

# Temperature Panelmeter T9648



- Measuring input for Pt100, Pt1000 or Thermocouple
- LED-Display 14.2 mm red
- Max. 4 alarm outputs relay SPDT or transistor

## Characteristics

The Temperature Panelmeter T9648 is suitable for measurement of temperatures in connection with RTD sensors Pt100, Pt1000 and thermocouples Fe-CuNi (J), NiCr-Ni (K), Pt10Rh-Pt (S). Devices for other temperature sensors are available on request. The measuring input is isolated. The measuring range can be limited in the configuration level. It is identical with the range of the analog output.

## Technical data

### Power supply

Supply voltage : 230 V AC  $\pm 10\%$ ; 115 V AC  $\pm 10\%$ ;  
24 V AC  $\pm 10\%$  or 24 V DC  $\pm 15\%$

Power consumption : max. 3.5 VA, with analog output 5 VA

Operating temp. : -10..+55 °C

CE- conformity : EN 61326-1:2013  
EN 60664-1:2007

### Input

Pt100 : -100..+600 °C

Pt1000 : -50..+200 °C

Accuracy : Pt100 or Pt1000  $< 0.1\% \pm 2$  Digit,  
max. 100 Ohm line resistance

Thermocouple : Fe-CuNi (J) 0..+800 °C,  
NiCr-Ni (K) 0..+1200 °C  
Pt10Rh-Pt (S) 0..+1600 °C  
built-in cold junction

Accuracy :  $< 0.1\% \pm 2$  Digit with compensating line

Display : LED red, 14.2 mm

Indicating range :  $\pm 9999(0)$  Digit

Parameter display : LED 2-digit red, 7 mm  
(parameter - and output indicator)

### Output

Relay SPDT :  $< 250$  V AC  $< 250$  VA  $< 2$  A,  
 $< 300$  V DC  $< 50$  W  $< 2$  A

Transistor : max. 35 V AC/DC, 100 mA,  
short circuit protected

Analog output : 0/4..20 mA burden  $\leq 500 \Omega$ ; 0/2..10 V  
burden  $> 500 \Omega$ , isolated  
automatic output changing  
(burden depending)

- Accuracy : 0.1 %; TK 0.01 %/K

Case : panel case DIN 96x48 mm,  
material PA6-GF; UL94V-0

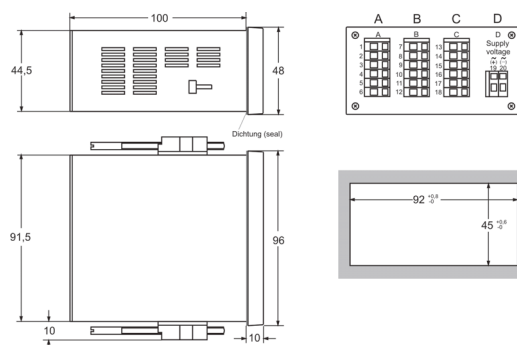
Dimensions : front 96x48 mm, mounting depth 100 mm

Weight : max. 390 g

Connection : clamp terminals, 0.08..1.5 mm<sup>2</sup>  
AWG28..AWG14

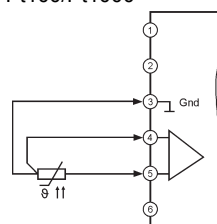
Protection class : front IP65, terminals IP20 acc. to BGV A3

## Dimensions

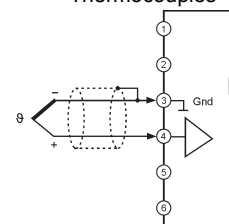


## Connection diagram

### Pt100/Pt1000



### Thermocouples



## Order code

T9648 -  -  -  -  -  -  -

1. Terminal strip A	
1	input Pt100
3	input Pt1000
5	input thermocouple
2. Terminal strip B	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
T1*	2 <sup>nd</sup> input Pt100
T3*	2 <sup>nd</sup> input Pt1000
3. Terminal strip C	
00	not installed
2R	2 relay outputs
2T	2 electronic outputs
AO	analog output 0/4..20 mA, 0/2..10 V
4. Terminal strip D; supply voltage	
0	230 V AC $\pm 10\%$ 50-60Hz
1	115 V AC $\pm 10\%$ 50-60Hz
4	24 V AC $\pm 10\%$ 50-60Hz
5	24 V DC $\pm 15\%$
5. Options	
00	without option
01	min-and max-peak hold
02	difference-, average-, larger-, smaller value
07	display brightness programmable
6. Unit (appears in the unit field)	
7. Additional text placed above the display (3x90 mm HxW)	

\*In connection with terminal strip A, only Pt100 or Pt1000; Pt100 and Pt1000 can not be mixed. Not isolated to terminal strip A. Input ranges of Input 1 and 2 have to be the same. Only available with option 02.