

Temperature monitoring - MCR-SL-PT100-SP - 2814948

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MCR temperature relay, for Pt 100 in 2-wire system; input: -100 °C ...+700 °C

Product Features

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



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	123.5 g
Custom tariff number	85437090
Country of origin	Germany

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	12.5 mm
Height	99 mm
Depth	114.5 mm

Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
Degree of protection	IP20

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Technical data

Input data

Sensor types (RTD) that can be used	Pt 100 (IEC 60751/EN 60751)
Sensor input current	approx. 1 mA
Temperature measuring range	-100 °C ... 700 °C
Connection method	2-wire

Switching output

Output name	Relay output
Contact type	1 PDT
Contact material	AgSnO, hard gold-plated
Operate delay time	approx. 6 ms
Dropout delay time	approx. 200 ms
Status display	Red LED (short-circuit/wire break) Yellow LED (relay active)
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)

Power supply

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

Connection data

Connection method	Pluggable 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 temperature coefficient	< 0.01 %/K
Temperature coefficient, typical	0.005 %/K
Linearity error	< 0.1 %
Test voltage, input/output/supply	1.5 kV (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	any

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Technical data

General

Conformance	CE-compliant
UL, USA / Canada	UL 508 Recognized

Standards and Regulations

Connection in acc. with standard	CUL
Conformance	CE-compliant
UL, USA / Canada	UL 508 Recognized

Classifications

eCl@ss

eCl@ss 4.0	27200206
eCl@ss 4.1	27200206
eCl@ss 5.0	27200206
eCl@ss 5.1	27200206
eCl@ss 6.0	27200206
eCl@ss 7.0	27200206
eCl@ss 8.0	27371810

ETIM

ETIM 2.0	EC001446
ETIM 3.0	EC001446
ETIM 4.0	EC001446
ETIM 5.0	EC001446

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121535
UNSPSC 11	39121535
UNSPSC 12.01	39121535
UNSPSC 13.2	39121535

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

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Approvals

Ex Approvals

Approvals submitted

Approval details

UL Recognized

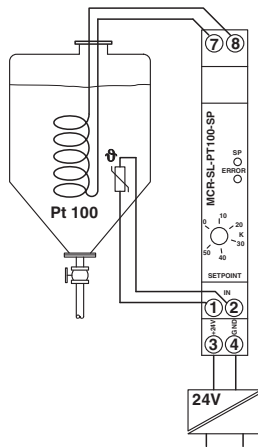
cUL Recognized

EAC

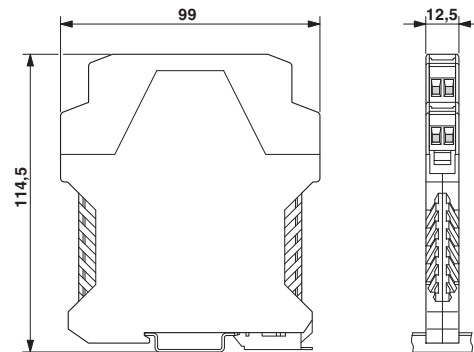
cULus Recognized

Drawings

Application drawing



Dimensional drawing

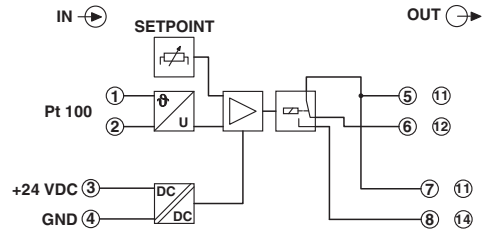


Application example - Temperature control of a heated medium

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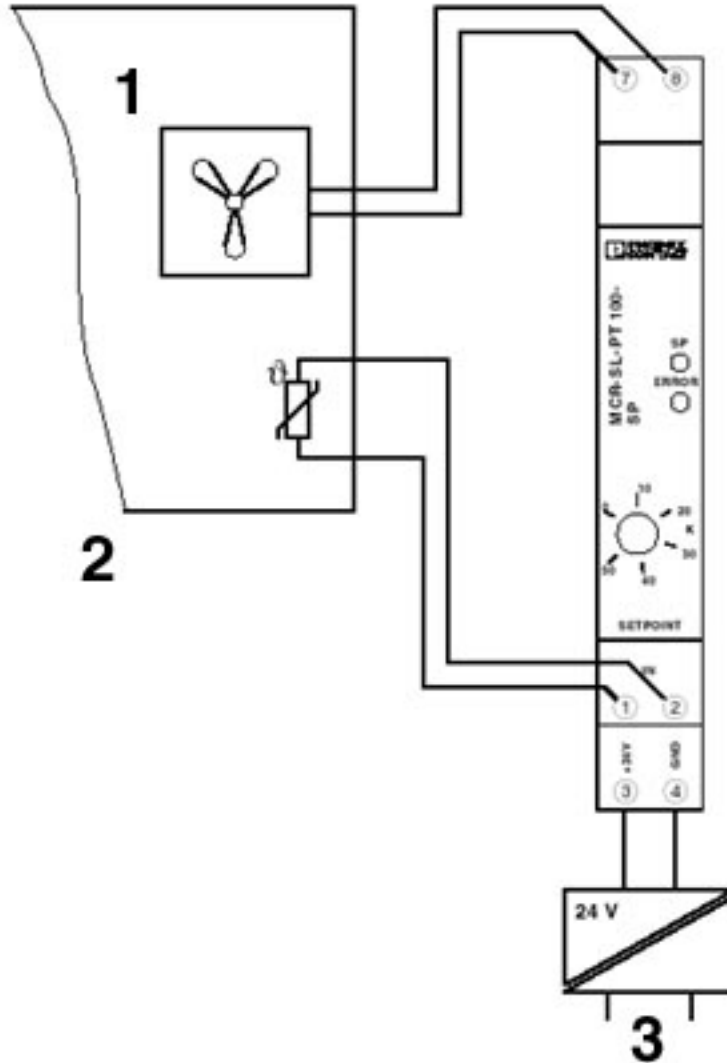
1 = mains voltage

Circuit diagram



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Application drawing



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