

## Repeater power supply - MINI MCR-2-RPSS-I-2I-PT - 2905629


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4-way power supply doubler with plug-in connection technology. HART transparent, 0(4) ... 20 mA input signal, 0(4)...20 mA output signals. The device can be used in both isolator and repeater power supply mode on active as well as passive analog input cards. Push-in connection technology.



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 999441
GTIN	4046356999441

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

#### Input data

Description of the input	Current input (sensor circuit)
Number of inputs	1
Current input signal	4 mA ... 20 mA (repeater power supply and isolator operation)
	0 mA ... 20 mA (isolator operation)
Input resistance current input	90 Ω (+ 1.6 V)

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## Technical data

### Input data

Transmitter supply voltage	> 19.5 V
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### Output data

Output name	Current output
Number of outputs	2
Current output signal	4 mA ... 20 mA (repeater power supply and isolator operation)
	0 mA ... 20 mA (isolator operation)
Max. output current	25 mA
Load/output load current output	≤ 500 Ω (per channel)
Ripple	< 20 mV <sub>PP</sub> (at 500 Ω)
Transmission Behavior	1:1 to input signal

### Power supply

Nominal supply voltage	24 V DC
Supply voltage range	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))
Typical current consumption	40 mA (at 24 V DC and in isolator operation)
	65 mA (at 24 V DC and in repeater power supply operation)
	75 mA (at 12 V DC and in isolator operation)
	130 mA (at 12 V DC and in repeater power supply operation)
Power consumption	1.6 W (at I <sub>OUT</sub> = 20 mA, 500 Ω load)

### Connection data

Connection method	Push-in connection
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 flexible min.	0.14 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	24
Max. AWG conductor cross section, flexible	12
Stripping length	10 mm

### General

No. of channels	2
Maximum transmission error	0.05 % (of final value)
Maximum temperature coefficient	0.0075 %/K
Limit frequency (3 dB)	> 1 kHz (typ.)
Step response (10-90%)	< 400 μs (typ.)
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Overvoltage category	II

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## Technical data

### General

Degree of pollution	2
Rated insulation voltage	300 V
Test voltage, input/output/supply	3 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	gray
Housing material	PBT
Mounting position	any
Assembly instructions	The T connector can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715.
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X
UL, USA/Canada	UL 508 Listed
	Class I, Div. 2, Groups A, B, C, D T5
	Class I, Zone 2, Group IIC T5
GL	GL applied for
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2

### Data communication (bypass)

Limit frequency (3 dB)	approx. 1 kHz
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### EMC data

Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Standards/regulations	EN 61000-4-2
Designation	Electromagnetic RF field
Standards/regulations	EN 61000-4-3
	EN 61000-4-4
	EN 61000-4-5
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6

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## Technical data

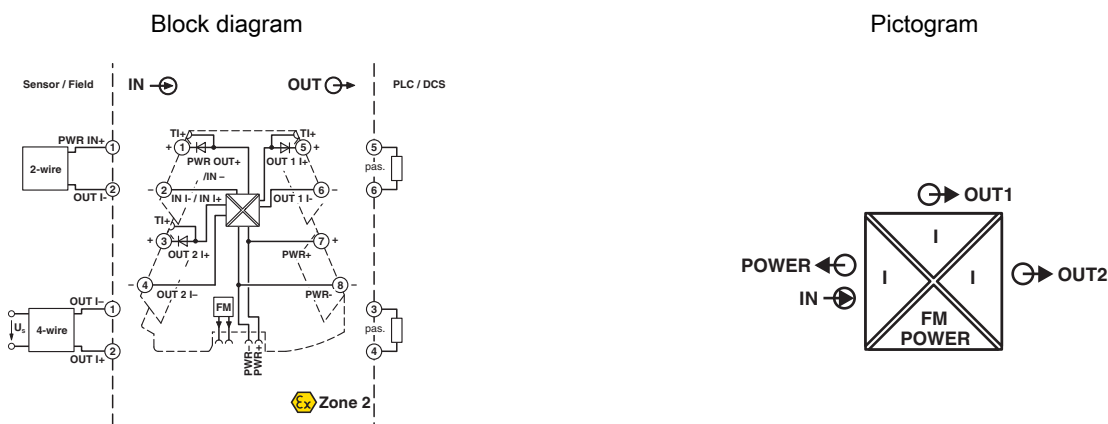
### Standards and Regulations

Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
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Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 2 HL 1 - HL 2 HL 1 - HL 2
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 2 HL 1 - HL 2 HL 1 - HL 2

### Environmental Product Compliance

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

## Drawings



## Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

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### Approvals


Ex Approvals

UL Listed / cUL Listed / cULus Listed

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#### Approval details

UL Listed		<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 238705
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cUL Listed		<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 238705
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cULus Listed		<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>	
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