

# 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

## Product Features

- ✔ 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
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
Response current	approx. 190 µA

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## Technical data

### Input data

<b>Input voltage limitation</b>	18 V
<b>Voltage dissipation</b>	1.7 V (at I = 20 mA)

### Output data

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

### Power supply

<b>Supply voltage range</b>	no separate supply voltage necessary
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### Connection data

<b>Connection method</b>	Screw connection
<b>Conductor cross section solid min.</b>	0.2 mm <sup>2</sup>
<b>Conductor cross section solid max.</b>	2.5 mm <sup>2</sup>
<b>Conductor cross section AWG/kcmil min.</b>	26
<b>Conductor cross section AWG/kcmil max</b>	12
<b>Conductor cross section stranded min.</b>	0.2 mm <sup>2</sup>
<b>Conductor cross section stranded max.</b>	2.5 mm <sup>2</sup>
<b>Stripping length</b>	12 mm
<b>Screw thread</b>	M3

### General

<b>No. of channels</b>	2
<b>Maximum transmission error</b>	≤ 0.1 % (of final value)
<b>Maximum temperature coefficient</b>	≤ 0.002 %/K (of measured value / 100 Ω load)
<b>Additional error, load-dependent</b>	0.03 % (of measured value / 100 Ω load)
<b>Limit frequency (3 dB)</b>	75 Hz
<b>Step response (10-90%)</b>	5 ms (At 600 Ω load)
<b>Electrical isolation</b>	Basic insulation according to EN 61010
<b>Surge voltage category</b>	II
<b>Pollution degree</b>	2
<b>Rated insulation voltage</b>	50 V AC/DC
<b>Test voltage input/output</b>	1.5 kV (50 Hz, 1 min.)
<b>Test voltage channel/channel</b>	1.5 kV (50 Hz, 1 min.)
<b>Electromagnetic compatibility</b>	Conformance with EMC Directive 2004/108/EC
<b>Noise emission</b>	EN 61000-6-4
<b>Noise immunity</b>	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
<b>Color</b>	green
<b>Housing material</b>	PBT

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## Technical data

### General

<b>Mounting position</b>	any
<b>Assembly instructions</b>	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.
<b>Conformance</b>	CE-compliant
<b>ATEX</b>	# II 3 G Ex nA II T6 X
<b>UL, USA / Canada</b>	UL 508 Recognized
<b>UL, USA / Canada</b>	Class I, Div. 2, Groups A, B, C, D
<b>GL</b>	GL EMC 2 D

### EMC data

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

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27210120
<b>eCl@ss 4.1</b>	27210120
<b>eCl@ss 5.0</b>	27210120
<b>eCl@ss 5.1</b>	27210120
<b>eCl@ss 6.0</b>	27210120
<b>eCl@ss 7.0</b>	27210120
<b>eCl@ss 8.0</b>	27210120

### ETIM

<b>ETIM 2.0</b>	EC001485
<b>ETIM 3.0</b>	EC001485
<b>ETIM 4.0</b>	EC001485
<b>ETIM 5.0</b>	EC001485

### UNSPSC

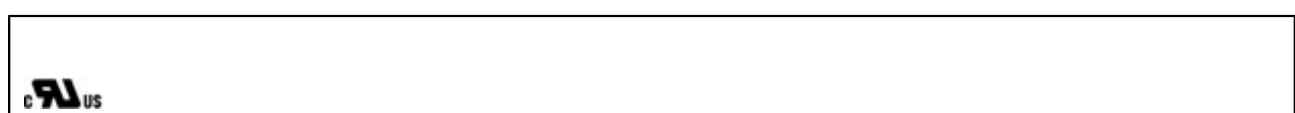
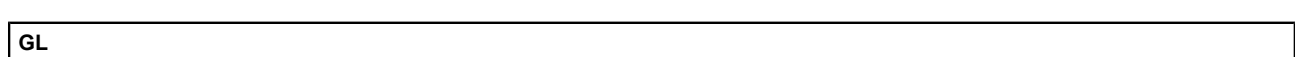
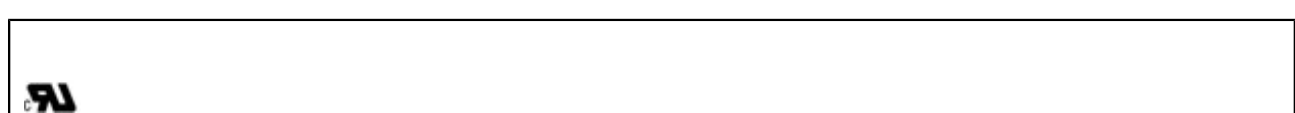
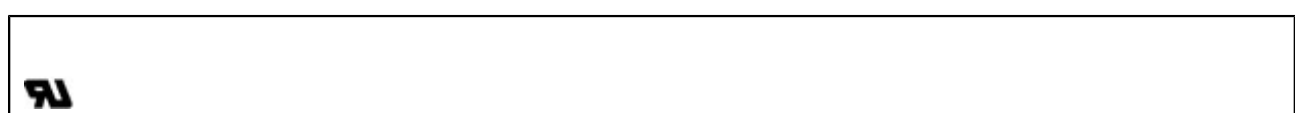
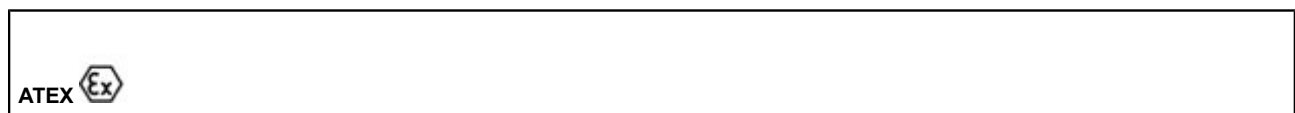
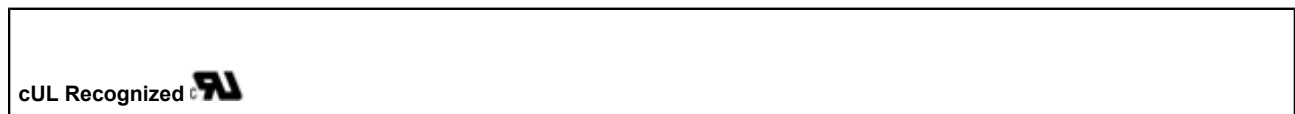
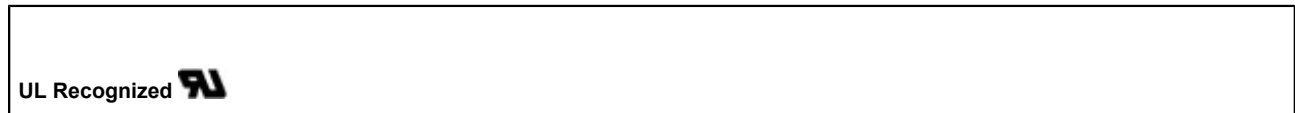
<b>UNSPSC 6.01</b>	30211506
<b>UNSPSC 7.0901</b>	39121008
<b>UNSPSC 11</b>	39121008
<b>UNSPSC 12.01</b>	39121008
<b>UNSPSC 13.2</b>	39121008

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## approvals

UL Recognized / cUL Recognized / ATEX / cULus Recognized / UL Recognized / cUL Recognized / GL / cULus Recognized /

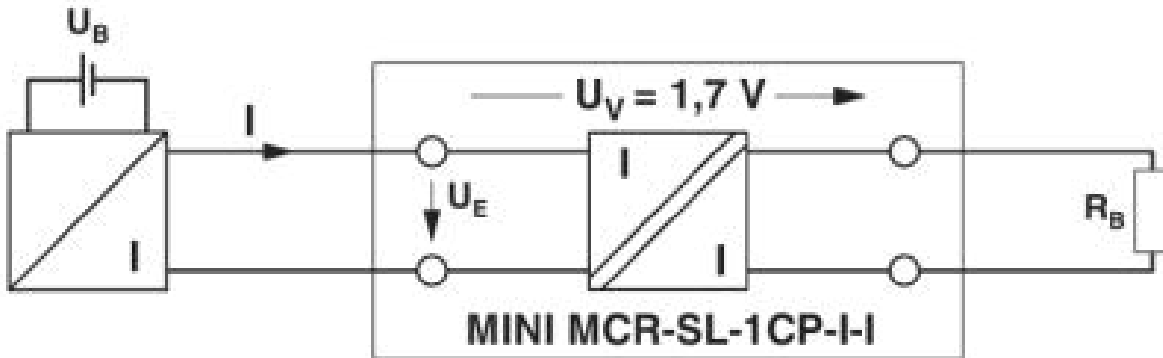
### Approval details



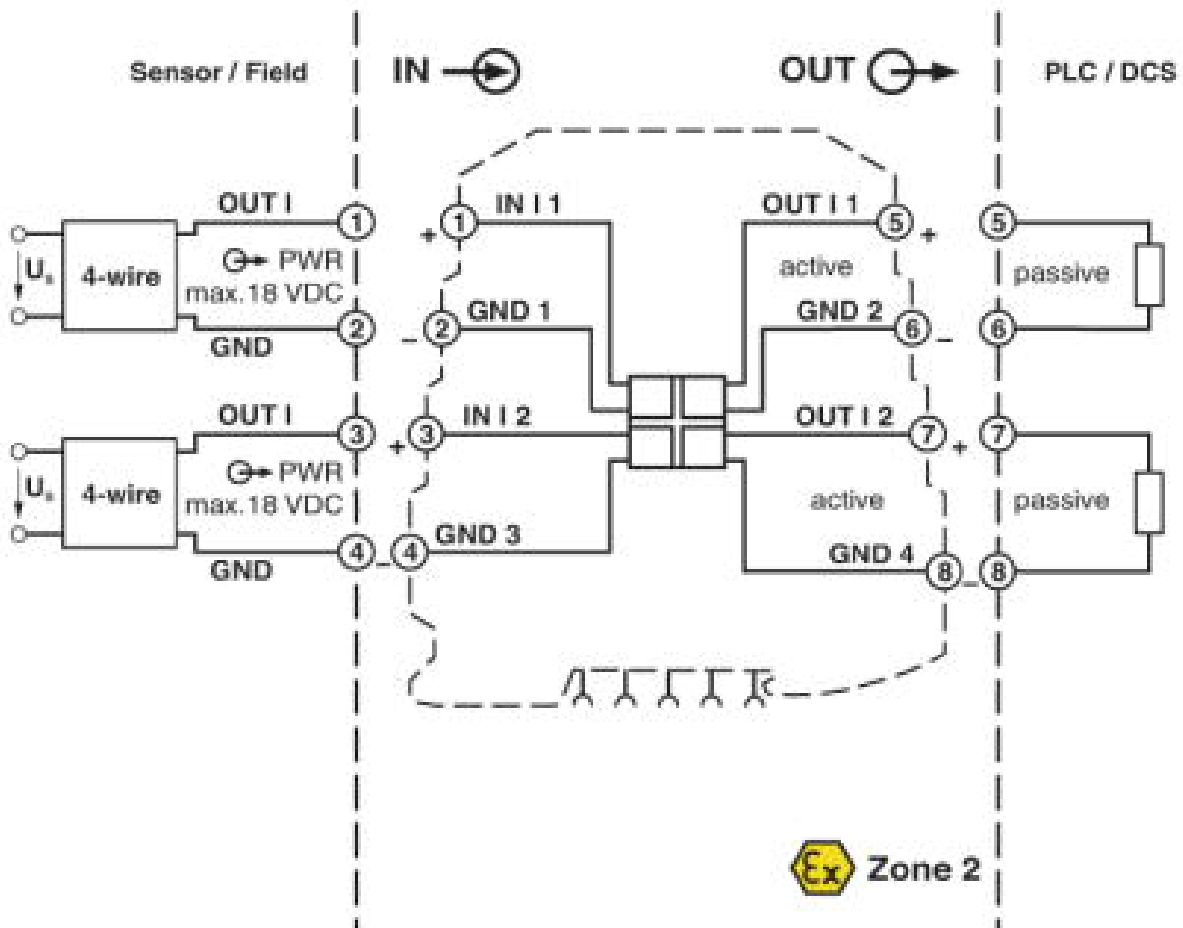
### Drawings

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Application drawing

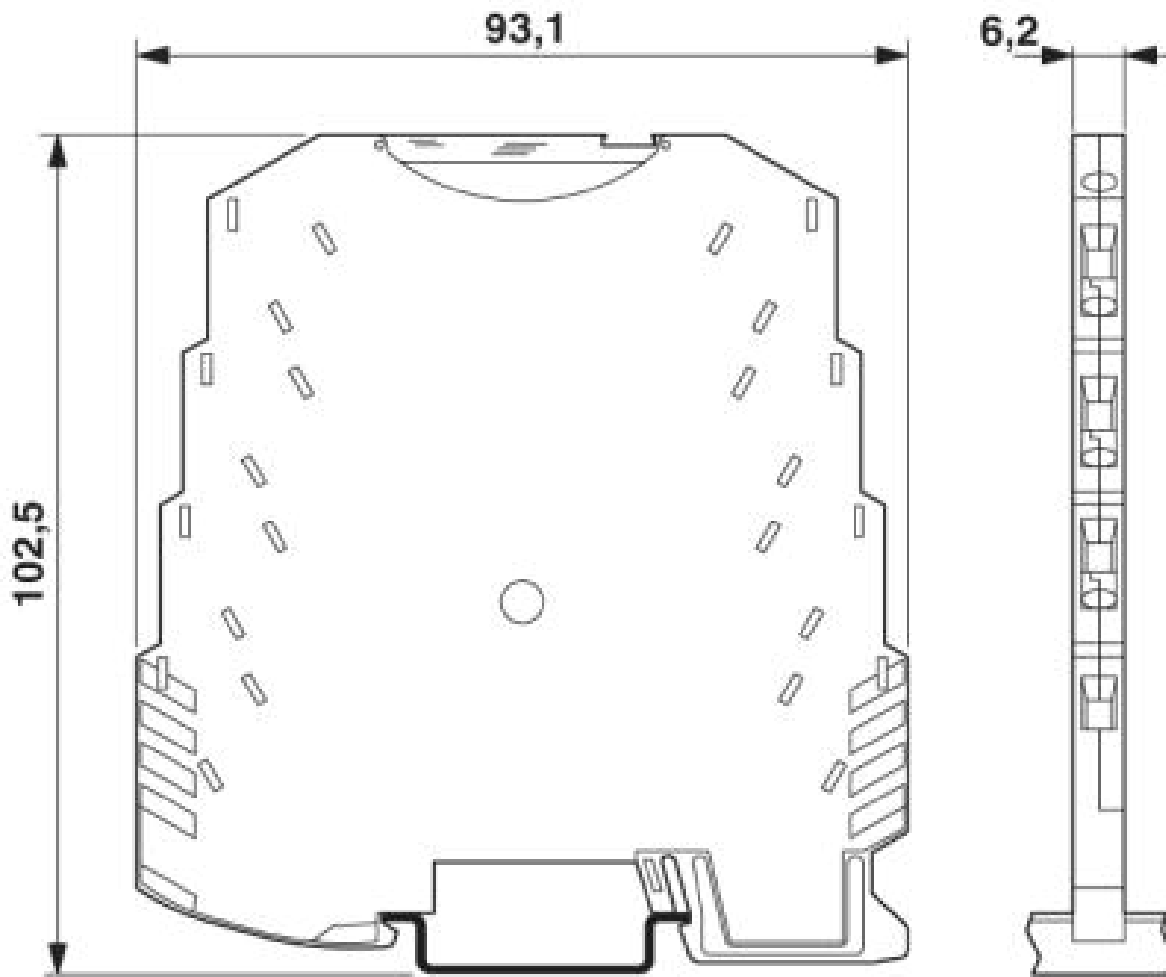


Block diagram



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Dimensioned drawing



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