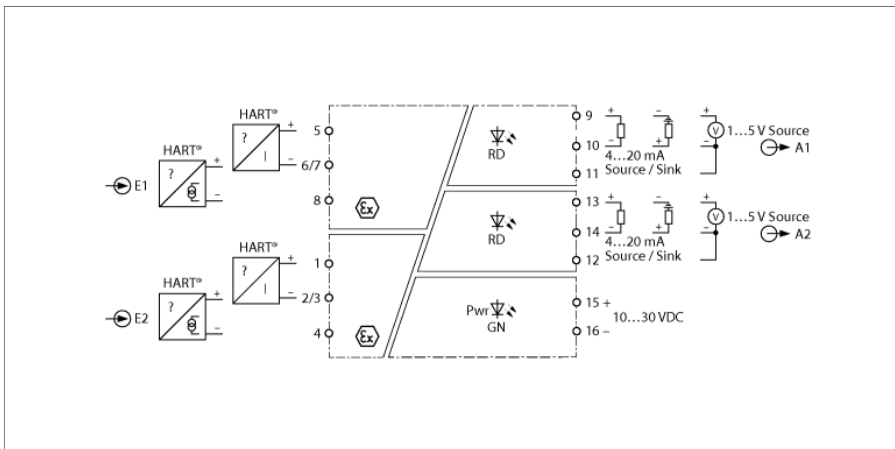


**Isolating transducer
2-channel
IMX12-AI01-2I-2IU-H0 /24VDC**



The 2-channel IMX12-AI01-2I-2IU-H0/24VDC HART® isolating transducer is designed to operate intrinsically safe HART® 2-wire transducers in the Ex area and to transmit the measured signals to the non-Ex area.

In addition to the analog signal also digital HART® communication signals can be transmitted bidirectionally. Furthermore, active and passive 2-wire HART® transmitters can be operated. The device is equipped with a 4 ... 20 mA input and output circuit (either as source or sink) or 1...5 V (source). The input signals are transmitted in the range of 3.8... 20.5 mA without interference 1:1 and made available at the outputs in the non-Ex area. Wire-break (< 3.5 mA) and short-circuit (> 22 mA) in the transducer circuit are output as current < 3.5 mA or voltage < 0.875 V.

A green LED indicates operational readiness. An error in the input circuit leads to a flashing red LED according to NE44.

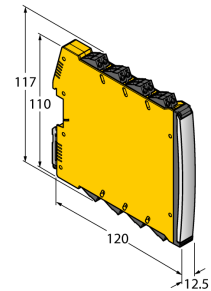
The device can be used in safety circuits up to SIL2 (high and low demand according to IEC 61508) and meets the requirements of the NE21. It is equipped with removable screw terminals.

- ATEX, IECEx, NEPSI, INMETRO, Kosha, TR CU
- Installation in zone 2
- SIL 2
- Input circuits monitored for wire-break and short-circuit
- Complete galvanic isolation
- HART transparent
- Removable screw terminals

**Isolating transducer
2-channel
IMX12-AI01-2I-2IU-H0 /24VDC**

Type designation		IMX12-AI01-2I-2IU-H0 /24VDC
Ident no.		7580305
Nominal voltage		24 VDC
Operating voltage range		10...30 VDC
Power consumption		≤ 3.8 W
Transmitter connection		
Supply voltage		≥ 17 V / 20 mA
Input current		2 x 4...20 mA
Temperature drift supply voltage		≤ 0.03 %/K
Reference temperature		23 °C
Output circuits		
Output current		2 x Source/Sink (15...28V) 4...20 mA
Output voltage		2 x 1...5 V
Load resistance, current output		≤ 0.8 kΩ
Short-circuit		Output < 3.5 mA, if in the input circuit a current > 22 mA flows
Wire break		Output < 3.5 mA, if in the input circuit a current < 3.5 mA flows
Rise time (10...90 %)		≤ 5 ms
Fall time (90...10 %)		≤ 5 ms
Measuring accuracy (including linearity, hysteresis and repeatability)		≤ 0.05 % of full scale
Reference temperature		23 °C
Temperature drift		≤ 0.002 % of final value /K
Galvanic isolation		
Test voltage		2.5 kV
Input 1 to output 1		375 V peak value acc. to EN 60079-11
Input 2 to output 2		375 V peak value acc. to EN 60079-11
Input 1 to supply		375 V peak value acc. to EN 60079-11
Input 2 to supply		375 V peak value acc. to EN 60079-11
Output 1 to supply		50 V RMS acc. to EN 50178 and EN 61010-1
Output 2 to supply		50 V RMS acc. to EN 50178 and EN 61010-1
Output 1 to output 2		50 V RMS acc. to EN 50178 and EN 61010-1
Input 1 to input 2		60 V peak value acc. to EN 60079-11
Important note		For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate		TÜV 15 ATEX 158337 X
Application area		II (1) G, II (1) D
Ignition protection category		[Ex ia Ga] IIC; [Ex ia Da] IIIC
Application area		II 3 (1) G
Ignition protection type		Ex ec [ia Ga] IIC T4 Gc
Important note		If the device is used in applications to achieve functional safety according to IEC 61508, the safety manual must be used. Information in the data sheet are not valid for functional safety.
Use in SIL safety circuits		SIL 2 acc. to IEC 61508
Indication		
Operational readiness		green
Error indication		red

Dimensions



**Isolating transducer
2-channel
IMX12-AI01-2I-2IU-H0 /24VDC**

Protection class	IP20																																																																																		
Flammability class acc. to UL 94	V-0																																																																																		
Ambient temperature	-25...+70 °C																																																																																		
Storage temperature	-40...+80 °C																																																																																		
Relative humidity	≤ 95 %																																																																																		
Dimensions	120 x 12.5 x 117 mm																																																																																		
Weight	183 g																																																																																		
Mounting instructions	DIN rail (NS35)																																																																																		
Housing material	Polycarbonate/ABS																																																																																		
Electrical connection	Removable screw terminals, 2-pin																																																																																		
Terminal cross-section	0.2...2.5 mm ² (24 ... 13 AWG)																																																																																		
Tightening torque	0.5 Nm																																																																																		
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