

# MCR-FL-C-UI-2UI-DCI - Signal conditioner



2814854

<https://www.phoenixcontact.com/pc/products/2814854>

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MCR signal multiplier, for doubling and electrical isolation of analog signals, unconfigured



## Your advantages

- Calibrated selectable input and output signals
- 4-way isolation

## Commercial Data

Item number	2814854
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	CK1811
Catalog Page	Page 130 (C-7-2015)
Weight per Piece (including packing)	138.4 g
Weight per Piece (excluding packing)	138.4 g
Customs tariff number	85437090
Country of origin	DE

## Technical Data

### Product properties

Product type	Signal duplicator
No. of channels	2

### Electrical properties

No. of channels	2 (1 inputs, 2 outputs)
Electrical isolation between input and output	yes
Limit frequency (3 dB)	30 Hz
Maximum power dissipation for nominal condition	15 mW
Test voltage, input/output/supply	1.5 kV AC (50 Hz, 60 s)
Protective circuit	Transient protection
Step response (10-90%)	12 ms
Maximum temperature coefficient	< 0.015 %/K
Temperature coefficient, typical	0.0075 %/K
Maximum transmission error	≤ 0.15 % (of final value)
Transmission error, typical	0.05 % (of final value)

### Supply

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	< 25 mA

### Input data

#### Signal

Description of the input	Current input
Number of inputs	1
Configurable/programmable	Yes, preconfigured
Current input signal	0 mA ... 24 mA (freely selectable in 0.1 mA steps)
Max. current input signal	50 mA
Input resistance current input	50 Ω
Current measuring range	min. 8 mA
Supply voltage	24 V DC

#### Signal

Description of the input	Voltage input
Configurable/programmable	Yes, preconfigured
Voltage input signal	0 V ... 12 V (freely selectable in 0.1 V steps)
Max. voltage input signal	30 V
Input resistance of voltage input	200 kΩ
Voltage measuring range	min. 4 V

### Output data

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## Signal:

Number of outputs	2
Configurable/programmable	Yes, preconfigured
Voltage output signal	0 V DC ... 10 V DC (refer to the order key)
	2 V DC ... 10 V DC
	0 V DC ... 5 V DC
	1 V DC ... 5 V DC
Max. voltage output signal	15 V
Load/output load voltage output	$\geq 10 \text{ k}\Omega$

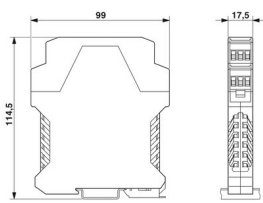
## Signal:

Configurable/programmable	Yes, preconfigured
Current output signal	0 mA ... 20 mA (refer to the order key)
	4 mA ... 20 mA
	0 mA ... 10 mA
Max. current output signal	35 mA
Load/output load current output	$\leq 600 \Omega$

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	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

Housing material	Polyamide PA non-reinforced
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
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Ambient temperature (operation)	-25 °C ... 55 °C
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## Approval data

CE

Certificate	CE-compliant
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UL, USA/Canada

Identification	Class I, Div. 2, Groups A, B, C, D or Non-Hazardous Locations
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## Mounting

Mounting type	DIN rail mounting
Mounting position	any

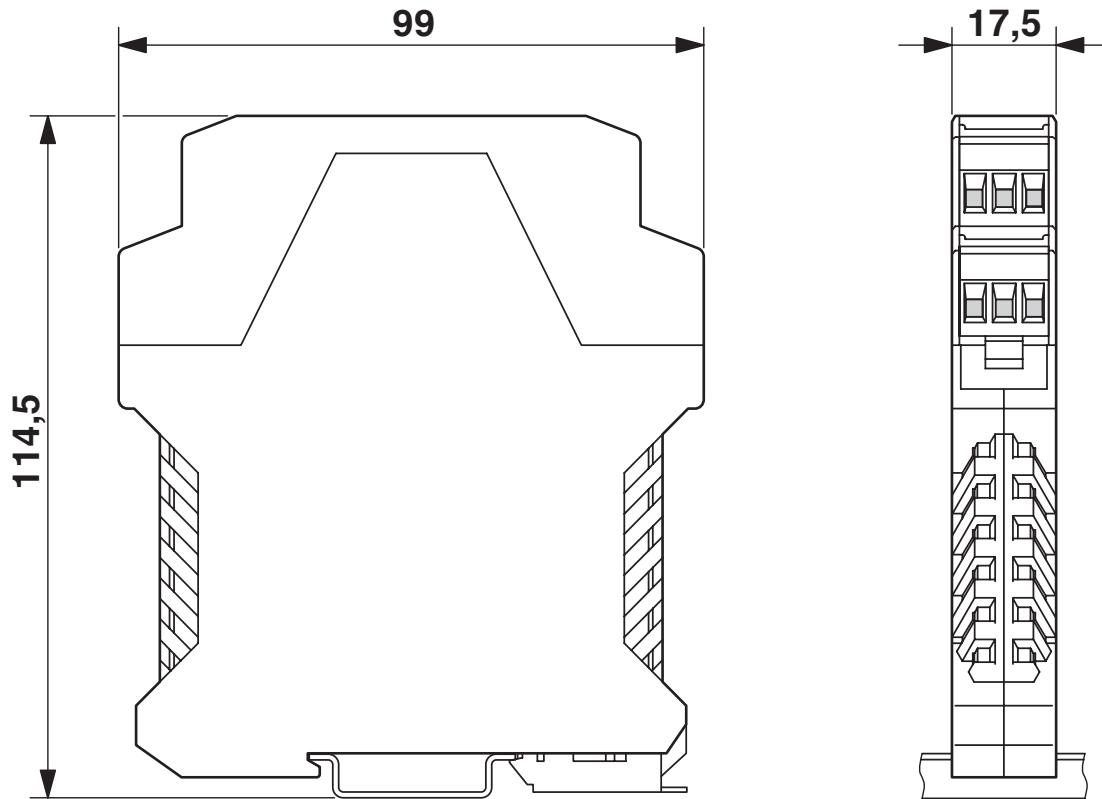
# MCR-FL-C-UI-2UI-DCI - Signal conditioner

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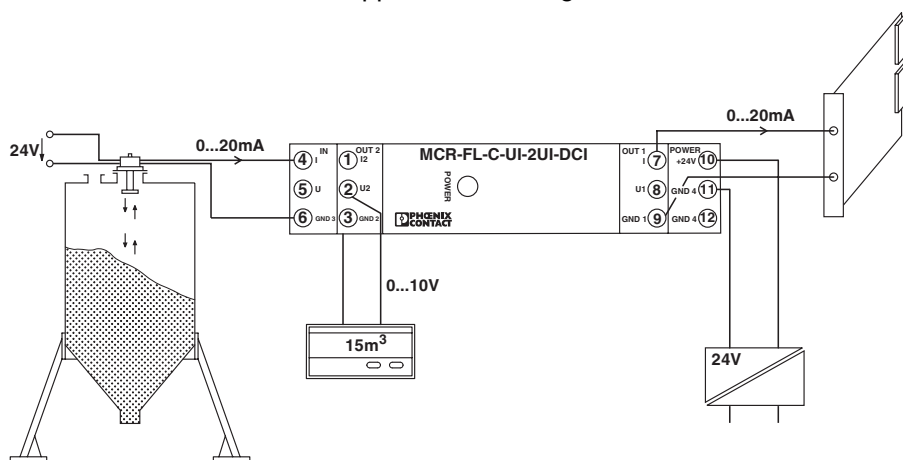
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## Drawings

Dimensional drawing



Application drawing



Application example: - Level measurement with subsequent signal multiplication

1 = filling level sensor

2 = control

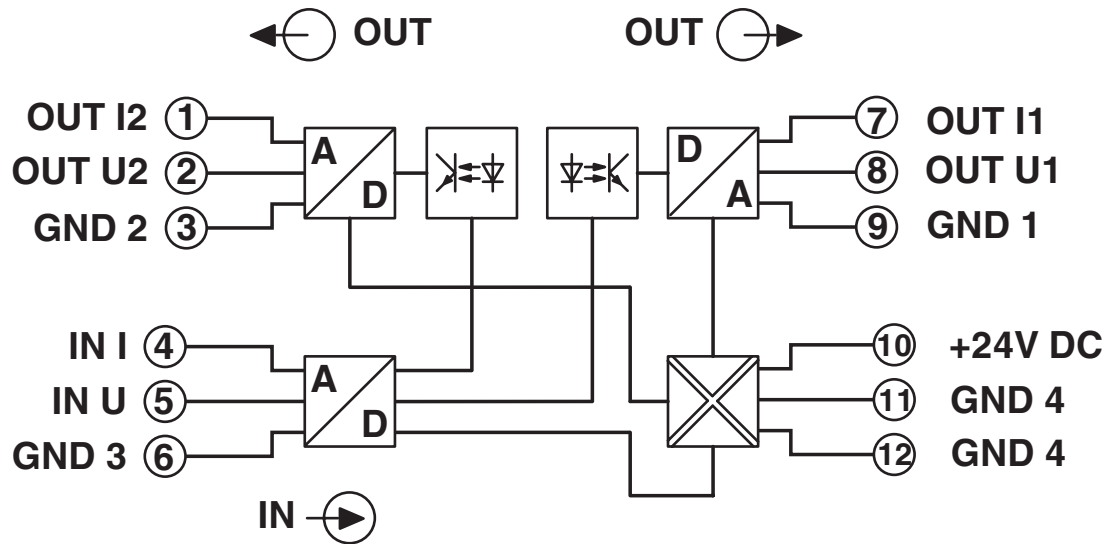
3 = mains voltage

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Circuit diagram



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## Classifications

### ECLASS

ECLASS-9.0	27210120
ECLASS-10.0.1	27210120

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## Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
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PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

[info@phoenixcontact.com](mailto:info@phoenixcontact.com)