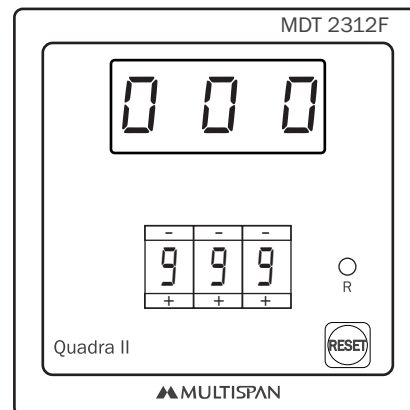


96 x 96 mm



72 x 72 mm

## Technical Specification

Description	MDT - 1310F	MDT - 2312F
Dimension	96 X 96 X 54 mm	72 X 72 X 45 mm
Panel Cutout	92 X 92 mm	68 X 68 mm
Display	7 segment, 3 digit, 0.56", RED LED	7 segment, 3 digit, 0.56", RED LED
Timer Type	Multi-range timer	
Resetting Timer	RST key in front and back	
Counting Direction	Up or Down counting	
Output	1 relay, 2 C/O	
Input	Start pulse M/S	
Relay Rating	230V AC,5Amp	
Supply	230V AC, 50Hz,4VA	100 to 270V AC,50/60Hz, 4VA

### NOTE:

Parameter setting is done by using Left First thumbwheel and reset key.:

1. Left first thumbwheel is used to change parameter
2. Reset key is used to change parameter value

## Parameter setting:

1. For parameter setting, Press reset key then power on, display will show by default Parameter.

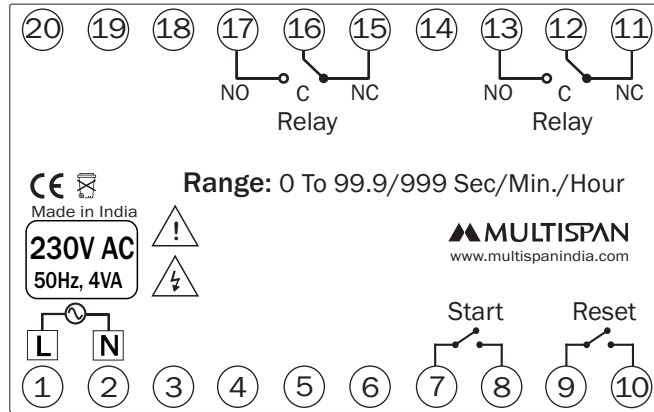
Left First Thumbwheel	Reset Key + Power ON
100	Time unit (Sec,Min,Hour) (Press reset key to Change parameter value)
200	Time Range: (999,99.9,9.99 For Sec.)(Press reset key to (999,99.9 For Min.) Change parameter value) (999,99.9 For Hour.)
300	Operating Relay Mode (Delayed ON, Delayed OFF) (Press reset key to change parameter value)
400	Counting Direction (UP & DOWN)
500	Memory ( YES Or NO)(Press reset key to change parameter value) <b>Yes</b> : Than option of Memory power trigger ( MPT ) will come on 700.
600	Auto Manual Mode ( IF Time = 0 then manual mode is selected IF Time $\neq$ 0 (Range 0 - 99 SEC.) then auto mode selected)
700	<b>Yes</b> : If select yes in MPT, the timer will start on it's own when start after power failure. <b>NO</b> : If select No again trigger is required to start.
800 900 000	OUT

### NOTE:

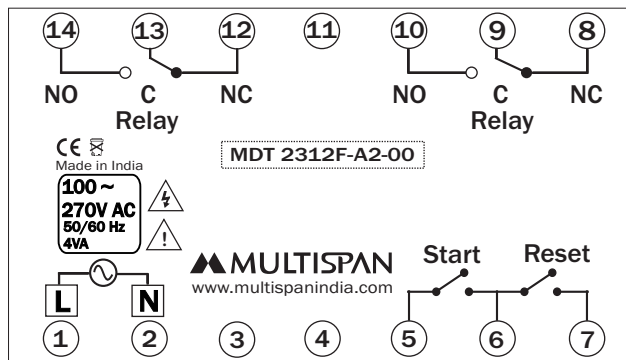
Press reset key to Save & Exit

1. In manual mode press reset key to reset, set point.
2. In Auto mode , set point is automatically reset after reset time is reaches to set value.

## Connection Diagram:



MDT-1310F



MDT-2312F

## Safety Precautions

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.

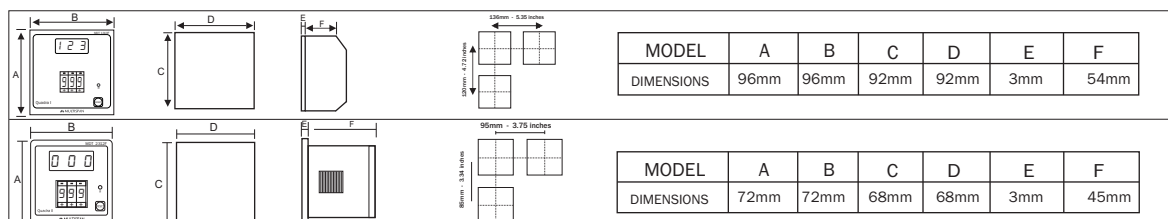
## Warning Guidelines

- 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 electro magnetic 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  $1\text{mm}^2$  or greater. These wires should have insulations capacity made of at least 1.5kV.
- 4) 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 such in 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



- 1) Prepare the panel cutout with proper dimensions as show 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, oils steam, or other unwanted process by products.
- 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 1.2 N.m.
- 5) Do not connect anything to unused terminals.

## 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.

Product improvement and upgrade is a constant procedure. So for more updated operating information and support, Please contact our helpline : +91-9081078681/83 or Email at [Service@multispanindia.com](mailto:Service@multispanindia.com) Ver:2305