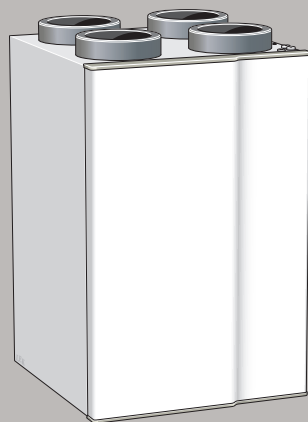


UHB EN 2127-4
431867

USER MANUAL

HRV unit NIBE GV-HR 120



 **NIBE**

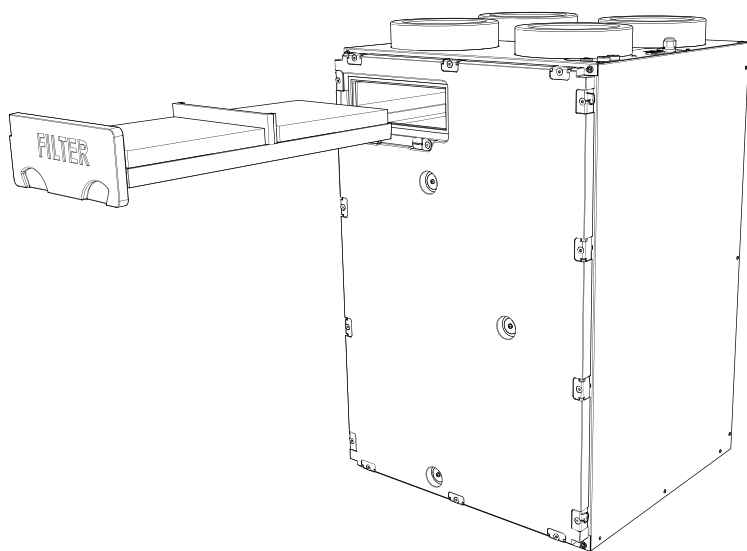
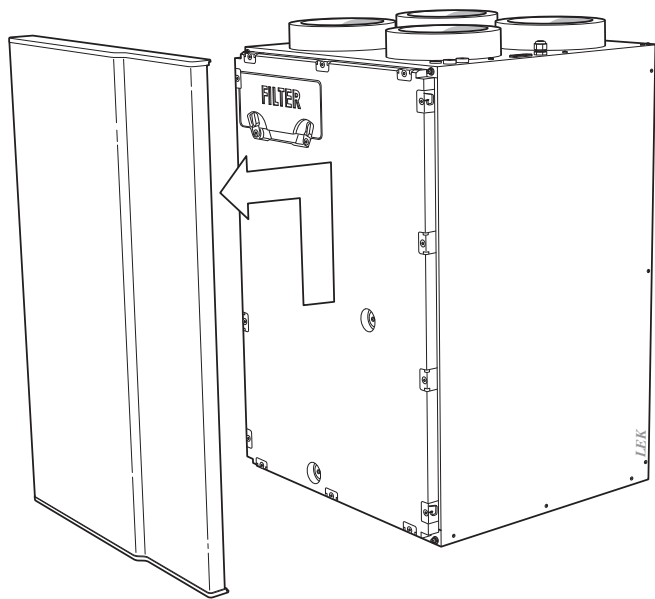


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1 Important information

Installation data

<i>Product</i>	<i>GV-HR 120</i>
Serial number	
Installation date	
Installer	

<i>No.</i>	<i>Name</i>	<i>Fact. sett.</i>	<i>Set</i>
11	Service menu - Level 2 supply air	50%	
14	Service menu - Level 2 exhaust air	50%	
24	Service menu - Frost reduction	3 °C	
21	Service menu - Bypass max.	5 °C	

Serial number must always be given

It is hereby certified that the installation has been carried out in accordance with the instructions in the 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.

This is an original manual. It may not be translated without the approval of NIBE.

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SYMBOLS

Explanation of symbols that may be present in this manual.



NOTE

This symbol indicates danger to person or machine .



Caution

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

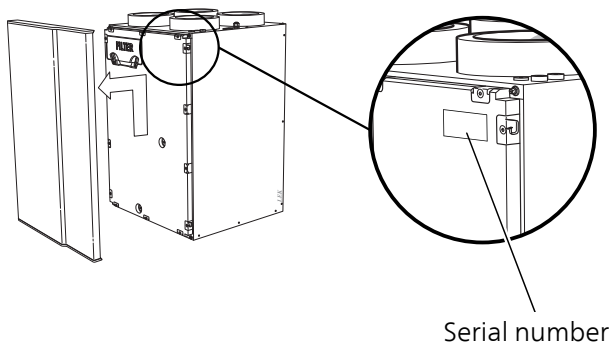


TIP

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

Serial number

The serial number can be found at the top right inside the front hatch.



Caution

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

GV-HR 120 - An excellent choice

GV-HR 120 is an HRV unit with high temperature efficiency and low energy consumption.

EXCELLENT PROPERTIES FOR GV-HR 120:

- *DC fans*

Two energy-efficient DC fans (Class A) are integrated in the HRV unit.

- *Low noise level*

The HRV unit has a very low noise level.

- *Display with user instructions*

GV-HR 120 has a display with easy-to-understand menus that facilitate adjustment of the ventilation.

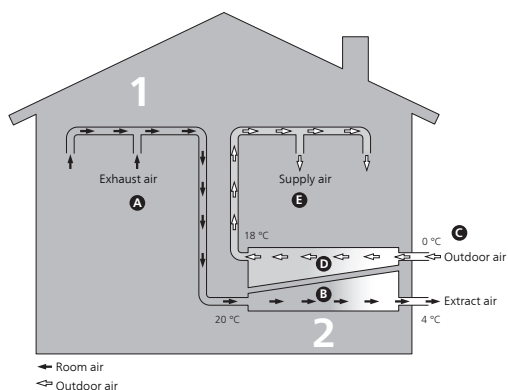
- *Scheduling ventilation*

The ventilation can be scheduled for each weekday.

- *Simple troubleshooting*

If a fault arises, you obtain information about this in the display.

2 The heating installation – the heart of the house



HRV unit function

An HRV unit is a ventilation heat exchanger that utilises the heat in the building's ventilation air to heat the incoming outdoor air. From the outgoing ventilation air (1), heating energy is recovered from the dwelling and transported to the HRV unit. In the heat exchanger (2), the heat from the indoor air is transferred to the incoming outdoor air.

Ventilation air

- A** The hot air is transferred from the rooms to the HRV unit via the building's ventilation system using a fan.
- B** In the HRV unit, the air releases heat energy and the temperature drops significantly. The cold air is then blown out of the building.

Outdoor air

- C** The outdoor air is transferred to the HRV unit via the building's ventilation system.
- D** In the HRV unit, the air absorbs the heat energy and the temperature is raised.
- E** 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.

Contact with GV-HR 120

DISPLAY



There is a display unit on GV-HR 120, which is used to communicate with the installation. Here you:

- switch on or switch off the installation
- set the ventilation and adjust the installation to your needs.
- receive information about settings, status and events.
- see different types of alarms.

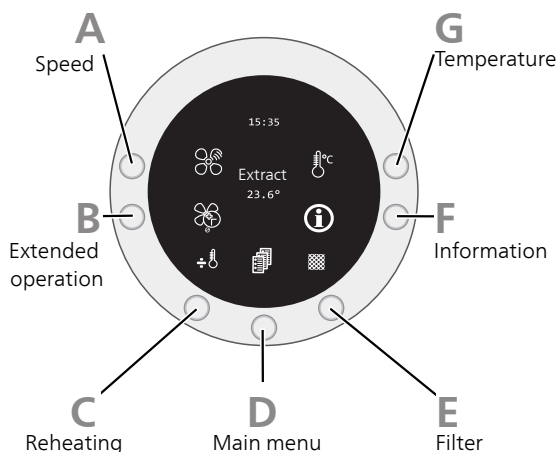
Screensaver

The screensaver can present various types of information (temperature and/or time or the main menu).

You decide what will be displayed in the screensaver mode. You set your own combination of information using the display unit. This information is specific to the screensaver and disappears when the screensaver is switched off.

The screensaver is switched off when you press any of the buttons or move your hand in front of the display.

OPERATING MENU



The operating menu contains quick buttons for various functions.

A *Speed*

Select the fan speed here (1-4). Switch off the fan by pressing and holding the button for 3-4 seconds.

To be able to switch off the fan, the settings have to be made in Service menu.

Speed 1

Reduced fan speed.

This mode is ideal when there is nobody at home.

Speed 2

The fan's normal level.

Speed 3

Forced fan speed.

This mode is ideal when there are a lot of people in the home.

Speed 4

Forced fan speed. The mode is ideal when you want to lower the indoor temperature slightly, e.g. in the summer.

B *Extended operation*

Here you activate a temporary increase in ventilation.

In the event of a temporary increase in the ventilation requirement, you can select an increase in ventilation for an optional time (1-9 hours) in this menu.

If the number of hours is set between 1 and 9, the speed 3 will automatically connect back to speed 2 after the set number of hours.

Select speed 0 if you want to switch off the function before the set number of hours has been reached.

C *Reheating*

Here you start or switch off any re-heater (external component that is not supplied by NIBE).

If the symbol is set to +, the heater will be connected if necessary; if it is set to ÷, it will not be connected, even if there is a need. It is a precondition that User menu, menu 3 - "Reheating", is "on".

D *Main menu*

Here you enter the main menu.

E *Filter*

Here you reset filter alarm.

F *Information*

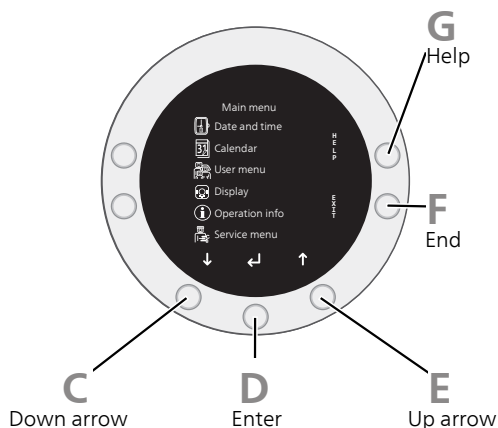
Quick button for menu **Operation info**.

Here you obtain information about the installation's current operating status (current temperatures, fan speed, activated/deactivated functions, alarms, hour counter, etc.). No changes can be made.

G *Temperature*

Here you set the temperature for any re-heater (external component that is not supplied by NIBE).

MAIN MENU



Here, you can find the HRV unit's menu system.

C *Down arrow* ↓

Used to:

- scroll in menus and between options.
- decrease the values.

D *Enter* ↵

Used to:

- confirm selections of sub menus/options/set values.

E *Up arrow* ↑

Used to:

- scroll in menus and between options.
- increase the values.

F *Exit*

Used to:

- go back to the previous menu.
- change a setting that has not been confirmed.

G

Help

Used to:

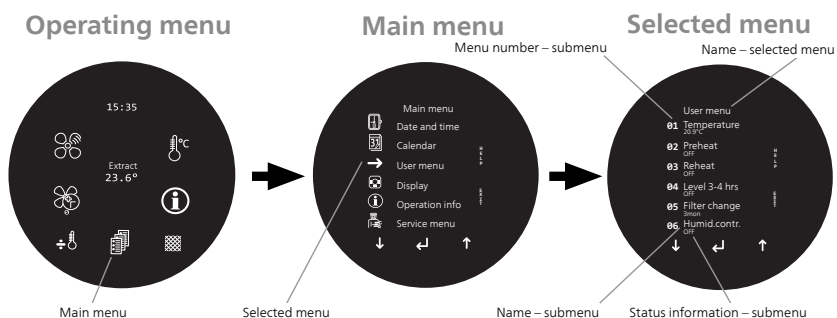
- obtain a brief description of the current menu.

MENU SYSTEM

The screensaver is switched off and the operating menu is displayed when you press any of the buttons or move your hand in front of the display.

Operation

To continue to the menu system, you press the button for Main menu.



Selecting menu

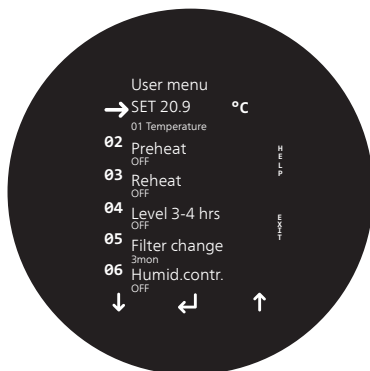
To move the cursor in the main menu and its submenus, press "↑" or "↓". The relevant menu is marked with an arrow.

Select the menu by pressing "↵".

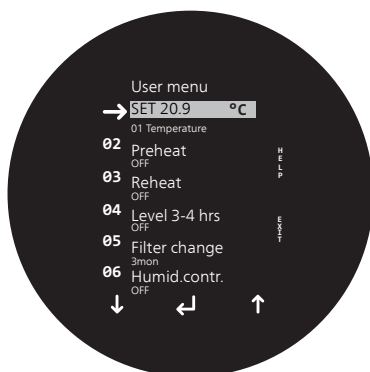
Setting a value

To set a value:

1. Mark the value you want to change using "↑" or "↓".



2. Press "↵". The background of the value turns grey, which means that you have accessed the setting mode.



3. Press "↑" or "↓" to increase or decrease the value.



4. Press "↵" to confirm the value you have set. To change your mind and return to the original value, press the Exit button instead.



Help menu

In many menus there is a symbol that indicates that extra help is available. To access the help text, press the Help button. To exit help mode, press the Exit button or "↵".

Maintenance of GV-HR 120

REGULAR CHECKS

Your HRV unit requires minimal maintenance after commissioning. However, it is recommended that you check your installation regularly. If something unusual occurs, messages about the malfunction appear in the display in the form of various alarm texts.



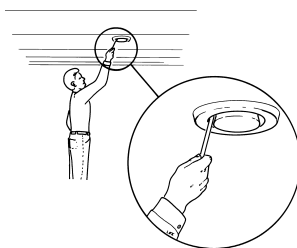
NOTE

Always switch off the power and wait until the fans have stopped before opening GV-HR 120.

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.

Replacing the air filter

The filters in GV-HR 120 are of a type that should not be cleaned; they have to be replaced instead. These must be replaced regularly, although how often depends of factors such as the amount of particles in the ventilation air. Test to find out what is most appropriate for your installation.



Caution

The efficiency of the installation can be reduced by a dirty air filter.

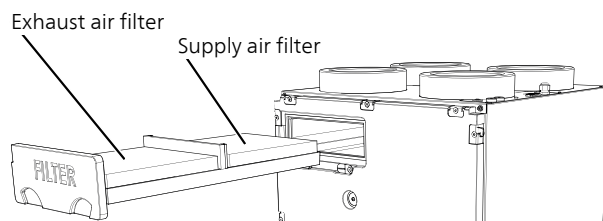
In the display, you will receive a reminder to check the filters. The factory setting for the reminder is every three months; however, if the power supply to GV-HR 120 is interrupted, the countdown starts again.

1. Switch off the power.
2. Remove the front hatch by lifting it slightly and then pulling it towards you.
3. Pull out the filter cassettes.
4. Check the condition of the filters and replace if needed.
5. Carry out assembly in reverse order.
6. Start GV-HR 120.
7. Press and hold the "Filter" button until the filter symbol resets.

Even if the filters look clean, dirt collects in them and this affects the efficiency of the filters. For this reason, replace them after approx. 1 years. New filters can be ordered via a dealer for NIBE.

Exhaust air filter: Coarse 65%

Supply air filter: ePM1 55%



Check the water lock for condensation water

The water seal must be checked at least once a year, ideally in the autumn.

The water seal is located outside GV-HR 120. Contact your installer if you are unsure of where to find it.

No condensation water is generated in the HRV unit during the warm period of the year and the water seal will dry out.

During the colder parts of the year, GV-HR 120 can produce several litres of condensation water every day. If the condensation outlet is not working, this may cause water damage inside the home.

The water seal must not dry out during this part of the year, because air will be drawn into the HRV unit due to the negative pressure in the unit, which will then prevent the condensation water from running out.

1. Check that the condensation drain and the water seal are not clogged with dirt.
2. Pour approx. one litre of water into the water seal.
3. Check that the water runs through unobstructed.

Cleaning the heat exchanger

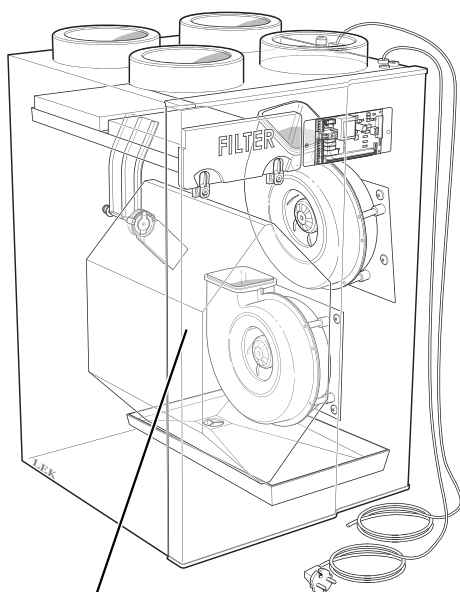
Check the heat exchanger every other year and clean if necessary. Avoid contact with the fins.



Caution

Do not damage the fins. If you are unsure, contact your installer for help with cleaning.

1. Remove the heat exchanger by pressing gently from the rear.
2. Clean the heat exchanger carefully, e.g. with a vacuum cleaner. If necessary, you can use warm water and mild soap.



Heat exchanger

3 GV-HR 120 – at your service

Set the date and time

OVERVIEW

Sub-menus

There are several submenus for menu **Date and time**.

Under the menus on the display, there is status information for each menu.

Menu
01

TEMPERATURE

Setting range: 0 – 23

Factory setting: 0

Set the current hour here. Summer/winter is set manually.

Menu
02

MINUTES

Setting range: 0 – 59

Factory setting: 0

Set the current minute here.

Menu
03

WEEK DAY

Setting range: 1 – 7

Factory setting: 1

Set the current weekday here.

Menu
04

DATE

Setting range: 1 – 31

Factory setting: 1

Set the current day of the month here.

Menu
05

MONTH

Setting range: 1 – 12

Factory setting: 1

Set the current month here.

Menu
06

YEAR

Setting range: 2015 – 2099

Factory setting: 2018

Set the current year here.

Setting the calendar

OVERVIEW

Sub-menus

With menu **Calendar**, you can choose between controlling the installation manually or automatically with its own weekly programme. The fan speed can be scheduled for each weekday, and there is the option to copy settings from one day to another.

Menu
01

CALENDAR

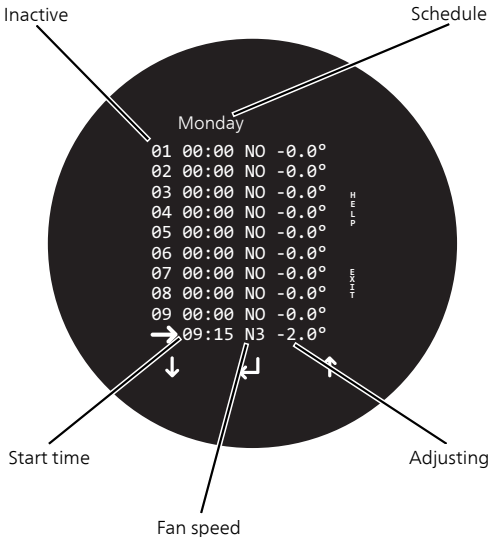
Setting range: "On" and "off"

Factory setting: "Off"

Here you activate the scheduling of the fan speed.

Menu
02 for
08

MONDAY TO SUNDAY



Here you can schedule changes to the ventilation. If the installation has a re-heater (external component that is not supplied by NIBE), you can also set a reduction in the heating of the home.

For each weekday, you can set 10 changes. You can set the times in whatever order you want. Rows that only contain the figure 0 are inactive and will be skipped.

Whenever a programmed time is passed, the changes will be activated, even if the fan speed has been changed manually using the Speed button in the Operating menu.

COPY DAY

Copy day from

Setting range: "Monday" to "Sunday"

Factory setting: "Monday"

Copy day to

Setting range: "Monday" to "Sunday"

Factory setting: "Monday"

Here you can copy settings from one day to another.

Select the day you want to copy information from as well as the day you want to paste information to. Then select "copy now".

Adjust the installation

OVERVIEW

Sub-menus

There are several submenus for menu **User menu**.

Under the menus on the display, there is status information for each menu.

Menu
01

TEMPERATURE

Setting range: 10.0 - 30.0 °C

Default value: 21.0 °C

Here you select the desired temperature for room, supply air or exhaust air control.

Menu
02

PREHEATING

Setting range: 0, 1, 2

Factory setting: 0

This is where you activate the electrical air heater accessory (EAH 21).

The **Preheating** menu is intended for the installer. Incorrect preheater settings can damage the HRV unit.



TIP

You select the start temperature in Service menu, menu 20 - "Preheating".

0 Off

1 Control against outdoor air temperature. Both the preheater and lowering the supply air flow are used to prevent the heat exchanger from freezing.

- 2 Control against extract air temperature. Only the preheater is used to prevent the heat exchanger from freezing.



Caution

The correct setting of the preheater is required; the power must be sufficient. This alternative means that, in Service menu, menu 24 - "Frost reduction", you select 0°C.

See the Installer Manual for EAH 21 for more information.

Menu 03

REHEATING

Setting range: "On" and "off"

Factory setting: "Off"

Here you adjust the operating settings for any re-heater (external component that is not supplied by NIBE).

Select "on" if you want the re-heater to start when necessary.

If you select "off", the re-heater will not be in operation, even if there is a need.

Consult the re-heater's installation instructions for more information.



Caution

The temperature is adjusted in User menu, menu 1 - "Temperature".

Menu 04

LEVEL 3-4 HOURS

Setting range: "On" and "off"

Factory setting: "Off"

You activate the timer for fan speed here.

Select "on" if you want the fan to revert to level 2 automatically, select "off" if you want to reset the fan speed manually.



TIP

You set the number of hours in Service menu, menu 17 - "Level 3-4 t".

Menu
05

FILTER REPLACEMENT

Setting range: 0 – 12 billion

Factory setting: 3 Billion

Here you set the number of months between alarms to act as a reminder to clean the filters in GV-HR 120.

Menu
06

HUMIDITY CONTROL

Setting range: "On" and "off"

Factory setting: "Off"

You activate humidity control here.

Adjust the display

OVERVIEW

Sub-menus

There are several submenus for menu **Display**.

Under the menus on the display, there is status information for each menu.

Menu
01

LANGUAGE

Choose the language that you want the information to be displayed in here.

Menu
02

PROGRAM INFO

Here you can see the current software version.

Menu
03

SCREENSAVER

Setting range: 0 - 5

Default value: 3

Here you set the appearance of the display in standby mode.

- 0 Main menu is displayed.
- 1 Main menu is displayed and the brightness is reduced slightly.
- 2 The room temperature is displayed and the brightness is reduced slightly.
- 3 The time is displayed and the brightness is reduced slightly.
- 4 The time and the room temperature are displayed and the brightness is reduced slightly.
- 5 Black screen.

Menu
04

PAUSE TIME

Operating menu

Setting range: 1 - 10

Default value: 10

The return time (pause time) from one menu mode to another after you have stopped pressing the buttons varies depending on whereabouts you are in the menu system. You can only adjust the return time from the operating menu to the screensaver.

Other return times vary between 30 seconds and 2 minutes.

Menu 05

AUTO ADVANCE

Setting range: 0 - 4

Default value: 1

You can turn off the screensaver by moving your hand in front of the display. In this menu you can set the display's sensitivity to movement.

0 Off

1 Max. sensitivity

2 Level 2

3 Level 3

4 Min. sensitivity

Menu 06

AUTO BRIGHTNESS

Setting range: "On" and "off"

Factory setting: "On"

The display is equipped with a light sensor .

In this menu, you select whether you want the brightness of the screen to be adjusted automatically, based on the light conditions where the display is located.

Menu 07

LIGHT DAY

Setting range: 0 - 100%

Factory setting: 100%

Here you set the desired maximum brightness during use in a fully lit room.

Menu
08

LIGHT NIGHT

Setting range: 0 - 100%

Factory setting: 30%

Here you set the desired minimum brightness during use when the room is completely dark.

Menu
09

LIGHT DAY PAUSE

Setting range: 0 - 100%

Factory setting: 50%

Here you set the desired maximum brightness for the screensaver in a fully lit room.

Menu
10

LIGHT NIGHT PAUSE

Setting range: 0 - 100%

Factory setting: 0%

Here you set the desired minimum brightness for the screensaver when the room is completely dark.

Menu
11

FACTORY RESET

Setting range: 0 - 2

Default value: 0

Here you can reset the settings to the factory values.

Choose between 2 levels: heavy and light.

0 Off

1 All settings apart from "Speed (level)", "Filter timer", "Calendar" and defrosting temperatures.

2 All settings.



Caution

After the factory setting, personal settings such as ventilation must be reset.

Menu
12

SAFETY MENU

Factory setting: 0000

This and subsequent menus are intended for advanced users.
Here you unlock menu 13-18 by tapping in a four-digit code.



TIP

You can change the code in Display, menu 18 - "Password".

Menu
13

DATE AND TIME

Setting range: "On" and "off"

Factory setting: "Off"

Select "on" if you want a code to be necessary to enter the menu Date and time.

Menu
14

CALENDAR

Setting range: "On" and "off"

Factory setting: "Off"

Select "on" if you want a code to be necessary to enter the menu Calendar.

Menu
15

USER MENU

Setting range: "On" and "off"

Factory setting: "Off"

Select "on" if you want a code to be necessary to enter User menu.

Menu
16

DISPLAY

Setting range: "On" and "off"

Factory setting: "Off"

Select "on" if you want a code to be necessary to enter the menu Display.

Menu
17

SERVICE MENU

Setting range: "On" and "off"

Factory setting: "Off"

Select "on" if you want a code to be necessary to enter Service menu.


Menu
18

PASSWORD

Setting range: 0000 - 9999

Factory setting: 0000

Here you select a code for menu 12-17.

Select the 4 digits that you want the code to comprise. Press " after each digit to confirm your selection.

Get information

OVERVIEW

Sub-menus

No settings can be made in the menu **Operation info**, it just displays information.

Here you obtain information about the installation's current operating status (current temperatures, fan speed, activated/deactivated functions, alarms, hour counter, etc.). No changes can be made.

The information is presented on several pages. Press "↑" or "↓" to browse between the pages.

The installation's operating licence is read off and the data is saved for up to two years on the built-in SD card .

ALARM LOG

To make troubleshooting easier, the installation's alarms are stored here. If "on" is beside the alarm, it is activated.

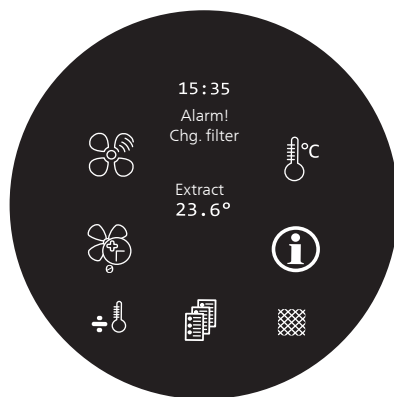
4 Disturbances in comfort

In most cases, GV-HR 120 detects a malfunction (malfunctions can lead to disruptions in comfort) and indicates this with an alarm in the display.

Info-menu

All the installation's measurement values are available from the menu Operation info in the display. Examining the values in this menu can often make it easier to identify the source of the fault. See page 33 for more information about menu Operation info.

Manage alarm



If there is an alarm, some kind of malfunction has occurred, which is shown by text in the display.

ALARM

If there is an alarm, a malfunction has occurred that GV-HR 120 cannot rectify itself. The display shows what type of alarm it is.

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 feed cable is connected to GV-HR 120.
- That the display cable is connected to GV-HR 120.
- Group and main fuses of the accommodation.
- The property's earth circuit breaker.

LOW OR A LACK OF VENTILATION

- Filters blocked.
 - Replace the filters.
- The ventilation is not adjusted.
 - Order ventilation adjustment.
- Closed, too much choke or blocked ventilation device.
 - Check and clean ventilation valves (see page 17).
- Fan speed in reduced mode.
 - Check the setting for "Speed" in the Operating menu.
- External switch for changing the fan speed activated.
 - Check any external switches.
- Fan running slow because of low incoming outdoor air temperature.
 - Contact the installer in the event of recurring problems.

HIGH OR DISTRACTING VENTILATION

- Filters blocked.
 - Replace the filters.
- The ventilation is not adjusted.

- Order ventilation adjustment.
- Closed, too much choke or blocked ventilation device.
 - Check and clean ventilation valves (see page 17).
- Fan speed in forced mode.
 - Check the setting for "Speed" in the Operating menu.
 - Check the setting for "Extended operation" in the Operating menu.
 - Check User menu, menu 4 - "Level 3-4 hour" and select "off" to return automatically to level 2.
- External switch for changing the fan speed activated.
 - Check any external switches.
- Silencers not correctly installed.
 - Contact your installer!

5 Technical data

Detailed technical specifications for this product can be found in the installation manual (nibe.eu).

6 Glossary

DISTURBANCES IN COMFORT

Disturbances in comfort means unwanted changes in the indoor comfort, e.g. that the indoor temperature is not at the desired level.

EXHAUST AIR

The air that comes from the exhaust air device in the various rooms of the accommodation, to GV-HR 120.

EXHAUST AIR DEVICES

Vents, usually in the ceiling, in the kitchen/bathroom/clothes closet where the air is drawn in to be forwarded to GV-HR 120.

EXTRACT AIR

The air from which the GV-HR 120 has retrieved heat, and thereby cooled. This air is blown out of the house.

HEAT EXCHANGER

Device that transfers heat energy from one medium to another without mixing mediums.

OUTDOOR AIR

Air that is drawn into the GV-HR 120 and heated.

SUPPLY AIR

The heated air that is blown from GV-HR 120 and out into the room.

SUPPLY AIR DEVICE

Valves, usually in the ceiling, where the heated supply air is blown out and aids in heating up the accommodation.

Contact information

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