GVAIRVENT, feel GOOD !

Fresh Air Ventilation Instructions

Content

1. Abstract

GVent heat exchange fresh air ventilation will bring you the fresh and clean air. The ventilation by windows, particularly in the hot summer and cold winter, belongs to the past. Fresh air from now on can be supplied automatically by heat-exchange machine. Stale air is sucked off and their warmth is transferred to the fresh air. You saved heating costs, increase your housing comfort and relieve our environment (CO2-saving).

GVent ventilation system is appropriate for continuous operation. With correct use, we assure you a long and effective functionality. We've enjoyed the fresh air it brings to us, hope you will too.

1.1 Rules for correct use

- The equipment is suitable excellently for the drying phase of the building after moving in. It is not suitable for the building dehumidification during the construction work and for ventilation during completion of the interior. A increased dusty condition or a constantly high air humidity will pollute the filters prematurely.

- Never operate the device without suitable filters. They protect your health and your living spaces against environmental influences.

- The device is not to be installed into a cabinet or similar situation, not to be covered with a towel or similar, not to be blocked by furniture and not to be covered with curtains, windows or similar covering.

- Please pay attention to all operation instructions.

- Please consider all maintenance references.

- **Warning !**

➢ This device is not to be used neither by persons (including children) with limited mental, sensory or intellectual abilities nor to be used by persons with lack of experience and/or knowledge, unless they are supervised by a person who is responsible for their safety or they received advise by this person how to use the device. Children should be supervised in order to assure that they will not play with the device.

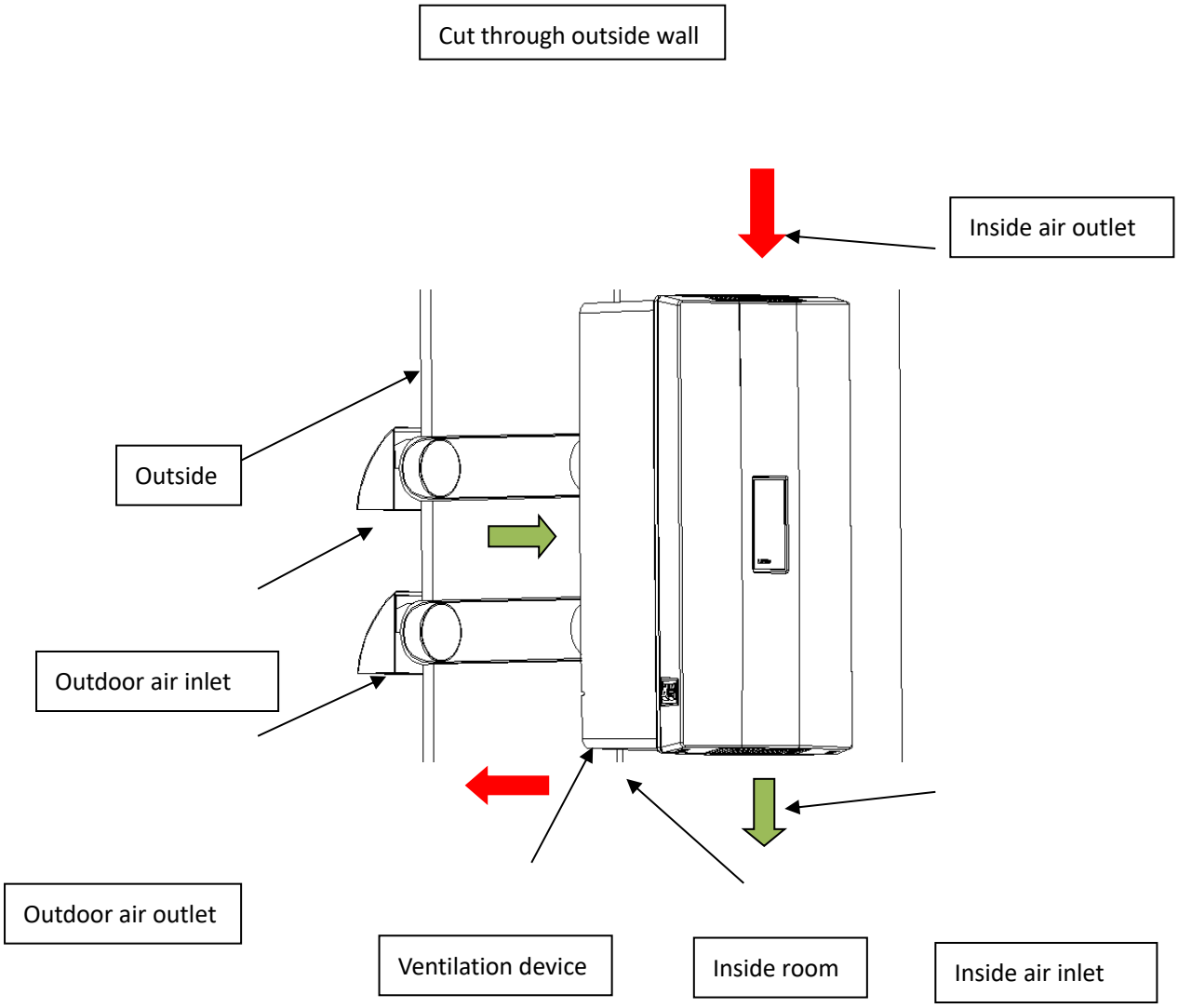
➢ There is no possibility of guarantee in case of nonobservance of these rules.

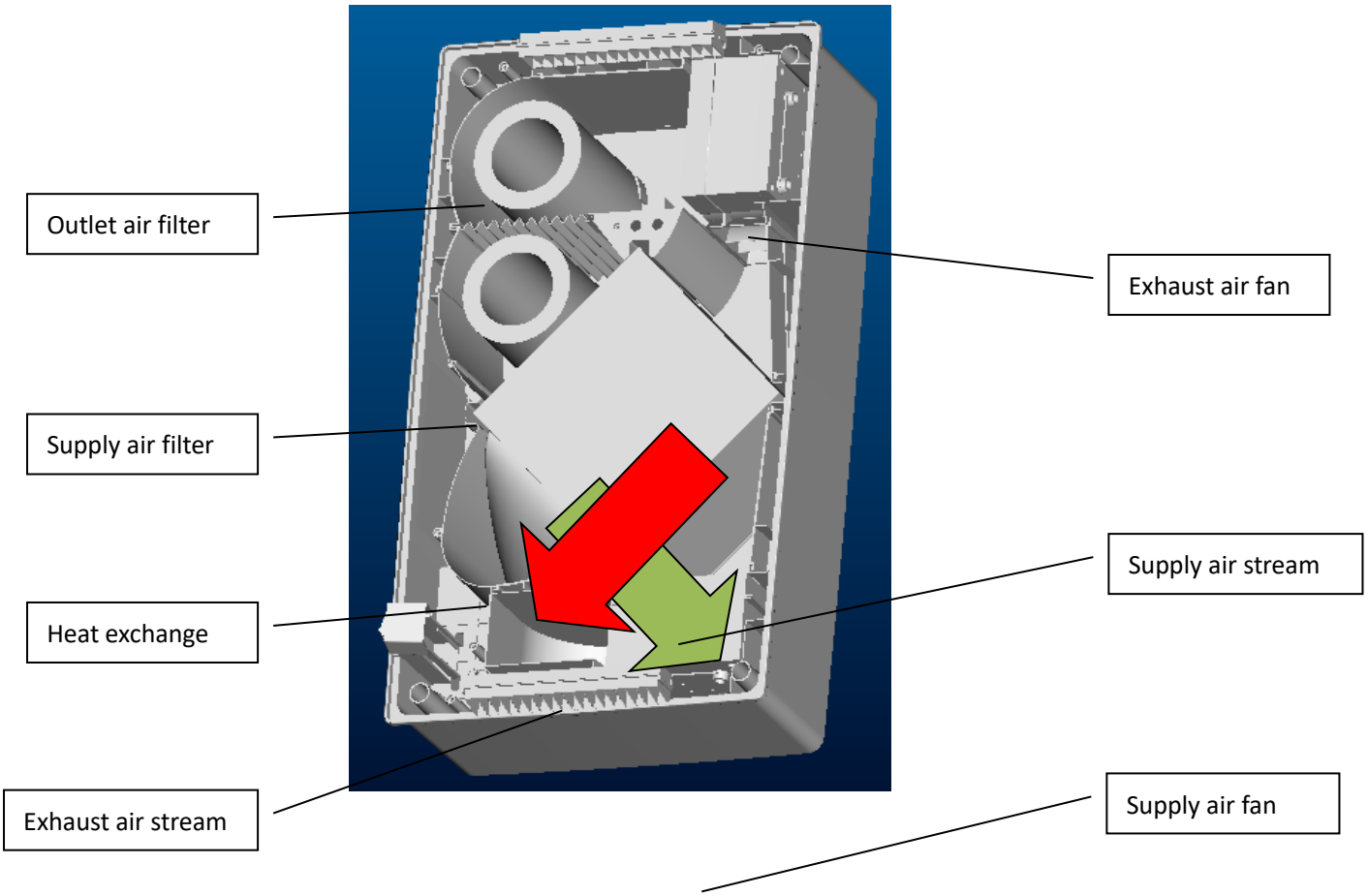
1.2 How it works

Install the device on an external wall and then switch on, two motors and two fans will start according to the program designing. The supply air fan promotes fresh air from the exterior via the supply air filter and the heat exchanger into the interior as supply air. The exhaust air fan promotes stale air via the exhaust air filter and the heat exchanger as exhaust air to outside.

The internal pressure remains almost constant. In an environment where inside temperature is higher, the warm room air stream keeps the heat through heat exchanger and warms it up. The outside cold fresh air stream is led around 90degree transferred across the heat exchanger and warms up at the heat exchanger. It is supplied to the living space as warmed up air. This procedure takes place contactlessly in separate air streams. A mixture of both air streams is not possible.

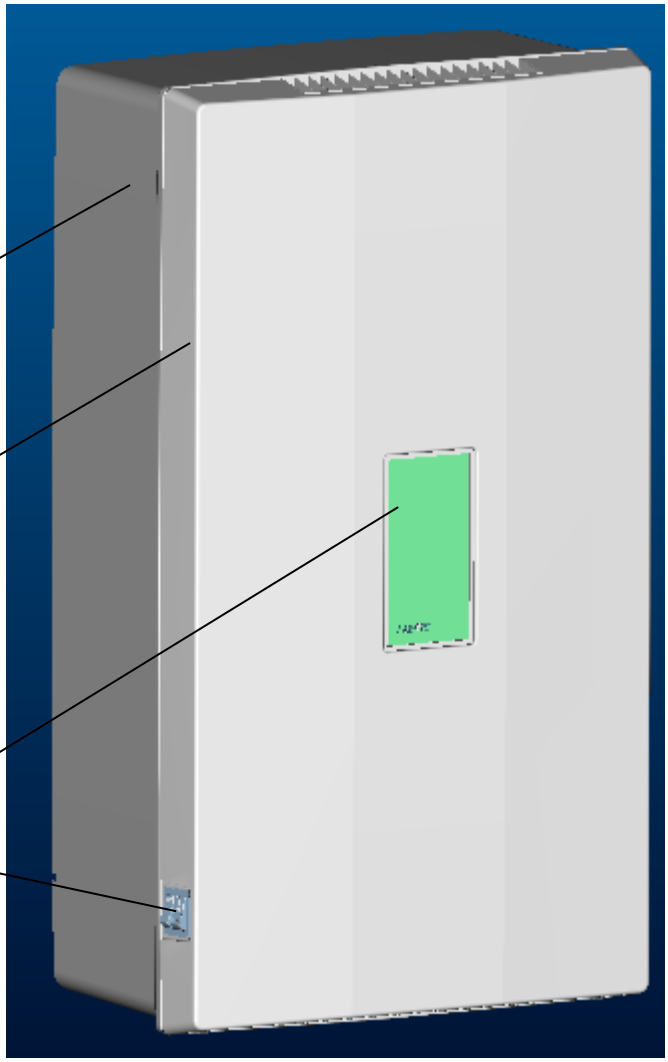
Chart as follows:

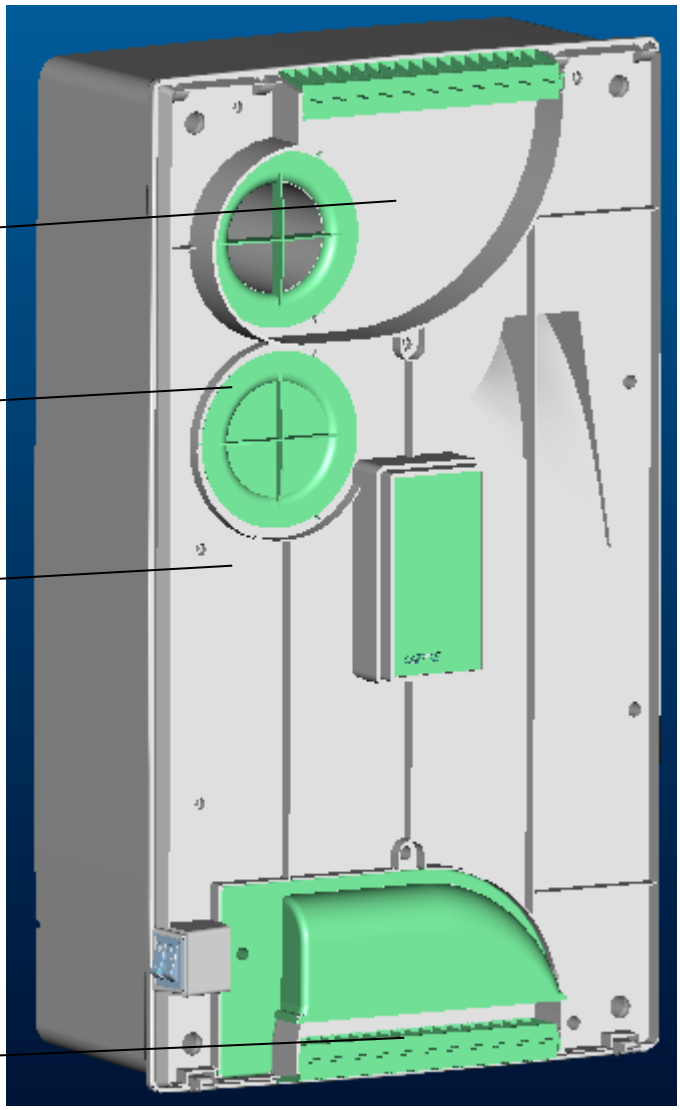


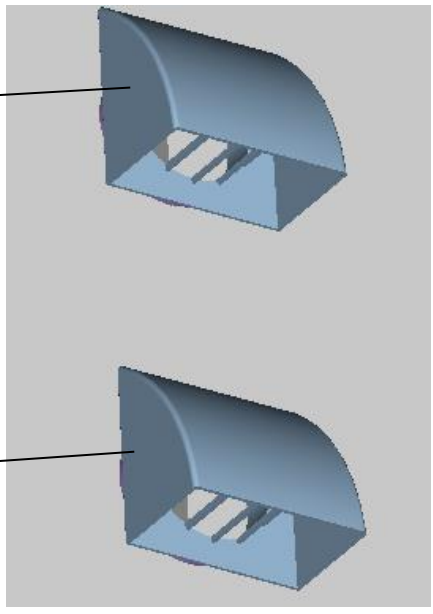


1.3 Technical Manual

chart as follows：

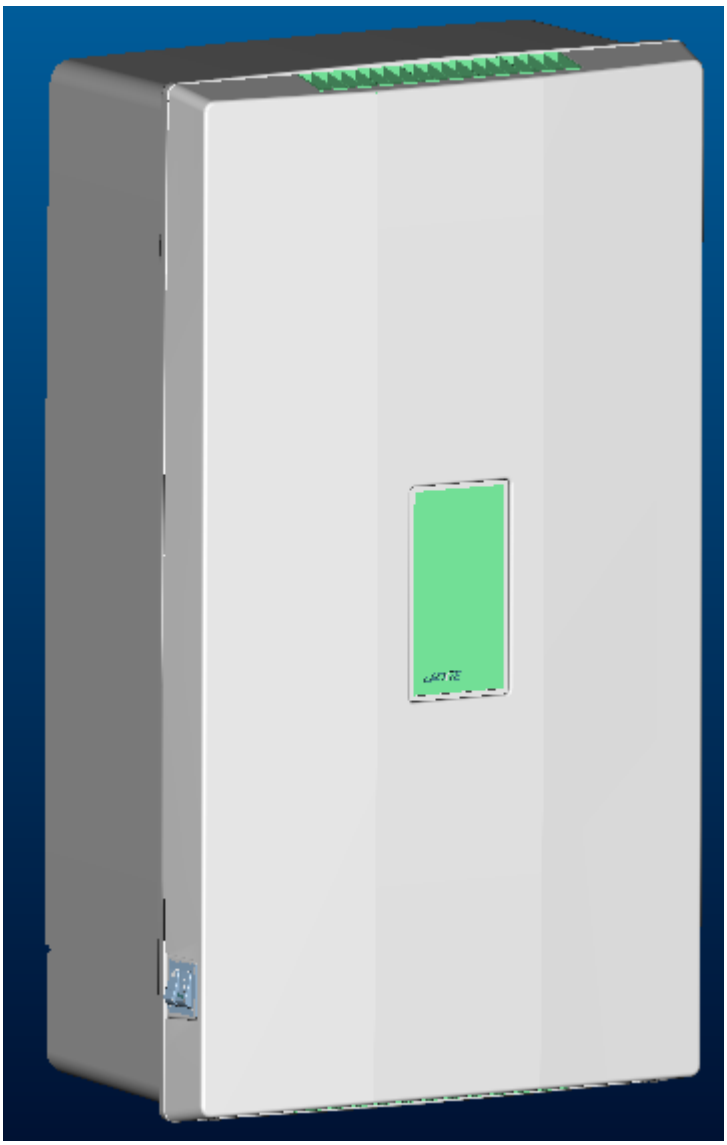

housing
cover
Logo area
Double switch ：
Power switch on/off
Switch for 3 air performance levels


Outlet air area
Outlet air filter with cap
Supply air filter with cap
Supply air area


Air outlet
Air inlet

2.0 Start-up

The device was mounted and attached well by a specialist and all details in assembly instruction were obeyed. Pleas examine the external intactness of the device. Are the air intakes and exits in interior room and external area freely accessible? Or are they not covered? Especially pay attention to the switch on the left side down of the device. It's a power switch (on/off). The outside switch is a three-step switch for the air performance level. People can select the air performance level as neccessory.



We recommend using the ventilation device in continuous operation (performance level "1"). Because of the permanent ventilation and

exhaust you receive a good and healthy room climate. If necessary two further air performance levels are available.

3.0 Anti-Freeze protection

The device is equipped with a fully automatic anti-freeze protection. (See point 6.1)

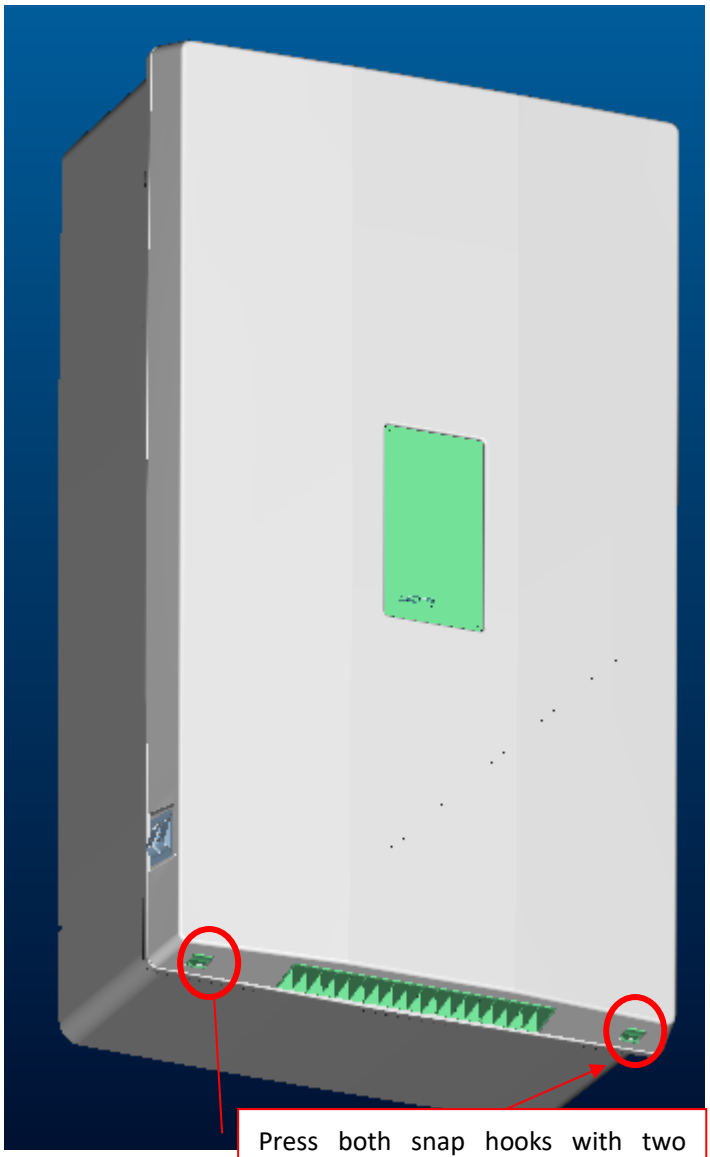
4.0 Filter maintenance

The device has a filter change announcement. You can do the filter exchange without any tools. The filters are to be changed always in pairs.

4.1 Filter selection

- For the ventilation device GVent you have the choice between different filter qualities. For the normal use standard filters (GF G4) is sufficient.
- For the person suffering from allergies you can use a special filter（GF F7） .
- If your external air polluted (car, industry, house fire etc…) you can use an active carbon filter（GF F6）for the supply air.
- Use only original filters. Only then the perfect operability of the ventilation device can be guaranteed.

4.2 Remove the cover



Switch off device at the power-switch

- Press both snap hooks with two thumbs at the lower surface of the device. The cover must separate from its attachment.
- Held the cover gently and take off it after the hooks are separated from cover and housing.

4.3 Unscrew the filters

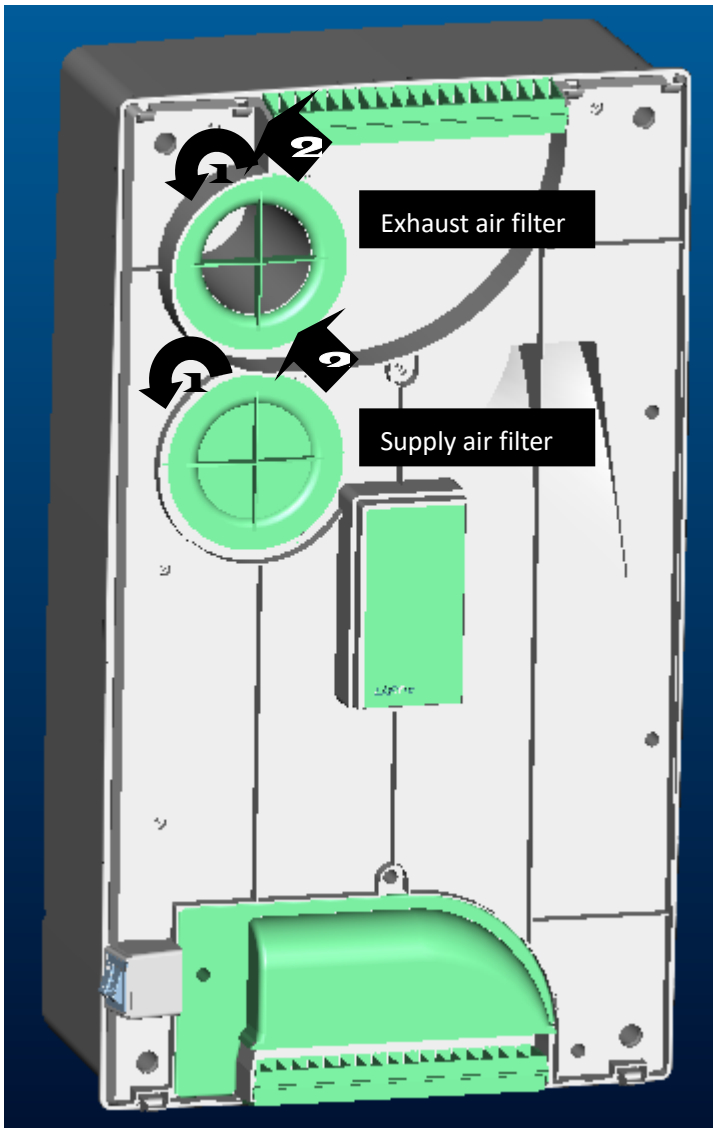
After the device is switched off, the flaps must be closed as well.

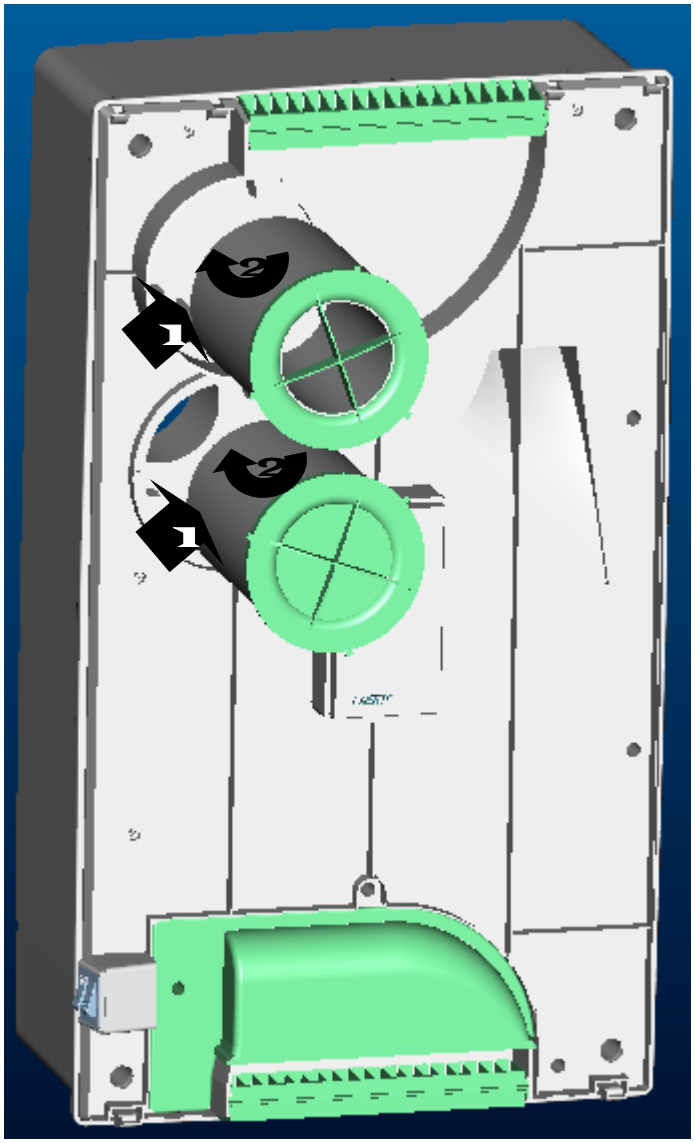
According to the rotation direction shown on the filter cap, rotate the cap out

from the cap ring and carefully pull out the filter.

4.4. Exchange filters

- ✧ Remove the filter cap.
- ✧ If necessary clean the cap with a damp cloth.
- ✧





- ✧ Put new filters into the device.
- ✧ Put the cap ring on the exhaust air filter.
- ✧ The marking at the cap ring must agree with the device slot.
- ✧ Turn the cap ring to the right and let the bayonet snap into place.
- ✧ The caps for supply air filters are to be attached in the same way.
- ✧ Allergy filters and active carbon filters are changed in the same way.

4.5 Put on cover

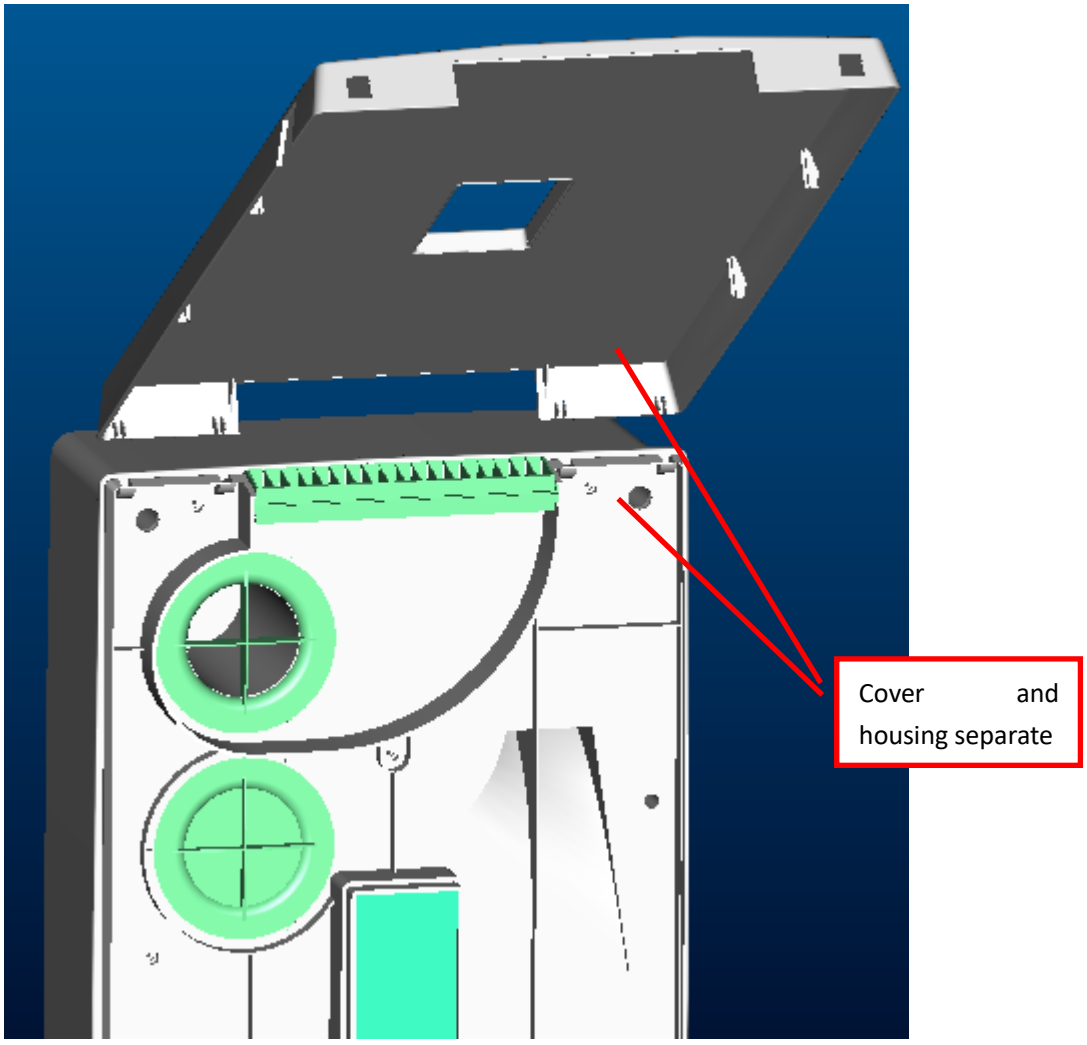
Please make sure the position of supply and exhaust air filter caps are correct.

- ✧ Grasp cover with both hands and bring into position as shown.
- ✧ Put the cover on device and make sure the screw hole is with the position of

screw column.

- ✧ Move the cover front edge downward and let the cover points of rotation snap into place.
- ✧ Swivel the screw and fix it on the device.

Warning! The device loses efficiency when the position of cap and cap rings not correct.



4.6 Close cover

The cover gets closed with light pressure on the lower cover edge. The snap connections must click in. the cover may not be able to be taken off.

Switch on power and switch the device.

5.0 Device cleaning

The equipment consists of high-quality plastic parts and only requires little care. Occasionally the exterior surfaces are to be wiped off with a soft damp cloth. For the conservation of the plastic surface only mild soaps are to be used. For particularly persistent dirt a commercial plastic cleaning agent may be used.

6.0 Routine trouble shooting

Problem error solution

Ventilation device doesn't run	Installation error	Examination of connection wiring only by authorized electrical staff.
Ventilation device doesn't run	Defect of switch, engine or electrical control	Examination only by authorized electrical staff
Ventilation device begins to beep in intervals.	Signal for a necessary filter exchange maintenance	Changing of filters by the user (see filter maintenance point 4.0 of manual)

6.1 important note----anti freeze protection

- ✧ "explanation of how the anti-freeze protection of the device works"
- ✧ The heat exchanger has to be adequately protected by the anti-freeze protection against permanent icing.
- ✧ In order to avoid an icing up of the heat exchanger, a temperature sensor is assembled at the exhaust air side for controlling the temperature permanently. In case the exhaust air temperature decreases under a value of 2ºC, the supply airflow and/or the exhaust airflow will be changed step by step by the engine control, depending on the preset air volume level, that the exhaust air portion will be increased. Thereby the temperature on the exhaust air side increases. Measured over a time interval of 3 minutes of an averaged exhaust air temperature of 4ºC, the device will switch again into the former operating status.

If the value of 2ºC at the exhaust air side is not reached although exhaust air portion is increased within the adjustment range of the device, e.g. because of cooling off the room, then the ventilation of the outlet section as well as the ventilator of the external/supply air section will be switched off. As soon as there is measured a value of more than 4ºC at the exhaust air temperature sensor, the ventilation will continue at the same level which was adjusted before.

Additional Note from laierte Z-F：

It is recommended to keep at least a temperature of 16-18ºC during the heating period in bedrooms, in order to avoid that the device continually runs in anti-freeze protection mode respectively switches off. The higher the indoor temperature the more of a buffer is available for running the device respectively the heat exchanger. This temperature range in bedrooms is, by the way, also beneficial for the healthiness of people.

Exchange efficiency test report：

No.	Test projects		Cooling (high-speed)	heating （high-speed）
1	Air pressure	kpa	100.75	100.85
2	Fresh air outlet static pressure	Pa	0	0
2	Exhausting air outlet static pressure	Pa	0	0
3	Fresh air volumn	m^3/h	43	46
4	Exhausting air volumn	m^3/h	23	23
5	Input power	W	8	8
6	Dry-bulb temperature in fresh air inlet	ºC	35.02	4.96
7	Dry-bulb temperature in fresh air outlt	ºC	32.16	14.58
8	Dry-bulb temperature in exhausting air inlet	ºC	27.09	20.98

9	Temperature exchange efficiency	%	36	60

Thermal characteristics and noise testing

No.	Testing items		result
1	Air volume（m^3/h）	Fresh air	44
		Exhausting air	23
2	Input power（w）		8
3	Effective exchange ratio %		94
4	Temperature exchange ratio in cooling mode（%）		36
5	Temperature exchange ratio in heating mode（%）		60
6	Noise（dB(A)）		28.5
remark：	1. The above tests are all in high-speed 2. Fresh air and exhausting air outlet static pressures are both 0Pa in the above tests.		