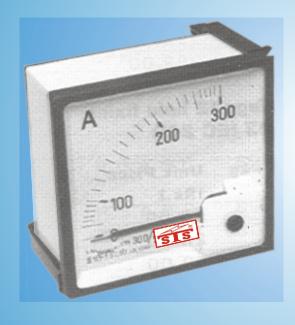


DIGITAL & ANALOGUE PANEL METERS















Directorate of Industries, Uttar Pradesh उद्योग निदेशालय उ०प्रo





ANALOGUE PANEL METERS

GENERAL:

STS Voltmeters and ammeters have been found indespensible by Laboratories and Industrial Houses. all the components used in the manufacture of the instruments are selective and are designed to ensure long term accuracy and service. All parts/sub-assemblies are throughly inspected and gauged at all stages with utmost care by experts.

Constructions:-

The movements are strongly constructed incorporating synthetic saphire jewel bearings, hard chrome plated highly polished pivots and phosphor-bronze cadmium copper hair springs. Moving coil meters are fitted with high flux density magnets results in linear scale. All these meters have zero adjuster accessible from the front.

Moving coil type meters:

Moving coil instruments are meant for the measurement of DC voltage and currents. All the meters are fitted with high flux density magnets resulting in linear scale.

Moving Coil rectifier type meters:

Rectifier type instruments are meant for the measurment of AC voltage and currents. These are moving coil instruments fitted with full wave rectifiers to measure AC quantities.

Moving Iron type Meters:

These are meant for measuring AC quantities. However, DC quantites could also be measured but with slightly low accuracy.

Following type terms are performed as per ISS: 1248-93

1. Vibration Test:-

The meters are subjected to vibrations. This test ensures that if there is any loose component it will be detected before the mateer is passes.

2. Life Test:

The meter is subjected from zero to full scale and the counter meter records the number of operations.

3. High Voltage Breakdown Test:

The meter should withstand 2kV, AC if applied between electrical circuit and any metalic point of the meter for one minute.

4. Over Load Test: The meter is over loaded 120% of its rated capacity for two hours.

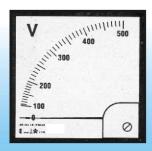
5. Insulation Resistance Test:-

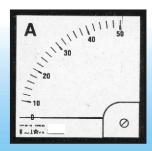
ISS 1248-93 specifies that the insulation resistance should be above 5 megohms. The test is performed accordingly.

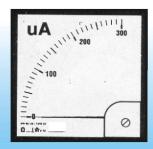
6. Accuracy Test:-

The accuracy test is performed as per ISS 1248-93. The error is calulated on the basis of full scale deflection of the meter











DIGITAL PANEL METERS

STS Digital Panel Meters have been developed to give instantaneous readings of various electrical parameters like V etc.

SIZES : 1/2DIN (96 x48cm) & DIN (96 x96mm)

DIGITS: 12.5 mm seven segment

AUX Supply : 230 V AC

PANEL CUTOUT: 44x92 mm for 1/2 DIN & 92x92 mm for DIN size

* Note:

1. Meters with an auxiliary supply of 415V can be supplied against customer's requirement.

2. Green LED available against specific requirement.

Digital Volt Meters AC:-

0 to 500 VAC 0 to 1000 VAC

Digital Ammeters AC:-

0-2A 0-20A

CTR:-

50/5, 100/5, 150/5, 200/5, 250/5, 300/5, 350/5, 400/5, 450/5, 500/5, 550/5, 600/5, 650/5, 700/5, 750/5 & 800/5

Digital Frequency Meters:-

4 digit, 30 to 70 Hz, Line (Mains) Freq Meter & 4 Digit, 10 to 100 Hz Freq. Meter

Accuracy :

 $\begin{array}{lll} \mbox{Digital Volt Meters (AC)} & : & 0.5\% \pm 2 \mbox{ Digits} \\ \mbox{Digital Ammeters (AC)} & : & 0.5\% \pm 2 \mbox{ Digits} \\ \mbox{Digital Frequency Meters} & : & 0.2\% \pm 2 \mbox{ Digits} \\ \end{array}$

Salient Features:

- 1. STS make Digital meters Body has been protected against shock, and over stress.
- 2. Special electronic enterlocking has been provided which ensure that any voltage distortion can not distroy the internat integrated circuit.







