

OM 47



OM 47DC	DC VOLTMETER AND AMMETER
OM 47AC	AC VOLTMETER AND AMMETER
OM 47PM	PROCESS MONITOR
OM 47OHM	OHMMETER
OM 47RTD	THERMOMETER FOR Pt XXX

- 4 ½ digit projection
- Size of DIN 96 x 24 mm
- Power supply 230 VAC

Options

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

Description

The OM 47 model series are 4 ½ digit panel instruments with good accuracy and stability.

Operation

The instrument is designed for simple measurement without further control. Placement of the decimal point is selectable by jumper under the front panel.

Calibration

Contingent corrections of display projection for both limit values of input signal may be performed by trimmers from the back of the instrument ($\pm 10\%$)

Options

Excitation is suitable for feeding of sensors and transmitters. It is isolated, with continuously adjustable value in the range of 2...24 VDC.

Dual comparator serves to monitor two limit values with relay output. Limits have adjustable hysteresis. Reaching the preset limits (top over/bottom under) is signalled by LED and simultaneously by the switch-on of the relevant relay.

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 or voltage non-isolated outputs. The analog output value corresponds with the input signal.

Technical data

PROJECTION

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

INSTRUMENT ACCURACY

TC: 100 ppm/°C
Accuracy: ±0,15% of range + 1 digit
 ±0,2% of range + 1 digit (RTD)
Rate: 1,2...10 meas./s
Overload capacity: 10x (t < 30 ms) - not for 300 V a 5 A; 2x
Calibration: at 25 °C and 40% r.h.

COMPARATOR

Type: analog, adjustable by trimmer under front panel
Limits: ±19999
Hysteresis: < 2% of range, adj. by trimmer under front panel
Output: 2x relays Form A (250 VAC/30 VDC, 3 A)

ANALOG OUTPUT

Type: non-isolated, AO corresponds with the input signal
Non-linearity: 0,3% of range
Rate: response to change of value < 40 ms
TC: 100 ppm/°C
Ranges: 0...2 V, 0...5 V, 0...10 V, 0/4...20 mA (comp.< 500 Ω)

EXCITATION

Adjustable: 2...24 VDC/50 mA, isolated **PM**

POWER SUPPLY

24, 110, 230 VAC, 50/60 Hz, ±10%, 5 VA
 10...30 VDC/max. 300 mA, isolated
 80...250 V AC/DC isolated

MECHANIC PROPERTIES

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

OPERATING CONDITIONS

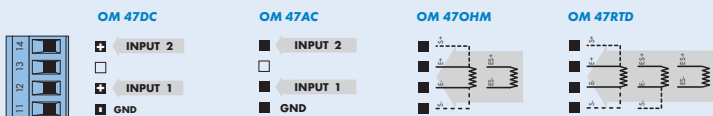
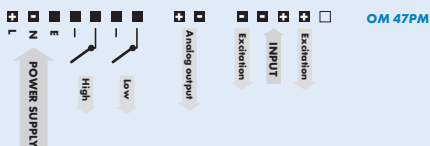
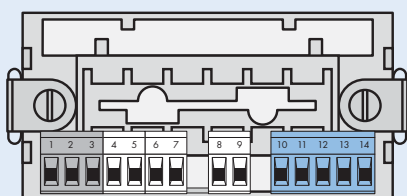
Connection: connector terminal board, section < 2,5 mm²
Stabilization period: within 15 minutes after switch-on
Working temperature: 0°...60°C
Storage temperature: -10°...85°C
Cover: IP40, on request IP64 (front panel only)
El. safety: EN 61010-1, A2
Insulation resistance: for pollution degree II, measuring cat. III.
 AC power supply > 600 V (PI), 300 V (DI)
 DC power supply, input, output, Exc. > 300 V (PI), 250 V (DI)
EMC: EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11;
 EN 550222, A1, A2

PI - Primary insulation, DI - Double insulation

Measuring ranges

	DC	AC	PM	OHM	RTD		RTD
w/o						w/o	
A	±199,99 mV	0...199,99 mV	0...5 mA	0...199,99 Ω	±199,9°C	1	Pt 100
B	±1,9999 V	0...1,9999 V	0...20 mA	0...1,9999 kΩ	-200...850°C	2	Pt 500
C	±19,999 V	0...19,999 V	4...20 mA	0...19,999 kΩ		3	Pt 1 000
D	±199,99 V	0...199,99 V	±2 V	0...199,99 kΩ			
E	±300,0 V	0...300,0 V	±5 V				
F			±10 V				
H				5...105 Ω			
J	±199,99 μA						
K	±1,9999 mA						
L	±19,999 mA						
M	±199,99 mA	0...199,99 mA					
N	±1,9999 A	0...1,9999 A					
P	±5,000 A	0...5,000 A					
Z	on request	on request	on request				

Connection



Order code

OM 47

Type	D	C	.	.	.	.	.	.	.
	A	C	.	.	.	.	.	.	.
	P	M	.	.	.	.	.	.	.
	O	H	M	.	.	.	.	.	.
	R	T	D	.	.	.	.	.	.

Order code shall not include blank spaces!

Power supply	24 VAC/50 Hz	0					
	230 VAC/50 Hz	1					
	110 VAC/50 Hz	3					
	10...30 VDC, isolated	4					
	80...250 V AC/DC, isolated	5					
Measuring range, see table „Measuring ranges“		?					
Comparators	no		0				
	yes		1				
Analog output	none		0				
	0...2 V		1				
	0...5 V		2				
	0...10 V		3				
	0...20 mA		4				
	4...20 mA		5				
Excitation	no		0				
	yes		1				
Connection	2-wire				1		
	*3-wire				2		
	4-wire				3		
Display color	red					1	
	green					2	

Please, state the requested projection for selected input range in your order (PM, OHM)!
 (e.g.: input 0...20 mA > projection 0.00...100.00)