

# Ventilation system ComfoAir Luxe 180, 200, 350

User manual



ComfoAir 180



ComfoAir 200






ComfoAir 350

## **Read this document carefully before use.**

This document provides all the information required for safe and optimal operation and maintenance of the ComfoAir 180, 200 or 350. In this document they will be referred to as “the unit”. The unit is subject to continuous development and improvement. As a result, the unit may slightly differ from the descriptions.

### **The following pictograms are used in this document:**

Symbol	Meaning
	Point of attention.
	Risk of compromised performance or damage to the ventilation system.
	Risk of personal injury.

### **!?** Questions

Please contact your local Zehnder representative if you have any questions or would like to order a new document, filters or spare parts, as specified in the Installer manual. The contact details of your Zehnder representative can be found on the final page of this document.

### **The following information can be found in this document:**

Information	Chapter
General information about the ventilation system.	1
Safety instructions which must be followed.	1
Operating devices available for the unit.	2
A summary of all the different parameters (P-menus).	2
CE / UKCA certification and warranty.	3
What to do with the unit at the end of its life.	3
How to replace or clean the filters of the unit.	4
How to clean the valves of the ventilation system.	4
How often additional maintenance is required by an installer or maintenance mechanic.	4
What to do in event of a malfunction.	5

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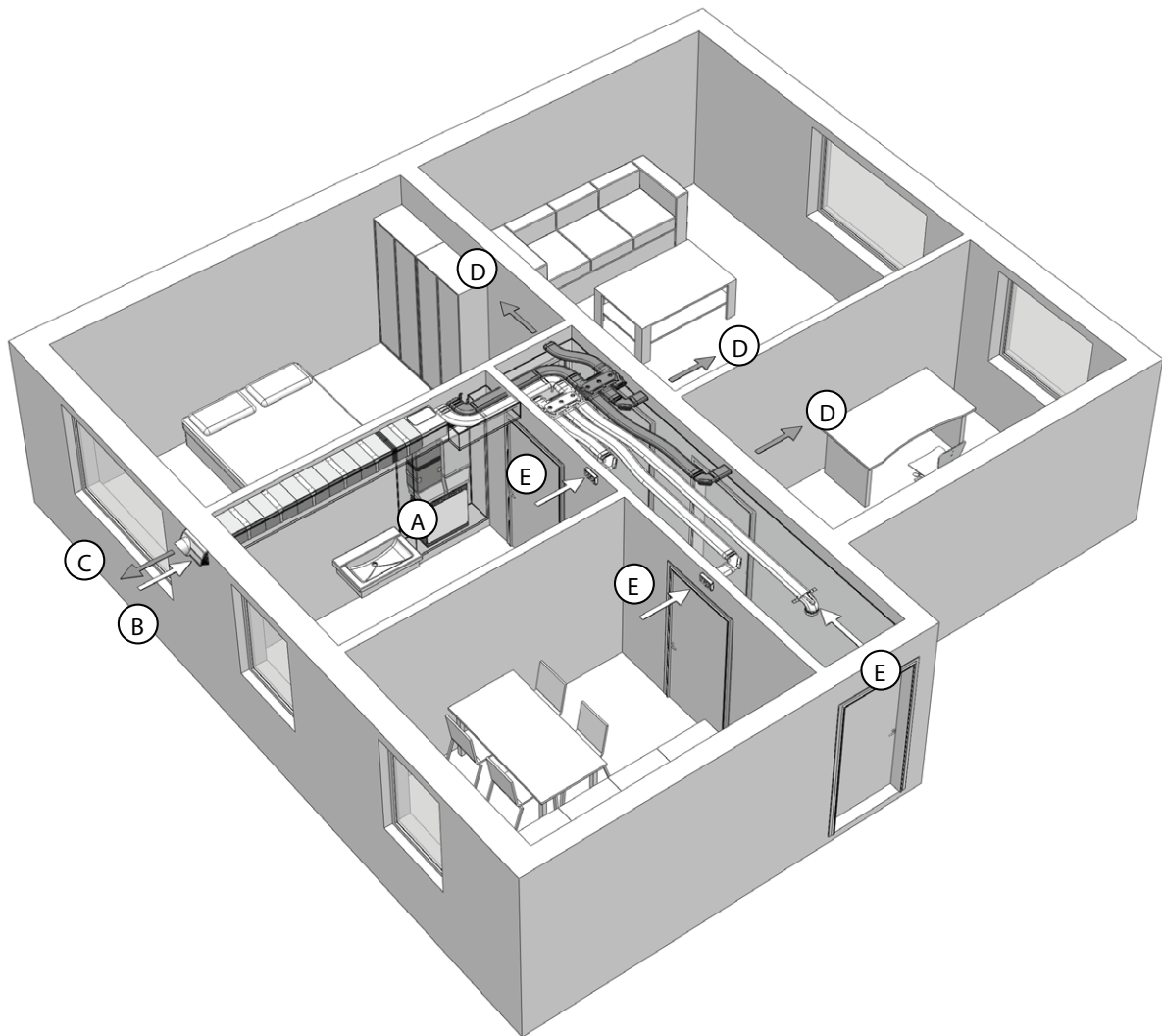
# 1 Introduction and safety

The unit is a balanced ventilation system with heat recovery in order to create energy-efficient ventilation in houses. 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.

A balanced ventilation system consists of:

- The unit (A);
- Duct system for the intake of outdoor air (B);
- Duct system for the exhaust of indoor air (C);
- Supply valves in the living room and bedrooms (D);
- Exhaust valves in the kitchen, bathroom, wc and (if present) the utility room (E).

**!** Ensure that the gaps under or near the door are never obstructed. For example by furniture, draught excluders or deep-pile carpet.



## **Safety instructions**

Always follow the safety regulations, warnings, comments and instructions given in this document. Personal injury or damage to the unit can arise from non-compliance with the safety regulations, warnings, comments and instructions in this document.

- It is recommended to take out a maintenance contract so that the device is checked on a regular basis. The supplier can provide a list of registered installers nearby;
- The unit may only be installed, connected, rendered operational and maintained by an appropriately approved installer, unless otherwise indicated in this document;
- Store this document for the entire working life of the unit;
- Instructions regarding maintenance of the filters must be carefully observed;
- When carrying out any work on the unit, make sure the power is disconnected and cannot be inadvertently reconnected;
- If the unit is disconnected from the power supply, mechanical ventilation of the dwelling will cease. This can lead to a build-up of moisture and result in problems with mould;
- The unit cannot be opened without using tools;
- If the power supply cord is damaged, it must be replaced with an original cord by the manufacturer, its service agent or similarly qualified persons in order to prevent accidents.

## **Use of the unit**






- The unit may only be used once it has been properly installed according to the instructions and guidelines given in the installer manual of the unit;
- Do not open the casing. The installer makes sure that all parts that can cause personal injury are safely contained within the casing;
- The unit 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 unit in a safe way and understand the hazards involved;
- Children must not play with the unit;
- Children must not clean and maintain the unit unsupervised.

## 2 Operation

 **How to use and read the operating devices of the unit is mentioned in the document of the operating device.**

### 2.1 Available operating devices

One or more of the following operating devices can be present to operate the unit:

Appearance	Name	Functions
 <p>Example switch</p>	Bathroom switch	Activating the overrun timer.
	RFZ	Set the desired ventilation level: <ul style="list-style-type: none"> <li>■ 1 = Low;</li> <li>■ 2 = Normal;</li> <li>■ 3 = High;</li> <li>■ ☺ = Overrun timer.</li> </ul> Indicating a malfunction or filter alert.
	ComfoSense	Indicating and setting the desired ventilation level: <ul style="list-style-type: none"> <li>■ ☺ = Absent</li> <li>■ ☺ = Low;</li> <li>■ ☺ = Normal;</li> <li>■ ☺ = High;</li> </ul> ■ PARTY TIMER = Overrun timer; ■ AUTO = Preset programme. Indicating a malfunction or filter alert; Indicating if the bypass, pre heater, ComfoFond-L <sup>2</sup> , preset programme, analogue programme <sup>3</sup> or overrun timer is activated; Turning the supply and/or exhaust fan on and off; Indicating and setting the comfort temperature; Setting the P-menus; Resetting the malfunctions and filter alert; Setting a preset ventilation programme; Setting and showing date and time.
	CC Luxe <sup>2</sup>	Indicating and setting the desired ventilation level: <ul style="list-style-type: none"> <li>■ A = Absent</li> <li>■ 1 = Low;</li> <li>■ 2 = Normal;</li> <li>■ 3 = High;</li> <li>■ ☺ 3 = Overrun timer;</li> <li>■ AUTO = Preset programme.</li> </ul> Indicating a malfunction or filter alert; Indicating if the bypass, pre heater, ComfoFond-L, preset programme, analogue programme or overrun timer is activated; Indicating outside and inside temperatures; Turning the supply and/or exhaust fan on and off; Turning the ComfoCool on and off; Indicating and setting the comfort temperature; Setting the P-menus; Resetting the malfunctions and filter alert; Setting a preset ventilation programme; Setting a preset comfort temperature programme; Setting and showing date and time; Setting languages and screen configuration.
	CO <sub>2</sub> sensor <sup>3</sup>	Indicating and setting the desired ventilation level: <ul style="list-style-type: none"> <li>■ I = Low;</li> <li>■ II = Normal;</li> <li>■ III = High;</li> <li>■ Auto = Automatic (according to measured CO<sub>2</sub> level);</li> </ul> Indicating the CO <sub>2</sub> level.

<sup>2</sup> Only available on the ComfoAir 350 Luxe.

<sup>3</sup> Not available on the ComfoAir 180.

## 2.2 P-menus for the user

The software of the unit can be customised to the users requirements by changing the values in the P-menus of the software. The P-menu can be accessed by the ComfoSense or CC-Luxe<sup>2</sup> of the unit. Menu P1 and menu P9 are read-only menus, menu P2 is for setting time delays among other things. A summary of all the accessible P-menus is given below.







### Menu P1 > Status of time programmes

Submenu	Description	Status
		Activated
P10 <sup>2</sup>	Is menu P20 currently active?	Yes (1) / No (0)
P11	Is menu P21 currently active?	Yes (1) / No (0)
P12	Is menu P22 currently active?	Yes (1) / No (0)
P13	Is menu P23 currently active?	Yes (1) / No (0)
P14	Is menu P24 currently active?	Yes (1) / No (0)
P15	Is menu P25 currently active?	Yes (1) / No (0)
P16	Is menu P26 currently active?	Yes (1) / No (0)
P17	Is the Summermode currently active?	Yes (1) / No (0)
P19 <sup>2</sup>	Is menu P29 currently active?	Yes (1) / No (0)

### Menu P9 > Status of additional programmes

Submenu	Description	Status
		Activated
P90	Open fire programme active?	Yes (1) / No (0)
P91	Bypass open?	Yes (1) / No (0)
P92 <sup>2</sup>	ComfoFond-L <sup>2</sup> valve open?	Yes (1) / No (0)
P93 <sup>2</sup>	Post heater on?	Yes (1) / No (0)
P94 <sup>3</sup>	Analogue input (0-10V) active?	Yes (1) / No (0)
P95	Frost protection or pre heater active?	Yes (1) / No (0)
P96	n/a	Yes (1) / No (0)
P97	Enthalpy programme active?	Yes (1) / No (0)

### Menu P2 > Setting time delays

Submenu	Description	Time delay values		
		Minimum	Maximum	Default
P20	n/a	0 Min.	180 Min.	0 Min.
P21	Delay timer for the bathroom switch (to switch to high position).  <b>Only applies to systems fitted with a bathroom switch.</b> ■ 'x' minutes after operating the bathroom switch, the unit switches to the high setting.	0 Min.	15 Min.	0 Min.
P22	Overrun timer for the bathroom switch (to switch to normal position).  <b>Only applies to systems fitted with a bathroom switch.</b> ■ 'x' minutes after operating the bathroom switch, the unit switches back to the normal setting.	0 Min.	120 Min.	30 Min.
P23	n/a	0 Min.	120 Min.	0 Min.
P24	Filter warning ■ 'x' weeks after replacing the filters the "filter dirty" alert will reappear.	10 weeks	26 weeks	16 weeks
P25	Overrun timer for ventilation setting 3 (using ☺).  <b>Only applies to systems fitted with an RFZ switch.</b> ■ After pressing ☺ briefly (< 2 sec.), the unit will switch to the high setting for 'x' minutes and then automatically returns to the normal setting.  If any switch is operated during this lagging time the unit will instantly revert to the ventilation position as set at that time.	1 Min.	20 Min.	10 Min.
P26	Overrun timer for ventilation setting 3 (using ☺).  <b>Only applies to systems fitted with an RFZ switch.</b> ■ After pressing ☺ continuously (> 2 sec.), the unit will switch to the high setting for 'x' minutes and then automatically returns to the normal setting.  If any switch is operated during this lagging time the unit will instantly revert to the ventilation position as set at that time.	1 Min.	120 Min.	30 Min.
P27	Time for the boost setting.  <b>Only applies to systems fitted with a ComfoSense or CC Luxe<sup>2</sup>.</b> ■ After pressing  on the CC Luxe <sup>2</sup> or after turning on the PARTY TIMER on the ComfoSense, the unit will switch to the high setting for 'x' minutes and then automatically returns to the normal setting.  If any switch is operated during this lagging time the unit will instantly revert to the ventilation position as set at that time.	0 Min.	120 Min.	30 Min.
P29	n/a	1%	99%	10%

<sup>2</sup> Only available on the ComfoAir 350 Luxe.

<sup>3</sup> Not available on the ComfoAir 180.

### 3 CE / UKCA certification and warranty

#### Warranty conditions

The unit 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 unit must not be dismantled without written permission from the manufacturer. Spare parts are only covered by the warranty 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-authorized changes or modifications have been made to the unit;
- Installation has not been carried out according to the applicable regulations;
- The defects are due to incorrect connection, inexperienced use, or contamination of the system.

On-site (dis)assembly costs are not covered by the terms of the warranty. This also applies to normal wear and tear. The manufacturer retains the right to change the construction and/or configuration of its products at any time without being obliged to alter previously delivered products.

#### Liability


The unit 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 unit 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 document;
- 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.

#### End of useful life

Consult with the supplier about what should be done with the unit at the end of its useful life. If the unit 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 take them to the specially designated disposal locations.

 **Dispose of the unit in an environmentally friendly manner. Do not dispose of the unit with your domestic waste.**



## 4 Maintenance



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

Zehnder recommends a maintenance contract with a specialist ventilation maintenance company. Some installers provide a maintenance contract in which the user maintenance can be integrated. Contact the supplier of the unit for a list of registered installers nearby.



**Ensure the unit has been disconnected from mains power before carrying out any maintenance work.**

The power to the unit should not be disconnected unless the unit is to be taken out of service due to a serious malfunction, or for filter replacement or any other compelling reasons.



**If the power to the unit is disconnected, mechanical ventilation of the dwelling will cease. This can lead to a build-up of moisture and result in problems with mould.**

### 4.1 Replacing the filters

Your heat recovery unit is covered by our standard warranty which requires annual replacement of the filters. To register for your own FREE „Filter Reminder“ service go to:  
<https://www.zehnder.co.uk/service/homeowner-registration>



**Replace the filters (at least) every six months and clean the filters every 2 or 3 months.**

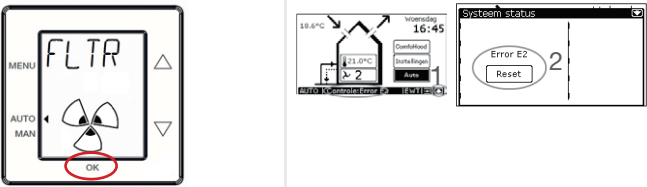

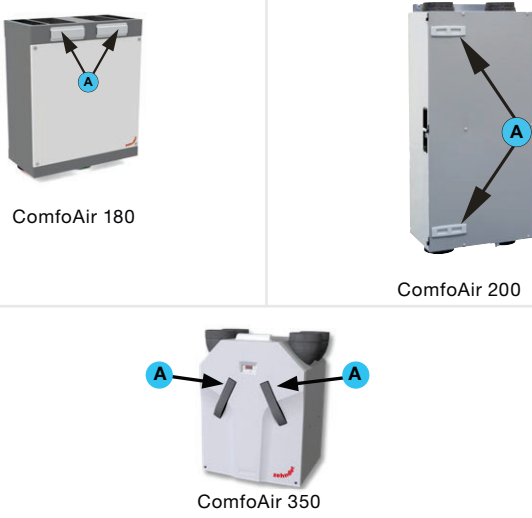


When indicated on the ComfoSense or CC Luxe<sup>2</sup> you must clean or replace the filters.

The installer of the unit can provide the necessary new filters.

Filter type	Remarks
ISO Coarse/ ISO ePM1	ISO 16890 compliant

<sup>2</sup> Only available on the ComfoAir 350 Luxe.

### 4.1.1 Replacing the internal filters

Action		Explanation
1		Reset the filter error as mentioned in the manual of the ComfoSense or CC Luxe <sup>2</sup> .
2		Disconnect the power from the unit.
3	 <p>ComfoAir 180</p> <p>ComfoAir 200</p> <p>ComfoAir 350</p>	Remove the handles (A) from the unit.
4	 <p>ComfoAir 200</p> <p>ComfoAir 180</p> <p>ComfoAir 350</p>	Remove the dirty filters (B) from the unit.
5		Install the clean filter back into the unit and reconnect the power.

<sup>2</sup> Only available on the ComfoAir 350 Luxe.

#### 4.1.2 Replacing or cleaning the external filter

If so indicated on the ComfoSense or CC Luxe<sup>2</sup> you must clean or replace the filter as is mentioned in the external filter document.

#### 4.2 Cleaning the valves

Clean the valves (at least) twice a year.

1. Mark the setting of the valve;
2. Remove the valve from the wall or ceiling;
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.

 **Some valves have a filter behind them. If a filter is present, clean it in the same way as the valve.**

##### About the valve settings

The ventilation air is supplied and discharged by means of valves. Gaps under or 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 under or near doors. For example with furniture, draught excluders or deep-pile carpet. The gap should be at least 10mm;
- 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.

#### 4.3 Condensation drain

The condensation drain is connected to the domestic waste-water system. To prevent sewer smells from entering your home, the water seal of the domestic waste-water system must always contain water. You can achieve this by pouring a cup of water into the water seal.

#### 4.4 Maintenance by the installer or maintenance mechanic

Not all necessary maintenance can be done by the user.

 **Once every 2 years the installer or a maintenance mechanic should come by for the maintenance inside the balanced ventilation system.**

Some installers offer a full maintenance contract package where the user maintenance can also be integrated.

### 5 Malfunctions


In the event of a malfunction, the corresponding malfunction code will be displayed on the ComfoSense or CC Luxe<sup>2</sup> of the unit.


In event of a filter malfunction the filter must be replaced as described in the Maintenance chapter.

In the event of all other malfunction:

1. Note down the malfunction code that appears on the display of the unit
2. Note down the unit type. This is given on the identification plate on the unit near the power supply.
3. Contact the installer or maintenance mechanic and give him the noted information.

The system should not be disconnected from the power supply, unless the unit must be taken out of service due to a serious malfunction, or for filter replacement or any other compelling reasons.

 **If the unit is disconnected from the power supply, mechanical ventilation of the dwelling will cease. This can lead to a build-up of moisture and result in problems with mould.**

 **If the unit is installed in an area with a higher average humidity (such as bathroom or wc) the probability of condensation on the outside of the unit is high. This is similar to condensation on a window and no action is needed.**

<sup>2</sup> Only available on the ComfoAir 350 Luxe.

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