

TEKA LU-500 TEMPERATURE TRANSMITTER / CONTROLLER

TEKA LU-500 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 sensor elements. The sensor elements resistance information is converted into a 0...10 V signal. The temperature range can be chosen at the commissioning.

TEKA LU-500 settings can be changed by using the ML-SER tool. One point field calibration of the transmitter can be executed and the temperature output can be changed to the controller function.

TEKA LU-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 0...10 Vdc < 2 mA
(temperature / controller)

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

 $\begin{array}{ll} \text{ambient temperature} & 0...+60 \ ^{\circ}\text{C} \\ \text{time constant} & \text{approx. 5 s} \end{array}$

Wiring:

1 supply 24 Vac/dc

2 0 V

3 output 0...10 Vdc (temperature / controller)

Ordering guide:

ModelProduct numberDescriptionTEKA LU-5001179170averaging temperature transmitterTE-N V21170250display module (cover)ML-SER1139010transmitter 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).