

OM 47RTD



2003-3-en

- **4 1/2 digit projection**
- **Pt 100; 500; 1 000**
- **±199,9°C/-200,0°...850,0°C**
- **2, 3 or 4 wire connection**
- **Size of DIN 96 x 48 mm**
- **Power supply 230 VAC**

Options

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

Description

The OM 47RTD model is a 4 1/2 digit panel thermometer for sensors Pt 100; 500; 1 000 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

Compensation upon 2-wire connection is performed by a trimmer under the front panel.

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

±199,9°C/-200,0°C...850,0°C
 Type: Pt 100; 500; 1 000 - 3 860 ppm/°C (EU)
 Connection: 2, 3 or 4 wire

PROJECTION

Display: ±19999, red or green 7-segment LED, digit height 14 mm
 Decimal point: fixed
 Brightness: fixed

INSTRUMENT ACCURACY

Tempco: 100 ppm/°C
 Accuracy: ±0,2 % of range + 1 digit
 Rate: 2,5 measurements/s
 Calibration: at 25°C and 40 % r.h.

COMPARATOR

Type: analog, 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 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

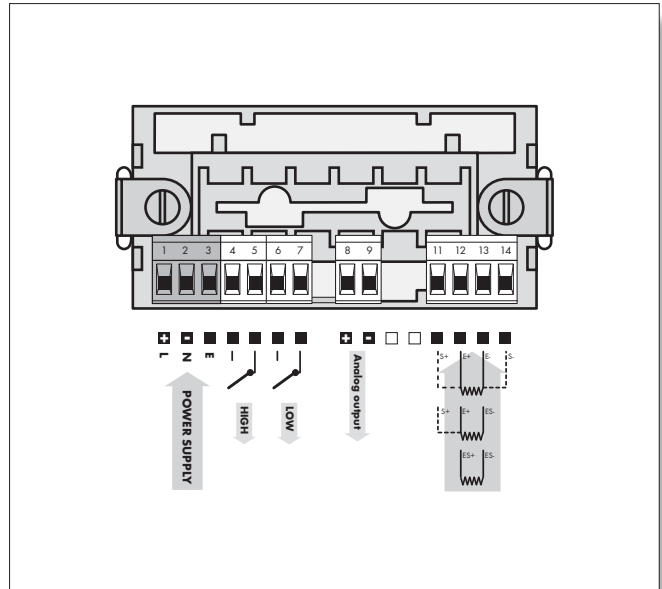
MECHANIC PROPERTIES

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

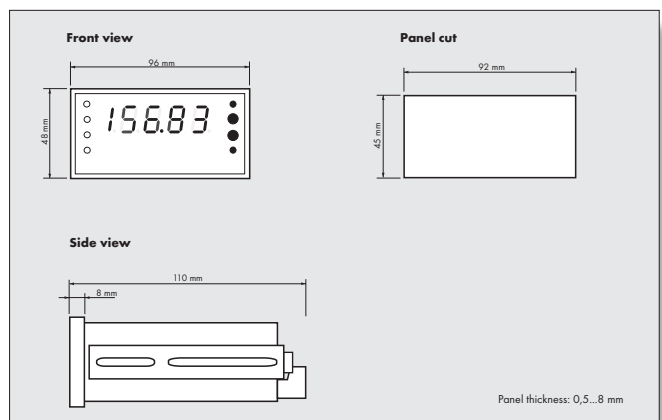
OPERATING CONDITIONS

Connection: connector terminal board, conductor section up to 2,5 mm²
 Stabilization period: within 15 minutes after switch-on
 Working temperature: 0°C...60°C
 Storage temperature: -10°C...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)
 EMC: EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2

Connection



Dimensions



Order code

