Type

Rail mounted temperature transducer

LXU - 811

Features

- 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.
- Single or dual independent channels.
- Detachable, fast and reliable wire connectors.
- Slim, rail and fast click mounted housing.
- Special versions on request.

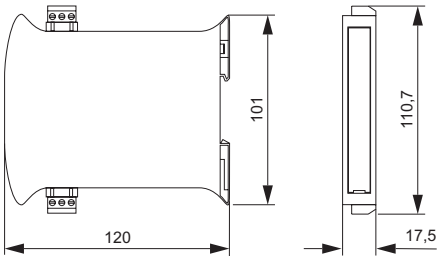
3 years warranty

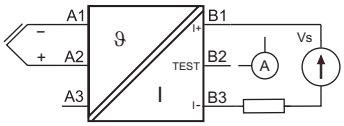
CE

Description

The LXU-811 transducer converts temperature from the thermocouple B, J, K, N, R, S, T type or mV signal 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. LXU-811 is self powered from the current loop.
A device assures cold junction compensation for all thermocouples.
There is possibility to deliver device for non-standard signals on demand.

Dimm. / Connect.





Ordering

Order LXU-811 using the following code:

LXU - 811 - □□□□□ (- □□□□□) *

Input sensor		
	Standard thermocouple	J
		K
		N
		R
		S
		B
		T
	Voltage (mV)	V
	On request	X

0	Min	Sensor break indication
1	Max	
A	Auto	Cold junction compensation CJC
0	0°C	

		Input span
0	1	-50...50°C
0	1	0...50°C
0	2	0...100°C
0	3	0...150°C
0	4	0...200°C
0	5	0...250°C
0	6	0...300°C
0	7	0...400°C
0	8	0...500°C
0	9	0...600°C
1	0	0...800°C
1	1	0...1000°C
1	2	0...1200°C
1	3	0...1400°C
1	4	0...1600°C

Notes:
1. If input signal is voltage, specify required span.
2. (...)*Order code for channel 2 specify as per channel 1.

Revision : ENG1V04

Specifications

Input

J, K, N, S, R, B, voltage	-35...150 mV
voltage source internal resistance	≤ 1kΩ
voltage source internal resistance variation infl.	≤ 0.1%/kΩ

Output

output signal	4...20 mA (may be inverted)
permissible load resistance (Rl)	see load diagram
load variation influeance	
sensor break indication	3.7mA or 22 mA

General data

basic accuracy	≤ 0.1%
- or larger value / 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...30 VDC
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

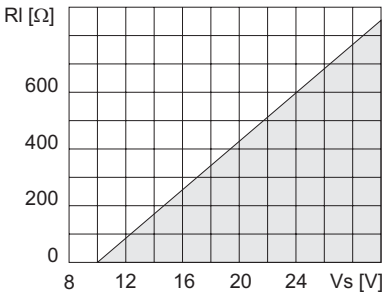
Environment conditions

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 (single / dual channel)	~ 100g / 140g

Diagrams



Rl=f(Vs)