DME D330 three-phase energy meter

Lovato electric

ENERGY AND AUTOMATION

DME D330

Three-phase energy meter with CT insertion with RS485 interface

DME D330

Order code	Description	Qty per pkg	Wt
		n°	[kg]
Digital meter for three phase with or without neutral			
DME D330	Connection by CT/5A, RS485 interface, multi-measurements	1	0.332

The three-phase energy meter with CT insertion, model DME D330, has been designed to combine the utmost ease of use with a wide range of advanced functions. Despite the extremely limited dimensions of the modular housing (just 4 modules), the energy meter features the same performance as a high-level device. The backlit LCD display permits a clear and intuitive user interface. The DME D330 also features an isolated RS485 communication interface with Modbus protocol to permit supervision and a tariffing input.

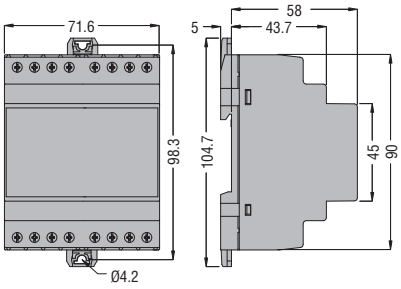
General characteristics

- Three-phase energy meter
- CT insertion
- 4U (72mm) modular construction for DIN rail
- Backlit LCD display
- Built-in RS485 interface
- AC tariffing input
- 3 navigation buttons for functions and settings
- Metrology LED for energy flow indication
- High-accuracy true root mean square (TRMS) measurement
- Active energy measurement according to EN62053-22 class 0.5s
- Active and reactive energy meters, total and by individual phase
- Total and partial energy meters that can be reset
- 1 total hour counter and 4 partial hour counters
- Programmable input (e.g. for tariff selection)
- 2-level password protection for settings
- Backup copy of original settings
- Fitting does not require tools
- Terminal covers that can be lead sealed
- Texts in 6 languages (English, Italian, French, Spanish, Portuguese, German)

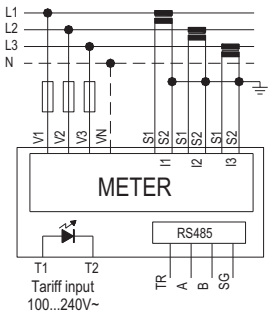
Reference standards

Compliant with standards: IEC/EN 61010-1, IEC/EN 61010-2-030, IEC/EN 61000-6-2, IEC/ EN 61000-6-4, UL508 e CSA C22.2-N°14.

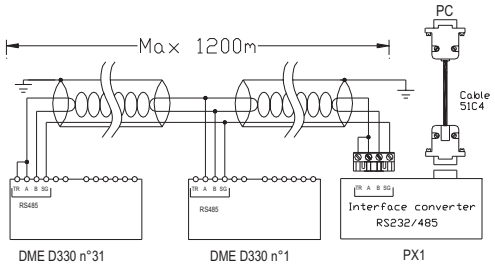
Dimensions [mm]

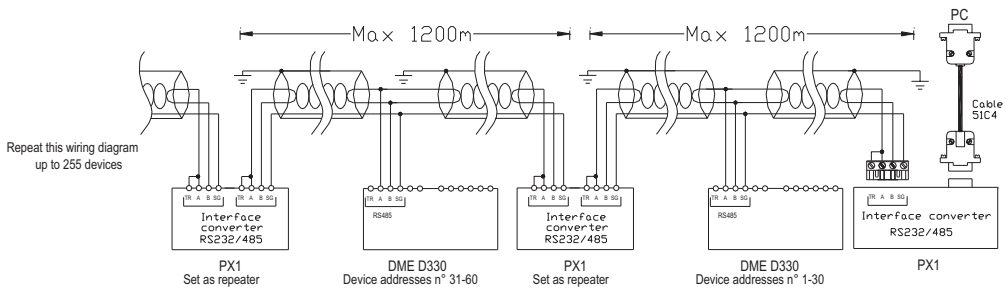


Wiring diagrams



PC-DME D330 connection via RS485 interface





Technical specifications

AUXILIARY SUPPLY	
Rated voltage (Us)	220...240VAC phase-neutral / 380...415VAC phase-phase The device may operate with or without neutral
Voltage range	187...264VAC phase-neutral / 323...456VAC phase-phase
Rated frequency	50/60Hz
Frequency range	45...66Hz
Power consumption/dissipation	3VA / 1.6W
CURRENT	
IEC maximum current (Imax)	6A
IEC minimum current (Imin)	0.05A
IEC rated current (Iref - Ib)	5A
IEC start current (Ist)	0.01A
IEC transition current (Itr)	0.25A
Burden (per phase)	≤0.3W
TARIFF CONTROL CIRCUIT	
Rated voltage Uc	100...240VAC
Voltage range	85...264VAC
Rated frequency	50/60Hz
Frequency range	45...66Hz
Power consumption/dissipation	0.25VA / 0.18W
ACCURACY	
Active energy (IEC/EN 62053-22)	Class 0.5s
LED PULSE	
Pulse rated	10.000 puls/kWh (referred to CT secondary)
Pulse duration	30ms
RS485 SERIAL INTERFACE	
Baud-rate	Programmable 1200-115200bps
Insulation	4000VAC towards voltage inputs and tariffing input 2000VAC towards current inputs
INSULATION	
IEC rated insulation voltage Ui	250VAC phase-neutral / 415VAC phase-phase
IEC rated impulse withstand voltage Uimp	6kV
IEC power frequency withstand voltage	4kV
MEASUREMENT AND TARIFF / POWER SUPPLY CIRCUIT CONNECTIONS	
Type of terminals	Screw-type (fixed)
Number of terminals	4 for supply / measurement 2 for tariff selection input
Cable cross section (min...max)	0.2...4.0mm² (24...12AWG)
Terminal tightening torque	0.8Nm (7lbin)
CURRENT INPUT CONNECTIONS	
Type of terminals	Screw-type (fixed)
Number of terminals	6
Cable cross section (min...max)	0.2...2.5mm² (24...12AWG)
Tightening torque	0.44Nm (4lbin)
AMBIENT CONDITIONS	
Operating temperature	–25...+55°C
Storage temperature	–25...+70°C
Relative humidity	<80% (IEC/EN 60068-2-70)
Maximum pollution degree	2
Overvoltage capacity	III
Altitude	≤2000m
Climatic sequence	Z/ABDM (IEC/EN 60068-2-61)
Shock resistance	15g (IEC/EN 60068-2-27)
Vibration resistance	0.7g (IEC/EN 60068-2-6)
HOUSING	
Version	4 modules (DIN 43880)
Mounting	35mm rail (IEC/EN 60715) or screw-type by means of removable clips
Material	Polyamide RAL 7035
Degree of protection	IP40 on front ❶, IP20 terminals

❶ To guarantee the required protection, the instrument must be installed in container with minimum protection rating of IP51 (IEC/EN 60529).

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