

## Resistance/potipotension transducer - MINI MCR-2-POT-UI-PT - 2902017

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Configurable potipotension transducer with plug-in connection technology for connecting potentiometers from 0  $\Omega$  ... 100  $\Omega$  to 0 k $\Omega$  ... 100 k $\Omega$ . Configurable via DIP switch or software. push-in connection technology, standard configuration

### Product description

Configurable, 3-way isolated potentiometer measuring transducer with plug-in connection technology. The measured values are converted into a linear and freely configurable current or voltage signal. You can optionally configure the device using DIP switches or with enhanced functionality via the S port using the standard ANALOG-CONF software via FDT/DTM or without further accessories using the MINI Analog Pro Smartphone app. If it is not possible to utilize the full potentiometer range, you can set the upper and lower potentiometer values in the software. The measuring transducer supports fault monitoring and NFC communication.



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	100.0 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
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#### Dimensions

Width	6.2 mm
Height	110.5 mm
Depth	120.5 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
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## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-40 °C ... 85 °C
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### Input data

Potentiometer	100 Ω ... 100 kΩ
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### Output data

Voltage output signal	1 V ... 5 V (via DIP switch)
	10 V ... 0 V (via DIP switch)
	0 V ... 5 V (via DIP switch)
	0 V ... 10 V (via DIP switch)
	0 V ... 10.5 V (Can be set via software)
Current output signal	0 mA ... 20 mA (via DIP switch)
	4 mA ... 20 mA (via DIP switch)
	20 mA ... 0 mA (via DIP switch)
	20 mA ... 4 mA (via DIP switch)
	0 mA ... 21 mA (Can be set via software)
Max. voltage output signal	approx. 12.3 V
Max. current output signal	24.6 mA
Load/output load voltage output	≥ 10 kΩ
Load/output load current output	≤ 600 Ω (at 20 mA)

### Power supply

Supply voltage	24 V DC
	9.6 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))
Current consumption	33 mA (at 24 V DC)
	68 mA (at 12 V DC)

### Connection data

Single conductor/terminal point, solid, with ferrule, min.	0.14 mm <sup>2</sup>
Single conductor/terminal point, solid, with ferrule, max.	2.5 mm <sup>2</sup>
Single conductor/terminal point, solid, without ferrule, min.	0.14 mm <sup>2</sup>
Single conductor/terminal point, solid, without ferrule, max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, stranded	24
Max. AWG conductor cross section, stranded	12
Stripping length	10 mm
Connection method	Push-in connection

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## Technical data

### General

Maximum transmission error	< 0.1 % (R < 240 Ω = < 0,2 %)
Maximum temperature coefficient	0.01 %/K
Step response (10-90%)	< 60 ms
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Housing material	PBT
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA / Canada	UL 508 Listed
GL	GL applied for

### EMC data

Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Typical deviation from the measuring range final value	0.2 %
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Typical deviation from the measuring range final value	0.4 %
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Typical deviation from the measuring range final value	0.2 %

## Classifications

### eCl@ss

eCl@ss 4.0	27210120
eCl@ss 4.1	27210120
eCl@ss 5.0	27210120
eCl@ss 5.1	27210120
eCl@ss 6.0	27210120
eCl@ss 7.0	27210120
eCl@ss 8.0	27210120

### ETIM

ETIM 3.0	EC001485
ETIM 4.0	EC001446
ETIM 5.0	EC002653

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## Classifications

### UNSPSC

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

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / cULus Listed

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#### Ex Approvals


ATEX / UL Listed / cUL Listed / cULus Listed


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#### Approvals submitted

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### Approval details

UL Listed 

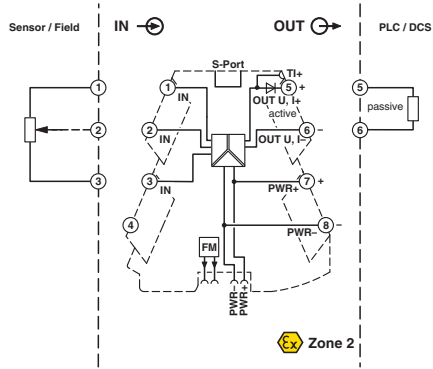
cUL Listed 

cULus Listed 

## Drawings

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Block diagram



Pictogram

