

WET 112 0101

CO₂ Temperature & humidity sensor KNX

112 0 101

- Temperature detection range: 0–40 °C
- Setting range thresholds: 500-2550 ppm
- "Physical value" object: 0–9999 ppm
- "Relative humidity" detection range: 1 %–100 %
- There are 3 independent thresholds of the readings for CO₂ and relative humidity as well as a threshold for the temperature reading.
- Exceeding or under-running the thresholds triggers a response: Send priority. Switching, value.
- Every threshold has a disable object.

1. Designated use

The sensor serves to detect carbon dioxide (CO₂), relative humidity and temperature in a variety of rooms (offices, schools, meeting rooms etc). The CO₂ content of the air is a verifiable indicator of the air quality in the living area. The higher the CO₂ content, the poorer the air. The devices are suitable for use in a normal environment.

2. Safety

WARNING

Danger of death through electric shock or fire!

- Installation should only be carried out by professional electrician!

The regulations and instructions in the ZVEI/ ZVEH Handbook must be observed to ensure that the bus lines are installed and the units are commissioned in a professional manner. Tampering with or making modifications to the device will invalidate the warranty.

- Do **not** use the sensor for safety related gas measurements!
- **Only** operate the sensor with extra-low voltage!
- Do not drop the sensor. Strong vibrations interfere with the accurate measurement of CO₂.

3. Characteristics

- The CO₂ gas makes up only approx. 0.034 % of our fresh air and acts as an indicator for assessing the air quality in a room.
- The sensor does not respond to other gas types which could reduce the quality of the air.

Composition of fresh air

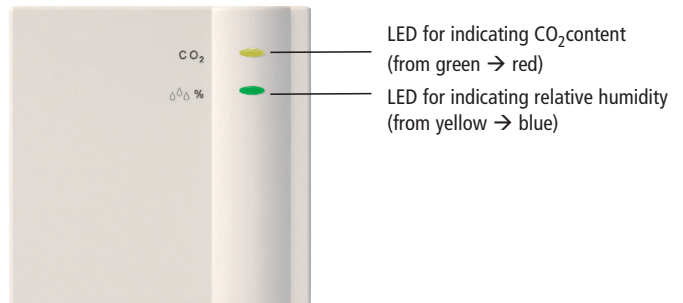
Gas		Percentage volume
Nitrogen	N ₂	78,08 %
Oxygen	O ₂	20,95 %
Argon	Ar	0,93 %
Carbon dioxide	CO ₂	340 ppm

4. Installation

- Locate the **sensor** (for temperature measurement) on an internal wall, at about eye level.
- Avoid drafts or heat emission.
- Do not **not** mount the sensor on a soft surface as this will inhibit air exchange.
- Please note that no false air is entering through a tube or a tube mounted in the wall.

5. Description and function

The sensor has 2 LEDs that indicate the current CO₂ content of the measured ambient air and the temperature.



Thresholds of different readings

Reading	LED CO ₂	CO ₂ concentration	LED relative humidity	Humidity status
below threshold 1	green	low	yellow	humidify
between threshold 1 and 2	yellow	average	green	humidity OK
between threshold 2 and 3	orange	high	red	dehumidify
above threshold 3	red	very high	blue	condensation alarm

6. Bus connection

1. Open the housing cover with a screwdriver at the 4 side lugs and feed the bus line from below through the opening.
2. Plug bus line into bus terminals.
Ensure correct polarity.
3. Close housing cover.

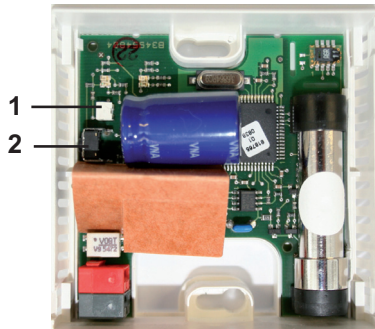


Don't touch the membrane while mounting the device

Bus terminal and bus line

7. Programming physical address

1. Press the program button (2) with a screwdriver through the openings at the bottom of the device.
→ Programming LED (1) lights up.
→ **WET 112** is in programming mode.



Start-up, diagnostics and configuration are handled by ETS (KNX Tool Software).

8. Start-up

Please refer to the Product Handbook for detailed functional descriptions (also at www.windowmaster.com).

9. Technical data

Operating voltage:	Bus voltage
Current consumption KNX:	max. 12 mA
Bus interface module (BCU):	integrated
Permissible ambient temperature:	-5 °C to +45 °C
Protection class:	III
Protection rating:	IP 20 in accordance with EN 60529
Equipment standard:	in accordance with EN 60730-1
Housing:	74 x 74 x 28 mm

Observe deviating technical data on the rating plate! Technical changes reserved. The devices comply with European Directives 73/23/EEC (low-voltage directives) and 89/336/EEC (EMC Directives).

If the devices are combined with others for use within a system, ensure that the system as a whole does not cause radio interference.

The application can be found under www.windowmaster.com. Please refer to the Handbook for detailed functional descriptions.

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