

# Temperature measuring transducer - MACX MCR-TS-I-OLP - 2908662


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Output loop-powered temperature transducer, two universal inputs for thermocouples, resistance and voltage sensor, HART communication, freely configurable, installable in Zone 2, SIL 2/3



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 355450
GTIN	4055626355450
Weight per Piece (excluding packing)	171.800 g
Custom tariff number	85437090
Country of origin	Germany

## Technical data

### Dimensions

Width	12.5 mm
Height	99 mm
Depth	114.5 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
	-40 °C ... 70 °C (SIL active)
Ambient temperature (storage/transport)	-40 °C ... 100 °C
Maximum altitude	≤ 4000 m (Above sea level)
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Degree of protection	IP20

### Input data

Sensor types (RTD) that can be used	Pt, Ni, Cu sensors: 2, 3, 4-wire
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## Technical data

### Input data

Sensor types that can be used (TC)	A, B, C, D, E, J, K, L, N, R, S, T, U
Linear resistance measuring range	10 Ω ... 2000 Ω (Minimum measuring span: 10 Ω)
Temperature measuring range	-250 °C ... 2500 °C (Range depending on the sensor type)
	-200 °C ... 850 °C (Pt 100)

### Output data

Configurable/programmable	no
Current output signal	4 mA ... 20 mA
	20 mA ... 4 mA
Max. output current	23 mA

### Power supply

Supply voltage range	12 V ... 42 V (Standard)
	12 V ... 32 V (SIL active)

### Connection data

Connection method	Screw connection
Stripping length	7 mm
Screw thread	M3
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14
Torque	0.5 Nm ... 0.6 Nm

### General

Overvoltage category	II
Degree of pollution	2
Color	gray
Conformance	CE-compliant
ATEX	# II 3G Ex nA IIC T6...T4 Gc
UL, USA/Canada	UL 61010 Recognized
FM approval	NI, Class I, Div. 2, Groups A, B, C, D
CSA	NI / Class I / Div. 2 / ABCD T6/T5/T4

### Standards and Regulations

Conformance	CE-compliant
ATEX	# II 3G Ex nA IIC T6...T4 Gc
UL, USA/Canada	UL 61010 Recognized
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### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
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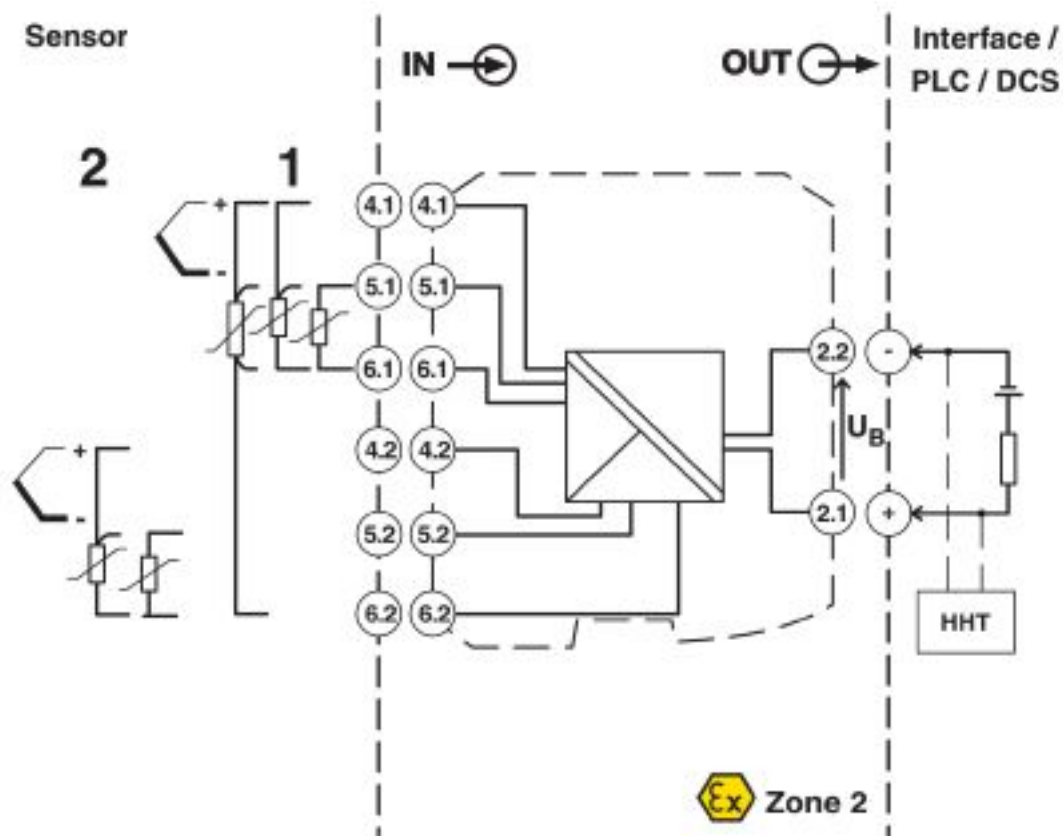
Technical data

Environmental Product Compliance

	No hazardous substances above threshold values
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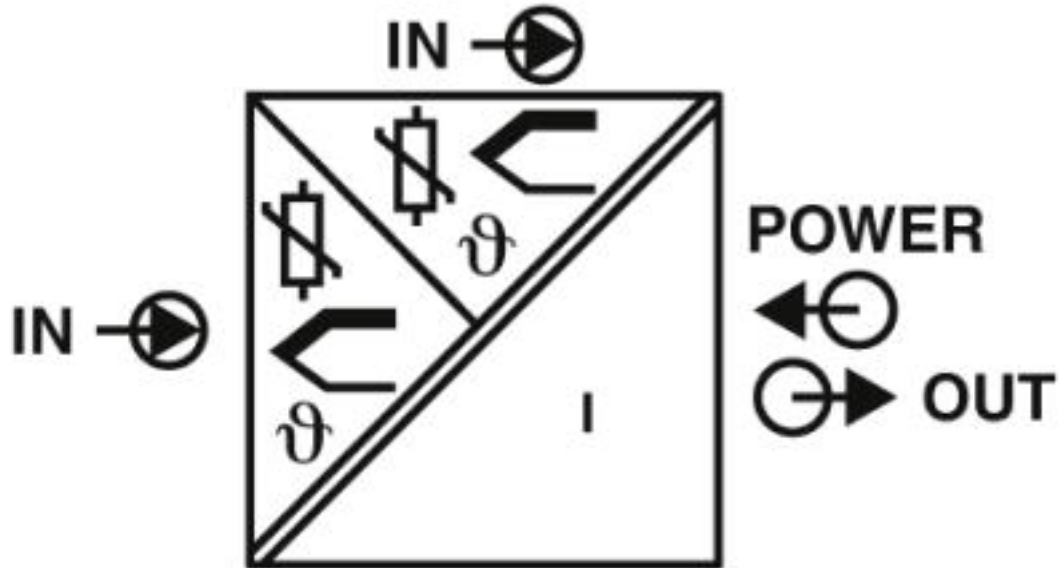
Drawings

Block diagram



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Pictogram



## Classifications

eCl@ss

eCl@ss 4.0	27200200
eCl@ss 4.1	27200200
eCl@ss 5.0	27200200
eCl@ss 5.1	27200200
eCl@ss 6.0	27200200
eCl@ss 7.0	27200206
eCl@ss 8.0	27200206
eCl@ss 9.0	27210129

ETIM

ETIM 2.0	EC001446
ETIM 3.0	EC001446
ETIM 4.0	EC001446
ETIM 5.0	EC001446
ETIM 6.0	EC002919
ETIM 7.0	EC002919

## Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / Functional Safety / EAC / cULus Recognized

# Temperature measuring transducer - MACX MCR-TS-I-OLP - 2908662

## Approvals

Ex Approvals

ATEX / FM approved / CSA

### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 198586
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cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 198586
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Functional Safety	<a href="http://www.tuev-sued.de">http://www.tuev-sued.de</a>	Z10 17 09 29429 006
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EAC		RU C- DE.A*30.B.01082
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cULus Recognized		
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## Accessories

### Accessories

#### Device marking

Plastic label - UC-EMLP (11X9) - 0819291



Plastic label, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 10

Plastic label - UC-EMLP (11X9) YE - 0822602



Plastic label, Sheet, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 10

## Temperature measuring transducer - MACX MCR-TS-I-OLP - 2908662

### Accessories

#### Plastic label - UC-EMLP (11X9) SR - 0828094



Plastic label, Sheet, silver, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 10

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#### Plastic label - US-EMLP (11X9) - 0828789



Plastic label, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 135

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#### Plastic label - US-EMLP (11X9) YE - 0828871



Plastic label, Card, yellow, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 135

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#### Plastic label - US-EMLP (11X9) SR - 0828872



Plastic label, Card, silver, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 135

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#### Device marker - LS-EMLP (11X9) WH - 0831678



Device marker, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 255

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## Accessories

Device marker - LS-EMLP (11X9) YE - 0831732

Device marker, Sheet, yellow, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 255



Device marker - LS-EMLP (11X9) SR - 0831705

Device marker, Sheet, silver, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 255



## Insulating sleeve

Insulating sleeve - MPS-IH BK - 0201731

Insulating sleeve, color: black



Insulating sleeve - MPS-IH GY - 0201728

Insulating sleeve, color: gray



Insulating sleeve - MPS-IH GN - 0201702

Insulating sleeve, color: green



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## Accessories

Insulating sleeve - MPS-IH YE - 0201692

Insulating sleeve, color: yellow



Insulating sleeve - MPS-IH BU - 0201689

Insulating sleeve, color: blue



Insulating sleeve - MPS-IH RD - 0201676

Insulating sleeve, color: red



Insulating sleeve - MPS-IH WH - 0201663

Insulating sleeve, color: white



## Labeled device marker

Plastic label - UC-EMLP (11X9) CUS - 0824547

Plastic label, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: adhesive, lettering field size: 11 x 9 mm





# Temperature measuring transducer - MACX MCR-TS-I-OLP - 2908662

## Accessories

Plastic label - UC-EMLP (11X9) YE CUS - 0824548



Plastic label, can be ordered: by sheet, yellow, labeled according to customer specifications, mounting type: adhesive, lettering field size: 11 x 9 mm

Plastic label - UC-EMLP (11X9) SR CUS - 0828098



Plastic label, can be ordered: by sheet, silver, labeled according to customer specifications, mounting type: adhesive, lettering field size: 11 x 9 mm, Number of individual labels: 10

## Programming adapter

Programming adapter - MCR-PAC-T-USB - 2309000



Programming adapter with USB and T port interface, 2.4 m for programming FA MCR-..., MCR-...-LP-..., and MCR-...-HT-... modules

## Programming cable

Cable adapter - GW HART USB MODEM - 1003824



USB HART modem cable for communication between a PC and HART devices, cable length: 1m.

## Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, color: gray

