

## OMM 370T/C



- **3 3/4 digit projection**
- **J, K, T, E, B, S, R, N**
- **Aut. compensation of cold junctions**
- **Simple comparator**
- **Size of DIN 72 x 24 mm**
- **Power supply 8...32 V AC/DC**

### Description

The OMM 370T/C model is a 3 3/4 digit panel thermometer for thermocouples J, K, T, E, B, S, R and N.

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

### Standard functions

#### Programmable input

Type J, K, T, E, B, S, R and N

#### Compensation of cold junctions

Type manual or automatic  
also performed in „CM“ may be the selection of the type of thermocouple and of compensation of cold junctions, which is adjustable (0...98 °C) according to temperature in the compensation box or automatic, according to temperature of input brackets of the instrument

#### 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 five 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

Type:	J (Fe-CuNi)	0°...900°C
	K (NiCr-Ni)	0°...1 300°C
	T (Cu-CuNi)	0°...400°C
	E (NiCr-CuNi)	0°...690°C
	B (PtRh30-PtRh6)	300°...1 820°C
	S (PtRh10-Pt)	0°...1 760°C
	R (Pt13Rh-Pt)	0°...1 740°C
	N (Omegalloy)	0°... 1300°C

### 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:	50 ppm/°C
Accuracy:	±0,2% of range
Rate:	1,3 - 2,5 - 5 - 10 - 20 - 40 measurements/s
Comp. of cold junc.:	adjustable 0°...98°C or automatic
Resolution:	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 < 10 ms
Limit 1	-999...3999
Hysteresis:	0...999
Delay:	0...99,9 s
Outputs:	relay with switching contact (48 VAC/30 VDC, 3 A)

### POWER SUPPLY

8...32 V AC/DC, max. 100 mA, isolated

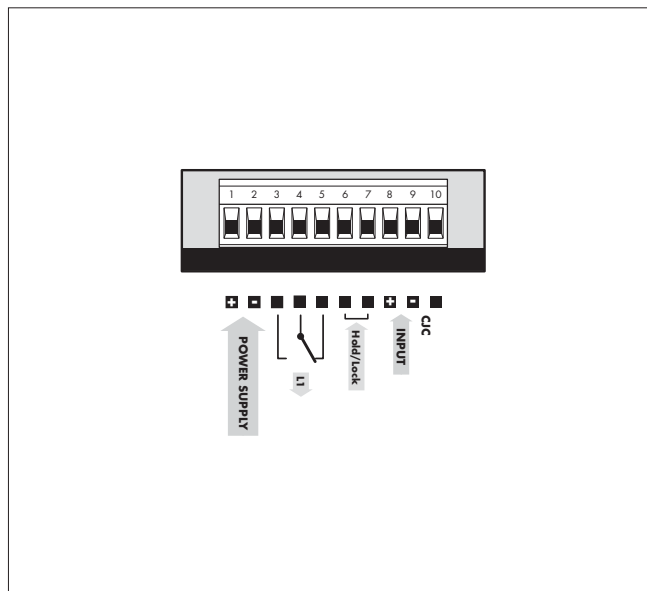
### MECHANIC PROPERTIES

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

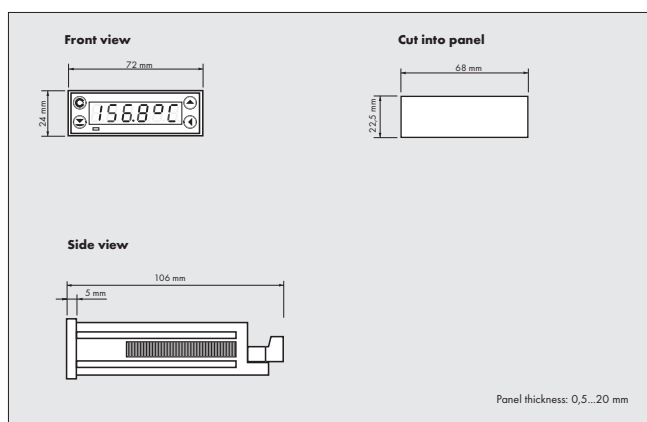
### OPERATING CONDITIONS

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:	IP42 (front panel only)
Electrical safety:	EN 61010-1, A2
Overvoltage 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 550222, A1, A2

## Connection



## Dimensions



## Order code

**OMM 370T/C - x**

Display color  
1: red  
2: green