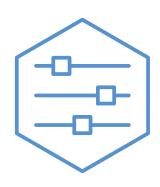


# Air/water heat pump NIBE F2050 UK 1x230V





UHB EN 2344-1 731680

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## Important information

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

### **Installation data**

Product	F2050
Serial number	
Installation date	
Installer	
Accessories	
Serial number must always be giv	en. is carried out according to instructions in the accompanying installer manual and applicable regulations.

Signed

### **Symbols**

Explanation of symbols that may be present in this manual.



Date

#### **CAUTION!**

This symbol indicates danger to person or machine.



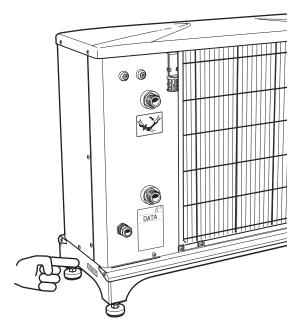
This symbol indicates important information about what you should observe when maintaining your installation.



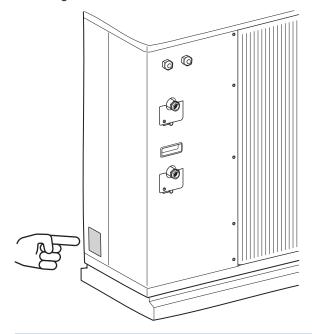
This symbol indicates tips on how to facilitate using the product.

## **Serial number**

The serial number for F2050-6 and F2050-10 can be found on the side of the foot.



The serial number for F2050-12 and F2050-16 can be found on the right-hand side.





You need the product's serial number for servicing and support.

### **Country specific information**

#### **SVERIGE**

#### Garanti- och försäkringsinformation

Det är ägaren som har huvudansvaret för anläggningen.

Om du misstänker att anläggningen på något sätt inte fungerar som den ska anmäler du detta omgående till installatören eller den du köpte produkten av.

Mellan privatperson och företaget som sålt F2050 gäller konsumentlagen. För fullständiga villkor se www.konsumentverket.se.

Mellan NIBE och det företag som sålt produkten gäller AA VVS. I enlighet med denna lämnar NIBE tre års produktgaranti till företaget som sålt produkten. Produktgarantin ersätter inte höjd energiförbrukning eller skada som uppkommit p.g.a. yttre omständigheter som t.ex. felaktig installation, vattenkvalité eller elektriska spänningsvariationer.

I F2050 ingår NIBEs 6-åriga trygghetsförsäkring och är ett komplement till hem-, villa- eller fritidshusförsäkringen. Trygghetsförsäkringen kan därefter förlängas årsvis.

För fullständiga villkor se www.nibe.eu.

Försäkringsblanketten är bipackad produkten och måste skickas in i samband med installationen för att försäkringen ska gälla.

#### **UNITED KINGDOM**

This installation is subject to building regulation approval, notify the local Authority of intention to install.

Use only manufacturer's recommended replacement parts.

For more information see nibe.co.uk.



#### **Warranty and insurance information**

Thank you for installing a new NIBE heat pump in your home.

CTC heat pumps are manufactured in Sweden to the very highest standard so we are pleased to offer our customers a comprehensive guarantee.

The product is guaranteed for 24 months for parts and labour from the date of installation or 33 months from the date of manufacture, whichever is the shorter.

The NIBE guarantee is based on the unit being installed and commissioned by a NIBE accredited installer, serviced every year and the Benchmark documents completed. Where this condition is not met, any chargeable spare parts or components issued within the applicable guarantee period still benefit from a 12 month warranty from the date of issue by the manufacturer.

We recommend the installer completes and returns as soon as possible, your guarantee registration card or completes the guarantee form on the NIBE website, www.ctc-heating.com.

Please ensure that the installer has fully completed the Benchmark Checklist in the end of the Installation Instructions supplied with the product and that you have signed to say that you have received a full and clear explanation of its operation. The installer is legally required to complete a commissioning checklist as a means of complying with the appropriate Building Regulations (England and Wales).

All installations must be notified to Local Area Building Control either directly or through a Competent Persons Scheme. A Building Regulations Compliance Certificate will then be issued to the customer who should, on receipt, write the Notification Number on the Benchmark Checklist.

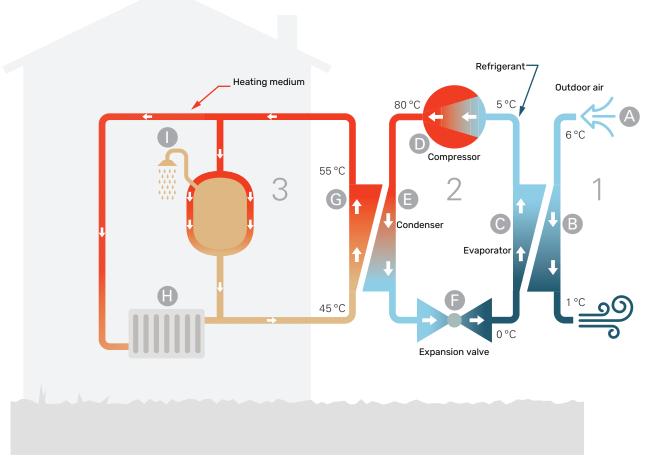
This product should be serviced regularly to optimise its safety, efficiency and performance. The service engineer should complete the relevant Service Record on the Benchmark Checklist after each service.

The Benchmark Checklist may be required in the event of any warranty work and as supporting documentation relating to home improvements in the optional documents section of the Home Information Pack.

## **Installation function**

An air/water heat pump installation uses the outdoor air to heat up a home. The conversion of the outdoor air's energy into residential heating occurs in three different circuits. From the outdoor air, (1), free heat energy is retrieved and

transported to the heat pump. The heat pump increases the retrieved heat's low temperature to a high temperature in the refrigerant circuit, (2) . The heat is distributed around the building in the heating medium circuit, (3) .



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

#### **Outdoor** air

- 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

- 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.
- 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.
- 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.
- 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.
- The indoor module's hot water.

## **Control of F2050**

F2050 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.

F2050 is controlled in different ways, depending on your system. You control the heat pump via your indoor module (CTC EcoZenith i360 H/L) or control module (CTC EcoLogic M, L).

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 F2050**

### Regular checks

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



#### **CAUTION!**

Insufficient maintenance can cause serious damage to F2050, which is not covered by the guarantee.

## CHECKING GRILLES AND BOTTOM PANEL ON F2050

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

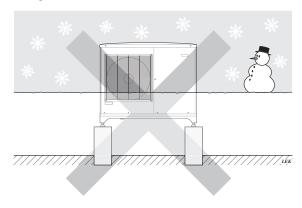
You should be particularly vigilant during windy conditions and/or in the event of snow, as the grille can become blocked.

Check that the back is free from dirt and leaves.

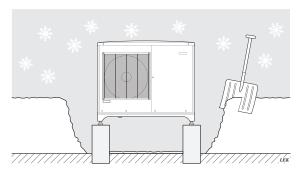
Also check that the drain holes in the bottom panel are free from dirt and leaves.

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 F2050.



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 when cleaning. Avoid spraying water into the grilles or the sides so that water penetrates into F2050. Prevent F2050 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 you installer if you are unsure.

### Silent operation

The heat pump can be set to "silent operation", which reduces the heat pump's noise level. The function is useful when F2050 must be placed in noise-sensitive areas. The function should only be used for limited periods, because F2050 might not reach its dimensioned power.

## **Disturbances in comfort**

In most cases, the indoor module/control module notes a malfunction (a malfunction can lead to disturbance in comfort) and indicates this with alarms and 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 accommodation.
- The property's earth circuit breaker.
- Make sure that the air flow to F2050 is not blocked by foreign objects.
- Check that F2050 does not have any external damage.

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

If problems arise, contact your installer.

#### **WATER BELOW F2050 (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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