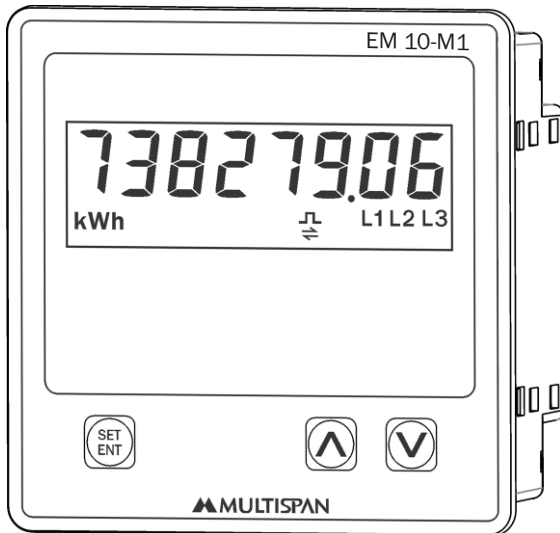
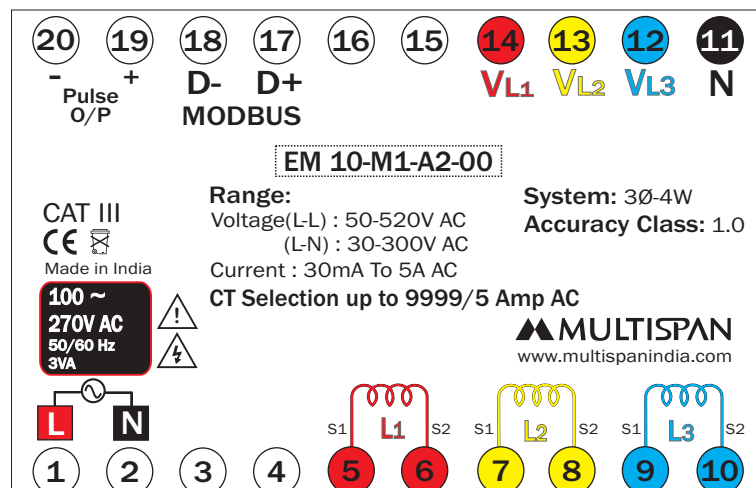


Technical Specification



Model	EM-10-M1
Display	8 digit, 7 segment, 0.5" Red display
Size (mm)	96(H) X 96 (W) X 43 (D) mm
Panel Cutout	92 X 92 mm
Voltage Input	50 To 520V AC VLL CAT III 30 To 300V AC VLN CAT III
Current Input	5 Amp or higher through external CT
Active Power (KW)	0.000 To 9999 KW
Active energy (KWh)	0.000 To 99999999 KWH
Power Supply	100 To 270V AC,50/60Hz,Approx 3VA
Frequency	45 To 65 Hz
Wiring System	3Ph-4W
Protection Level (As Per Request)	IP-65 (Front side) As per IS/IEC 60529 : 2001
Operating Temperature	0°C To 50°C
Relative Humidity	Up to 95% RH Non Condensing

Connection Diagram




HOLD AND SCROLL MODE :

Press  &  Key for 5 sec.

PARAMETER SETTING:

Press  key For 5 Sec



(CT Password)

(10) Change by  &  Key

Press  key



(CT Ratio)

(5 to 9999Amp Selectable)

Change by  &  Key

Press  key



(Pulse mode)

(Auto-Manual selectable)

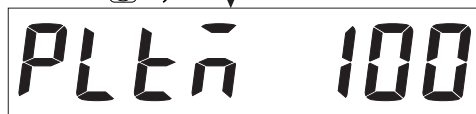
Change by  &  Key

If auto mode
selectable



/ 0.01,0.1,1,10 (Pulse out)

Press  key



/ 10 to 500 ms (Pulse on time)


Press  key TO Save & exit

RESET SETTING

Press  key For 5 Sec



(Reset Password)

(15) Change by  &  Key



(YES/NO) Change by  &  Key

Press  key TO Save & exit

Modbus Setting

Press  key For 5 Sec

PASS 35

(CT Password)

(35) Change by  &  Key

Press  key

Addr 1

Address

1 to 127

Press  key

baud9600

Baudrate


9600,19200,38400

Press  key

PrtyNone

Parity

None/Even/odd

Press  key TO Save & exit

RESOLUTION

CT PRIMARY	ENERGY RATE PULSE OUTPUT
5 to 75	0.01 Kwh
76 to 750	0.1 Kwh
751 to 7500	1 Kwh
7501 to 9999	10 Kwh

PAGES:

1) KWH

73827.906
kWh

4) KW(L₃)

1.200
kW L3

2) KW(L₁)

1.200
kW L1

5) KW(TOTAL)

3.600
kW L1 L2 L3

3) KW(L₂)

1.200
kW L2

TO Change Page Press  &  key

APPLICATION:

- Energy Management System
- Control Panels
- Genertor Set
- Power Distribution boards
- Building Management System
- Quality Control System
- Motor Control Panel
- Energy Audit

MODBUS

Slave Address :	1 to 127
Baudrate :	9600,19200,38400bps
Parity :	None,Even,Odd
Datatype :	Float
Read Function Register :	0x03 and 0x04
Write Function Register :	0x06 and 0x10

Sr.No	Access Type	Parameter	Register
			Data Type
			Float
1	R	Kwh	0
			2
2	R	Line1 kw	4
3	R	Line2 kw	6
4	R	Line3 kw	8
5	R	Total kw	10
6	R/W	CT Ratio	12
7	R	Pulse Mode	14
		Selection	
		Auto	
		Manual	
8	R/W	Pulse Out	16
		Selection	
		0.01	
		0.1	
		1	
9	R/W	Pulse on time	18
		Address	
		Buadrate	
		Selection	
10	R/W	9600	22
		19200	
		38400	
		Selection	
11	R/W	Parity	24
		Selection	
		Non	
		Even	
12	R/W	Odd	
		Selection	
		Non	
		Even	
13	R/W	Energy Reset	26
		Selection	
		Non	
		Even	

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 1mm² 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.

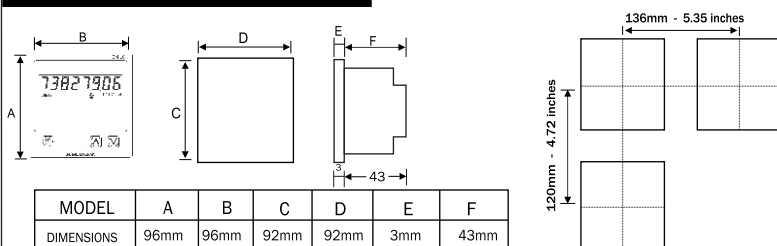
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Installation Guidelines

- 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



- 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: +91-9081078683/81 or Email at service@multispanindia.com Ver:2106

Note :

Note :