

Loop-powered isolators - MINI MCR-SL-2CP-I-I-SP - 2864781

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MCR passive isolator, 2-channel, for the electrical isolation of current signals without auxiliary power, with spring-cage connection

The illustration shows the versions with screw connection

Why buy this product

- ✓ Voltage drop at isolating amplifier of just 1.7 V
- ✓ Does not require additional auxiliary voltage
- ✓ Two channels on a design width of just 6.2 mm
- ✓ Highly-compact 2-wire passive isolators for electrical isolation and filtering of standard analog signals
- ✓ Supplied by an input loop



Key commercial data

Packing unit	1 pc
GTIN	 4 017918 974961
Weight per Piece (excluding packing)	65.4 g
Custom tariff number	85437090
Country of origin	Germany

Technical data

Dimensions

Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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Technical data

Ambient conditions

Degree of protection	IP20
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Input data

Description of the input	Current input
Configurable/programmable	No
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. input voltage	18 V
Max. input current	40 mA
Response current	approx. 190 µA
Input voltage limitation	18 V
Voltage dissipation	1.7 V (at 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	(no separate supply voltage necessary)
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Connection data

Connection method	Spring-cage connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
Stripping length	8 mm

General

No. of channels	2
Maximum transmission error	≤ 0.1 % (of final value)
Maximum temperature coefficient	≤ 0.002 %/K (of measured value / 100 Ω load)
Additional error, load-dependent	0.03 % (of measured value / 100 Ω load)
Limit frequency (3 dB)	75 Hz
Step response (10-90%)	5 ms (At 600 Ω load)
Electrical isolation	Basic insulation according to EN 61010
Surge voltage category	II

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Technical data

General

Pollution degree	2
Rated insulation voltage	50 V AC/DC
Test voltage input/output	1.5 kV (50 Hz, 1 min.)
Test voltage channel/channel	1.5 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	green
Housing material	PBT
Mounting position	any
Assembly instructions	The T connector can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715.
Conformance	CE-compliant
ATEX	# II 3 G Ex nA II T6 X
UL, USA / Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D
GL	GL EMC 2 D

EMC data

Name	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Evaluation criterion	A
Name	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Evaluation criterion	B
Name	Conducted interferences
Standards/regulations	EN 61000-4-6
Evaluation criterion	A

Classifications

eCl@ss

eCl@ss 4.0	27210120
eCl@ss 4.1	27210120
eCl@ss 5.0	27210120
eCl@ss 5.1	27210120
eCl@ss 6.0	27210120
eCl@ss 7.0	27210120
eCl@ss 8.0	27210120

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Classifications

ETIM

ETIM 2.0	EC001485
ETIM 3.0	EC001485
ETIM 4.0	EC001485
ETIM 5.0	EC001485

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

Approvals

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UL Recognized / cUL Recognized / GL / cULus Recognized

Ex Approvals

UL Recognized / cUL Recognized / ATEX / cULus Recognized

Approvals submitted

Approval details

UL Recognized 

cUL Recognized 

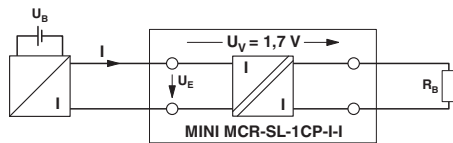
GL

cULus Recognized 

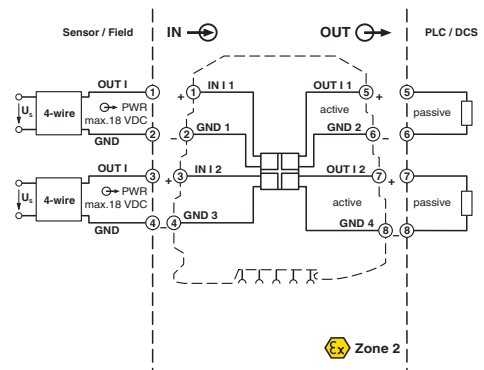
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Drawings

Application drawing



Block diagram



Dimensioned drawing

