

Loop-powered isolators - MINI MCR-2-I-I-ILP-PT - 2901995

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Single-channel input loop-powered 2-way isolator with plug-in connection technology for the electrical isolation of analog signals. Input signal = output signal: 0(4) mA ... 20 mA. Push-in connection technology.

Product Description

Single-channel input-loop-powered 2-way isolator with plug-in connection technology for the electrical isolation and filtering of analog signals. The input-loop-powered isolator allows operation with active sensor technology with a supply voltage of 6 V DC to 30 V DC. The device is powered via the current loop of the sensor. Input signal = output signal: 0(4) mA to 20 mA. The measuring transducer supports NFC communication.



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 649261
GTIN	4046356649261
Weight per Piece (excluding packing)	100.000 g
Custom tariff number	85437090
Country of origin	Germany

Technical data

Dimensions

Width	6.2 mm
Height	110.5 mm
Depth	120.5 mm

Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Loop-powered isolators - MINI MCR-2-I-I-ILP-PT - 2901995

Technical data

Ambient conditions

Maximum altitude	< 2000 m
Degree of protection	IP20

Input data

Description of the input	Current input
Configurable/programmable	no
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
Response current	approx. 200 μ A
Input voltage limitation	30 V
Voltage dissipation	3.1 V (I = 20 mA)

Output data

Output name	Current output
Configurable/programmable	no
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
Load/output load current output	< 600 Ω (at I = 20 mA output signal)
Transmission Behavior	1:1 to input signal

Power supply

Supply voltage range	9.6 V DC ... 30 V DC (no separate supply voltage necessary)
Power consumption	600 mW

Connection data

Connection method	Push-in connection
Single conductor/terminal point, solid, with ferrule, min.	0.14 mm ²
Single conductor/terminal point, solid, with ferrule, max.	2.5 mm ²
Single conductor/terminal point, solid, without ferrule, min.	0.14 mm ²
Single conductor/terminal point, solid, without ferrule, max.	2.5 mm ²
Conductor cross section flexible min.	0.14 mm ²
Conductor cross section flexible max.	2.5 mm ²
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	12
Stripping length	10 mm

General

No. of channels	1
Maximum transmission error	≤ 0.1 % (of final value)
Maximum temperature coefficient	≤ 0.002 %/K (of measured value / 100 Ω load)

Loop-powered isolators - MINI MCR-2-I-I-ILP-PT - 2901995

Technical data

General

Additional error, load-dependent	< 0.075 % (of measured value / 100 Ω load)
Limit frequency (3 dB)	100 Hz
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Overvoltage category	II
Degree of pollution	2
Rated insulation voltage	300 V (effective)
Test voltage, input/output/supply	3 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	gray
Housing material	PBT
Mounting position	any

Standards and Regulations

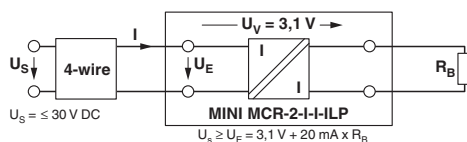
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1

Environmental Product Compliance

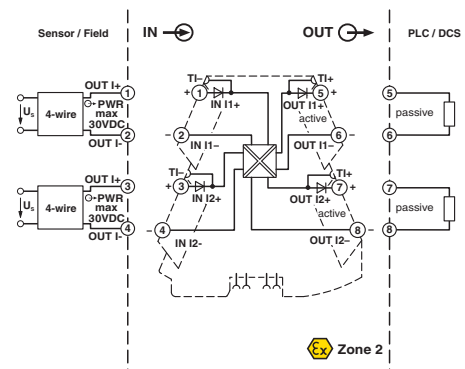
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Application drawing

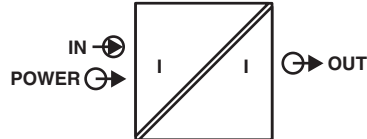


Block diagram



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Pictogram



Approvals

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ATEX / UL Listed / cUL Listed / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

ATEX			PxCIF16ATEX2901996X
UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705

Loop-powered isolators - MINI MCR-2-I-I-ILP-PT - 2901995

Approvals

cULus Listed

