

Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



MCR passive isolator, single-channel, for electrical isolation of current signals without supply voltage, with spring-cage connection. Replacement part: 2901995 MINI MCR-2-I-I-ILP-PT.

Your advantages

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



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4017918974947

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
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.

Input data

Description of the input	Current input
--------------------------	---------------

Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Technical data

Input data

Number of inputs	1
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	< 2 V (20 mA)
Voltage dissipation	1.9 V (I = 20 mA)

Output data

Output name	Current output
Number of outputs	1
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)
Ripple	< 10 mV _{rms} (at 600 Ω)
Transmission Behavior	1:1 to input signal

Power supply

Supply voltage range	no separate supply voltage necessary
Power consumption	34 mW

Connection data

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section solid	0.2 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

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)
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

Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Technical data

General

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
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.
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2

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
	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
ATEX	# II 3 G Ex nA II T6 X

Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Technical data

Standards and Regulations

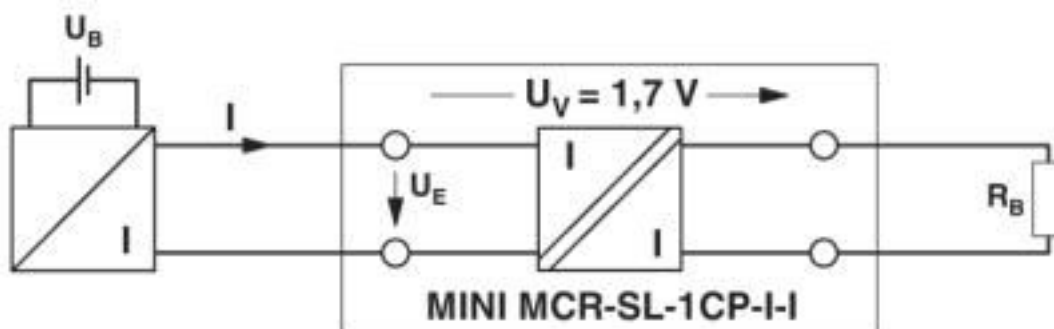
UL, USA/Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D
GL	GL EMC 2 D

Environmental Product Compliance

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

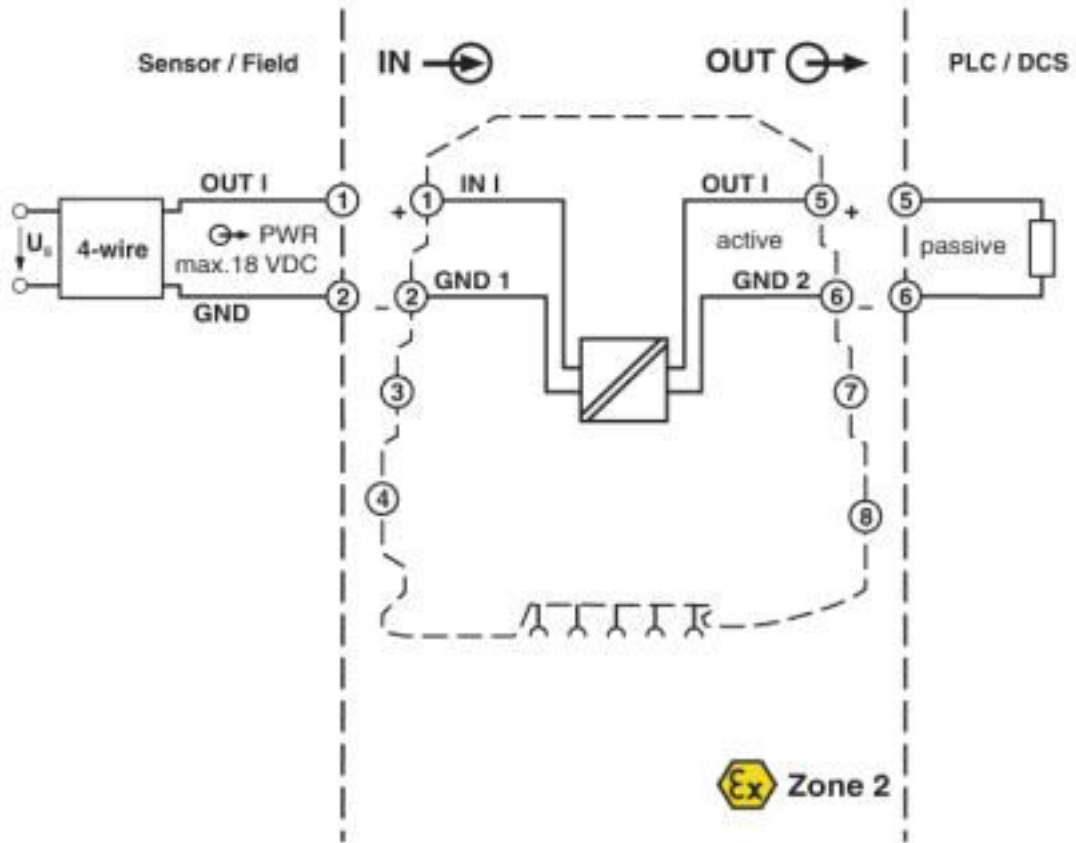
Drawings

Application drawing



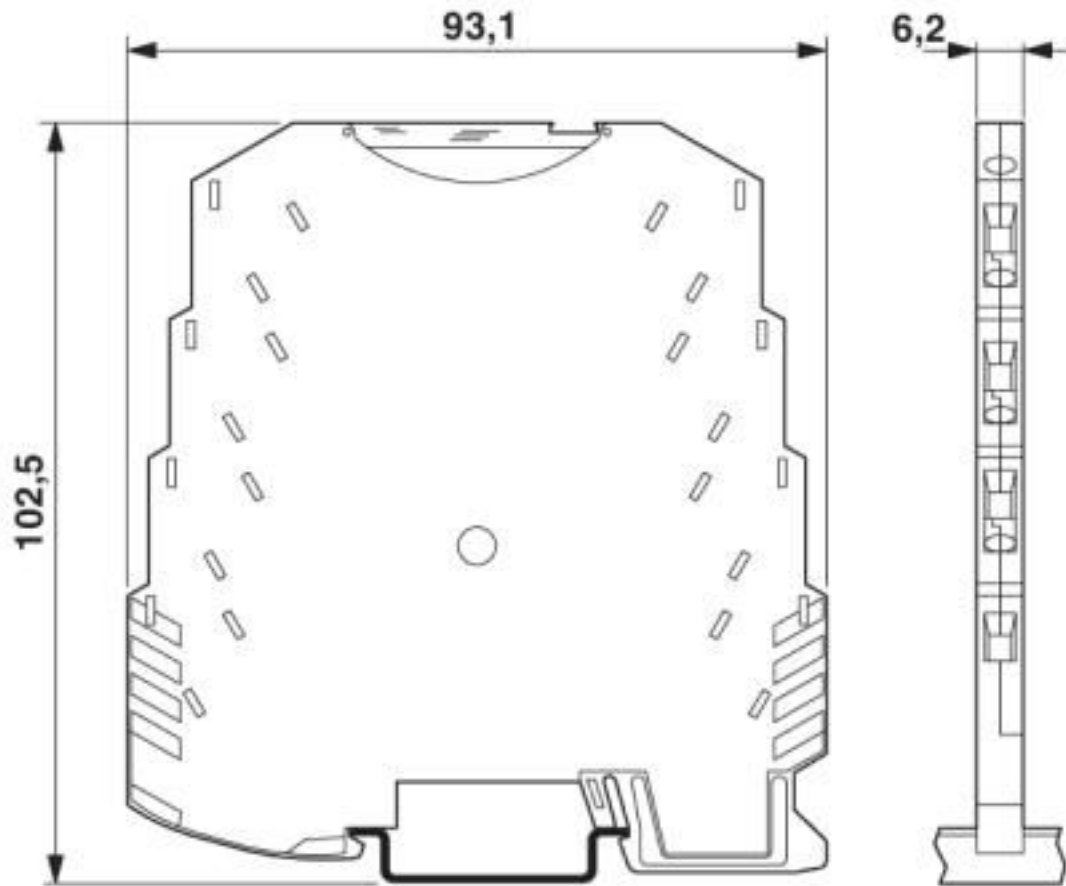
Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Block diagram



Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27210120
eCl@ss 4.0	27210100
eCl@ss 4.1	27210100
eCl@ss 5.0	27210100
eCl@ss 5.1	27210100
eCl@ss 6.0	27210100
eCl@ss 7.0	27210120
eCl@ss 8.0	27210120
eCl@ss 9.0	27210120

ETIM

ETIM 4.0	EC002653
ETIM 5.0	EC002653
ETIM 6.0	EC002653
ETIM 7.0	EC002653

Loop-powered isolators - MINI MCR-SL-1CP-I-I-SP - 2864749

Classifications

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008
UNSPSC 19.0	39121008

Accessories

Accessories

Marking material

Marking label - MINI MCR-DKL-LABEL - 2810272



Label for extended marking of MINI MCR modules in connection with the MINI MCR-DKL

Transparent cover - MINI MCR DKL - 2308111



Fold up transparent cover for MINI MCR modules with additional labeling option using insert strips and flat Zack marker strip 6.2 mm

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Terminal Block Interface Modules](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[73-551-6002I](#) [GCN1MX25B](#) [DIN-50P-01](#) [DIN-68H-01](#) [DIN-96DI-01](#) [2291901](#) [2295185](#) [2907794](#) [2M10FCL](#) [FLKM-2I/O](#) [FLKM-4I/O](#)
[2281759](#) [2906251](#) [2907808](#) [5601749](#) [5541962](#) [1776613-1](#) [GCN1-004A](#) [ADAM-3920R-AE](#) [060-6827-06](#) [2311030](#) [2287708](#) [XW2C-20G6-](#)
[IO16](#) [GCN1-T](#) [MACX](#) [MCR-VAC](#) [5775235](#) [ADAM-3956-BE](#) [XW6T-COM2.5X20YL](#) [XW6T-COM1.5X8BL](#) [XW6T-COM1.5X16BL](#)
[XW6T-COM1.5X20YL](#) [XW6T-COM1.5X16YL](#) [XW6T-COM1.5X20RD](#) [XW6T-COM1.5X20BL](#) [XW6T-COM2.5X8BL](#) [1976610000](#) [UM](#)
[45-D50SUB/B/ZFKDS](#) [5541234](#) [410-261](#) [902056](#) [2906243](#) [2906915](#) [2907706](#) [ADAM-3909-AE](#) [ADAM-3920-AE](#) [ADAM-3925-AE](#)
[ADAM-3937-BE](#) [ADAM-3950-AE](#) [ADAM-3951-BE](#) [ADAM-3968-AE](#)