

## Repeater power supply - MACX PL-RPSSI-2I-SP - 2904962

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Measuring transducer power supply and input signal conditioner, HART-transparent. Transfers supplied or active 4 - 20 mA electrically isolated signals from the field to two loads. 4-way electrical isolation, PLd

The figure shows a version with a screw connection

### Product Features



### Key commercial data

Packing unit	1 pc
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	12.5 mm
Height	99 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C (Any mounting position)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Maximum altitude	≤ 2000 m
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.

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## Technical data

### Ambient conditions

Degree of protection	IP20
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### Input data

Signal input	Repeater power supply operation
Current input signal	4 mA ... 20 mA
Transmitter supply voltage	> 21.5 V (20 mA)
	> 21 V (23 mA)
Signal input	Signal conditioner operation
Current input signal	4 mA ... 20 mA
Voltage drop	< 3.9 V

### Output data

Signal output	Repeater power supply operation
Current output signal	4 mA ... 20 mA (active)
Load/output load current output	< 450 Ω (20 mA)
	< 380 Ω (23 mA)
Output ripple	< 20 mV <sub>rms</sub>
Output behavior in the event of an error	0 mA (Cable break in the input)
	≥ 23 mA (Cable short-circuit in the input)
Signal output	Signal conditioner operation
Current output signal	4 mA ... 20 mA (active)
Load/output load current output	< 450 Ω (20 mA)
	< 380 Ω (23 mA)
Output ripple	< 20 mV <sub>rms</sub>
Output behavior in the event of an error	0 mA (Cable break in the input)
	≥ 23 mA (Cable short-circuit in the input)

### Power supply

Designation	Repeater power supply operation
Supply voltage range	19.2 V DC ... 30 V DC (24 V DC (-20% ... +25%))
Max. current consumption	< 75 mA (24 V DC)
Power consumption	< 1.45 W (24 V DC/ 20 mA)

### Connection data

Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section AWG min.	24

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### Technical data

#### Connection data

Conductor cross section AWG max.	16
Stripping length	8 mm
Connection method	Push-in connection

#### General

Maximum transmission error	< 0.1 % (of final value)
Transmission error, typical	< 0.05 % (of final value)
Maximum temperature coefficient	< 0.01 %/K
Step response (10-90%)	< 1.3 ms (for 4 mA ... 20 mA step)
Status display	Green LED (PWR supply voltage)
Inflammability class according to UL 94	V0
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Housing material	PA 66-FR
Color	yellow
Designation	Input/output/power supply
Electrical isolation	300 V <sub>rms</sub> (Rated insulation voltage (surge voltage category II; pollution degree 2, safe isolation as per EN 61010-1))
	2.5 kV (50 Hz, 1 min., test voltage)
Designation	Output 1/output 2
Electrical isolation	1.5 kV AC (50 Hz, 1 min., test voltage)
Conformance	CE-compliant, additionally EN 61326
ATEX	# II 3 G Ex nA IIC T4 Gc X

#### Data communication (bypass)

HART function	Yes
Protocols supported	HART

#### EMC data

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

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## 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 2.0	EC001485
ETIM 3.0	EC001485
ETIM 4.0	EC001485
ETIM 5.0	EC002653

### 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 / GL / cULus Listed

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Ex Approvals

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Approvals submitted

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Approval details

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## Approvals

UL Listed

cUL Listed

GL

cULus Listed

## Drawings

