HUMIDITY-TEMPERATURE SENSOR

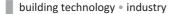## Combined - for two parameters!

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

Sensor Shelter 8141.6
(optional)

Humidity/Temperature Sensor 8091

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)
		self-heating coefficient Pt 100 (v = 2 m/s in air) 0.2 K/mW	
Time constant:		< 1 min	
Long-term stability:		typical under normal conditions < 1 % r. h./ year	
Outputs:		humidity: 4...20 mA = 0...100 % r. h. • temperature: 4...20 mA = -30...+70 °C	
Supply voltage:		12...30 V_{DC}	
Current consumption:		max. 45 mA	
Housing:		aluminium · lacquered · grey-white • IP 65 • membrane filter as sensor protection IP 30 •	
Cable:		4 x AWG 20 C UL sw (Id-No. 67.01002.056 041 · not included in delivery)	
Dimensions/ Weight:		H 180 mm · Ø 20 mm • 0.34 kg	
Standards:		CE/ EMC: DIN 50082-2 · EN 550011 Cl. B	
Accessories:			
00.08141.600 000	**(8141.6)**	**Sensor shelter** for sensor (8091) • **Data logger TROPOS**	
Version:	**(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}	
Cable:		8 x AWG 20 C UL sw (Id-No. 67.01002.056 081 · not included in delivery)	