

Isolated digital converter communicating over RS-485

- input for DC current, voltage, thermocouple and PXL310 also RTD
- 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 (PXL310 also RTD), voltages or currents. All user selectable options (address, baud rate, linearization...) are done through the communication port. Modul PXL312 has input isolation 2kV

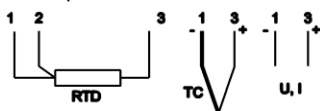
TECNICAL DATA

- input:
 - termocouple: J, T, K, E, N, L, S, R, B, C, D, G
 - 0..24mA
 - 0..15V
 - ±120mV
 - 0..300V
- PXL310: Pt100, Pt1000, 0..2kΩ
- operating temperature range: -25...+80°C
- supply voltage: 8..28V DC
- accuracy: measurement error: < 0.1%
- temperature induced error: <0.02%/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
- factory setting:
 - ASCII: 19200 Bd, 8N1, address: A
 - MODBUS/RTU: 19200 Bd, 8E1, address: 1
 - input 4-6 has even address (B,D,2,4)

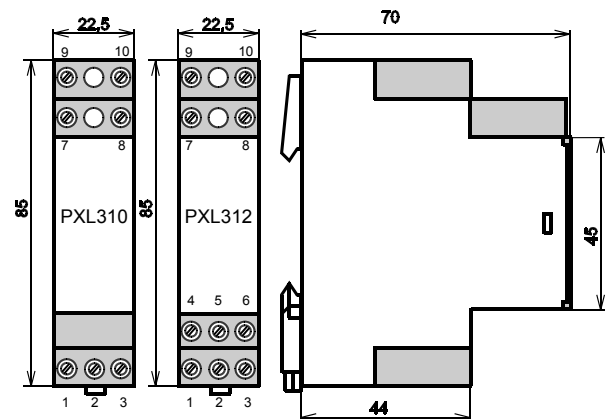
Termocouple	Range	Accuracy
Fe-Ko L DIN 43 710	-25..+900°C	0,10%
Fe-Ko J EN 60 584	-210..+1200°C	0,10%
Cu-Ko T EN 60 584	-270..+400°C	0,10%
NiCr-Ni K EN 60 584	-270..+1372°C	0,10%
NiCr-Ko E EN 60 584	-270..+1000°C	0,10%
NiCrSi-NiSi N EN 60 584	-270..+1300°C	0,1% od -130°C
Pt10Rh-Pt S EN 60 584	-50..+1768°C	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

Terminal connection for PXL310:

- 4(B),5(A) output
- 6,7 DC power supply terminals (7 is +),
- 1, 2, 3 input



The terminals accept wires with cross sections not exceeding 2.5mm².
For PXL312 simalary



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: PXL310, 0..60mV, MODBUS/RTU, 2 pcs.
PXL310, 0..500V, ASCII, 1 pc.
PXL310, Termocouple K, MODBUS/RTU, 3 pcs.
PXL310, 0..24mA, MODBUS/RTU, 6 pcs.

Type tests:

- Standard type test: by ČSN EN 660770-1
- EMC: by ČSN EN 61326-1
- Safety: by ČSN EN 61010-1

