

# MCR-C-UI-UI-450-DCI - Signal conditioner



2810887

<https://www.phoenixcontact.com/us/products/2810887>

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, with configurable I/O, for the electrical isolation of analog signals, with cut-off frequency (3 dB) 450 Hz, preconfigured. For information about permitted signal combinations, please refer to the data sheet. Replacement part: 2811284 MACX MCR-UI-UI.

The figure shows version MCR-C-UI-UI-DCI

## Commercial data

Item number	2810887
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	DK1XXX
Weight per piece (including packing)	129 g
Weight per piece (excluding packing)	129 g
Customs tariff number	85437090
Country of origin	DE

# MCR-C-UI-UI-450-DCI - Signal conditioner



2810887

<https://www.phoenixcontact.com/us/products/2810887>

## Technical data

### Product properties

Product type	Signal conditioner
No. of channels	1

### Electrical properties

Alignment span	$\pm 2 \%$
Alignment zero	$\pm 2 \%$
Electrical isolation between input and output	yes
Limit frequency (3 dB)	450 Hz
Maximum power dissipation for nominal condition	900 mW
Test voltage input/output	1.5 kV AC (50 Hz, 60 s)
Test voltage power supply/signal	1 kV AC (50 Hz, 60 s)
Protective circuit	Transient protection
Step response (10-90%)	0.8 ms
Maximum temperature coefficient	0.0075 %/K
Maximum transmission error	$\leq 0.1 \%$ (of final value)

### Supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	< 30 mA (without load)

### Input data

#### Signal

Number of inputs	1
Configurable/programmable	Yes, preconfigured
Voltage input signal	0 V ... 10 V (please indicate if different setting when ordering)
Max. voltage input signal	30 V
Max. current input signal	50 mA
Input resistance of voltage input	1 M $\Omega$
Input resistance current input	50 $\Omega$

### Output data

#### Signal

Number of outputs	1
Configurable/programmable	Yes, preconfigured
Voltage output signal	0 V ... 10 V (please indicate if different setting when ordering)
Max. voltage output signal	15 V
Max. current output signal	30 mA
Load/output load voltage output	$\geq 10 \text{ k}\Omega$
Load/output load current output	$\leq 500 \Omega$

# MCR-C-UI-UI-450-DCI - Signal conditioner

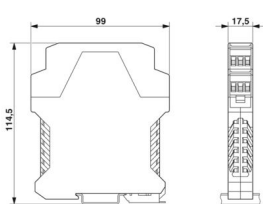
2810887

<https://www.phoenixcontact.com/us/products/2810887>

## 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	17.5 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

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 65 °C

## Approvals

### CE

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

## EMC data

Electromagnetic compatibility	Conformance with EMC directive
Noise immunity	EN 61000-6-2

### Noise emission

Standards/regulations	EN 61000-6-4
-----------------------	--------------

## Mounting

Mounting type	DIN rail mounting
Mounting position	any

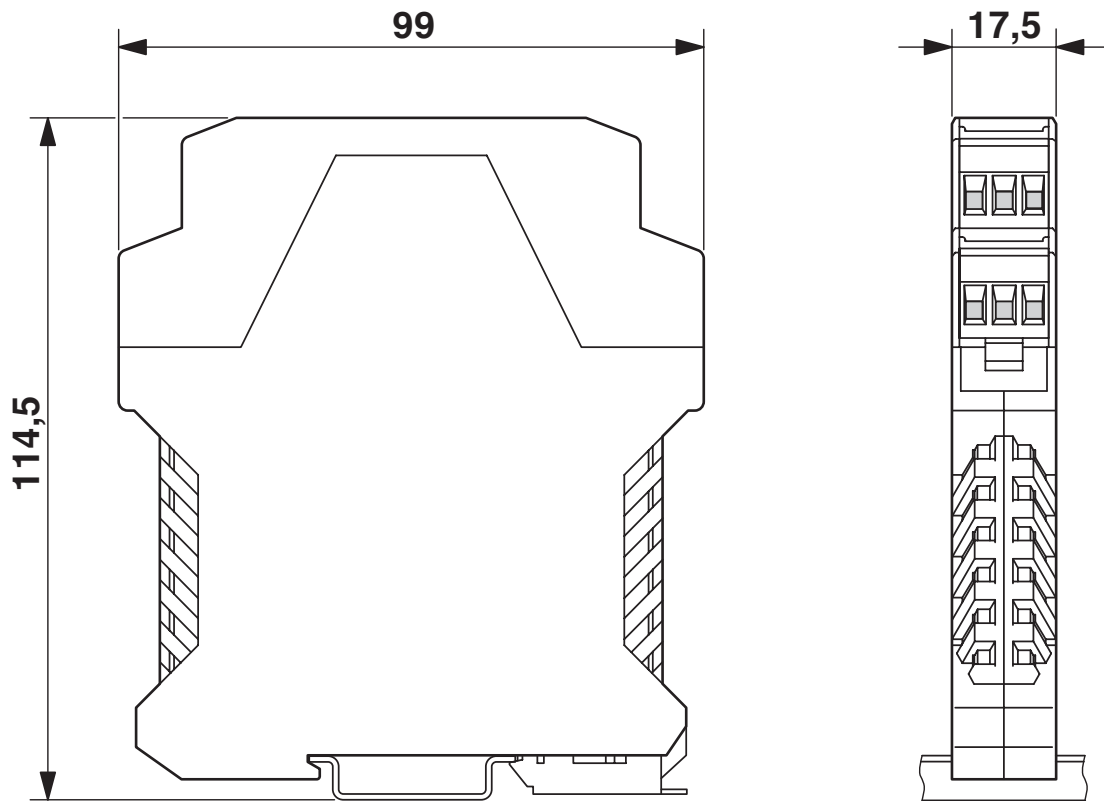
# MCR-C-UI-UI-450-DCI - Signal conditioner

2810887

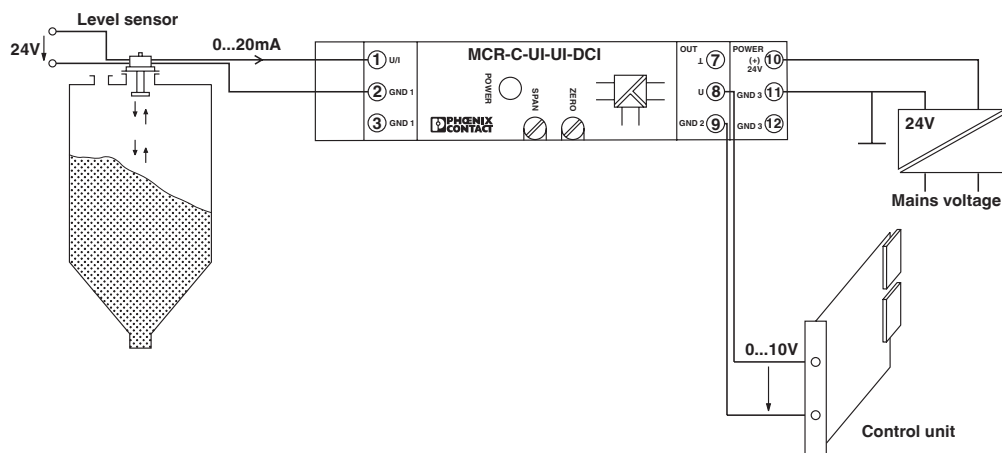
<https://www.phoenixcontact.com/us/products/2810887>

## Drawings

Dimensional drawing



Application drawing



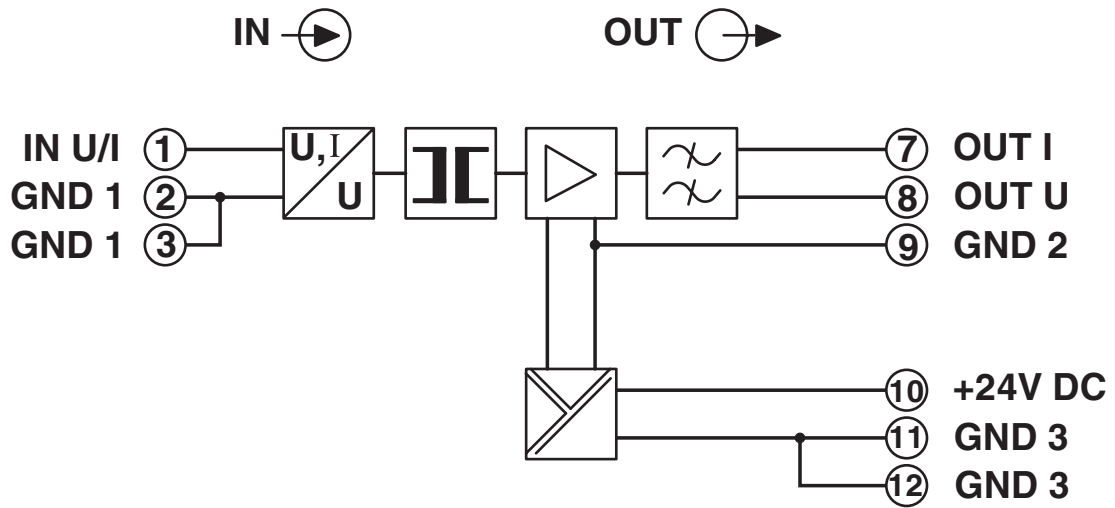
Application example: Level measurement

# MCR-C-UI-UI-450-DCI - Signal conditioner

2810887

<https://www.phoenixcontact.com/us/products/2810887>

Circuit diagram



# MCR-C-UI-UI-450-DCI - Signal conditioner



2810887

<https://www.phoenixcontact.com/us/products/2810887>

## Classifications

### UNSPSC

UNSPSC 21.0	39121008
-------------	----------

2810887

<https://www.phoenixcontact.com/us/products/2810887>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	15, 15(a), 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.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

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](mailto:info@phoenixcon.com)