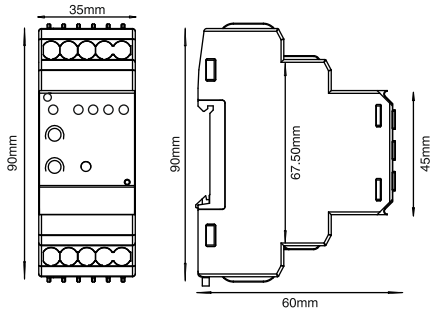
Display specifications					
Type	Analog				
No. of LED	5				
No. of knob	2				
LED indication chart					
Condition	**ON**	**25%**	**50%**	**75%**	**T**
Power on	ON	OFF	OFF	OFF	OFF
Tripped indication	ON	ON	ON	ON	ON
CBCT error / absent / CBCT short	ON	Blink	Blink	Blink	Blink
25% leakage current	ON	ON	OFF	OFF	OFF
50% leakage current	ON	ON	ON	OFF	OFF
75% leakage current	ON	ON	ON	ON	OFF

Input specifications	
Monitored leakage current	30mA, 100mA, 300mA, 500mA and 1A,3A, 5A, 10A, 20A, 30A
Trip level limits	95% to 105% of set leakage current value
Time delay	0, 0.15, 0.25, 0.5, 1, 2, 3, 5, 7.5, 9sec Δt=0 (when leakage set to 30mA)
Reset time	~1sec
CBCT dectection	Yes, when CBCT absent or short
Response time	<30ms (If trip current >5 X set value) <50ms (if trip current = 1 X set value)
Accuracy	Current : ±5% of set trip current Time : ±5% of set time + response time
Test / Reset facility	1. Front (key) 2. Remote (through terminal contact) 3. Power interruption
Reset enable level	Below 85% of tripped level in presence of CBCT
Output specification	
1. Trip relay : 1 SPDT	Case 1: 10A @277V AC / 28 $DC_{(1)}$(NO) Case 2: 5A @250V AC (NO) 5A @250V AC (NC)

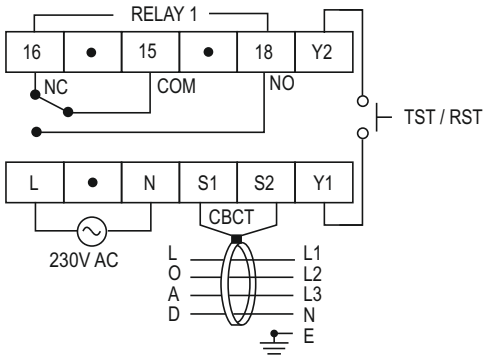
Note : 1) applicable when NC is not energized with load

Auxiliary supply specifications	
Supply voltage	230V AC (±15%), 50/60Hz
Power consumption	5VA max
Environmental specification	
Temperature	Operating : 0 to 50 °C Storage: 0 to 75 °C
Humidity (non-condensing)	Upto 95% RH
Pollution degree For PCB For product	 2 3
Degree of protection of device	IP20
Mechanical specifications	
Mounting	Din rail
Weight	157gms

Dimensions (All are in mm)



Terminal connections



Compliance

Applicable EMI / EMC standards		
Product standard : IEC 60947-2		
Category	**Reference standards**	**Testing level**
Electrostatic discharge	IEC 61000-4-2	Level-3
Electrical fast transient / Brust	IEC 61000-4-4	Level-3
Electromagnetic field	IEC 61000-4-3	Level-3
Surge	IEC 61000-4-5	Level-3
Conducted RF	IEC 61000-4-6	Level-2
Rated power frequency	IEC 61000-4-8	Level-4
Voltage dip / Short interruptions	IEC 61000-4-11	Level-3
Conducted emissions	CISPR-11	Class-B
Radiated emission	CISPR-22	Class-A
Emission & Immunity	IEC 61326-1	
Safety	IEC 61010-1	

Ordering information

Product code	Supply voltage	Certification
ELRA2M2-1-230V-CE	230V AC (±15%)	CE

Accessories

Product code	Inner diametes	Turns ratio
CBCT-35-1-CE	35mm Inner diameter	1000:1
CBCT-70-1-CE	70mm Inner diameter	1000:1
CBCT-120-1-CE	120mm Inner diameter	1000:1
CBCT-210-1-CE	210mm Inner diameter	1000:1
CBCT-310-1-CE	310mm Inner diameter	1000:1