

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

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



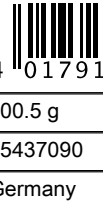
MCR passive isolator, for the electrical isolation of current signals without auxiliary power, 1-channel, input signal: 0(4)...20 mA, output signal: 0(4)...20 mA

Why buy this product

- 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)	100.5 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

Description of the input	Current input
Configurable/programmable	no
Current input signal	0 mA ... 20 mA

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

Technical data

Input data

	4 mA ... 20 mA
Max. input voltage	30 V (30 V overload)
Max. input current	50 mA (100 mA overload)
Response current	< 50 µA
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	≤ 1375 Ω (at I = 20 mA output signal)
Transmission Behavior	1:1 to input signal

Power supply

Supply voltage range	no separate supply voltage necessary
----------------------	--------------------------------------

Connection data

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

General

No. of channels	1
Maximum transmission error	≤ 0.1 % (of final value)
Maximum temperature coefficient	≤ 0.002 %/K (of measured value / 100 Ω load)
Additional error, load-dependent	0.02 % (of measured value)
Limit frequency (3 dB)	< 75 Hz
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

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

Technical data

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

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

Approvals

Approvals

Approvals

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

Ex Approvals

Approvals submitted

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

Approvals

Approval details

UL Recognized

cUL Recognized

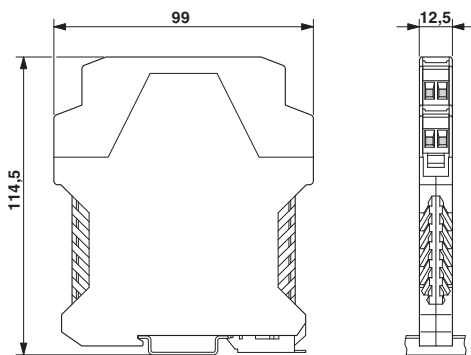
EAC

EAC

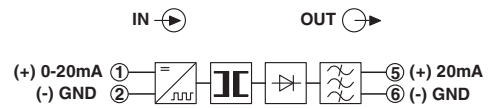
cULus Recognized

Drawings

Dimensional drawing

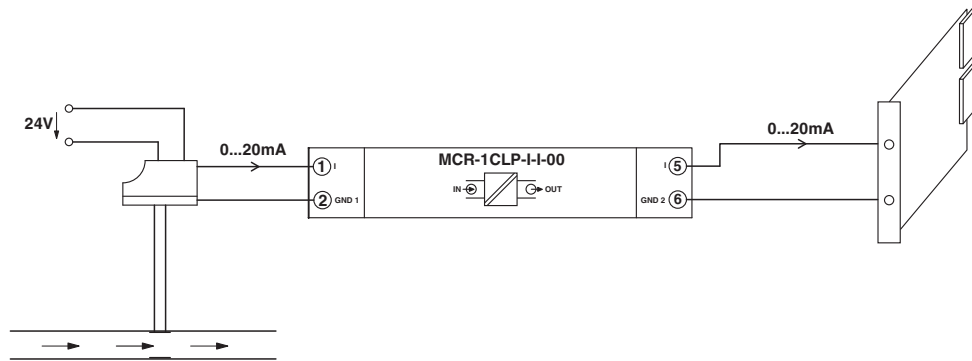


Circuit diagram



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

Application drawing



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

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

Diagram

