

DESCRIPTION

It is used to measure the applied frequency, functionally similar to vibrating reed meter. The meter incorporates light emitting diodes which are used instead of vibrating reeds to indicate applied frequency. The frequency is determined by blinking LEDs. When applied frequency matches with the frequency marked on the dial, that particular LED blinks with maximum intensity. When the applied frequency is mid way between two adjacent LEDs, both LEDs blink. When the meter is "switched on" all the LEDs glow sequentially for a period of 1 to 1.5 seconds. Thereafter it will indicate the applied frequency.

All voltage ranges are available in single meter. Terminal screws with washers are provided only for specific voltage as per requirement & remaining two terminals are covered with insulated caps.

In case of 96mm & 144mm instruments, two sets of LEDs with the same scale range can be offered, giving two independent meters in one casing (Double Scale). This facilitates in comparing the frequency of two voltage supplies for paralleling operation.

FEATURES

- ◆ No vibrating parts.
- ◆ No aging effect.
- ◆ Faster response.
- ◆ Lighter in weight.
- ◆ Low power consumption
- ◆ No effect of external vibration
- ◆ Visible in dark & from distance.

ELECTRICAL SPECIFICATIONS

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|-----------------------------|---|
| ◆ TYPE | : Electronic |
| ◆ OPERATING VOLTAGE | : 110V~125V, 220V~250V, 380V~440V.(4Terminals) |
| ◆ POWER CONSUMPTION | : Less than 3VA (Single scale), Less than 6VA (Double scale). |
| ◆ MEASURING METHOD | : Time measurement between consecutive cycles. |
| ◆ DISPLAY : Box LED, Colour | : Red/Green, Size : 6.3 X 3.7mm |
| ◆ SAMPLING RATE | : 2~3 samples/sec. |
| ◆ RESPONSE TIME | : Less than 1sec. |
| ◆ INSULATION RESISTANCE | : Greater than 20M Ω 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) |

Electronic LED Frequency Meter



AVAILABLE RANGES

| MODEL | | | | ELFS 72 | ELFS 96 | ELFD 96 | ELFS 144 | ELFD 144 |
|--------------|------------|------|--------|--------------|--------------|--------------|--------------|--------------|
| RANGE | Resolution | LEDs | 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 | ■ | ■ | ■ | ■ | ■ |
| 370-400-430 | 5Hz | 13 | ±1 | ■ | ■ | ■ | ■ | ■ |
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% of centre frequency ■ Available models

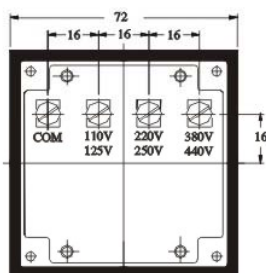
◆ There are 11 LEDs in a row in steps of 1Hz for range 45 – 50 – 55Hz (55 – 60 – 65Hz) with additional 2LEDs for 49.5 and 50.5Hz (59.5 and 60.5Hz) respectively.

NOTE : FREQUENCY METER FOR OTHER RANGE / RESOLUTION SHALL BE SUPPLIED ON REQUEST IF FEASIBLE.

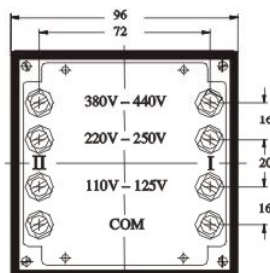
MECHANICAL SPECIFICATIONS

| MODEL | ELFS 72 | ELFS 96 | ELFD 96 | ELFS 144 | ELFD 144 |
|-----------------------|-------------------------|-------------------------|-------------------------|---------------------------|---------------------------|
| SIZE (mm) | 72 X 72 X 70 | 96 X 96 X 70 | 96 X 96 X 70 | 144 X 144 X 60 | 144 X 144 X 60 |
| PANEL CUTOUT (mm) | 68 X 68 ^{+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.) | 350gms. | 400gms. | 600gms. | 500gms. | 700gms. |

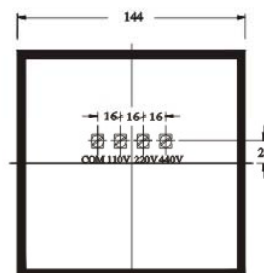
TERMINAL ARRANGEMENT



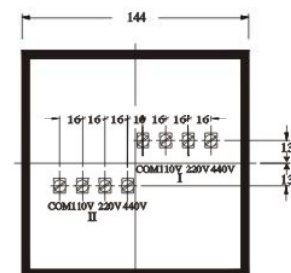
ELFS 72



ELFS96 / ELFD96



ELFS144



ELFD144

Ordering information

1) Type 2) Model 3) Range 4) Operating Voltage