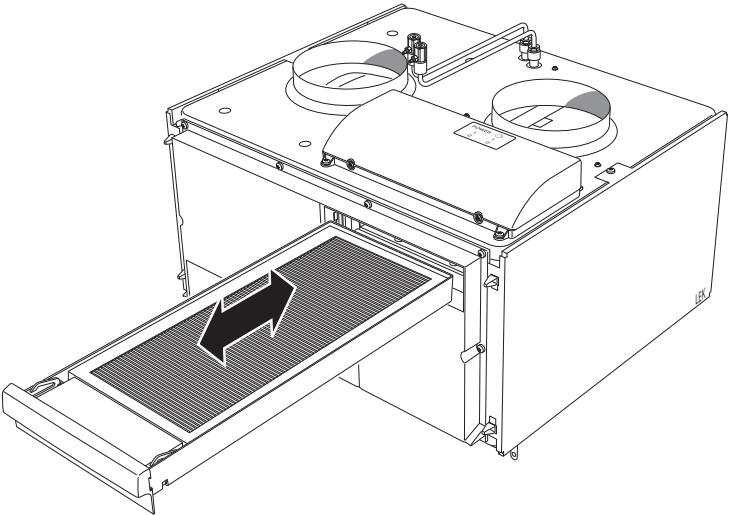
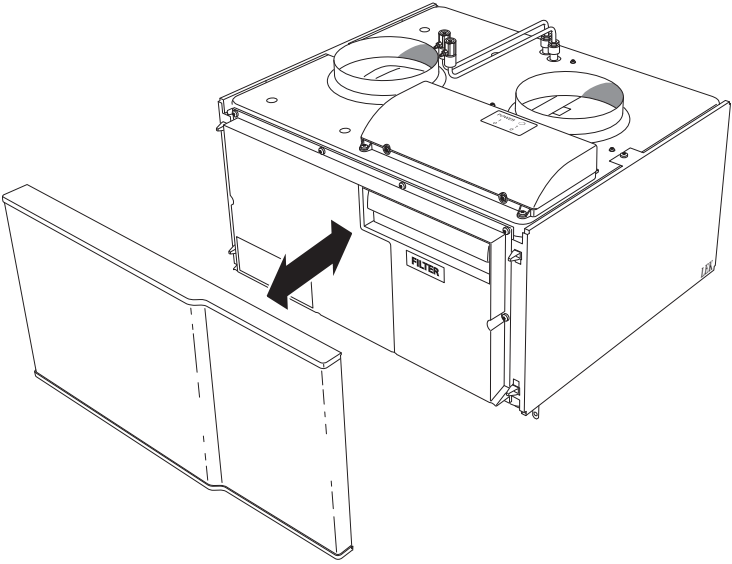


User manual  
**NIBE SAM 40**  
Supply air module



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# 1 Important information

## Installation data

<b>Product</b>	<b>SAM 40</b>
Serial number	
Installation date	
Installer	

No.	Name	Fact. sett.	Set
5.1.6	fan sp. supply air normal	60%	
5.3.9	ext sup air md outdoor temp. T1 supply air temp. at T1 outdoor temp. T2 supply air temp. at T2 outdoor temp. T3 supply air temp. at T3	-15°C 18°C 0°C 18°C 15°C 18°C	

### 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 \_\_\_\_\_

## Safety information

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

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If the supply cable is damaged, only NIBE, its service representative or similar authorised person may replace it to prevent any danger and damage.

## Symbols



### NOTE

This symbol indicates danger to person or machine .



### Caution

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

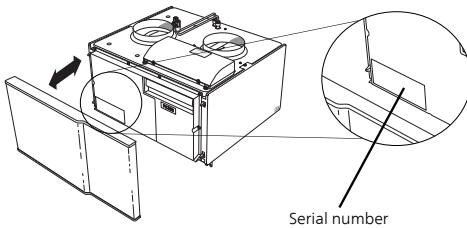


### TIP

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

## Serial number

The serial number can be found at the bottom left inside the front cover.



### Caution

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

## SAM 40 - An excellent choice

SAM 40 is a supply air module that, together with an exhaust air heat pump from NIBE, gives you a complete solution for mechanical exhaust air and pre-heated supply air.

### **Excellent properties for SAM 40:**

- ***Low noise level***

The supply air module has a low noise level.

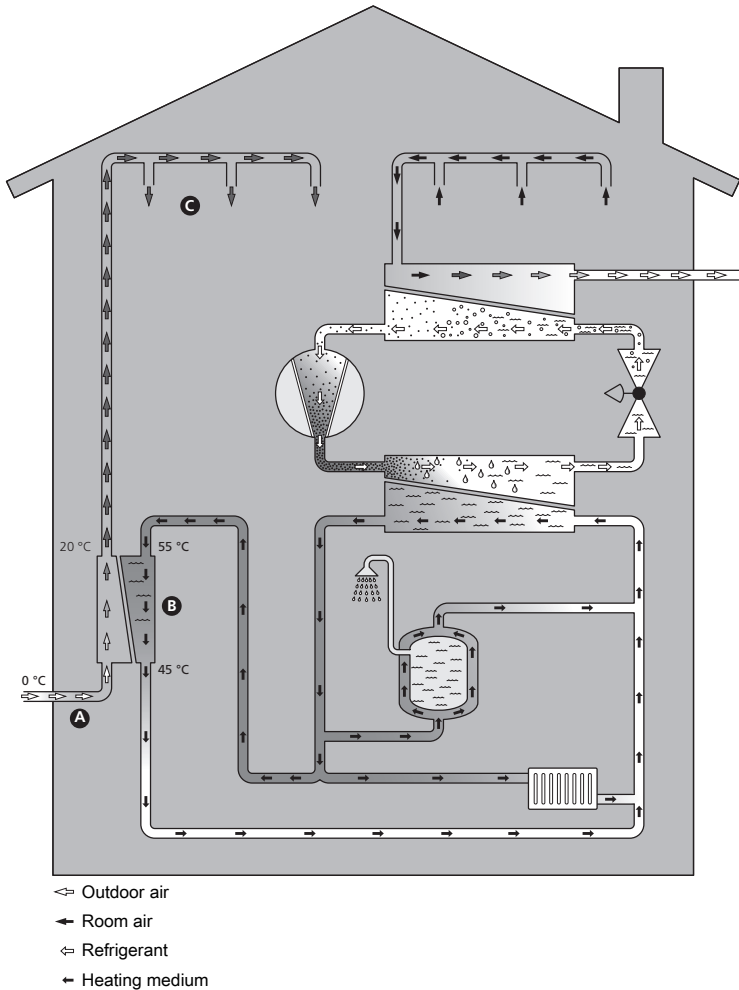
- ***Easy to install***

The supply air module is easy to install together with a compatible heat pump from NIBE. The supply air module is connected to the heat pump, which allows you to read off the supply air module's values from the heat pump's display.

### **Compatible NIBE heat pumps**

- F370
- F750

## 2 The heating installation – the heart of the house



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



## Supply air module function

A supply air module utilises, via the heat pump, the heat in the building's ventilation air to heat up the incoming outdoor air.

### **Outdoor air**

- A** The outdoor air is transferred to the supply air module via the house's ventilation system.
- B** In the supply air module, the air absorbs the heat energy and the temperature is raised.
- C** A fan blows the heated air into those rooms that have supply air inlets.

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

# Maintenance of SAM 40

## Regular checks

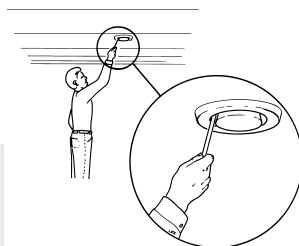
Your supply air module requires minimal maintenance after commissioning. On the other hand, it is recommended that you check your installation regularly.

If something unusual occurs, messages about the malfunction, in the form of different alarm texts, appear in the heat pump display.

## *Cleaning the ventilation devices*

The building's ventilation devices should be cleaned regularly with, for example, a small brush to maintain the correct ventilation.

The device settings must not be changed.



### **NOTE**

If you take down more than one ventilation device for cleaning, do not mix them up.

## ***Cleaning the air filter***

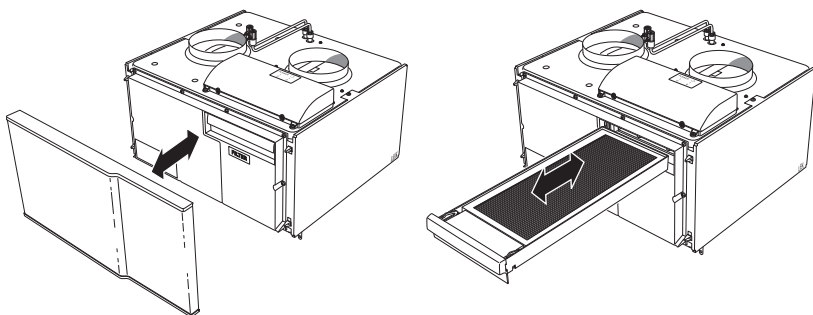
The air filter in SAM 40 must be replaced regularly, although how often depends on the amount of dust in the ventilation air. Test until you find out what is most suitable for your installation.

You receive a reminder, in the heat pump's display, to clean the filters. The default setting for the reminder is every three months; however, if the power supply to the heat pump is interrupted, the countdown starts again.

The filter in SAM 40 is of a type that should not be cleaned, but has to be replaced instead.

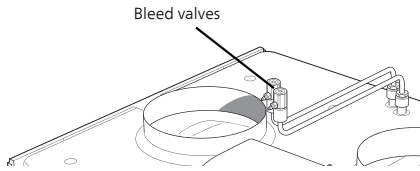
1. Switch off the heat pump.
2. Remove the upper front cover by pulling straight out.
3. Pull out the filter cassette.
4. Check the condition of the filter.
5. Carry out assembly in reverse order.

Even if the filter appears clean, dirt collects in it and this affects the efficiency of the filter. Therefore, replace it after approx. 1 years. New filters can be ordered via the installer.



## ***Venting***

Vent SAM 40 by opening one vent valve at a time, until water comes out. Then close the valve again.



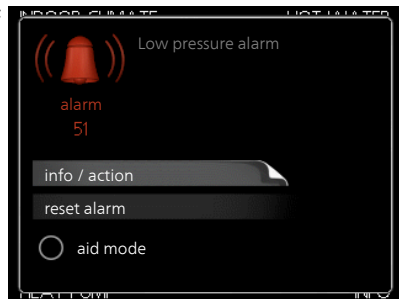
# 3 Disturbances in comfort

In most cases, the compatible heat pump notes a malfunction (a malfunction can lead to disturbance in comfort) and indicates this with alarms and action instructions in the display.

## Info-menu

All the heat pump measurement values are gathered under menu 3.1 in the heat pump menu system. Looking through the values in this menu can often simplify finding the source of the fault.

In the event of an alarm, some kind of malfunction has occurred, which is indicated by the status lamp changing from green continuously to red continuously. In addition, an alarm bell appears in the information window.



## Alarm

In the event of an alarm with a red status lamp a malfunction has occurred that the heat pump cannot remedy itself. In the display, by turning the control knob and pressing the OK button, you can see the type of alarm it is and reset it. You can also choose to set the heat pump to aid mode.

**info / action** Here you can read what the alarm means and receive tips on what you can do to correct the problem that caused the alarm.

**reset alarm** In most cases it is sufficient to select "reset alarm" to correct the problem that caused the alarm. If a green light comes on after selecting "reset alarm", the alarm has been remedied. If a red light is still visible and a menu called "alarm" is visible in the display, the problem causing the alarm remains. If the alarm disappears and then returns, see the troubleshooting section (page Troubleshooting).

**aid mode** "aid mode" is a type of emergency mode. This means that the heat pump produces heat and/or hot water despite there being some kind of problem. This can mean that the heat pump's compressor is not running. In this case the immersion heater produces heat and/or hot water.



### Caution

Selecting "aid mode" is not the same as correcting the problem that caused the alarm. The status lamp will therefore continue to be red.

If the alarm does not reset, contact your installer for suitable remedial action.



**TIP**

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

# Troubleshooting

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

## Basic actions

Start by checking the following items:

- That the heat pump is running or that the supply cable to SAM 40 is connected.
- Group and main fuses of the accommodation.
- The property's earth circuit breaker.

## Low hot water temperature or a lack of hot water

- The heat pump has temporarily prioritised supply air ventilation to prevent too low temperatures in the supply air coil.

## Low or a lack of ventilation

- Filter blocked.
- The ventilation is not adjusted.
  - Order ventilation adjustment.
- Check external frost protection (outdoor air damper).

## High or distracting ventilation

- Filter blocked.
- The ventilation is not adjusted.
  - Order ventilation adjustment.

## Low supply air temperature

- Air in the heating medium system.
  - Venting SAM 40. See section Venting.
- Incorrect value set in supply air automatic control system.
  - Contact your installer!

## High supply air temperature

- Incorrect value set in supply air automatic control system.
  - Contact your installer!

# 4 Technical data

Detailed technical specifications for this product can be found in the installation manual ([nibe.eu](http://nibe.eu)).



# 5 Glossary

## **Disturbances in comfort**

Disturbances in comfort are undesirable changes to the hot water/indoor comfort, for example when the temperature of the hot water is too low or if the indoor temperature is not at the desired level.

A malfunction in the heat pump can sometimes be noticed in the form of a disturbance in comfort.

In most cases, the heat pump notes operational interference and indicates this with alarms and shows instructions in the display.

## **Exhaust air**

The air coming via the exhaust air valves in the various rooms of the accommodation, to the heat pump.

## **Supply air**

The heated air that is blown from SAM 40 and out into the room.

## **Supply air device**

Valves, usually in the ceiling, where the heated supply air is blown out.

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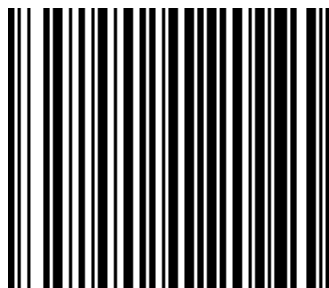
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