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Wireless sensor

CO₂ sensor with signal FC02TF65-wg

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 CO₂+temperature+humidity sensor pure white glossy for single mounting 84x84x29 mm or mounting into the E-Design65 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 12 V DC power supply unit. Smart Home sensor.

The sensor measures the CO₂ content of the air up to 2550ppm, as well as the temperature 0 to 51°C and humidity 0 to 100%.

For CO₂ 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 80 mA.

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

We recommend stainless-steel countersunk screws 2.9x25 mm, DIN 7982 C, for screw connections. Both with rawl plugs 5x25 mm and with 55mm switch boxes. Set of 2 stainless-steel countersunk screws 2.9x25 mm and plugs 5x25 mm are enclosed.

Within 2 minutes the color of the LED may change potentially according to the indoor air quality: lights green up to 750 ppm, lights yellow from 751 to 1250 ppm and flashes red from 1251 ppm.

The LED flashes red excitedly with a defective CO₂ 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 CO₂ sensor is installed, the first 14 operation days of the sensor serve for self-calibration to local environments.

Wireless telegrams according to EEP A5-09-04:

ORG = 0x07

Data_byte3 = Humidity 0..100% (0..200)

Data_byte2 = CO₂ value 0..2550 ppm (0..255)

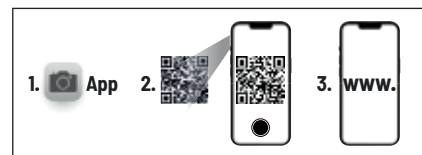
Data_byte1 = Temperature 0..51°C (0..255)

Teach-in telegram: 0x24200D80

Manuals and documents in further languages:



<https://eltako.com/redirect/FC02TF65-wg>



enocean®

THE UNIQUE WIRELESS PROFESSIONAL
SMART HOME STANDARD

Frequency 868.3 MHz

Transmit power max. 10 mW

Hereby, ELTAKO GmbH declares that the radio equipment type FC02TF65-wg is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity can be accessed via the QR code or the internet address under 'Documents'.

Must be kept for later use!

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50/2023 Subject to change without notice.