

PE86238



DM6000 series digital panel meter front display (above), and rear (below)

PE86261



The PowerLogic DM6000 series digital panel meters offer the basic measurement capabilities required to monitor an electrical installation.

Characterized by their rugged construction, compact size, and low installation costs, these state-of-the-art meters are ideal for control panels, motor control centres and genset panels.

The PowerLogic DM6000 series digital meter is available in two different versions to better fit specific applications:

DM6000, basic version;

DM6200, basic version plus an RS485 port for Modbus communication.

Applications

Power monitoring operations.

Equipment monitoring.

Preventive maintenance.

Main characteristics

Easy to read display

The bright, alphanumeric 15mm high LED display provides 3 lines for measurement values with 4 digits per line. This display auto-scales for Kilo, Mega and Giga values. Auto scrolling mode allows for easy reading.

Analogue load bar

The colour-coded analogue load bar indicates the percentage of load through 12 LED segments.

Turbo Key access to information

The Turbo Key gives access to the most commonly viewed parameters or enter set up mode with a single push of the button.

Quick and easy installation

Setup is done through the front panel keys. Quick entry to setup during power up by TURBO key. Direct connection for metering voltage inputs up to 480 Vac L-L.

Colour-coded terminal board labeling

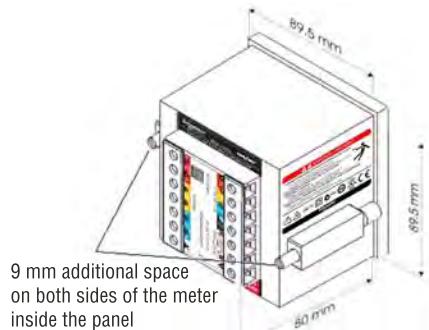
The colour-coded label on the terminal board helps ensure accurate wiring.

Secure settings

Safeguard access to setup parameters with unique password protection. A keypad lock lets you display a user-selected page by default.

Part numbers

| Description | Schneider Electric |
|---|--------------------|
| DM6000 digital meter with basic readings; no communications | METSEDM6000 |
| Same as DM6000 plus an RS485 communication port | METSEDM6200 |



PowerLogic DM6000 series digital panel meter dimensions.

| Selection guide | | DM6000 | DM6200 |
|---------------------------------|---|-------------|--------|
| General | | | |
| Use on LV and HV systems | | ■ | ■ |
| Current and voltage accuracy | 1.0 % | 1.0 % | |
| Number of samples per cycle | 20 at 50 Hz | 20 at 50 Hz | |
| Instantaneous rms values | | | |
| Current | Per phase & Neutral | ■ | ■ |
| Voltage | Average Phase to Neutral & Phase to Phase | ■ | ■ |
| Frequency | | ■ | ■ |
| Power factor | Average & per phase | ■ | ■ |
| Unbalance | Current, voltage | ■ | ■ |
| Phase angle | Between V & I, Ph1, Ph2, Ph3 | ■ | ■ |
| RPM | For generator only, speed calculated on generator voltage output and number of machine poles. | ■ | ■ |
| Other measurements | | | |
| ON hours | Operating time for meter in hours | ■ | ■ |
| INTR | Number of interruptions | ■ | ■ |
| Display | | | |
| LED display | | ■ | ■ |
| Communication | | | |
| RS-485 port | - | 1 | |
| Modbus protocol | - | | ■ |

Electrical characteristics

| | | |
|--|---|---|
| Type of measurement | True RMS up to the 15th harmonic 20 samples per cycle at 50 Hz | |
| Measurement accuracy* | Current and voltage | 1.0 % of reading |
| | Frequency | 0.1 % of reading |
| | Power factor | 1.0 % of reading |
| * Additional error of 0.05% of full scale, for meter input current below 100mA | | |
| Data update rate | 1 second | |
| Input-voltage characteristics | Inputs | V1, V2, V3, Vn |
| | Measured voltage | 80 - 480 V AC L-L without PTs Up to 999 kV with external PTs |
| | Permissible overload | 1.10 Un (480 V L-L) |
| | Burden | 0.2 VA per phase max. |
| Input-current characteristics | Impedance | VLL - 4 Mohms, VLN - 2 Mohms |
| | Frequency range | 45 - 65 Hz |
| | CT ratings | Primary Secondary |
| | Measurement range | 1 A - 99.0 kA 1 A - 5 A |
| Power supply | Permissible overload | 50 mA - 6 A (5 mA is the starting) |
| | Burden | 10 A continuous |
| | Impedance | 0.2 VA per phase max. |
| | AC | < 0.1 ohm |
| Power supply | DC | 44 - 277 V AC at 50 Hz/60 Hz |
| | Ride-through time | 44 - 277 V DC |
| | Burden | 100 ms at 50V |
| | | 3 VA max. |

Mechanical characteristics

| | |
|-------------------------|--|
| Weight | 0.500 kg (shipping), 0.400 kg (unpacked) |
| IP degree of protection | Front: IP 51; Back: IP 40 |
| Dimensions | Bezel: 96 x 96 mm Depth: 80 mm behind bezel Panel cutout: 92 x 92 mm |

Environmental conditions

| | |
|-----------------------|-----------------------------|
| Operating temperature | -10°C to +60°C |
| Storage temperature | -25°C to +70°C |
| Humidity rating | 5 to 95 % RH non-condensing |
| Altitude | 2000 m |
| Measurement CAT | III |
| Pollution degree | 2 |
| Protection class | 2 |

Electromagnetic compatibility

| | |
|--|--|
| Electrostatic discharge | IEC 61000-4-2 |
| Immunity to electromagnetic RF fields | IEC 61000-4-3 |
| Immunity to electrical fast transients | IEC 61000-4-4 |
| Immunity to surge waves | IEC 61000-4-5 |
| Conducted disturbance immunity | IEC 61000-4-6 |
| Damped oscillatory waves immunity | IEC 61000-4-12 |
| Impulse voltage withstand | 6kV for 1.2/50 μ s per IEC 60060-1 |
| Conducted and radiated emissions | CISPR11 Class A |

Safety and standards

| | |
|---|--|
| Safety construction | Self extinguishable V0 plastic; UL 508 |
| CE certification IEC61010 | Yes |
| Complies with Regulation (EC) n° 1907/2006 of Dec 18 2006 named REACH (related to the Registration, Evaluation, Authorization and restrictions applicable to Chemical substances) | |

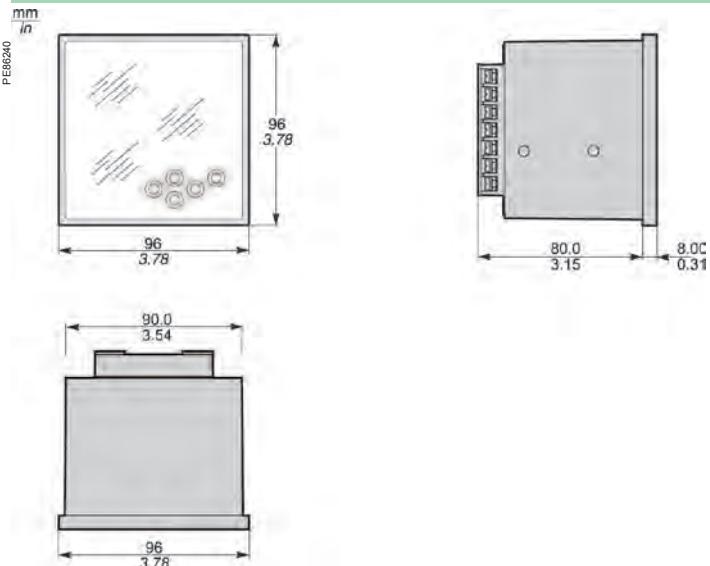
Communication

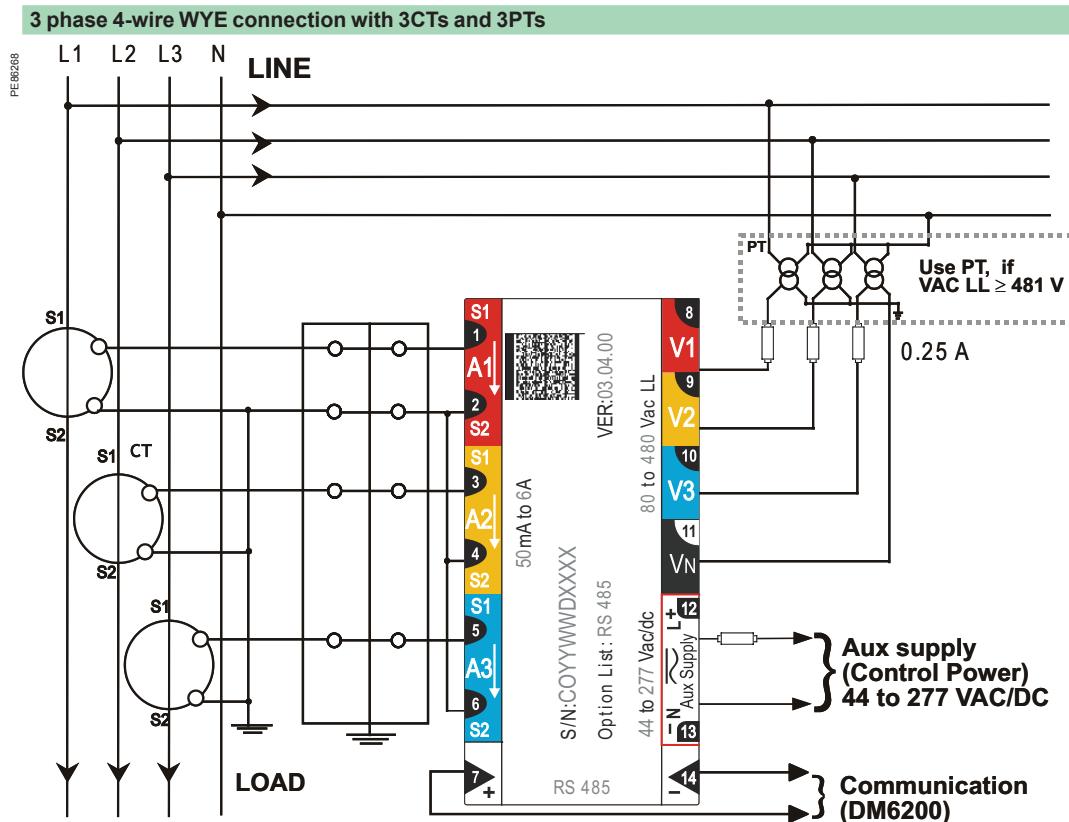
| | |
|-------------|---|
| RS-485 port | 2 terminals only; Baud rate up to 19,200 bps Protocols: Modbus RTU |
|-------------|---|

Display characteristics

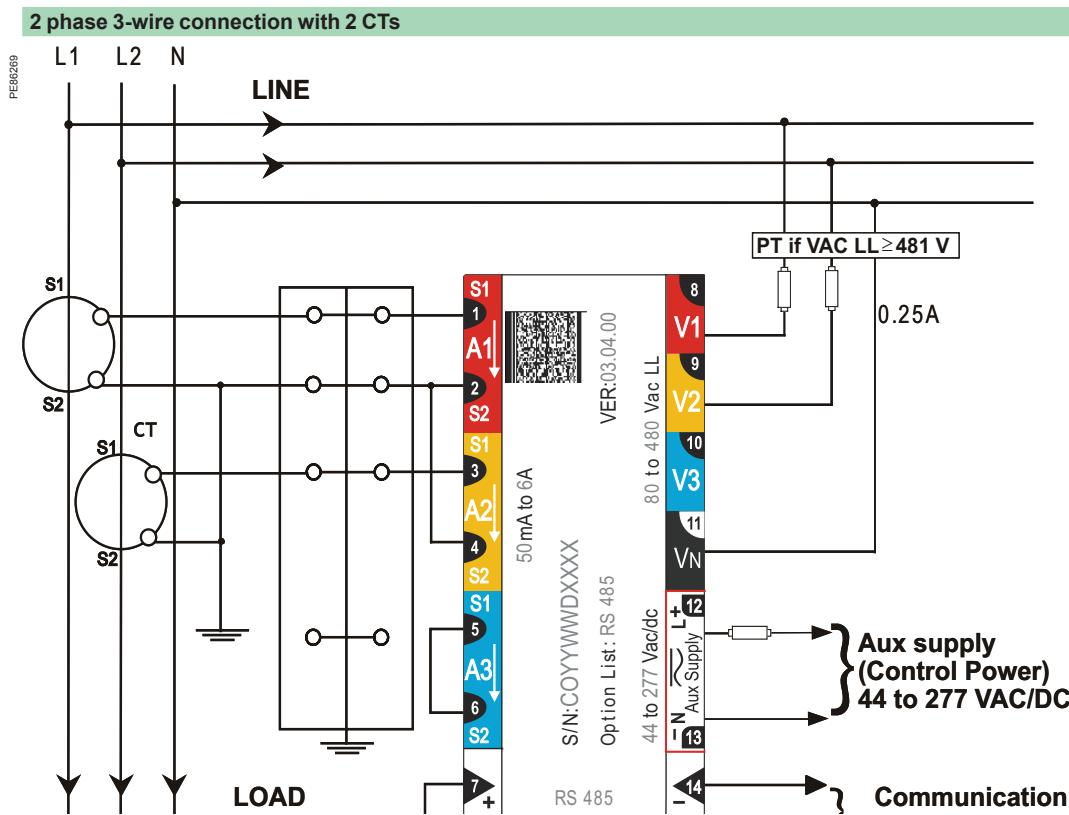
| | |
|------------------------|---|
| Integrated LED display | View 3 parameters together on 3 line, 4 digits per line display. Auto-scaling capability for Kilo, Mega, and Giga values. User-selectable default display page. Password protection for setup parameters. |
| Analogue load bar | Colour-coded analogue indicator provides an option to select the full scale of the load bar based on the sanctioned power limit |

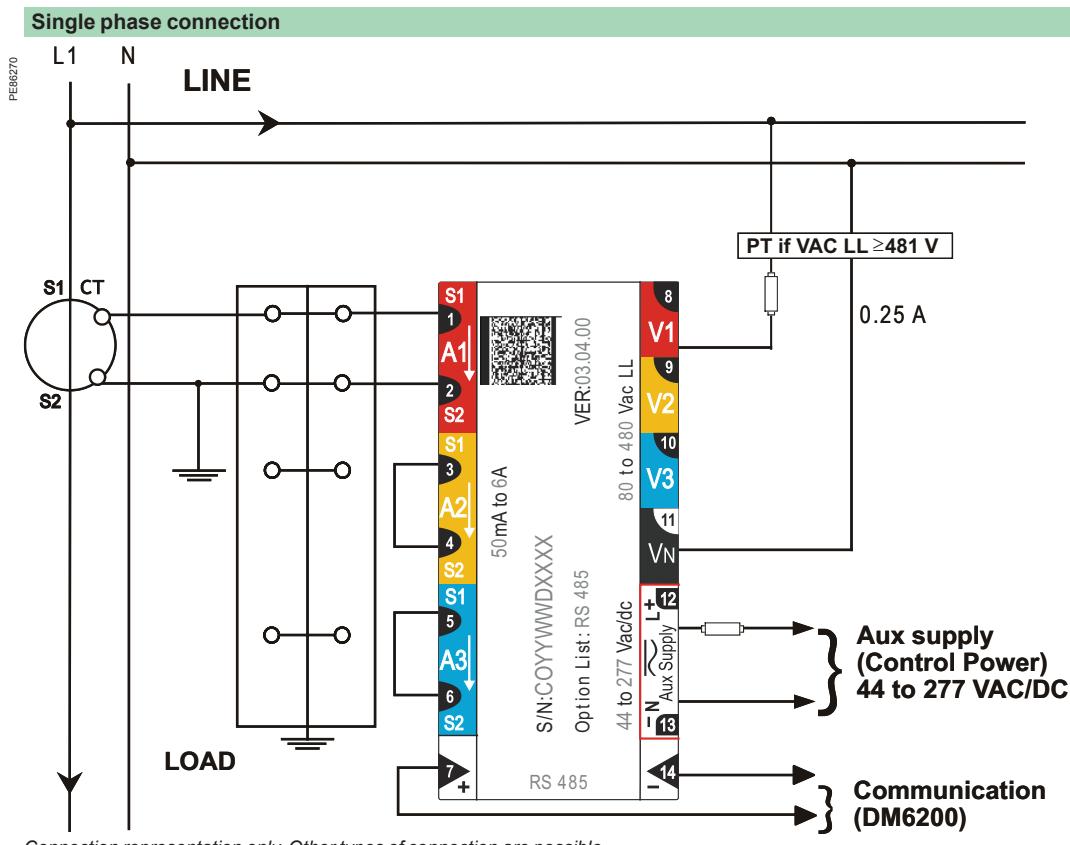
DM6000 series meter dimensions





Connection representation only. Other types of connection are possible.
Refer to the DM6000 series Quick Start Guide for details.





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