

MCR-SL-PT100-I-DC-24 - Resistance thermometer measuring transducer



2814883

<https://www.phoenixcontact.com/us/products/2814883>

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MCR temperature transducer, for Pt 100, 2-, 3-, 4-conductor technology, input: -100°C ... 600°C, output signal: 0(4) mA ... 20 mA

Commercial data

Item number	2814883
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DK1XXX
Weight per piece (including packing)	121.9 g
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Customs tariff number	85389091
Country of origin	DE

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

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Technical data

Product properties

Product type	Temperature transmitter
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Electrical properties

Alignment span	± 5 % (via keys)
Alignment zero	± 5 % (via keys)
Test voltage output/power supply	1 kV AC (50 Hz, 60 s)
Test voltage input/output	1 kV AC (50 Hz, 60 s)
Test voltage input/power supply	1 kV AC (50 Hz, 60 s)
Step response (10-90%)	≈  ms (fast) ≈  ms (slow)
Temperature coefficient, typical	0.05 %/K
Maximum transmission error	< 0.4 % (from measurement range $\Delta > 100$ K) ≤ 0.6 % (from measurement range $\Delta \leq 100$ K)

Supply

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	< 60 mA

Input data

Measurement

Temperature measuring range	-100 °C ... 600 °C (freely selectable in 5 K steps following the order key)
Temperature measuring range	min. 50 K
Temperature measuring range: Pt 100	-100 °C ... 600 °C (freely adjustable)
Sensor input current	< 1 mA
Connection technology	2-, 3-, 4-conductor

Output data

Signal: Current output

Configurable/programmable	Yes
Current output signal	0 mA ... 20 mA 4 mA ... 20 mA
Output current range with wire break	0 A ... 24 mA (freely selectable via order key)
Output current range with overrange/underrange	0 A ... 24 mA (freely selectable via order key)
Load/output load current output	≤ 500 Ω

Connection data

Connection method	Pluggable screw connection
Stripping length	8 mm

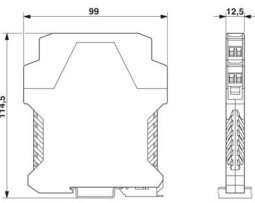
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Screw thread	M3
Conductor cross-section rigid	0.2 mm ² ... 2.5 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 14

Dimensions

Dimensional drawing	
Width	12.5 mm
Height	99 mm
Depth	114.5 mm

Material specifications

Color	green (RAL 6021)
Housing material	Polyamide PA non-reinforced

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 55 °C

EMC data

Electromagnetic compatibility	Conformance with EMC directive
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Mounting

Mounting position	any
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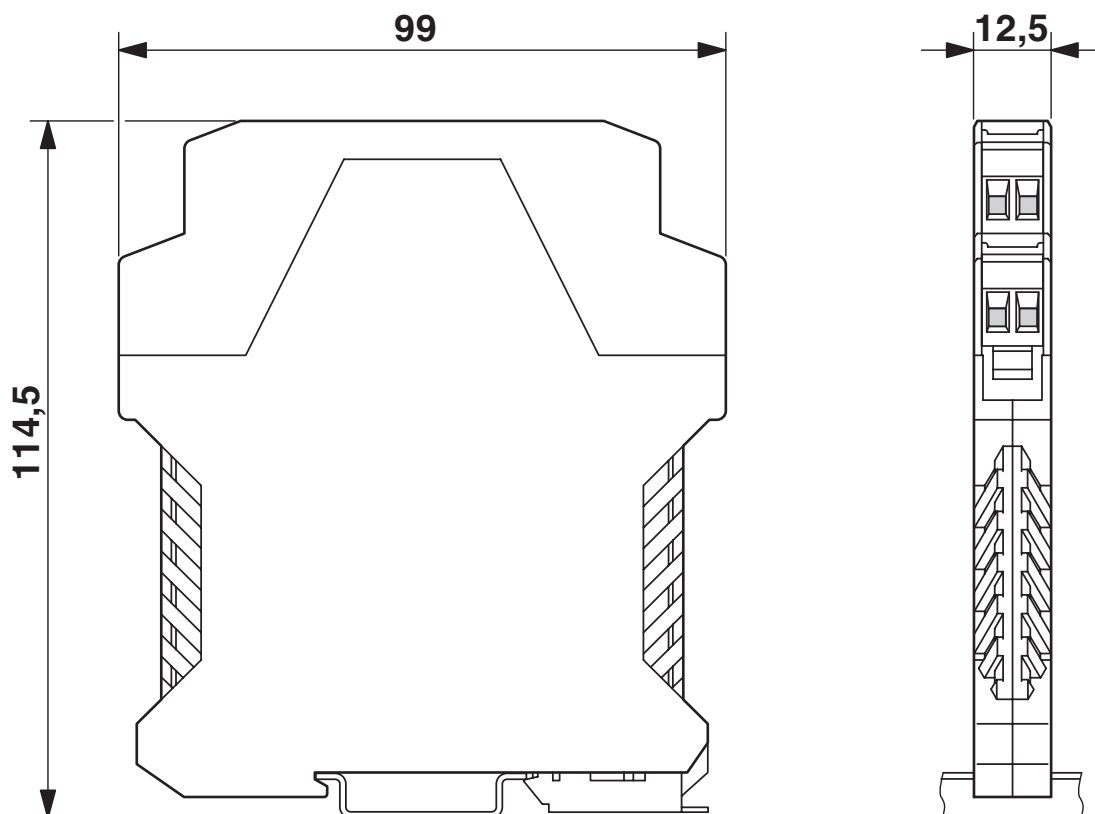
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Drawings

Dimensional drawing

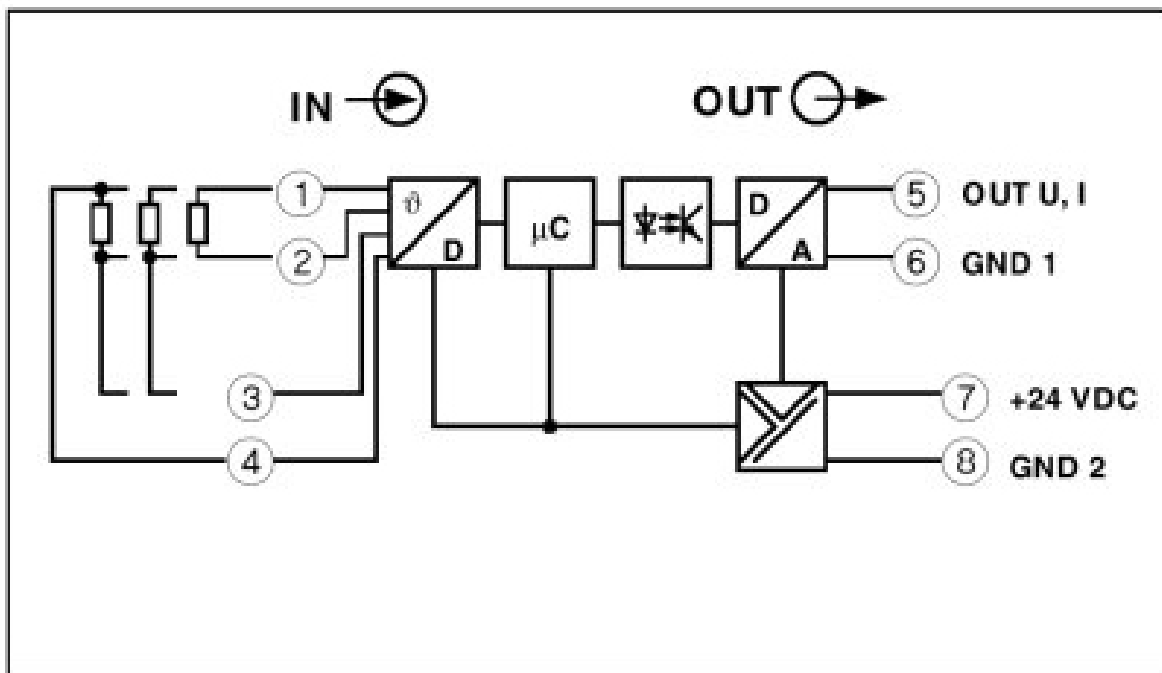


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Circuit diagram



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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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