

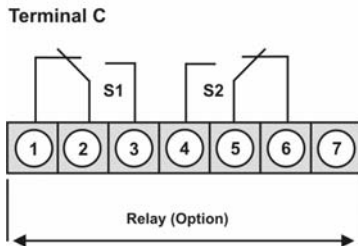
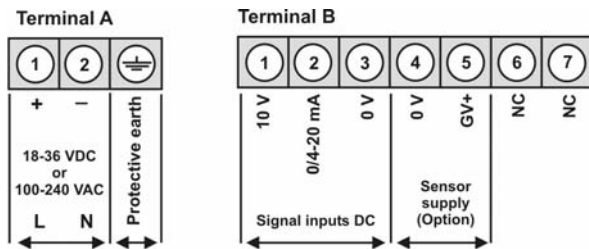
# MG – 4-digit large size displays for indoor use

## Standard signals 0/4-20 mA, 0-10 VDC

- red display of -999...9999 Digits  
(optional 5 digits, or 6 digits with rounding function)
- digit height 57 mm or 100 mm, 200 mm on demand
- Aluminium profile housing, protection class IP65
- built-on devices or panel meter
- display adjustment via factory setting or directly on the sensor signal
- min/max-memory
- 30 additional adjustable supporting points
- display flashing at threshold value exceedance / undercut
- rounding function for display slowdown
- zero point suppression
- programming interlock via code input
- on demand: outdoor devices with ultra-bright LED and heating

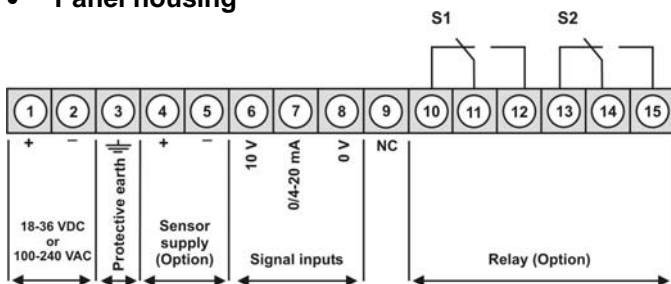


### Build-up housing



|        | Supply      | Order number<br>(without options) | EUR            |
|--------|-------------|-----------------------------------|----------------|
| 57 mm  | 100-240 VAC | <b>MG-AVR41.0001.S10BD1</b>       | <b>730,00</b>  |
| 57 mm  | 18-36 VDC   | <b>MG-AVR41.0001.710BD1</b>       | <b>820,00</b>  |
| 100 mm | 100-240 VAC | <b>MG-AVR42.0001.S10BD1</b>       | <b>990,00</b>  |
| 100 mm | 18-36 VDC   | <b>MG-AVR42.0001.710BD1</b>       | <b>1080,00</b> |

### Panel housing



|        |             |                             |                |
|--------|-------------|-----------------------------|----------------|
| 57 mm  | 100-240 VAC | <b>MG-BVR41.0001.S10BD3</b> | <b>730,00</b>  |
| 57 mm  | 18-36 VDC   | <b>MG-BVR41.0001.710BD3</b> | <b>820,00</b>  |
| 100 mm | 100-240 VAC | <b>MG-BVR42.0001.S10BD3</b> | <b>990,00</b>  |
| 100 mm | 18-36 VDC   | <b>MG-BVR42.0001.710BD3</b> | <b>1080,00</b> |

### Order key options

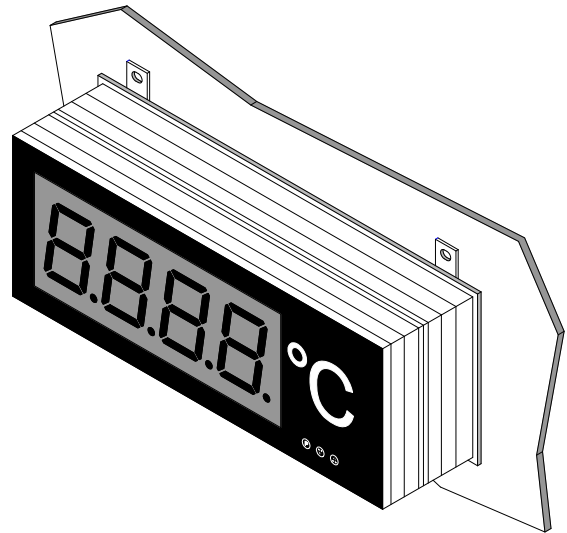
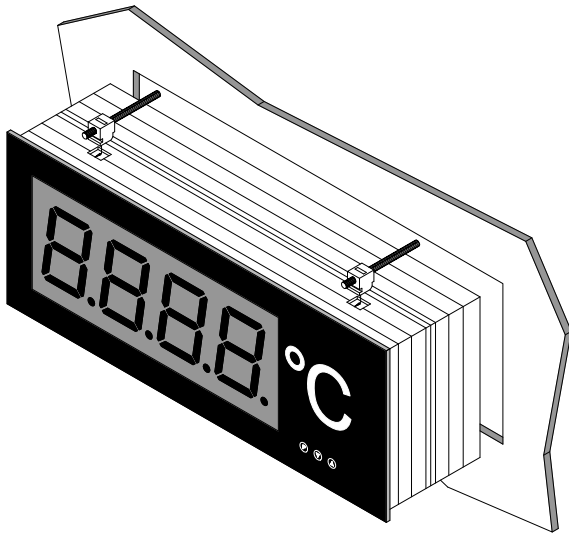
| M | G | - | A | V | R | 4 | X. | 0 | 0 | 0 | 1. | X | 1 | 0 | B | D | 1 | Built-on enclosure | EUR                          |            |
|---|---|---|---|---|---|---|----|---|---|---|----|---|---|---|---|---|---|--------------------|------------------------------|------------|
| M | G | - | B | V | R | 4 | X. | 0 | 0 | 0 | 1. | X | 1 | 0 | B | D | 3 | Panel housing      |                              |            |
|   |   |   |   |   |   |   |    |   |   |   |    |   |   |   |   |   |   | 2                  | 2 relay outputs              | 120,00     |
|   |   |   |   |   |   |   |    |   |   |   |    |   |   |   |   |   |   | 3                  | Sensor supply 24 VDC / 50 mA | 60,00      |
|   |   |   |   |   |   |   |    |   |   |   |    |   |   |   |   |   |   | 5                  | 200 mm LED                   | on request |
|   |   |   |   |   |   |   |    |   |   |   |    |   |   |   |   |   |   | X                  | Number of digits             | on request |
|   |   |   |   |   |   |   |    |   |   |   |    |   |   |   |   |   |   | G                  | Green LED                    |            |
|   |   |   |   |   |   |   |    |   |   |   |    |   |   |   |   |   |   | X                  | Further device types         | on request |

State physical unit by order on demand, e.g. kg.

## • Technical data

|                           |  |  |
|---------------------------|--|--|
| <b>Dimensions</b>         | Built-on enclosure   | 57 mm display: 316 mm x 124 mm x 82 mm (WxHxD)<br>100 mm display: 526 mm x 176 mm x 82 mm (WxHxD)  |
|                           | Fixing   | via fixing flange at the back  |
|                           | Housing material<br>Protection                                     | Aluminium, black, powder-coated<br>IP65  |
| <b>Connection</b>         | Type of plug   | circular plug-in connector Binder-Series 693   |
|                           | Cable admission  | PG9 (6.0 ... 9.5 mm)   |
|                           | Protection class   | IP65   |
|                           | Mechanic durability  | > 500 contact durability   |
|                           | Connection type  | screws   |
| <b>Terminal A</b>         | Number of poles  | 3 + PE   |
|                           | Cable cross section  | 0.5...2.5 mm (AWG 20...14)   |
|                           | Rating voltage   | 400 V  |
|                           | Rating current   | 12 A   |
| <b>Terminal B &amp; C</b> | Number of poles  | 7  |
|                           | Cable cross section  | 0.34...1.5 mm (AWG 22...16)  |
|                           | Rating voltage   | 250 V  |
|                           | Rating current   | 8 A  |
| <b>Dimensions</b>         | Panel housing  | 57 mm display: W 316 mm x H 124 mm x D 104 mm<br>100 mm display: W 526 mm x H 176 mm x D 104 mm  |
|                           | Panel cut-out  | 57 mm display: W 310.0 x H 118.0 <sup>+/-0.5</sup> mm<br>100 mm display: W 520.0 x H 176.0 <sup>+/-0.5</sup> mm  |
|                           | Fixing   | Screw-/clamp fixing  |
|                           | Housing material   | Aluminium, black, powder-coated  |
|                           | Protection   | Front IP65, Connection IP00  |
| <b>Connection</b>         | Terminal type  | 15-pole removable screw clamp for inputs and outputs for conductor diameter up to 1.5 mm <sup>2</sup>  |
| <b>Weight</b>             | 57 mm display  | approx. 3.0 kg   |
|                           | 100 mm display   | approx. 5.0 kg   |
| <b>Display</b>            | Display  | 7-segment LED  |
|                           | Digit height   | 57 mm, 100 mm  |
|                           | Segment colour   | red  |
|                           | Number of digits   | 4 digits   |
|                           | Display range  | -999...9999  |
|                           | Overflow   | Indication of horizontal bars at the top   |
|                           | Underflow  | Indication of horizontal at the bottom   |
|                           | Display time   | 0.1...10.0 seconds   |
|                           | Area   | Indoor   |
| <b>Measuring input</b>    | Measuring range  | R; approx. Measuring error Digit<br>[%] MR   |
|                           | 0...10 V   | 150 kΩ 0.1 ± 1   |
|                           | 0...5 V  | 150 kΩ 0.1 ± 1   |
|                           | 0...20 mA  | 100 Ω 0.1 ± 1  |
|                           | 4...20 mA  | 100 Ω 0.1 ± 1  |
|                           | Temperature drift  | all measuring inputs ~ 50 ppm/K  |
|                           | Measuring-/<br>display time  | 0.01...10.0 seconds  |
|                           | Measuring<br>principle   | Voltage-/frequency converter   |
| Resolution                | approx. 20 bit<br>(at 1 second measuring time)                     |  |
| <b>Memory</b>             | EEPROM   | Data life > 20 years   |
| <b>Output</b>             | Sensor supply  | 24 VDC / 50 mA   |
|                           | Relay  | With change-over contact 259 V / 5 AAC / 5 AAC, 30 V / 5 ADC   |
|                           | Switching cycles   | 30*10 <sup>3</sup> at 5 AAC, 5 ADC ohm resistive burden, 10*10 <sup>6</sup> mechanically<br>Division according to DIN EN50178 / Characteristics according to DIN EN60255 |
| <b>Power unit</b>         | Power supply   | 100-240 VAC nominal voltage ± 10%, 50/60 Hz<br>18-36 VDC, galv. isolated   |
|                           | Power consumption  | max. 30 VA   |
| <b>Ambient conditions</b> | Working temperature  | 0...60°C   |
|                           | Storing temperature  | -20...80°C   |
|                           | Climatic resistance  | rel. humidity ≤ 75 % on year average without dew   |
| <b>EMV</b>                | EN 61326   |  |
| <b>CE-sign</b>            | conformity to 2014/30/EU   |  |
| <b>Safety standard</b>    | according to low voltage directive 2014/35/EU; EN61010; EN 60664-1 |  |

- **Assembly picture for panel and built-on enclosure**



- **Dimensions**

**57 mm display**

| Number of digits       | Length L | Length LA | Height H | Height HA |
|------------------------|----------|-----------|----------|-----------|
| 3-digit with dimension | 268 mm   | 262 mm    | 124 mm   | 118 mm    |
| 4-digit with dimension | 316 mm   | 310 mm    |          |           |
| 5-digit with dimension | 364 mm   | 358 mm    |          |           |
| 6-digit with dimension | 412 mm   | 406 mm    |          |           |
| 7-digit with dimension | 460 mm   | 454 mm    |          |           |

**100 mm display**

| Number of digits       | Length L | Length LA | Height H | Height HA |
|------------------------|----------|-----------|----------|-----------|
| 3-digit with dimension | 268 mm   | 262 mm    | 176 mm   | 170 mm    |
| 4-digit with dimension | 526 mm   | 520 mm    |          |           |
| 5-digit with dimension | 616 mm   | 610 mm    |          |           |
| 6-digit with dimension | 706 mm   | 700 mm    |          |           |
| 7-digit with dimension | 796 mm   | 790 mm    |          |           |

• Order code

|                                    | M | G- | A | V           | R                              | 4 | 1. | 0 | 0 | 0 | 1. | 7 | 1 | 0 | B | D | 1 |  |
|------------------------------------|---|----|---|-------------|--------------------------------|---|----|---|---|---|----|---|---|---|---|---|---|--|
| <b>Standard type M-line</b>        |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Large size display - indoor</b> |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Housing designs</b>             |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Built-on enclosure                 |   |    | A |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Panel housing                      |   |    | B |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Suspendend/onesided                |   |    | C | } on demand |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Suspendend/double-sided            |   |    | D |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Upright                            |   |    | E |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Portable                           |   |    | T |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Stainless steel housing            |   |    | V |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Display type</b>                |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| Standard signal                    |   |    |   | V           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Display colour</b>              |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| green LED                          |   |    |   | G           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| red LED                            |   |    |   | R           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Number of digits</b>            |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 3-digit                            |   |    |   | 3           | } only with funktion reduction |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 4-digit                            |   |    |   | 4           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 5-digit                            |   |    |   | 5           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 6-digit                            |   |    |   | 6           | } only with rounding function  |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 8-digit                            |   |    |   | 8           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Digit height</b>                |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 57 mm LED                          |   |    |   | 1           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 100 mm LED                         |   |    |   | 2           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| 200 mm LED                         |   |    |   | 5           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| <b>Interfaces</b>                  |   |    |   |             |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |
| none                               |   |    |   | 0           |                                |   |    |   |   |   |    |   |   |   |   |   |   |  |

|                         |                                       |
|-------------------------|---------------------------------------|
| <b>Connection</b>       |                                       |
| 1                       | Rear side                             |
| 2                       | Surface                               |
| 3                       | Back side                             |
| <b>Dimension</b>        |                                       |
| 0                       | without                               |
| D                       | simple labelling field (7 characters) |
| Z                       | double labelling field                |
| <b>Version</b>          |                                       |
| B                       | Version B                             |
| <b>Setpoints</b>        |                                       |
| 0                       | no setpoints                          |
| 2                       | 2 setpoints                           |
| <b>Protection class</b> |                                       |
| 1                       | IP65                                  |
| <b>Voltage supply</b>   |                                       |
| 5                       | 18-36 VDC                             |
| S                       | 100-240 VAC                           |
| <b>Measuring input</b>  |                                       |
| 1                       | Direct current / Direct voltage       |
| <b>Analog output</b>    |                                       |
| 0                       | without                               |
| <b>Sensor supply</b>    |                                       |
| 0                       | without                               |
| 3                       | 24 VDC / 50 mA                        |