

## OM 47AC



- **4 1/2 digit projection**
- **199,99 mV ... 300,0 V**
- **199,99 mA ... 5,000 A**
- **Size of DIN 96 x 48 mm**
- **Power supply 230 VAC**

2003-3-en

### Options

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

### Description

The OM 47AC model is a 4 1/2 digit panel AC 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 from the front of the instrument. 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.

**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 and voltage outputs. The analog output value corresponds with the input signal.

## Technical data

MEASURING RANGE		Impedance/Max. drop	
Voltage:	0...199,99 mV	> 1 MOhm	Input 1
	0...1,9999 V	1 MOhm	Input 1
	0...19,999 V	1 MOhm	Input 1
	0...199,99 V	1 MOhm	Input 2
	0...300,0 V	1 MOhm	Input 2
Current:	0...199,99 mA	< 200 mV	Input 1
	0...1,9999 A	< 200 mV	Input 1
	0...5,000 A	< 50 mV	Input 1
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: 100 ppm/°C  
 Accuracy: ±0,5% of range (< 100 Hz, crest factor 1-2) + 1 digit  
 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: analog, adjustable by potentiometers under the front panel  
 Limit 1 and 2: 0...19999  
 Hysteresis: < 2% of range, adjustable by potentiometers inside the instrument  
 Outputs: 2 relays with switch-on contact (250 VAC/30 VDC, 3 A)

### ANALOG OUTPUTS

Type: (non)isolated, analog output corresponds with the input signal  
 Non-linearity: 0,3% of range  
 Tempco: 100 ppm/°C  
 Rate: response to change of value < 40 ms  
 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

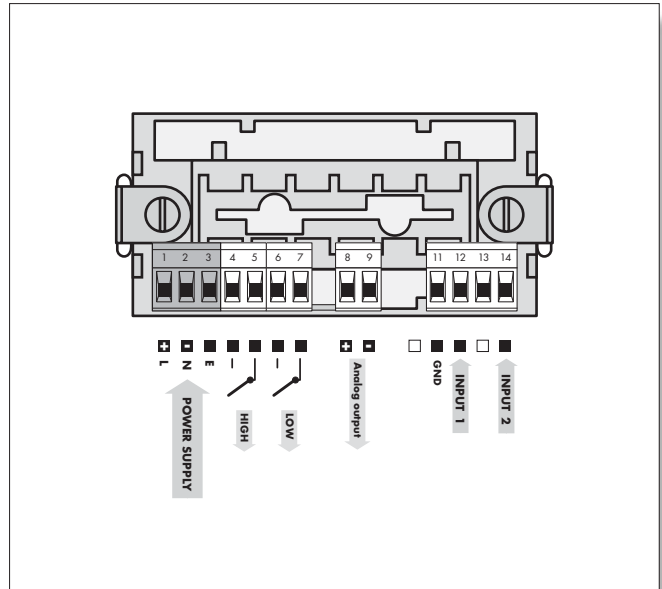
Material: Noryl GFN2 SE1, incombustible UL 94 V-1  
 Dimensions: 96 x 48 x 110 mm  
 Panel cut: 92 x 45 mm

### OPERATING CONDITIONS

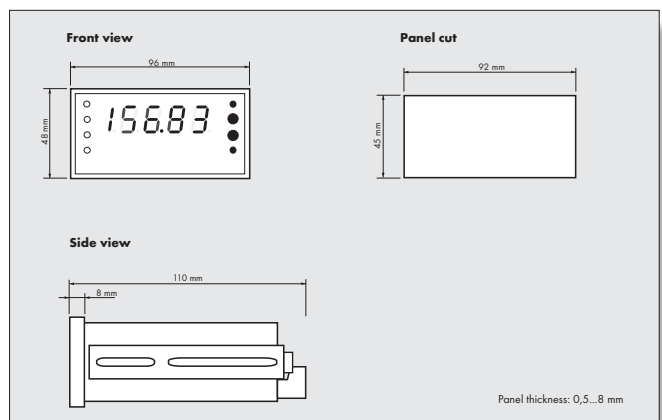
Connection: connector terminal board, conductor section up to 2,5 mm<sup>2</sup>  
 Stabilization period: within 15 minutes after switch-on  
 Working temperature: 0°...60°C  
 Storage temperature: -10°...85°C  
 Covering: IP40, upon request IP64 (front panel only)  
 Construction: safety class I  
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

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**

<b>Power supply</b>	0: 24 VAC/50 Hz	1: 230 VAC/50 Hz	2: 110 VAC/50 Hz	3: 10...30 VDC, isolated	
<b>Input</b>	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	
<b>Comparators</b>	0: no	1: yes			
<b>Display color</b>	1: red	2: green			
<b>Type of AO</b>	0: non-isolated	1: isolated			
<b>Analogue output</b>	0: no	1: 0...2 V	2: 0...5 V	3: 0...10 V	4: 0...20 mA
				5: 4...20 mA	