

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

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



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 169275
GTIN	4017918169275

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
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Maximum altitude	< 2000 m
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Degree of protection	IP20

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Ambient conditions

Noise immunity	EN 61000-6-2
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Input data

Number of inputs	3
Configurable/programmable	Yes, unconfigured
Input current range	0 A AC/DC ... 11 A AC/DC (Permitted continuous overload: 120%)
Operate threshold	2 % (of measuring range nominal value 1/5/10 A)
Setting range for min. input current	0 A ... 200 mA
Setting range for max. input current	0 A ... 11 A
LSB	~ 1 µA (1 A)
	~ 2 µA (2 A)
	~ 5 µA (5 A)
	~ 10 µA (10 A)
	~ 50 µA (50 A)
	~ 100 µA (100 A)
Impulse form	AC, DC or distorted currents
Overload capacity	2 x I _N (continuous)
Surge strength	20 x I _N (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
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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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
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

General

Maximum transmission error	< 0.5 % (of nominal range value under nominal conditions)
Total error	≤ 1.5 % (Temperature range)
Temperature coefficient, typical	< 0.025 %/K
Measuring category	III
Step response (10-90%)	330 ms (with AC) 40 ms (with DC)
Status display	Green LED
Protective circuit	Surge protection 33 V suppressor diode
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
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Housing material	Polyamide PA non-reinforced
Mounting position	any

Standards and Regulations

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Standards/regulations	IEC 61010-2-030
Pollution degree	2
Overvoltage category	III

Conformance/approvals

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Technical data

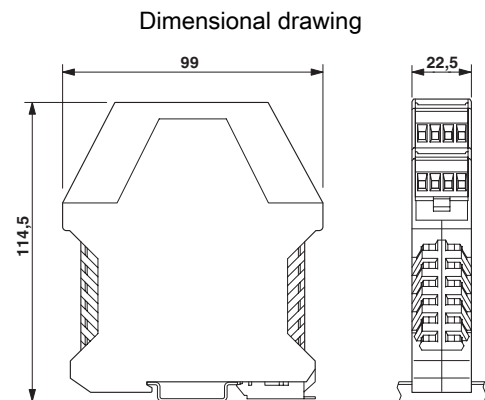
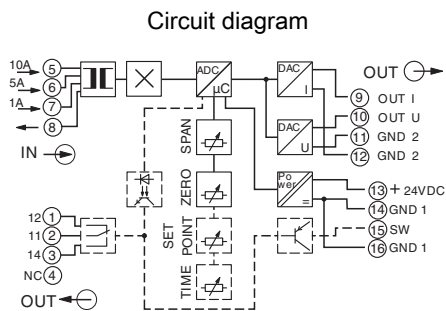
Conformance/approvals

Designation	CE
Certificate	CE-compliant
Designation	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

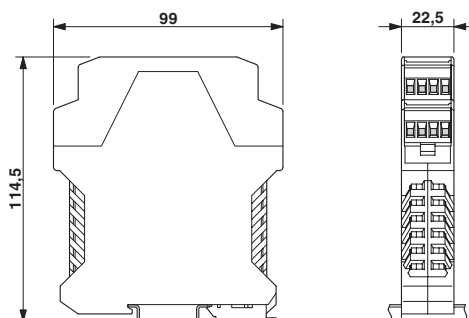
Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings



Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27210123
eCl@ss 11.0	27210123

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Classifications

eCl@ss

eCl@ss 4.0	27271100
eCl@ss 4.1	27200300
eCl@ss 5.0	27200300
eCl@ss 5.1	27200300
eCl@ss 6.0	27210100
eCl@ss 7.0	27210123
eCl@ss 9.0	27210123

ETIM

ETIM 3.0	EC002475
ETIM 4.0	EC002475
ETIM 6.0	EC002475
ETIM 7.0	EC002475

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121032
UNSPSC 18.0	39121032
UNSPSC 19.0	39121032
UNSPSC 20.0	39121032
UNSPSC 21.0	39121032

Approvals

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UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 238705
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EAC		EAC-Zulassung
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cULus Recognized	
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Accessories

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Arrester test system

Cable - CM-KBL-RS232/USB - 2881078



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

Programming adapter

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