akribis

DATA SHEET

TEHR-M

Produal

Distributed by AKRIBIS



ROOM TEMPERATURE TRANSMITTER / CONTROLLER TEHR-M

TEHR-M Modbus temperature transmitter is designed for automatic HVAC systems to measure room temperatures. The temperature is measured by a Pt1000 element. The sensor element resistance information is converted to a 0…10 V signal and this voltage signal is available also via Modbus. The transmitter temperature range can be changed during the commissioning.

TEHR-M settings can be changed by using the ML-SER tool. One point field calibration of the transmitter can be executed, the temperature output can be changed to the controller function and communication settings of the Modbus can be configured.

TEHR-M-N transmitter is equipped with a 3.5-digit liquid crystal display. The display resolution is 0.1 °C. TEHR-M-PU model has two separate outputs. Output 1 can be used as a temperature output or a control function. Output 2 is used for active potentiometer.

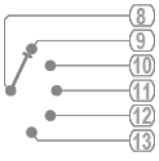
There are also available 5-state switch options, K5 and K5R. The K5 is a traditional 5-stage switch for a fan control. The K5R is a 5-stage switch with resistance output. The resistance output signal can be read by NTC10k input in automatic HVAC system. See more information about the options from TEHR transmitter order form.

Wiring:

1	supply, 24 Vac/dc
2	0 V
3	temperature signal 0…10 Vdc or controller
4	active potentiometer (TEHR-M-PU model only)
5	Modbus B-
6	COM
7	Modbus A+

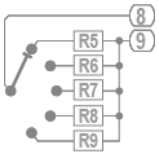
TEHR-K5, 5-state switch (30 V / 0.1 A)

8	selector switch
9	switch position A
10	switch position 0
11	switch position 1
12	switch position 2
13	switch position 3



TEHR-K5R, 5-state switch with resistance output

8	selector switch
9	K5R output





Technical data:

sensor	Pt1000 EN 60751/B
measuring range	selectable
supply	24 Vac/dc (22…26 V)
output 1	0…10 Vdc (temp. / controller),
output 2 (-M-PU model)	active potentiometer
accuracy	±0.5 °C at 25 °C
ambient temperature	0…+50 °C
housing	ABS plastic, IP20
dimensions (w x h x d)	86 x 85 x 32 mm
mounting	on the wall or on the standard flush mounting box (60 mm hole distance)
communication	RS-485 Modbus RTU

Range selection:

*0…+50 °C	0…+100 °C	-50…+50 °C	-50…+150 °C
S1 S2	S1 S2	S1 S2	S1 S2

* = Factory setting

Output signal:

0…+50	0…+100	-50…+50	-50…+150	Signal
0 °C	0 °C	-50 °C	-50 °C	0 V
25 °C	50 °C	0 °C	50 °C	5 V
50 °C	100 °C	50 °C	150 °C	10 V

Ordering guide:

Model	Product number	Description
TEHR-M	117Z190	Modbus temperature transmitter
TEHR-M-N	117Z191	temperature transmitter with display
TEHR-M-PU	117Z350	Modbus temp. transmitter with two separate outputs
TEHR-K5	1170240	option, 5-state switch
TEHR-K5R	1170241	option, 5-state switch with resistance output
TEHR-N V2	1170260	option, display module + cover
ML-SER	1139010	transmitter commissioning tool

Products fulfill the requirements of directive 2004/108/EC and are in accordance with the standards EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).

Produal Oy Keltakalliontie 18, 48770 Kotka FINLAND Tel: +358 10 219 9100 / Fax: +358 5 230 9210 info@produal.fi **www.produal.com**

AKRIBIS · www.akribis.info · contacto@akribis.info Information is subject to change without prior notice.