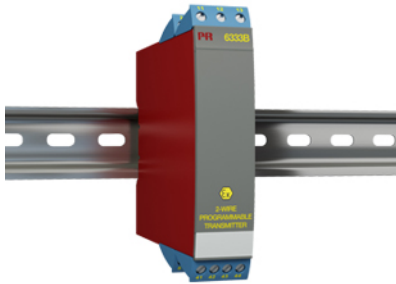


2-wire programmable transmitter



6333B

- RTD or Ohm input
- High measurement accuracy
- 3-wire connection
- Can be installed in Ex zone 0
- 1- or 2-channel version



Application

- Linearized temperature measurement with Pt100...Pt1000 or Ni100...Ni1000 sensor.
- Conversion of linear resistance variation to a standard analog current signal, for instance from valves or Ohmic level sensors.

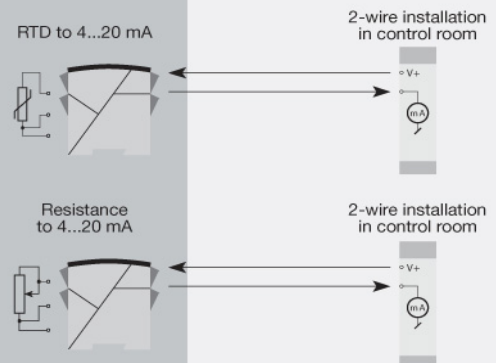
Technical characteristics

- Within a few seconds the user can program PR6333B to measure temperatures within all RTD ranges defined by the norms.
- The RTD and resistance inputs have cable compensation for 3-wire connection.
- A limit can be programmed on the output signal.

Mounting / installation

- Mounted vertically or horizontally on a DIN rail. Using the 2-channel version, up to 84 channels can be mounted per meter.
- NB: As Ex barrier we recommend 5104B, 5114B, or 5116B.

Connections



Order:

Type	Galvanic Isolation	Channels
6333B	None : 1	Single : A Double : B

Environmental Conditions

Specifications range.....	-40°C to +60°C
Calibration temperature.....	20...28°C
Relative humidity.....	< 95% RH (non-cond.)
Protection degree.....	IP20

Mechanical specifications

Dimensions (HxWxD).....	109 x 23.5 x 104 mm
Weight (1 / 2 channels).....	145 / 185 g ₂
Wire size.....	1 x 1.5 mm ² stranded wire

Common specifications

Supply voltage.....	8.0...30 VDC
Internal consumption.....	0.19...0.8 W
Voltage drop.....	8.0 VDC
Isolation voltage, ch. 1 / ch. 2.....	1500 VAC
Warm-up time.....	5 min.
Communications interface.....	Loop Link
Signal / noise ratio.....	Min. 60 dB
Accuracy.....	Better than 0.1% of selected range
Response time (programmable).....	0.33...60 s
Signal dynamics, input.....	19 bit
Signal dynamics, output.....	16 bit
Effect of supply voltage change.....	< 0.005% of span / VDC

Input specifications

Max. offset.....	50% of selected max. value
RTD input.....	Pt100, Ni100, lin. R
Cable resistance per wire (max.), RTD.....	10 Ω
Sensor current, RTD.....	> 0.2 mA, < 0.4 mA
Effect of sensor cable resistance (3-wire), RTD.....	< 0.002 Ω / Ω
Sensor error detection, RTD.....	Yes

Output specifications

Current output: Signal range.....	4...20 mA
Min. signal range.....	16 mA
Updating time.....	135 ms
Load resistance, current output.....	≤ (Vsupply - 8) / 0.023 [Ω]
Load stability, current output.....	≤ 0.01% of span / 100 Ω
Sensor error indication, current output.....	Programmable 3.5...23 mA
NAMUR NE 43 Upscale/Downscale.....	23 mA / 3.5 mA
*of span.....	= of the presently selected range

Approvals

EMC.....	EN 61326-1
ATEX 2004/108/EC.....	KEMA 09ATEX0147
EAC Ex TR-CU 012/2011.....	RU C-DK.GB08.V.00410