

MINI MCR-BL-PT100-I-NC - Temperature measuring transducer



2810489

<https://www.phoenixcontact.com/sg/products/2810489>

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Temperature signal conditioner, configurable, for Pt 100 temperature sensors for the measuring range -50°C ... 200°C, screw connection

Commercial data

Item number	2810489
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	*****
Product key	DKA135
GTIN	4046356166706
Weight per piece (including packing)	67.9 g
Weight per piece (excluding packing)	60.5 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
Product family	ESSENTIAL edition
No. of channels	1

Insulation characteristics

Overvoltage category	II
Pollution degree	2

Electrical properties

Step response (0–99%)	< 500 ms
Maximum temperature coefficient	< 0.02 %/K
Transmission error in the set measuring range	$((50 \text{ K} / \Delta \text{ Temp}) + 0.05)\%$
Transmission error in the full measuring range	≤ 0.25 %

Electrical isolation Input/output/power supply

Rated insulation voltage	50 V AC/DC
Test voltage	1.5 kV AC (50 Hz, 60 s)
Insulation	Basic insulation in accordance with IEC/EN 61010

Supply

Nominal supply voltage	24 V DC ±10 %
Supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	< 25 mA
Power consumption	< 500 mW

Input data

Signal

Number of inputs	1
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Measurement

Sensor types (RTD) that can be used	Pt 100 (IEC 60751/EN 60751)
Temperature measuring range	-50 °C ... 200 °C
Temperature measuring range	min. 50 K
Temperature measuring range: PT100	-50 °C ... 200 °C (configurable)
Sensor input current	1 mA (constant)

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Max. permissible overall conductor resistance	10 Ω (Per cable)
Connection technology	3-conductor

Output data

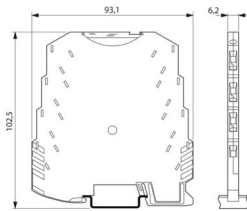
Signal: Current

Configurable/programmable	no
Open-circuit voltage	approx. 12.5 V
Current output signal	0 mA ... 20 mA 4 mA ... 20 mA
Max. current output signal	23 mA
Load/output load current output	< 500 Ω (at 20 mA)
Ripple	< 20 mV _{PP} (at 500 Ω)

Connection data

Connection method	Screw connection
Stripping length	12 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	26 ... 12

Dimensions

Dimensional drawing	
Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Material specifications

Color	green (RAL 6021)
Housing material	PBT
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2

Environmental and real-life conditions

Ambient conditions

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Degree of protection	IP20
Ambient temperature (operation)	-10 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 65 °C

Approvals

CE

Certificate	CE-compliant
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UKCA

Certificate	UKCA-compliant
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EMC data

Electromagnetic compatibility	Conformance with EMC directive
Noise immunity	EN 61000-6-2:2005

Noise emission

Standards/regulations	EN 61000-6-4
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Electrostatic discharge

Comments	Safety measures must be taken to prevent electrostatic discharge.
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Mounting

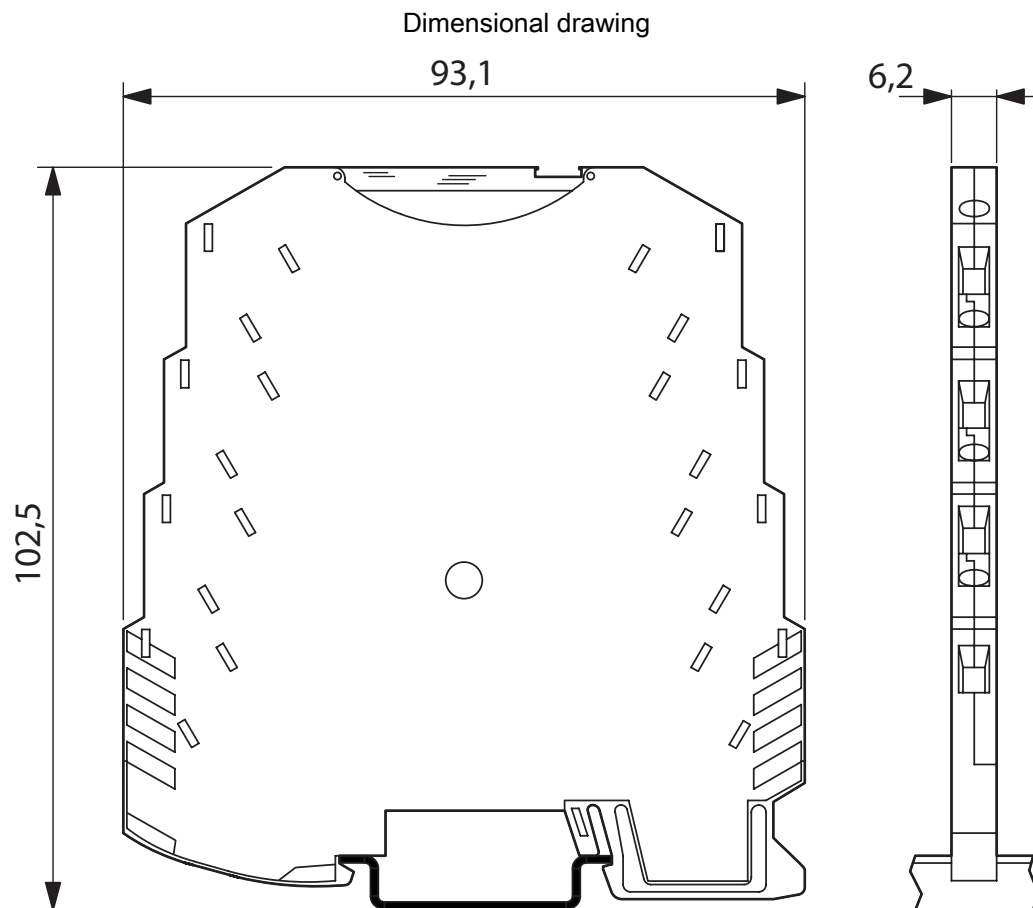
Mounting type	DIN rail mounting
Mounting position	any

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Drawings

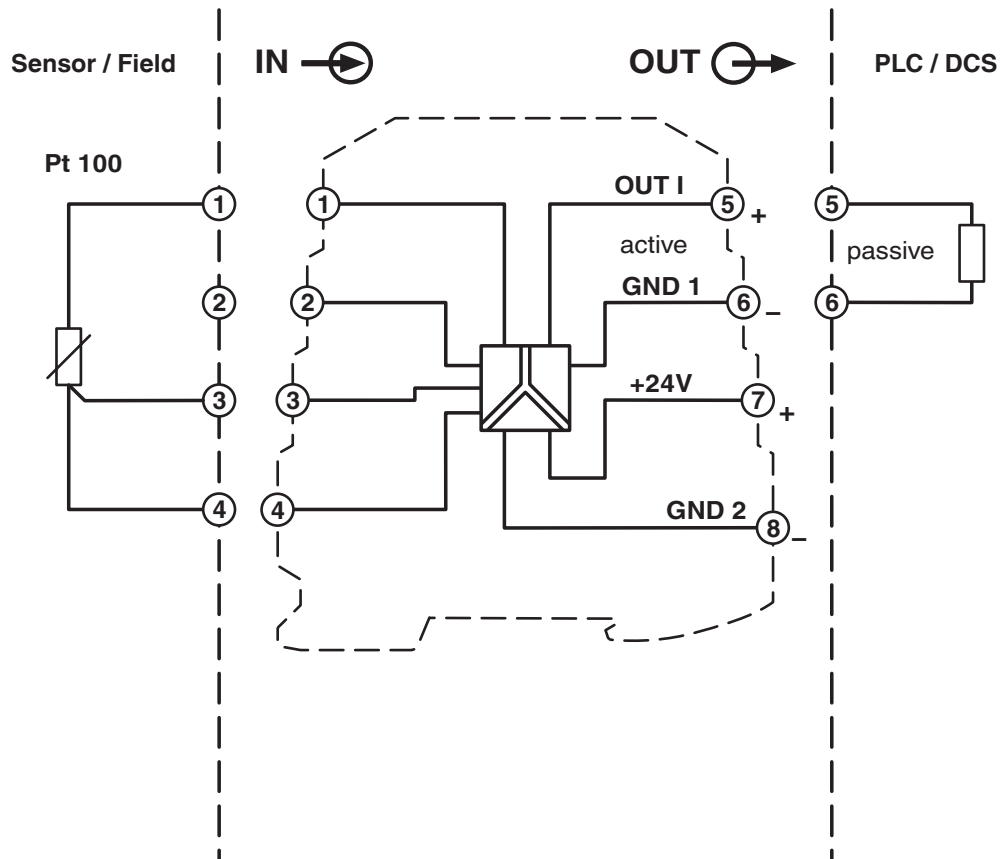


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Block diagram



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Classifications

ECLASS

ECLASS-13.0	27210129
ECLASS-15.0	27210129

ETIM

ETIM 9.0	EC002919
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UNSPSC

UNSPSC 21.0	41112100
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

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.)	Lead(CAS: 7439-92-1)
	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7)
SCIP	c3ab2341-94d0-416b-90d3-cba540932424

EF3.0 Climate Change

CO2e kg	5.452 kg CO2e
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Accessories

MINI MCR DKL - Transparent cover

2308111

<https://www.phoenixcontact.com/sg/products/2308111>



Fold up transparent cover for MINI MCR modules with additional labeling option using insert strips and flat Zack marker strip 6.2 mm

MINI MCR-DKL-LABEL - Marking label

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Label for extended marking of MINI MCR modules in connection with the MINI MCR-DKL

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SZS 0,6X3,5 - Screwdriver

1205053

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Actuation tool, for ST terminal blocks, insulated, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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