

DATA SHEET



Temperature measurement system in wall housing

Description



Characteristic features

- Inconspicuous wall housing
- Standard signal 0...10 V
- Linearised and temperature compensated temperature measurement
- High long-term stability, innovative technology
- Integrated sensor technology

Areas of application

- Temperature measurement in the inner area
- Building technology
- Industrial measurement and control technology
- Climatic record
- Home Automation

Technical Data

Temperature measurement	
Measuring range	-30...+70 °C
Accuracy	±0,7 °K (0...40°C)
Output scale	-30...70 °C FS
In general	
CE-conformity	89/336/EWG
EMV transient emissions	EN 61000-6-3:2001
Dimensions	see drawing
Housing	ABS
Connection	screw terminals 0,75 mm ²
Operating voltage	12...24 V AC/DC
Overvoltage protector	varistor and RC filter

Features

In the building automation budget-priced measuring systems which are suitable for long-term work and protected against overvoltage and transients are needed. Further aspects are the choice between direct current and alternating current supply, a high long-term stability plus a good measurement accuracy during the application.

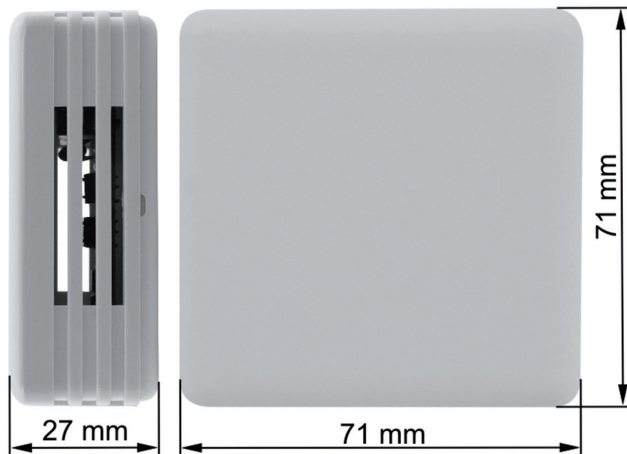
The B+B Temperature probe series –GLT have been developed especially for these requirements and are specifically suitable for working in this branche through the most modern sensor technology and the innovative installation using an ASIC. The measurement of temperature occurs with a precise and longterm stable resistance temperature detector. The processing of the measurement values is linearised and temperature compensated. The power supply occurs optionally through alternating curent (AC) and direct current (DC) supply. Due to the big exchange area and the labelled clamps a simple and fast connection is warranted.

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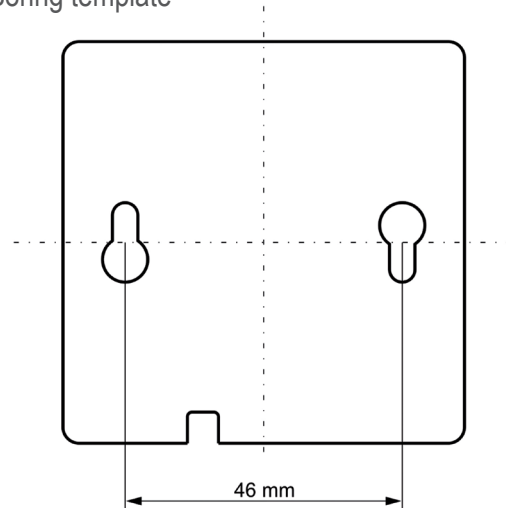


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Drawing



Boring template



Feeding

The measurement probe can be fed alternatively with AC or DC or unsifted, rectified voltage.

At AC-feeding the ground mark of the transformer has to lay on the signal ground and the connection of further probes has to occur in-phase.

At feeding with unsifted, rectified voltage you have to switch Minus on the reference ground and Plus on the +DC/AC 24 V. A wrong connection can lead to failure or to damage of the electronics.

Measurement of the signal voltage

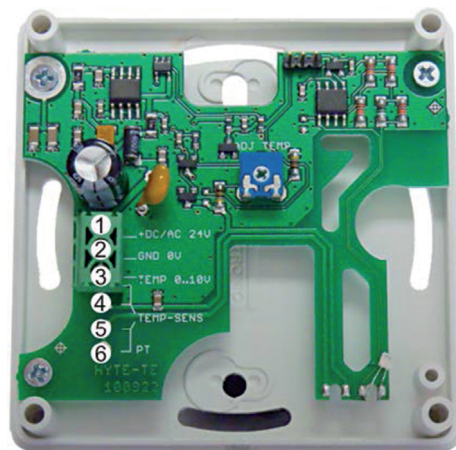
To avoid measurement failures by the cable resistance and the supply current through the earth cable in the 0...10 V model a separate earth cable for the signal voltage is to be planned.

Connection

For the connection should be preferentially used screened connection cables. Especially in EMI disturbed environment. The shielding is to be grounded. Please check before connecting that the supply voltage agrees to the specified operating voltage (data sheet).

Warranty

You get 24 month warranty on our high class measurement probes. Modifications to the electronics will result in loss of the warranty claims.. Calibration service is excluded from warranty.



- 1 +DC 24 V
- 2 GND
- 3 TEMP 0-10 V

Temperature measurement 0...10 V

Pin	Function	Description
1	+DC/AC 24 V	Operating voltage
2	GND 0 V	Reference potential
3	TEMP 0...10 V	Temperature signal 0...10 V

The measurement of the output signal should be done with separate signal ground in order to avoid measurement errors of the ground connection due to voltage drop.

For further information, please visit our website:
www.bb-sensors.com