

## Type

# Rail mounted temperature transducer

# LXT - 811 - D

## Features

- Resistace input - Pt100, Ni100, Cu100, Pt1000,  $\Omega$ , 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.



## Description

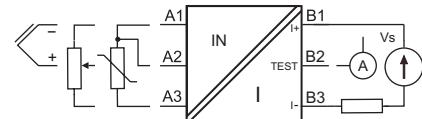
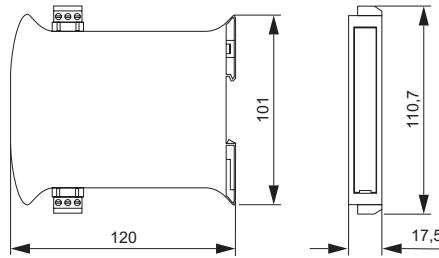
The LXT-811-D transducer converts temperature from an input sensor to the output current signal 4...20mA. A device works as a current loop regulator with galvanic separation between an input sensor and the output. The LXT-811-D is self powered from the current loop.

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.

## Dimm. / Connect.



## Programming

CJC: 0°C 1	1 SB: MAX
CJC: AUTO 0	0 SB: MIN
INPUT	
<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
1 2 3 4 5 6 7 8 9 10	
-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 ← $\Omega$ (= °C) 0...1200°C → 1 1 0 0      1 1 0 0 ← Potentiometer 0...1400°C → 1 1 0 1      1 1 0 1 ← $\Omega$ (= °C) 0...1600°C → 1 1 1 0      1 1 1 0 ← $\Omega$ (= °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) - resistance input / accuracy (range) /	≤ 0.1%
- voltage input / accuracy (range) /	0.1Ω (200Ω); 0.13Ω (400Ω); 0.16Ω (800Ω); 0.2Ω (1600Ω)
■ response time (10...90%)	10µV (35mV); 13µV (75mV); 16µV (150mV)
■ cold junction compensation (CJC)	≤ 1s
■ galvanic separation (test)	≤ 0.5°C
■ warm up time	1.5kV AC, 50Hz, 1min
	15min

## **Power supply**

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

## **Temperature**

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

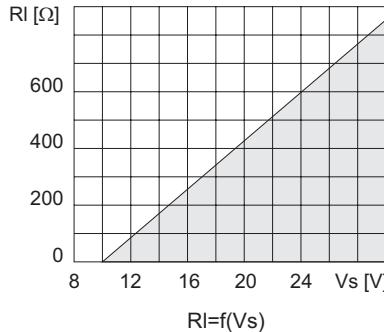
## **Environment conditions**

■ 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 <sup>2</sup>
■ dimensions	see drawings on the first page
■ weight	~ 100g

## **Diagrams**



# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for Board Mount Temperature Sensors category:***

***Click to view products by SSA manufacturer:***

Other Similar products are found below :

[5962-8757102XA](#) [66F115](#) [MCP9808-EMS](#) [MCP98242T-BEMNY](#) [MCP9843T-BEMC](#) [EMC1063-1-ACZL-TR](#) [NCT218FCT2G](#)  
[O53GAB175A-160Y](#) [OH10/62,112](#) [3610085020002](#) [389049M9527](#) [TC622EAT](#) [TC6501P095VCTTR](#) [TC6501P105VCTTR](#)  
[TC6501P125VCTTR](#) [MCP9802A0T-M/OT](#) [MCP9803T-M/SN](#) [MCP9843-BEST](#) [TC6501P115VCTTR](#) [TC6502P065VCTTR](#)  
[ADM1023ARQZ-REEL](#) [ADM1024ARUZ-REEL](#) [ADM1032ARMZ-1RL](#) [AT30TS74-U1FMBB-T](#) [AT30TS74-U1FMAB-T](#) [AT30TS74-U1FMCB-T](#) [AT30TS74-U1FMDB-T](#) [ADT7483AARQZ-RL](#) [ADT7481ARMZ-REEL](#) [ADT7463ARQZ-REEL](#) [MCP98243T-BEMNY](#)  
[MCP98243T-BE/MC](#) [66L080-0226](#) [MAX31820MCR+T](#) [MAX1452CAEC8H](#) [DS1780E](#) [TMP05BKSZ-REEL7](#) [5962-8757103XA](#) [WTK-14-36/N](#) [E52-CA6D-N 4M](#) [MCP98244T-BEMNY](#) [MCP9802A5T-MOT](#) [MAX6581TG9A+T](#) [DS75S-C11+T&R](#) [S-58LM20A-I4T1U](#)  
[MAX6501UKP120+T](#) [MCP98243T-BE/ST](#) [AT30TS01-MAA5M-T](#) [NCT375DR2G](#) [DS18S20-SL+T&R](#)