

Converter for a resistor sensor TPt/I-7

DESCRIPTION:

The converter TPt/I-7 is assigned for signal processing from the resistor temperature sensor Pt100. A resistor compensation of incoming wires is ensure by three-wires connection. The output signal is current 4 ~ 20 mA, lineary with temperature and is assigned for longer distance transfer. An interrupting or short of the sensor is indicated by increase or decrease of output current out of range. The converter is working as passive transmitter in a current loop. The converter output is for it's power supply as well. Circuits of the converter are produced for wall mounting. The power supply of the converter must connected from safety supply by ČSN EN 61 010 - 1.

TECHNICAL DATES:

Power supply: 10 ~ 36 VDC
 Input signal: resistor sensor Pt100 by IEC 751/A2
 Connection of Pt100: three wires
Measurement range: 0 ~ 150°C
 Output signal: 4 ~ 20 mA
 at sensor short: < 2,4 mA
 at sensor interrupting: about 25 mA

Errors by CSN IEC 770:

basic: < 0,1 %
 hysteresis: < 0,02 %
 repeating: < 0,015 %
 linearity: < 0,08 %

Temperature dependence: < 0,01 % / °C

Voltage dependence: < 0,02 % / 1 V

Load resistance influence: < 0,02 % / 100 W

Long-term stability and converter drift: < 0,003 % / 500 hours

Calibration: at 25°C and 40 % r.h.

Electromagnetic compatibility:

Electrostatic discharge resistance ČSN EN 61000 - 4 - 2, class 3, 8 kV

Electromagnetic poles resistance ČSN EN 61000 - 4 - 3, class 3, 10V/m, error ± 1 %

Bursts resistance ČSN EN 61000 - 4 - 4, class 4, 4 kV

Type: DIN rail

Protection: IP 20

Weight: 0,08 kg

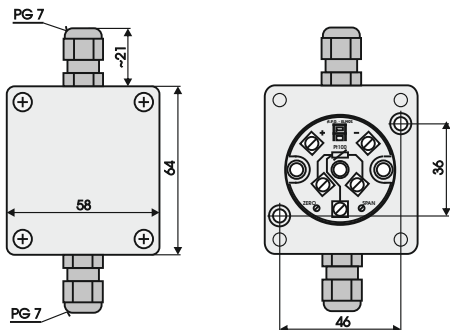
Working temperature: -20 ~ 70°C

Steady time: till 15 minutes after switch-on

Mounting position: arbitrary

Connection: terminal block, wire cross section up 2,5 mm²

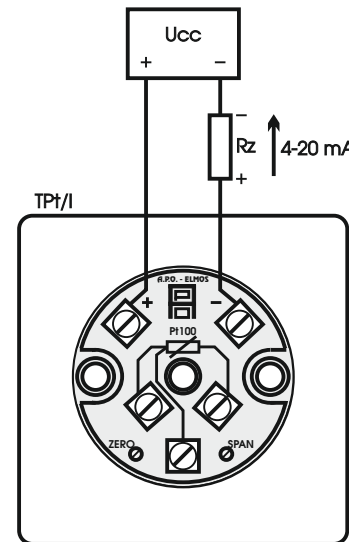
DIMENSION:



Spacing of holes for wall mouting

December 2014, TD-P-07-407

CONNECTION:



$$R_{max} = (U_{cc} - 10) / 0,02 (W)$$

$$U_{cc} = 10 \text{ až } 36 \text{ VDC}$$

$$R_{max} = R_z + R_v$$

R_z - load rezistor

R_v - line rezistance

CERTIFICATE ABOUT THE PRODUCT ASSEMBLY AND QUALITY:

The Converter TPt/I - 7

product no.:

14-07-23487

GUARANTEE AND SERVIS CONDITIONS:

The producer answers that his product has characters appointed technical norms for appointed time. That is complete and without defects. The producer also answers for defects which a customer find out in the guarantee time and which he claim in the time.

The guarantee time is 24 months from the date of sale.

The guarantee is possible to apply at material defects or at bad function of product. When is a defect's product sent to repair is necessary to protect this product agains damage during transport.

The guarantee is dissolved as long as the product were arrangements achieved or as long as the product were vilently mechanical damage or with wrong using.

Guarantee and after guarantee servis perform entirely A.P.O. - ELMOS.

Stamp

Date of sale:

Signature:

