Analog DC Meters



Features:

- ▶ Linear scale
- ▶ Knife edge pointer
- ► Easy replacement glass & bezel
- ▶ Easy installation with swivel screws



The moving coil panel meters are suitable for the measurement of DC Current & Voltages.

Specifications

Scale and Pointer

Pointer Knife - edge pointer

Pointer deflection 0 to 90° Scale characteristics Linear

Scale division Coarse - fine
Pointer length VIPS27 | VIPS96
34mm | 54mm

Over range:

Voltmeters

Ammeters 10 times for 5 sec : 1 overload

10 times for 0.5~sec: 9 overload

2 times for 5 sec : 1 overload

2 times for 0.5 sec : 9 overload

Scale Interchangeability Interchangeable

Mechanical Specifications

Case details Moulded square case suitable for

mounting in Control / Switchgear panels, Machinery consoles.

pariets, Macrimery consoles

Case material ABS
Front facia Glass
Colour of bezel Black
Position of use Vertical
Panel fixing Swivel screws
Panel thickness < 25 mm

Terminals

Voltmeters and Rectangular studs, M4 screw

Ammeters <= 30A

Electrical Specification

Measured quantity AC voltage or current

Power consumption:

Voltmeters <4.5VA Ammeters < 15A < 0.5VA

Overload capacity (acc. to IS: 1248 / IEC 51
Continuously 1.2 times rated voltage
Short duration 2 times rated current
1s 10 times current
Enclosure code IP 54 case

Insulation resistance > 50 Mohm at 500 VDC

Reference Conditions

Accuracy class 1.5 according to IS: 1248

Ambient temperature 23°C ± 2°

Position of use Nominal position ±1°

Input Rated value of measured quantity
Waveform Sine wave, distortion factor <= 5 %

Frequency 45 to 65HZ

Other conditions IS:1248 (IEC 51/ DIN EN 60051)

Nominal Range of Use

Ambient Temperature 0 to 55° C Position of use Vertical $\pm 5^{\circ}$

Environmental Specification

Operating temperature 0 to 55°C Storage temperature -25 to 65°C

Relative humidity $\leq 75\%$ average, non-

condensing

Shock resistance 15g_n 11 ms

Vibration resistance 10-55-10 Hz/0.15 mm

1.5 g₁ at about 50 Hz.

Measuring Ranges

Description	Specification	
DC Ammeter	From 50uA, 100uA, 1mA, 5mA 1A, 5A, 10A, 25A, 30A TO 100A	DC direct connection
	From 10A, 15A, 20A, 30A, 2500A, 3000A TO 8KA, 10KA	with external shunt 50mV, 60mV OR 75mV
DC Voltmeter	From 10V, 20V, 30V TO 500V, 600V, 1000V	DC direct connection
	From 1KV, 2KV, 5KV TO 8KV, 9KV, 10KV	With external resistor