Rail mounted temperature transducer

LXT - 81U - S

- ■ All parameters programmable.
- ■ Resistace input - Pt100, Ni100, Cu100, Pt1000, Ω, potentiometer.
- ■ Voltage input - B, J, K, N, R, S, mV
- ■ Current output 0...5 mA, 0...20 mA, 4...20 mA.
- ■ Voltage output 0...5 V, 0...10 V.
- ■ Galvanic separation input/output.
- ■ Sensor break signalization.
- ■ All sensors linearization.
- ■ High reliabilty and accuracy.
- ■ Detachable, fast and reliable wire connectors.
- ■ Slim, rail and fast click mounted housing.
- ■ Special versions on request.

3 years warranty

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LXT-81U-S

http://www.ssa.pl   e-mail : office@ssa.pl

The LXT-81U-S temperature transducer converts temperature from an input sensor to the output signal 0...5mA, 0...20mA, 4...20mA, 0...5V or 0...10V with galvanic separation between an input sensor and the output.
A device assures cold junction compensation (if thermocouple is connected as input signal) or it makes input wire resitance compensation (if resistive element is connected).
LXTconfig software is dedicated for setting sensor type, measurment range, sensor break signalization, output signal, fine calibration and it allows to define custom sensor characteristic.
There is possibility to deliver device for non-standard signals on demand.
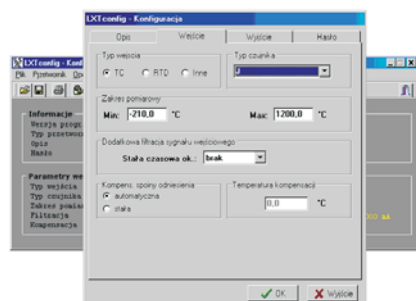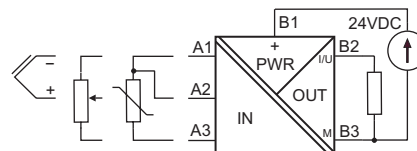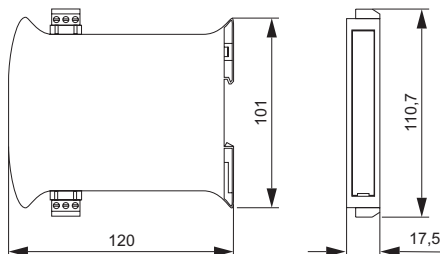
LXTconfig is a software dedicated for easy configuration of the device.
It runs on PC computer and requires Windows operating system.
Features of the software:
- easy menu,
- read current configuration of a device,
- read/write configuration setting from/to a file,
- configuration printout,
- password (optional) against any changes,
- input signal simulation (monitor mode),
- data logging to a file in the CSV format (easy import into MS Excel),
- graphical chart logged data,
- chart printout.

Order LXT-81U-S using the following code:

LXT - 81U - S

AUTOMATION
AND INDUSTRIAL ELECTRONIC

http://www.ssa.pl   e-mail : ssa@ssa.pl

Input
- Pt100, Ni100, Cu100, Pt1000,
  resistance, potentiometer — 0...1600Ω
- J, K, N, S, R, B, voltage — -35...150mV
- sensor current — ~ 0.35mA
- input line resistance — ≤ 10 Ω/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 — 0...20mA, 0...10V (may be inverted)
  - subranges — 0...5mA, 4...20mA, 0...5V (may be inverted)
- load resistance
  - current output — ≤ 500Ω
  - voltage output — ≥ 10kΩ
- load variation influeance — ≤ 0.05%
- sensor break indication — 0...22mA / 0...11V

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
  - nominal — 24V DC
  - supply voltage range — 20...30V DC
- supply current — ≤ 35mA
- supply voltage variation influence — ≤ 0.03%

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 1.5mm^2
- dimensions — see drawings on the first page
- weight — ~ 100g

Programming accessories:
1. Configuration software LXTconfig.
   LXTconfig allows for configuration and calibration of a device. The newest version may be downloaded from www.ssa.pl. Software is free of charge.
2. Converter RS232/LXT.
   Converter is used for communication between PC and devices like LXT and SXT.

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