OM 47DC

- **4 ½ digit projection**
- **±199,99 mV ... ±300,0 V**
- **±199,99 µA ... ±5,000 A**
- **Size of DIN 96 x 48 mm**
- **Power supply 230 VAC**

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

Description

The OM 47DC model is a 4 ½ digit panel DC voltmeter/ammeter 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

Contingent corrections of display projection may be performed by a trimmer under the front panel (approx 10 %).

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.
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	
Voltage:	±199,99 mV	> 1 MOhm	Input I/U
	±1,9999 V	1 MOhm	Input I/U
	±19,999 V	1 MOhm	Input I/U
	±199,99 V	1 MOhm	Input HU
	±300,0 V	1 MOhm	Input HU
Current:	±199,99 µA	< 200 mV	Input I/U
	±1,9999 mA	< 200 mV	Input I/U
	±19,999 mA	< 200 mV	Input I/U
	±199,99 mA	< 200 mV	Input I/U
	±1,9999 A	< 50 mV	Input I/U
	±5,000 A	< 50 mV	Input I/U

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
Rate:	1,2/2,5/5/10 measurements/s
Overload capacity:	10x (t < 30 ms) - does not apply for 300 V and 5 A, 2x (long-term)
Calibration:	at 25°C and 40 % r.h.

COMPARATOR

Type:	analogue, 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 switching contact (250 VAC/30 VDC, 3 A)

ANALOGUE OUTPUTS

Type:	(non) isolated, analogue 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 600 Ohm)

POWER SUPPLY

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

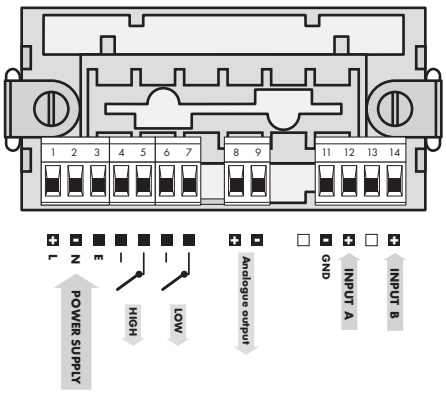
MECHANIC PROPERTIES

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

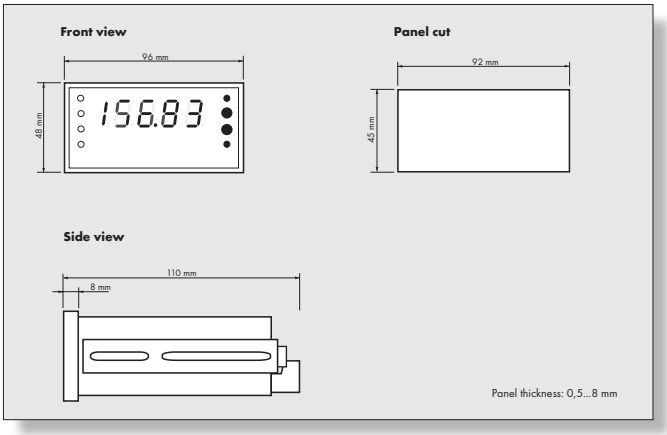
OPERATING CONDITIONS

Connection:	connector terminal board, conductor section up to 2,5 mm^2
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 (300 V)
	II. - input, output, relay output (300 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 47DC - xxxxxx

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

Input
A: ±199,99 mV
B: ±1,9999 mV
C: ±19,999 V
D: ±199,99 V
E: ±300,0 V
J: ±199,99 µA
K: ±1,9999 mA
L: ±19,999 mA
M: ±199,99 mA
N: ±1,9999 A
P: ±5,000 A

Comparators
0: no
1: yes

Display color
1: red
2: green

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

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