

## Loop-powered isolators - MCR-1CLP-I-I-00 - 2814016

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MCR passive isolator, for the electrical isolation of current signals without auxiliary power, 1-channel, input signal: 0(4)...20 mA, output signal: 0(4)...20 mA

### Product Features

- 1, 2 or 4-channel version as an option
- Electrical isolation without additional auxiliary voltage
- 0/4 ... 20 mA current signals



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 131722
Weight per Piece (excluding packing)	100.0 g
Custom tariff number	85437090
Country of origin	Germany

### Technical data

#### Dimensions

Width	12.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-10 °C ... 70 °C
Degree of protection	IP20

#### Input data

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### Technical data

#### Input data

Description of the input	Current input
Configurable/programmable	no
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. input voltage	30 V (30 V overload)
Max. input current	50 mA (100 mA overload)
Response current	< 50 $\mu$ A
Input voltage limitation	33 V (with Zener diode)
Voltage dissipation	2.5 V (I = 20 mA)

#### Output data

Output name	Current output
Configurable/programmable	no
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. output current	< 50 mA
Load/output load current output	$\leq$ 1375 $\Omega$ (at I = 20 mA output signal)
Transmission Behavior	1:1 to input signal

#### Power supply

Supply voltage range	no separate supply voltage necessary
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#### 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	$\leq$ 0.1 % (of final value)
Maximum temperature coefficient	$\leq$ 0.002 %/K (of measured value / 100 $\Omega$ load)
Additional error, load-dependent	0.02 % (of measured value)
Limit frequency (3 dB)	< 75 Hz

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### General

Step response (10-90%)	5 ms (with 500 Ω load)
Test voltage input/output	510 V (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	any
Conformance	CE-compliant
UL, USA / Canada	cULus

### Standards and Regulations

Connection in acc. with standard	CUL
Conformance	CE-compliant
UL, USA / Canada	cULus

## 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 2.0	EC001485
ETIM 3.0	EC001485
ETIM 4.0	EC001485
ETIM 5.0	EC002653

### UNSPSC

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

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## Approvals

### Approvals

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#### Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

UL Recognized 

cUL Recognized 

EAC

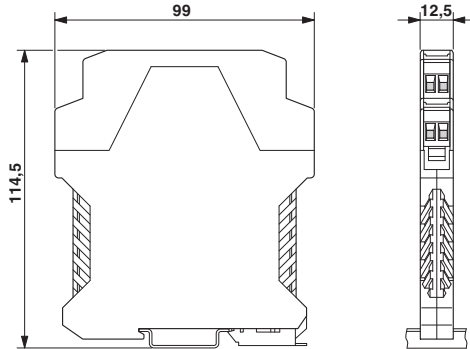
EAC

cULus Recognized 

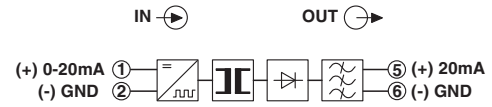
## Drawings

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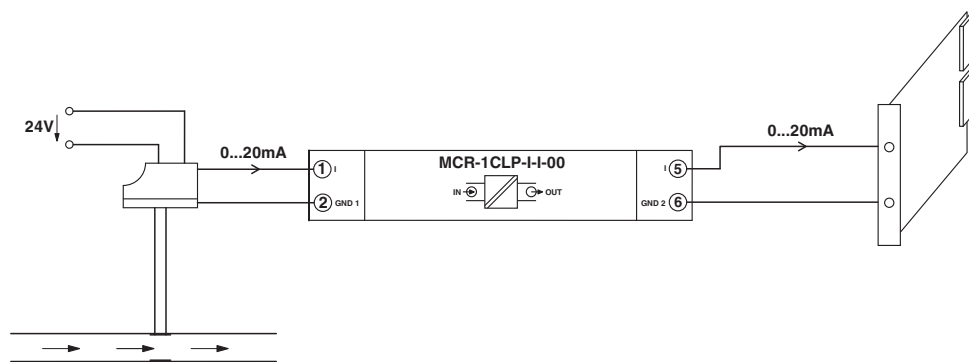
Dimensional drawing



Circuit diagram



Application drawing



Application example: - flow measurement  
1 = magnetic inductive flow gauge  
2 = control

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Diagram

