

# 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

<b>package_quantity</b>	1
<b>GTIN</b>	4017918820381

## Technical data

### Note

<b>Utilization restriction</b>	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

<b>Width</b>	12.5 mm
<b>Height</b>	99 mm
<b>Depth</b>	114.5 mm

### Ambient conditions

<b>Ambient temperature (operation)</b>	-20 °C ... 65 °C
<b>Degree of protection</b>	IP20

### Input data

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

### Switching output

<b>Output name</b>	Relay output
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## Technical data

### Switching output

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

### Power supply

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

### Connection data

<b>Connection method</b>	Pluggable screw connection
<b>Conductor cross section solid min.</b>	0.2 mm <sup>2</sup>
<b>Conductor cross section solid max.</b>	2.5 mm <sup>2</sup>
<b>Conductor cross section AWG/kcmil min.</b>	24
<b>Conductor cross section AWG/kcmil max</b>	14
<b>Conductor cross section stranded min.</b>	0.2 mm <sup>2</sup>
<b>Conductor cross section stranded max.</b>	2.5 mm <sup>2</sup>
<b>Stripping length</b>	8 mm
<b>Screw thread</b>	M3

### General

<b>Maximum temperature coefficient</b>	< 0.01 %/K
<b>Temperature coefficient, typical</b>	0.005 %/K
<b>Linearity error</b>	< 0.1 %
<b>Test voltage, input/output/supply</b>	1.5 kV (50 Hz, 1 min.)
<b>Color</b>	green
<b>Housing material</b>	Polyamide PA non-reinforced
<b>Mounting position</b>	any
<b>Conformance</b>	CE-compliant
<b>UL, USA / Canada</b>	UL 508 Recognized

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27200206
<b>eCl@ss 4.1</b>	27200206
<b>eCl@ss 5.0</b>	27200206
<b>eCl@ss 5.1</b>	27200206
<b>eCl@ss 6.0</b>	27200206
<b>eCl@ss 7.0</b>	27200206
<b>eCl@ss 8.0</b>	27200206

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## classifications

### ETIM

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

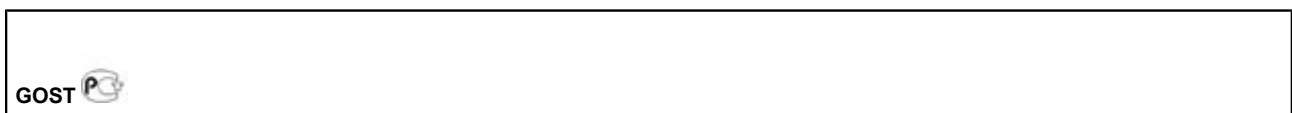
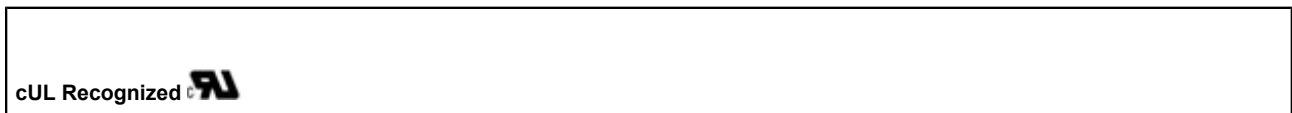
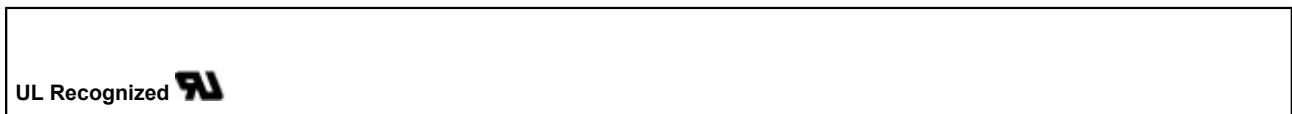
### UNSPSC

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

## approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized /

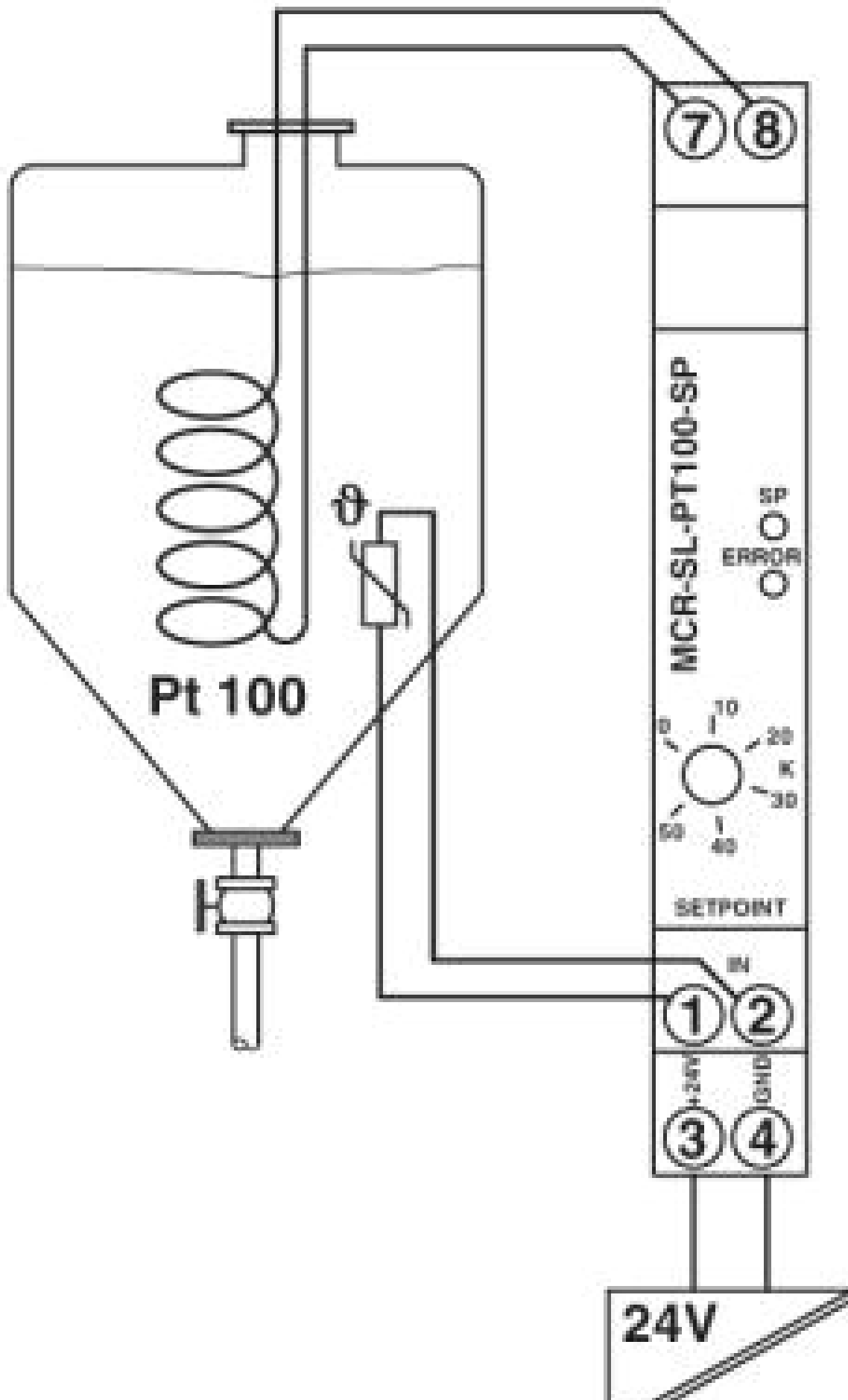
### Approval details



## Drawings

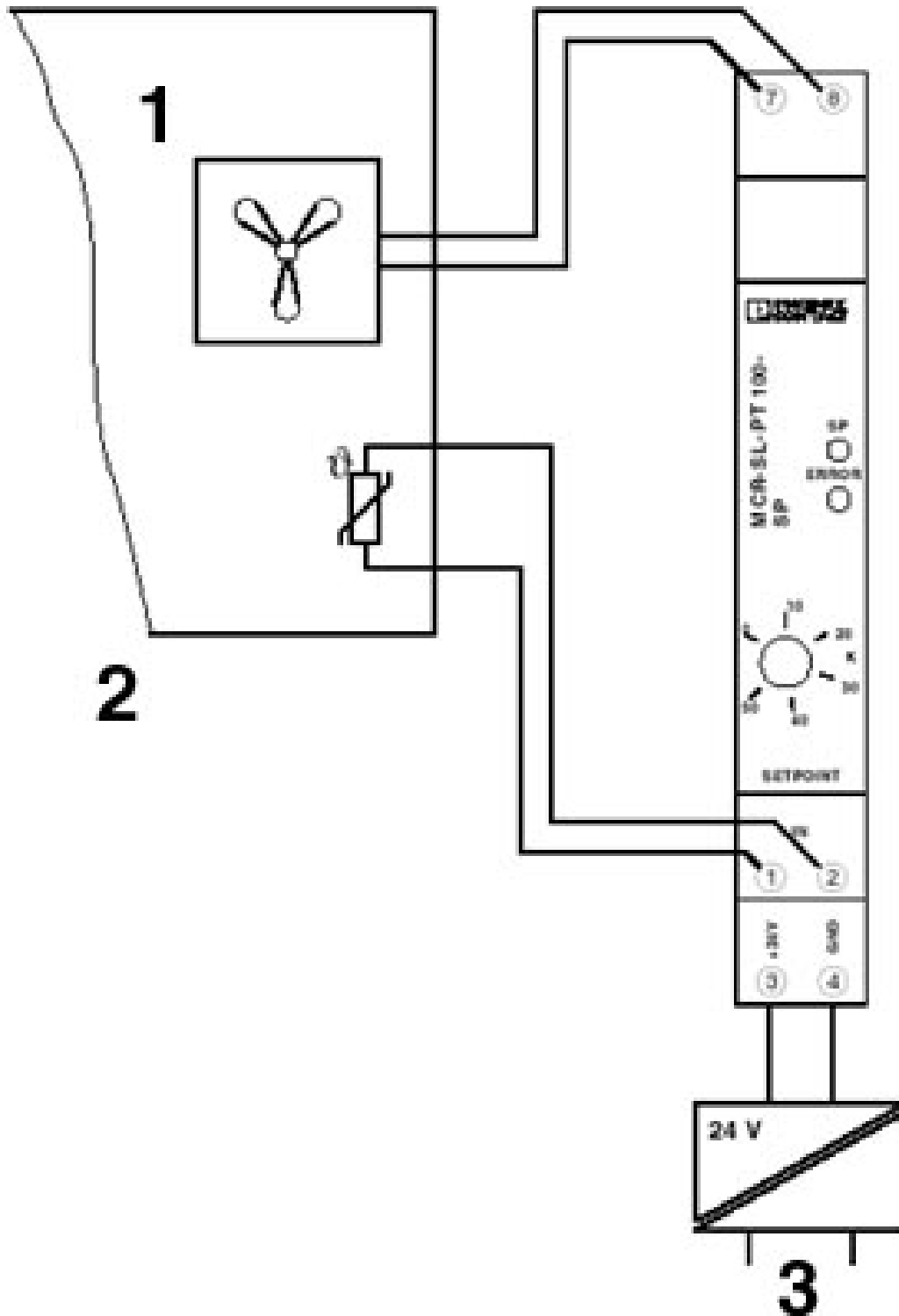
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Application drawing



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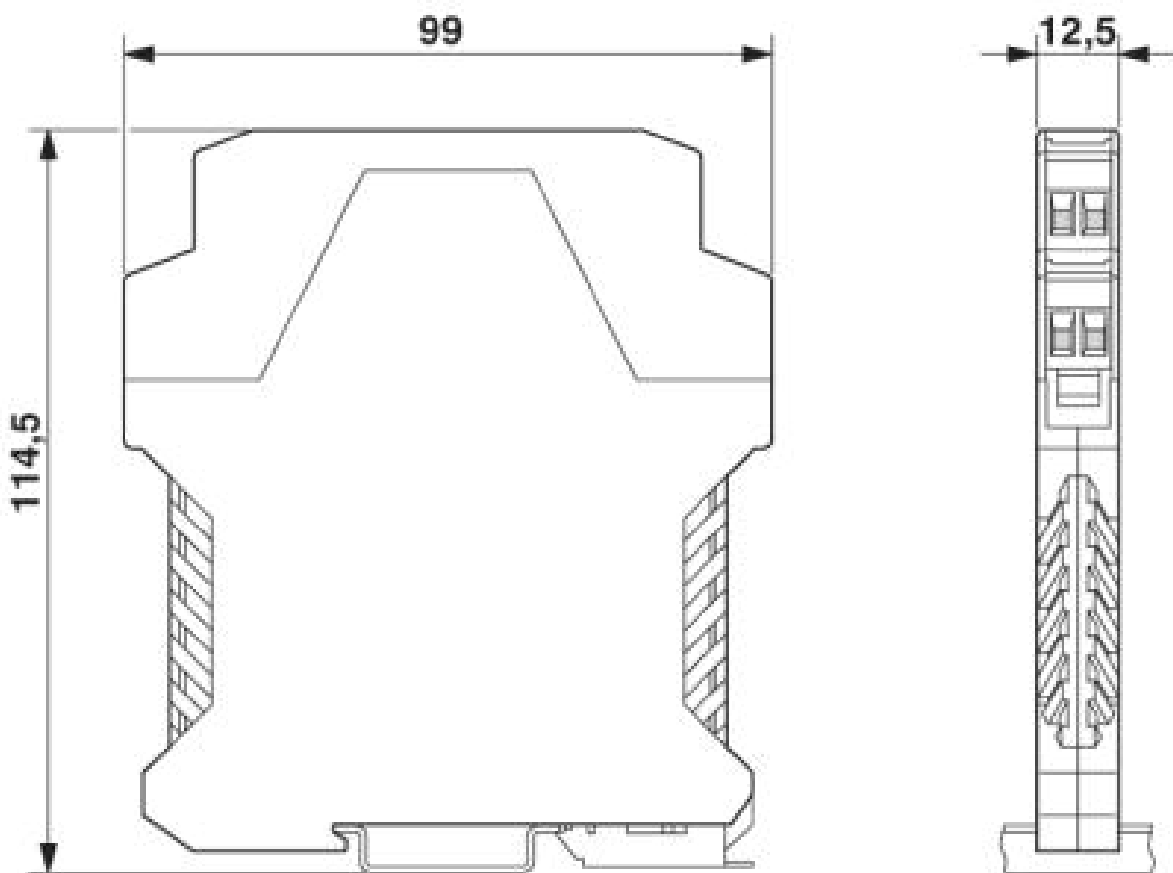
Application drawing



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

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Dimensioned drawing



Circuit diagram

