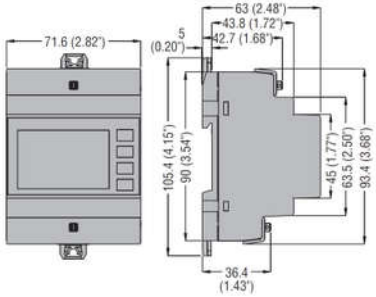
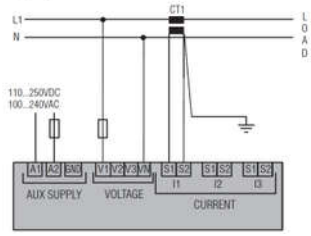
Lovato DMG200 / DMG200L01 Datasheet



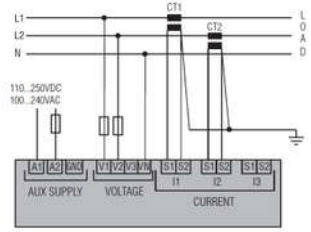


Order code	Description	Qty per pkg	Wt
		n°	[kg]
DMG 200	Graphic 128x80 pixel LCD, auxiliary supply 100-240VAC/110-250VDC. Multilanguage: Italian, English, French, Spanish and Portuguese	1	0.294
DMG 200 L01	Graphic 128x80 pixel LCD, auxiliary supply 100-240VAC/110-250VDC. Multilanguage: English, Czech, Polish, German and Russian	1	0.294

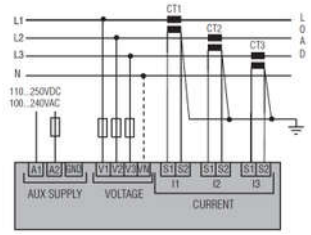
Single phase



Two phase



Three phase with or without neutral



TYPE	DMG 200	DMG 210 ❶	DMG 300
AUXILIARY SUPPLY			
Rated voltage Us	100-240VAC / 110-250VDC		
Voltage range	85-264VAC / 93.5-300VDC		
Frequency range	45-66Hz		
Maximum power consumption	3.5VA	4.5VA	4.2VA
Maximum power dissipation	1.2W	1.7W	1.3W
Microbreaking immunity	≥50ms	≥50ms	≥50ms
VOLTAGE INPUTS			
Type of input	Three phase + neutral		
Maximum rated voltage Ue	690VAC phase-phase (400VAC phase-neutral)		
Measurement range	20-830VAC phase-phase (10-480VAC phase-neutral)		
Frequency range	45-66Hz		
Method of measurement	True RMS		
Method of connection	Single, two, three phase with or without neutral, balanced three phase systems		
CURRENT INPUTS			
Rated current Ie	5A	5A	1A / 5A
Measurement range	0.01-6A	0.01-6A	0.01-1.2A / 0.01-6A
Method of measurement	True RMS		
Overload capacity	+20% Ie through external CT with 5A secondary		
Overload peak	50A for 1s		
INSULATION			
IEC rated insulation voltage Ui	690VAC		
IEC rated impulse withstand voltage Uimp	9.5kV		
IEC power frequency withstand voltage	5.2kV		
SUPPLY CIRCUIT/VOLTAGE MEASUREMENT CONNECTIONS			
Type of terminal	Fixed		
Conductor section min-max	0.2-4.0mm² (24-12 AWG)		
Maximum tightening torque	0.8Nm (7lbin)		
CURRENT MEASUREMENT CIRCUIT AND RS485❶ CONNECTIONS			
Type of terminal	Fixed		
Conductor section min-max	0.2-2.5mm² (24-12 AWG)		
Maximum tightening torque	0.44Nm (4lbin)		
AMBIENT CONDITIONS			
Operating temperature	-20...+60°C		
Storage temperature	-30...+80°C		
Relative humidity	<90%		
Maximum pollution degree	2		
Measurement class	III		
Overload capacity	III		
HOUSING			
Material	Polyamide		

General characteristics

DMG 200... and DMG 210 digital multimeters are available with a modular housing, 4 module size, and are equipped with a graphic backlight LCD capable of providing extremely clear, intuitive and flexible viewing of all electrical parameters of an installation. Very accurate measurements combined with their extreme compactness provide an ideal solution for every type of application.
The DMG 210 version is supplied with RS485 opto-isolated built-in interface.
Main measurements and functions include:

- Voltage: phase, line and system values
- Current: phase values (neutral current calculated)
- Power: apparent, active and reactive phase and total values
- P.F.: Power Factor per phase and total
- Frequency of measured voltage value
- HIGH-LOW-AVERAGE value functions of all measurements
- Maximum demand of power and current values
- Total harmonic distortion (THD) of voltage and current values
- Energy meters for active, reactive and apparent values
- Hour counter for programmable total and partial hours.

Operational characteristics

DMG200 - DMG210

- Auxiliary supply voltage range: 85-264VAC / 93.5-300VDC
- Voltage measurement range:
  20-830VAC phase-to-phase
  10-480VAC phase-neutral
- Usage in medium and high-voltage systems with voltage transformers
- Rated input current: With external CT /5A
- Current measurement range with CT up to 10,000A
- Frequency measurement range: 45-66Hz
- True RMS measurements for voltage and current values
- Accuracy:
  - Voltage: ±0.5% (50-830VAC)
  - Current: ±0.5% (0.1-1.1 In)
  - Power: ±1% f.s.
  - Frequency: 0.05%
  - Active energy: Class 1 (IEC/EN 62053-21)
  - Reactive energy: Class 2 (IEC/EN 62053-23)
- Non-volatile memory for data storage
- Communication protocol Modbus-RTU and ASCII for DMG 210 only
- Programming and remote control by software for DMG 210 only; compatible with Synergy software
- Modular housing, 4 module
- IEC protection degree: IP40 on front; IP20 at terminals.