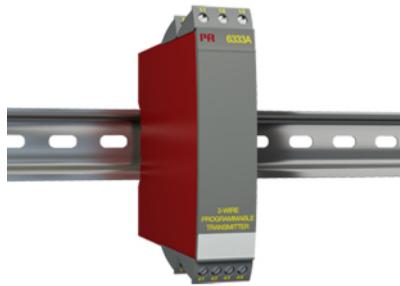


## 2-wire programmable transmitter

### 6333A



- RTD or Ohm input
- High measurement accuracy
- 3-wire connection
- Programmable sensor error value
- 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.

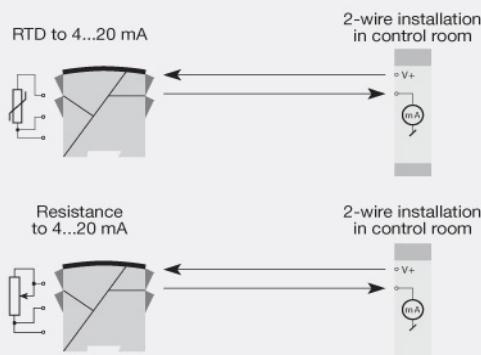
#### Technical characteristics

- Within a few seconds the user can program PR6333A 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 per meter can be mounted.

#### Connections



**Order:**

| Type  | Galvanic Isolation | Channels                        |
|-------|--------------------|---------------------------------|
| 6333A | None               | : 1<br>Single : A<br>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  
 Wire size..... 1 x 2.5 mm<sup>2</sup> stranded wire

**Common specifications**

Supply voltage..... 8.0...35 VDC  
 Internal consumption..... 0.19...0.8 W  
 Voltage drop..... 8.0 VDC  
 Isolation voltage, ch. 1 / ch. 2..... 3.75 kVAC  
 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  
 Effect of supply voltage change..... < 0.005% of span / VDC  
 EMC immunity influence..... < ±0.5% of span

**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..... ≤ (V<sub>supply</sub> - 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..... KEMA 10ATEX0007 X  
 GOST R..... Yes