## Display options:


**Version 1:**

| | |
|---|---|
| 360° stepper motor display | 4320 steps, resolution 0.083° |
| Vertical LED[1)] bar graph | 49 LEDs (as bars or points) |
| Horizontal LED[1)] bar graph or | 49 LEDs (as bars or points) or |
| Digital display | 7-segment, 4 characters digital display |

**Version 2:**

| | |
|---|---|
| 270° stepper motor display | 3280 steps, resolution 0.083° |
| Vertical LED[1)] bar graph | 49 LEDs (as bars or points) |
| Horizontal LED[1)] bar graph or | 49 LEDs (as bars or points) or |
| Digital display | 7-segment, 4 characters digital display |

1) Available in red, green, yellow, or in colour combinations

## Mesurement input:

**Configuration 1:**
1 x CAN bus
2 x analogue input: 4 ...20 mA DC (0 ... 10 V, +/-10 V DC, 0 ... 20 mA, +/-20 mA, 0 ... 1 mA)
Note: measurement inputs are galvanically isolated from each other

**Configuration 2:**
3 x analogue input: 4 ...20 mA DC (0 ... 10 V, +/-10 V DC, 0 ... 20 mA, +/-20 mA, 0 ... 1 mA)
Note: measurement inputs are galvanically isolated from each other

**Configuration 3:**
1 x CAN bus for all displays

The measurement inputs are configured in the factory.

## Operating elements:

For analogue input: potentiometer for zero-point adjustment and end-point adjustment.
Rotary switch on the rear for:
⇒ adjustment of brightness levels
⇒ adjustment of the CAN bus adress in the range from 1 to 126 or adjustment of the PDO (0 x 180 + rotary switch adress setting)

## Error messages:

If the measured value is too high or too low, a corresponding message is shown on the 7-segment display, and alternates with the display value.
The messages have the following meanings:

| | | |
|---|---|---|
| ⇒ | uFA | value under minimum (A) |
| ⇒ | oFA | value over maximum (A) |
| ⇒ | uFb | value under minimum (bar graph) |
| ⇒ | oFb | value over maximum (bar graph) |
| ⇒ | uFd | value under minimum (numeric) |
| ⇒ | oFd | value over maximum (numeric) |

Sensor break in measuring range 4 ... 20 mA:
If the measured value is below 2 mA, this is interpreted as line breakage; an error message is shown on the 7-segment display, and alternates with the measured value.

| | |
|---|---|
| Err 2 | line breakage (A) |
| Err 3 | line breakage (bar graph) |
| Err 4 | line breakage (numeric) |

## Technical Data

| | | |
|---|---|---|
| Auxiliary voltage | 18 ... 36 V | |
| Overvoltage category | CAT III | EN 61010-1:2001 |
| Operating grid voltage | 50 V | EN 61010-1:2001 |

### Housing

| | |
|---|---|
| Dimensions (W x H x D) | 96 x 96 x101 mm |
| Cut out | $92^{+0,8}$ x $92^{+0,8}$ mm |
| Weight | approx.570 g |
| Fastening | srew clips for control panel thickness ≤ 15 mm |
| Connections | 13-pole |
| Protection degree | front IP56, connections IP20 |

### Ambient conditions

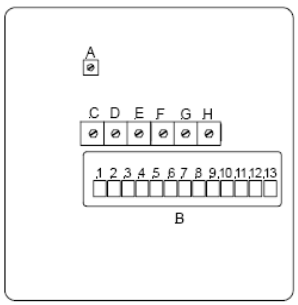
| | |
|---|---|
| Operating temperature | 0 ... 50 °C |
| Storage temperature | -20 ... 70 °C |
| Relative humidity | up to 90% (non condensing) |
| Degree of pollution | 2 as per EN 61010-1:2001 |
| EMC interference emission | EMC Directive 89/336 EWG/EEC, EN 61326:2004 |
| interference resistance | EMC Directive 89/336 EWG/EEC, EN 61326:2004 |

### Measuring accuracy

| | |
|---|---|
| SM 270° | 0.5 |
| SM 360° | 0.5 |
| Bar graph | 2.5 % with zero point at beginning / end of scale |
| | 5.0 % with zero point in the middle |
| 7 segment digital display | 0.5 ±1 digit |

## Rear view

| | |
|---|---|
| A: | DIM - analog |
| B: | Connection |
| 1 | PWM + |
| 2 | PWM - |
| 3 | Invers + |
| 4 | Invers - |
| 5 | input step motor + |
| 6 | input step motor - |
| 7 | input bar + |
| 8 | input bar - |
| 9 | input 7-segment + |
| 10 | input 7-segment - |




| | |
|---|---|
| 11 | not used |
| 12 | UH + |
| 13 | UH - |
| C | end point 7-segment |
| D | not used |
| E | end point bar |
| F | not used |
| G | end point step motor |
| H | not used |

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