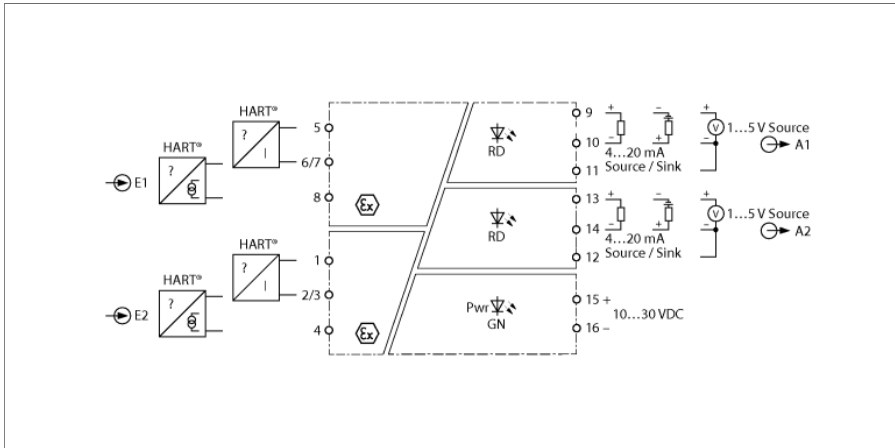


**Isolating transducer
2-channel
IMX12-AI01-2I-2IU-H0/24VDC/CC**



The 2-channel IMX12-AI01-2I-2IU-H0/24VDC/CC 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. Alternatively, active 2-wire HART® transmitters and passive 3-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 1:1 in a range between 3.5 ... 21.5 mA and made available to the outputs in the non-Ex area. Wire-break or short circuit in the measuring transducer circuit are output as currents of < 3.5 mA or > 22 mA or voltages of 0.95 V or > 5.125 V.

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

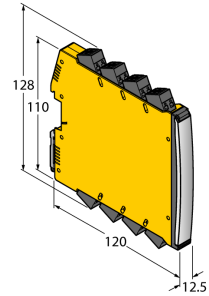
The device can be used in safety circuits up to SIL2 (high and low demand according to IEC 61508) and meets the requirements of the NE21. It is equipped with removable cage clamp terminals.

- ATEX, IECEx
- Installation in zone 2
- Input circuits monitored for wire-break and short-circuit
- Complete galvanic isolation
- HART transparent
- Removable cage clamp terminals

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

Type code	IMX12-AI01-2I-2IU-H0/24VDC/CC
Ident no.	7580307
Nominal voltage	24 VDC
Operating voltage range	10...30 VDC
Power consumption	≤ 3.8 W
Transmitter connection	
Supply voltage	≥ 17 V / 20 mA
Current input	2 x 4...20 mA
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	If in the input circuit, a current < 21.5mA flows
Wire-break	If in the input circuit a current < 3.5 mA flows
Rise time (10-90%)	≤ 5 ms
Dropout time (90...10%)	≤ 5 ms
Measuring accuracy	≤ 0.05 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.002 % / K
Galvanic isolation	
Test voltage	2.5 kV
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 1 to output 2	60 V peak value acc. to EN 60079-11
Input 1 to input 2	60 V RMS acc. to EN 50178 and EN 61010-1
Important note	For safety applications the values specified in the safety manual or the relevant Ex certificates (ATEX, IECEx, UL, etc.) apply. TÜV 15 ATEX 158337 X II (1) G, II (1) D [Ex ia Ga] IIC; [Ex ia Da] IIIC Max. output voltage U_o ≤ 26.1 V Max. output current I_o ≤ 97 mA Max. output power P_o ≤ 632 mW Characteristic linear Max. input voltage U_i ≤ 25 V Internal inductance/capacitance L/C, Effective internal capacitance C_i = 11nF Effective internal inductance L_i = 110 µH External inductance/capacitance L/C,
Ex approval acc. to conformity certificate	
Application area	
ignition protection category	
Max. output voltage U_o	
Max. output current I_o	
Max. output power P_o	
Characteristic	
Max. input voltage U_i	
Internal inductance/capacitance L/C,	
External inductance/capacitance L/C,	
Application area	
Protection type	
Max. input voltage U_i	
Max. input current I_i	
Max. input power P_i	
Internal inductance/capacitance L/C,	

Dimensions



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

Suitable for use in safety circuits up to	SIL 2 acc. to IEC 61508
Useful lifetime	10 years
Hardware fault tolerance HFT	0

Indication	
Operational readiness	green
Error indication	red

IP Rating	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 128 mm
Weight	0 g
Mounting instruction	for DIN rail
Housing material	polycarbonate/ABS
Electrical connection	removable cage clamps, 2-pin
Terminal cross-section	0.2 ... 2.5 mm ² (24 ... 13 AWG)
Environmental conditions	

Operating altitude	up to 2000 m above sea level
Pollution degree	II
Standards used	
Voltage resistance and insulation	
	EN 50178
	EN 61010-1
	EN 50155
	GL VI-7-2
Shock	
	EN 61373 class B
	EN 50155
	GL VI-7-2
	EN 60068-2-6
	EN 60068-2-27
Temperature	
	EN 60068-2-1 Ad
	EN 50155
	GL VI-7-2
	EN 60068-2-2 Bd
	EN 60068-2-1
Humidity	
	EN 60068-2-38
EMC	
	EN 50155
	GL VI-7-2
	NE21
	EN 61326-1
	EN 61326-3-1
	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
	EN 61000-4-6
	EN 61000-4-11
	EN 61000-4-29
	EN 55011
	EN 55016
	EN 50121-3-2
	EN 61000-6-2