Digital carbon dioxide sensor FYAD 00-CO2M2 / M3 for assessing the indoor air quality. With ALMEMO® D6 connector.

CO_2 sensor
FYAD 00-CO2M3B05

CO_2 sensor
FYAD 00-CO2M2B05

Technical data and functions

- Assessment of air quality for checking demand-oriented ventilation in recreation and work rooms, including classrooms, lecture halls, day care centers, meeting rooms, event rooms, production halls, health care facilities, public transportation.
- In combination with an ALMEMO® data logger, the measured values are continuously recorded with date, time. Based on the stored data, a differentiated analysis of the air quality during the room usage times is possible.
- Simultaneous measurement of air temperature as a criterion for assessing the quality of stay (comfort) in the rooms.
- Quantitative measurement of CO_2 concentration in ppm. Differentiated decision for concentrations near the quality levels 1000 ppm and 2000 ppm. On request: calibration of the sensor (traceable) by a DAkkS accredited calibration laboratory.
- Calibrated reference system for CO_2 concentration for checking CO_2 sensors permanently installed in the building management system (BMS) / room ventilation system (AHU).
- Digital sensor with integrated signal processor. All calibration and sensor data are stored in the sensor.
- Unique auto-calibration procedure (without fresh air supply): aging effects are automatically compensated.
- With filter cap to protect against dust and dirt.
- Automatic compensation with built-in digital temperature and barometric pressure sensor.
- Low power consumption. Long-term measurements with ALMEMO® data logger in sleep mode; only for current instrument types with sleep delay.
- 3 primary measurement channels (real measured variables): carbon dioxide concentration, air temperature, air pressure.

11/2026 • We reserve the right to make technical changes.

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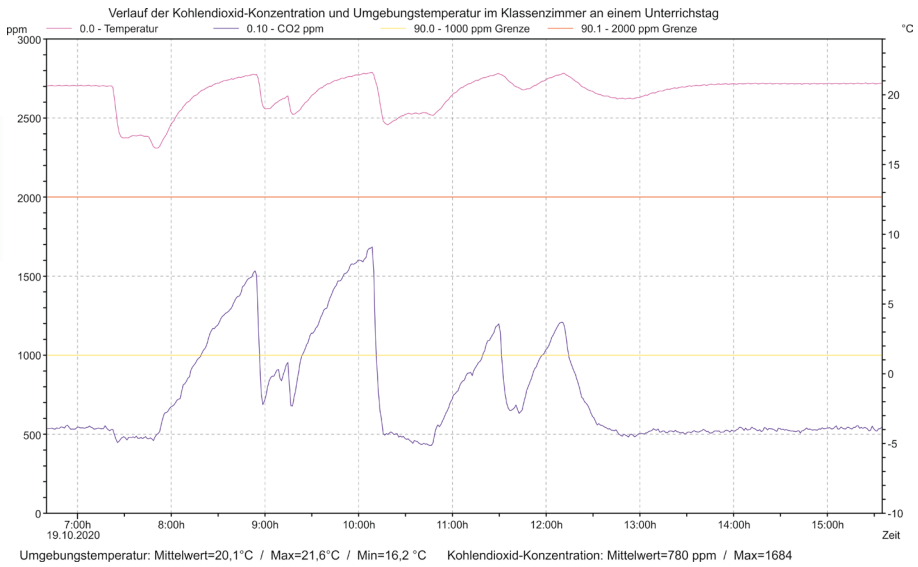
Technical Data

Sensor:	2-beam infrared sensing element. Non-dispersive infrared technology (NDIR).
Measuring range:	0...5 000 ppm. Automatic compensation of pressure and temperature dependence of CO_2 measurement with the built-in sensors.
Accuracy:	±(50 ppm +3 % of measured value)
Nominal conditions:	25 °C, 1013 mbar
Switch-on time (initialization): 15 s	
Response time t63:	140 s
Measuring interval:	fixed 15 s as exponential moving average over 60 s (= 4 instantaneous values 15 s).
Range of application:	
FYAD 00-CO2M3B05:	-40 ... 60 °C
FYAD 00-CO2M2B05:	-10 ... 60 °C 0...95 % r.h. (non-condensing), 700 ... 1100 mbar
Filter cap:	PTFE, diameter approx. 25 mm, length approx. 70 mm
Sensor tube:	
FYAD 00-CO2M3B05:	stainless steel, diameter 12 mm, length approx. 130 mm,
Sensor supply:	via ALMEMO® D6 connector

Connection:	
FYAD 00-CO2M3B05:	permanently connected cable 2 m with ALMEMO® plug
FYAD 00-CO2M2B05:	sensor mounted directly on ALMEMO® connector
Digital air pressure sensor (built-in)	
Measuring range:	700 ... 1100 mbar
Accuracy:	typ. ± 2 mbar (at 25 °C)
Digital air temperature sensor (built-in)	
Measuring range:	-40 ... +60 °C
Accuracy:	typ. ± 0.5 °C (at 25 °C)
ALMEMO® D6 connector:	
Measuring channels:	Carbon dioxide concentration, air temperature, air pressure
Refresh rate:	15 sec. for all 3 channels
Supply voltage:	6 ... 13 V DC
Current consumption:	approx. 4 mA (avg), approx. 70 mA (max)



Measured Value Recordings of CO_2 Concentration and Room Temperature (Example)

ALMEMO® measuring system (example):
CO_2 sensor
with data logger ALMEMO® 202-S/204

Versions (incl. works test certificate) — Order no.

Digital carbon dioxide sensor, measuring range 5 000 ppm, digital air temperature sensor and air pressure sensor built-in, with filter cap	
With handle, permanently connected cable with ALMEMO® D6 connector.	**FYAD00CO2M3B05**
Sensor, directly mounted on ALMEMO® D6 connector	**FYAD00CO2M2B05**

ÖKD calibration KY96xx, carbon dioxide concentration, for digital probe, see chapter „Calibration certificates“.
The ÖKD calibration fulfills the requirements of DIN EN ISO/IEC 17025 for test equipment.