

# CONTROLLER MANUAL



HOMEVAP

## Controller Manual

*The controller controls the unit based on the relative humidity (RH) and temperature measured in the room. It is already uniquely paired with the unit and the defaults are standard.*

*The following are shown on the display of the controller:*

- **Functions**  
Humidify (HUMIDIFY), Cool (Cool) or both (AUT) depending on the equipment connected.
- **Status**  
batteries, RF connection and control.

### Operation

The controller communicates with the unit via a wireless RF signal (902MHz). Based on the (pre-)set values (setpoints) the controller sends a signal to the unit that responds to this. The (pre-)set values (setpoints) can be adjusted by the user.

N.B.! The display switches off automatically after 8 seconds to optimise the battery life. The controller connects 3 times per hour to the unit to update the measured values and to adjust the humidification control to this.

### Explanation symbols:

Symbols relevant to HomEvap Humidifier:

- Humidity; humidify function
- Heat; function heater. This does not mean that it is actually on

Symbols relevant to HomEvap Cooler:

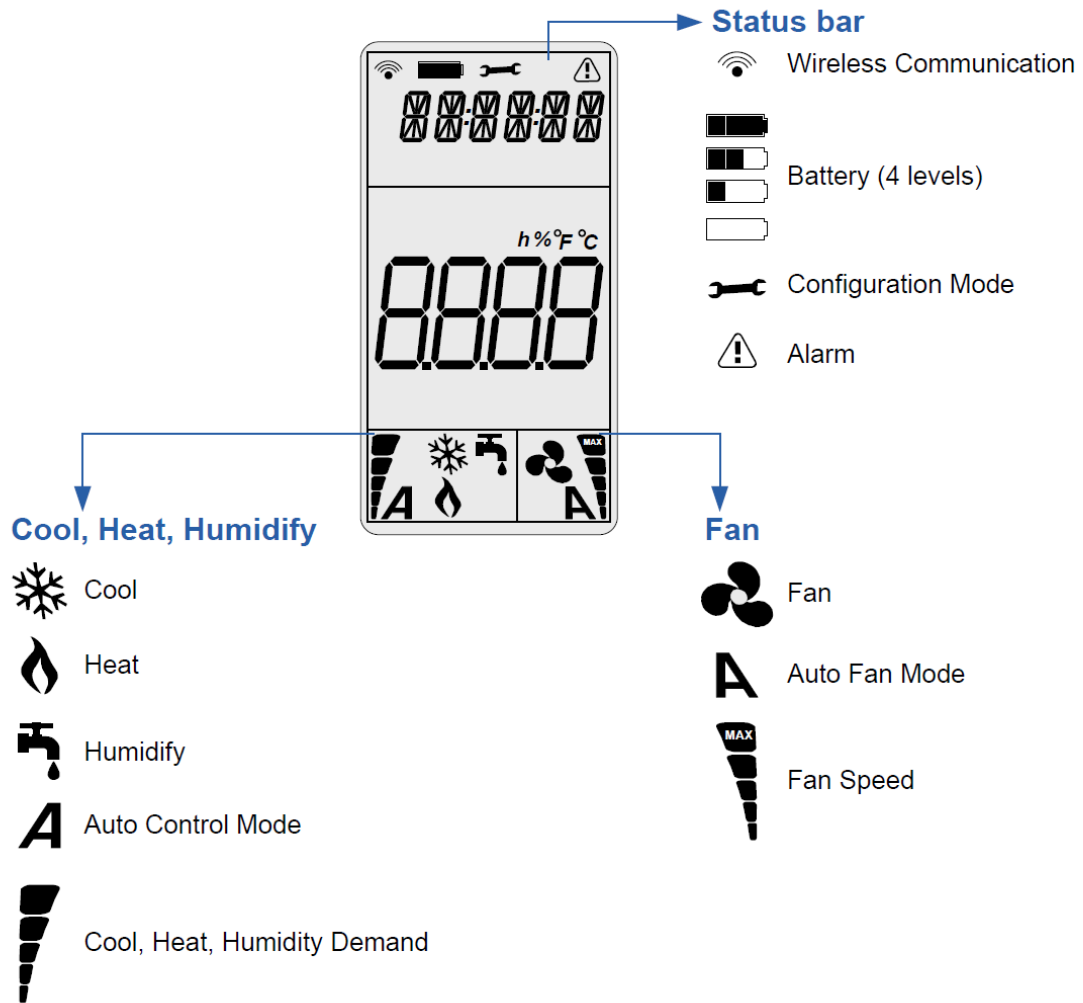
- Cool; cooling function

Symbols relevant to HomEvap Combi Comfort:

- A; function fully automatically
- Heat; function heater. This does not mean that it is actually on

Symbols relevant to HomEvap Direct:


- Humidity; humidify function
- Heat; function heater. This does not mean that it is actually on.
- Fan; function fan
- A; automatic operation fan
- Fan speed; speed fan. The higher the question the more dashes.




**Activate the HomEvap controller display:**

- Press **mode**


**Switch between temperature and RH (relative humidity):**

- Press: 

**Change RH setpoint:**



- Activate the controller by pressing **mode**.
- Ensure that the RH value is visible by pressing 
- Briefly press **mode** again.
- Then press the arrow button to change the RH setpoint.
- Press **mode** to confirm the new value.

**Change temperature setpoint:**

- Activate the controller by pressing **mode**.
- Ensure that the temperature value is visible by pressing 
- Briefly press **mode** again.
- Then press the arrow button to change the temperature.
- Press **mode** to confirm the new value.

**Function menu (this does not mean that the humidifier becomes a cooler by changing the function):**

- Press mode
- Briefly press mode again
- Select function with the arrow keys: Attention, only select the function you bought otherwise it will not

|               |   |
|---------------|---|
| Bevochtiger   |  |
| Koeler        |  |
| Combi Comfort | <b>A</b>  |

react!

- Press mode to confirm


## Technical menu

In the technical menu you can view the integrated temperature and relative humidity (RH) measurements.

In this menu you can also reset the **alarm** and change the setpoints.

This menu can be accessed by holding down the **mode button** for **2 sec.**

| Main menu | Submenu | Description  |                                      | Funtion   |                         |
|-----------|---------|--|--------------------------------------|---|-------------------------|
| SETPNT    | SP01    | Setpoint temperature in the duct after Humidifier. | Standard set on 18°C                 | Controls heater   |                         |
|           | SP02    | Setpoint RH duct                                   | Standard set on 78%                  |   |                         |
| TEMP      | TS01    | Measured duct temperature after Humidifier/Cooler  | Measured with the T1 sensor (SHC080) |   |                         |
|           | TS02    | Measured temperature before Humidifier/Cooler      | Measured with the T2 sensor          |   |                         |
|           | TS03    | Measured outside temperature T3                    | If not connected, then standard 50°C |   | Only Combi Comfort      |
|           | TS04    | Setpoint temperature humidifier                    | Standard set on 12°C                 | Below this setpoint the Humidifier is allowed to function.      | Only Combi Comfort      |
|           | TS05    | Setpoint temperature indirect cooler               | Standard set on 18°C                 | Above this setpoint the Indirect Cooler is allowed to function. | Only Combi Comfort      |
|           | TS06    | Setpoint temperature direct cooler                 | Standard set on 22°C                 | Above this setpoint the Direct Cooler is allowed to function.   | Only Combi Comfort      |
|           | TS07    | Setpoint minimal supply-air temperature            | Standard set on 14°C                 | Below this setpoint the unit stops.                             |                         |
|           | TS 08   | Measured temperature return duct                   |                                      |   | Only with return sensor |
| HUM       | RH01    | Measured humidity in duct after Humidifier/Cooler  |                                      |   |                         |
|           | RH02    | Measured humidity in return duct                   |                                      |   | Only with return sensor |
| COUNTR    | CT01    | Count valve Humidifier/Cooler                      |                                      |   |                         |
|           | CT02    | Count valve indirect Cooler                        |                                      |   | Only Combi Comfort      |
| ALARM     | AL01    | Turn off service alarm                             |                                      |   |                         |
|           | AL02    | Turn off alarm                                     |                                      |   |                         |

| Menu navigation |   |
|-----------------|---|
| 1.              | Use the arrow buttons to change to the main menu  |
| 2.              | Press <b>mode</b> to select the menu  |
| 3.              | Use the arrow buttons to scroll between the submenus  |
| 4.              | Press <b>mode</b> to select a submenu   |
| 5.              | Use the arrow buttons to change the values  |
| 6.              | Press <b>mode</b> to confirm the change   |
| 7.              | Press  to go back one step |

#### Example of changing setpoint RH and temperature duct

- Press the **mode** button for 2 seconds.
- Scroll with the arrow keys to SETPNT.
- Press **mode** to select menu.
- Scroll with the arrow keys to SP001 for temperature and SP002 for RH.
- Press **mode** to select submenu SP001/SP002.
- Use the arrow buttons to change the values
- Press **mode** to confirm value.

#### Reset alarms

- Press the **mode** button for 2 seconds.
- Scroll with the arrow keys to ALARM.
- Press **mode** to select menu.
- Scroll with the arrow keys to AL01 for service or AL02 for other alarms.
- Press **mode** to select submenu.
- Use the arrow buttons to go to Rst.
- Press **mode** to confirm value.

### Combi Comfort When does which unit function?

The Combi Comfort is controlled by the outside temperature sensor. This determines when which unit is allowed. If the temperature is between 12 and 18 degrees, the unit will be off and the display shows OFF. Below the setpoints when which function may come in:

- Humidifier: below 12 degrees outside temperature (TS04).
- Indirect cooler: above 18 degrees outside temperature (TS05).
- Direct cooler: above 22 degrees outside temperature (TS06).

These setpoints can be adjusted in the technical menu.

NOTE: TS04 cannot exceed TS05, TS05 cannot exceed TS06.

## FAULTS AND ALARMS

| Alarm LED                 | Display Tekst | Meaning                                       | Action   |
|---------------------------|---------------|---|--|
| Alarm LED on              | <i>S OFF</i>  | Contact main enable broken, unit switches off | Restore contact main enable, see wiring diagram  |
| Alarm LED on              | <i>U OFF</i>  | Contact user enable broken, unit switches off | Restore contact user enable, see wiring diagram  |
| Alarm LED blinks 3 times  | <i>SENSUP</i> | Contact with SHC80 sensor broken              | Check SHC80 wiring and if necessary repair, check that the light on SCH80 sensor flashes regularly, if not replace faulty sensor.  |
| Alarm LED blinks 5 times  | <i>OUTDEF</i> | T3 sensor outside air faulty                  | Check wiring for break or wear, in case of doubt replace. Testing can be done by keeping the sensor at 8°C or colder in water or air; the Evap must then be activated because the water valve opens.   |
| Alarm LED blinks 9 times  | <i>WATER</i>  | No rise of RH in duct                         | <p>Check that the water tap is open</p> <ul style="list-style-type: none"> <li>If tap is open and there is a demand (outside air below 12°C) disconnect the black hose on top on the knee joint and activate the water valve by switching the voltage off and back on again, water should now come out of the hose; if valve does not respond, replace valve.</li> </ul> <p>If valve is working and matrix material does not get wet after switching, then the LegioSafe filter is blocked and must be replaced. Order product code 351025 from your dealer.</p>   |
| Alarm LED blinks 11 times | <i>NOAIR</i>  | No airflow Cooler                             | Check if HRAV is working   |
| Alarm LED blinks 13 times | <i>NOCOOL</i> | No water Cooler                               | <p>Check that the water tap is open.</p> <ul style="list-style-type: none"> <li>If the faucet is open and there is a demand (for the combination comfort outside temperature must be below 12 ° C) disconnect the black supply hose from the knee on the unit, and reset the unit by plugging the plug in and plugging it in again. ; if water comes out and the water valve does not respond, the water valve is defective, replace the water valve.</li> <li>Does the water valve work and the matrix does not get wet after the valve has switched, then the legionella filter is clogged; replace the cassette.</li> </ul> |
| Alarm LED blinks 15 times | <i>HEATER</i> | Heating faulty                                | Check air temperature after the humidifier, this must be >8°C, if not air heater is faulty. Call installer for replacement.  |
| Alarm LED blinks 17 times | <i>AIRFLW</i> | No airflow                                    | Check if HRV is working.   |
| Alarm LED blinks 19 times | <i>T2Def</i>  | T2 sensor outside air faulty                  | Check wiring for break or wear, in case of doubt replace. Testing can be done by keeping the sensor at 8°C or colder in water or air; the Evap must then be activated because the water valve opens.   |


|                             |         |  |                               |
|-----------------------------|---------|--|-------------------------------|
| Service LED continuously on | Service |  | The cassette must be replaced |
|-----------------------------|---------|--|-------------------------------|

## EXAMPLE

**The display shows:** “WATER” and an “alarm” triangle.

**Use of Humidifier:** cause no water supply, or no increase in RH% measurement by SHC80. Actions: check that the tap is open, check that the valve is working by turning off power to the HomEvap system module and switching it on again. Listen to see whether water is flowing for min 20 seconds.

RESET procedure:

- Activate LCD by pressing **mode**, wait 2 seconds, press **mode** again for 2 sec to go to the reset menu.
- Display shows **STPT**.
- Use the arrow buttons to scroll through the menu
- If the display shows **ALARM**, press **mode**. Display indicates **AL01**, press the arrow buttons until the display shows **AL02**. Press **mode** - the display shows **NO**
- Press arrow buttons until display shows **Rst**.
- Confirm reset by pressing **mode** and then the button 
- Check reset by pressing **mode** again.
- The ‘water’ and ‘alarm’ triangle should now have disappeared.



## Controller Pair – Unpair instructions

To operate the HomEvap with our wireless remote controller, it is necessary to link (pair) the controller to the specific HomEvap unit.

This is a step by step instructions to connect a new controller or reconnect an existing controller to the HomEvap unit.

**To connect the HomEvap to the wireless control panel, these must first be connected to each other in a unique way. See below the step-by-step plan for realizing this.**

### Control panel

- Remove the small screw at the bottom of the control panel.
- Carefully remove the back from the front.
- You now see the back of the print. On this is a push button, see red arrow.




1 Controller backside

### HomEvap

- On the underside of the unit there is a cover that is closed by means of a screw. Open it up and carefully remove the valve.
- The same button is present on the PCB as on the control panel.
- Press for 1 second, the Power LED will flash, 1 sec on / 1 sec off.

### Control panel

- Then press the button on the back of the control panel, a green LED light will flash briefly.
- Check whether the connection between Control panel and unit has been successful by pressing the MODE button.
- At the top left of the display the RF symbol  should be visible to confirm they are linked!(paired)



Mainboard at bottom of unit

**!!! NOTE you cannot link or control multiple devices with 1 controller!!!!**