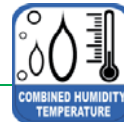


HUMIDITY-TEMPERATURE SENSOR



manual

Combined - for two parameters !



Special resistance...

to airborne pollutants as a result of the use of a high-quality measuring element! This ensures - in combination with the high-quality electronics - excellent measuring accuracy and high long-term stability. As a consequence, the sensor (8091) is particularly appropriate for measurements outdoors in different areas of application.

- small, light, compact
 - simple mounting, very robust, low-maintenance
 - low power consumption
 - good dynamic behaviour
 - reliable membrane filter as protection against atmospheric pollutants
 - high long-term stability
- building technology • industry

Standard Line	(8091)	Humidity-Temperature Sensor	Id-No. 00.08091.000 042
Measuring elements:		capacitive • Pt100 • IEC 751 class B	
Measuring range:		0...100 % r. h. • -30...+70 °C	
Accuracies:		± 2 % r. h. (5...95 % r. h. at 10...40 °C) plus < 0.1 %/ K (<10 °C, >40 °C) ± 0.3 °C (4...20 mA) plus ± 0.007 K/K (<10 °C, >40 °C)	
Time constant:		self-heating coefficient Pt 100 (v = 2 m/s in air) 0.2 K/mW	
Long-term stability:		< 1 min	
Outputs:		typical under normal conditions < 1% r. h./ year	
Supply voltage:		humidity: 4...20 mA = 0...100 % r. h. • temperature: 4...20 mA = -30...+70 °C	
Current consumption:		12...30 V _{DC}	
Housing:		max. 45 mA	
Dimensions/ Weight:		aluminium • lacquered • grey-white • IP 65 • membrane filter as sensor protection IP 30 •	
Standards:		cable 4 x AWG 20 C UL SW (not included in delivery)	
Accessories:		H 180 mm • Ø 20 mm • 0.34 kg	
00.08141.400 000	(8141.4)	Sensor shelter for sensor (8091) • Data logger TROPOS	
<u>Version:</u>	(8091)	Humidity-Temperature Sensor	Id-No. 00.08091.000 012
Signal output H:		0...10 V _{DC} • 0...100 % r. h.	
Signal output T:		0...10 V _{DC} • -30...+70 °C	
Supply voltage:		15...30 V _{DC}	