

PROGRAMMABLE TRANSMITTER

PP210

- The transmitter is engineered to convert the measured standard signal such is temperature, resistance transmitter or thermocouple.
Output signal is standard linearized 4..20mA without isolation.
- The converter is designed onto the 35 mm DIN rail.
- Transmitter can be programmed via PC program (range and linearization) PP212 is double transmitter PP210 with one another isolation 1kV



Technical data

- input:
 - thermometer: Pt100 (-200...+610°C), Pt1000 (-200...+500°C) dle IEC 751 Ni100, 1000 TKR 5000 or 6180 ppm/K (-60..180°C)
 - potentiometer, resistance: 0..50, 100, 105, 250, 500, 1000, 10 000, 5..105 Ω
 - thermocouple: E, J, K, T, R, S, B, N, L, C, D, G, F
 - thermistor: KTY81, NTC 10k, 15k, 20k, 25k
 - DC current: 0..24mA
 - DC voltage: 0..15V, ±120mV
- cold junction compensation: -30..70°C ± 1°C (Pt10 0)
- accuracy: measurement error: < 0.1%
- temperature induced err: <0.02%/10K
- connection circuit: 3wire, thermocouple - 2wire
- sensor lead resistance: < 10 Ω /1 wire
- input filter: 0 .. 30 s
- sampling rate: < 50ms
- output current limiting: min. < 3,5 mA, max > 22
- burden (Rb) $R_b = (U_b - 8V) / 22mA$
- output: 4...20mA
- supply voltage: 8...30V DC
- ambient temperature: -40..80°C
- relative humidity: 95%, no condensation
- IP code: housing:IP40, terminal strip:IP10
- screw terminal: ≤ 1.75mm²;
- accessories: PK-USB, PC setup program

Type tests:

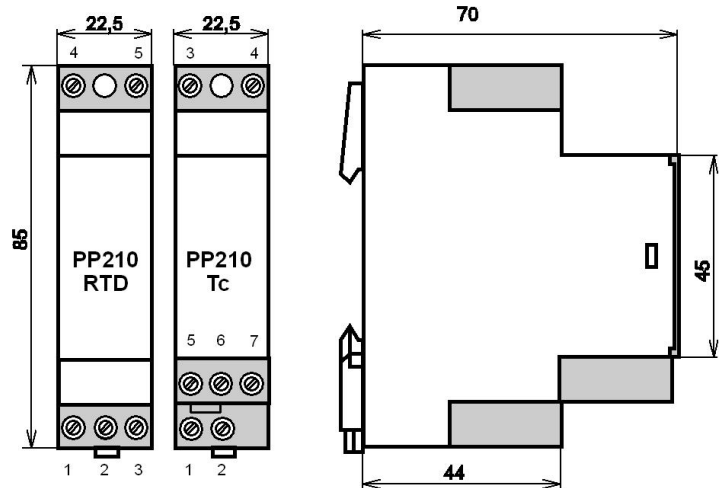
- Standard type test: to ČSN EN 60770-1 ed.2
- EMC: to ČSN EN 61326-1
- Safety: assessed acc. to ČSN EN 61010-1

A DC converter purchase order should include:

- converter type: PP210 or PP212
- number of units: 10
- programmable: yes or type and input range
e.g. Pt100; 0 ..120°C, filter 0,5s

- examples:** PP210; 10pcs; Pt100; -20..80°C; filter 1s
 PP210; 1pc; TC „K“, 0..500°C; filter 0,8s
 PP210; 20pcs; Tc, programmable (all Thermocouples)
 PP210; 20pcs; R, programmable (potenciometr, RTD, without thermistor...)
 PP210; 13pcs; thermistor NTC10k, filter 1s
 PP210; 5pcs; potentiometer, 0..1kΩ, filter 0,1s
 PP210; 5pcs; resistance, 0..100Ω, filter 0,1s

Dimension drawing PP210
Connector is under cover



Terminal connection:

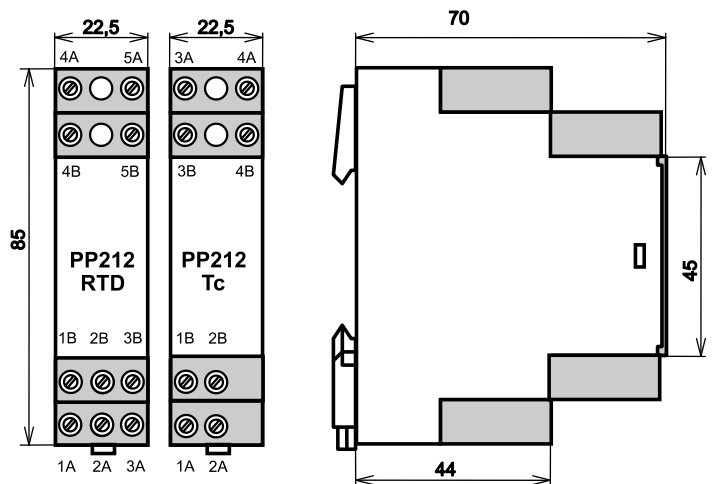
PP210 (RTD):

- 1,2,3...input
- 4,5 ...output 4..20mA

Thermocouple:

- 1,2...input Tc (1 +)
- 3,4...output
- 5,6...internal compensation
- 5,7...external compensation

Dimension drawing PP212
Connector is under cover



PP212 (RTD):

- 1A,2A,3A...input of transm. 1
- 1B,2B,3B...input of transm. 2
- 4A,5A.....output of transm. 1
- 4B,5B.....output of transm. 2

thermocouple:

- 1A,2A..... Tc input of transm. 1 (1 +)
- 1B,2B.....Tc input of transm. 2(1 +)
- 3A,4A.....output of transm. 1
- 3B,4B.....output of transm. 2

without external compensation - only internal compensation

PP210 / 212 : output current loop – any polarity

Connection diagram:

