

DMS-20PC-2-LM

Self-Powered LED Display High-Voltage, 50/60/400Hz AC Line Monitor



FEATURES

- Self-powered, two-terminal operation
- Dual operating ranges: 240-310Vac at 50/60Hz or 85-140Vac at 400Hz
- Half-wave averaging, rms calibrated
- Large, easy-to-read, bright red LED display
- Rugged, epoxy-encapsulated construction
- Built-in bezel for panel mounting
- Reliable screw terminals for easy installation
- Small 1.38" x 0.88" x 1.0" package

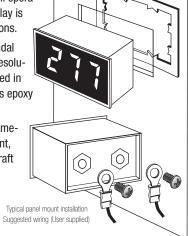
specifically designed for high-voltage or high-frequency operation. The DMS-20PC-2-LM's unique power-supply circuitry allows a single model to

DATEL's DMS-20PC-2-LM is a component-size, self-contained, low-cost ac voltmeter

unique power-supply circuitry allows a single model to operate from either 240 to 310Vac with 50/60Hz inputs or from 85 to 140Vac with 400Hz inputs. The meter requires no external components or auxiliary power for full operation! Its large, 0.37"/9.4mm, bright red LED display is easily readable under virtually all lighting conditions.

DMS-20PC-2-LM employs half-wave sinusoidal averaging (rms calibrated) to achieve a display resolution of 1Vac over its full operating range. Packaged in a red-filter case with a built-in bezel, the meter is epoxy encapsulated for ruggedness.

This low-cost, extremely versatile digital voltmeter is ideal for use in emergency power equipment, 277Vac fluorescent lighting systems, 400Hz aircraft installations, and any other application requiring accurate, high-voltage or high-frequency, ac line monitoring.



Functional Specifications

Input

Voltage Range ① 240-310Vrms (47-99Hz) 85-140Vrms (350-450Hz)

Current Consumption 50mArms (max.)

Performance

Sampling Rate 2.5 readings/second
Measurement Type Half-wave average, rms

calibrated for sinusoidal input

Accuracy @ $+25^{\circ}$ C $\pm 1V$ (typ.), $\pm 2V$ (max.)

Temperature Drift

 $(-25 \text{ to } +60^{\circ}\text{C})$ $\pm 0.15 \text{ Volts/°C (max.)}$

Mechanical

Dimensions 1.38" x 0.88" x 1.00"
Display Type 3 digit, red LED, 0.37"/9.4mm
Weight 1 ounce (28 grams)
Case Material Polycarbonate

Environmental

 $\begin{array}{ll} \text{Operating Temperature} & -25 \text{ to } +60^{\circ}\text{C} \\ \text{Storage Temperature} & -40 \text{ to } +75^{\circ}\text{C} \\ \text{Humidity (Non-condensing)} & 0 \text{ to } 95\% \\ \end{array}$

① Operation and accuracy at inputs above or below this range are not specified.

Ordering Information

DMS-20PC-2-LM-C High-voltage ac line monitor with screw terminals and screws

DMS-BZL3-C Panel mount bezel

DMS-BZL4-C Panel mount bezel with sealing gasket

DMS-20-CP Panel cutout punch

Brass screws (6-32 thread) and a panel-mount retaining clip are supplied with each meter









DMS-20PC-2-LM

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Dimensions in inches (millimeters) Tolerances: 2 PL Dec ±0.02 (±0.51) 3 PL Dec ±0.010 (±0.254) 1.30 (33.0)Recommended panel cutout dimensions: 1.336 (33.93)W × 0.838 (21.29)H Internal corner radii 0.032 (0.81) Max. DMS-20PC-2-LM 0.04 (1.016)0.04 0.04 (1.016)(1.016)(35.1)UNC THD 0 44 (11.2)0.80 0.88 0.37 (20.3)(22.4)(9.4)0.75 0.32 1 00 (19.1) (8.1) (25.4)0.19 (4.8) #2-56 INSERT 0.156 (3.96) DEEP DMS-BZL3-C 1.07 1.28 (27.2) (32.5) 1.63 (41.4) 0.10 (2.5)



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1.83 (46.5)

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