

MINI MCR-BL-UI-UI - Signal conditioner



1070346

<https://www.phoenixcontact.com/gb/products/1070346>

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3-way signal conditioner for the electrical isolation of analog signals, I/O can be configured via DIP switches, with screw connection, standard configuration

Commercial data

Item number	1070346
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DKA131
Product key	DKA131
GTIN	4055626749815
Weight per piece (including packing)	66.6 g
Weight per piece (excluding packing)	59 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

Electrical properties

Electrical isolation	3-way isolation
Electrical isolation between input and output	yes
Limit frequency (3 dB)	approx. 100 Hz
Step response (10-90%)	≈  ms
Temperature coefficient, typical	< 0.002 %/K
Maximum transmission error	< 0.2 % (of final value)
	< 0.5 % (manual adjustment)

Electrical isolation

Overvoltage category	II
Pollution degree	2

Electrical isolation Input/output/power supply IEC/EN 61010

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

Supply

Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (The DIN rail connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, item no. 2869728) can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail in accordance with EN 60715)
Max. current consumption	< 19 mA (Current output, at 24 V DC incl. load)
	< 9 mA (Voltage output, at 24 V DC incl. load)
Power consumption (I output)	< 450 mW (Current output)
Power consumption (U output)	< 200 mW (Voltage output)

Input data

Signal: Voltage/current

Number of inputs	1
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Configurable/programmable	Yes, preconfigured
Voltage input signal	0 V ... 10 V
	0 V ... 5 V
Max. voltage input signal	30 V
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. current input signal	50 mA
Input resistance of voltage input	approx. 100 k Ω
Input resistance current input	approx. 50 Ω

Output data

Signal: Voltage/current

Voltage output signal	0 V ... 10 V
	0 V ... 5 V
Max. voltage output signal	approx. 12.5 V
Open-circuit voltage	approx. 12.5 V
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. current output signal	28 mA
Short-circuit current	approx. 22 mA
Load/output load voltage output	≥ 10 k Ω
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	109.5 mm
Depth	119.2 mm

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Material specifications

Color	traffic gray B (RAL 7043)
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

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
Note	When being exposed to interference, there may be minimal deviations.

Noise emission

Standards/regulations	EN 61000-6-4
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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

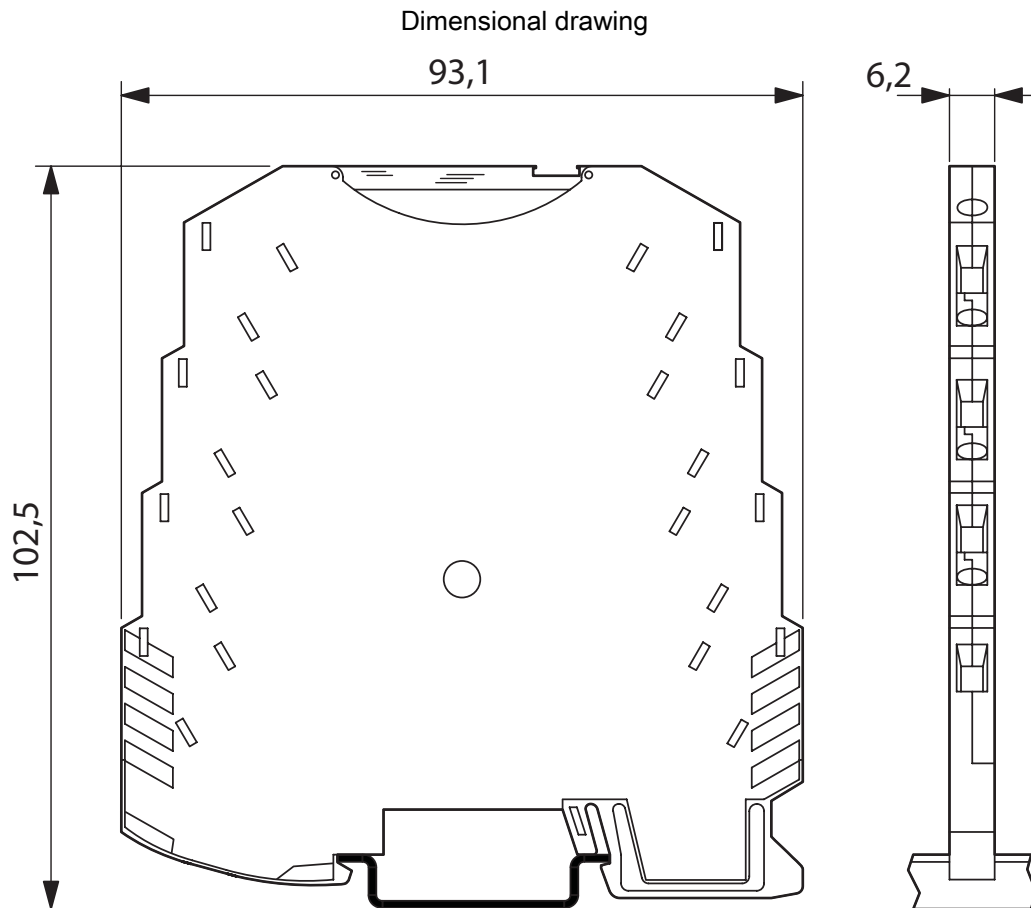
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Drawings



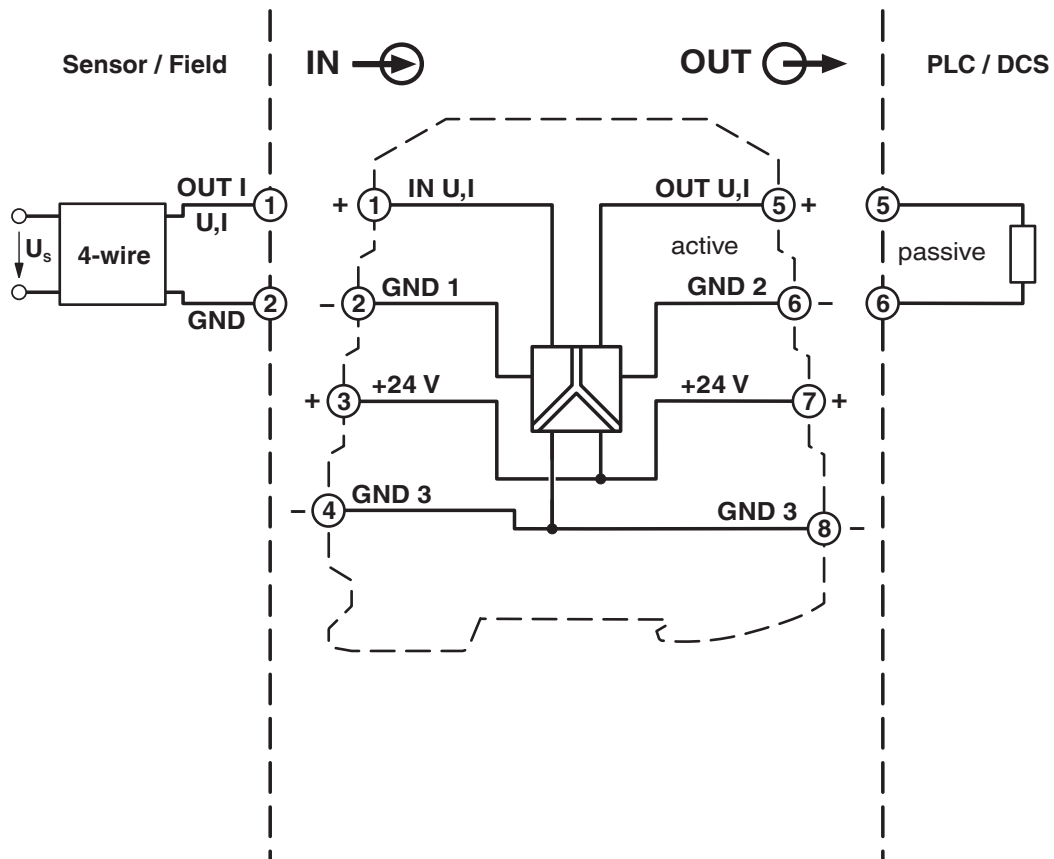
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Block diagram



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Classifications

ECLASS

ECLASS-13.0	27210120
ECLASS-15.0	27210120

ETIM

ETIM 10.0	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: 7439-92-1)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	bf68e761-3686-48cd-98b4-506ed8330281

EF3.1 Climate Change

CO2e kg	2.153 kg CO2e
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