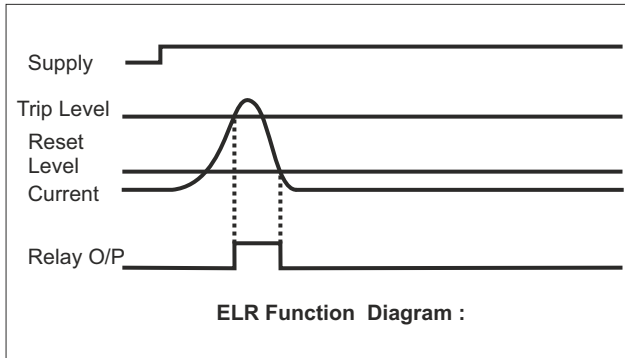


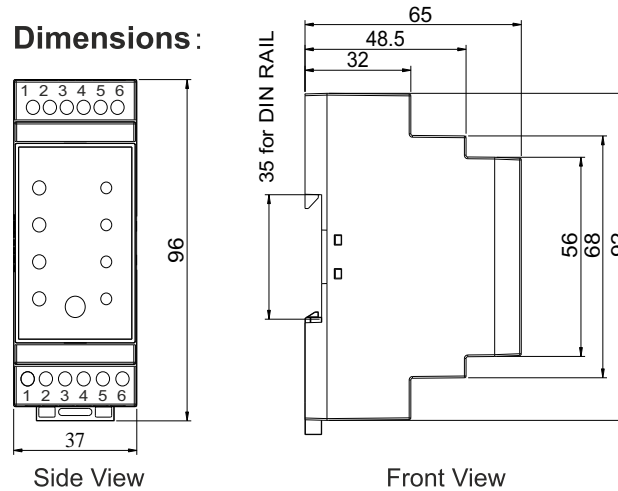
Function Diagram



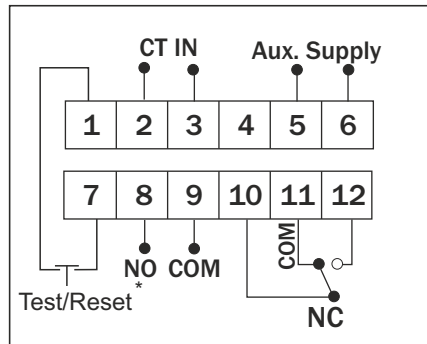
TECHNICAL CHARACTERISTICS :

PRODUCT	CMR 1AL/ CMR 1AL-N	CMR 1ML/ CMR 1ML-N	CMR 5AL/ CMR 5AL-N
Auxiliary Supply	35VAC / DC-300 VAC / DC		
Power Consumption (max.)	5VA (APPROX.)		
EL SETTING	0.03-30Amp	50-300 mAmp	0.2 - 1.2 Amp
Trip Time	0.02 - 10 Sec	0.2 - 10 Sec	0.2 - 10 Sec
Reset Type	A/M	A/M	A/M
Reset Time	3 SEC	3 SEC	3 SEC
Power On Delay	< 500 ms		
LED Indication			
Mains	POWER ON / CBCT ERROR		
EL	EARTH LEAKAGE		
Test Function	YES		
Setting Accuracy	+ / - 5%		
Repeat Accuracy	+ / - 2%		
Hysterisis	+ / - 5%		
Relay Output :			
Contact	1C/O		
Arrangement	5A Res. @ 250 VAC / 30VDC		
Contact	Ag Alloy		

Dimensions :



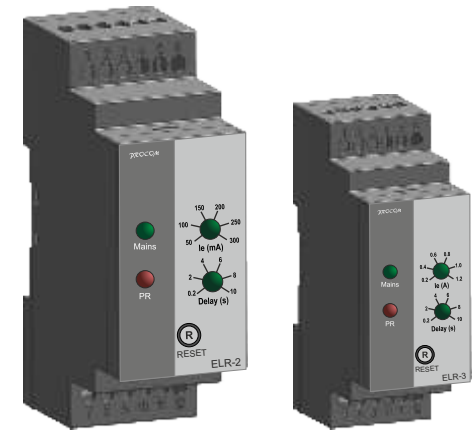
CONNECTION DIAGRAM



MRM PROCOM[®] Pvt. Ltd.

Plot No. 20-21, Sector 59 Phase- II,
Faridabad, Haryana
Pin - 121004

Phone : 091-129-4700400
E-mail Address
info@mrmprocom.com



EARTH LEAKAGE RELAY

ELR - 1
ELR - 2
ELR - 3

Current Range	Time Delay	Aux. Supply	Contact	Reset Type	Model Type
30 mA - 30 A	0.02 - 10 sec	30 - 300v AC/DC	1CO + 1 NO	Auto	ELR-1A
				Manual	ELR-1M
50 mA - 300 mA	0.2 - 10 sec	30 - 300v AC/DC	1CO + 1 NO	Auto	ELR-2A
				Manual	ELR-2M
0.2 A - 1.2 A	0.2 - 10 sec	30 - 300v AC/DC	1CO + 1 NO	Auto	ELR-3A
				Manual	ELR-3M

MRM PROCOM[®] Pvt. Ltd.

FEATURES

- Auto / Manual reset available
- Wide range of Earth Leakage current adjustment.
- Adjustable Earth Leakage trip time.
- Test feature to check complete product functionality.
- Reset feature through reset switch on product.
- Remote reset feature.
- 1 C/O Relay output 1CO + 1NO.
- LED indications for all failure conditions.
- Wide Auxiliary supply range. (30V - 300VAC/DC)
- DIN rail mounting.
- Compact Size 35mm width

FUNCTIONAL DESCRIPTION

EARTH LEAKGE PROTECTION

Earth Leakage relay is a microcontroller based device meant to measure low level of leakage current and protect the faulty circuit from the system. Leakage current is sensed through core balance current transformer (CBCT). Earth leakage fault occurs when the current exceeds the set Earth Leakage Current (I_e) which is adjustable by means of a front mounted potentiometer. Definite time trip occurs when the set time delay trip level expires which is adjustable from 0.2 Sec to 10 Sec by means of a front mounted potentiometer. The Red LED indicates the presence of Earth Leakage.

CBCT CONNECTION

All conductors to be protected shall pass through the core balance current transformer. Main winding of current transformer and test winding should be connected to the product terminals by a twisted pair of 1 mm² wires. The CT wires should be placed adequately away from high current carrying conductors of source of strong magnetic field to avoid noise pickup. The Earth Leakage Relay also verifies CT connection. If CT is open power LED blinks CBCT error

RESET

1. Auto Reset

Relay reset occurs automatically when the Earth leakage fault disappears. Auto reset is enabled for 4 times only. After 4 trips relay doesn't reset automatically. It has to be reset manually

2. Manual Reset

In Manual Reset, Relay reset can be obtained by pressing switch button only after Earth Leakage fault disappears.

3. Remote Reset

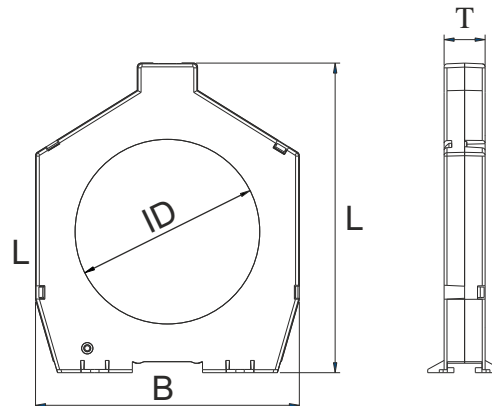
For Remote reset, connect an external push button switch between Pin No. 7 & 12.

Test Function:

For test function, press and hold the Reset push button for duration of trip time selected. The relay will trip and all LED's would glow.

CBCT DIMENSIONS

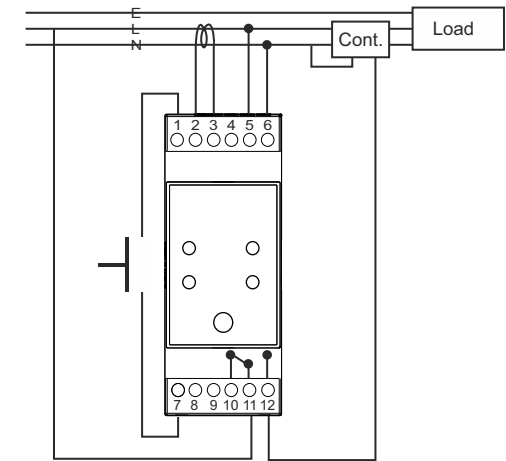
CBCT Variant	ID	L	B	T
CBCT38	38	90	70	20
CBCT55	55	117	97	20
CBCT92	92	155	132	20



CAUTION

1. Do not touch the terminal area while the power is turned ON.
2. Before installation, check to ensure that specifications agree with intended application.

CONNECTION DIAGRAM 3P 3W



CONNECTION DIAGRAM 3P 4W

