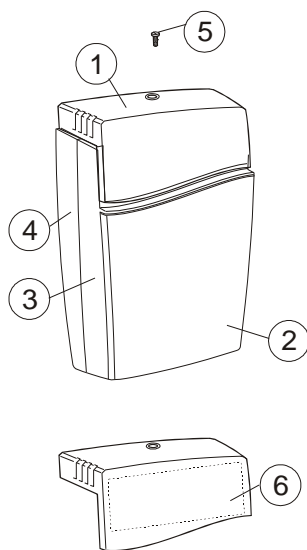


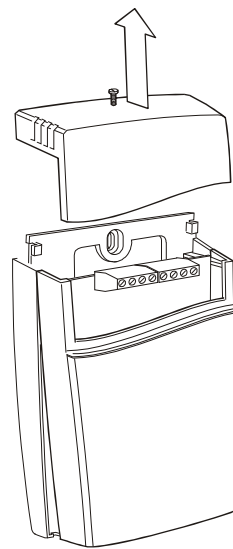
# Installation Manual

## aSENSE VAV

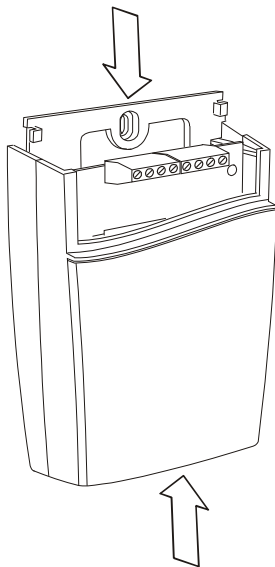
### Dismounting of the sensor



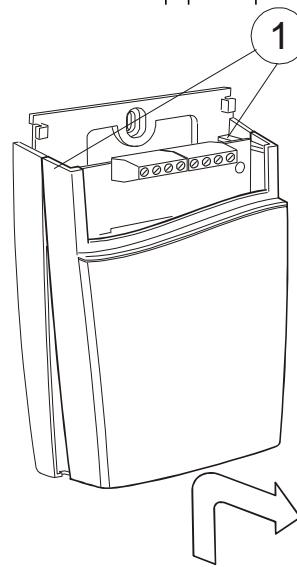
- 1 Top part
- 2 Lid
- 3 Front part
- 4 Wall plate
- 5 Screw
- 6 Label with settings inside the top part



Pull the top part upwards



Push the front part with the lid upwards while keeping the wall plate steady

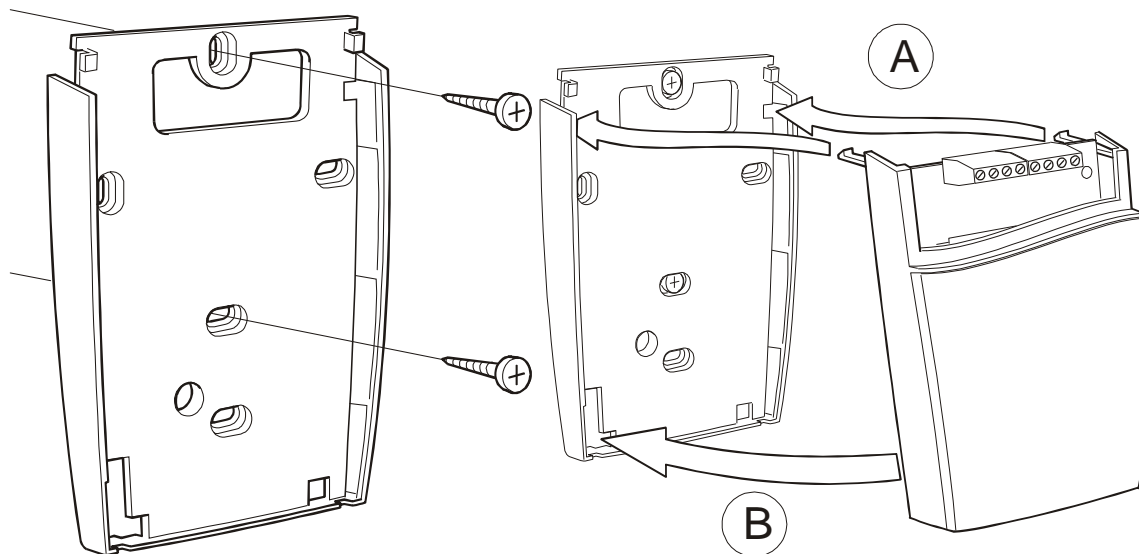


Fold the front part with the lid forwards and loose it from the hooks (#1)

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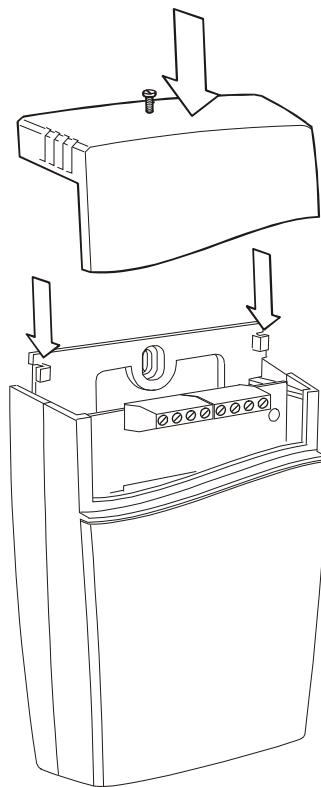
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## Mounting of the sensor



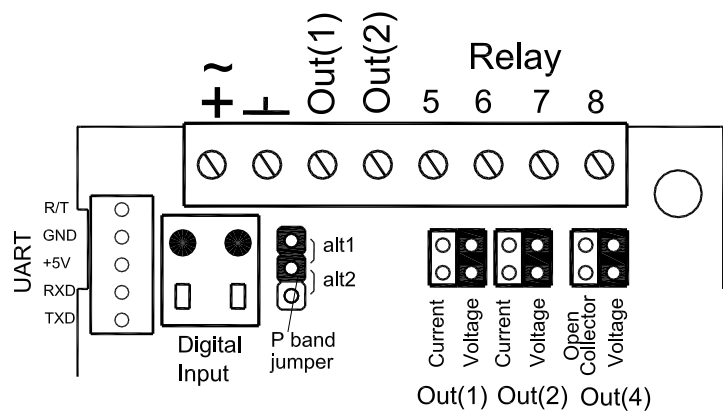
The wall plate is screwed onto the wall holes of the wall plate.

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



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 VAV.

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 handled 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!

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






Connection Terminal	Function	Electrical Data	Remarks
	Power (+)	24 VAC/DC+ (+20%), 3 W	2 W without output load See note 1
	Power ground (-)	24 V AC/DC-	
Out(1)	Analogue Output 1 (+)	0 – 10 VDC or 0 – 20 mA, 2 – 10 VDC or 4 – 20 mA,	According to positions of Out(1) jumper and start point selection. See note 2
Out(2)	Analogue Output 2 (+)	Same as Output 1	According to positions of Out(2) jumper and start point selection. See note 2!
5	Signal Ground (-)	Connected to  via PTC fuse	See note 1
6 7	Normally open relay	Contact free relay minimum load 1 mA/5 V rated load 0.5 A/125 VAC; 1 A/24 VDC	Triggered by register Out(3)
8 Out(4)	Analogue Output 4 (+) or Open Collector	0 – 10 VDC  Max 0.5A, 55 VDC / 40 VAC (half-wave rectifier protection)	According to positions of Out(4). See note 2 and 3
DI1  DI1	Digital Input 1	Closed contact current 1 mA Open contact voltage max 5 V	<b>Do not apply any voltage on this input!</b>

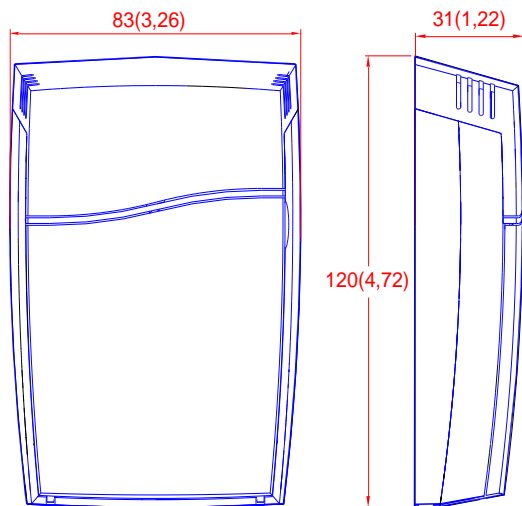
Table I. Electrical terminal connections for aSENSE VAV

**Note 1:** The ground terminal is used as negative power supply DC input or AC phase ground  (half wave rectifier). The signal ground M, protected by a PTC resistor, is the same as power ground  (permitting a "3-wire" configuration). A single transformer may be used for the entire system.

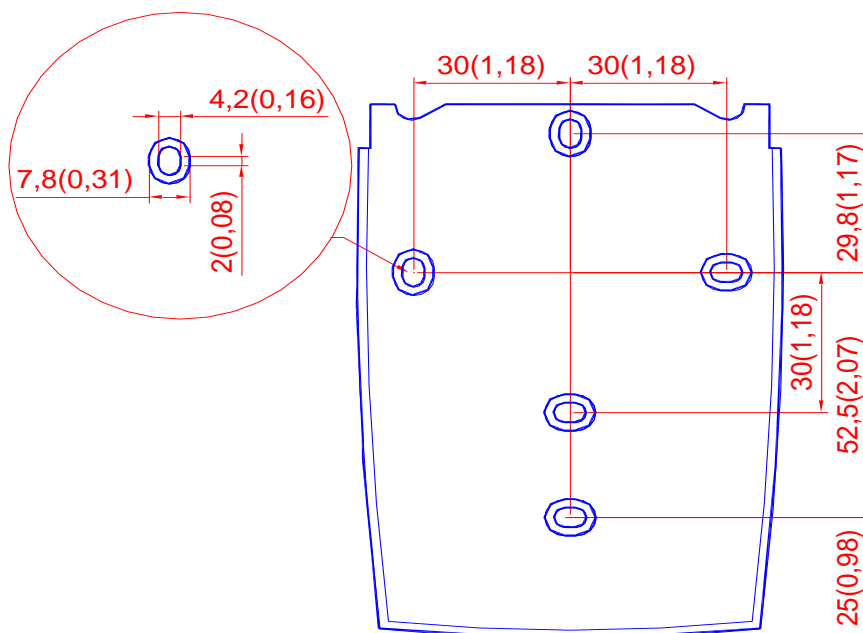
**Note 2:** aSENSE VAV can deliver both a voltage or a current loop for Out(1) / Out(2). For Out(4) a voltage output or an open collector output is selected with jumper OUT4. To change between voltage and current output mode the hardware jumpers are used. There is one jumper for Out(1) and one for Out(2), 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 VDC or 0 – 20 mA) or 20% (2 – 10 VDC or 4 – 20 mA) selected from PC software.

**Note 3:** Current of Open Collector is internally returned to  terminal.

## Dimensions and holes



Dimensions of sensor in mm and (inches)



### 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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