

Thermocouple measuring transducer - MINI MCR-TC-UI-NC - 2902851

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Configurable temperature transducer for the connection of thermocouples. Can be configured via DIP switches or, with extended functionality, using the software. Screw connection, standard configuration.

Product Description

The configurable temperature transducer with 3-way isolation is suitable for the connection of thermocouples. The measured values are converted into a linear current or voltage signal. The device can either be configured via DIP switches or, with extended functionality, via the S port using the software (FDT/DTM). The measuring transducer supports fault monitoring.



Key commercial data

package_quantity	1
GTIN	4046356689229

Technical data

Note

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

Configurable/programmable	Yes
Sensor types that can be used (TC)	B, E, J, K, N, R, S, T, L, U, A-1, A-2, A-3, M, L
Temperature measuring range	-250 °C ... 2500 °C (Range depending on the sensor type)

Output data

Thermocouple measuring transducer - MINI MCR-TC-UI-NC - 2902851

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Output data

Configurable/programmable	Yes
Voltage output signal	0 V ... 10 V
Voltage output signal	10 V ... 0 V
Voltage output signal	0 V ... 5 V
Voltage output signal	1 V ... 5 V
Current output signal	0 mA ... 20 mA
Current output signal	4 mA ... 20 mA
Current output signal	20 mA ... 0 mA
Current output signal	20 mA ... 4 mA
Max. output voltage	approx. 12.3 V
Max. output current	24.6 mA
Load/output load voltage output	≥ 10 kΩ
Load/output load current output	< 500 Ω (at 20 mA)

Power supply

Supply voltage range	9.6 V DC ... 30 V DC (The T 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))
Typical current consumption	< 27 mA (at 24 V DC)
Power consumption	≤ 700 mW (at I _{OUT} = 20 mA, 9.6 V DC, load 500 Ω)

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	≤ 0.01 %/K
Cold point error, max.	< 3 K
Typical cold point errors	< 2 K
Status display	LED red
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

Thermocouple measuring transducer - MINI MCR-TC-UI-NC - 2902851

Technical data

General

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	508 listed
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D T5 applied for
GL	GL applied for

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	27200206

ETIM

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

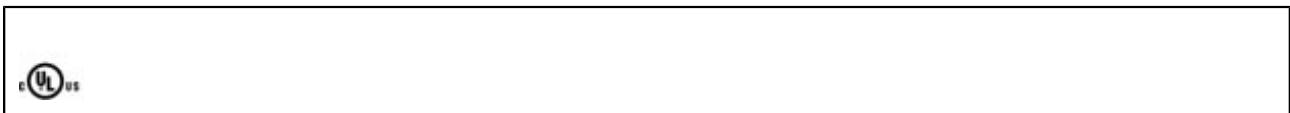
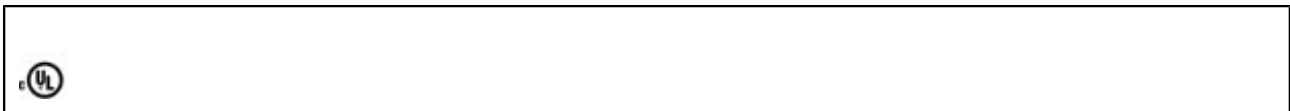
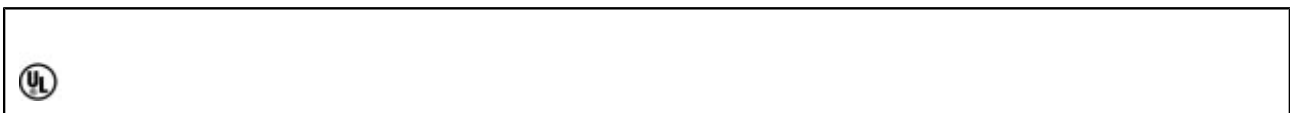
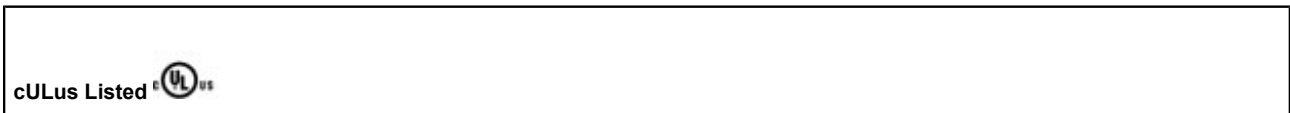
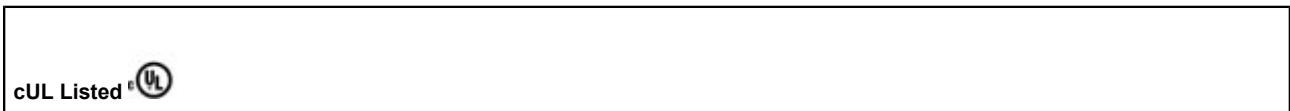
approvals

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

Thermocouple measuring transducer - MINI MCR-TC-UI-NC - 2902851

approvals

Approval details



accessories

Programming adapter

IFS-USB-PROG-ADAPTER - 2811271



DIN rail connector

Thermocouple measuring transducer - MINI MCR-TC-UI-NC - 2902851

accessories

ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - 2869728



Power module

MINI MCR-SL-PTB-FM - 2902958



MINI MCR-SL-PTB-FM-SP - 2902959



Evaluation unit

MINI MCR-SL-FM-RC-NC - 2902961



MINI MCR-SL-FM-RC-SP-NC - 2902962



Thermocouple measuring transducer - MINI MCR-TC-UI-NC - 2902851

accessories

Power supply

MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



System adapter

MINI MCR-SL-V8-FLK 16-A - 2811268



Multiplexer

MINI MCR-SL-MUX-V8-FLK 16 - 2811815



Marking material

MINI MCR DKL - 2308111



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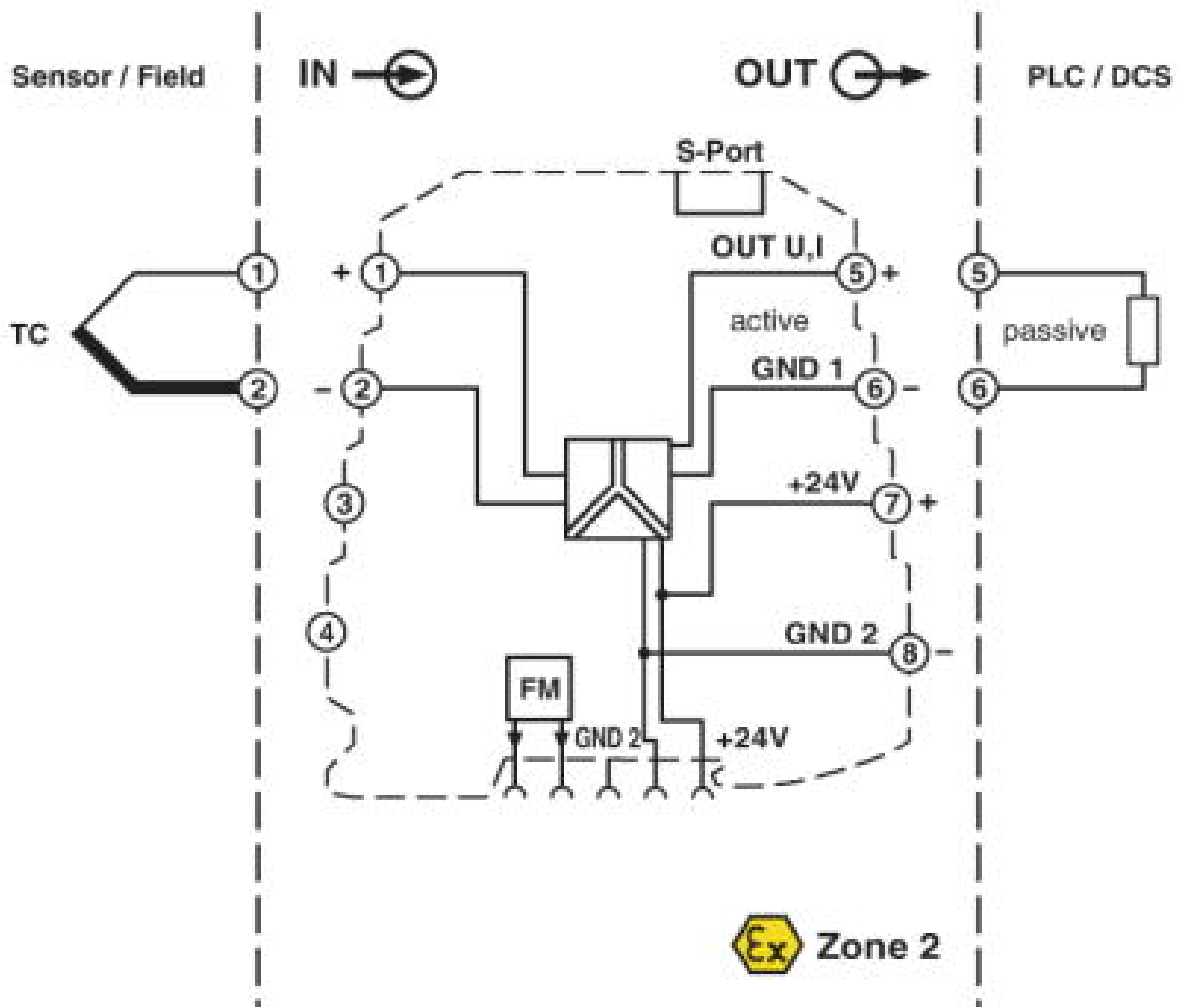
accessories

MINI MCR-DKL-LABEL - 2810272



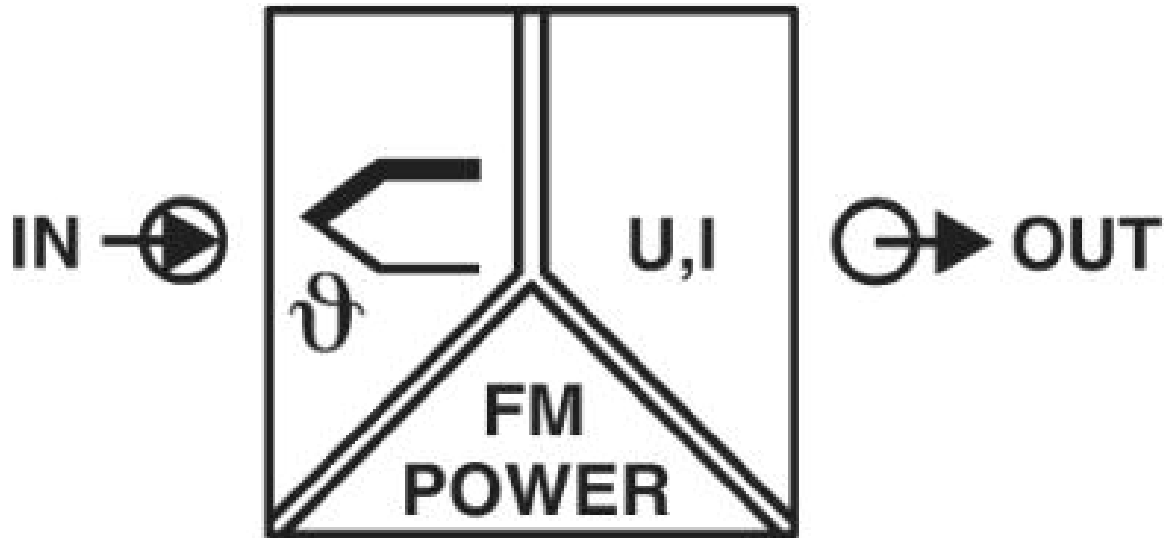
Drawings

Block diagram



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Pictogram



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