

# MCR-S10-50-UI-SW-DCI-NC

Order No.: 2814744

The illustration shows version MCR-S-10-50-UI-DCI




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2814744>

MCR current measuring transducer, programmable and configurable, for measuring direct, alternating and distorted currents, with relay and transistor output, input current 0...10 to 0...50 A, unconfigured



## Commercial data

GTIN (EAN)	 4 017918 169299
sales group	H530
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 712 (IF-2011)

## Product notes

WEEE/RoHS-compliant since:  
06/20/2006



<http://www.download.phoenixcontact.com>  
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## Technical data

### Input data

Input	Current measuring input
Configurable/programmable	Yes, unconfigured
Input current range	0 A ... 55 A (AC/DC)
Operate threshold	0.8 % (of measuring range nominal value 50 A)

Setting range for min. input current	0 A ... 9.5 A
Setting range for max. input current	0 A ... 55 A
Impulse form	AC, DC or distorted currents
Overload capacity	Depending on through connected conductor
Surge strength	Depending on through connected conductor
Frequency measuring range	15 Hz ... 400 Hz
Connection method	Through connection, diameter 10.5 mm

**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 k $\Omega$
Load/output load current output	< 500 $\Omega$

**Switching output**

Output name	Relay output
Contact type	1 PDT
Contact material	AgSnO, hard gold-plated

Maximum switching voltage	30 V AC
	36 V DC
	250 V AC (when the gold layer is destroyed)
Limiting continuous current	50 mA
	2 A (when the gold layer is destroyed)

**Power supply**

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	< 50 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 data**

Width	22.5 mm
Height	99 mm
Depth	114.5 mm
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
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20
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.)
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

**Certificates / Approvals**



Certification CUL, GOST, UL  
 Certification Ex: CUL-EX LIS, UL-EX LIS

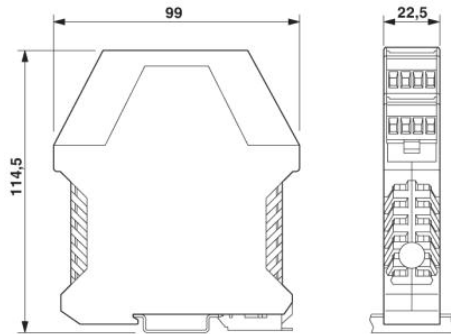
**Accessories**

Item	Designation	Description
<b>Cable/conductor</b>		
2881078	CM-KBL-RS232/USB	Connecting cable D-9-SUB to USB, with adapter D-9-SUB to D-25-SUB.
2814388	MCR-TTL-RS232-E	Software adapter cable (Stereo jack connector/D-SUB 25-pos.), 1.2 m length, for programming MCR-T-..., MCR-S-... and MCR-f-... modules

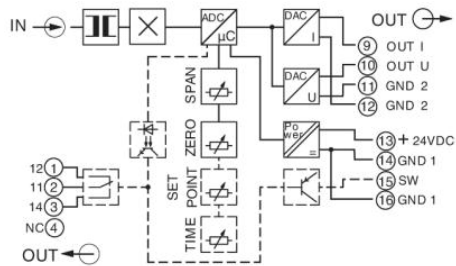
<b>General</b>		
2814799	MCR/PI-CONF-WIN	

## Diagrams/Drawings

### Dimensioned drawing



### Circuit diagram



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