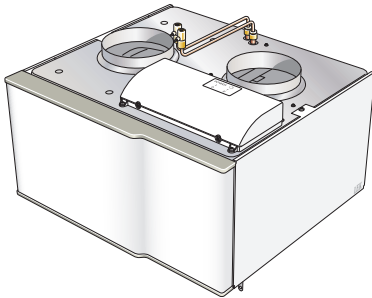
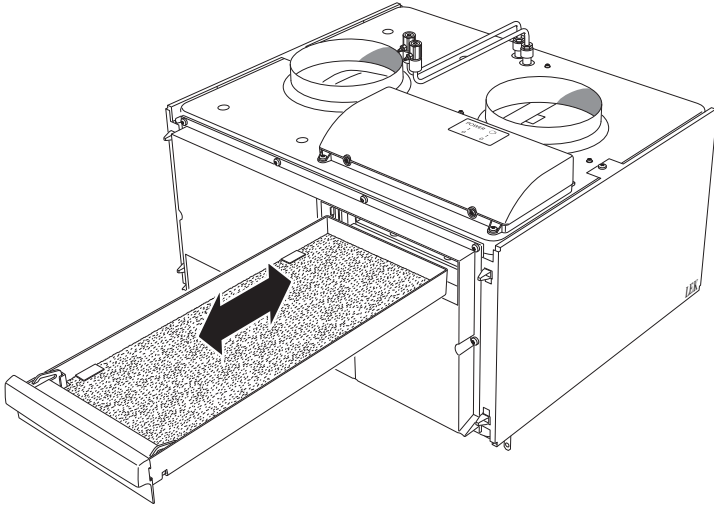
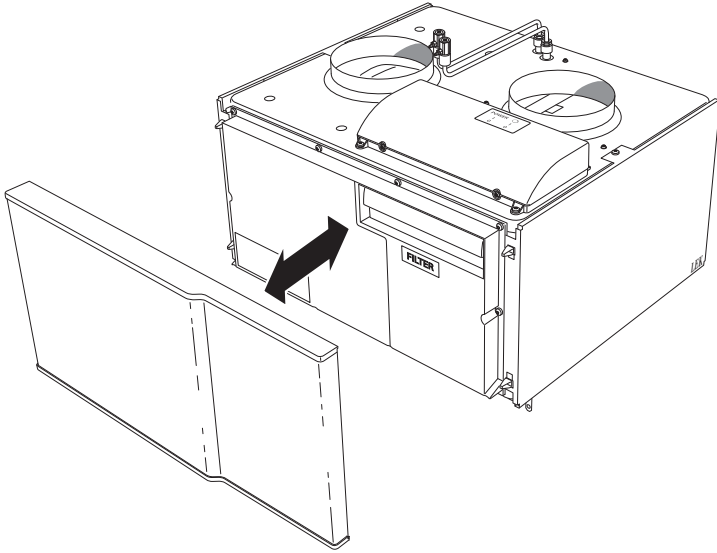




---

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





# Table of Contents

<b>1 Important information</b>	<b>4</b>
Installation data	4
Safety information	5
Serial number	7
Contact information	8
NIBE SAM 40 – An excellent choice	10
<b>2 Maintenance of NIBE SAM 40</b>	<b>11</b>
Regular checks	11
Disturbances in comfort	12
<b>3 Technical data</b>	<b>15</b>
<b>4 Glossary</b>	<b>16</b>
<b>Index</b>	<b>17</b>

# 1 Important information

## Installation data

Product	NIBE SAM 40
Serial number	
Installation date	
Installer	

No.	Name	Factory settings	Set
5.1.6	fan sp. supply air normal speed 1 speed 2 speed 3 speed 4	60 0 25 70 90	
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 22 0 22 15 22	

### Serial number must always be given

Certification that the installation is carried out according to instructions in NIBE's 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.

Rights to make any design or technical modifications are reserved.

©NIBE 2015.



### NOTE

NIBE SAM 40 must be installed via an isolator switch with a minimum breaking gap of 3mm.



### NOTE

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 machine or person.



### 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.

## Marking

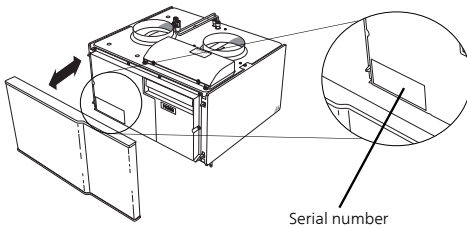
NIBE SAM 40 is CE marked and fulfils IP21.

The CE marking means that NIBE ensures that the product meets all regulations that are placed on it based on relevant EU directives. The CE mark is obligatory for most products sold in the EU, regardless where they are made.

IP21 means that objects with a diameter larger than or equivalent to 12.5 mm cannot penetrate and cause damage and that the product is protected against vertically falling drops of water.

## Serial number

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



### Caution

Always give the product's serial number (14 digits) when contacting your installer.

## Contact information

- AT KNV Energietechnik GmbH**, Gahberggasse 11, 4861 Schörföling  
Tel: +43 (0)7662 8963-0 Fax: +43 (0)7662 8963-44 E-mail: mail@knv.at  
www.knv.at
- CH NIBE Wärmetechnik c/o ait Schweiz AG**, Industriepark, CH-6246 Altishofen  
Tel: (52) 647 00 30 Fax: (52) 647 00 31 E-mail: info@nibe.ch  
www.nibe.ch
- CZ Druzstevni zavody Drazice s.r.o.**, Drazice 69, CZ - 294 71 Benatky nad Jizerou  
Tel: +420 326 373 801 Fax: +420 326 373 803 E-mail: nibe@nibe.cz  
www.nibe.cz
- DE NIBE Systemtechnik GmbH**, Am Reiherpfahl 3, 29223 Celle  
Tel: 05141/7546-0 Fax: 05141/7546-99 E-mail: info@nibe.de  
www.nibe.de
- DK Vølund Varmeteknik A/S**, Member of the Nibe Group, Brogårdsvej 7, 6920 Videbæk  
Tel: 97 17 20 33 Fax: 97 17 29 33 E-mail: info@volundvt.dk  
www.volundvt.dk
- FI NIBE Energy Systems OY**, Juurakkotie 3, 01510 Vantaa  
Puh: 09-274 697 0 Fax: 09-274 697 40 E-mail: info@nibe.fi www.nibe.fi
- FR NIBE Energy Systems France Sarl**, Zone industrielle RD 28, Rue du Pou du Ciel, 01600 Reyrieux  
Tel : 04 74 00 92 92 Fax : 04 74 00 42 00 E-mail: info@nibe.fr  
www.nibe.fr
- GB NIBE Energy Systems Ltd**, 3C Broom Business Park, Bridge Way, Chesterfield S41 9QG  
Tel: 0845 095 1200 Fax: 0845 095 1201 E-mail: info@nibe.co.uk  
www.nibe.co.uk
- NL NIBE Energietechniek B.V.**, Postbus 634, NL 4900 AP Oosterhout  
Tel: 0168 477722 Fax: 0168 476998 E-mail: info@nibenl.nl  
www.nibenl.nl



**NO ABK AS**, Brobekkveien 80, 0582 Oslo, Postadresse: Postboks 64 Vollebakk, 0516 Oslo

Tel. sentralbord: +47 23 17 05 20 E-mail: [post@abkklima.no](mailto:post@abkklima.no) [www.nibeenergysystems.no](http://www.nibeenergysystems.no)

**PL NIBE-BIAWAR Sp. z o. o.** Aleja Jana Pawła II 57, 15-703 BIAŁYSTOK

Tel: 085 662 84 90 Fax: 085 662 84 14 E-mail: [sekretariat@biawar.com.pl](mailto:sekretariat@biawar.com.pl)  
[www.biawar.com.pl](http://www.biawar.com.pl)

**RU © "EVAN"** 17, per. Boynovskiy, Nizhny Novgorod

Tel./fax +7 831 419 57 06 E-mail: [info@evan.ru](mailto:info@evan.ru) [www.nibe-ewan.ru](http://www.nibe-ewan.ru)

**SE NIBE AB Sweden**, Box 14, Hannabadsvägen 5, SE-285 21 Markaryd

Tel: +46-(0)433-73 000 Fax: +46-(0)433-73 190 E-mail: [info@nibe.se](mailto:info@nibe.se)  
[www.nibe.se](http://www.nibe.se)

For countries not mention in this list, please contact Nibe Sweden or check [www.nibe.eu](http://www.nibe.eu) for more information.

## NIBE SAM 40 – An excellent choice

NIBE SAM 40 is a supply air module specially designed to combine recovery of mechanical exhaust air with preheated supply air.

NIBE SAM 40 together with NIBE F750 provides a total solution for exhaust and supply air.

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

- ***DC fan***

An energy efficient DC fan (Class A) is integrated in the supply air module.

- ***Low noise level***

The supply air module has a very low noise level.

- ***Easy to install***

The supply air module is easy to install together with NIBE F750. The supply air module is connected to the heat pump, which means that you can read off the supply air module's values in the heat pump display.

# 2 Maintenance of NIBE 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.

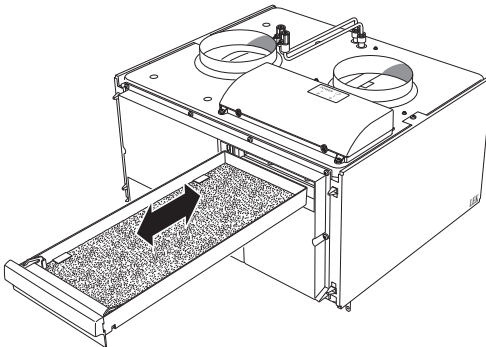
## Cleaning the air filter

Clean the NIBE SAM 40's air filter regularly, how often depends on the amount of dust in the outside air. Select what is most suitable for your installation.

You will receive a reminder about filter cleaning in the display. The default setting for the reminder is every three months, however, if the power to NIBE F750 is interrupted the countdown begins again.

1. Switch off the heat pump and wait until the fan in NIBE SAM 40 has stopped.
2. Remove the upper front cover by pulling straight out.
3. Pull out the filter cassette.
4. Take out the filter and shake/vacuum off any dirt. Do not use water or other liquids for cleaning.
5. Check that the filter is not damaged.
6. 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 2 years. New filters can be ordered via the installer.



## Disturbances in comfort

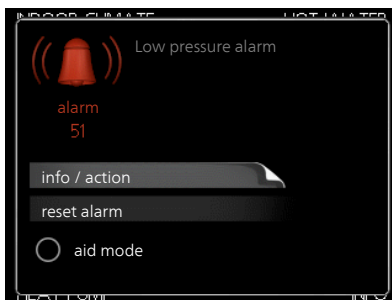
In most cases, the heat pump NIBE F750 notes operational interference (operational interference can lead to disturbance in comfort) and indicates this with alarms and shows action instructions in the display.

### 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.

### Manage alarm

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 enough to select "reset alarm" to correct the problem that caused the alarm. If a green light illuminates 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 that caused the alarm remains. If the alarm disappears and then returns, see the troubleshooting section (page 13).

**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.

## NOTE

Always give the heat pump and supply air module serial numbers when contacting your installer.

## Troubleshooting

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

### **Basic actions**

Start by checking the following possible fault sources:

- That the heat pump is running or that the supply cable to NIBE 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 room temperature**

- Air in the heating medium system.
  - Venting NIBE SAM 40. See section Venting.
- See user manual for NIBE F750.

### **High room temperature**

- See user manual for NIBE F750.

### **Low or a lack of ventilation**

- Filter blocked.
  - Clean or replace filter (see page 11).
- The ventilation is not adjusted.
  - Order ventilation adjustment.

### **High or distracting ventilation**

- Filter blocked.
  - Clean or replace filter (see page 11).
- The ventilation is not adjusted.
  - Order ventilation adjustment.

### **Low supply air temperature**

- Air in the heating medium system.

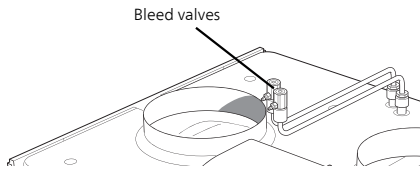
- Venting NIBE SAM 40. See section Venting.
- Incorrect value set in supply air automatic control system.
  - Contact your installer!

### ***High supply air temperature***

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

## **Venting**

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



# 3 Technical data

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

# 4 Glossary

## **Additional heat**

The additional heat is the heat produced in addition to the heat supplied by the compressor in your heat pump. Additional heaters can be for example, immersion heater, electric heater, solar power system, gas/oil/pellet/wood burner or district heating.

## **Circulation pump**

Pump that circulates liquid in a pipe system.

## **Climate system**

The climate system can also be called the heating and/or cooling system. The building is cooled or heated using radiators, under floor coils or convector fans.

## **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.

## **Heat exchanger**

Device that transfers heat energy from one medium to another without mixing mediums. Examples of different heat exchangers are evaporators and condensers.

## **Mixing valve**

A valve that mixes the cold water with the hot water leaving the heater.

## **Supply temperature**

The temperature of the heated water that the heat pump sends out to the heating system. The colder the outdoor temperature, the higher the supply line temperature becomes.



# 5 Item register

## **A**

Alarm, 12

## **C**

Contact information, 8

## **D**

Disturbances in comfort, 12

Alarm, 12

Manage alarm, 12

Troubleshooting, 13

## **G**

Glossary, 16

## **I**

Important information, 4

Contact information, 8

Installation data, 4

NIBE SAM 40 – An excellent choice, 10

Serial number, 7

Installation data, 4

## **M**

Maintenance of NIBE SAM 40, 11

Regular checks, 11

Manage alarm, 12

## **N**

NIBE SAM 40 – An excellent choice, 10

## **R**

Regular checks, 11

## **S**

Serial number, 7

## **T**

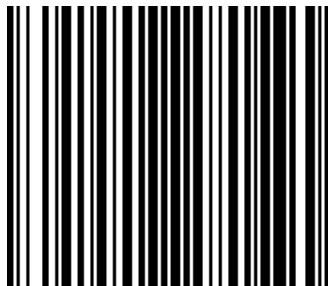
Technical data, 15

Troubleshooting, 13





NIBE AB Sweden  
Hannabadsvägen 5  
Box 14  
SE-285 21 Markaryd  
info@nibe.se  
www.nibe.eu



331751