

OMM 370RTD



2003-3-en

- **3 ¾ digit projection**
- **Pt 100; 500; 1 000; Ni 1 000; 10 000**
- **-99,9° ... 399,9° C**
- **Simple comparator**
- **Size of DIN 72 x 24 mm**
- **Power supply 10...30 V AC/DC**

Description

The OMM 370RTD model is a small 3 ¾ digit panel programmable thermometer for sensors Pt 100; 500; 1 000, Ni 1 000; 10 000.

The instrument is based on an 8-bit controller with precise A/D converter, that secures high accuracy, stability and easy operation of the instrument.

Standard functions

Programmable input

Type Pt 100; 500; 1 000, Ni 1 000; 10 000
Projection -99.9° ...399.9° C

Compensation

Conduct for 2-wire connection
Probes internal connection (conduct resistance in the measuring head)

Digital filters

Radius of insensitiv. band of suppressed change of measured value

External control

Hold display/instrument blocking
Lock control keys blocking

Output

Limit relay with switching contact,
The limit has both adjustable hysteresis and optional delay of the switch-on. Reaching the limits is signalled by LED and at the same time by the switch-on of the relevant relay.

Operation

The instrument is set and controlled by four control keys located on the front panel. All programmable settings of the instrument are realised in two adjusting modes.

Configuration menu (hereinafter referred to as CM) is protected by an optional number code and contains complete instrument setting

User menu may contain arbitrary programming settings defined in „CM“ with another selective restriction (see, change)

All programmable parameters are stored in the EEPROM memory (they hold even after the instrument is switched off). The display shows the measured units (°C).

Technical data

MEASURING RANGE

Pt	-99,9°...399,9°C
Ni	-30°...250°C
Type:	Pt 100; 500; 1 000 - 3 860 ppm/°C (EU) Pt 100 - 3 920 ppm/°C (US) Ni 1 000; 10 000 - 5 000 ppm/°C Ni 1 000; 10 000 - 6 180 ppm/°C
Connection:	2, 3 or 4 wire

PROJECTION

Display:	-999...3999, red or green 7-segment LED, digit height 9,1 mm
Decimal point:	fixed
Brightness:	adjustable - in Configuration/User menu

INSTRUMENT ACCURACY

Tempco:	60 ppm/°C
Accuracy:	±0,2 % of range + 1 digit
Rate:	1,3 - 2,5 - 5 - 10 - 20 - 40 measurements/s
Resolution:	0,1°C
Watch-dog:	reset after 1,2 s
Function:	Hold/Lock (upon contact) Digital filter - adjustable in Configuration menu
Calibration:	at 25°C and 40 % r.h.

COMPARATOR

Type:	digital, adjustable in programming mode, contact switch-on < 30 ms
Limit:	-999...3999
Hysteresis:	0...999
Delay:	0...99,9 s
Outputs:	relay with switching contact (48 VAC/30 VDC, 3 A)

POWER SUPPLY

10...30 V DC, max. 140 mA, (24 V/45 mA), isolated
12...28 V AC, max. 160 mA, (24 V/110 mA), isolated

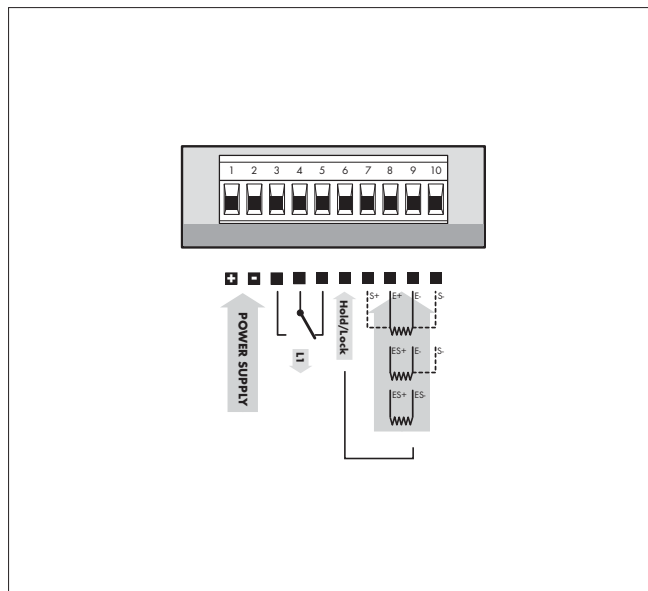
MECHANIC PROPERTIES

Material:	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions:	72 x 24 x 106 mm
Panel cut:	68 x 22,5 mm

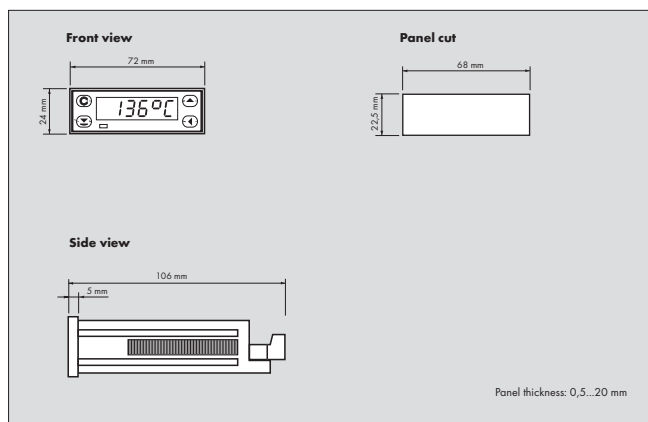
OPERATING CONDITIONS

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:	IP42 (front panel only)
Electrical safety:	EN 61010-1, A2
Overtoltage category:	for pollution degree II
EMC:	II. - instrument power supply, input, relay 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

OMM 370TD - xx

Display color	1: red 2: green
Input	1: Pt 100 2: Pt 500 3: Pt 1 000/№ 1 000 4: Ni 10 000 5: Pt 100 - (US - 3920 ppm/°C)