

Ventilation system ComfoAir Basic

User document

zehnder

always
around you

Heating

Cooling

Fresh Air

Clean Air



ComfoAir 160



ComfoAir 200



ComfoAir 350



ComfoAir 450
ComfoAir 550

Foreword



Read this document carefully before use.

This document provides all the information required for safe and optimal operation and maintenance of the ComfoAir 160, 200, 350 or 550. In this document it 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:



Point of attention.



Risk of:

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



Risk of personal injury for the user.



Maintenance



Questions

Please contact the supplier if you have any questions or would like to order a new document or new filters. The contact details of the main supplier can be found on the rear flap 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 |
| The meaning of the information displayed on the display of the unit. | 2 |
| Using the display to set different parameters (P-menus). | 2 |
| A summary of all the different parameters (P-menus). | 2 |
| Warranty and liability conditions. | 3 |
| What to do with the unit at the end of its life. | 3 |
| EEC declaration of conformity. | 3 |
| How to replace the filters of the unit. | 4 |
| How to clean the valves of the ventilation system. | 4 |
| When the installer or maintenance mechanic must come by for the maintenance of the unit. | 4 |
| What to do in event of an malfunction. | 5 |

All rights reserved.

This documentation has been compiled with the utmost care. The publisher cannot be held liable for any damage caused as a result of missing or incorrect information in this document. In case of disputes the English version of these instructions will be binding.

Table of Contents

| | |
|--|-----------|
| Foreword | 2 |
| 1 Introduction and safety | 5 |
| 2 Operation | 6 |
| 2.1 Available operating devices | 6 |
| 2.2 Reading the display on the unit | 7 |
| 2.3 Reading and setting the comfort temperature | 8 |
| 2.4 Switching the supply fan on and off | 9 |
| 2.5 Setting a overrun timer for the RFZ | 9 |
| 2.6 Setting an overrun timer for the SA 1-3V, SA 0-3V or SAI Flash | 10 |
| 2.7 Setting an overrun timer for the second SA 1-3V, SA 0-3V or SAI Flash (bathroom switch) | 10 |
| 2.8 Setting a delay timer for the second SA 1-3V, SA 0-3V or SAI Flash (bathroom switch) | 11 |
| 2.9 Setting the delay timer for the filter alert | 11 |
| 2.10 P menus for the user | 12 |
| 3 CE certification and warranty | 13 |
| 4 Maintenance  | 14 |
| 4.1 Cleaning or replacing the filters  | 14 |
| 4.1.1 Replacing the internal filters  | 15 |
| 4.1.2 Cleaning the internal filters  | 16 |
| 4.2 Cleaning the valve  | 16 |
| 4.3 Condensation drain  | 16 |
| 4.4 Maintenance by the installer or maintenance mechanic  | 16 |
| 5 Malfunctions | 16 |
| I Installation/test report | 17 |
| II Maintenance log | 18 |

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.

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

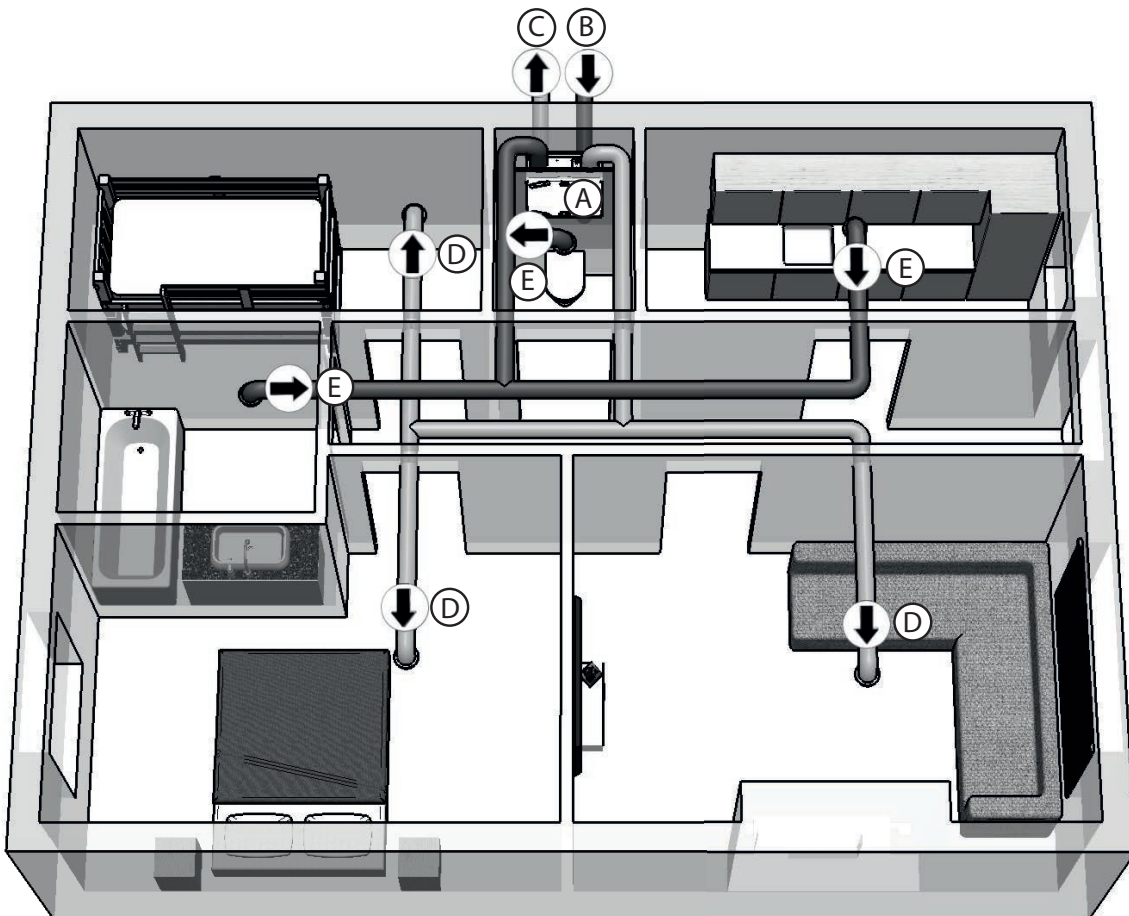
A balanced ventilation system consists of:

- The unit (A);
- Duct system for the supply 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, the toilet and (if present) the storage room (E).

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 the document for the entire working life of the unit;
- Instructions with regard to cleaning or replacing 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;
- The unit cannot be opened without using tools.










2 Operation

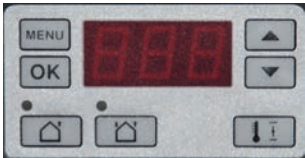
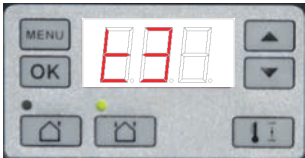
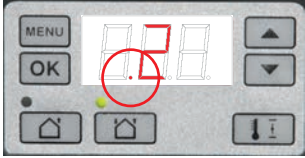

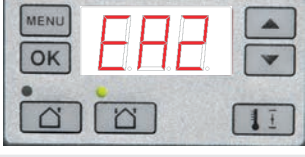

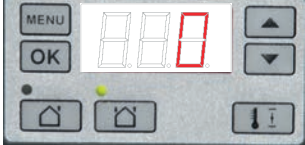

How to use and read the operating devices of the unit is mentioned in the document of the operating device.
How to use and read the display on the unit is mentioned in this document.


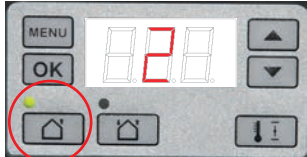
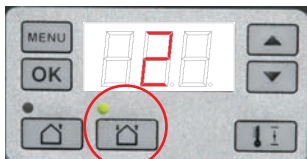
2.1 Available operating devices

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

| Appearance | Name | Functions |
|---|-----------------|---|
|  | Display on unit | <p>Indicating the set ventilation level; Indicating a malfunction or filter alert; Indicating if the bypass is open; Turning the supply fan on and off; Indicating and setting the comfort temperature; Setting the P-menus; Resetting the malfunctions and filter alert.</p> <p> The desired ventilation level cannot be set with the display on the unit.</p> |
|  | SA 1-3V | <p>Set the desired ventilation level:</p> <ul style="list-style-type: none"> ■ 1 = Low; ■ 2 = Normal; ■ 3 = High; ■ Overrun timer. |
|  | SA 0-3V | <p>Set the desired ventilation level:</p> <ul style="list-style-type: none"> ■ 0 = Off; ■ 1 = Low; ■ 2 = Normal; ■ 3 = High; ■ Overrun timer. |
|  | SAI Flash | <p>Set the desired ventilation level:</p> <ul style="list-style-type: none"> ■ 1 = Low; ■ 2 = Normal; ■ 3 = High; ■ Overrun timer. <p>Indicating a malfunction or filter alert.</p> |
|  | Bathroom switch | Activating the overrun timer. |
|  | RFZ | <p>Set the desired ventilation level:</p> <ul style="list-style-type: none"> ■ 0 = Off; ■ 1 = Low; ■ 2 = Normal; ■ 3 = High; ■ ☺ = Overrun timer. <p>Indicating a malfunction or filter alert.</p> |


2.2 Reading the display on the unit

| Appearance | Description | What to do |
|---|---|---|
|  | All lights are off. The power of the unit is turned off. | Turn on the power of the unit. |
|  | One number is displayed in the middle of the display. The current ventilation setting is displayed. Possible displayed settings are: ■ 1 = Low; ■ 2 = Normal; ■ 3 = High. | No action required. |
|  | The letter "A" is displayed in the middle of the display. The current ventilation setting is displayed. The displayed setting is "Absent". | No action required. |
|  | The letter "t" is displayed at the left of the display (with one number in the middle of the display). An overrun timer is activated (and the current ventilation setting is displayed). | No action required. |
|  | A point is displayed next to the middle of the display (with one number in the middle of the display). The bypass is opened (and the current ventilation setting is displayed). | No action required. |
|  | The letters "FIL" and "tEr" are alternately flashing on the display. The "internal filter malfunction" is displayed.. | Clean or replace the filters as mentioned in the "Maintenance" chapter. |
|  | The letter "A" is flashing at the left of the display with one or two numbers on the right of the display. The current "malfunction code" is displayed. | Contact the installer or maintenance mechanic as mentioned in the "Malfunctions" chapter. |
|  | The letter "E" is flashing at the left of the display with one number on the right of the display. The current "malfunction code" is displayed. | Contact the installer or maintenance mechanic as mentioned in the "Malfunctions" chapter. |
|  | The letters "EA" are flashing at the left of the display with one number on the right of the display. The current "malfunction code" is displayed. | Contact the installer or maintenance mechanic as mentioned in the "Malfunctions" chapter. |
|  | The letter "P" is displayed at the left of the display with one or two numbers on the right of the display. The current chosen "P-menu" is displayed. | No action required.  At this time the lower buttons of the display are not functional. |
|  | One, Two or Three numbers are displayed in the right of the display. The current setting of the chosen "P-menu" is displayed. | No action required.  At this time the lower buttons of the display are not functional. |









| Appearance | Description | What to do |
|---|--|---|
|  | Three numbers with a point after the second number are displayed in the display. The current setting of the comfort temperature is displayed. | No action required. |
|  | The light above the icon with one arrow is lit. The supply fan is turned off. There is no supply of fresh air. | Do not forget to turn on the supply fan again when the supply fan has been turned off manually. |
|  | The light above the icon with two arrows is lit. The supply fan is turned on. There is balanced ventilation. | No action required. |

2.3 Reading and setting the comfort temperature

The unit will strive for the most comfortable supply air temperature based on the set comfort temperature.

 **It is best to set the comfort temperature to the same temperature as the room thermostat (of the central heating system).**

The comfort temperature can be set between 12°C and 28°C. How to read or set the comfort temperature on the present operating device can be found in the document of the operating device.

| | Action on display | Reaction on display*** | Explanation |
|---|---|---|---|
| 1 | Press and hold  for at least 3 seconds |  | Current set comfort temperature is being displayed. |
| 2 | Press  |  | Comfort temperature is increased by 0.5°C. |
| | Or press  |  | Comfort temperature is decreased by 0.5°C. |
| 3 | Press  |  | Comfort temperature is confirmed and the display returns to the default screen. |

2.4 Switching the supply fan on and off


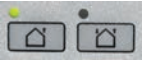


When required, the supply fan of the unit can be turned off manually. This may be desired to keep out unpleasant odors from outside. Bear in mind that switching off the supply or exhaust fan will temporarily immobilize your dwelling's balanced ventilation system, so do not forget to turn the supply fan on again. How to switch the supply fan on or off on the present operating device can be found in the document of the operating device.


When can the supply fan not be turned off on the display?

To prevent air being sucked back from the chimney of a fireplace the unit is fitted with an open fire programme. When needed the installer or maintenance mechanic can turn this programme on. If the open fire programme is turned on the supply fan cannot be turned on or off manually.

When can the supply fan not be turned on?

The supply fan cannot only be operated manually but can also be controlled automatically by the unit itself. This occurs in the winter to protect the unit from freezing. If the supply air is too cold for the unit, the unit will automatically switch the supply fan off. In this case the supply fan cannot be turned on manually.

| | Action on display | Reaction on display | Explanation |
|---|---|---|--|
| 1 | Press and hold  for at least 3 seconds |  | The supply fan is turned off. The light above the button turns green. |
| 2 | Press and hold  for at least 3 seconds |  | The supply fan is turned on. The light above the button turns green. |





















 **The supply fan will not automatically turn back on. Do not forget to turn the supply fan back on later on.**

2.5 Setting a overrun timer for the RFZ

The ventilation setting can be increased for a set time using one button on the RFZ. This can be useful when additional ventilation is needed for a short time like during cooking and showering. How to switch the overrun timer on or off can be found in the document of the RFZ. The RFZ has two overrun timers which must be set separately.

The overrun timer for briefly pressing the RFZ must be set in P-menu 25. This timer can be set between 1 minute and 10 minutes.


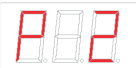















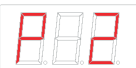


The overrun timer for pressing and holding the RFZ must be set in P-menu 26. This timer can be set between 1 minute and 120 minutes.

| | Action on display | Reaction on display*** | Explanation |
|---|---|---|---|
| 1 | Press  |  | The main P-menus are being entered. |
| 2 | Press  |  | The sub P-menus of the selected P-menu are being entered |
| 3 | Press  until P25 or P26 appears |  | The different sub P-menus of the selected P-menu are being displayed. |
| 4 | Press  |  | The selected P-menu is being entered. |
| 5 | Press  |  | Time delay is increased with 1 minute. |
| | Or press  |  | Time delay is decreased with 1 minute. |
| 6 | Press  |  | Time delay is confirmed and returned to the sub P-menus of the selected P-menu. |
| | Press  |  | Old settings are restored and returned to the sub P-menus of the selected P-menu. |
| 7 | Press  |  | Returned to the main P-menus. |
| 8 | Press  |  | Returned to the default screen. |

*** The displayed settings are the standard setting of the unit. This may differ from the actual setting of the unit.





















2.6 Setting an overrun timer for the SA 1-3V, SA 0-3V or SAI Flash

The ventilation setting can be increased for a set time. This can be useful when additional ventilation is needed for a short time like during cooking and showering. How to switch the overrun timer on or off can be found in the document of the SA 1-3V, SA 0-3V or SAI Flash. The overrun timer can be set in P-menu 23 between 0 minute and 120 minutes.

| | Action on display | Reaction on display*** | Explanation |
|---|---|---|---|
| 1 | Press  |  | The main P-menus are being entered. |
| 2 | Press  |  | The sub P-menus of the selected P-menu are being entered |
| 3 | Press  until P23 appears |  | The different sub P-menus of the selected P-menu are being displayed. |
| 4 | Press  |  | The selected P-menu is being entered. |
| 5 | Press  |  | Time delay is increased by 1 minute. |
| | Or press  |  | Time delay is decreased by 1 minute. |
| 6 | Press  |  | Time delay is confirmed and returned to the sub P-menus of the selected P-menu. |
| | Press  |  | Old settings are restored and returned to the sub P-menus of the selected P-menu. |
| 7 | Press  |  | Returned to the main P-menus. |
| 8 | Press  |  | Returned to the default screen. |

2.7 Setting an overrun timer for the second SA 1-3V, SA 0-3V or SAI Flash (bathroom switch)

The ventilation setting can be increased for a set time. This can be useful when additional ventilation is needed for a short time like during cooking and showering. How to switch the overrun timer on or off can be found in the document of the SA 1-3V, SA 0-3V or SAI Flash. The overrun timer can be set in P-menu 22 between 0 minute and 120 minutes.

| | Action on display | Reaction on display*** | Explanation |
|---|--|---|---|
| 1 | Press  |  | The main P-menus are being entered. |
| 2 | Press  |  | The sub P-menus of the selected P-menu are being entered |
| 3 | Press  until P22 appears |  | The different sub P-menus of the selected P-menu are being displayed. |
| 4 | Press  |  | The selected P-menu is being entered. |
| 5 | Press  |  | Time delay is increased by 1 minute. |
| | Or press  |  | Time delay is decreased by 1 minute. |
| 6 | Press  |  | Time delay is confirmed and returned to the sub P-menus of the selected P-menu. |
| | Press  |  | Old settings are restored and returned to the sub P-menus of the selected P-menu. |
| 7 | Press  |  | Returned to the main P-menus. |
| 8 | Press  |  | Returned to the default screen. |

*** The displayed settings are the standard setting of the unit. This may differ from the actual setting of the unit.

2.8 Setting a delay timer for the second SA 1-3V, SA 0-3V or SAI Flash (bathroom switch)

A high ventilation setting is not always desired, for instance when you only go to the bathroom for a short time. Therefore a delay time, in which the unit will do nothing with the information it receives from the bathroom switch, can be set. How to switch the overrun timer on or off can be found in the document of the SA 1-3V, SA 0-3V or SAI Flash. The delay timer can be set in P-menu 21 between 0 minute and 15 minutes.

| | Action on display | Reaction on display*** | Explanation |
|---|-------------------|------------------------|---|
| 1 | Press | | The main P-menus are being entered. |
| 2 | Press | | The sub P-menus of the selected P-menu are being entered |
| 3 | Press | | The selected P-menu is being entered. |
| 4 | Press | | Time delay is increased by 1 minute. |
| | Or press | | Time delay is decreased by 1 minute. |
| 5 | Press | | Time delay is confirmed and returned to the sub P-menus of the selected P-menu. |
| | Press | | Old settings are restored and returned to the sub P-menus of the selected P-menu. |
| 6 | Press | | Returned to the main P-menus. |
| 7 | Press | | Returned to the default screen. |

2.9 Setting the delay timer for the filter alert

How fast the filters of the unit needs cleaning or replacing depends on the air quality of the environment.

In the countryside the filters may not pollute as fast as in urban places. Therefore the filter alert has an adjustable delay timer. After the delay timer has run out the following filter malfunctions appear alternately on the display: **FIL** and **EEF**.

How to clean or replace the filters is mentioned in the "Maintenance" chapter. The delay timer can be set in P-menu 24 between 10 weeks and 25 weeks.

| | Action on display | Reaction on display*** | Explanation |
|---|--------------------------|------------------------|---|
| 1 | Press | | The main P-menus are being entered. |
| 2 | Press | | The sub P-menus of the selected P-menu are being entered |
| 3 | Press until P24 appears | | The different sub P-menus of the selected P-menu are being displayed. |
| 4 | Press | | The selected P-menu is being entered. |
| 5 | Press | | Time delay is increased by 1 minute. |
| | Or press | | Time delay is decreased by 1 minute. |
| 6 | Press | | Time delay is confirmed and returned to the sub P-menus of the selected P-menu. |
| | Press | | Old settings are restored and returned to the sub P-menus of the selected P-menu. |
| 7 | Press | | Returned to the main P-menus. |
| 8 | Press | | Returned to the default screen. |

*** The displayed settings are the standard setting of the unit. This may differ from the actual setting of the unit.

2.10 P menus for the user

A summary of all the accessible P-menus is given below.






Menu P1 > Status of time programmes

| Submenu | Description | Status |
|---------|-------------------------------|------------------|
| | | Activated |
| 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) |

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) |
| P94 | Analogue input (0-10V) active? | Yes (1) / No (0) |
| P95 | Frost protection active? | Yes (1) / No (0) |
| P96 | n/a | Yes (1) / No (0) |
| P99 | Enthalpy programme active? | Yes (1) / No (0) |

Menu P2 > Setting time delays

| Submenu | Description | Time delay values | | |
|--|---|-------------------|----------|---------------|
| | | Minimum | Maximum | General reset |
| P21  Only applies to systems fitted with two SA 1-3V, SA 0-3V or SAI Flash switches. | Delay timer for the bathroom switch (to switch to high position). ■ 'x' minutes after operating the bathroom switch, the unit switches to the high setting. | 0 Min. | 15 Min. | 0 Min. |
| P22  Only applies to systems fitted with two SA 1-3V, SA 0-3V or SAI Flash switches. | Overrun timer for the bathroom switch (to switch to normal position). ■ 'x' minutes after operating the bathroom switch, the unit switches back to the normal setting. | 0 Min. | 120 Min. | 30 Min. |
| P23  Only applies to systems fitted with a SA 1-3V, SA 0-3V or SAI Flash switch. | Overrun timer for ventilation position 3 (using a hardwired 3-position switch). ■ If ventilation setting 3 (high) is switched on briefly (< 3 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. | 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  Only applies to systems fitted with an RFZ switch. | Overrun timer for ventilation setting 3 (using ☺). ■ 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  Only applies to systems fitted with an RFZ switch. | Overrun timer for ventilation setting 3 (using ☺). ■ 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 | n/a | 0 Min. | 120 Min. | 30 Min. |

3 CE 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, inexpert 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. Zehnder retains the right to change the construction and/or configuration of its products at any time without being obliged to alter previously delivered products.

CE certification

Zehnder Group Nederland B.V.
Lingenstraat 2 • 8028 PM Zwolle-NL
T +31 (0)38 4296911 • F +31 (0)38 4225694
Company register Zwolle 05022293

Machine description

Complies with the following directives

EEC declaration of conformity

Heat recovery units: ComfoAir 160, 200, 350, 550 series

| | |
|-----------------------|----------------|
| Machinery Directive | (2006/42/EEC) |
| Low Voltage Directive | (2006/95/EEC) |
| EMC Directive | (2004/108/EEC) |

Zwolle, 15-01-2014

Zehnder Group Nederland B.V.



O. Schulte,
Director Production Zwolle

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 bring them to the specially designated disposal locations.


4 Maintenance

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


The unit should be inspected and cleaned every 2 years by a specialist. To ensure a hassle free lifespan for your unit, we recommend you take out a service agreement with an expert company.

 **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 results in problems with mould.**

4.1 Cleaning or replacing the filters

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

When indicated on the display you must clean or replace the filters. The following filter malfunctions appears alternately on the display: **FIL** and **EEF**

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

| Unit type | Filter type | Article number |
|--------------|---------------|----------------|
| ComfoAir 160 | 2x G4 | 400100023 |
| | 1x F7 / 1x G4 | 400100024 |
| ComfoAir 200 | 1x F7 / 1x G4 | 400100013 |
| | 2x G4 | 400100014 |
| | 2x F7 | 400100017 |
| ComfoAir 350 | 1x F7 / 1x G4 | 400100084 |
| | 2x G4 | 400100085 |
| | 2x F7 | 400100086 |
| ComfoAir 550 | 1x F7 / 1x G4 | 400100084 |
| | 2x G4 | 400100085 |
| | 2x F7 | 400100086 |

4.1.1 Replacing the internal filters

| | Action | Explanation |
|---|---|--|
| 1 |  <p>4 seconds</p> | Reset the filter error by pressing OK on the display for at least 4 seconds until the filter warning disappears. |
| 2 |  | Disconnect the power from the unit. |
| 3 | <div style="display: flex; justify-content: space-around;"> <div data-bbox="295 716 518 952">  <p>ComfoAir 160</p> </div> <div data-bbox="702 683 893 996">  <p>ComfoAir 200</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div data-bbox="311 1142 502 1411">  <p>ComfoAir 350</p> </div> <div data-bbox="710 1176 869 1377">  <p>ComfoAir 550</p> </div> </div> | Remove the handles (A) from the unit. |
| 4 | <div style="display: flex; justify-content: space-around;"> <div data-bbox="295 1489 518 1724">  <p>ComfoAir 160/200</p> </div> <div data-bbox="694 1489 901 1736">  <p>ComfoAir 350/550</p> </div> </div> | Remove the dirty filters (B) from the unit. |
| 5 |  | Install the clean filter back into the unit and reconnect the power.  When using the unit 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. |

4.1.2 Cleaning the internal filters

Vacuum the filters (B) with a vacuum cleaner instead of replacing them with new filters.



When using the unit for the first time, it is recommended to clean the filters (and valves) first. During the construction phase the ventilation system could have become dirty with building dust.

4.2 Cleaning the valve

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 it. If a filter is present clean this 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 the doors. For example by furniture, draught excluders or deep-pile carpet. The gap should be at least 10mm;
- Do not change the settings of the valves;
- Do not swap the valves around.

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

Ensure that the water seal (u-bend) connected to the domestic waste-water system is always full of water.

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 display of the unit.

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

In the event of all other malfunction:

| | Action | Explanation |
|---|--|---|
| 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 cleaning/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 results in problems with mould.



If the unit is installed in an area with a higher average humidity (such as bathroom or toilet) 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.

I Installation/test report

| | | | |
|---------------------|--|----------------|--|
| Date | | Address | |
| Work instruction | | Town/city | |
| Commissioning party | | Project type | |
| Installed by | | Residence type | |
| Gemeten door | | Unit type | |

Return

| Room | Position | Required [m ³ /h] | Tested [m ³ /h] | Type valve | Settings valve | Settings unit |
|----------|----------|------------------------------|----------------------------|------------|----------------|---------------|
| Kitchen | | | | | | P30 |
| Bathroom | | | | | | P31 |
| Toilet | | | | | | P32 |
| ... | | | | | | P33 |
| ... | | | | | | |
| ... | | | | | | |
| Total: | | | | | | |

Supply

| Room | Position | Required [m ³ /h] | Tested [m ³ /h] | Type valve | Settings valve | Settings unit |
|-------------|----------|------------------------------|----------------------------|------------|----------------|---------------|
| Living room | | | | | | P34 |
| Bedroom 1 | | | | | | P35 |
| Bedroom 2 | | | | | | P36 |
| Bedroom 3 | | | | | | P37 |
| ... | | | | | | |
| ... | | | | | | |
| ... | | | | | | |
| Total: | | | | | | |

Pressure

| Measured | Supply [Pa] | Return [Pa] |
|------------------|-------------|-------------|
| Press pressure | | |
| Suction pressure | | |
| Total: | | |

Zehnder Group Nederland B.V.
Lingenstraat 2 · 8028 PM · Postbus 621 · 8000 AP Zwolle
T +31 38 429 69 11 · F +31 38 422 56 94
ventilatie@zehnder.nl • www.zehnder.nl

zehnder