

# MCR-C-I-U- 0-DC - Signal conditioner



2814498

<https://www.phoenixcontact.com/us/products/2814498>

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MCR 3-way isolating amplifier, for electrical isolation of analog signals, input signal: 0 mA ... 20 mA/(+/-)20 mA, output signal: 0 V ... 10 V/(+/-)10 V

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

## Your advantages

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

## Commercial data

Item number	2814498
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DK1XXX
GTIN	4017918156183
Weight per piece (including packing)	89.35 g
Weight per piece (excluding packing)	82.09 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
No. of channels	1

### Electrical properties

Limit frequency (3 dB)	30 Hz
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	≤ 0.2 % (of final value)
Transmission error, typical	0.1 % (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	Current input
Configurable/programmable	no
Current input signal	0 mA ... 20 mA -20 mA ... 20 mA
Max. current input signal	50 mA
Input resistance current input	50 Ω

### Output data

#### Signal: Voltage output

Configurable/programmable	no
Voltage output signal	0 V ... 10 V -10 V ... 10 V
Max. voltage output signal	15 V
Load/output load voltage output	> 10 kΩ
Linear transmission range (in reference to the output range end value)	-110 % ... 110 % (Bipolar signals)

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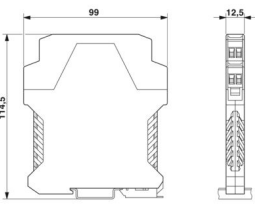
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## Connection data

Connection method	Pluggable screw connection
Stripping length	8 mm
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

## 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 position	any
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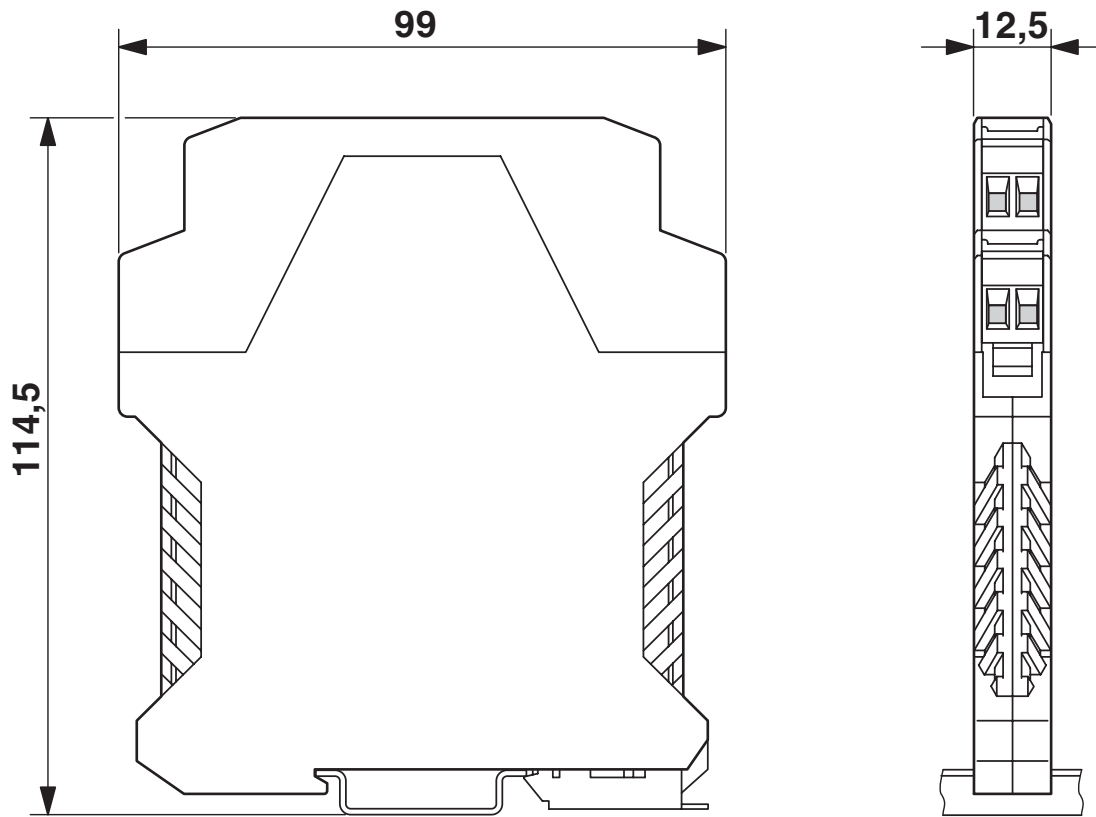
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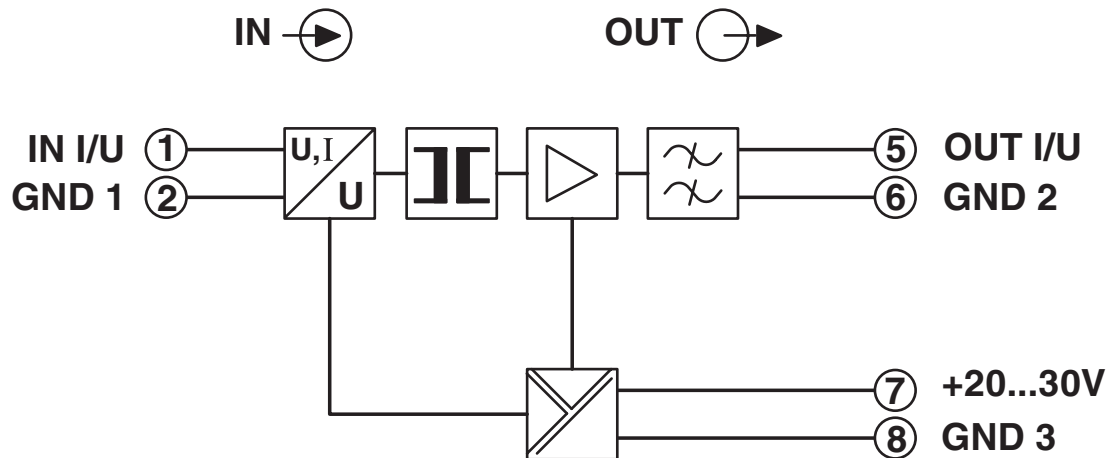
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## Drawings

Dimensional drawing



Circuit diagram



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## Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	
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	No substance above 0.1 wt%
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