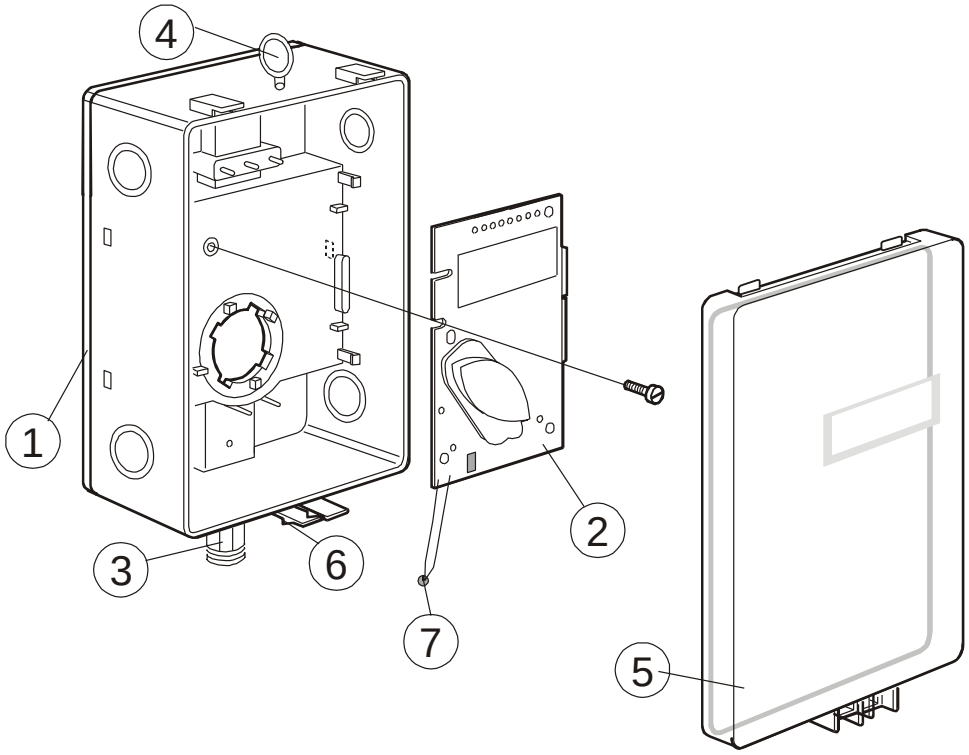
Installation Manual

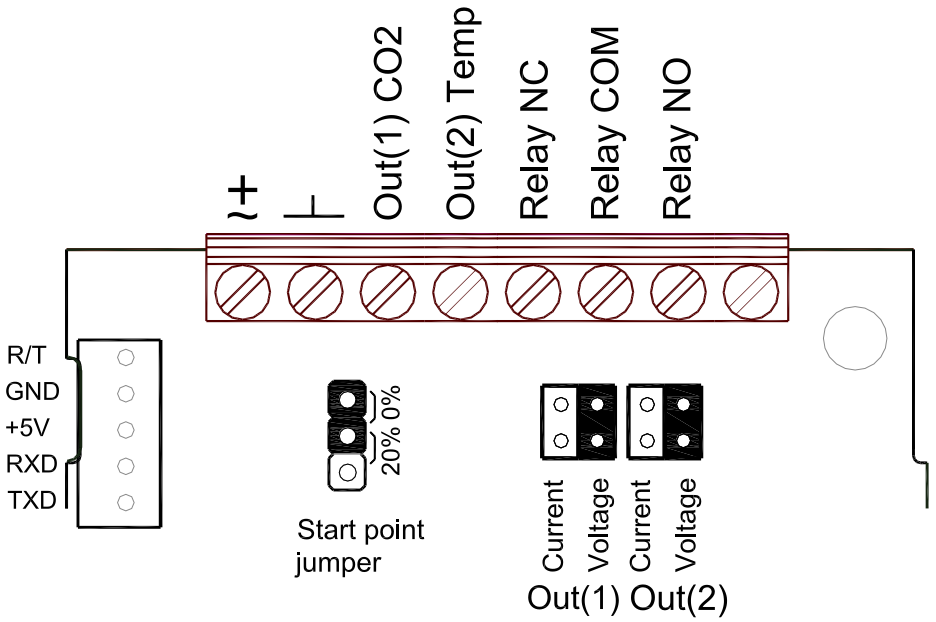
aSENSE GH (Disp) RL

CO_2 / temperature transmitter with relay for use in greenhouses



1 Back plate
2 PCB (mounted in the box at delivery)
3 PG7 Cable entry bushing
4 Attachment loop
5 Snap-in lid
6 Lid locking screw (not shown)
7 Temperature sensor

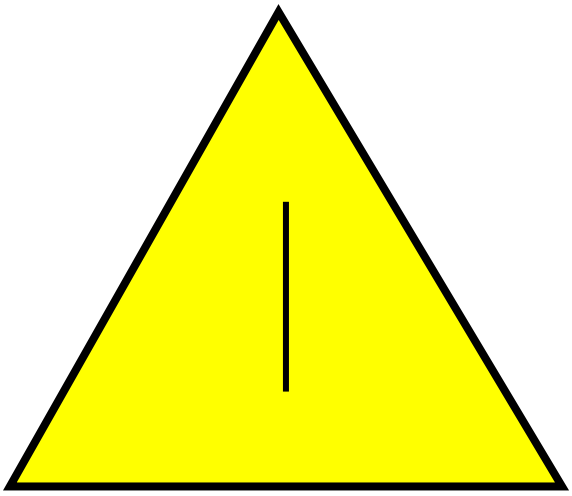
If the connection cables are drawn through a conduit the conduit must be sealed.
Air of different temperature may otherwise disturb the temperature measurements.



Terminals and jumpers on aSENSE GH (Disp) RL. Darker positions are default settings

Electrical connections

The power supply has to be connected to ~ + and ⊥. ⊥ is considered as system ground. If analogue output is connected to a controller *same ground reference has to be used for aSENSE GH (Disp) RL unit and for control system!* If different transformers are used, special precautions need to be taken.



<u>PLEASE NOTE!</u> Same ground reference has to be used for *aSENSE GH (Disp) RL*

Connect analogue output before measuring.

Connection Terminal	Function	Electrical Data	Remarks
~ +	Power (+)	24 VAC/DC+ (+-20%), 3W	2W without output load
⊥	Power ground (-)	24 VAC/DC-	*See note 1!*
Out(1) CO_2	Analogue Output 1 (+) 0-2000 ppm See label for non-standard	0-10 VDC or 0-20 mA, 2-10 VDC or 4-20 mA,	According to positions of Out(1) and start point jumpers. *See note 2!*
Out(2) Temp	Analogue Output 2 (+) 0-50 ^{o}C See label for non-standard	Same as Output 1	According to positions of Out(2) and start point jumpers. *See note 2 and 3!*
5	Normally closed relay	Contact free relay minimum load 1mA/5V rated load 0,5A/125VAC; 1A/24VDC	Triggered by register Out(3) Standard relay ON/OFF 1000/900 ppm CO_2 See label for non-standard
6	Relay COM		
7	Normally open relay		
8	Not used		

Table 1: Electrical connections

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 GH (Disp) 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 user 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