

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



2814511

<https://www.phoenixcontact.com/us/products/2814511>

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 signal conditioner, for galvanic isolation of analog signals, input signal: 4 mA ... 20 mA, output signal: 0 V ... 10 V. Replacement part: 2902002 MINI MCR-2-I4-U.

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

Your advantages

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

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2814511 |
| Packing unit | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | C401 |
| Product key | DK1XXX |
| GTIN | 4017918156206 |
| Weight per piece (including packing) | 80.08 g |
| Weight per piece (excluding packing) | 74.69 g |
| Customs tariff number | 85437090 |
| Country of origin | DE |

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



2814511

<https://www.phoenixcontact.com/us/products/2814511>

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) |
| Max. scale factor error | < 0.3 % (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 |
| Number of inputs | 1 |
| Configurable/programmable | no |
| Current input signal | 4 mA ... 20 mA |
| Max. current input signal | 50 mA |
| Input resistance current input | 50 Ω |

Output data

Signal

| | |
|--|-----------------|
| Number of outputs | 1 |
| Configurable/programmable | no |
| Voltage output signal | 0 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) | -10 % ... 110 % |

Connection data

| | |
|-------------------|----------------------------|
| Connection method | Pluggable screw connection |
|-------------------|----------------------------|

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

2814511

<https://www.phoenixcontact.com/us/products/2814511>

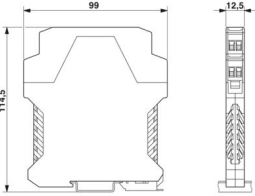
| | |
|----------------------------------|---|
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross-section rigid | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross-section flexible | 0.2 mm ² ... 2.5 mm ² |
| Conductor cross-section AWG | 24 ... 14 |

Interfaces

Data communication (bypass)

| | |
|------------------------|-------|
| Limit frequency (3 dB) | 30 Hz |
|------------------------|-------|

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 |
|---------------------------------|------------------|

Approvals

CE

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

Mounting

| | |
|-------------------|-------------------|
| Mounting type | DIN rail mounting |
| Mounting position | any |

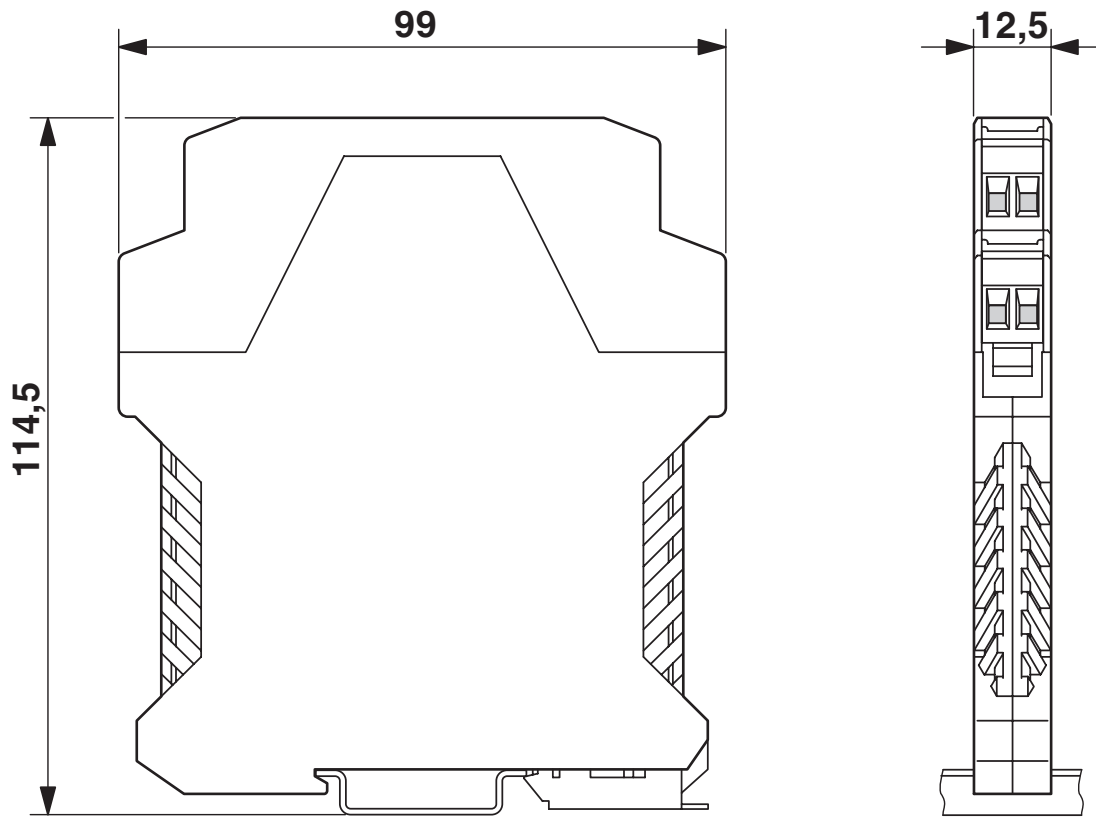
MCR-C-I-U- 4-DC - Signal conditioner

2814511

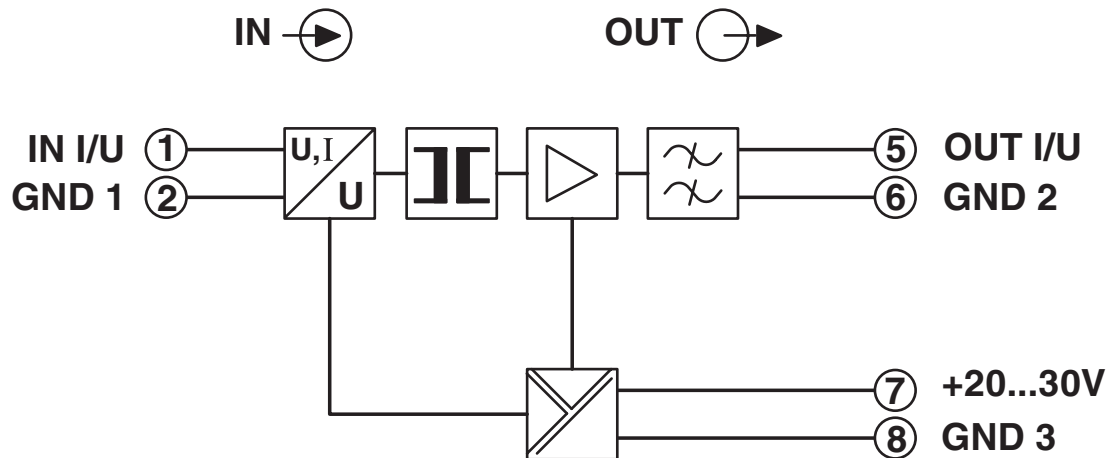
<https://www.phoenixcontact.com/us/products/2814511>

Drawings

Dimensional drawing



Circuit diagram



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



2814511

<https://www.phoenixcontact.com/us/products/2814511>

Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121000 |
|-------------|----------|

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



2814511

<https://www.phoenixcontact.com/us/products/2814511>

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) |
|-------------------------------------|----------------------|

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com