

Signal conditioner - MINI MCR-BL-I-I



2810463

<https://www.phoenixcontact.com/pc/products/2810463>

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 documentation. Our General Terms of Use for Downloads are valid.



MCR 3-way isolating amplifier, for electrical isolation of analog signals, with screw connection, input signal: 0(4) mA ... 20 mA, output signal: 0(4) mA ... 20 mA

Signal conditioner - MINI MCR-BL-I-I



2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Commercial Data

Item number	2810463
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	CK1211
GTIN	4046356166683
Weight per Piece (including packing)	61.7 g
Weight per Piece (excluding packing)	60.5 g
Customs tariff number	85437090
Country of origin	DE

Signal conditioner - MINI MCR-BL-I-I



2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Technical Data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

Product properties

Product type	Signal conditioner
No. of channels	1

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

No. of channels	1
Electrical isolation	3-way isolation
Limit frequency (3 dB)	approx. 100 Hz
Maximum power dissipation for nominal condition	250 mW
Step response (10-90%)	500 ms
Maximum temperature coefficient	< 0.01 %/K
Temperature coefficient, typical	< 0.002 %/K
Maximum transmission error	< 0.1 % (of final value)

Electrical isolation Input/output/power supply

Rated insulation voltage	50 V AC/DC
Test voltage	1.5 kV AC (50 Hz, 60 s)
Insulation	Basic insulation in accordance with IEC/EN 61010

Supply

Nominal supply voltage	24 V DC \pm 10 %
Supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	< 20 mA
Power consumption	< 450 mW

Input data

Signal: Current input

Number of inputs	1
Configurable/programmable	no
Current input signal	0 mA ... 20 mA 4 mA ... 20 mA
Max. current input signal	50 mA
Input resistance current input	approx. 50 Ω

Signal conditioner - MINI MCR-BL-I-I

2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Output data

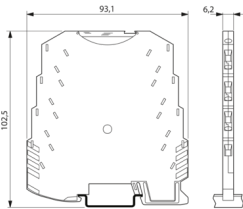
Signal:

Number of outputs	1
Transmission Behavior	1:1 to input signal
Non-load voltage	approx. 12.5 V
Current output signal	0 mA ... 20 mA 4 mA ... 20 mA
Max. current output signal	28 mA
Load/output load current output	< 500 Ω (at 20 mA)
Ripple	< 20 mV _{PP} (at 500 Ω)

Connection data

Connection method	Screw connection
Stripping length	12 mm
Screw thread	M3
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	26 ... 12

Dimensions

Dimensional drawing	
Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Material specifications

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
Housing material	PBT

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-10 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 65 °C

Signal conditioner - MINI MCR-BL-I-I



2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Approval data

CE

Certificate	CE-compliant
-------------	--------------

UKCA

Certificate	UKCA-compliant
-------------	----------------

EMC data

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2:2005

Electrostatic discharge

Comments	Safety measures must be taken to prevent electrostatic discharge.
----------	---

Standards and regulations

Electrical isolation	3-way isolation
----------------------	-----------------

Mounting

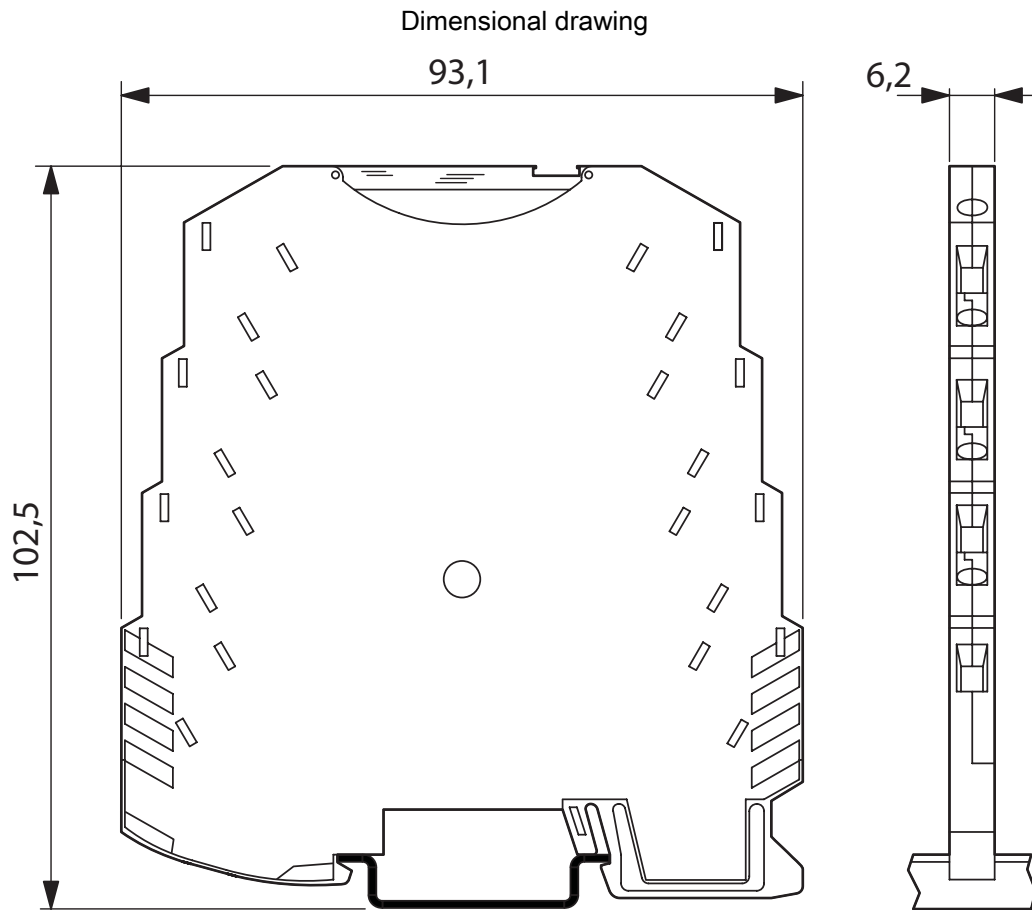
Mounting type	DIN rail mounting
Mounting position	any

Signal conditioner - MINI MCR-BL-I-I

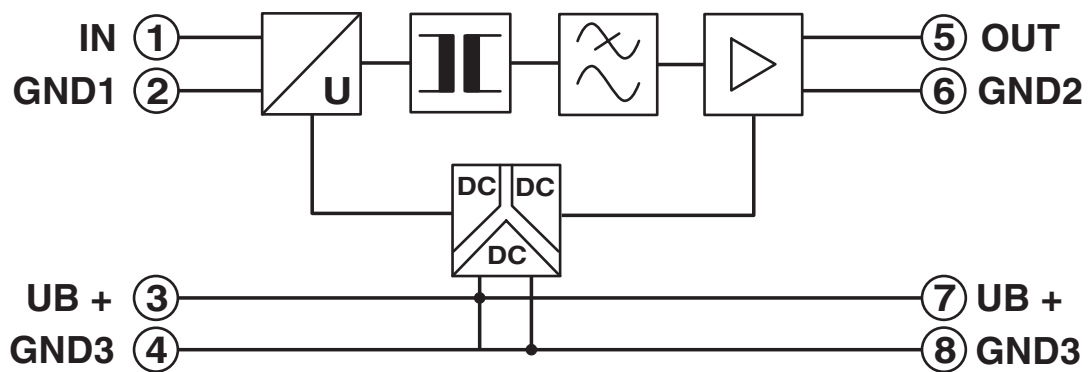
2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Drawings



Circuit diagram



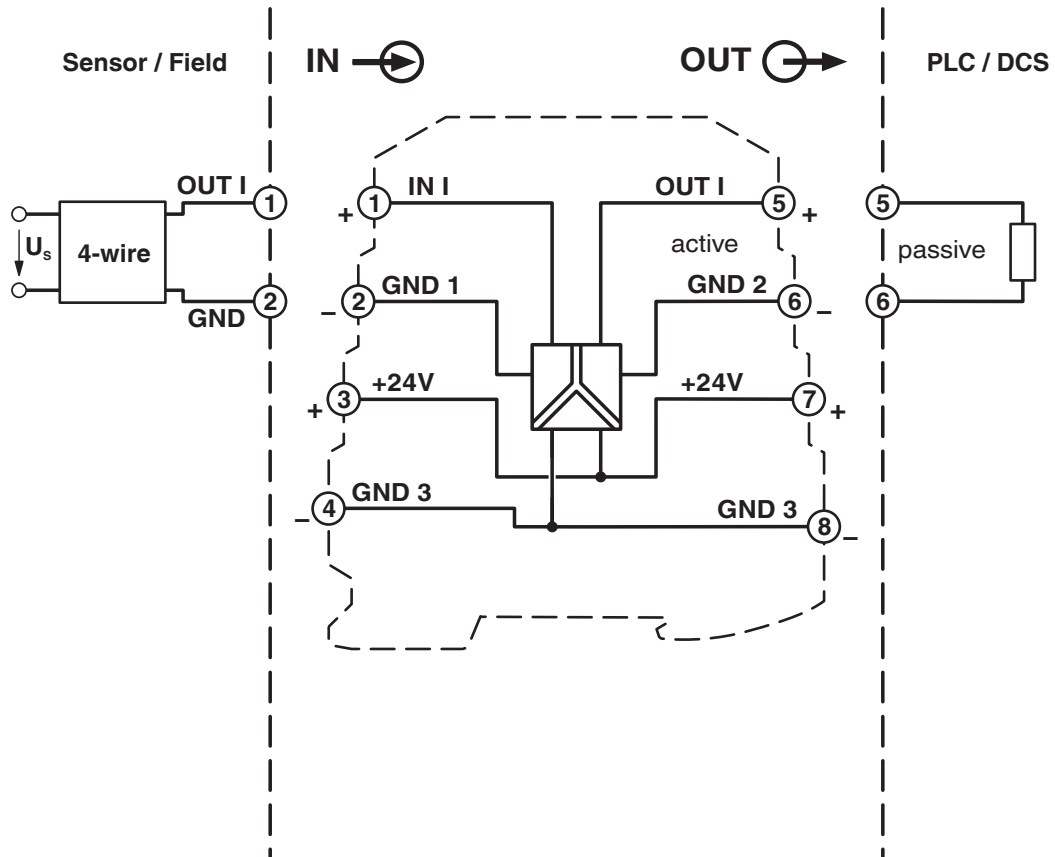
Signal conditioner - MINI MCR-BL-I-I

2810463

<https://www.phoenixcontact.com/pc/products/2810463>



Block diagram



Signal conditioner - MINI MCR-BL-I-I



2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Classifications

ECLASS

ECLASS-9.0	27210120
ECLASS-10.0.1	27210120
ECLASS-11.0	27210120

ETIM

ETIM 8.0	EC002653
----------	----------

UNSPSC

UNSPSC 21.0	
-------------	--

Signal conditioner - MINI MCR-BL-I-I



2810463

<https://www.phoenixcontact.com/pc/products/2810463>

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Signal conditioner - MINI MCR-BL-I-I

2810463

<https://www.phoenixcontact.com/pc/products/2810463>



Accessories

Transparent cover

Transparent cover - MINI MCR DKL - 2308111

<https://www.phoenixcontact.com/pc/products/2308111>



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

Marking label

Marking label - MINI MCR-DKL-LABEL - 2810272

<https://www.phoenixcontact.com/pc/products/2810272>



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

Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com