



Data Sheet

**Isolated DC Signal Conditioner  
OMX 39DC**

*Distributed by*



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## ISOLATED TRANSMITTER DC V-A > U/I

- Input: 0...10 mV ~ 450 V  
0...5 mA ~ 5 A
- Output: 0...5 mA, 0...20 mA, 4...20 mA,  $\pm 20$  mA  
0...2 V, 0...5 V, 0...10 V,  $\pm 10$  V
- Galvanic separation: 3,75 kVAC
- Power supply 10...30 V AC/DC; 80...250 V AC/DC
- Option  
Excitation

## OMX 39DC

The OMX 39 model series are low-price and simple analog transmitters with mounting on a 35 mm wide DIN rail.

Type OMX 39DC is a transmitter for galvanic separation of DC voltage or current.

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 39DC

GALVANIC SEPARATION FOR DC VOLTAGE OR CURRENT

#### 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  $\pm 10$  %.

#### OPTION

**EXCITATION** with continuously adjustable value is suitable for feeding sensors and transmitters.

## TECHNICAL DATA

### INPUT

Number of inputs	1		
DC	Range	fixed unipolar or bipolar - please specify the required range in the order	
		0...10 mV ~ 10 V	0,5 MΩ
		0...10 V ~ 450 V	1 MΩ
		0...5 mA ~ 5 A	< 260 mV

Input U  
Input U  
Input I

### INSTRUMENT ACCURACY

TC: 50 ppm/°C  
 Accuracy: ±0,1% 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  
 TC: 50 ppm/°C  
 Rate: response to change of value < 1 ms  
 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)

### EXCITATION

Adjustable: 5...24 VDC/max. 1,2 W

### POWER SUPPLY

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

### MECHANIC PROPERTIES

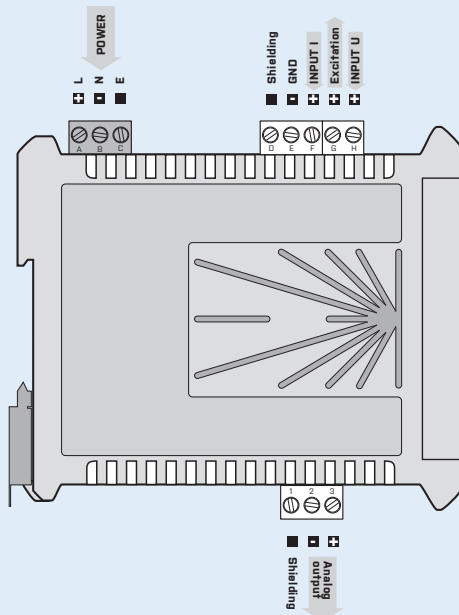
Material: PA 66, incombustible UL 94 V-1, blue  
 Dimensions: 22 x 98 x 113 mm (w x h x d)  
 Installation: on DIN rail, width 35 mm

### OPERATING CONDITIONS

Connection: connector terminal blocks, section < 2,5 mm<sup>2</sup>  
 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 39DC

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Power supply	10...30 V AC/DC 80...250 V AC/DC	<b>0</b> <b>1</b>		
Measuring range*	voltage current	<b>A</b> <b>B</b>		
Excitation	no yes		<b>0</b> <b>1</b>	
Analog output	0...2 V 0...5 V 0...10 V 0...20 mA <b>4...20 mA</b> ±10 V ±20 mA 0...5 mA			<b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b> <b>8</b>

\* Kindly specify the required input range in the order!

Basic configuration of the instrument is indicated in bold.