

OMX 38



- Isolated transmitters to DIN rail
- Power supply 230 VAC

Options

- Power supply: 24/110 VAC, 10...30 VDC

| | |
|------------------|--------------------------|
| OMX 38DC | DC VOLTMETER AND AMMETER |
| OMX 38AC | AC VOLTMETER AND AMMETER |
| OMX 38PM | PROCESS MONITOR |
| OMX 38W | WATTMETER |
| OMX 38OHM | OHMMETER |
| OMX 38RTD | THERMOMETER FOR Pt /Ni |
| OMX 38DU | LINEAR POTENTIOMETERS |

Description

The OMX 38 model series are low-price and simple analog transmitters with mounting to 35 mm wide DIN rail.

Transmitters have galvanic separation with isolation voltage of 300 V and thus they are suitable as primary isolation for majority of industrial applications.

Operation

The transmitter is designed for simple measurement without further control.

Calibration

By trimmers accessible from the face of the transmitter we may adjust the range of output signal within the range of $\pm 10\%$.

Technical data

INSTRUMENT ACCURACY

TC: 100 ppm/°C
Accuracy: ±0,1% of range
 ±0,2% of range (RTD, OHM)
 ±0,3% of range (AC)
 ±0,5% of range (W)
Rate: continuous measurement
Overload capacity: 10x (t < 30 ms) - not for > 300 V, 5A; 2x
Calibration: at 25 °C and 40 % r.h.

ANALOG OUTPUT

Type: isolated, fixed setting
TC: 100 ppm/°C
Rate: response to change of value < 1 ms
 response to change of value < 1 s (AC, W, RTD, OHM)
Voltage: 0...2 V, 0...5 V, 0...10 V, on request ±10 V
 (minimum load 1 kΩ)
Current: 0...20 mA, 4...20 mA, on request ±20 mA (< 500 Ω)
Ripple: 5 mV residual ripple at output voltage of 10 V

POWER SUPPLY

24; 110; 230 VAC, 50/60 Hz, ±10%, 3 VA
 10...30 VDC/max. 150 mA, isolated
Power supply is protected by a fuse inside the instrument

MECHANIC PROPERTIES

Material: PA 66, incombustible UL 94 V-1, blue
Dimensions: 113 x 98 x 22 mm
Installation: to DIN rail 35 mm wide

OPERATING CONDITIONS

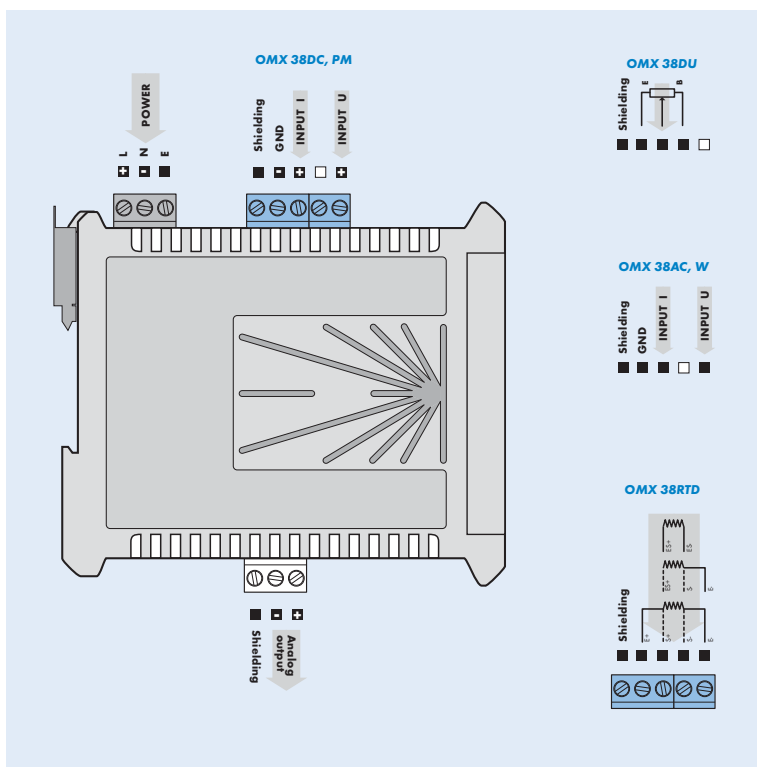
Connection: terminal board, section < 2,5 mm²
Stabilization period: within 5 minutes after switch-on
Working temperature: 0°...60°C
Storage temperature: -10°...85°C
Cover: IP20
El. safety: EN 61010-1, A2
Insulation resistance: for pollution degree II, measuring cat. III.
 AC power supply > 600 V (PI), 300 V (DI)
 DC power supply, input, output, Exc. > 500 V (PI), 250 V (DI)
EMC: EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11;
 EN 550222, A1, A2

PI - Primary insulation, DI - Double insulation

Measuring ranges

| | PM | W | W | DU | OHM | | DC | AC | RTD |
|-----|------------|------------|------------|--------------|--------------|-----|---------------|---------------|---------------|
| w/o | | | | 0,5...100 kΩ | 0,1...100 kΩ | w/o | | 40...2 500 Hz | -50°...850 °C |
| A | 0...5 mA | | | | | A | 60 mV...450 V | 60 mV...450 V | Pt 100 |
| B | 0...20 mA | | | | | B | 5 mA...5 A | 5 mA...5 A | Pt 500 |
| C | 4...20 mA | | | | | C | | | Pt 1 000 |
| D | 0...2 V | | | | | D | | | Ni 1 000 |
| E | 0...5 V | | | | | E | | | |
| F | 0...10 V | | | | | F | | | |
| H | | | 0...60 mV | | | G | | | |
| J | | | 0...150 mV | | | H | | | |
| K | | | 0...300 mV | | | I | | | |
| N | | | 0...1 A | | | J | | | |
| P | | | 0...5 A | | | K | | | |
| R | | 0...120 V | | | | L | | | |
| S | | 0...150 V | | | | N | | | |
| T | | 0...250 V | | | | P | | | |
| U | | 0...450 V | | | | R | | | |
| Z | on request | on request | on request | | | S | | | |
| | | | | | | T | | | |
| | | | | | | U | | | |
| | | | | | | Z | | | |

Connection



Order code

OMX 38

| | | | | | |
|------|---|---|---|----|---|
| Type | D | C | . | . | . |
| | A | C | . | . | . |
| | P | M | . | . | . |
| | | W | . | .. | . |
| | O | H | M | . | . |
| | R | T | D | . | . |
| | | D | U | . | . |

Order code shall not include blank spaces!

| | | | |
|--|-----------------------|---|---|
| Power supply | 24 VAC/50 Hz | 0 | |
| | 230 VAC/50 Hz | 1 | |
| | 110 VAC/50 Hz | 3 | |
| | 10...30 VDC, isolated | 4 | |
| Measuring range, see table „Measuring ranges“ | | ? | |
| Connection | 2-wire | | 1 |
| | 3-wire | | 2 |
| | 4-wire | | 3 |
| Analog output | 0...2 V | | 1 |
| | 0...5 V | | 2 |
| | 0...10 V | | 3 |
| | 0...20 mA | | 4 |
| | 4...20 mA | | 5 |
| | ±10 V | | 6 |
| | ±20 mA | | 7 |
| | 0...5 mA | | 8 |

Please, state the input range (from the entire range stated) in your order!