Type

Rail mounted temperature transducer

LXR - 800

Features

- Resistace input Pt100, Ni100
- Output 0...20mA or 0...10V.
- 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.

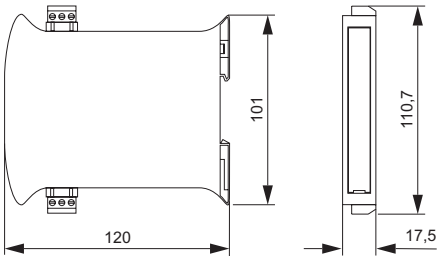
3 years warranty

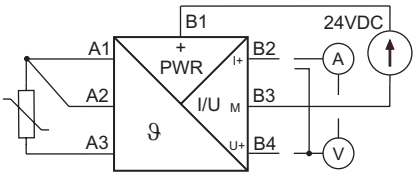
CE

Description

The LXR-800 temperature transducer converts temperature from the input sensor Pt100 / Ni100 to the output signal 0...20mA. Built-in, high precision resistor 500Ω allows for easy conversion current signal 0...20mA to the voltage 0...10V.
A device assures input wire resitance compensation for 3 wires connection.
The LXR-800 can operate with almost any resistive sensor but only Pt100 (Ptxxx) is linearized.
There is possibility to deliver device for non-standard signals on demand.

Dimm. / Connect.





Ordering

Order LXR-800 using the following code:

Channel 1 — Channel 2

LXR - 800 - □□□□ - □□□□

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 - 800 - P030.*
2. Order code for channel 2 specify like for 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	
- current	0...20mA
- voltage (built-in resistor 500Ω, 0.1%)	0...10V
permissible load resistance	
- current output	≤ 500Ω
- voltage output	≥ 1MΩ
load variation influeance	
- current output	≤ 0.15%
- voltage output	≤ 0.05%
sensor break indication	
- max	22mA...30mA or 11...15V
- min	0mA or 0V

General data

basic accuracy	≤ 0.1%
- span ≥ 600°C	≤ 0.2%
response time (10...90%)	≤ 0.2 s
warm up time	15min

Power supply

supply voltage	
- nominal	24V DC
- supply voltage range	20...30V DC
supply current	≤ 30mA
supply voltage variation influence	≤ 0.03%

Temperature

operating temperature	0...70°C
temperature influence	≤ 0.01%/°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 1.5mm^2
dimensions	see drawings on the first page
weight (single / dual channel)	~ 80g / 110g