



PROFIBUS-Interface

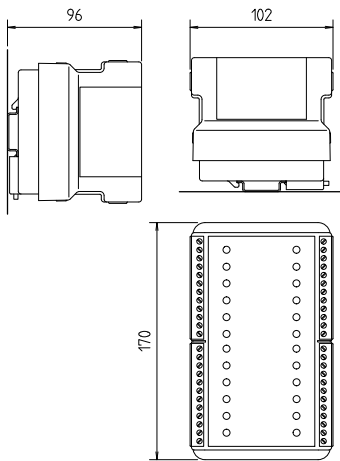
Features

- 4 Channels
- Pt100, Pt1000, Potentiometer, Resistors
- Ex ia/ib
- Galvanic isolation
- LED display
- Programmable address on front panel

Description

This modul allows the intrinsically safe connection of 4 Pt100, Pt1000, resistors or potentiometers at PROFIBUS DP. The inputs themselves, power supply and the bus are galvanically isolated.

Dimensions/mounting positions



Technical data

Construction

Flameproof, clip-on enclosure for TH 35 rail

Enclosure material

High-quality thermoplastic

Protection class

Enclosure	IP 66
Terminals	IP 20
Terminals with cover	IP 30

Terminals

2,5 mm², fine stranded

Labelling

front panel label for markings

Display

LEDs on front panel

Storage temperature

-40 °C to +60 °C

Ambient temperature

-20 °C to +60 °C

Weight

2.1 kg

Electrical data

Supply voltage

DC 20 V to DC 30 V

Power consumption

P = 4 W

Power dissipation

P_v = 4 W

Galvanic isolation

power supply//inputs (one below the other)
//bus//electronic

Bus interface

RS485 with screw-clamping terminals

Sensor power

200 µA

Display

Bus status	ON, BF, SF
Inputs	4 x double LED
	LED yellow, sensor active
	LED red, open/short circuit

Measuring range

Temperature (Pt100, Pt1000)	-150 °C to 850 °C
Potentiometer	500 Ω to 5 kΩ
Resistor	0 Ω to 5 kΩ

Account

Temperature	-1500 to 8500 (dec.)
Potentiometer	0000 to 1000 (dec. 0-100 %)
Resistor	0000 to 5000 (dec.)

Cable resistor

R ≤ 50 Ω

Accuracy

0.2 %

Temperature drift

0.05 %/10 K

Guidelines/norms/certifications

Directive 2004/108/EC
Directive 94/9/EC

Explosion protection

Ex protection type

Ex II 2(1)G Ex de [ia] IIC

Certification

PTB 97 ATEX 1066 U
TÜV 01 ATEX 1668
Type 17-6583-.7./....

For further data see EC model test certification.

Safety data

U ₀ = 7.2 V	U _m = 253 V
I ₀ = 6 mA	P ₀ = 11 mW
L ₀ ≤ 25 mH (IIC)/50 mH (IIB)	
C ₀ ≤ 1.1 µF (IIC)/5.7 µF (IIB)	

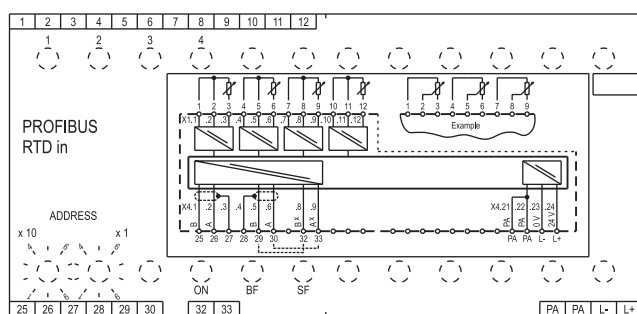
Operating mode

4 x Pt 100		
4 x Pt 1000		
4 x Potentiometer		
4 x Resistor		
2 x Pt 100	(channel 1 and 2); 2 x Potentiometer	(channel 3 and 4)
2 x Pt 100	(channel 1 and 2); 2 x Resistor	(channel 3 and 4)
2 x Pt 1000	(channel 1 and 2); 2 x Potentiometer	(channel 3 and 4)
2 x Pt 1000	(channel 1 and 2); 2 x Resistor	(channel 3 and 4)
all values 0 (dez.)		
all values 32767 (dez.)		

Response time

380 ms (*1)	320 ms (*2)
380 ms (*1)	320 ms (*2)
80 ms (*3)	
80 ms (*3)	
380 ms (*1)	320 ms (*2)
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380 ms (*1)	320 ms (*2)
380 ms (*1)	320 ms (*2)

Wiring diagram/terminal assignment



- (*1) Filter on 50 Hz adjusted
- (*2) Filter on 60 Hz adjusted
- (*3) Filter on 250 Hz

Notes

- last bus modul in system:
Bridge A-A^x (terminals 30, 33)
Bridge B-B^x (terminals 29, 32)
- GSD-file: BARX2307.gsd

➔ **Order no.**
07-7331-2307/0000

Technical data subject to change without notice.