

Current transducers - MCR-S-1-5-UI-SW-DCI-NC - 2814731

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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

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

Why buy this product

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



Key commercial data

Packing unit	1 pc
GTIN	
Weight per Piece (excluding packing)	149.08 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
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Current transducers - MCR-S-1-5-UI-SW-DCI-NC - 2814731

Technical data

Ambient conditions

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 _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	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

Switching output

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

Current transducers - MCR-S-1-5-UI-SW-DCI-NC - 2814731

Technical data

Switching output

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)
Output name	Transistor output, pnp
Output voltage range	19 V ... 29 V (supply voltage - 1 V)
Continuous load current	80 mA (Not short-circuit proof)
Setting range of the threshold value	1 % ... 110 %
Setting range of the response delay	0.1 s ... 20 s
Status display	Yellow LED

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 ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max.	14
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²
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

Current transducers - MCR-S-1-5-UI-SW-DCI-NC - 2814731

Technical data

General

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

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

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

UL Recognized / cUL Recognized / EAC / cULus Recognized

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Current transducers - MCR-S-1-5-UI-SW-DCI-NC - 2814731

Approvals

Approvals submitted

Approval details

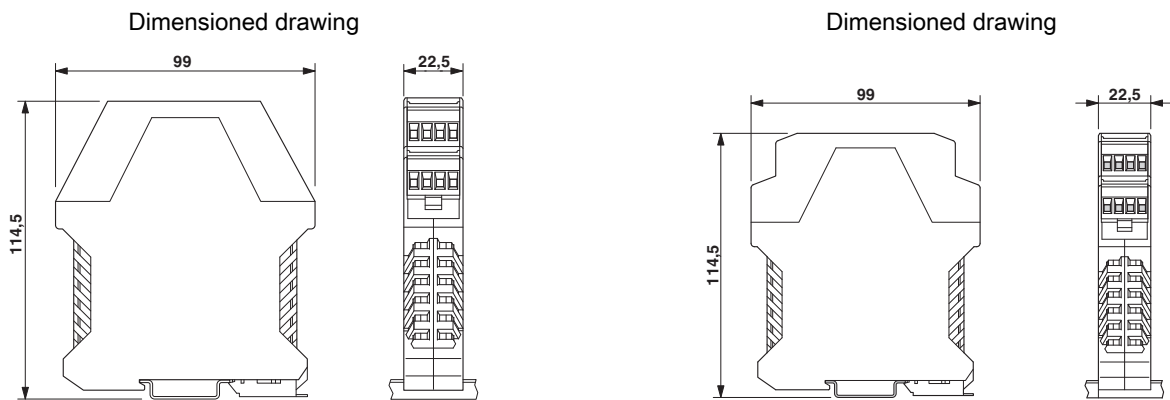
UL Recognized

cUL Recognized

EAC

cULus Recognized

Drawings



Circuit diagram

