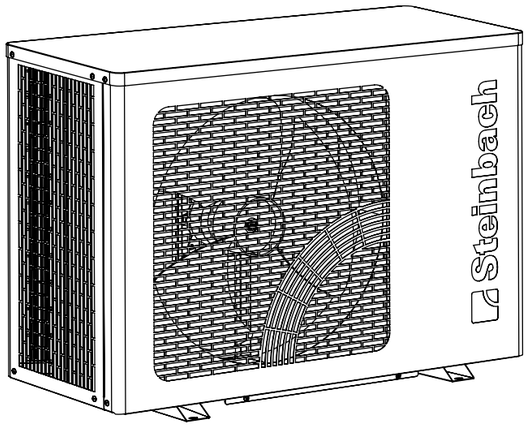
A



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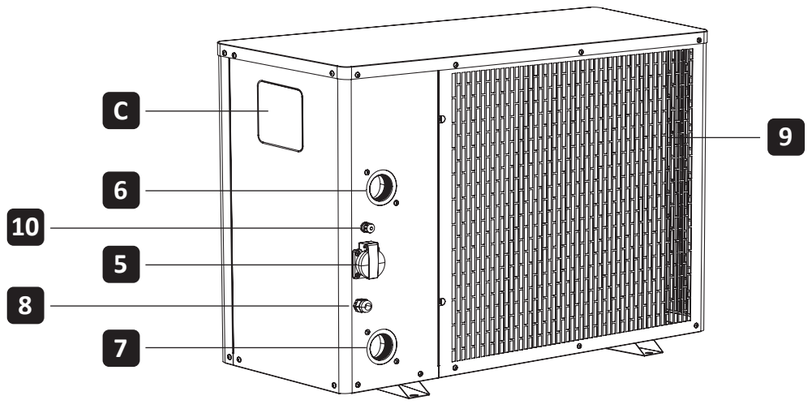
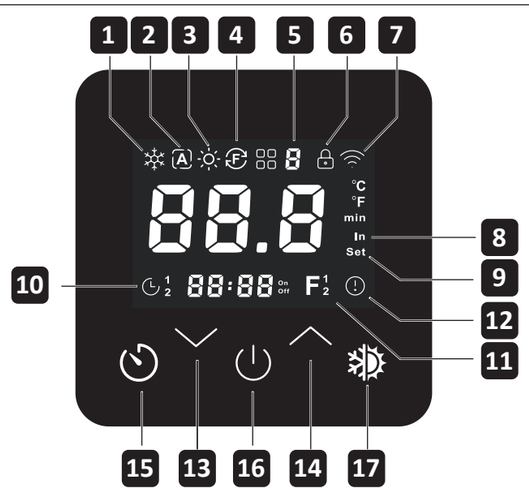


C



Scope of delivery

1 Heat pump
2 Hose nozzle Ø 32/38 x 1 1/2“ external thread (2x)
3 Seal; pre-assembled in hose nozzle (x2)
4 Hose clamp Ø 32/38 mm (x2)

Device parts

5 Switchable socket
6 Water connection outlet
7 Water connection inlet
8 Power cable feed-through (power cable not shown)
9 Lamellar heat exchanger
10 External control input

(C) Display: Operating and display elements

1 Display **Cooling mode**
2 Display **Automatic mode**
3 Display **Heating mode**
4 Display **Switchable socket**
5 Display **External control input**
6 Display **Key lock**
7 Display **Wifi**
8 Display **Input temperature (In)**
9 Display **Setpoint temperature (Set)**
10 Display **Time/Timer**
11 Display **Timer switchable socket**
12 Display **Error**
13 Button **Control/Navigation DOWN**
14 Button **Control/Navigation UP**
15 Button **Time/Timer**
16 Button **ON/OFF**
17 Button **Operating mode**

General

Read and keep the operating instructions

These operating instructions belong to this Solid 7 or Solid 9 heat pump (hereinafter also referred to as “device” or “heat pump”). They contain important information on commissioning and operation.
Read the operating instructions carefully, especially the safety instructions, before using the device. Failure to follow these operating instructions can result in serious injury or damage to the device.
Keep the operating instructions for future reference. If you pass the device on to a third party, be sure to include these operating instructions.

Intended use

This device is designed exclusively for heating or cooling water as part of a water treatment system for private swimming pools.
The salt concentration of the water must not exceed 0.5% (equivalent to 5 g/l or 5,000 ppm).
This device may only be used outdoors.
It is intended for private use only and is not suitable for commercial use.
Only use the device as described in this operating manual. Any other use is considered improper and may result in property damage or even personal injury.
The device is not a toy for children.
The manufacturer or dealer accepts no liability for damage caused by improper or incorrect use.

Explanation of symbols

The following symbols are used in this operating manual, on the device, or on the packaging.

Read the quick start guide and operating instructions.

The operating instructions contain important information on maintenance and repair.

Danger of electric shock! Warning of electrical voltage.

The operating instructions contain important additional information.

Fire hazard! Warning about flammable substances.

Products marked with this symbol comply with protection class I.

Never use sharp knives or other pointed objects to open the packaging. You could damage the contents.

Safety

The following signal words are used in this operating manual.

⚠ WARNING!	This signal symbol/word indicates a hazard with a medium degree of risk which, if not avoided, could result in death or serious injury.
⚠ CAUTION!	This signal symbol/word indicates a hazard with a low degree of risk which, if not avoided, could result in minor or moderate injury.
NOTE!	This signal word warns of possible property damage.

General safety instructions

⚠ WARNING!

Fire and explosion hazard!

The refrigerant circuit of the device contains highly flammable, odorless gas under high pressure. If refrigerant escapes uncontrollably, there is a risk of fire and explosion. A safety area of one meter must be maintained around the device.

» Only operate the device outdoors.
» There must be no heat sources, open flames, or ignition sources such as power outlets or light switches within the safety zone.
» Windows, doors, basement entrances, and other building openings must not be located within the safety zone.
» The device must be placed on a solid surface, as R290 is heavier than air and must not be allowed to enter the ground or sewage system in the event of a leak.
» Only store the device in well-ventilated areas.

⚠ WARNING!

Risk of injury due to lack of qualification!

Lack of experience or skill in handling the necessary tools and lack of knowledge of regional or normative regulations for the required manual work can result in serious injury or property damage.

» For all work where you cannot assess the risks based on sufficient personal experience, hire a qualified specialist.

⚠ WARNING!

Risk of electric shock!

» Do not operate the heat pump if it shows visible damage or if the power cord or plug is defective.
» Only connect the heat pump to standard-compliant sockets that are protected by a residual current device (RCD) with a maximum permissible residual current of 30 mA.
» Never pull the power plug out of the socket by the power cord; always grasp the power plug itself.

⚠ WARNING!

Risk of injury for people with personal impairments or lack of experience and knowledge!

Improper use of the device can result in serious injury or damage to the device.

» Do not leave the device unattended during operation.
» Only allow others to use the device after they have read and understood these instructions in full or have been instructed in its proper use and the associated hazards.
» Never leave persons with reduced physical, sensory, or mental capabilities (e.g., children or intoxicated persons) or lack of experience and knowledge (e.g., children) unattended near the device.

⚠ CAUTION!

Risk of injury when moving heavy equipment!

The equipment is heavy! Incorrect lifting or uncontrolled tilting of the equipment can result in injury or damage to the equipment.

» Always lift, carry, or tilt the equipment with at least two people, never alone.
» Ensure you have the correct posture (straight back, secure footing, etc.).
» Use transport aids (e.g., pallet truck or dolly).
» Wear protective equipment such as safety shoes or gloves.

Preparation

⚠ WARNING!

Risk of suffocation from packaging material!

Packaging material can cause death by suffocation. Children and mentally impaired persons, who are unable to assess the risks due to a lack of knowledge and experience, are particularly at risk.

» Ensure that children and mentally impaired persons do not play with the packaging material.

NOTE!

Careless opening of the packaging, especially with sharp or pointed objects, can cause damage to the device.

» Open the packaging as carefully as possible.
» Do not pierce the packaging with sharp or pointed objects.

Check the scope of delivery for completeness and damage

1. Open the packaging carefully.
2. Remove all parts from the packaging.
3. Check that the scope of delivery is complete.
4. Check the scope of delivery for damage.

Basic cleaning of the device

1. Remove the packaging material and all protective films, if present.
2. Clean all parts of the scope of delivery as described in the “Cleaning” chapter.

The device is now clean and ready for use.

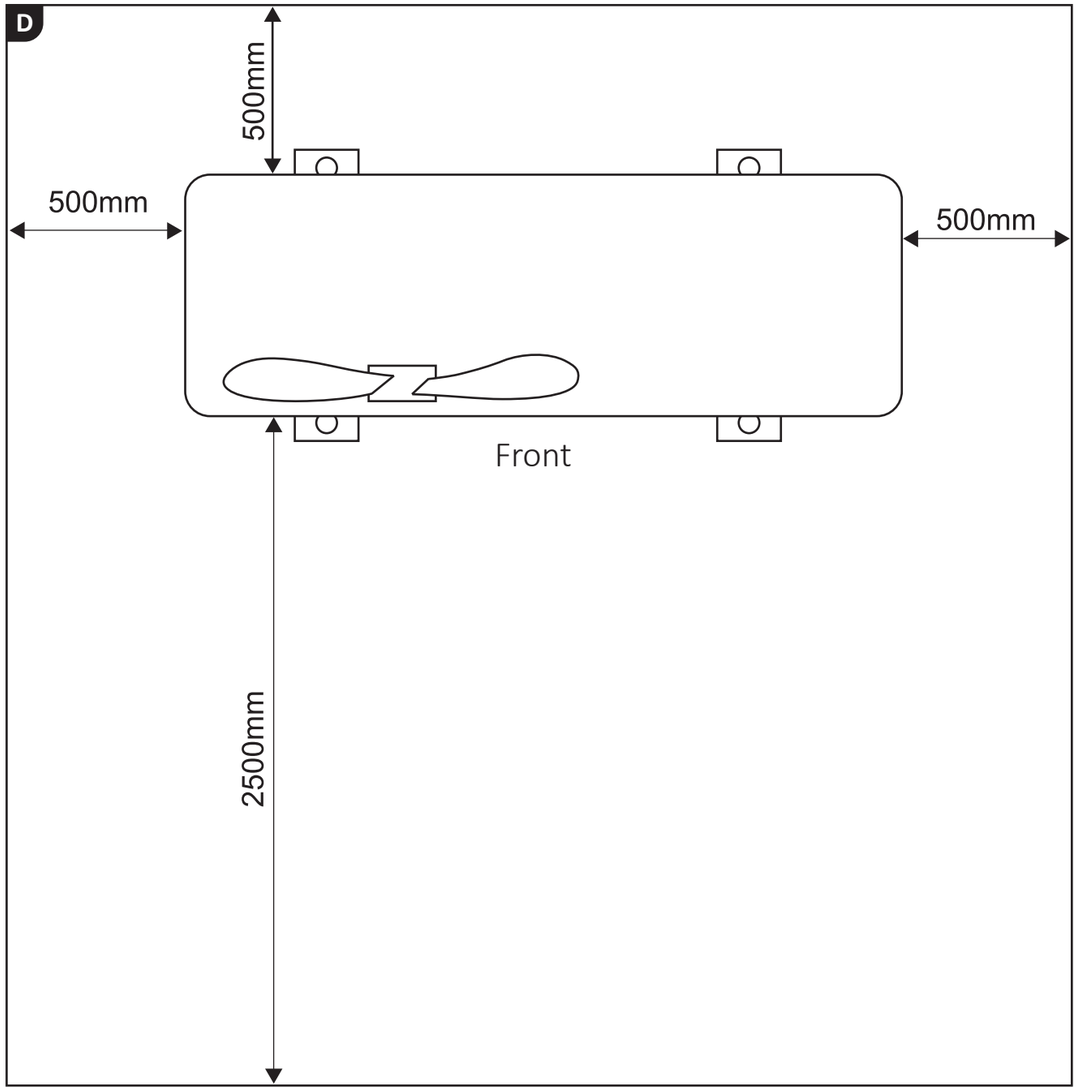
Prepare the installation site and connections

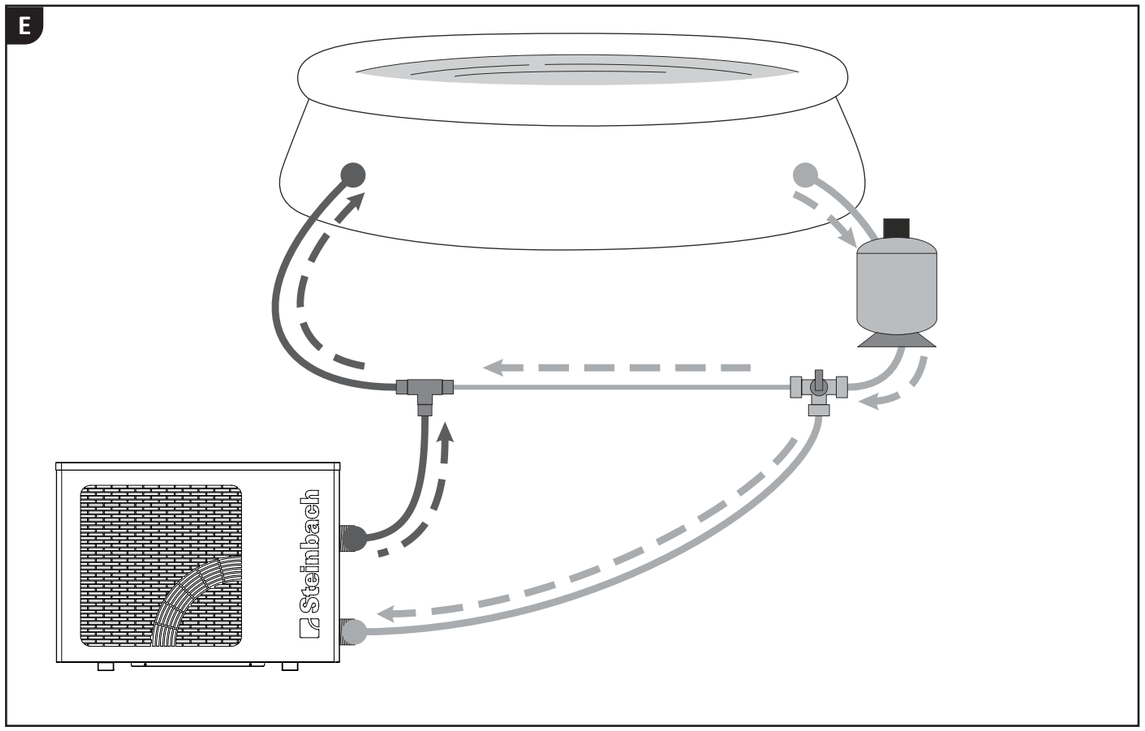
Choosing and preparing the installation site carefully will make installing and operating the heat pump much easier. The following requirements must be met or taken into account:

» Outdoor installation site
» Stable, level, and waterproof surface
» Ensure that the safety area is observed (see chapter “General safety instructions”)
» Required minimum distance from walls or objects (see **Fig. D**)
» Required minimum distance of 2 m from the swimming pool.
» Easy connection of water pipes
» Easy connection of power supply
» Easy access to the display
» Possibility to drain condensation water

For even more efficient use of the heat pump, we also recommend our Steinbach bypass set (item no. 060045).

D





The heat pump must be operated with filtered water.

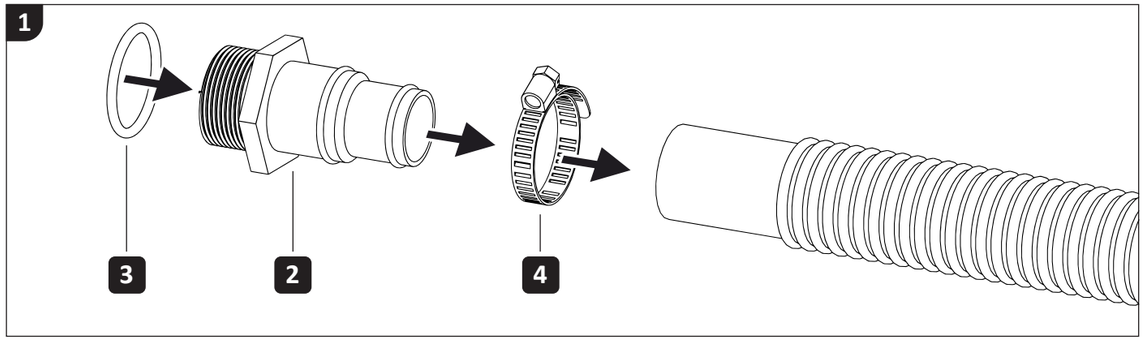
Prepare the installation site

1. Set up the heat pump exactly as it will be used later.
2. Position the heat pump exactly as it will be later.
3. Lay the hose lines from the water treatment system to the heat pump installation site. Ensure that all lines laid to the heat pump are not under tension and do not obstruct any paths.
4. Lay a supply line for the heat pump‘s power supply (see chapter Technical Data). Use an extension cord or a power outlet with a protection class suitable for the environmental conditions at the connection point!

The installation site is now prepared.

Installation

Attach adapters to the hose ends



1. Place a **hose clamp** **4** on the end of the supply line.
2. Insert an **adapter** **2** into the end of the supply line.
3. Secure the **adapter** **2** by tightening the **hose clamp** **4** on the end of the supply line hose.
4. Place the **seal** **3** over the thread on the **Adapter** **2**.
5. Install the second adapter in the same way on the end of the discharge line hose.

The adapters are mounted on the hose ends.

Connecting the water pipes (hose connection)

1. Place the heat pump on the prepared site.
2. Clean the water connection **outlet** **6** and the water connection **inlet** **7** on the **heat pump** **1** of coarse contaminants.
3. Clean any coarse contaminants from the **adapter** **2** at the hose ends of the water pipes.
4. Screw the drain pipe onto the water connection **outlet** **6**.
5. Screw the inlet pipe onto the water connection **inlet** **7**.

The swimming pool hoses are now connected.

Connecting the power supply

Connect the power plug at the end of the **power cable** **8** to the power supply prepared at the installation site. As soon as the power supply is connected, all display elements on the **display** **C** will light up.

Downloads and further links

Among other things, the following QR code will take you to the heat pump operating instructions, product registration, and the link to the “Steinbach Control” app.

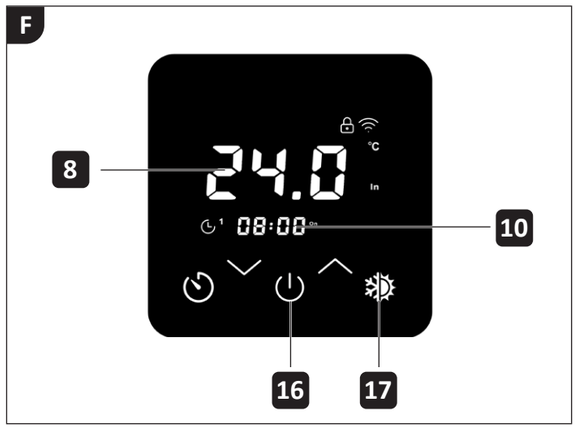
Keep the app up to date by installing updates regularly.
This is the only way to guarantee trouble-free operation of the control via Bluetooth in the long term.

Display

Standby mode

In standby mode, the heat pump is ready for operation but deactivated. The water is neither heated nor cooled. Pressing the **On/Off** 16 button for about 3 seconds switches the heat pump between standby mode and an operating mode.

Standby mode:



» The **Temperature** 8 display shows the current water inlet temperature.
» The **Time/Timer** 10 display shows the current time.

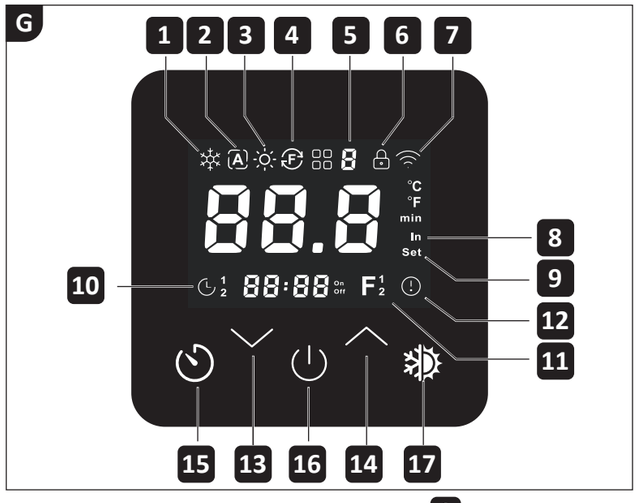
Operating modes

Press the **Operating mode** 17 button to switch between the heat pump‘s operating modes. The set water temperature can be between +10°C and +45°C.

The heat pump has the following **operating modes:**

1. The **Heating** operating mode
   The heat pump heats the pool water to the set target temperature.
2. The **Cooling** operating mode
   The heat pump cools the pool water to the set target temperature.
3. The **Auto** operating mode
   The heat pump regulates the temperature of the pool water to the set target temperature by heating or cooling.
4. The **Defrost** operating mode
   At low ambient temperatures, the temperature at the heat exchanger can drop so low in heating mode that the condensation freezes and the heat exchanger ices up.
   The heat pump monitors the temperature at the heat exchanger and defrosts automatically if necessary.

Active display elements in operating mode:



» Operating mode: The **Cooling mode** **1**, **Automatic mode** **2** or **Heating mode** **3** indicator lights up.
» The **Temperature** **18** display shows the current water temperature at the **water inlet** **7** (In).
» The **Timer ON/OFF** **10** display provides information about the time control. If the“**1**” symbol is lit, **Timer 1** is activated. If the “**2**” symbol is lit, **Timer 2** is activated.
» The **Time / Timer** **10** display shows the current time.

Save energy

To reduce energy consumption and the associated costs, you can take the following measures:
» If you are not using the pool for more than a week, switch off the heat pump or reduce the set water temperature.
» Do not use the heat pump if the ambient temperature is below 5°C.
» Cover the pool to protect it from heat loss.

Operation

⚠ WARNING!

Danger to life due to operation of the water treatment system while swimming!

Hair or clothing can be sucked into the pool‘s suction opening and, in extreme cases, trap people underwater and prevent them from surfacing.
» Never operate water treatment system equipment while people are in the pool.
» Prevent any access to the pool while water treatment system equipment is in operation.

⚠ CAUTION!

Risk of injury!

A damaged device or damaged accessories can cause injury.
» Check the device and accessories (see chapter Inspection).

NOTE!

Reduced or blocked ventilation of the heat pump can lead to inadequate removal of heat or moisture. This can cause mold growth or overheating of the finned heat exchanger, for example.
» Clean the grilles in front of the fan impeller and the fins of the heat exchanger regularly and ensure that no contaminants such as leaves or similar objects get inside the heat exchanger.
» Ensure that the grille on the heat exchanger is never covered and that air can flow freely through the unit.

Activate heating

Select this operating mode if your pool water temperature is consistently below your desired temperature.

The pool water is heated most quickly at maximum throughput through the heat pump (see Technical Data). This results in a smaller temperature difference between the pool water and the heated water at the pool inlet, making it less noticeable. Please measure and record the change in the current water temperature every 30 minutes to determine the actual heating of the pool water.

Activate heating operating mode

1. Switch on the filter system.
   The heat pump requires sufficient water flow to operate.
2. Deactivate the key lock, if active, by pressing and holding the **Control/Navigation DOWN** **13** and **Control/Navigation UP** **14** buttons for 3 seconds.
   *The **key lock** **6** indicator goes out.*
   The **key lock** **6** is activated automatically after 60 seconds of no input.
3. Press and hold the **On/Off** **16** button for 3 seconds.
   The heat pump switches from standby mode to operating mode.
4. Press the **Operating Mode** **17** button until the desired operating mode is active.
   *The Heating Mode **indicator** **3** lights up.*
   Similar to the **Heating** operating mode, the **Automatic** operating mode can also be set as an alternative.
   The Heating operating mode is activated.

If the error code “**E 03**” appears on the display, the water flow through the heat pump is too low. You can increase the flow using the 3-way valve of a bypass set. Please also refer to the detailed information in the Troubleshooting section.

Set target temperature

1. If the key lock is active, deactivate it by pressing and holding the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 **buttons for 3 seconds.**
   *The **Key Lock** 6 indicator will turn off.*
   The key lock activates automatically after 60 seconds of no input.
2. Press the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14, buttons until the desired setpoint temperature is set.
   *The display **Setpoint temperature (Set)** 9 flashes to indicate the desired setpoint temperature.*
3. Press the **ON/OFF** 16 button to confirm your entry.
   The heat pump starts as soon as the inlet temperature (In) falls below the set temperature (Set) by approx. 1°C.
   The desired set temperature is now set.

Activate cooling

Select this operating mode if your pool water temperature is consistently above your desired temperature, e.g., due to solar radiation, and does not cool down sufficiently at night.

The pool water is heated most quickly at maximum throughput through the heat pump (see Technical Data). This means that the temperature difference between the pool water and the heated water at the pool inlet is smaller and therefore less noticeable. Please measure and record the change in the current water temperature every 30 minutes to determine the actual heating of the pool water.

Activate cooling mode

1. Switch on the filter system.
   The heat pump requires sufficient water flow to operate.
2. Deactivate the key lock, if active, by pressing and holding the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **key lock** 6 indicator goes out.*
   The key lock is automatically activated after 60 seconds of no input.
3. Press and hold the **On/Off** 16 button for 3 seconds.
   The heat pump switches from standby mode to operating mode.
4. Press the **Operating Mode** 17 button until the desired operating mode is active.
   *The **Cooling Mode** 1 indicator lights up.*
   Similar to the **Cooling,** operating mode, the **Automatic** operating mode can also be set as an alternative.

The Cooling operating mode is activated.

If the error code "**E 03**" appears on the display, the water flow through the heat pump is too low. You can increase the flow using the 3-way valve of a bypass set. Please also refer to the detailed information in the Troubleshooting section (see Troubleshooting).

Set desired temperature

1. If the key lock is active, deactivate it by pressing and holding the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **key lock** 6 indicator will go out.*
   The key lock is automatically activated after 60 seconds of no input.
2. Press the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons until the desired set temperature is set.
   *The display **Set temp. (Set)** 9 flashes to indicate the desired set temperature.*
3. Press the **ON/OFF button** 16, to confirm your entry.
   The heat pump starts as soon as the input temperature (In) falls below or exceeds the set temperature (Set) by approx. 1°C.
   The desired set temperature is now set.

Manual defrosting

At low ambient temperatures, the temperature at the heat exchanger can drop so low in **heating** mode that the condensation that forms freezes and the heat exchanger ices up. The unit monitors the temperature and defrosts automatically when necessary, but also offers the option of initiating the defrosting process manually.

Activating defrost mode

1. First activate the **Heating** operating mode.
   *The indicator **Heating mode** 3 lights up.*
2. Press and hold the **Operating mode** 17 and **Control/Navigation DOWN** 13 buttons simultaneously for about 3 seconds.
   *The indicator symbol for **Heating** 3 lights up and the indicator symbol for **Cooling** 1 flashes on the display. The **Defrost mode** is activated.*
3. Wait a few minutes until the defrosting process is complete.
   *The display symbol **Cooling** 1 no longer flashes.*

The heat exchanger is defrosted. Manual defrosting is complete.

Change temperature scale [°C/°F]

The heat pump has the option of displaying all measured and set temperatures in °C or °F. Press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 and the **(ON/OFF) button** 16 simultaneously for about 5 seconds to switch between the temperature scales. The corresponding symbol on the display will light up.

Key lock

The key lock activates automatically after 60 seconds of no input. When the key lock is active, the **Key Lock** 6 indicator lights up. When the key lock is deactivated, the **Key Lock** 6 indicator goes out. Press and hold the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons for 3 seconds to activate or deactivate the key lock.

Setting the time

The heat pump has a real-time clock so that it can be operated on a timed basis using a timer.

The clock continues to run for several days even without a power supply.

Setting the clock

1. If the key lock is active, deactivate it by pressing and holding the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **key lock** 6 indicator will turn off.*
   The key lock will automatically activate after 60 seconds of no input.
2. Press and hold (repeatedly) the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **time/timer** 10 indicator will flash. The time can now be set.*
3. Press the **Time/Timer** 15 button.
   *The two seven-segment displays for hours on the **Time/Timer** 10 display flash.*
4. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons (repeatedly) to set the hours of the time.
5. Press the **Time/Timer** 15 button to confirm the entry.
   *The two seven-segment displays for minutes on the **Time/Timer** 10 display flash.*
6. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14, buttons (repeatedly) to set the minutes of the time.
7. Press the **Time/Timer** 15 button to confirm the entry.

The clock is now set.

Device control timer

The heat pump has two timers that can be configured via the display on the device. Each timer has two freely adjustable times. The switch-on and switch-off times for each timer must be different and the timers must not overlap.

» At the first time, the control activates the heat pump and sets it to the last active operating mode.
» At the second time, the control deactivates the heat pump and sets it to standby mode.

To control the heat pump using the timers in the **„Steinbach Control“** app, both timers on the device control must be deactivated via the display. The settings are not transferred from the device to the app or vice versa.

Set (activate) the device control timer via the display

1. Deactivate the key lock, if active, by pressing and holding the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **Key Lock** 6 indicator will turn off.*
   The key lock activates automatically after 60 seconds of no input.
2. Press and hold the **Time/Timer** 15 and **Control/Navigation UP** 14 buttons simultaneously for 3 seconds to activate the timer settings.
   *The **Timer ON/OFF** 10 indicator lights up and the “**1**” symbol flashes. **Timer 1** can be set.*
3. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons (repeatedly) to switch between **Timer 1** and **Timer 2**.
   *The symbol for the desired timer (“**1**” oder “**2**”) flashes.*
4. Press the **Time/Timer** 15 button to confirm your selection.
   The two seven-segment displays for hours on the **Time/Timer** 10 *display will flash.*
5. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons to set the **hours** of the time for automatic activation of the **operating mode**.
6. Press the **Time/Timer** 15 button to confirm your entry.
   *The two seven-segment displays for minutes on the **Time/Timer** 10 display will flash.*
7. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons to set the **minutes** of the time for automatic activation of the **operating mode**.
8. Press the **Time/Timer** 15 button to confirm your entry.
   *The two seven-segment displays for hours on the **Time/Timer** 10 display will flash.*
9. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons to set the **hours** of the time for automatic activation of **standby mode.**
10. Press the **Time/Timer** 15 button to confirm your entry.
    *The two seven-segment displays for minutes on the **Time/Timer** 24 display will flash.*
11. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons (repeatedly) to set the minutes for automatic activation of **standby mode**.
12. Press the **Time/Timer** 15 button to confirm your entry.
    *The **Time/Timer** 10 indicator lights up. The symbol for the selected timer flashes.*
13. Press the **ON/OFF** 16 button to save your settings.
    The symbol for the correctly set timer lights up.
    After 30 seconds without input, the settings are automatically saved and the timer menu is exited.

The timer is set and activated.

Deactivating the device control timer via the display

1. Deactivate the key lock, if active, by pressing and holding the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **key lock** 6 indicator will disappear.*
   The key lock will activate automatically after 60 seconds of no input.
2. Press and hold the **Timer/Timer** 15 and **Control/Navigation UP** 14 buttons simultaneously for 3 seconds to activate the timer settings.

*The display **Timer ON/OFF** 10 lights up and the symbol "**1**" flashes.*

3. Press the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons (repeatedly) to switch between **Timer 1** and **Timer 2**.
   *The symbol for the desired timer ("**1**" or "**2**") flashes.*
4. To deactivate the selected timer ("**1**" or "**2**"), press and hold the **Operating Mode** 17 button for 3 seconds.
5. Press the **ON/OFF** 16 button to save your settings.
   The symbol for the set timer will disappear.
   Repeat the process if you also want to deactivate the second device timer. After 30 seconds without input, the settings will be saved automatically and the timer menu will close.
   The timer is active/inactive.

External control input

The heat pump is switched on and off exclusively via the external switch contact. A manually operated switch or a switch controlled via Wi-Fi can be used as an external switch contact, for example. Potential-free relay contacts, such as those from solar power management systems, can also be used. This allows the heat pump to be automatically activated or deactivated depending on the available solar power.
The heat pump is activated when the external switching contact is closed and deactivated when the contact is open. All device settings, such as the operating mode, operating mode, and set temperature, remain unaffected and must still be made directly on the heat pump or via the app.

External control input enabled/disabled

1. If the key lock is enabled, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **Key Lock** 6 indicator will turn off.*
   The key lock is automatically activated after 60 seconds of no input.
2. Press and hold the **Operating Mode** 17 button for 10 seconds. You are now in the parameter menu.
3. Use the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons to scroll through the menu until the value "**P11**" appears in the lower right-hand corner of the display.
   *The value "**P11**" flashes.*
4. Press the **Operating Mode** 17 button to select the parameter "**P11**".
5. Click **Control/Navigation DOWN** 13 to set the value "**1**".
   *The value "**1**" flashes.*
6. Repeatedly click the **Operating Mode** 17 button to set the parameter "**1**".
   External control input is active.
7. To deactivate the external control input, repeat the steps described above up to and including step 4 and select the parameter value "**0**" in the subsequent steps.
   External control input is deactivated.

External pump operating mode

The heat pump requires sufficient water flow for operation, which must be provided by an external water pump. The device has a controllable switchable socket that can be used to supply and control the external pump.
There are three modes available:
0: The switchable socket is not supplied with power.
1: The switchable socket is only supplied with power when the heat pump is actively heating or cooling. Once the set target temperature is reached, the heat pump switches to standby mode. In this state, the power supply to the socket – and thus the operation of the connected water pump – is automatically interrupted.
2: The switch socket continues to be supplied with power both during heating or cooling operation and after the set temperature has been reached. The power supply remains active as long as the heat pump is not switched to standby mode.

Enable/disable external pump operating mode

1. If the key lock is active, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 keys for 3 seconds.
   *The **Key Lock** 6 indicator will turn off.*
   The key lock is automatically activated after 60 seconds of no input.
2. Press and hold the **Operating Mode** 17 button for 10 seconds. You are now in the parameter menu.
3. Use the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons to scroll through the menu until the value "**P10**" appears in the lower right-hand corner of the display.
   *The value "**P10**" flashes.*
4. Press the **Operating Mode** 17 button to select parameter "**P10**".
5. Click **Control/Navigation DOWN** 13 to set your desired value "**0**", "**1**", or "**2**."
   The selected value will flash.
6. Repeatedly click the **Operating Mode** 17 button to set your selected parameter value "**1**" or "**2**".
   The operating mode of the external pump is now set.
7. To deactivate the operating mode of the external pump, repeat the steps described above up to and including step 4 and select the parameter value "**0**" in the subsequent steps.
   The operating mode of the external pump is now deactivated.

Switchable socket

The device has a controllable switchable socket that can be used, for example, to supply and control the external pump.

The switchable socket is de-energized when delivered.

Activate switch socket

⚠ WARNING!

Risk of electric shock!

When active, the device socket is live. Do not touch the device socket input with your bare hands or conductive objects to avoid electric shock.

1. If the key lock is active, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **Key Lock** 6 indicator will turn off.*
   The key lock is activated automatically after 60 seconds of no input.
2. Press and hold the **Operating mode** 17 and **Control/Navigation UP** 14 buttons simultaneously for 3 seconds.
   *The display **Switch socket** 4 appears.*
   In this setting, the switch socket is permanently supplied with power regardless of the device status of the heat pump. The switch socket is activated.

Deactivating the switch socket

To deactivate the switch socket, press and hold (repeatedly) the **Operating mode** 17 and **Control/Navigation UP** 14 buttons simultaneously for 3 seconds.
*The **Switch socket** 4 indicator goes out.*
In this setting, the switch socket is permanently de-energized regardless of the device status of the heat pump.
The switch socket is deactivated.

Set (activate) the timer for the switchable power outlet via the display

NOTE!

The heat pump has an additional switchable socket that can be controlled independently of the main operation via its own timer. To activate the timers on the switchable socket, you must first activate the switchable socket. For more information, see the chapter: Activating the switchable socket.

1. The switchable socket must be activated. (For more information, see the chapter: Activating the switchable socket.)
2. If the key lock is active, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 keys for 3 seconds.
   *The **key lock** 6 indicator goes out.*
   The key lock is automatically activated after 60 seconds of no input.
3. Press and hold the **Time/Timer** 15 and **Control/Navigation UP** 14 buttons simultaneously for 3 seconds.
   *The timer symbol (“**1**”) flashes.*
4. Press **Control/Navigation DOWN** 13, to access the timers for the “**F1**” or “**F2**” switchable sockets.
5. Select the desired timer for the switchable socket (“**F1**” or “**F2**”). Once the corresponding timer flashes, press the **Time/Timer** 15 button to confirm the selected timer (“**F1**” or “**F2**”).
6. The two seven-segment displays for hours on the **Time/Timer** 10 display will flash.
   Press the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons to set the hours of the time for automatic activation of the switchable socket.
7. Press the **Time/Timer** 15 button to confirm your entry.
   The two seven-segment displays for minutes on the **Time/Timer** 10 display will flash.
8. Press the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons to set the minutes of the time for automatic activation of the switchable socket.
   Press the **Time/Timer** 15 button to confirm your entry.
   Repeat this process for the settings of the second timer.
   Press the **ON/OFF** 16 button to return to the standard display.
   The symbol for the correctly set timer lights up.
   The timer is set and activated.

If the switch socket is activated but no timer is programmed, this corresponds to 24-hour continuous operation (permanently active and live). In this case, an external timer, e.g., from a filter pump, can be used as an alternative.

Timer for the switchable socket – Time coordination

The heat pump has two independent timer types:

» Heat pump timer
» Switchable socket timer

When setting the timers, it is essential to ensure that there is no overlap between these two timer types. This means:

» The switch-on and switch-off times of the heat pump timers must not coincide with the switch-on and switch-off times of the switchable socket.
» There must also be no overlap between the time periods within a timer (e.g., several timers for the switchable socket or several timers for the heat pump).

Deactivate the timer on the display of the switchable power outlet

1. The switchable socket must be activated. (For more information, see the chapter: Activating the switchable socket.)
2. If the key lock is active, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **key lock** 6 indicator will turn off.*
   The key lock will activate automatically after 60 seconds of no input.
3. Press and hold the **Time/Timer** 15 and **Control/Navigation UP** 14 buttons simultaneously for 3 seconds.
   The timer symbol (“1”) flashes.
4. Press **Control/Navigation DOWN** 13 to access the timers for the “**F1**” or “**F2**” switchable sockets.
5. Select the desired timer for the switchable socket (“**F1**” or “**F2**” flashes).
6. To deactivate the selected timer (“**F1**”’ or “**F2**”), press and hold the **Operating Mode** 17 button for 3 seconds.
7. Press the **ON/OFF** 16 button to save your settings.
   The symbol for the set timer will disappear.
   Repeat the process if you also want to deactivate the second switch socket timer. After 30 seconds without input, the settings will be saved automatically and the timer menu will close.
   The timer is active/inactive.

Timer overview

The timer overview clearly displays all currently activated timers and their respective timer settings. Please note that the timers for the switchable socket are only displayed in this overview if the switchable socket is activated. If the switchable socket is deactivated, its timers are not displayed. In this case, only the device timers are visible.

In the timer overview, you can view all timer settings, but you cannot make any changes. Information on editing the individual timers can be found in the corresponding chapters “Device control timers” and “Switchable socket timers.”

1. If the key lock is active, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **Key Lock** 6 indicator will turn off.*
   The key lock activates automatically after 60 seconds of no input.
2. Press and hold the **Time/Timer** 15 and **Control/Navigation DOWN** 13 buttons simultaneously for 3 seconds.
   You are now in the timer overview.
3. Press the **Control/Navigation DOWN** 13 or **Control/Navigation UP** 14 buttons to navigate through the timer overview.

Reset to factory settings

1. Press the **ON/OFF** 16 button to put the heat pump into standby mode.
   All operating mode display elements are off. The heat pump is in standby mode.
2. Press and hold the **ON/OFF** 16 and **Operating Mode** 17 buttons simultaneously for approx. 10 seconds.
   An acoustic signal will sound. The heat pump control has been reset to factory settings.

Pair the app with the device

To control your heat pump with your smartphone, you must first pair the two devices. To do this, your smartphone must be connected to a WiFi router whose WiFi signal can also be received by the heat pump.

Please note that the “Steinbach Control” app only supports the 2.4 GHz channel of the WiFi router. To pair the devices, the 5.0 GHz channel on the WiFi router must be deactivated.

The app allows you to make changes to the following heat pump settings via your smartphone:
» Change the target temperature of the pool water
» Change the operating mode Switch to standby mode
» Change the power level
» Set the timer
» Display measured temperatures

Pairing for the first time
1. Press the **ON/OFF** 16.
   The heat pump is activated and in operating mode.
2. If the key lock is active, press and hold the **Control/Navigation DOWN** 13 and **Control/Navigation UP** 14 buttons for 3 seconds.
   *The **Key Lock** 6 indicator will turn off.*
   The key lock activates automatically after 60 seconds of no input.
3. Press and hold the **ON/OFF** 16 and **Control/Navigation UP** 14 buttons simultaneously for approx. 3 seconds.
   *The **WiFi** 7 indicator will start flashing.*
4. Connect your smartphone to the WiFi router.
5. Start the "**Steinbach Control**" app.
6. Press the **Add device** button or then **+** in the app.
   All available heat pumps are displayed.
7. Select your heat pump from the list.
8. Enter the access data for your WiFi router and pair the heat pump with the app.
   Once the device has been successfully paired, you can access your heat pump under "My devices."
   The app is paired with the device for the first time.

Uninstallation

⚠ CAUTION!

Risk of injury when moving heavy equipment!

The equipment is heavy! Incorrect lifting or uncontrolled tilting of the equipment can result in injury or damage to the equipment.
» Always lift, carry, or tilt the equipment with at least two people, never alone.
» Ensure you have the correct posture (straight back, secure footing, etc.).
» Use transport aids (e.g., pallet truck or dolly).
» Wear protective equipment such as safety shoes or gloves.

Disconnecting the cables

Disconnecting the power supply
1. Press the **ON/OFF** 16 button to put the heat pump into standby mode.
   All operating mode indicators are off. The heat pump is in standby mode.
2. Disconnect the **power cord** 8 plug from the power supply.
   *All indicators on the **Display** C disappear.*

The heat pump is disconnected from the power supply and out of operation.

Disconnect the water pipes
1. Deactivate the water treatment pump.
2. Completely loosen the union nut on the **water inlet** 7.
3. Disconnect the inlet pipe from the **water inlet** 7.
   When removing the hose end of the water pipe, hold it with the opening facing upwards to prevent the residual water in the hose from spilling out uncontrollably.
4. Completely loosen the union nut on the **water connection outlet** 6.
5. Disconnect the drain pipe from the **water connection outlet** 6.
   When removing the hose end of the water pipe, hold it with the opening facing upwards to prevent any residual water in the hose from spilling out uncontrollably.
   The water pipes are now disconnected.

Cleaning

Cleaning the device
Wipe the surfaces with a dry cloth.

Inspection

Check the following before each use:
» Is there any visible damage to the appliance?
» Is there any visible damage to the controls?
» Are the accessories in perfect condition?
» Are all cables in perfect condition?
» Is the water supply unobstructed?
» Are the ventilation slots clear and clean?

Do not use a damaged device or accessory. Have it checked and repaired by the manufacturer or its customer service department or a qualified specialist.

Leak

If liquid leaks from the heat pump, it may be condensation or pool water.
Condensation is unavoidable during heating operation. The surface of the heat exchanger becomes cold, the humidity in the ambient air condenses and, in extreme cases, can also freeze. The device monitors the temperature and automatically defrosts the heat pump if necessary. Any condensation is drained via the base plate of the heat pump.
If pool water leaks out, check all connections, pipes, and adapters of the heat pump for leaks.

Storage

As soon as the outside temperature falls below +5°C for a prolonged period, the heat pump should be winterized to prevent damage from ice formation (frost damage).

Fixed water pipes do not necessarily have to be uninstalled. Provided that the location of the heat pump is protected from coarse contamination and severe weather conditions, it is sufficient to completely drain the water from the heat pump and the water pipes. Care must be taken when doing this! Frost damage is not covered by the warranty.

Shutdown in winter

Only store the device outdoors or in a well-ventilated, above-ground location and protect it from the weather.
1. Disconnect all pipes (see chapter on uninstallation).
2. Clean the heat pump thoroughly (see chapter on cleaning).
3. Once completely dry, store the heat pump in a dry and frost-free location (>+5°C).

The heat pump is now shut down for the winter.

Troubleshooting

Problem:	Cause:	Solution:
The heat pump does not switch on.	The heat pump was not installed correctly.	Contact an authorized specialist.
	The fuse in the power cord has blown or an all-pole protective device has tripped.	Reset the switch.
		Replace the fuse.
The heat pump does not start.	The three minutes required to start the heat pump have not elapsed.	Wait three minutes.
	The temperature of the pool water is approximately the same as the set salt temperature.	The heat pump operates when the water temperature differs from the set target temperature.
	The operating mode of the heat pump is set incorrectly.	Set the required operating mode.
The heat pump is working, but the water is not being heated.	The heat pump has just been installed.	Wait 24-48 hours until the set temperature is reached.
	The pool water has cooled down significantly since the heat pump was last used.	Wait 24-48 hours until the set temperature is reached.
There is ice on the heat exchanger.	The ambient temperature is too low and/or there is high humidity.	Wait until the automatic defrost function starts.
Heat pump leakage.	Accumulation of condensation.	Put the heat pump on standby. If the leak stops, it is condensation.
	Water leakage at the heat exchanger or at the connections of the water circuit.	Check all connections, pipes, and the heat pump for leaks.
During operation, the Wi-Fi signal or radio reception is disrupted.	The device is equipped with frequency converters that can generate high-frequency leakage currents due to the nature of the system.	If you notice any malfunctions despite using a short power cord, stop using the affected device and have the power supply (e.g., power outlet, extension cord) checked immediately by a qualified electrician.

If the fault cannot be rectified, please contact an authorized technician or the Steinbach support team.

Error message display

Error code:	Cause:	Solution:
E 03	Water flow too low	Increase the pool water flow through the heat pump.
		Check the pump that circulates the pool water through the heat pump.
		When using a 3-way valve or bypass set in the water circuit, check that the valve setting is correct and that sufficient water flow is ensured.
E 04	De-icing	Wait until the heat pump has completed the automatic defrosting process.
E 05	Pressure in the coolant circuit too high	Please contact an authorized specialist or the Steinbach support team.
E 06	Pressure in the coolant circuit too low	Please contact an authorized specialist or the Steinbach support team.
E 09	Communication error	Please contact an authorized specialist or the Steinbach support team.
E 10	Communication error	Please contact an authorized specialist or the Steinbach support team.
E 12	Temperature sensor error: Compressor coolant circuit too high	Pool water temperature too high, reduce the setpoint.
E 15	Temperature sensor error: Water inlet	Please contact an authorized specialist or the Steinbach support team.
E 16	Temperature sensor error: Coolant circuit	Please contact an authorized specialist or the Steinbach support team.
E 18	Temperature sensor error: Compressor output	Please contact an authorized specialist or the Steinbach support team.
E 20 **	Frequency converter module error	Please contact an authorized specialist or the Steinbach support team.
E 21	Ambient temperature sensor error	Please contact an authorized specialist or the Steinbach support team.

E 23	Cooling mode: Output temperature Water too low	Increase the target temperature in cooling mode.
E 27	Temperature sensor error Water outlet	Please contact an authorized specialist or the Steinbach support team.
E 28	Fan motor fault	Please contact an authorized specialist or the Steinbach support team.
E 29	Error Return temperature Coolant	Please contact an authorized specialist or the Steinbach support team.
E 32	Heating mode: Water outlet temperature too high	Lower the target temperature in heating mode.
E 33	Cooling mode: Coolant circuit too hot.	Increase the setpoint temperature in cooling mode.
		Carefully clean any dirt from the fins of the heat exchanger.

If the fault cannot be rectified, please contact an authorized technician or the Steinbach support team.

Technical specifications

Model:	Solid 7	Solid 9
Item number:	049401Z	049402Z
Pool size (water capacity):	max. 35.000 L	max. 50.000 L
Heating capacity *:	7 kW	9 kW
Heating input power *:	1,2 kW	1,5 kW
Input current heating *:	6,6 A	8,2 A
Cooling capacity:	4,6 kW	5,8 kW
Input power cooling *:	1,35 kW	1,7 kW
Input current cooling *:	6,1 A	7,7 A
Maximum input power:	1,6 kW	2,1 kW
Maximum input current:	7,3 A	9,6 A
Operating voltage and frequency **:	220-240 V~, 50 Hz	220-240 V~, 50 Hz
Performance coefficient COP *:	6	6
Energy Efficiency Ratio EER *:	3,4	3,4
Protection class:	I	I
Protection class:	IPX4	IPX4
Sound pressure level: (At a distance of 10 m)	47 dB(A)	47 dB(A)
Water throughput:	min. 4.000 L/h	min. 5.000 L/h
* Variable- depending on environmental conditions ** Single-phase alternating current		
REFRIGERANT CIRCUIT		
Nominal suction pressure:	0,7 MPa	0,7 MPa
Maximum suction pressure:	0,8 MPa	0,8 MPa
Nominal delivery pressure:	1,9 MPa	1,9 MPa
Maximum delivery pressure:	2,3 MPa	2,3 MPa
Refrigerant:	R290	R290
Maximum refrigerant charge:	350 g	450 g
Global warming potential GWP:	3	3
CO2 equivalent:	1,05 kg	1,35 kg

RADIO CONTROL

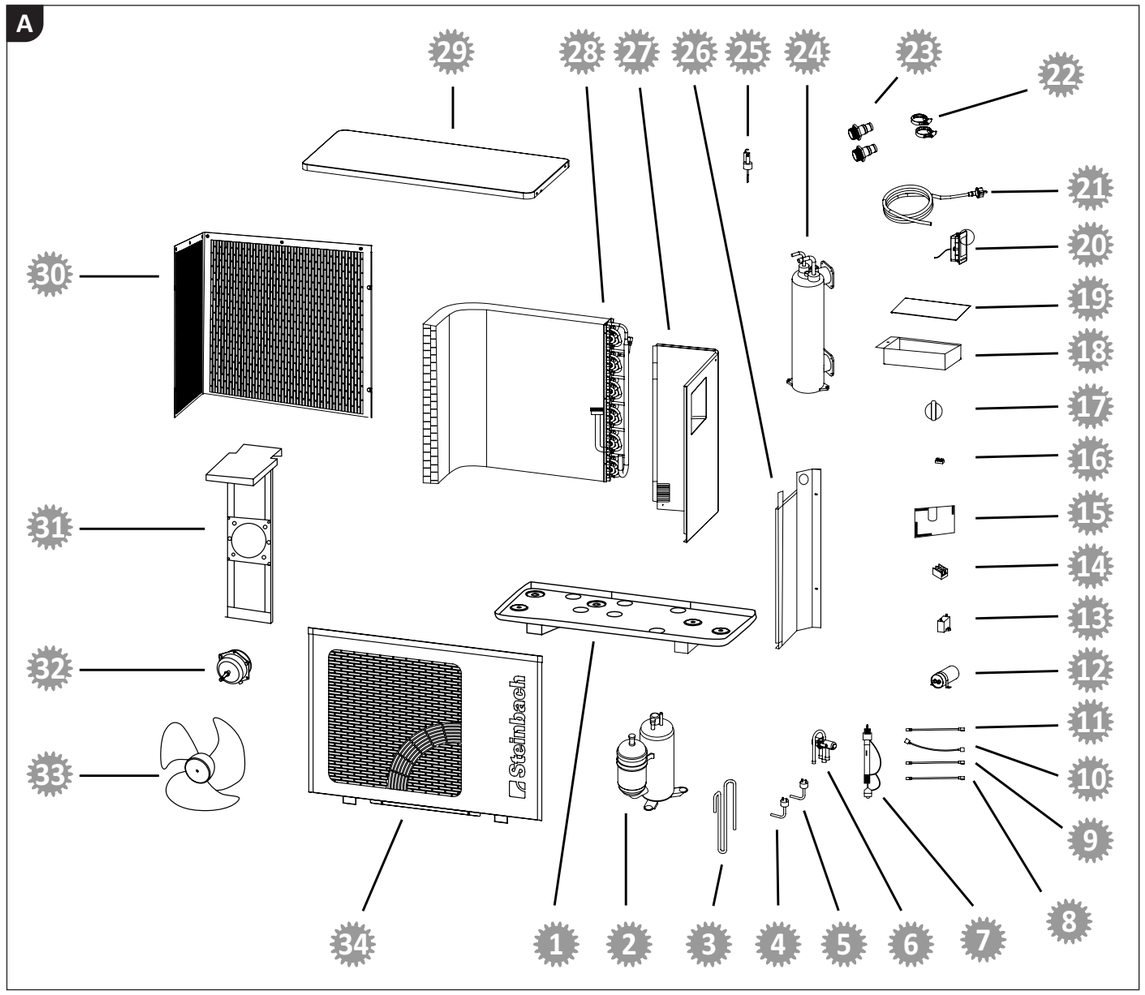
App: Steinbach Control
Transmission frequency: 2.483 MHz
Effective radiated power ERP: 20 dBm

Temperature increase in pool water

Parameters for the measurement data of the temperature increase depending on the water content of the pool:
» Ambient temperature = 26°C
» Water temperature = 26°C
» Salt content of pool water < 0.5% (salt electrolysis)
Heat loss due to lack of cover, insulation, etc. was not taken into account.

Pool water capacity	**Solid 7**	**Solid 9**
10.000 L	0,7°C/h	0,8°C/h
20.000 L	0,4°C/h	0,4°C/h
30.000 L	0,2°C/h	0,3°C/h
35.000 L	0,2°C/h	0,2°C/h
50.000 L	-	0,2°C/h

Spare parts



Pos.	Spare part	Item no.	Pos.	Spare part	Item no.
22	Hose clamp	060039	23	Hose adapter	049334

Declaration of Conformity

CE Steinbach International GmbH hereby declares that the radio equipment type heat pump “Solid Series,” in the Solid 7 (049401Z) and Solid 9 (049402Z) versions, complies with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following Internet address: www.steinbach-group.com

Disposal

Dispose of packaging

Dispose of packaging separately. Put cardboard and paperboard in the waste paper bin and plastic film in the recycling bin.

Dispose of old appliances

Old appliances must not be disposed of with household waste!
If the appliance can no longer be used, every consumer is **legally obliged to dispose of old appliances separately from household waste**, e.g. at a collection point in their municipality/district. This ensures that old appliances are recycled properly and that negative effects on the environment are avoided. This is why electrical appliances are marked with the above symbol.

Disposing of refrigerant

The appliance contains refrigerant. Refrigerant must be disposed of properly as hazardous waste at an approved collection point.