

MINI MCR-BL-I-I - Signal conditioner



2810463

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

Commercial data

Item number	2810463
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CK1
Product key	DKA131
GTIN	4046356166683
Weight per piece (including packing)	66.9 g
Weight per piece (excluding packing)	60.5 g
Customs tariff number	85437090
Country of origin	DE

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Technical data

Notes

Utilization restriction

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

Product type	Signal conditioner
Product family	ESSENTIAL edition
No. of channels	1

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

Electrical isolation	3-way isolation
Limit frequency (3 dB)	approx. 100 Hz
Maximum power dissipation for nominal condition	250 mW
Signal transmission behavior	In = Out
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 ± 10 %
Supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	< 20 mA
Power consumption	< 450 mW

Input data

Signal: Current

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

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Input resistance current input

approx. 50 Ω

Output data

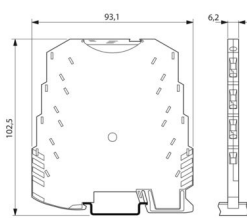
Signal: Current

Number of outputs	1
Open-circuit 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 rigid	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

Color	green (RAL 6021)
Housing material	PBT
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

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

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Approvals

CE

Certificate	CE-compliant
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UKCA

Certificate	UKCA-compliant
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EMC data

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

Noise emission

Standards/regulations	EN 61000-6-4
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Electrostatic discharge

Comments	Safety measures must be taken to prevent electrostatic discharge.
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Standards and regulations

Electrical isolation	3-way isolation
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Mounting

Mounting type	DIN rail mounting
Mounting position	any

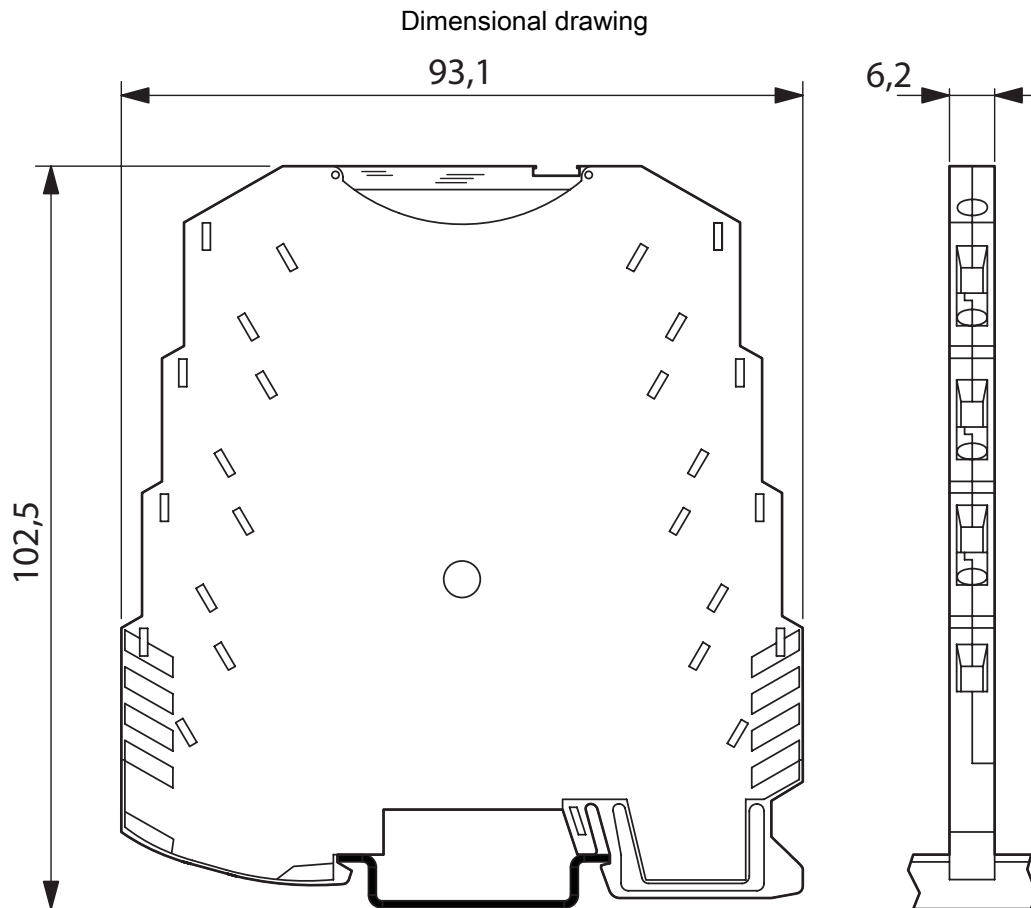
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2810463

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Drawings



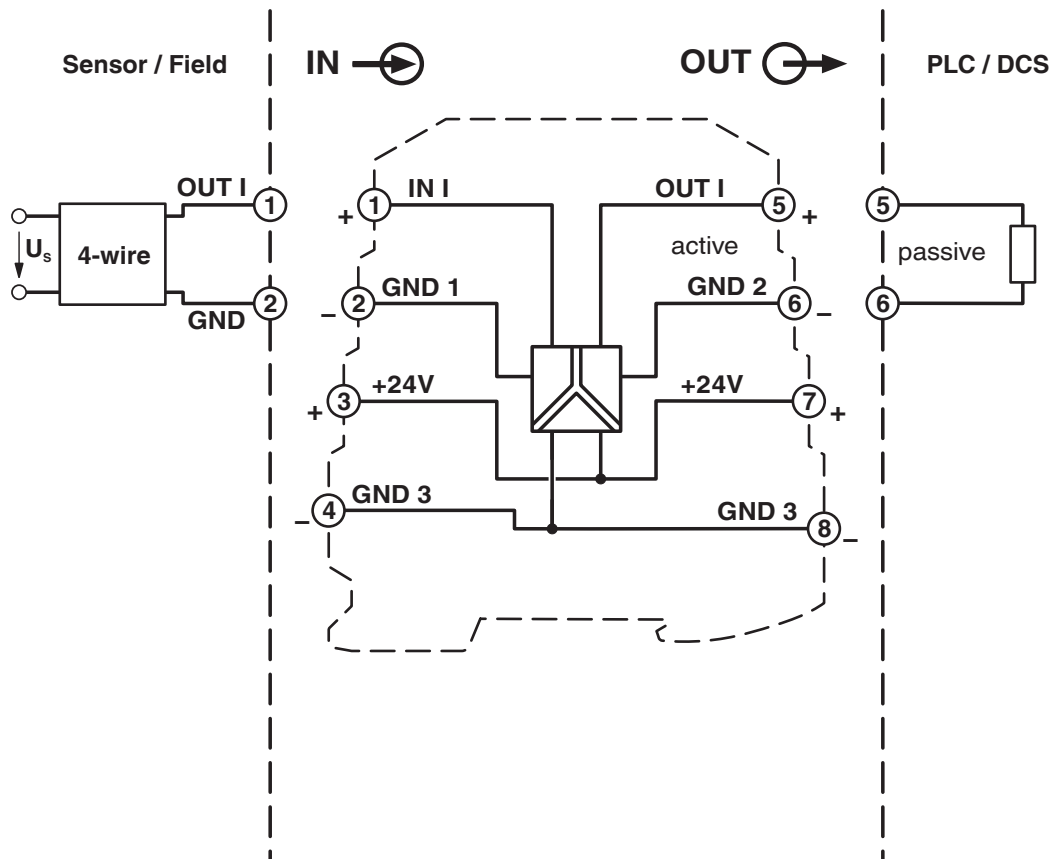
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Block diagram



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Classifications

ECLASS

ECLASS-13.0	27210120
ECLASS-15.0	27210120

ETIM

ETIM 9.0	EC002653
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UNSPSC

UNSPSC 21.0	39121000
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: n/a)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: n/a)
SCIP	e188af64-eeba-4a75-a762-db36b1c4ebb8

EF3.0 Climate Change

CO2e kg	1.897 kg CO2e
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Accessories

MINI MCR DKL - Transparent cover

2308111

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

MINI MCR-DKL-LABEL - Marking label

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

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SZS 0,6X3,5 - Screwdriver

1205053

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Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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