

3 Phase VIF Meter True RMS

Instrument Division Digital Panel meter-3Phase True RMS, Voltage, Current and Frequency

Data sheet No.: VIF/10/11



Introduction

The 3 Phase VIF meter measures the true RMS voltage, currents and frequency of three phase electrical system. These parameters are displayed on three rows of four digit seven segment LED displays. The first row displays the voltage (both phase to neutral & phase to phase) of the selected phase. The second row displays the current in the selected phase and the third row displays the frequency. The channel selection is done by the push buttons 'V' and 'I' for voltage & current respectively.

Features

- √ Voltage, Current, Frequency measurement
- ✓ True RMS measurement
- ✓ State of Art Microcontroller Based Design.
- ✓ Ultra bright 4 Digit, 3 Row LED Display
- ✓ Site programmable CT ratio.
- ✓ Site programmable PT ratio.
- ✓ MODBUS RS 485 Communication (optional)
- √ 3 Row of 4 Digit LED Display

Optional features

- > MOD BUS communication.
- Baud Rate programmable.
- Device ID programmable

Applications

- Generation Control Panels
- > Distribution Control Panels
- Commercial Panels

Specifications	
Nominal Input Voltage Range	0-300 V AC L-N (520 V L-L)
Nominal Input Current Range	0 - 5 A or 0 - 1A AC / Phase
Nominal Input Frequency	20 HZ to 99.9HZ
Computation	True RMS
Max. continuous input overload Voltage	120% of nominal
Max. continuous input overload current	120% of nominal
Frequency	45-65 HZ
Auxiliary Supply	110 VAC, 50 HZ (90 - 130 V) /
	240 V AC, 50 HZ (180 - 270 V)
Accuracy Class	
Voltage (V)	0.5 % of Full Scale Indication
Current (A)	0.5 % of Full Scale Indication
Frequency (HZ)	0.2 % of C.F.
Nominal input Voltage burden Per Phase	0.2 VA (Max)
Nominal Input Current burden Per Phase	0.2 VA (Max)
Auxilliary Supply Burden	2 VA Maximum.
Display	3 Row of 4 Digit
	(14 mm / 7 Segment) LED Display
Optional Feature	
Communication	With RS 485 Modbus
Туре	2-wire half duplex
Baud Rate	4800,9600,19200
Mechanical Specification	
Enclosure style	Flush mounting with side clamps.
Dimensions	96x96x80
Panel Cut-out	92x92mm
Panel thickness	1-5mm
Front protection rating	IP 52
Case protection rating	IP 30
Material	ABS
Weight	350gm
Terminals	Shrouded screw -clamp
Environment	
Operating Temperature	0°C to +60°C
Storage temperature	-20° to +70° C
Temperature coefficient	100 ppm / C
Dielectric Strength	2KV RMS for 1 minute
Insulation resistance	> 20M Ω @ 500V DC.



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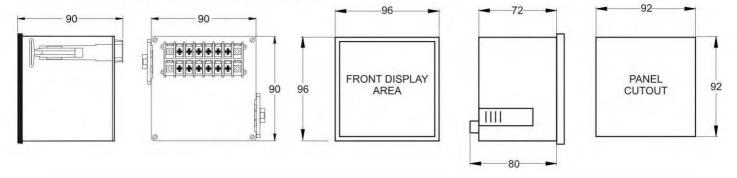
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Monitoring the Parameters

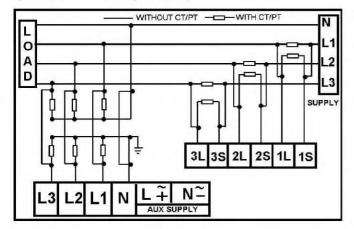
When the Auxiliary supply of the meter is switched ON, the display shows the voltage, current and frequency of the L1 phase. The sequential voltage phases are selected by pressing 'V' button provided on the front panel. The selected phase is indicated by the respective LED. The sequence of phase selection is L1-L2-L3-L1L2-L2L3-L3L1-L1. Similarly current phases are selected by pressing 'l' button provided on the front panel. The selected phase is indicated by the respective LED. The sequence of current phase selection is L1-L2-L3-L1.

Meter Dimensions & Installation cut out



Connection Diagram:

1) 3 Phase VIF Meter (standard)



2) 3 Phase VIF Meter with RS 485 Communication port (optional)

