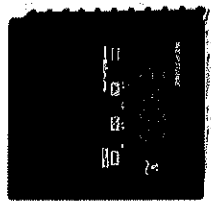


3 PHASE METERS



3 PHASE VOLTMETER



3 PHASE AMMETER

TEST CERTIFICATE

Type : 3 PHASE VOLTMETER

3 PHASE AMMETER

Accuracy : 3Ø Voltmeter - Class 0.5% For V
0.1% of FS for Hz

3Ø Ammeter - Class 0.5% For A

Accuracy Test :

Accuracy Test :
3Ø Ammeter

VOLTAGE	FREQUENCY	AMPS
10%	100%	100%
+/-0.5%	+/-4.5%	+/-0.5%
OK	OK	OK

Note :

A) For Digital Readouts the error is Computed in Counts.

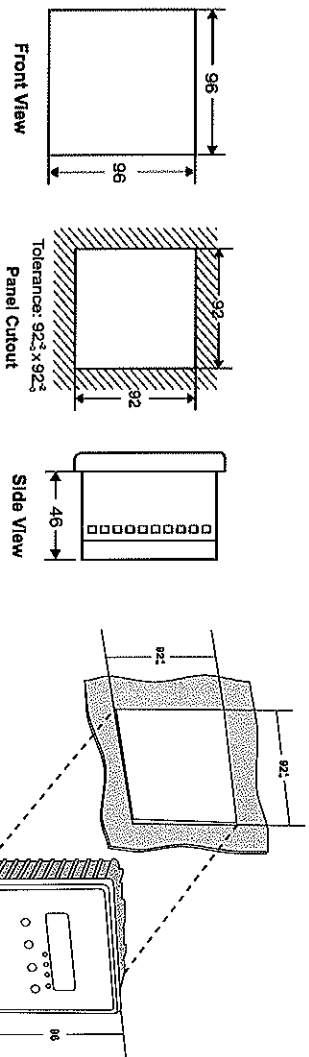
- Class 1.0 ± 1% of Full Scale ± 1 Count

- Class 0.5 ± 0.5% of Full Scale ± 1 Count

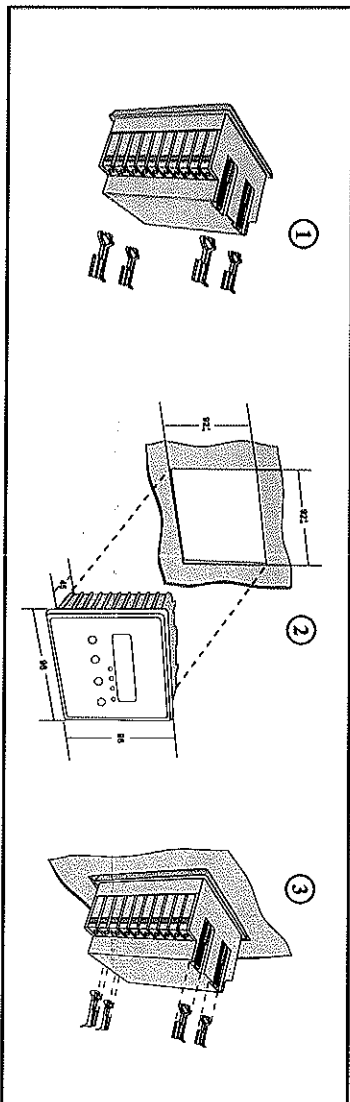
Tested By : Miss Jayashree

Date : 13 JUL 2021

MECHANICAL DIMENSION



MOUNTING ARRANGEMENT



1) Remove the mounting clamps

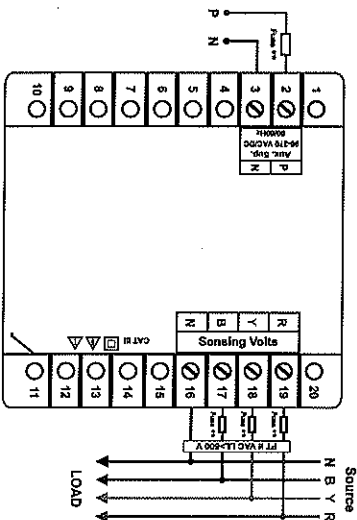
2) Gently slide the Meter through the cut-out.

3) Put the mounting clamps back in the Meter.

CONNECTION DETAILS

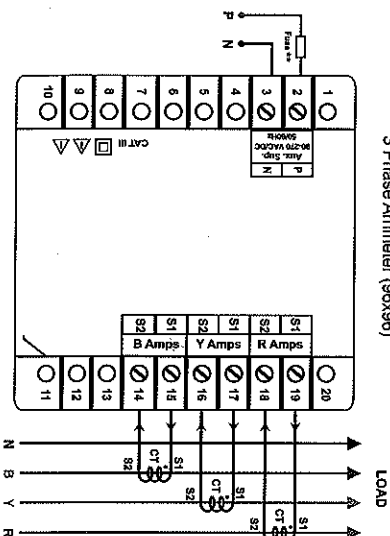
Electrical Wiring / Connection Diagram

3 Phase Voltmeter (96x96)



Electrical Wiring / Connection Diagram

3 Phase Ammeter (96x96)



FEATURES

- State of Art Micro controller Based Design
- 1 Line 4 Digit Ultra Bright LED Display
- Site Programmable PT ratio (3 Phase Voltmeter)
Site Programmable CT ratio (3 Phase Ammeter)
- True RMS Measurement
- Password Protection
- Harmonics THDV (3 Phase Voltmeter)
Harmonics THDI (3 Phase Ammeter)
- Auto Ranging
- Universal Aux. Supply
- RS 485 Computer interface (Optional)

SPECIFICATION

- Input** : 3 Phase 4 Wire
: 3Ø Voltmeter - Range 10-300 VAC (L-N)
Range 10-500 VAC (L-L)
: 3Ø Ammeter - Range 0.015-6.00 Amps
Direct 60 ampere optional
- Burden** : 3VA Max. for Aux. Supply, 0.2VA for
Voltage & Current Input
- Aux. Supply** : 90 - 270 VAC / DC, 50/60 Hz
- Display** : 1 Line x 4 Digit
{ 0.56 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** : 280 gms
- Dimensions** : 96 x 96 x 46 mm (L x W x D)
- Panel Cutout** : (92.2)mm x (92.2)mm
- Mounting** : Flush Mounting with Side Clamps.

** Connected Fuse = 0.25A

PARAMETERS

3 Phase Voltmeter	V-L-L, V-L-N Phase wise & Avg., Hz, THDV phase wise & Avg.
--------------------------	--

3 Phase Ammeter	Ampere phase wise & Avg., THDI phase wise & Avg.
------------------------	--

MEASUREMENT RANGES

Description	3Ø VOLT METER	3Ø AMMETER
Volts :	10-300 VAC (L-N) 10-500 VAC (L-L)	—
Amps :	—	0.015 - 6.00 AAC Direct 60 Amps
Display Update	1 Sec	
Hz	45.0 to 65.0 Hz	
Resolution	Auto Ranging	
Frequency	± 0.1% for Hz	
Accuracy	±0.5% of full scale for voltage	±0.5% of full scale for Current

DISPLAY PAGES

3 Phase Voltmeter :

Page	Symbol	Parameters
1	V-L-L	Voltage (L-L) RY, YB, BR & Average
2	V-L-N	Voltage (L-N) RN, YN, BN & Average
3	Hz	Frequency
4	THDV	Harmonics - Voltage - THDV

3 Phase Ammeter :

Page	Symbol	Parameters
1	A	Amps R, Y, B & Average
2	THD	Harmonics - Amps - THDI

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 or 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 key during normal meter operation.

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

In this mode 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 key once again will bring the meter out of freeze mode.

PROGRAMMING

Press Programming

Set 2000 (Factory Reset Password 2000)

Unit Address

PT Primary (Only for 3Ø Voltmeter)

PT Secondary (Only for 3Ø Voltmeter)

CT Primary (Only for 3Ø Ammeter)

CT Secondary (Only for 3Ø Ammeter)

New Password

Baud rate

Parity

Auto / manual Scroll

No. of display rows

Parameter update Speed

To enter into address

To change value of address (Default value 001)

To enter into PT Primary (Only For 3Ø Voltmeter)

To change value of PT Primary (Default value 0001)

To enter into PT Secondary (Only For 3Ø Voltmeter)

To change value of PT Secondary (Default value 0001)

To enter into CT Primary (Only for 3Ø Ammeter)

To change value of CT Primary (Default value 0001)

To enter into CT Secondary (Only For 3Ø Ammeter)

To change value of CT Secondary (Default value 0001)

To enter into Change Password

To edit new password

To enter into Baud Rate

To set baud rate (1200, 2400, 4800, 9600)

To enter into Parity

To set parity (Even, Odd, None)

To enter into select Auto / Manual Scroll

To Disable / Enable Scrolling

To enter into select Display Rows

1 Parameter **3 Parameter** **4 Parameter**
* Explanation Provided in Note Below

To enter into select next Parameter Update Speed

To set speed (average, slow, very slow, very fast, fast)

To come out of program mode

3Ø Voltmeter

1 Parameters :	3Ø Ammeter
Page 1 V-L-Avg	1 Avg
Page 2 V-L-N Avg	THDI Avg
Page 3 HZ	
Page 4 THDV Avg	

3 Parameters :

Page 1 VRY VYB VBR	IR IY IB
Page 2 VRN VYN VBN	THDR THDY THDB
Page 3 HZ	
Page 4 THDR THDY THDB	

4 Parameters :

Page 1 VRY VYB VBR V-L-Avg	IR IY IB 1 Avg
Page 2 VRN VYN VBN V-L-N Avg	THDR THDY THDB THDI Avg
Page 3 HZ	
Page 4 THDR THDY THDB THDV Avg	

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.

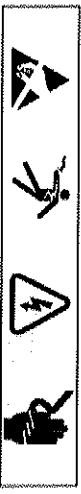
WIRING GUIDELINES:

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. Confirm that all connection are correct.

CAUTION:



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