MCR-S-1-5-UI-DCI-NC - Current measuring transducer

2814715

https://www.phoenixcontact.com/us/products/2814715

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 transducer, programmable and configurable, for measuring direct, alternating and distorted currents, input current 0...0.2 to 0...11 A, unconfigured

Your advantages

- True r.m.s. value measurement
- Device can be set via DIP switches or MCR/PI-CONF-WIN configuration software
- 3-way isolation

Commercial data

Item number	2814715
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C444
Product key	CMMA33
GTIN	4017918169275
Weight per piece (including packing)	185.5 g
Weight per piece (excluding packing)	180 g
Customs tariff number	85437090
Country of origin	DE

Technical data

Product properties

Product type	Current measuring transducer

Insulation characteristics

Overvoltage category	III
Pollution degree	2

Electrical properties

Total error	≤ 1.5 % (Temperature range)
Maximum power dissipation for nominal condition	2.2 W
Measuring category	III
Test voltage output/power supply	500 V AC (50 Hz, 60 s)
Test voltage input/output	4 kV AC (50 Hz, 60 s)
Test voltage input/power supply	4 kV AC (50 Hz, 60 s)
Protective circuit	Surge protection; 33 V suppressor diode
Step response (10-90%)	330 ms (AC)
	40 ms (DC)
Temperature coefficient, typical	< 0.025 %/K
Maximum transmission error	< 0.5 % (of nominal range value under nominal conditions)
Rated insulation voltage	300 V AC (to earth)

Supply

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	< 40 mA (without load)

Input data

Measurement

Number of inputs	3
Configurable/programmable	Yes, unconfigured
Input current range	0 A AC/DC ... 11 A AC/DC (Permitted continuous overload: 120%)
Measuring range	0 A AC/DC ... 1 A AC/DC
	0 A AC/DC ... 5 A AC/DC
	0 A AC/DC ... 10 A AC/DC
Setting range for min. input current	0 mA AC/DC ... 200 mA AC/DC
Setting range for max. input current	0 A AC/DC ... 11 A AC/DC
LSB: Current	1 µA (1 A)
	2 µA (2 A)
	5 µA (5 A)
	10 µA (10 A)
	50 µA (50 A)
	100 µA (100 A)

Overload capacity	2 x I_N (continuous)
Surge strength	20 x I_N (1 s)
Frequency measuring range	15 Hz ... 400 Hz
Curve type	AC, DC or distorted currents
Operate threshold	2 % (of measuring range nominal value 1/5/10 A)

Output data

Signal: Voltage/current

Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 5 V
	1 V ... 5 V
	0 V ... 10 V
	2 V ... 10 V
	-5 V ... 5 V
	-10 V ... 10 V
	10 V ... 0 V
	10 V ... 2 V
	10 V ... -10 V
	5 V ... 0 V
	5 V ... 1 V
	5 V ... -5 V
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
	20 mA ... 0 mA
	20 mA ... 4 mA
Load/output load voltage output	> 10 kΩ
Load/output load current output	< 500 Ω

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

Signaling

Status display	LED (green)

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)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	< 2000 m
Permissible humidity (operation)	10 % ... 95 % (non-condensing)

Approvals

CE

Certificate	CE-compliant

UL, USA/Canada

Identification	Class I, Zone 2, AEx nA nC IIC T4, Ex nA nC IIC T4 Gc X
	Class I, Div. 2, Groups A, B, C and D or Non-Hazardous Locations Only

EMC data

Electromagnetic compatibility	Conformance with EMC directive
Low Voltage Directive	Conformance with Low Voltage Directive
Noise immunity	EN 61000-6-2

Noise emission

Standards/regulations	EN 61000-6-4

Standards and regulations

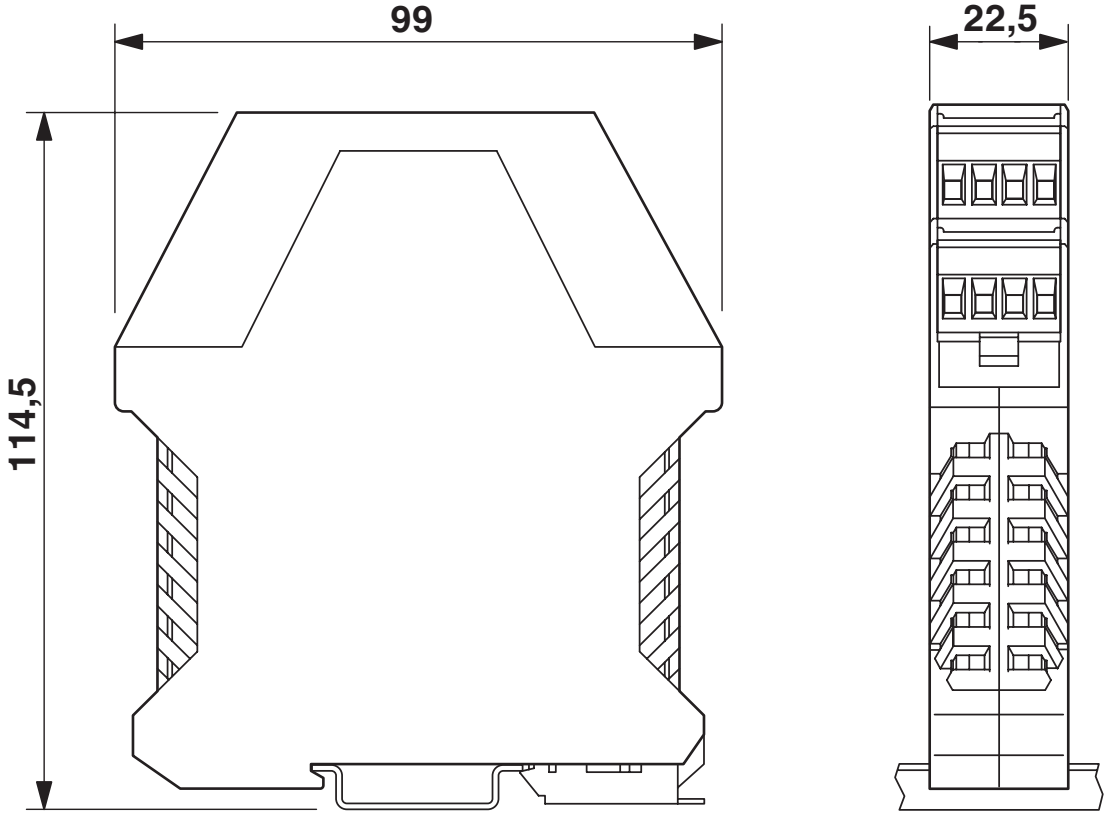
Standards/regulations	IEC 61010-2-030

Mounting

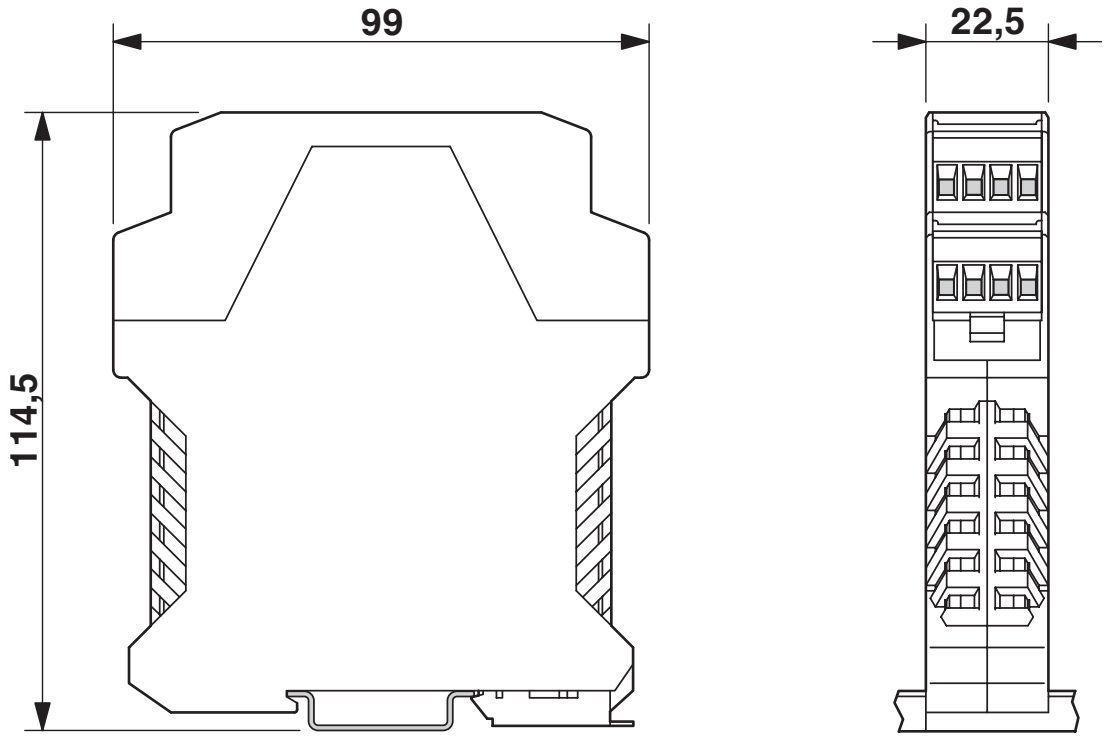
Mounting type	DIN rail mounting
Mounting position	any

Drawings

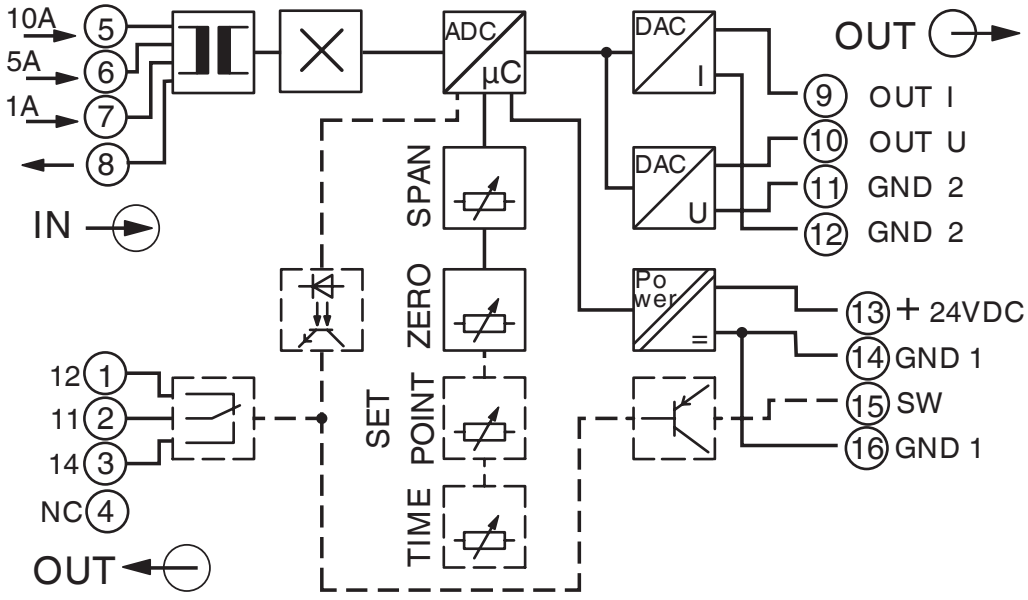
Dimensional drawing



Dimensional drawing



Circuit diagram



Classifications

ECLASS

ECLASS-13.0	27210123

ETIM

ETIM 9.0	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.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	38c583fc-a97e-4912-9e18-8facc1ed1f15

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