Type

Rail mounted temperature transducer

LXR - 811

Features

- Resistace input - Pt100, Ni100
- Current output 4...20 mA (current loop).
- Galvanic separation input/output.
- Sensor break signalization.
- Pt100 linearization.
- High reliability and accuracy.
- Detachable, fast and reliable wire connectors.
- Slim, rail and fast click mounted housing.
- Single or dual independent channels.
- Special versions on request.

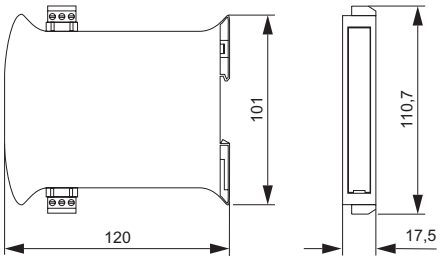
3 years warranty

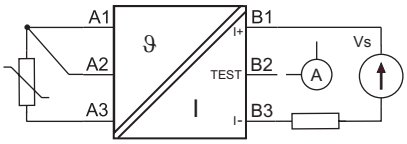
CE

Description

The LXR-811 transducer converts temperature from the input sensor Pt100 / Ni100 to the output signal 4...20mA. A device works as a current loop regulator with galvanic separation between the input sensor and the output. The LXR-811 is self powered from the current loop.
A device assures input wire resitance compensation for 3 wires connection.
The LXR-811 can operate with almost any resistive sensor but only for Pt100 (Ptxxx) is linearized .
There is possibility to deliver device for non-standard signals on demand.

Dimm. / Connect.





Ordering

Order LXR-811 using the following code:

Channel 1 — Channel 2

LXR - 811 - □□□□ - □□□□

Input sensor	Pt100	P		
	Ni100	N		
Input span Pt100 and Ni100	-50... 50°C	0	1	
	0... 50°C	0	2	
	0...100°C	0	3	
	0...150°C	0	4	
Input span Pt100 only	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	
Sensor break signalization	Min			0
	Max			1

Notes :
1. Single channel version - specify only channel 1, eg. *LXR - 811 - P030.*
2. Order code for channel 2 specify as per channel 1.

Revision : ENG1V08

Specifications

Input

Pt100, Ni100	-50...800°C
sensor current	~ 0.5mA
input line resistance	≤ 100Ω/wire
input line resistance variation influence	≤ 0.005%/Ω

Output

output signal	4...20mA
permissible load resistance (Rl)	see load diagram
load variation influeance	≤ 0.03%
sensor break indication	
- max	22...30mA
- min	≤ 3.6mA

General data

basic accuracy	≤ 0.1%
- span ≥ 600°C	≤ 0.2%
response time (10...90%)	≤ 0.2s
galvanic separation (test)	1.5kV AC, 50Hz, 1min
warm up time	15min

Power supply

supply voltage (Vs)	9...30V DC
supply voltage variation influence	≤ 0.03%
permissible ripple	≤ $4V_{pp}$, 50Hz

Temperature

operating temperature	0...70°C
temperature influence	≤ 0.005%/°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	headers with screw terminals 1.5mm^2
dimensions	see drawings on the first page
weight (single / dual channel)	~ 100g / 140g

Diagrams