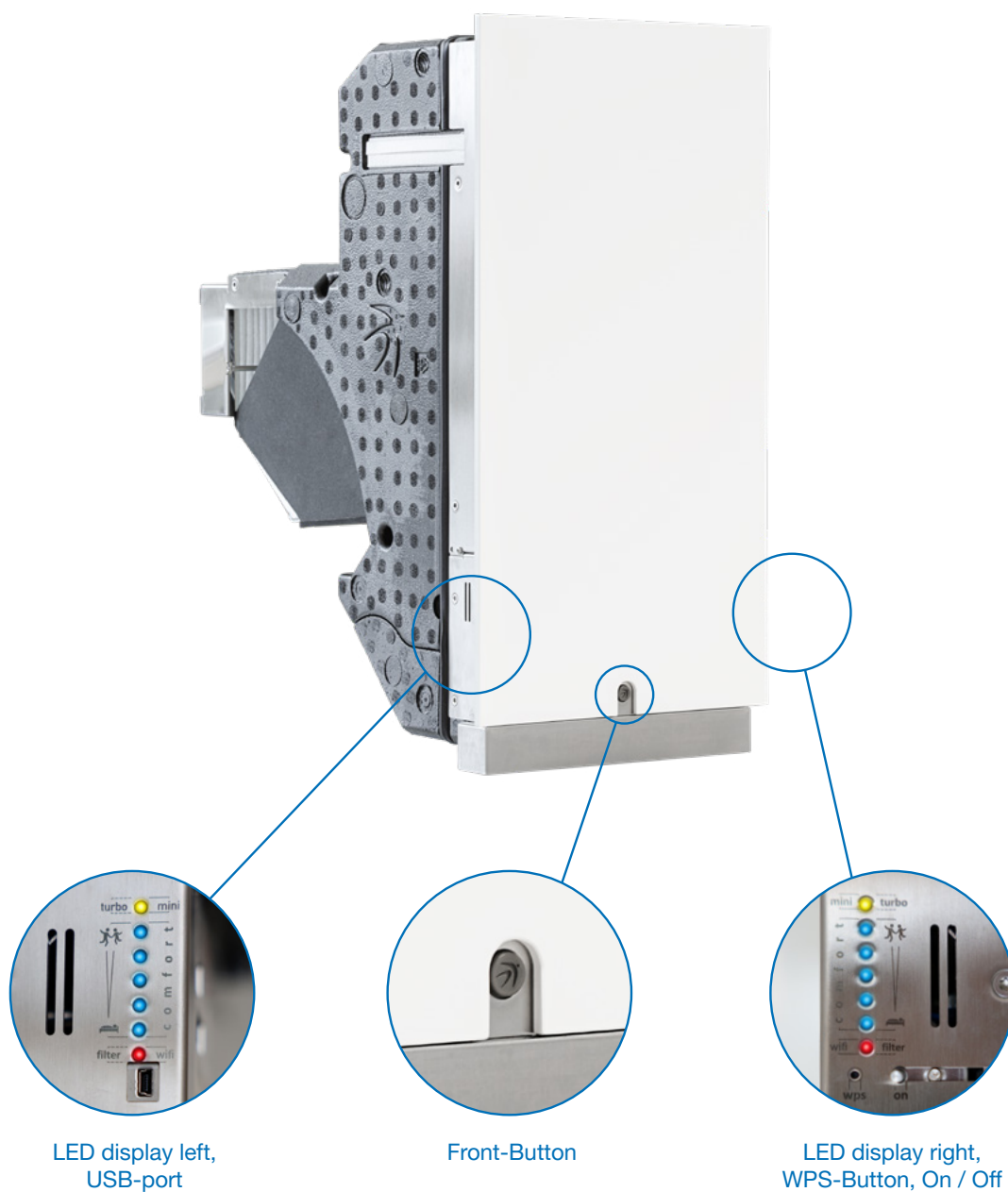




Manual for the *freeAir* 100^e

The freeAir Comfort mode: The automatic, demand-based ventilation mode of your freeAir 100^e

- After switching on, your ventilation unit works in comfort mode → The living space is automatically supplied with as much fresh air as necessary
- Pressing the front button briefly several times changes the comfort level (1-5); the more blue LEDs are illuminated, the more active your appliance is
- Changing the comfort level does not always mean an immediate change to the fan speed, but rather the appliance reacts to changes in the room air quality, in **Level 1** very soft and fluent and in **Level 5** fast and intensive

Operating modes and programmes: Used to adjust the demand-based control, depending on the situation

Turbo	Sleep	Turbo-Cool	Dehumidification	Summer night cooling
• Hold the front button down until 4 short beeps are heard • The appliance ventilates for 30 minutes without interruption at the highest level	• Hold the front button down until 4 short beeps and then 1 long beep are heard • The appliance pauses the operation for 90 minutes	• Hold the front button down until 4 short, one long and 4 short beeps are heard • The appliance switches to the highest output level for 3 hours • Feeds cool outside air directly into the rooms	• Hold the front button down for 15 seconds until 3 beeps are heard • For applications e.g. in damp cellars • Dehumidification reacts from 45 % relative interior humidity	• If the outside temperature drops below an individually set figure, the bypass is activated and the appliance feeds the cooler outside air directly past the heat exchanger into the rooms (particularly in the morning, evening and at night)
→ These functions can be ended prematurely by pressing the front button			→ These functions are ended automatically	

Operating displays: Different coloured LEDs tell you about the status of your appliance

Yellow	Blue	Red / White	Yellow + Red
● Flashes slowly during turbo mode ● Continuous illumination indicates reduced minimum ventilation (defrost function or to prevent the ingress of moisture)	● The number indicates the comfort level selected (1-5) ● Slow flashing during sleep mode; fast flashing during dehumidification mode ● LEDs go out after 3 minutes; "Wake up" by pressing button	● Red: Fast flashing indicates necessary change of filter ● Red: Slow flashing indicates hindered air flow ● White: Flashes in W-LAN search mode ● White: Flashes quickly upon successful connection ● White: continuous illumination for W-LAN connection error	● Red LED on, Yellow LED flashes, indicates a control error (The appliance switches off and closes the air vents) ● Pressing the front button shows the exact cause of the fault by means of LED combination (See operating instructions or online support)

Filter change: Annually, after filter message and as required

- Pull the appliance (grab it in the middle left and right) off the wall (do **not** set it down on the front panel, condensation could get into the control system)
 - Pull the metal tabs on the incoming air filter panel (at the back) apart and replace the contaminated filter with a new, original bluMartin filter (With the window reveal, the incoming air filter holder is located in the wall box at the top)
 - The exhaust air filter is pulled out of the appliance at the side and replaced
 - When inserting all filters, pay attention to the direction of the **AIR FLOW** arrows
 - The filter should always be changed after a longer standstill period (hygiene)
- To reset the filter operating hours counter, hold down the WPS button and briefly press the front button

W-LAN: WPS button and Connect software

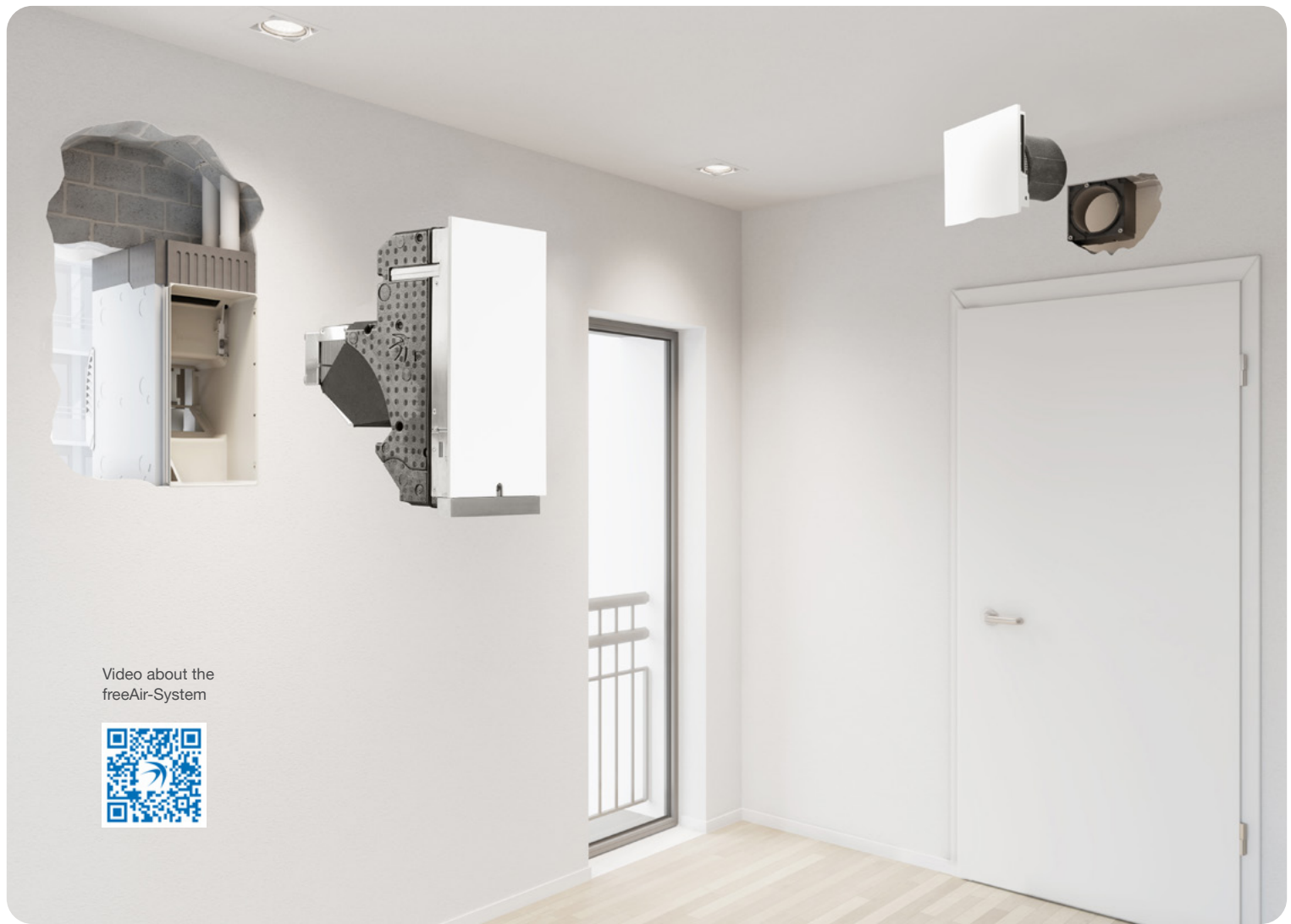
- Download the freeAir Connect software according to the software version of your appliance. Connect your freeAir 100^e to a Windows PC via a USB
- Enter your data in the "Wifi-config" tab
- Optionally the W-LAN data can be synchronised by pressing the WPS buttons on the router and freeAir 100^e (This is to be carried out before connecting with the cable, leave the "Wifi" data fields free in this case)
- Set your personal password and enter an address for the automatic service emails

freeAir Connect + software updates

- Download the freeAir Connect software and keep yourself regularly informed about software updates on our website
- Follow the instructions there (keep a mini USB cable to hand): <https://blumartin.de> → Service → Downloads → Software

→ If your freeAir 100^e does not ventilate as expected, please get in touch with us by email: service@blumartin.de

→ Tell us your concern including the serial number of your appliance (s-number can be found on the right hand side of the dismantled unit)



Video about the
freeAir-System



Dear customer,

Thank you for choosing the freeAir ventilation system.

Please read and follow this manual carefully before using the unit.

After correct installation by your installer, simply select your preferred

Comfort Level to determine how actively the unit operates.

All remaining control functions are automatically managed by the integrated sensors
and the intelligent control system of your freeAir ventilation unit.

Enjoy a pleasant indoor climate with the right amount of fresh air – fully automatic.

Your bluMartin-Team



General

Important notes for use of the freeAir 100^e

This operating manual applies exclusively to the freeAir 100e ventilation unit and is supplied with the product. Keep it accessible at all times.

Read the manual completely before carrying out any work on the unit – whether installation, commissioning, or service.

All contents must be observed by every technician involved. Installation, commissioning, and maintenance must only be performed by qualified personnel. Failure to comply with these instructions will void all warranty claims. Additional information can be found in our General Terms of Delivery.

Safety symbols:



Indicates a risk of electric shock that could result in serious injury or death.



This symbol marks instructions which must be followed exactly to avoid injury to persons or damage to property.



Indicates possible material damage or reduced performance if ignored.



Provides important information or recommendations for safe and efficient operation.

Safety instructions:

DANGER

- The unit operates with electrical power; certain components remain live while the supply voltage is connected (and for a short time after disconnection).
- Never open the housing while the unit is connected to the mains.
- Electrical installation and service work may only be performed by qualified electrical personnel.
- Follow all applicable VDE regulations and national electrical safety standards.
- Operate the unit only when it is in perfect technical condition.
- Always follow the specified maintenance instructions (see ,Service‘).
- If any fault occurs that could affect safety, switch the unit off immediately, prevent it from being switched on again, and arrange for professional repair.
- Use only original bluMartin spare and replacement parts.

Intended use:

- The freeAir 100e is a decentralized ventilation unit with heat recovery for supply and exhaust air ventilation of one or several rooms in dwellings or houses. It is installed in an exterior wall (with supply and exhaust ducts as required).
- Used air is extracted from the room where the unit is installed. With the optional two-room exhaust module, air can also be drawn from adjoining rooms such as a kitchen, bathroom, or WC.
- Fresh filtered outside air is supplied into the installation room. Using the optional two-room supply module, part of the fresh air can be distributed to a second room, e.g. a children's room.

Improper use:

- The unit is intended only for ventilation.
- The freeAir 100^e must not be used for building-drying or other non-ventilation purposes.

DANGER

The unit must only transport air that is free from flammable, explosive, aggressive, or corrosive substances, and not harmful to health.

Disposal:

Dispose of the freeAir 100e according to local legal regulations. Separate metal, plastic, and electronic components for proper recycling.

Transport and storage

Transport and store all components of the freeAir 100e only in the original packaging supplied. Protect both unit and packaging from moisture and impact. Dispose of packaging material in accordance with local waste regulations.



The freeAir 100e is delivered in a protective carton. Follow the included unpacking instructions and retain the user quick guide.

Product data – single-room variants *

Delegated Regulation (EU) No. 1254/2014

Supplier name or trademark	bluMartin GmbH
Model identification	freeAir 100° HHV-D ERV-D
Specific energy consumption (cold climate)	-80,3 kWh/(m² x a) -79,5 kWh/(m² x a)
Specific energy consumption class (average climate)	A+ A
Specific energy consumption (average climate)	-42,1 kWh/(m² x a) -41,4 kWh/(m² x a)
Specific energy consumption (warm climate)	-17,6 kWh/(m² x a) -16,9 kWh/(m² x a)
Type	Bi-directional ventilation unit (BVU)
Type of drive	Variable speed drive
Type of heat recovery system	Recuperative
Temperature efficiency of heat recovery	85,0 % 84,6 %
Maximum air volume flow	100 m³/h
Electrical input power of fan drive	50,0 W 50,8 W
Sound power level	44 dB 45 dB (33 dB with Premiumcover)
Reference air flow	0,020 m³/s 0,019 m³/s
Reference pressure difference	0 Pa
Specific input power	0,21 W/(m³/h) 0,25 W/(m³/h)
Control factor	0,65
Control typology	local demand control – 0,65
Maximum internal leakage rates	0,4 % 1,9 %
Höchste äußere Leckluftquoten	1,9 % 2,4 %
Location of optical filter warning	red LED left and right side — report by email
Beschreibung der optischen Filterwarnanzeige	LED flashes red when the filter lifetime (1 year) is exhausted or when filter contamination is detected via pressure loss. (Report by email, display in browser app). Note: Regular filter replacement is essential for device performance and efficiency.
URL für Anweisungen zur Vormontage/Zerlegung	https://blumartin.de/downloads/anleitungen/
Pressure sensitivity of airflow variation at +20 Pa and -20 Pa	4,7 % 1,4 %
Airtightness between inside and outside	1,9 m³/h 2,1 m³/h
Annual electricity consumption	3,3 kWh electricity/a 1,9 kWh Elektrizität/a
Annual heating energy savings in cold climate	90,1 kWh primary energy/a 89,0 kWh Elektrizität/a
Annual heating energy savings in average climate	46,1 kWh primary energy/a 45,5 kWh Elektrizität/a
Annual heating energy savings in warm climate	20,8 kWh primary energy/a 16,9 kWh Elektrizität/a

* HHV-D = aluminium heat exchanger

ERV-D = enthalpy heat exchanger

Product data – multi-room variants *

Delegated Regulation (EU) No. 1254/2014

Supplier name or trademark	bluMartin GmbH
Model identification	freeAir 100° HHV-Z ERV-Z
Specific energy consumption (cold climate)	-80,7 kWh/(m² x a) -79,6 kWh/(m² x a)
Specific energy consumption class (average climate)	A+ A
Specific energy consumption (average climate)	-42,1 kWh/(m² x a) -41,2 kWh/(m² x a)
Specific energy consumption (warm climate)	-17,4 kWh/(m² x a) -16,5 kWh/(m² x a)
Type	Bi-directional ventilation unit (BVU)
Type of drive	Variable speed drive
Type of heat recovery system	Recuperative
Temperature efficiency of heat recovery	85,0 % 84,6 %
Maximum air volume flow	100 m³/h
Electrical input power of fan drive	50,0 W 50,8 W
Sound power level	44 dB 45 dB (33 dB with Premiumcover)
Reference air flow	0,011 m³/s 0,019 m³/s
Reference pressure difference	50 Pa
Specific input power	0,25 W/(m³/h) 0,32 W/(m³/h)
Control factor	0,65
Control typology	local demand control – 0,65
Maximum internal leakage rates	0,6 % 1,9 %
Maximum external leakage rates	1,9 % 2,4 %
Location of optical filter warning	red LED left and right side — report by email
Description of optical filter warning	LED flashes red when the filter lifetime (1 year) is exhausted or when filter contamination is detected via pressure loss. (Report by email, display in browser app). Note: Regular filter replacement is essential for device performance and efficiency.
URL for pre-assembly / disassembly instructions	https://blumartin.de/downloads/anleitungen/
Annual electricity consumption	3,3 kWh electricity/a 2,1 kWh Elektrizität/a
Annual heating energy savings in cold climate	80,7 kWh primary energy/a 89,6 kWh Elektrizität/a
Annual heating energy savings in average climate	42,1 kWh primary energy/a 45,8 kWh Elektrizität/a
Annual heating energy savings in warm climate	17,5 kWh primary energy/a 20,7 kWh Elektrizität/a

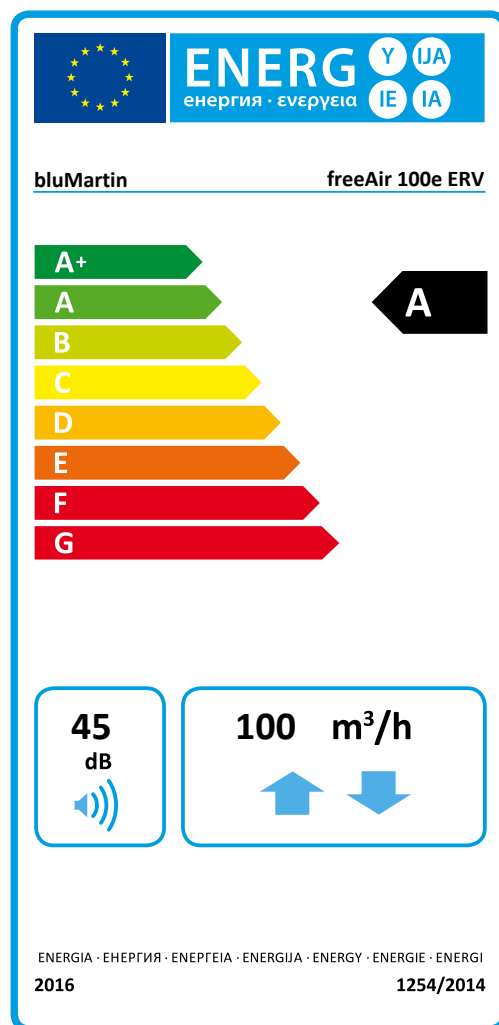
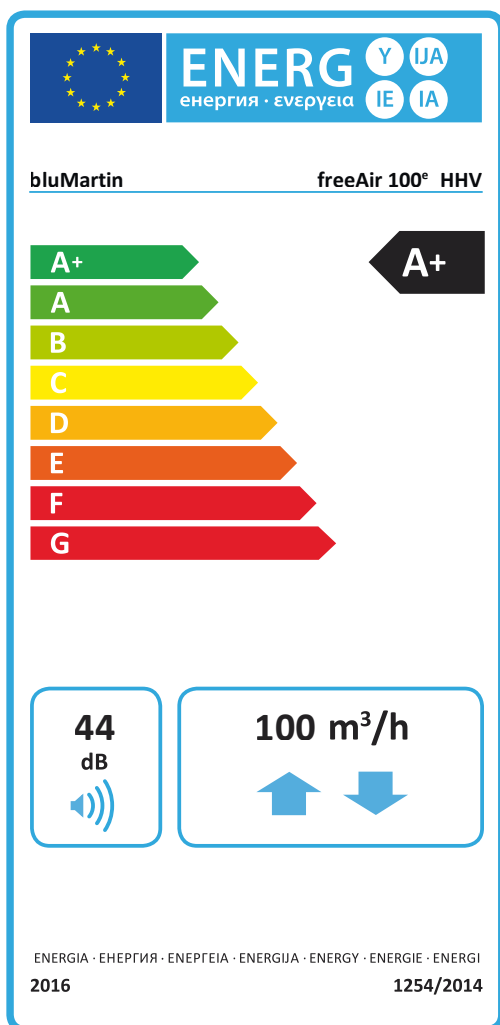
* HHV-Z = aluminium heat exchanger

ERV-Z = enthalpy heat exchanger

Further Technical Data

freeAir® 100^e

Dimension of inner front panel	28 x 58 cm (Front Panel); 30 x 63 cm (Front Cover II)
Wall thickness	32 to 53 cm incl. plaster (other dimensions possible with accessories)
Heat exchanger type	Cross counterflow; aluminium, enthalpy
Supply voltage	125 to 265 V AC; 45 to 65 Hz; internal fuse 3 A
Weight	10 kg
Sound pressure level in room	20 m³/h → 17 dB (A); 30 m³/h → 21 dB (A);
(10 m² absorption area)	80 m³/h → with Premium Cover 30 dB (A); 91 m³/h → with Premium Cover 35 dB (A)
Sound insulation index	Standby → 52 dB (DIN EN 10140-2; $D_{n,e,w}$) Operation → 46 dB (with Premium Cover max. 62 dB)
Control	Intelligent comfort control with 5 levels
Airflow control	Automatic; volume-constant; balanced
CO ₂ -Control	Automatic
Humidity management	Automatic (typically 40 bis 60 % relative humidity)
Summer night cooling	Automatic and with Turbo-Cool
Frost protection	Automatic bypass control from approx. -5°C outside
Temperature range	-40 to +50°C outside and 0 to +40°C inside
Supply air filter	Protect ePM10 (Pollen), Protect plus ePM1 (for allergy sufferers) oder Protect carbon ePM10 (activated carbon)
Exhaust air filter	Protect ePM10 (DIN ISO 16890)
Smart-Home	Connect WiFi; Connect USB; bluHome Connect (accessory for ModBus, KNX, BACnet, RS232)
Color	Front plate white or primed (paintable / designable)
Approvals	DIBt, Passive House
Optional connections	5 x 75 mm exhaust air; 2 x 75 mm + 51 mm x 138 mm flat duct supply air



Operation

GEFAHR

Observe all notes on safety and the correct use of the freeAir 100e in the [General](#) section.

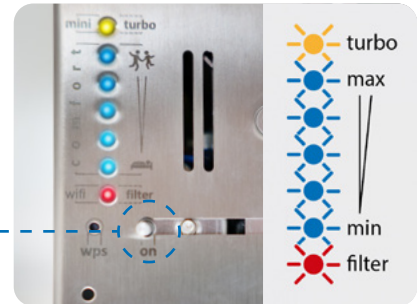
Controls and Indicators

Main power switch:

Use the main power switch to turn the freeAir 100e on or off. When switched on, all LEDs flash slowly during the start-up and self-test. During shutdown the LEDs flash rapidly, and all air flaps close automatically.

Note

If your unit is fitted with a Front Cover or Premium Cover, the control elements are accessible only after removing the cover ([see p.14](#)).



Operating elements on the **right side** of your freeAir ventilation unit

CAUTION

Wait until all LEDs are off before switching the unit on again.



-button:

The freeAir 100e is operated with a single front button. With this button you can:

- Select the desired Comfort level
- Activate or stop Turbo, Sleep, or Dehumidify mode ([see from page 14](#))

Press the -button briefly to switch between Comfort Levels 1 to 5. The more blue LEDs light up, the higher the ventilation activity. Higher levels allow the unit to react faster to changes in air quality (e.g. CO₂, humidity, temperature).

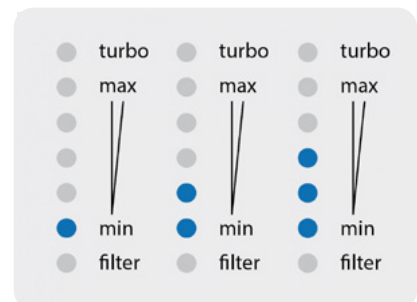


Blue LEDs:

The blue LEDs on both sides of the unit indicate the current Comfort Level. In Sleep Mode they blink slowly. In Dehumidify Mode they flash rapidly.

Note

After 3 minutes the blue LEDs switch off automatically to avoid disturbing you. Press the -button once to reactivate the display.



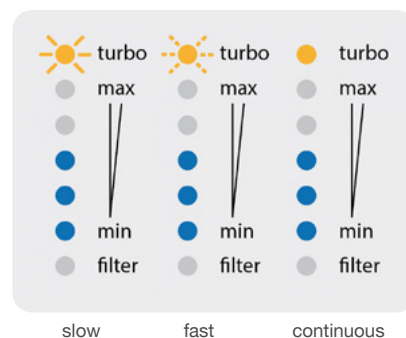
Acoustic signal:

If excessively high temperature or CO₂ levels occur, the unit emits a continuous warning tone (see [“Fault messages” p.22](#)).

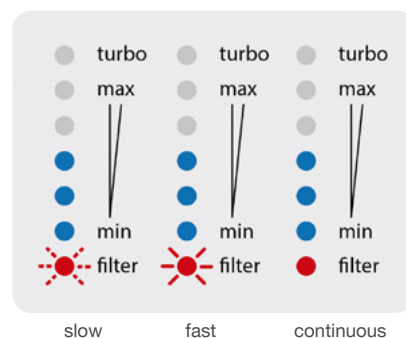
Beep)))

Yellow LED:

- **Slow blinking:** Turbo Mode active
- **Fast blinking:** Turbo-Cool Mode active
- **Continuous light:** reduced ventilation due to defrost function, humidity protection, or outside temperature below $-22\text{ }^{\circ}\text{C}$

**Red LED:**

- **Fast blinking:** Filter change due – more than 8 700 operating hours (≈ 1 year) have passed (see [Service](#) section)
- **Slow blinking:** Airflow restricted (check filters and air passages)
- **Continuous light:** Control error – ([Fault Messages p.22](#)).

**DANGER**

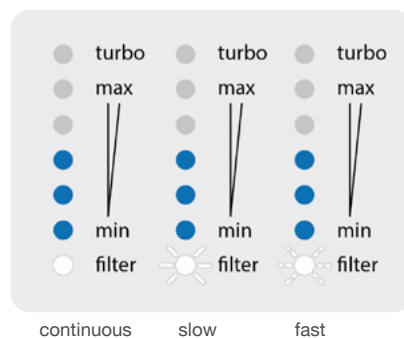
- Heavily soiled filters can restrict airflow and cause poor air quality or pressure imbalance between rooms.
- If filters are not replaced as indicated, microorganisms may form.

NOTE

During construction phases, heavy dust loads can require earlier filter replacement.

White LED:

- **Slow blinking:** After pressing the WPS button, while searching
- **Fast blinking:** Indicating a successful connection
- **Continuous light:** (instead of the red) when Wi-Fi is enabled but no connection to the local router exists. Typical causes: incorrect network name or password, distance too great, or router/internet fault. After pressing the WPS button the white LED blinks for Wi-Fi search. A successful connection is shown by rapid flashing.



continuous slow fast

WPS-button:

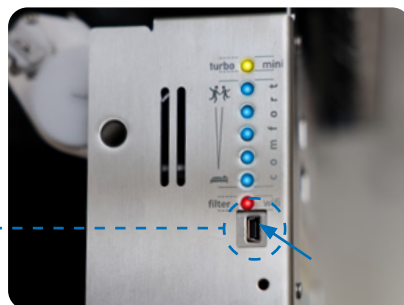
Press this button with a thin pin, while pressing the respective Button on your Router, to start the automatic connection. After successful connection (fast blinking white LED), set your personal Wi-Fi password via the USB port.

Holding the WPS button and simultaneously pressing the -button resets the filter-hour counter after filter replacement.

**USB port:**

The USB socket on the left side is used to:

- Connect to the freeAir Connect USB software (Windows PC)
- Activate Wi-Fi and set personal password
- Perform firmware updates



Mini USB socket for connecting to a Windows computer (cable not included).

Note ⓘ

Please visit our Website www.bluMartin.de In the Service and Downloads section, you will find the latest software versions for your device:



[Software](#)

NOTE ⓘ

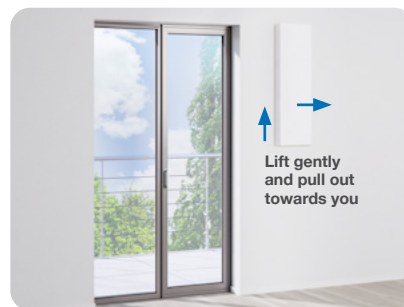
- When connecting the unit to the internet, the operator or landlord must inform residents about the automatic data transfer. The device transmits CO₂, humidity, and temperature values, from which occupancy can be derived.
- The data are protected by a freely chosen freeAir password.

Front- & Premium-Cover:

For particularly noise-sensitive installations (e.g. bedroom) our Premium Cover provides additional sound reduction of 12 dB. Front Cover III reduces noise by 5 dB. Both covers also provide a different visual appearance.

If the unit must be removed or the controls must be used, the cover must be detached. Slightly lift the cover (front or Premium) to release it from the spline-like retention clips and then pull it forward.

To reinstall the cover, guide the retention clips loosely into the openings and press the cover flush to the wall. Press and hold until 4 short beeps = Turbo mode (note: beep codes shown in original).



Operating modes

Comfort mode (Standard):

After start-up the unit operates in Comfort Mode. Ventilation rate and response speed depend on the selected Comfort Level. Higher levels increase airflow and allow faster adaptation to changes in air quality. The 8 Sensors continuously monitor CO₂, temperature, and humidity (inside and outside).

Recommended settings:

- Level 1 – quiet rooms, e.g. bedrooms
- Level 3 – normal operation in living rooms

Note

On the freeAir basic device you can choose between 3 base ventilation stages.

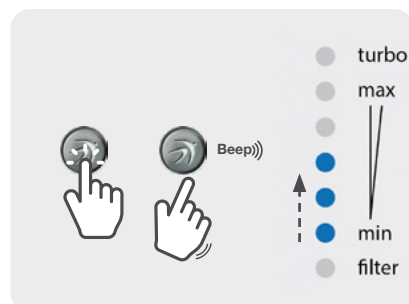
The -button is used manually:

Level 1 = 20 m³, Level 3 = 30 m³, Level 5 = 40 m³.

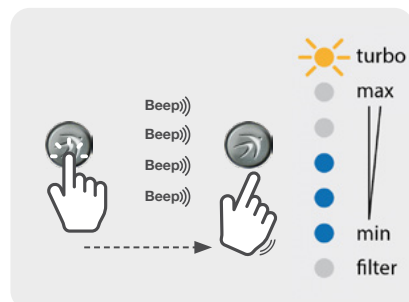
Level 2 (between 20 and 30 m³) and **Level 4** (between 30 and 40 m³) depend on device DIP settings.

Turbo-Mode (rapid airing):

Turbo sets the unit to the highest stage for 30 minutes and thus maximum airflow. The yellow LED blinks slowly. This mode is useful when you have guests, for rapid airing, or to quickly remove cooking odors. Comfort mode is resumed automatically afterward. You can terminate the Turbo mode early by pressing the -button once.



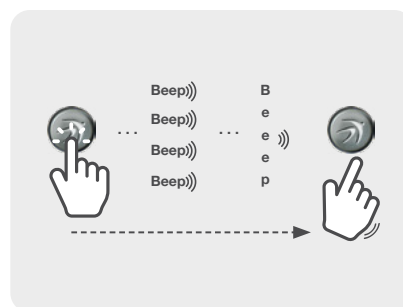
1 short press → 1 short Beep = advance Comfort-Level



Press and hold until you hear 4 short beeps = Turbo mode

Sleep-Mode:

Hold the -button until first four short beeps (Turbo) and then one long beep sound. Your freeAir 100e will pause operation for 90 minutes and then automatically return to Comfort mode. You can end this mode early by pressing the -button once.



Press and hold → 4x short beeps →
1x long Beep = **Sleep Mode**

Automatic Summer Night Cooling:

At night during warm periods, the unit automatically uses cooler outdoor air to lower indoor temperature.

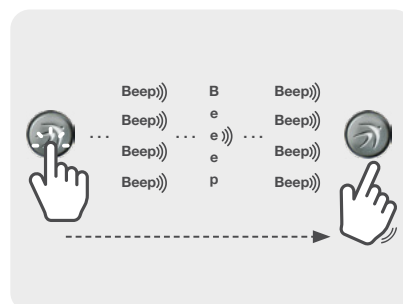
When indoor temperature exceeds a defined threshold, the bypass flap opens and directs the fresh air past the heat exchanger.

Airflow increases automatically.

Temperature limits can be adjusted via DIP switches.

Turbo-Cool-Mode:

Press and hold the -button longer until four short tones, one long tone, and then four short tones sound. The bypass flap opens and the unit operates at maximum power for 3 hours. Cool outside air flows directly indoors to reduce room temperature. Turbo-Cool Mode ends automatically after 3 hours or earlier if the -button is pressed.

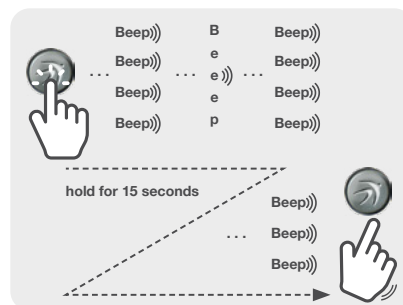


Press + hold → 4x short Beep → 1x long Beep → 4x short Beep = **Turbo-Cool**

Dehumidify-Mode:

If automatic dehumidification in Comfort Mode is insufficient (e.g. in basements), press and hold the -button for 15 seconds. Three tones sound and the blue LEDs flash. Dehumidify Mode activates when relative indoor humidity exceeds 45 %.

The unit compares absolute humidity indoors and outdoors and increases ventilation when indoor humidity is higher, thus ensuring reliable moisture removal.



Press and hold → 4 short Beeps →
1 long Beep → 4 short Beeps + hold for 15 seconds = **Dehumidify-Mode**

Service

NOTE

- Annual filter replacement requires no tools.
- The data are protected by a freely chosen freeAir password.
- Use only original bluMartin filters, available from installers or at www.blumartin.de and Amazon.
- Replacement separation medium for the condensate siphon is available from your dealer.
- For installation and service work, Torx-10 and Torx-20 screwdrivers are required.

DANGER

Observe all safety and use instructions in the [General](#) section.

Device-Test

After installation, switch the unit on at the main power switch.
Wait several minutes until all self-tests are complete.

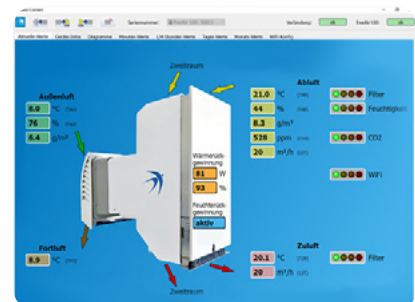
Connect-Software

For diagnostics, firmware updates, or Wi-Fi activation:

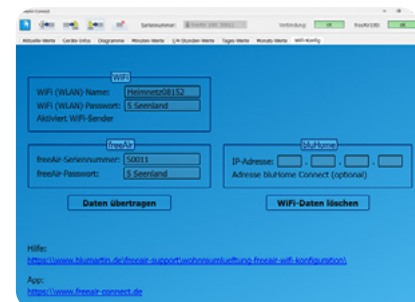
- Only required for installation, troubleshooting and data access
- Laptop (Windows 7, 8, 10 or 11)
- USB cable (A plug to Mini-B plug)
- Install the freeAir-Connect software. Download at:
www.blumartin.de/service/downloads
- Device control is not possible in this mode

Wi-Fi Configuration:

1. In the freeAir Connect-USB software, open the Wi-Fi Config tab
2. Enter Wi-Fi name and password; check signal strength
3. Optionally use the WPS button or the bluHome connect module
4. Click „transfer data“ to save
5. To deactivate Wi-Fi, delete all network entries.



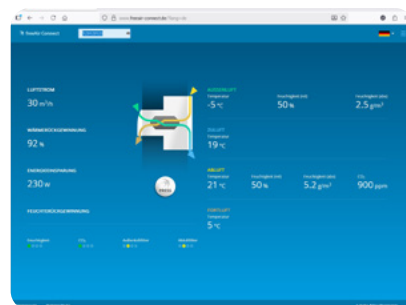
View of the freeAir connect browser app, used to change the comfort level and check device values via Wi-Fi.



View of the freeAir connect WiFi setup in the 'WiFi Config' tab.

Registration in the freeAir-Connect browser app:

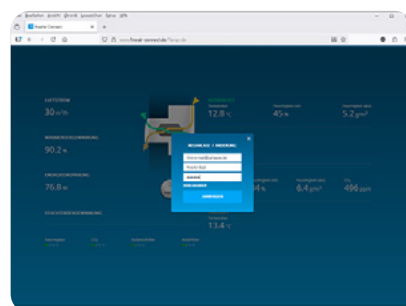
- freeAir-Connect is not mandatory, but useful for system overview and remote operation without a cable connection – also when off-site. Browser-based at www.freeAir-Connect.de (PC and mobile)
- Enter the serial number of your unit in the upper input field, then log in using your personal password.
The following functions are available:
 - Retrieve current, daily, and monthly operating data
 - Set Comfort level and select operating modes (e.g. Turbo)



View of the freeAir connect browser app, used after logging in to change the comfort level and check device values.

Registration for reporting function

- Click the notepad icon to register the unit for the reporting function
- Information e-mails (e.g. filter replacement, faults) are sent automatically
- Gerät individuell benennen, mehrere Geräte als Favoriten speichern.
- Confirm all entries with the password from freeAir-Connect-USB.



Registration for the report function.

Note ⓘ

Eine ausführlichere Anleitung finden sie auf unserer Webseite im [freeAir Supportbereich](#).

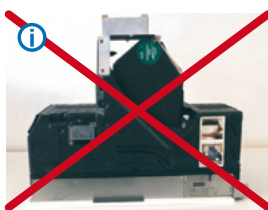
Filter Replacement / Maintenance

Perform annually or as required:

1. Pull the freeAir 100e straight out of the wall using both hands at the center.

Note ⓘ

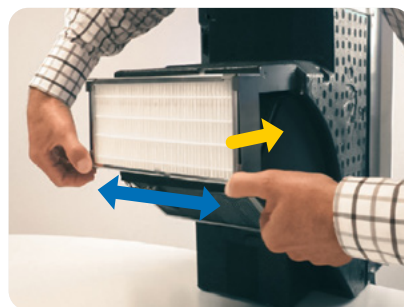
Do not place the unit on its front side to avoid condensate entering the electronics.



2. Press both metal tabs outward and remove the filter holder. Replace the used supply-air filter with a new original bluMartin filter.

Note ⓘ

- For the window-reveal version, the supply-air filter is at the rear top of the casing.
- Observe the **AIR FLOW** arrow when inserting filters.

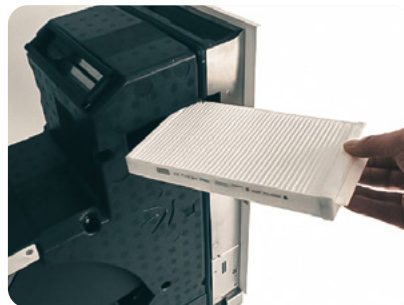


i Check the heat exchanger for contamination and clean gently with a soft brush if required.

3. Pull the exhaust-air filter out sideways and insert a new original filter observing the **AIR FLOW** arrow.

Note ⓘ

After a longer period of inactivity, the filter must be replaced for hygiene reasons.



4. Clean the wall casing and outer hood from the inside with mild soapy water.
Check that the condensate drain (brass opening at rear) is clear.
Apply the supplied silicone grease to the front edge of the wall casing so the unit slides easily into place.



5. Check the condensate drain and refill the separation medium if necessary.
6. Insert the unit straight into the wall casing and push firmly until it stops. The unit will only start when fully seated.

Note ⓘ

The unit will only start when fully seated.



7. To reset the filter-hour counter, press and hold the WPS button with a pin, then briefly press the  -button.
Alternatively, activate **Service Mode p.21**.



Heatexchanger Maintenance

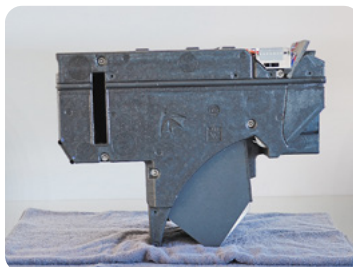
Enthalpy - recommended every 5 years; **Aluminium** - recommended as required or after 10 years.

1. Remove the unit from the wall as described in the section on the [Filter replacement p.17](#).

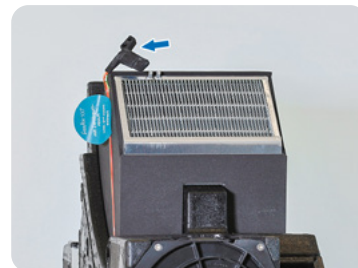
2. Loosen the four Torx-20 screws and remove the filter holder plate.



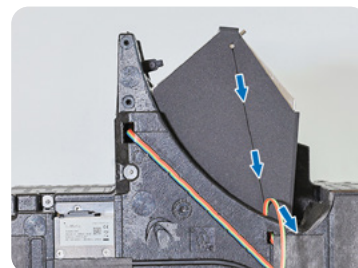
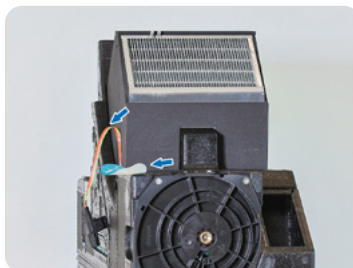
3. Place the unit with the heat-exchanger side down to allow condensate to drain.



4. Loosen the two Torx-10 screws and carefully pull the sensor downward.



5. Remove the cable sticker and free the cable from its recess.



6. Pull the heat exchanger backward and fold the sensor aside.



7. Rinse the exchanger gently in warm soapy water in a large Tub. Rinse off any residue thoroughly with plenty of warm water. Leave the heat exchanger to drain in an upright position. Allow it to dry completely before reinstallation!

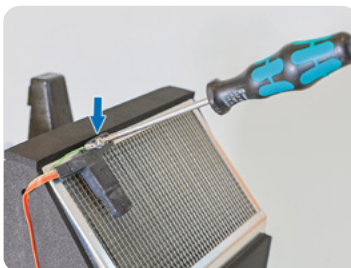
8. Reinsert the dry exchanger, ensuring correct position of threaded sleeves.



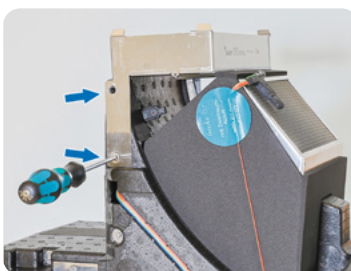
9. Put the sensor back in position and insert the cable into the recess.



10. Re-install the sensor and ground cable, tightening the screws lightly.

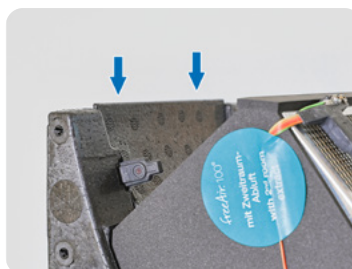
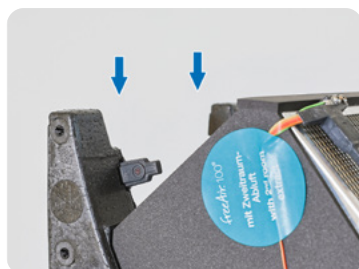


11. Refit the filter plate with four screws.



Note

If you are not using the window-recess version, ensure the EPP air-guide element is reinserted correctly.



Service Mode

Activating Service Mode:

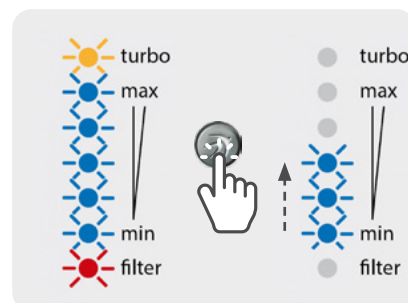
1. Switch the unit off at the main power switch.
2. Hold the -button and switch the unit on again.
3. Continue holding until a short tone sounds.

The unit is now in Service Mode.



Functions in Service Mode:

- All LEDs blink briefly, then the blue LEDs light up continuously.
- Each press of the front button sets a fixed airflow:
20, 30, 40, 50, 60, 70, 85 oder 100 m3/h.
- For levels 1–5, LEDs light according to the selected stage.
- For levels 6–8, LEDs go out from bottom to top.
- When switching on, firmware version is shown by LED sequence.



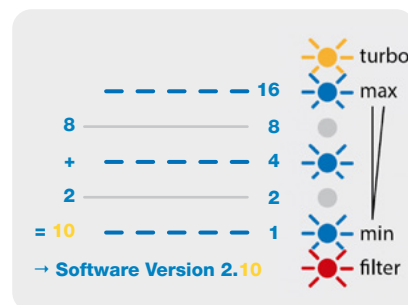
1x short press in service mode =
Select air flows

NOTE

- Entering Service Mode resets the filter-hour counter to zero.
- After switching off and on again, the unit returns to normal operation.
- Holding the -button activates a self-test mode.
- Certain functions (e.g. defrost control) are disabled in Service Mode.
Use this mode only for maintenance or testing.

When switching on, firmware version is shown by LED sequence, digitally starting from below.

Example image shows Software version 2.10.



Fault messages:

Filter operating time:

Fast flashing red LED → More than 8,700 operating hours (≈ 1 year) have passed since the last filter change.

Note

After a filter replacement, putting the Divece into Service mode resets the filter hours counter to zero.

Filter contamination:

Slow flashing red LED. One or both fans report a fault because of restricted airflow. (only displayed after 3 days).

Can also be caused by other airflow obstructions (e.g. insufficiently sized openings or DIP switch exhaust flow set too high).

WiFi:

White LED lights continuously → no connection to the local Wi-Fi router.

Causes:

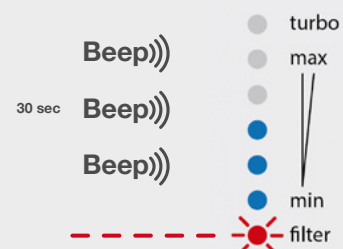
- Wrong Wi-Fi name or password
- Excessive distance to the router
- Router or internet fault

CO₂-Level:

Measured CO₂ concentration is above 4500 ppm. Acoustic warning for 30 seconds.

Fire alarm:

If any temperature sensor detects > 80 °C, the unit triggers an alarm, stops ventilation, and closes all air flaps.

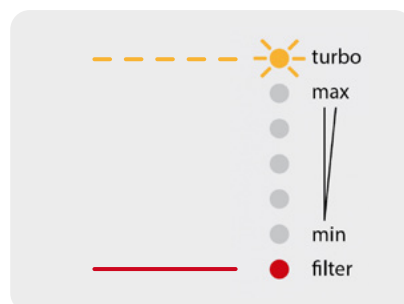


Control Error Analysis:

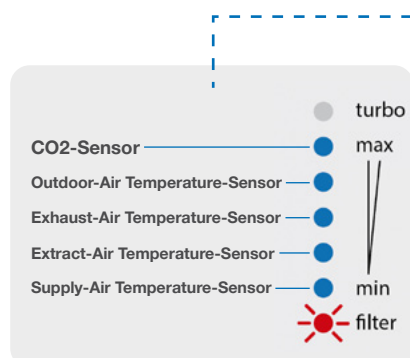
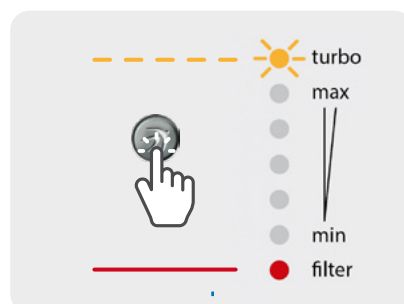
1. A control error is indicated when the red LED is steady and the yellow LED blinks.

Note ①

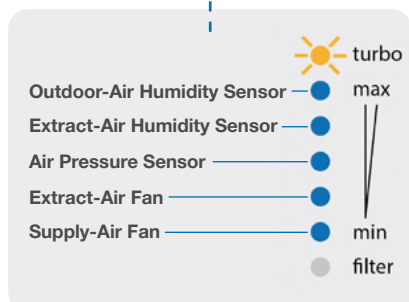
A **steady red LED alone** indicates only that a filter change is due.



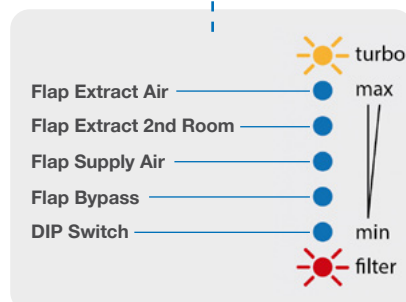
2. Press and hold the -Taste. The unit displays an error code using the side LEDs: the yellow, red, or yellow+red indicator blinks together with one of the five blue LEDs. The position of the blue LED identifies the specific fault source (as listed in the error table).



Red LED blinking + one of the blue LEDs lights up continuously



Yellow LED blinking + one of the blue LEDs lights up continuously



Yellow + red LEDs blinking + one of the blue LEDs lights up continuously

3. Restart the unit and perform a firmware update if available.
4. For further troubleshooting, visit:
www.blumartin.de/freeair-support/
5. If the fault cannot be resolved, contact your service partner.
Provide the identified error code and the serial number of your freeAir 100°.



NOTE ①

Eine Rücksendung des Gerätes darf nur nach Rücksprache mit Ihrem Service-Partner und in der dafür vorgesehenen Versandverpackung erfolgen.



ausgezeichnet lüften

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