SCHISCHEK
EXPLOSIONPROOF

Room Hygrostat

Room hygrostat with contact output
binary sensor in hazardous locations zones 1, 2

Type FBR-2G
ATEX compliant

APPLICATION

FBR-2G is suitable for monitoring of relative humidity in non aggressive areas. In combination with Ex-i switch Type EXL-IRU-1 with intrinsic safe circuit the sensors may be used in hazardous areas zones 1 and 2.

suitable for
Zone 1, 2
acc. to ATEX

TECHNICAL DATAS

Type	**FBR-2G**
Supply	by EXL-IRU-1
Contact	dust encapsulated single potentail free switch
Ambient temperature	0...+40 °C
Storage temperature	0...+60 °C
Adjustment range	35...100 %r.H., non condensing
Differential gap	~4%r.H
Enclosure	Plastic, ABS, IP20 (EN60529)
Dimension	95 x 95 x 33 mm
Protection class	simple apparatus acc. to EN 60079-11
CE	94/9/EC (ATEX)
Included in price	1 room hygrostat Type FBR-2G
Installation area	Zone 1 and 2 with switching module Type EXL-IRU-1

Ex-i CIRCUIT - TABLE 1

Operation values maximum at terminal
Simple apparatus suitable for Zone 1, 2
Only for connecting to intrinsically safe circuits with max values

Voltage	Uo	13,5 VDC
Current	Io	23 mA
Power	Po	76 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

The ideal value can be select with a switch under the cover. The unit migth be wall mounted far from heat sources and freely accessible for air convection at the heigth of approx. 1,5 m. No silicons for sealing should be used.

ELEKTRICAL CONNECTION

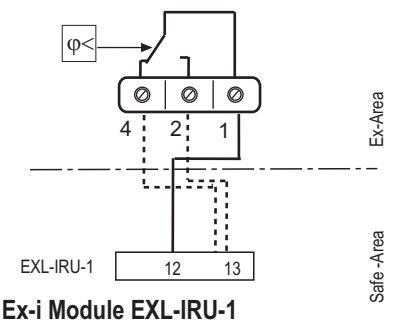
Terminals 1-2 humidify
Terminals 1-3 dehumidify

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.

ELECTRICAL CONNECTIONS

Room hygrostat
FBR-2G



Ex-i Module EXL-IRU-1

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.

subject to change

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