

MODULAR LCD MULTIMETER, NON EXPANDABLE, BACKLIGHT LCD ICON DISPLAY, RS485 PORT, AUXILIARY SUPPLY 100-240VAC/115-250VDC. MULTILANGUAGE: ITALIAN, ENGLISH, FRENCH, GERMAN, SPANISH AND PORTUGUESE



| Product designation                                                                                                                                                                                                                      |                                               |                               | Modular LCD<br>multimeters. non<br>expandable                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Product type designation                                                                                                                                                                                                                 |                                               |                               | DMG110                                                                                                                                     |
| Туре                                                                                                                                                                                                                                     |                                               |                               | Three-phase + neutral                                                                                                                      |
| DIN rail module number                                                                                                                                                                                                                   |                                               |                               | 4                                                                                                                                          |
| Auxiliary supply Us                                                                                                                                                                                                                      |                                               |                               |                                                                                                                                            |
| Auxiliary rated supply voltage AC                                                                                                                                                                                                        |                                               | VAC                           | 100240                                                                                                                                     |
| Auxiliary rated supply voltage DC                                                                                                                                                                                                        |                                               | VDC                           | 110250                                                                                                                                     |
| Auxiliary operating voltage range                                                                                                                                                                                                        |                                               |                               |                                                                                                                                            |
| AC                                                                                                                                                                                                                                       |                                               |                               |                                                                                                                                            |
|                                                                                                                                                                                                                                          | min                                           | VAC                           | 90                                                                                                                                         |
|                                                                                                                                                                                                                                          | Max                                           | VAC                           | 264                                                                                                                                        |
| DC                                                                                                                                                                                                                                       |                                               |                               |                                                                                                                                            |
|                                                                                                                                                                                                                                          | min                                           | VDC                           | 93.5                                                                                                                                       |
|                                                                                                                                                                                                                                          | Max                                           | VDC                           | 300                                                                                                                                        |
| Operational frequency                                                                                                                                                                                                                    |                                               |                               |                                                                                                                                            |
|                                                                                                                                                                                                                                          | min                                           | Hz                            | 45                                                                                                                                         |
|                                                                                                                                                                                                                                          | max                                           | Hz                            | 66                                                                                                                                         |
| Power consumption                                                                                                                                                                                                                        |                                               |                               |                                                                                                                                            |
|                                                                                                                                                                                                                                          | Max                                           | VA                            | 2.2                                                                                                                                        |
| Power dissipation Max                                                                                                                                                                                                                    |                                               | W                             | 0.8                                                                                                                                        |
|                                                                                                                                                                                                                                          |                                               |                               |                                                                                                                                            |
| Measuring voltage inputs                                                                                                                                                                                                                 |                                               |                               |                                                                                                                                            |
|                                                                                                                                                                                                                                          |                                               |                               |                                                                                                                                            |
| Measuring voltage inputs                                                                                                                                                                                                                 | phase-phase                                   | VAC                           | 690                                                                                                                                        |
| Measuring voltage inputs                                                                                                                                                                                                                 | phase-phase<br>phase-neutral                  | VAC<br>VAC                    | 690<br>346                                                                                                                                 |
| Measuring voltage inputs                                                                                                                                                                                                                 |                                               |                               |                                                                                                                                            |
| Measuring voltage inputs Rated voltage (Ue)                                                                                                                                                                                              |                                               |                               |                                                                                                                                            |
| Measuring voltage inputs Rated voltage (Ue)                                                                                                                                                                                              | phase-neutral                                 | VAC                           | 346                                                                                                                                        |
| Measuring voltage inputs Rated voltage (Ue)                                                                                                                                                                                              | phase-neutral phase-phase                     | VAC                           | 90720                                                                                                                                      |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range                                                                                                                                                                     | phase-neutral phase-phase                     | VAC                           | 90720                                                                                                                                      |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range                                                                                                                                                                     | phase-neutral  phase-phase phase-neutral      | VAC<br>VAC<br>VAC             | 90720<br>50415                                                                                                                             |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range                                                                                                                                                                     | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 90720<br>50415                                                                                                                             |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency                                                                                                                               | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 346 90720 50415 45 66 True RMS Single. two.                                                                                                |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method                                                                                            | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 346  90720 50415  45 66  True RMS  Single. two. three-phase with                                                                           |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency                                                                                                                               | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 346  90720 50415  45 66  True RMS  Single. two. three-phase with or without neutral.                                                       |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method                                                                                            | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 346  90720 50415  45 66  True RMS  Single. two. three-phase with or without neutral. balanced three-                                       |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method                                                                         | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 346  90720 50415  45 66  True RMS  Single. two. three-phase with or without neutral.                                                       |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method  Current inputs                                                         | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC<br>Hz<br>Hz | 90720 50415  45 66 True RMS Single. two. three-phase with or without neutral. balanced three-phase systems                                 |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method  Current inputs Rated current (Ie)                                      | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC             | 346  90720 50415  45 66  True RMS Single. two. three-phase with or without neutral. balanced three-phase systems                           |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method  Current inputs Rated current (le) Measurement range                    | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC<br>Hz<br>Hz | 90720 50415  45 66 True RMS Single. two. three-phase with or without neutral. balanced three-phase systems  5 0.0256A                      |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method  Current inputs Rated current (Ie)                                      | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC<br>Hz<br>Hz | 90720 50415  45 66 True RMS Single. two. three-phase with or without neutral. balanced three-phase systems  5 0.0256A TRMS                 |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method  Current inputs Rated current (Ie) Measurement range Measurement method | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC<br>Hz<br>Hz | 90720 50415  45 66 True RMS Single. two. three-phase with or without neutral. balanced three-phase systems  5 0.0256A TRMS +20% le through |
| Measuring voltage inputs Rated voltage (Ue)  Operating voltage range  Voltage inputs operational frequency  Voltage inputs measurement method  Connection method  Current inputs Rated current (le) Measurement range                    | phase-neutral  phase-phase phase-neutral  min | VAC<br>VAC<br>VAC<br>Hz<br>Hz | 90720 50415  45 66 True RMS Single. two. three-phase with or without neutral. balanced three-phase systems  5 0.0256A TRMS                 |



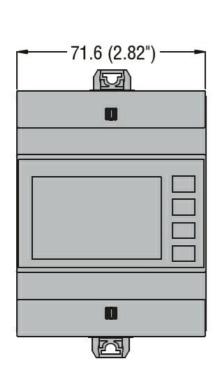
MODULAR LCD MULTIMETER, NON EXPANDABLE, BACKLIGHT LCD ICON DISPLAY, RS485 PORT, AUXILIARY SUPPLY 100-240VAC/115-250VDC. MULTILANGUAGE: ITALIAN, ENGLISH, FRENCH, GERMAN, SPANISH AND PORTUGUESE

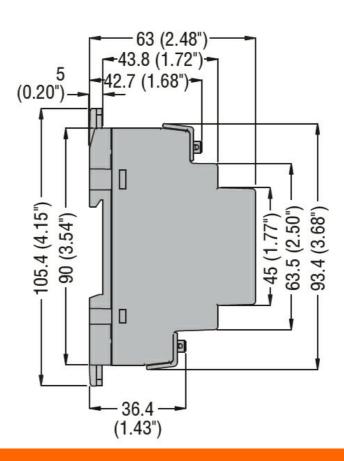
| Overload peak                         |                 | Α     | 50A for 1s                   |
|---------------------------------------|-----------------|-------|------------------------------|
| Accuracy                              |                 |       |                              |
|                                       | VLN voltage     |       | ±0.5%                        |
|                                       | VLL voltage     |       | ±0.5%                        |
|                                       | Current         |       | ±0.5%                        |
|                                       | Frequency       |       | ±0.05%                       |
|                                       | Active power    |       | ±1%                          |
|                                       | Active energy   |       | Class 1 (IEC/EN<br>62053-21) |
|                                       | Reactive energy |       | Class 2 (IEC/EN 62053-23)    |
| RS485 serial interface                |                 |       |                              |
| Baud rate                             |                 | bps   | Programmable 120038400       |
| Insulations                           |                 |       |                              |
| Rated insulation voltage Ui IEC/EN    |                 | V     | 690                          |
| Rated impulse withstand voltage Uimp  |                 | kV    | 9.5                          |
| Operating frequency withstand voltage |                 | kV    | 5.2                          |
| Functions                             |                 |       |                              |
| Harmonic analysis                     |                 |       | 15th order                   |
| PLC logic                             |                 |       | No                           |
| Type of communication port            |                 |       | RS485                        |
| Ethernet-RS485 gateway function       |                 |       | No                           |
| Mechanical features                   |                 |       |                              |
| Housing type                          |                 |       | Polyamide                    |
| Terminals type                        |                 |       | Fixed                        |
| Conductor cross section               |                 |       | i ixeu                       |
| Conductor cross section               |                 | · · 2 | 0.2                          |
|                                       | min             | mm²   |                              |
|                                       | Max             | mm²   | 4                            |
|                                       | min             | AWG   | 24                           |
|                                       | Max             | AWG   | 12                           |
| Tightening torque (Max)               |                 |       |                              |
|                                       |                 | Nm    | 0.8                          |
|                                       |                 | lbin  | 7                            |
| Fixing                                |                 |       | Din rail                     |
| Weight                                |                 | g     | 294                          |
| Ambient conditions                    |                 |       |                              |
| Temperature                           |                 |       |                              |
| Operating temperature                 |                 |       |                              |
| · ·                                   | min             | °C    | -20                          |
|                                       | max             | °C    | +60                          |
| Storage temperature                   |                 |       |                              |
|                                       | min             | °C    | -30                          |
|                                       | max             | °C    | +80                          |
| Relative humidity                     |                 | %     | <90                          |
| Maximum Pollution degree              |                 | ,,,   | 2                            |
| Protection degree                     |                 |       | IP30                         |
| Dimensions                            |                 |       | 11 00                        |
|                                       |                 |       |                              |



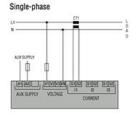
**ENERGY AND AUTOMATION** 

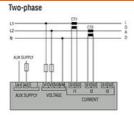
MODULAR LCD MULTIMETER, NON EXPANDABLE, BACKLIGHT LCD ICON DISPLAY, RS485 PORT, AUXILIARY SUPPLY 100-240VAC/115-250VDC. MULTILANGUAGE: ITALIAN, ENGLISH, FRENCH, GERMAN, SPANISH AND PORTUGUESE

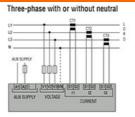




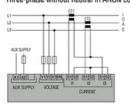


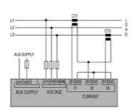


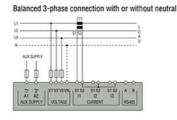




Three-phase without neutral in ARON connection







| CODE                   | AUX SUPPLY             |
|------------------------|------------------------|
| DMG100-110-200-210-300 | 100240VAC<br>110250VDC |
| DMG6                   | 100440VAC<br>110250VDC |
| DMG7000-7500-8000-9000 | 100240VAC<br>110250VDC |

| RS485 for I<br>DMG210 | OMG110 an |
|-----------------------|-----------|
| TR A B SG<br>RS485    |           |

RS485 for DMG7500 and DMG9000 A B SG RS485

## Certifications and compliance

## Compliance

CSA 22.2 n°61010-1

IEC/EN 61000-6-2

IEC/EN 61000-6-3

IEC/EN 61010-1

IEC/EN 61010-2-030





**ENERGY AND AUTOMATION** 

MODULAR LCD MULTIMETER, NON EXPANDABLE, BACKLIGHT LCD ICON DISPLAY, RS485 PORT, AUXILIARY SUPPLY 100-240VAC/115-250VDC. MULTILANGUAGE: ITALIAN, ENGLISH, FRENCH, GERMAN, SPANISH AND PORTUGUESE

|                     | UL61010-1 |                                                        |
|---------------------|-----------|--------------------------------------------------------|
| Certificates        |           |                                                        |
|                     | cULus     |                                                        |
|                     | EAC       |                                                        |
|                     | GOST      |                                                        |
|                     | RCM       |                                                        |
| ETIM classification |           |                                                        |
| ETIM 8.0            |           | EC002301 -<br>Multifunction<br>measuring<br>instrument |