MCR-SLP-1-5-UI-0 - Current measuring transducer

2814359

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MCR passive current measuring transducer, for sinusoidal alternating currents 0..1 A AC/0..5 A AC, without switching output, output signal 0..10 V/0..20 mA

Your advantages

- Loop-powered
- Measuring ranges1 A and 5 A AC, reconnectable

Commercial data

Item number	2814359
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C444
Product key	CMMA21
GTIN	4017918148447
Weight per piece (including packing)	223.2 g
Weight per piece (excluding packing)	210.4 g
Customs tariff number	85437090
Country of origin	DE

Technical data

Notes

Utilization restriction

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

Product properties

Product type	Current measuring transducer

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Total error	≤ 1.175 % (Temperature range)
Test voltage	3.5 kV
Measuring category	III
Step response (10-90%)	< 200 ms
Maximum temperature coefficient	< 0.015 %/K
Maximum transmission error	< 0.5 % (of final value)
Rated insulation voltage	300 V AC (to earth)

Input data

Signal

Configurable/programmable	no

Measurement

Input current range	0 A AC ... 1 A AC (Permitted continuous overload: 120%)
Overload capacity	2 x I_N (5 min. at 60°C ambient temperature)
Surge strength	50 A (1 s)
Permissible output range	1.2 x I_N
Nominal frequency f_N	50 Hz
Frequency measuring range	45 Hz ... 60 Hz
Power dissipation	1.6 VA (at I_A = 20 mA)
Curve type	Sine

Measurement

Input current range	0 A AC ... 5 A AC (Permitted continuous overload: 120%)
Impulse form	Sine
Overload capacity	2 x I_N (5 min. at 60°C ambient temperature)
Surge strength	100 A (1 s)
Permissible output range	1.2 x I_N
Nominal frequency f_N	50 Hz

Frequency measuring range	45 Hz ... 60 Hz
Power dissipation	2.2 VA (I = 20 mA)

Output data

Signal: Voltage

Voltage output signal	0 V ... 10 V
Max. voltage output signal	20 V
Load/output load voltage output	> 100 kΩ
Ripple	< 50 mV_{PP}

Signal: Current

Current output signal	0 mA ... 20 mA
Max. current output signal	30 mA
Load/output load current output	< 750 Ω
	< 250 Ω (when current and voltage outputs are used simultaneously)
Ripple	< 50 mV_{PP}
Residual ripple, in reference to the measured value	0.5 % (pp of measured value)

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm² ... 2.5 mm²
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 14

Dimensions

Item dimensions

Width	22.5 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

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 80 °C (non-condensing)
Altitude	< 2000 m
Permissible humidity (operation)	10 % ... 95 % (non-condensing)

Approvals

CE

Certificate	CE-compliant

EMC data

Electromagnetic compatibility	Conformance with EMC directive
Noise immunity	EN 61000-6-2
Note	When being exposed to interference, there may be minimal deviations.

Noise emission

Standards/regulations	EN 61000-6-4

Standards and regulations

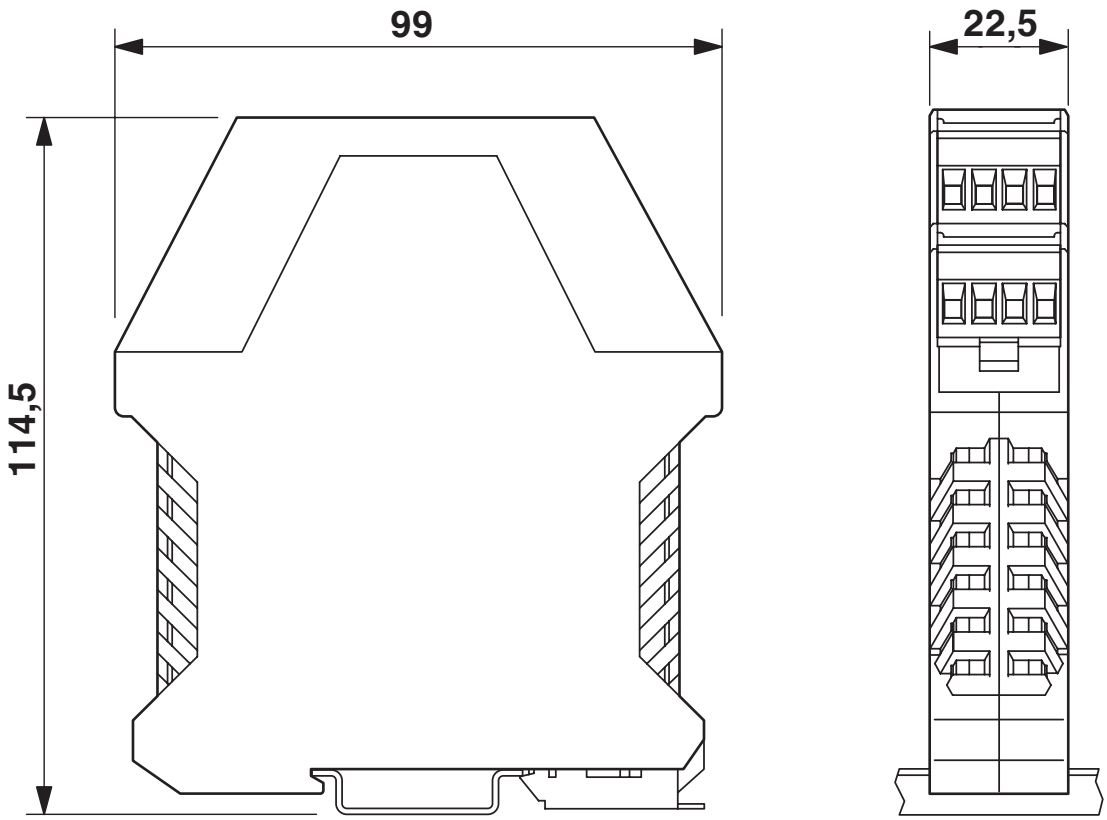
Standards/regulations	IEC 61010-2-030

Mounting

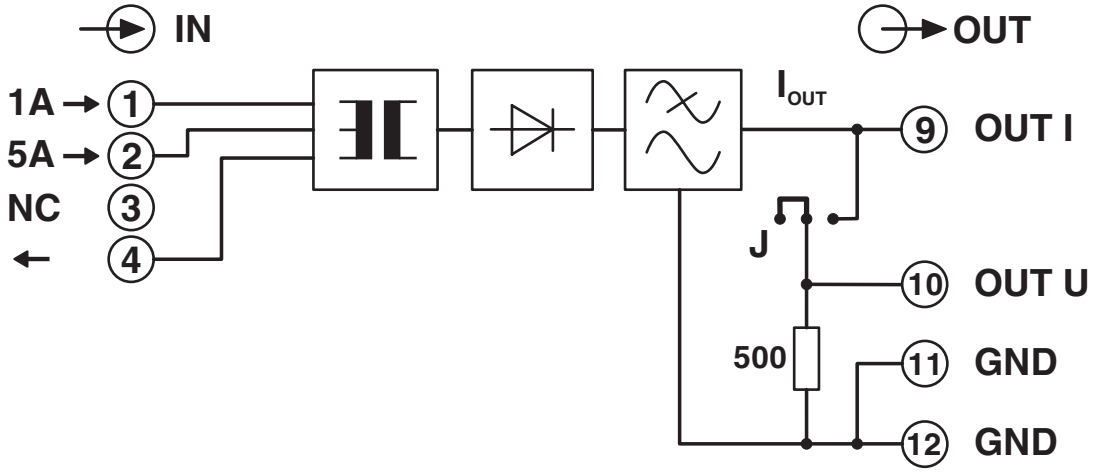
Mounting type	DIN rail mounting
Mounting position	< 50 °C: any; > 50 °C: vertical (installation on horizontal DIN rail)

Drawings

Dimensional drawing



Circuit diagram



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2814359

cUL Recognized
Approval ID: E238705

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Classifications

ECLASS

ECLASS-13.0	27210123
ECLASS-15.0	27210123

ETIM

ETIM 10.0	EC002475

UNSPSC

UNSPSC 21.0	39121000

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	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.)	Lead(CAS: 7439-92-1)
SCIP	681206d3-8832-4e1f-bb7b-9720cb9d9362

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