

# MCR-C-U-I- 4-DC - Signal conditioner



2814537

<https://www.phoenixcontact.com/us/products/2814537>

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MCR 3-way signal conditioner, for electrical isolation of analog signals, input signal: 0 V .. . 10 V, output signal: 4 mA ... 20 mA. Replacement part: 2902029 MINI MCR-2-U-I4.

The figure shows version MCR-C-I-I-00-DC

## Your advantages

- Processing of standard signals
- 3-way isolation
- Fixed setting of input and output signals

## Commercial data

Item number	2814537
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	DK1XXX
GTIN	4017918156220
Weight per piece (including packing)	80.75 g
Weight per piece (excluding packing)	74.78 g
Customs tariff number	85437090
Country of origin	DE

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## Technical data

### Product properties

Product type	Signal conditioner
No. of channels	1

### Electrical properties

Electrical isolation between input and output	yes
Limit frequency (3 dB)	30 Hz
Maximum power dissipation for nominal condition	450 mW
Test voltage, input/output/supply	1.5 kV AC (50 Hz, 60 s)
Protective circuit	Transient protection
Step response (10-90%)	11 ms
Maximum temperature coefficient	< 0.015 %/K
Maximum transmission error	≤ 0.3 % (of final value)
Transmission error, typical	< 0.2 % (of final value)

### Supply

Supply voltage range	20 V DC ... 30 V DC
Typical current consumption	< 15 mA (without load)

### Input data

#### Signal

Description of the input	Voltage input
Number of inputs	1
Configurable/programmable	no
Voltage input signal	0 V ... 10 V
Max. voltage input signal	30 V
Input resistance of voltage input	100 kΩ

### Output data

#### Signal: Current output

Number of outputs	1
Configurable/programmable	no
Current output signal	4 mA ... 20 mA
Max. current output signal	30 mA
Load/output load current output	≤ 500 Ω
Linear transmission range (in reference to the output range end value)	-5 % ... 105 %

### Connection data

Connection method	Pluggable screw connection
Stripping length	8 mm

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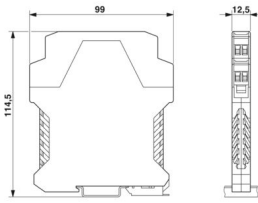
Screw thread	M3
Conductor cross-section rigid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section AWG	24 ... 14

## Interfaces

### Data communication (bypass)

Limit frequency (3 dB)	30 Hz
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## Dimensions

Dimensional drawing	
Width	12.5 mm
Height	99 mm
Depth	114.5 mm

## Material specifications

Color	green (RAL 6021)
Housing material	Polyamide PA non-reinforced

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
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## Approvals

### CE

Certificate	CE-compliant
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## Mounting

Mounting type	DIN rail mounting
Mounting position	any

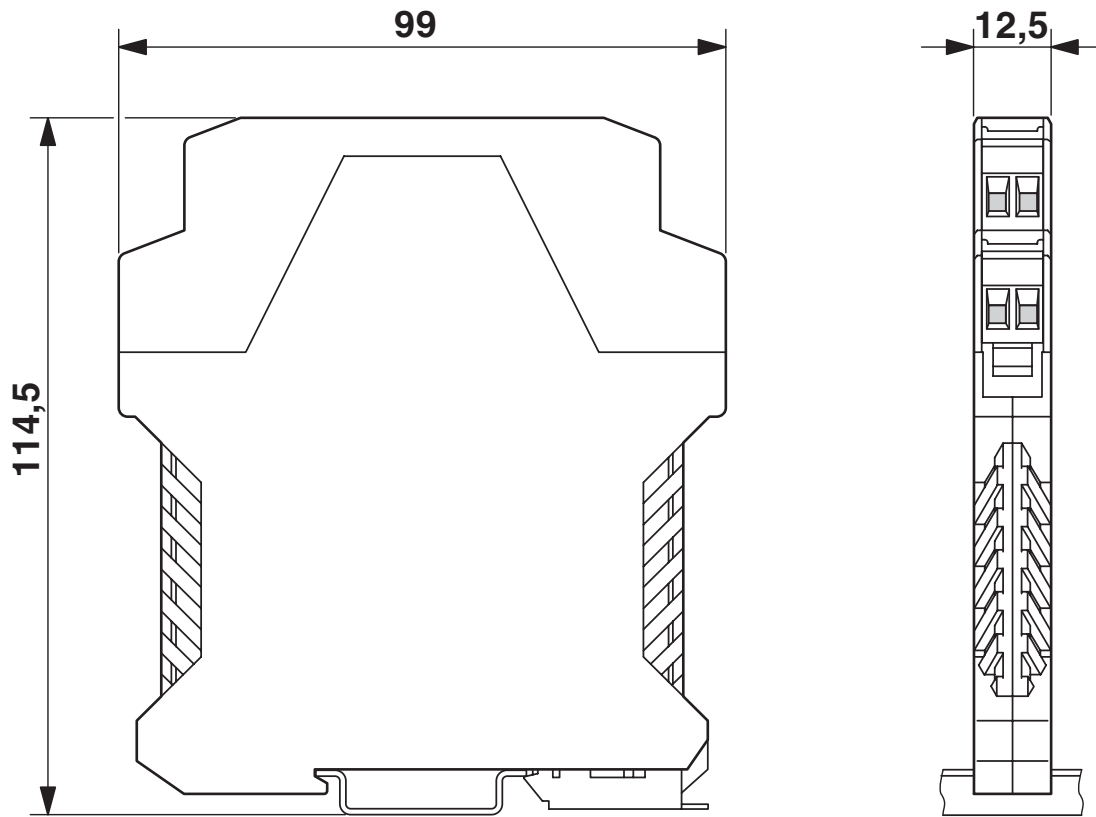
# MCR-C-U-I- 4-DC - Signal conditioner

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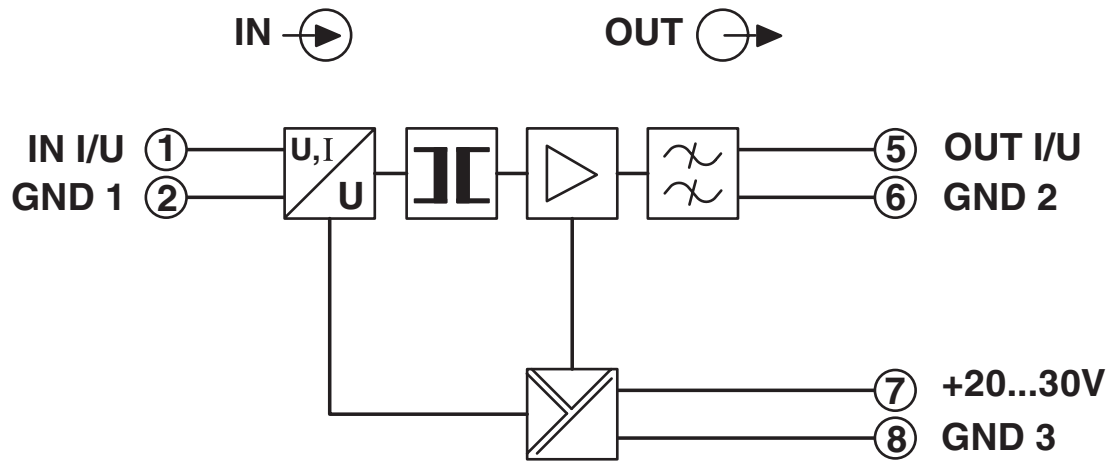
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## Drawings

Dimensional drawing



Circuit diagram



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## Classifications

### 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)
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