

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

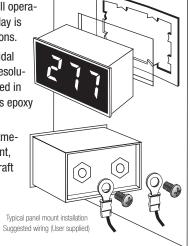
specifically designed for high-voltage or high-frequency operation. The DMS-20PC-2-LM's unique power-supply circuitry allows a single model to

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

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

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

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

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)



Murata Power Solutions. Inc.

11 Cabot Boulevard, Mansfield, MA 02048-1151 U.S.A. Tel: (508) 339-3000 (800) 233-2765 Fax: (508) 339-6356

www.murata-ps.com email: sales@murata-ps.com ISO 9001 REGISTERED

07/15/08

1.83 (46.5)

Murata Power Solutions, Inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.

© 2008 Murata Power Solutions, Inc. USA: Mansfield (MA), Tel: (508) 339-3000, email: sales@murata-ps.com Toronto, Tel: (866) 740-1232, email: toronto@murata-ps.com UK: Milton Keynes, Tel: +44 (0)1908 615232, email: mk@murata-ps.com

Montigny Le Bretonneux, Tel: +33 (0)1 34 60 01 01, email: france@murata-ps.com

Germany: München, Tel: +49 (0)89-544334-0, email: munich@murata-ps.com Tokyo, Tel: 3-3779-1031, email: sales_tokyo@murata-ps.com Japan: Osaka, Tel: 6-6354-2025, email: sales_osaka@murata-ps.com

Website: www.murata-ps.jp

China: Shanghai, Tel: +86 215 027 3678, email: shanghai@murata-ps.com Guangzhou, Tel: +86 208 221 8066, email: guangzhou@murata-ps.com

