



Wireless sensor

CO<sub>2</sub> sensor with signal

FCO2TF65

**Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!**

Temperature at mounting location:

-20°C up to +50°C.

Storage temperature: -25°C up to +70°C.

Relative humidity:

annual average value <75%.

Wireless indoor CO<sub>2</sub>+temperature+-humidity sensor for single mounting 84x84x29mm or mounting into the E-design switching system. With controlled LED display according to the ambient air quality and brightness. Additionally with warning signal at level red. Standby loss only 0.4 watts on average. Power supply with a 12V DC power supply unit.

The sensor measures the CO<sub>2</sub> content of the air up to 2550ppm, as well as the temperature 0 to 51°C and humidity 0 to 100%.

For CO<sub>2</sub> measurement, the NDIR technology (Non Dispersive InfraRed) is used with automatic self-calibration ABCLogic™ (Automatic Background Calibration).

Power supply with a switching power supply unit FSNT61-12V/6W in a flush-mounted box below the sensor. Pulsed power consumption every 3 seconds for 1 second 80mA.

The complete module can be removed from the frame for screw mounting.

We recommend stainless-steel counter-sunk screws 2.9x25mm, DIN 7982 C, for screw connections. Both with rawl plugs 5x25mm and with 55mm switch boxes. Set of 2 stainless-steel counter-sunk screws 2,9x25mm and plugs 5x25mm are enclosed.

Within 2 minutes the color of the LED may change potentially according to the indoor air quality: lights green up to 750ppm, lights yellow from 751 to

1250ppm and flashes red from 1251ppm.

The LED flashes red excitedly with a defective CO<sub>2</sub> sensor.

In operation a warning signal at level red sounds every 3 minutes for 5 times.

A light sensor adjusts the brightness of the LED dependent on the ambient brightness.

After connecting of the power supply a teach-in telegram is sent, then at a change of at least 5% the data telegrams will be sent within 60 seconds. If nothing changed a status telegram is sent after 10 minutes. The sending of the telegrams is displayed by one flashing of the LED.

The correct actual temperature is measured only about 30 minutes after connecting the supply voltage due to the temperature compensation of the electronics.

### Use of ABCLogic™

Please note that ABCLogic™ has been designed for applications where rooms are periodically unoccupied for 4 or more hours per day, so that the indoor concentrations may fall to typical outdoor levels. If the CO<sub>2</sub> sensor is installed, the first 14 operation days of the sensor serve for self-calibration to local environments.

ELTAKO GmbH hereby declares that the products that relates to this operating manual, are in compliance with the essential requirements and other relevant provisions of directive 1999/5/EC.

A copy of the EU declaration of conformity can be requested at the address below.

**Must be kept for later use!**

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