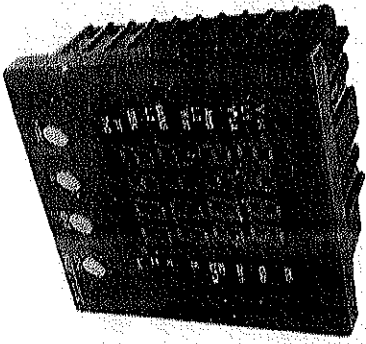


## ENERGY METER(DUAL SOURCE)



### TEST CERTIFICATE

Type : ENERGY METER (DUAL SOURCE)

Accuracy : Class 0.5 for V & A ; 0.1% of FS for Hz

Accuracy TEST :

VOLTAGE	CURRENT	WATTAGE/CT
10%	10%	100%
+/-0.5%	+/-0.5%	+/-0.5%
OK	OK	OK
Power Factor	Watts	KVA
10%	10%	100%
+/-0.5%	+/-0.5%	+/-0.5%
OK	OK	OK

Note:

A) For Digital Readouts the error is computed in counts.

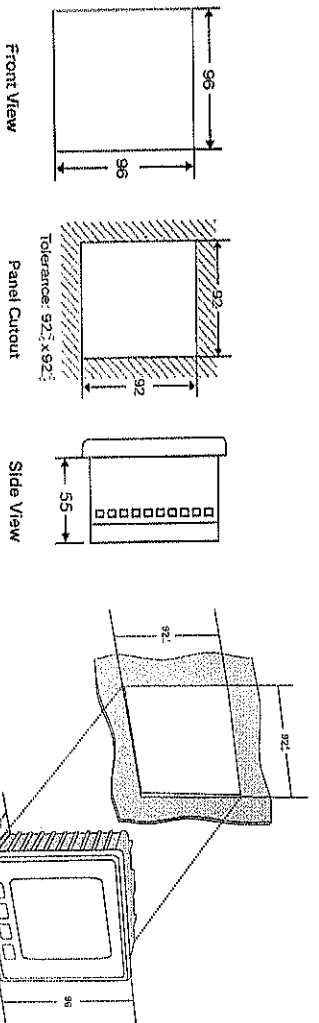
- Class 1.0 = ±1% of Full Scale + 1 count

- Class 0.5 = ±0.5% of Full Scale + 1 count

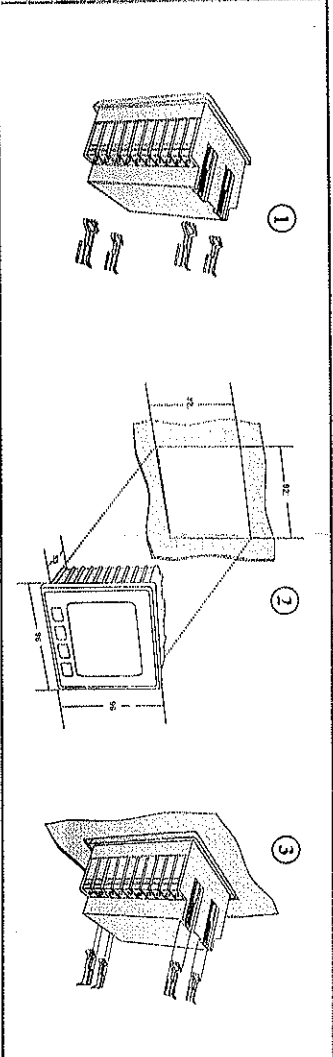
Tested By : Mr. Dipesh

Date : 31 AUG 2021

### MECHANICAL DIMENSION



### MOUNTING ARRANGEMENT



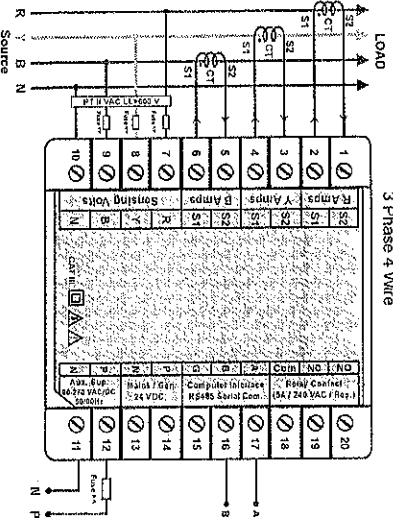
- 1) Remove the mounting clamps
- 2) Gently slide the Meter through the cut-out
- 3) Put the mounting clamps back in the Meter.

### FEATURES

- (1) State of Art Micro controller Based Design
- (2) 4 Line 4 Digit Ultra Bright LED Display
- (3) Site Programmable PT ratio (Primary & Secondary) Site Programmable CT ratio (Primary & Secondary)
- (4) True RMS Measurement
- (5) Password Protection
- (6) RS 485 Computer Interface (optional)
- (7) Total Harmonic Distortion
- (8) Auto Ranging
- (9) Universal Aux. Supply

### CONNECTION DETAILS

#### Electrical Wiring / Connection Diagram



\*\* Connect Fuse = 0.25 A

### SPECIFICATION

System	: 3 Phase 4 Wire / 1 Phase 2 Wire
Volts	: 10 - 300VAC (L-N) 10 - 500VAC (L-L)
Amp	: 0.015A - 6.00Amp AC Direct 60 Amperes Optional
Burden	: 3VA Max. for Aux. Supply, 0.2VA for Voltage & Current Input
Aux. Supply	: 90-270 VAC/DC / 50/60Hz
Display	: 4 Line x 4 Digit display { 0.39 inches 7 Segment LED Display }
Computation	: True RMS
Frequency	: 45 Hz - 65 Hz
Ambient	: -10 to 55°C
Storage	: -20 to 75°C
Humidity	: < 95% Non-Condensing
Weight	: 320 gms
Dimensions	: 96 X 96 X 55 mm (L x W x D)
Panel Cutout	: (92±3)mm X (92±3)mm
Mounting	: Flush Mounting with Side Clamps.
<b>MEASUREMENT RANGES</b>	
Volts	: 10 - 300VAC (L-N) 10 - 500VAC (L-L)
Amp	: 0.015A - 6.00Amp AC Direct 60 Amperes Optional
Display Update	: 1 Sec : 45 to 65 Hz
Resolution	: 0.1kWh For Energy, auto ranging for other parameter.
Accuracy	: ± 0.5% of full scale for voltage, current, power, power factor.
Frequency	: ± 0.1% for Hz
Energy	: class 1.0

## DISPLAY PAGES

Page	Symbol	Parameters
1	V-L-L	Voltage (L-L) RY, YB, BR & Avg
2	V-L-N	Voltage (L-N) RN, YN, BN & Avg
3	PH- $\alpha$	Phase Angle between Voltage in degrees
4	A	Amps R, Y, B & Avg
5	Hz	Frequency
6	W	Watts (Active Power) R, Y, B & Total
7	PF	Power Factor R, Y, B & Total
8	I-RE	Import Active Energy
9	I-LE	Import Reactive - Inductive Energy
10	I-CE	Import Reactive - Capacitive Energy
11	I-RPE	Import Apparent Energy
12	E-RE	Export Active Energy
13	E-LE	Export Reactive - Inductive Energy
14	E-CE	Export Reactive - Capacitive Energy
15	E-RPE	Export Apparent Energy
16	ON-h	ON Hour (duration for which the meter is ON with/without load)
17	L-h	Load Hour (timer) - Import
18	L-h	Load Hour (timer) - Export

### MANUAL SCROLL MODE:

In this mode the display shows parameter of the selected page one after another.  
The parameter of next / previous page can be viewed by pressing  $\leftarrow$  or  $\rightarrow$  keys.

### AUTO SCROLL MODE:

In this mode the display shows parameter of page 1 then scroll to page 2 and so on.

### DISPLAY FREEZE MODE:

This mode can be activated by pressing  $\text{ESC}$  key during normal meter operation.

When this key is pressed the display will remain on the parameter it is currently displaying.

In this mode  $\leftarrow$  key can be pressed to see the other parameters of this page only, but to scroll to next page parameters first you have to come out of freeze mode.  
Pressing  $\text{ESC}$  key once again will bring the meter out of freeze mode.

## PROGRAMMING

Press Programming  $\leftarrow$   $\rightarrow$   $\text{ESC}$   
Set 2000 Factory Reset Password 2862)

Unit Address  
PT Primary & Secondary  
CT Primary & Secondary  
Clear Import Energy  
Clear Export Energy  
New Password  
Baud rate / Parity  
ON Timer  
Reset Import Timer  
Reset Export Timer  
Auto / manual Scroll

Addr-  
To enter into address  
To change value of address (Default value 001)  
To Save

PE-P  
To enter into PT Primary & Secondary  
To change value of PT Primary & Secondary (Default: 277 0002 975 0001)  
To Save

CE-P  
To enter into CT Primary & Secondary  
To change value of CT Primary & Secondary (Default: CTP 0002 CCS 0001)  
To Save

SE-E  
To Clear Import Energy  
To Are You Sure ? Clear Import Energy  
To Save

SE-E  
To Clear Export Energy  
To Are you Sure ? Clear Export Energy  
To Save

CHG  
To New Password  
PR-5  
To Set New Password (change Password 0000)  
To Save

BR-B  
To Baud Rate & Parity  
PR-  
To set Baud Rate & Parity  
To Save

ON-T  
To ON Timer  
SE-E  
To set On Timer 'Count are you Sure'  
To Save

SE-E  
To Import Timer  
SE-E  
To Reset Import Timer  
To Save

SE-E  
To Export Timer  
SE-E  
To Reset Export Timer  
To Save

DIS-E  
To enter into select Auto / Manual Scroll  
SE-E  
To Disable / Enable Scrolling  
To Save

ESC  
To come out of program mode

### 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 the equipment is not used in a manner specified by the manufacturer it might impair the protection provided by the equipment.

If there is physical damage to the unit then do not use it.

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

### WIRING GUIDELINES:

#### Warning

- 1) To Prevent the risk of electric shock power supply to the equipment must be kept OFF while doing the wiring arrangement.
- 2) Wiring shall be done strictly according to the terminal layout with shortest connection. Conform that all connection are correct.

#### CAUTION:



- 1) To ensure the safe operation of unit, check the wiring and connections.

The Document are subject to change without Notification