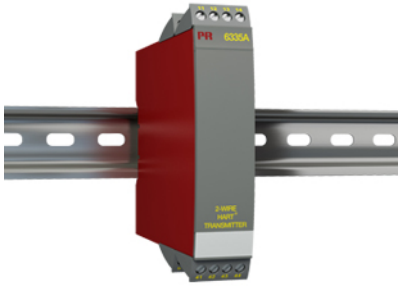
PERFORMANCE MADE SMARTER



2-wire HART® transmitter

6335A

– RTD, TC, Ohm, or mV input
– Extremely high measurement accuracy
– HART® 5 protocol
– Galvanic isolation
– 1- or 2-channel version

Application

- Linearized temperature measurement with Pt100...Pt1000, Ni100...Ni1000, or TC sensor.
- Difference or average temperature measurement of 2 resistance or TC sensors.
- Conversion of linear resistance variation to a standard analog current signal, for instance from valves or Ohmic level sensors.
- Amplification of a bipolar mV signal to a standard 4...20 mA current signal.
- Connection of up to 15 channels to a digital 2-wire signal with HART® communication.

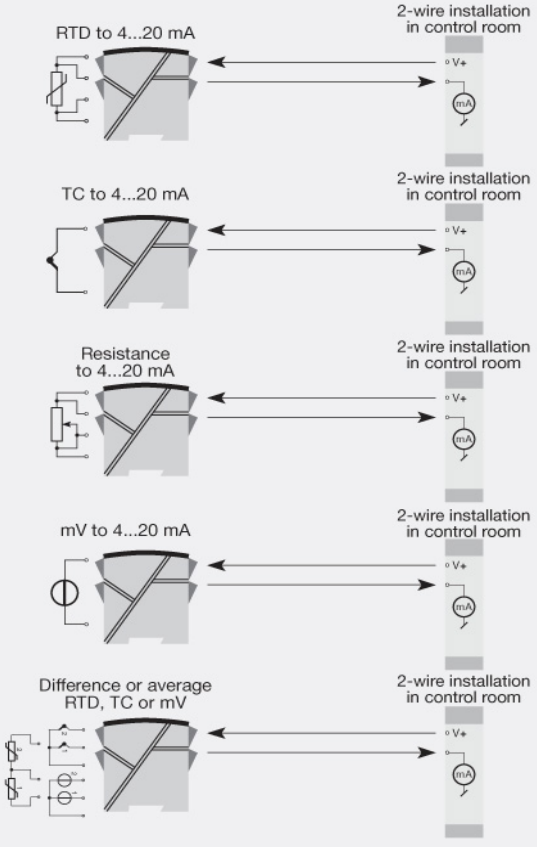
Technical characteristics

- Within a few seconds the user can program PR6335A to measure temperatures within all ranges defined by the norms.
- The RTD and resistance inputs have cable compensation for 2-, 3- and 4-wire connection.
- The 6335A has been designed according to strict safety requirements and is thus suitable for application in SIL 2 installations.
- Continuous check of vital stored data for safety reasons.
- Sensor error detection according to the guidelines in NAMUR NE89.

Mounting / installation

- Mounted vertically or horizontally on a DIN rail. As the devices can be mounted without any distance between neighbouring units, up to 84 channels can be mounted per metre.

Connections



Order:

Type	Galvanic isolation	Channels
6335A	1500 VAC : 2	Single : A Double : B

*NB! Please remember to order CJC connectors type 5910 (channel 1) and 5913 (channel 2) forTC inputs with an internal CJC.

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 1.5 mm^2 stranded wire

Common specifications

Supply voltage	8.0...35 VDC
Voltage drop	8.0 VDC
Isolation voltage, test / working	1.5 kVAC / 50 VAC
Isolation voltage, ch. 1 / ch. 2	3.75 kVAC
Warm-up time	30 s
Communications interface	Loop Link & HART®
Signal / noise ratio	Min. 60 dB
Accuracy	Better than 0.05% of selected range
Response time (programmable)	1...60 s
Signal dynamics, input	22 bit
Signal dynamics, output	16 bit
Effect of supply voltage change	< 0.005% of span / VDC
EMC immunity influence	< ±0.1% of span
Extended EMC immunity: NAMUR NE 21, A criterion, burst	< ±1% of span

Input specifications

Max. offset	50% of selected max. value
RTD input	Pt100…1000, Ni100...1000, lin. R
Cable resistance per wire (max.), RTD	5 Ω (up to 50 Ω per wire is possible with reduced measurement accuracy)
Sensor current, RTD	Nom. 0.2 mA
Effect of sensor cable resistance (3-/4-wire), RTD	< 0.002 Ω / Ω
Sensor error detection, RTD	Yes
TC input: Thermocouple type	B, E, J, K, L, N, R, S, T, U, W3, W5
Cold junction compensation (CJC)	< ±1.0°C
Sensor error detection, TC	Yes
Sensor error current: When detecting / else	Nom. 33 µA / 0 µA
Voltage input: Measurement range	-800...+800 mV
Min. measurement range (span), voltage input	2.5 mV
Input resistance, voltage input	10 MΩ

Output specifications

Current output: Signal range	4…20 mA
Min. signal range	16 mA
Updating time	440 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 10ATEX0006 X
IECEx	KEM 10.0084X
EAC TR-CU 020/2011	EN 61326-1
SIL	Hardware assessed for use in SIL applications