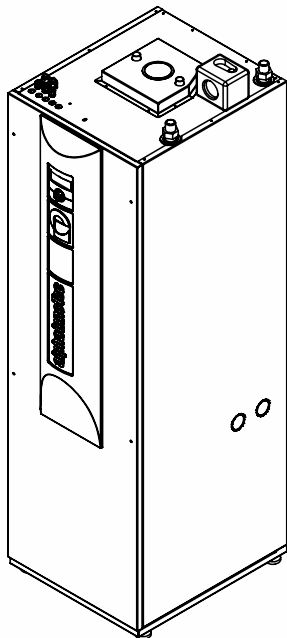
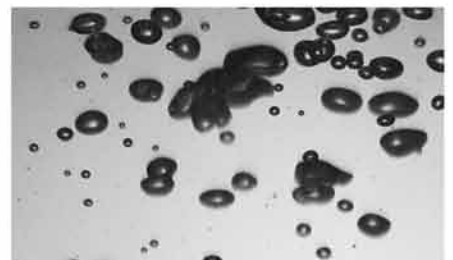
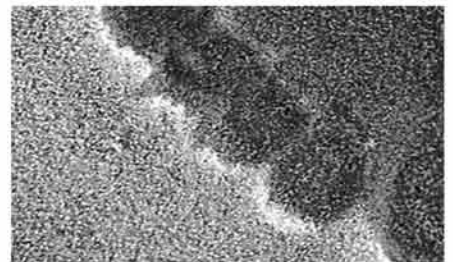


BRINE/WATER HEAT PUMPS

Brine heat station



WZS 41-101H/SX





Please read first

This operating manual provides important information on the handling of the unit. It is an integral part of the product and must be stored so that it is accessible in the immediate vicinity of the unit. It must remain available throughout the entire service life of the unit. It must be handed over to subsequent owners or users of the unit.

Read the operating manual before working on or operating the unit. This applies in particular to the chapter on safety. Always follow all instructions completely and without restrictions.

It is possible that this operating manual may contain instructions that seem incomprehensible or unclear. In the event of any questions or if any details are unclear, contact the factory customer service department or the manufacturer's local partner.

Since this operating manual was written for several different models of the unit, always comply with the parameters for the respective model.

This operating manual is intended only for persons assigned to work on or operate the unit. Treat all constituent parts confidentially. The information contained herein is protected by copyright. No part of this manual may be reproduced, transmitted, copied, stored in electronic data systems or translated into another language, either wholly or in part, without the express written permission of the manufacturer.

Symbols

The following symbols are used in the operating manual. They have the following meaning:



Information for operators.



Information or instructions for qualified technicians.



DANGER!

Indicates a direct impending danger resulting in severe injuries or death.



WARNING!

Indicates a potentially dangerous situation that could result in serious injuries or death.



CAUTION!

Indicates a potentially dangerous situation that could result in medium or slight injuries.



ATTENTION

Indicates a potentially dangerous situation, which could result in property damage.



NOTE

Emphasised information.



ENERGY SAVING TIP

Indicates suggestions that help to save energy, raw materials and costs.



Reference to other sections of the operating manual.



Reference to other instructions of the manufacturer.



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Intended use

The unit may be used only for the intended purpose. This means:

- for heating.
- for domestic water heating.
- in frost-free buildings

The unit may be operated only within its technical parameters.

 Overview "Technical data / scope of delivery".



NOTE.

Notify the responsible power supply company of the use of a heat pump or heat pump system.

Disclaimer

The manufacturer is not liable for losses resulting from any use of the unit which is not its intended use.

The manufacturer's liability also expires:

- if work is carried out on the unit and its components contrary to the instructions in this operating manual.
- if work is improperly carried out on the unit and its components.
- if work is carried out on the unit which is not described in this operating manual, and this work has not been explicitly approved by the manufacturer in writing.
- if the unit or components in the unit have been altered, modified or removed without the explicit written consent of the manufacturer.

EC conformity

The unit bears the CE mark of conformity.

 EC declaration of conformity

Safety

The unit is safe to operate for its intended use. The construction and design of the unit conform to current state of the art standards, all relevant regulations and all relevant safety regulations.

Every person who performs work on the unit must have read and understood the operating manual prior to starting any work. This also applies if the respective person has already worked with such a unit or a similar unit or has been trained by the manufacturer.

Every person who performs work on the unit must comply with the applicable accident prevention and safety regulations. This applies in particular to the wearing of personal protective equipment.



DANGER!

Risk of fatal injury due to electric shock!
Electrical connections may be installed only by qualified electricians.

Before opening the unit, disconnect the system from the power supply and secure it from being switched back on!



WARNING!

Only qualified technicians (trained heating, cooling, refrigerant and electrical technicians) may perform work on the unit and its components.



WARNING!

Observe safety labels on and in the unit.



WARNING!

Unit contains refrigerants!
Leaking refrigerant could result in personal injury or material damage. Therefore:

- Shut down unit.
- Ventilate installation location
- Notify the manufacturer's authorised service centre.



ATTENTION

For safety reasons:
Never disconnect the unit from the power supply unless the unit is being opened.



Customer service

For technical information please contact a qualified technician or the manufacturer's local partner.



Overview "Customer service".

Warranty / Guarantee

For warranty and guarantee conditions, please refer to the purchase documents.



NOTE.

Please contact your dealer concerning warranties and guarantees.

Disposal

When decommissioning the unit, always comply with applicable laws, directives and standards for the recovery, recycling and disposal of materials and components of cooling units.



"Dismantling".



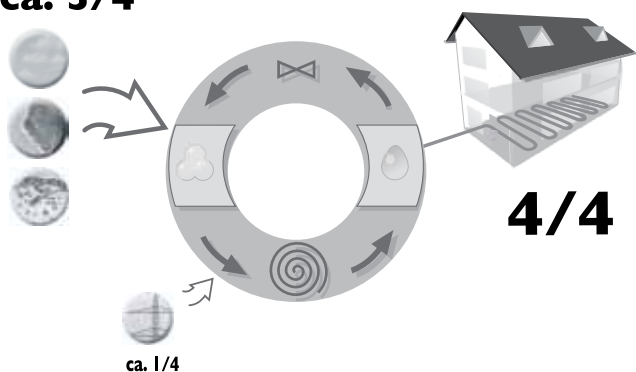
Operating principle of heat pumps

Heat pumps operate on the same principle as a refrigerator: same technology, only with reversed benefits. The refrigerator extracts heat from foods, which is released into the room through fins on the back.

The heat pump extracts heat from our environment: air, earth or ground water. The extracted heat is conditioned in the unit and supplied to the heating water. Even when it is extremely cold outside, the heat pump draws enough heat to heat a house.

Example: drawing of a brine/water heat pump with underfloor heating:

ca. 3/4



$\frac{4}{4}$ = usable energy
approx. $\frac{3}{4}$ = environmental energy
approx. $\frac{1}{4}$ = external electrical energy

Area of utilisation

Taking into consideration the ambient conditions, limits of application and the applicable regulations, every heat pump can be utilised in new or existing heating systems.



Overview “Technical data / scope of delivery”.

Operation

Your decision to purchase a heat pump or a heat pump system is a long-term contribution to protecting the environment through low emissions and reduced primary energy use.

You can operate and control the heat pump system with the control element of the heating and heat pump regulator.



NOTE.

Make sure that the control settings are correct.



Operating manual of the heating and heat pump regulator.

To ensure that your heat pump or heat pump system operates efficiently and ecologically, the following are especially important:



ENERGY SAVING TIP

Avoid unnecessarily high flow temperatures. A lower flow temperature on the hot water side increases the efficiency of the system.



ENERGY SAVING TIP

When letting in fresh air, do not leave windows open for an extended period, in order to save energy and reduce your heating costs.



Care of the unit

The outer surfaces of the unit can be cleaned with a damp cloth and household cleaning products.

Do not use cleaning or care products that contain abrasives, acids and/or chlorine. Such products would destroy the surfaces and could also damage the technical components of the unit.

Maintenance of the unit

The cooling circuit of the heat pump requires no regular maintenance.

According to EU regulation (EC) 842/2006 of May 17, 2006, leak inspections and maintenance of a log book are required for certain heat pumps!

The criteria for conducting leak inspections and maintaining a log book are based on the hermetic impermeability of the cooling circuit and the refrigerant capacity of the heat pump! No log book is required for heat pumps with a refrigerant capacity of < 3kg. With all other heat pumps, the log book is included with all other delivered materials.



Log book for heat pumps, Section "Information on use of the log book".

The components of the heating circuit and the heat source (valves, expansion vessels, circulating pumps, filters, dirt traps) should be inspected as well as cleaned as needed - at the very least annually - by a qualified heating or cooling system technician.

Regularly check that the safety valve for the domestic hot water tank is in proper working order.

It is a good idea to have a maintenance contract with a heating installation company. The company will conduct all required maintenance at regular intervals.

CLEANING AND FLUSHING OF UNIT COMPONENTS



CAUTION!

Unit components may be cleaned and flushed only by customer service personnel authorised by the manufacturer. Use only liquids recommended by the manufacturer.

Flushing of the liquefier with chemical cleaning agents must be followed by neutralisation of residue and intensive flushing with water. Always observe the technical data of the manufacturer of the heat exchanger.

Malfunctions

In the event of a malfunction, you can detect the cause of the malfunction via the diagnostic program of the heating and heat pump regulator.



Operating manual of the heating and heat pump regulator.



WARNING!

Service and repair work on the components of the unit may be performed only by customer service personnel authorised by the manufacturer.



Overview "Customer service".

Note that no malfunction is displayed if the safety temperature limiter on the electric heating element has been triggered.

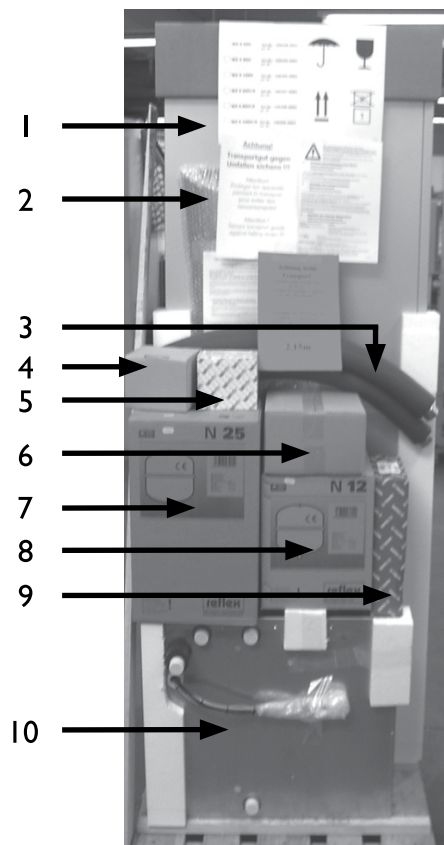


"Commissioning", "Safety temperature limiter" section.



Scope of delivery

Example of scope of delivery:



- 1 Compact unit with integrated domestic hot water tank, electric heating element, integrated circulating pump heating circuit and sensors
- 2 Screen
- 3 Vibration decouplers for heat source connection
- 4 Control element of the heating and heat pump regulator
- 5 Heating circuit safety assembly
- 6 Package with 4 feet, 1 outdoor sensor, 1 insulating set, 2 ball valves, 8 seals, 1 service hose, 1 cap valve, 1 mount for expansion vessel of heating circuit
- 7 Expansion vessel of heating circuit, 25 l
- 8 Expansion vessel of heat source, 12 l
- 9 Connection assembly for heat source
- 10 Module box with integrated circulating pump of heat source

Complete the following first:

- ① Inspect the delivery for outwardly visible signs of damage...
- ② Check to make sure that the delivery is complete. Any defects or incorrect deliveries must be reported immediately.



NOTE.

Note the model.



Overview "Technical data/scope of delivery" or rating plate on unit.

Installation and assembly

The following applies to all work to be done:



NOTE.

Always comply with the applicable local accident prevention regulations, statutory regulations, ordinances, guidelines and directives.



WARNING!

The heat pump or heat pump system may be installed and assembled only by a qualified technician!



NOTE.

Observe the sound levels of the respective model.



Overview "Technical data/scope of delivery", "Sound" section.

INSTALLATION AREA



ATTENTION

Install the unit only indoors.

The installation area must be frost-free and dry. It must meet the requirements of EN 378. It must also fulfil applicable local regulations.



TRANSPORT TO INSTALLATION LOCATION

To avoid damage during transport, you should transport the unit to the final installation location (secured on a wooden pallet) using a lifting truck.

If it is not possible to transport the unit to the final installation location using a lifting truck, you can also transport the unit using a hand truck.



WARNING!

Several people are required to transport the unit. Do not underestimate the weight of the units.



Overview "Technical data/scope of delivery", "General unit data" section.



CAUTION!

Wear safety gloves.



WARNING!

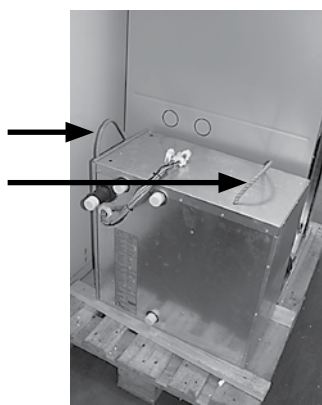
Unit is not fastened to the wooden pallet. The unit can tip when being lifted down and during transport with a hand truck. This can result in personal injury and damage to the unit.

- Take suitable precautions to prevent the risk of tipping over.

Proceed as follows if transport with a lifting truck is not possible:

- ① Remove packaging and transport material. Remove extra box and module box from the wooden pallet and bring to installation location.

Use straps to lift and carry the module box.



ATTENTION

Do not tilt the module box more than a maximum of 45° (in any direction).



ATTENTION

Never use components, pipes of the cooling circuit or hydraulic connections on the module box for transport purposes.



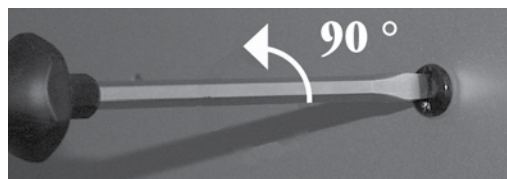
ATTENTION

Do not damage the hydraulic connections under any circumstances.

Dispose of angle bracket, transport and packaging material properly and in accordance with ecological principles.

- ② We recommend removing the front panel to reduce the weight of the unit for further transport.

Loosen quick-release screws for the front panel. Turn through 90° to the left...



Lift front panel and set aside in a safe place.



DANGER!

The carrying strap attached to the back of the unit is an aid for tipping the unit onto a hand truck! Always secure the unit on the hand truck with a tension belt!

The carrying strap can also be used as a transport aid so that the unit without the module box can be carried by two persons (see illustration)! Do not lift or transport the unit using only the strap!

- The strap could break!
- Persons could be injured!
- Persons beneath the load could be fatally injured!
- The unit itself or other equipment could be damaged!



- ③ Transport unit to installation location using a hand truck or have two persons carry it.

! ATTENTION

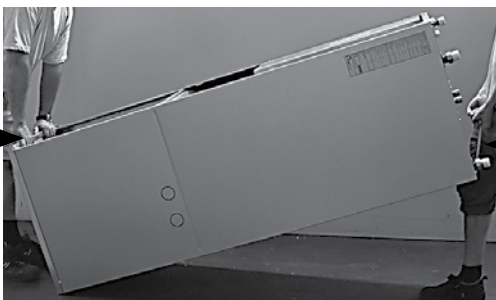
Do not damage the hydraulic connections under any circumstances.

- Push hand truck only beneath back of unit for transport.



NOTE.

Without the module box, the unit can be transported horizontally.



- 1 Recessed grips
- 2 Carrying strap

! ATTENTION

Never use components and hydraulic connections on the unit for purposes of transport.

INSTALLATION



WARNING!

Several people are required to install the unit. Do not underestimate the weight of the unit.



NOTE.

The heat source can be connected either on the left or right side of the unit. Maintain the required clearance between the connection side and the wall.



“Installation of the hydraulic connections”,
“Connection of module box to the heat source”
section.



ATTENTION

Always comply with required clearance dimensions.



“Dimensional drawings” and “Clearance dimensions” overviews.

Proceed as follows at the installation location:



ATTENTION

Set unit on a solid and level, preferably sound-insulated surface.

- ① Mount feet...



ATTENTION

Moving the unit without the feet mounted can damage the floor.

Mount the feet **before** installing the module box in the unit.

Proceed as follows to mount the feet on the unit:

- ①.①

Tip the unit slowly and carefully to one side.

Secure unit in raised tilted position so that it cannot accidentally tip back into the original position.

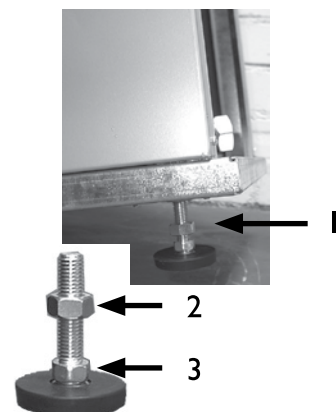


CAUTION!

Hands and fingers could be crushed during the following tasks!

- ①.②

Mount one foot each on the front and back of the unit.



- 1 Foot
- 2 Lock nut
- 3 Adjusting screw



①•③

Slowly and carefully tip the unit back into the original position.

①•④

Repeat procedure on the other side of the unit.

- ② Place unit at final installation location. Compensate for minor unevenness using the four adjusting screws. Then tighten the lock nuts.

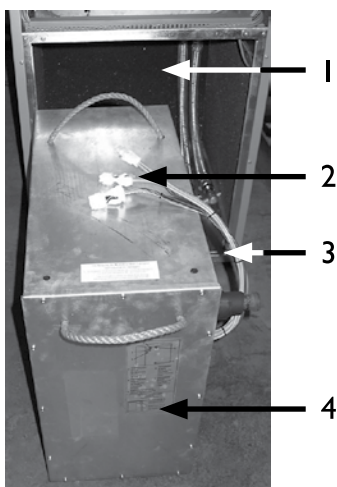
INSTALLATION OF THE MODULE BOX

The entire cooling circuit of the heat station is contained in the module box.

! ATTENTION

Do not tilt the module box more than a maximum of 45° (in any direction).

- ① Place module box in front of the unit.

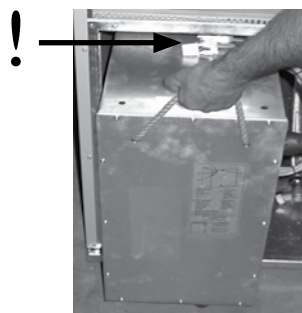


- 1 Unit
- 2 Plug for electrical connection
- 3 Front edge of bottom of unit
- 4 Module box

- ② Use straps to lift module box and initially place in unit so that the rubber feet of the module box that are facing the unit come to rest on the centring plate behind the front edge of the bottom of the unit.

- ③ Push module box into the unit until the front rubber foot of the module box contacts the front edge of the bottom of the unit and has to be lifted over it.

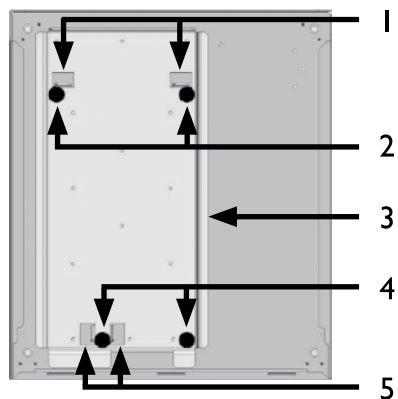
When pushing in the box, make sure that the plugs for the electrical connection are not pinched and damaged.



- ④ Raise module box, push it further into the unit and lower the box as soon as the rubber feet contact the corresponding stops of the centring plate.

Set the front left rubber foot of the module box **between** the guide elements.

The module box is positioned correctly in the unit when the rubber feet are placed as shown in the following sketch:



- 1 Stops on centring plate
- 2 Rear rubber feet of module box
- 3 Centring plate for module box on bottom of unit
- 4 Front rubber feet of module box
- 5 Guide element

! ATTENTION

Once the module box has been placed in the unit, it may no longer be transported.



INSTALLATION OF THE HYDRAULIC CONNECTIONS

! ATTENTION

The heat source system must be constructed according to the specifications of the planning manual.



Planning manual and “Hydraulic connection” instructions.



NOTE.

Check to make sure that the diameters and lengths of the pipes for the heating circuit and the heat source are sufficiently dimensioned. The free compression of the circulating pumps must be able to deliver at least the minimum flow rate required for your model.



Overview “Technical data/scope of delivery”, “Heat source” and “Heating circuit” sections.



DANGER!

Risk of fatal injury due to electric shock!
Before opening the unit, disconnect the system from the power supply and secure it from being switched back on!

Proceed as follows:

- ① Install shut-off devices at the heating circuit.
- ② Install shut-off devices at the heat source.



NOTE.

During installation of the shut-off devices, the evaporator and liquefier of the heat pump can be flushed, if necessary.



CAUTION!

The condenser may be flushed only by customer service personnel authorised by the manufacture.



ATTENTION

During connection of components, secure connections on the module box and on the compact unit against twisting in order to prevent damage to the copper pipes in the inside of the module box and the compact unit.

- ③ Place a bleeder at the highest point of the heat source in the heat source outlet...

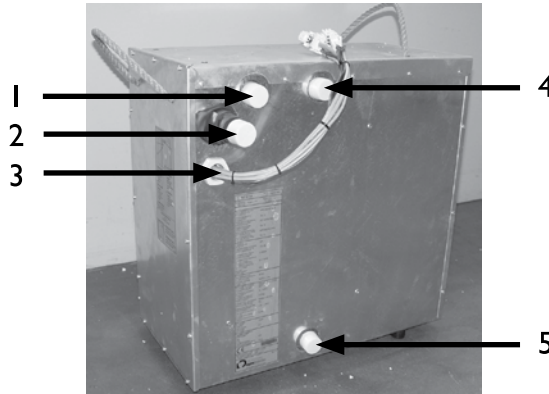
If necessary, place a bleeder at the highest point of the heat source in the heat source inlet...

- ④ Place a bleeder at the highest point of the heating circuit in the heating circuit outlet (forward flow)...

If necessary, place a bleeder at the highest point of the heating circuit in the heating circuit inlet (return flow)...

- ⑤ We recommend installing a contamination filter (screen size 0.9 mm) on the heat source inlet connection.

CONNECTIONS ON THE MODULE BOX



- 1 Heat source inlet
- 2 Heat source outlet
- 3 Electric/sensor lines
- 4 Heating circuit outlet (forward flow)
- 5 Heating circuit inlet (return flow)

CONNECTING THE MODULE BOX TO THE HEATING CIRCUIT

The vibration decouplers for the connection of the heating circuit to the module box are pre-mounted in the unit. They are located to the right of the module box after it has been inserted.

Proceed as follows:



- ① Remove two seals from the extra box and place them in the angle ball valves.
- ② Screw angle ball valves of the vibration decouplers to the heating circuit connections.



Heating circuit outlet (forward flow) connection



Heating circuit inlet (return flow) connection



NOTE.

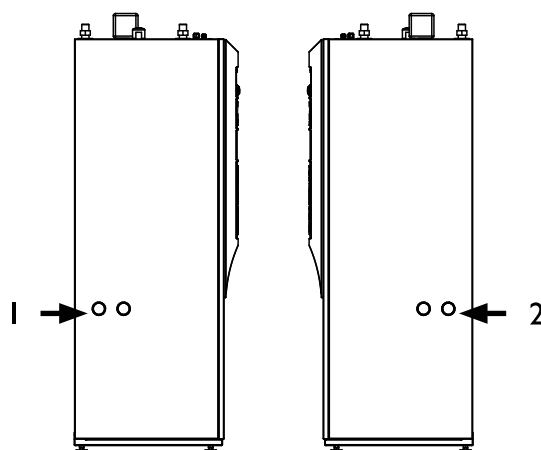
Always note which is the inlet (return flow) and outlet (forward flow) of the heating circuit. They are marked with colours, as are the vibration decouplers:

red = heating circuit outlet (forward flow)

blue = heating circuit inlet (return flow)

CONNECTING THE MODULE BOX TO THE HEAT SOURCE

Vibration decouplers are included for the connection to the pipes of the heat source. They must be installed in order to prevent the transfer of structure-borne sound to the fixed piping. The pipes of the heat source can be connected either on the right or left side of the unit.



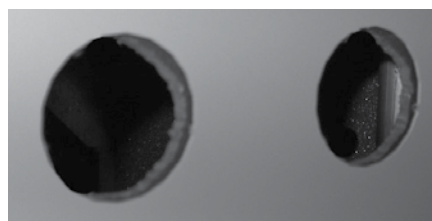
- 1 Connection on left side of unit
- 2 Connection on right side of unit

Proceed as follows:

- ① Cut out round plates on the desired connection side.

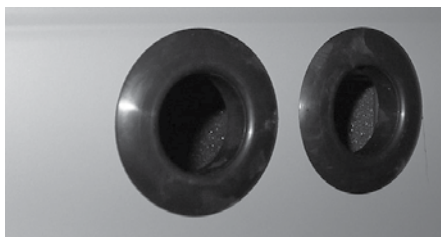


- ② Remove the tags cleanly so that no metal burrs remain. Cut foam with a knife...





- ③ Insert included plastic rosettes in the holes.



- ④ Insert vibration decouplers in unit from outside and guide them inside the unit to the connections on the module box...

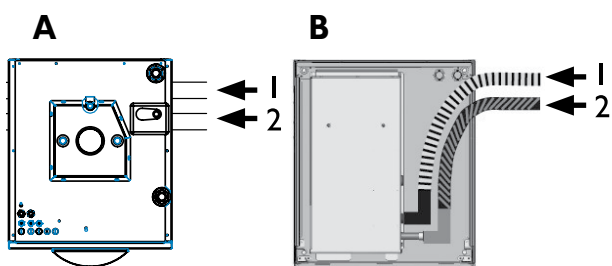


CONNECTION OF THE VIBRATION DECOUPLERS

Proceed as follows:

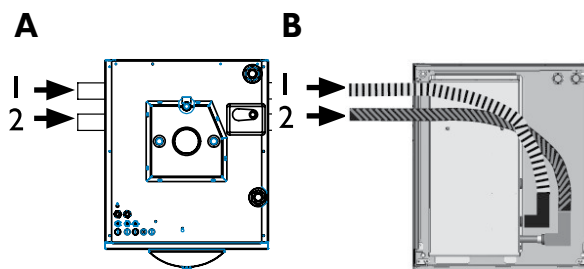
- ① Arrange vibration decouplers in a quarter circle in the unit to the connections on the module box.

Example of hose installation for connection on right side of unit:



- A Top view of outside of unit
B Top view of inside of unit
1 Heat source inlet
2 Heat source outlet

Example of hose installation for connection on left side of unit:



- A Top view of outside of unit
B Top view of inside of unit
1 Heat source inlet
2 Heat source outlet

- ② Screw included angle ball valves to vibration decouplers. Use seals from the extra box.
③ Screw angle ball valves to the connections provided on the module box. Use seals from the extra box.



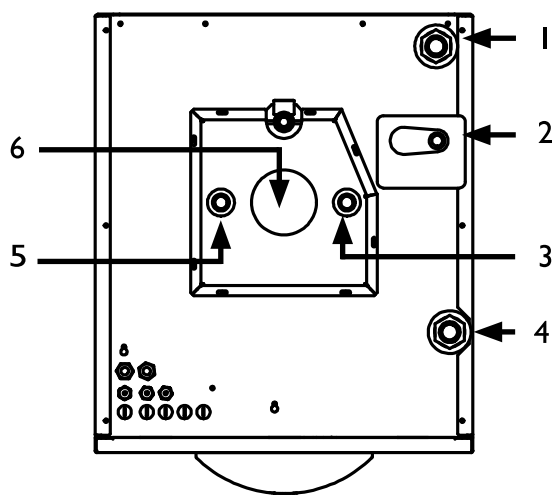
ATTENTION

When tightening the connections on the module box, always secure connections against twisting.



CONNECTION OF THE COMPACT UNIT TO THE HEATING AND DOMESTIC HOT WATER CIRCUIT

The connections for the pipes of the heating circuit and the hot water supply are located on the top of the unit.



- 1 Heating circuit inlet (return flow)
- 2 Connection for heating circuit safety assembly
- 3 Domestic water connection, hot
- 4 Heating circuit outlet (forward flow)
- 5 Domestic water connection, cold
- 6 Service opening

Proceed as follows:

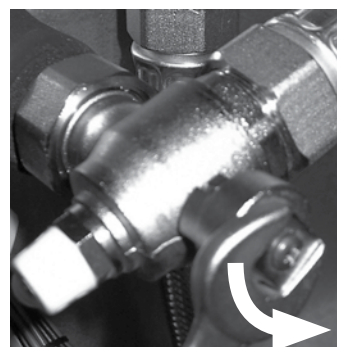
- ① When connecting the heating circuit, install bleeding valves above the heat station...
- ② Connect the domestic hot water tank according to the relevant local standards and guidelines.
- ③ Connect the safety drain (safety valve) of the domestic hot water tank according to the relevant local standards and guidelines.

! ATTENTION

Do not exceed the operating pressures specified on the rating plate. Install a pressure reducer, if necessary.

OPENING THE ANGLE BALL VALVES ON THE MODULE BOX

Open all angle ball valves on the module box by turning them 90° anti-clockwise.



SAFETY ASSEMBLY

The safety assembly for the heating circuit is in the extra box.

Proceed as follows:

- ① Fit the safety assembly (heating circuit) to the connection provided at the top of the unit...
- ② The safety drain of the safety valve (heating circuit) must lead into the drain via a funnel siphon in accordance with the relevant standards and regulations.

EXPANSION VESSELS

The expansion vessel of the heat source is included in delivery and must be installed with the connection assembly.

The expansion vessel for the heating circuit, the corresponding cap valve and the wall mount are included in the scope of delivery. They must be integrated in the heating circuit on-site in compliance with the applicable standards and directives.



Electrical connections

The following applies to all work to be done:



DANGER!

Risk of fatal injury due to electric shock!
Electrical connections may be installed only by qualified electricians.

Before opening the unit, disconnect the system from the power supply and secure it from being switched back on!



WARNING

Comply with the local regulations and standards when installing and carrying out electrical work.

Comply with technical connection requirements of the responsible power supply company (if required by the latter)!



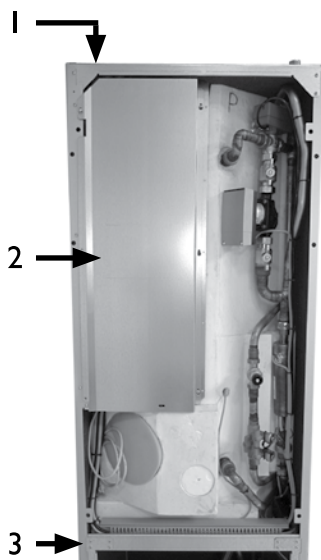
NOTE.

All live wires must be stripped before they are installed in the cable duct of the switch cabinets!

- ① Remove front panel of unit, if necessary.



Transport to installation location, ②.



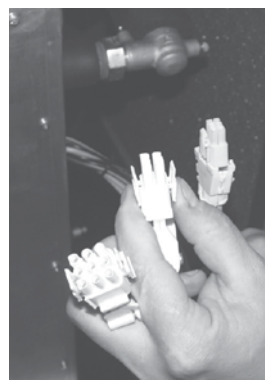
- 1 Penetrations for electric/sensor cables with strain relief screws
- 2 Electrical switch cabinet
- 3 Intermediate floor of unit

- ② Connect connecting plug of module box...



ATTENTION

Insert all three connecting plugs of the module box in the plug-in connections on the bottom of the intermediate floor of the unit. Watch out for retaining nose. Plugs must be mounted for easy movement...



- ③ Open electrical switch cabinet of unit...

To do this, only loosen the two upper screws of the cover plate. Remove the remaining screws. Now the cover plate can be removed...

- ④ Insert load lines and external control and sensor wires in unit through holes at top for electric/sensor wires. Guide wires via the cable duct to the terminals. Tighten strain relief screws.

- ⑤ Install electrical connections according to the terminal diagram and the circuit diagrams.



„Terminal diagram” and “Circuit diagrams”.



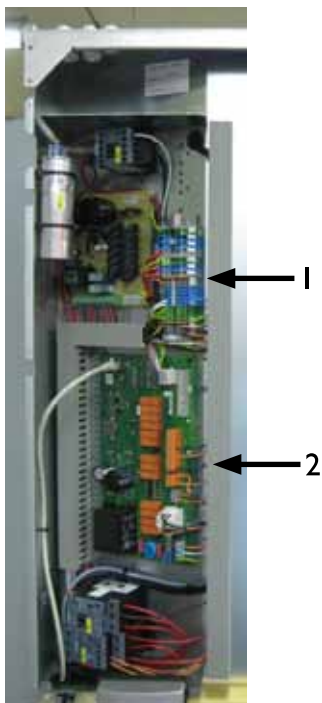
ATTENTION

The power supply for the heat pump and the electric heating element must be equipped with an automatic circuit-breaker with at least 3mm contact spacing to IEC 60947-2.

Note the level of the trigger current.



Overview “Technical data/scope of delivery”,
“Electric” section.



- 1 Regulator connection, compressor load, heating element load
- 2 Regulator board: Connections for sensors, pumps...



Terminal diagram, circuit diagram for respective model



NOTE.

The control element of the heat and heat pump regulator can be connected with a computer or network using a network cable designed for such purposes, therefore allowing the heating and heat pump regulator to be controlled remotely.

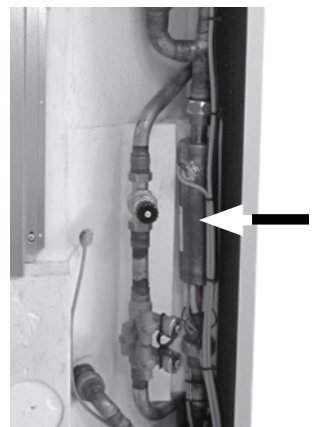
If such a connection is desired, install a screened network cable (category 6, with RJ-45 plug) through the unit when installing the connections and run it through the front façade of the unit, parallel to the already-present heating and heat pump regulator control cable.



NOTE.

Electric heating element is connected to 6kW in the factory (except WZS 4IH/SX to 2kW). It can be reconnected to 2, 4 or 6 kW at the contactor of the electric heating element.

For further information, see the sticker on the electric heating element.



I Sticker on electric heating element

- ⑥ After completion of all electrical installation work, close the switch cabinet inside the unit.
- ⑦ Close the front panel of the unit if no further installation work inside the unit is to be performed immediately.



Flushing and filling the unit



DANGER!

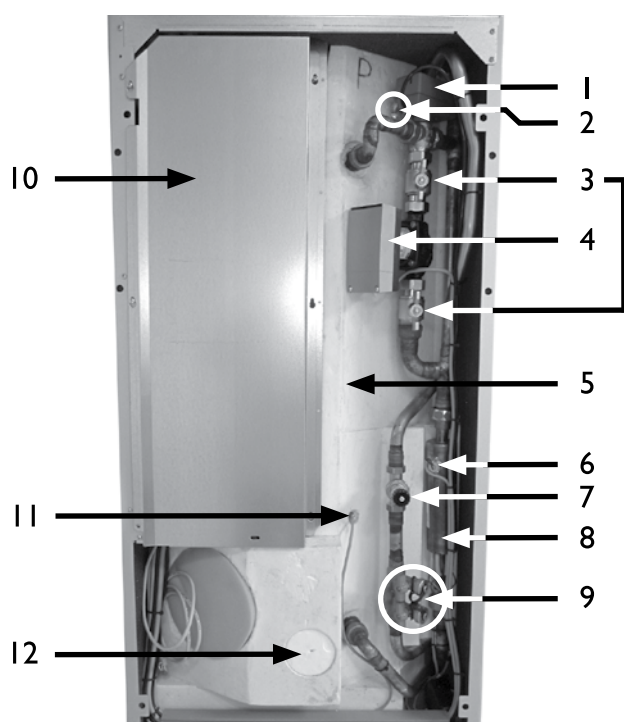
Risk of fatal injury due to electric shock!
The electric switch cabinet inside the unit must be closed with the cabinet's cover!

- ① Open unit if this has not already been done.



Transport to installation location, ②.

- ② Obtain overview of the interior of the unit...



- 1 2-way safety valve heating circuit for domestic water and 3-way switching valve of heating circuit/heating circuit for domestic water
- 2 Bleeder
- 3 Pump ball valves
- 4 Circulating pump, heating circuit/ heating circuit for domestic water
- 5 Hot-water tank
- 6 Reset knob of electric heating element
- 7 Differential pressure overflow valve
- 8 Flushing ball valve
- 9 Electrical switch cabinet
- 10 Safety temperature limiter, domestic water tank
- 11 Safety thermostat, domestic water tank
- 12 Domestic hot water tank drain emptying valve (under foam cover)

FLUSHING AND FILLING THE HEAT SOURCE

Contamination and deposits in the heat source can cause malfunctions.

Proceed as follows:

- ① Flush heat source system thoroughly.
- ② Thoroughly mix the anti-freeze, available as an accessory, with water with the required ratio. Add only anti-freeze mixed with water to the heat source...
- ③ Check concentration of anti-freeze in the mixture...



ATTENTION

The concentration of anti-freeze in the water must be at the level specified for your model.



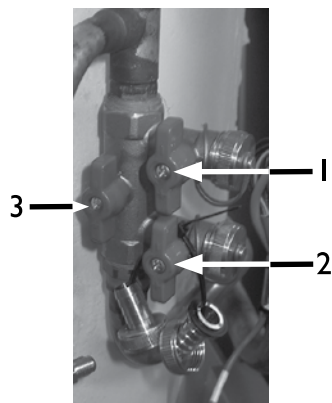
Overview "Technical data/scope of delivery", "Heat source" section.

- ④ Fill heat source with anti-freeze mixture.



FLUSHING AND FILLING THE HEATING AND DOMESTIC HOT WATER CIRCUIT

Use the flushing ball valves for flushing and filling.



Picture shows operating condition at time of delivery

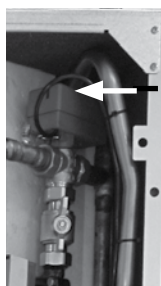
Contamination and deposits in the heating circuit can cause malfunctions.

! ATTENTION

Before flushing and filling the system, the drain pipe of the safety valve must be connected. Do not exceed the response pressure of the safety valve.

Proceed as follows:

- ① Close flushing ball valve 3.
- ② Connect hose for water outlet to flushing ball valve 1
Open flushing ball valve 1
- ③ Connect hose for water inlet to flushing ball valve 2
Open flushing ball valve 2
- ④ Remove the motor of the 3-way valve. To do so, remove the U-bolt on the motor base and carefully pull the motor upward



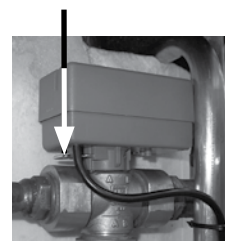
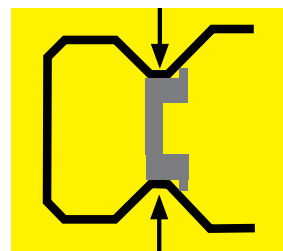
- ⑤ Turn stem of 3-way valve through 180° and flush domestic hot water circuit for approx. 1 minute
- ⑥ Turn stem of 3-way valve through 180° back to starting position (rounded side of stem points to B).
- ⑦ Flush heating circuit! If necessary, heating and hot water circuit can be flushed at the same time! To do this, turn the stem through 30° ... At the same time as flushing, open additional 2-way valve
- ⑧ After completing the flushing and filling, return the stem of the 3-way valve to the starting position and mount the motor of the 3-way valve... Reset switch for 2-way valve

1

NOTE.

To ensure a good seat of the motor on the valve, make sure that the U-bolt with the reduction is not pushed past the lug, because then the motor will not be held securely on the valve!

In order to be supported securely, the U-bolt must bear with both ends against the lug.



- ⑨ Move flushing ball valves to starting position.



FLUSHING, FILLING AND BLEEDING THE DOMESTIC HOT WATER TANK

! ATTENTION

Drinking water must lie within the drinking water quality. The maximum sulphate content is 200mg/l, the maximum chloride content is 200mg/l. The sum of the two values must not exceed 300 mg/l!

- ① Open domestic cold water inlet valve on domestic hot water tank...
- ② Open the domestic hot water valves at the taps...
- ③ Flush the domestic hot water tank until no more air discharges from the valves at the taps...
- ④ Close domestic hot water valves at the taps.

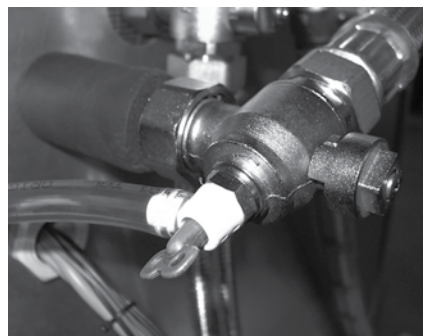
Bleeding

The unit is bled automatically when the bleeder (black cap) of the safety component of the heating circuit is open. If the heating circuit is filled or emptied, the bleeding valve of the safety assembly opens.

BLEEDING THE MODULE BOX

Proceed as follows:

- ① Attach service hose from the extra box to the angle ball valve.
- ② Bleed bleeding valves on the four angle ball valves using the bleeding key...



BLEEDING THE CIRCULATING PUMP OF THE HEAT SOURCE

- ① Unscrew front panel of module box...
- ② Loosen the screw-on cap in the middle of the circulating pump for the heat source...



- ③ Screw on front panel of module box after bleeding.



Insulating the hydraulic connections

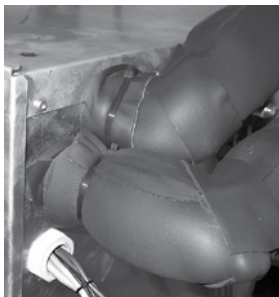


NOTE.

Insulate the heating circuit and the heat source according to local applicable standards and directives.

The angle ball valves of the connections on the module box must be opened.

- ① Check seals of all hydraulic connections. Conduct pressure test...
- ② Remove insulation material for internal pipes from the extra box.
- ③ Insulate all connections: angle ball valves, vibration decouplers, connections and lines of the heat source in the unit so that they are **moistureproof**.



Overflow valve

INSPECTING AND SETTING UP THE OVERFLOW VALVE



NOTE.

Make sure to perform the following steps within a relatively short time. The heat pump switches to high-pressure fault if the maximum return flow temperature is exceeded.

- ① Make sure that the system is running in heating mode (ideally in cold condition)...
With the heating curve set low, switch the system to "Forced heating"...



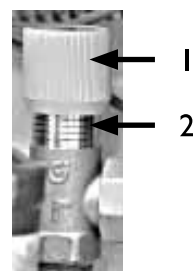
Operating manual of the heating and heat pump regulator.

- ② Shut off valves to heating circuit...
- ③ Make sure that the volume flow is channelled 100% through the overflow valve...
- ④ Read the forward flow and return flow temperatures in the heating and heat pump regulator...



Operating manual of the heating and heat pump regulator.

- ⑤ Turn the adjusting knob of the overflow valve until the temperature difference (= spread) between the forward and return flow is between 5 and 9 K...



- 1 Adjusting knob
2 Overflow valve



NOTE.

Turning the adjusting knob:
– clockwise = increases spread.
– anticlockwise = decreases spread.

- ⑥ Open valves to heating circuit.
- ⑦ Reset the heating and heat pump regulator.



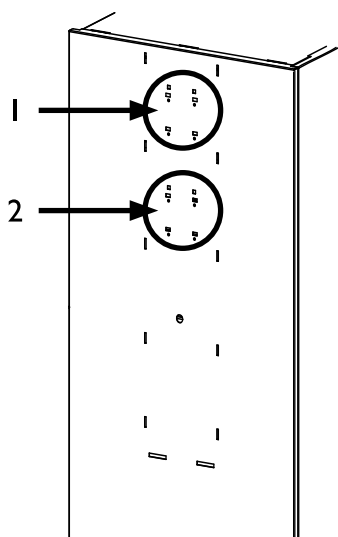
Installation of the control element



DANGER!

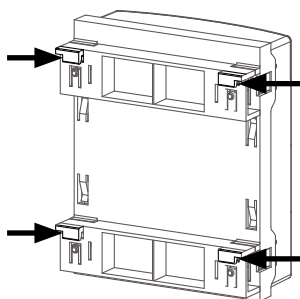
Risk of fatal injury due to electric shock!
Electrical connections may be installed only by qualified electricians.
Before opening the unit, disconnect the system from the power supply and secure it from being switched back on!

Situated at different heights in the front façade of the unit are recesses (each with 4 recesses) for the fastening of the control element:



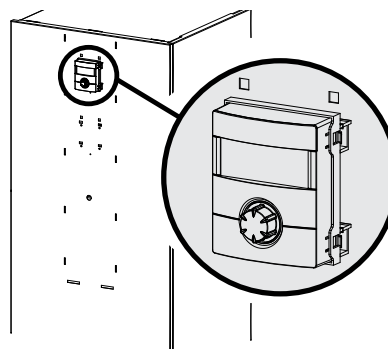
- 1 four upper recesses
- 2 four lower recesses

4 hooks are located on the back of the control element and can be used to hang the control element on the front façade of the unit:



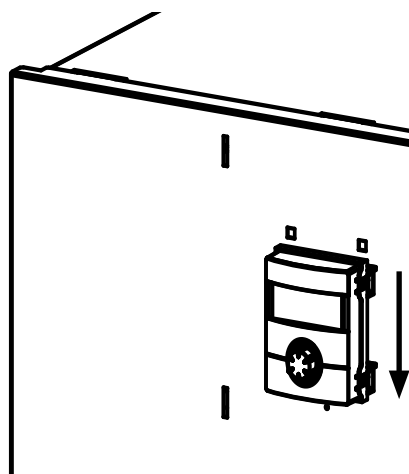
Proceed as follows:

- ① Hang the control element's hooks on the recesses of the front façade (either in the upper or lower recesses)...

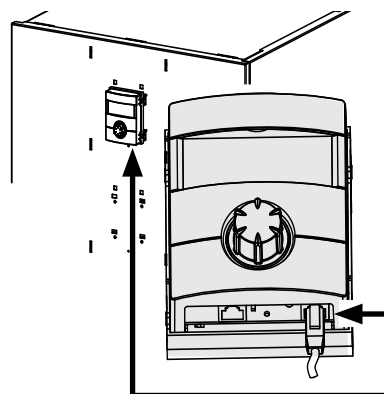


Example:
Control element in upper recesses

- ② Push the control element down until it locks into position...



- ③ Stick the heating and heat pump regulator's control cable into the **right** bushing on the bottom of the control element...





NOTE.

A connection to a computer or a network can be installed via the left bushing on the bottom of the control element, thus allowing the heating and heat pump regulator to be controlled remotely. One precondition is that a shielded network cable (category 6) has been installed through the unit as part of the electrical connection work.



Operating manual for the heating and heat pump regulator, version “Qualified technician”, “Web server” section.

If this network cable is available, insert the network cable’s RJ-45 plug into the left bushing of the control element.



NOTE.

The network cable can be retrofitted at any time. However, in order to be able to connect it, the screen must first be removed.

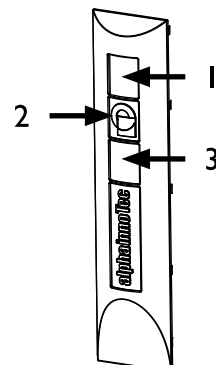
Installation and removal of the screen

INSTALLING THE SCREEN



NOTE.

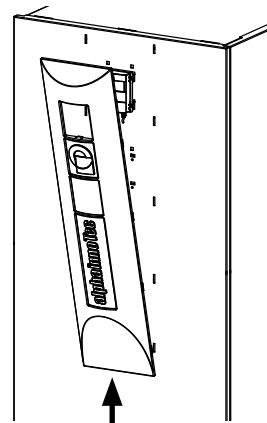
The screen is provided at the time of delivery so that the control element may be inserted in the upper recesses of the front façade. If the control element has been inserted in the lower recesses of the front façade, you must first remove the screen’s temporary cover and then reinsert it above the logo.



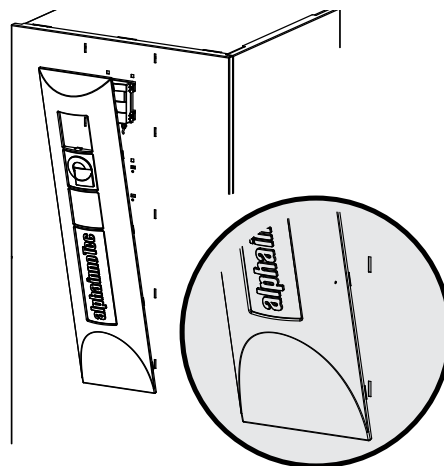
Screen at time of delivery:

- 1 Recess for control element
- 2 Logo
- 3 Temporary cover

- ① First, insert the screen **below**, in the provided slots on the façade...

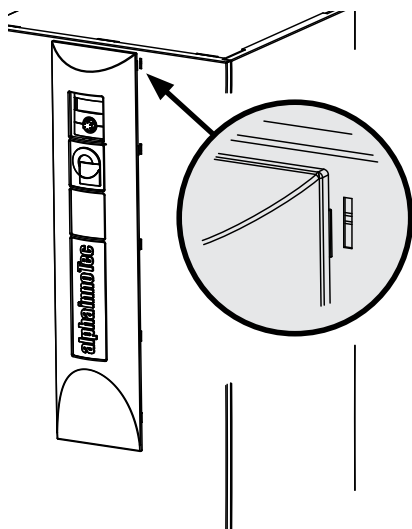


- ② Beginning first on one side and moving upwards, lock the screen’s snap-in lugs in place **in the slots** provided on the façade...





- ③ Then, on the opposite side, moving upwards, lock the screen's snap-in lugs in place, in the slots provided on the façade...
- ④ Finally, press the screen's upper snap-in lugs into the slots provided on the façade.



REMOVING THE SCREEN

In order to remove the screen, the snap-in lugs must **first be loosened by pressing one side** completely towards the **middle of the screen**. Then remove the snap-in lugs from the opposite side.

Hot-water tank

The integrated domestic hot water tank is made of stainless steel and is suitable for normal drinking water.

! ATTENTION

Drinking water must lie within the drinking water quality. The maximum sulphate content is 200 mg/l, the maximum chloride content is 200 mg/l. The sum of the two values must not exceed 300 mg/l!

Commissioning

Proceed as follows:

- ① Conduct a thorough installation inspection and go through the items on the general checklist...



“General checklist”.

The installation inspection will prevent damage to the heat pump system that could be caused by incorrect installation work.

Ensure that...

- The **Installation and assembly** of the heat station is according to the information in this operating manual.
- the electrical installation work has been properly completed.
- a **3-phase automatic circuit breaker** has been installed for the compressor. It must have a contact gap of at least 3 mm.
- the heating circuit and the heat source are flushed, filled and bled thoroughly.
- all valves and shut-off devices of the heating circuit are open.
- the concentration of the anti-freeze must be sufficient.
- all valves and shut-off devices of the heat source are open.
- all pipe systems and components of the system are sealed.

- ② Carefully fill out and sign the completion report for heat pump systems...



“Completion report for heat pump systems”.

- ③ Send completion report for heat pump systems and general checklist to the manufacturer's local partner.



Overview “Customer service”.

- ④ The heat pump system will be commissioned by customer service personnel authorized by the manufacturer. There is a fee for commissioning!



The initial filling and commissioning of the hot water tank must be carried out by a qualified technician.

Ensure sure that...

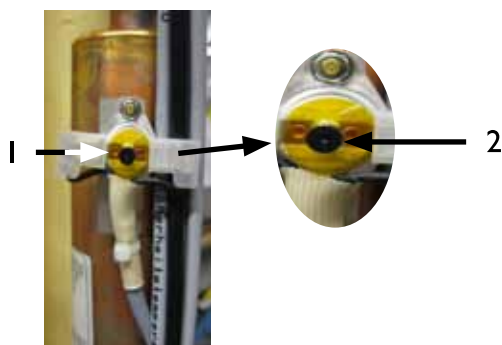
- the water supply to the domestic hot water tank is open.
- the domestic hot water tank is filled.



Operating manual of the heating and heat pump regulator.

SAFETY TEMPERATURE LIMITER

A safety temperature limiter is built into the electric heating element. Please check whether or not the reset knob of this safety temperature limiter has jumped out. If this is the case, push in the button.



- 1 Safety temperature button on electric heating element
- 2 Reset knob

Dismantling



DANGER!

Risk of fatal injury due to electric shock!
Electrical connections may be installed only by qualified electricians.

Before opening the unit, disconnect the system from the power supply and secure it from being switched back on!



WARNING!

Only qualified electrical technicians are allowed to disconnect the unit from the power supply and de-install all electrical connections.



WARNING!

Only qualified heating or cooling system technicians are allowed to remove the unit from the system.



ATTENTION

The anti-freeze mixture of the heat source must not be allowed to enter the sewer system. Collect anti-freeze mixture and dispose of properly.



WARNING!

Only qualified cooling system technicians are allowed to dismantle the unit and its components.



ATTENTION

Recycle or provide for proper disposal of unit components, refrigerants and oil in accordance with the applicable regulations, standards and directives.



REMOVAL OF THE BUFFER BATTERY

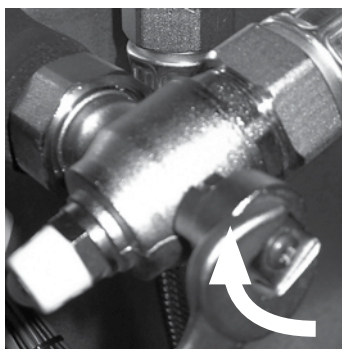
! CAUTION!

Before scrapping the heating and heat pump regulator, remove the buffer battery on the processor board. The battery can be pushed out using a screwdriver. Dispose of battery and electronic components in keeping with environmental considerations.

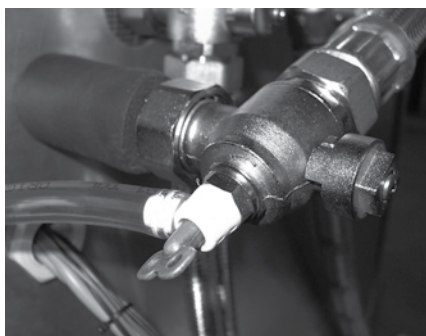
REMOVAL OF THE MODULE BOX

Proceed as follows:

- ① Remove insulation.
- ② Close angle ball valves.



- ③ Attach service hoses from the extra box to the angle ball valves.
- ④ Open bleeding valves of the angle ball valves using a bleeding key and completely empty the module box.



- ⑤ Disconnect hydraulic and electric connections.
- ⑥ Raise module box using the straps and lift and pull from the unit.





Technical data/scope of delivery

Heat pump type	Brine/water Air/water Water/water	• applicable — not applicable
Installation location	Indoors Outdoors	• applicable — not applicable
Conformity		CE
Performance data	Heating capacity/COP at	
	B0/W35 Standard point acc. to EN14511 1 Compressor	kW ...
	B0/W45 Standard point acc. to EN14511 1 Compressor	kW ...
	B0/W55 Standard point acc. to EN14511 1 Compressor	kW ...
Limits of application	Heating circuit	°C
	Heat source	°C
	Additional operating points	...
Sound	Sound level measured at distance of 1m around the device (in free field)	dB(A)
	Sound power level according to EN12102	dB
Heat source	Volume flow: minimum flow rate nominal flow rate maximum flow rate	l/h
	Pressure loss heat pump Δp (with cooling Δp_K) volume flow	bar (bar) l/h
	Free compression heat pump Δp (with cooling Δp_K) volume flow	bar (bar) l/h
	Anti-freeze agent	monoethylene glycol
	minimum concentration frost proof down to	% °C
Heating circuit	Volume flow: minimum flow rate nominal flow rate maximum flow rate	l/h
	Pressure loss heat pump Δp (with cooling Δp_K) volume flow	bar (bar) l/h
	Free compression heat pump Δp (with cooling Δp_K) volume flow	bar (bar) l/h
General unit data	Dimensions (see dimensional drawing for the specified unit size)	unit size
	Total weight (including cooling)	kg (kg)
	Additional weight module 1	kg
	Additional weight module 2	kg
	Connections Heating circuit	...
	Heat source	...
	Refrigerant Refrigerant type Quantity	... kg
Hot water tank	Net contents	l
	External current anode	integrated
	Hot water temperature	till °C
	Output 38°C 45 °C at removal of 10 l/min	l l
	Hot water tank Connections	...
Electric	Voltage code all-pole circuit breaker heat pump *)	... A
	Voltage code circuit breaker control voltage *)	... A
	Voltage code circuit breaker electric heating element *)	l A
Heat Pump	Effective power consumption in standard point B0/W35 according to EN14511: Power consumption current consumption $\cos\phi$	kW A ...
	Maximum device current within the limits of application	A
	Starting current: direct with soft starter	A A
	Protection type	IP
Components	Output electric heating element 3 2 1 phase	kW kW kW
	Circulating pump heating circuit at nominal flow rate: Power consumption current consumption	kW A
	Circulating pump heat source at nominal flow rate: Power consumption current consumption	kW A
Passive cooling function	Specification only for units with designator K: Cooling output at nominal volume flow (15 °C heat source, 25 °C heating water)	kW
Safety equipment	Safety component heating circuit Safety component heat source	Incl. in scope of deliv.: • yes — no
Heating and heat pump regulator		Incl. in scope of delivery: • yes — no
Electronic soft starter		integrated: • yes — no
Expansion vessels	Heat source: Scope of delivery Volume Initial pressure	• yes — no l bar
	Heating circuit: Scope of delivery Volume Initial pressure	• yes — no l bar
Overflow valve		integrated: • yes — no
Vibration decouplers	Heating circuit heat source	Incl. in scope of delivery: • yes — no

UK813195-c

*) comply with local regulations n.n. = not detectable



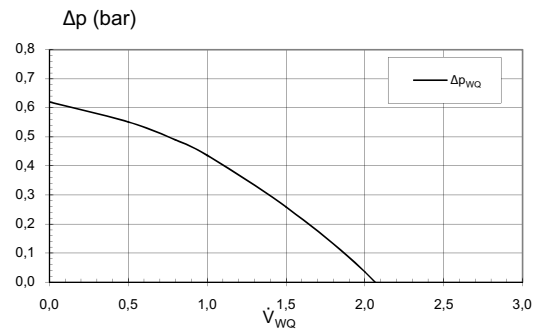
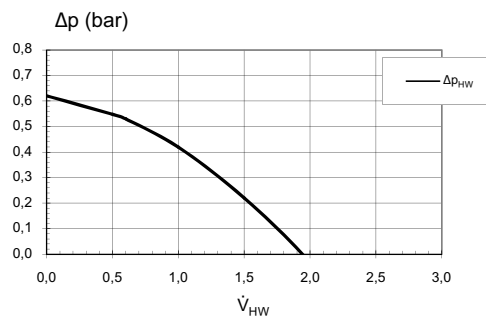
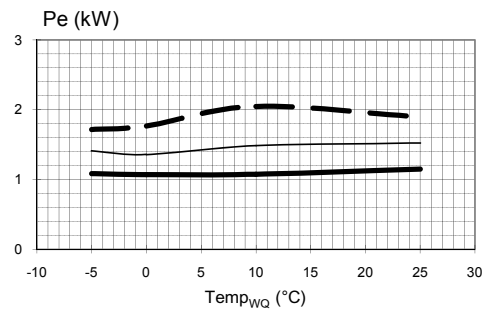
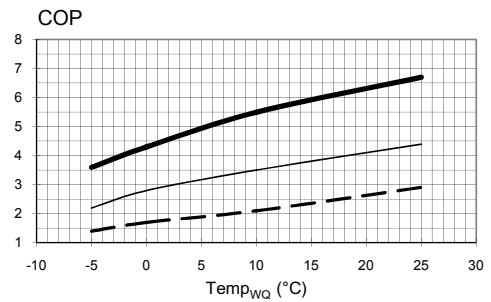
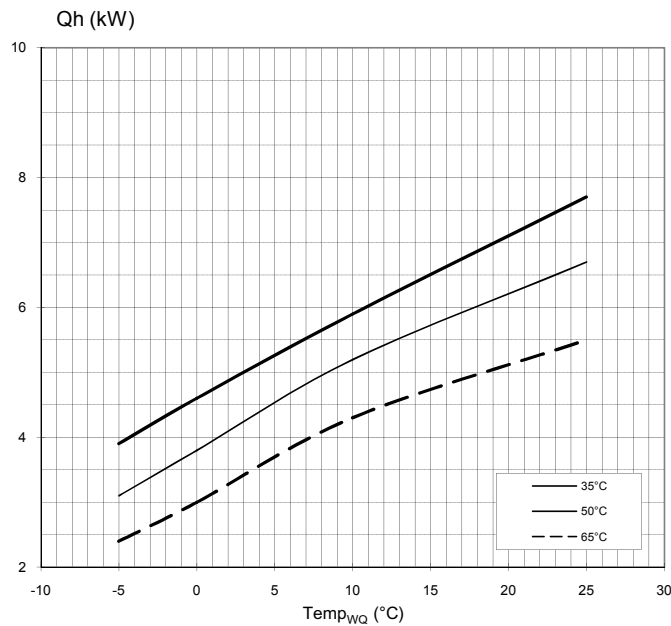
	WZS41H/SX	WZS 61H/SX	WZS 81H/SX	WZS 101H/SX
	• — —	• — —	• — —	• — —
	• —	• —	• —	• —
	•	•	•	•
	4,6 4,30	6,0 4,35	7,6 4,40	9,5 4,40
	4,0 3,30	5,7 3,50	7,1 3,58	8,7 3,60
	3,6 2,40	5,4 2,90	6,6 2,95	7,8 2,98
	20 – 60	20 – 65	20 – 60	20 – 65
	-5 – 25	-5 – 25	-5 – 25	-5 – 25
	B0 / W65	—	B0 / W65	—
	37	37	37	37
	49	49	49	49
	800 1100 1600	1100 1500 2200	1300 1800 2500	1800 2300 3500
	— —	— —	— —	— —
	0,41 (—) 1100	0,42 (—) 1500	0,39 (—) 1800	0,27 (—) 2300
	•	•	•	•
	25 -13	25 -13	25 -13	25 -13
	400 800 1000	500 1050 1350	660 1300 1700	800 1650 2100
	— —	— —	— —	— —
	0,52 (—) 600	0,53 (—) 750	0,49 (—) 950	0,44 (—) 1200
	1	1	1	1
	223 (—)	238 (—)	240 (—)	245 (—)
	160	160	160	160
	63	78	80	85
	R1"AG	R1"AG	R1"AG	R1"AG
	G1" ÜWM DIN ISO 228	G1" ÜWM DIN ISO 228	G1" ÜWM DIN ISO 228	G1" ÜWM DIN ISO 228
	R407c 1,43	R407c 1,50	R407c 1,70	R407c 1,95
	195	195	195	195
	—	—	—	—
	52	52	52	52
	250 200	250 200	250 200	250 200
	R 3/4" AG	R 3/4" AG	R 3/4" AG	R 3/4" AG
	1~/N/PE/230V/50Hz C10	1~/N/PE/230V/50Hz C16	1~/N/PE/230V/50Hz C16	1~/N/PE/230V/50Hz C20
	1~/N/PE/230V/50Hz B10	1~/N/PE/230V/50Hz B10	1~/N/PE/230V/50Hz B10	1~/N/PE/230V/50Hz B10
	1~/N/PE/230V/50Hz B10	1~/N/PE/230V/50Hz B32	1~/N/PE/400V/50Hz B32	1~/N/PE/230V/50Hz B32
	1,07 4,6 —	1,37 5,9 0,96	1,7 7,4 0,97	2,13 9,73 0,93
	8,2	9,9	11,6	15,9
	34,0 —	— 27,0	— 27,0	— 35
	20	20	20	20
	— — 2	6 4 2	6 4 2	6 4 2
	0,90 n.n.	0,90 n.n.	0,10 n.n.	0,10 n.n.
	0,10 n.n.	0,10 n.n.	0,10 n.n.	0,11 n.n.
	—	—	—	—
	• •	• •	• •	• •
	•	•	•	•
	—	•	•	•
	• 12 0,5	• 12 0,5	• 12 0,5	• 12 0,5
	• 25 1,5	• 25 1,5	• 25 1,5	• 25 1,5
	•	•	•	•
	• •	• •	• •	• •
		813250a	813251a	813252a

813249a



Performance curves

WZS 41H/SX



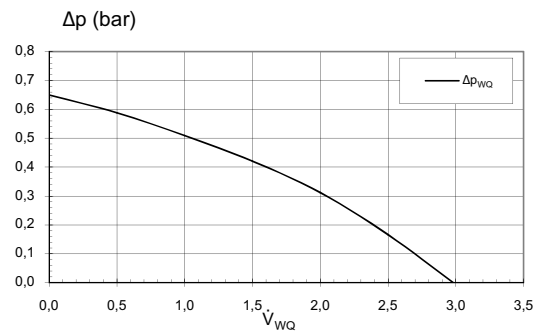
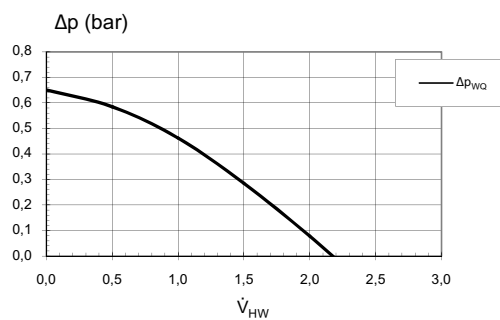
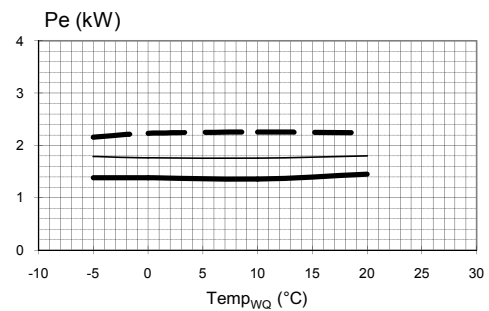
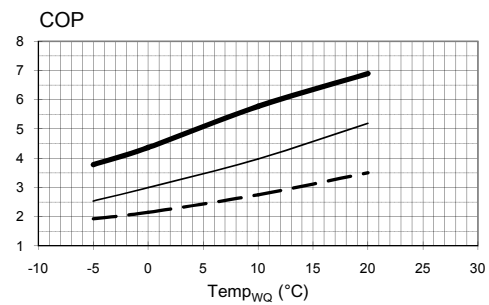
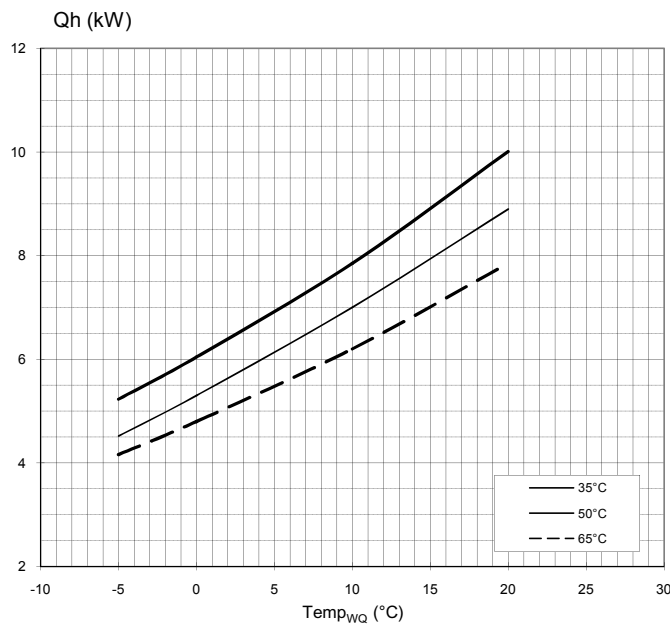
823083

Legend:	UK823000L/170408
$\dot{V}_{HW}$	Volume flow, heating water
$\dot{V}_{WQ}$	Volume flow, heat source
$Temp_{WQ}$	Temperature, heat source
Q_h	Heating capacity
Pe	Power consumption
COP	Coefficient of performance / efficiency rating
$\Delta p_{HW} / \Delta p_{HW/K}$	Free compression, heating circuit / free compression, heating circuit with cooling
$\Delta p_{WQ} / \Delta p_{WQ/K}$	Free compression, heat source / free compression, heat source with cooling



WZS 61H/SX

Performance curves



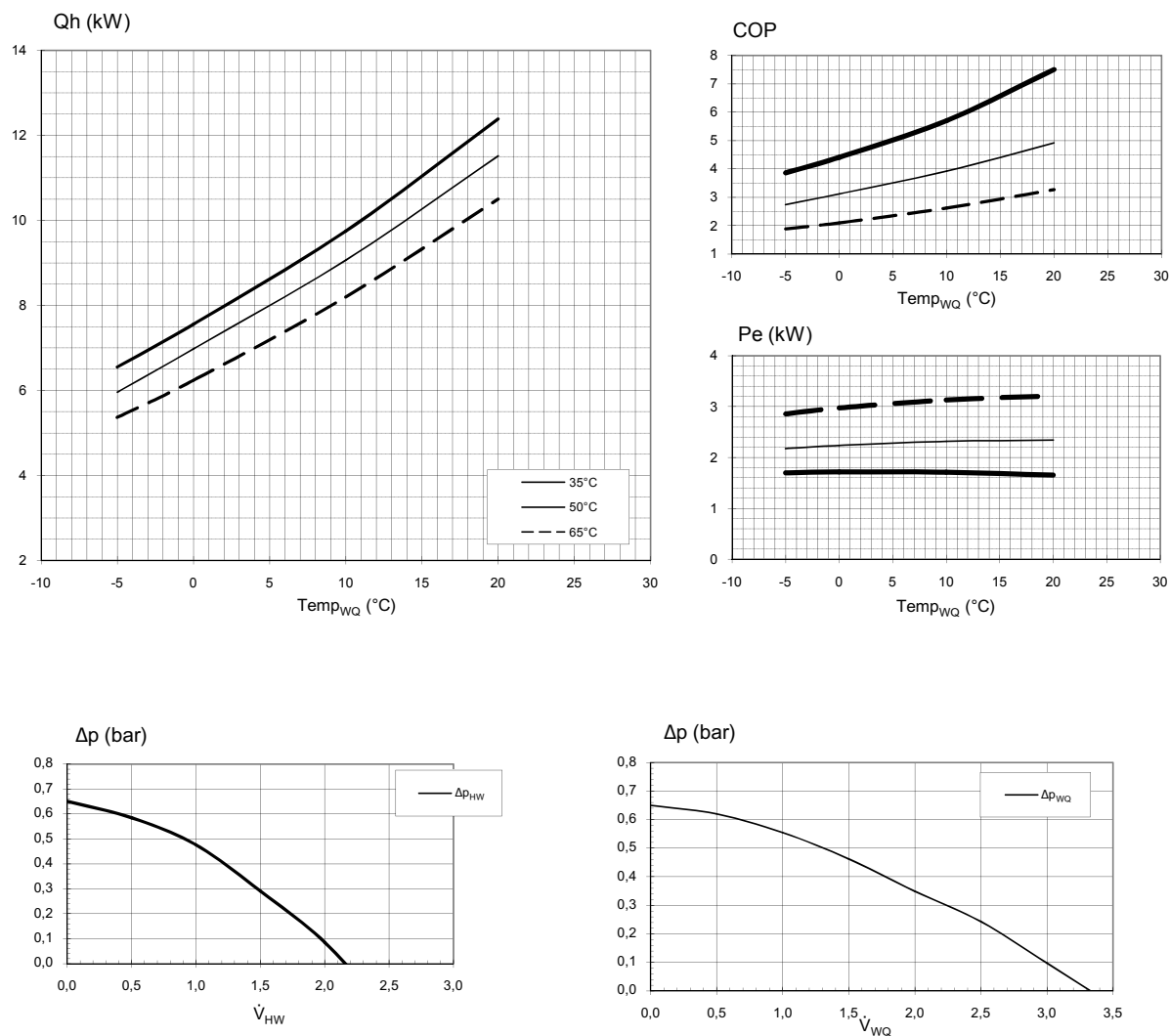
823084

Legend:	UK823000L/170408
$\dot{V}_{HW}$	Volume flow, heating water
$\dot{V}_{WQ}$	Volume flow, heat source
Temp _{WQ}	Temperature, heat source
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance / efficiency rating
Δp _{HW} / Δp _{HW/K}	Free compression, heating circuit / free compression, heating circuit with cooling
Δp _{WQ} / Δp _{WQ/K}	Free compression, heat source / free compression, heat source with cooling



Performance curves

WZS 81H/SX



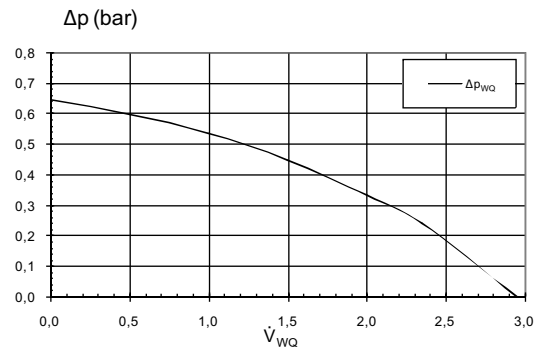
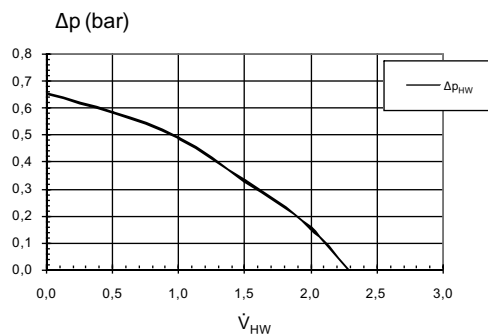
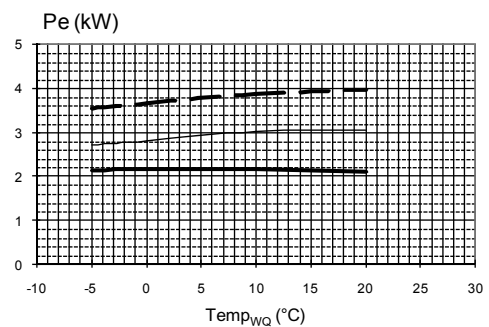
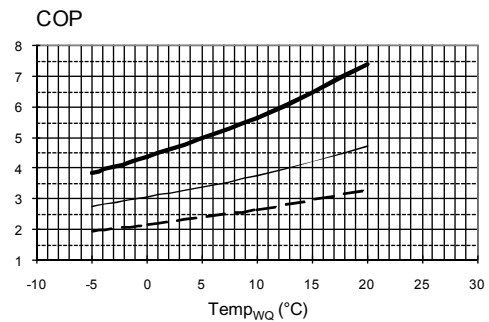
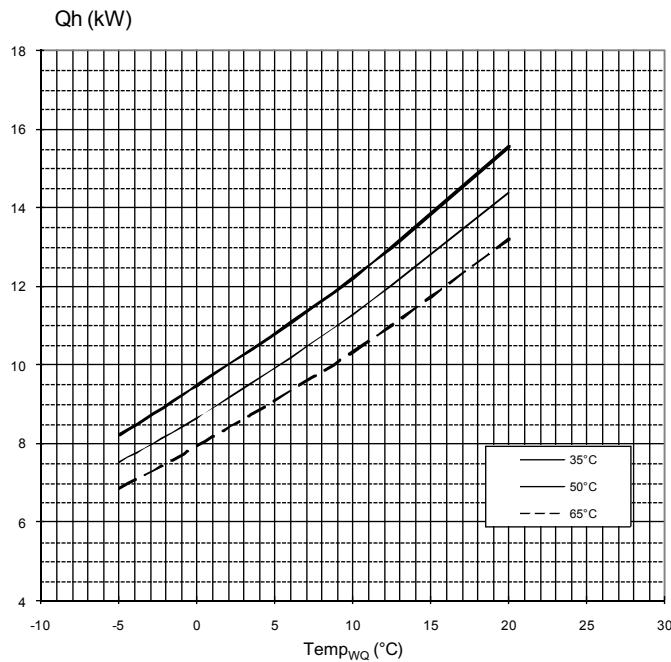
823085

Legend:	UK823000L/170408
$\dot{V}_{HW}$	Volume flow, heating water
$\dot{V}_{WQ}$	Volume flow, heat source
Temp _{WQ}	Temperature, heat source
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance / efficiency rating
$\Delta p_{HW} / \Delta p_{HW/K}$	Free compression, heating circuit / free compression, heating circuit with cooling
$\Delta p_{WQ} / \Delta p_{WQ/K}$	Free compression, heat source / free compression, heat source with cooling



WZS 101H/SX

Performance curves

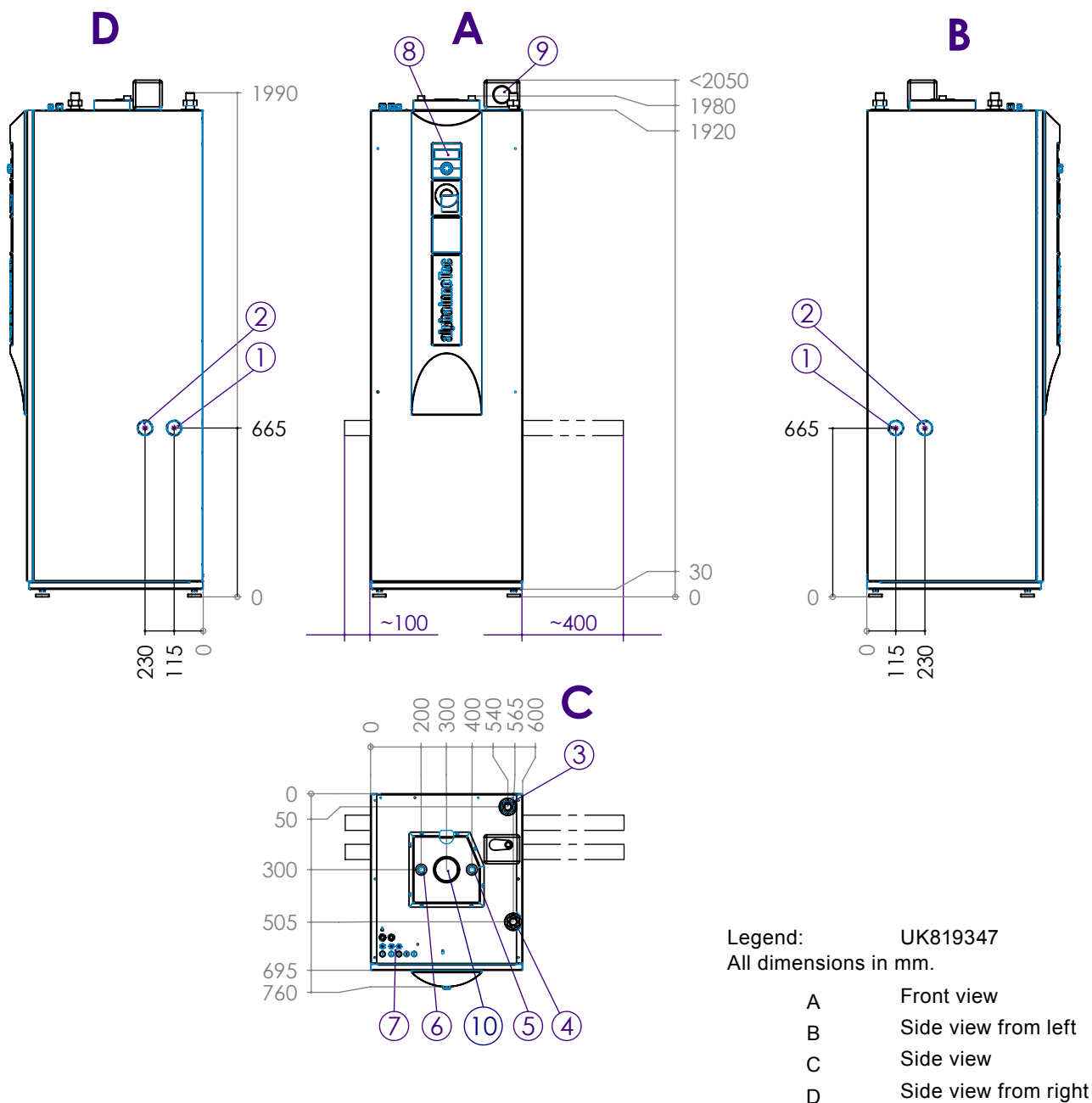


823086

Legend:	UK823000L/170408
$\dot{V}_{HW}$	Volume flow, heating water
$\dot{V}_{WQ}$	Volume flow, heat source
Temp _{WQ}	Temperature, heat source
Qh	Heating capacity
Pe	Power consumption
COP	Coefficient of performance / efficiency rating
Δp _{HW} / Δp _{HW/K}	Free compression, heating circuit / free compression, heating circuit with cooling
Δp _{WQ} / Δp _{WQ/K}	Free compression, heat source / free compression, heat source with cooling



Dimensional drawings



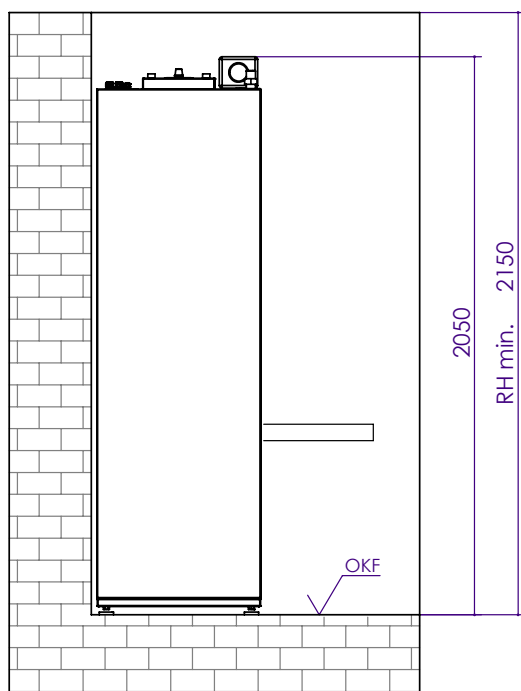
- 1 Heat source inflow flat sealing cap nut (optionally right or left): G1"
- 2 Heat source outflow flat sealing cap nut (optionally right or left): G1"
- 3 Heating water inflow (return flow): R1"
- 4 Hot water outflow (forward flow): R1"
- 5 Hot water: R $\frac{3}{4}$ "
- 6 Cold water: R $\frac{3}{4}$ "
- 7 Ducts for electric/sensor cables
- 8 Control element (in extra box)
- 9 Safety component heating circuit (in extra box)
- 10 Safety valve hot water tank: $\varnothing 22$
- 11 Inspection chamber:

For emptying the domestic hot water tank, see „flushing and filling the unit“ in the operating manual

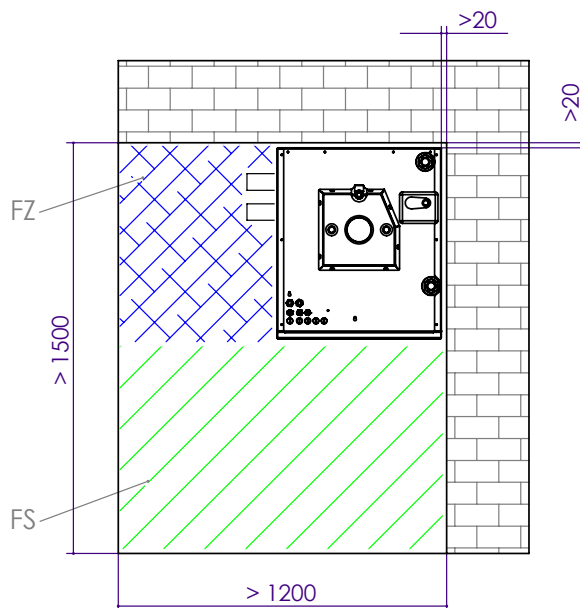
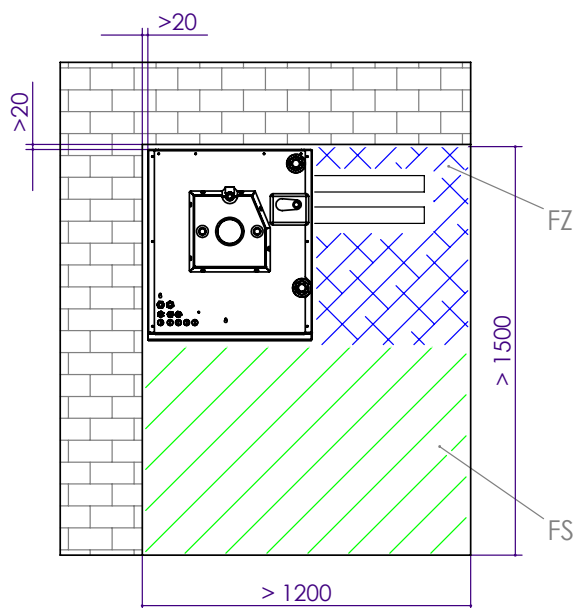
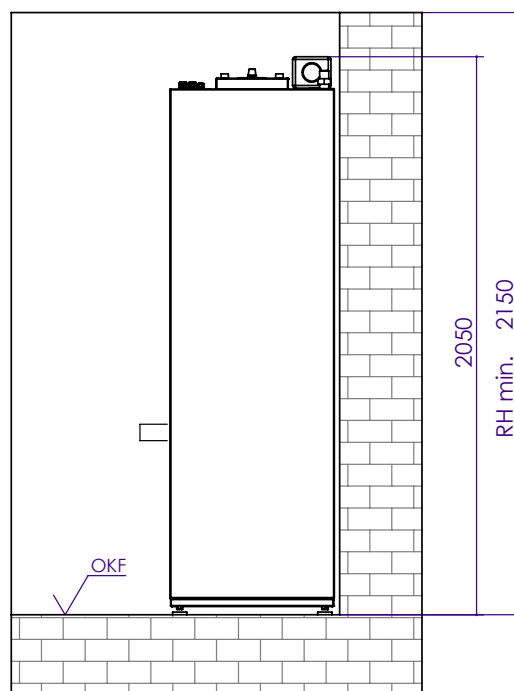


Clearance dimensions

V 1



V 2



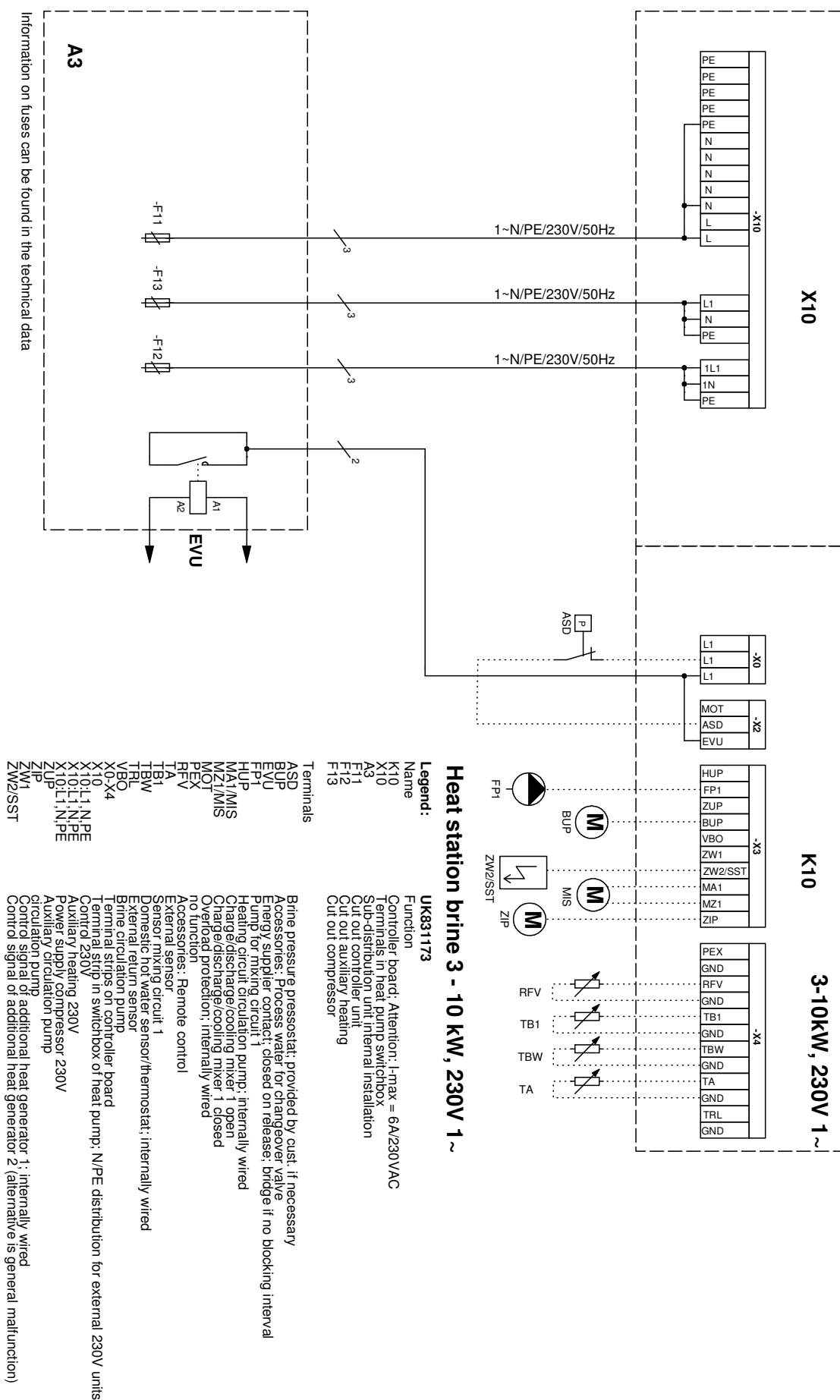
Legend: UK819349
All dimensions in mm.

RH min.	Room height minimum
FZ	Free space for functionally necessary accessories
FS	Free space for service purposes
OKF	Top edge of finished floor
V1	Version 1
V2	Version 2



Terminal diagram

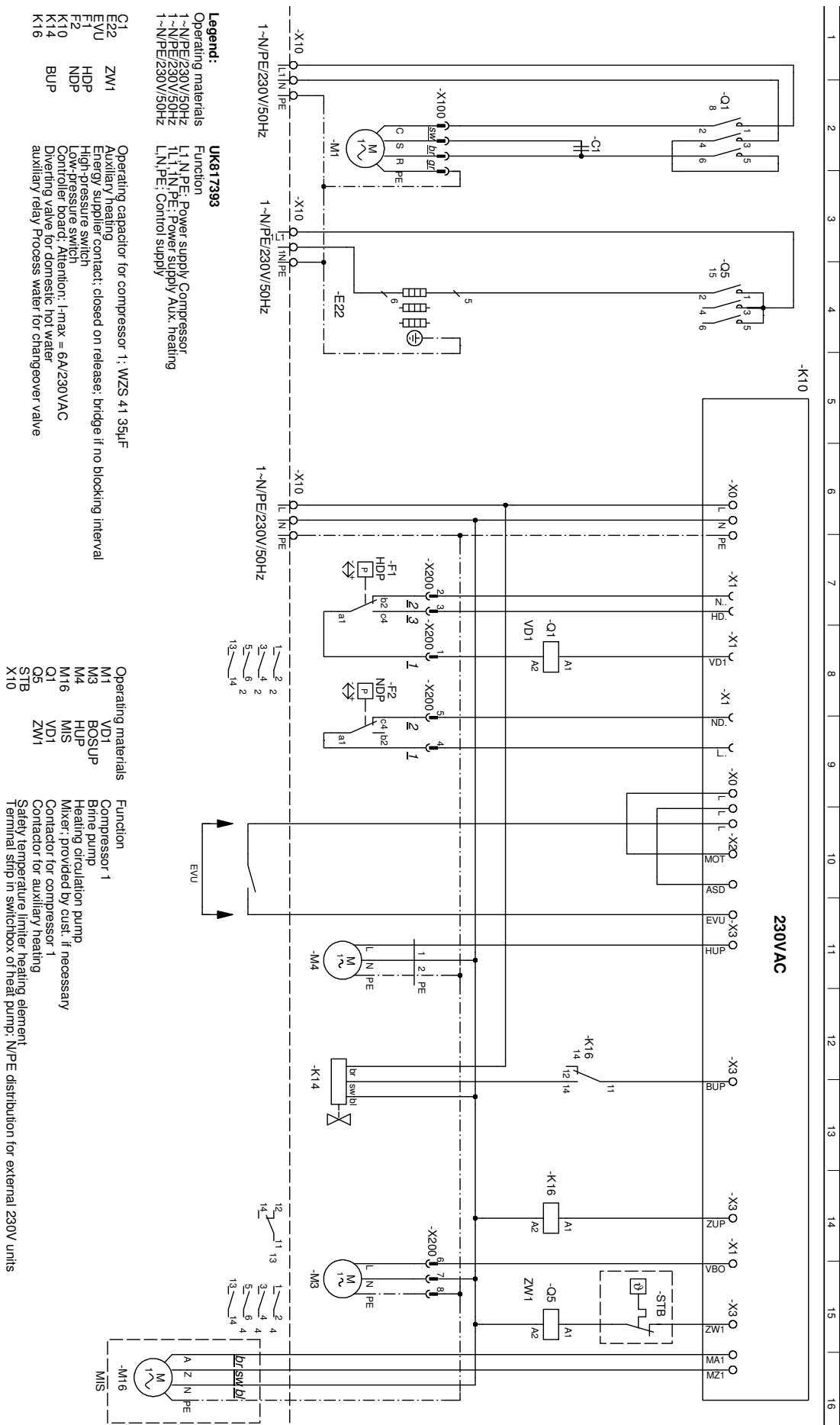
WZS 41H/SX – WZS 101H/SX





WZS 41H/SX

Circuit diagram 1/2





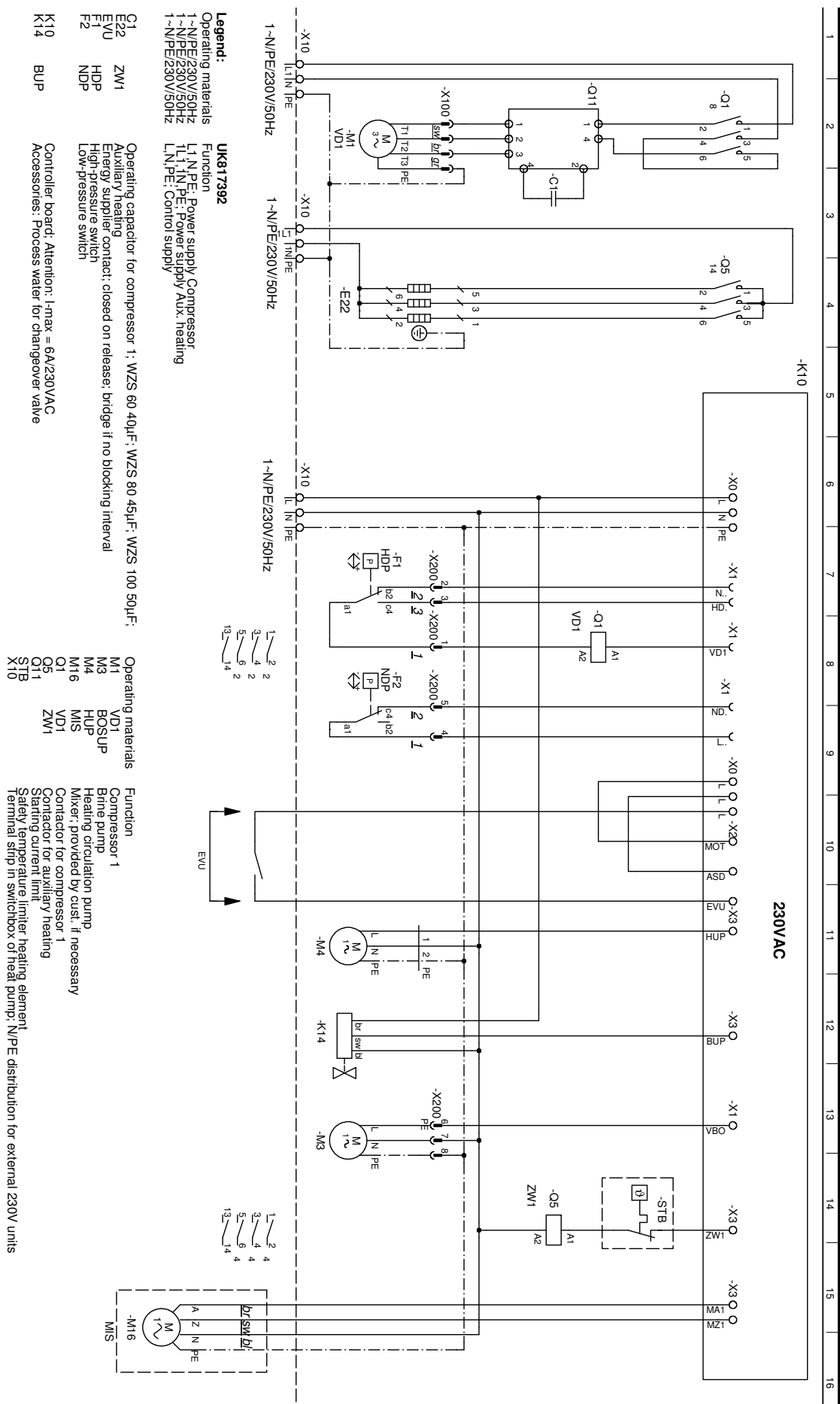
WZS 41H/SX





WZS 61H/SX - WZS 101H/SX

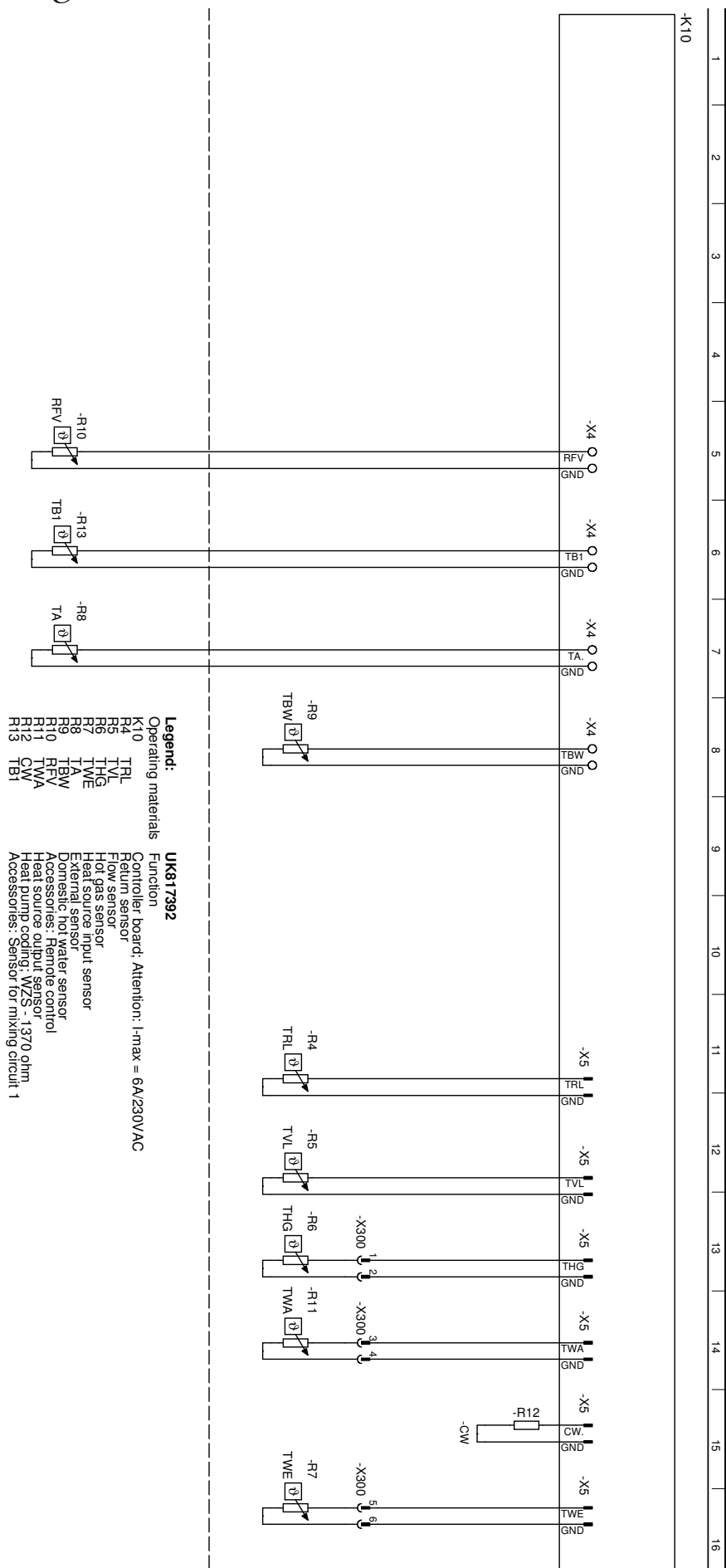
Circuit diagram 1/2





Circuit diagram 2/2

WZS 61H/SX - WZS 101H/SX





EC declaration of conformity



in accordance with the EC Machinery Directive 2006/42/EC, Annex II A

The undersigned

confirms that the following designated device(s) as designed and marketed by us fulfill the standardized EC directives, the EC safety standards and the product-specific EC standards.

In the event of modification of the device(s) without our approval, this declaration shall become invalid.

DESIGNATION OF THE DEVICE(S)

Heat Pump

Unit model	Number	Unit model	Number
WZS 41H/SX	100 596		
WZS 61H/SX	100 61102		
WZS 81H/SX	100 61202		
WZS 101H/SX	100 61302		

EC DIRECTIVES

2006/42/EG
2006/95/EG
2004/108/EG

STANDARDIZED EN

EN 378	EN 349
EN 60529	EN 60335-1/-2-40
EN ISO 12100-1/2	EN 55014-1/-2
EN ISO 13857	EN 61000-3-2/-3-3

* NATIONAL STANDARDS/DIRECTIVES

Kategorie: II
Modul: A1
Benannte Stelle:
"TÜV-SÜD
Industrie Service
GmbH (Nr.:0036)"

Company:



Industriestrasse 3, D – 95359 Kasendorf

Place, date::

Kasendorf, 10.08.2012

Signature::

"Jesper Stannow
Technical Director

DE818162





Customer service

FOR PREPARATION OF THE COMPLETION REPORT FOR HEAT PUMP SYSTEMS

The general checklist is intended as an aid for the installation and assembly personnel. It makes no claim to be exhaustive. Nevertheless, all items must be checked carefully for compliance.

Heat source air

- Channels closed and sealed ☐ Yes
- Minimum cross-section is met ☐ Yes
- Weather protection screen installed ☐ Yes
- Rotary field of fan ☐ O.K.

Heat source brine / heat source water

- Heat source volume flow ¹⁾ ²⁾ ☐ O.K.
- Motor protection setting A
- Rotary field of heat source circulating pump ☐ O.K.
- Heat source filled, air-free and sealed ☐ Yes

Brine

- Frost protection inspected down to °C
- Type of anti-freeze agent (please enter)

Water

- Water quality OK ³⁾ ☐ Yes
- Well units ☐ Yes
- Other heat source ☐ Yes

Heat pump

- Installation of condensate hose ☐ O.K.
- Decoupled from structure ☐ Yes
- Vibration decouplers of heating circuit and heat source connections mounted ☐ Yes

Solar heat system

- ☐ No ☐ Yes
- Solar heat system filled, air-free and sealed ☐ Yes
- Frost protection inspected down to °C
- Type of anti-freeze agent (please enter)

Hydraulic integration

- Integration of the heating heat pump into the heating system corresponds to the planning documents ☐ Yes
- Shut-off devices are correctly set ☐ Yes

Heating

- Volume flow ¹⁾ ²⁾ ☐ O.K.
- Heating system designed for maximum °C
- Heating system filled, air-free and sealed ☐ Yes
- Low temperature heating ☐ Yes
- High temperature heating ☐ Yes
- All heating circuits can be opened ☐ Yes
- Forward flow tank ☐ Yes
- Return flow tank ☐ Yes
- Separating tank ☐ Yes
- Additional heating kW

Domestic hot water

Type: Hot-water tank (please enter) ⁴⁾

- with heat pump ☐ Yes
- Request with thermostat ☐ Yes
- Request with sensor ☐ Yes
- Volume flow ¹⁾ ²⁾ ☐ O.K.
- Connections sealed ☐ Yes
- Exchanger area m²
- Nominal contents l
- Electric flange heating kW

Control / electrical connection

- All electrical components are permanently connected in accordance with the installation and operating instructions and the requirements of the electricity supply company (not a construction site connection) ☐ Yes
- Clockwise rotating field observed ☐ Yes
- All sensors are present and correctly installed ☐ Yes

1) checked with specifications. • 2) The minimum volume flow must be ensured through uncontrolled circulating pumps with constant volume flows. • 3) Report of water analysis must be submitted. • 4) No functional guarantee is given if tanks are used which are not made by Alpha-InnoTec GmbH or are not approved for the heat pump type..

- The heating system is filled and pressure tested; the circulating pumps function properly. ☐ No ☐ Yes
- The heat source system is completed, inspected and OK. ☐ No ☐ Yes
- The heating circuit, heat source system and circulating pumps have been bled. ☐ No ☐ Yes
- All volume flows and water flow rates have been checked and are OK. ☐ No ☐ Yes

Checked on:

by:

Signature:

The following applies in Germany and Austria:

Send this general checklist **along with the completed report** to the factory customer service.

Sending the general checklist and the completion report also serves as a request for a technician authorized by the manufacturer to commission your heat pump.





COMPLETION REPORT AND REQUEST FOR FACTORY COMMISSIONING

During factory commissioning, the system will be inspected to ensure that it is functioning properly. This ensures that all factory specifications have been checked and that the system can operate reliably over an extended period. The factory commissioning involves costs and is mandatory for extension of the warranty services.

☐ INITIAL COMMISSIONING ☐ REPEAT COMMISSIONING

Heat pump type / serial number		Regulator type	
CONTRACTOR		END CUSTOMER / OPERATOR	
☐ electric ☐ heating			
☐ other company			
Company			
Contact person		Last name First name	
Street address		Street address	
Postcode Head office		Postcode City	
Phone		Phone	
Preferred date: *)		Alternate date: *)	
Date Time		Date Time	

*) The contractor must submit the completion report **along with the completely reviewed general checklist 14 business days** prior to the desired date of commission.

If there is a conflict with the date, you will be contacted by phone.

I hereby confirm that all preliminary work required for commissioning has been carried out and completed. The system is ready for operation.

Requested commissioning

IBN (Art.-Nr. I600210I) ☐	IBN P5+EW (Art.-Nr. I600250I) ☐
IBN 5+ (Art.-Nr. I600220I) ☐	IBN WP + LG5+ (Art.-Nr. I600090I) ☐
IBN 5+EW (Art.-Nr. I600230I) ☐	IBN L (Art.-Nr. I600500I) ☐
IBN P5+ (Art.-Nr. I600240I) ☐	IBN L EW (Art.-Nr. I600270I) ☐
Free IBN on the basis of the sales campaign ☐	

I, the undersigned, hereby request commissioning in return for a fee.

Invoice to ☐ Contractor ☐ End customer / operator

Location	Date	Name (block letters)	Signature	Company stamp
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In the event that the system is not ready for operation and if installation work has to be performed on the system by the commissioning technician during commissioning, this will involve charges (billed separately) to the contractor. If the system is not ready for operation, the commissioning technician can request a repeat commissioning, which will involve additional costs. The contractor or an authorized representative must be present during commissioning.

It is absolutely necessary that the operator is present for the one-time, free instruction that occurs during commissioning.

A report will be prepared during commissioning.



ADDRESSES FOR A SERVICE CASE

For a current list and additional partners of the manufacturer, please visit www.alpha-innotec.com.

AT

Alpha-InnoTec Österreich
ECO-WP
Wärmepumpenhandelsges. m.b.H
Währingerstr. 26
1090 Wien
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Fax: +43 (0) 800 205 854
office@alpha-innotec.at
www.alpha-innotec.at

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NATHAN Import/Export N.V.-
S.A.
Lozenberg 4
1932 Zaventem
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Fax: +32 (0) 27 25 35 53
info@nathan.be
www.nathan.be

BR

THERMACQUA
AV. República Argentina
3021 Conj. 14 Piso L
CEP 80610-260 Portao Curtiba
PR
Tel.: +55 (0) 41 301 566 59
Fax: +55 (0) 41 301 566 59
otto@thermacqua.com.br
www.thermacqua.com.br

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6246 Altishofen
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www.alpha-innotec.ch

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www.alpha-innotec.ch

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www.alpha-innotec.cz

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www.alpha-innotec.hu

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www.origen.ie

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www.alpha-innotec.it

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6921 RZ Duiven
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www.nathan.nl

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www.hydro-tech.pl

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info@gudenergy.pt
www.gudenergy.pt

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