

Current transducers - MCR-S-10-50-UI-SW-DCI - 2814663

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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, configured

Why buy this product

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



Key Commercial Data

Packing unit	1 STK
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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

Input data

Input	Current measuring input
Configurable/programmable	Yes, preconfigured
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

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Input data

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 kΩ
Load/output load current output	< 500 Ω

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
Limiting continuous current	50 mA (for gold layer, 30 V AC/ 36 V DC)
	2 A (in case of a destroyed gold layer, 250 V AC)
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

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Switching output

Status display	Yellow LED
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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 min.	24
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible 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
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
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 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

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2

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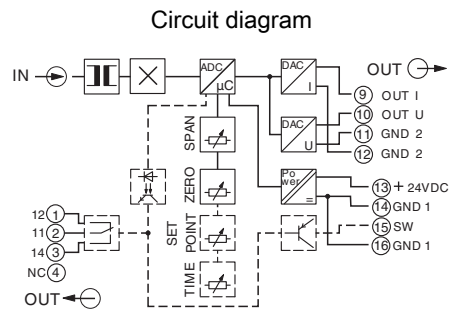
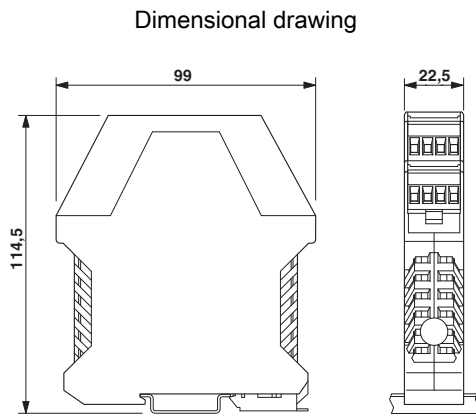
Standards and Regulations

Connection in acc. with standard	CUL
Low Voltage Directive	Conformance with Low Voltage Directive
Conformance	CE-compliant
UL, USA/Canada	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

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings



Approvals

Approvals

Approvals

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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