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Ex i measuring transducer repeater power supply, 2-channel; HART-transparent. Supplies Ex i 2-wire measuring transducers and transmits the 4 - 20 mA signal from the Ex area to the safe area. 5-way electrical isolation, PLd, spring-cage connection.

The figure shows a version with a screw connection

#### **Product Features**

V



## Key commercial data

Packing unit	1 pc
Custom tariff number	85437090
Country of origin	Germany

#### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### **Dimensions**

Width	12.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C 60 °C (Any mounting position)
Ambient temperature (storage/transport)	-40 °C 80 °C
Maximum altitude	≤ 2000 m
Permissible humidity (operation)	10 % 95 % (non-condensing)
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.



# Technical data

### Ambient conditions

Degree of protection	IP20

## Input data

Signal input	Intrinsically safe
Current input signal	4 mA 20 mA
Transmitter supply voltage	> 16 V (at 20 mA)

### Output data

Signal output	Current output
Current output signal	4 mA 20 mA (active)
Transmission Behavior	1:1 to input signal
Load/output load current output	$\leq$ 450 $\Omega$ (20 mA)
	$\leq$ 375 $\Omega$ (24 mA)
Output behavior in the event of an error	< 3.6 mA (In the event of cable break at the input (as per NE 43))
	> 22.5 mA (In the event of cable short circuit at the input (as per NE 43))

## Power supply

Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC 30 V DC (24 V DC (-20% +25%))
Max. current consumption	< 100 mA (24 V / 20 mA)
Power consumption	< 1.4 W (at 24 V DC / 20 mA)

### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	1.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	16
Stripping length	8 mm
Connection method	Push-in connection

#### General

Maximum transmission error	< 0.1 % (of final value)
Maximum transmission error	Co. 1 % (or illiar value)
Transmission error, typical	< 0.05 % (of final value)
Maximum temperature coefficient	< 0.01 %/K
Step response (10-90%)	< 1.3 ms (for 4 mA 20 mA step)
Status display	Green LED (supply voltage)
Inflammability class according to UL 94	V0
Pollution degree	2



# Technical data

#### General

Surge voltage category	II
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Emitted interference	EN 61000-6-4
Color	yellow
Electrical isolation	300 V <sub>rms</sub> (Rated insulation voltage (surge voltage category II; pollution degree 2, safe isolation as per EN 61010-1))
	2.5 kV (50 Hz, 1 min., test voltage)
Designation	Input/output
Electrical isolation	375 V (Peak value in accordance with EN 60079-11)
Designation	Input/power supply
Electrical isolation	375 V (Peak value in accordance with EN 60079-11)
Designation	Output 1/output 2/ power supply
Electrical isolation	1.5 kV (50 Hz, 1 min., test voltage)
Conformance	CE-compliant, additionally EN 61326
ATEX	# II (1) G [Ex ia Ga] IIC/IIB
	# II (1) D [Ex ia Da] IIIC
	# II 3(1) G Ex nA [ia Ga] IIC T4 Gc
IECEx	[Ex ia Ga] IIC/IIB
	[Ex ia Da] IIIC
	Ex nA [ia Ga] IIC T4 Gc
UL, USA / Canada	UL 61010 Listed

## Data communication (bypass)

HART function	Yes
Protocols supported	HART

## Safety data

Max. output voltage U₀	25.2 V
Max. output current I <sub>o</sub>	93 mA
Max. output power P₀	587 mW
Group	IIC
Max. external inductivity L <sub>o</sub>	2 mH
Max. external capacity C <sub>o</sub>	107 nF
Group	IIB
Max. external inductivity L <sub>o</sub>	4 mH
Max. external capacity C <sub>o</sub>	820 nF
Safety-related maximum voltage U <sub>m</sub>	253 V AC (125 V DC)



# Classifications

# eCl@ss

GL

Functional Safety

00.000		
eCl@ss 5.1	27210121	
eCl@ss 6.0	27200206	
eCl@ss 8.0	27210121	
ETIM		
ETIM 4.0	EC002653	
ETIM 5.0	EC002653	
Approvals		
Approvals		
Approvals		
UL Listed / cUL Listed / GL / Functional Safety / cULus Listed		
Ex Approvals		
ATEX / IECEx / UL Listed / cUL Listed / cULus Listed		
Approvals submitted		
Approval details		
UL Listed (II)		
cUL Listed •		

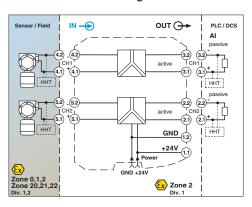


# Approvals



# **Drawings**

### Block diagram



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