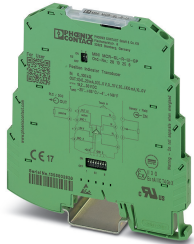


# Resistance/potiposition transducer - MINI MCR-SL-R-UI-SP - 2810256

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The MCR potiposition transducer for converting potentiometer positions to an analog standard signal, input 0 kΩ ... 100 Ω to 0 kΩ ... 100 kΩ. Replacement part: 2902017 MINI MCR-2-POT-UI-PT.

## Your advantages

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



## Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 996079
GTIN	4017918996079
Weight per Piece (excluding packing)	80.000 g
Custom tariff number	85437090
Country of origin	Germany

## Technical data

### Dimensions

# Resistance/potipotension transducer - MINI MCR-SL-R-UI-SP - 2810256

## Technical data

### 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
Maximum altitude	≤ 2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Degree of protection	IP20
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.

### Input data

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

### Output data

Voltage output signal	0 V ... 5 V
	1 V ... 5 V
	0 V ... 10 V
	10 V ... 0 V
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
	20 mA ... 0 mA
	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

Nominal supply voltage	24 V DC
Supply voltage range	19.2 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))
Typical current consumption	< 25 mA (at 24 V DC)
Power consumption	< 500 mW

### Connection data

Connection method	Spring-cage connection
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## Technical data

### Connection data

Stripping length	8 mm
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 ... 12

### General

Maximum transmission error	< 0.2 %
Maximum temperature coefficient	< 0.02 %/K
Temperature coefficient, typical	< 0.02 %/K
Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Housing material	PBT
Color	green

### 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 %

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Connection in acc. with standard	CUL
Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
	EN 61000-4-4
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Electrical isolation	Basic insulation according to EN 61010

### Conformance/approvals

Designation	CE
Certificate	CE-compliant

# Resistance/potiposition transducer - MINI MCR-SL-R-UI-SP - 2810256

## Technical data

### Conformance/approvals

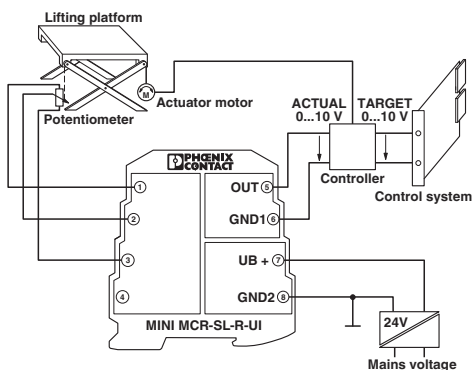
Designation	ATEX
Identification	# II 3 G Ex nA IIC T4 Gc X
Designation	UL, USA/Canada
Identification	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D T4
Designation	Shipbuilding approval
Identification	BBBAA
Certificate	DNV GL TAA00000N1

### Environmental Product Compliance

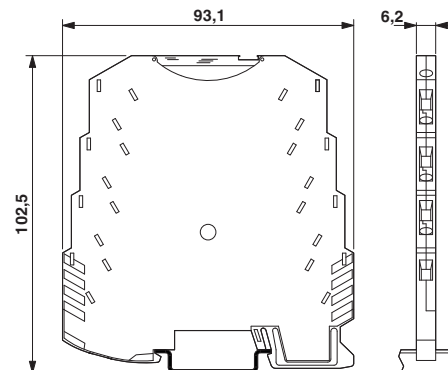
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Application drawing



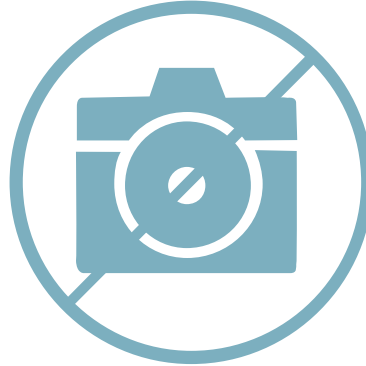
Dimensional drawing



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

# Resistance/potiposition transducer - MINI MCR-SL-R-UI-SP - 2810256

Block diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27210120
eCl@ss 11.0	27210120
eCl@ss 4.0	27210100
eCl@ss 4.1	27210100
eCl@ss 5.0	27210100
eCl@ss 5.1	27210100
eCl@ss 6.0	27210100
eCl@ss 7.0	27210120
eCl@ss 9.0	27210120

### ETIM

ETIM 4.0	EC002653
ETIM 6.0	EC002653
ETIM 7.0	EC002653

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008
UNSPSC 18.0	39121008
UNSPSC 19.0	39121008
UNSPSC 20.0	39121008
UNSPSC 21.0	39121008

## Resistance/potiposition transducer - MINI MCR-SL-R-UI-SP - 2810256

### Accessories

#### Accessories

##### DIN rail connector

DIN rail bus connectors - ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - 2869728



DIN rail connector for DIN rail mounting. Universal for TBUS housing. Gold-plated contacts, 5-pos.

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##### Power module

Power terminal block - MINI MCR-SL-PTB - 2864134



MCR power terminal block for supplying several MINI Analog modules via the DIN rail connector, with screw connection, maximum current consumption of up to 2 A

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Power terminal block - MINI MCR-SL-PTB-SP - 2864147



MCR feed-in terminal for supplying several MINI Analog modules via a DIN rail connector, with spring-cage connection, maximum current consumption of up to 2 A. Replacement part: 2902067 MINI MCR-2-PTB-PT.

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##### Power supply

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



Primary-switched MINI POWER supply for DIN rail mounting, input: 1-phase, output: 24 V DC/1.5 A

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## Resistance/potiposition transducer - MINI MCR-SL-R-UI-SP - 2810256

### Accessories

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



Primary-switched power supply MINI POWER for DIN rail mounting, input: 1-phase, output: 24 V DC/1,5 A, for the potentially explosive area