



Product designation

Product type designation

Type

Panel m. color  
glcd mult.  
DMG7000  
Three-phase +  
neutral

#### Auxiliary supply Us

|                                   |     |           |
|-----------------------------------|-----|-----------|
| Auxiliary rated supply voltage AC | VAC | 100...240 |
| Auxiliary rated supply voltage DC | VDC | 110...250 |
| Auxiliary operating voltage range |     |           |
| AC                                | min | VAC 90    |
|                                   | Max | VAC 264   |
| DC                                | min | VDC 100   |
|                                   | Max | VDC 300   |

Operational frequency

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

Power consumption

|     |    |    |
|-----|----|----|
| Max | VA | 15 |
|-----|----|----|

Power dissipation Max

|   |   |
|---|---|
| W | 6 |
|---|---|

#### Measuring voltage inputs

|                         |               |     |          |
|-------------------------|---------------|-----|----------|
| Rated voltage (Ue)      | phase-phase   | VAC | 600      |
|                         | phase-neutral | VAC | 347      |
| Operating voltage range | phase-phase   | VAC | 40...830 |
|                         | phase-neutral | VAC | 5...480  |

Voltage inputs operational frequency

|     |    |            |
|-----|----|------------|
| min | Hz | 45 and 360 |
| max | Hz | 66 and 440 |

Voltage inputs measurement method

True RMS  
Single. Two.  
Three-phase with  
or without neutral.  
Balanced three-  
phase system.  
Three-phase  
ARON.

Connection method

#### Current inputs

|                    |   |                                                |
|--------------------|---|------------------------------------------------|
| Rated current (Ie) | A | 1A/5A                                          |
| Measurement range  |   | 0.004...6                                      |
| Measurement method |   | TRMS                                           |
| Overload capacity  |   | +20% Ie by<br>external CT with<br>5A secondary |

|                                                    |                          |                                            |
|----------------------------------------------------|--------------------------|--------------------------------------------|
| Overload peak                                      | A                        | 120A for 0.5s                              |
| <b>Accuracy</b>                                    |                          |                                            |
|                                                    | VLN voltage              | Class 0.2<br>(IEC/EN 61557-12), V:50-480V~ |
|                                                    | VLL voltage              | Class 0.2<br>(IEC/EN 61557-12), V:87-830V~ |
|                                                    | Current                  | Class 0.2<br>(IEC/EN 61557-12), In:5A~     |
|                                                    | Frequency                | Class 0.02<br>(IEC/EN 61557-12)            |
|                                                    | Active power             | Class 0.5<br>(IEC/EN 61557-12)             |
|                                                    | Reactive power           | Class 1 (IEC/EN 61557-12)                  |
|                                                    | Active energy            | Class 0.5s<br>(IEC/EN 62053-22)            |
|                                                    | Reactive energy          | Class 1 (IEC/EN 62053-24)                  |
|                                                    | THD                      | Class 5 (IEC/EN 61557-12)                  |
|                                                    | 2nd 15th order harmonics | Class 5 (IEC/EN 61557-12)                  |
| <b>Insulations</b>                                 |                          |                                            |
| Rated insulation voltage Ui IEC/EN                 | V                        | 600                                        |
| Rated impulse withstand voltage Uimp               | kV                       | 9.6                                        |
| Operating frequency withstand voltage              | kV                       | 5.4                                        |
| <b>Functions</b>                                   |                          |                                            |
| Harmonic analysis                                  |                          | 63rd order                                 |
| PLC logic                                          |                          | Yes                                        |
| Type of communication port                         |                          | No                                         |
| Ethernet-RS485 gateway function                    |                          | +EXP1012<br>+EXP1013                       |
| Data logging memory                                |                          | No                                         |
| Neutral/earth current and voltage monitoring       |                          | No                                         |
| Statistics of network quality according to EN50160 |                          | No                                         |
| EASY BRANCH support                                |                          | No                                         |
| <b>Mechanical features</b>                         |                          |                                            |
| Housing type                                       |                          | Xantar RAL 7035                            |
| Terminals type                                     |                          | Removable                                  |
| Conductor cross section                            | min                      | mm <sup>2</sup> 0.2                        |
|                                                    | Max                      | mm <sup>2</sup> 2.5                        |
|                                                    | min                      | AWG 24                                     |
|                                                    | Max                      | AWG 12                                     |
| Tightening torque (Max)                            | Nm                       | 0.5                                        |
|                                                    | lbin                     | 4.5                                        |
| Fixing                                             |                          | Flush-mounting                             |
| Weight                                             | g                        | 412                                        |

## Ambient conditions

### Temperature

#### Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -20 |
| max | °C | +60 |

#### Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -30 |
| max | °C | +80 |

### Relative humidity

% <80

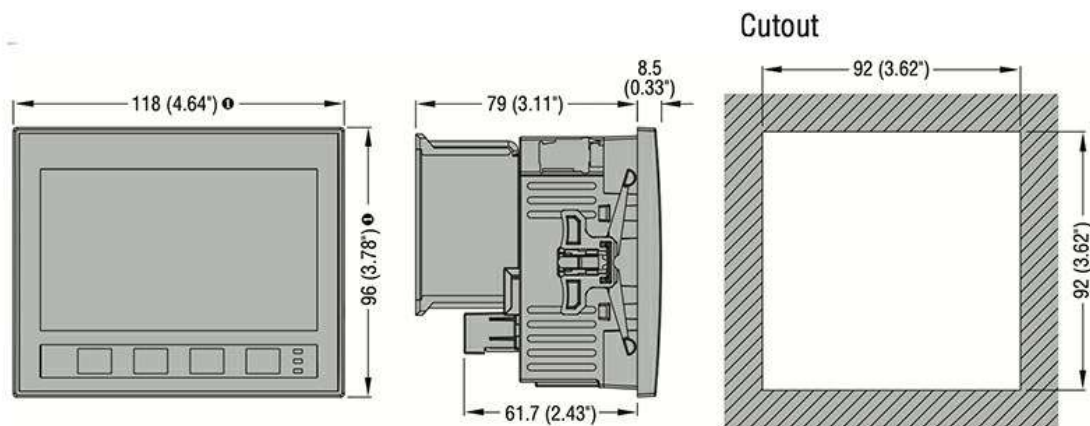
### Maximum Pollution degree

2

### Protection degree

IP65

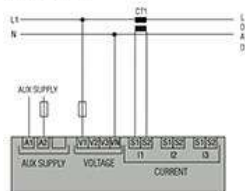
## Dimensions



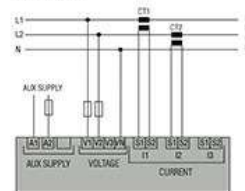
① Dimensions with gasket: 122x100mm/4.80x3.94".

## Wiring diagrams

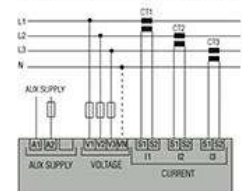
### Single-phase



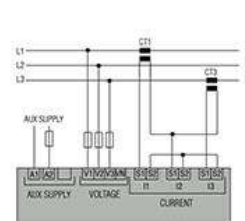
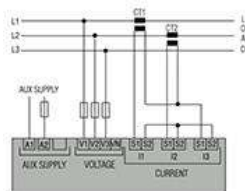
### Two-phase



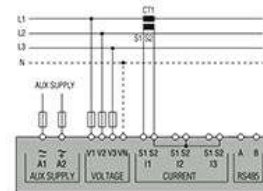
### Three-phase with or without neutral



### 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<br>110...250VDC |
| DMG6...                | 100...440VAC<br>110...250VDC |
| DMG7000-7500-8000-9000 | 100...240VAC<br>110...250VDC |

### RS485 for DMG110 and DMG210



### RS485 for DMG610



### RS485 for DMG7500 and DMG9000



## Certifications and compliance

### Compliance

CSA 22.2 No 61010-2-030

CSA C22.2 No 61010-1

IEC/EN/BS 61000-6-2

IEC/EN/BS 61000-6-4

|                       |
|-----------------------|
| IEC/EN/BS 61010-1     |
| IEC/EN/BS 61010-2-030 |
| UL61010-1             |
| UL61010-2-030         |

Certificates

|        |
|--------|
| CE     |
| cETLus |
| EAC    |
| UKCA   |

ETIM classification

ETIM 8.0

EC002301 -  
Multifunction  
measuring  
instrument