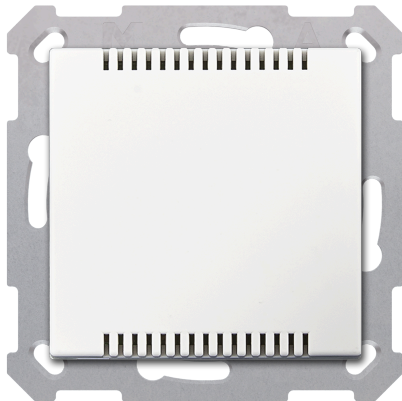


## SCN-CO2MGS01.02

### KNX CO2 / VOC Combi Sensor 55, Pure White matt finish



#### Product description:

The MDT CO2 / VOC Combi Sensor 55 comprises of two separate sensors for measuring the CO2 and mixed gas concentration (VOC). Additionally to measuring CO2 and VOC, the combi-sensor measures the room temperature and relative humidity. With these measured values, it is able to regulate temperature and air quality. The air quality traffic light gives an early warning of excessive CO2 or VOC concentrations in the room.

#### Product functions:

- Suitable for 55 mm switch ranges e.g. MDT assortment 55, GIRA Standard 55, E2, Event, Esprit, BERKER S1, B3, B7, JUNG A 500, A PLUS, A CREATION, AS 500, A 550, A FLOW or MERTEN 1M, M-Smart, M-Plan, M-Pure
- **Combi Sensor to measure the CO2 and Mixed gas concentration (VOC), the room temperature and the relative humidity**
- Upper and lower threshold value selectable per measured value
- Integrated room temperature controller (2-step, PI, PWM)
- **Air quality control function selectable as step-/ PI-controller for CO2-/ or VOC-sensor**
- 4-step controller with 1 Bit outputs or 1 Byte output with selectable thresholds
- Adjustable PI controller, external setpoint shift
- **Air quality status indication light for CO2 or VOC concentration with 4 colour channels and adjustable output objects (1-bit / scenes / RGB / HSV)**
- **Day/Night function**
- Installation in an airtight flush mounted installation box using the included installation frame
- Supply voltage via KNX bus, no auxiliary voltage required
- Integrated Bus coupler

## Technical data:

<b>Device</b>	Device type	SCN CO2 / VOC Combi Sensor
	Article Number	SCN-CO2MGS01.02
	EAN / GTIN	4251916112561
	Colour	Pure White, matt finish
	Dimensions (H x W x D)	55 x 55 x 13 mm
	Weight, gross (incl. packaging)	0.067 kg
	Protection classification	IP20
	Installation type	Flush mounted *1
	Included carrying ring	Carrying ring A
	Recommended installation height	1.1 m
	Installation position	any
	Weight, net	0.04 kg
	<b>Inputs</b>	Measuring range for CO2 concentration
Measuring range for VOC concentration		0 ... 500 IAQ (Index for air Quality)
Measuring range for temperature		0 ... 40 °C
Measuring range for relative humidity		0 ... 95 %
<b>Outputs</b>	Number of integrated temperature controllers	1
	Room temperature control range	7 ... 35 °C
	Temperature range for messages	3 ... 45 °C
<b>KNX</b>	Nominal voltage KNX	30 V DC SELV
	Voltage range KNX	21 ... 31 V DC SELV
	Typical power consumption KNX bus	< 0,5 W
	KNX Medium	TP-256 with long frame support
	KNX Application	as of ETS 5 (latest)
<b>Environmental conditions</b>	Ambient operating temperature	0 ... 45 °C
	Storage	-20 ... +55 °C
	Humidity	< 95 %
	Condensation permissible	No
<b>Connections</b>	Temperature sensor	Integrated
	KNX connection type	KNX terminal
	KNX cable cross section	0.6 ... 0.8 mm, solid conductor
<b>Hinweise</b>	Not suitable for safety#relevant measurements.	

## Technical data:

<b>Evaluation of the CO2 concentration</b>	400 ppm	Fresh, natural ambient air
	401 ... 800 ppm	Good indoor air quality
	801 ... 1000 ppm	Average indoor air quality
	1001 ... 1400 ppm	Moderate indoor air quality
	1401 ... 2000 ppm	Low indoor air quality, fatigue may set in
	2001 ... 5000 ppm	Poor indoor air quality, poor air hygiene
	5000 ppm	Maximum workplace concentration (8 h)
<b>Evaluation of the IAQ</b>	0 ... 50	Excellent indoor air quality
	51 ... 100	Good indoor air quality, typical air quality value at approx. 100
	101 ... 150	Indoor air with low pollution, ventilation recommended
	151 ... 200	Indoor air with moderate pollution, low ventilation
	201 ... 250	Indoor air with heavy pollution, medium ventilation
	251 ... 350	Room air with very heavy pollution, intensive ventilation
	> 351	Room air with extreme pollution, maximum ventilation

\*1 Suitable for airtight installation boxes as of 35 mm depth

## Wiring diagram:

