

**Probe thermostat with contact output
binary sensor in hazardous locations zones 1 and 2**

ATEX compliant

TBT-2G

APPLICATION

TBT-2G the thermostate is suitable for temperature controll, limitation and regulation for non aggressive gas or liquid. In combination with EEx-i switch Type EXL-IRU-1 with intrinsic safe circuit the sensors may be used in hazardous areas zones 1 and 2.

TECHNICAL DATAS

Type	TBT-2G
Supply	by EXL-IRU-1
Contact	dust encapsulated single micro switch
Ambient temperature	-20...+65 °C
Storage temperature	-20...+80 °C
Range	20... 90 °C
Hysteresis	2... 20 K, adjustable
Humidity	0...95 %r.H., non condense
Enclosure	Plastic, ABS reinforced, IP54
Sensor material	brass
Dimension	108 x 70 x 243 mm
Protection class	II2G EEx ia IIC T6, acc. to EN 50014/ EN 50020 simple apparatus
CE	94/9/EC (ATEX)
Includes in price	1 thermostat Type TBT-2G
Installation area	Zone 1, 2 by using the switch module Type EXL-IRU-1

II2G EEx ia IIC T6
Zone 1, 2
acc. to ATEX



EEx-i CIRCUIT - TABLE 1

Operation values maximum at terminal

Voltage	Ui	15 VDC
Current	Ii	50 mA
Power	Pi	100 mW
Capacity	Ci	0 µF
Inductivity	Li	0 mH

The maximum values must not be exceeded!
Please check your external capacities and inductivities in acc. to the length of the cable and the methode of installation

MOUNTING AND INSTALLATION

For installation remove the two screws in the cover and the external knob. Mounting is in any posion possible. At wall mounting use the holes in the housing. The differential gap (hysteresis) can adjusted by a knop under the terminal. After installation fix all screws and cable entry tight.

RECOMMENDED MODULE

- Switching module Mfr. Schischek Type EXL-IRU-1.
- In combination with transducer EXL-IRU-1 is intrinsic safety proof for simple circuits given.
- Manufacturer declaration zone 1 and 2.

FUNCTION

Heating

Connect red to blue terminal; the contact opens while rising of the temperature.

Cooling

Connect red to white terminal; the contact opens while dropping of the temperature.

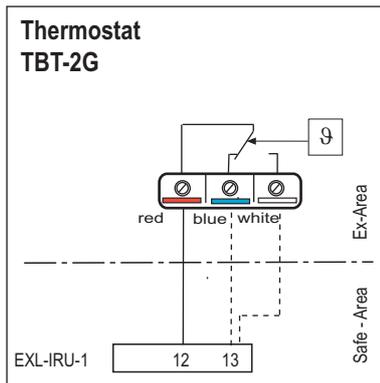
MAINTENANCE

The thermostate is maintenance free!

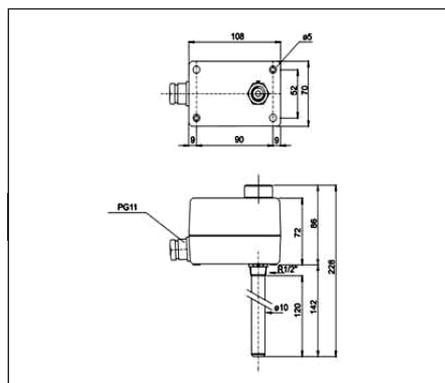
ATTENTION!

- For installation, use and maintenance the official standards and rules must be applied.
- The energy of intrinsically safe circuits are below the level to start an explosion in case of a spark..
- Intrinsic safe circuits must be installed with light blue coloured and separate from non intrinsic safe circuits.
- The sensor is passiv and potential free for use in hazardous locations in zone 1, 2.
- Pay attention to the max values for wiring, listed in table 1.
- Avoid electrostatic discharge.
- Only wet cleaning.

ELECTRICAL CONNENCTION



DIMENSION



subject to change