

# Signal conditioner - MCR-C-UI-UI-DCI-NC - 2810939

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MCR 3-way signal conditioner, with configurable input/output, for electrical isolation of analog signals, not configured

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



## Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 118303
GTIN	4017918118303
Weight per Piece (excluding packing)	140.000 g
Custom tariff number	85437090
Country of origin	Germany

## Technical data

### Note

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

Width	17.5 mm
Height	99 mm
Depth	114.5 mm

### Ambient conditions

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

### Input data

Configurable/programmable	Yes, standard configuration IN 0 ... 10 V, OUT 0 ... 10 V
Voltage input signal	0 V ... 10 V (please indicate if different setting when ordering)

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## Technical data

### Input data

Max. input voltage	30 V
Max. input current	50 mA
Input resistance of voltage input	1 MΩ
Input resistance current input	50 Ω

### Output data

Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 10 V (please indicate if different setting when ordering)
Max. output voltage	15 V
Max. output current	30 mA
Load/output load voltage output	≥ 10 kΩ
Load/output load current output	≤ 500 Ω

### Power supply

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

### Connection data

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Stripping length	8 mm
Screw thread	M3

### General

No. of channels	1
Maximum transmission error	≤ 0.1 % (of final value)
Maximum temperature coefficient	0.0075 %/K
Limit frequency (3 dB)	30 Hz
Alignment zero	± 2 %
Alignment span	± 2 %
Step response (10-90%)	11 ms
Protective circuit	Transient protection
Test voltage input/output	1.5 kV (50 Hz, 1 min.)
Test voltage power supply/signal	1 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Color	green

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## Technical data

### General

Housing material	Polyamide PA non-reinforced
Mounting position	any
Conformance	CE-compliant
UL, USA/Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D
	Class I, Zone 2, Group IIC

### Standards and Regulations

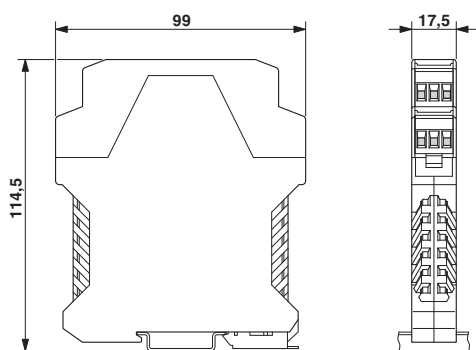
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Connection in acc. with standard	CUL
Conformance	CE-compliant
UL, USA/Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D
	Class I, Zone 2, Group IIC

### Environmental Product Compliance

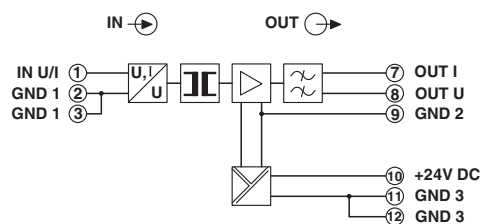
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Dimensional drawing

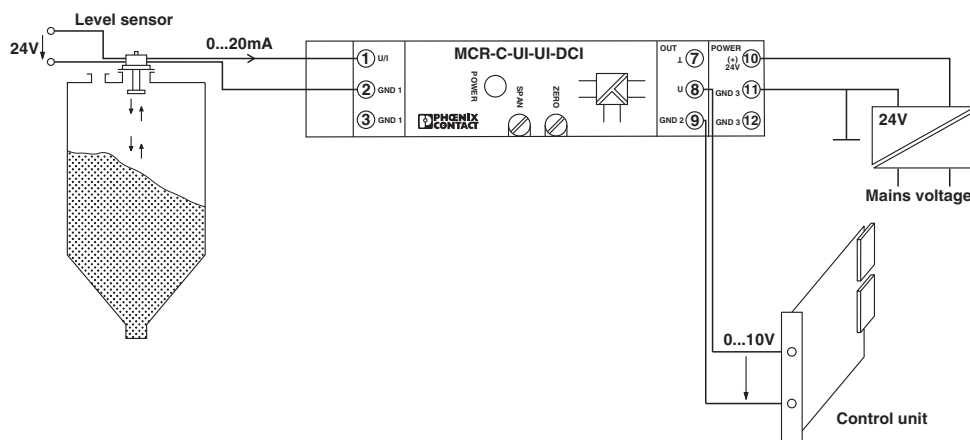


Circuit diagram



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Application drawing



Application example: Level measurement

## Classifications

eCl@ss

eCl@ss 4.0	27210120
eCl@ss 4.1	27210120
eCl@ss 5.0	27210120
eCl@ss 5.1	27210120
eCl@ss 6.0	27210120
eCl@ss 7.0	27210120
eCl@ss 8.0	27210120
eCl@ss 9.0	27210120

ETIM

ETIM 4.0	EC002653
ETIM 5.0	EC002653
ETIM 6.0	EC002653

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

## Approvals

Approvals

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## Approvals

### Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

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### Ex Approvals

UL Listed / cUL Listed / cULus Listed

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### 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			EAC-Zulassung
cULus 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>	

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