

Product Page

The KNX-Sensor Neo-TC-CO2-x is used for measuring and controlling indoor air parameters

- Air temperature (sensor in the housing) also weighted with external temperature
- CO2 level (sensor in the housing)
- Control functions for heating and cooling applications (can be combined)
- Setpoint temperatures for Comfort, Standby, Economy and Protection, selectable via KNX HVAC objects
- Setpoint change via objects
- Storage of minimum- and maximum-temperature
- Heat- and frost-alarm
- Limits for temperature and CO2 level
- Fan control by CO2 limits and external inputs
- Adaptation for setpoint and maximum temperatures
- Controller output 0...100% or programmable PWM for thermal actuators
- Valve rinse function
- Second temperature controller as auxiliary controller

Four binary inputs / outputs (floating)

- Light control as switch / button with short, long, double and both function
- Dimmer
- Blind and shutter control
- Programmable Encoder
- Temperature adjustment
- The binary inputs can be configured as outputs (LED / Beeper)

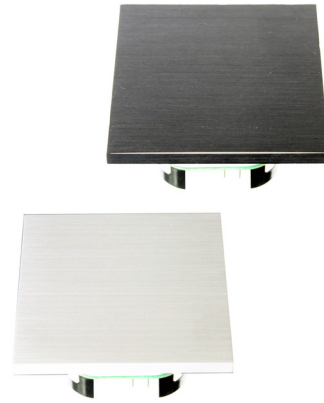
Four logic blocks for the logical link between internal and external signals.

- 10 associated logic inputs / outputs
- Heat- and cooling-request as additionally available signals
- Functions "AND, OR, NOT, XOR" for binary logic
- Functions "+ - *" for 8-bit values
- Function "=" for conditional forwarding of events

Applications

- Detection and control of room temperature
- Detection of CO2 level
- Decentralized control for steady KNX-valves or thermal actuators
- Decentralized ventilation control depending on air quality
- Evaluation of external switches and push buttons for switching functions

Article No. 3051256x



Neo-TC-CO2-AQx

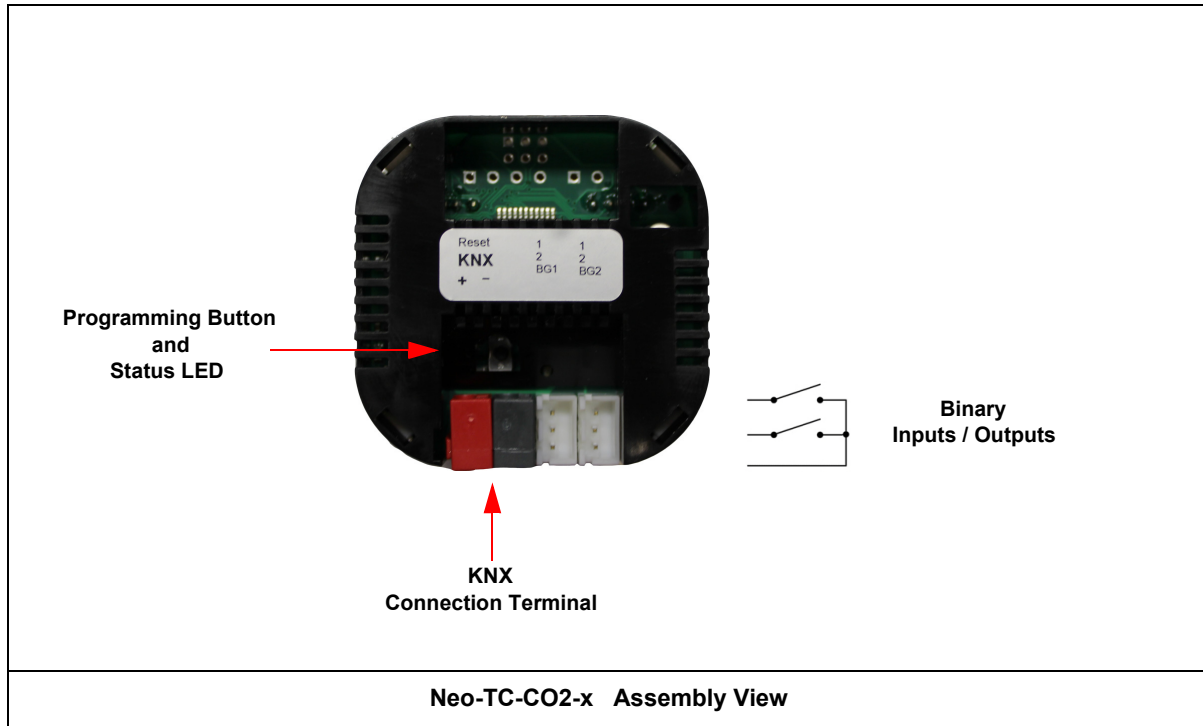
Article No. 3051266x



Neo-TC-CO2-ARx

Startup

The KNX Sensor is set up using the ETS (Version 4 or higher) and the applicable application program.
 The sensor is delivered unprogrammed.
 All functions are programmed and parameterized with ETS.
 Please read the ETS instructions.



Assembly

The **Neo-TC-CO2-x** sensor is designed for mounting in a standard flush-mounted socket (60/68) mm and is located in an IP20 plastic housing with aluminum cover.

In Case of Bus Voltage Recurrence

All changes made using the help key for the KNX bus are saved if the device has been correctly parameterized..
 By using the weighted mixture temperature, the external temperature scaling is set to 0% until an external temperature value is received.

The measuring and control values start with their current values (integral component=0 by PI-Controller).
 The ETS parameter settings are retained.

Discharge Program and Reset Sensor

In order to delete the programming (projecting) and to reset the module back to delivery status, it must be switched off (disconnect the KNX bus).

Press and hold the programming button while reconnecting the KNX bus and wait until the programming LED lights up (approx. 5-10 seconds).

Now you can release the programming button.

The module is ready for renewed projecting.

If you release the programming button too early, repeat the aforementioned procedure.

Technical Data

Technical Data - Neo-TC-CO2-x

Measurement	Temperature CO2 Concentration
Control	integrated
Temperature Range	0 .. +50°C
Resolution	0.02°C
Accuracy	± 0.4°C (5..60°C), sonst ± 0.8°C
Measurement Range CO2	300 - 5000 ppm
Accuracy	± (50ppm +3% of the measured value)
Binary In- / Output	4
Operating Voltage	KNX Bus Voltage 21 .. 32VDC
Power Consumption	approx. 240mW (at 24VDC)
Environment Temperature KNX-Module	Operating: 0 .. +50°C Storage: -25 .. +60°C
Environment Humidity KNX-Module	0 .. 95% r.H Non Condensing
Bus Coupler	integrated
Auxiliary Supply	not required
Startup with the ETS Version 4 or higher	HLK305
Curcuit Points	KNX 2-pole clamps (red / black)
Protection Class	IP20
Housing KNX-Module	Cover aluminum anodized (black) square: (80 x 80 x 6) mm round: Ø 84 x 6 mm Standard flush-mounted socket (60/68 mm) in the dry interior
Article Number	30512563 Aluminum, square, sanded 30512564 Aluminum, square, sanded, black 30512663 Aluminum, round, anodized 30512664 Aluminum, round, anodized, black

Imprint

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Safety Regulations

Attention! Installation and mounting must be carried out by a qualified electrician.

The buyer/operator of the facility has to make sure that all relevant safety regulations, issued by VDE, TÜV and the responsible energy suppliers are respected. There is no warranty for defects and damages caused by improper use of the devices or by non-compliance with the operating manuals.

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We take over guarantees as required by law.

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