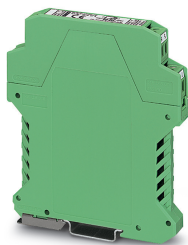


# Signal conditioner - MCR-C-U-I- 4-DC - 2814537

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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



## Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 5 pc                                                                                                    |
| GTIN         | <br>4 017918 156220 |
| GTIN         | 4017918156220                                                                                           |

## Technical data

### Note

|                         |                                                                           |
|-------------------------|---------------------------------------------------------------------------|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---------------------------------------------------------------------------|

### Dimensions

|        |          |
|--------|----------|
| Width  | 12.5 mm  |
| Height | 99 mm    |
| Depth  | 114.5 mm |

### Ambient conditions

|                                 |                  |
|---------------------------------|------------------|
| Ambient temperature (operation) | -25 °C ... 60 °C |
|---------------------------------|------------------|

### Input data

|                          |               |
|--------------------------|---------------|
| Description of the input | Voltage input |
| Number of inputs         | 1             |

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## Technical data

### Input data

|                                   |              |
|-----------------------------------|--------------|
| Configurable/programmable         | no           |
| Voltage input signal              | 0 V ... 10 V |
| max. input voltage                | 30 V         |
| Input resistance of voltage input | 100 kΩ       |

### Output data

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

### Power supply

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

### General

|                                   |                             |
|-----------------------------------|-----------------------------|
| No. of channels                   | 1                           |
| Maximum transmission error        | ≤ 0.3 % (of final value)    |
| Transmission error, typical       | < 0.2 % (of final value)    |
| Maximum temperature coefficient   | < 0.015 %/K                 |
| Limit frequency (3 dB)            | 30 Hz                       |
| Step response (10-90%)            | 11 ms                       |
| Protective circuit                | Transient protection        |
| Test voltage, input/output/supply | 1.5 kV (50 Hz, 1 min.)      |
| Color                             | green                       |
| Housing material                  | Polyamide PA non-reinforced |
| Mounting position                 | any                         |

### Standards and Regulations

|                                  |     |
|----------------------------------|-----|
| Connection in acc. with standard | CUL |
|----------------------------------|-----|

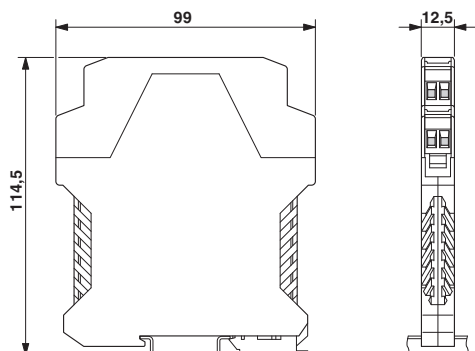
### Environmental Product Compliance

|            |                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------|
| REACH SVHC | Lead 7439-92-1                                                                                      |
| China RoHS | Environmentally Friendly Use Period = 50 years                                                      |
|            | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

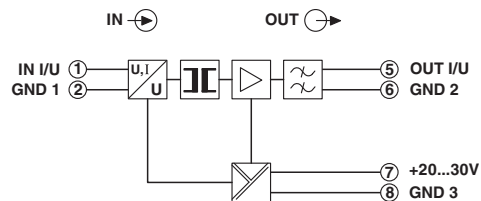
## Drawings

# Signal conditioner - MCR-C-U-I- 4-DC - 2814537

Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27210120 |
| eCl@ss 11.0   | 27210120 |
| eCl@ss 4.0    | 27210100 |
| eCl@ss 4.1    | 27210100 |
| eCl@ss 5.0    | 27210100 |
| eCl@ss 5.1    | 27210100 |
| eCl@ss 6.0    | 27210100 |
| eCl@ss 7.0    | 27210120 |
| eCl@ss 9.0    | 27210120 |

ETIM

|          |          |
|----------|----------|
| ETIM 4.0 | EC002653 |
| ETIM 6.0 | EC002653 |
| ETIM 7.0 | EC002653 |

UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 30211506 |
| UNSPSC 7.0901 | 39121008 |
| UNSPSC 11     | 39121008 |
| UNSPSC 12.01  | 39121008 |
| UNSPSC 13.2   | 39121008 |
| UNSPSC 18.0   | 39121008 |
| UNSPSC 19.0   | 39121008 |
| UNSPSC 20.0   | 39121008 |
| UNSPSC 21.0   | 39121008 |

## Approvals

Approvals

# Signal conditioner - MCR-C-U-I- 4-DC - 2814537

## Approvals

Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

## Approval details

|                  |  |                                                                                                                                                       |                      |
|------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| UL Recognized    |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705        |
| cUL Recognized   |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> | FILE E 238705        |
| EAC              |  |                                                                                                                                                       | RU*DE.*08.B.01536/19 |
| cULus Recognized |  |                                                                                                                                                       |                      |

## Accessories

Accessories

Loop bridge

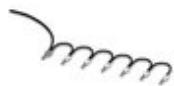
Wire bridge - DB 50- 90 GY - 2820929

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm<sup>2</sup>, loop length: 90 mm, ferrule length: 8 mm, color: gray



Wire bridge - DB 50- 90 BK - 2820916

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm<sup>2</sup>, loop length: 90 mm, ferrule length: 8 mm, color: black



## Signal conditioner - MCR-C-U-I- 4-DC - 2814537

### Accessories

Wire bridge - DB 50- 90 BU - 2821180

Flexible wire loop bridge, 50-pos., conductor cross-section: 0.5 mm<sup>2</sup>, loop length: 90 mm, ferrule length: 8 mm, color: blue



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