

Current transducers - MCR-SL-S-100-I-LP



2813486

<https://www.phoenixcontact.com/pc/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
Product Key	CK4A23
Catalog Page	Page 235 (C-5-2019)
GTIN	4046356043663
Weight per Piece (including packing)	141.6 g
Weight per Piece (excluding packing)	141.4 g
Customs tariff number	85437090
Country of origin	JP

Technical Data

Product properties

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

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	1 W
Test voltage input/output	5 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

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

Current transducers - MCR-SL-S-100-I-LP



2813486

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

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	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
Torque	0.5 Nm ... 0.6 Nm (4,4 ... 5,31 lbf-in.)

Dimensions

Dimensional drawing	
Width	55 mm
Height	85 mm
Depth	70.5 mm

Material specifications

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

Approval data

CE

Designation	CE
Certificate	CE-compliant

CE

Designation	UKCA
Certificate	UKCA-compliant

CE

Designation	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

Current transducers - MCR-SL-S-100-I-LP



2813486

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

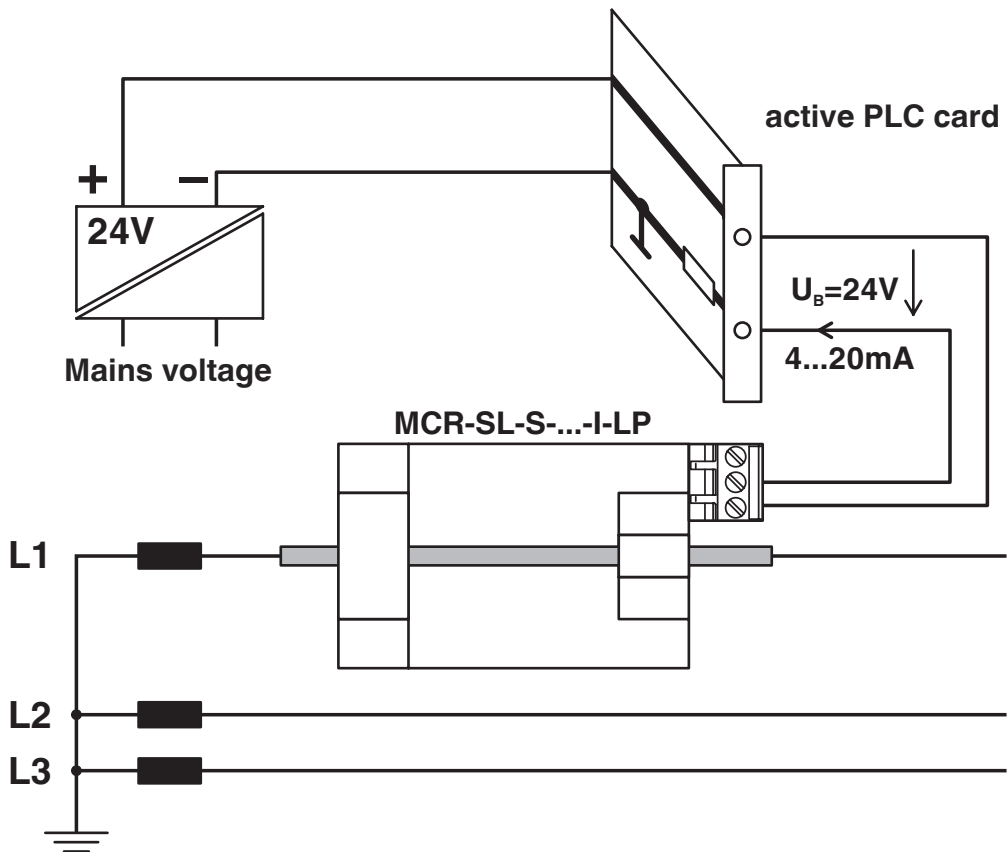
	Or Non-Hazardous Locations only
--	---------------------------------

Mounting

Mounting type	DIN rail mounting
Mounting position	any

Drawings

Application drawing



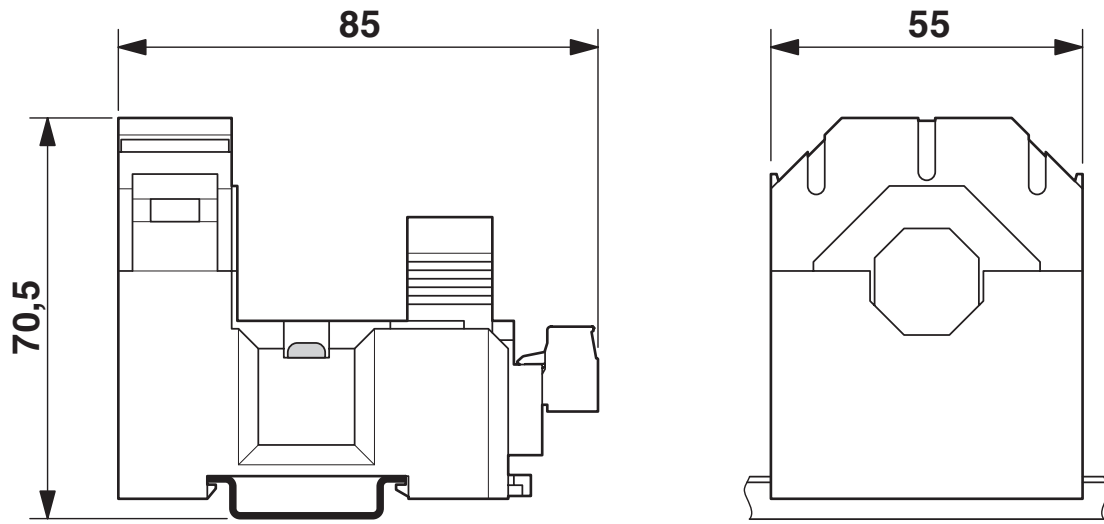
Current monitoring

Current transducers - MCR-SL-S-100-I-LP

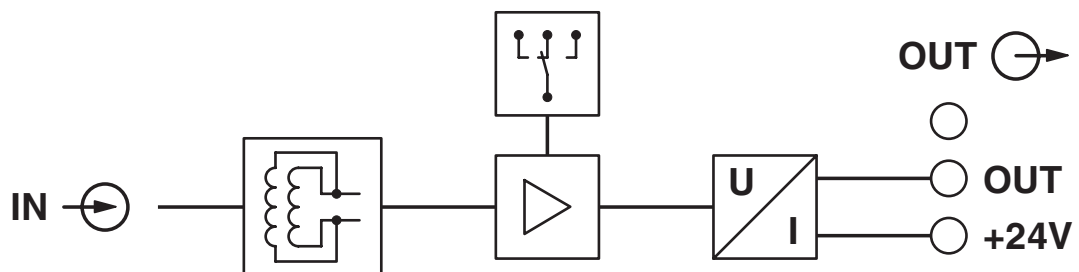
2813486

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

Dimensional drawing



Circuit diagram



Current transducers - MCR-SL-S-100-I-LP



2813486

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

Approvals



EAC

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



UL Listed

Approval ID: FILE E 123528



cUL Listed

Approval ID: FILE E 123528

cULus Listed

Current transducers - MCR-SL-S-100-I-LP



2813486

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

Classifications

ECLASS

ECLASS-9.0	27210123
ECLASS-10.0.1	27210123
ECLASS-11.0	27210123

ETIM

ETIM 8.0	EC002475
----------	----------

UNSPSC

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

Current transducers - MCR-SL-S-100-I-LP



2813486

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

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 25; For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
------------	---

Phoenix Contact 2022 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com