

**Surface contact  
temperature controller**

**Surface contact temperature controller with contact output  
binary sensor in hazardous locations zones 1 and 2**

**TBR-AN-2G / 0 ... 60 °C  
ATEX compliant**

**APPLICATION**

**TBR-AN-2G** for monitoring, controlling and limiting of temperatures on piping or vessels 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**

<b>Type</b>	<b>TBR-AN-2G</b>
Supply	by EXL-IRU-1
Contact	dust encapsulated single micro switch
Ambient temperature	-10...+65 °C
Storage temperature	-20...+70 °C
Range	0... 60 °C adjustable
Hysteresis	approx. 5 +/- 1K
Enclosure	Plastic, PA reinforced, IP54
Sensor	Copper
Dimension	135 x 70 x 102 mm
Protection class	II2G EEx ia IIC T6, acc. to EN 50014/ EN 50020
CE	simple apparatus
Includes in price	94/9/EC (ATEX)
Installation area	1 thermostat Type TBR-AN-2G
	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**

Mounting is in any posion possible. After installation fix all screws and cable entry tight.

Heating	Cooling
Contact 2 - 3 breaks when temperatur rises to the preset value	Contact 2 - 1 breaks when temperatur drop to the preset value

**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.

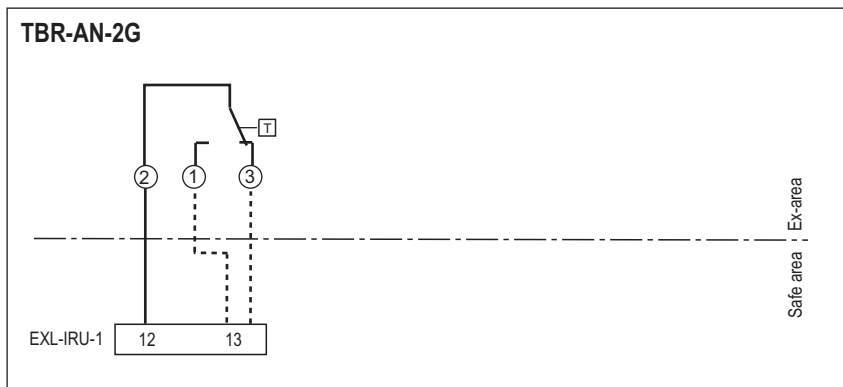
**MAINTENANCE**

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**



subject to change