

MACX MCR-SL-RPSSI-I-SP

Order No.: 2924207




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Repeater power supply and input isolating amplifier, HART. Transfers supplied or active 0/4 - 20 mA signals to a load (active or passive). 3-way electrical isolation, SIL 2 according to IEC 61508.



Commercial data

GTIN (EAN)	 4 046356 448338
sales group	H550
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 384 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
03/24/2009



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Technical data

Input data

Current input signal	0 mA ... 20 mA
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	4 mA ... 20 mA
Transmitter supply voltage	> 16 V (at 20 mA)
Voltage drop	< 3.5 V (in input isolating amplifier operation)

Output data

Signal output	Current output
Current output signal	0 mA ... 20 mA (active)
	4 mA ... 20 mA (active)
	0 mA ... 20 mA (14 ... 26 V ext. source voltage)
	4 mA ... 20 mA (14 ... 26 V ext. source voltage)
Transmission Behavior	1:1 to input signal
Load/output load current output	< 600 Ω
Output ripple	< 20 mV _{rms}

Power supply

Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	< 60 mA (at 24 V DC)
Power consumption	< 1.1 W (at 24 V DC / 20 mA)

Connection data

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Connection method	Spring-cage conn.

General data

No. of channels	1
Maximum transmission error	< 0.1 % (of final value)
Transmission error, typical	< 0.05 % (of final value)
Maximum temperature coefficient	< 0.01 %/K
Ambient temperature (operation)	-20 °C ... 60 °C (Any mounting position)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Permissible humidity (operation)	10 % ... 95 % (no condensation)

Step response (10-90%)	< 600 µs (for 4 mA ... 20 mA step)
Status display	Green LED (supply voltage)
Width	12.5 mm
Height	99 mm
Depth	114.5 mm
Inflammability class acc. to UL 94	V0
Pollution degree	2
Surge voltage category	II
Housing material	PA 66-FR
Degree of protection	IP20
Color	green
Electrical isolation input / output / supply	2.5 kV (50 Hz, 1 min., test voltage)
Electrical isolation input / output	375 V (Peak value in accordance with EN 60079-11)
Electrical isolation input / supply	375 V (Peak value in accordance with EN 60079-11)
Conformance	CE-compliant, additionally EN 61326
ATEX	Ex II 3 G Ex nA II T4 X
UL, USA / Canada	UL applied for
Functional safety (SIL)	SIL 2 according to EN 61508

Data communication (bypass)

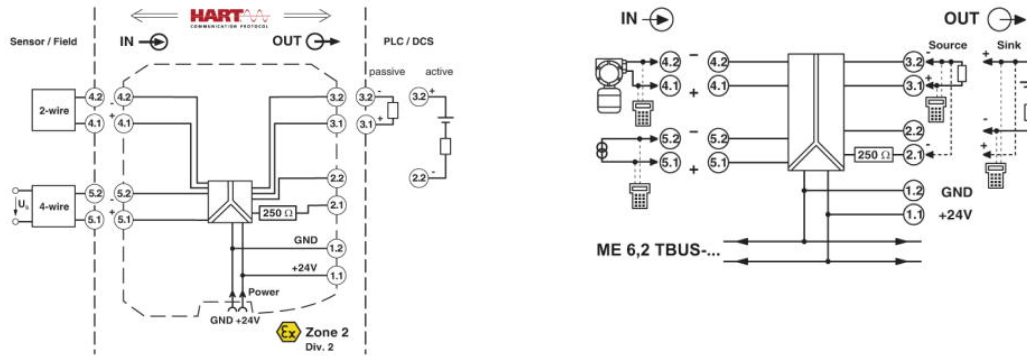
HART function	Yes
Protocols supported	HART

Certificates / Approvals

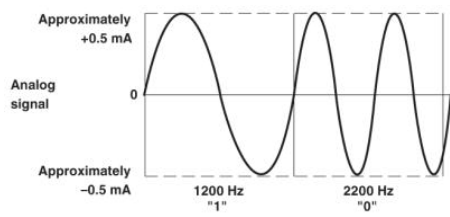
Certification Ex:	PxC-EX
Certifications applied for:	UL Listed / CUL Listed

Diagrams/Drawings

Block diagram

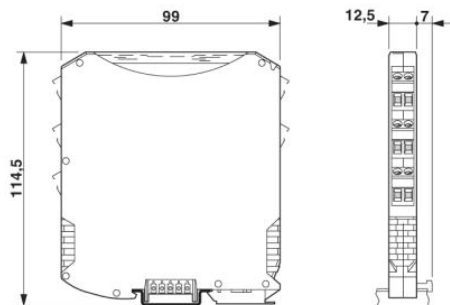


Diagram



Signal transmission analog and digital at the same time

Dimensioned drawing



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