

MCR-PT100-U-NC - Resistance thermometer measuring transducer

2810418

<https://www.phoenixcontact.com/us/products/2810418>

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The figure shows version MCR-PT100-I-DC

Pt 100 temperature transducer, configurable via DIP switch, selection between 2, 3, 4-conductor technology; input: 0...100 °C, 0...150 °C, 0...200 °C, 0...300 °C, -50...+50 °C, -50...100 °C, -50...150 °C, -50...250 °C, output signal 0...10 V

Commercial data

Item number	2810418
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	DK1XXX
GTIN	4017918118280
Weight per piece (including packing)	139.9 g
Weight per piece (excluding packing)	117.9 g
Customs tariff number	85437090
Country of origin	DE

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Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Product type	Temperature transmitter
No. of channels	1

Electrical properties

Alignment span	± 5 %
Alignment zero	± 5 %
Test voltage power supply/signal	750 V AC (50 Hz, 60 s)
Step response (10-90%)	11 ms
Maximum temperature coefficient	≤ 0.02 %/K
Maximum transmission error	≤ 0.4 % (of final value)

Supply

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

Input data

Measurement

Configurable/programmable	Yes, unconfigured
Sensor types (RTD) that can be used	Pt 100 (IEC 60751/EN 60751)
Temperature measuring range	0 °C ... 300 °C (0 ... 100/150/200/300) -50 °C ... 250 °C (-50 ... 50/100/150/250)
Temperature measuring range: Pt 100	-50 °C ... 50 °C -50 °C ... 100 °C -50 °C ... 150 °C -50 °C ... 250 °C 0 °C ... 100 °C 0 °C ... 150 °C 0 °C ... 200 °C 0 °C ... 300 °C
Sensor input current	approx. 1 mA
Connection technology	2-, 3-, 4-conductor
Connection method	Pluggable screw connection

Output data

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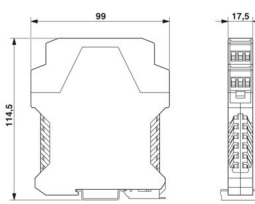
Signal: Voltage output

Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 10 V
Max. voltage output signal	15 V
Output voltage with wire break	> 11 V
Load/output load voltage output	≥ 10 kΩ

Connection data

Connection method	Screw connection
Stripping length	8 mm
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	17.5 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 ... 65 °C

Approvals

CE

Certificate	CE-compliant
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UL, USA/Canada

Identification	cULus
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Mounting

Mounting position	any
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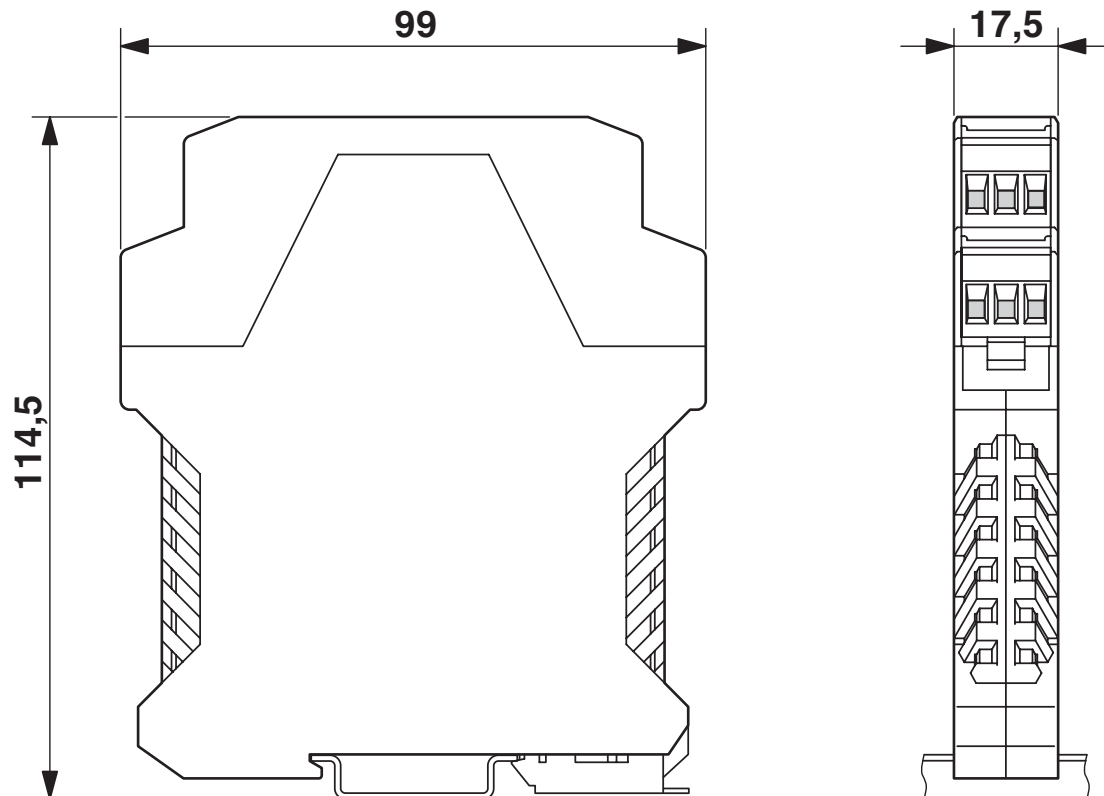
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Drawings

Dimensional drawing



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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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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com