OM 47PM

2003 - 3 - en

- **4 ½ digit projection**
- **±2; ±5; ±10 V**
- **0...5/20 mA; 4...20 mA**
- **Size of DIN 96 x 48 mm**
- **Power supply 230 VAC**

Options
Dual comparator • Excitation • Analog output • Power supply 24 VAC, 110 VAC, 10...30 VDC

Description

The OM 47PM model is a 4 ½ digit panel process monitor designed for direct projection of analog signals in required units with great accuracy and stability.

Operation

In its basic version the instrument is designed for simple measurement without further control. In version with dual comparator its setting is performed by two control keys and potentiometers.
Placement of the decimal point is selectable by a shorting link under the front panel.

Calibration

Projection for both limit values of input signal is adjustable by potentiometers under the front panel.
(e.g. 4...20 mA ⇨ projection 0.00...150.00)

Options

Dual comparator serves to monitor two limit values with relay output. The limits have adjustable hysteresis. Reaching the preset limits (top over/bottom under) is signalled by LED and at the same time by the switch-on of the relevant relay.
Excitation is suitable for feeding of sensors and transmitters. It has a galvanic isolation, with continuously adjustable value in the range of 2...24 VDC.
Analog outputs will find their place in applications where further evaluating or processing of measured data is required in external devices. We offer several types of current and voltage outputs. The analog output value corresponds with the input signal.

Technical data

MEASURING RANGE — Impedance/Max. drop

0...5 mA	< 260 mV
0...20 mA	< 260 mV
4...20 mA	< 260 mV
±2 V	1 MOhm
±5 V	1 MOhm
±10 V	1 MOhm

PROJECTION

Display:	±19999, red or green 7-segment LED, digit height 14 mm
Decimal point:	adjustable - by shorting link
Brightness:	adjustable - by potentiometer under the front panel

INSTRUMENT ACCURACY

Tempco:	100 ppm/°C
Accuracy:	±0,15 % of range (applies for full range of the projection) + 1 digit
Rate:	1,2/2,5/5/10 measurements/s
Overload capacity:	10x (t < 30 ms), 2x (long-term)
Calibration:	at 25°C and 40 % r.h.

COMPARATOR

Type:	analog, adjustable by potentiometers under the front panel
Limit 1 and 2	±19999
Hysteresis:	< 2 % of range, adjustable by potentiometers inside the instrument
Outputs:	2 relays with switch-on contact (250 VAC/30 VDC, 3 A)

ANALOG OUTPUTS

Type:	(non)isolated, analog output corresponds with the input signal
Non-linearity:	0,3 % of range
Rate:	response to change of value < 40 ms
Tempco:	100 ppm/°C
Voltage:	0...2 V, 0...5 V, 0...10 V
Current:	0/4...20 mA (compensation of conduct up to 400 Ohm)

EXCITATION

Adjustable:	2....24 VDC/50 mA, galvan. separated from power supply and the input signal

POWER SUPPLY

24; 110; 230 VAC, 50/60 Hz, ±10 %, 5 VA
10...30 VDC/max. 300 mA, (24 V/110 mA), isolated

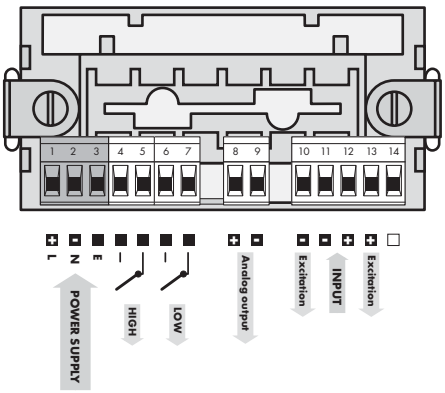
MECHANIC PROPERTIES

Material:	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions:	96 x 48 x 110 mm
Panel cut:	92 x 45 mm

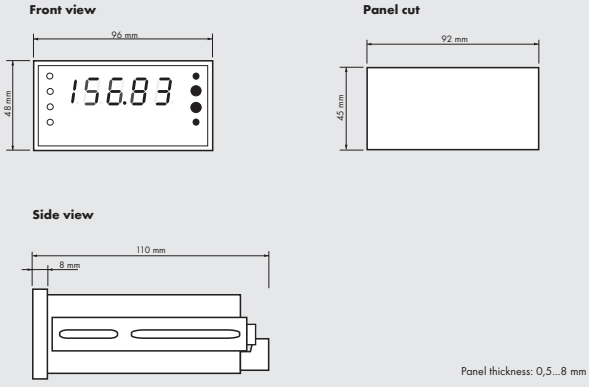
OPERATING CONDITIONS

Connection:	connector terminal board, conductor section up to 2,5 mm²
Stabilization period:	within 15 minutes after switch-on
Working temperature:	0°...60°C
Storage temperature:	-10°...85°C
Covering:	IP40, upon request IP64 (front panel only)
Construction:	safety class I
Electrical safety:	EN 61010-1, A2
Overvoltage category:	for pollution degree II III. - instrument power supply, relay outputs (300 V) II. - input, output (300 V) II. - excitation (50 V)
EMC:	EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2

Connection



Dimensions



Order code

OM 47PM - xxxxxxx

Power supply
0: 24 VAC/50 Hz
1: 230 VAC/50 Hz
3: 110 VAC/50 Hz
4: 10...30 VDC, isolated

Input
A: 0...5 mA
B: 0...20 mA
C: 4...20 mA
D: ±2 V
E: ±5 V
F: ±10 V

Comparators
0: no
1: yes

Display color
1: red
2: green

Excitation
0: no
1: yes

Type of AO
0: non-isolated
1: isolated

Analogue output
0: no
1: 0...2 V
2: 0...5 V
3: 0...10 V
4: 0...20 mA
5: 4...20 mA

Please, state the required input range in your order!

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