MCR-SL-PT100-SP - Temperature monitoring

2814948

https://www.phoenixcontact.com/us/products/2814948

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MCR temperature relay, for Pt 100 in 2-conductor technology, input: -100°C ... +700°C

Your advantages

- Adjustable switching hysteresis
- Electrical isolation
- Relay changeover contact output
- Switching point can be freely selected in the temperature range from -100°C ... +700°C

Commercial data

Item number	2814948
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C401
Product key	CK1843
Catalog page	Page 132 (C-7-2015)
GTIN	4017918820381
Weight per piece (including packing)	123.5 g
Weight per piece (excluding packing)	101.5 g
Customs tariff number	85437090
Country of origin	DE

Technical data

Notes

Utilization restriction

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

Product properties

Product type	Temperature monitoring relay

Electrical properties

Linearity error	< 0.1 %
Maximum power dissipation for nominal condition	900 mW
Test voltage, input/output/supply	1.5 kV AC (50 Hz, 60 s)
Maximum temperature coefficient	< 0.01 %/K
Temperature coefficient, typical	0.005 %/K

Supply

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

Input data

Measurement

Sensor types (RTD) that can be used	Pt 100 (IEC 60751/EN 60751)
Temperature measuring range	-100 °C ... 700 °C
Sensor type:	-100 °C ... 700 °C (freely adjustable)
Sensor input current	approx. 1 mA
Connection technology	2-conductor

Output data

Switching: Relay

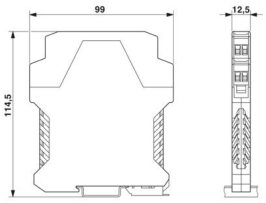
Contact switching type	1 changeover contact
Contact material	AgSnO, hard gold-plated
Max. switching current	50 mA (for gold layer, 30 V AC/ 36 V DC)
	2 A (in case of a destroyed gold layer, 250 V AC)
Typical response time	approx. 6 ms
Typical release time	approx. 200 ms
Status display	Red LED (short-circuit/wire break)
	Yellow LED (relay active)

Connection data

Connection method	Screw connection
Stripping length	8 mm

Screw thread	M3
Conductor cross section rigid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
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 ... 65 °C

Approvals

CE

Certificate	CE-compliant

UL, USA/Canada

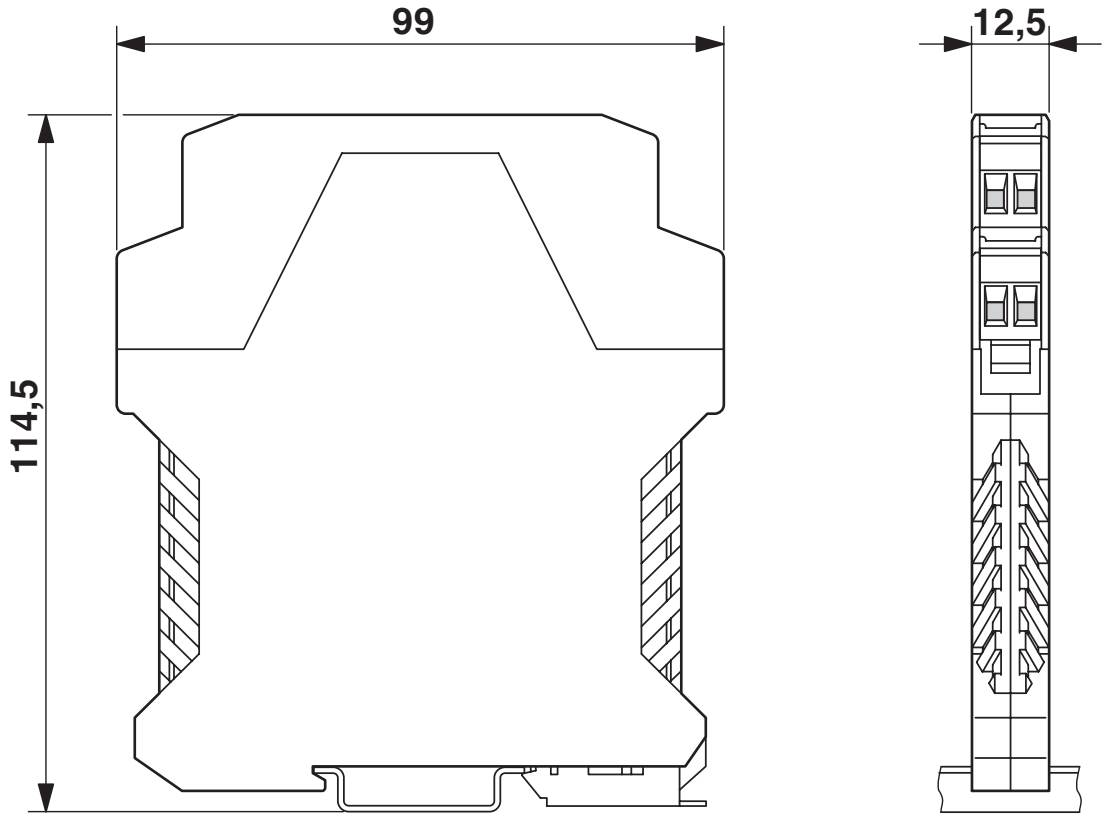
Identification	UL 508 Recognized

Mounting

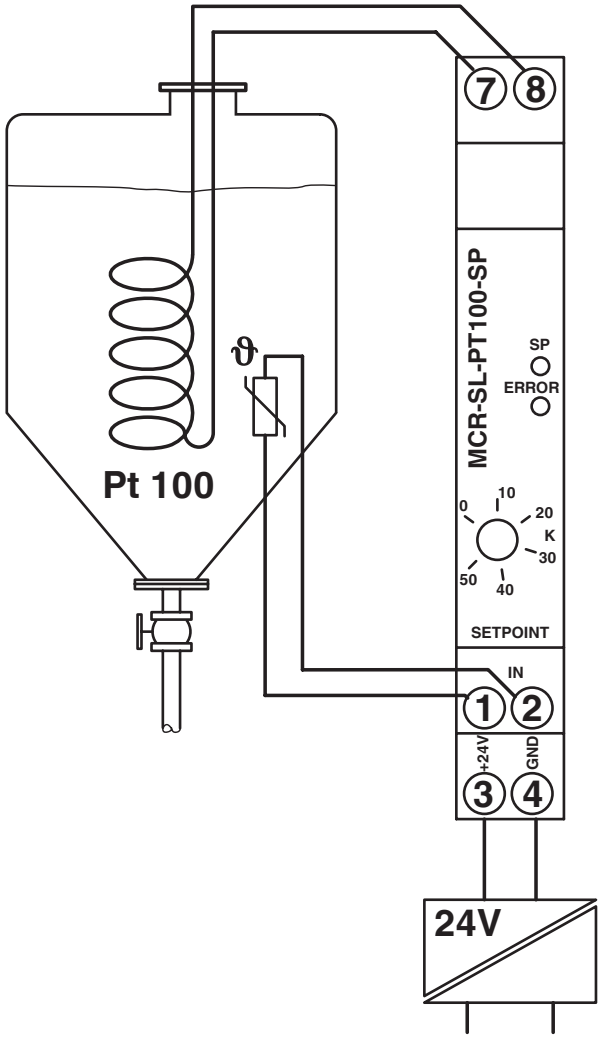
Mounting type	DIN rail mounting
Mounting position	any

Drawings

Dimensional drawing

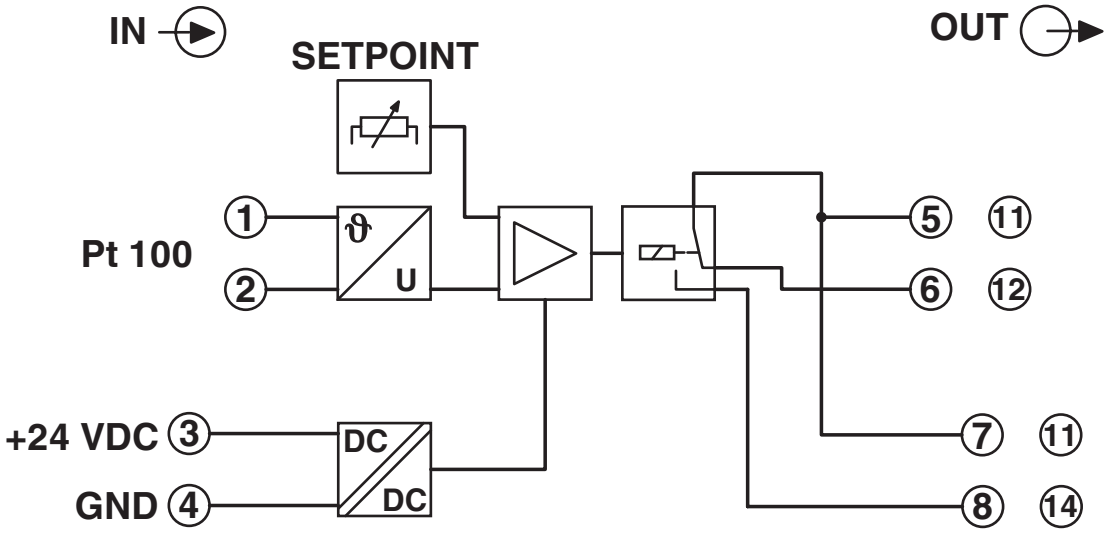


Application drawing

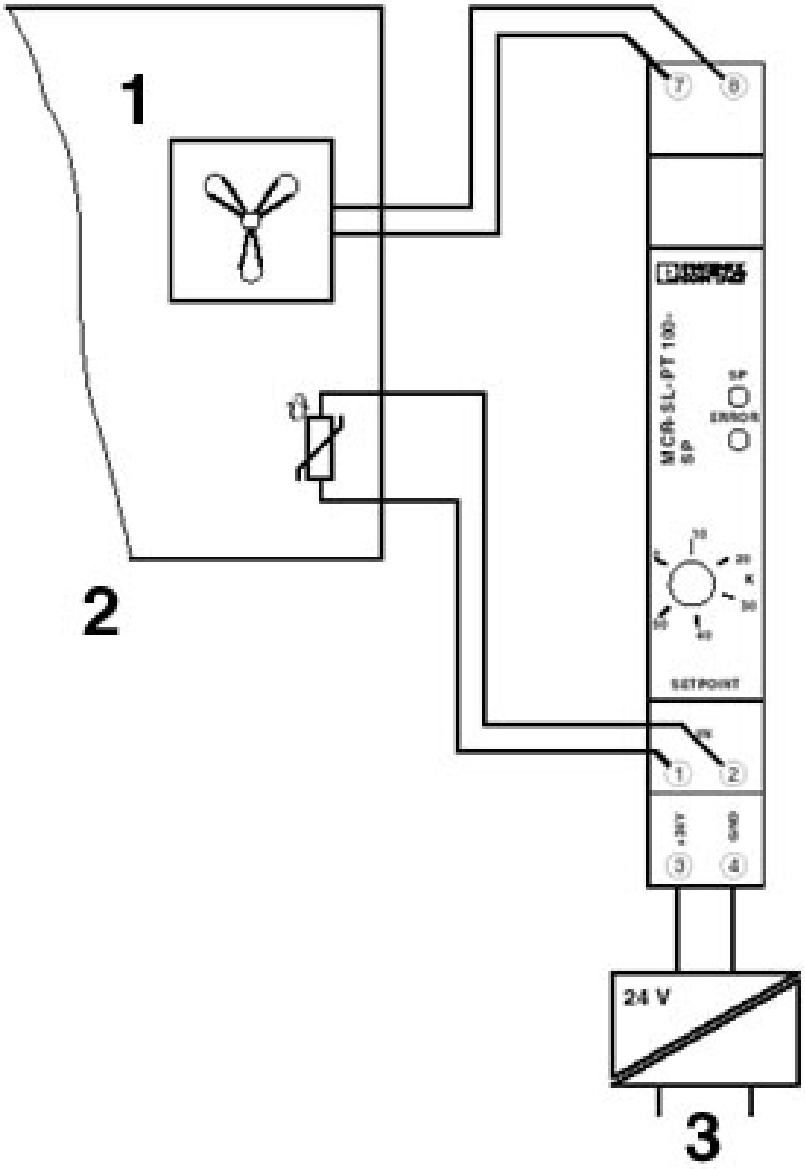


Application example - Temperature control of a heated medium
1 = mains voltage

Circuit diagram



Application drawing



Application example - Temperature control with connection of a fan
1 = fan
2 = control cabinet/room
3 = mains voltage

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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