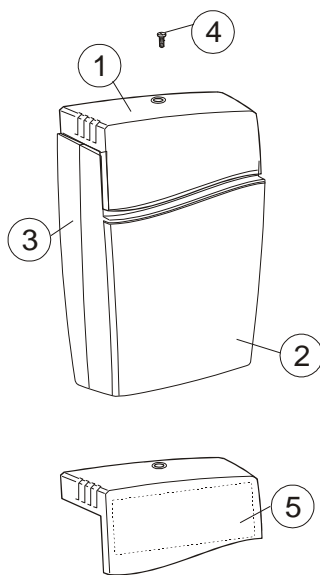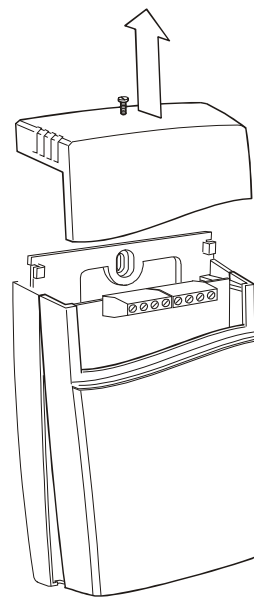# Installation Manual

aSENSE
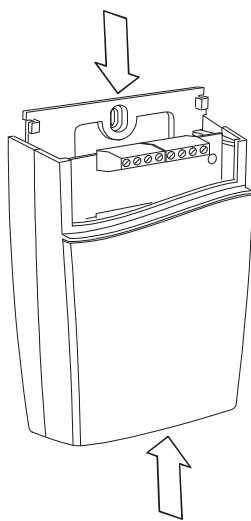
Dismounting of the sensor
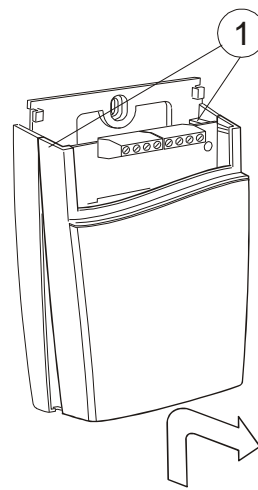
1 Top part

2 Front part

3 Wall plate

4 Screw

5 Label with settings inside the top part

Pull the top part upwards
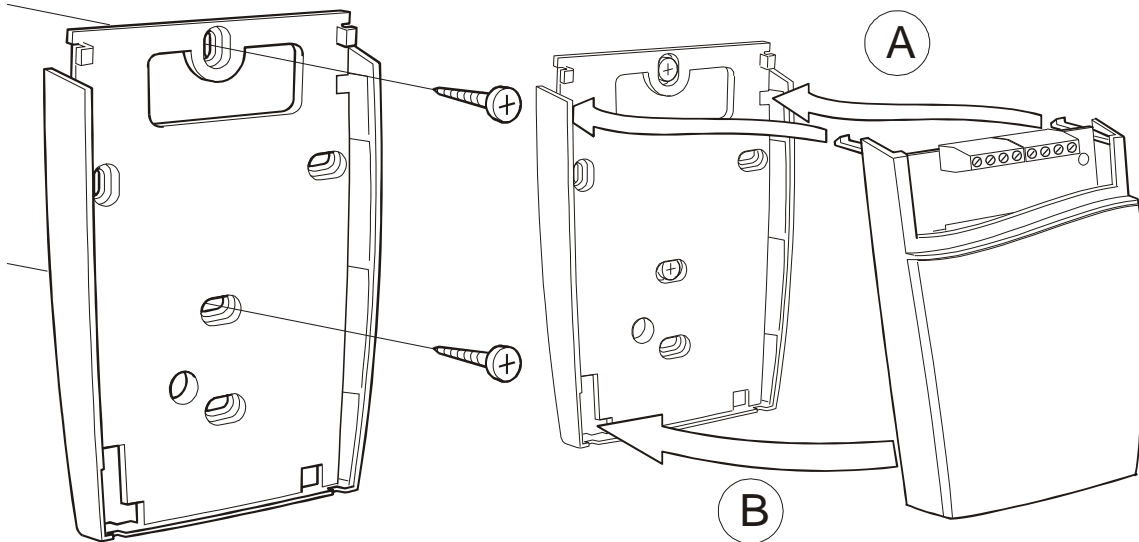
Push the front part upwards while keeping the wall plate steady

Fold the front part forwards and loose it from the hooks (#1)

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Mounting of the sensor

The wall plate is screwed onto the wall (

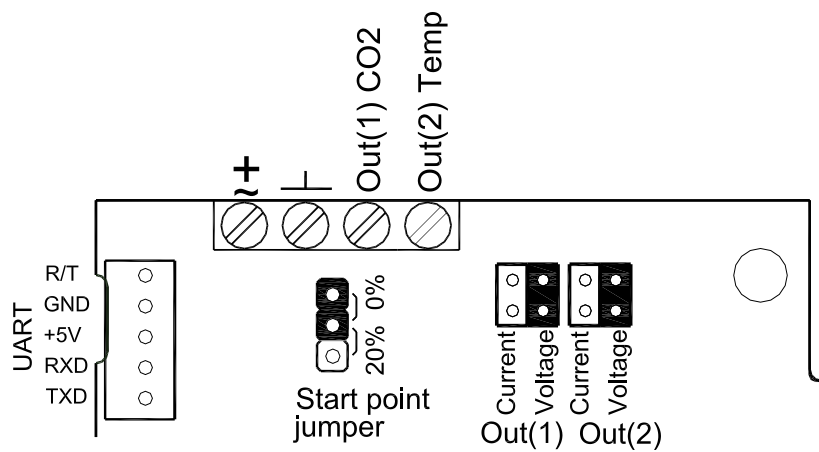A) Put the top tabs of the front part into the top holes of the wall plate.
(B) Press the lower edge of the case onto the wall plate to latch

If the connection cables are drawn through a conduit the conduit must be sealed.
Air of different temperature may otherwise disturb the temperature measurements.
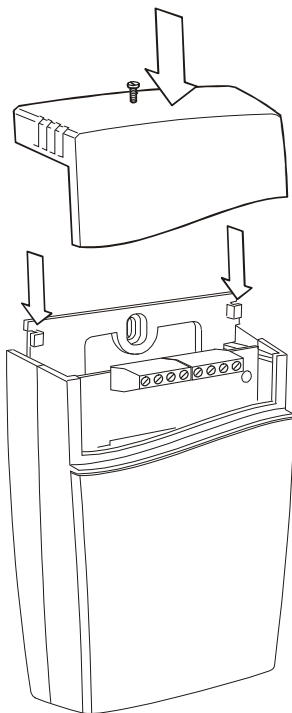
Screw head diameter: **max 7.5 mm**

Screw head height: **max 2.5 mm**

The top part is pushed under the
locking hooks of the wall plate
and is secured with a screw

Terminals and jumpers on aSENSE.
The darker positions are default settings.
Terminals and jumpers are located under the top part.

NOTE!
If for some reason the PCB must be removed it must be handed carefully and protected from electrostatic discharge! Normally, removing the PCB is not required.

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Electrical connections

The power supply has to be connected to **≃+** and **⊥**. **⊥** is considered as system ground. The same ground reference has to be used for the aSENSE VAV unit and for any connected device! Unless different transformers are used, special precautions need to be taken.

NOTE!
The signal ground is not galvanically separated from the aSENSE VAV power supply!

NOTE!
The same ground reference has to be used for the aSENSE VAV unit and for any connected device!

NOTE!
An external fuse shall be used with this sensor. A separate fuse must be used for each sensor.

If possible, keep the sensor powered up after mounting. Connect the analogue output before measuring.

| Connection Terminal	Function	Electrical Data	Remarks
≃ **+** **⊥**	Power (+) Power ground (-)	24 V AC/DC+ (+-20%), 1W 24 V AC/DC	See note 1
Out(1) **CO_2** **Out(2)** **Temp**	Analogue Output 1 (+) Standard 0 – 2000 ppm See label for non-standard Analogue Output 2 (+) Standard temperature 0 – 50 °C or 32 – 122 °F See label for non-standard	0 – 10 VDC or 0 – 20 mA 2 – 10 VDC or 0 – 20 mA or See label Same as Output 1	According to positions of Out(1) and start point jumpers. See note 1 According to positions of Out(2) and start point jumpers. See note 1 and 2

Note 1: The ground terminal is used as negative power supply DC input or AC phase ground **⊥** (halfwave rectifier). A single transformer may be used for the entire system.

Note 2: aSENSE can deliver a voltage or a current loop for Out(1) / Out(2). To change between voltage and current output mode the hardware jumpers are used. There is one jumper for Out(1) and one for Out(2), so that one output can be a voltage output and the other a current output. Both, voltage output and current output can have start points 0% (0 – 10 V DC or 0 – 20 mA) or 20% (2 – 10 V DC or 4 – 20 mA). The same start point is used for both outputs. See the user manual.
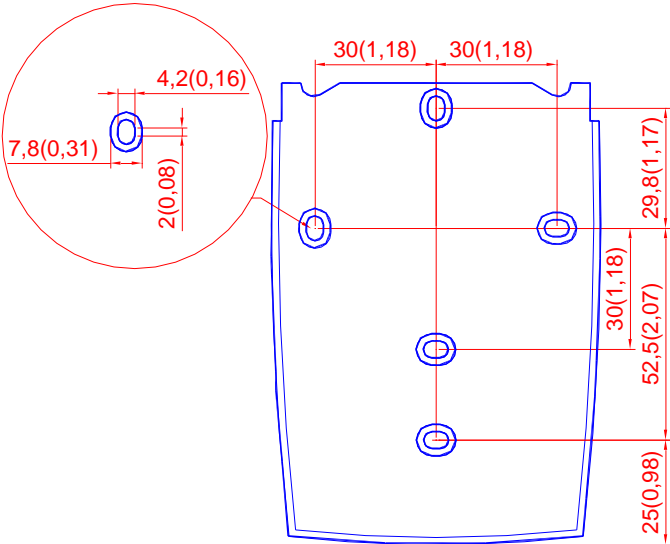
Important
1. All low voltage connections to this device must be 24 V AC/DC Class 2 (or equivalent to your local regulations).
2. All wiring must comply with applicable local codes, ordinances and regulations.

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Dimensions and holes

83(3,26)
31(1,22)
120(4,72)
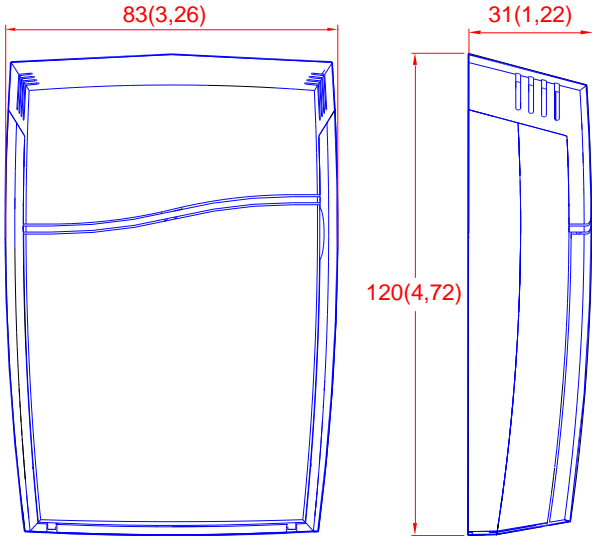
Dimensions of sensor in mm and (inches)

4,2(0,16)
7,8(0,31)
2(0,08)
30(1,18) 30(1,18)
29,8(1,17)
30(1,18)
52,5(2,07)
25(0,98)

Mounting of the sensor onto the wall
Screw head diameter: **max 7.5 mm**
Screw head height: **max 2.5 mm**

Dimensions of mounting plate in mm and (inches)

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