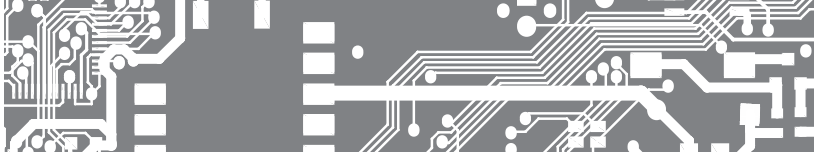


OMX 39W

The OMX 39 model series are low-price and simple analog transmitters with mounting on a 35 mm wide DIN rail.
Type OMX 39W is a transmitter for galvanic separation and power measurement.
The transmitters have galvanic separation with isolation voltage of 600 V and thus they are suitable as primary isolation for majority of industrial applications.

OMX 39W
GALVANIC SEPARATION FOR ACTIVE POWER

ISOLATED POWER TRANSMITTER > U/I

- INPUT: 0...60 mV ~ 300 mV
  0...120 V ~ 450 V
  0...5 mA ~ 5 A
- OUTPUT: 0...5 mA, 0...20 mA, 4...20 mA, ±20 mA
  0...2 V, 0...5 V, 0...10 V, ±10 V
- GALVANIC SEPARATION: 3,75 kVAC
- POWER SUPPLY 10...30 V AC/DC; 80...250 V AC/DC

OPERATION

The transmitter is designed for simple measurements without further control.

CALIBRATION

By trimmers accessible from the face of the transmitter you may adjust the range of the output signal within the range of ±10 %.

TECHNICAL DATA

INPUT

W	Range	fixed - please specify the required range in the order		
		0...120 V	1 MΩ	Input U
		0...150 V	1 MΩ	Input U
		0...250 V	1 MΩ	Input U
		0...450 V	1 MΩ	Input U
		0...60 mV	< 400 mV	Input I
		0...150 mV	< 400 mV	Input I
		0...300 mV	< 400 mV	Input I
		0...1 A	< 400 mV	Input I
		0...5 A	< 400 mV	Input I
	Input frequency	40...2 500 Hz		

INSTRUMENT ACCURACY

TK: 50 ppm/°C
Accuracy: 0,5 % of range
Rate: continuous measurement
Overload capacity: 2x; 10x (t < 30 ms) - not for > 300 V and 5 A
Calibration: at 25°C and 40 % r.h.

ANALOG OUTPUTS

Type: isolated, fixed setting
TK: 50 ppm/°C
Rate: response to change of value < 1 s
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
(line compensation up to 600 Ω)

POWER SUPPLY

Range: 10...30 V AC/DC, ±10 %, PF≥0,4, I_{STP}< 40 A/1 ms, isolated
80...250 V AC/DC, ±10 %, PF≥0,4, I_{STP}< 40 A/1 ms, isolated
Consumption: < 2,4 W/2,6 VA
Power supply is protected by a fuse inside the instrument.

MECHANIC PROPERTIES

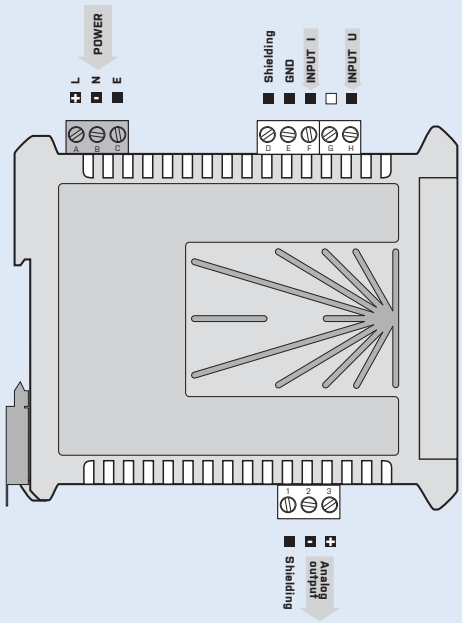
Material: PA 66, incombustible UL 94 V-I, blue
Dimensions: 22 x 98 x 113 mm (w x h x d)
Installation: on DIN rail, width 35 mm

OPERATING CONDITIONS

Connection: connector terminal blocks, section < 2,5 mm²
Stabilization period: within 5 minutes after switch on
Working temperature: -20°...60°C
Storage temperature: -20°...85°C
Protection: IP20
El. safety: EN 61010-1, A2
Dielectric strength: 4 kVAC per 1 min test between supply and input
4 kVAC per 1 min test between supply and analog output
3,75 kVAC per 1 min test between input and analog output
Insulation resistance: for pollution degree II, measuring cat. III
power supply > 600 V (PI), 300 V (DI)
input, output, PN > 500 V (PI), 250 V (DI)
EMC: EN 61326-1

PI - Primary insulation, DI - Double insulation

CONNECTION



ORDER CODE

OMX 39W - ☐☐☐☐

Power supply	10...30 V AC/DC	**0**			
	80...250 V AC/DC	**1**			
Measuring range - U	0...120 V		**R**		
	0...150 V		**S**		
	0...250 V		**T**		
	0...450 V		**U**		
	on request		**Z**		
Measuring range - I	0...60 mV			**H**	
	0...150 mV			**J**	
	0...300 mV			**K**	
	0...1 A			**N**	
	0...5 A			**P**	
	on request			**Z**	
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**

Basic configuration of the instrument is indicated in bold.