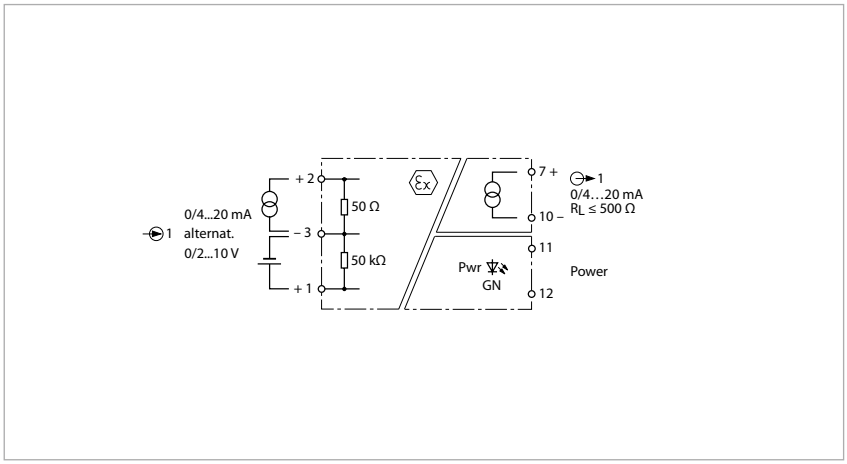
Input analog signal isolator, 1-channel



Features

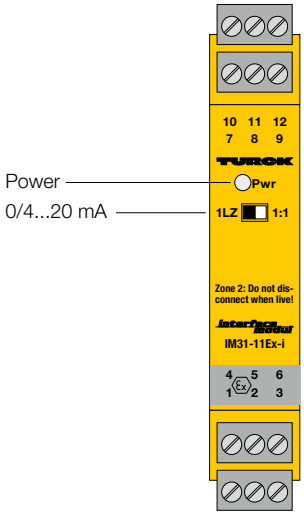
- ATEX, IECEx, UL, $_{C}FM_{US}$, TR CU, NEPSI
- Installation in zone 2
- Transmission of normalized analog signals from the Ex area to the non-Ex area
- Input circuit: 0/2…10 V or 0/4…20 mA
- Output circuit: 0/4…20 mA
- Complete galvanic isolation

The 1-channel analog signal isolator IM31-11EX-I is designed to transmit normalized active voltage or current signals galvanically isolated from the Ex area to the non-Ex area.

The device is equipped with one input circuit of 0/2…10 V or 0/4…20 mA and one short-circuit proof output circuit of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signal is transmitted directly to the output in the non-Ex area. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the associated output (4…20 mA).

A green LED indicates operational readiness.



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Technical data

Type	IM31-11EX-I
Ident no.	7506320

Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W

Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω

Outputs	
Load resistance, current output	≤ 0.5 kΩ
Output current	0/4…20 mA

Response characteristic	
Measuring accuracy	≤ 0.2 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.01 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms

Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 04 ATEX 2679
Device designation	Ⓔx II (1) G; II (1) D [Ex ia Ga] IIC/IIB; [Ex ia Da] IIIC
Max. values:	Terminal connection: 1…3
Max. output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	L_i = 65 µH; C_i = 52 nF

External inductance/capacitance L_o/C_o

Ex ia	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	2	1.5	1.3	9	6.7	6.1

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553387 X
Application area	II 3 G
Protection type	Ex nA [ic Gc] IIC/IIB T4 Gc
Max. values:	Terminal connection: 1…3
Max.output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Characteristic	linear

External inductance/capacitance L_o/C_o

Ex ic	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	3.9	2.5	2.2	17	12	10

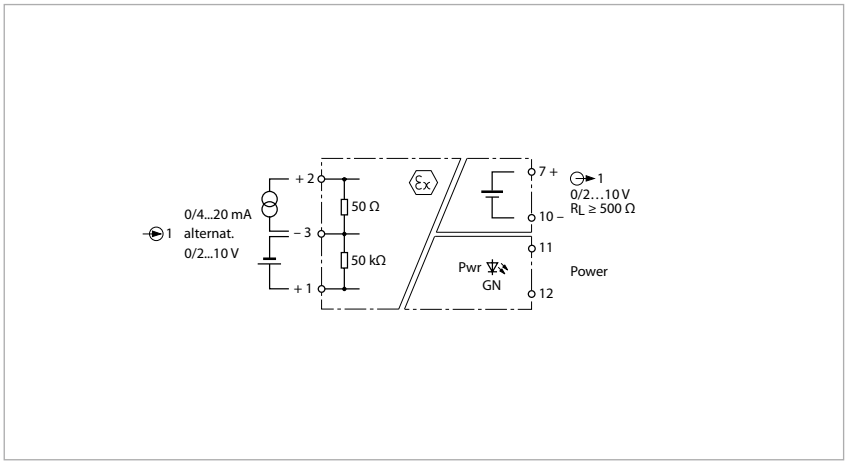
Indication	
Operational readiness	green

Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV

Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm

Approval | Certification	ATEX, IECEx, UL, cFM$_{us}$, TR CU, NEPSI

Input analog signal isolator, 1-channel



Features

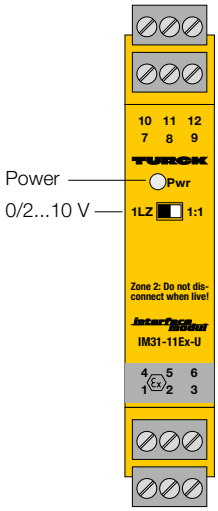
- ATEX, IECEx, UL, $_{C}FM_{US}$, TR CU, NEPSI
- Installation in zone 2
- Transmission of normalized analog signals from the Ex area to the non-Ex area
- Input circuit: 0/2…10 V or 0/4…20 mA
- Output circuit: 0/2…10 V
- Complete galvanic isolation

Standard active voltage or current signals are transmitted via the 1-channel analog signal isolator IM31-11Ex-U.

The device is equipped with one input circuit of 0/2…10 V or 0/4…20 mA and one short-circuit proof output circuit of 0/2…10 V.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signal is transmitted directly to the output in the non-Ex area. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the associated output (2…10 V).

A green LED indicates operational readiness.



Technical data

Type	IM31-11EX-U
Ident no.	7506327

Power supply

Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W

Inputs

Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω

Outputs

Load resistance voltage output	≥ 0.5 kΩ
Output voltage	0/2…10 V

Response characteristic

Measuring accuracy	≤ 0.2 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.01 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms

Approvals and declarations

Ex approval acc. to conformity certificate	TÜV 04 ATEX 2679
Device designation	⟨Ex⟩ II (1) G; II (1) D [Ex ia Ga] IIC/IIB; [Ex ia Da] IIIC
Max. values:	Terminal connection: 1…3
Max. output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	L_i = 65 µH; C_i = 52 nF

External inductance/capacitance L_o/C_o

Ex ia	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	2	1.5	1.3	9	6.7	6.1

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553387 X
Application area	II 3 G
Protection type	Ex nA [ic Gc] IIC/IIB T4 Gc
Max. values:	Terminal connection: 1…3
Max.output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Characteristic	linear

External inductance/capacitance L_o/C_o

Ex ic	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	3.9	2.5	2.2	17	12	10

Indication

Operational readiness	green

Environmental Conditions

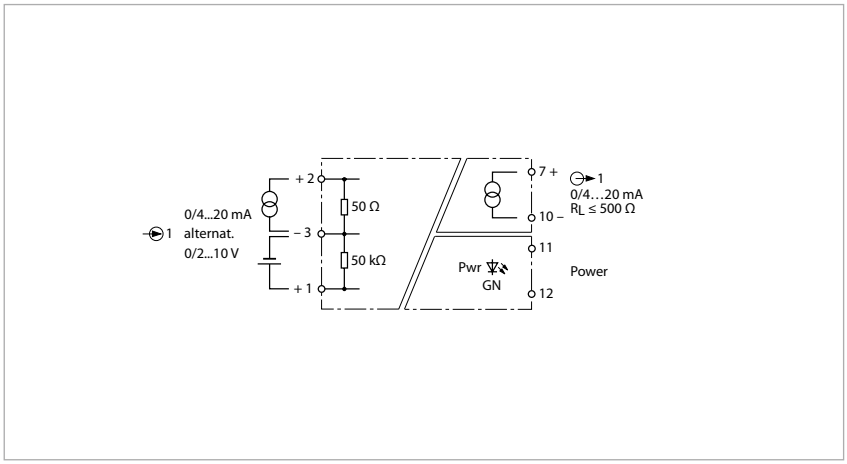
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV

Mechanical data

Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm

Approval | Certification	ATEX, IECEx, UL, cFM$_{us}$, TR CU, NEPSI

Input analog signal isolator, 1-channel



Features

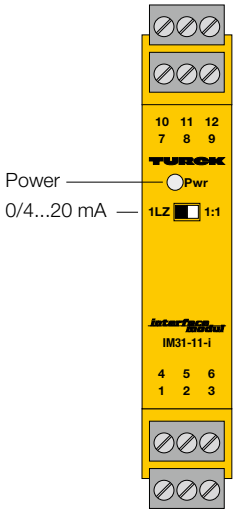
- TR CU
- Transmission of normalized analog signals
- Input circuit: 0/2…10 V or 0/4…20 mA
- Output circuit: 0/4…20 mA
- Complete galvanic isolation

Standard active voltage or current signals are transmitted galvanically isolated via the 1-channel analog signal isolator IM31-11-I.

The device is equipped with one input circuit of 0/2…10 V or 0/4…20 mA and one short-circuit proof output circuit of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signal is transmitted directly to the output. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the output (4…20 mA).

A green LED indicates operational readiness.



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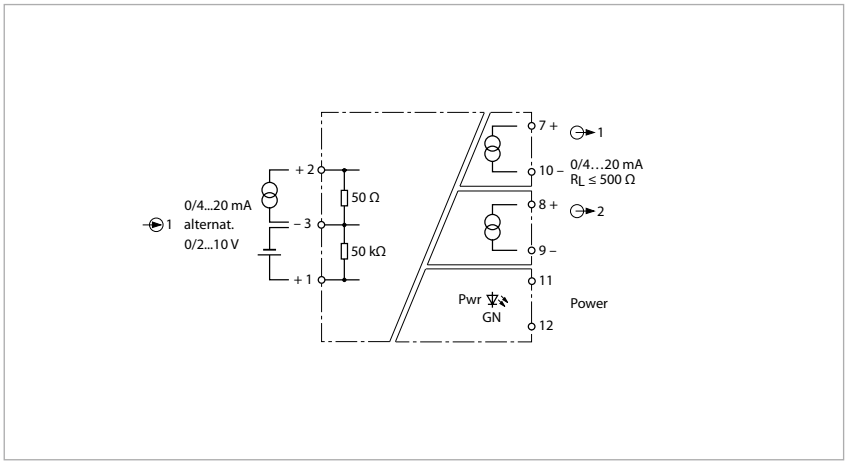
Technical data

Type	IM31-11-I
Ident no.	7506323
Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W
Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω
Outputs	
Load resistance, current output	≤ 0.5 kΩ
Output current	0/4…20 mA
Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms
Indication	
Operational readiness	green
Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV
Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm
Approval | Certification	TR CU

Input analog signal isolator, 1-channel – Signal duplicating



Features

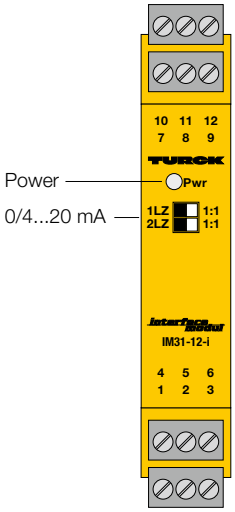
- TR CU
- Transmission of normalized analog signals
- Input circuit: 0/2…10 V or 0/4…20 mA
- Output circuit: 2 x 0/4…20 mA
- Complete galvanic isolation

Standard active voltage or current signals are transmitted galvanically isolated via the 1-channel analog signal isolator IM31-12-I. The signal is duplicated and provided at both outputs.

The device features one input circuits of 0/2…10 V or 0/4…20 mA as well as two short-circuit proof output circuits of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signal is transmitted directly to the outputs. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the output (4…20 mA).

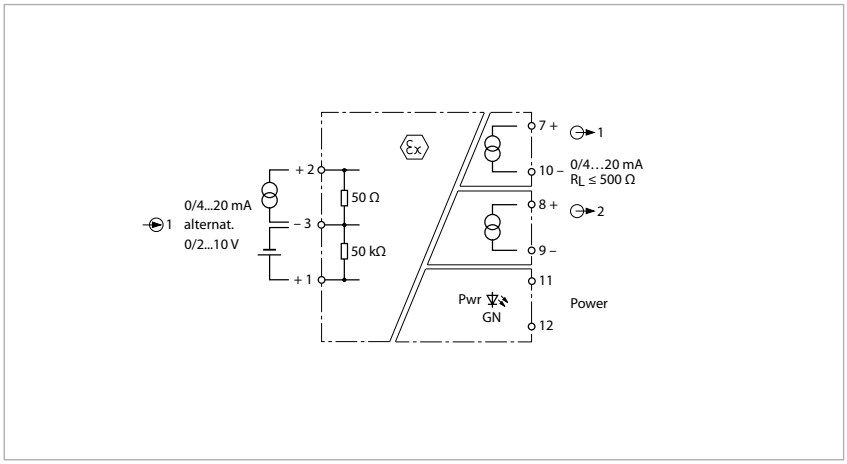
A green LED indicates operational readiness.



Technical data

Type	IM31-12-I
Ident no.	7506324
Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W
Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω
Outputs	
Load resistance, current output	≤ 0.5 kΩ
Output current	0/4…20 mA
Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms
Indication	
Operational readiness	green
Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV
Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm
Approval | Certification	TR CU

Input analog signal isolator, 1-channel – Signal duplicating



Features

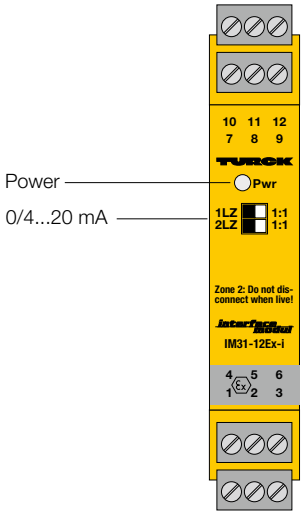
- ATEX, IECEx, UL, $_{C}FM_{US}$, TR CU, NEPSI
- Installation in zone 2
- Transmission of normalized analog signals from the Ex area to the non-Ex area
- Input circuit: 0/2…10 V or 0/4…20 mA
- Output circuit: 2 x 0/4…20 mA
- Complete galvanic isolation

The 1-channel analog signal isolator IM31-12EX-I is designed to transmit normalized active voltage or current signals galvanically isolated from the Ex area to the non-Ex area. The signal is duplicated and provided at both outputs.

The device features one input circuits of 0/2…10 V or 0/4…20 mA as well as two short-circuit proof output circuits of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signal is transmitted directly to the outputs in the non-Ex area. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the output (4…20 mA).

A green LED indicates operational readiness.



Technical data

Type	IM31-12EX-I
Ident no.	7506321

Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W

Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω

Outputs	
Load resistance, current output	≤ 0.5 kΩ
Output current	0/4…20 mA

Response characteristic	
Measuring accuracy	≤ 0.2 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.01 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms

Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 04 ATEX 2679
Device designation	Ⓔx II (1) G; II (1) D [Ex ia Ga] IIC/IIB; [Ex ia Da] IIIC
Max. values:	Terminal connection: 1…3
Max. output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	L_i = 65 µH; C_i = 52 nF

External inductance/capacitance L_o/C_o

Ex ia	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	2	1.5	1.3	9	6.7	6.1

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553387 X
Application area	II 3 G
Protection type	Ex nA [ic Gc] IIC/IIB T4 Gc
Max. values:	Terminal connection: 1…3
Max.output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Characteristic	linear

External inductance/capacitance L_o/C_o

Ex ic	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	3.9	2.5	2.2	17	12	10

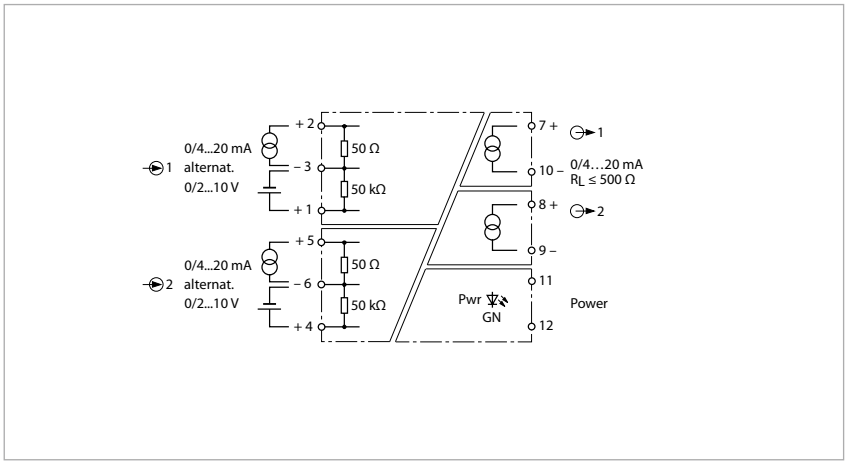
Indication	
Operational readiness	green

Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV

Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm

Approval | Certification	ATEX, IECEx, UL, cFM$_{us}$, TR CU, NEPSI

Input analog signal isolator, 2-channel



Features

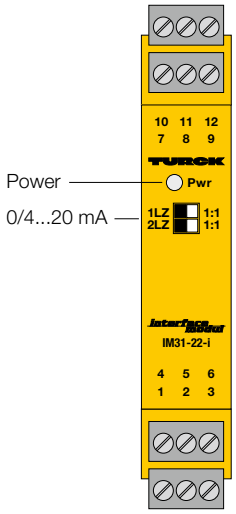
- TR CU
- Transmission of normalized signals
- Input circuit: 2 x 0/2…10 V or 0/ 4…20 mA
- Output circuit: 2 x 0/4…20 mA
- Complete galvanic isolation

Standard active voltage or current signals are transmitted galvanically isolated via the 2-channel analog signal isolator IM31-22-I.

The device features two input circuits of 0/2…10 V or 0/4…20 mA as well as two short-circuit proof output circuits of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In „1: 1“ switch position, the input signals are transmitted directly to the outputs. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the output (4…20 mA).

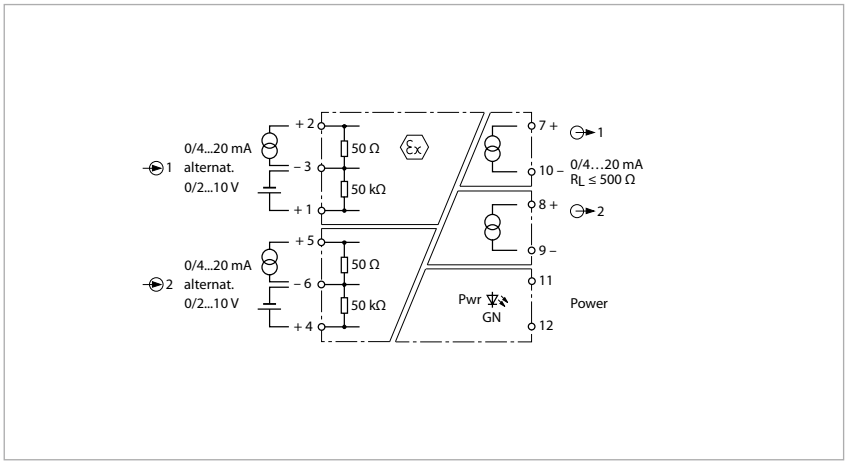
A green LED indicates operational readiness.



Technical data

Type	IM31-22-I
Ident no.	7506325
Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W
Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω
Outputs	
Load resistance, current output	≤ 0.5 kΩ
Output current	0/4…20 mA
Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms
Indication	
Operational readiness	green
Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV
Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm
Approval | Certification	TR CU

Input analog signal isolator, 2-channel



Features

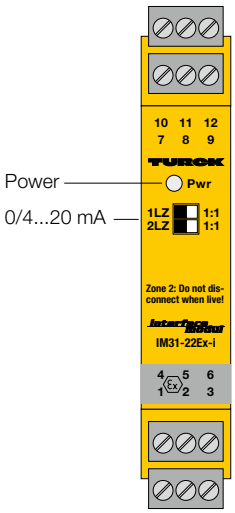
- ATEX, IECEx, UL, $_{C}FM_{US}$, TR CU, NEPSI
- Installation in zone 2
- Transmission of normalized analog signals from the Ex area to the non-Ex area
- Input circuits: 0/2…10 V or 0/4…20 mA
- Output circuits: 0/4…20 mA
- Complete galvanic isolation

The 2-channel analog signal isolator IM31-22EX-I is designed to transmit normalized active voltage or current signals galvanically isolated from the Ex area to the non-Ex area.

The device features two input circuits of 0/2…10 V or 0/4…20 mA as well as two short-circuit proof output circuits of 0/4…20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signals are transmitted directly to the outputs in the non-Ex area. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the output (4…20 mA).

A green LED indicates operational readiness.



Technical data

Type	IM31-22EX-I
Ident no.	7506322

Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W

Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω

Outputs	
Load resistance, current output	≤ 0.5 kΩ
Output current	0/4…20 mA

Response characteristic	
Measuring accuracy	≤ 0.2 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.01 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms

Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 04 ATEX 2679
Device designation	Ⓔx II (1) G; II (1) D [Ex ia Ga] IIC/IIB; [Ex ia Da] IIIC
Max. values:	Terminal connection: 1…3 / 4…6
Max. output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	L_i = 65 µH; C_i = 52 nF

External inductance/capacitance L_o/C_o

Ex ia	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	2	1.5	1.3	9	6.7	6.1

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553387 X
Application area	II 3 G
Protection type	Ex nA [ic Gc] IIC/IIB T4 Gc
Max. values:	Terminal connection: 1…3 / 4…6
Max.output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Characteristic	linear

External inductance/capacitance L_o/C_o

Ex ic	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	3.9	2.5	2.2	17	12	10

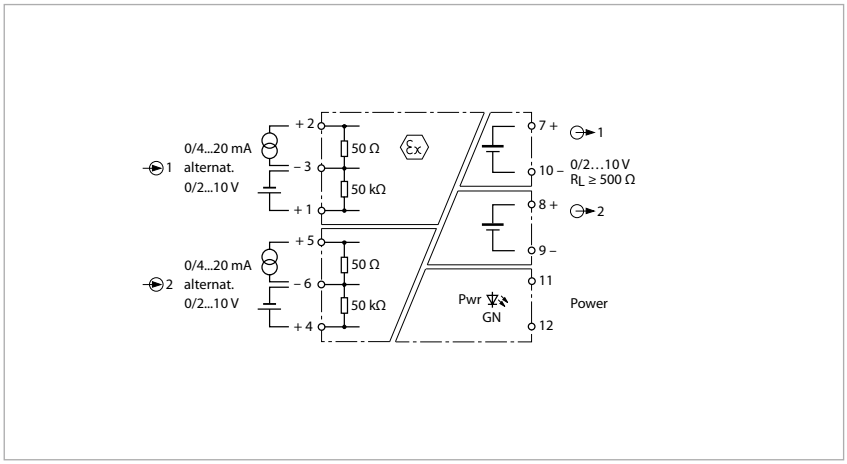
Indication	
Operational readiness	green

Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV

Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm

Approval | Certification	ATEX, IECEx, UL, cFM$_{us}$, TR CU, NEPSI

Input analog signal isolator, 2-channel



Features

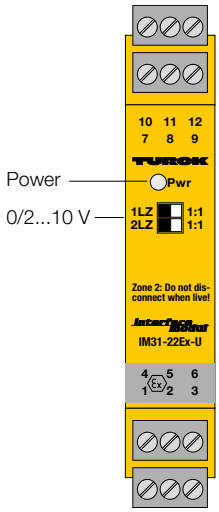
- ATEX, IECEx, UL, $_{C}FM_{US}$, TR CU, NEPSI
- Installation in zone 2
- Transmission of normalized analog signals from the Ex area to the non-Ex area
- Input circuits: 0/2…10 V or 0/4…20 mA
- Output circuits: 0/2…10 V
- Complete galvanic isolation

The 2-channel analog signal isolator IM31-22EX-U is designed to transmit normalized active voltage or current signals galvanically isolated from the Ex area to the non-Ex area.

The device features two input circuits of 0/2…10 V or 0/4…20 mA as well as two short-circuit proof output circuits of 0…10 V.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position "1:1", the input signals are transmitted directly to the outputs in the non-Ex area. In "LZ" switch position, a dead-zero signal at the input (0…10 V / 0…20 mA) is converted and provided as a live-zero signal at the output (0…10 V).

A green LED indicates operational readiness.



Technical data

Type	IM31-22EX-U
Ident no.	7506326

Power supply	
Nominal voltage	Universal voltage supply unit
Operating voltage range	20…125 VDC
Operating voltage range	20…250 VAC
Frequency	40…70 Hz
Power consumption	≤ 2.2 W

Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 50 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 50 Ω

Outputs	
Load resistance voltage output	≥ 0.5 kΩ
Output voltage	0/2…10 V

Response characteristic	
Measuring accuracy	≤ 0.2 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.01 % / K
Rise time (10-90%)	≤ 50 ms
Dropout time (90…10%)	≤ 50 ms

Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 04 ATEX 2679
Device designation	Ⓔx II (1) G; II (1) D [Ex ia Ga] IIC/IIB; [Ex ia Da] IIIC
Max. values:	Terminal connection: 1…3 / 4…6
Max. output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	L_i = 65 µH; C_i = 52 nF

External inductance/capacitance L_o/C_o

Ex ia	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	2	1.5	1.3	9	6.7	6.1

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553387 X
Application area	II 3 G
Protection type	Ex nA [ic Gc] IIC/IIB T4 Gc
Max. values:	Terminal connection: 1…3 / 4…6
Max.output voltage U_o	≤ 7.2 V
Max. output current I_o	≤ 1 mA
Max. output power P_o	≤ 2 mW
Characteristic	linear

External inductance/capacitance L_o/C_o

Ex ic	IIC			IIB		
L_o [mH]	0.5	4.5	9.5	1.5	9.5	20
C_o [µF]	3.9	2.5	2.2	17	12	10

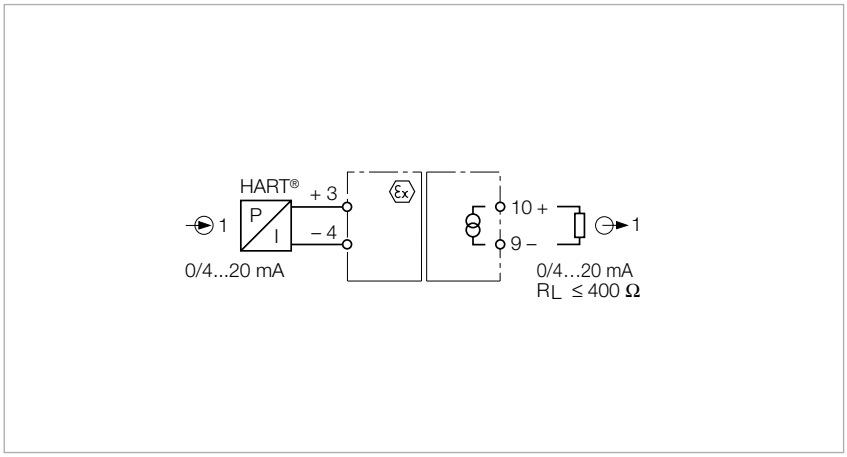
Indication	
Operational readiness	green

Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Relative humidity	≤ 95 %
Test voltage	2.5 kV

Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm² / 2 x 1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail / panel
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 104 x 110 mm

Approval | Certification	ATEX, IECEx, UL, cFMus, TR CU, NEPSI

Input analog signal isolator, 1-channel



Features

- ATEX, IECEx, TR CU, NEPSI
- Installation in zone 2
- HART® transmissible
- Complete galvanic isolation

Standard active current signals are galvanically isolated and transmitted via the 1-channel analog signal isolator IME-AI-11EX-i/L from the Ex area to the non-Ex area.

The device features one input circuit 0/4… 20 mA and one short-circuit proof output circuit 0/4…20 mA.

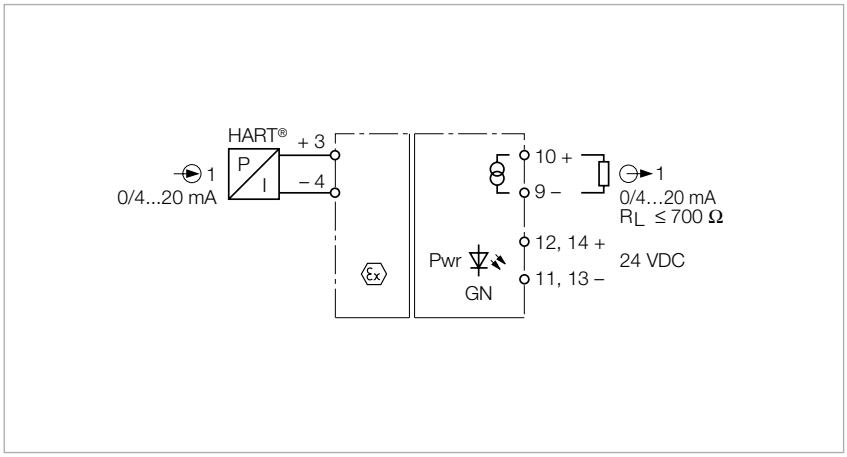
Input and output circuit are safely galvanically isolated. The input signals are transmitted 1:1 and are presented to the relevant outputs in the non-Ex area.

The device is loop-powered and HART® transmissible.

Technical data

Type	IME-AI-11Ex-Hi/L
Ident no.	7541192
Power supply	
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 0.75 W
Inputs	
Voltage input	max. 30 VDC
Current input	0…20 mA
Control circuits	Current limiting 42 mA
Outputs	
Load resistance, current output	≤ 0.4 kΩ
Output current	0…20 mA
Output voltage	max. 13 V
Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.001 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms
Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 08 ATEX 553236
Device designation	Ⓔx II (1) G, II (1) D [Ex ia] IIB/IIC; [Ex iaD]
Max. values:	Terminal connection: 3+4
Rated voltage	250 V
Max. input voltage U_i	≤ 27 V
Max. input current I_i	≤ 150 mA
Max. input power P_i	≤ 1000 mW
Internal inductance/capacitance L_i/C_i	negligibly small
Ex approval acc. to conformity certificate	TÜV 08 ATEX 554624 X
Application area	II 3 G
Protection type	Ex nA [nL] IIC/IIB T4
Max. values:	Terminal connection: 3+4
Max. input voltage U_i	≤ 27 V
Max. input current I_i	≤ 150 mA
Max. input power P_i	≤ 1000 mW
Internal inductance/capacitance L_i/C_i	negligibly small
Declaration	SIL 2 acc. to EXIDA FMEDA
Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Test voltage	2.5 kV
MTTF	537 years acc. to SN 29500 (Ed. 99) 40 °C
Mechanical data	
Electrical connection	Spring terminal made of Beryllium-Bronze
Terminal cross-section	1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 112 x 110 mm
Approval | Certification	ATEX, IECEx, TR CU, NEPSI

Input analog signal isolator, 1-channel



Features

- ATEX, IECEx, TR CU, NEPSI
- Installation in zone 2
- HART® transmissible
- Complete galvanic isolation

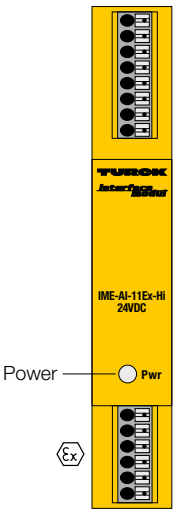
Standard active current signals are galvanically isolated and transmitted via the 1-channel analog signal isolator IME-AI-11EX-Hi/24VDC from the Ex area to the non-Ex area.

Besides the analog signals, digital HART® communication signals can also be transmitted bidirectionally.

The device features one input and one output circuit, each with 0/4…20 mA.

A green LED indicates operational readiness.

Input and output circuit are safely galvanically isolated. The input signal is transmitted 1:1 and is presented to the relevant output in the non-Ex area. As a result of the 1:1 transmission behaviour, wire-break and short circuit are output as currents of 0 mA or > 22.5 mA in the measuring transducer circuit.



Technical data

Type	IME-AI-11Ex-Hi/24VDC
Ident no.	7541198

Power supply

Nominal voltage	24 VDC
Operating voltage range	20…30 VDC
Power consumption	≤ 0.75 W

Inputs

Current input	0/4…20 mA
Control circuits	Current limiting 42 mA

Outputs

Load resistance, current output	≤ 0.7 kΩ
Output current	0/4…20 mA
Wire break monitoring	≤ 1 mA
Short circuit monitoring	≥ 22.5 mA

Response characteristic

Measuring accuracy	≤ 0.1 % of full scale
Temperature drift	≤ 0.001 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms

Approvals and declarations

Ex approval acc. to conformity certificate	TÜV 10 ATEX 555275
Device designation	Ⓔx II (1) G, II (1) D [Ex ia] IIB/IIC; [Ex ia Da]
Max. values:	Terminal connection: 3+4
Rated voltage	250 V
Max. input voltage U_i	≤ 27 V
Max. input current I_i	≤ 150 mA
Max. input power P_i	≤ 1000 mW
Internal inductance/capacitance L_i/C_i	negligibly small
Ex approval acc. to conformity certificate	TÜV 10 ATEX 555276 X
Application area	II 3 G
Protection type	Ex nA [nL] IIC/IIB T4
Max. values:	Terminal connection: 3+4
Max. input voltage U_i	≤ 27 V
Max. input current I_i	≤ 150 mA
Max. input power P_i	≤ 1000 mW
Internal inductance/capacitance L_i/C_i	negligibly small
Declaration	SIL 2 acc. to EXIDA FMEDA

Indication

Operational readiness	green

Environmental Conditions

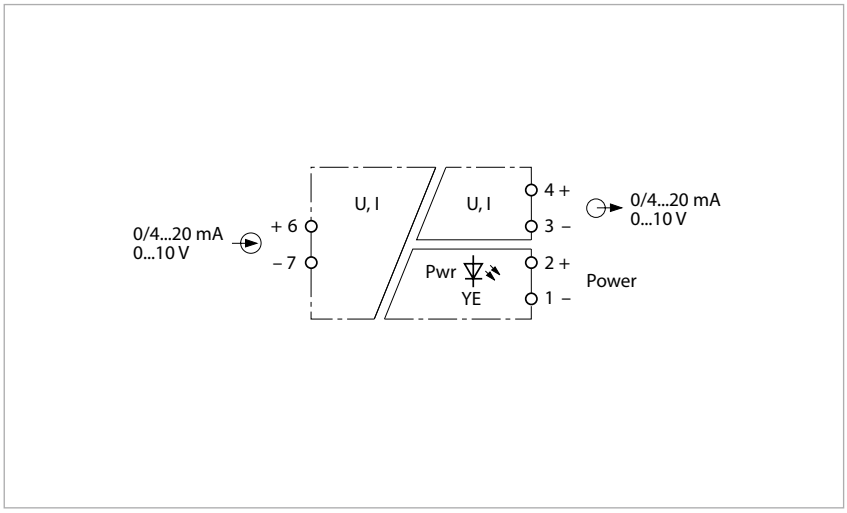
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Test voltage	2.5 kV
MTTF	435 years acc. to SN 29500 (Ed. 99) 40 °C

Mechanical data

Electrical connection	Spring terminal made of Beryllium-Bronze
Terminal cross-section	1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 112 x 110 mm

Approval | Certification	ATEX, IECEx, TR CU, NEPSI

Input analog signal isolator, 1-channel



Features

- UL: Class1, Div 2, Group A, B, C, D; GOST
- Input circuit: 0/4…20 mA or 0…10 V
- Output circuit: 0/4…20 mA or 0…10 V
- Type of input and output signal adjusted via DIP switch
- Linearity < 0.1 % f.s.
- Accuracy < 0.1 % f.s.
- Complete galvanic isolation
- 6.2 mm width

Standard active voltage or current signals are transmitted galvanically isolated and converted to other signal types via the 1-channel universal analog signal isolator IMS-AI-UNI/24VDC.

The device is equipped with available input circuit of 0/4…20 mA or 0…10 V and a variable short-circuit proof output circuit of 0/4…20 mA or 0…10 V.

The transmission characteristic (for input and output signal type) is adjusted via side-mounted DIP switches. The input signals are transmitted according to the setting and made available at the output.

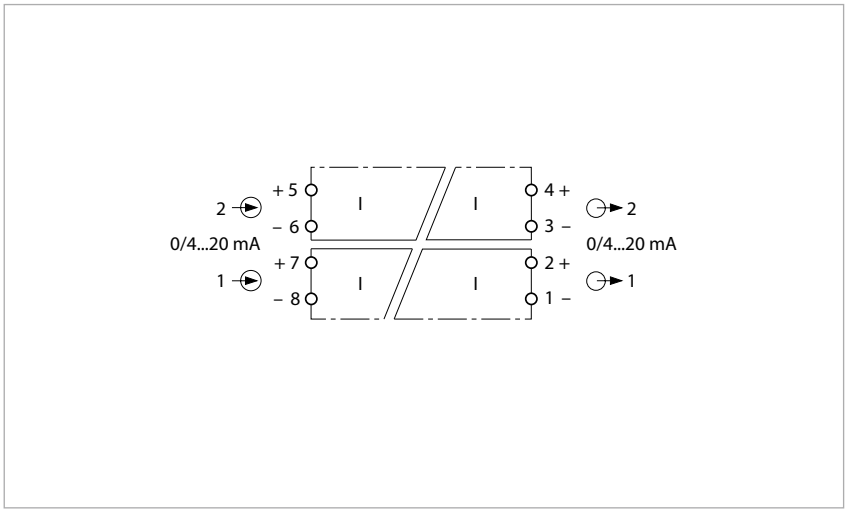
The green LED indicates operational readiness.

With a width of 6.2 mm, the device is galvanically isolated up to 1.5 kV.

Technical data

Type	IMS-AI-UNI/24V
Ident no.	7504009
Power supply	
Nominal voltage	24 VDC
Operating voltage range	19…29 VDC
Power consumption	≤ 0.312 W
Residual ripple	≤ 5 mV_{ss}
Inputs	
Voltage input	0/2…10 VDC
Input resistance (voltage)	≥ 330 kΩ
Current input	0/4…20 mA
Input resistance (current)	≤ 100 Ω
Outputs	
Load resistance, current output	≤ 0.4 kΩ
Load resistance voltage output	≥ 1 kΩ
Output current	0/4…20 mA
Output voltage	0…10 V
Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Temperature drift	≤ 0.00015 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms
Indication	
Operational readiness	green
Environmental Conditions	
Ambient temperature	-20…+60 °C
Storage temperature	-40…+80 °C
Test voltage	1.5 kV
Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	screw terminals
Terminal cross-section	2.5 mm^2
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	6.2 x 114.5 x 90 mm
Approval | Certification	$_cUL_{us}$, GOST

Input analog signal isolator, 2-channel



Features

- UL: Class1, Div 2, Group A, B, C, D; GOST
- Input circuits: 0/4…20 mA
- Output circuits: 0/4…20 mA
- Linearity < 0.1 % f.s.
- Accuracy < 0.1 % f.s.
- Complete galvanic isolation
- 6.2 mm width

The 2-channel analog signal isolator IMS-AI-DLI-22-DLI/L is designed to transmit normalized active current signals galvanically isolated.

The device features two input circuits 0/4…20 mA and two short-circuit proof output circuits 0/4…20 mA.

The device is loop powered, transmission starts with 250 µA. Required minimum voltage 2.8 V + (20 mA x R_{load}).

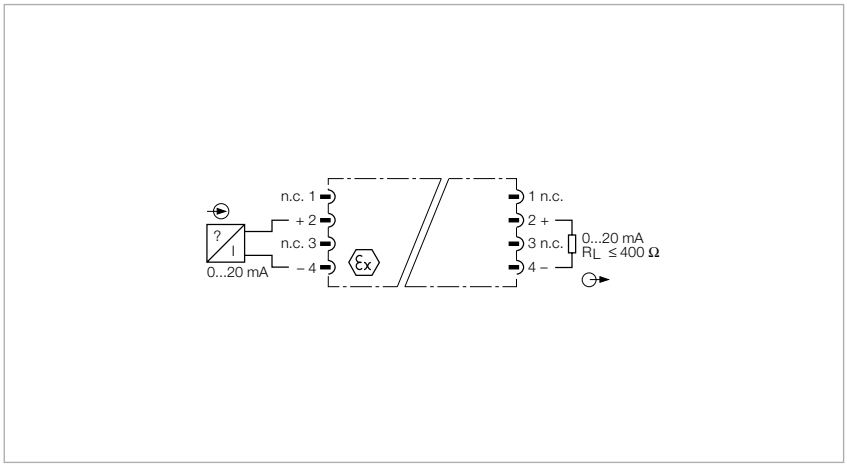
The input signals are transmitted 1:1 and are presented to the relevant output.

The device is loop-powered. Separate power supply is not necessary.

Technical data

Type	IMS-AI-DLI-22-DLI/L
Ident no.	7504011
Power supply	
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 0.312 W
Residual ripple	≤ 5 mV_{ss}
Inputs	
Voltage input	max. 29 VDC
Current input	0/4…20 mA
Input resistance (current)	≤ 100 Ω
Outputs	
Load resistance, current output	≤ 0.4 kΩ
Output current	0/4…20 mA
Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Temperature drift	≤ 0.00015 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms
Environmental Conditions	
Ambient temperature	-20…+60 °C
Storage temperature	-40…+80 °C
Test voltage	1.5 kV
Mechanical data	
Tightening torque	0.5 Nm
Electrical connection	screw terminals
Terminal cross-section	2.5 mm^2
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	6.2 x 114.5 x 90 mm
Approval | Certification	$_cUL_{us}$, GOST

Input analog signal isolator, 1-channel



Features

- ATEX, IECEx, TR CU
- Installation in zone 2/22
- Analog signal isolator with M12 x 1 connectors, 1-channel
- Input circuit: 0/4…20 mA
- Output circuit: 0/4…20 mA
- Complete galvanic isolation
- Protection class IP67

The 1-channel analog signal isolator IMC-AI-11EX-I/L features an intrinsically safe input circuit. The device can be mounted in zone 2.

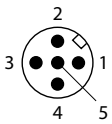
The device must be protected against mechanical load on connector and housing when mounted in zone 2 or 22. For this, use the TURCK cover plate IMC-SG (Ident no. 7560016).

The standard current signal is transmitted from the Ex-area to the safe area without attenuation (1:1). The output circuit is equipped with a short-circuit protected power source.

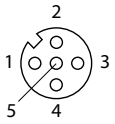
Intrinsically save analog data transmitters can be connected to the device in the Ex area.

The device is loop-powered.

Pin assignment male M12



Pin assignment female M12 (intrinsically safe end)



Technical data

Type	IMC-AI-11EX-I/L
Ident no.	7560004

Power supply	
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 3 W

Inputs	
Voltage input	max. 30 VDC
Current input	0…20 mA

Outputs	
Load resistance, current output	≤ 0.4 kΩ
Output voltage	max. 13 VDC
Output current	0…20 mA

Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms

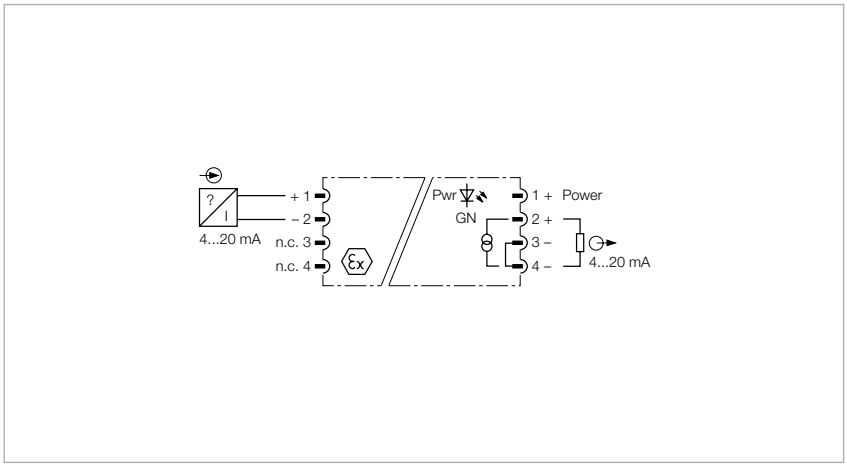
Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 07 ATEX 553222
Device designation	Ⓔx II (1) GD [Ex ia] IIC/IIB
Rated voltage	250 V
Max. values:	M12 female connection: 2+4
Max. input voltage U_i	≤ 27 V
Max. input current I_i	≤ 150 mA
Max. input power P_i	≤ 1000 mW
Internal inductance/capacitance L_i/C_i	negligibly small
Ex approval acc. to conformity certificate	TÜV 07 ATEX 553945 X
Application area	II 3 GD
Protection type	Ex nA [nL] IICIIB T4 or rather Ex tDA 22 IB67 T80°C
Max. values:	M12 female connection: 2+4
Max. input voltage U_i	≤ 27 V
Max. input current I_i	≤ 150 mA
Max. input power P_i	≤ 1000 mW
Approval	SIL2 acc. to EXIDA FMEDA

Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Test voltage	2.5 kV
MTTF	565 years acc. to SN 29500 (Ed. 99) 40 °C

Mechanical data	
Tightening torque	3.5 Nm
Electrical connection	M12 flange connection
Housing material	Polycarbonate/ABS
Mounting instruction	for panel
Protection class	IP67
Dimensions	32 x 100 x 25 mm

Approval | Certification	ATEX, IECEx, TR CU

Isolating transducer, 1-channel



Features

- ATEX, IECEx, TR CU
- Installation in zone 2/22
- Isolating transducer with M12 x 1 connectors, 1-channel
- Output circuit: 0/4…20 mA
- Complete galvanic isolation
- Protection class IP67

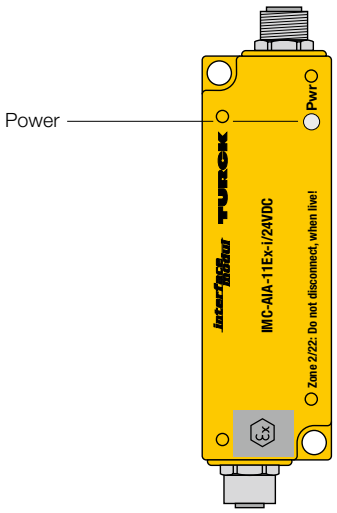
The 1-channel isolating transducer IMC-AIA-11Ex-i/24VDC features an intrinsically safe input circuit. The device can be mounted in zone 2.

The device must be protected against mechanical load on connector and housing when mounted in zone 2 or 22. For this, use the TURCK cover plate IMC-SG (Ident no. 7560016).

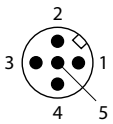
The standard current signal is transmitted from the Ex-area to the safe area without attenuation (1:1). The output circuit is equipped with a short-circuit protected power source.

Intrinsically save analog data transmitters can be connected to the device in the Ex area.

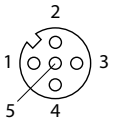
The device is designed for a 24 VDC supply. A green LED indicates operational readiness.



Pin assignment male M12



Pin assignment female M12 (intrinsically safe end)



Technical data

Type	IMC-AIA-11EX-I/24VDC
Ident no.	7560009

Power supply

Nominal voltage	24 VDC
Operating voltage range	20…30 VDC
Power consumption	≤ 1.5 W

Inputs

Supply voltage	≤ 14 V / 20 mA
Current	25 mA
Current input	4…20 mA

Outputs

Load resistance, current output	≤ 0.5 kΩ
Output current	0…20 mA

Response characteristic

Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms

Approvals and declarations

Ex approval acc. to conformity certificate	TÜV 07 ATEX 553644
Device designation	Ex II (1) GD [Ex ia] IIB
Max. values:	M12 female connection: 1+2
Max. output voltage U_o	≤ 21.8 V
Max. output current I_o	≤ 64.5 mA
Max. output power P_o	≤ 1130 mW
Rated voltage	250 V
Characteristic	Trapezoidal
Internal inductance/capacitance L_i/C_i	L_i = negligibly small; C_i = 11 nF

External inductance/capacitance L_o/C_o

Ex ia	IIB	
L_o[mH]	5.8	0.2
C_o[nF]	469	799

Max. output voltage U_o	≤ 21.8 V
Max. output current I_o	≤ 64.5 mA
Max. output power P_o	≤ 1130 mW
Characteristic	linear
Internal inductance/capacitance L_i/C_i	C_i = 11nF, L_i = negligibly small

External inductance/capacitance L_o/C_o

Ex nL	IIC		IIB	
L_o [mH]	0.85	0.2	22	10
C_o [nF]	129	219	800	1200

Ex approval acc. to conformity certificate	TÜV 07 ATEX 554129 X
Application area	II 3G, II 3D
Protection type	Ex nA [nL] IIB/IIC T4 or rather Ex tD A22 IP67 T 80 °C Dc
Max. values:	M12 female connection: 1+2
Max.output voltage U_o	≤ 21.8 V
Max. output current I_o	≤ 64.5 mA
Max. output power P_o	≤ 1130 mW
Characteristic	trapezoidal
Internal inductance/capacitance L_i/C_i	L_i = negligibly small; C_i = 11 nF
External inductance/capacitance L_o/C_o	C_i = 11nF, L_i = negligibly small
Approval	SIL2 acc. to EXIDA FMEDA

Indication

Operational readiness	green

Environmental Conditions

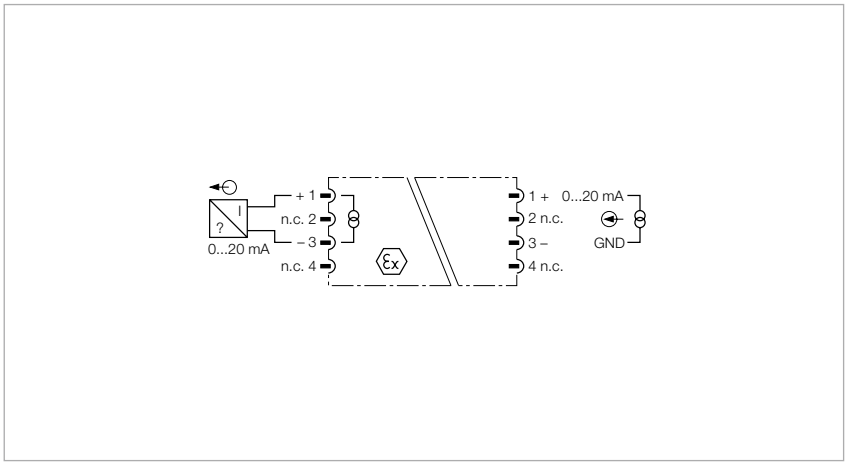
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Test voltage	2.5 kV
MTTF	294 years acc. to SN 29500 (Ed. 99) 40 °C

Mechanical data

Tightening torque	3.5 Nm
Electrical connection	M12 flange connection
Housing material	Polycarbonate/ABS
Mounting instruction	for panel
Protection class	IP67
Dimensions	32 x 100 x 25 mm

Approval | Certification	ATEX, IECEx, TR CU

Ouput analog signal isolator, 1-channel



Features

- ATEX, IECEx, TR CU
- Installation in zone 2/22
- Analog signal isolator with M12 x 1 connectors, 1-channel
- Input circuit: 0/4…20 mA
- Output circuit: 0/4…20 mA
- Complete galvanic isolation
- Protection class IP67

The 1-channel analog signal isolator IMC-AO-11Ex-i/L features an intrinsically safe output circuit. The device can be mounted in zone 2.

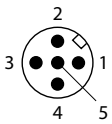
The device must be protected against mechanical load on connector and housing when mounted in zone 2 or 22. For this, use the TURCK cover plate IMC-SG (Ident no. 7560016).

The normalized current signal is transmitted, galvanically isolated 1:1, from the non-Ex to the Ex-area. The output circuit is equipped with a short-circuit proof power source.

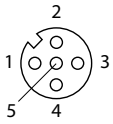
Intrinsically analog actuators like I/P converters (e.g. at control valves) or displays can be applied in the Ex area.

The device is loop-powered.

Pin assignment male M12



Pin assignment female M12 (intrinsically safe end)



Technical data

Type	IMC-AO-11EX-I/L
Ident no.	7560006

Power supply

Nominal voltage	24 VDC loop-powered
Power consumption	≤ 3.5 W

Inputs

Voltage input	max. 30 VDC
Current input	0…20 mA

Outputs

Load resistance, current output	≤ 0.4 kΩ
Output current	0…20 mA

Response characteristic

Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms

Approvals and declarations

Ex approval acc. to conformity certificate	TÜV 07 ATEX 553223
Device designation	Ex II (1) GD [Ex ia] IIC/IIB
Max. values:	M12 female connection: 1+3
Max. output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex ia	IIC		IIB	
L_o [mH]	2	0.2	2	0.2
C_o [nF]	420	910	2700	5500

Ex approval acc. to conformity certificate	TÜV 07 ATEX 553946 X
Application area	II 3G, II 3D
Protection type	Ex nA [nL] IIC/IIB T4 or rather Ex tD A22 IP67 T80°C
Max. values:	M12 female connection: 1+3
Max.output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex ia	IIC		IIB	
L_o [mH]	5	0.5	10	1.0
C_o [nF]	510	1200	2900	5800

Approval	SIL2 acc. to EXIDA FMEDA

Environmental Conditions

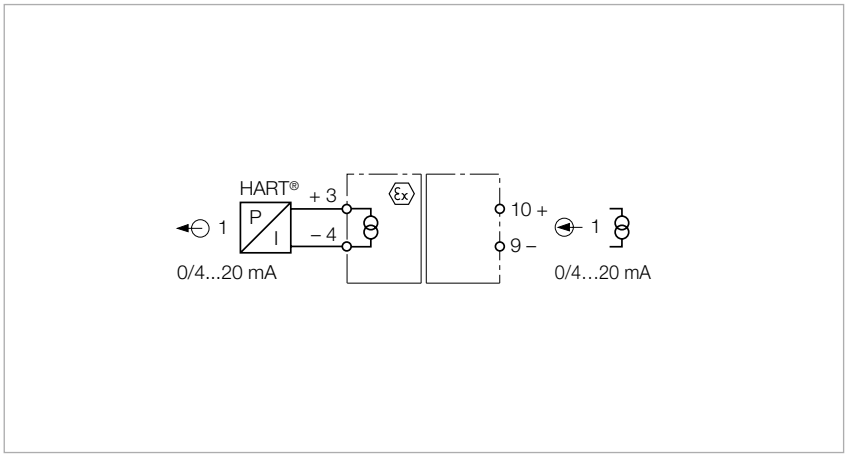
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Test voltage	2.5 kV
MTTF	566 years acc. to SN 29500 (Ed. 99) 40 °C

Mechanical data

Tightening torque	3.5 Nm
Electrical connection	M12 flange connection
Housing material	Polycarbonate/ABS
Mounting instruction	for panel
Protection class	IP67
Dimensions	32 x 100 x 25 mm

Approval | Certification	ATEX, IECEx, TR CU

Ouput analog signal isolator, 1-channel



Features

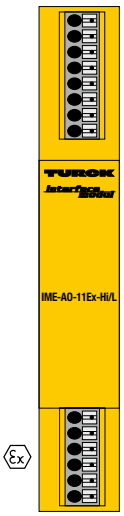
- ATEX, IECEx, TR CU, NEPSI
- Installation in zone 2
- Output isolator, 1-channel
- HART® transmissible
- Connection of positioners, displays etc.
- Complete galvanic isolation

The 1-channel analog data transmitter IME-AO-11Ex-i/L has an intrinsically safe output circuit.

The normalized current signal is transmitted, galvanically isolated 1:1, from the non-Ex to the Ex-area.

The output circuit is equipped with a short-circuit proof power source. Intrinsically analog actuators like I/P converters (e.g. at control valves) or displays can be applied in the Ex area.

The device is loop-powered.



Technical data

Type	IME-AO-11Ex-Hi/L
Ident no.	7541194

Power supply	
Nominal voltage	24 VDC loop-powered
Power consumption	≤ 0.75 W

Inputs	
Voltage input	max. 30 VDC
Current input	0…20 mA
Control circuits	Current limiting 42 mA

Outputs	
Output circuits	0…20 mA
Load resistance, current output	≤ 0.4 kΩ
Output current	0…20 mA
Output voltage	max. 13 V

Response characteristic	
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.001 % / K
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms

Approvals and declarations	
Ex approval acc. to conformity certificate	TÜV 08 ATEX 554800
Device designation	⟨Ex⟩ II (1) G, II (1) D [Ex ia] IIB/IIC; [Ex iaD]
Max. values:	Terminal connection: 3+4
Max. output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Rated voltage	250 V
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex ia	IIC		IIB	
L_o[mH]	2	0.2	2	0.2
C_o[µF]	0.42	0.91	2.7	5.5

Max. output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex nL	IIC		IIB	
L_o [mH]	5	0.5	10	1
C_o [µF]	0.51	1.2	2.9	5.8

Ex approval acc. to conformity certificate	TÜV 08 ATEX 554818 X
Application area	II 3 G
Protection type	Ex nA [nL] IIC/IIB T4
Max. values:	Terminal connection: 3+4
Max.output voltage U_o	≤ 13.3 V
Max. output current I_o	≤ 97 mA
Max. output power P_o	≤ 322 mW
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligibly small

External inductance/capacitance L_o/C_o

Ex nL	IIC		IIB	
L_o [mH]	5	0.5	10	1
C_o [µF]	0.51	1.2	2.9	5.8

Declaration	SIL 2 acc. to EXIDA FMEDA

Environmental Conditions	
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80 °C
Test voltage	2.5 kV
MTTF	515 years acc. to SN 29500 (Ed. 99) 40 °C

Mechanical data	
Electrical connection	Spring terminal made of Beryllium-Bronze
Terminal cross-section	1.5 mm²
Housing material	Polycarbonate/ABS
Mounting instruction	for DIN rail
Protection class	IP20
Flammability class acc. to UL 94	V-0
Dimensions	18 x 112 x 110 mm

Approval | Certification	ATEX, IECEx, TR CU, NEPSI