

# DM6000 series

## Functions and characteristics

PE66238



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

PE66261



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.

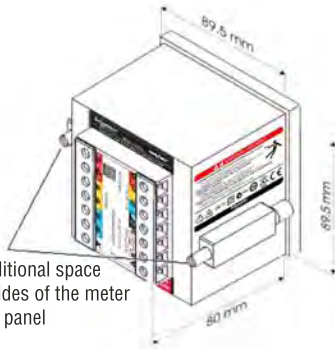
### Part numbers

Description	Schneider Electric
DM6000 digital meter with basic readings; no communications	<b>METSEDM6000</b>
Same as DM6000 plus an RS485 communication port	<b>METSEDM6200</b>

# DM6000 series

## Functions and characteristics (cont.)

PE66239



9 mm additional space on both sides of the meter inside the panel

PowerLogic DM6000 series digital panel meter dimensions.

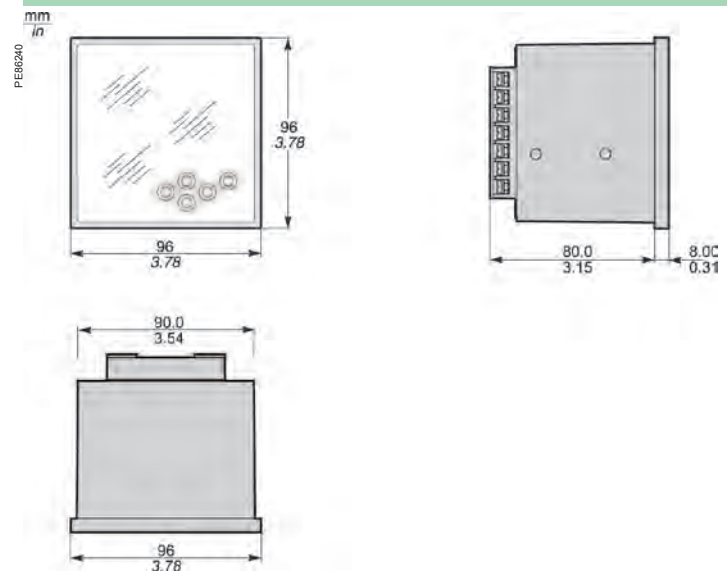
Selection guide		DM6000	DM6200
<b>General</b>			
Use on LV and HV systems		■	■
Current and voltage accuracy		1.0 %	1.0 %
Number of samples per cycle		20 at 50 Hz	20 at 50 Hz
<b>Instantaneous rms values</b>			
Current	Per phase & Neutral	■	■
Voltage	Average Phase to Neutral & Phase to Phase	■	■
Frequency		■	■
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.	■	■
<b>Other measurements</b>			
ON hours	Operating time for meter in hours	■	■
INTR	Number of interruptions	■	■
<b>Display</b>			
LED display		■	■
<b>Communication</b>			
RS-485 port		-	1
Modbus protocol		-	■

# DM6000 series

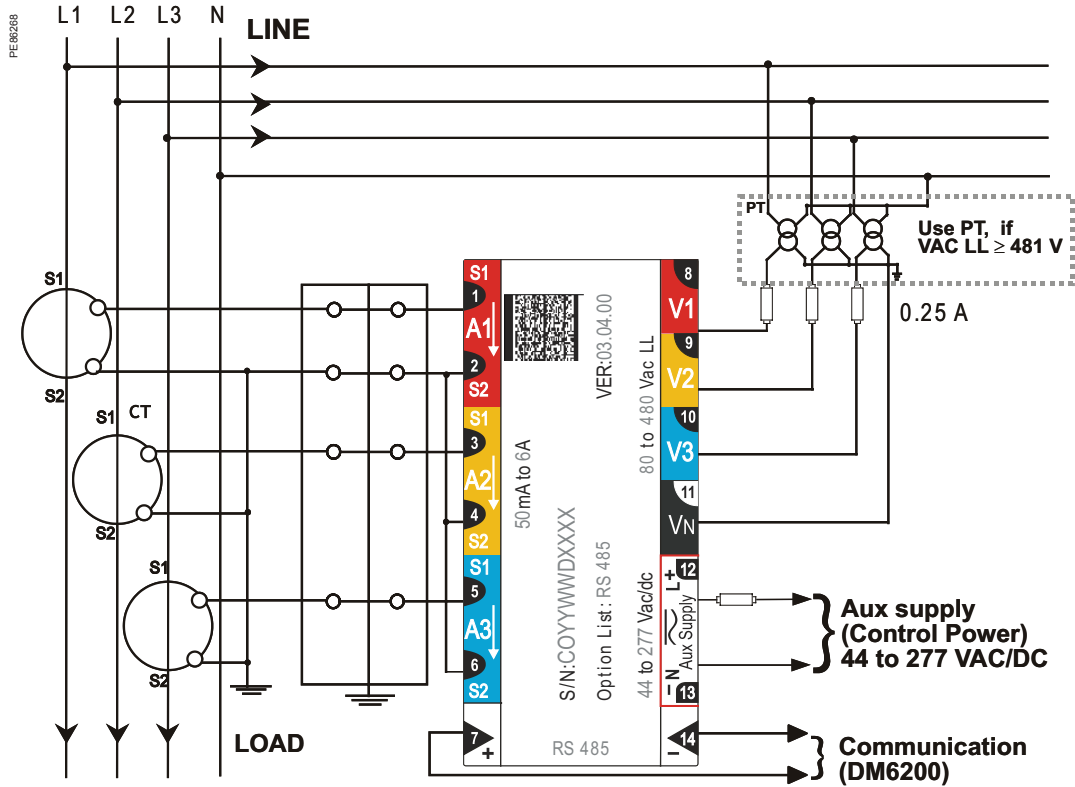
## Functions and characteristics (cont.)

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.	
	Impedance	VLL - 4 Mohms, VLN - 2 Mohms	
	Frequency range	45 - 65 Hz	
Input-current characteristics	CT ratings	Primary	1 A - 99.0 kA
		Secondary	1 A - 5 A
	Measurement range	50 mA - 6 A (5 mA is the starting)	
	Permissible overload	10 A continuous	
	Burden	0.2 VA per phase max.	
	Impedance	< 0.1 ohm	
Power supply	AC	44 - 277 V AC at 50 Hz/60 Hz	
	DC	44 - 277 V DC	
	Ride-through time	100 ms at 50V	
	Burden	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 µS 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

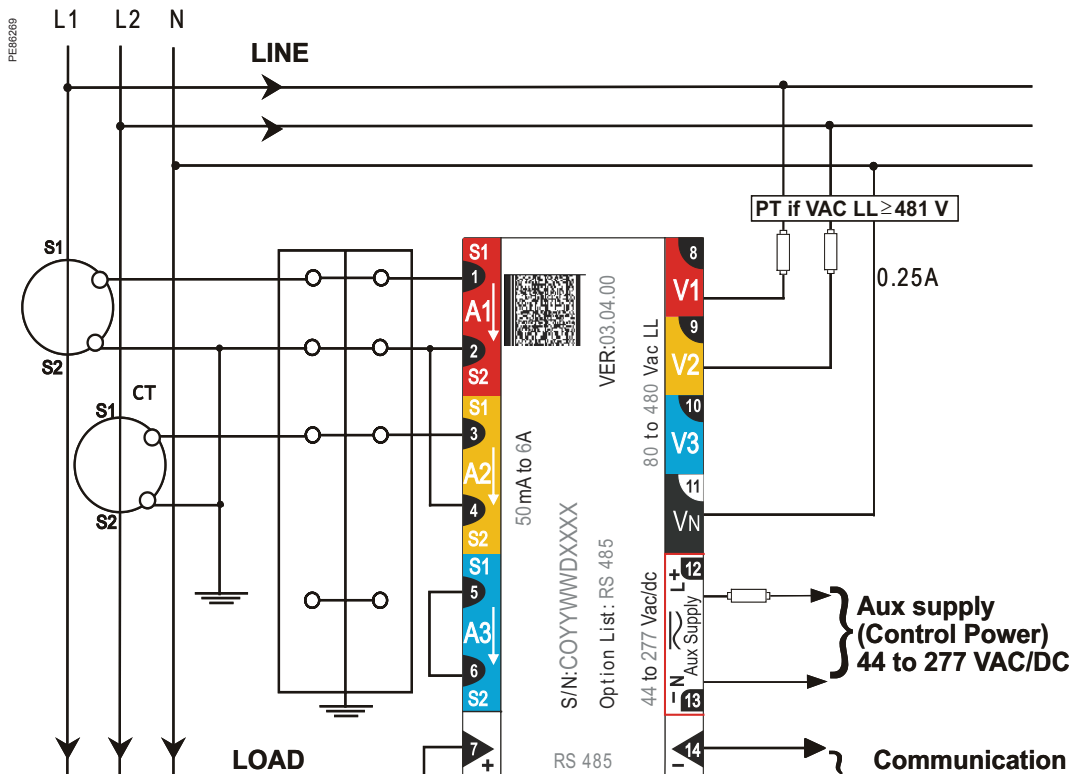


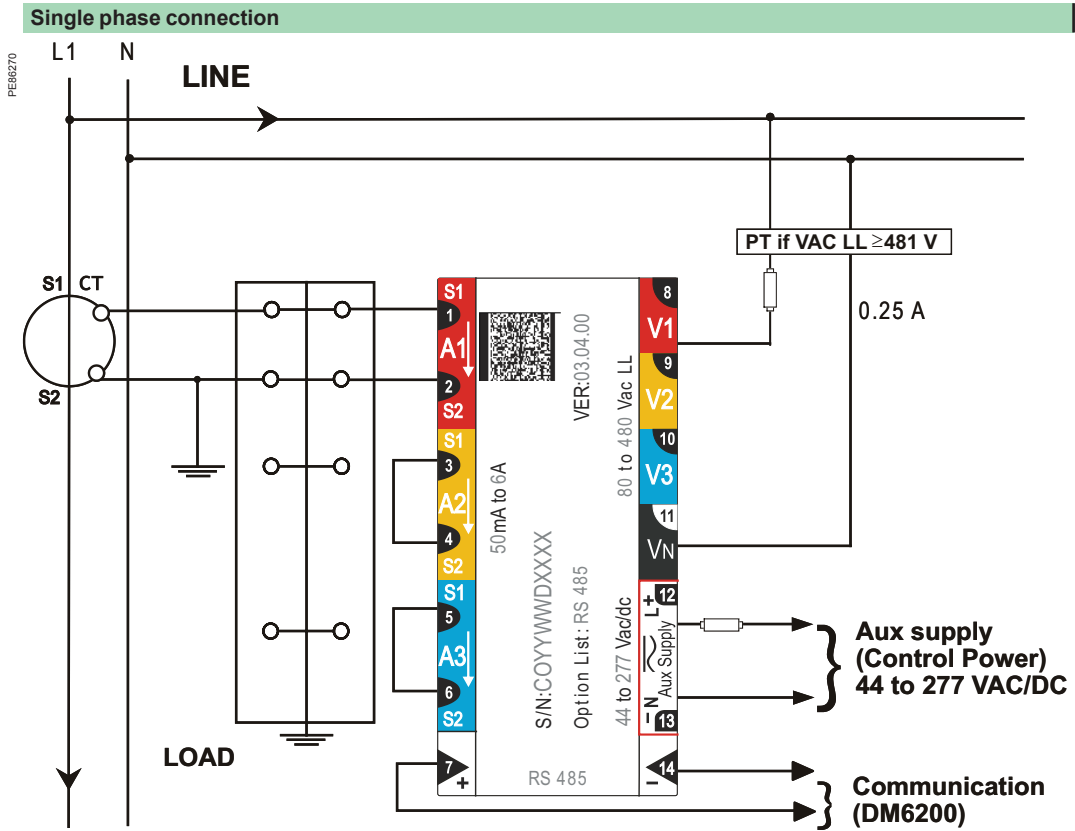
**3 phase 4-wire WYE connection with 3CTs and 3PTs**



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

**2 phase 3-wire connection with 2 CTs**





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