



FEATURE

- Auto/Manual Tripping Reset Facility.
- Trip Reset Via Front Key

TECHNICAL SPECIFICATION

INPUT SPECIFICATION :

Input Voltage	0 To 10V AC
Display Voltage Range	0.00 To 10.00V AC
Resolution	0.01 V AC

DISPLAY & KEYS :

Display	Upper: 4 Digit , 7 Seg. 0.56" Red Lower: 4 Digit , 7 Seg. 0.56" White
Keys	SET, ENT/RST, INC, DEC

DIMENSION :

Size (mm)	96 (H) X 96 (W) X 54 (D)
Panel Cutout	92(H) X 92(W)

OUTPUT SPECIFICATION :

Relay	1 Nos.
Relay Type	1 C/O (NO-C-NC)
Rating	10A,230V AC Resistive Load

COMMUNICATION:

RS-485 MODBUS

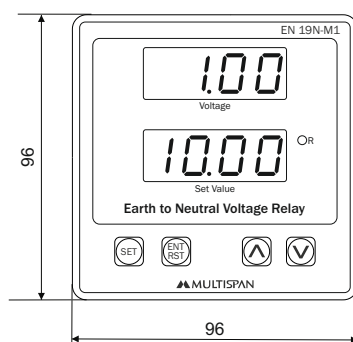
AUXILIARY SUPPLY :

Supply Voltage	100 To 270 V AC
Power Consumption (VA Rating)	4VA @ 230 VAC MAX

ENVIRONMENT CONDITION:

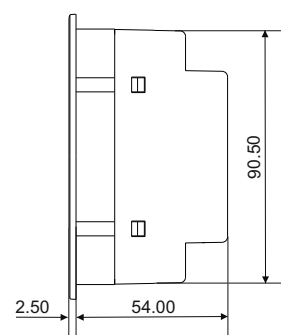
Operating Temp.	0 °C to 55 °C
Relative Humidity	UP to 95% RH (non-condensing)
Protection Level (As per request)	IP-65 (Front side) As per IS/IEC 60529 : 2001

MECHANICAL DIMENSION



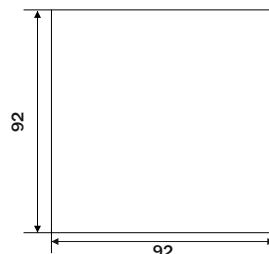
FRONT VIEW

All dimensions are in mm

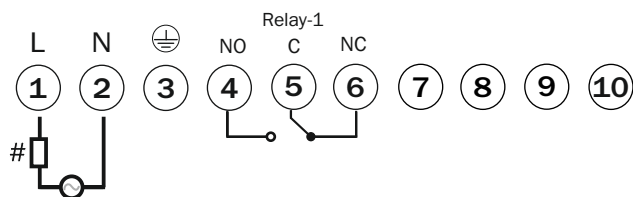
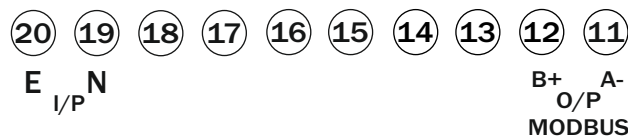


RIGHT SIDE VIEW

Panel Cutout



TERMINAL CONNECTION



KEY OPERATION

FUNCTION	KEY PRESS
OPERATION MODE	
To Enter in Parameter Setting	
To Reset the Relay Contact Manually After Tripping	 For 2 sec
To Enter into Modbus Parameter	 + 
PARAMETER SETTING MODE	
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 1mm² 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.

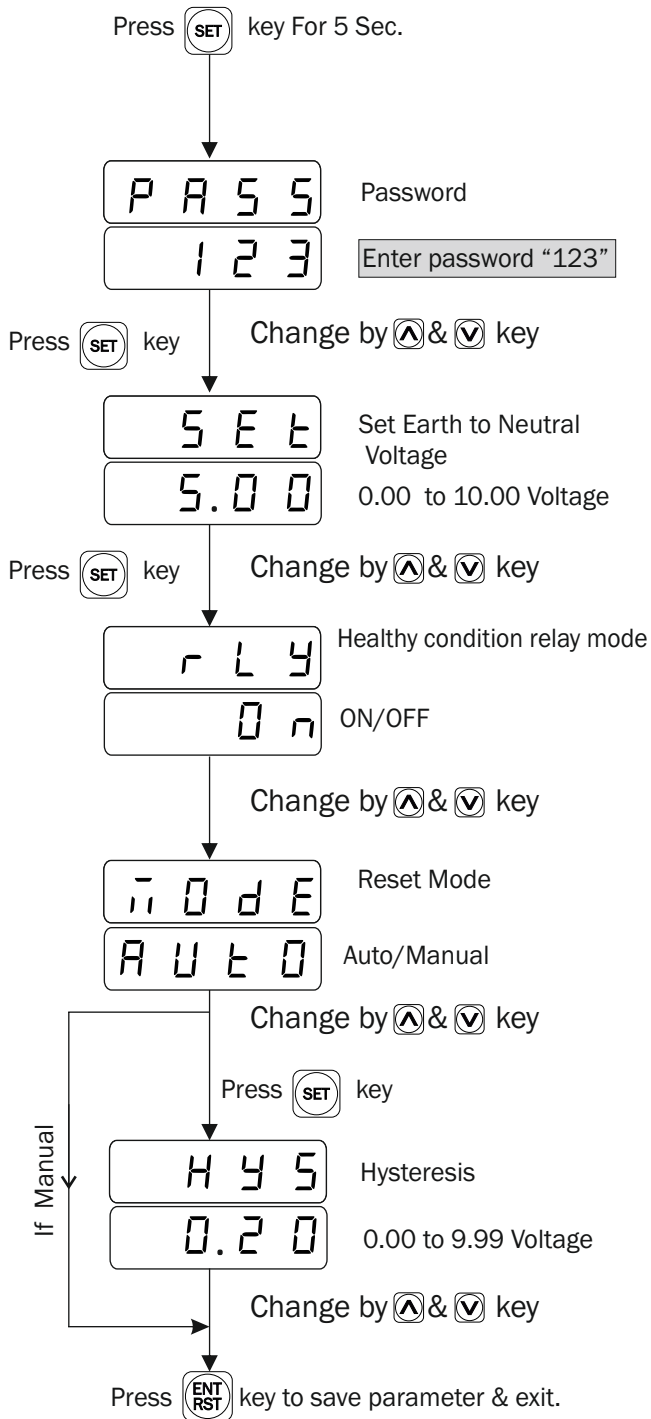
INSTALLATION GUIDELINES

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

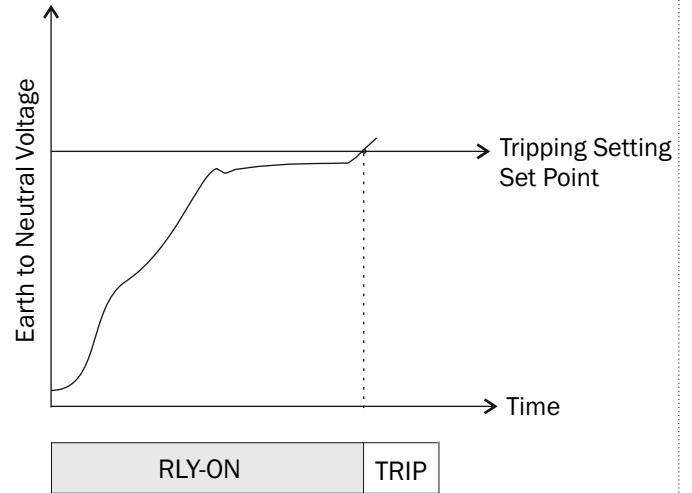
1. Prepare the panel cutout with proper dimensions as shown above.
2. Fit the unit into the panel with the help of clamp given.
3. The equipment in its installed state must not come in close proximity to any heating source, caustic vapors, oil steam, or other unwanted process Byproducts.
4. Use the specified 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



TRIP FUNCTION

Healthy Condition relay mode = ON

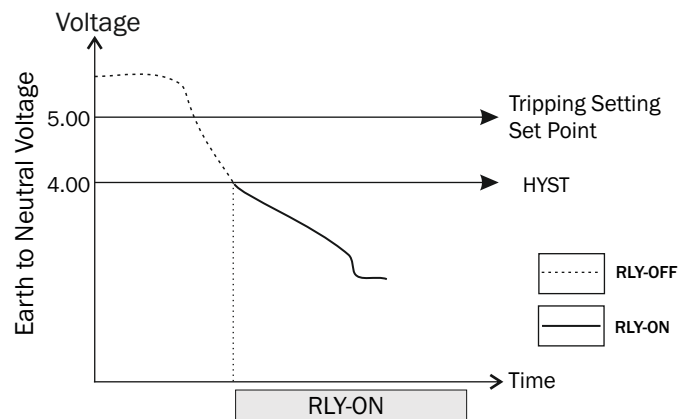


RESET FUNCTION

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

1) Auto Reset

Healthy Condition relay mode = ON
 Trip Set Point = 5.000 V
 Hysteresis = 1.000 V



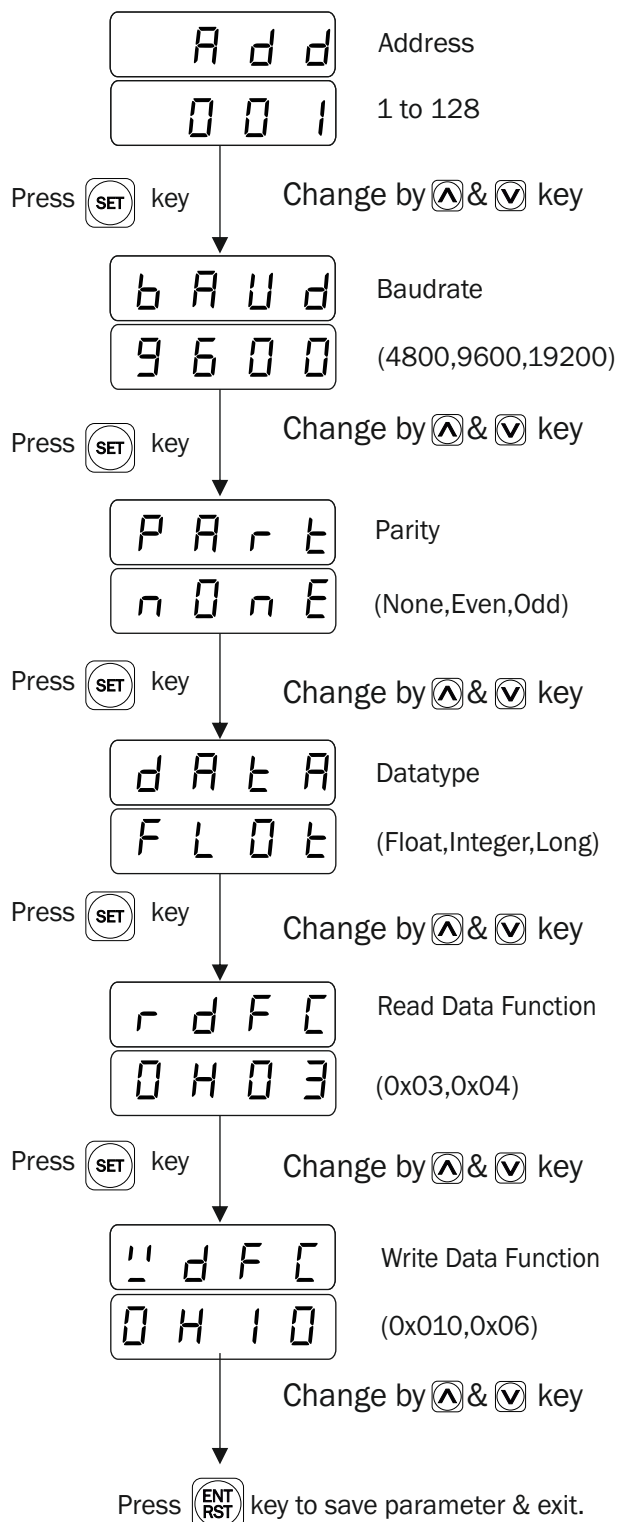
2) Manual Reset

NOTE: When Leakage Voltage < Setpoint

Press **ENT RST** Key For 2 Sec.

MODBUS PARAMETER

Press **SET** + **✓** Key To Enter Into Modbus Parameter



MODBUS

Salve Address :	1 to 128
Baudrate :	4800,9600,19200 bps
Parity :	None,Even,Odd
Datatype :	Long, Float (32 Bit Little Endian Byte Swap),Integer
Read Function Register :	0x03,0x04
Write Function Register :	0x10,0x06

Sr.No	Access Type	Parameter	Register		
			Data Type		
			Integer	Float & long	
1	R	Relay 1 Status		0	0
		Selection	Value		
		ON	1		
		OFF	0		
2	R	Earth to Neutral Voltage		1	2
3	R/W	Set E-N Voltage		2	4
4	R/W	Hysteresis		3	6
5	R/W	Healthy condition Relay mode		4	8
		Selection	Value		
		ON	0		
		OFF	1		
6	R/W	Reset mode		5	10
		Selection	Value		
		Auto	0		
		Manual	1		
7	R/W	Address		6	12
8	R/W	Baudrate		7	14
		Selection	Value		
		4800	0		
		9600	1		
		19200	2		
9	R/W	Parity		8	16
		Selection	Value		
		None	0		
		Even	1		
		Odd	2		
10	R/W	Data Type		9	18
		Selection	Value		
		Long	0		
		Float	1		
		Integer	2		
11	R/W	Read Function		10	20
		Selection	Value		
		0x03	0		
		0x04	1		
12	R/W	Write Function		11	22
		Selection	Value		
		0x06	0		
		0x010	1		