DMS-20PC-3-LM

Self-Powered LED Display 480V AC Line Monitor

Discontinued

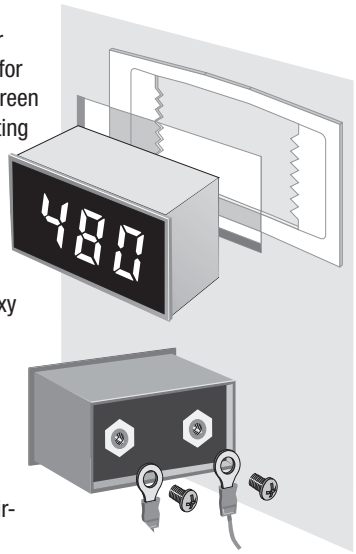
FEATURES

- Self-powered, two-terminal operation
- 350 to 600Vac operating input range
- Half-wave averaging, rms calibrated
- Large, easy-to-read, bright red or green 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

Murata Power Solutions' DMS-20PC-3-LM is a low-cost, self-powered, 2-wire digital voltmeter designed for monitoring 480Vac 3-phase primary power. The DMS-20PC-3-LM's unique power-supply design allows a single model to operate from 350 to 600Vac (47-63Hz). The meter requires no external components or auxiliary power for full operation! Its large, 0.37″/9.4mm, bright red or green LED display is easily readable under virtually all lighting conditions.

DMS-20PC-3-LM employs rms calibrated, half-wave sinusoidal averaging to achieve a display resolution of 1Vac over its full operating range. Packaged in a subminiature (1.38″ x 0.88″ x 1.0″) red-filter case with a built-in bezel, the meter is epoxy encapsulated for ruggedness. An optional bezel assembly, featuring metal fasteners, simplifies panel mounting.

This easy-to-use, vibration-proof voltmeter is the ideal digital upgrade for fragile analog-style panel meters in 480Vac power distribution equipment. It similarly excels in any new application requiring accurate, high-voltage, ac line monitoring.



Typical panel mount installation and suggested wiring (user supplied)

Functional Specifications

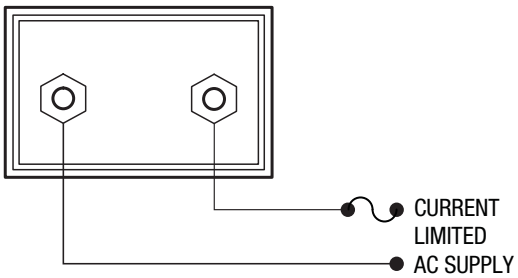
Input	
Voltage Range ①	350-600Vrms (47-63Hz)
Current Consumption	50mArms (max.)
Performance	
Sampling Rate	2.5 readings/second
Measurement Type	Half-wave average, rms calibrated for sinusoidal input
Accuracy @ +25°C	±1V (typ.), ±2V (max.)
Temperature Drift (–25 to +60°C)	±0.15 Volts/°C (max.)
Mechanical	
Dimensions	1.38″ x 0.88″ x 1.00″
Display Type	3 digit LED, 0.37″/9.4mm
Weight	1 ounce (28 grams)
Case Material	Polycarbonate
6-32 screw torque	6-8 in-lb (0.7 – 0.9N-m)
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

DMS-20PC-3-LM-C	Red LED display
DMS-20PC-3-LM-G-C	Green LED display
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



Typical Connection Diagram

RoHS COMPLIANT

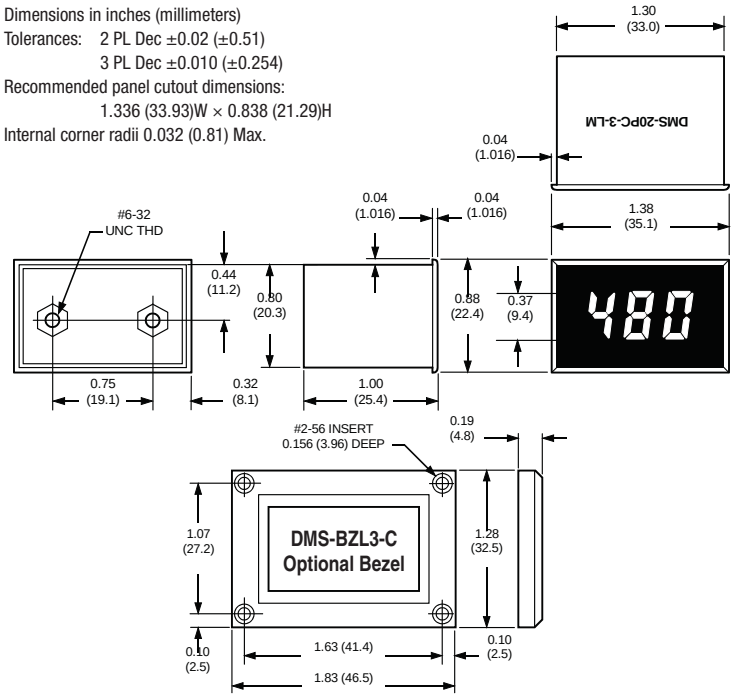
For full details go to www.murata-ps.com/rohs

Power Supply Polarity, Fusing, Wiring, and Grounding: DMS-20PC-3-LM's ac-supply terminals are not polarity sensitive, that is, they have no "AC LO" or "AC HI" designations. These meters do not include nor require a connection to earth/chassis ground.

All ac-supply wiring must be rated for the voltages and currents they will conduct and comply with any code or application-mandated requirements pertaining to the user's specific installation. 600V UL rated wire suitable for the intended application is required.

DMS-20PC-3-LM ac voltmeters are not internally fused. The rear threaded standoff input-terminals are to be used only for powering the voltmeter's internal circuitry; they must not be used to supply power to external loads. The supply wires feeding these voltmeters must be fused with a 0.25A/600V time delay/time lag fuse, in accordance with applicable regulatory codes.

The recommended wire size is 16AWG to 20AWG (1.31mm^2 to 0.52mm^2) stranded copper wire. Wires must be properly stripped and attached to the threaded standoffs such that their insulation is not pinched by the supplied 6-32 screws. Rated tightening torque for the 6-32 screws is 7 to 8 pound-inches (0.8 to 0.9N-m).



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ISO 9001 and 14001 REGISTERED

This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy:
Refer to: http://www.murata-ps.com/requirements/