Steinbach

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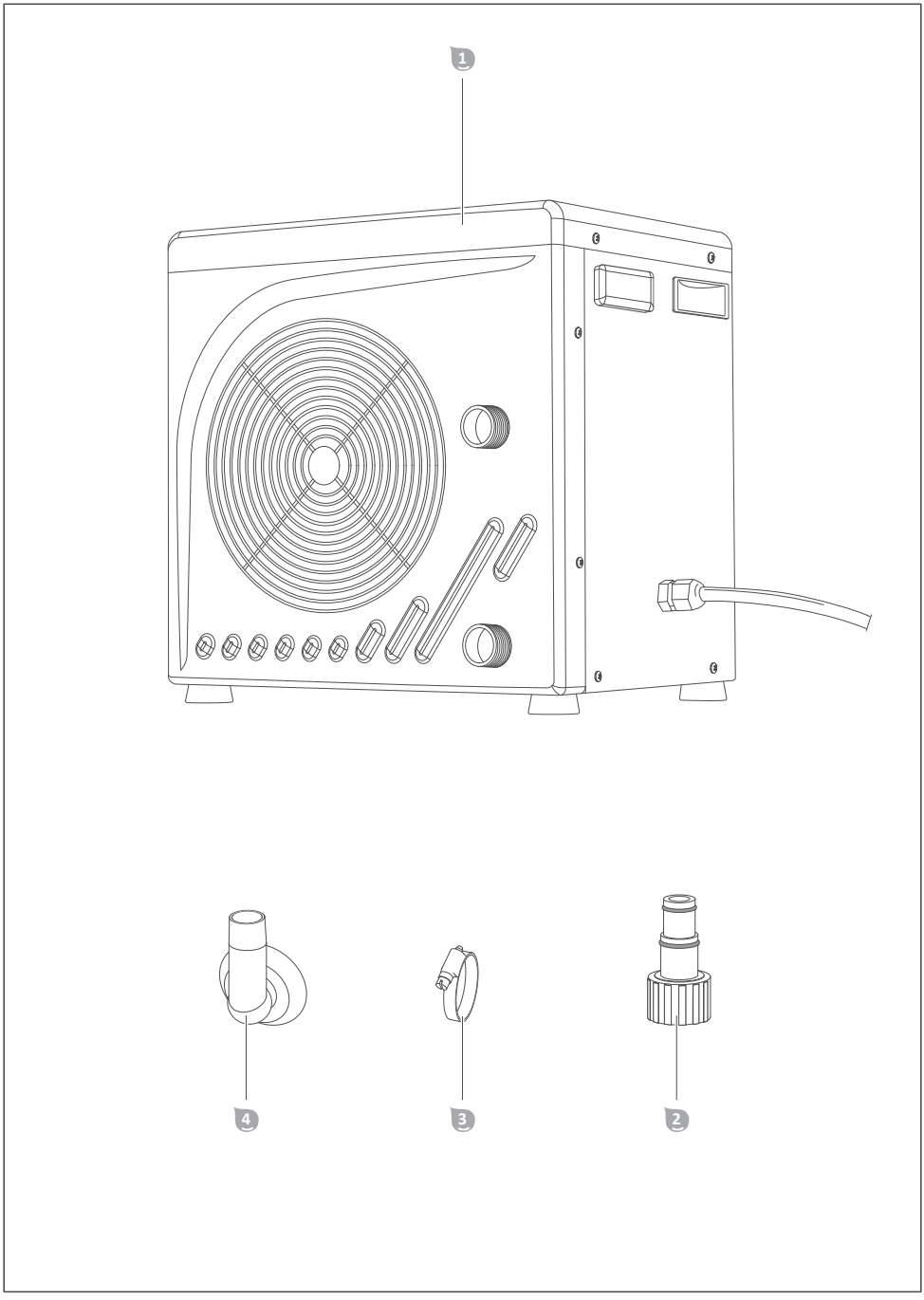
Bedienungsanleitung / User Manual / Mode d'emploi / Istruzioni per l'uso / Operación manual / Návod k obsluze / Használati útmutató / Navodila za uporabo / Návod na obsluhu / Instrukcja obsługi / Manual de utilizare / Uputstvo za upotrebu / Ръководство за работа / Kullanım kılavuzu

Wärmepumpe
MINI


1
4
3
2

Package contents

1. Heat pump
2. Adapter (x2)
1. Hose clamp (x2)
2. Drain connection piece (condensation water)

Components

1. Handle (x2)
2. Water connection, outlet
3. Water connection, inlet
1. Power cable (with RCD power plug)
2. Fan
3. Finned heat exchanger

(C) RCD power plug

1. **LED**
1. **RESET** button
2. **TEST** button

(D) Display: operating and display elements

1. **Display**
2. **ON/OFF** button
1. **Up** button
2. **Down** button
3. **SET** button

Contents

General Information

Reading and storing the operating manual

This instruction manual is part of this MINI heat pump (in the following also called "device" or "heat pump"). It contains important information about start-up and operation.

Before using the device, read the operating manual carefully, in particular the safety instructions. Failure to follow this operating manual may lead to severe injuries or product damage.

Keep this operating manual for future reference. If you pass this device on to a third party, you must also supply this operating manual.

Intended use

The device is designed exclusively to heat water passed through it as part of the water treatment system for private pools.

The salt concentration of the water must not exceed 0.5% (corresponds to 5 g/l or 5,000 ppm).

This device must only be used in outdoor areas.

This device is intended for private use only and is not suitable for commercial use.

Use the device only as described in this operating manual. Any other use is improper and may lead to product damage or even personal injury. This device is not a toy.

The manufacturer or retailer assume no liability for damage caused by improper or incorrect use.

Fluorinated greenhouse gas - difluoromethane (R32)

The device contains the fluorinated greenhouse gas difluoromethane (R32), which is required for the functioning of the device.

Industrial name	HFKW-32
Common name	R32
Chemical name	Difluoromethane
Molecular formula	CH_2F_2
Global warming potential (GWP)	675

Further information is indicated on the device or in the "Technical data" section.

Explanation of Symbols

The following symbols and signal words are used in this user manual, on the device or on the packaging.

Read the user manual.

The user manual contains important additional information.

The user manual contains important information about maintenance and repairs.

Risk of fire! Warning! Flammable materials.

Risk of electric shock!
Warning! Electric voltage.

Products marked with this symbol conform to protection class I.

Do not tighten with tools, only by hand.

Do not insert any objects into the openings.

Never use sharp knives or other pointed objects to open the packaging. They might damage the content.

Safety

The following signal words are used in this user manual.

⚠WARNING!	This signal symbol/word denotes a hazard with an average risk level that could lead to death or severe injury if it is not avoided.
⚠CAUTION!	This signal symbol/word denotes a hazard with a low risk level that could lead to mild or moderate injury if it is not avoided.
NOTICE!	This signal word provides a warning about potential material damage.

General safety instructions

⚠WARNING!

Danger of death due to unsuitable water temperature!

Long stays in pools with an excessively high or low water temperature can lead to overheating (body temperature above 38 °C) or hypothermia (body temperature below 35 °C). This can result in fatigue and vertigo, and even fainting or unconsciousness. This may result in death by drowning in the pool. For pregnant women, there is a risk of deformations or brain damage to their unborn child, especially during the first trimester.

- Keep the water temperature in a range from 26 °C to 30 °C during normal swimming.
- Do not let children and pregnant women use the pool if the water temperature is above 38 °C.
- Do not let the water temperature rise above 40 °C.
- If in doubt, check the water temperature with a suitable high-resolution thermometer before going into the water. (The temperature sensor of the heat pump guarantees an accuracy of approx. ±3 °C.)

⚠WARNING!

Risk of fire and explosion due to leaking finned heat exchanger!

The refrigerant circuit of the finned heat exchanger contains a highly flammable, odorless gas under high pressure. Risk of fire and explosion due to uncontrolled escaping of refrigerant.

- Keep heat sources and naked flames away from the heat pump.
- Do not burn or drill into the heat pump.
- Do not use any objects other than those permitted by the manufacturer to speed up the defrosting process.
- Stop using the heat pump immediately if you suspect a refrigerant leak.
- The refrigerant is odorless. Always keep ignition sources away from the installation site of the heat pump.
- Contact an authorized qualified person if you suspect refrigerant leaks.
- Observe the national regulations on gas.
- All persons involved in work on the refrigerant circuit must have a valid certificate from an industry accredited certification body that ensures competence in handling refrigerants according to a specific assessment recognized by industry associations.
- Take precautions so that the device cannot be damaged while in storage.
- Store the device in a well ventilated location where the room size corresponds to the room area specified for operation.

⚠WARNING!

Risk of injury through insufficient qualification!

Insufficient experience or skills for handling the required tools and insufficient knowledge of regional or normative regulations for the required work can lead to severe injuries or material damage.

- Assign all work whose risks you cannot estimate due to insufficient personal experience to a qualified expert.

⚠WARNING!

Risk of electric shock!

Faulty electric installation or excess mains voltage can cause an electric shock.

- Have the installation, initial start-up and maintenance of the heat pump carried out by authorized specialists only.
- Do not start work on the heat pump before all safety instructions have been complied with.
- Work on the heat pump may only be carried out when it is de-energized.
- Only connect the heat pump if the mains voltage of the socket matches that on the type plate.
- Only connect the heat pump to an easily accessible socket so that you can quickly disconnect the heat pump in the event of a fault.
- Do not operate the heat pump if there is visible damage or if the power cable or power plug is defective.
- If the power cable of the heat pump is damaged, it must be replaced by the manufacturer, its customer service or a qualified person to prevent hazards.
- Do not open the housing. Let specialists perform any repairs. All liability and warranty claims will be void in the case of arbitrary repairs, improper connection or wrong operation.
- Only parts that match the original device data may be used for repairs. This heat pump contains electrical and mechanical parts that are essential for protection against sources of danger.
- Do not operate the heat pump with an external timer or a separate remote control system.

- Do not immerse the heat pump, power cable or power plug in water or other liquids.
- Never touch the power plug with wet hands.
- Never pull the power cable to disconnect the power plug from the socket. Always disconnect by holding the power plug.
- Never use the power cable as a carrier handle.
- Keep the heat pump, power plug and power cable away from open fires and hot surfaces.
- Make sure that the power cable does not present a trip hazard.
- Do not bend the power cable or position it over sharp edges.
- Make sure that children do not put objects into the heat pump.
- Keep the openings free from foreign objects.
- When the heat pump is not in use, is being cleaned, or if a fault occurs, always switch off the heat pump and disconnect its power plug from the socket.
- Make sure that the actual operating voltage does not deviate from the nominal value by more than 10% (see "Technical Data").
- As a protective device, the heat pump must have a circuit breaker with a 16 A slow-blow fuse; this protective device may only feed the heat pump. Even when using a protective device with all-pole disconnection, it must still have a differential switch with a differential current not exceeding 30 mA.
- Make sure that the electrical system to which the heat pump is connected contains a grounding conductor.
- If a power plug is going to be installed for connection to the mains, it must have a protection level of at least IPX4 and a terminal for connecting the grounding conductor. The same applies to the power supply cable, which must also have a grounding conductor.
- Protect the power cable and the power plug from rain and moisture.
- Protect the power cable and the power plug from damage.

⚠WARNING!

Risk of injury for persons with personal impairments or a lack of experience and expertise!

Improper handling of the device can lead to severe injury or damage to the device.

- This heat pump can be used by children above the age of 8 and by persons with reduced physical, sensory or mental capacities or lack of knowledge and expertise if they are supervised or have been instructed concerning the safe handling of the heat pump and comprehend the resulting risks. Children must not play with the heat pump. Children must not clean and service the device.
- Do not leave the device unattended while in use.
- Only allow others to access the device after they have read and comprehended the entire manual or have been instructed about the intended use and the associated risks.
- Never let persons with reduced physical, sensory or mental capacities (such as children or people under the influence of alcohol) or a lack of experience and knowledge (such as children) unsupervised near the device.

⚠CAUTION!

Risk of injury when moving heavy equipment!

The device is heavy! Incorrect lifting or uncontrolled toppling of the device can lead to injuries or damage the device.

- Always carry or tilt the device with the help of at least one other person, never alone.
- Make sure that your posture is correct (straight back, secure footing, etc.).
- Use transport aids (such as a lifting truck or roller board).
- Wear protective equipment, such as safety shoes or gloves.

Preparation

⚠WARNING!

Packaging materials pose a risk of suffocation!

Catching your head in the packaging foil or swallowing other packaging materials can cause death. There is a higher risk for children and mentally challenged persons who cannot estimate the hazard potential due to lack of knowledge and experience.

- Prevent children and mentally challenged persons from playing with the packaging materials.

NOTICE!

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

- Open the packaging very carefully.
- Do not penetrate the packaging with sharp or pointed objects.

Checking the delivery for completeness and damage

1. Open the packaging carefully.
2. Take all parts out of the packaging.
3. Check the completeness of the delivery.
4. Check the delivery for damage.

Initial cleaning of the device

1. Remove the packaging materials and all protective foils if present.
2. Clean all parts of the package content as described in the "Cleaning" section.

The device has been cleaned and is ready for use.

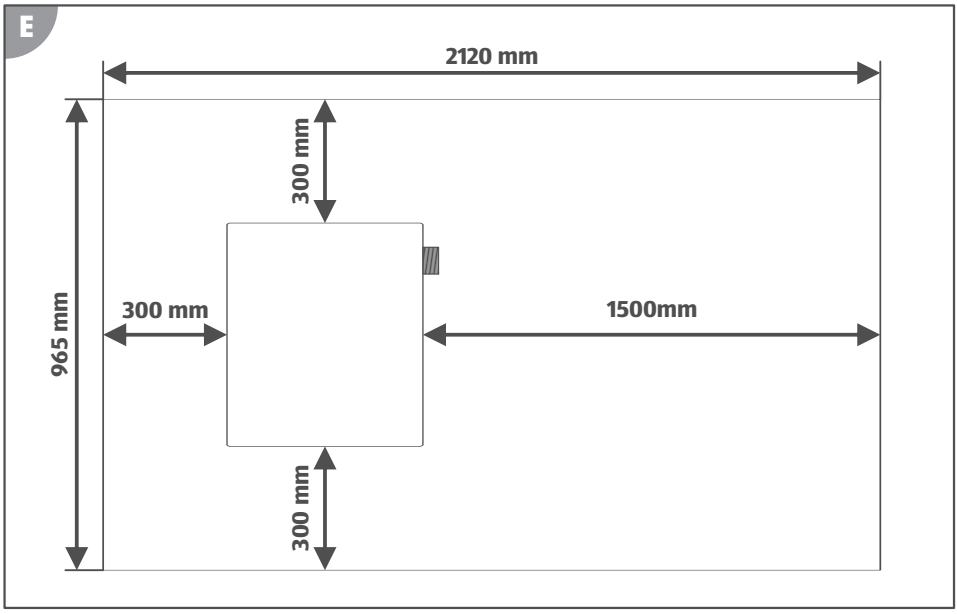
Preparing the setup location and the connections

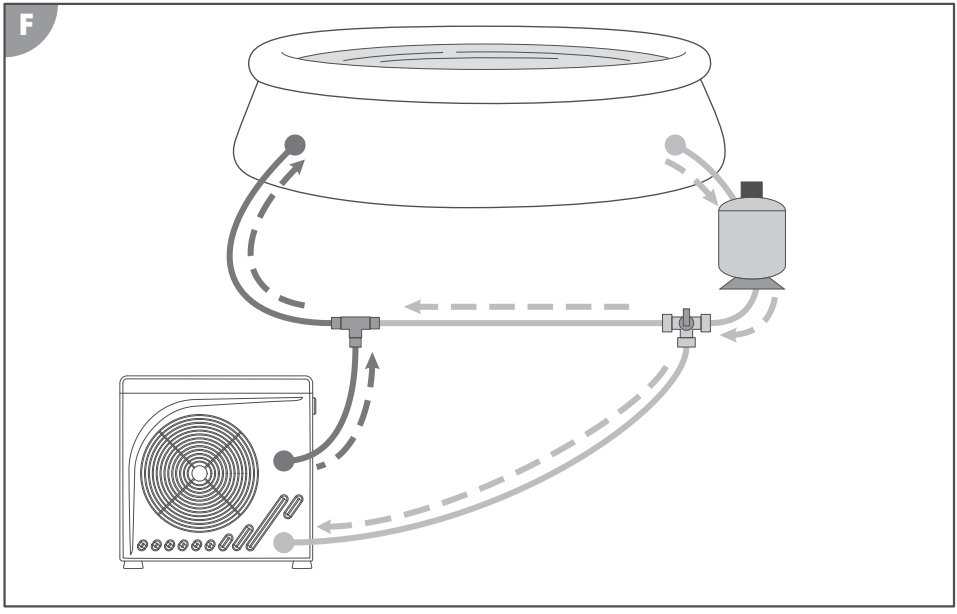
Careful selection and good preparation of the setup location significantly simplifies installation and operation of the heat pump. The following requirements must be met or considered:

- Outdoor setup location
- Protection from flooding and severe exposure to rain or sprinkler systems
- Stable, level ground not subject to the influence of water
- Required minimum distance to walls or objects (see **Fig. E**)
- Required minimum distance of 2 m to the pool
- Easy connection of the water pipes
- Easy connection of the power supply
- Easy access to the display
- Ability to drain condensation water
- Surroundings not sensitive to vibration and noise

For a still more efficient use of the heat pump, we recommend to add our Steinbach bypass set (item no. 060045).

Preparing the setup location





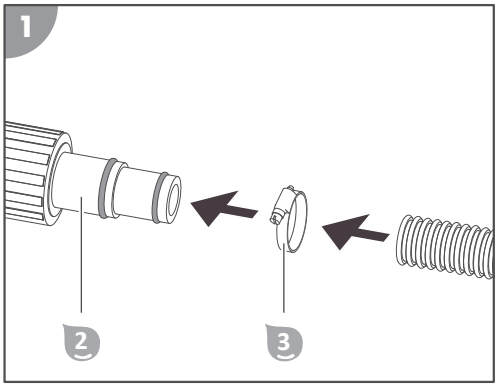
1. Set up the heat pump exactly as it will be installed later.

2. Lay the hoses from the water treatment system to the setup location of the heat pump (see **Fig. F**). Make sure that there is no tension on any of the lines routed to the heat pump and that they are not in the way.
3. Lay the supply line for the heat pump's power supply (see section "Technical data"). Use an extension cable or a socket with the required protection class for the environmental conditions of the connection site!

The setup location is prepared.

Installation

Installing adapters on the hose ends



The heat pump is always the last link in the water treatment system. If a filter or salt system or similar is used, it must be connected upstream of the heat pump so that the filtered, treated water flows through the heat pump.

1. Clean large-particle soiling from the connection points of the heat pump 1, the adapters 2 and the hose ends of the water pipes.
2. Screw an adapter 2 onto the outlet water connection 6.
3. Screw an adapter 2 onto the inlet water connection 7.
4. Attach the hose end of the drain line with a hose clamp 3 and the adapter 2 on the outlet water connection 6 (see **Fig. 1**).
5. Connect the hose end of the feed line with a hose clamp 3 and the adapter 2 on the inlet water connection 7 (see **Fig. 1**).

The adapters are installed on the hose ends.

Connecting the lines/pipes

Establishing the power supply

The MINI heat pump cannot be operated with an external timer and you need to manually switch the pump on and off via the RCD power plug.

1. Connect the RCD power plug C to the power supply prepared at the setup location.

The power supply is established.

Connecting a drain pipe for condensation water (optional)

1. Insert the drain connection piece 4 into the hole in the base plate.
2. Attach the drain pipe (garden hose) for condensation water to the drain connection piece 4.

The drain pipe for condensation water is connected.

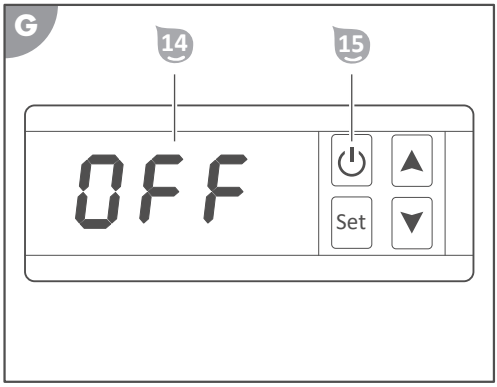
Display

Standby mode

In standby mode, the heat pump is ready for operation but it is deactivated. By pressing the **On/Off** 15 button, the heat pump switches to operating mode.

After switching on, the heat exchanger has to heat up first before the heat pump is ready for use in operating mode. This process can take up to 90 seconds.

Display:



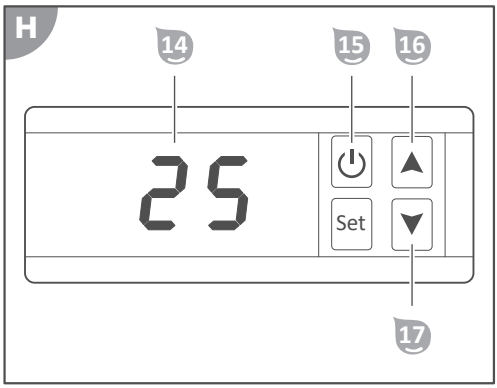
- The **display** 14 shows "OFF".

Operating mode

In operating mode, the heat pump heats the water to the set water temperature. The standard value for the set water temperature is 27 °C. You can set the water temperature to a value between +15 °C and +35 °C. By pressing the **On/Off** 15 button, the heat pump switches to standby mode. The desired water temperature can be set by pressing the **Up** button 16 or the **Down** button 17.

After switching off, the heat exchanger has to cool down before the fan stops running. This process can take up to 90 seconds.

Display:



- The **display** 14 shows the current water temperature.

Saving energy

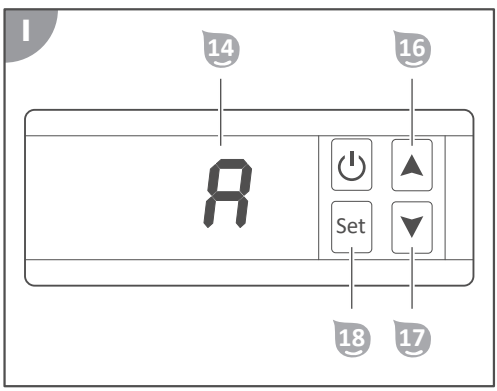
To reduce energy consumption and related costs, you can take the following measures:

- If you do not use the pool for a few days (e.g., on weekends), keep the current water temperature approximately at the desired water temperature. The heat pump needs time to heat up the pool water. If there is a large temperature difference between the current water temperature and the desired water temperature, it can take several days until the desired water temperature is reached.
- If do not use the pool for more than a week, shut off the heat pump or reduce the set water temperature.
- Do not use the heat pump when the ambient temperature falls below 5 °C.
- Cover the pool to prevent heat loss due to wind.

Parameters

In operating mode, the heat pump allows you to display temperatures or make settings by pressing the **SET** button 18. The desired parameter can be selected by pressing the **Up** button 16 or the **Down** button 17.

Display:



- The **display** 14 shows the selected parameter.

Available parameters:

The heat pump has two temperature sensors that measure the following temperatures:

	Parameters	Display range	Example
A	current water temperature at inlet	-19 °C to +99 °C	A 25 (25 °C)
C	current temperature at heat exchanger	-19 °C to +99 °C	C 9 (9 °C)

The heat pump has eight adjustable parameters:

	Parameters	Setting range	Default
1	desired water temperature	15 °C to 35 °C	1 27 (27 °C)
2	Temperature difference for restart	1 °C to 10 °C	2 2 (2 °C)
4	Automatic restart	0 to 1	4 1 (1 °C)
5	Duration for automatic defrost function	10 min to 90 min	5 40 (40 min)
6	Temperature setting for automatic defrost function	-30 °C to 0 °C	6 0 (0 °C)
7	Temperature setting for exiting automatic defrosting	1 °C to 30 °C	7 2 (2 °C)
8	Exit automatic defrosting	10 min to 40 min	8 30 (30 min)

Operation

⚠WARNING!

Risk of death when operating the water treatment system during bathing.

Hair or clothing might get sucked into the suction openings of the pool and in extreme cases trap persons under water and prevent them from surfacing again.

- Never operate water treatment system devices while persons are in the pool.
- Prevent any access to the pool for as long as water treatment system devices are in use.

⚠CAUTION!

Risk of injury!

A damaged device or damaged accessories may cause injuries.

- Check the device and the accessories (see section "Testing").

NOTICE!

Reduced or blocked ventilation of the heat pump can lead to faulty extraction of heat or moisture. This might cause mold or overheating of the finned heat exchanger.

- Clean the grate in front of the fan impeller and the fins of the heat exchanger at regular intervals and make sure that dirt such as leaves or similar does not get into the heat exchanger.
- Make sure that the grate on the heat exchanger is never covered up and that the air can circulate freely through the device.

RCD power plug

The RCD power plug consists of a safety plug and a residual current circuit breaker. The safety plug must be connected to a matching socket with an earthed protective conductor. The residual current circuit breaker disconnects the heat pump from the voltage as soon as unexpectedly high currents that are dangerous for persons flow through the heat pump (e.g. short circuit through electroconductive parts of the housing).

Testing the residual current circuit breaker

1. Connect the RCD power plug to the power supply prepared at the setup location.
2. Press the **RESET** button.
   *The **LED**is lit. The heat pump is supplied with power and is in standby mode.*
3. Press the **TEST** button.
   *The **LED**goes off. The heat pump is disconnected from power and the **display** goes off.*
4. Press the **RESET** button.
   *The **LED**is lit. The heat pump is supplied with power and is in standby mode.*

The residual current circuit breaker of the RCD power plug has been tested successfully.

Activating heating

The adjustable temperature range in operating mode is between 15 to 35°C. The start value of the set water temperature is 27°C.

The water in the pool is heated up fastest at maximum throughput of the water through the heat pump (see section "Technical data"). However, increasing the flow rate reduces the time spent at the heat exchanger, which means that the difference in temperature between the water in the pool and the heated water at the pool inlet is lower overall 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.

Activating operating mode

1. Press the **RESET** 12 button.
   *The **LED** 11 is lit. The heat pump is supplied with power and is in standby mode.*
2. Press the **ON/OFF** button 15.

*The heat pump 1 is in operating mode and the **display** 14 shows the current water temperature in °C.*

Setting the desired water temperature

1. Repeatedly press the **Up** button 16 or the **Down** button 17.

*The **display** 14 shows the desired water temperature in °C.*

The heat pump does not work when the set desired water temperature is below the currently measured water temperature.

Showing or setting parameters

The heat pump has 9 parameters that can be shown or set via the display D (see "Parameters").

Showing parameters

1. Press and hold the **SET** button 18 for 5 seconds while the heat pump is in operating mode.
   *The **display** 14 shows "A".*
2. Repeatedly press the **Up** button 16 or the **Down** button 17.
   *The **display** 14 shows the desired parameter (see "Parameters").*
3. Press the **SET** button 18 to select the desired parameter.

*The value of the selected parameter blinks on the **display** 14.*

Setting parameters

1. Repeatedly press the **Up** button 16 or the **Down** button 17.

*The desired value of the selected parameter blinks on the **display** 14.*

2. Press the **SET** button 18.

The desired value of the selected parameter is set.

Deinstallation

⚠CAUTION!

Risk of injury when moving heavy equipment!

The device is heavy! Incorrect lifting or uncontrolled toppling of the device can lead to injuries or damage the device.

- Always carry or tilt the device with the help of at least one other person, never alone.
- Make sure that your posture is correct (straight back, secure footing, etc.).
- Use transport aids (such as a lifting truck or roller board).
- Wear protective equipment, such as safety shoes or gloves.

Disconnecting the lines/pipes

Disconnecting the power supply

1. Put the heat pump into standby mode (see section "Display").
2. Press the **RESET** 12 button.
3. Disconnect the RCD power plug 9 from the power supply.

The heat pump is disconnected from the power supply.

Disconnecting the water lines

1. Deactivate the water treatment pump.
2. Undo the hose clamps 3 on the adapters 2.
3. Pull the hose end off the adapter 2 at the inlet water connection 7.
   When removing the hose end of the water line, hold it with the opening facing upward so that residual water in the hose does not uncontrollably run out.
4. Unscrew the hose end from the adapter 2 at the outlet water connection 6.
   When removing the hose end of the water line, hold it with the opening facing upward so that residual water in the hose does not uncontrollably run out.

The water lines are disconnected.

Cleaning

Cleaning the device

Wipe the surface with a dry cloth.

Test

Check the following before each use:

- Is there visible damage on the device?
- Is there visible damage on the control elements?
- Are the accessories in flawless condition?
- Are all lines in flawless condition?
- Are the ventilation slots unobstructed and clean?

Do not start up a damaged device or damaged accessories. Have them checked by the manufacturer or its customer service or a qualified service technician.

⚠WARNING!

Risk of fire and explosion due to leaking finned heat exchanger!

The refrigerant circuit of the finned heat exchanger contains a highly flammable, odorless gas under high pressure. Risk of fire and explosion due to uncontrolled escaping of refrigerant.

- Keep heat sources and naked flames away from the heat pump.
- Do not burn or drill into the heat pump.
- Do not use any objects other than those permitted by the manufacturer to speed up the defrosting process.
- Stop using the heat pump immediately if you suspect a refrigerant leak.
- The refrigerant is odorless. Always keep ignition sources away from the installation site of the heat pump.
- Contact an authorized qualified person if you suspect refrigerant leaks.
- Observe the national regulations on gas.
- All persons involved in work on the refrigerant circuit must have a valid certificate from an industry accredited certification body that ensures competence in handling refrigerants according to a specific assessment recognized by industry associations.

Ice on finned heat exchanger

A layer of ice (water condensation) may form on the finned heat exchanger during operation of the heat pump. This phenomenon is to be expected. Depending on the ambient conditions, it is possible that the layer of ice is not thawed completely by the automatic defrost function which may lead to a performance drop and damage to the heat pump.

You can personalize the automatic defrost function:

- **(5)** Duration for automatic defrosting: sets the duration of the automatic defrost function in minutes.
- **(6)** Temperature setting for automatic defrosting: as soon as the "current temperature at heat exchanger" **(C)** has dropped below this value in °C, the automatic defrost function starts.
- **(7)** Temperature setting for stopping automatic defrosting: as soon as the "current temperature at heat exchanger" **(C)** has exceeded this value in °C, the automatic defrost function stops.
- **(8)** Temperature setting for stopping automatic defrosting: as soon as automatic defrosting exceeds the set duration in minutes, the automatic defrost function stops.

Do not use any objects other than those permitted by the manufacturer to speed up the defrosting process!

Leakage

If fluids are coming out of the heat pump, it can be one of the following:

- Condensation water
- Pool water
- Refrigerant

Condensation water

Condensation water forming during operation is normal. There is no damage. The surface of the finned heat exchanger gets cold, humidity in the ambient air condenses and, in extreme cases, freezes. Condensation water collects in the bottom tray and is discharged through a hole and via the drain connection piece 4. If the drain connection piece 4 is plugged up, the condensation water cannot drain from the heat pump and larger amounts collect in the heat pump.

Pool water

Leaking pool water indicates that:

- the hose is not correctly installed on the adapter 2.
- the adapter 2 is not correctly connected to the heat pump 1.
- the seal in the adapter 2 is defective or missing.
- the flow pipe inside the heat pump has a leak.

Refrigerant

Leaking refrigerant indicates that the refrigerant circuit in the finned heat exchanger has a leak. Contact a qualified person immediately if you detect a leak in the refrigerant circuit.

Keep in mind that refrigerants are odorless.

Storage

As soon as the outside temperature permanently falls below +5 °C, the heat pump should be stored away for the winter to prevent damage through ice formation (frost bursts).

Permanently installed water pipes do not necessarily have to be deinstalled. If the location of the heat pump is protected against heavy soiling and strong weather influences, it is sufficient to drain the water from the heat pump and the water pipes.

Shutdown in winter

1. Disconnect all lines and pipes (see section "Deinstallation").
2. Clean the heat pump thoroughly (see section "Cleaning").
3. After thorough drying, store the heat pump in a dry, frost-free place (>+5 °C).

The heat pump is stored away for the winter.

Troubleshooting

Problem	Possible cause	Remedy
The display is not lit	The power plug is not properly connected to the socket/ extension cable.	Disconnect the power plug from the socket/extension cable and reconnect it.
	The RCD power plug is in the triggered state (the LED is not lit).	Press the **RESET** button 12. If the LED is not continuously lit, contact an authorized electrician.
	No voltage is present at the socket/extension cable.	Contact an authorized electrician.
The heat pump does not start.	The heat exchanger has not reached its operating temperature yet.	Wait for 90 seconds after activation.
	The current water temperature is higher than or equal to the set water temperature.	Set a higher temperature or wait until the current water temperature drops below the set water temperature.
The water in the swimming pool does not reach the desired temperature even though the heat pump is running.	The operating time of the heat pump was too short for it to reach the set water temperature.	Wait for 24-48 hours.
Ice has formed on the finned heat exchanger.	The ambient temperature is too low/the humidity is too high.	Activate manual defrosting (see section "Operation").
	The gas pressure in the refrigerant circuit is too low (see section "Testing").	Contact an authorized qualified person.
Liquid is escaping.	Condensation water has accumulated.	Check the drain connection piece and drain line for blockage.
	The water connections are leaking.	Check the seal and firmly tighten the union nuts.
	The water outlet is leaking (see section "Testing")	Contact an authorized qualified person.
	The refrigerant circuit is leaking (see section "Testing")	Contact an authorized qualified person.
Display: error message **P1**	The temperature sensor at the inlet is defective or does not emit a signal.	Contact an authorized qualified person.
Display: error message **P3**	The temperature sensor at the heat exchanger is defective or does not emit a signal.	Contact an authorized qualified person.
Display: error message **P5**	Pressure in refrigerant circuit is too low.	Contact an authorized qualified person.

Problem	Possible cause	Remedy
Display: error message **P6**	Insufficient water flow.	Increase the water throughput of the hydraulic circuit that supplies the heat pump.
		Contact an authorized qualified person.

If the problem cannot be solved, contact the customer service listed on the last page.

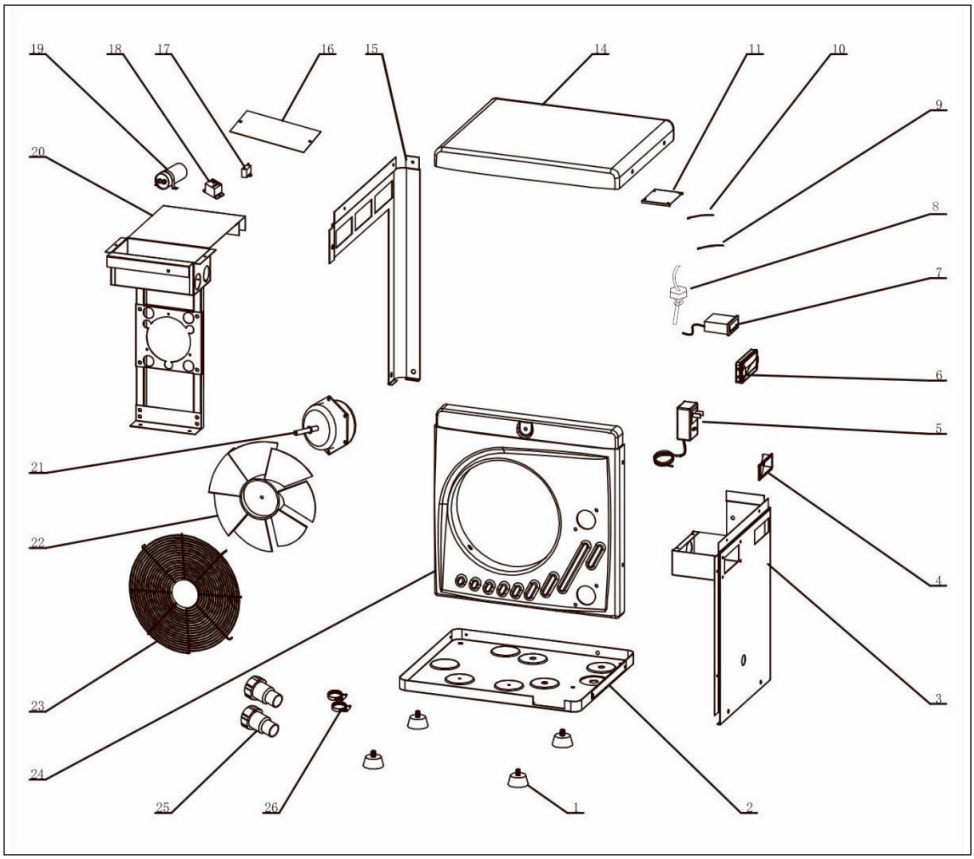
Technical data

Model:	BP-39WS-B Mini/049275	Coefficient of performance (COP):	6.0
Item number:	049275	Energy efficiency ratio (EER):	- - -
Total weight:	approx. 18 kg	Protection class:	I
Dimensions (W x H x D):	365 mm × 370 mm x 320 mm	Protection code:	IPX4
Pool volume (water content):	max. 20,000 l (5283.44 gal)	Sound pressure level ****:	47 dB(A)
Heating output *:	3.9 kW	Water throughput:	min. 3,000 l/h
Heating input power *:	0.65 kW	Nominal suction pressure:	0.7 MPa
Heating input current *:	3.3 A	Maximum suction pressure:	1.5 MPa
Cooling output *:	- - -	Nominal pump pressure:	3.0 MPa
Cooling input power *:	- - -	Maximum pump pressure:	4.3 MPa
Cooling input current *:	- - -	Refrigerant:	R32
Maximum input power:	0.85 kW	Maximum refrigerant capacity:	280 g
Maximum input current:	3,9 A	Global warming potential (GWP):	675
Operating voltage and frequency **:	220 – 240 V~, 50 Hz	CO2 equivalent:	0.19 kg/t

Pool water temperature increase***	(outside temp. = water temp. = 26 °C)
Salt content in water (salt electrolysis):	<0.5%
10,000 l	20,000 l
0.3 °C/h	0.2 °C/h

* Variable - dependent on ambient conditions
** Single-phase alternating current
*** Heat loss has not been taken into account (e.g., with or without cover, insulation etc.)
**** Emission sound level comparable to a large household appliance

Spare parts



Item	Replacement part	Item no.	Item	Replacement part	Item no.
without	Drain connection piece for condensation water	049249	15	Left side wall	049291
1	Rubber foot	049280	16	Control box cover 2	049292
2	Underbody	049281	17	Fan starting capacitor	049293
3	Right side wall	049282	18	Relay	049294
4	Handle	049283	19	Compressor starting capacitor	049295
5	Power cable (with RCD power plug)	049284	20	Fan bracket	049296
6	Control panel cover	049285	21	Fan motor	049297

Item	Replacement part	Item no.	Item	Replacement part	Item no.
7	Control	049308	22	Fan impeller	049298
8	Flow sensor	049306	23	Fan guard	049299
9	Inlet temperature sensor	049288	24	Front	049300
10	Compressor temperature sensor	049303	25	Adapter	049301
11	Control box cover 1	049289	26	Hose clamp	049302
14	Top part	049290			

Declaration of Conformity

CE

You can request the EU Declaration of Conformity from the address stated at the end of this instruction manual.

Disposal

Disposing of the packaging

Sort the packaging before you dispose of it. Dispose of paperboard and cardboard with the recycled paper service and wrappings with the appropriate collection service.

Disposing of used appliances

Used appliances do not belong in the household waste!
If the device can no longer be used, each consumer **is obligated by law to drop off used appliances separate from the household waste** at a municipal collection point. This ensures that used appliances are recycled properly and negative effects on the environment are avoided. Therefore electrical appliances are marked with the above symbol.

Disposing of the refrigerant

The device contains refrigerant. Refrigerant is a problematic substance and must be disposed of properly at an approved collection point.