

DMS-20PC-1-LM

Self-Powered, 3 Digit, LED
AC Line Voltage Monitors

Features

- Plugs directly into USA-style wall outlets
- Screw terminals for panel mounting
- Small 1.38" x 0.88" x 1.0" packages
- Large, easy-to-read, red LED displays
- Fully encapsulated for harsh environments
- Half-wave averaging, rms calibrated
- UL, CSA and IEC1010-1 certified
- Very low cost!

Functional Specifications

Input

| | |
|------------------------|-----------------------------------|
| Voltage Range ① | 85-264Vrms |
| Overvoltage Protection | 300Vrms (Overvoltage category II) |
| Frequency Range ① | 47-63Hz |
| Current Consumption | 50mArms (max.) |

Performance

| | |
|-------------------------------------|--|
| Sampling Rate | 2.5 readings/second |
| Measurement Type | Half-wave average, rms calibrated for sinusoidal input |
| Accuracy @ +25°C | ±1V (typ.), ±2V (max.) |
| Temperature Drift (-25 to +60°C) | ±0.15 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

| | |
|---------------------------|--------------|
| Operating Temperature | -25 to +60°C |
| Storage Temperature | -40 to +75°C |
| Humidity (Non-condensing) | 0 to 95% |

① Operation and accuracy at inputs above or below these ranges are not specified.

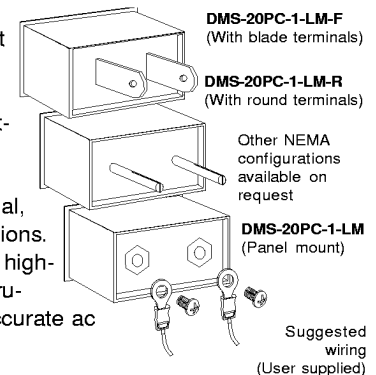
Ordering Information

| | |
|--|---|
| DMS-20PC-1-LM | With threaded terminations and screws |
| DMS-20PC-1-LM-F | With blade terminals, factory installed |
| DMS-20PC-1-LM-R | With round terminals, factory installed |
| DMS-20-CP | Panel cutout punch |
| DMS-BZL3 | Panel mount bezel |
| DMS-BZL4 | Panel mount bezel with sealing gasket |
| Brass screws (6-32 thread) and a panel-mount retaining clip are supplied with each meter | |

DATEL's DMS-20PC-1-LM is a component-size, self-contained, low-cost ac voltmeter for true line measurements. It requires no additional components or auxiliary power. Simply plug it into any wall outlet and instantly read voltages from 85 to 264Vac (47-63Hz). The large (0.37"/9.4mm), bright red LED display makes the DMS-20PC-1-LM easily readable under any lighting conditions.

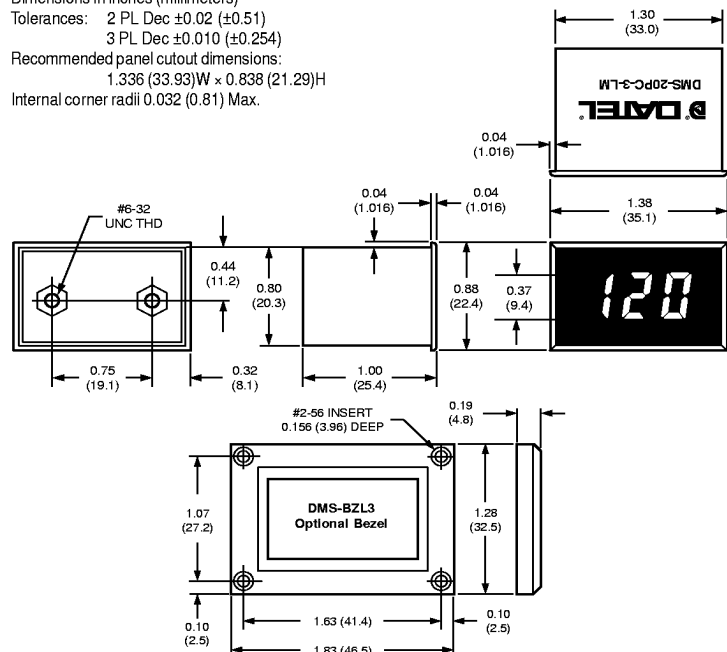
DMS-20PC-1-LM employs half-wave sinusoidal averaging (rms calibrated) and has a display resolution of 1Vac over its full input range. Packaged in a red-filter case with built-in bezel, the meter is fully encapsulated for ruggedness. All units are overvoltage protected to 300Vac.

This low-cost meter is ideal for industrial, laboratory, office and field-service applications. Its miniature size is perfect for design into high-end consumer electronics, laboratory instrumentation and other products requiring accurate ac line monitoring.



Mechanical Specifications

Dimensions in inches (millimeters)
Tolerances: 2 PL Dec ±0.02 (±0.51)
3 PL Dec ±0.010 (±0.254)
Recommended panel cutout dimensions:
1.336 (33.93)W x 0.838 (21.29)H
Internal corner radii 0.032 (0.81) Max.



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