



# CO<sub>2</sub> concentration and humidity sensor

VSHC, VSHW

The VSHC sensor is designed to measure the concentration of carbon dioxide and humidity in rooms. When the set value of carbon dioxide concentration and humidity is exceeded, the capacity of the air handling unit is automatically increased.

VSHC is equipped with automatic calibration algorithms. For the indications to be correct it is necessary to ventilate the room in which the sensor is located at least once a month to correct the reference point. After connecting the power supply, VSHC gives a value of 500 ppm of CO<sub>2</sub>. The first measured value appears after approx. three minutes. Due to the automatic sensor calibration, the sensor gives correct measurements only after 30 minutes from the power supply connection. To ensure accurate measurements, VSHC should run continuously. The unit can operate at temperatures between 0°C-55°C in conditions where no vapour condensation occur.

The VSHW sensor is designed to measure the humidity in rooms. When the set humidity value is exceeded, the air handling unit's capacity is automatically increased. The device can operate in the temperature range of 0°C-55°C.



VSHC  
VSHW

## COMPATIBILITY

HRU type	Intended use
AUROS VER305	•
AUROS VER405	•
AUROS VER505	•
AUROS VER605	•
AVIRA VAVP305	•
AVIRA VAVP405	•
AVIRA VAVP505	•
AVIRA VAVP605	•
AQUILA VARS305	•
AQUILA VARP305	•

VSHC	
HUMIDITY MEASUREMENT	
Humidity measurement range	0-100% (Note: Humidity measurement is only possible at temperatures between 0°C-55°C)
Humidity reading accuracy	±3%
CARBON DIOXIDE MEASUREMENT	
Carbon dioxide concentration measurement range	400 – 2000 ppm (Note: carbon dioxide concentration measurement is possible in the temperature range of 0°C-50°C)
Carbon dioxide reading accuracy	±3% + ±50 ppm (Note: the CO <sub>2</sub> sensor is equipped with an automatic calibration algorithm).

VSHW	
HUMIDITY MEASUREMENT	
Humidity measurement range	0-100% (Note: Humidity measurement is only possible at temperatures between 0°C-55°C)
Humidity reading accuracy	Digital ±3%
	Analogue (output AO) ±3% + ±0.1 V