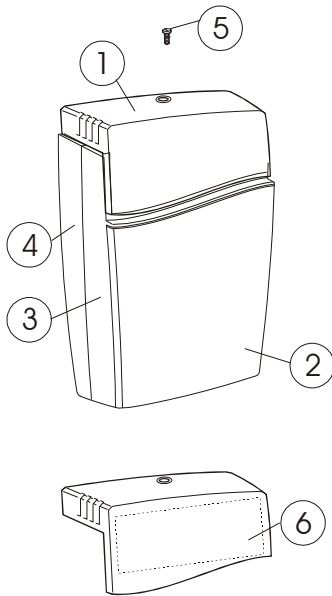


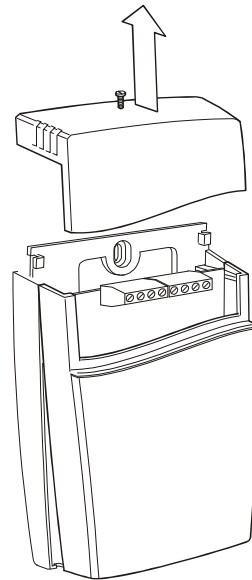
# Installation Manual

## **aSENSE RL**

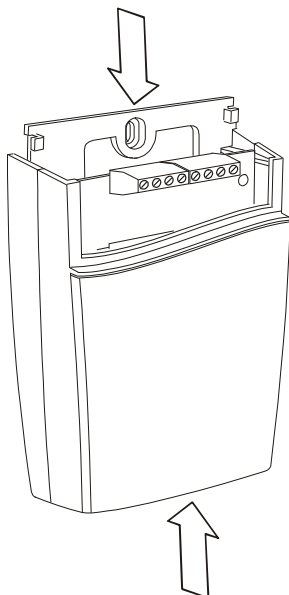
### Dismounting of the sensor



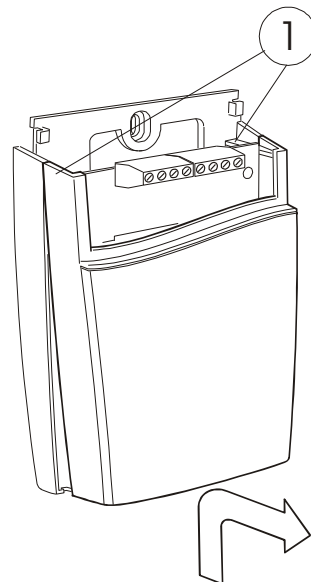
- 1 top part
- 2 lid
- 3 front part
- 4 wall plate
- 5 screw
- 6 label with settings inside the top part



*Pull the top part upwards*

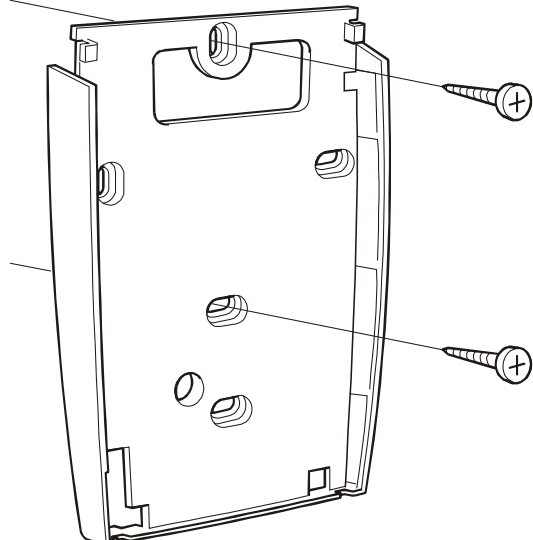


*Push the front part with the lid upwards while keeping the wall plate steady*

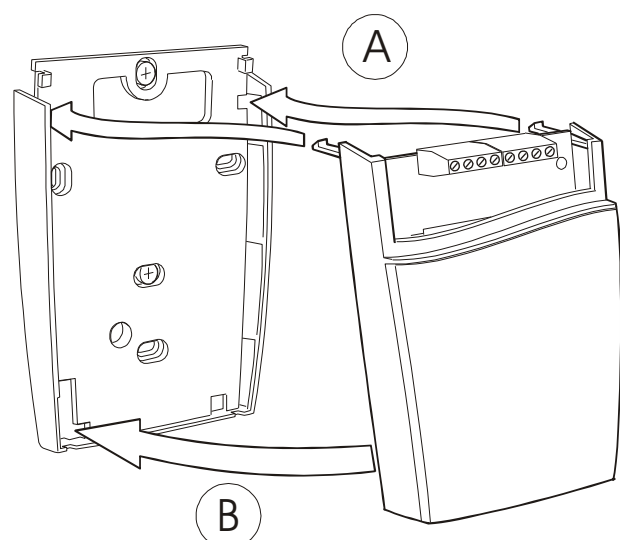


*Fold the front part with the lid forwards and loose it from the hooks (#1)*

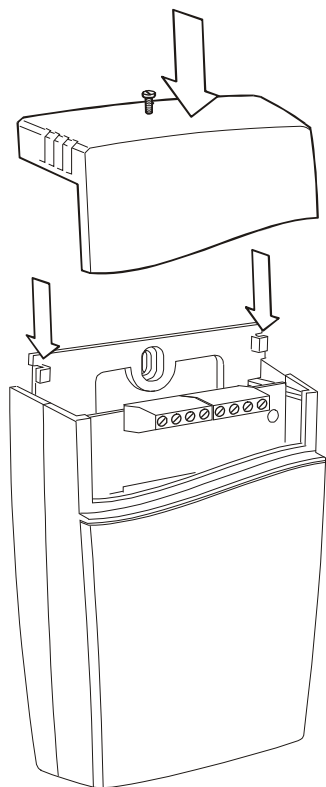
# Mounting of the sensor



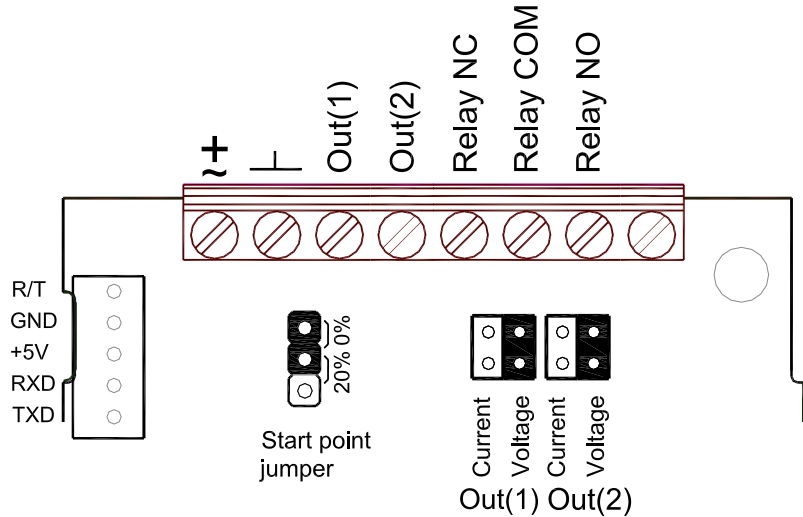
The wall plate is screwed onto the wall  
 The screw head diameter should be **max 7,5 mm**  
 The screw head height should be **max 2,5 mm**



(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



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



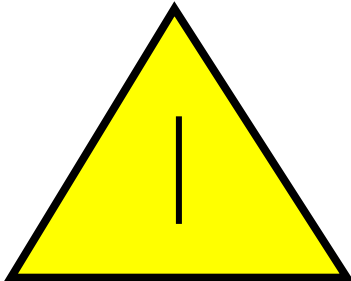
Terminals and jumpers on aSENSE RL.  
 The darker positions are default settings.  
 Terminals and jumpers are located under the top part.



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.

## Electrical connections

The power supply has to be connected to  $\tilde{+}$  and  $\perp$ .  $\perp$  is considered as system ground. If the analogue output is connected to a controller *the same ground reference has to be used for the aSENSE RL unit and for the control system!* Unless different transformers are used, special precautions need to be taken.



**PLEASE NOTE! The same ground reference has to be used for the aSENSE RL unit and for the control system!**

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

| Connection Terminal | Function              | Electrical Data   | Remarks   |
|---------------------|-----------------------|---|---|
| $\tilde{+}$         | Power (+)             | 24 VAC/DC+ (+-20%),<br>3W   | 2W without output load<br><i>See note 1!</i>  |
| $\perp$             | Power ground (-)      | 24 VAC/DC-  |   |
| Out(1)              | Analogue Output 1 (+) | 0-10 VDC or 0-20 mA,<br>2-10 VDC or 4-20 mA,  | According to positions of OUT1 and start point jumpers.<br><i>See note 2!</i>       |
| Out(2)              | Analogue Output 2 (+) | Same as Output 1  | According to positions of OUT2 and start point jumpers.<br><i>See note 2 and 3!</i> |
| 5                   | Normally closed relay | Contact free relay<br>minimum load 1mA/5V<br>rated load<br>0,5A/125VAC;<br>1A/24VDC | Triggered by register Out(3)  |
| 6                   | Relay COM             |   |   |
| 7                   | Normally open relay   |   |   |
| 8                   | Not used              |   |   |

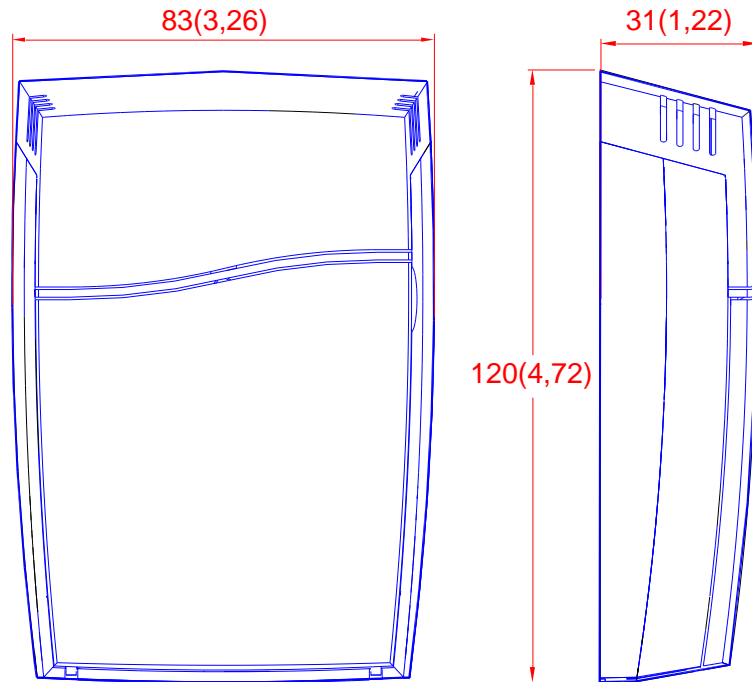
Table I. Electrical terminal connections for aSENSE RL

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

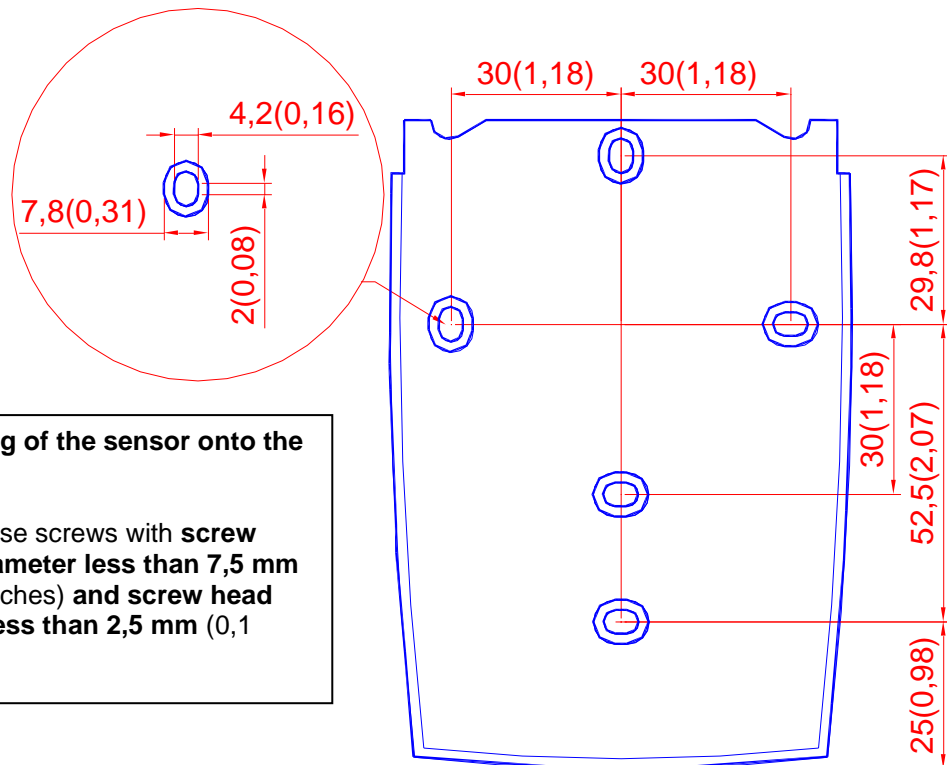
**Note 2:** aSENSE RL can deliver a voltage or a current loop for Out(1) / Out(2). To change between voltage and current output mode the hardware jumpers are used. There is one jumper for Out(1) and one for Out(2), so that one output can be a voltage output and the other a current output. Both, voltage output and current output can have start points 0 % (0-10 VDC or 0-20mA) or 20% (2-10 VDC or 4-20mA). The same start point is used for both outputs. See the function manual.

**Note 3:** Please use voltage outputs for temperature measurements. The accuracy of temperature measurements is valid only for units configured in voltage outputs mode.

## Dimensions and holes



Dimensions of sensor in mm and (inches)



### Mounting of the sensor onto the wall

Please use screws with **screw head diameter less than 7,5 mm** (0,295 inches) and **screw head height less than 2,5 mm** (0,1 inches)

Dimensions of mounting plate in mm and (inches)

