

Temperature measuring transducer - MINI MCR-SL-PT100-UI-200-NC - 2864370

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 transducer, configurable, for Pt 100 temperature sensors, with screw-connection, not configured

Product Features

- ✓ Power supply possible via the foot element (TBUS)
- ✓ Optimized temperature measuring range of -50°C to +200°C for increased accuracy
- ✓ For 2, 3 or 4-wire Pt 100 sensors according to IEC 60751
- ✓ Error indication via diagnostic LED and analog signal
- ✓ Pt 100 signals to create standard signals
- ✓ 3-way isolation
- ✓ Highly-compact temperature transducer for electrical isolation, conversion, amplification, and filtering of
- ✓ Input and output signals can be configured via DIP switches



Key commercial data

| | |
|--------------------------------------|----------|
| Packing unit | 1 pc |
| Weight per Piece (excluding packing) | 90.0 GRM |
| 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

Temperature measuring transducer - MINI MCR-SL-PT100-UI-200-NC - 2864370

Technical data

Dimensions

| | |
|--------|----------|
| Width | 6.2 mm |
| Height | 93.1 mm |
| Depth | 102.5 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -20 °C ... 65 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Degree of protection | IP20 |

Input data

| | |
|-------------------------------------|-----------------------------|
| Sensor types (RTD) that can be used | Pt 100 (IEC 60751/EN 60751) |
| Sensor input current | 1 mA (constant) |
| Temperature measuring range | -50 °C ... 200 °C |
| Connection method | 2, 3, 4-wire |

Output data

| | |
|---------------------------------|--------------------|
| Voltage output signal | 0 V ... 10 V |
| | 10 V ... 0 V |
| | 0 V ... 5 V |
| | 1 V ... 5 V |
| Current output signal | 0 mA ... 20 mA |
| | 4 mA ... 20 mA |
| | 20 mA ... 0 mA |
| | 20 mA ... 4 mA |
| Max. output voltage | approx. 12.5 V |
| Max. output current | 23 mA |
| Short-circuit current | approx. 10 mA |
| Load/output load voltage output | > 10 kΩ |
| Load/output load current output | < 500 Ω (at 20 mA) |

Power supply

| | |
|--------------------------|---|
| Nominal supply voltage | 24 V DC |
| Supply voltage range | 19.2 V DC ... 30 V DC (The DIN rail bus connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, Order No. 2869728) can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715)) |
| Max. current consumption | < 21 mA (at 24 V DC) |
| Power consumption | < 500 mW |

Connection data

Temperature measuring transducer - MINI MCR-SL-PT100-UI-200-NC - 2864370

Technical data

Connection data

| | |
|--|---------------------|
| Connection method | Screw connection |
| Conductor cross section solid min. | 0.2 mm ² |
| Conductor cross section solid max. | 2.5 mm ² |
| Conductor cross section AWG/kcmil min. | 26 |
| Conductor cross section AWG/kcmil max | 12 |
| Conductor cross section stranded min. | 0.2 mm ² |
| Conductor cross section stranded max. | 2.5 mm ² |
| Stripping length | 12 mm |
| Screw thread | M3 |

General

| | |
|-----------------------------------|---|
| Maximum temperature coefficient | < 0.02 %/K |
| Protective circuit | Transient protection |
| Electrical isolation | Basic insulation according to EN 61010 |
| Surge voltage category | II |
| Pollution degree | 2 |
| Rated insulation voltage | 50 V AC/DC |
| Test voltage, input/output/supply | 1.5 kV (50 Hz, 1 min.) |
| Electromagnetic compatibility | Conformance with EMC Directive 2004/108/EC |
| Noise emission | EN 61000-6-4 |
| Noise immunity | EN 61000-6-2 When being exposed to interference, there may be minimal deviations. |
| Color | green |
| Housing material | PBT |
| Mounting position | any |
| Conformance | CE-compliant |
| ATEX | # II 3 G Ex nA IIC T4 Gc X |
| UL, USA / Canada | UL 508 Recognized |
| | Class I, Div. 2, Groups A, B, C, D T5 |
| GL | GL EMC 2 D |

EMC data

| | |
|--|--------------------------|
| Designation | Electromagnetic RF field |
| Standards/regulations | EN 61000-4-3 |
| Typical deviation from the measuring range final value | 10 % |
| Designation | Fast transients (burst) |
| Standards/regulations | EN 61000-4-4 |

Temperature measuring transducer - MINI MCR-SL-PT100-UI-200-NC - 2864370

Technical data

EMC data

| | |
|--|-------------------------|
| Typical deviation from the measuring range final value | 10 % |
| Designation | Conducted interferences |
| Standards/regulations | EN 61000-4-6 |
| Typical deviation from the measuring range final value | 10 % |

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 | 27210120 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001446 |
| ETIM 3.0 | EC001446 |
| ETIM 4.0 | EC001446 |
| ETIM 5.0 | EC001446 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211506 |
| UNSPSC 7.0901 | 39121008 |
| UNSPSC 11 | 39121008 |
| UNSPSC 12.01 | 39121008 |
| UNSPSC 13.2 | 39121008 |

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / GL / cULus Recognized

Temperature measuring transducer - MINI MCR-SL-PT100-UI-200-NC - 2864370

Approvals

Ex Approvals

UL Listed / cUL Listed / ATEX / cUL Listed / cULus Listed / cULus Listed

Approvals submitted

Approval details

UL Recognized

cUL Recognized

GL

cULus Recognized

Drawings



