

## Self-Powered LED Display High-Voltage, 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

### FUNCTIONAL SPECIFICATIONS

#### Input

|                     |   |
|---------------------|---|
| Voltage Range ①     | 240-310Vrms (47-63Hz)<br>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°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 this range are not specified.

### ORDERING INFORMATION

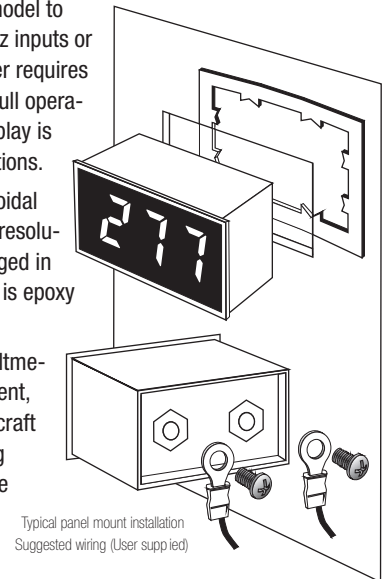
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|------------------------|--|
| <b>DMS-20PC-2-LM-C</b> | High-voltage ac line monitor with screw terminals and screws |
| <b>DMS-BZL3-C</b>      | Panel mount bezel  |
| <b>DMS-BZL4-C</b>      | Panel mount bezel with sealing gasket                        |
| <b>DMS-20-CP</b>       | Panel cutout punch   |

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

DATEL's DMS-20PC-2-LM is a component-size, self-contained, low-cost ac voltmeter specifically designed for high-voltage or high-frequency operation. The DMS-20PC-2-LM's 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.



### 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.

