



**FEATURE**

- Earth Leakage Current Monitoring In 1Ø - 2W, 3Ø-3W And 3Ø-4W System
- Test Mode Available.
- Auto/Manual Tripping Reset Facility.
- LED Indication (25% , 50% , 75%, Trip , Alarm, Delay Time).
- Test/Trip Reset Via Front Key / Remote

**TECNICAL SPECIFICATION**

**INPUT SPECIFICATION :**

Input Current	0.03 A To 30.0 Amp AC
Display Current Range	0.03 To 30.0 Amp AC
Resolution	If Current in Amp = 0.01A If Current in 10 A Above = 0.1 A

**DISPLAY AND KEYS:**

Display	Upper: 3 digit, 7 segment, 0.4" (White) Lower: 3 digit, 7 segment, 0.28" (Green)
Keys	SET, INC, DEC / RST

**DIMENSION :**

Size (mm)	90(H) X 35(W) X 61.5(D)
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**OUTPUT SPECIFICATION :**

Relay	2 Nos.
Relay Type	NO-C-NC, NO-C
Rating	5A,250V AC / 30V DC

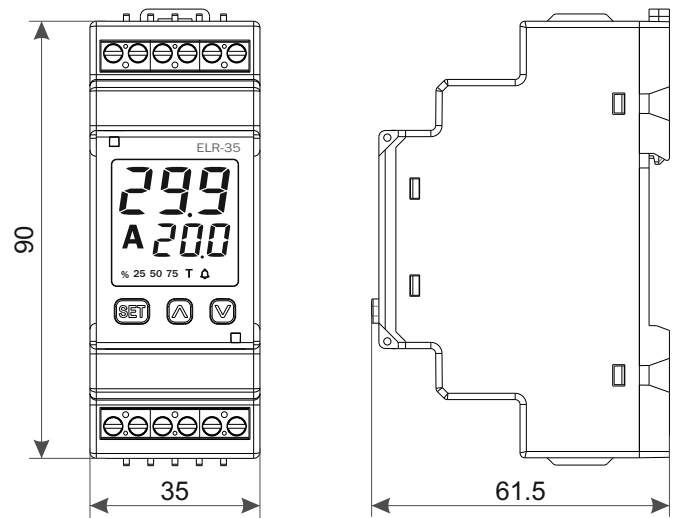
**AUXILIARY SUPPLY :**

Supply Voltage	100 To 270 V AC/DC,50/60Hz
Power Consumption (VA Rating)	3VA @ 230 VAC MAX

**ENVIRONMENT CONDITION:**

Operating Temp.	0°C to 55°C
Relative Humidity	UP to 95% RH (non-condensing)
Protection Level (As per request)	IP-65 (Front side) As per IS/IEC 60529 : 2001

**MECHANICAL DIMENSION**

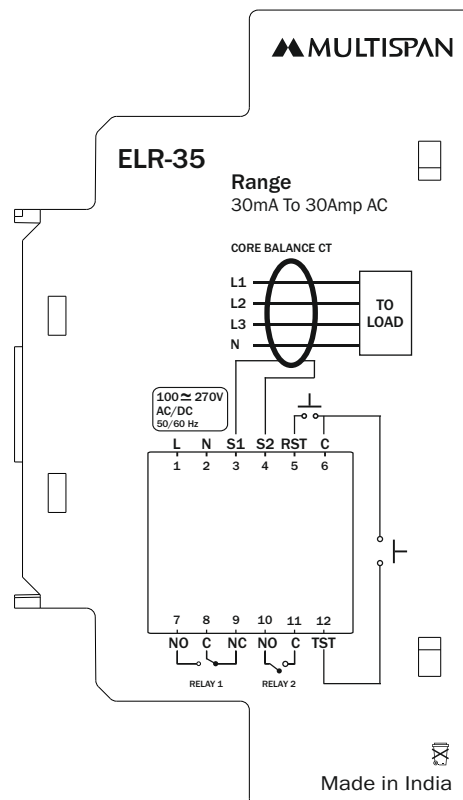


**FRONT VIEW**








**RIGHT SIDE VIEW**

All dimensions are in mm

**TERMINAL CONNECTION**



## KEY OPERATION

FUNCTION	KEY PRESS
<b>OPERATION MODE</b>	
To Enter in Parameter Setting	 For 3 sec
To Enter in Test Mode	 For 5 sec
To Reset the Relay Contact Manually After Tripping	 For 2 sec
<b>PARAMETER SETTING MODE</b>	
To set parameter value	
To increment parameter value.	
To decrement parameter value.	
Set parameter to be save & exit.	



## SAFETY PRECAUTION

All safety related codifications, symbols and instructions that appear in this operating manual or on the equipment must be strictly followed to ensure the safety of the operating personnel as well as the instrument.

If all the equipment is not handled in a manner specified by the manufacturer, it might impair the protection provided by the equipment.



Read complete instructions prior to installation and operation of the unit.



**WARNING** : Risk of electric shock.

## MAINTENANCE

1. The equipment should be cleaned regularly to avoid blockage of ventilating parts.
2. Clean the equipment with a clean soft cloth. Do not use isopropyl alcohol or any other cleaning agent.
3. Fusible resistor must not be replaced by operator.

## WARNING GUIDELINES



### **WARNING** : Risk of electric shock.

1. To prevent the risk of electric shock, power supply to the equipment must be kept OFF while doing the wiring arrangement. Do not touch the terminals while power is being supplied.
2. To reduce electromagnetic interference, use wire with adequate rating and twists of the same of equal size shall be made with shortest connection.
3. Cable used for connection to power source, must have a cross section of 1mm<sup>2</sup> or greater. These wires should have insulations capacity made of at least 1.5kV.
4. When extending the thermocouple lead wires, always use thermocouple compensation wires for wiring for the RTD type, use a wiring material with a small lead resistance (5 Ω max per line) and no resistance differentials among three wires should be present.
5. A better anti-noise effect can be expected by using standard power supply cable for the instrument.

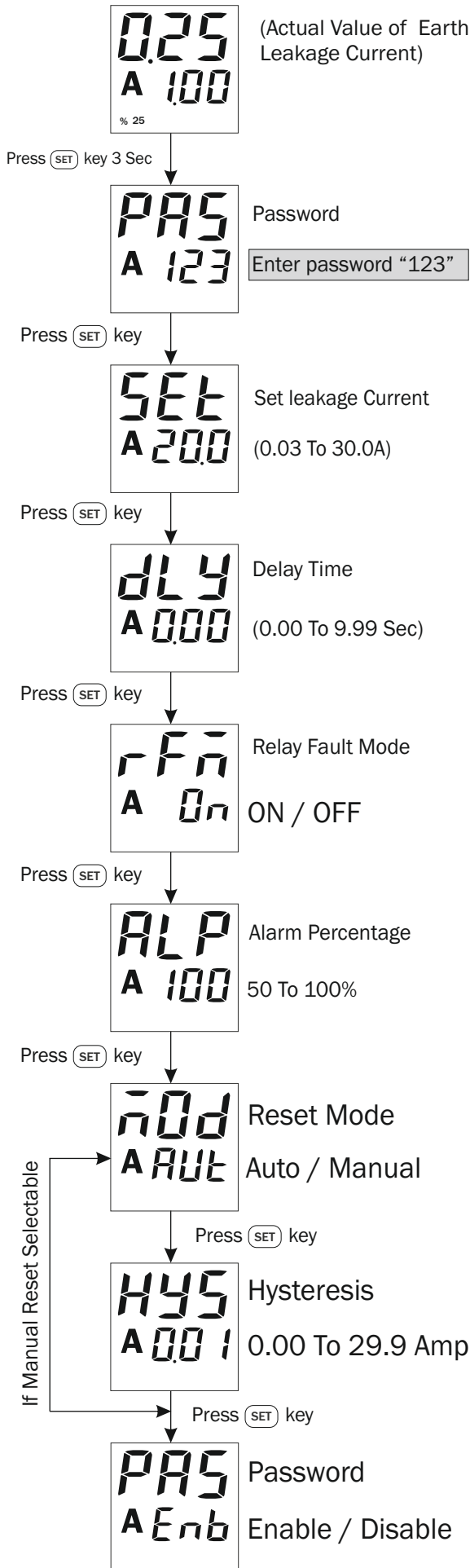
## INSTALLATION GUIDELINES

1. This equipment, being built-in-type, normally becomes a part of main control panel and in such case the terminals do not remain accessible to the end user after installation and internal wiring.
2. Do not allow pieces of metal, wire clippings, or fine metallic fillings from installation to enter the product or else it may lead to a safety hazard that may in turn endanger life or cause electrical shock to the operator.
3. Circuit breaker or mains switch must be installed between power source and supply terminal to facilitate power 'ON' or 'OFF' function. However this mains switch or circuit breaker must be installed at convenient place normally accessible to the operator.
4. Use and store the instrument within the specified ambient temperature and humidity ranges as mentioned in this manual.

## MECHANICAL INSTALLATION GUIDELINES

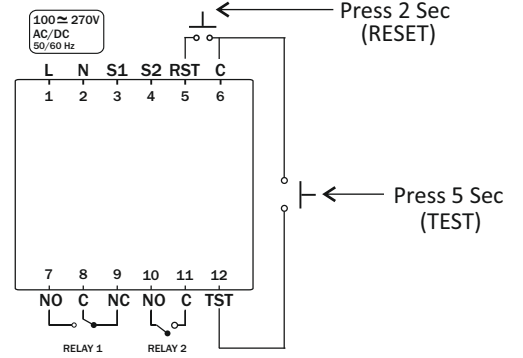
1. Prepare the panel cutout with proper dimensions as shown above.
2. Fit the unit into the panel with the help of clamp given.
3. The equipment in its installed state must not come in close proximity to any heating source, caustic vapors, oil steam, or other unwanted process Byproducts.
4. Use the specified size of crimp terminal (M3.5 screws) to wire the terminal block. Tightening the screws on the terminal block using the tightening torque of the range of 0.5 N.m.
5. Do not connect anything to unused terminals.

## PARAMETER SETTING



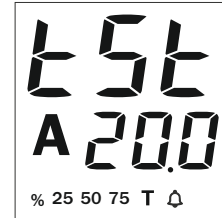
## TEST MODE

### To Enter In Test Mode



Press ▲ Key for 5 sec

- Display Shows



- To exit from test mode, Press ▼ key

### NOTE :

Relay Fault mode select only for trip relay and alarm continuously ON for alarm condition

Alarm Relay Hysteresis is 10% of set leakage current value.

## RESET FUNCTION

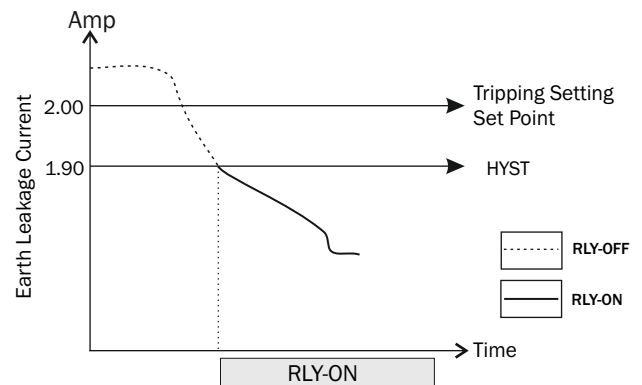
To Reset the Relay Contact after tripping two modes are given.

### 1) Auto Reset

Faulty Condition relay mode = OFF

Trip Set Point = 2.000 Amp

Hysteresis = 0.100 Amp

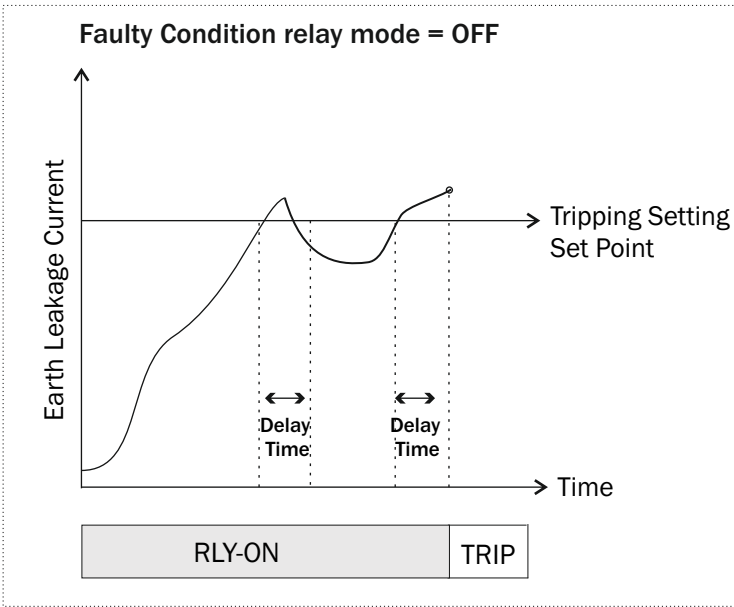


### 2) Manual Reset

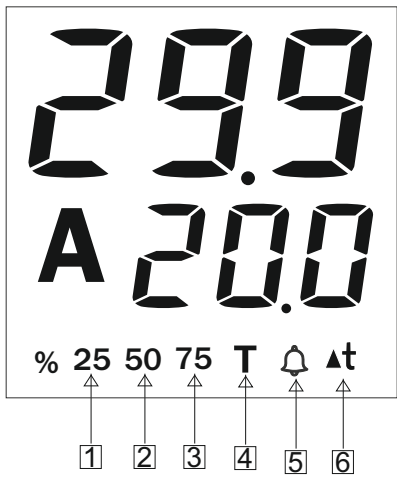
NOTE: When Leakage Current < Setpoint

Press ▼ Key For 2 Sec.

## TRIP FUNCTION



## LED STATUS INDICATION



1) 25% LED	
Leakage Current $\geq$ 25%	LED Continuously ON
2) 50% LED	
Leakage Current $\geq$ 50%	LED Continuously ON
3) 75% LED	
Leakage Current $\geq$ 75%	LED Continuously ON
4) T (TRIP) LED	
Control Output Indication (ON/OFF)	
5)  (ALARM) LED	
Alarm Indication (ON/OFF)	
6)  (Time) LED	
Delay Time Run indication	