

Resistance/potiposition transducer - MINI MCR-SL-R-UI - 2864095

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MCR potiposition transducer for conversion of potentiometer positions into a standard analog signal, 0 Ω input... 100 Ω to 0 kΩ ... 100 kΩ

Product Description

The slim MINI MCR-SL-R-UI... potiposition transducer has a width of only 6.2 mm and converts potentiometer positions as a percentage to an analog standard signal. If the potentiometer range cannot be utilized to the full, an externally accessible slide switch is used to set the upper and lower potiposition end values. The output signal between 0 and 100% is based on this fixed end value. The DIP switches are accessible on the side of the housing and allow the following parameters to be configured: – Output signal, – Automatic potentiometer detection, – Open circuit detection slider and – Fault evaluation type. Power (19.2 V DC to 30 V DC) can be supplied through connection terminals on the modules or in conjunction with the DIN rail connector.

Product Features

- Power supply possible via the foot element (T-connector)
- Automatic potentiometer detection without manual adjustment
- Error indication via diagnostic LED and analog signal
- For 100 Ω to 100 kΩ potentiometers
- potentiometer signals to create standard signals
- Configurable measuring range and output signals
- Highly-compact potentiometer transducer for electrical isolation, conversion, amplification, and filtering of
- Input and output signals can be configured via DIP switches
- 3-way isolation
- A potentiometer sub-range can be linearized via the "teach-in" switch on the device



Key commercial data

package_quantity	1
GTIN	4046356046442

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

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Technical data

Dimensions

Depth	102.5 mm
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Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Input data

Potentiometer	100 Ω ... 100 kΩ
Reference voltage source	< 3.6 V

Output data

Voltage output signal	0 V ... 5 V
Voltage output signal	0 V ... 10 V
Voltage output signal	1 V ... 5 V
Voltage output signal	10 V ... 0 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. voltage output signal	12.5 V
Max. current output signal	23 mA
Load/output load voltage output	> 10 kΩ
Load/output load current output	< 500 Ω (20 mA)

Power supply

Supply voltage	24 V DC
Supply voltage	19.2 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))
Current consumption	< 25 mA (at 24 V DC)

Connection data

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
Connection method	Screw connection

General

Maximum transmission error	< 0.2 %
Maximum temperature coefficient	< 0.02 %/K

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Technical data

General

Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Housing material	PBT
Color	green
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA / Canada	UL 508 Recognized
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	5 %
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Typical deviation from the measuring range final value	5 %
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Typical deviation from the measuring range final value	5 %

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	27210107
eCl@ss 8.0	27210107

ETIM

ETIM 2.0	EC001485
ETIM 3.0	EC001485
ETIM 4.0	EC001485
ETIM 5.0	EC001485

UNSPSC


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

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approvals

UL Recognized / cUL Recognized / GL / cULus Recognized /

Approval details

UL Recognized 

cUL Recognized 

GL

cULus Recognized 

accessories

DIN rail connector

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



Power module

MINI MCR-SL-PTB - 2864134



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accessories

MINI MCR-SL-PTB-SP - 2864147



Power supply

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



MINI-PS-100-240AC/24DC/1.5/EX - 2866653



System adapter

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



Marking material

MINI MCR DKL - 2308111



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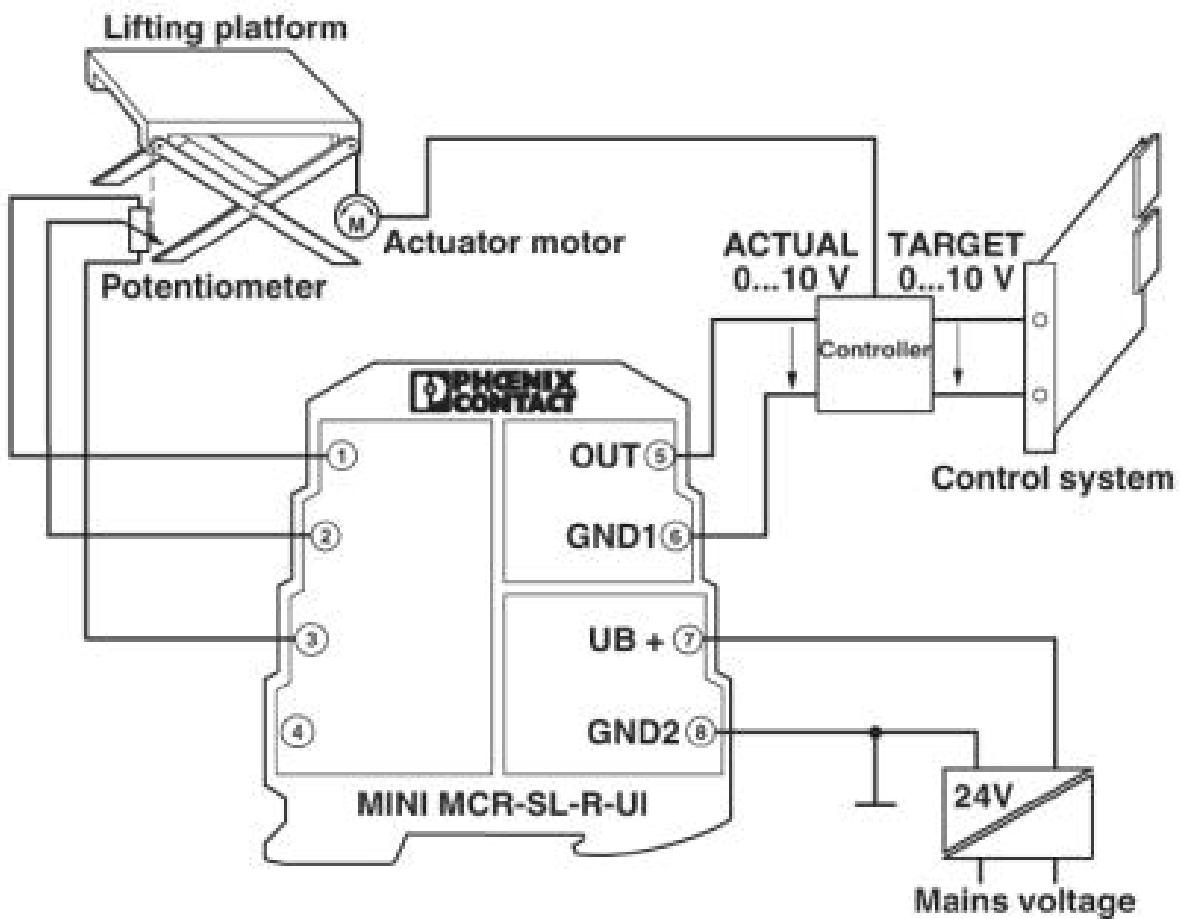
accessories

MINI MCR-DKL-LABEL - 2810272



Drawings

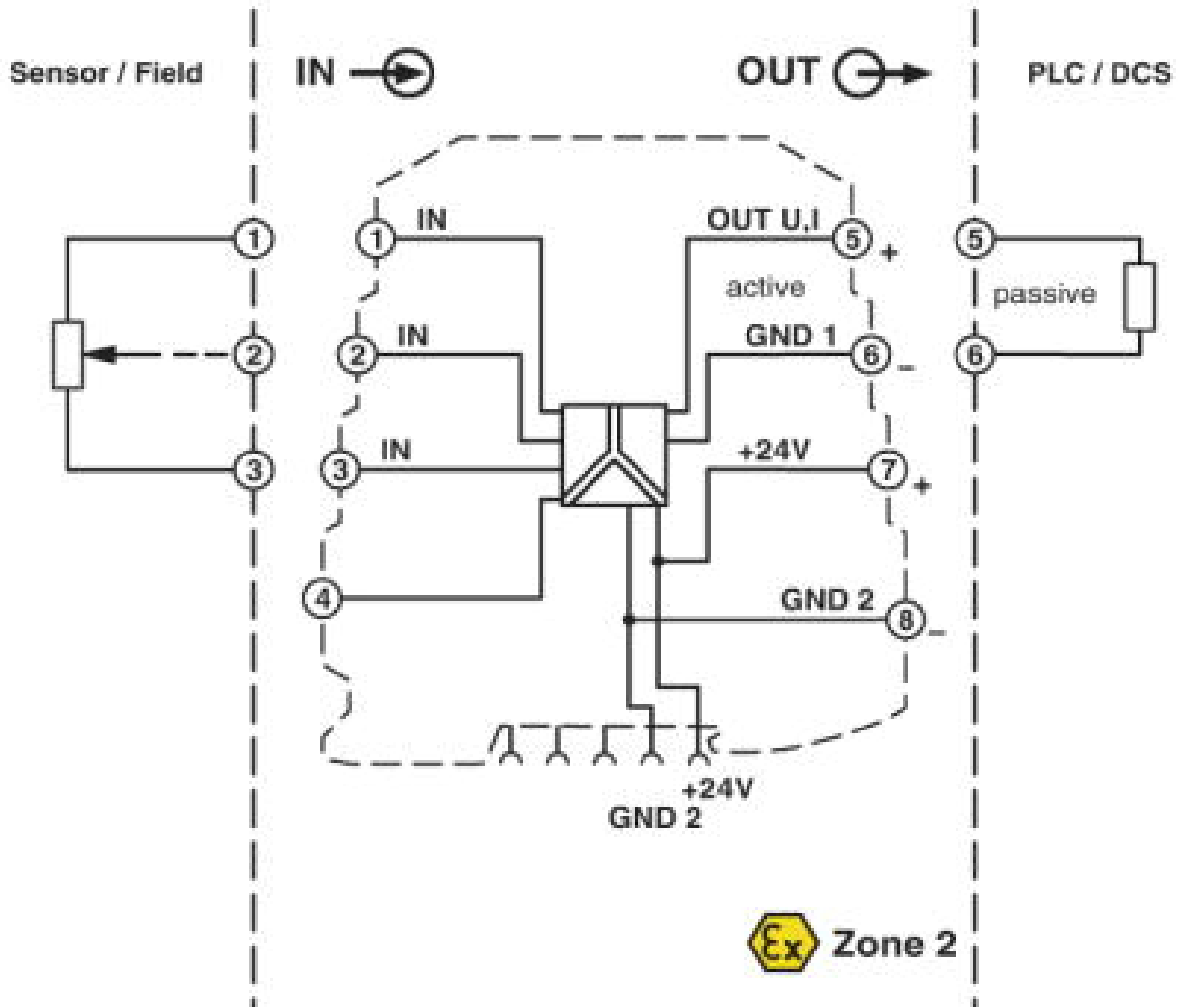
Application drawing



Height adjustment of a lifting platform with setpoint and actual value control

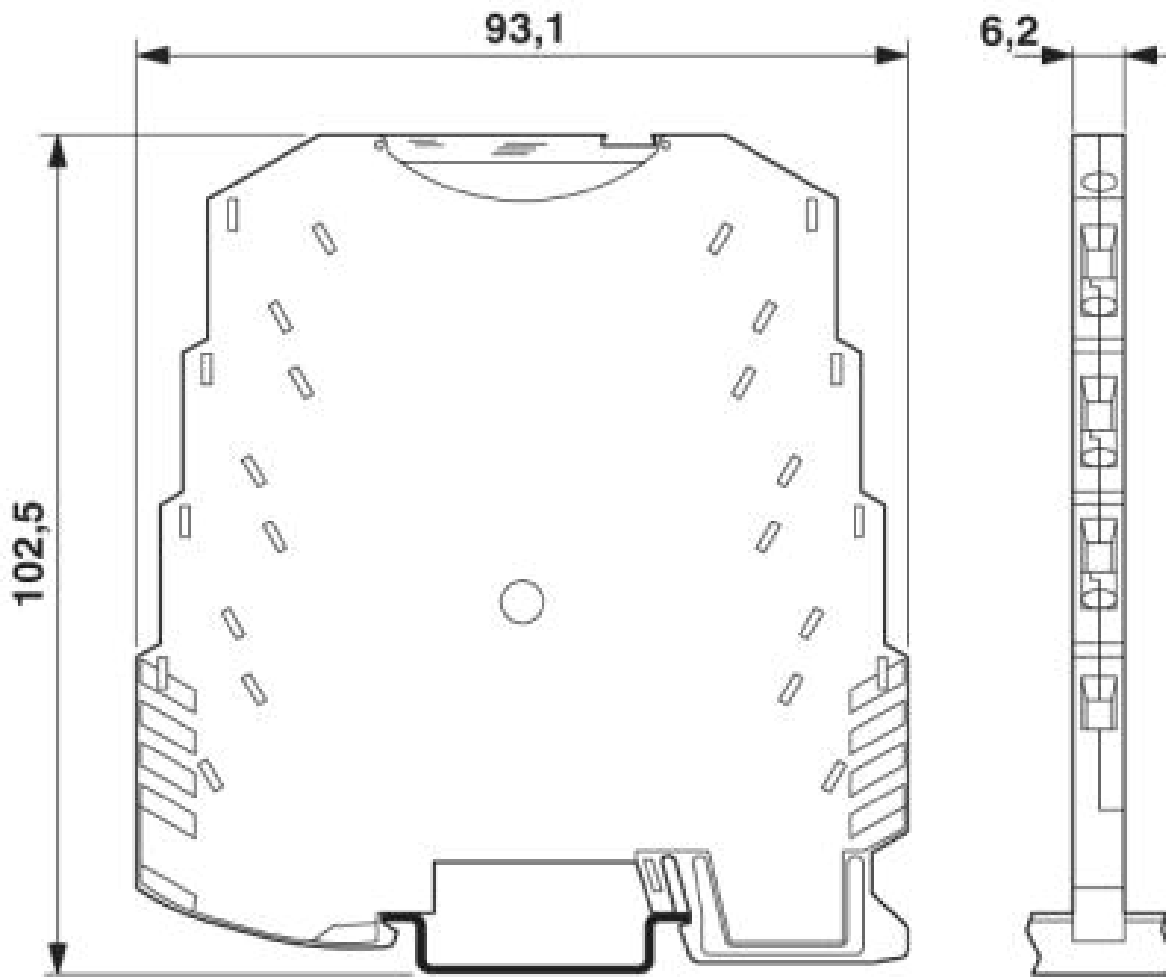
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Block diagram



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Dimensioned drawing



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