Installation instructions
Humidity sensor TBLZ-4-31-6, wall mounted
GOLD

1. General

The humidity sensor is intended for wall mounting and is equipped with a screw terminal connection for a cable.

An adapter for conversion from a 4-wire cable to a 3-metre long modular cable is supplied with the sensor.

2. Application area

The humidity sensor is designed to measure humidity in a room in connection with the humidification/dehumidification functions.

Humidity sensor TBLZ-4-31-6

Adapter

Modular cable

3. Installation

3.1 Humidity sensor

The humidity sensor must be positioned at a representative measurement point about 1.5 metres above the floor.

Loosen the cover on the humidity sensor by releasing the locking tabs on the sides with, e.g. a small screwdriver.

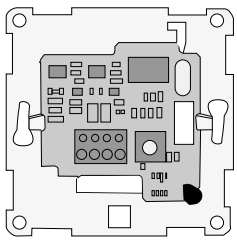
Remove the frame.

Mount the back piece of the humidity sensor on an interior wall using two screws. Makes sure to mount the back piece so that the arrows on the rear of the back piece point upwards.

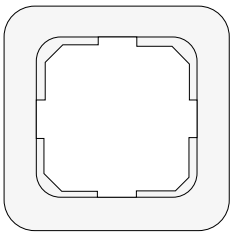
Place the frame on the back piece.

Fit the cover. Make sure that the ventilation holes in the cover for the free flow of air point to the sides and downwards and push the cover on the locking tabs.

See below.

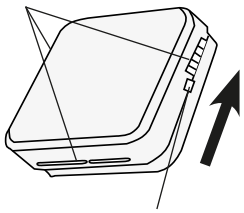


Back piece
Makes sure to mount the back piece so that the arrows on the rear point upwards (as illustrated).



Frame
Placed on the back piece after the back piece is fitted.

Holes for the free flow of air



Holes for locking tabs

Cover
Make sure that the cover is fitted so that the holes for the free flow of air point to the sides and downwards. Press the cover onto the locking tabs.

3.2 Adapter

Remove the cover on the adapter by pressing in the tab on the side of the cover with a small screwdriver and then twist the cover. Secure the adapter at an appropriate place by means of two screws or the double-adhesive pad (supplied).

4. Technical data

4.1 Humidity sensor

Dimensions (W x H x D)	80x80x16 mm
Range of measurement, moisture	0-100 % RH
Range of measurement, temp	-40 – 125 °C
Measurement accuracy, moisture	<2% RH, 0 - 90% RH <4% RH, 90-100% RH
Measurement accuracy, temperature	± 0.3 °C, <0 °C ± 0.2 °C, 0 – 90 °C ± 0.75 °C, > 90 °C
Resolution, moisture	0.01 %
Resolution, temperature	0.01 °C
Non-linearity, moisture	<1 %
Hysteresis, moisture	± 0.8%, 25 °C
Long-term stability, moisture	<0.25%/year
Enclosure class	IP 20
Terminal blocks, cross section	0.1 – 1.0 mm^2
Colour	White, RAL 9010

4.2 Adapter

Dimensions (W x H x D)	52x58x22 mm
Enclosure class	IP 20
Colour	Beige

4.3 Modular cable

Cable	6-pin
Connection	RJ12
Length	3 m
Colour	Black

5. Electrical connections

The electrical connections should be wired by a qualified electrician in accordance with local electrical safety regulations.

5.1 Air handling unit

Connect the modular cable to an optional modular connection, marked COM1-3, on the air handling unit's control unit. See the wiring diagram below.

5.2 Adapter and humidity sensor

Connect the modular cable from the air handling unit to the modular connection on the adapter. Connect a 4-wire cable (not supplied by Swegon) between the screw connections on the adapter and the humidity sensor. Insert the cable according to the instructions on the humidity sensor's cover and mounting plate.

The humidity sensor is digital and depending on the installation may be sensitive to external interference. The cable to the humidity sensor must not be routed in parallel next to a power cable. If the sensor cable crosses a power cable, it should cross it at a 90° angle.

Set the function selector switch on the humidity sensor to position F.

Connect the leads according to the following:

Adapter	**Moisture sensor**
Screw GR	Terminal A
Screw RD	Terminal B
Screw BK	Terminal V-
Screw YL	Terminal V+