

OM 47AC



- 4 1/2 digit projection
- 0 ... 300,0 V
- 0 ... 5,000 A
- 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 47AC model is a 4 1/2 digit panel alternating voltmeter/ammeter 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

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:	0...199,99 mV	> 1 MOhm	Input I/U
	0...1,9999 V	1 MOhm	Input I/U
	0...19,999 V	1 MOhm	Input I/U
	0...199,99 V	1 MOhm	Input HU
	0...300,0 V	1 MOhm	Input HU
Current:	0...199,99 mA	< 200 mV	Input I/U
	0...1,9999 A	< 200 mV	Input I/U
	0...5,000 A	< 50 mV	Input I/U
Frequency range:	40...2 500 Hz		

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: 50 ppm/°C
 Accuracy: ±0,3 % of range (< 100 Hz, crest factor 1-2)
 Rate: 1,2/2,5/5/10 measurements/s
 Overload capacity: 10x (t < 100 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: 0...19999
 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

Type: (non)isolated, analogue output corresponds with the input signal
 Non-linearity: 0,3 % of range
 Tempco: 100 ppm/°C
 Voltage: 0...2 V, 0...5 V, 0...10 V (min. 1 kOhm)
 Current: 0/4...20 mA (compensation of conduct up to 600 Ohm)

POWER SUPPLY

24/110/230 VAC/50 Hz
 9...32 VDC/max. 300 mA, isolated

MECHANIC PROPERTIES

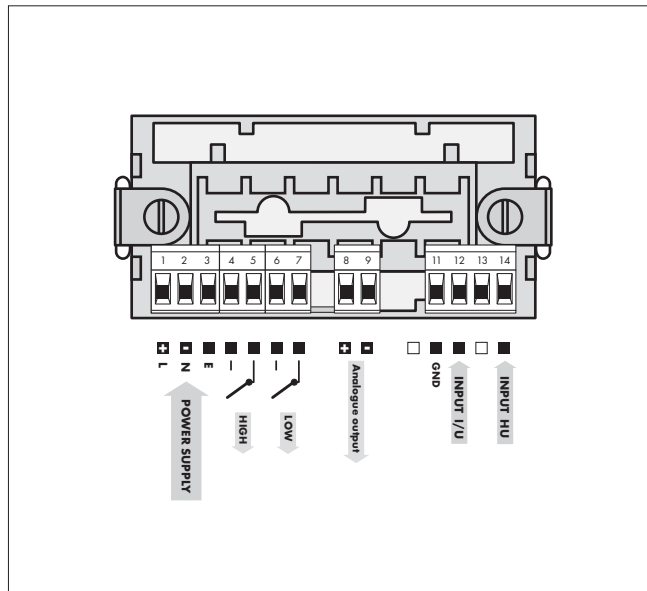
Material: Noryl GFN2 SE1, incombustible UL 94 V-1
 Dimensions: 96 x 48 x 110 mm
 Panel cut-out: 92 x 45 mm

OPERATING CONDITIONS

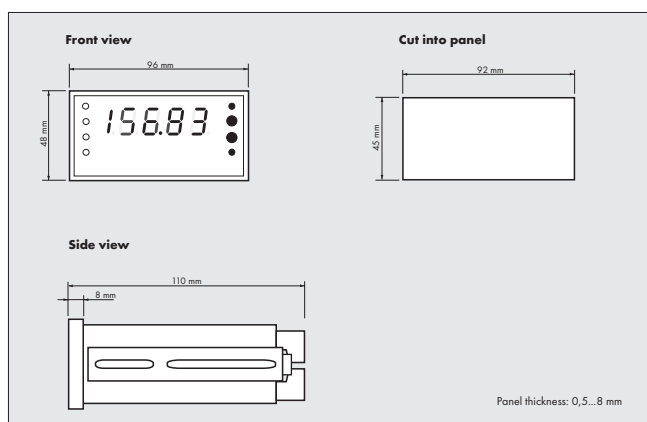
Connection: connector terminal board, conductor section up to 2,5 mm²
 Stabilization period: within 15 minutes after switch-on
 Working temperature: 0°...60°C
 Storage temperature: -10°...85°C
 Covering: IP40, upon request IP64 (front panel only)
 Construction: safety class I
 Electrical safety: EN 61010-1, A2
 Overvoltage category: for pollution degree II

EMC: III. - instrument power supply, relay outputs (300 V)
 II. - input, output (300 V)
 EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 55022, A1, A2

Connection



Dimensions



Order code

OM 47AC - xxxxxx

Power supply	0: 24 VAC/50 Hz	1: 230 VAC/50 Hz	2: 110 VAC/50 Hz	3: 110 VAC/50 Hz	4: 8...32 VDC, isolated
Input	A: 0...199,99 mV	B: 0...1,9999 mV	C: 0...19,999 V	D: 0...199,99 V	E: 0...300,0 V
	M: 0...199,99 mA	N: 0...1,9999 A	P: 0...5,000 A		
Comparators	0: no	1: yes			
Display color	1: red	2: green			
Type 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	