



Flush-mount LCD
multimeters
DMG500
Three-phase +
neutral

Product designation

Product type designation

Type

Auxiliary supply U_s

| | | | | |
|-----------------------------------|-----|-----------|-----|------|
| Auxiliary rated supply voltage AC | VAC | 100...240 | | |
| Auxiliary rated supply voltage DC | VDC | 120...250 | | |
| 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 | 9.5 |
|-----|----|-----|

Power dissipation Max

| | |
|---|-----|
| W | 3.5 |
|---|-----|

Measuring voltage inputs

| | | | |
|-------------------------|---------------|-----|-----|
| Rated voltage (U_e) | phase-phase | VAC | 480 |
| | phase-neutral | VAC | 277 |

Operating voltage range

| | | |
|---------------|-----|----------|
| phase-phase | VAC | 50...576 |
| phase-neutral | VAC | 30...330 |

Voltage inputs operational frequency

| | | |
|-----|----|----|
| min | Hz | 45 |
| max | Hz | 66 |

Voltage inputs measurement method

True RMS

Connection method

Single, two,
three-phase with
or without neutral.
balanced three-
phase system

Current inputs

| | | |
|-------------------------|---|---|
| Rated current (I_e) | A | 1A/5A |
| Measurement range | | 0.01...1.2 / 0.01...6 |
| Measurement method | | TRMS |
| Overload capacity | | +20% I_e by external CT with 5A secondary |
| Overload peak | A | 50A for 1s |

Accuracy

| | |
|-----------------|---------------------------|
| VLN voltage | ±0.5% |
| VLL voltage | ±0.5% |
| Current | ±0.5% |
| Frequency | ±0.05% |
| Active power | ±0.5% |
| Active energy | Class 1 (IEC/EN 62053-21) |
| Reactive energy | Class 2 (IEC/EN 62053-23) |

Insulations

| | | |
|---------------------------------------|----|-----|
| Rated insulation voltage Ui IEC/EN | V | 480 |
| Rated impulse withstand voltage Uimp | kV | 9.5 |
| Operating frequency withstand voltage | kV | 5.2 |

Mechanical features

| | | | |
|-------------------------|-----------|-----------------|-----|
| Housing type | Polyamide | | |
| Terminals type | Removable | | |
| Conductor cross section | min | mm ² | 0.2 |
| | Max | mm ² | 2.5 |
| | min | AWG | 24 |
| | Max | AWG | 12 |

| | | |
|-------------------------|------|-----|
| Tightening torque (Max) | Nm | 0.5 |
| | lbin | 4.5 |

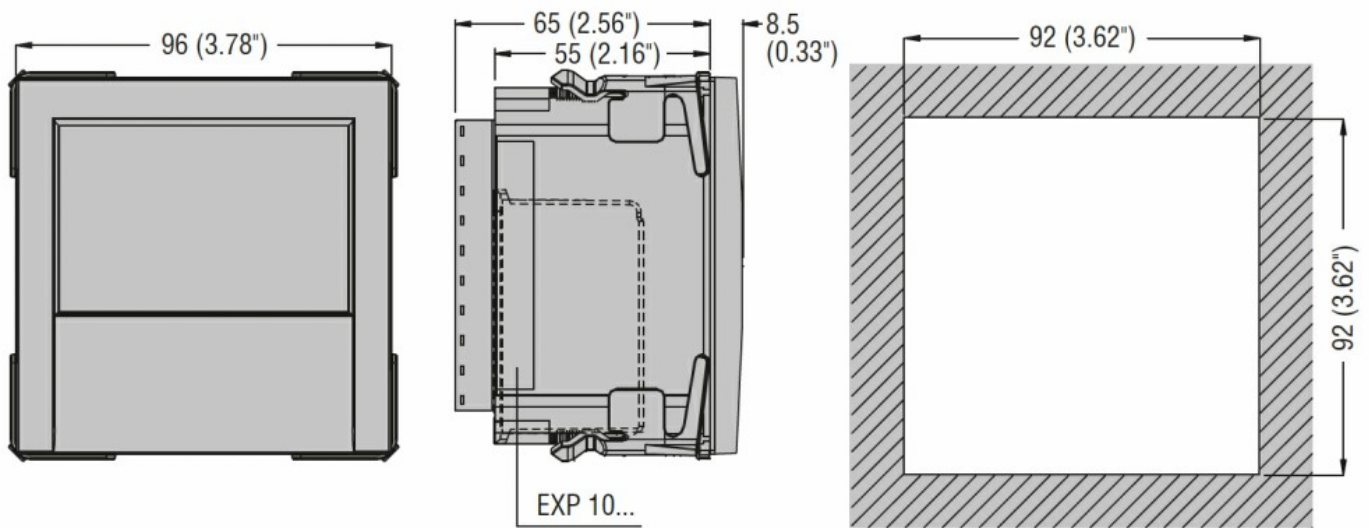
| | | |
|--------|----------------|-----|
| Fixing | Flush-mounting | |
| Weight | g | 320 |

Ambient conditions

| | | | |
|-------------|-----------------------|----|-----|
| Temperature | Operating temperature | | |
| | min | °C | -20 |
| | max | °C | +60 |
| | Storage temperature | | |
| | min | °C | -30 |
| | max | °C | +80 |

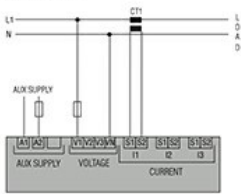
| | | |
|--------------------------|------|-----|
| Relative humidity | % | <90 |
| Maximum Pollution degree | 2 | |
| Protection degree | IP54 | |

Dimensions

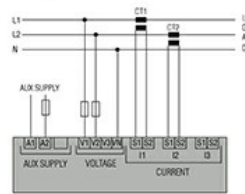


Wiring diagrams

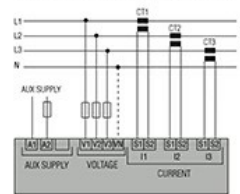
Single-phase



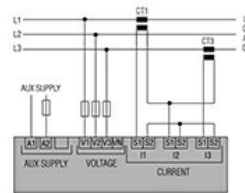
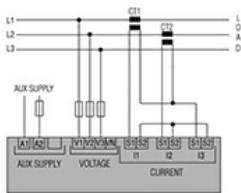
Two-phase



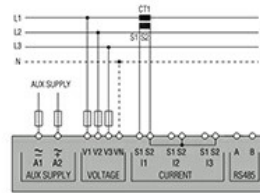
Three-phase with or without neutral



Three-phase without neutral in ARON connection



Balanced 3-phase connection with or without neutral



| CODE | AUX SUPPLY |
|------------------------|------------------------------|
| DMG100-110-200-210-300 | 100...240VAC 110...250VDC |
| DMG6... | 100...440VAC 110...250VDC |
| DMG7000-7500-8000-9000 | 100...240VAC 110...250VDC |

RS485 for DMG110 and DMG210



RS485 for DMG610



RS485 for DMG7500 and DMG9000



Certifications and compliance

Compliance

- IEC/EN 61000-6-2
- IEC/EN 61000-6-3
- IEC/EN 61010-1
- IEC/EN 61010-2-030
- UL61010-1

Certificates

- CE
- EAC

ETIM classification

ETIM 8.0

EC002301 -
Multifunction
measuring
instrument