

# OMX 38



- Isolated transmitters to DIN rail 35 mm
- Power supply 230 VAC

## Options

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

<b>OMX 38DC</b>	DC VOLTMETER AND AMMETER
<b>OMX 38AC</b>	AC VOLTMETER AND AMMETER
<b>OMX 38PM</b>	PROCESS MONITOR
<b>OMX 38W</b>	WATTMETER
<b>OMX 38OHM</b>	OHMMETER
<b>OMX 38RTD</b>	THERMOMETER FOR Pt /Ni
<b>OMX 38DU</b>	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**

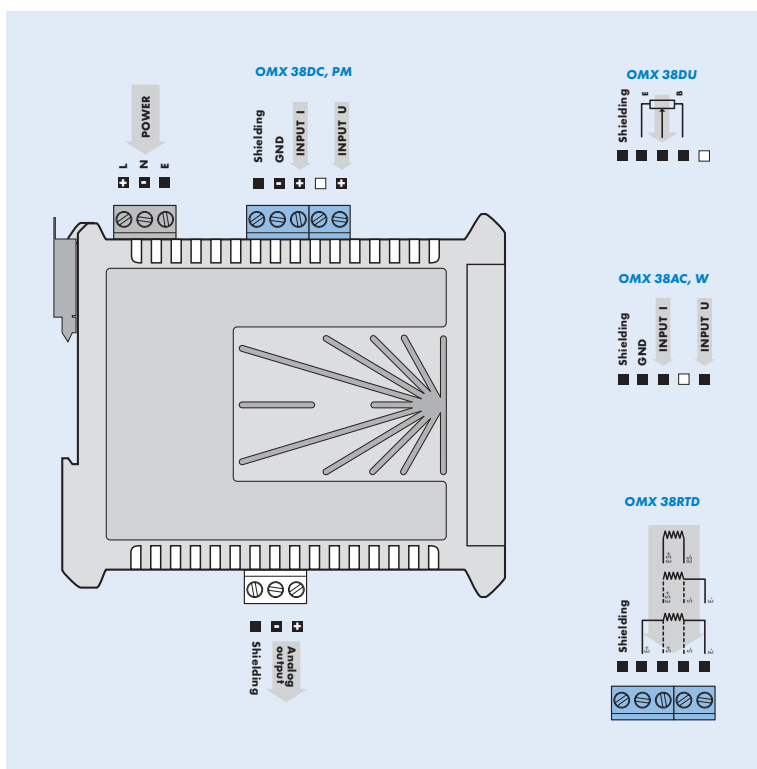
**Connection:** terminal board, section < 2,5 mm<sup>2</sup>  
**Stabilization period:** within 5 minutes after switch-on  
**Working temperature:** 0°...60°C  
**Storage temperature:** -10°...85°C  
**Cover:** IP20  
**El. safety:** EN 61010-1, A2  
**Insulation resistance:** for pollution degree II, 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 55022, 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				M			
T		0...250 V				N			
U		0...450 V				O			
Z	on request	on request	on request			P			

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

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