3 Phase VAF Meter AVF - 19D





# **TECHNICAL SPECIFICATION**

# **INPUT**

Voltage AC		
Direct voltage AC	30 to 300V (L - N)	
	50 to 520V (L - L)	
Burden	< 0.2 VA	
Current AC		
Primary CT Ratio	5 to 9999A Selectable	
Secondary Current Ac	(0.1 To 5 Amp)	
Burden	< 0.2 VA	
Overload	Up to 6A Continuous	
Frequency	45.0 to 65.0 Hz	

## **DISPLAY, KEY & LED**

Display	3 Digit , 3 Line 7 Seg. 0.59"Red LED	
Key	Set/Ent , Inc ,Dec/Scroll	
LED Indication	A , KA , VLL , VLN , AVg, HZ , $L_1$ , $L_2$ , $L_3$	

#### **DIMENSION**

Size (mm)	101 (H) x 101 (W) x 43 (D) mm	
Panel Cutout	92 (H) x 92 (W) mm	

# **CALCULATED PARAMETERS**

Voltage	VLL ,VLN , Avg
Current	All Phase Amp,
	Avg Amp
Frequency	System Frequency
Load hour	Up to 9999 Hr 59 min
RPM	

## **ACCURACY**

# Class 0.5 (Standard)

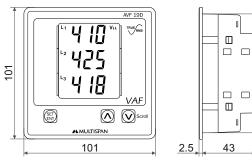
## **AUXILIARY POWER SUPPLY**

Power Supply	230V AC,50Hz ± 20%	
Burden	3VA	

## **ENVIRONMENTAL CONDITION**

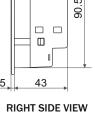
Working Temperature	0 to 55°C	
Storage Temperature	0 to 55°C	
Relative Humidity	95 % RH Non- Condensing	
Protection Level ( As per Request )	IP-65 (Front side As per IS/IEC 60529 : 2001)	

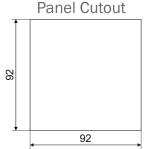
# **MECHANICAL INSTALLATION**



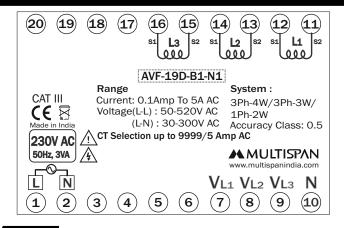
#### FRONT VIEW

All dimensions are in mm





# **TERMINAL CONNECTION**



# NOTE:-

1) In CT Ratio parameter setting if primary C.T is greater than 999 Amp. Then display will shown as below.



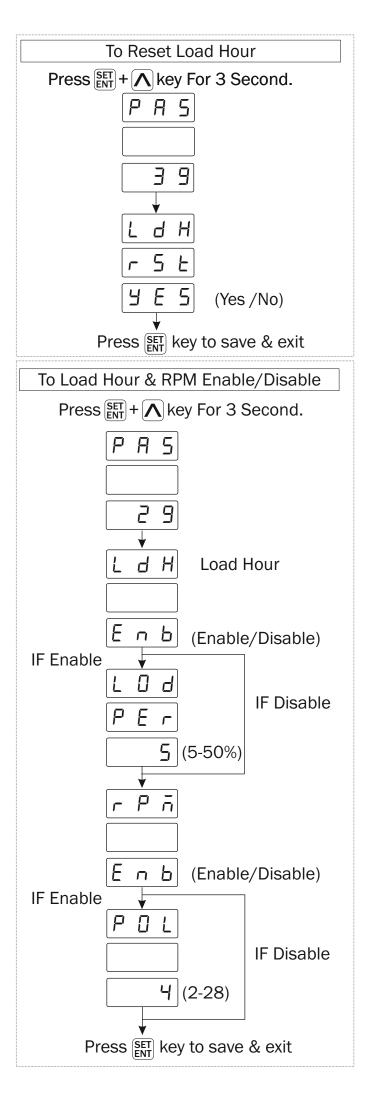
2) If CT Ratio is greater than 999 Amp. then "KA" LED will be turn on and Amp page will be shown as below.



# FRONT PANEL DESCRIPTION

FUNCTION	SYMBOL
Operator mode: To change page Parameter setting mode: To increment value	
To decrement value in Parameter Setting Mode	V
To save and exit from menu	SET
Scroll & hold	V for 5 sec

# **PARAMETER SETTING**



# **3Ø-4W NETWORK SELECTION**

1) VLL Page :-

2) VLN Page :-



3) Amp Page :-

4) V<sub>LL</sub> Avg Page :-

VIII A

 $^{\prime}$  5)  $\mathsf{V}_{\scriptscriptstyle\mathsf{LN}}$  Avg Page :-

Z J VLN
S J J A
S J J A
Avg

6) Load Hour Page:-



7) RPM Page:-



# **3Ø-3W NETWORK SELECTION**

1) VLL Page :-



2) Amp Page:-



3) V<sub>LL</sub> Avg Page :-

4) Load Hour Page :-

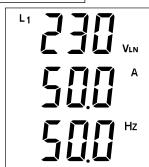


5) RPM Page:-



# **10-2W NETWORK SELECTION**

1) Volt, Amp & Freq. Page :-



2) Load Hour Page:-



3) RPM Page:-



## **MECHANICAL INSTALLATION**

- 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
- 5. Do not connect anything to unused terminals.

# **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.

# **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.

## **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.

# **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 1mm<sup>2</sup> 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.