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DATA SHEET

TEKA-M-500

Produal

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TEKA-M-500 TEMPERATURE TRANSMITTER / CONTROLLER

TEKA-M-500 Modbus averaging temperature transmitter is designed for automatic ventilating systems to measure large air duct temperatures. Thanks to the special mechanical construction the transmitter is able to detect temperature throughout its entire length. Information of the transmitter can be used to control other device in the HVAC system.

Temperature is measured by four Pt1000 elements. The sensor elements resistance information is converted into a 0…10 V signal and this voltage signal is available also via Modbus. The temperature range can be chosen at the commissioning.

TEKA-M-500 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 the communication settings of the Modbus can be configured.

TEKA-M-500 transmitter can be equipped with a 3.5-digit liquid crystal display option TE-N V2. The display resolution is 0.1 °C.

Housing is made of heat resistant plastics. The bayonet cover and the terminal blocks tilted to 45° make an easy installation. Transmitter is mounted to the duct by means of an adjustable duct connection flange for the optimal temperature measurement.

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



Technical data:

supply voltage	24 Vac/dc < 1 VA (22…30Vac/dc)
sensor	4 x Pt1000 EN 60751/B
output 1	0…10 Vdc < 2 mA (temp. / controller)
output 2	RS-485 Modbus/RTU
temperature range	selectable
duct mounting	adjustable flange
stem	Ø 8mm x 500 mm, material AISI316
housing	plastics (< 120 °C)
protection class	IP54, cable entry or stem down
cable entry	M16
accuracy	± 0.5 °C (at 50 °C)
ambient temperature	0…+60 °C
time constant	approx. 5 s

Wiring:

1	supply 24 Vac/dc
2	0 V
3	output 0…10 Vdc (temperature / controller)
4	Modbus A+
5	Modbus B-

Ordering guide:

Model	Product number	Description
TEKA-M-500	117Z170	averaging temperature transmitter
TE-N V2	1170250	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: 2001 (Emission) and EN61000-6-2: 2001 (Immunity).

Information is subject to change without prior notice.