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MSI 20mA

4-20mA Current input adapter

Technical Reference Manual

v 2.0

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1 Technical data

1.1 Electrical specifications

Input current	4mA – 20mA
Shunt resistor	50.000 Ω, Metal Foil
Resistance Tolerance	±0.01%
Temperature Coefficient	±0.05ppm/ºC typical (0ºC to +60ºC) ±0.2ppm/ºC typical (-55ºC to +125ºC MIL Range)
Power Rating	250mW (1)
TEDS	1024-Bit, 1-Wire EEPROM

(1) Do not exceed absolute maximum rating!

1.2 Connection

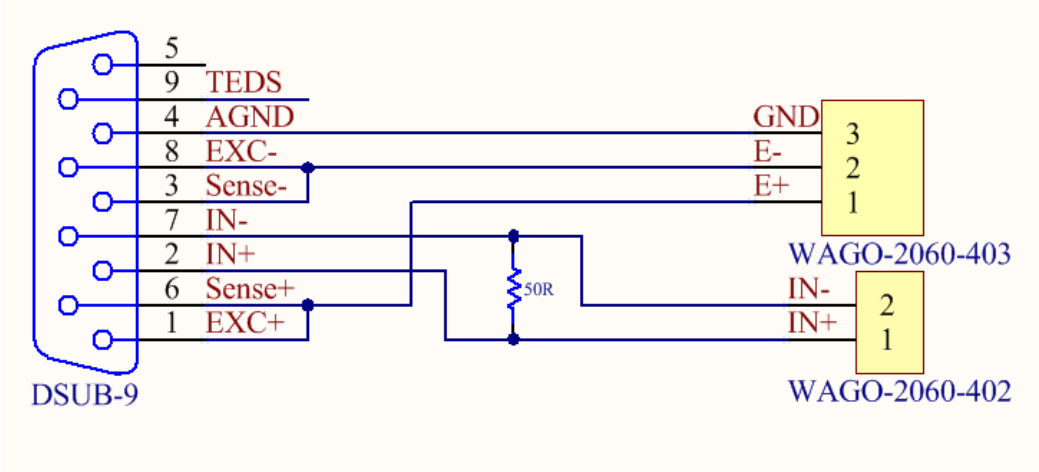

Illustration 1: Schematic connection

1.3 Connectors

1.3.1 Input connector pinout

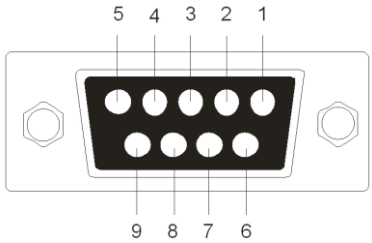

Illustration 2: 9 pin DSUB male

1	EXC + connected to Sense +
2	IN +
3	Sense -
4	AGND
5	Not Connected
6	Sense +
7	IN -
8	EXC - connected to Sense -
9	TEDS

1.3.2 Output connector pinout

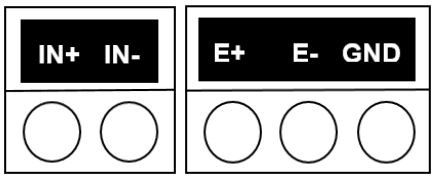

Illustration 3: 2 and 3 pin Surface Mount Terminal Strips with Push-Buttons

E+	EXC +
E-	EXC -
GND	AGND
IN+	IN +
IN-	IN -

Illustration 4: 3 pin Surface Mount Terminal Strips with Push-Buttons

1.4 Assembly

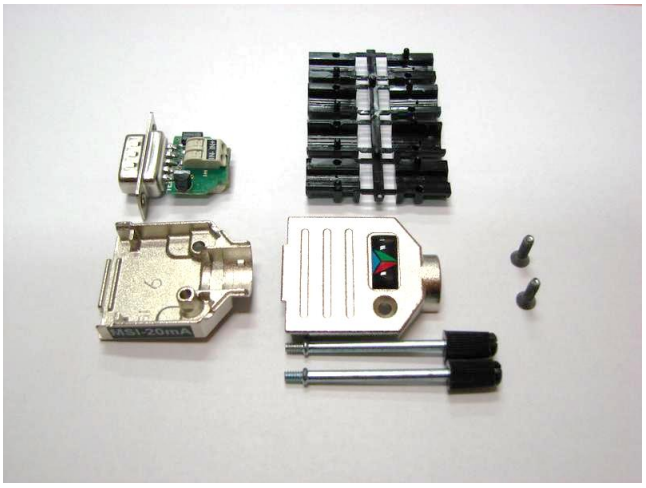

Illustration 5: MSI 20mA bundle content

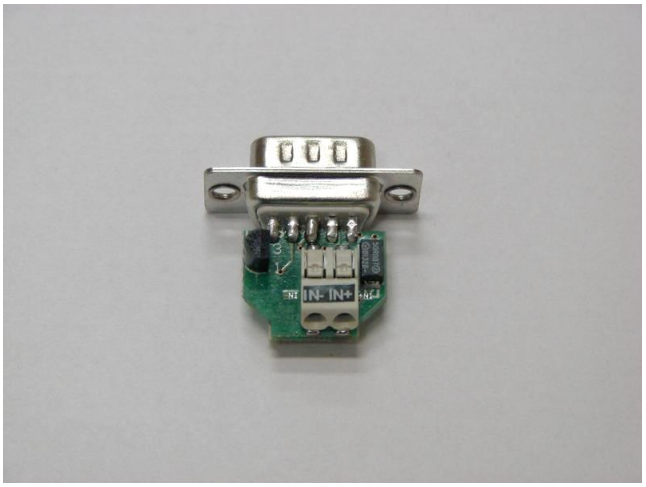

Illustration 6: MSI 20mA top assembly

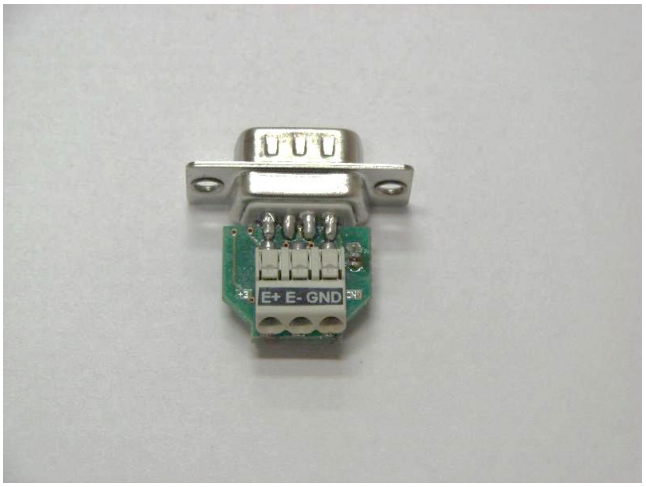

Illustration 7: MSI 20mA bottom assembly

2 Documentation Version

Doc-Version	Date [dd.mm.yyyy]	Notes
0.9	17.1.2014	Initial version (JK)
1.0	21.8.2014	Added schematic connection(ŽK)
2.0	15.12.2014	New header logo, specs revised (JK)