

MCR-CLP-UI-I-4-NC - Signal conditioner



2814252

<https://www.phoenixcontact.com/us/products/2814252>

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MCR loop powered isolators, for analog signal isolation, with unconfigured input, output signal: 4.20 mA

Your advantages

- No separate supply voltage
- 4 mA ... 20 mA output
- Electrically isolated input
- Configurable input
- Zero/span adjustment ($\pm 2\%$)

Commercial data

Item number	2814252
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DK1XXX
GTIN	4017918309183
Weight per piece (including packing)	142 g
Weight per piece (excluding packing)	109.8 g
Customs tariff number	85437090
Country of origin	DE

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Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Product type	Passive separator
No. of channels	1

Electrical properties

Alignment span	$\pm 2\%$ (of final value)
Alignment zero	$\pm 2\%$ (of final value)
Limit frequency (3 dB)	30 Hz
Maximum power dissipation for nominal condition	160 mW
Test voltage input/output	1.5 kV AC (50 Hz, 60 s)
Step response (10-90%)	11 ms
Maximum temperature coefficient	$\leq 0.01\%/K$
Temperature coefficient, typical	0.005 %/K
Maximum transmission error	$\leq 0.1\%$ (of final value)
Transmission error, typical	0.05 %

Supply

Designation	Loop-powered
Supply voltage range	8 V DC ... 30 V DC

Input data

Signal

Description of the input	Current input
Number of inputs	1
Configurable/programmable	Yes
Max. voltage input signal	30 V
Current input signal	4 mA ... 20 mA (please indicate if different setting when ordering)
Max. current input signal	50 mA
Input resistance of voltage input	1 M Ω
Input resistance current input	50 Ω

Output data

Signal: Current output

Number of outputs	1
Configurable/programmable	no
Current output signal	4 mA ... 20 mA

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Max. current output signal	35 mA
Load/output load current output	$\leq 800 \Omega$ (at $U_B = 24 \text{ V}$; otherwise: $(U_B - 8 \text{ V}) / 20 \text{ mA}$)

Connection data

Connection method	Pluggable screw connection
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
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Dimensions

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

Ambient temperature (operation)	-25 °C ... 65 °C
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Approvals

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 position	any
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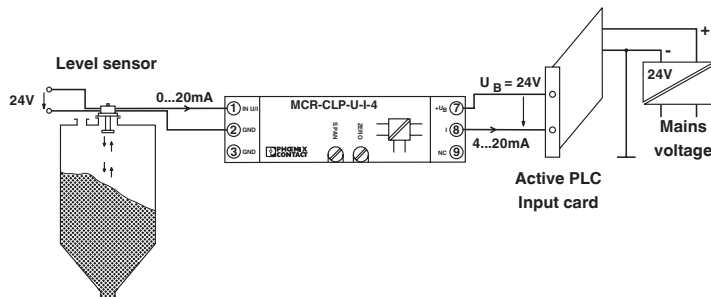
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Drawings

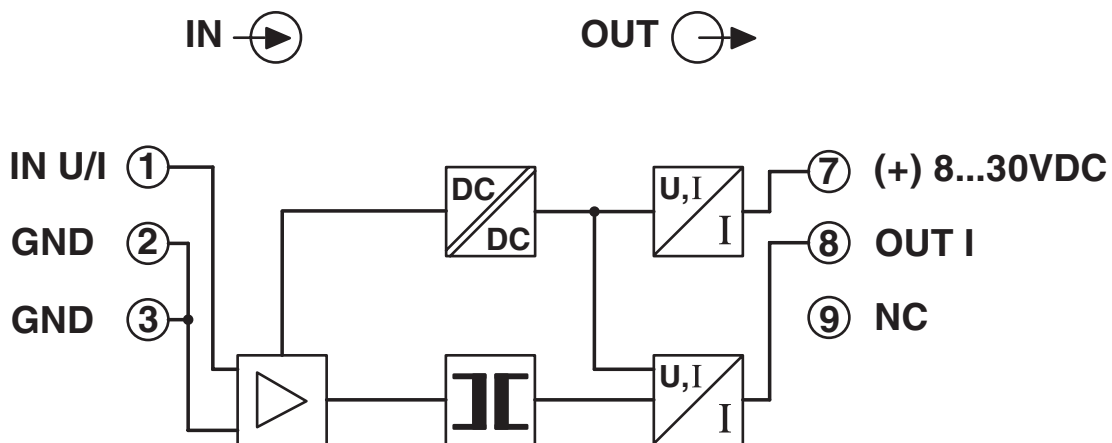
Application drawing



Application example: Level measurement

- 1 = Level sensor
- 2 = Mains voltage
- 3 = Control unit

Circuit diagram



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Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com