FuehlerSysteme eNET International
Die Marke für Sensorik

EN **DATA SHEET**

RTM1/E

Room temperature transducer

Measuring size: temperature
Output: 0-10 V, 4-20 mA, 2 Relay
Highlights: modern housing design, mounting on-wall or on junction box

MADE IN GERMANY

Description

The RTM/1E temperature transducer in modern room design registers the temperature via the sensor in the housing 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 room temperature transducer is, for example in offices or flats, fitted onto the wall or on the flush-mounted socket.
In the event of a deviation from the reference temperature the service correction can be performed directly on the device.

Technical Specifications

Measurement range temp.	0...+50°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
Housing	ABS polyman, colour signal white like RAL 9003
Cable gland	on the back or housing side (predetermined breaking point)
Display	optional LCD display with backlight on/off/auto
Dimensions	Housing: L 82 x W 82 x H 25 mm
Protection type	IP30, IP20 (with display)
Protection class	III
Working range r.H.	0...98% r.H. in contaminant-free, non-condensing air
Working temperature	Electronic: -20...+70°C
Storage temperature	-20...+70°C
Installation	on-wall or on flush-mounted box
Approvals	CE, EAC, RoHS

Variants

Article Number		
MR temp. preset	Output temperature	Version
RTM1/E-I		
0...+50°C	4-20 mA	without display
RTM1/E-I2R		
0...+50°C	4-20 mA, 2 changer	without display
RTM1/E-I2RD		
0...+50°C	4-20 mA, 2 changer	with display
RTM1/E-ID		
0...+50°C	4-20 mA	with display
RTM1/E-U		
0...+50°C	0-10 V	without display
RTM1/E-U2R		
0...+50°C	0-10 V, 2 changer	without display
RTM1/E-U2RD		
0...+50°C	0-10 V, 2 changer	with display
RTM1/E-UD		
0...+50°C	0-10 V	with display

Accessories

FS9510

Table stand for room housing

motrona AX350

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

motrona AX020

AX020: Process Indicator for Analog Signals

Dimensional Drawing