

Čapkova 22
678 01 Blansko
tel.: +420 516 416942, 419995
fax: +420 516 416963

Isolated digital converter communicating over RS-485

- input for DC current, voltage, thermocouple
- designed for DIN 35 rail mounting
- input and output are isolated
- conversion accuracy < 0.1%
- ASCII or MODBUS/RTU protocol

The module has been designed to convert DC analog input signal to engineering units and transmit in our ASCII protocol or MODBUS/RTU to RS485 with 2400 - 19200 Bd. This modul can measure temperature from thermocouple, voltages or currents. All user selectable options (address, baud rate, linearization...) are done through the communication port.
Modul PXL212 has input isolation 2kV

TECNICAL DATA

- input: thermocouple: J, T, K, E, N, L, S, R, B, C, D, G
0..24mA
0..15V
±120mV
0..300V
- operating temperature range: -25...+70°C
- supply voltage: 8..28V DC
- accuracy: measurement error: < 0.1%
temperature induced error: <0.05%/10K
- enclosure: casing / terminal board: IP40 / IP10
- dielectric strength: 3750Vr.m.s.
- termination RS485 ("idle" state): 39kΩ
- linearization: for selection thermocouple
- cold junction compensation: -25..70°C ± 1°C

Termocouple	Range	Accuracy
Fe-Ko L DIN 43 710	-25..+900°C	0,10%
Fe-Ko J EN 60 584	-210..+1200°C	0,10%
Cu-Ko T EN 60 584	-270..+400°C	0,10%
NiCr-Ni K EN 60 584	-270..+1372°C	0,10%
NiCr-Ko E EN 60 584	-270..+1000°C	0,10%
NiCrSi-NiSi N EN 60 584	-270..+1300°C	0,1% od -130°C
Pt10Rh-Pt S EN 60 584	-50..+1768°C	0,15% od 0°C
Pt13Rh-Pt R EN 60 584	-50..+1767°C	0,15% od 0°C
Pt30Rh-Pt6Rh B EN 60 584	0..+1820°C	0,15% od 400°C
W3Re-W25Re D	0..+2495°C	0,15% od 500°C
W5Re-W26Re C	0..+2320°C	0,15%
W-W26Re G	0..+2315	0,15% od 500°C

Factory setting: 19200 Bd, 8N1, MODBUS: 19200 8E1

ASCII adres A – input 1 to 3
adres B – input 4 to 6

MODBUS adres 01 – input 1 to 3
adres 02 – input 4 to 6

input 4-6 has even adress (B,D.....,2,4....)

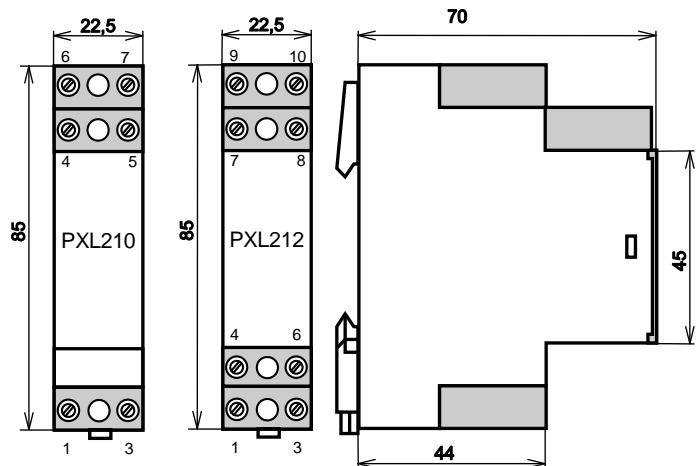
Terminal connection - for PXL210:

- 4(B),5(A) output
6(-),7(+) DC power supply terminals (7 is +),
1(-), 3(+) input

Terminal connection - for PXL212:

- 7(B),8(A) output
9(-),10(+) DC power supply terminals (10 is +),
1(-), 3(+) input 1
4(-), 6(+) input 2

The terminals accept wires with cross sections not exceeding 2.5 mm².



Ordering instructions:

The device has a fixed factory setting. The input signal type and range cannot be changed. The protocol setting is fixed, too. This information must therefore be included in your purchase order. Your purchase order should include: converter type, input signal type and range, protocol, number of pieces. Special requirements must be discussed with us beforehand.

- Examples: PXL210, 0..60mV, MODBUS/RTU, 2 pcs.
PXL210, 0..500V, ASCII, 1 pc.
PXL210, Termocouple K, MODBUS/RTU, 3 pcs.
PXL210, 0..24mA, MODBUS/RTU, 6 pcs.

Type tests:

- Basic type test: - in compliance with ČSN EN 60770-1
EMC: - in compliance with ČSN EN 61326-1
Safety: - in compliance with ČSN EN 61010-1

