# PROCESS MONITORS

# **OM 47PM**



- 4 1/2 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 • Analogue output • Power supply 24 VAC, 110 VAC, 10...30 VDC

#### Description

The OM 47PM model is a 4  $^{1}$ /2 digit panel process monitor designed for direct projection of analogue 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.

**Analogue 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 analogue output value corresponds with the input signal.



# Technical data

**MEASURING RANGE** Impedance/Max. drop < 260 mV 0...5 mA < 260 mV 0 20 mA 4 20 mA < 260 mV±2 V 1 M0hm 1 MOhm ±5 V ±10 V 1 M0hm

**PROJECTION** 

Display: Decimal point:  $\pm 19999$  , red or green 7-segment LED, digit height 14 mm 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)

1,2/2,5/5/10 measurements/s Rate: Overload capacity: 10x (t < 30 ms), 2x (long-term) Calibration: at 25°C and 40 % r.h.

COMPARATOR

analogue, adjustable by potentiometers under the front panel Type:

Limit 1 and 2

Hysteresis: < 2 % of range, adjustable by potentiometers inside the instrument

Outputs: 2 relays with switch-on contact (250 VAC/30 VDC, 3 A)

**ANALOGUE OUTPUTS** 

Type: Non-linearity: (non)isolated, analogue output corresponds with the input signal

0,3 % of range Tempco: 100 ppm/°C 0...2 V, 0...5 V, 0...10 V Voltage:

0/4...20 mA (compensation of conduct up to 400 0hm) Current

**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 92 x 45 mm Panel cut:

**OPERATING CONDITIONS** 

Connection: connector terminal board, conductor section up to 2,5 mm<sup>2</sup>

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)

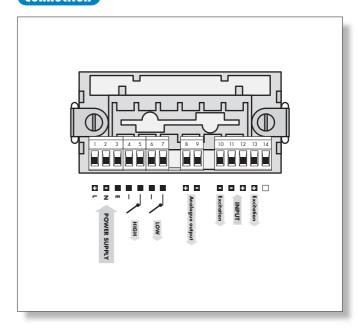
Construction safety class I Electrical safety: EN 61010-1, A2 Overvoltage category: for pollution degree II

III. - instrument power supply, relay outputs (300 V)

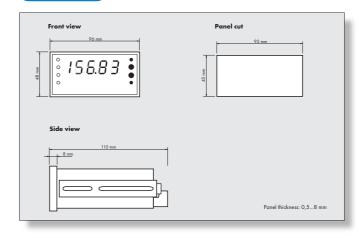
II. - input, output (300 V) II. - excitation (50 V)

EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2 FMC:

#### **Connection**



### **Dimensions**



## Order code

