

MCR-SL-S-100-I-LP - Current measuring transducer



2813486

<https://www.phoenixcontact.com/us/products/2813486>

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 documentation. Our general terms of use for downloads are valid.



MCR current measuring transducer, for measuring sinusoidal and non-sinusoidal alternating currents, input current 0...100 A, loop-powered output with 4...20 mA

Your advantages

- Can be retrofitted with open-up Rogowski coil
- Loop-powered
- 30 ... 6000 Hz true r.m.s. value measurement
- Measuring range selection via slide switch

Commercial data

Item number	2813486
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C444
Product key	CMMA23
GTIN	4046356043663
Weight per piece (including packing)	141.4 g
Weight per piece (excluding packing)	141.4 g
Customs tariff number	85437090
Country of origin	JP

MCR-SL-S-100-I-LP - Current measuring transducer



2813486

<https://www.phoenixcontact.com/us/products/2813486>

Technical data

Product properties

Product type	Current measuring transducer
--------------	------------------------------

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	1 W
Test voltage input/output	4.13 kV AC (50 Hz, 60 s)
Step response (10-90%)	< 340 ms
Maximum temperature coefficient	< 0.025 %/K
Maximum transmission error	< 1 % (of final value)
Rated insulation voltage	300 V AC (to earth)

Supply

Supply voltage range	loop-powered, no external supply necessary
----------------------	--

Input data

Signal

Configurable/programmable	Yes
Current input signal	0 A ... 100 A

Measurement

Input current range	0 A AC ... 50 A AC
	0 A AC ... 75 A AC
	0 A AC ... 100 A AC
Setting range for min. input current	0 A AC ... 50 A AC
Setting range for max. input current	0 A AC ... 100 A AC
Overload capacity	Depending on laid conductor
Surge strength	Depending on through connected conductor
Frequency measuring range	30 Hz ... 6000 Hz
Curve type	Sinusoidal and non-sinusoidal
Operate threshold	1 % (of final value)

Output data

Signal: Current

Current output signal	4 mA ... 20 mA
Max. current output signal	< 25 mA
Load/output load current output	$(U_B - 12 \text{ V}) \times 350 / 12 \text{ A}$

Connection data

MCR-SL-S-100-I-LP - Current measuring transducer



2813486

<https://www.phoenixcontact.com/us/products/2813486>

Connection method	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
Tightening torque	0.5 Nm ... 0.6 Nm (4,4 ... 5,31 lbf-in.)
Connection method	Through connection

Dimensions

Item dimensions

Width	55 mm
Height	85 mm
Depth	70.5 mm

Circular conductor

Diameter	≤ 18.5 mm
----------	-----------

Material specifications

Color	green (RAL 6021)
Housing material	Polyamide PA non-reinforced

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

Certificate	CE-compliant
-------------	--------------

UL, USA/Canada

Identification	UL/C-UL Listed UL 508
	Class I, Div. 2, Groups A, B, C, D T4A
	Class I, Zone 2, Group IIC T4A
	Or Non-Hazardous Locations only

Mounting

Mounting type	DIN rail mounting
Mounting position	any

MCR-SL-S-100-I-LP - Current measuring transducer

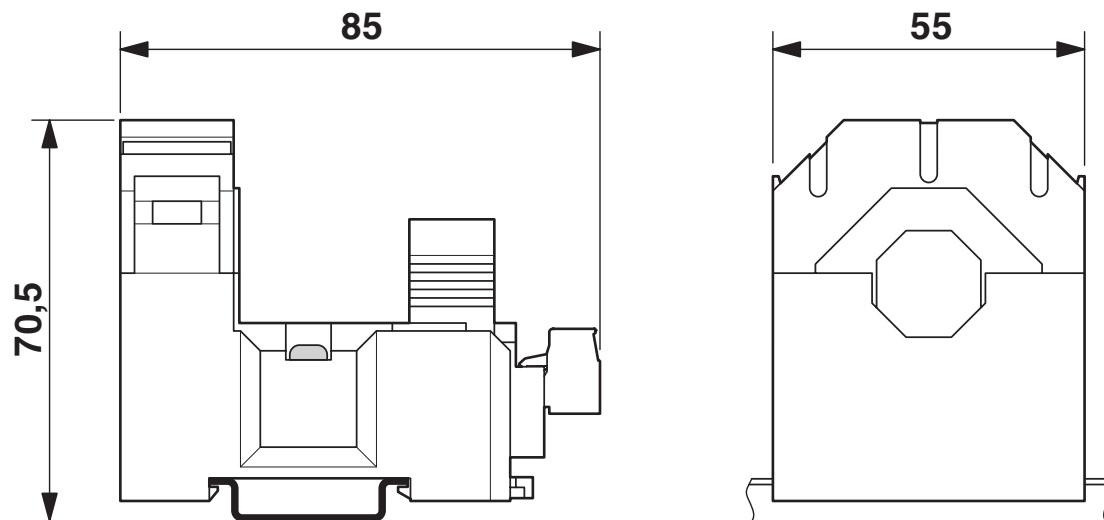
2813486

<https://www.phoenixcontact.com/us/products/2813486>



Drawings

Dimensional drawing



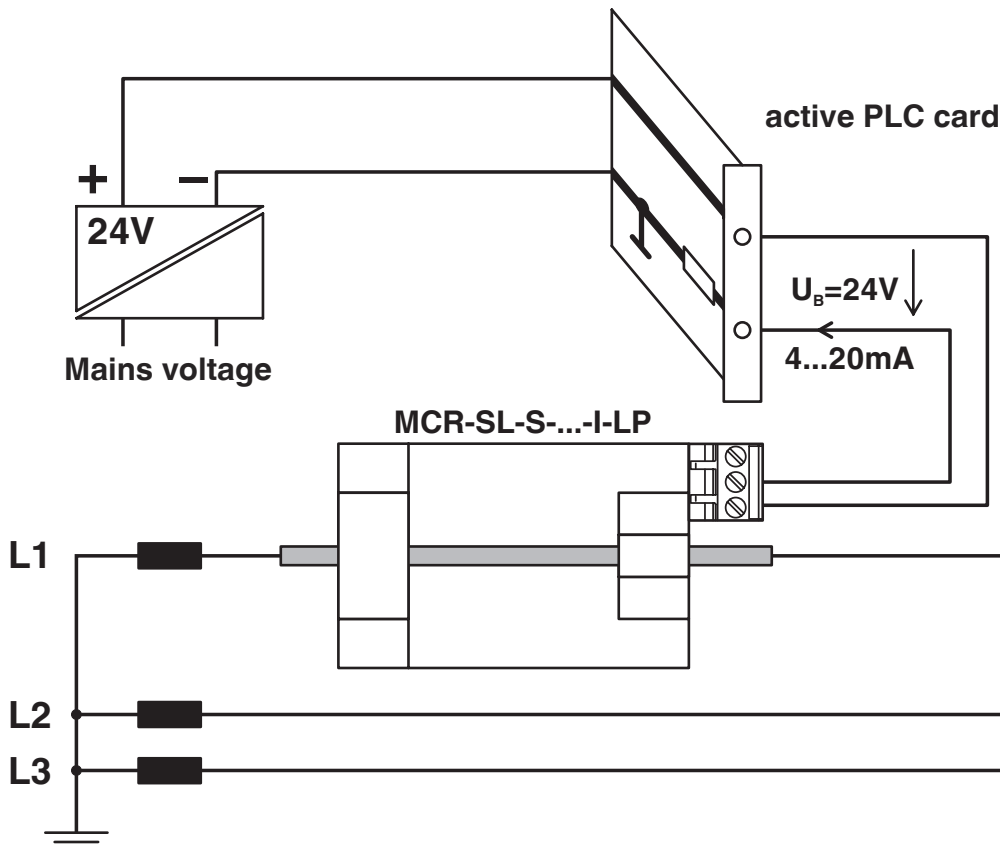
MCR-SL-S-100-I-LP - Current measuring transducer



2813486

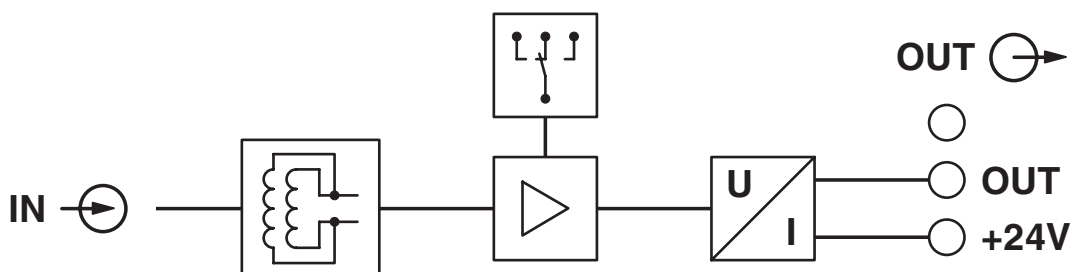
<https://www.phoenixcontact.com/us/products/2813486>

Application drawing



Current monitoring

Circuit diagram



MCR-SL-S-100-I-LP - Current measuring transducer



2813486

<https://www.phoenixcontact.com/us/products/2813486>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2813486>



EAC

Approval ID: RU*DE.*08.B.01852-19



UL Listed

Approval ID: E123528



cUL Listed

Approval ID: E123528

MCR-SL-S-100-I-LP - Current measuring transducer



2813486

<https://www.phoenixcontact.com/us/products/2813486>

Classifications

ECLASS

ECLASS-13.0	27210123
ECLASS-15.0	27210123

ETIM

ETIM 10.0	EC002475
-----------	----------

UNSPSC

UNSPSC 21.0	39121000
-------------	----------

MCR-SL-S-100-I-LP - Current measuring transducer



2813486

<https://www.phoenixcontact.com/us/products/2813486>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-25
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com