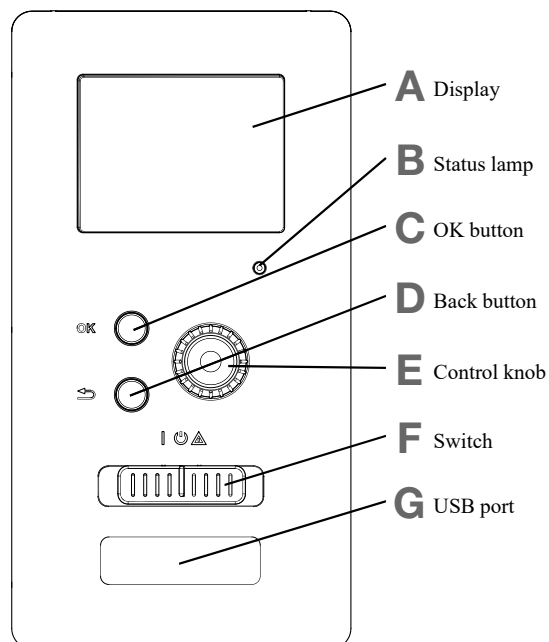


Control

Control Display unit



A Display

Instructions, settings and operational information are shown on the display. The easy-to-read display and menu system, make it easy to navigate between various menus and options, set comfort and get the necessary information.

B Status lamp

The status lamp indicates the status of the control module. It:

- lights green during normal operation.
- lights yellow in emergency mode.
- lights red in the event of an alarm.

C OK button

The OK button is used to:

- confirm selections of sub menus/options/set values/page in the start guide.

D Back button

The back button is used to:

- go back to the previous menu.
- change a setting that has not been confirmed.

E Control knob

The control knob can be turned to the right or left. You can:

- scroll in menus and between options.
- increase and decrease values.
- change pages in multiple page instructions (for example help text and service info).

F Switch (SF1)

The switch shows three positions:

- On (I)
- Standby (⏻)
- Emergency mode (⚠)

Emergency mode must only be used in the event of a fault on the control module. In this mode, the compressor in the heat pump is turned off and the immersion heater is activated.

The control module display is not illuminated and the status lamp lights yellow.

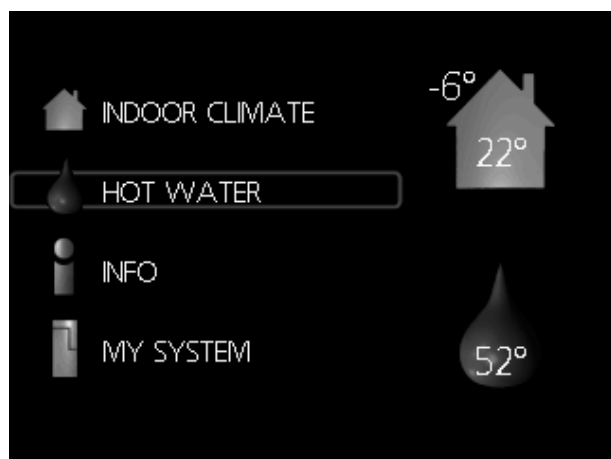
G USB port

The USB port is hidden behind the plastic badge of the product name.

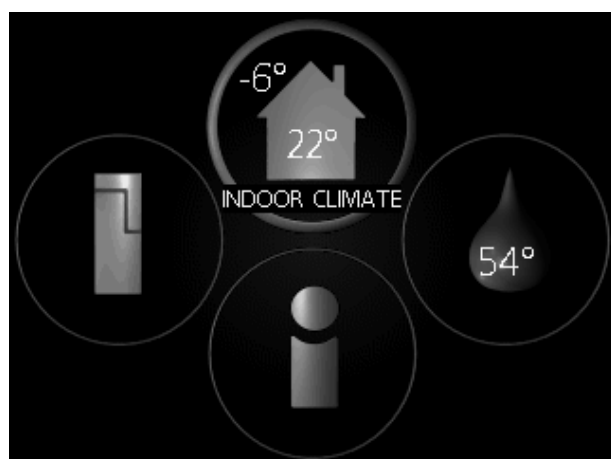
The USB port is used to update the software.

Menu system

RC-HY20-W



RC-HY40-W



Menu 1 - INDOOR CLIMATE

Setting and scheduling the indoor climate. See information in the help menu or user manual.

Menu 2 - HOT WATER

Setting and scheduling hot water production. See information in the help menu or user manual.

This menu only appears if a water heater is installed in the system.

Menu 3 - INFO

Display of temperature and other operating information and access to the alarm log. See information in the help menu or user manual.

Symbols in the display

The following symbols can appear in the display during operation.

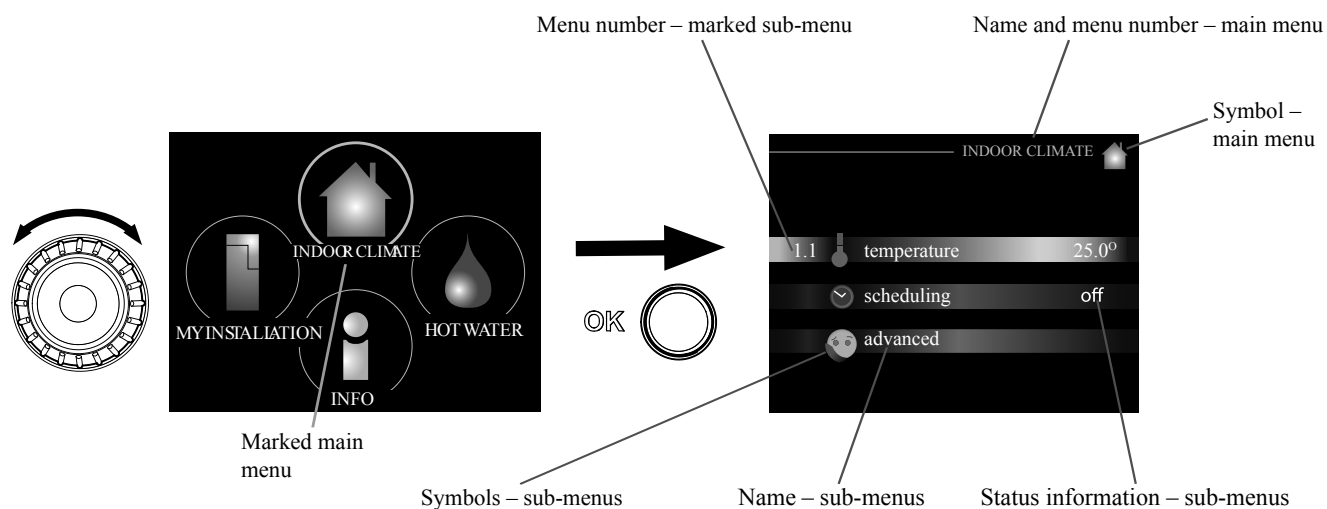
Symbol	Description
	This symbol appears when there is information to be noticed in menu 3.1.
	These two symbols indicate whether the compressor in the outdoor unit or additional heat in the installation is blocked via controller. These functions will be blocked for example, when either of the operation mode is blocked in menu 4.2, when blocking of either function is scheduled in menu 4.9.5, or when an alarm for blocking the operation occurs.
	Blocking the compressor. Blocking additional heat.
	This symbol appears if periodic increase or lux mode for the hot water is activated.
	This symbol indicates if "holiday setting" is active in menu 4.7.
	This symbol indicates if the controller has contact with myUpway.
	This symbol indicates if cooling is active.

Menu 4 - MY INSTALLATION

Setting time, date, language, display, operating mode etc. See information in the help menu or user manual.

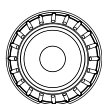
Menu 5 - SERVICE

Advanced settings. These settings are not available to the end user. The menu is made visible by pressing the Back button for 7 seconds in the top screen.



Operation

To move the cursor, turn the control knob to the left or the right. The marked position is brighter and/or has a light frame.

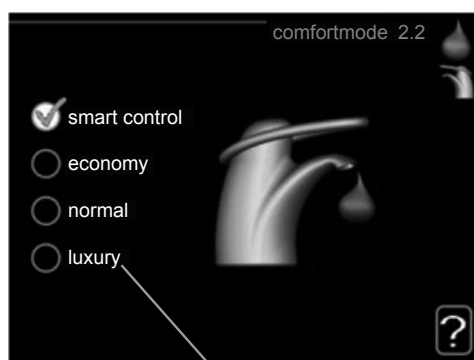


Selecting menu


To advance in the menu system select a main menu by marking it and then pressing the OK button. A new window opens with sub menus.

Select one of the sub menus by marking it and then pressing the OK button.



Selecting options



Alternative

In an options menu the current selected option is indicated by a green tick. 

To select another option:





1. Mark the applicable option. One of the options is pre-selected (white). 
2. Press the OK button to confirm the selected option. 
The selected option has a green tick.

Setting a value

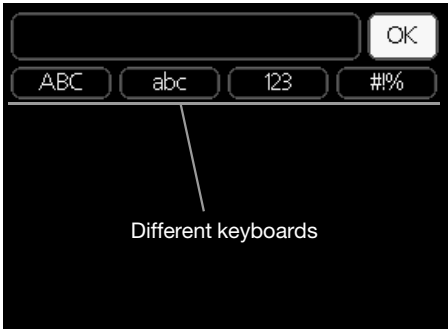


Values to be changed

To set a value:

1. Mark the value you want to set using the control knob. 
2. Press the OK button. The background of the value becomes green, which means that you have accessed the setting mode. 
3. Turn the control knob to the right to increase the value and to the left to reduce the value. 
4. Press the OK button to confirm the value you have set. To change and return to the original value, press the Back button. 

Use the virtual keyboard



In some menus where text may require entering, a virtual keyboard is available.

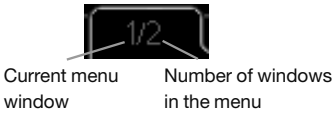


Depending on the menu, you can gain access to different character sets which you can select using the control knob. To change character table, press the Back button. If a menu only has one character set, the keyboard is displayed directly.

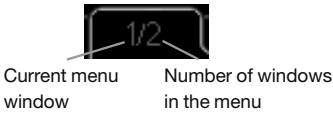
When you have finished writing, mark "OK" and press the OK button.

Scroll through the windows

A menu can consist of several windows. Turn the control knob to scroll between the windows.




Scroll through the windows in the start guide



1. Turn the control knob until one of the arrows in the top left corner (at the page number) has been marked.
2. Press the OK button to skip between the steps in the start guide.

Help menu

 In many menus there is a symbol that indicates that extra help is available.

To access the help text:

1. Use the control knob to select the help symbol.
2. Press the OK button.

The help text often consists of several windows that you can scroll between using the control knob.

Menu list

** Accessories are needed. ** Heat pump with cooling function required. 40"

MENU			RC-HY20-W	RC-HY40-W
1 INDOOR CLIMATE				
1.1 - temperature	1.1.1 heating		✓	✓
	1.1.2 cooling **		✓	✓
1.3 - scheduling	1.3.1 heating		✓	✓
	1.3.2 cooling **		✓	✓
1.9 - advanced	1.9.1 curve	1.9.1.1 heating curve	✓	✓
		1.9.1.2 cooling curve **	✓	✓
	1.9.2 external adjustment		✓	✓
	1.9.3 min. flow line temp.	1.9.3.1 heating	✓	✓
		1.9.3.2 cooling **	✓	✓
	1.9.4 room sensor settings		✓	✓
	1.9.5 cooling settings *		✓	✓
	1.9.7 own curve	1.9.7.1 heating	✓	✓
		1.9.7.2 cooling **	✓	✓
	1.9.8 point offset		✓	✓
2 HOTWATER				
2.1 temporary lux			✓	✓
2.2 comfort mode			✓	✓
2.3 scheduling			✓	✓
2.9 advanced	2.9.1 periodic increase		✓	✓
	2.9.2 hot water recirc. *		✓	✓
3 INFO				
3.1 service info			✓	✓
3.2 compressor info			✓	✓
3.3 add. heat info			✓	✓
3.4 alarm log			✓	✓
3.5 indoor temp. log			✓	✓
4. MY SYSTEM				
4.1 plus functions	4.1.1 Pool 1		—	✓
	4.1.2 Pool 2		—	✓
	4.1.3 internet	4.1.3.1 myUpway™	✓	✓
		4.1.3.8 tcp/ip settings	✓	✓
		4.1.3.9 proxy settings	✓	✓
	4.1.5 SG Ready		✓	✓
	4.1.6 smart price adaption™		✓	✓
	4.1.8 smart energy source™	4.1.8.1 settings	—	✓
		4.1.8.2 set. Price	—	✓
		4.1.8.3 CO2 impact	—	✓
		4.1.8.4 tariff periods, electricity	—	✓
		4.1.8.6 tariff per, ext. shunt add	—	✓

** Accessories are needed. ** Heat pump with cooling function required. 40"

MENU			RC-HY20-W	RC-HY40-W
		4.1.8.7 tariff per, ext. step add	—	✓
	4.1.10 Solar electricity		✓	✓
4.2 op. mode			✓	✓
4.3 my icons			✓	✓
4.4 time & date			✓	✓
4.6 language			✓	✓
4.7 holiday setting			✓	✓
4.9 advanced	4.9.1 op. prioritisation		✓	✓
	4.9.2 auto mode setting		✓	✓
	4.9.3 degree minute setting		✓	✓
	4.9.4 factory setting user		✓	✓
	4.9.5 schedule blocking		✓	✓
	4.9.6 schedule silent mode		✓	✓
5 SERVICE				
5.1 operating settings	5.1.1 hot water settings *		✓	✓
	5.1.2 max flow line temperature		✓	✓
	5.1.3 max diff flow line temp.		✓	✓
	5.1.4 alarm actions		✓	✓
	5.1.12 addition		✓	✓
	5.1.14 flow set. climate system		✓	✓
	5.1.22 heat pump testing		✓	✓
	5.1.23 compressor curve		✓	✓
5.2 system settings	5.2.2 installed slaves		✓	✓
	5.2.3 docking		✓	✓
	5.2.4 accessories		✓	✓
5.3 accessory settings	5.3.2 shunt controlled add. heat *		—	✓
	5.3.3 extra climate system *		—	✓
	5.3.4 solar heating *		—	✓
	5.3.6 step controlled add. heat		—	✓
	5.3.8 hot water comfort *		—	✓
	5.3.10 modbus *		—	✓
	5.3.20 flow sensor*		—	✓
5.4 soft in/outputs			✓	✓
5.5 factory setting service			✓	✓
5.6 forced control			✓	✓
5.7 start guide			✓	✓
5.8 quick start			✓	✓
5.9 floor drying function			✓	✓
5.10 change log			✓	✓

"* Accessories are needed. ** Heat pump with cooling function required. 40"

MENU			RC-HY20-W	RC-HY40-W
5.11 slave settings	5.11.1 EB101	5.11.1.1 heat pump	✓	✓
		5.11.1.2 charge pump (GP12)	✓	✓
	5.11.2 EB102		—	✓
	5.11.3 EB103		—	✓
	5.11.4 EB104		—	✓
	5.11.5 EB105		—	✓
	5.11.6 EB106		—	✓
	5.11.7 EB107		—	✓
	5.11.8 EB108		—	✓
5.12 country			✓	✓

RC-HY20/40-W – at your service

Set the indoor climate

Overview

Sub-menus



For the menu "INDOOR CLIMATE" there are several sub-menus. Status information for the relevant menu can be found on the display to the right of the menus.

"temperature" Setting the temperature for the climate system. The status information shows the set values for the climate system.

"scheduling" Scheduling heating and cooling. Status information "set" is displayed if you set a schedule but it is not active now, "holiday setting" is displayed if the vacation schedule is active at the same time as the schedule (the vacation function is prioritised), "active" displays if any part of the schedule is active, otherwise it displays " off".

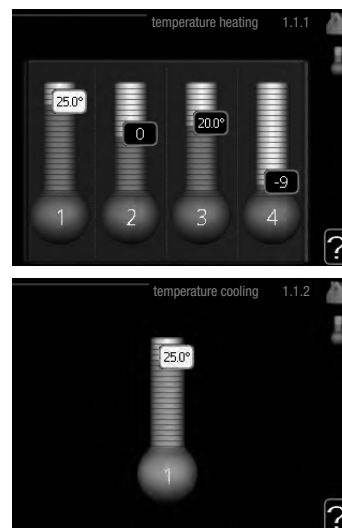
"advanced" Setting of heat curve, adjusting with external contact, minimum value for supply temperature, room sensor and cooling function.

Menu 1.1 - temperature

If the house has several climate systems, this is indicated on the display by a thermometer for each system.

Choose heating or cooling and then set the desired temperature in the next menu "temperature heating/cooling" in menu 1.1.

Set the temperature (with room sensors installed and activated):



heating

Setting range: 5 – 30 °C

Default value: 20

cooling (accessory is required)

Setting range: 5 – 30 °C

Default value: 25

The value in the display appears as a temperature in °C if the climate system is controlled by a room sensor.

CAUTION

A slow heat-releasing heating system, such as for example, underfloor heating, may not be suitable for control using the heat pump's room sensor.

To change the room temperature, use the control knob to set the desired temperature in the display. Confirm the new setting by pressing the OK button. The new temperature is shown on the right-hand side of the symbol in the display.

Setting the temperature (without room sensors activated):

Setting range: -10 to +10

Default value: 0

The display shows the set values for heating (curve offset). To increase or reduce the indoor temperature, increase or reduce the value on the display.

Use the control knob to set a new value. Confirm the new setting by pressing the OK button.

The number of steps the value has to be changed to achieve a degree change of the indoor temperature depends on the heating installation. One step is usually enough but in some cases several steps may be required.

The new value is shown on the right-hand side of the symbol in the display.

CAUTION

An increase in the room temperature can be slowed by the thermostats for the radiators or under floor heating. Therefore, open the thermostats fully, except in those rooms where a cooler temperature is required, e.g. bedrooms.

TIP

Wait 24 hours before making a new setting, so that the room temperature has time to stabilise.

If it is cold outside temperature and the room temperature is too low, increase the curve slope in menu 1.9.1.1 by one increment.

If it is cold outside temperature and the room temperature is too high, reduce the curve slope in menu 1.9.1.1 by one increment.

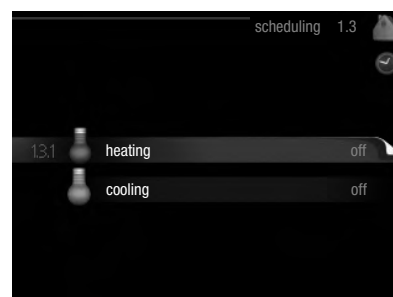
If it is warm outside temperature and the room temperature is too low, increase the value in menu 1.1.1 by one increment.

If it is warm outside temperature and the room temperature is too high, reduce the value in menu 1.1.1 by one increment.

Menu 1.3 - temperature scheduling

In the menu scheduling indoor climate (heating/cooling) is scheduled for each weekday.

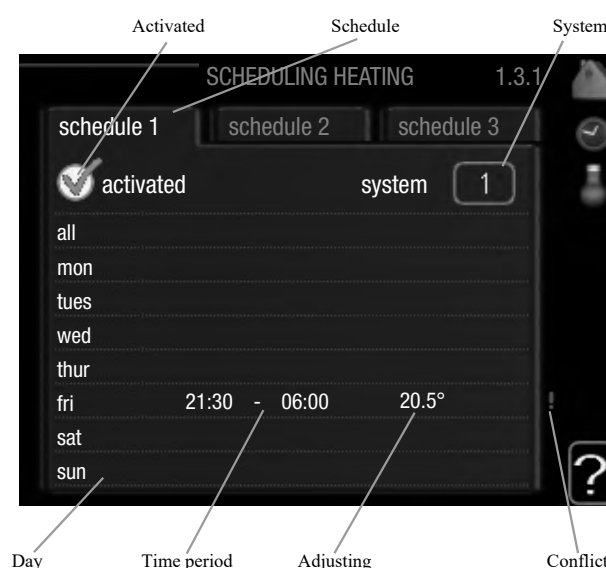
You can also schedule a longer period during a selected period (vacation) in menu 4.7.



Menu 1.3.1 - heating

Increases or decreases in the accommodation temperature can be scheduled here for up to three time periods per day. One step is usually enough to change the room temperature by one degree, but in some cases several steps may be required for the accommodation temperature.

If a room sensor is installed and activated, the desired room temperature (°C) is set during the time periods.



Schedule: The schedule to be changed is selected here.

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.

System (RC-HY40-W only): Which climate system the schedule is for is selected here. This alternative is only displayed if more than one climate system is present.

Day: Select which day or days of the week the schedule is to apply to here. To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to the same as the stop time. If the line "all" is used, all days in the period are set for these times.

Time period: The start and stop time for the selected day for scheduling are selected here.

Adjusting: How much the heating curve is to be offset in relation to menu 1.1 during scheduling is set here. If the rooms sensor is installed and activated, the desired room temperature is set in °C.

Conflict: If two settings conflict with each other a red exclamation mark is displayed.

TIP

If you wish to set similar scheduling for every day of the week start by filling in "all" and then changing the desired days.

TIP

*Set the stop time earlier than the start time so that the period extends beyond midnight. Scheduling then stops at the set stop time the day after.
Scheduling always starts on the date that the start time is set for.*

CAUTION

Changes of temperature in accommodation take time. For example, short time periods in combination with underfloor heating will not give a noticeable difference in room temperature.

Time period: The start and stop time for the selected day for scheduling are selected here.

Adjusting: Here, you set when active cooling will not be permitted.

Conflict: If two settings conflict with each other a red exclamation mark is displayed.

TIP

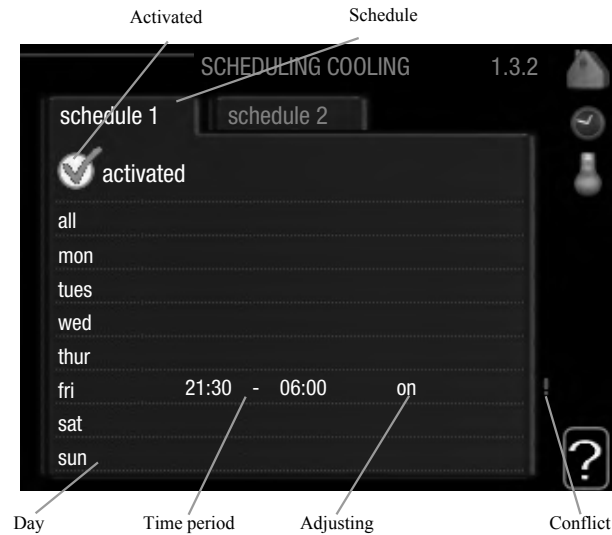
If you wish to set similar scheduling for every day of the week start by filling in "all" and then changing the desired days.

TIP

*Set the stop time earlier than the start time so that the period extends beyond midnight. Scheduling then stops at the set stop time the day after.
Scheduling always starts on the date that the start time is set for.*

Menu 1.3.2 - cooling

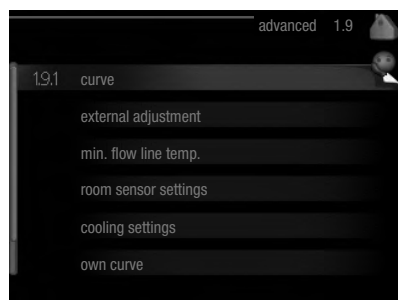
Here you can schedule when cooling is permitted in the accommodation for up to two different time periods per day.



Schedule: The schedule to be changed is selected here.

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.

Day: Select which day or days of the week the schedule is to apply to here. To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to the same as the stop time. If the line "all" is used, all days in the period are set for these times.

Menu 1.9 - advanced

Menu "advanced" has orange text and is intended for the advanced user. This menu has several sub-menus.

"curve" Setting the curve slope for heating and cooling.

"external adjustment" Setting the heat curve offset when the external contact is connected.

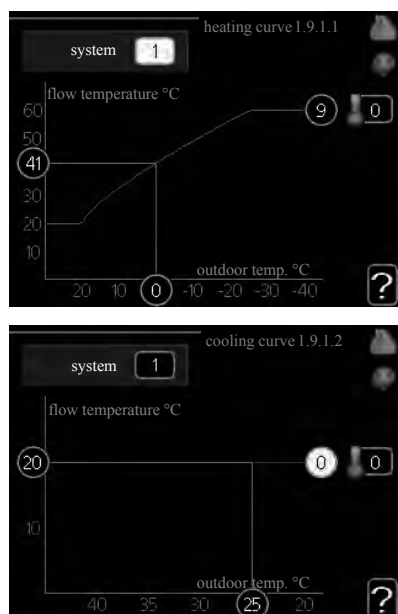
"min. flow line temp." Setting minimum permitted flow line temperature.

"room sensor settings" Settings regarding the room sensor.

"cooling settings" Settings for cooling.

"own curve" Setting own curve for heating and cooling.

"point offset" Setting the offset of the heating curve or cooling curve at a specific outdoor temperature.

Menu 1.9.1 - Heating/cooling curve setting**heating curve**

Setting range: 0 – 15

Default value: 9

cooling curve (accessory required)

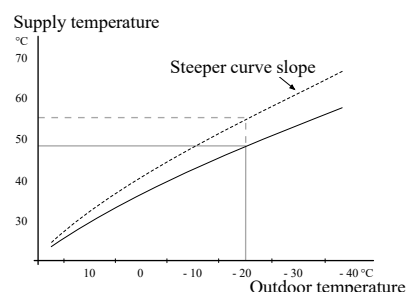
Setting range: 0 – 9

Default value: 0

The prescribed heating curve for your house can be viewed in the menu "heating curve". The task of the heating curve is to give an even indoor temperature, regardless of the outdoor temperature, and thereby energy efficient operation. From this heating curve, the control module determines the temperature of the water to the heating system, supply temperature, and therefore the indoor temperature. Select the heating curve and read off how the supply temperature changes at different outdoor temperatures here. If there is cooling function, the same settings can be made for the cooling curve.

Curve coefficient

The heating/cooling curve shows the relation between the target supply temperature and the corresponding outdoor temperature. A steep curve indicates that supply temperature becomes higher at low outdoor air temperature in heating and it becomes lower at high outdoor air temperature in cooling.



The optimum slope depends on the climate conditions in your location, the type of heating device (radiators or under floor heating) and how well insulated the house is.

The curve is set when the heating installation is installed, but may need adjusting later. Normally, the curve will not need further adjustment.

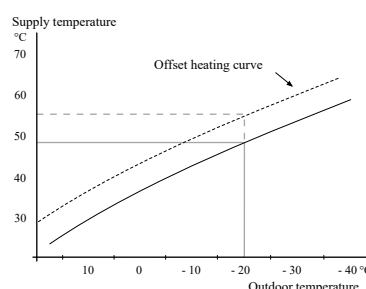
CAUTION

In the event of making fine adjustments of the indoor temperature, the curve must be offset up or down instead, this is done in menu 1.1 "temperature".

Curve offset

The target temperature can be offset in parallel over the entire outdoor temperature range by this function. This is offset by 5 °C by adjusting 2 steps.

The target temperature can be parallel offset in the entire outdoor temperature range with this function. It is offset by 5 °C by adjusting 2 steps.



Flow line temperature – maximum and minimum values

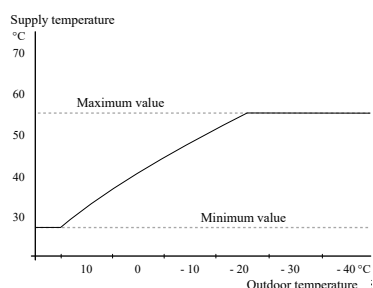
This function is used in order to limit max-min supply temperature. The heating / cooling curve becomes flat beyond max / min target temperature.

CAUTION

Underfloor heating systems are normally "max flow line temperature" set between 35 and 45°C. Take care not to cause low temperature burns in case it is set higher than 35°C.

Must be restricted with underfloor cooling min. flow line temp. to prevent condensation.

Check the max temperature for your floor with your installer/floor supplier.



The figure at the end of the curve indicates the curve number. The figure beside the thermometer icon gives the curve offset. Use the control knob to set a new value.

Confirm the new setting by pressing the OK button.

Curve 0 is an own curve created in menu 1.9.7.

To select another curve (slope):

1. Press OK button to access the setting mode
2. Select a new curve. The curves are numbered from 0 to 15, and the bigger number curve has steeper slope.
Curve 0 means that "own curve" (menu 1.9.7) is used.
3. Press OK button to exit the setting.

To read off a curve:

1. Turn the control knob so that the ring on the shaft with the outdoor temperature is marked.
2. Press OK button.
3. Follow the grey line up to the curve and out to the left to read off the value for the supply temperature at the selected outdoor temperature.
4. You can now select to take read outs for different outdoor temperatures by turning the control knob to the right or left and read off the corresponding flow temperature.
5. Press OK or Back button to exit read off mode.

TIP

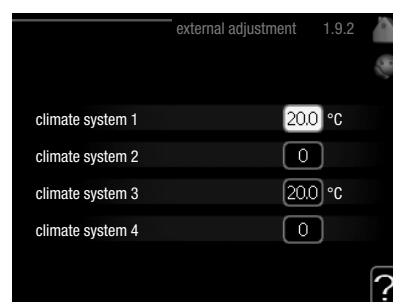
Wait 24 hours before making a new setting, so that the room temperature has time to stabilise.

If it is cold outdoors and the room temperature is too low, increase the curve slope by one increment.

If it is cold outdoors and the room temperature is too high, lower the curve slope by one increment.

If it is warm outdoors and the room temperature is too low, increase the curve offset by one increment.

If it is warm outdoors and the room temperature is too high, lower the curve offset by one increment.

Menu 1.9.2 - external adjustment

*If there is one climate system, display shows "climate system 1" only.

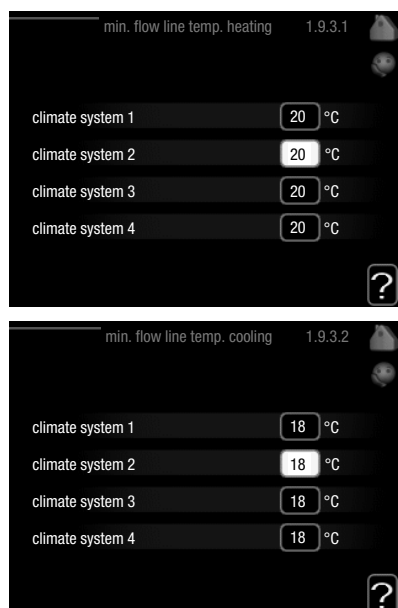
climate system

Setting range: -10 to +10 or desired room temperature if the room sensor is installed.

Default value: 0

Connecting an external contact, for example, a room thermostat or a timer allows you to temporarily or periodically increase or decrease the room temperature while heating. When the contact is on, the heating curve offset is changed by the number of steps selected in the menu. If a room sensor is installed and activated the desired room temperature (°C) is set.

If there is more than one climate system the setting can be made separately for each system.

Menu 1.9.3 - min. flow line temp.

*If there is one climate system, display shows "climate system 1" only.

heating

Setting range: 5 – 70 °C

Default value: 20 °C

cooling (heat pump with cooling function required)

Depending on which cooling function (2-pipe /4-pipe system) is used, the lower limit of the setting range can vary from 7 to 18 °C.

Setting range: 7 – 30 °C

Factory setting: 18 °C

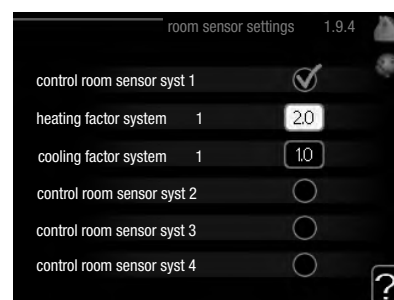
In menu 1.9.3 you select heating or cooling, in the next menu (min. supply temp.heating/cooling) set the minimum temperature on the supply temperature to the climate system. This means that RC-HY20/40-W never calculates a temperature lower than that set here.

If there is more than one climate system the setting can be made separately for each system.

TIP

The value can be increased if you have, for example, a cellar that you always want to heat, even in summer.

You may also need to increase the value in "stop heating" menu 4.9.2 "auto mode setting".

Menu 1.9.4 - room sensor settings**factor system**

*If there is one climate system, display shows "control room sensor system 1" only.

heating

Setting range: 0.0 – 6.0

Factory setting heating: 2.0

cooling (accessory required)

Setting range: 0.0 – 6.0

Factory setting cooling: 1.0

Room sensors to control the room temperature can be activated here.

CAUTION

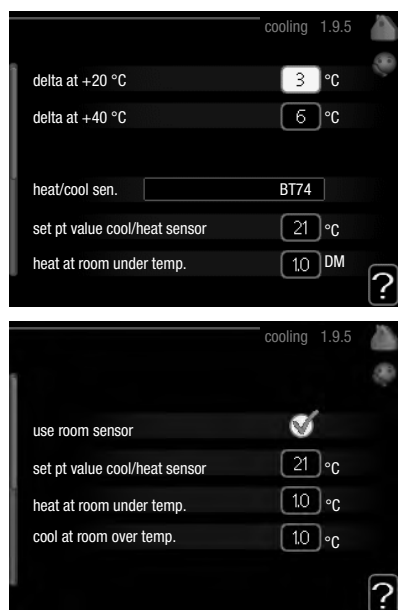
A slow heat-releasing heating system, such as for example, underfloor heating, may not be suitable for control using the heat pump's room sensor.

Here you can set a factor (a numerical value) that determines how much an over or sub normal temperature (the difference between the desired and actual room temperature) in the room is to affect the supply temperature to the climate system. A higher value gives a greater and faster change of the heating curve's set offset.

NOTE

Too high a set value for "factor system" can (depending on your climate system) produce an unstable room temperature.

If several climate systems are installed the above settings can be made for the relevant systems.

Menu 1.9.5 - cooling settings**delta at +20 °C**

Setting range: 3 – 10 °C

Factory setting: 3

delta at +40 °C

Setting range: 3 – 20 °C

Factory setting: 6

heat/cool sen.

Setting range: BT74 (BT50, RMU-BT50)

Factory setting: BT74

set pt value cool/heat sensor

Setting range: 5 – 40 °C

Factory setting: 21

heat at room under temp.

Setting range: 0.5 – 10.0 °C

Default value: 1.0

cool at room over temp.

Setting range: 0.5 – 10.0 °C

Default value: 3.0

start active cooling

Setting range: 10 – 300 DM

Factory setting: 30 DM

step difference compressors (RC-HY40-W only)

Setting range: 10 – 150

Default value: 30

degree minutes cooling (RC-HY40-W only)

Setting range: -3000 – 3000 cooling degree minutes

Factory setting: -1

time betw. switch heat/cool

Setting range: 0 – 48 h

Factory setting: 2

You can use RC-HY20/40-W to cool the house during hot periods of the year.

CAUTION

Certain setting options only appear if their function is installed and activated in RC-HY20/40-W.

delta at +20 °C

Set the desired temperature difference between supply and return lines to the climate system during cooling operation when the outdoor temperature is +20 °C. RC-HY20/40-W then attempts to get as close to the set temperature as possible.

delta at +40 °C

Set the desired temperature difference between supply and return lines to the climate system during cooling operation when the outdoor temperature is +40 °C. RC-HY20/40-W then attempts to get as close to the set temperature as possible.

heat/cool sen.

If a particular room will determine how the whole installation will work, a room sensor (BT74) is used. If room sensor (BT74) is connected to RC-HY20/40-W, room sensor (BT74) determines when it is time to switch between cooling and heating operation for the whole installation.

CAUTION

When the heating/cooling sensors (BT74) have been connected and activated in menu 5.4, no other sensor can be selected in menu 1.9.5.

set pt value cool/heat sensor

Here you can set at which indoor temperature RC-HY20/40-W is to shift between heating respectively cooling operation.

heat at room under temp.

Here you can set how far the room temperature can drop below the desired temperature before RC-HY20/40-W switches to heating operation.

cool at room over temp.

Here you can set how high the room temperature can increase above the desired temperature before RC-HY20/40-W switches to cooling operation.

start active cooling

Here you can set when active cooling is to start.

Degree minutes are a measurement of the current heating demand in the house and determine when the compressor, cooling operation respectively additional heat will start/stop.

step difference compressors (RC-HY40-W only)**CAUTION**

This setting option only appears if cooling is activated in menu 5.2.4.

The degree minute difference for controlling when the next compressor is to start is set here.

degree minutes cooling (RC-HY40-W only)

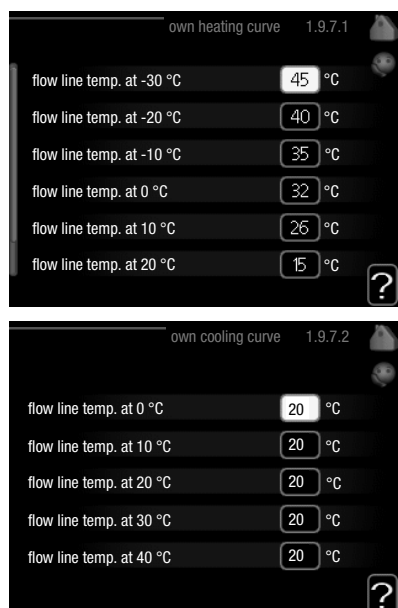
This selection is only available when the connected accessory itself counts cooling degree minutes.

After a min. or max. value has been set, the system will automatically set the real value in relation to the number of compressors that are running cooling.

time betw. switch heat/cool

This selection is only available in cooling 2-pipe systems.

Here you can set how long RC-HY20/40-W is to wait before it returns to heating mode when the cooling demand has ceased or vice versa.

Menu 1.9.7 - own curve**supply temperature****heating**

Setting range: 5 – 70 °C

cooling (accessory required)

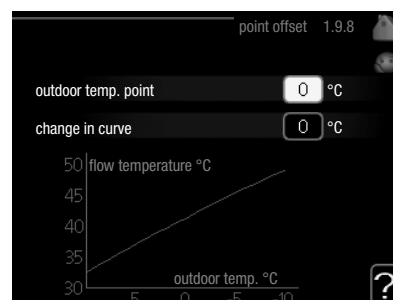
Depending on which accessory is used the setting range can vary.

Setting range: -5 – 40 °C

Create your own heating or cooling curve here, by setting the desired supply temperatures for different outdoor temperatures.

CAUTION

Curve 0 in menu 1.9.1 must be selected for own curve to apply.

Menu 1.9.8 - point offset**outdoor temp. point**

Setting range: -40 – 30 °C

Default value: 0 °C

change in curve

Setting range: -10 – 10 °C

Default value: 0 °C

Select a change in the heating curve at a certain outdoor temperature here. One step is usually enough to change the room temperature by one degree, but in some cases several steps may be required.

The heat curve is affected at ± 5 °C from set outdoor temp. point.

It is important that the correct heating curve is selected so that the room temperature is experienced as even.

TIP

If it is cold in the house, at, for example -2 °C, "outdoor temp. point" is set to "-2" and "change in curve" is increased until the desired room temperature is maintained.

CAUTION

Wait 24 hours before making a new setting, so that the room temperature has time to stabilise.

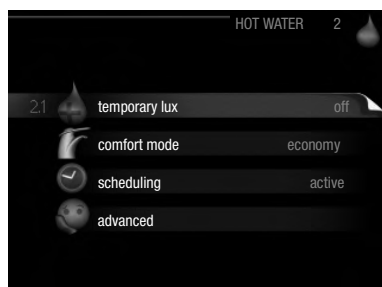
Set the hot water capacity

Overview

Sub-menus

This menu only appears if a water heater is docked to the heat pump.

For the menu "HOT WATER" there are several sub-menus. Status information for the relevant menu can be found on the display to the following menus.



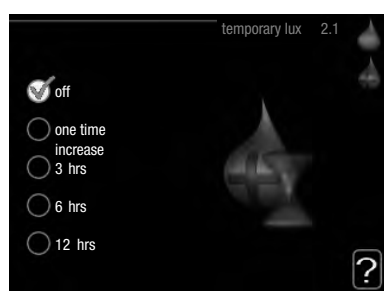
"temporary lux" Activation of temporary increase in the hot water temperature. Status information displays "off" or what length of time of the temporary temperature increase remains.

"comfort mode" Setting hot water comfort. The status information displays what mode is selected, "economy", "normal" or "luxury".

"scheduling" Scheduling hot water comfort. The status information "set" appears if you have set scheduling but it is not currently active, "holiday setting" appears if holiday setting is active at the same time as scheduling (when the holiday function is prioritised), "active" appears if any part of scheduling is active, otherwise "off" appears.

"advanced" Setting periodic increase in the hot water temperature.

Menu 2.1 - temporary lux



Setting range: 3, 6 and 12 hours
and mode "off" and "one time increase"
Default value: "off"

When hot water requirement has temporarily increased this menu can be used to select an increase in the hot water temperature to lux mode for a selectable time.

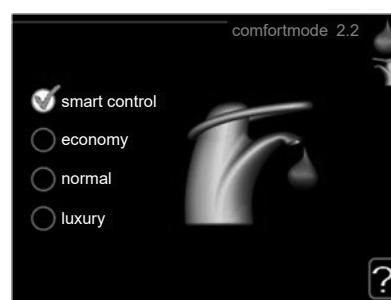
CAUTION

If comfort mode "luxury" is selected in menu 2.2 no further increase can be carried out.

The function is activated immediately when a time period is selected and confirmed using the OK button. The remaining time for the selected setting is shown to the right.

When the time has run out RC-HY20/40-W returns to the mode set in menu 2.2. Select "off" to switch off temporary lux.

Menu 2.2- comfort mode



Setting range: economy, normal, luxury

Default value: normal

The difference between the selectable modes is the temperature of the hot tap water. Higher temperature means that the hot water lasts longer.

smart control: In this menu you activate the Smart Control function. The function learns the previous week's hot water consumption and adapts the temperature in the water heater for the coming week to ensure minimal energy consumption. If the hot water demand is greater, there is a certain additional amount of hot water available. When the Smart Control function is activated, the water heater delivers the reported performance according to the energy decal.

economy: This mode gives less hot water than the others, but is more economical. This mode can be used in smaller households with a small hot water requirement.

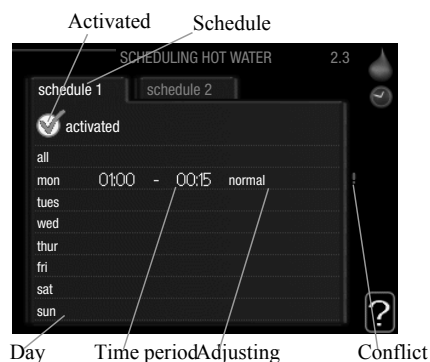
normal: Normal mode gives a larger amount of hot water than the economy mode and is suitable for most households.

luxury: Lux mode gives the greatest possible amount of hot water. In this mode, the immersion heater, as well as the compressor, is used to heat hot water, which may increase operating costs.

Menu 2.3 - scheduling

Two different periods of hot water comfort per day can be scheduled here.

Scheduling is activated/deactivated by ticking/unticking "activated". Set times are not affected at deactivation.



Schedule: The schedule to be changed is selected here.

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.

Day: Select which day or days of the week the schedule is to apply to here.

To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to the same as the stop time. If the line "all" is used, all days in the period are set for these times.

Time period: The start and stop time for the selected day for scheduling are selected here.

Adjusting: Set the hot water comfort that is to apply during scheduling here.

Conflict: If two settings conflict with each other a red exclamation mark is displayed.

TIP

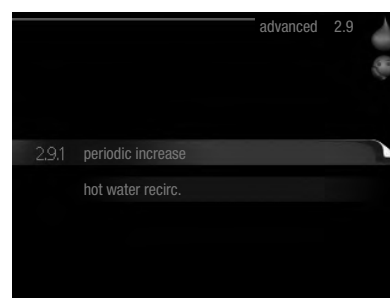
If you wish to set similar scheduling for every day of the week start by filling in "all" and then changing the desired days.

TIP

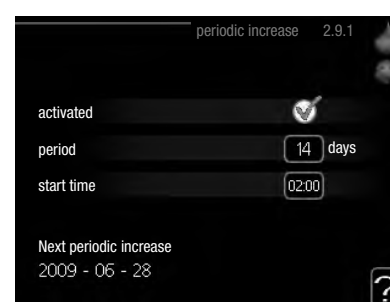
Set the stop time earlier than the start time so that the period extends beyond midnight. Scheduling then stops at the set stop time the day after.
Scheduling always starts on the date that the start time is set for.

Menu 2.9 - advanced

Menu "advanced" has orange text and is intended for the advanced user. This menu has several sub-menus.



Menu 2.9.1 - periodic increase



period

Setting range: 1 – 90 days

Default value: 14 days

start time

Setting range: 00:00 – 23:00

Default value: 00:00

To prevent bacterial growth in the water heater, the heat pump and any additional heater can increase the hot water temperature for a short time at regular intervals.

The length of time between increases can be selected here. The time can be set between 1 and 90 days. Factory setting is 14 days. Tick/untick "activated" to start/switch off the function.

Menu 2.9.2 - hot water recirc. (accessory required)***operating time***

Setting range: 1 – 60 min

Default value: 60 min

downtime

Setting range: 0 – 60 min

Default value: 0 min

Set the hot water circulation for up to three periods per day here. During the set periods the hot water circulation pump will run according to the settings above.

"operating time" decide how long the hot water circulation pump must run per operating instance.

"downtime" decide how long the hot water circulation pump must be stationary during operating instances.

Hot water circulation is activated in menu 5.4 "soft inputs and outputs".

Get information

Overview

Sub-menus

For the menu "INFO" there are several sub-menus. No settings can be made in these menus, they just display information. Status information for the relevant menu can be found on the display to the following menus.



"**service info**" shows temperature levels and settings in the installation.

"**compressor info**" shows operating times, number of starts etc for the compressor in the heat pump.

"**add. heat info**" displays information about the additional heat's operating times etc.

"**alarm log**" shows the latest alarms.

"**indoor temp. log**" the average temperature indoors week by week during the past year.

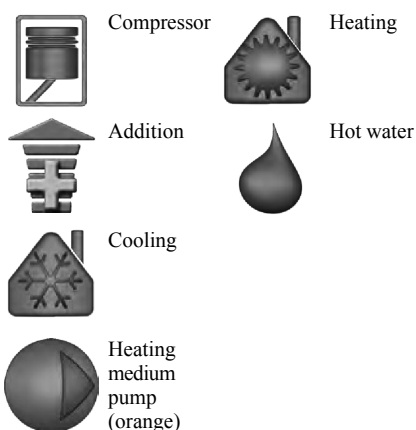
Menu 3.1 - service info

Information about the actual operating status of the installation (e.g. current temperatures etc.) can be obtained here. But no changes can be made.

The information is on several pages. Turn the control knob to scroll between the pages.



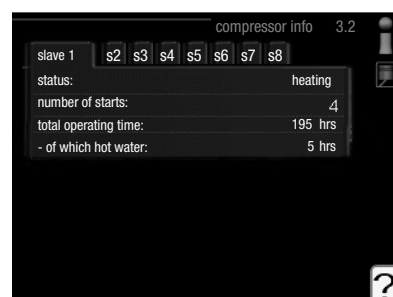
Symbols in this menu:



Menu 3.2 - compressor info

Information about the compressor's operating status and statistics can be obtained here. But no changes can be made.

If there is more than one climate system the information is on several pages. Turn the control knob to scroll between the pages.



Menu 3.3 - add. heat info

Information about the additional heat's settings, operating status and statistics can be obtained here. But no changes can be made.

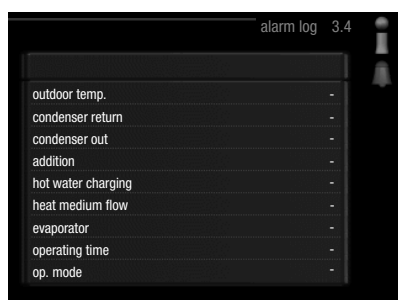
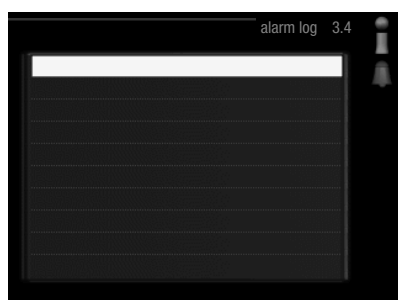
If there is more than one climate system the information is on several pages. Turn the control knob to scroll between the pages.



Menu 3.4 - alarm log

To facilitate fault-finding the installation's operating status at alarm alerts is stored here. You can see information for the 10 most recent alarms.

To view the run status in the event of an alarm, mark the alarm and press the OK button.



Information about an alarm.

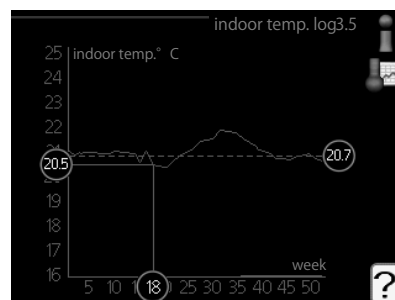
Menu 3.5 - indoor temp. log

Here you can see the average temperature indoors week by week during the past year. The dotted line indicates the annual average temperature.

The average outdoor temperature is only shown if a room temperature sensor/room unit is installed.

To read off an average temperature

- 1 Turn the control knob so that the ring on the shaft with the week number is marked.
- 2 Press the OK button.
- 3 Follow the grey line up to the graph and out to the left to read off the average indoor temperature at the selected week.
- 4 You can now select to take read outs for different weeks by turning the control knob to the right or left and read off the average temperature.
- 5 Press the OK or Back button to exit read off mode.



Adjust the heat pump

Overview

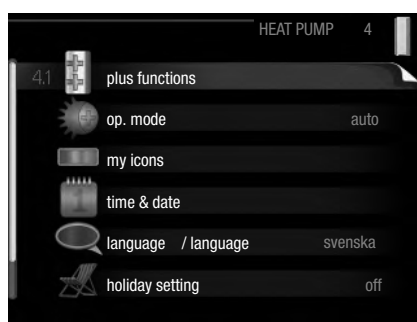
Sub-menus

For the menu "MY SYSTEM" there are several sub-menus. Status information for the relevant menu can be found on the display to the right of the menus.

"plus functions" Settings applying to any installed extra functions in the heating system.

"op. mode" Activation of manual or automatic operating mode. The status information shows the selected operating mode.

"my icons" Settings regarding which icons in the control module's user interface that are to appear on the hatch when the door is closed.



"time & date" Setting current time and date.

"language" Select the language for the display here. The status information shows the selected language.

"holiday setting" Vacation scheduling heating, hot water and ventilation. Status information "set" is displayed if you set a vacation schedule but it is not active at the moment, "active" is displayed if any part of the vacation schedule is active, otherwise it displays "off".

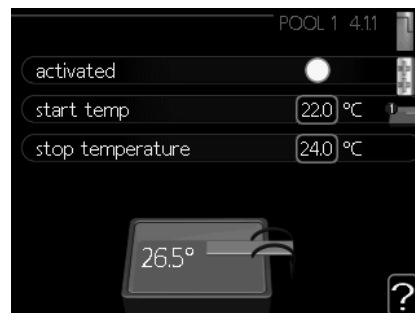
"advanced" Settings of control module work mode.

Menu 4.1 - plus functions

Settings for any additional functions installed in RC-HY20/40-W can be made in the sub-menus.

Menu 4.1.1/4.1.2 - Pool 1/Pool 2

Here you can activate pool heating and set start and stop temperatures.



start temp

Setting range: 5 – 80 °C

Default value: 22 °C

stop temperature

Setting range: 5 – 80 °C

Default value: 24 °C

maximum number of compr. (Cascade only)

Setting range: 1 – 8

Default value: 8

Select whether the pool control is to be activated, within what temperatures (start and stop temperature) pool heating must occur and how many compressors may work again the pool at the same time.

Maximum number of compressors gives the possibility of restricting the number of compressors that are permitted to work with pool heating. The setting can be adjusted if requirements other than pool heating must be prioritised for example.

When the pool temperature drops below the set temperature and there is no hot water or heating requirement, RC-HY40-W starts pool heating.

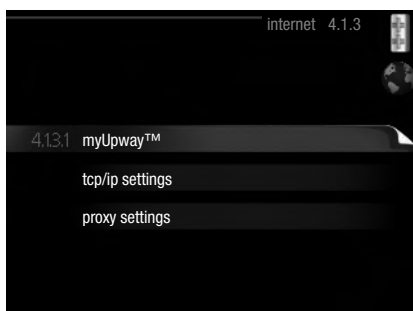
Untick "activated" to switch off the pool heating.

CAUTION

The start temperature cannot be set to a value that is higher than the stop temperature.

Menu 4.1.3 - internet

Here you make settings for connecting RC-HY20/40-W to the internet.

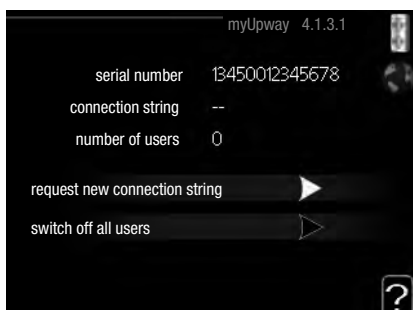
**NOTE**

For these functions to work the network cable must be connected.

Menu 4.1.3.1 - myUpway™

Here you can manage the installation's connection to myUpway™ (www.myUpway.com) and see the number of users connected to the installation via the internet.

A connected user has a user account in myUpway™, which has been given permission to control and/or monitor your installation.

**Request new connection string**

To connect a user account on myUpway™ to your installation, you must request a unique connection code.

1. Mark "request new connection string" and press the OK button.
2. The installation now communicates with myUpway™ to create a connection code.
3. When a connection string has been received, it is shown in this menu at "connection string" and is valid for 60 minutes.

Disconnect all users

1. Mark "switch off all users" and press the OK button.
2. The installation now communicates with myUpway™ to release your installation from all users connected via the internet.

NOTE

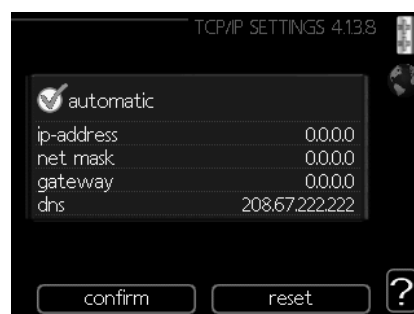
After disconnecting all users, none of them can monitor or control your installation via myUpway™ without requesting a new connection code

Menu 4.1.3.8 - tcp/ip settings

You can set TCP/IP settings for your installation here.

Automatic setting (DHCP)

1. Tick "automatic". The installation now receives the TCP/IP settings using DHCP.
2. Mark "confirm" and press the OK button.

**Manual setting**

1. Untick "automatic", you now have access to several setting options.
2. Mark "ip-address" and press the OK button.
3. Enter the correct details via the virtual keypad.
4. Mark "OK" and press the OK button.
5. Repeat 1 - 3 for "net mask", "gateway" and "dns".
6. Mark "confirm" and press the OK button.

CAUTION

The installation cannot connect to the internet without the correct TCP/IP settings. If unsure about applicable settings use the automatic mode or contact your network administrator (or similar) for further information.

TIP

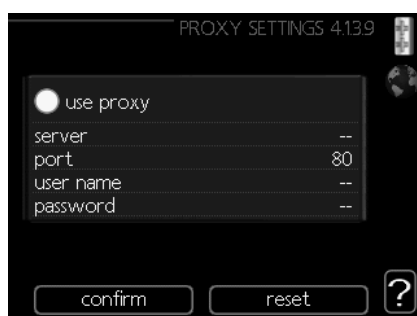
All settings made since opening the menu can be reset by marking "reset" and pressing the OK button.

Menu 4.1.3.9 - proxy settings

You can set proxy settings for your installation here.

Proxy settings are used to give connection information to a intermediate server (proxy server) between the installation and internet. These settings are primarily used when the installation connects to the internet via a company network. The installation supports proxy authentication of the HTTP Basic and HTTP Digest type.

If unsure about applicable settings, contact your network administrator (or similar) for further information.

**Setting**

1. Tick "use proxy" if you do not want to use a proxy.
2. Mark "server" and press the OK button.
3. Enter the correct details via the virtual keypad.
4. Mark "OK" and press the OK button.
5. Repeat 1 - 3 for "port", "user name" and "password".
6. Mark "confirm" and press the OK button.

TIP

All settings made since opening the menu can be reset by marking "reset" and pressing the OK button.

Menu 4.1.5 - SG Ready

This function can only be used in SG Ready 4.1.5 mains networks that support the "SG Ready"-standard.

Make settings for the function "SG Ready" here.

**affect room temperature**

Here you set whether room temperature should be affected when activating "SG Ready".

With low price mode on "SG Ready" the parallel offset for the indoor temperature is increased by "+1". If a room sensor is installed and activated, the desired room temperature is instead increased by 1 °C.

With over capacity mode on "SG Ready" the parallel offset for the indoor temperature is increased by "+2". If a room sensor is installed and activated, the desired room temperature is instead increased by 2 °C.

affect hot water

Here you set whether the temperature of the hot water should be affected when activating "SG Ready".

With low price mode on "SG Ready" the stop temperature of the hot water is set as high as possible at only compressor operation (immersion heater not permitted).

With over capacity mode of "SG Ready" the hot water is set to "luxury" (immersion heater permitted).

affect cooling (accessory required)

Here you set whether room temperature during cooling operation should be affected when activating "SG Ready".

With low price mode of "SG Ready" and cooling operation the indoor temperature is not affected.

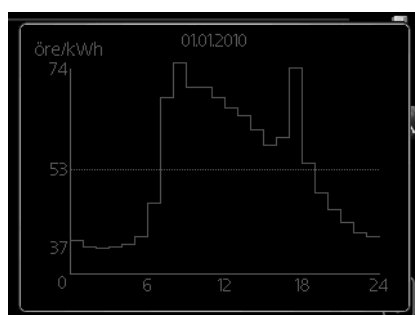
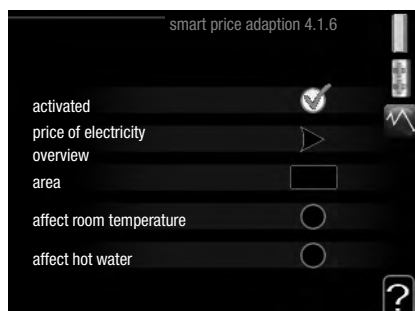
With over capacity mode on "SG Ready" and cooling operation, the parallel offset for the indoor temperature is reduced by "-1". If a room sensor is installed and activated, the desired room temperature is instead reduced by 1 °C.

NOTE

The function must be connected and activated in your RC-HY20/40-W.

Menu 4.1.6 - Smart price adaption™**area**

In this menu you state where the heat pump is located and how great a role the electricity price should play. The greater the value, the greater the effect the electricity price has and the possible savings are larger, but at the same time there is an increased risk of affecting comfort. Smart price adaption is available on selected markets, at present Austria, Denmark, Estonia, Finland, Norway and Sweden.

**price of electricity overview**

Here you can obtain information on how the electricity price varies over up to three days.

affect room temperature

Setting range: 1 – 10

Factory setting: 5

affect hot water

Setting range: 1 – 4

Factory setting: 2

affect cooling

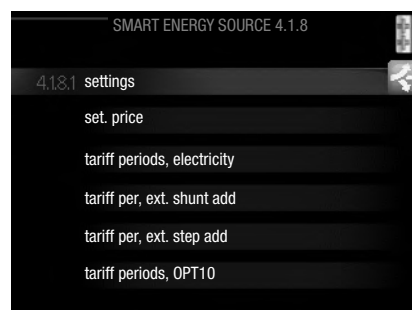
Setting range: 1 – 10

Factory setting: 3

Smart price adaption™ moves the heat pump's consumption over 24 hours to periods with the cheapest electricity tariff, which gives savings for hourly rate based electricity contracts. The function is based on hourly rates for the next 24 hours being retrieved via myUpway™ and therefore an internet

connection and an account for myUpway™ are required.

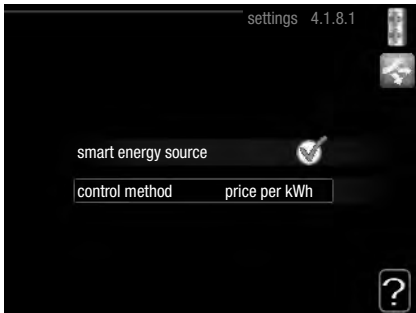
Deselect "activated" to switch off Smart price adaption™.

Menu 4.1.8 - smart energy source™ (RC-HY40-W only)**settings****set. price****CO2 impact*****tariff per, ext. shunt add****tariff per, ext. step add**

The function prioritises how / to what extent each docked energy source will be used. Here you can choose if the system is to use the energy source that is cheapest at the time. You can also choose if the system is to use the energy source that is most carbon neutral at the time.

*Select control method "CO₂" under settings to open this menu.

Menu 4.1.8.1 - settings



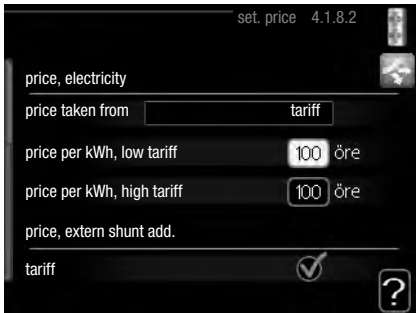
smart energy source™

Setting range: Off/On
Factory setting: Off

control method

Setting range: Price /CO₂
Factory setting: Price

Menu 4.1.8.2 - set. price



price, electricity

Setting range: spot, tariff, fixed price
Factory setting: fixed price
Setting range fixed price: 0 – 100,000*

price, extern shunt add.

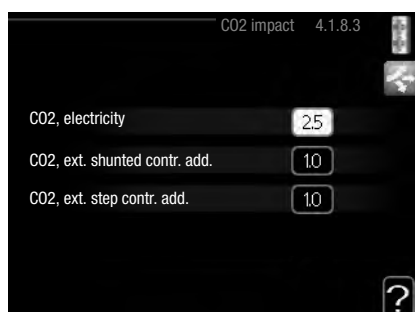
Setting range: tariff, fixed price
Factory setting: fixed price
Setting range fixed price: 0 – 100,000*

price, extern step add.

Setting range: tariff, fixed price
Factory setting: fixed price
Setting range fixed price: 0 – 100,000*

Here you can choose if the system is to exercise control based on the spot price, tariff control or a set price. The setting is made for each individual energy source. Spot price can only be used if you have an hourly tariff agreement with your electricity supplier.

*The currency varies depending on the country selected.

Menu 4.1.8.3 - CO2 impact**CO2, electricity**

Setting range: 0 – 5

Default value: 2.5

CO2, ext. shunted contr. add.

Setting range: 0 – 5

Default value: 1

CO2, ext. step contr. add.

Setting range: 0 – 5

Default value: 1

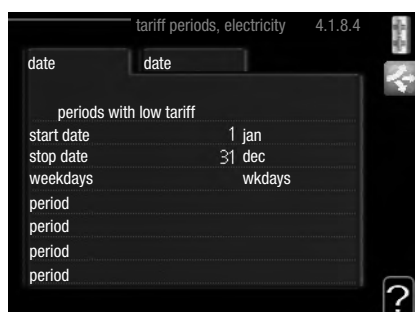
Here you set the size of the carbon footprint for each energy source.

The carbon footprint is different for different energy sources. For example, the energy from solar cells and wind turbines can be considered carbon dioxide neutral and, therefore, has a low CO2 impact. Energy from fossil fuels can be considered to have a higher carbon footprint and, therefore, has a higher CO2 impact.

Menu 4.1.8.4 - tariff periods, electricity

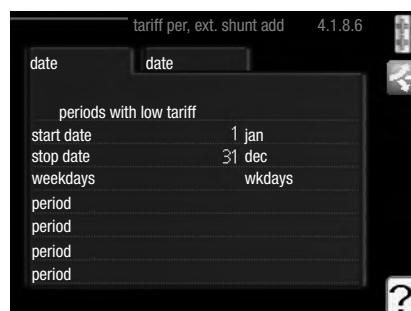
Here you can use tariff control for the electric additional heat.

Set the lower tariff periods. It is possible to set two different date periods per year. Within these periods, it is possible to set up to four different periods on weekdays (Monday to Friday) or four different periods on weekends (Saturdays and Sundays).

**Menu 4.1.8.6 - tariff per, ext. shunt add**

Here you can use tariff control for the external shunted additional heat.

Set the lower tariff periods. It is possible to set two different date periods per year. Within these periods, it is possible to set up to four different periods on weekdays (Monday to Friday) or four different periods on weekends (Saturdays and Sundays).

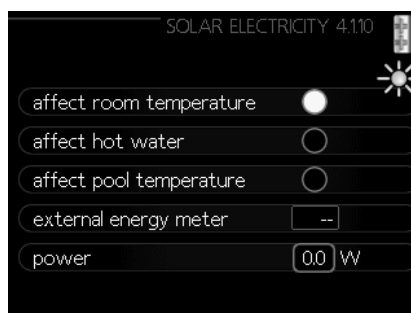
**Menu 4.1.8.7 - tariff per, ext. step add**

Here you can use tariff control for the external step controlled additional heat.

Set the lower tariff periods. It is possible to set two different date periods per year. Within these periods, it is possible to set up to four different periods on weekdays (Monday to Friday) or four different periods on weekends (Saturdays and Sundays).

**Menu 4.1.10 - Solar electricity**

Here you set whether you want EME20M to affect the room temperature and/or the hot water and/or pool.

**affect room temperature**

Setting range: on/off

Default value: off

affect hot water

Setting range: on/off

Default value: off

affect pool temperature

Setting range: on/off

Default value: off

Menu 4.2 - op. mode**op. mode**

Setting range: auto, manual, add. heat only

Default value: auto

functions

Setting range: compressor, addition, heating, cooling

The control module operating mode is usually set to "auto". It is also possible to set the control module to "add. heat only", when only additional heat is used, or "manual" and then select what functions are to be permitted.

Change the operating mode by marking the desired mode and pressing the OK button. When an operating mode is selected it shows what in the control module is permitted (crossed out = not permitted) and selectable alternatives to the right. To select selectable functions that are permitted or not, mark the function using the control knob and press the OK button.

Operating mode auto

In this operating mode the control module automatically selects what functions are permitted.

Operating mode manual

In this operating mode you can select what functions are permitted. You cannot deselect "compressor" in manual mode.

Operating mode add. heat only

In this operating mode the compressor is not active, only additional heat is used.

CAUTION

If you choose mode "add. heat only" the compressor is deselected and there is a higher operating cost.

CAUTION

You cannot change from only additional heat if you do not have a heat pump connected.

Functions

"**compressor**" is that which produces heating and hot water for the accommodation. If "compressor" is deselected, a symbol is displayed in the main menu on the symbol for the control module. You cannot deselect "compressor" in manual mode.

"**addition**" is what helps the compressor to heat the accommodation and/or the hot water when it cannot manage the whole requirement alone.

"**heating**" means that you get heat in the accommodation. You can deselect the function when you do not wish to have heating running.

"**cooling**" means that you get cooling in the accommodation in hot weather. This alternative requires an accessory for cooling or that the heat pump has a built in function for cooling and is activated in the menu. You can deselect the function when you do not wish to have the cooling running.

Menu 4.4 - time & date

Set time and date, display mode and time zone here.

**TIP**

Time and date are set automatically if the heat pump is connected to myUpway™. To obtain the correct time, the time zone must be set.

Menu 4.6 - language

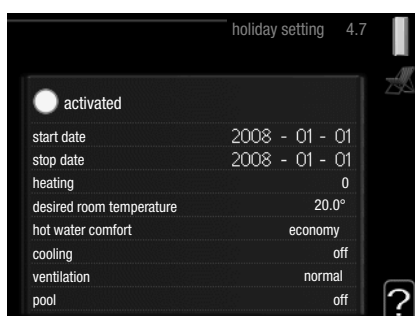
Choose the language that you want the information to be displayed in here.



Menu 4.7 - holiday setting

To reduce energy consumption during a holiday you can schedule a reduction in heating and hot water temperature. Cooling can also be scheduled if the functions are connected.

If a room sensor is installed and activated, the desired room temperature (°C) is set during the time period. This setting applies to all climate systems with room sensors.



If a room sensor is not activated, the desired offset of the heating curve is set. One step is usually enough to change the room temperature by one degree, but in some cases several steps may be required. This setting applies to all climate systems without room sensors.

Vacation scheduling starts at 00:00 on the start date and stops at 23:59 on the stop date.

TIP

Complete holiday setting about a day before your return so that room temperature and hot water have time to regain usual levels.

TIP

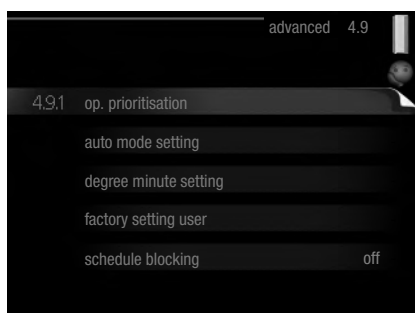
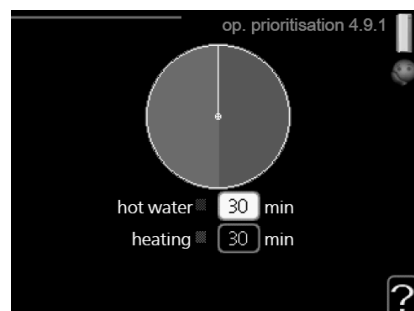
Set the vacation setting in advance and activate just before departure in order to maintain the comfort.

CAUTION

If you choose to switch off hot water production during the vacation "periodic increase" (preventing bacterial growth) are blocked during this time. "periodic increase" started in conjunction with the vacation setting being completed.

Menu 4.9 - advanced

Menu "advanced" has orange text and is intended for the advanced user. This menu has several sub-menus.

**Menu 4.9.1 - op. prioritisation****op. prioritisation**

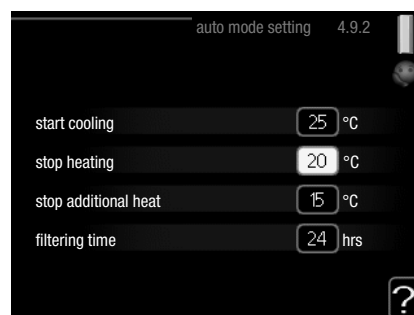
Setting range: 0 – 180 min

Default value: 30 min

Choose here how long the installation should work with each requirement if there are several requirements at the same time. If there is only one requirement the installation only works with that requirement.

The indicator marks where in the cycle the installation is.

If 0 minutes is selected it means that requirement is not prioritised, but will only be activated when there is no other requirement.

Menu 4.9.2 - auto mode setting**start cooling (accessory auto mode setting required)**

Setting range: 15 – 40 °C

Factory setting: 25

stop heating

Setting range: -20 – 40 °C

Default values: 17

stop additional heat

Setting range: -25 – 40 °C

Factory setting: 5

filtering time

Setting range: 0 – 48 h

Default value: 24 h

When the operating mode is set to "auto", the control module selects when start and stop of additional heat and heat production is permitted, depending on the average outdoor

temperature. If the heat pump has the integrated cooling function and it is activated in the menu you can also select the start temperature for cooling.

Select the average outdoor temperatures in this menu.

You can also set the time over which (filtering time) the average temperature is calculated. If you select 0, the present outdoor temperature is used.

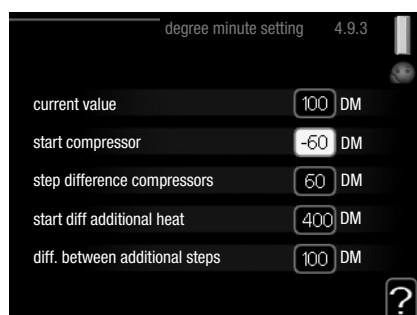
CAUTION

It cannot be set "stop additional heat" higher than "stop heating".

CAUTION

In systems where heating and cooling share the same pipes "stop heating" cannot be set higher than "start cooling" if there is not a cooling/heating sensor.

Menu 4.9.3 - degree minute setting



current value

Setting range: -3000 – 3000

start compressor

Setting range: -1000 – -30

Default value: -60

step difference compressors (RC-HY40-W only)

Setting range: 10 – 2000

Default value: 60

start diff additional heat

Setting range: 100 – 2000

Factory setting: 400

diff. between additional steps

Setting range: 10 – 1000

Factory setting: 30

Degree minutes are a measurement of the current heating requirement in the house and determine when the compressor respectively additional heat will start/stop.

CAUTION

Higher value on "start compressor" gives more compressor starts, which increase wear on the compressor. Too low value can give uneven indoor temperatures.

Menu 4.9.4 - factory setting user

All settings that are available to the user (including advanced menus) can be reset to default values here.

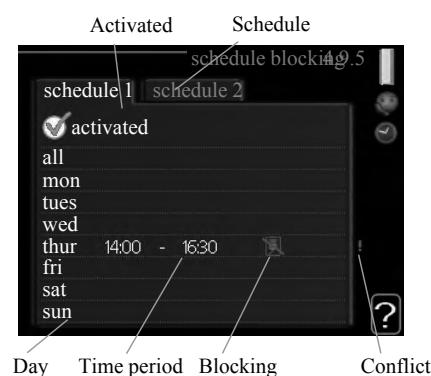


CAUTION

After factory setting, personal settings such as heating curves must be reset.

Menu 4.9.5 - schedule blocking

The additional heat can be scheduled to be blocked for up to two different time periods here.



When scheduling is active the relevant blocking symbol is shown in the main menu on the symbol for the control module.

Schedule: The period to be changed is selected here.

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.

Day: Select which day or days of the week the schedule is to apply to here. To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to the same as the stop time. If the line "all" is used, all days in the period are set for these times.

Time period: The start and stop time for the selected day for scheduling are selected here.

Blocking: The desired blocking is selected here.

Conflict: If two settings conflict with each other a red exclamation mark is displayed.



Blocking the compressor in the outdoor unit.



Blocking additional heat.

TIP

If you wish to set similar scheduling for every day of the week start by filling in "all" and then changing the desired days.

TIP

*Set the stop time earlier than the start time so that the period extends beyond midnight. Scheduling then stops at the set stop time the day after.
Scheduling always starts on the date that the start time is set for.*

CAUTION

Long term blocking can cause reduced comfort and operating economy.

TIP

If you wish to set similar scheduling for every day of the week start by filling in "all" and then changing the desired days.

TIP

*Set the stop time earlier than the start time so that the period extends beyond midnight. Scheduling then stops at the set stop time the day after.
Scheduling always starts on the date that the start time is set for.*

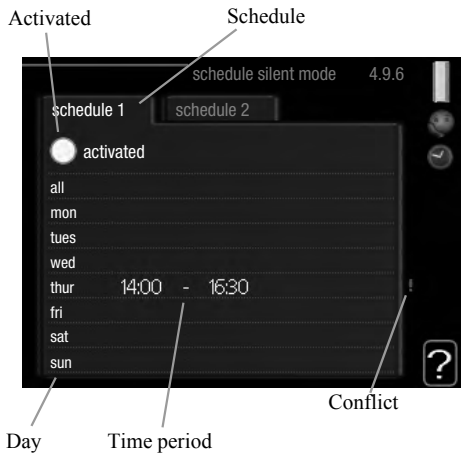
CAUTION

Long term scheduling of "silent mode" can cause reduced comfort and operating economy.

Menu 4.9.6 - schedule silent mode

The compressor can be scheduled to be set to "silent mode" (the heat pump must support this) for up to two different time periods here.

When scheduling is active the "silent mode" symbol is shown in the main menu on the symbol for the control module.



Schedule: The period to be changed is selected here.

Activated: Scheduling for the selected period is activated here. Set times are not affected at deactivation.

Day: Select which day or days of the week the schedule is to apply to here. To remove the scheduling for a particular day, the time for that day must be reset by setting the start time to the same as the stop time. If the line "all" is used, all days in the period are set for these times.

Time period: The start and stop time for the selected day for scheduling are selected here.

Conflict: If two settings conflict with each other a red exclamation mark is displayed.

Sub-menus

Menu SERVICE has orange text and is intended for the advanced user. This menu has several sub-menus.

Status information for the relevant menu can be found on the display to the right of the menus.

operating settings: Operating settings for the control module.

system settings: System settings for the control module, activating accessories etc.

soft in/outputs: Setting software controlled in and outputs on the input card (AA3) and terminal block (X2).

factory setting service: Total reset of all settings (including settings available to the user) to default values.

forced control: Forced control of the different components in the indoor module.

start guide: Manual start of the start guide which is run the first time when the control module is started.

quick start: Quick starting the compressor.

NOTE

Incorrect settings in the service menus can damage the installation.

Menu 5.1 - operating settings

Operating settings can be made for the control module in the sub-menus.

Menu 5.1.1 - hot water settings

economy

Setting range start temp. economy: 5 – 55 °C

Factory setting start temp. economy: 42 °C

Setting range stop temp. economy: 5 – 60 °C

Factory setting stop temp. economy: 48 °C

normal

Setting range start temp. normal: 5 – 60 °C

Factory setting start temp. normal: 46 °C

Setting range stop temp. normal: 5 – 65 °C

Factory setting stop temp. normal: 50 °C

luxury

Setting range start temp. lux: 5 – 70 °C

Factory setting start temp. lux: 49 °C

Setting range stop temp. lux: 5 – 70 °C

Factory setting stop temp. lux: 53 °C

stop temp. per. increase

Setting range: 55 – 70 °C

Factory setting: 55 °C

charge method

Setting range: target temp, delta temp.

Default value: delta temp.

Here you set the start and stop temperature of the hot water for the different comfort options in menu 2.2 as well as the stop temperature for periodic increase in menu 2.9.1.

The charge method for hot water mode is selected here. "delta temp" is recommended for heaters with charge coil, "target temp" for heaters with domestic coil.

Menu 5.1.2 - max flow line temperature

climate system

Setting range: 5 – 70 °C

Default value: 60 °C

Set the maximum supply temperature for the climate system here. If the installation has more than one climate system, individual maximum supply temperatures can be set for each system. Climate systems 2 – 8 cannot be set to a higher max supply temperature than climate system 1.

CAUTION

Underfloor heating systems are normally max flow line temperature set between 35 and 45°C.

Be careful not to cause low temperature burn if it is set at 35°C or higher.

Check the max floor temperature with your floor supplier.

Menu 5.1.3 - max diff flow line temp.**max diff compressor**

Setting range: 1 – 25 °C

Default value: 10 °C

max diff addition

Setting range: 1 – 24 °C

Default value: 7 °C

Here you set the maximum permitted difference between the calculated and actual supply temperature during compressor mode and add. heat mode. Max diff. additional heat can never exceed max diff. compressor

max diff compressor

When the current supply temperature **deviates** from the set value compared to that calculated, the heat pump is forced to stop irrespective of the degree minute value.

If the current supply temperature exceeds the calculated flow temperature plus the set value, the degree minute value is set to 0. The compressor in the heat pump stops when there is only a heating demand.

max diff addition

If "addition" is selected and activated in menu 4.2 and the present supply temp **exceeds** the calculated temperature plus the set value, the additional heat is forced to stop.

Menu 5.1.4 - alarm actions

Select how to control the heat pump in the event of an alarm. You can choose to stop producing hot water and/or reduce the room temperature.

CAUTION

If no alarm action is selected, it can result in higher energy consumption in the event of an alarm.

Menu 5.1.12 - addition

add type: step controlled

max step

Setting range (binary stepping deactivated): 0 – 3

Setting range (binary stepping activated): 0 – 7

Default value: 3

fuse size

Setting range: 1 – 200 A

Factory setting: 16 A

You can set the maximum number of permitted additional heat steps, if there is internal additional heat in the tank (only accessible if the additional heat is positioned after QN10), whether binary stepping is to be used and the size of the fuse.

<Add. Type: shunt controlled (RC-HY40 only)>

prioritised additional heat

Setting range: on/off

Factory setting: off

minimum running time

Setting range: 0 – 48 h

Default value: 12 h

min temp.

Setting range: 5 – 90 °C

Default value: 55 °C

mixing valve amplifier

Setting range: 0.1 – 10.0

Default value: 1.0

mixing valve step delay

Setting range: 10 – 300 s

Default values: 30 s

fuse size

Setting range: 1 – 200 A

Factory setting: 16 A

transformation ratio

Setting range: 300 – 3000

Factory setting: 300

Select this option if shunt controlled additional heat is connected.

Set when the addition is to start, the minimum run time and the minimum temperature for external addition with shunt here. External addition with shunt is for example a wood/oil/gas/pellet boiler.

You can set shunt valve amplification and shunt valve waiting time.

Selecting "prioritised additional heat" uses the heat from the external additional heat instead of the heat pump.

The shunt valve is regulated as long as heat is available, otherwise the shunt valve is closed.

TIP

See the accessory installation instructions for function description.

Menu 5.1.14 - flow set. climate system**presettings**

Setting range: radiator, floor heat., rad. + floor heat.

Default value: radiator

Setting range DOT: -40.0 – 20.0 °C

The factory setting of DOT value depends on the country that has been given for the product's location.

The example below refers to Sweden.

Factory setting DOT: -20.0 °C

own setting

Setting range dT at DOT: 0.0 – 25.0

Factory setting dT at DOT: 10.0
 Setting range DOT: -40.0 – 20.0 °C
 Factory setting DOT: -20.0 °C

Select the type of heating distribution system.

dT at DOT is the difference in degrees between flow and return temperatures at dimensioned outdoor temperature.

Menu 5.1.22 - heat pump testing

NOTE

This menu is intended for testing heat pump according to different standards.

Use of this menu for other reasons may result in your installation not functioning as intended.

This menu contains several sub-menus, one for each standard.

Menu 5.1.23 - compressor curve

Set whether the compressor in the heat pump should work to a particular curve under specific requirements or if it should work to predefined curves.

You can set a curve for each operation mode (heat, hot water, cooling etc.) by unticking "auto", turning the control knob until a temperature is marked and pressing OK. You can set at what temperature max- min frequencies will occur.

This menu consists of several windows (one for each operation mode). Use the navigation arrow in the top left corner to change between the windows.

Menu 5.2 - system settings

Make different system settings for your installation here, e.g. activate the connected heat pump and which accessories are installed.

Menu 5.2.2 - installed heat pump

If a heat pump is connected to the master installation, set it here.

For RC-HY40-W, you can set slave unit to be connected.

There are two ways of activating connected slaves. You can either mark the alternative in the list or use the automatic function "search installed slaves".

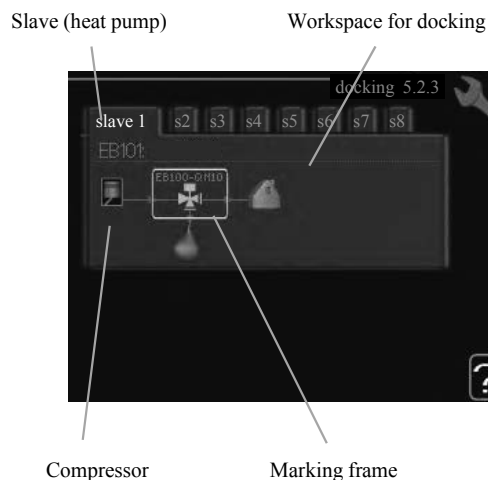
search installed slaves

Mark "search installed slaves" and press the OK button to automatically find connected slaves for the master heat pump.

Menu 5.2.3 – docking (RC-HY40-W only)

Enter how your system is docked regarding pipes, for example to hot water heating and heating the building.

This menu has a docking memory which means that the control system remembers how a particular reversing valve is docked and automatically enters the correct docking the next time you use the same reversing valve.









Slave: Here you select for which heat pump the docking setting is to be made.

Compressor: Select if the compressor in the heat pump is blocked (factory setting), or standard (docked for example to pool heating, hot water charging and heating the building).

Marking frame: Move around the marking frame using the control knob. Use the OK button to select what you want to change and to confirm setting in the options box that appears to the right.

Workspace for docking: The system docking is drawn here.

Symbol	Description
	Compressor (blocked)
	Compressor (standard)
	Reversing valves for hot water, cooling. The designations above the reversing valve indicate where it is electrically connected (EB101 = Slave 1, etc.).
	Hot water charging
	Heating (heating the building, includes any extra climate system)
	Cooling

Menu 5.2.4 - accessories

Set which accessories are installed on the installation here.

If the water heater is connected, hot water charging must be activated here.

Menu 5.3 - accessory settings

The operating settings for accessories that are installed and activated are made in the sub-menus for this.

Menu 5.3.2 - shunt controlled add. Heat

prioritised additional heat

Setting range: on/off

Factory setting: off

start diff additional heat

Setting range: 0 – 2000 GM

Default values: 400 GM

minimum running time

Setting range: 0 – 48 h

Default value: 12 h

min temp.

Setting range: 5 – 90 °C

Default value: 55 °C

mixing valve amplifier

Setting range: 0.1 – 10.0

Default value: 1.0

mixing valve step delay

Setting range: 10 – 300 s

Default values: 30 s

Set when the addition is to start, the minimum run time and the minimum temperature for external addition with shunt here. External addition with shunt is for example a wood/oil/gas/pellet boiler.

You can set shunt valve amplification and shunt valve waiting time.

Selecting "prioritised additional heat" uses the heat from the external additional heat instead of the heat pump.

The shunt valve is regulated as long as heat is available, otherwise the shunt valve is closed.

See the accessory installation instructions for function description.

Menu 5.3.3 - extra climate system

use in heating mode

Setting range: on/off

Factory setting: on

use in cooling mode

Setting range: on/off

Factory setting: off

mixing valve amplifier

Setting range: 0.1 – 10.0

Default value: 1.0

mixing valve step delay

Setting range: 10 – 300 s

Default values: 30 s

Here you select which climate system (2 – 8) you wish to set. In the next menu you can make settings for the climate system

that you have selected. If this function is activated, you can set "cooling flow temp. at +20°C" and "cooling flow temp. at +40°C" for each climate system where the function is activated.

CAUTION

This setting option only appears if "cooling permitted" is activated in menu 5.11.1.1.

The shunt amplification and shunt waiting time for the different extra climate systems that are installed are also set here.

See the accessory installation instructions for function description.

Menu 5.3.6 - step controlled add. heat

start addition

Setting range: 0 – 2000 GM

Default values: 400 GM

diff. between additional steps

Setting range: 0 – 1000 GM

Default values: 30 GM

max step

Setting range

(binary stepping deactivated): 0 – 3

Setting range

(binary stepping activated): 0 – 7

Default value: 3

binary stepping

Setting range: on/off

Factory setting: off

Make settings for step controlled addition here. Step controlled addition is for example an external electric boiler.

It is possible, for example, to select when the additional heat is to start, to set the maximum number of permitted steps and whether binary stepping is to be used.

When binary stepping is deactivated (off), the settings refer to linear stepping.

See the accessory installation instructions for function description.

Menu 5.3.8 - hot water comfort

activating imm heater

Setting range: on/off

Factory setting: off

activ. imm heat in heat mode

Setting range: on/off

Factory setting: off

activating the mixing valve

Setting range: on/off

Factory setting: off

outgoing hot water

Setting range: 40 – 65 °C

Default value: 55 °C

mixing valve amplifier

Setting range: 0.1 – 10.0

Default value: 1.0

mixing valve step delay

Setting range: 10 – 300 s

Default values: 30 s

Make settings for the hot water comfort here.

See the accessory installation instructions for function description.

activating imm heater: The immersion heater is activated here if installed in the water heater.

activ. imm heat in heat mode: Activate here whether the immersion heater in the tank (required if the alternative above is activated) will be permitted to charge hot water, if the compressors in the heat pump prioritise heating.

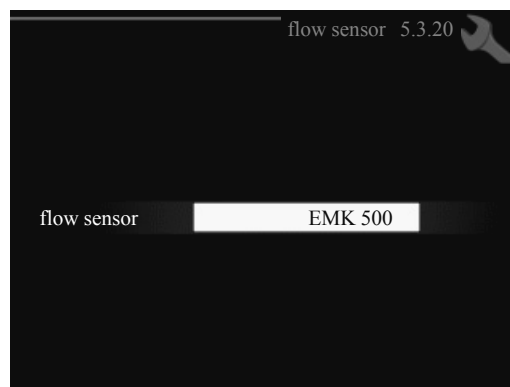
activating the mixing valve: Activate here whether a mixer valve for limiting the temperature of hot water from the water heater is installed.

If this alternative has been activated, you can set the outgoing hot water temperature, shunt amplification and shunt waiting time for the mixer valve.

outgoing hot water: Set the temperature at which the mixing valve is to restrict hot water from the water heater.

See the accessory installation instructions for function description.

Menu 5.3.20 - flow sensor



flow sensor

Setting option: EMK 500, EMK 310 / 300, EMK 150

Factory setting: EMK 500

Here you select which flow sensor is used for the energy measurement.

Menu 5.4 – soft in/outputs

You can set the function of in/output for each terminal (AUX1-6 and output).

Position of the terminal depends on the type of controller.

RC-HY20-W: port 11-18 on X2 terminal (AUX1-6), X4 terminal on AA2 board (output)

RC-HY40-W: port 9-14 on terminal X6 and port 1-4 on X2 terminal on AA3 board (AUX1-6), X7 terminal on AA3 board (output)

Menu 5.5 - factory setting service

All settings can be reset (including settings available to the user) to default values here.

NOTE

When resetting, the start guide is displayed the next time the control module is restarted.

Menu 5.6 - forced control

You can force control the different components in the control module and any connected accessories here.

Menu 5.7 - start guide

When the control module is started for the first time the start guide starts automatically. Start it manually here.

See page 76 for more information about the start guide.

Menu 5.8 - quick start

It is possible to start the compressor from here.

CAUTION

There must be a heating or hot water demand to start the compressor.

CAUTION

Do not quick start the compressor too many times over a short period of time as this may damage the compressor and its surrounding equipment.

Menu 5.9 - floor drying function**length of period 1 – 7**

Setting range: 0 – 30 days

Factory setting, period 1 – 3, 5 – 7: 2 days

Factory setting, period 4: 3 days

temp. period 1 – 7

Setting range: 15 – 70 °C

Default value:

temp. period 1	20 °C
temp. period 2	30 °C
temp. period 3	40 °C
temp. period 4	45 °C
temp. period 5	40 °C
temp. period 6	30 °C
temp. period 7	20 °C

Set the function for under floor drying here.

You can set up to seven period times with different calculated flow temperatures. If less than seven periods

are to be used, set the remaining period times to 0 days.

Mark the active window to activate the underfloor drying function. A counter at the bottom shows the number of days the function has been active.

TIP

If operating mode "add. heat only" is to be used, select it in menu 4.2.

Menu 5.10 - change log

Read off any previous changes to the control system here.

The date, time and ID No. (unique to certain settings) and the new set value is shown for every change.

NOTE

The change log is saved at restart and remains unchanged after factory setting.

Menu 5.11 - heat pump settings

Settings for installed heat pump can be made in the submenus.

Menu 5.11.1 - EB101 - EB108

Make settings specifically for the installed heat pump and charge pump here.

For RC-HY40-W, it is possible to connect up to 8 heat pumps.

Menu 5.11.1.1 - heat pump

Make settings for the installed heat pump here. To see what settings you can make, see installation manual for the heat pump.

Cooling permitted

Here you can set whether the cooling function is to be activated for the heat pump.

Silent mode permitted

Set whether silent mode is to be activated for the heat pump.

Current limit

Set whether the current limiting function is to be activated for the heat pump here.

During active function you can limit the value of the maximum current.

Setting range: 6 – 32 A

Factory setting: 32 A

Stop temperature compressor

Here you can limit the value for the set outdoor temperature down to the value the heat pump is to work.

Setting range: -20°C – -2°C

Factory setting: -20°C

blockFreq 1

Select a frequency range within the heat pump may work here.

blockFreq 2

Select a frequency range within the heat pump may work here.

Menu 5.11.1.2 - charge pump (GP12)

op. mode

Heating/cooling

Setting range: auto / intermittent

Default value: auto

Set the operating mode for the charge pump here.

auto: The charge pump runs according to the current operating mode for RC-HY20-W.

intermittent: The charge pump starts and stops 20 seconds before and after the compressor in the heat pump.

speed during operation heating, hot water, cooling

Setting range: auto / manual

Default value: auto

Manual setting

Setting range: 1 – 100 %

Default values: 70 %

speed in wait mode

Setting range: 1 – 100 %

Default values: 30 %

max. allowed speed

Setting range: 80 – 100 %

Default values: 100 %

Set the speed at which the charge pump is to operate in the present operating mode. Select "auto" if the speed of the charge pump is to be regulated automatically (factory setting) for optimal operation.

If "auto" is activated for heating operation, you can also make the setting "max. allowed speed" which restricts the charge pump and does not allow it to run at a higher speed than the set value.

For manual operation of the charge pump deactivate "auto" for the current operating mode and set the value to between 1 and 100 % (the previously set value for "max. allowed speed" no longer applies).

Speed in standby mode (only used if "auto" has been selected for "Operating mode") means the charge pump operates at the set speed during the time when there is neither a need for compressor operation nor additional heat.

5.12 - country

Select here where the product was installed. This allows access to country specific settings in your product.

Language settings can be made regardless of this selection.

NOTE

This option locks after 24 hours, restart of display or program updating.