Installation Manual

aSENSE Ind

CO_2 / temperature sensor
mounted in industrial housing
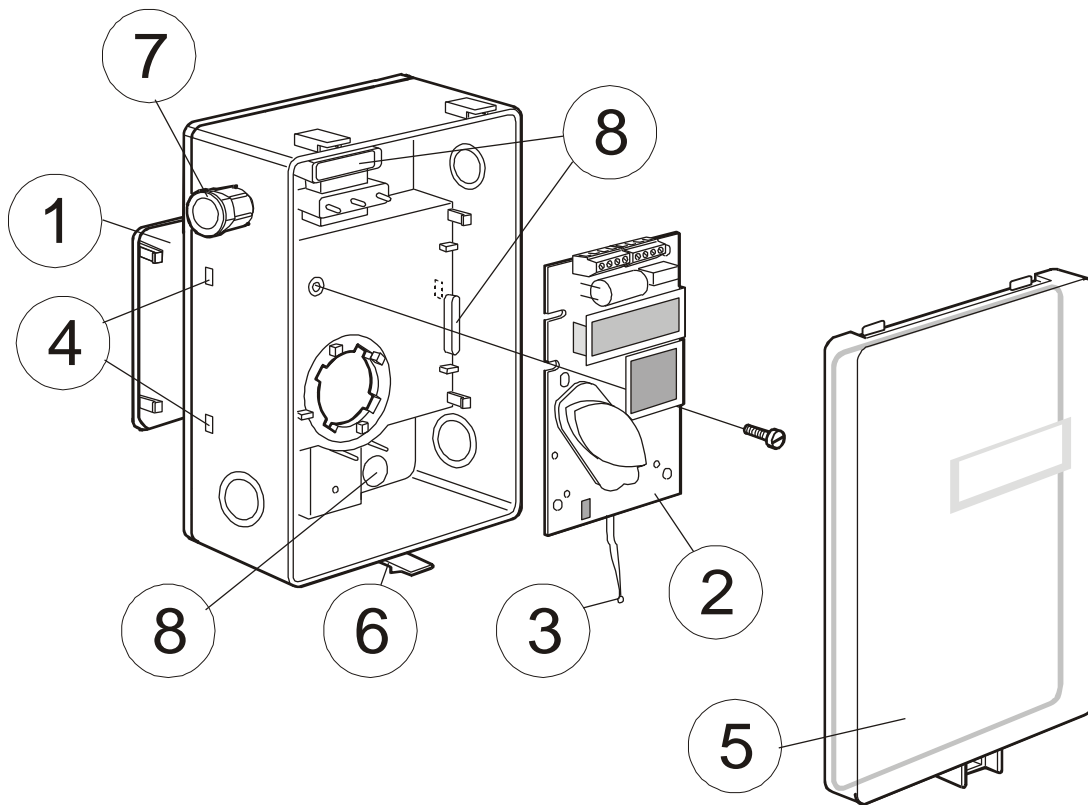
1	Wall plate	5	Snap-in lid
2	PCB (Factory supplied mounted in box)	6	Locking screw of the lid (not shown)
3	Temperature sensor	7	PG9 cable entry bushing
4	Hole for wall plate hooks	8	Air holes

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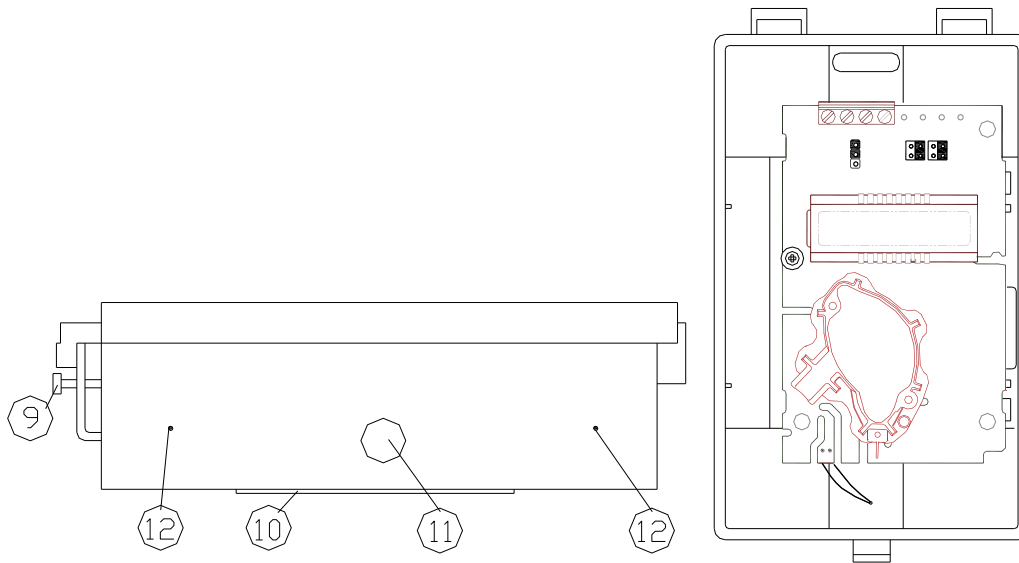
9 Lidlocking screw
10 Wall plate
11 Screw to hold the wall plate
12 Drill marks for cable entry bushings

Dismounting the wall plate

The sensor is delivered with the wall plate mounted. The wall plate has to be removed before the sensor is mounted onto the wall. Unscrew the screw on the side of the box.

Wall Mounting Instruction

Normally the PCB should not be removed from the housing. If for some reason the PCB must be removed it must be handed carefully and protected from electrostatic discharge.

1) **Electrical cable entry:** Mount the cable entry bushing in dimension PG9. Never feed more than one cable through each cable entry bushing, or else gas might leak through!

2) **Screw the wall plate onto the wall:** The wall plate has holes for three screws. Drill holes for 3.5mm screws and put dowel into them. Dowels and screws 3,5 x 25mm are included in a plastic bag

3) **Attaching the sensor box** to the wall plate is done by a snap-in fitting. The wall plate has three hooks that fit in holes in the sensor box. Fasten the screw on the side of the box.

4) **The lid can be locked** with the screw at the bottom of the sensor box.

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. Unless different transformers are used, special precautions need to be taken.

NOTE:
The aSENSE Ind signal and power supply grounds are common.

The same ground reference has to be used for the aSENSE Ind unit and for the control system!

Connect the power after mounting. The analogue output should be connected before measuring.

Connection Terminal	Function	Electrical Data	Remarks
~ + ⏚	Power (+) Power ground (-)	24 V AC/DC+ (+-20%), 1 W 24 V AC/DC-	See note 1
Out(1) CO₂ Out(2) Temp	Analogue Output 1 (+) Standard 0 – 2000 ppm Analogue Output 2 (+) Standard 0-50ºC For other settings see the label	0 – 10 V DC or 0 – 20 mA, 2 – 10 V DC or 4 – 20 mA, Same as Output 1 For other settings see the label	According to positions of Out(1) and start point jumpers. See note 2 According to positions of Out(2) and start point jumpers. See note 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 Ind 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 outputs, 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 function manual.
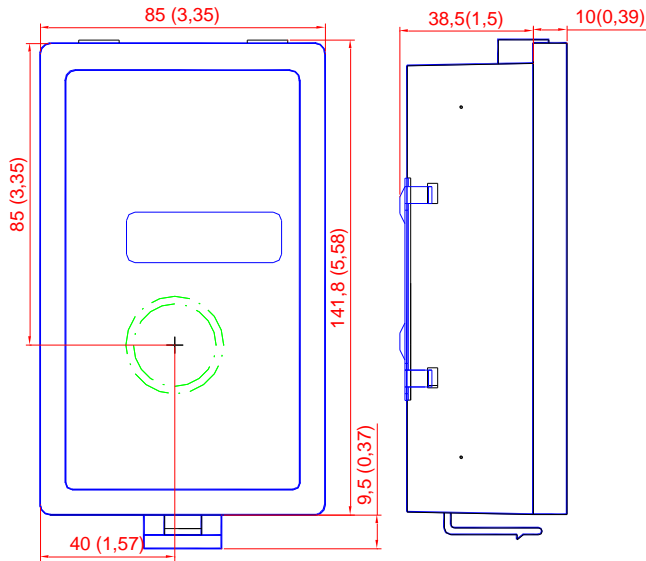
Note 3: Please use voltage outputs for temperature measurements. The accuracy can only be guaranteed if voltage outputs are used.
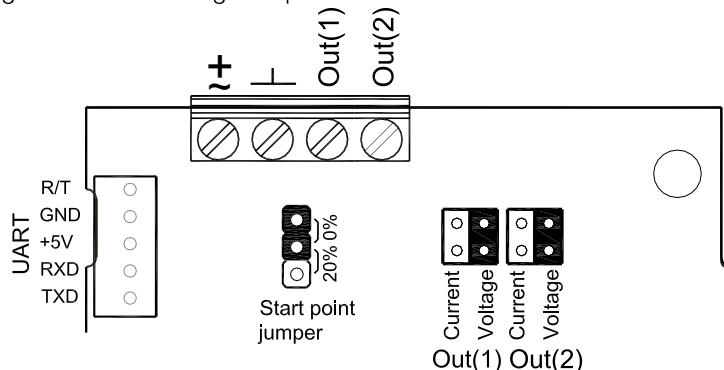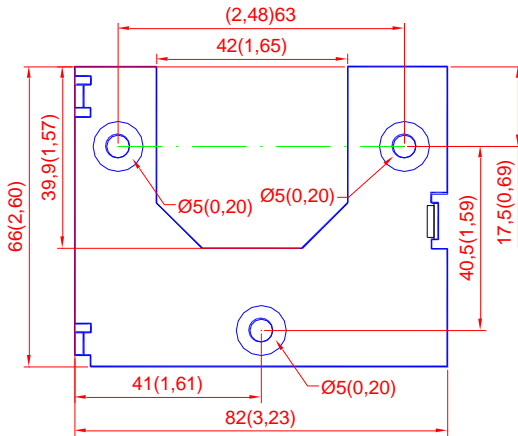

Terminals and jumpers on aSENSE Ind. The darker positions are default settings. The start point jumper is not mounted on some models

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The dimensions of the sensor in mm and (inches)

The measurements of the wall plate in mm and (inches)

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