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

Extension

Dual comparator • Excitation • Analogue output • Power supply 24 VAC, 110 VAC, 8...32 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 the version with dual comparator their 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 mV0 20 mA 4 20 mA < 260 mV±2 V 1 M0hm 1 MOhm ±5 V ±10 V 1 M0hm

PROJECTION

Display: Decimal point: ± 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: 50 ppm/°C

Accuracy: ±0,1 % of range (applies for full range of the projection)

Rate: 2,5 measurements/s Overload capacity: 10x (t < 100 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, analogue, adjustable by potentiometers inside the instrument

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

ANALOGUE OUTPUTS

(non)isolated, analogue output corresponds with the input signal

Type: Non-linearity: 0,3 % of range Tempco: 100 ppm/°C

0...2 V, 0...5 V, 0...10 V (min. 1 k0hm) 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 Hz 8...32 VDC/max. 300 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-out:

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)

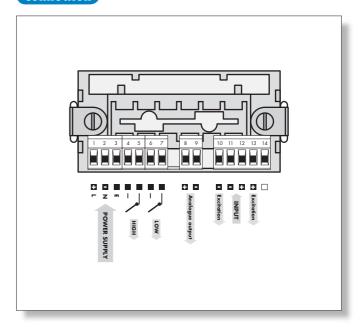
Construction safety class I Electrical safety: EN 61010-1, A2 Overvoltage category: for pollution degree II

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

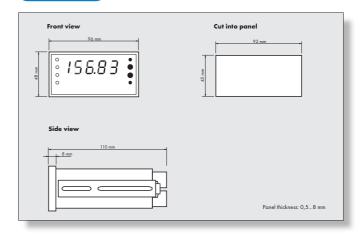
II. - input, output (300 V) II. - excitation (50 V)

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

Connection



Dimensions



Order code

