TEMPERATURE TRANSMITTER MP4201

Programmable temperature transmitter type MP4201 is used for mounting in terminal head form B (acc. to DIN 43729). It enables the 2-, 3- or 4-wire connection of Pt100 or Pt1000 temperature sensors. MP4201 transmits the resistance of temperature sensors (Pt100 or Pt1000) to standard current output 4...20mA.

Programming of the MP4201 transmitter (setting the measuring range, filters, etc.) is carried out through the current loop therefore the transmitter doesn't have to be removed from the terminal head in case of reprogramming of testing.

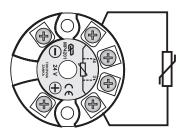
Programming of the MP4201 can be carried out from the distance of up to 100m (length of current loop cable).

Programming is done via programming device PNMP1¹ and EPKON² software.

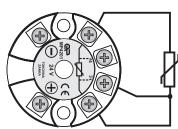


TEMPERATURE SENSOR CONNECTIONS

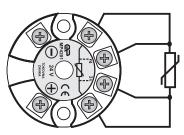




3-wire connection

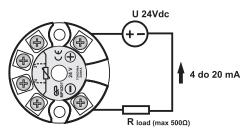


4-wire connection

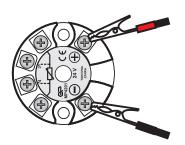


CURRENT LOOP CONNECTION AND PROGRAMMING

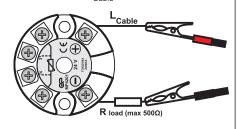
Current loop connection



Programming of transmitter



Testing the transmitter at a distance - L_{Cable} ≤ 100m



WARRNING: Before connecting the programing device PNMP1 disconnect the supply voltage from transmitter!

LIST OF DOCUMENTATION

- Programming
- Datasheet
- Declaration of conformity

inst-EPKON datasheet-MP4201 izCE-MP4201



- 1) Programming device PNMP1 can be found on www.termomer.com or inquired upon when buying the transmitter.
- 2) You can download EPKON software free of charge from www.termomer.com.



ELEKTRONIKA PAHOR d.o.o.

Brnciceva 9a 1231 Ljubljana-Crnuce SI-Slovenia tel: +386 (0)1 561 51 20 fax: +386 (0)1 561 13 308 info@termomer.com

TEMPERATURE TRANSMITTER MP4201

 D/ 11/ 10/ 1EE 1	0

TEA	A INT			E A.
IEC	HN	ICAL	DAI	IA

п	n			4
П		10	ш	г э
П		.,	ш	
ш		r	•	

Input sensor Pt100/Pt1000 2-, 3- or 4- wire connection Accuracy <0,25°C for measuring range < 250°C

Sampling period 1s

Pt100, Pt1000 standard IEC/DIN/EN 60751-2

Sensor current for Pt100 0.5mA for Pt1000 0,25mA

Probe short-circuit <-225°C Probe break >650°C **Error detection delay** <10s

Connection wire resistance <0,02°C/Ohm at 3-wire connection

compensation error

Cable resistance max. 15 ohm/wire

Range limits Pt100 -200°C .. 600°C programmable Pt1000 -100°C .. 300°C programmable

20°C Minimum span

50 and 60 Hz Damping

none ,1, 2, 5, 10, 30 sek Filter programmable

Resolution 15 bit <0,1°C Repeatability Offset setting max. ± 10°C

Output

Damping

Output signal 4...20mA 2- wire <0,1% measuring range Accuracy Linearity <0,1FS Supply voltage 2- wire 10 .. 30 Vdc 3,5 mA or 21,5 mA Namur NE43 Probe break Resolution 15 bit 0 ... 30s

Operating conditions and external features of the transmitter

Mounting in terminal head form B Housing **ABS** plastics **Protection grade** IP 40 **Dimensions** Ф45 x 23mm **Operating temeprature** - 40 .. +80°C **Humidity** <98% no condensation

> Page: 2/2



ELEKTRONIKA PAHOR d.o.o. Brnciceva 9a

1231 Ljubljana-Crnuce SI-Slovenia

tel: +386 (0)1 561 51 20 fax: +386 (0)1 561 13 308 info@termomer.com