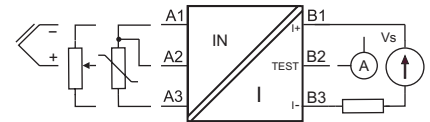
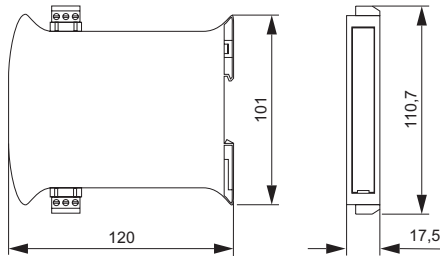


- Resistance input - Pt100, Ni100, Cu100, Pt1000, Ω , potentiometer.
- Voltage input - B, J, K, N, R, S, mV
- Current output 4...20 mA (current loop).
- Galvanic separation input/output.
- Sensor break signalization.
- All sensors linearization.
- High reliability and accuracy.
- Detachable, fast and reliable wire connectors.
- Slim, rail and fast click mounted housing.
- Special versions on request.



The LXT-811-D transducer converts temperature from an input sensor to the output current signal 4...20mA. A device works as a current loop regulator with galvanic separation between an input sensor and the output. The LXT-811-D is self powered from the current loop. A device assures cold junction compensation (if thermocouple is connected as input signal) or it makes input wire resistance compensation (if resistive element is connected). Front jumpers allow for easy and comfortable setting all parameters: sensor type, operating range, compensation and sensor break signalization. There is possibility to deliver device for non-standard signals on demand.



CJC: 0°C	1	1 SB: MAX
CJC: AUTO	0	0 SB: MIN
INPUT		
	ON	
	1 2 3 4 5 6 7 8 9 10	ON 1
		OFF 0
-50...100°C	→ 0 0 0 0	0 0 0 0 ← J
-50...50°C	→ 0 0 0 1	0 0 0 1 ← K
0...50°C	→ 0 0 1 0	0 0 1 0 ← N
0...100°C	→ 0 0 1 1	0 0 1 1 ← S
0...150°C	→ 0 1 0 0	0 1 0 0 ← R
0...200°C	→ 0 1 0 1	0 1 0 1 ← B
0...300°C	→ 0 1 1 0	0 1 1 0 ← Pt100
0...400°C	→ 0 1 1 1	0 1 1 1 ← Ni100
0...500°C	→ 1 0 0 0	1 0 0 0 ← Cu100
0...600°C	→ 1 0 0 1	1 0 0 1 ← Pt1000
0...800°C	→ 1 0 1 0	1 0 1 0 ← mV (= °C/10)
0...1000°C	→ 1 0 1 1	1 0 1 1 ← Ω (= °C)
0...1200°C	→ 1 1 0 0	1 1 0 0 ← Potentiometer
0...1400°C	→ 1 1 0 1	1 1 0 1 ← Ω (= °C)
0...1600°C	→ 1 1 1 0	1 1 1 0 ← Ω (= °C)
SPECIAL	→ 1 1 1 1	1 1 1 1 ← SPECIAL

SB - Sensor Break
 CJC - Cold Junction Compensation
 SPECIAL - on request



Input

■ Pt100, Ni100, Cu100, Pt1000 resistance, potentiometer	0...1600Ω
■ J, K, N, S, R, B, voltage	-5...140mV
■ sensor current	~ 0.35mA
■ input line resistance	≤ 10Ω/wire
■ input line resistance variation influence	≤ 0.005%/Ω
■ voltage source internal resistance	≤ 1kΩ
■ voltage source internal resistance variation infl.	≤ 0.1%/kΩ

Output

■ output signal	4...20mA
■ permissible load resistance (RI)	see load diagram
■ load variation influence	≤ 0.03%
■ sensor break indication	3.7mA or 22mA

General data

■ basic accuracy (larger value)	≤ 0.1%
- resistance input / accuracy (range) /	0.1Ω (200Ω); 0.13Ω (400Ω); 0.16Ω (800Ω); 0.2Ω (1600Ω)
- voltage input / accuracy (range) /	10μV (35mV); 13μV (75mV); 16μV (150mV)
■ response time (10...90%)	≤ 1s
■ cold junction compensation (CJC)	≤ 0.5°C
■ galvanic separation (test)	1.5kV AC, 50Hz, 1min
■ warm up time	15min

Power supply

■ supply voltage (Vs)	10...30V DC
■ supply voltage variation influence	≤ 0.03%
■ permissible ripple	≤ 4V _{pp} , 50Hz

Temperature

■ operating temperature	0...70°C
■ temperature influence	≤ 0.01%/°C
■ temperature influence for CJC	≤ 0.1%/°C

Environment conditions

■ storage temperature	-20...85°C
■ humidity (non-condensing)	≤ 90%
■ working position	any

Housing

■ material	molded PC/ABS
■ protection housing/terminals	IP20/IP20
■ wire connections	plugs with screw terminals 1.5 mm ²
■ dimensions	see drawings on the first page
■ weight	~ 100g

Diagrams

