

ORIGINAL OPERATING INSTRUCTIONS

SIEGENIA®
brings spaces to life

AERO

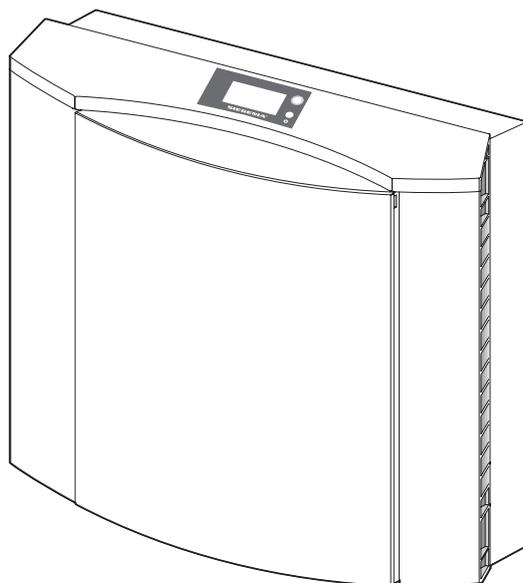
AEROLIFE

Wall-mounted ventilator with heat recovery.

Window systems

Door systems

Comfort systems



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Target group of this documentation

This documentation is intended for use by specialists only. All work described in this document is to be performed by experienced professionals with training and practice in the installation, commissioning and maintenance of ventilation units. Safe and proper assembly of this unit is not possible without expert knowledge.

Correct use

- Use the AEROLIFE exclusively for the ventilation of closed rooms (kitchen, bathroom, living rooms and bedrooms).
- The AEROLIFE is not suitable for dehumidification (e.g. for the drying of new buildings).
- The unit must always be installed by an experienced specialist, in accordance with the installation and planning documents of SIEGENIA. The installation instructions in this document must be complied with at all times.
- Be sure to mount the supplied SIEGENIA weather grille for the protection of the unit from the outer side.
- Do not install the unit in contaminated rooms and ensure that no hazardous substances can be drawn in.
- The unit is not suitable for use in swimming pools and/or damp locations.
- The AEROLIFE must be mounted in a vertical position. Mounting on inclines (e.g. walls and ceilings), is not permissible.
- If the unit is to be used in a room with a heating unit that draws air from the room, prior authorisation must be obtained from the proper authorities, such as the officially appointed district chimney sweep.
- Only operate and/or store the AEROLIFE at temperatures between -15 °C and $+40\text{ °C}$.
- Use the unit only with original accessories from SIEGENIA.
- Comply with the safety regulations for operating electrical equipment and, if necessary, for ladders, steps and work overhead or at certain heights.
- Use the unit only when it is in a technically sound condition.
- Do not modify the unit's components in any way.
- Please do not put any objects on top of the unit.
- Do not use the device as a seat.
- Make sure that air can flow in and out at the two outer sides without impedance. Do not hang any textiles or paper or similar items over the air inlet and outlet ports and do not place any objects directly in front of or next to the unit. Do not insert any objects into the openings of the unit.
- Do not remove any covers or unit components that are not defined in the "Maintenance" chapter. Do not remove the cover of the connecting clamps inside the unit.
- The unit must be checked by a specialist in the event of a fault.

Safety notes

- This unit can be used by children aged 8 and above as well as by people with physical, sensory or mental difficulties or with a lack of experience and knowledge as long as they are supervised or have been instructed in how to use the unit safely and understand the resulting risks. Children must not play with the unit. Cleaning and user maintenance may not be carried out by unsupervised children.
- Electrically operated unit. Risk of fatal injury from electric shock or fire.
To prevent personal injury or damage to property, always comply with the following instructions:
 - Insert the Euro mains plug of the standard connecting cable only into a suitable 230 V AC mains power supply socket.
 - If the mains connection cable for the unit is damaged, it must be replaced by SIEGENIA, its customer service or an equally qualified person to eliminate hazards.
 - Only a qualified electrician may perform any work on the 230 V AC mains power supply that is required in order to connect the unit.
 - All-pole safety isolation is required if the customer is routing the mains cable.
 - Current local regulations (such as those of the VDE in Germany) must be observed.
 - Relevant country-specific regulations must be strictly followed for all work carried out on the voltage supply system or house wiring system.
 - Should a solid object or any liquid get inside the unit, stop operation immediately and disconnect the unit from the mains power supply.

Scope of delivery

	AEROLIFE		Pipe
	Top and bottom blower unit		Drilling template
	Weather grille		4 screws 5 x 120 4 dowels S8
	Adhesive tape		Original operating instructions

Installation

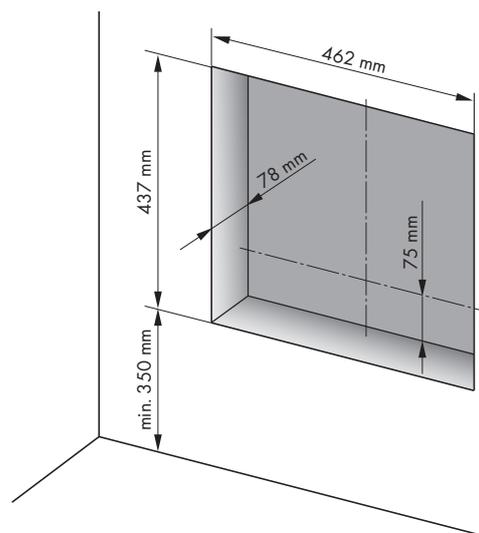
⚠ NOTICE Risk of damage to property by drilling holes through concealed cables or pipes!

- › Before installing the unit, use a suitable cable and pipe detector at the installation location to identify the presence of concealed cables or pipes in the wall (such as water pipes).

Step 1 (only for in-wall mounting): Create a wall opening

1. Create the wall opening in accordance with the adjacent diagram.

Note: The base must be level (plastered).



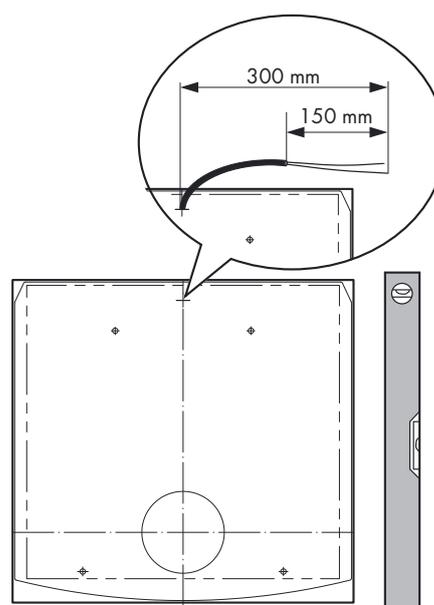
Step 2: Marking the holes

For in-wall mounting and electrical fixed connection

1. For in-wall mounting, cut out the drilling template along the dotted line.
2. Cut out an opening in the drilling template at the point marked with a cross and pull the end of the cable through the hole.
3. Use a water spirit level to adjust the drilling template and then fix into place.
4. Mark four mounting holes and the core mounting hole on the wall.

Please note:

- The base must be level (plastered).
- The entire free cable length should be 300 mm, of which 150 mm must be without outer sheathing.

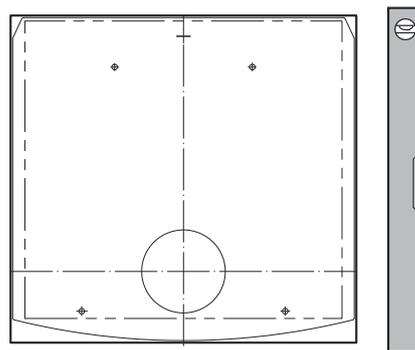


On-wall mounting

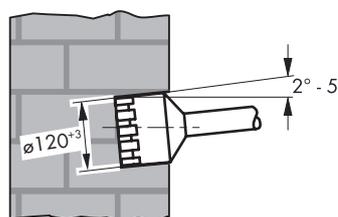
1. Use a water spirit level to align the drilling template at a suitable position and attach to the wall.
2. Mark four mounting holes and the core mounting hole on the wall.

Please note:

- The base must be level (plastered).
- The maximum interval from the outer edge of the template to the next socket should not exceed 300 mm.

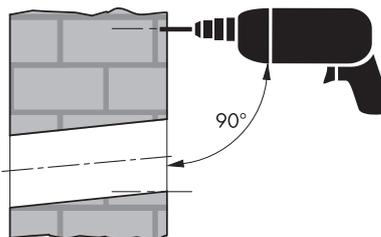
**Step 3: Drilling the core mounting hole and mounting holes**

1. Drill the core mounting hole ($\varnothing 120^{+3}$). Using a hammer drill at an angle of approx. 2° to 5° , drill a hole through to the outside wall.

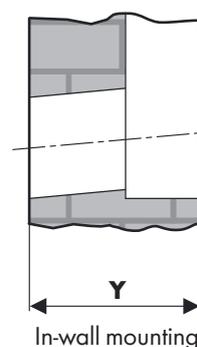
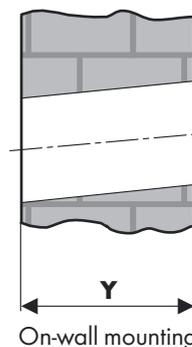
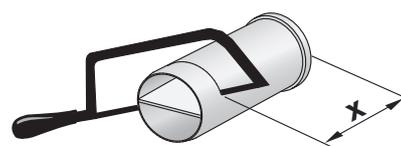


2. Drill the four marked mounting holes (all drilled holes should have a diameter of 8 mm and be at least 45 mm deep).
3. Insert four S8 dowels (included in delivery) into the drilled holes.

Note: depending on the type of wall (e.g. plasterboard), suitable dowels may need to be provided by the customer for inserting into the drill holes.

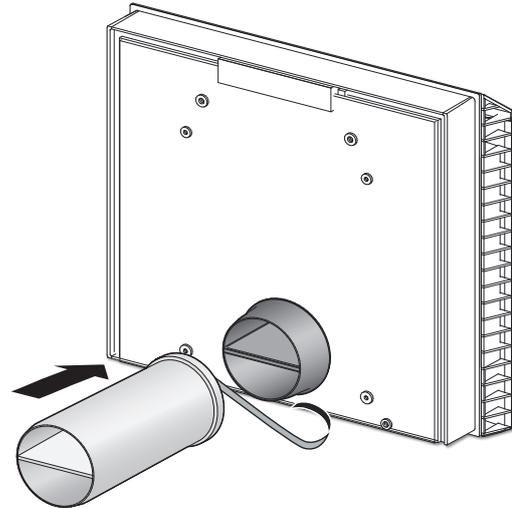
**Step 4: Trim PVC ventilation pipe**

1. Trim the pipe according to the formula:
 $X = Y - 43 \text{ mm}$ (on-wall mounting)
 $X = Y - 118 \text{ mm}$ (in-wall mounting)

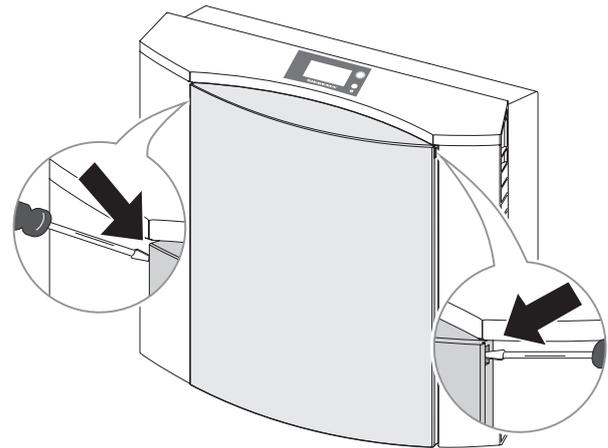


Step 5: Fixing the pipe to socket piece

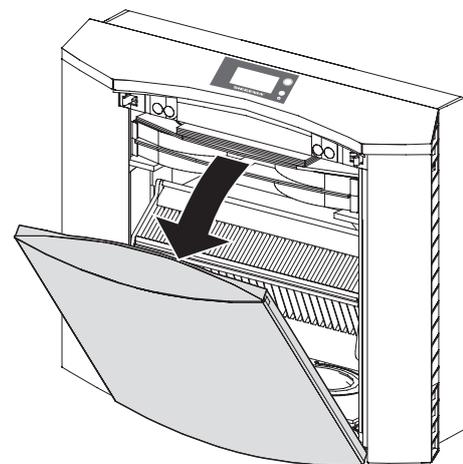
1. Push the side of the pipe with the recessed middle bar on to the socket piece of the ventilation unit until the pipe is firmly seated.
2. Fix the transition point with the adhesive tape included in the delivery. The pipe and socket pieces must be firmly interconnected.

**Step 6:** Removing the front panel

1. Insert screwdriver into the left and then the right opening of the front panel until the underlying snap connection is released at both sides.



2. Tilt the front panel forwards, lift off and lay down on the side.



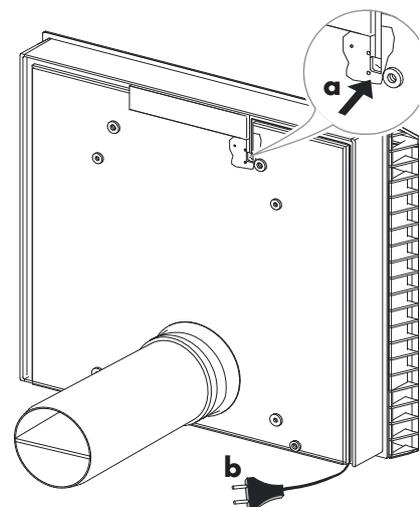
Step 7: Cable routing**For electrical fixed connection (a)**

1. Lift the ventilation unit and push the pipe, fixed to the unit, a little bit into the wall opening.
2. Pull the cable through the opening on the rear side of the ventilation unit.

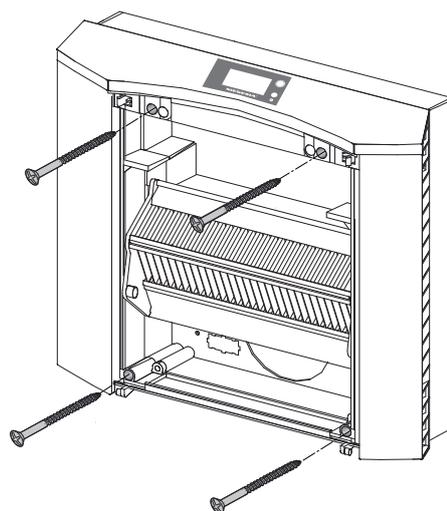
For connection to a socket (b)

1. Route the connection cable on the left or right side in the cable duct.

Note: The cable must be neatly routed in the cable duct to prevent it from being pushed through or squeezed during the installation.

**Step 8:** Screwing the ventilation unit onto the wall

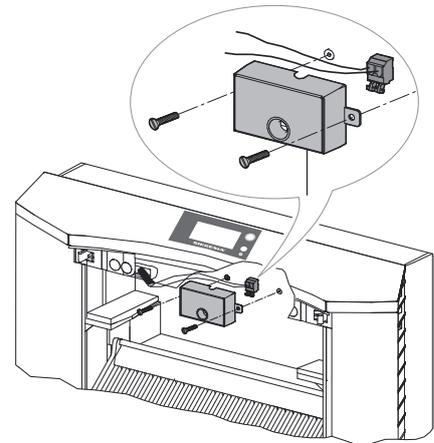
1. Lift the ventilation unit and push the pipe fixed to the unit through the wall opening.
2. Press the ventilation unit firmly against the wall and fix with four screws.
3. Seal joints between the ventilation unit and wall with permanently elastic sealing compound.



Step 9: Connecting the cable to the clamping block (only for permanent electrical connection)

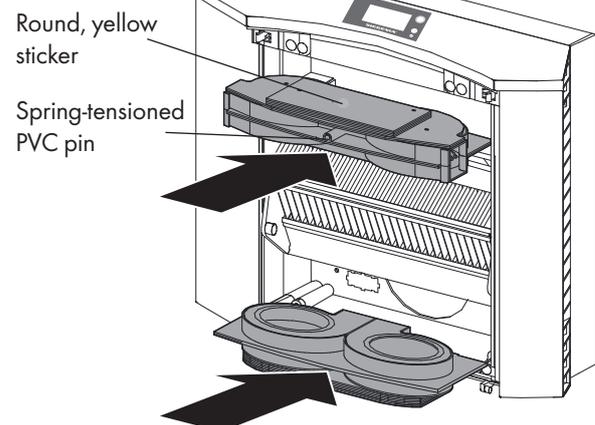
1. Remove screws and cover.
2. Connect the cable to the clamping block.
3. Position cover and screw firmly into place.

Note: Route the cable through the top break-through on the terminal box.

**Step 10:** Inserting the blower units

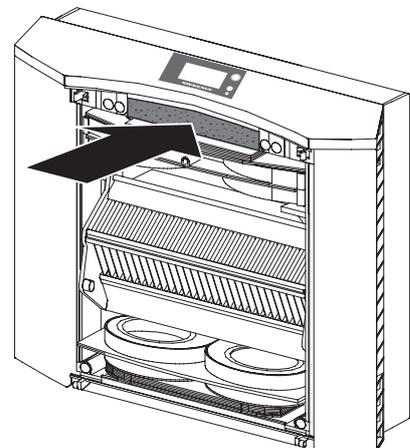
1. Insert the top and bottom blower unit and press slightly against the contacts.

Note: The blower units are kept in this position after the assembly of the front panel.

**Step 11:** Inserting the foam strips

1. Press the foam strips into the hollow cavity between the casing and the top blower unit.

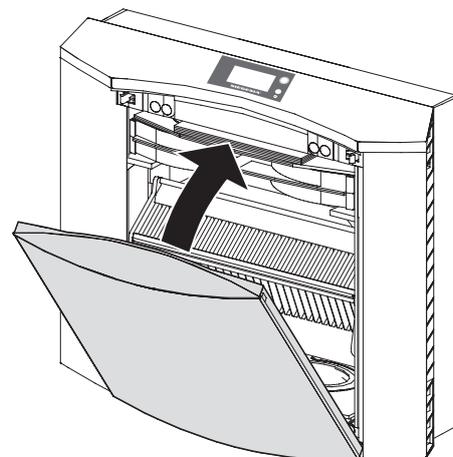
Note: The second foam strip must not project beyond the front edge of the front panel.



Step 12: Closing the front panel and testing the function

1. Hook in the front panel at the bottom of the ventilation unit.
2. Press the top of the front panel with both hands until you can hear it engage at both sides.
3. Insert the Euro plug into the socket, with an electrical fixed connection, switch on the security device of the power circuit for the ventilation unit.
4. Press the On/Off button beside the display and test the functioning of the ventilation unit.
5. Switch off the ventilation unit following successful testing.

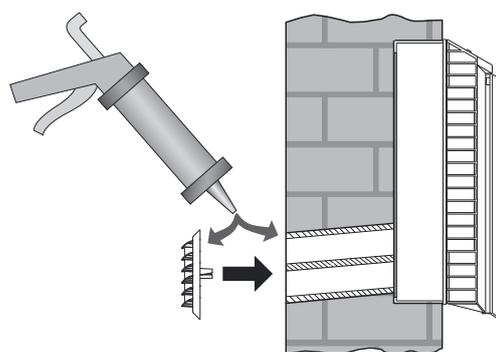
Note: If the ventilation unit is not working, check that the front panel is correctly seated.

**Step 13:** Mounting the weather grille

1. Apply the permanent elastic sealing compound to the outer edge of the pipe and weather grille.
2. Press the weather grille firmly against the wall. Two clamps must be located above the middle bar and one clamp below the middle bar.

Please note:

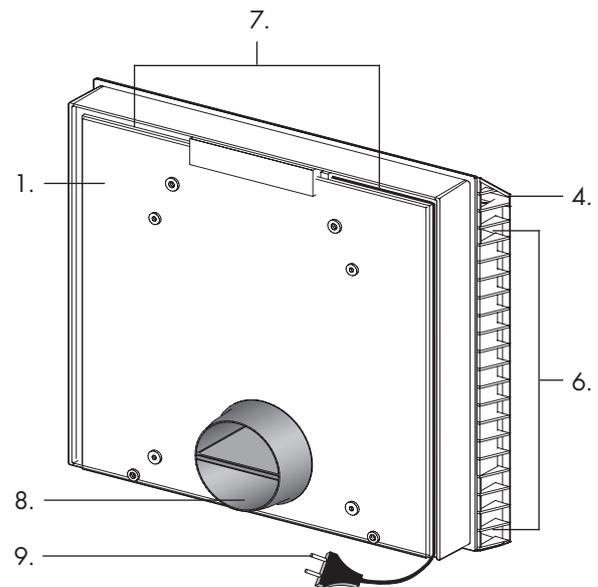
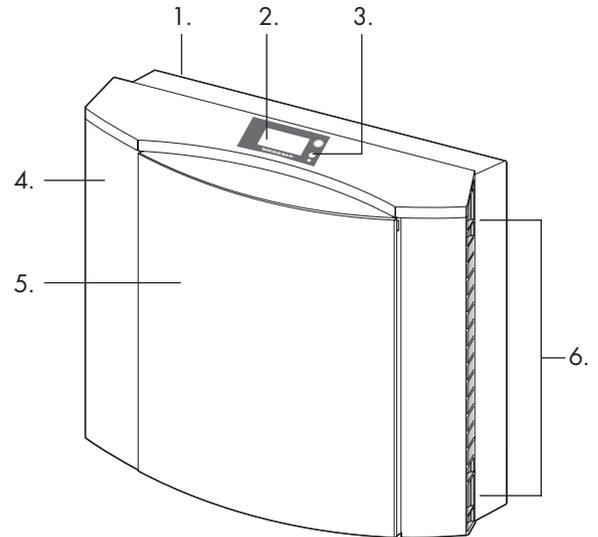
- Ensure that the fins of the weather grille are pointing downwards.
- There must not be a gap at the transition from the pipe to the house wall.



Unit description

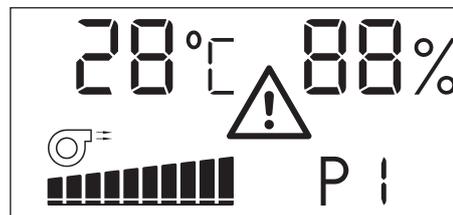
AEROLIFE

- 1. Casing trough
- 2. Display
- 3. Button
- 4. Casing frame
- 5. Front panel
- 6. Air inlet and outlet with cover flaps
- 7. Cable duct
- 8. Socket piece
- 9. Mains cable with Euro plug



Display

In a normal situation all symbols would not be displayed simultaneously.



Room temperature in degrees Celsius
(Measuring range from 0°C to 99°C)

28°C

Relative air humidity in %
(Measuring range from 30% to 90%)

88%

Air throughput level (three possible levels)



Mode of operation (programs):

- P1 Manual ventilation mode (pollen protection)
- P2 Automatic ventilation mode (humidity control)

P 1

Operation of the blower units



Filter replacement required

Note! The filter is monitored on the basis of the current consumption of the unit. If the unit is operated continuously in air throughput level 1 or 2, the AEROLIFE processor switches every 8 hours for approximately two minutes to air throughput level 5, for technical measuring reasons, to check the filter. The unit then automatically switches back to the previously set air throughput level.



Function

Features

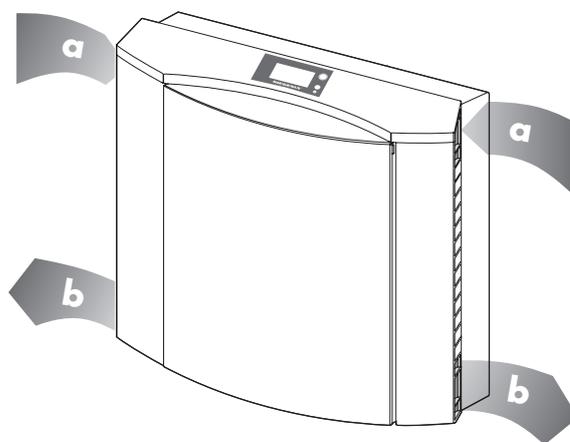
- Simultaneous aeration and ventilation
- Filters pollen and dust
- Filtering of the exhaust air
- Heat recovery
- Sound absorption of the outside air
- Low inherent noise

Ventilation mode

In ventilation mode, the AEROLIFE vents and aerates simultaneously. The unit is equipped with two internal, segregated air passages and two separated blower units for this purpose.

Indoor air is drawn in at the two top air inlets (**a**), filtered, conveyed via the heat exchanger and exhausted to the outside.

Fresh air is drawn in from the outside, filtered, conveyed via the heat exchanger and through the two bottom air outlets into the room (**b**).



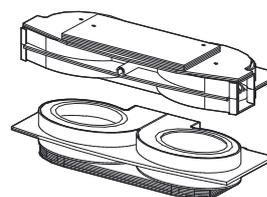
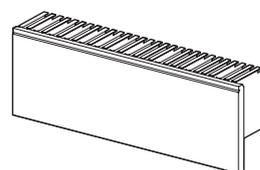
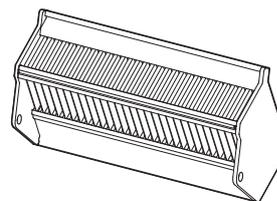
Ventilation elements

The **heat exchanger** partially absorbs the heat from the exhausted indoor air, thus heating the supplied fresh air. The heat exchanger is detachable so that the filter unit in the heat exchanger can be changed.

The **filter unit** consists of a cassette filter (filter grade F7), which filters over 97% of the pollen out of the fresh air and a fleece filter that filters the indoor air. The two filters prevent the contamination of the heat exchanger and the blower units. The necessary replacement of the filter unit is indicated by the "△" symbol in the AEROLIFE display.

The performance of the **supply air** and the **exhaust air unit** and therefore the amount of air is adjustable in three levels.

Neither blower unit is in operation when the AEROLIFE is switched off.



Commissioning

⚠ WARNING Electrically operated unit. Risk of fatal injury from electric shock or fire.

- › The AEROLIFE is connected directly to the 230 V AC mains power supply. However, the voltage is transformed to 12 V low voltage in the unit. In case of overload, a safety device (thermal overload protection) in the transformer disconnects the unit from 230 V AC mains power supply and automatically switches on again when the overload has been rectified.
- › A safety switch is also integrated for maintenance purposes. If the front panel is removed, the safety switch cuts off the supply voltage.

To prevent personal injury or damage to property, always comply with the following instructions

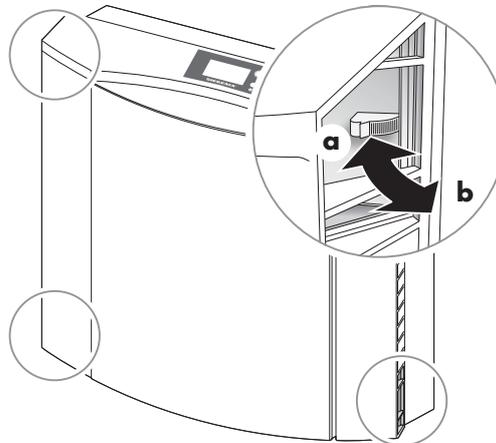
- › There is a 230 V AC voltage prevailing on the power connection terminals of the unit, even when the front panel is removed.
- › Do not remove the cover of the connecting clamps behind the top casing unit.

The unit can be commissioned following successful installation and electrical connection of the AEROLIFE.

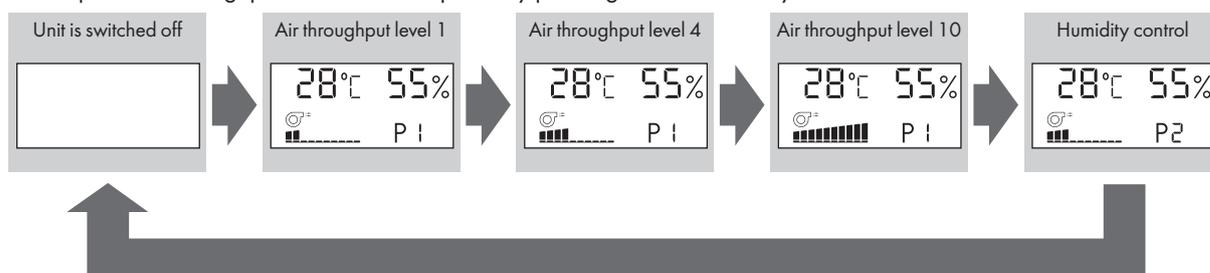
- The Euro plug of the power cable must be properly connected to the 230 V AC mains power supply via a socket. If the unit has been permanently connected to the 230 V AC mains power supply, the safety device belonging to this electrical circuit must be switched on.
- Remove any transport and mounting aids prior to the commissioning.

Operation

- › Open the cover flaps **(a)**, before the AEROLIFE is switched on.
- › Close the cover flaps **(b)**, before the AEROLIFE remains switched off for a prolonged period.



- › The required air throughput level can be adjusted by pressing the button briefly.



Program overview

Program	Function
P1	Manual control of the air throughput level
P2	<p>Humidity control</p> <p><i>The unit automatically switches to basic ventilation if the room air humidity drops below the value 55%. If the room air humidity exceeds the value 55%, the air throughput level is increased automatically.</i></p> <p>Attention! The AEROLIFE only operates in basic ventilation mode if the outside air simultaneously has a higher air humidity than the indoor air.</p> <ul style="list-style-type: none"> • Background: Due to the humid outside air, otherwise the room air humidity would continue to rise. • Recommendation: On especially humid days, manual control of the unit is recommended because outside air will still enter the room via the basic ventilation.

Care and maintenance

⚠ WARNING

**Electrically operated unit.
Risk of fatal injury from electric shock or fire.**

To prevent personal injury or damage to property, always comply with the following instructions:

- › Pull the mains plug out of the socket prior to every cleaning process or maintenance work. Never pull at the cable to disconnect the device from the electricity grid.
- › For all devices with a fixed connection to the 230 V AC mains power supply, switch off all poles of the feeder. The fuses may need to be removed.

Cleaning

Important: When cleaning the AEROLIFE, do not allow liquids to get inside the unit.

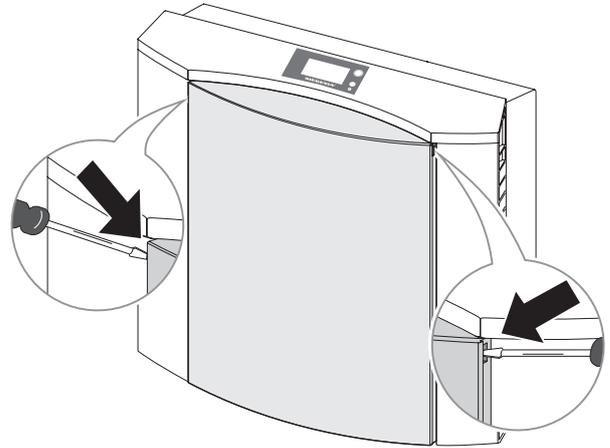
- Never use cleaning agents that are aggressive or contain solvents, or sharp-edged objects, as these may damage the surfaces of the casing.
- Never clean the unit with a high-pressure cleaner or steam-jet cleaner.
- Clean the AEROLIFE with a cloth moistened with a mild soap solution or cleaning agent.

Replace filter

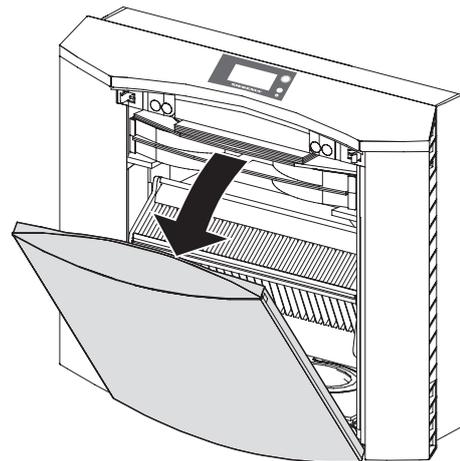
- The filter should be changed when this is indicated in the display - at least every six months.
- Only use genuine filters from SIEGENIA. You can purchase replacement filters from SIEGENIA or from specialist retailers.

Caution! Activate and remove only the specified device components.

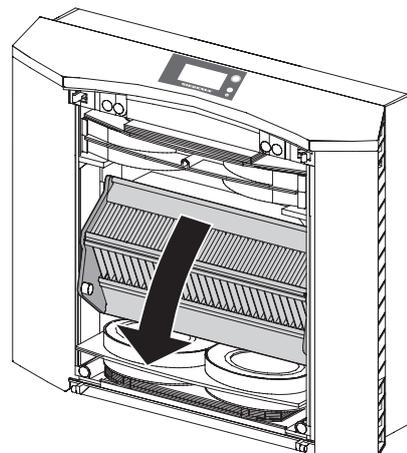
1. Insert a screwdriver into the left and then the right opening of the front panel until the underlying snap connection is released at both sides.



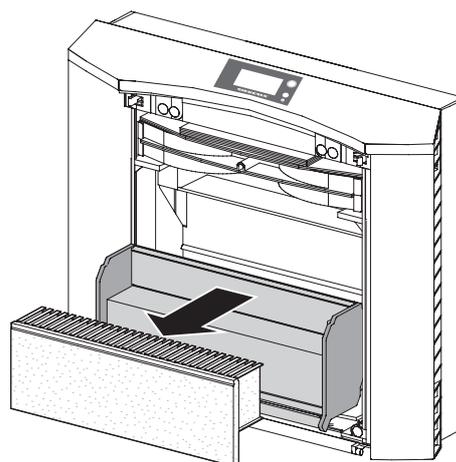
2. Tilt the front panel forwards, lift it off and set it aside.



3. Pull the heat exchanger forwards.



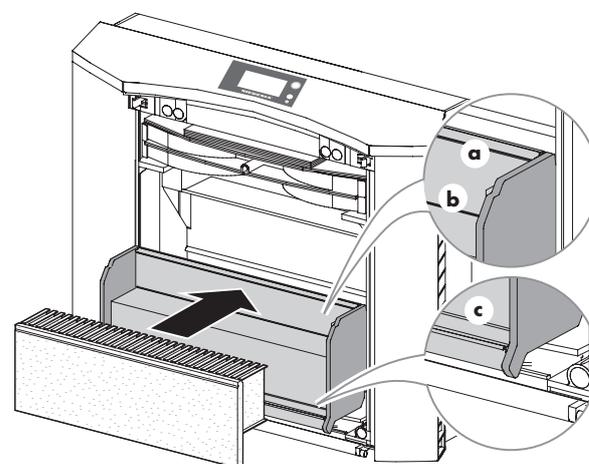
- Remove the filter from the heat exchanger and dispose of the filter in the household waste.



- Insert the new filter into the heat exchanger.

Note: The front cardboard strip on the filter cassette must be inserted between the two aluminium edges (**a** + **b**). The upper edge of the cardboard strip must end under the upper aluminium edge. The bottom edge of the fleece filter must be pressed behind the bottom aluminium edge (**c**).
- Reassemble the AEROLIFE in the reverse order.

Note: Check the correct seating of the front panel if the AEROLIFE does not function at once after the filter change.



Accessories

Material description	Material number
Spare filter F7 (three-layer, synthetic composite filter)	248843
Spare filter NOx filter F7	L5300200-099010

Rectification of malfunctions

In case of a malfunction, do not open the device or try to repair it under any circumstances.

If the problem is not listed in the table below, please contact your installation firm or SIEGENIA directly: Tel. +49 271 3931-0

Problem	Possible cause	Solution
AEROLIFE shows no reaction when button is pressed	No power supply	<ul style="list-style-type: none"> Check that the front panel is correctly seated Check power supply
	Wiring wrong/defective or cable defective	<ul style="list-style-type: none"> Have the wiring checked by a qualified electrician
	Power supply defective	<ul style="list-style-type: none"> Have the supply voltage checked by a qualified electrician
The display flashes	<p>Frost protection warning! The display flashes when an outside temperature of -5°C and an air humidity of $>60\%$ is reached.</p>	<ul style="list-style-type: none"> Recommendation: Switch off the unit and wait until the outside temperature rises again.

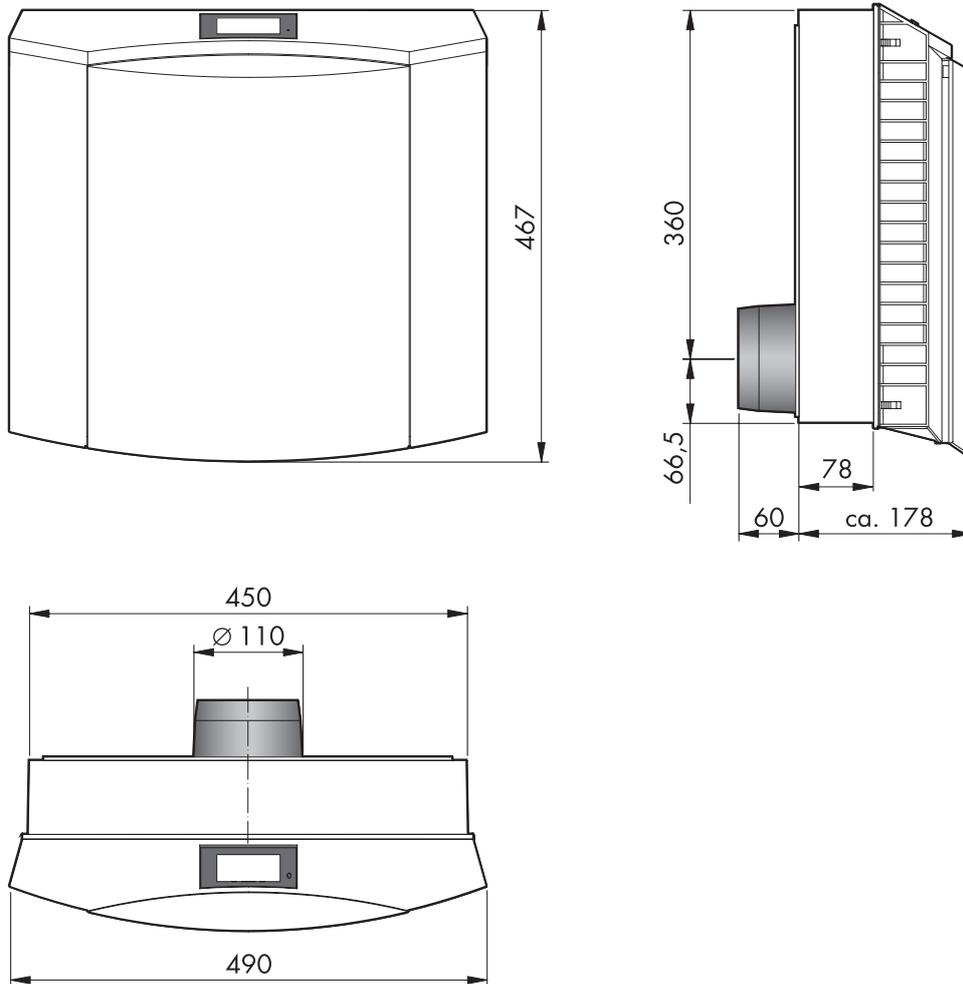
Technical specifications

	AEROLIFE
Air throughput	Level 1 approx. 29 m ³ /h Level 2 approx. 35 m ³ /h Level 3 approx. 60 m ³ /h
Inherent noise (measured in accordance with DIN EN ISO 3745, at 8 dB room insulation)	Level 1 L _{PA} = 26 dB (A) Level 2 L _{PA} = 30 dB (A) Level 3 L _{PA} = 40 dB (A)
Power consumption	Level 1 11 Watt Level 2 17 Watt Level 3 32 Watt
Heat recovery efficiency (in accordance with DiBT)	max. 66%
Sound absorption (in accordance with DIN EN 10140-2)	D _{n,e,w} = 52 dB
Electrical connection	230 V~ / 0.17 A
Protection class	II
Weight	12.5 kg
Fresh air filter	Filter grade F7 (3-layer, synthetic composite filter)

Product data sheet (in accordance with EU Regulation 1254/2014)

a	Manufacturer	SIEGENIA
b	Model identification	AEROLIFE
c	Energy consumption (SEV); Energy efficiency class (SEV class) (according to climatic zone warm / average / cold)	- 7.8 kWh/(m ² · a); F - 28.9 kWh/(m ² · a); B - 65.7 kWh/(m ² · a); A+
d	Type	WLA / ZLA
e	Type of drive	Multi-stage drive
f	Heat recovery system	Recuperative
g	Degree of temperature change	53.8 %
h	Highest air flow rate	60 m ³ /h
i	Electrical input power	32 W
j	Noise level	42 dB (A)
k	Relative air flow rate	43 m ³ /h
l	Relative pressure differential	—
m	Specific input power	0.51 W/(m ³ /h)
n	Control factor / control typology	1.21 / 0.65
o	Highest degree of inner and outer leakage rate (inner / outer leakage)	- 1 % / 7 %
p	Mix rate (inner area / outer area)	1.9 % / 21 %
q	Instructions for replacing filter	„Replace filter“ see page 17
r	Instructions for the mounting of outside air / exhaust air grilles (for one-directional ventilation units)	—
s	Instructions for dismantling	—
t	Pressure fluctuation sensitivity of the air flow (at +20 Pa and -20 Pa)	15 % / 14 %
u	Air tightness between inside and outside	2.5 m ³ /h
v	Annual power consumption	4.1 kWh/a
w	Annual saving of heating energy (according to climatic zone warm / average / cold)	17.4 kWh/a 38.5 kWh/a 75.4 kWh/a

Dimensions



Feedback on documentation

We welcome your comments and suggestions on how to improve our documentation. Please email your comments to dokumentation@siegenia.com.

EU Declaration of Conformity

In accordance with the EU Directives Electromagnetic Compatibility 2004/108/EC and 2006/42/EC

SIEGENIA-AUBI KG
Beschlag- und Lüftungstechnik
Duisburger Straße 8
D-57234 Wilnsdorf

declares that the product:

Ventilation unit

unit type

AEROLIFE / AEROVITAL

Designation of type

compliant with the following industrial standards and normative documents

EN 55014-1 :2006
EN 55014-2 :1997+A1
EN 61000-3-2 :2006
EN 61000-3-3 :1995+A1,A2
EN 60335-1 :2010
EN 60335-2-80 :2003+A1 :2004, EN 62233 :2008
EN 62233 Br.1 :2008, EN 62233 :2008-11
EN ISO 12100:2010
RoHS 2011/65/EU

This declaration is based on test reports from:

EMC TestHaus Dr. Schreiber GmbH - Test protocol 14/317

Siegen, 2014-11-03



S. Bauerdick (Works management)

The technical documents are provided by SIEGENIA-AUBI KG.

This declaration certifies conformity with the directives cited but does not warrant properties in the legal sense.

The safety instructions in the product documentation supplied must be followed.

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