User manual

Air/water heat pump
NIBE S2060 6, 10

UHB EN 2604-1
831340

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Important information

The manual must be left with the customer.

For the latest version of the product's documentation, see nibe.eu.

This manual contains information for operation and maintenance. For more technically detailed information, please refer to the Installer Manual.

> **CAUTION!**
>
> Read the enclosed safety manual when taking S2060 into use and when taking it out of use.

Installation data

Product	S2060
Serial number	
Installation date	
Installer	

Accessories	

Serial number must always be given.

Certification that the installation is carried out according to instructions in the accompanying installer manual and applicable regulations.

Date _____ Signed _____

Symbols

Explanation of symbols that may be present in this manual.

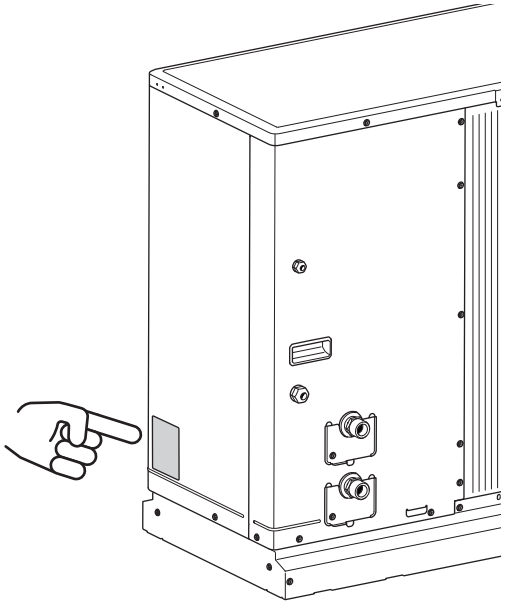
> **CAUTION!**
>
> This symbol indicates danger to person or machine.

> **NOTE!**
>
> This symbol indicates important information to consider when maintaining the installation.

> **TIP!**
>
> This symbol indicates tips on how to facilitate using the product.

Serial number

The serial number for S2060 can be found on the side of the foot on the type plate.



NOTE!

You need the product's (14 digit) serial number for servicing and support.

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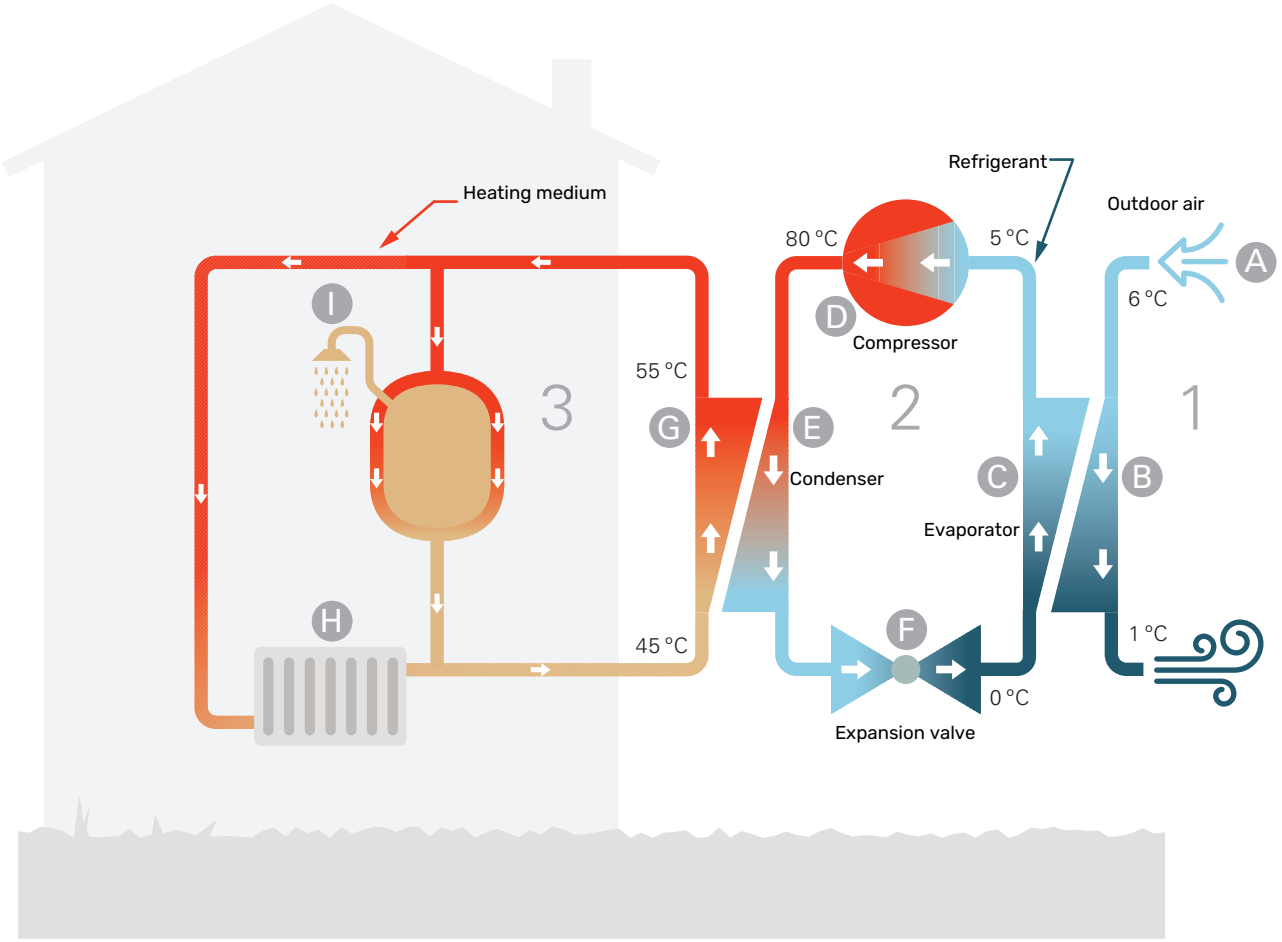
Installation function

An air/water heat pump installation uses the outdoor air to heat a home. The conversion of the outdoor air's energy into residential heating occurs in three different circuits. The heat energy is transferred from the outdoor air (1) to the refrigerant circuit in the heat pump (2), where the refrigerant achieves a higher temperature due to increased pressure from the heat pump's compressor. The heat is then transferred to the heating medium circuit (3), which distributes it into the house.



The temperatures are only examples and may vary between different installations and time of year.

Outdoor air

A The outdoor air is drawn into the outdoor unit.

B The fan then routes the air to the outdoor unit's evaporator. Here, the air releases thermal energy to the refrigerant and the air's temperature drops. The cold air is then blown out of the outdoor unit.

Refrigerant circuit

C In a closed system in the outdoor unit, a gas (a refrigerant) circulates, which also passes the evaporator. The refrigerant has a very low boiling point. In the evaporator, the refrigerant collects the heat energy from the outdoor air and starts to boil.

D The gas that is produced during boiling is routed into an electrically powered compressor. When the gas is compressed, the pressure increases and the gas's temperature increases considerably, from 0 °C to approx 80 °C.

E From the compressor, gas is forced into a heat exchanger, condenser, where it releases heat energy to the indoor module, whereupon the gas is cooled and condenses to a liquid form again.

F As the pressure is still high, the refrigerant can pass an expansion valve, where the pressure drops so that the refrigerant returns to its original temperature. The refrigerant has now completed a full cycle. It is routed to the evaporator again and the process is repeated.

Heat medium circuit

G The heat energy that the refrigerant produces in the condenser is retrieved by the indoor unit's heating medium, water, which is heated to approx. 55 °C (supply temperature).

H The heating medium circulates in a closed system and transports the heated water's heat energy to the house radiators/heating coils.

I The indoor module's integrated charge coil is placed in the boiler section. The water in the coil heats up the surrounding domestic hot water.

Control of S2060

S2060 is controlled in different ways, depending on your system. You control the heat pump via your indoor module or control module.
See the Installer Manual for the indoor module/control module.

During installation, the installation engineer adjusts the necessary settings for the heat pump in the indoor module or control module, so that the heat pump works optimally in your system.

Maintenance of S2060

Regular checks

When your heat pump is located outdoors some external maintenance is required.

> **CAUTION!**
>
> Insufficient maintenance can cause serious damage to S2060, which is not covered by the guarantee.

CHECKING GRILLES AND BOTTOM PANEL ON S2060

Check regularly throughout the year that the grille is not clogged by leaves, snow or anything else.

You should be particularly vigilant during windy conditions and/or in the event of snow, as the grille can become blocked.

Check that the back is free from dirt and leaves.

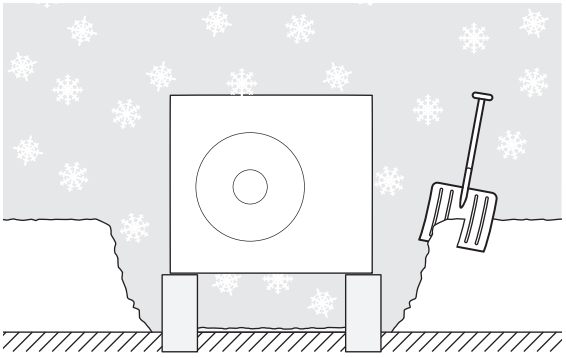
Also check that the drain holes in the bottom panel are free from dirt and leaves.

Regularly check that condensation is routed away correctly through the condensation pipe. Ask your installer for assistance if required.

Keep free of snow and ice

Prevent snow building up and covering the grille on S2060.

Keep free of snow and/or ice.



CLEANING THE OUTER CASING

If necessary the outer casing can be cleaned using a damp cloth.

Care must be exercised so that the heat pump is not scratched during cleaning. Avoid spraying water into the grilles or on the sides so that water penetrates into S2060. Prevent S2060 coming into contact with alkaline cleaning agents.

In event of long power cuts

In the event of prolonged power failures it is recommended that the part of the heating system located outdoors is drained. This is made easier if shut-off and draining valves are installed. Ask your installer if you are uncertain.

Silent mode

The heat pump can be set to "Silent mode", which reduces the heat pump's noise level. This function can help when S2060 has to be placed in noise-sensitive areas. The function should only be used for limited periods, because S2060 might not reach its dimensioned power.

Updating the software

Information about updating software can be found in the Installer Manual for your indoor module or control module.

Disturbances in comfort

In most cases, the indoor module / control module notes a malfunction and indicates this with alarms and presents action instructions in the display.

> **CAUTION!**
>
> Work behind covers secured by screws may only be carried out by, or under the supervision of, a qualified installation engineer.

Troubleshooting

If the operational interference is not shown in the display the following tips can be used:

BASIC ACTIONS

- Group and main fuses of the building.
- The building's earth circuit breaker.
- Make sure that the air flow to S2060 is not blocked by foreign objects.
- Check that S2060 does not have any external damage.

ICE BUILD-UP IN THE FAN, GRILLE AND/OR FAN CONE

Set the "Fan de-icing" function in the indoor module/control module. For more information, see the section "Control – Heat pump EB101" in the Installer Manual.

If problems arise, contact your installer.

WATER BELOW S2060 (LARGER AMOUNT)

- Fit accessory KVR to divert condensation from the air/water heat pump.
- Check that the water drainage via the condensation pipe (KVR) is working.

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