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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 g
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

#### **Dimensions**

Width	22.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C 60 °C



# 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 200 mA
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 V10 V
	5 V 0 V
	5 V 1 V
	5 V5 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



## Technical data

### Switching output

Output name	No switching output
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 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm²
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
Overvoltage category	III
Degree of pollution	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

Standards and Regulations



# Technical data

## Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Connection in acc. with standard	CUL
Low Voltage Directive	Conformance with Low Voltage Directive 2006/95/EC
Conformance	CE-compliant
UL, USA / Canada	Class I, Zone 2, AEx nC IIC T6, Ex nC IIC T6

## 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	27210123
eCl@ss 9.0	27210123

### **ETIM**

ETIM 2.0	EC001440
ETIM 3.0	EC001440
ETIM 4.0	EC001440
ETIM 5.0	EC002475

### UNSPSC

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

# Approvals

## Approvals



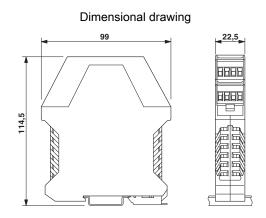
## Approvals

Approvais
Approvals
UL Recognized / cUL Recognized / EAC / cULus Recognized
Ex Approvals
UL Listed / cUL Listed / cULus Listed
Approvals submitted
Approval details
UL Recognized <b>\$1</b>
cUL Recognized

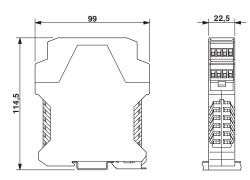
EAC

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## Drawings

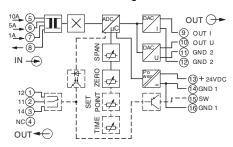


### Dimensional drawing





### Circuit diagram



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