

8096 HUMIDITY-TEMPERATURE SENSOR



Reliable measurements for precise environmental monitoring

The Sensor 8096 is a precise measuring device for relative humidity and temperature, suitable for meteorology and industry. It features a capacitive sensing element that is protected from air pollutants by a membrane filter. With energy-efficient electronics, it offers high accuracy and long-term stability when handled properly.

- Measuring element temperature: Pt100 1/3 DIN
- Capacitive humidity measuring element
- Special resistance to air pollutants
- High accuracy and long-term stability

APPLICATIONS

- Meteorology and industry
- Automatic weather stations in all climatic zones

Professional Line	8096
Id-No.	00.08096.230402 Standard model 00.08096.330402 Shock and vibration-tested precision instrument according to BV0230/ 0430 and BV0440/ 0240
Meas. range air temperature	-40...+70 °C
Meas. range rel. humidity	0...100 % r. h.
Accuracy air temperature	± 0.1 °C, 1/3 DIN IEC 751 Class B
Accuracy rel. humidity	± 2 % r. h. at: 5...95 % r. h.; +10...+40 °C (at > 0.5 m/s); plus: < 0.1 % r. h./ °C at: < +10 °C; > +40 °C
Response time	Humidity: < 20 s (without wind and without filter, otherwise at 1.5 m/s: 1.5 min)
Output	Humidity: 0...1 V DC = 0...100 % r. h.; Min. load resistance ≥ 2 k Ohm Temperature: Pt100 (4-wire circuit)
Range of application	0...100 % r. h.; -40...+70 °C
Supply voltage	6...30 V DC
Power consumption	< 1 mA
Measuring elements	Humidity: capacitive; temperature: Pt100 1/3 DIN (DIN EN 60571); IEC 751 Class B (± 0.1 °C)
Housing	Stainless steel; IP 65; protection class of filter IP 40; sinter filter for outdoor use
Weight	Approx. 0.3 kg
Standards	EMV: DIN EN 60945 - Chapter 9, 10
Cable	3.3 m; fixed cable
Accessories (order separately)	00.08141.600000 Sensor shelter with natural ventilation 00.08141.600004 Sensor shelter with artificial ventilation

As of: 14.03.2025