

2-wire HART® transmitter

6337D

- 1- or 2-channel converter for RTD, TC, Ohm, and bipolar mV signals
- 2 analog inputs and 5 device variables with status available
- HART® protocol revision selectable from HART® 5 or HART® 7
- Hardware assessed for use in SIL applications
- Mounting on a DIN rail in hazardous gas and dust area



Application

- Linearized temperature measurement with TC and RTD sensors e.g. Pt100 and Ni100.
- HART® communication and 4...20 mA analog PV output for individual, difference or average temperature measurement of up to two RTD or TC input sensors.
- Conversion of linear resistance to a standard analog current signal, e.g. from valves or Ohmic level sensors.
- Amplification of bipolar mV signals to standard 4...20 mA current signals.
- Up to 63 transmitters (HART® 7) can be connected in a multidrop communication setup.

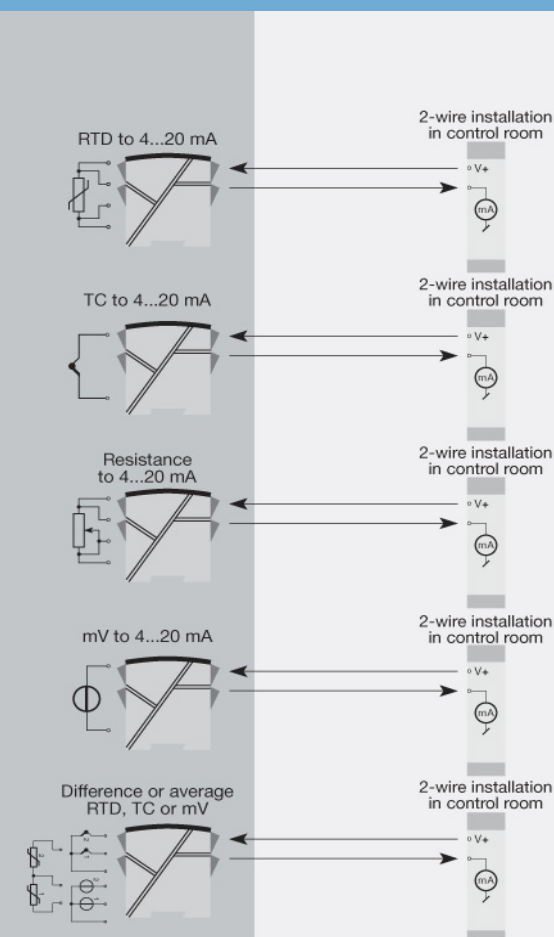
Technical characteristics

- HART® protocol revision can be changed by user configuration to either HART® 5 or HART® 7 protocol.
- The HART® 7 protocol offers:
 - Long Tag numbers of up to 32 characters.
 - Enhanced Burst Mode and Event notification with time stamping.
 - Device variable and status mapping to any dynamic variable PV, SV, TV or QV.
 - Process signal trend measurement with logs and summary data.
 - Automatic event notification with time stamps.
 - Command aggregation for higher communication efficiency.
- 6337D is designed according to strict safety requirements and is therefore suitable for applications in SIL installations.
- Continuous check of vital stored data.
- Meeting the NAMUR NE 21 recommendations, the 6337D HART® transmitter ensures top measurement performance in harsh EMC environments. Additionally, the 6337D meets NAMUR NE43 and NE89 recommendations.

Mounting / installation

- DIN rail mounting with up to 84 channels per meter.
- Configuration via standard HART® communication interfaces or by PR 5909 Loop Link.

Connections



Order:

Type	Galvanic isolation	Channels
6337D	1500 VAC : 2	Single : A Double : B

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

Environmental Conditions

Specifications range.....	-40°C to +60°C
Storage temperature.....	-40°C to +85°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).....	150 / 200 g
DIN rail type.....	DIN EN 60715/35 mm
Wire size.....	0.13...2.08 mm ² AWG 26...14 stranded wire
Screw terminal torque.....	0.5 Nm

Common specifications

Supply voltage.....	8.0...30 VDC
Voltage drop.....	8.0 VDC
Isolation voltage, test / working.....	1.5 kVAC / 50 VAC
Isolation voltage, ch. 1 / ch. 2.....	1500 VAC
Communications interface.....	Loop Link & HART®
Accuracy.....	Better than 0.05% of selected range
Signal / noise ratio.....	> 60 dB
Response time (programmable).....	1...60 s
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.....	Pt50, Pt100, Pt200, Pt500, Pt1000, Ni50, Ni100, Ni120, Ni1000
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
TC input: Thermocouple type.....	B, E, J, K, L, N, R, S, T, U, W3, W5
Cold junction compensation (CJC).....	Constant, internal or external via a Pt100 or Ni100 sensor
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]
Sensor error indication, current output.....	Programmable 3.5...23 mA
NAMUR NE 43 Upscale/Downscale.....	23 mA / 3.5 mA
HART protocol revisions.....	HART 5 and HART 7

Approvals

EMC.....	EN 61326-1
ATEX 2004/108/EC.....	KEMA 09ATEX0148
IECEX.....	DEK 11.0084X
FM.....	2D5A7
CSA.....	1125003
EAC TR-CU 020/2011.....	EN 61326-1
EAC Ex TR-CU 012/2011.....	RU C-DK.GB08.V.00410
SIL.....	Hardware assessed for use in SIL applications