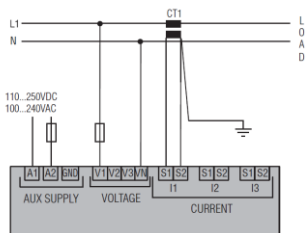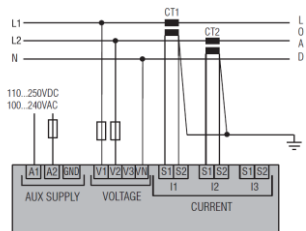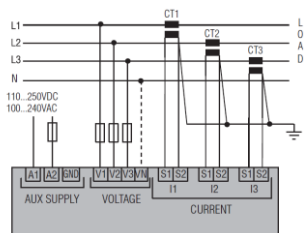| Order code	Description	Qty per pkg	Wt
		n°	[kg]
DMG 800	Graphic 128x80 pixel LCD, harmonic analysis, auxiliary supply 100-440VAC/110-250VDC. Multilanguage: Italian, English, French, Spanish and Portuguese	1	0.510

General characteristics

DMG 600, DMG 610, DMG 700 and DMG 800 digital multimeters are capable of viewing the measurements with high accuracy on the wide graphic LCD, which allow to control energy distribution networks.
They are available with a flush-mount housing, 96x96mm/3.78x3.78" size, and expansion slots to fit plug-in expansion modules (1 for DMG 600/610 and 4 for DMG 700/800) suitable for numerous applications.
The main features include an extended power supply voltage range, high measurement accuracy, expandability and graphic interactive interface for simple use.
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 for all measurements
- Maximum demand of power and current values
- Voltage and current asymmetry
- Total harmonic distortion (THD): voltage and current
- Harmonic analysis of voltage and current up to the 31° order with DMG 800 only
- Energy meters for active, reactive, apparent partial and total values with programmable tariff functions
- Hour counter for programmable total and partial hours
- Pulse counter for general use: consumption pulse counting for water, gas, etc., with expansion module only.

Operational characteristics
- Auxiliary supply voltage range:
  - 100-400VAC / 120-250VDC for DMG 600/610
  - 90-484VAC / 93.5-300VDC for DMG 700/800
  - 9-70VDC for DMG 800 D048
- Voltage measurement range:
  - 50-720VAC for DMG600/610
  - 20-830VAC L-L / 10-480VAC L-N for DMG 700/800
- Usage in medium and high voltage systems with voltage transformers
- Rated input current: By external CT 5A for DMG 700; 1A or 5A for DMG 600/610 and DMG 800…
- Frequency measurement range: 45-66Hz
- True RMS measurements: for voltage and current
- Measurement accuracy for DMG 600/610-DMG 700:
  - Voltage: ±0.5% (50-720VAC DMG 600/610; 50-830VAC DMG 700)
  - Current: ±0.5% (0.1-1.1In)
  - Power: ±1% f.s.
  - Frequency: ±0.05%
  - Active energy: Classe 1 (IEC/EN 62053-22)
  - Reactive energy: Class 2 (IEC/EN 62053-23)
- Measurement accuracy for DMG 800…:
  - Voltage: ±0.2% (50-830VAC)
  - Current: ±0.2% (0.1-1.1In)
  - Power: ±0.5% f.s.
  - Power factor: ±0.5%
  - Frequency: ±0.05%
  - Active energy: Classe 0.5S (IEC/EN 62053-22)
  - Reactive energy: Class 2 (IEC/EN 62053-23)
- Non-volatile memory for data storage
- Communication protocol Modbus-RTU, ASCII and TCP
- Compatible with Synergy software
- Flush-mount housing 96x96mm/3.78x3.78"
- IEC degree of protection: On front IP54 DMG600/610; IP65 all others. All IP20 at terminals

Single phase

Two phase

Three phase with or without neutral

AUXILIARY SUPPLY			
Rated voltage Us	100-440VAC / 110-250VDC - (12-48VDC❷)		
Voltage range	90-484VAC / 93.5-300VDC - (9-70VDC❷)		
Frequency range	45-66Hz		
Maximum power consumption	3.9VA		
Maximum power dissipation	3.4W		
Microbreaking immunity	≥50ms		
VOLTAGE INPUTS			
Type of input	Three phase + neutral		
Maximum rated voltage Ue	690VAC L-L (400VAC L-N)		
Measurement range	20-830VAC L-L (10-480VAC L-N)		
Frequency range	45-66Hz		45-66Hz e 360-440Hz
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	1A/5A	1A/5A
Measurement range	0.01-6A	0.01-1.2A / 0.01-6A	0.002-1.2A / 0,01-10A
Method of measurement	True RMS		
Overload capacity	+20% Ie by 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		