PM-3DM

DIGITAL MULTIMETER

1. INTRODUCTION

PM-3DM is designed to measure currents, voltages and frequency of 3 phase systems. In furthermore, The device warns the user in case of frequency and phase sequence failure occurances.

2. USAGE of PM-3DM

All connections have to be done according to connection diagramme. (See figüre 1) Entering correct CT ratio value is sufficient for the device to operate smoothly. The current and volatge values are displayed once the device is energized. V(L-N)/V(L-L)/ Frequency values can be displayed on the screen seperately via the use of selector button. Hz LED will warn by flashing on /off in time of phase sequence failure, phase loss and frequency failure. L1,l2,l3 refer to 3 phase connection whereas N to neutral. The main transformers as in order should be connected to the inputs of I11-I12, I21-I22 and I31-I32 whereas its k and l ends should be connected to the terminals seperately.

2.1 Setting of Current Transformer Ratio(CT)

Press "SET" button to display CT value as in "Ctr" on the upper screen and" xxxx' at the bottom. The primer value of CT is set to a value in between "0005A-10000A" via the use of directional keys. Press' SET' to complete the setting. The measured current value can be displayed up to 9999A the maximum. The screen of 'U000' is to be displayed once the CT Value is "Ctr10000A".

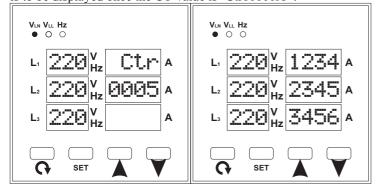


Figure-1 Front Panel

2.2 Monitoring of Voltage, Current and Frequency

V-LN(Phase to Neutral), V-LL(Phase –Phase) and Hz(
Frequency) values are displayed on the left side of screen once the
device is initially energized. The value being required is opted for
via teh use of • key. The LEDs on the upper left corner indicate
the values to which parameters they are referred to. The 3 phase
current values are continously shown on the right side of screen in
between 0.020A-9999A. Nothing else is displayed but only for the
value of CT Ratio at this section.

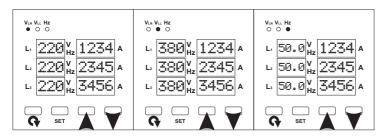


Figure-2 Front Panel

3. CONNECTION DIAGRAM

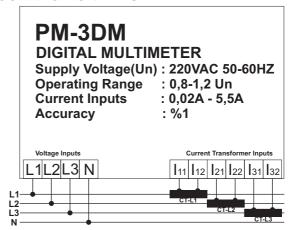


Figure-3 Connection Diagram

4. TECHNICAL SPECIFICATIONS

 $\begin{array}{lll} \textbf{Operating Voltage(Un)} & 220\text{VAC} \pm \%20(\text{L-N}) \\ \textbf{Operating Range} & (0,8 - 1,2) \times \text{Un} \\ \textbf{Operating Frequency} & 50/60\text{Hz} \\ \textbf{Power Consumption} & <3\text{VA} \\ \textbf{Current Transformer Ratio} & 5/5\text{A}.....10000/5\text{A} \\ \textbf{Current Inputs} & 0,05\text{A} - 5,5\text{A} \\ \textbf{Accuracy} & +\%1 \\ \end{array}$

Display Type
7 Segment Red Lights
Operating Temperature
Mounting Type
Panel Mounted
96mm x 96mm x 96mm x 65mm

Protection Class IP 20 Weight 405 gr.

Weight 405 gr.

5. SAFETY & WARNING INSTRUCTIONS

- · Turn off power during connection/wiring.
- · Check correct mains voltage/wiring terminal.
- · Installation shall only be performed by qualified personnel.
- · Do not use any solvent or alike for cleaning.

6. MECHANICAL DIMENSIONS

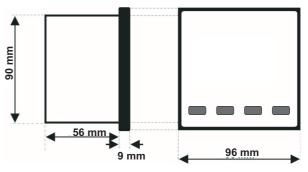


Figure-4 Dimensions