

## Current transducers - MCR-S-1-5-UI-DCI-NC - 2814715

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

The illustration shows version MCR-S-1-5-UI-DCI

### Product Features

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



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	192.1 GRM
Custom tariff number	85437090
Country of origin	Germany

### Technical data

#### Note:

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
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### Technical data

#### Ambient conditions

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

#### Input data

Input	Current measuring input
Number of inputs	3
Configurable/programmable	Yes, unconfigured
Input current range	0 A ... 11 A (AC/DC)
Operate threshold	2 % (of measuring range nominal value 1/5/10 A)
Setting range for min. input current	0 A ... 0.2 A
Setting range for max. input current	0 A ... 11 A
Impulse form	AC, DC or distorted currents
Overload capacity	2 x I <sub>N</sub> (continuous)
Surge strength	20 x I <sub>N</sub> (1 s)
Frequency measuring range	15 Hz ... 400 Hz
Connection method	Screw connection

#### Output data

Output name	Voltage output / current output
Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 10 V
	2 V ... 10 V
	-10 V ... 10 V
	0 V ... 5 V
	1 V ... 5 V
	-5 V ... 5 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

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### Technical data

#### Switching output

Output name	No switching output
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#### Power supply

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

#### Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	14
Stripping length	8 mm
Screw thread	M3

#### General

Maximum transmission error	< 0.5 % (of nominal range value under nominal conditions)
Temperature coefficient, typical	< 0.025 %/K
Step response (10-90%)	330 ms (with AC) 40 ms (with DC)
Status display	Green LED
Surge voltage category	III
Pollution degree	2
Rated insulation voltage	300 V AC (to earth)
Test voltage input/output	4 kV (50 Hz, 1 min.)
Test voltage input/power supply	4 kV (50 Hz, 1 min.)
Test voltage output/power supply	500 V (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	any
Conformance	CE-compliant
UL, USA / Canada	Class I, Zone 2, AEx nC IIC T6, Ex nC IIC T6

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### Classifications

#### eCl@ss

eCl@ss 4.0	27200303
eCl@ss 4.1	27200303
eCl@ss 5.0	27200303
eCl@ss 5.1	27200303
eCl@ss 6.0	27200303
eCl@ss 7.0	27142316
eCl@ss 8.0	27142316

#### ETIM

ETIM 2.0	EC001440
ETIM 3.0	EC001440
ETIM 4.0	EC001440
ETIM 5.0	EC001440

#### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

### Approvals

#### Approvals

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##### Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

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##### Ex Approvals

UL Listed / cUL Listed / cULus Listed

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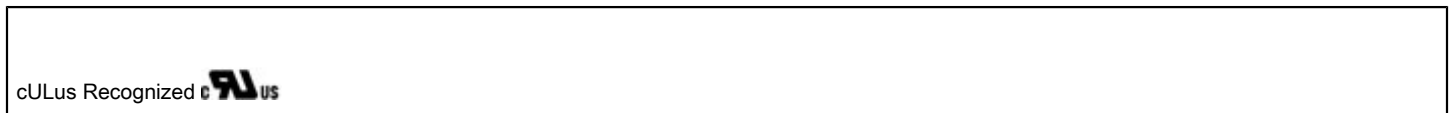
##### Approvals submitted

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#### Approval details

## Current transducers - MCR-S-1-5-UI-DCI-NC - 2814715

### Approvals



### Accessories

#### Accessories

#### Arrester test system

Conductor - CM-KBL-RS232/USB - 2881078



Connecting cable D-9-SUB to USB, with adapter D-9-SUB to D-25-SUB.

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### Configuration and diagnostics

Configuration software - MCR/PI-CONF-WIN - 2814799



PI/MCR configuration software for programming PI-EX-RTD..., PI-EX-TC..., MCR-T..., MCR-PSP..., MCR-f..., and MCR-S... modules. This software is available to download free of charge at - [phoenixcontact.com](http://phoenixcontact.com).

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### Programming adapter

# Current transducers - MCR-S-1-5-UI-DCI-NC - 2814715

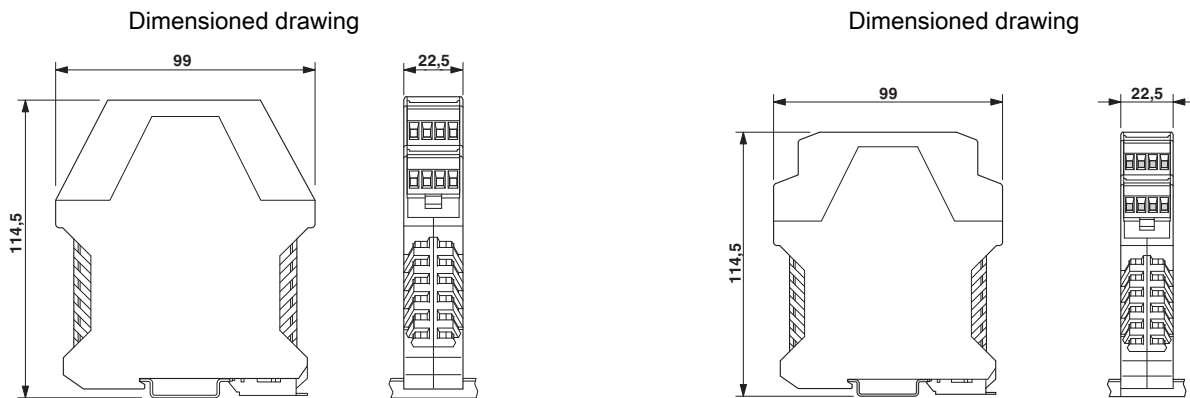
## Accessories

Adapter cable - MCR-TTL-RS232-E - 2814388



Software adapter cable (Stereo jack connector/D-SUB 25-pos.), 1.2 m length, for programming MCR-T-..., MCR-S-... and MCR-f-... modules

## Drawings



Circuit diagram

