

## DAT 734



### FEATURES

- Input for Pt100 2 or 3 wires sensors
- Visualisation on LCD or LED display
- High accuracy
- Measure freezing by command
- Low current consumption
- EMC compliant – CE mark
- DIN 36 x 72 mm housing
- Mounting on panel in according to DIN 43700 standard

### GENERAL DESCRIPTION

The DAT 734 is a 3.5 digit LCD or LED display, digital thermometer for Pt100 2 or 3 wires sensor with high accuracy and reliability. The range of measure must be chosen in phase of order.

It is possible to adjust the visualised value by the potentiometers located on the rear of the device.

The DAT 734 is designed for the mounting on panel in according to DIN 43700 standard .

Moreover is available the complementary function of measure freezing (HOLD).

The DAT 734 is in compliance with the Directive 2004/108/EC on the Electromagnetic Compatibility.

### USER INSTRUCTIONS

The digital thermometer DAT 734 must be connected as follows.

Connect the power supply between the terminals T3 (+V) and T2 (GND); in order to avoid damages for the device, the power supply value must be lower than 5.5 Vdc.

The input sensor Pt100 3 wires must be connected between the terminals T5 (PT2) and T6 (PT3), the third wire must be connected to the terminal T4 (PT1). The input sensor Pt100 2 wires must be connected between the terminals T5 (PT2) and T6 (PT3) with a short-circuit between the terminals T4 (PT1) and T5 (PT2).

The complementary function HOLD could be used to freeze the measure at the last value detected. To use this function connect the terminal T1 (HOLD) to the terminal T2 (GND); in order to avoid damages for the device, it is recommended to active this function for a maximum time of 2 minutes.

To calibrate and install the device refer to sections “Calibration DAT 734” and “Installation Instructions”.

### TECHNICAL SPECIFICATIONS (Typical at 25 °C and in nominal conditions)

#### INPUT

Type of signal 2 or 3 wires Pt100 sensor  
Input range - 50 ÷ 200 °C  
0 ÷ 600 °C  
Out of scale visualisation High: 1(On the left side); Low -1(On the left side)



#### VISUALISATION

Type of visualisation (LCD – version C) Static polarised Liquid Crystal Display for wide angle of visualisation  
Digit height 0.35 "  
Type of visualisation (LED – version D) High efficiency LED display or standard LED display  
Digit height 0.52 "

#### PERFORMANCES

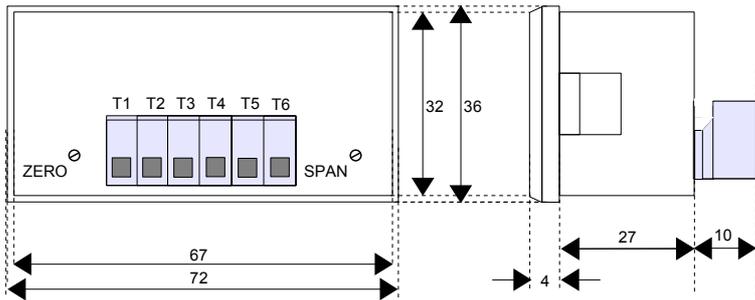
Reading accuracy ± 0.25 % of f.s.  
Thermal drift 0.02 % of f.s./°C  
Response time 800 ms  
Power supply voltage 5 Vdc ± 5 %  
Current consumption Version D: 180 mA (high efficiency), 90 mA (standard)  
Version C: 10 mA  
Electromagnetic Compatibility (EMC)  
( for industrial environments ) Immunity: EN 61000-6-2; Emission: EN 61000-6-4.  
Operative temperature -10 ÷ 60 °C  
Storage temperature - 40 ÷ 80 °C  
Relative humidity (not condensed) 0 ÷ 90%  
Weight about 100 g

## CALIBRATION DAT 734

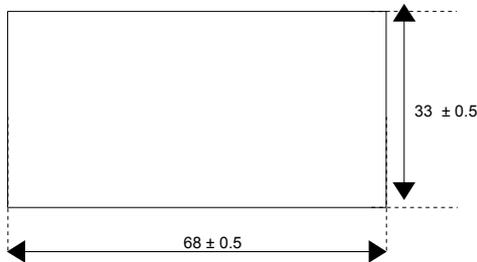
Refer to section "Dimensions and Regulations".

- 1) Connect on input a Pt100 simulator.
- 2) Set the simulator at the minimum value of the input range.
- 3) By the ZERO potentiometer, adjust the minimum value of visualisation.
- 4) Set the simulator at the maximum value of the input range.
- 5) By the SPAN potentiometer, adjust the maximum value of visualisation.

## DIMENSIONS (mm) AND REGULATIONS



## PANEL CUT-OUT

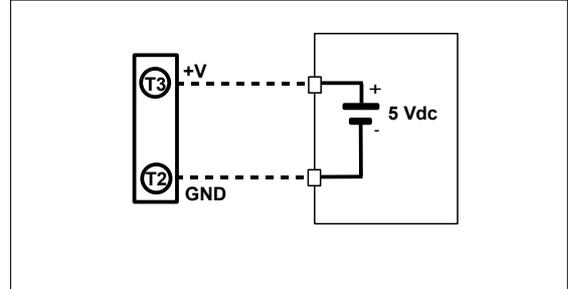


## INSTALLATION INSTRUCTIONS

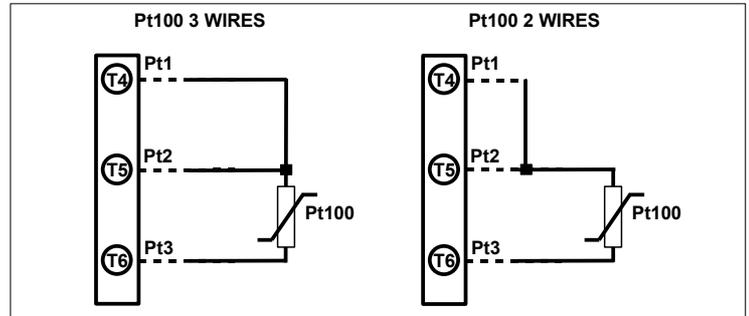
The device DAT 734 is suitable for mounting on panel (DIN 43700); the device needs a panel cut out of 68 \* 33 mm (W\*H). It is necessary to install the device in a place without vibrations; avoid to routing conductors near power signal cables .

## CONNECTION DAT 734

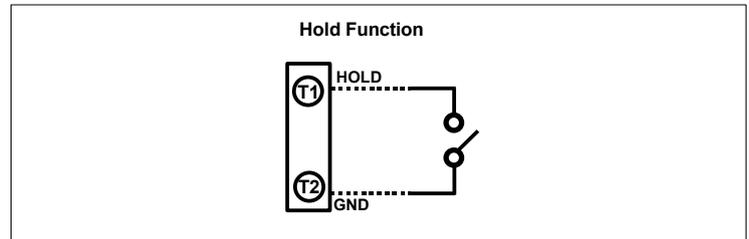
### POWER SUPPLY CONNECTIONS



### INPUT CONNECTIONS



### COMPLEMENTARY FUNCTION CONNECTIONS



## HOW TO ORDER

The DAT 734 is provided configured as requested from the Customer in phase of order.

### ORDER CODE:

DAT 734 -C- [-50÷200 °C]

Range of visualisation

Type of display  
Version C: LCD display  
Version D: LED display