

# MCR-S-10-50-UI-DCI

Order No.: 2814647



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2814647>

MCR current measuring transducer, programmable and configurable, for measuring direct, alternating and distorted currents, input current 0...10 to 0...50 A, configured



Commercial data	
Note	Made-to-order
sales group	H530
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 712 (IF-2011)

### Product notes

WEEE/RoHS-compliant since:  
06/19/2006



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## Technical data

Input data	
Input	Current measuring input
Configurable/programmable	Yes, preconfigured
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, preconfigured
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 $\Omega$

#### 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 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

**Configuration options**

Output signal	0...20 mA [OUT01] 4...20 mA [OUT02] 0...10 V [OUT03] 2...10 V [OUT04] 0...5 V [OUT05] 1...5 V [OUT06] 20...0 mA [OUT07] 20...4 mA [OUT08] 10...0 V [OUT09] 10...2 V [OUT10] 5...0 V [OUT11] 5...1 V [OUT12] -5...+5 V [OUT13] -10...+10 V [OUT14] +10...-10 V [OUT17] +5...-5 V [OUT18]
Plant calibration certificate	No plant calibration certific. [NONE]

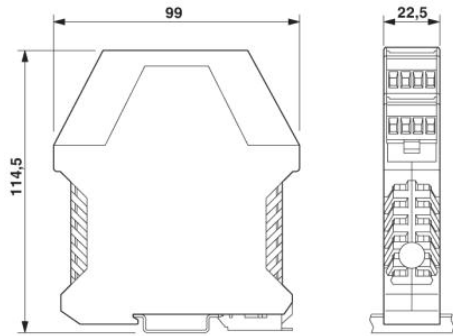
**Accessories**

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

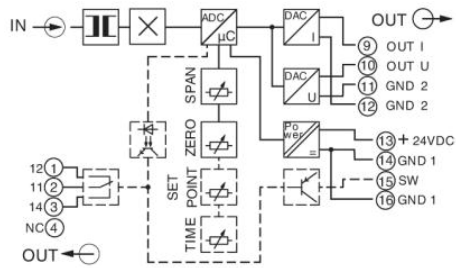
<b>General</b>		
2814799	MCR/PI-CONF-WIN	

**Diagrams/Drawings**

Dimensioned drawing



Circuit diagram



**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



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