PHŒNIX CONTACT

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

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)

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

Why buy this product

☑ 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
GTIN	4 017918 820381
Weight per Piece (excluding packing)	101.5 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

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

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

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)

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 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
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
Conformance	CE-compliant
UL, USA / Canada	UL 508 Recognized

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

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

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

Ex Approvals
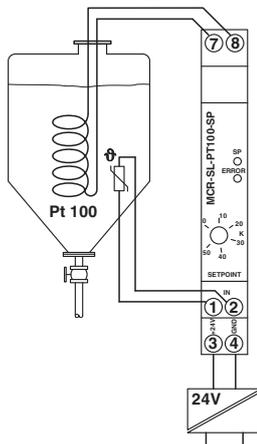

Approvals submitted

Approval details

UL Recognized

PHŒNIX CONTACT

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

Approvals

cUL Recognized

EAC

cULus Recognized
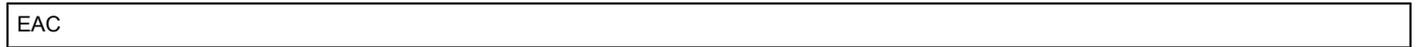
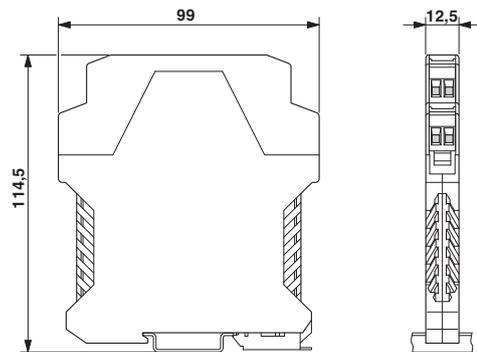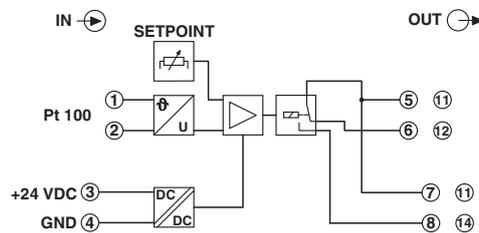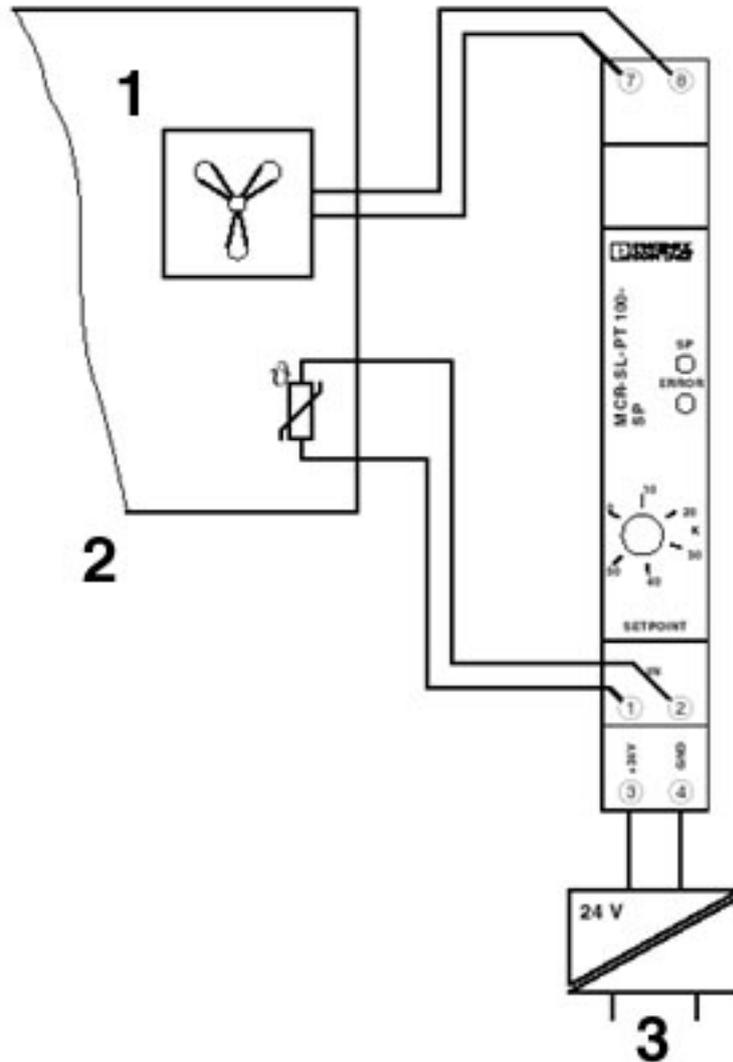## Drawings

Application drawing

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

Dimensional drawing

Circuit diagram

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

Application drawing

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