





# FRESH AIR FOR YOUR HEALTH

# Wöhler CDL 110 CO<sub>2</sub>-Datamonitor

Evaluation of the indoor air quality (IAQ)



#### FRESH AIR AGAINST VIRUS CONTAMINATED AEROSOLS CO<sub>2</sub>-concentration in ppm (parts per million)



## Ventilate the right way

Ventilating and heating the right way is extremely important for your health and saves money as well. Whilst ventilating dry air enters the room depending on weather circumstances. Dry air can be heated up quicker, so less energy is needed. In winter season it is important to only ventilate shortly to prevent heat loss. Fortunately air exchange is quicker when it is cold. The colder it is outside, the shorter the necessary ventilating time (maximum 5 minutes).

There are three different types of ventilating:

- · Impact ventilation Windows should be fully opened for five to ten minutes.
- · Cross ventilation Opposite facing windows should be opened from one to ten minutes in order to create a cross ventilation for quick air exchange.
- · Tilt ventilation With tilted windows a complete air exchange takes one hour. Walls and furniture nearby the window cool down so air humidity can condensate. The danger of mould development rises. During the heating period warm air escapes and the energy consumption rises.

It is recommended to ventilate regularly and at least three times per day with opposite facing windows. Especially in the morning to remove high humidity and CO2 concentration from the night and also before going to bed as a preventive measure.

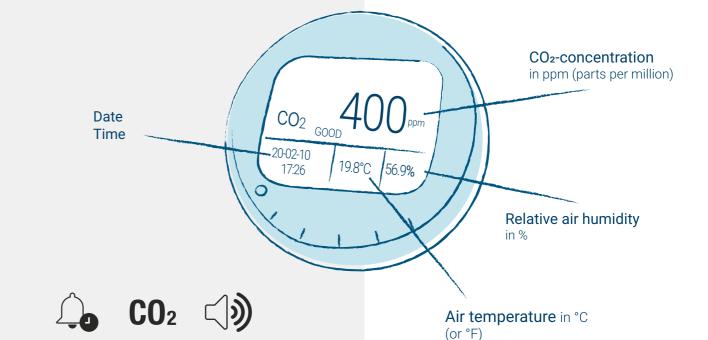
### CO2 AS THE MOST IMPORTANT INDICATOR FOR INDOOR AIR QUALITY (IAQ)

Scientists agree on the following point:

Viruses are transported mainly by airborne particles loaded with aerosols. That is why infections can spread quickly indoors. An effective ventilation removes viruses-contaminated "used up air" outside and transports fresh air into the room. Sufficient air exchange can be ensured either by a well-maintained ventilation system or by window ventilation. It is more important to ventilate in time. A permanent monitoring of the air quality can be done easily.

An important factor to check the indoor air quality is the CO<sub>2</sub> concentration. The concentration can be measured and is indicated in ppm (parts per million). Breathing releases humidity and CO2 in the environment. In case of illness also viruses can be spreaded. High CO<sub>2</sub> concentration in the air makes immediate ventilation necessary because it also means a high amount of aerosols in the air. Also a massive impact of CO2 on comfort and well-being is scientifically proven. An increased value of CO<sub>2</sub> causes lack of concentration and extreme decrease in performance. Simple monitoring of the indoor air quality has a positive effect to your health and well-being.

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Technical data		
CO₂-Measurement	Range	09.999 ppm
	Resolution	1 ppm
	Accuracy	±50 ppm ±5 % of measured value (02.000 ppm)
°C-Measurement	Range	-1060 °C
	Resolution	0,1 °C
	Accuracy	±0,6 °C (±0,9 °F)
Rel. air humidity	Range	595 % r.F.
	Resolution	0,1 % r.F
	Accuracy	2090 % 25 °C: ±5 % r.F. otherwise: ±7 % r.F

Scope of delivery:

Wöhler CDL 110 CO2-Datamonitor, power supply

Article no. 8500

Further information can be found at woehler-international.com/8500



Wöhler CDL 110 CO2-Datamonitor | 3