

ComfoAir 200



User manual

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Preface

Carefully read this manual before use.

This manual provides all the information required for safe and optimal installation, operation and maintenance of the ComfoAir 200. It is also intended as a reference for servicing, so that this can be carried out in a responsible manner. The device is subject to continuous development **1.1.2 Guarantee conditions** and improvement. As a result, the ComfoAir 200 may slightly differ from the descriptions.

NOTE

This manual has been compiled with the utmost care. However, no rights can be derived from it. In addition, we at all times reserve the right to change the contents of this manual, without prior notice.

1 Introduction

The device's name is ComfoAir 200. In the following it will be referred to as ComfoAir.

The ComfoAir is a balanced ventilation system with heat recovery in order to create healthy, balanced and energy-efficient ventilation in houses. The ComfoAir has a CE marking on the identification plate. The identification plate can be found on side of the ComfoAir.

1.1 Warranty and liability

1.1.1 General

The sales and warranty conditions for companies in the metal, plastic and technology industries, which apply to the ComfoAir, have been deposited with the Clerk of the District Courts of the Hague on 19th October 1998, under number 119/1998.

The ComfoAir is covered by a manufacturer's warranty for a period of 24 months after fitting up to a maximum of 30 months after the date of manufacture. Warranty claims may only be submitted for material faults and/or construction faults arising during the warranty period. In the case of a warranty claim, the ComfoAir must not be dismantled without written permission from the manufacturer. Spare parts are only covered by guarantee, if they were supplied by the manufacturer and have been installed by an approved installer.

The warranty becomes invalid if:

- The guarantee period has elapsed;
- The device is used without filters;
- Parts are used that have not been supplied by the manufacturer:
- Non-authorised changes or modifications have been made to the unit.

1.1.3 Liability

The ComfoAir has been designed and manufactured for use in balanced ventilation systems incorporating Zehnder heat recovery systems. Any other application is seen as inappropriate use and can result in damage to the ComfoAir or personal injury, for which the manufacturer cannot be held liable. The manufacturer is not liable for any damage originating from:

- Non-compliance with the safety, operating and maintenance instructions in this manual;
- The use of components not supplied or recommended by the manufacturer. Responsibility for the use of such components lies entirely with the installer;
- Normal wear and tear.

1.2 Safety

1.2.1 Safety regulations

Always comply with safety regulations in this manual. Non-compliance with the safety regulations, warnings, notes and instructions in this manual can cause personal injury or damage to the ComfoAir.

- The ComfoAir may only be installed, connected, rendered operational and maintained by an appropriately approved installer, unless otherwise indicated in this manual;
- Installation of the ComfoAir must be carried out in accordance with the general and locally applicable construction, safety and installation instructions of the local council, electricity and water boards or other agencies;
- Observe the safety regulations, warnings, comments and instructions as prescribed in this manual at all times;
- Keep this manual with the ComfoAir throughout its life;
- Instructions with regard to cleaning or replacing the filters of the intake and exhaust valves must be carefully observed;
- The specifications stated in this document may not be changed;
- Modifying the ComfoAir is not allowed;
- The ComfoAir is only suitable for connetion to 230V 50Hz mains;
- It is recommended to take out a maintenance contract so that the device is checked on a regular Basic. The supplier can provide a list of registered installers nearby.

1.2.2 Safety provisions and measures

- The ComfoAir cannot be opened without using tools;
- It should not be possible to touch the fans, therefore ducting must be connected to the ComfoAir at a minimum duct length of 900mm.

1.2.3 Pictograms used

The following pictograms are used in this manual:



Risk of:

- damage to the device;
- performance of the device is compromised if instructions are not observed carefully.

Risk of personal injury to the user or installer. Congratulations, you are the owner of a ComfoAir 200, an heat recovery unit from Zehnder. We wish you lots of comfort.

2.1 Glossary

The ComfoAir features:

- Balanced ventilation;
- Heat recovery;
- Bypass for free cooling;
- Frost protection;
- Open fire programme;
- Wireless (RF) control (optional)
- Non-powered extractor hood (optional)
- Preheater element (optional);
- Analogue input (0-10V);
- Enthalpy (optional).

A concise explanation of these concepts/features is given in the paragraphs below.

2.1.1 Balanced ventilation

The ComfoAir is a balanced ventilation system. Balanced ventilation means that pollutants from the kitchen, the bathroom, the toilet(s) and possibly the storage room are extracted, while the same amount of fresh air is blown into the living room and bedrooms. Gaps under or near the doors ensure a good through-flow in the dwelling. The air circulation is in balance.

Ensure that these gaps are never obstructed by draught excluders or deep-pile carpet, for example. Otherwise the system will not function optimally.

A balanced ventilation system consists of:

- ComfoAir (A);
- Duct system for the supply of outdoor air (B) and the exhaust of indoor air (C);
- Supply valves in the living room and bedrooms (D);
- Exhaust valves in the kitchen, bathroom, the toilet and (if present) the storage room (E);
- Optional non-powered extractor hood with 3-position switch (F).



2.1.2 Heat recovery

Besides ensuring a healthy balance between incoming and outgoing air, the ComfoAir also provides the benefits of heat recovery. Heat recovery means that heat from the extracted air is transferred to the fresh, and usually colder, air from outside the building.

2.1.3 Bypass for free cooling

The bypass is often used during hot days in the summer season. By allowing colder outside air in at night, the indoor temperature of the dwelling can be kept low during hot days. The bypass works automatically: simply set the required comfort temperature.

2.1.4 Frost protection

The ComfoAir is also fitted with a frost protection device. This is an automatic protective system that temporarily reduces (or even briefly stops) the supply of outdoor air to the ComfoAir if there is a risk of freezing in the ComfoAir. This can occur in the event of moderate to sharp frost during the winter months.

2.1.5 Open fire programme

The ComfoAir is fitted with an Open fire programme. The Open fire programme is used in houses that have a fireplace, as there is a risk of air being sucked back from the chimney. The Open fire programme works automatically but requires activation by the installer.

While the Open fire programme is activated the supply and exhaust fan can not be turned off manually.

2.1.6 Wireless (RF) control (optional)

It is possible to set the ventilation positions of the ComfoAir with one or more wireless switches. To do this the ComfoAir needs a build in RF module or a connected CC Ease panel. 2.1.7 Non-powered extractor hood (optional) It is possible to fit the ventilation system with a nonpowe-

It is possible to fit the ventilation system with a nonpowe red extractor hood.

A powered extractor hood may nevery be connected to the same ducting as the ComfoAir.

The non-powered extractor hood is mounted above the hob and removes undesirable cooking smells. There are four types of non-powered extractor hoods available:

- Type 1 \rightarrow Mechanical on/off switch.
 - The exhaust valve is operated by turning the on/off switch.
 - The ventilation setting must be set with the ComfoAir switch;
- Type 2 → Electrical on/off switch.
 - The exhaust valve is operated by pushing **2.2.1** the on/off switch.
 - The ventilation setting must be set with the ComfoAir switch;
- Type 3 \rightarrow Electrical on/off switch with connection to the ComfoAir.
 - The exhaust valve is operated by pushing the on/off switch.
 - The ventilation setting switches automatically to an "High" setting;
- Type 4 \rightarrow 3-position switch with connection to the ComfoAir.
 - The exhaust valve is operated by selecting a ventilation setting on the extractor hood.
 - The ventilation setting switches automatically to an "High" setting.

The ComfoAir is not equipped with an connection for a type 3 or 4 extractor hood.

The non-powered extractor hood is part of the ducting of the ventilation system, and does not form part of the ComfoAir.

2.1.8 Preheater element (optional)

Fitting the optional Preheater element in the ComfoAir gives the added bonus that balanced ventilation remains intact for longer. In that case, the supply of cold outside air no longer needs to be reduced (so soon). The Preheater element is activated and deactivated automatically.

2.1.10Enthalpy (optional)

It is possible to fit the ComfoAir with an enthalpy exchanger. An enthalpy exchanger helps to regulate humidity levels in the dwelling. In addition to heat recovery, the enthalpy exchanger also ensures

moisture recovery. Moisture recovery means that moisture from extracted air is transferred to the supply air sourced from outside the dwelling. An enthalpy exchanger is also less sensitive to freezing.

2.1.11 Analogue input (0-10V)

The ComfoAir Luxe is fitted with one input (0-10V). This input can be used to connect a sensor or control system to the ComfoAir. Examples of the options include:

- CO2 sensor; flow regulation using carbon dioxide levels;
- Moisture sensor; flow regulation using moisture levels.

2.2 Available operating elements

The ComfoAir is fitted with the following operating elements:

- Display on the unit;
- 3-position switch;
- 3-position switch with malfunction indicator;
- Wireless 3-position switch;
- Wireless 3-position switch with malfunction indicator;
- 3-position switch on the non-powered extractor hood;
- Bathroom switch to temporarily select the highest ventilation position;
- CO₂ sensor;
- CC Ease panel.

A concise explanation of these operating elements is given in the paragraphs below.

.2.1 Display on the unit

The ComfoAir can be operated by means of a digital display which is mounted on the unit.



Access to the menus

Sequence	Press	Display	Description
1	MENU	P2	Time delay
2		P9	Status
3		P1	Status

Example

Setting bathroom switch delay

•			
Sequence	Press	Display	Description
1	MENU	P2	Time delay
2	OK	P21	Activation delay
3	A	P22	Select 22
4	OK	30	Current setting
5	▼(10 x or press and hold)	20	Select 20
6	OK	P22	Sets the value to 20

7	MENU	P2	
8	MENU	1	Fan setting

Conly in the P2 menus settings can be made. The other P-menus (P1 and P9) can only be read.

Leaving Reading menu

• At action point 6 press "MENU" (instead of "OK").

The display can not be used for setting the ventilation positions of the ComfoAir. The arrow keys are only for setting the additional programmes.

2.2.2 3-position switch

A 3-position switch can be used to set the ventilation positions of the ComfoAir. One or multiple 3-position switches can be fitted in the house (e.g. in the kitchen). The following types of switches can be used:

- Type 1 \rightarrow Standard 3-position switch;
- Type 2 → 3-position switch with malfunction and filter alerts indicator;
- Type 3 \rightarrow Wireless 3-position switch (RF)
- Type 4 → Wireless 3-position switch (RF) with malfunction and filter alerts indicator;
- Type 5 → 3-position switch integrated on a motor free extractor hood.

A wireless 3-position switch need to be retuned to the ComfoAir if a General Reset is given.



Setting the ventilation using 3-position switch(es)

A 3-position switch can be used to set 3 different ventilation positions.

- Position 1 → Low.
 - Use for low ventilation levels.
 - Position 2 \rightarrow Normal.
 - Use when present and no extra ventilation is needed.
- Position 3 → High.
 - Use during cooking, showering and when additional ventilation is needed. Temporary High
- Timer → Temporary High
 - Use during cooking, showering and when additional ventilation is needed for a short time.

The wireless 3-position switches have an seperated button for the Timer. After the timer delay the ComfoAir will return to the ventilation setting which was active before the timer function was activated.

To use the Timer function with a wired 3-position switch choose setting 3 and immediately return to the setting you want after the timer delay.

The CC Ease panel has an integrated type 2 3-position switch. Next to the standard 3 ventilation settings the CC Ease panel also has an additional ventilation setting:

Position A → Absent
 Use when absent.

At setting A, the house is ventilated using the minimum prescribed ventilation volume.

If multiple position switches are available in the house, the ComfoAir will switch to the highest ventilation setting unless overruled by an automated software programme.

2.2.3 Bathroom switch

A bathroom switch can be used to temporarily set the ComfoAir in the highest ventilation level. This switch is mostly fitted in the bathroom to extract any excess moisture after showering, as soon as possible. The bathroom switches vary widely in model and are therefore not illustrated here. If required, the bathroom switch can be turned on and off using a time delay entered via a digital operating device.

Delay timer

This ensures that the ComfoAir does not switch on at the highest setting when activated, but first waits for the delay timer to run its course.

```
If the bathroom switch is deactivated during
the delay timer period, then the ComfoAir will
remain at its current ventilation setting and not
switch to the highest setting.
```

The delay timer does not work with all types of bathroom switches (e.g. pulse switches). In that case, leave the delay timer at 0.

Overrun timer

This ensures that the ComfoAir does not switch back to the normal (or previous) setting when deactivated, but first waits for the overrun timer to run its course. Once the programmed overrun timer is complete, the ComfoAir returns to the normal (or previous) ventilation setting.

If the bathroom switch is turned off within the programmed delay timer period, then the overrun function will be terminated.

Light switch

The functions of the bathroom switch can also be integrated into a light switch.



2.2.4 CO₂ sensor

The ComfoAir Luxe can also be operated using a CO2 sensor. A CO2 sensor measures the CO2 levels in the room where it is placed. When the CO2 sensor is set on 'automatic' the CO2 sensor will control the ventilation setting according to the ventilation need in the room.

When the CO2 levels are high the ventilation setting will automatically increase. When the CO2 levels are low the ventilation setting will automatically decrease. It is also possible to use the CO2 sensor as a standard 3-position switch. The CO2 levels in the room will then by ignored.

2.2.5 CC Ease panel

The ComfoAir Luxe can be operated by means of a CC Ease panel, which can be ordered separately.

The CC (Comfort Control) Ease panel is a digital operating device which can be mounted on the wall in the living room and from there communicates with the ComfoAir. The following overview summarizes the information that will be displayed.



The CC Ease panel has a number of buttons to operate the ComfoAir and to enter the settings. These buttons are illustrated below.

F	This button allows you to switch to the highest ventilation setting. - Press once ->Boost setting ON. - Press twice-> Boost setting OFF.
	 This button allows you to switch between supply/exhaust. Press once → SUPPLY OFF (and EXHAUST ON). Press twice → EXHAUST OFF (and SUPPLY ON). Press 3 times → SUPPLY and EXHAUST both ON.
	With this button you can read or set the comfort temperature. - Press for less than 2 seconds → READ. - Press for longer than 2 seconds → SET.
\bigcirc	This button allows you to programme two settings. - Press for less than 2 seconds → Programme ventilation setting (AUTO / MANUAL). - Press longer than 2 seconds → Programme date and time.
+	 This button allows you to programme different settings: - In P menu → Set values. - In main screen → Enter ventilation setting (A, 1, 2, 3).

2.3 Operating the CC Ease panel

The CC Ease panel is used for the following:

- Reading and setting the day and time;
- Reading and setting the comfort temperature;
- Reading and setting the ventilation volume;
- Switching Boost on;
- Switching the supply and exhaust fan on/off;
 Setting a personal ventilation programme;
- Setting a personal ventilation programmes/ options in the P menus.

A concise explanation of the above listing is given in the paragraphs below.

The CC ease will automatically return to the main screen when no buttons are pressed for 30 seconds.

2.3.1 Setting the date and time

- 1. Press " 🞯 " longer than 2 seconds.
- Wait until the day, e.g. "Sa", starts blinking.
- 2. Select the correct day using " 🕂 " or " 🗸 ".



- 3. Press " 🔘 ".
 - Wait until the hour, e.g. "12 ", starts blinking.
- 4. Select the correct hour using " /+ " or "
 ".



- 5. Press " 🞯 ".
 - Wait until the minutes, e.g. " *00* ", start blinking.
- 6. Select the correct minutes using



 Press " O " to store the settings and return to the main screen.

2.3.2 Reading and setting the comfort temperature

The comfort temperature can be read, but also set to the desired indoor temperature. By this temperature the ComfoAir will determined if free cooling with the use of the bypass is desired.

Reading the comfort temperature

- 1. Press " 📳 " briefly.
 - Wait until the comfort temperature appears.
- 2. Press " 👔 " to return to the main screen.



Setting the comfort temperature

- 1. Press " 🔋 " longer than 2 seconds.
 - Wait until the comfort temperature, e.g.
 - " 20.0 " starts blinking.
- Select the desired comfort temperature using
 " + " or " " ".
- 3. Press and briefly hold " I to store the settings and return to the main screen.

It is best to set the comfort temperature at the same temperature as the room thermostat (of the Central Heating system)

2.3.3 Reading and setting the ventilation volume

Reading the ventilation volume

The current ventilation volume, e.g. "2 ", will always be displayed on the CC Ease panel. Normally the ComfoAir regulates the required ventilation volume <u>automatically</u> according to a preset personal ventilation programme. During automatic ventilation mode "**AUTO**" will be displayed on the CC Ease panel.

In addition to showing the programmed ventilation setting, the CC Ease panel also displays whether a temporary control system (such as a CO_2 sensor or a bathroom switch) is overriding the ventilation setting.

In the event a required ventilation setting is being overridden by a time delay function (such as the bathroom switch overrun timer). a 't' is displayed in the bottom right-hand corner of the CC Ease panel.

In the event a required ventilation setting is being overridden by a signal from a sensor (such as a CO_2 sensor), an 'A' is displayed in the bottom right-hand corner of the CC Ease panel.



Setting the ventilation volume

The ventilation volume can also be set <u>manually</u> by increasing or decreasing it. A total of 4 ventilation volumes/ levels can be set. They are:

- Setting A → Absent.
 - Use when absent.

At setting A, the house is ventilated using the minimum prescribed ventilation volume.

- Setting $1 \rightarrow$ Low.
 - Use for low ventilation levels.
- Setting 2 \rightarrow Normal.
 - Use when present and no extra ventilation is needed.
- Setting 3 → High.
 - Use during cooking, showering and when additional ventilation is needed.
 - Boost → Temporary High - Use during cooking, showering and when additional ventilation is needed for a short time.

The ComfoAir will switch to the highest ventilation position set in the house unless overruled by an automated software programme.

The ventilation volume can be set as follows:

- 1. Press " 🕂 " to increase the ventilation volume.
- 2. Press " V " to decrease the ventilation volume.



During <u>manual</u> ventilation, the CC Ease panel will not display "**AUTO**", but "**MANUAL**".

3. Press " 🙆 " to return to automatic ventilation.



2.3.4 Switching Boost on

Press" v longer than 2 seconds.
 Wait until '3t' appears.



Once the programmed time delay is complete, the ComfoAir automatically switches back to the previous ventilation setting.

The Boost timer can be deactivated by pressing



2.3.5 Switching the supply and exhaust fan on/ off

While the Open fire programme is activated the supply and exhaust fan can not be turned off manually.

1. Press " [] " once (first time) to switch off the supply fan.



This mode can be used when the windows are open during the summer. In that case, fresh air is not supplied through the supply fan, but through the open windows.

2. Press " [1] " again (second time) to switch the exhaust fan off (and simultaneously switching the supply fan on).



3. Press " 🖆 " again (third time) to switch the supply and exhaust fans on again.



Bear in mind that switching off the supply or exhaust fan will temporarily immobilize your balanced ventilation system.

2.3.6 Setting a personal ventilation programme

The ComfoAir has a factory default ventilation setting (setting 2).

If wanted, you can change the default ventilation setting to suit your individual situation. For example a weekday and weekend programm.

The ventilation volume can be changed/set as follows:

- 1. Press " 🞯 " and " 🗊 " for two seconds <u>simultane-ously</u>.
 - Wait until the ventilation programme appears.
- 2. Programme the desired day or series of days.
 - Select the desired option using " 👍 " or " 🧹 ". You can choose from:
 - Weekend: "SaSu";
 - Working week: "MoTuWeThFr";
 - Week: "SaSuMoTuWeThFri";
 - Separate days: "Sa", "Su", "Mo", "Tu", "We", "Th" and "Fri".



- 4. Press " 🙆 ".
 - Wait until the programme position, e.g. "1", starts blinking.
- 5. Select the desired programme position using





- 6. Press " 🙆 ".
 - Wait until the hour, e.g. "7 ", starts blinking.
- 7. Select the desired start time in hours using



8. Press " 🙆 ".

- Wait until the minutes , e.g. " 00 ", starts blinking.

9. Select the desired start time in minutes using



- 10. Press " 🙆 " .
 - Wait until the ventilation setting e.g. " 3 ", starts blinking.
- 11. Select the desired ventilation level using " + " or "

When "d" is selected the selected programme position will be deleted.



- 12. Press " 🔊 " to save the settings and return to the main screen.
- **13. Programme** the next ventilation programme if required. Up to 8 program positions can be programmed.
 - Repeat steps 1 to 12.
- The default ventilation setting (setting 2) will be loaded again if a General Reset is given.
- 2.3.7 Setting additional ventilation programmes/ options in the P menus.
 - Some P menus in the CC Ease panel can be used to:
 - Read the status of various ventilation programmes;
 - Set ventilationsettings for the extractor hood;
 - Set time delays for various ventilation programmes.

The user can only access P menus P1, P2 and P9 to set additional programmes. The remaining P menus (P3 to P8) are for use by the installer only.

Accessing the P menus

- 1. Press """ and "" + " for two seconds <u>simultane-ously.</u>
 - Wait until "P 2" appears on the display.
- 2. Select the desired P sub-menu using " 🕂 " or "





- 3. Press " 🙆 ".
- 4. Select the desired P sub-menu using " 🚣 " or "
- 5. Press " 🙆 ".



Entering settings in P menus

The minimum and maximum values for the available parameters are preset in the software.

- 6. Select a new value for the programme using " + " or " .
- 7. Press " 🙆 " to store the settings.
- 8. Repeat steps 4 to 7 to set multiple parameters in succession.

Or Press " 📋 " to return to the P menu so steps 2 to 7 can be repeated.



9. **Press** " 📋 " twice to return to the main screen.



Only in the P2 menus settings can be altered. The other P-menus (P1 and P9) can only be read.

Leaving Reading menu

• Press " 📋 " (instead of " 🞯 ") ad step 7.

2.3.8 P menus for the user

Menu P1 → Status of programmes

		Status
Sub- menu	Description	Activated
P11	Is menu 21 currently active?	Yes (1) / No (0)
P12	Is menu 22 currently active?	Yes (1) / No (0)
P13	Is menu 23 currently active?	Yes (1) / No (0)
P14	Is menu 24 currently active?	Yes (1) / No (0)
P15	Is menu 25 currently active?	Yes (1) / No (0)
P16	Is menu 26 currently active?	Yes (1) / No (0)

Menu P2 → Setting time delays

		Time delay values		
Sub-menu	Description	Minimum	Maxi- mum	General Reset
P21 (Optional) Note: Only applies to systems fitted with a corded switch and a second switch in the bathroom.	 Delay timer for the bathroom switch (to switch to high position). 'x' minutes after operating the bathroom switch, the ComfoAir switches to the нідн SETTING. Low voltage input 	0 Min.	15 Min.	0 Min.
P22 (Optional) Note: Only applies to systems fitted with a corded switch and a second switch in the bathroom.	 Overrun timer for the bathroom switch (to switch to normal position). 'x' minutes after operating the bathroom switch, the ComfoAir switches back to the NORMAL SETTING. Low voltage input 	0 Min.	120 Min.	30 Min.
P23 (Optional) Note: Only applies to systems fitted with a hardwired 3-position switch.	 Overrun timer for ventilation position 3 (using an wired 3-position switch). If ventilation setting 3 (high) is switched on briefly (< 3 sec), the ComfoAir will switch to the HIGH SETTING for 'x' minutes and then automatically returns to the NORMAL SETTING. If any 3-position switch is operated during this lagging time the ComfoAir will instantly revert to the ventilation position as set at that time. 	0 Min.	120 Min.	0 Min.
P24	 Filter warning 'x' weeks after cleaning the filters the "FILTER DIRTY" alert will reappear. 	10 weeks	26 weeks	16 weeks
P25 Note: Only applies to systems fit- ted with an RF switch.	 Overrun timer for ventilation setting 3 (using " ⊙ "). After pressing " ⊙ " briefly (< 2 sec.), the ComfoAir will switch to the HIGH setting for 'x' minutes and then automatically returns to the NORMAL setting. If any 3-position switch is operated during this lagging time the ComfoAir will instantly revert to the ventilation position as set at that time. 	1 Min.	20 Min.	10 Min.

		Time	e delay val	ues
Sub-menu	Description	Minimum	Maxi-	General
			mum	Reset
P26	Overrun timer for ventilation setting 3 " using $igodot$ ".	1 Min.	120 Min.	30 Min.
Note: Only applies to systems fit- ted with an RF switch.	• After pressing " ⊘ " CONTINUOUSLY (> 2 sec.), the ComfoAir will switch to the HIGH setting for 'x' minutes and then automatically returns to the NORMAL setting.			
	If any 3-position switch is operated during this lag- ging time the ComfoAir will instantly revert to the ventilation position as set at that time.			
P27	Time for the Boost setting.	0 Min.	120 Min.	30 Min.
Note: Only applies to systems fit- ted with a CC Ease panel.	• After pressing " 🔊 " continuosly (>2 sec.) on the CC Ease panel, the ComfoAir will switch to the high setting for 'x' minutes and then automatically returns tot the NORMAL setting			
	If any 3-position switch is operated during this lag- ging time the ComfoAir will instantly revert to the ventilation position as set at that time.			

Menu P9 → *Status of programmes (from menu P5 and P6 additional programmes)*

		Status
Sub-menu	Description	Activated
P90	Open fire programme active?	Yes (1) / No (0)
P91	Bypass Open?	Yes (1) / No (0)
P94	Analogue input (0-10V) active?	Yes (1) / No (0)
P95	Frost protection or Preheater active?	Yes (1) / No (0)
P97	Enthalpy programme active?	Yes (1) / No (0)

2.4 Maintenance by the user

The following maintenance must be carry out by the user: Cleaning or replacing the filters;

Cleaning the valves (in the dwelling).

A concise explanation of these maintenance activities is given in the paragraphs below.

A Failure to carry out (periodic) maintenance on the ComfoAir ultimately compromises the performance of the ventilation system.

2.4.1 Replacing the filters

If so indicated on the digital operating device, you must replace the filters.



\Lambda Replace the filters (at least) once every six months.



- On the display the message "FiL" and "tEr" will appear alternately.
- On the CC Ease panel "Filterl" will appear.
- 1. Press " OK " on the display or press " CC Ease panel until the filter warning disappears.
- 2. Disconnect the power from the ComfoAir.
- 3. Remove the filter caps (A) from the ComfoAir.



4. Remove the old filters (B) from the ComfoAir



- Slide the new filters back into the ComfoAir. 5.
- Refit the filter caps (A) to the ComfoAir. 6
- 7. Reconnect the power to the ComfoAir.
- When using the ComfoAir for the first time, it is recommended to replace the filters and clean the valves first. During the construction phase the ventilation system could have become dirty with building dust.

2.4.2 Cleaning the valves (in your dwelling)

The ventilation system may be fitted with the following valves:



Exhaust valve (STV) Exhaust valve (STK)



Supply valve (STH)

You must clean the valves (at least) twice a year:

- 1. Mark the setting of the valve;
- Remove the valve from the wall or ceiling; 2.
- 3. Clean the valve in a solution of soap and warm water;
- 4. Rinse the valve thoroughly and wipe dry;
- 5. Place the valve back WITH EXACTLY THE SAME SETTING (and IN THE SAME HOLE):
- 6. Repeat this procedure for the other valves.

About the valve settings...

The ventilation air is supplied and discharged by means of valves. Gaps near doors in the dwelling ensure that the air flows in the right direction. In order to ensure that the correct ventilation volumes are maintained in the rooms, the following must be observed:

- Do not seal the gaps;
- Do not change the settings of the valves;
- Do not replace the valves with one another.

The installer will have set all the valves to ensure the optimum performance of the ventilation system. Therefore, do not change the setting of the valves.

After cleaning, make sure that all valves are placed back with the same setting (and in exactly the same ventilation hole in the wall or ceiling) AT ALL TIMES. Otherwise, system performance will be compromised.

2.5 Malfunctions

Malfunctions in the ComfoAir are reported as follows:

- The malfunction alert appears on the display,
- The malfunction alert appears on the CC Ease panel;
 The malfunction indicator on the 3-position switch lights up.

A concise explanation of methods of reporting malfunctions is given in the paragraphs below.

2.5.1 Malfunction alerts on the digital operating device

In the event of a malfunction, the corresponding malfunction code will be displayed on the digital operating device of the ComfoAir. Please refer to the malfunction overview to find out the meaning of the relevant malfunction alert.



2.5.2 3-position switch with malfunction indicators

The 3-position switches that are fitted with a malfunction indicator show when a malfunction or filter dirty alert has occurred. Depending on the type of the 3-position switch, this is done in one of the following two ways:

- 3-position switch with malfunction indicator. In the event of a malfunction or filter dirty alert the indicator lights up;
- Wireless 3-position switch with malfunction indicator.

The malfunction indicators will light up once this 3-position switch is used. One indicator will light up green to indicate communication has been established. Subsequently, in the event of a malfunctionor filter dirty alert both indicators will flash red 3 times. After that, both indicators will light up green once more.





2.5.3 What to do in the event of a malfunction In the event of a malfunction, contact the installer. Note down the malfunction code that appears on the digital operating device. Make a note of your ComfoAir type. This is given on the identification plate on the side of the ComfoAir. The system should not be disconnected from the power supply, unless the ComfoAir must be taken out of service due to a serious malfunction, or for filter cleaning/replacement or any other compelling reasons.



If the ComfoAir is disconnected from the power supply, mechanical ventilation of the dwelling will cease. This can lead to a build-up of moisture and results in problems with mould. Longterm deactivation of the ComfoAir must therefore be prevented.

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If the ComfoAir is installed in an area with a higher average humidity (such as bathroom or toilet) the probability of condensation on the outside of the ComfoAir is high. This is a normal phenomenon, similar to condensation on a window, on which no action is needed.

2.6 End of useful life

Consult with the supplier about what should be done with the ComfoAir at the end of its useful life. If the ComfoAir cannot be returned to the supplier, avoid disposing of it with the domestic waste, and ask your local council about the options for recycling the components or processing the materials in an environmentally friendly manner.

Furthermore, do **not** dispose of batteries from the wireless (RF) switches with the normal waste, but bring them to the specially designated disposal locations.

3 EEC declaration of conformity

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Machine description : Heat recovery units: ComfoAir 200 series Complies with the following directives : Machinery Directive (2006/42/EEC) Low Voltage Directive : (2006/95/EEC) (2004/108/EEC)

Zwolle, 3 March 2010 Zehnder Group Nederland B.V.

E. van Heuveln, Managing Director



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