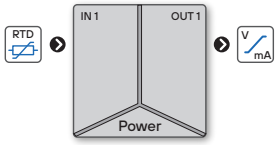
ISOLATED TRANSMITTER Pt > U/I



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 %.

OMX 39RTD

- Input Pt 100/500/1 000
- 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

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

Type OMX 39RTD is a transmitter for galvanic separation of temperature resistance sensors Pt 100/500/1 000.

The transmitters have galvanic separation with isolation voltage of 600 V and thus they are suitable as primary isolation for majority of industrial applications.

TECHNICAL DATA

INPUT

No. of inputs	1 The range is fixed	
RTD Range	Pt 100, 3 850 ppm/°C Pt 500, 3 850 ppm/°C Pt 1 000, 3 850 ppm/°C	-50°...850°C -50°...850°C -50°...850°C
Connection	2-, 3- or 4-wire	

INSTRUMENT SPECIFICATION

TC	50 ppm/°C
Accuracy	±0.2 % of FS
Rate	continuous measurement
Overload	10x (t < 30 ms), 2x
Calibration	at 25°C and 40 % r.h.

ANALOG OUTPUTS

No. of outputs	1
Type	isolated, fixed setting
TC	25 ppm/°C
Rate	response to change of value < 1 ms
Ranges	0...2 / 5 / 10 V, ±10 V, resistive load ≥ 1 kΩ 0...5 / 20 mA /4...20 mA, ±20 mA comp. < 600 Ω/12 V

POWER SUPPLY

Range	10...30 V AC/DC, ±10 %, PF ≥ 0.4, I_{STP} < 75 A / 1 ms, isolated 80...250 V AC/DC, ±10 %, PF ≥ 0.4, I_{STP} < 40 A / 1 ms, isolated *Protection by fuse inside the device.*
Consumption	< 2.4 W / 2.6 VA

MECHANIC PROPERTIES

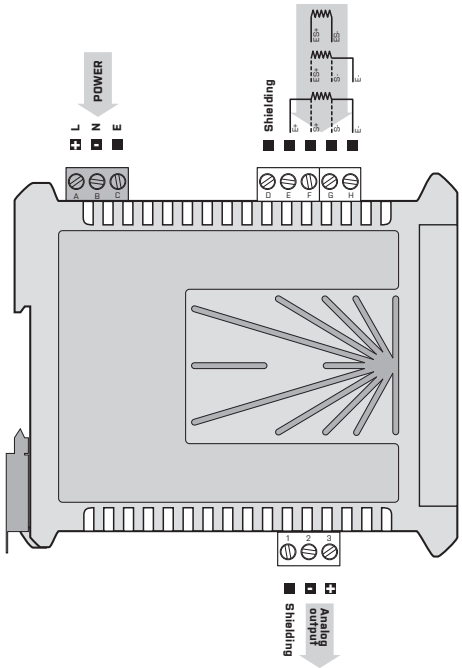
Material	PA 66, incombustible UL 94 V-I, blue
Dimensions	22 x 98 x 113 mm (w x h x d)
Installation	on DIN rail, width 35 mm

OPERATING CONDITIONS

Connection	connector terminal blocks, section < 2.5 mm²
Stabilization period	within 5 minutes after switch-on
Working temperat.	-20°...60°C
Storage temperat.	-20°...85°C
Working humidity	< 95 % r.v., non condensing
Protection	IP20
Construction	safety class I
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 resist.*	for pollution degree II, measuring cat. II power supply > 600 V (PI), 300 V (DI) input, output > 500 V (PI), 250 V (DI)
EMC	EN 61326-1:2021, Industrial area
RoHS	EN IEC 63000:2018
Seismic qualification	IEC/IEEE 60980-344 Edition 1.0, 2020, par. 6, 9
Mechanical resistance	EN 60068-2-6 ed. 2:2008

* PI - Primary insulation, DI - Double insulation

CONNECTION



ORDER CODE

OMX 39RTD - ☐☐☐☐

Power supply	10...30 V AC/DC	**0**			
	80...250 V AC/DC	**1**			
Measuring range*	Pt 100		**A**		
	Pt 500		**B**		
	Pt 1 000		**C**		
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 specify the required input temperature range in the order!

Basic configuration of the instrument is indicated in bold.