

Vibrating Reed Frequency Meter

DATA SHEET NO. RF/08/99





DESCRIPTION

It is used to measure the applied frequency. Vibrating Reed Frequency meters indicate the supply frequency by means of individual reeds. When rated voltage \pm 20% is applied across the terminals of the meter, the particular reed, whose natural frequency of vibration coincides with the supply frequency, vibrates with full amplitude. In case the supply frequency falls midway between two reeds both the reeds vibrate, at reduced amplitude. The amplitude of vibration at the tip of reeds is high enough for a distinct indication.

The instrument can be operated at 110V, 220V, or 440V. Terminal screws with washers are provided for the selected operating voltage & remaining two terminals are covered with insulated caps.

In case of RFD96 and RFD144 instruments, two sets of reeds with the same scale range can be offered, giving two independent meters in one casing. This facilitates in comparing the frequency of two voltage supplies for paralleling operation.

FEATURES

- · Vibrating reed.
- · No aging effect.
- · Faster response.
- · Lighter in weight.
- Low power consumption
- Rugged construction
- High reliability

ELECTRICAL SPECIFICATIONS

TYPE : Vibrating Reed

♦ OPERATING VOLTAGE : 110V~125V, 220V~250V, 380V~440V.(4Terminals)

◆ POWER CONSUMPTION : Less than 0.3VA, 0.6VA and 1.2VA for respective voltage in 72 & 96.

Less than 0.6VA, 1.2VA, 2.4VA for respective voltage in 144

• INSULATION RESISTANCE: Greater than $20M\Omega$ at 500V DC

♦ DIELECTRIC STRENGTH : 2kV RMS for 1minute.

◆ OPERATING TEMP. : -10°C to 55°C
◆ STORAGE TEMP. : -20°C to 70°C
◆ HUMIDITY : Up to 95% RH

CONFORMS TO : I.S. 1248 / I.E.C. 60051(Part 4).

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AVAILABLE RANGES

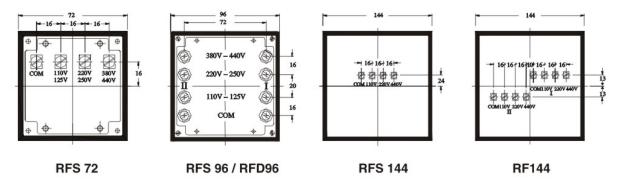
MODEL				RFS 72	RFS 96	RFD 96	RFS 144	RFD 144
RANGE	Resolution	Reeds	Acc. #	Single Scale	Single Scale	Double Scale	Single Scale	Double Scale
45 - 50 - 55	•	13	±1					-
47 - 50 - 53	0.5Hz	13	±1	•	•		-	-
55 - 60 - 65	•	13	±1	•	-			
57 - 60 - 63	0.5Hz	13	±1	-	-			
45 - 50 - 55	0.5Hz	21	±1					
55 - 60 - 65	0.5Hz	21	±1	-				

- # % of center frequency Available models
- ♦ There are 11 reeds in a row in steps of 1Hz for range 45 50 55Hz (55 60 65Hz) with additional 2reeds for 49.5 and 50.5Hz (59.5 and 60.5Hz) respectively.

MECHANICAL SPECIFICATIONS

MODEL	RFS 72	RFS 96	RFD 96	RFS 144	RFD 144
SIZE (mm)	72 X 72 X 70	96 X 96 X70	96 X 96 X70	144 X 144 X 60	144 X 144 X 60
PANEL CUTOUT (mm)	68 X68 ^{+0.7}	92 X 92 +0.8	92 X 92 ^{+0.8}	138 X 138 ^{+1.0}	138 X 138 ^{+1.0}
WEIGHT (Approx. gms.)	300gms.	360gms.	550gms.	650gms.	950gms.

TERMINAL ARRANGEMENT



Ordering information

1) Type 2) Model 3) Range