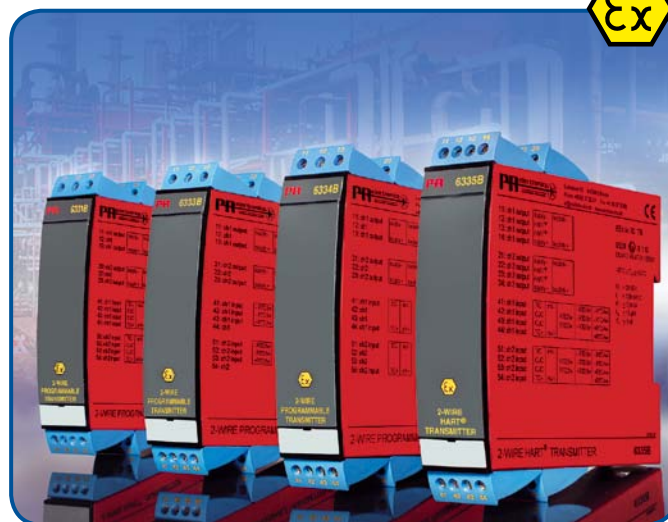


2-WIRE PROGRAMMABLE TRANSMITTER



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



Application:

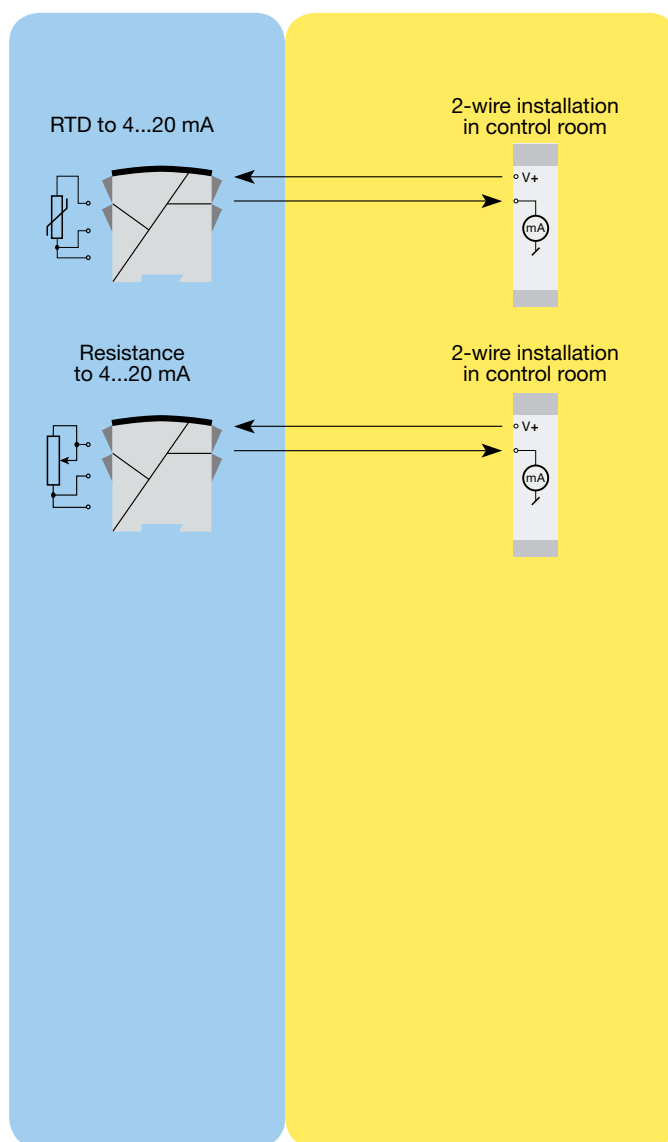
- Linearised temperature measurement with Pt100...Pt1000 or Ni100...Ni1000 sensor.
- Conversion of linear resistance variation to a standard analogue current signal, for instance from valves or Ohmic level sensors.

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 metre.
- **NB:** As Ex barrier we recommend 5104B, 5114B, or 5116B.

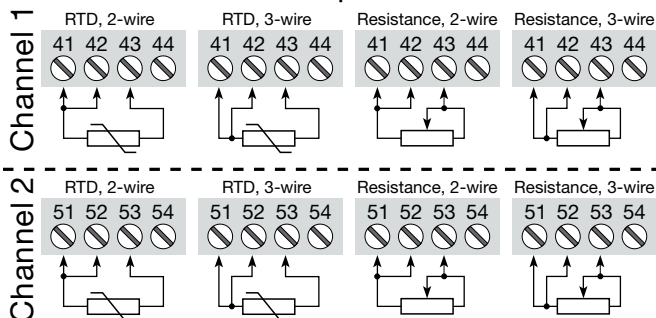


Order: 6333B

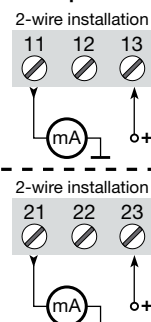
Type	Galvanic Isolation		Channels	
6333B	None	: 1	Single	: A
			Double	: B

Connections:

Inputs:



Outputs:



Electrical specifications:

Specifications range:

-40°C to +60°C

Common specifications:

Supply voltage, DC	8.0...30 VDC
Internal consumption	0.19...0.8 W
Voltage drop	8 VDC
Isolation voltage, ch. 1 / ch. 2	1500 VAC
Warm-up time	5 min.
Communications interface	Loop Link
Signal / noise ratio	Min. 60 dB
Response time (programmable)	0.33...60 s
Signal dynamics, input	19 bit
Signal dynamics, output	16 bit
Calibration temperature	20...28°C
Accuracy, the greater of general and basic values:	

General values		
Input type	Absolute accuracy	Temperature coefficient
All	≤ ±0.1% of span	≤ ±0.01% of span / °C

Basic values		
Input type	Basic accuracy	Temperature coefficient
RTD	≤ ±0.3°C	≤ ±0.01°C/°C
Lin. R	≤ ±0.2 Ω	≤ ±20 mΩ / °C

EMC immunity influence	< ±0.5% of span
------------------------	-----------------

Effect of supply voltage variation	≤ 0.005% of span / VDC
Max. wire size	1 x 1.5 mm ² stranded wire
Humidity	< 95% RH (non-cond.)
Dimensions (H x W x D)	109 x 23.5 x 104 mm
Protection degree	IP20
Weight (1 / 2 channels)	145 / 185 g

Electrical specifications, input:

Max. offset..... 50% of selec. max. value

RTD and linear resistance input:

RTD type	Min. value	Max. value	Min. span	Standard
Pt100	-200°C	+850°C	25°C	IEC 60751
Ni100	-60°C	+250°C	25°C	DIN 43760
Lin. R	0 Ω	10000 Ω	30 Ω	-----

Cable resistance per wire (max.)	10 Ω
Sensor current	> 0.2 mA, < 0.4 mA
Effect of sensor cable resistance (3-wire)	< 0.002 Ω / Ω
Sensor error detection	Yes

Outputs:

Current outputs:

Signal range	4...20 mA
Min. signal range	16 mA
Updating time	135 ms
Load resistance	≤ (V _{supply} - 8) / 0.023 [Ω]
Load stability	< ±0.01% of span/100 Ω

Sensor error detection:

Programmable	3.5...23 mA
NAMUR NE43 Upscale	23 mA
NAMUR NE43 Downscale	3.5 mA

Ex / I.S. approval:

KEMA 09ATEX0147	Ex II 1 G
	Ex ia IIC T6...T5
Max. amb. temperature for T6	40°C
Max. amb. temperature for T5	60°C
ATEX, applicable in zone	0, 1 or 2
ATEX Installation Drawing No.	6333QA01

GOST R approval:

VNIIFTRI, Cert. no. www.prelectronics.com

Observed authority requirements: Standard:

EMC 2004/108/EC	EN 61326-1
ATEX 94/9/EC	EN 60079-0, -11 and -26

Of span = Of the presently selected range