

# MINI MCR-SL-PT100-UI-NC

Tilausnumero: 2864273

The illustration shows the versions with screw connection



<http://eshop.phoenixcontact.fi/phoenix/treeViewClick.do?UID=2864273>

MCR temperature transducer for Pt 100 temperature sensors, configured via DIP switch, with screw connection, not pre-configured



| Kaupalliset tiedot     |                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------|
| Nettohinta             | 99,4150 EUR / 1                                                                                        |
| EAN                    | <br>4 017918 956561 |
| Pakkaus                | 1 kpl.                                                                                                 |
| Tullitariffi           | 85437090                                                                                               |
| Gross weight in pieces | 0,0751 kg                                                                                              |
| Tuoteluettelossa       | Sivu 362 (IF-2011)                                                                                     |

## Tuotekohtaiset lisätiedot

WEEE/RoHS-yhteensopiva seuraavasta päivästä lähtien: 11.04.2006



Huomioithan, että tiedot on otettu online-luettelosta. Täydelliset tekniset tiedot voit ladata osoitteesta <http://www.download.phoenixcontact.com>. Yleiset toimitus- ja käyttöehdot koskevat myös Internet-latauksia.

## Tuotekuvaus

The 6.2 mm wide MINI MCR-SL-PT100-UI... is a configurable 3-way isolated temperature measuring transducer. It is suitable for the connection of Pt 100 resistance thermometers according to IEC 60751 in 2, 3 and 4-wire connection methods.

On the output side, the analog standard signals 0...20 mA, 4...20 mA, 0...10 V, 0...5 V, 1...5 V, 10...0 V, 20...0 mA or 20...4 mA are available, electrically isolated.

The DIP switches are accessible on the side of the housing and allow the following parameters to be configured:

– Connection method

- Temperature range to be measured
- Output signal as well
- Fault evaluation type

Power (19.2 V DC to 30 V DC) can be supplied through connection terminal blocks on the modules or in conjunction with the DIN rail connector.

#### Tekniset tiedot

##### Input data

|                                     |                             |
|-------------------------------------|-----------------------------|
| Configurable/programmable           | Yes                         |
| Sensor types (RTD) that can be used | Pt 100 (IEC 60751/EN 60751) |
| Sensor input current                | 1 mA (constant)             |
| Connection method                   | 2, 3, 4-wire                |

##### Output data

|                                 |                           |
|---------------------------------|---------------------------|
| Configurable/programmable       | Yes, unconfigured         |
| 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 | $\geq 10 \text{ k}\Omega$ |
| Load/output load current output | $< 500 \Omega$ (at 20 mA) |

##### Power supply

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

#### Connection data

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

#### General data

|                                         |                                                                                                                                  |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| No. of channels                         | 1                                                                                                                                |
| Width                                   | 6.2 mm                                                                                                                           |
| Height                                  | 93.1 mm                                                                                                                          |
| Depth                                   | 102.5 mm                                                                                                                         |
| Maximum temperature coefficient         | < 0.02 %/K                                                                                                                       |
| Protective circuit                      | Transient protection                                                                                                             |
| Ambient temperature (operation)         | -20 °C ... 65 °C                                                                                                                 |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C                                                                                                                 |
| Degree of protection                    | IP20                                                                                                                             |
| 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                                                                                                                     |
| Color                                   | green                                                                                                                            |
| Housing material                        | PBT                                                                                                                              |
| Mounting position                       | Any                                                                                                                              |
| Assembly instructions                   | The DIN rail bus connector (TBUS) can be used for bridging the supply voltage. It can be snapped onto a 35 mm EN 60715 DIN rail. |
| Conformance                             | CE-compliant                                                                                                                     |
| ATEX                                    | Ex 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                            |

#### Sertifikaatit

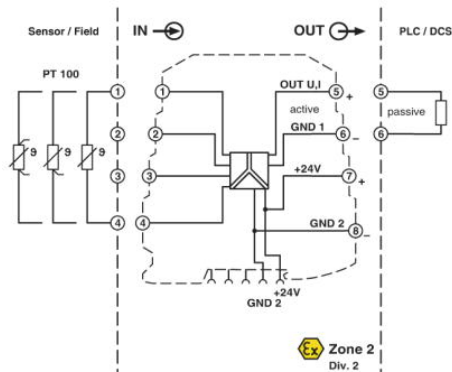
|                   |                               |
|-------------------|-------------------------------|
| Certification     | CUL, GL, UL                   |
| Certification Ex: | CUL-EX LIS, PxC-EX, UL-EX LIS |

#### Lisätarvikkeet

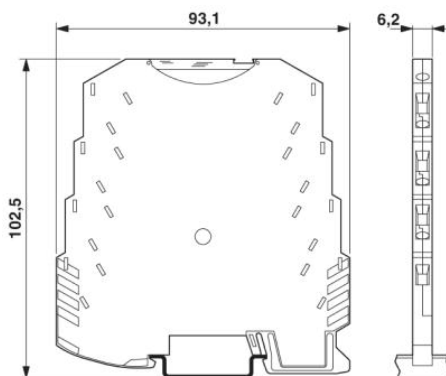
| Tuote          | Merkintä                       | Kuvaus                                                                                                                                                                                            |
|----------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General</b> |                                |                                                                                                                                                                                                   |
| 2869728        | ME 6,2 TBUS-2 1,5/5-ST-3,81 GN | DIN rail connector (TBUS), 5-pos., for bridging the supply voltage, can be snapped onto NS 35/... DIN rails according to EN 60715                                                                 |
| 2308111        | MINI MCR DKL                   | Fold up transparent cover for MINI MCR modules with additional labeling option using insert strips and flat Zack marker strip 6.2 mm                                                              |
| 2810272        | MINI MCR-DKL-LABEL             | Label for extended marking of MINI MCR modules in connection with the MINI MCR-DKL                                                                                                                |
| 2864134        | MINI MCR-SL-PTB                | MCR power terminal block for supplying several MINI Analog modules via the DIN rail connectors, with screw connection, current consumption up to max. 2 A                                         |
| 2864147        | MINI MCR-SL-PTB-SP             | MCR power terminal block for supplying several MINI-ANALOG modules via the DIN rail connectors, with spring-cage connection, current consumption up to max. 2 A                                   |
| 2811268        | MINI MCR-SL-V8-FLK 16-A        | Eight MINI analog signal converters with screw connection method can be connected to a control system using a system adapter and system cabling with a minimum of wiring and very low error risk. |
| 2866653        | MINI-PS-100-240AC/24DC/1.5/ EX | DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A, ATEX approval                                                                                            |
| 2866983        | MINI-SYS-PS-100-240AC/24DC/1.5 | DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A                                                                                                           |

## Piirroksset

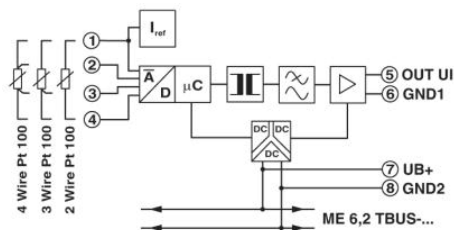
### Block diagram



### Dimensioned drawing



### Circuit diagram



Connection data incl. use groups

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## Osoite

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