

Loop-powered isolators - MINI MCR-SL-2CP-I-I - 2864655

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

Your advantages

- ✔ 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

package_quantity	1
GTIN	4017918974893

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
Degree of protection	IP20

Input data

Description of the input	Current input
Number of inputs	2
Configurable/programmable	no
Current input signal	0 mA ... 20 mA
Current input signal	4 mA ... 20 mA
Max. input voltage	18 V
Max. input current	40 mA

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Technical data

Input data

Response current	approx. 190 μ A
Input voltage limitation	< 2 V (20 mA)
Voltage dissipation	1.7 V (I = 20 mA)

Output data

Output name	Current output
Number of outputs	2
Configurable/programmable	no
Current output signal	0 mA ... 20 mA
Current output signal	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	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Stripping length	12 mm
Screw thread	M3

General

No. of channels	2
Maximum transmission error	\leq 0.1 % (of final value)
Maximum temperature coefficient	\leq 0.002 %/K (of measured value / 100 Ω load)
Temperature coefficient, typical	< 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
Overvoltage category	II
Degree of pollution	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
Noise emission	EN 61000-6-4

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General

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
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D
GL	GL EMC 2 D

EMC data

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

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-2
Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Evaluation criterion	A
Standards/regulations	EN 61000-4-4
Standards/regulations	EN 61000-4-5
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Evaluation criterion	A
Electrical isolation	Basic insulation according to EN 61010
Conformance	CE-compliant
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UL, USA / Canada	UL 508 Recognized
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D
GL	GL EMC 2 D

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Technical data

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
eCl@ss 9.0	27210120

ETIM

ETIM 2.0	EC001485
ETIM 3.0	EC001485
ETIM 4.0	EC001485
ETIM 5.0	EC002653

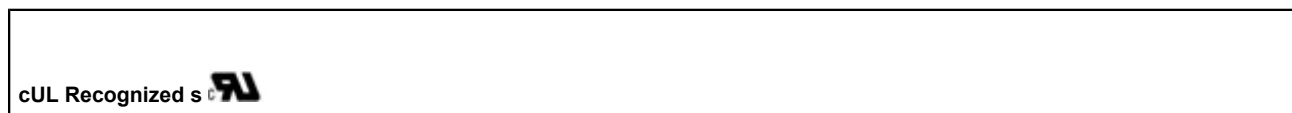
UNSPSC

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

Approvals

UL Recognized / cUL Recognized / ATEX / cULus Recognized / UL Recognized / cUL Recognized / EAC / cULus Recognized /

Approval details



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Approvals



Accessories

Marking material

MINI MCR-DKL-LABEL - 2810272

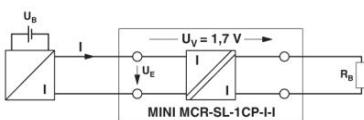


MINI MCR DKL - 2308111



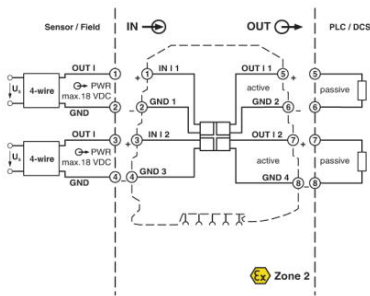
Drawings

Application drawing

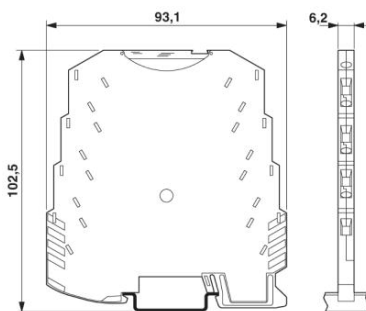


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Block diagram



Dimensional drawing



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