Installation Instructions for theELQZ-2-504 Air Quality Sensor GOLD/COMPACT

1. General

The carbon dioxide content of the indoor air is an effective indicator of how many occupants are in a room and the degree of ventilation required to maintain the air quality we need. Ventilation control based on CO_2 measurements guarantee the adequate supply of fresh air, and at the same time keeps energy costs as low as possible.

2. Function

Demand control

Set the air handling unit to DEMAND CONTROL under the FAN REGULATION function menu (GOLD LP/COMPACT) or under Functions/Flow (GOLD RX/PX/CX/SD, Version E/F). Set the setpoint required as a percentage of the sensor's operating range. If a setpoint of 1000 ppm is required, for instance, set the setpoint to 50%. Enter the setting under the Flow/Pressure menu group (GOLD LP/COMPACT) or under Functions/Flow (GOLD RX/PX/CX/SD, Version E/F). See the Operating & maintenance instructions.

ReCO$_2$

Set the GOLD air handling unit to "CO_2" under the ReCO$_2$ function menu (GOLD LP/COMPACT) or under Functions/ReCO$_2$ (GOLD RX/PX/CX/SD, Version E/F). Set the setpoint required as a percentage of the sensor's operating range. If a setpoint of 1000 ppm is required, for instance, set the setpoint to 50%. Enter the setting under the Flow/Pressure menu group (GOLD LP/COMPACT) or under Functions/ReCO$_2$ (GOLD RX/PX/CX/SD, Version E/F). See the Operating & maintenance instructions.

3. Mounting

Locate the sensor where the indoor climatic conditions are typical for the premises. Avoid any spot where the sensor would be exposed to direct draught or poor air mixture. We advise locating the sensor at least 2 metres above the floor to minimize the risk of physical damage or inaccurate readings due to direct exposure to exhaled air. Access to the sensor is needed for checking its function and servicing only.
1. Route the cable to where the sensor is to be located. The cable can be recessed in the wall or other surface and should then be passed into the air quality sensor through its bottom section. If the wire is surface-mounted, it can be passed into the sensor through one of the knockout lead-throughs in the top of the sensor.
2. Back off the screw and pull the top section straight upward.
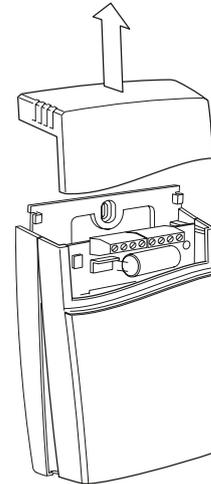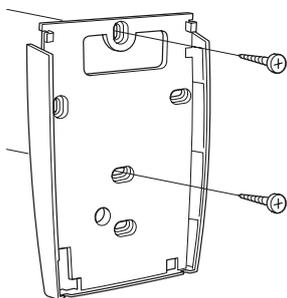

3. Push the intermediate plate together with cover upward and hold firmly against the base plate.
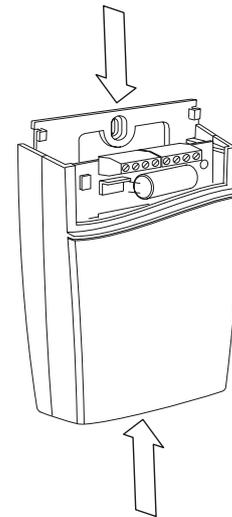

4. Bend the intermediate plate with cover obliquely outward and detach it from the hooks. 1

Specifications are subject to alteration without notice.
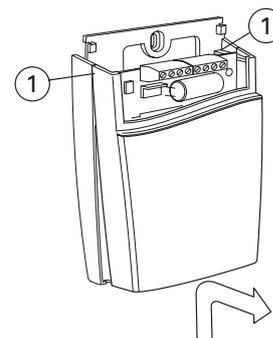
5. Secure the base plate by means of screws to the wall. The screw head should be max. 4 mm.

6. A   Insert the hooks into the holes in the upper section of the base plate.

   B   Press the front against the base plate until its hooks lock into the bottom edge of the front.
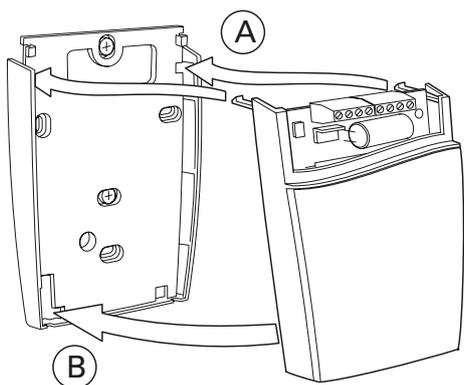
7. Push in the top section under the locking hooks in the base plate and secure it in position by means of the screw.
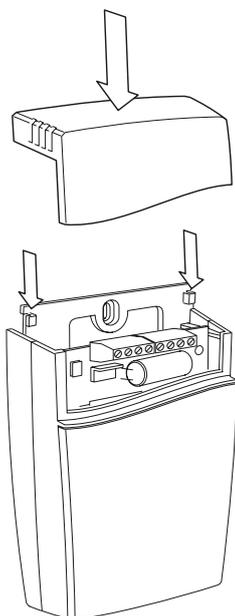
4. Technical Data

Supply voltage	24 V AC ± 20%
Frequency	50/60 Hz
Power consumed	3 W
Output signal	0–10 VDC
Measuring range	500–1500 ppm
Accuracy*	± 1% of the measuring range
	± 5% of the reading
Warm-up period	$\leq$ 1 min.
Response time	$\leq$ 2 min.
Wiring nuts	for max. 1,5 mm²
Enclosure Class IP 20	
Operating temperature	0 till +50 °C
Storage temperature	-20 till +70°C
Dimensions (H×W×D)	120×82×30

The accuracy is defined for continuous operation (at least three weeks after installation).

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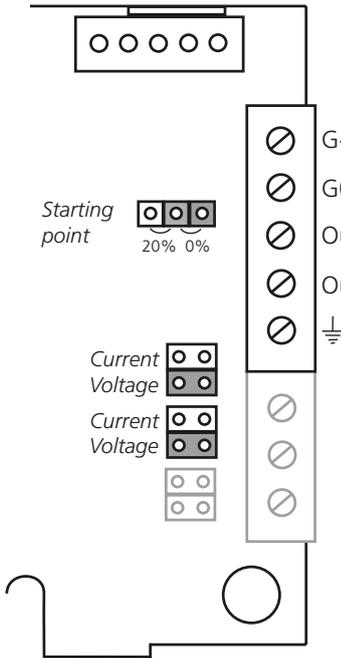
5. Electrical Connections

A qualified electrician should wire electrical connections in accordance with local regulations.
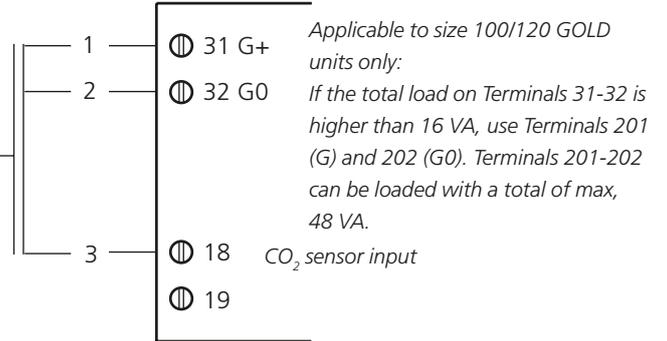
GOLD RX/PX/CX/SD, version E/F
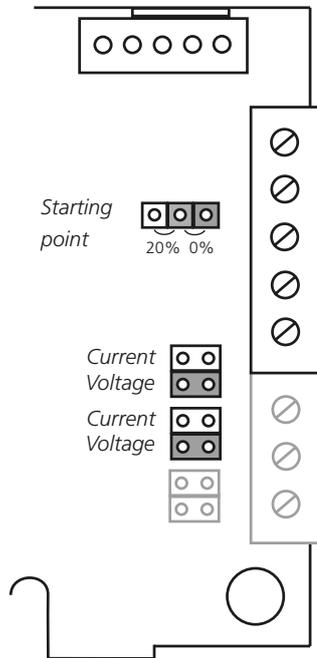
Demand control or RECO$_2$

Air quality sensor

GOLD RX/PX/CX/SD

IQlogic control unit

Applicable to size 100/120 GOLD units only:

If the total load on Terminals 31-32 is higher than 16 VA, use Terminals 201 (G) and 202 (G0). Terminals 201-202 can be loaded with a total of max, 48 VA.

31 G+

32 G0

18   CO_2 *sensor input*

19

GOLD LP/COMPACT

Demand Control

Air quality sensor

Starting point 20% 0%

Current Voltage

Current Voltage

GOLD LP/COMPACT

IQnomic control unit

1	9 G+
2	10 G0
	35
3	37*
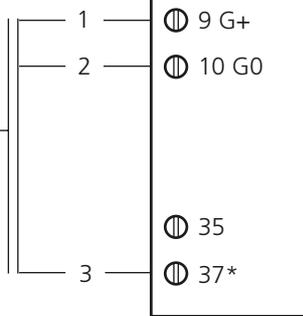
Demand regulation (control) should be selected for the one fan and slave control should be selected to the other fan if so desired.

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