FuehlerSysteme eNET International
Die Marke für Sensorik

EN **DATA SHEET**

TPM2/E

Temperature transducer with stainless steel room pendulum

Measuring size: temperature
Output: 0-10 V, 4-20 mA, 2 Relay
Highlights: stainless steel pendulum

MADE IN GERMANY

Description

The TPM2/E room pendulum transducer registers the temperature in, for example, high rooms and converts this measured value into a linear output signal 0-10 V respectively 4-20 mA. As an option the temperature transducer has two potential-free changeover contacts and a backlit display. The display content can be rotated in 90° steps using a menu and the measured value, the switching threshold set, the state of the respective relay, the MIN/MAX measured values for the selected intervals(1 h / 6 h / 12 h / 24 h) etc. can be read out.
On the display version the user can, via the menu, specify an individual temperature range.
The temperature transducer is simply hung in the room as a pendulum, whereby an accurate measurement result for the room temperature is ensured in high rooms.

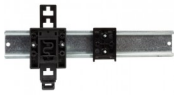
Technical Specifications

Measurement range temp.	-30...+100°C
Scales	-50...0°C, -50...+50°C, -50...+150°C, -30...+20°C, -30...+70°C, -20...+50°C, -20...+80°C, -20...+120°C, -20...+150°C, -10...+15°C, 0...+50°C, 0...+100°C, 0...+150°C, 0...+200°C, 0...+250°C, +10...+35°C
Measurement range configuration	1 freely programmable measuring range via the menu input in the display (span min. 25K)
Accuracy	±0,2 K + max. ±1,5% Span
Supply voltage analog 0-10 V	24 V AC/DC (±5%)
Supply voltage analog 4-20 mA	15...36 V DC, depends on liability (Ubmin = 15 V + Rload*0,02A)
Current consumption at 0-10 V	typ. 10 mA, 30 mA peak current consumption for 50 ms at switching moment at option relay
Current consumption at 4-20 mA	max. 20 mA / output, 40 mA peak current consumption for 50 ms at switching moment at option relay
Analogue output 0-10 V	3-wire connection, min. load resistance 100 kOhm
Analogue output 4-20 mA	2-wire connection (transmitter), max. RLoad(Ohm) = (+Ub - 15 V) / 0,02 A
Alarm output	2 x potential-free change-over contact, 48 V, 1 A
Switching Hysteresis Relay	Temperature: 2K (without display), 0,5...5K adjustable (with display)
Electrical connection	screw terminals max. 1,5 mm²
Cable	2 m PVC cable (max. +105°C)
Housing	Polycarbonate PC UL 94 V0 with hinge locks, color signal white similar to RAL 9003
Cable gland	PG11 high-strength cable gland with strain relief
Display	optional LCD display with backlight on/off/auto
Material	Protection sleeve: stainless steel VA 1.4571
Dimensions	Housing: L 89 x W 80 x H 47 mm, Pendulum: Ø 15 x 100 mm
Protection type	IP65
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	Probe: -30...+105°C, Electronic: -20...+70°C
Storage temperature	-20...+70°C
Installation	screw fastening
Approvals	CE, EAC, RoHS

Variants

Article Number			
MR temp. preset	Output temperature	Cable	Version
TPM2/E-I			
0...+100°C	4-20 mA	2 m PVC (2x0,25 mm²)	without display
TPM2/E-I2R			
0...+100°C	4-20 mA, 2 changer	2 m PVC (2x0,25 mm²)	without display
TPM2/E-I2RD			
0...+100°C	4-20 mA, 2 changer	2 m PVC (2x0,25 mm²)	with display
TPM2/E-ID			
0...+100°C	4-20 mA	2 m PVC (2x0,25 mm²)	with display
TPM2/E-U			
0...+100°C	0-10 V	2 m PVC (2x0,25 mm²)	without display
TPM2/E-U2R			
0...+100°C	0-10 V, 2 changer	2 m PVC (2x0,25 mm²)	without display
TPM2/E-U2RD			
0...+100°C	0-10 V, 2 changer	2 m PVC (2x0,25 mm²)	with display
TPM2/E-UD			
0...+100°C	0-10 V	2 m PVC (2x0,25 mm²)	with display

Accessories



SB/E

Snap-on mounting for DIN rails

motrona AX350

AX350: touchMATRIX® Process Indicator with two 16 bit Analog Inputs

motrona AX020

AX020: Process Indicator for Analog Signals

Dimensional Drawing