Svea eAir

Operating and maintenance instructions for the ventilation unit

English

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READ FIRST

This instruction manual is intended for all the users of the Enervent ventilation units. Only qualified professionals may install the equipment described in this manual in accordance with the manufacturer's instructions and the local laws and regulations. If the instructions provided in this manual are not followed, the warranty for the equipment becomes void and damages may be caused to persons or property.

The equipment described in this manual may not be used by persons (including children) with reduced physical, sensory or mental capacity or without sufficient experience or knowledge, unless a person responsible for their safety is supervising and advising them in the use of the equipment.

INTENDED USE

The intended use of the unit is the improvement of indoor air quality, and its primary function is ventilation.

The unit is also used for the recovery of heat energy from the extract air. Depending on the model and the accessories, the unit can also be used for cooling the supply air in the summer. Moreover, the unit can also be used for controlling the humidity and carbon dioxide levels of indoor air.

SAFETY

General information

DANGER

Always check that the supply voltage to the equipment is switched off before opening the service hatch.

WARNING

In case of a malfunction, always determine the reason for the malfunction before restarting the unit.

WARNING

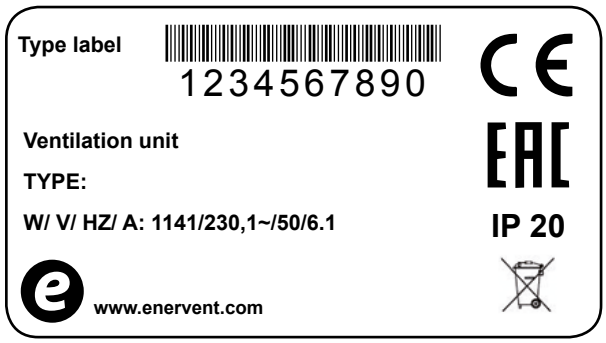
When you have switched off the power to the unit, wait for two (2) minutes before starting the maintenance work. Even though the power is switched off, the fans continue running and the post-heating coil remains hot for a while.

Electrical safety

DANGER

Only an authorised electrician may open the electrical box.

TYPE PLATE



If you need technical support, please check the equipment type and serial number from the type plate.

USING THE VENTILATION UNIT

Once the ventilation system is carefully designed and installed, any user actions are hardly required. The user can relax and enjoy good ventilation.

This instruction is for the users of the Enervent ventilation unit and control panel.

Be patient! The control panel takes some time to react.

General instructions

FOR INFORMATION

Do not switch off the ventilation unless for service or when instructed so by the authorities. The ventilation must always be kept in operation at the power level set at the commissioning.

- Ventilation must be sufficient.

If ventilation is not sufficient, the indoor air humidity may rise, which can cause condensation on cold surfaces.

- The indoor air humidity levels must be checked at regular intervals.

During winter an indoor relative humidity level of no more than 40-45% is recommended (room temperature 20-22°C). The relative humidity level can be checked from the ventilation unit measurements. If the relative humidity level rises over 45%, ventilation should be boosted.

- The cleanliness of filters must be checked regularly.

Often in wintertime, the extract air filter collects more dirt than the supply air filter. This means that the extract air flow is reduced, which can lead to a rise in indoor air relative humidity, and reduced heat recovery efficiency.

More information about cleaning and changing the filters can be found in the ***Maintenance*** section.

- Check monthly that the heat exchanger is functioning correctly, i.e. rotating.
- More information about checking and cleaning the heat exchanger can be found in the ***Maintenance*** section.
- If the ventilation unit is shut down for a longer time than a couple of hours during winter, the fresh air intake vent and exhaust air blowout vent must be covered airtight.

This prevents humidity from condensing on the electric motors of the fans, for example.

- In the autumn, before the beginning of the heating season and in the spring before the beginning of the cooling season (if the unit has a cooling function), the condensation water drain must be checked by pouring water in the condensation water drain and making sure that the water drains away.

FOR INFORMATION

Always keep the control panel in the wall mount.

FOR INFORMATION

If you encounter issues with using the ventilation unit, check for answers in the Troubleshooting table at the end of this manual.

WARNING

Do not damage the control panel screen with a sharp or scratching object.

WARNING

Do not try to set the system settings by yourself! Installing a ventilation system is a job for a trained installer.

How do I begin to use the unit?

The ventilation system should be installed and ready for use.

Tap the control pane screen. Its keylock might be on. Open the lock by pressing the lock button for a few seconds.

The main page of the control panel should open:

The main page of the control panel

The circle around the operating mode button changes its color depending on what the ventilation unit is doing. The circle is green, when heat recovery is active. The circle is orange and red when heating is active, and blue when cooling is active.

If the text ***Select language*** displays on the screen instead, the system has not been installed yet. In this case do not continue using the panel. Contact the installing technician instead.

If nothing happens when you tap the screen, the control panel battery may have run out, or the ventilation unit is switched off. Switch on the ventilation unit, or charge the battery by putting the panel in the wall mount, or connect a mobile charger (µUSB connector).

What is the ventilation unit used for?

The unit is meant to improve the indoor air quality, mainly by ventilating.

The unit also recovers heat from the extract air. Some models can be used for cooling supply air during summer. The indoor humidity and carbon dioxide levels can be controlled with the unit.

How does the ventilation unit work?

Functioning ventilation is the basis for living comfortably. In mechanical ventilation, fresh air is blown into the house, and used air is blown out. The purpose of ventilation is to bring in clean, filtered air for people and pets to breathe, and to extract impurities from indoor air.

A rotating heat exchanger recovers heat energy from the extract air. The heat in the extract air warms up the aluminium vanes in the heat exchanger, which in turn releases the heat energy into the supply air when rotating, with an efficiency of over 80%.

How is the ventilation unit used?

When ventilation is carefully designed and installed, you do not have to do anything. Sit comfortably and enjoy the fresh air.

FOR INFORMATION

Some control panel functions are meant only for installation or maintenance use. Because these functions are not usually needed, they are password-protected.

Daily usage of the ventilation unit

Ventilation is controlled with a simple and easy to use touch screen, that has functions based on actual operating conditions. The modes available in the panel cover all your home ventilation needs. Selecting a function changes the ventilation unit operations accordingly. The installing technician configures all the mode parameters in accordence to the ventilation plan when the ventilation unit is commissioned.

Operating modes of the unit

- ***At home*** (when at home)
- ***Away*** (when not at home)
- ***Overpressure*** (when lighting a fireplace)
- ***Boosting*** (when additional ventilation is needed)
- ***Silent**** (when ventilation needs to be as silent as possible)
- ***Max. heating / Max. cooling***

* To be activated separately

When at home

When at home, the ventilation mode should be ***At home***.

WARNING

Do not switch off the ventilation unless for service or when instructed so by the authorities.

Check that the central circle on the control panel main page has the status "At home". If it is not so, change it by doing the following:

1. Tap the green circle in the middle of the main page of the control panel.
Choose operating mode window opens.
2. Tap the ***At home*** icon.

Ventilation system is adapting to new conditions.

FOR INFORMATION

If the ventilation unit is used in business premises or in a public space, its operating mode might be Office. When the ventilation is operating normally, the center circle of the control panel main page displays the At office symbol.

When away

If you are going on a trip, for example, or spending time away from the building, you can configure the ventilation accordingly.

1. Tap the green circle in the middle of the main page of the control panel.
Choose operating mode window opens.
2. Tap the ***Away*** icon.

The ventilation system adapts to using less energy when you are away.

This function can be timed to switch on when you are not usually at home, e.g. during working hours.

In the section ***I want the ventilation system to automatically follow my schedule*** there are more information about configuring the ventilation system.

When you want to boost ventilation temporarily

If you have invited guests, the ventilation designed for your normal living situation may not be enough. This function is especially important in houses with a sauna, because the heat and humidity produced by saunas must be ventilated efficiently.

When more powerful ventilation is temporarily needed:

1. Tap the green circle in the middle of the main page of the control panel.
   Choose operating mode window opens.
2. Tap the ***Boost*** icon.
   Ventilation is boosted.

The ventilation system returns to normal mode in 30 minutes.

When you want to light the fireplace

You may need the overpressure function when lighting the fireplace.

To activate the ***Overpressure*** mode:

1. Tap the green circle in the middle of the main page of the control panel.
   Choose operating mode window opens.
2. Tap the ***Overpressure*** icon.

The ventilation system adapts to function so that lighting the fireplace is easy.

The ventilation system returns to normal mode after ten minutes.

WARNING

Overpressure mode is only meant for making lighting the fireplace easier, not for supplying actual combustion air for the fire.

TIP

Use the overpressure function sparingly. Using the function unneccessary wastes lots of energy.

When you want to silence the ventilation temporarily

If you need a moment of silence, e.g. when going to sleep or putting the children to bed, you can switch on the ***Silent*** mode.

You must activate the ***Silent*** mode before it can be used for the first time.

Activating Silent mode

1. Tap the upward arrow on the main page of the control panel.
   Main menu window opens.
2. Tap ***Settings***.
   The ***Settings*** menu opens.
3. Tap ***Usage modes***.
   The ***Usage modes*** menu opens.
4. Tap ***Silent mode settings***.
   Activate the ***Silent mode*** by tapping ***Inactive***.
   "***Inactive***" is replaced with "***Active***", and the mode is activated.
5. You can change the duration of Silent mode, if you want to.
   Default value is 60 minutes.

The settings are saved automatically.

Silencing the ventilation temporarily

1. Tap the green circle in the middle of the main page of the control panel.
   Choose operating mode window opens.
   Tap the ***Silent*** icon.
2. When ***Silent*** mode is in use, the CO_2, %RH, and maximum heating boost are reduced so that the ventilation system will operate as quietly as possible.

The ventilation system returns to normal mode in 60 minutes or after a period set by you. Configuration is done in the ***Silent mode settings*** menu.

Using the ***Silent*** mode is limited. The mode can be activated only twice a day.

I want the ventilation to follow my schedule automatically

If your life has a regular rhythm, you can make things easier by configuring some of the ventilation functions to activate automatically at certain times. The following functions can be timed:

Function	Description
Away	Ventilation unit can be configured to operate in ***Away*** mode by using a time program, for example during working days when nobody is at home.
Heating prevented	Heating is prevented at certain time. This mode is practical in the summer, for example, when sudden changes in temperature can activate heating even though it is not needed.
Cooling prevented	Cooling is prevented at certain time. This function is useful in the spring, for example, when sudden changes in temperature can trigger cooling even though is not needed.
Temperature drop	Ventilation is functioning at a normal level, but allows the indoor temperature to drop.
Time relay	Sets time relay (DO7) to activate at a certain time. The function can only be used if the installer has made the neccessary connections for the desired function.
Boost	The ventilation unit will boost ventilation during the time defined in the time program.

To schedule functions:

1. Tap the upward arrow on the main page of the control panel.
   Main menu window opens.
2. Tap the ***Time programs*** icon. You can choose from weekly and annually run programs.
3. Tap ***New weekly program*** or ***New annual program***.
4. Tap ***Not selected*** to display a list of programmable functions.
5. Tap the function you want.
   The function setting window opens.
6. Set the start and end times for the function.
7. Tap the ***OK*** button.
   A window listing the time programs displays, and the time program you created is shown on the screen.

How can I save money and energy, and advance the healthiness of my living environment?

Correctly designed and used ventilation saves money and energy. Additionally, it promotes healthy living environments and healthy inhabitants.

- Use the ventilation system according to the designed plan throughout the year.
- Clean or change the filters at set intervals and vacuum the inside of the unit regularly. Dust and other air impurities can contaminate the unit. Dirt blocks the filters and adheres to the heat exchanger, which in turn weakens the efficiency of ventilation. The ventilation unit service door needs to be opened regularly - once a month, for example - and the condition of the unit must be checked.
- Use special modes like ***Silent*** and ***Overpressure*** only when they are really needed. Unnecessary use of special modes will show in your electric bill.
- Besides controlling the ventilation system, you can add to your comfort by traditional means. For example, closing curtains and windows on a hot day, or dressing warm on cold days can save a lot of energy.
- Use only Enervent-approved spare parts.

The ventilation system Eco mode saves energy and money without compromising air quality.

FOR INFORMATION

The control panel main screen displays a time program reminder two hours before the program starts. When the ventilation unit is operating under a time program, the panel main screen displays a clock symbol.

When using Eco mode

The Eco mode minimizes the electrical power usage of the ventilation unit, and maximizes heat recovery, without compromising ventilation. The Eco mode prevents additional heating and cooling, as well as maximizing the heat recovery. The heat recovery is on maximum efficiency, except for the hottest summer days.

Observe that the use of Eco mode may cause draft on cold winter days.

When using Eco mode

1. Tap the leaf symbol on the upper right corner of the control panel main page.

Eco mode is now activated, and the leaf icon turns green to indicate this.

Should ventilation be reduced in winter in order to save energy?

Do not reduce ventilation power or turn off ventilation even when the outdoor temperature drops. Instead of savings, it can cause additional expenses.

Your ventilation system is designed by a professional. The changes in the outdoor temperature have been taken into account when designing the system and ventilation units. If you do not change your daily routines, there is no reason to change the settings of the ventilation system.

If the airflow is reduced during cold weather, ice can accumulate in the ventilation unit. The risk grows in extremely cold conditions, and when indoor air is very humid (e.g. after using the shower and when drying laundry).

If you are suspecting that the ventilation system settings need to be updated, contact the system designer.

WARNING

Do not switch off the ventilation unless for service or when instructed so by the authorities.

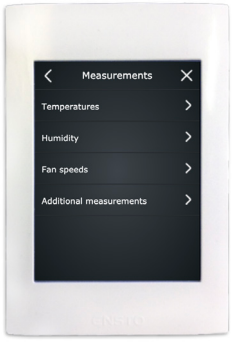
What other properties does the ventilation unit have?

Network interface

You can control your ventilation unit over internet. Fot this the ventilation unit motherboard must be connected to internet. The technician will tell you your user ID (unit serial number) and password once the installation is done. Go to ***my.enervent.com*** and log in with these credentials. You can monitor and control your ventilation unit over internet.

You can check you password from the eAir Web-settings menu. Tap the arrow at the bottom of the control panel main screen > *eAir web Settings* > *Pin-code*.

Measurements

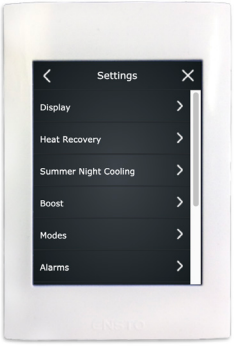


You can check the temperature, air humidity, heat recovery efficiency, and other values from the ***Measurements*** menu.

To open the ***Measurements*** menu:

1. Tap the upward arrow on the main page of the control panel.
   Main menu window opens.
2. Tap the icon in the ***Measurements*** menu.
   Open the submenu of the measurement you want.
3. A list of measurement results opens on the screen. Tap the arrow at the end of the measurement, if you want to check a graphical representation of the measurement.
4. Graphical representations are available as daily or weekly graphs.

Settings



Most submenus in the ***Settings*** menu are read only menus. Their function is to show which settings have been selected for your ventilation system.

WARNING

Only trained ventilation technicians can change the unit settings. Making changes requires a password.

You can make changes in the following menus, if necessary:

Menu	Description of change
Screen settings	- Changing language, date, time, brightness, and other screen properties.
Heat recovery settings	- Heat recovery anti-freeze activation. The technician has configured the rest of the heat recovery anti-freezing settings.
Summer night cooling	- Turning the summer night cooling on and off. - Setting the dates and times for summer night cooling. - Preventing or allowing active cooling. Summer night cooling is an efficient way to cool indoor air. Summer night cooling activates at night and brings in cool night air, which in turn lowers the indoor temperature. The installer has configured the other summer night cooling settings.
Boost functions	- Start and shutdown of humidity, carbon dioxide, and temperature boost Other values are not editable.
Usage mode settings	- Setting the boost time in the ***Manual boost*** settings. - Setting the overpressure time in the ***Manual overpressure*** settings. - Activating and deactivating ***Silent*** mode. - Setting the duration of the ***Silent*** mode When the ***Silent*** mode is activated, the mode symbol appears in the mode menu on the main page (behind the green circle). - Activating and de-activating the Maximum heating/cooling mode in the ***Maximum heating/cooling*** settings menu. The technician has configured most ***Mode*** settings when installing the unit.
Alarm settings	- Changing the alarm or maintenance notification for changing filters. - Acknowledge the maintenance notification for changing filters. By setting the times and dates for alarms in the ***Alarms*** menu, you can decide when to receive B alarms. B alarms do not require immediate action. - Activating and de-activating the filter guard. If your unit has installed filter guards (very rare in detached houses), you can activate and de-activate them in the ***Alarms*** settings menu.

Office usage mode

If the ventilation unit is used in business premises or in a public space, its operating mode is possibly *Office*.

Office usage modes are:

- *Office* (during normal working hours)
- *Overtime* (when people are present outside normal working hours)
- *Boosting* (when additional ventilation is needed)

When the ventilation is operating in *Office* mode, the center circle on the control panel main page displays the *At office* symbol.

Office mode means that the ventilation unit is often programmed to function only when there are people at the premises. Other times the center circle of the control panel indicates "Stop".

I want to work overtime (only Office mode)

If you are working for longer than the ventilation is in operation, you can switch on the *Overtime* mode.

To activate the *Overtime* mode:

1. Tap the green circle in the middle of the main page of the control panel.
   Choose operating mode window opens.
2. Tap the *Overtime* icon.
   Ventilation is left on and ends only after the set time.
   Default value is 2 hours.

What to do if ventilation is not working as wanted?

Supply air is too warm

If the air flowing from the ventilation is too warm:

1. Tap the minus symbol (-) on the main page of the control panel.
   The temperature reading on the panel changes, and the ventilation system begins to adapt for the set temperature.

The set temperature is shown in green on the screen. The indicated temperature reading can be the set point temperature for supply air, extract air or room temperature depending on the settings.

The unit uses all available options for reaching the set temperature. If your system is missing elements, such as a cooling coil, it will not necessarily be able to reach the set temperature.

Supply air is too cold

If the air flowing from the ventilation is too cold:

1. Tap the plus symbol (+) on the main page of the control panel.
   The temperature reading on the panel changes, and the ventilation system begins to adapt for the set temperature.

The set temperature is shown in green on the screen. The indicated temperature reading can be the set point temperature for supply air, extract air or room temperature depending on the settings.

The unit uses all available options for reaching the set temperature. If your system is missing elements, such as a heater, it will not necessarily be able to reach the set temperature.

FOR INFORMATION

The use of Eco mode may prevent the ventilation unit from reaching the set temperature

Ventilation is too weak

If ventilation is not efficient enough, check that:

- the filters are clean and do not need to be changed. If the filters are dirty, change them as described in the instructions in the chapter ***Changing filters***.
- ventilation needs have not changed significantly after designing and installing the system. For example, if the number of people using the building or your daily routines have changed, your ventilation system may require an update. Contact the system designer.

Ventilation is too noisy

Although our ventilation units are fairly quiet, it is impossible to make them completely silent. A well-planned and built system, where the units are not near the bedrooms, and where sound-proofed doors and silencers are used, reduces the disturbance caused by ventilation.

If the ventilation system is noisier than usual, check that:

- the filters are clean and do not need to be changed. If the filters are dirty, change them as described in the instructions in the chapter ***Changing filters***.
- the fans are clean and do not need to be cleaned. If they are dirty, clean them as described in the instructions in the chapter ***Cleaning the fans***.
- automatic humidity boosting is not in operation. If the ventilation boost is constantly on*, it can be a sign of too high indoor air humidity. Contact the system designer.

If ventilation needs to be silenced only temporarily, you can activate the ***Silent*** mode by tapping the green circle on the main page of the control panel and choosing ***Silent*** mode. The ventilation unit automatically reverts to normal operation after a time period configured in the settings.

* You can check this from the ***system information*** menu.

Control panel is not working

If controlling the ventilation unit with the control panel is not working, check that:

- the control panel battery is not run out. If the battery is empty, recharge it by placing the control panel in the wall mount, or connect it to a mobile charger (µUSB connector), If the battery is faulty, it must be removed. The control panel will function without a battery in its wall mount.
- If the control panel is showing "***connecting to network***"-icon, check that the ventilation unit is on and operating. A new pairing connection between control panel and wall holder can be made by following the instructions in the Installation manual on page 12, or Youtube.com, search word: **eAir pariliitos**.

Air is too humid

Besides your own observations, you can notice high humidity by checking the control panel and listening to the sound level of the ventilation system. If the automatic humidity boost is constantly* on, it can be a sign that the indoor air is too humid and the ventilation system is trying to fix the issue. If the indoor air is too humid, check that:

- the filters are clean and do not need to be changed. If the filters are dirty, change them as described in the instructions in the chapter ***Changing filters***.
- ventilation needs have not changed significantly after designing and installing the system. For example, if the number of people using the building and/ or the use of sauna and showers has changed, your ventilation system may require an update. Contact the system designer.

* You can check this from the ***system information*** menu.

Ventilation is not on

If ventilation is not working, check that:

- the service door upper latching screw is locked.
- the unit power cable is plugged in
- the power outlet has power
- the fuse in the fusebox is ok
- there is no alarm shown on the control panel

If the problem is not any of the above, and the ventilation is not working, contact a maintenance company.

The control panel is showing an alarm – what must be done?

If the control panel is alarming, it is shown in yellow on the main page, reading *Alarm is active*.

If you notice that the ventilation system has sent an alarm:

1. On the control panel main page you can
   - tap the alarm notification text or
   - tap the arrow at the bottom of the screen and then tap the ***Alarms*** icon.
2. Alarms menu opens and the new alarm is shown first in the list.
   At first glance you can see:
   - which alarm was sent
   - when the alarm was sent

   If you need more information, tap the alarm row and an instruction will display on the screen. Tapping the active alarm row also displays the Acknowledge button.
3. Check the ***Troubleshooting*** table at the end of this document to see if the issue can be solved. If it is a more difficult problem, contact the installer.

WARNING

Do not acknowledge the alarm before you have solved the issue causing the alarm.

MAINTENANCE

The unit does not need much maintenance. Sufficient maintenance usually covers the following tasks:

- changing filters
- cleaning the heat exchanger (when sweeping the ventilation ductwork)
- cleaning the fans (when sweeping the ventilation ductwork)
- checking condensation water drain.

DANGER

Before starting maintenance, switch off the power by removing the plug from the socket. Wait approximately two (2) minutes before starting maintenance. Although power has been shut down, the fans will rotate and the electric heater will be hot for a while.

The ventilation unit contains moving parts (e.g. fans, motor and belt of the rotating heat exchanger) that wear out during use. Because of normal wear, these parts will have to be changed during the ventilation unit´s lifetime. The normal lifetime of wear parts is dependant of the operating conditions and periods, which means that a normal maintenance period cannot be defined for the wear parts.

Maintenance notification

The control panel reminds you about regular maintenance.

FOR INFORMATION

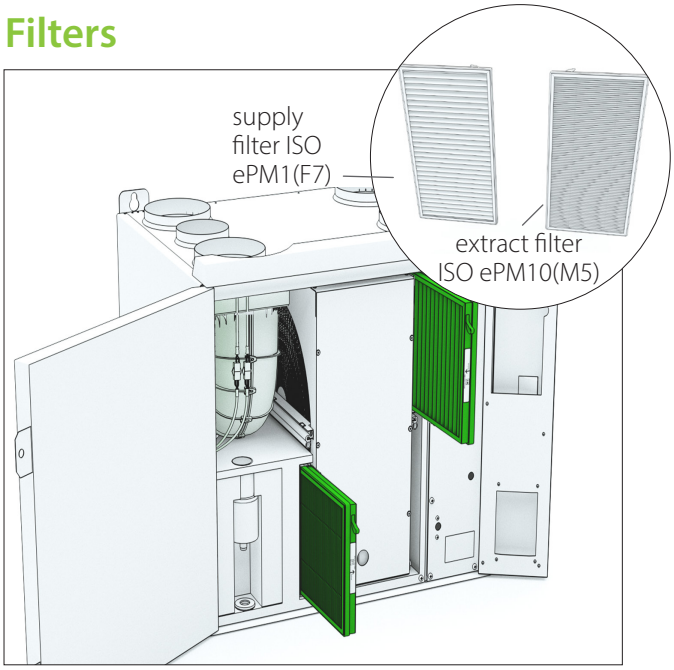
When some part of the unit is serviced, check also if other parts are worn or needs to be cleaned.

FOR INFORMATION

To acknowledge the maintenance remainder, go to: > *Main menu* > *Settings* > *Alarm* > *Acknowledge service reminder* > *ok*

For more information on maintenance actions, see a video in the Help Center on our website at www.enervent.com.

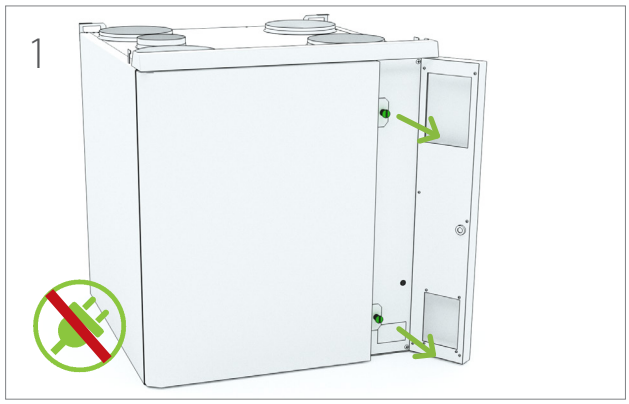
Filters

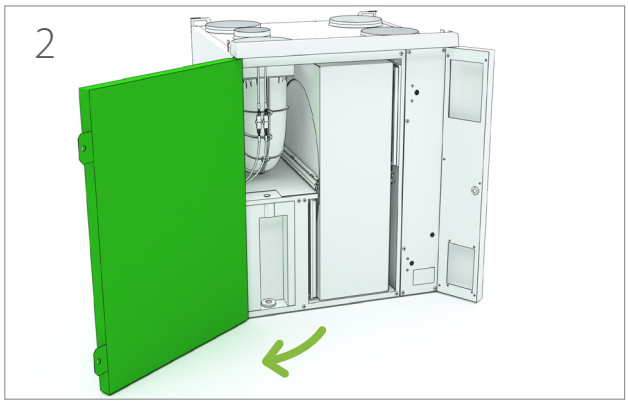


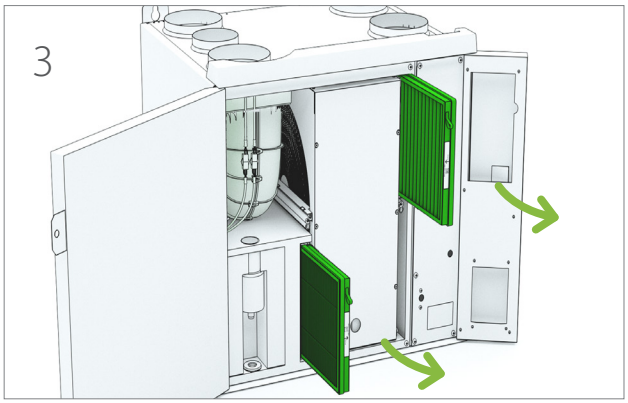
The ventilation unit uses cartridge filters ISO ePM1 (F7) for supply and ISOePM10 (M5) for extract.

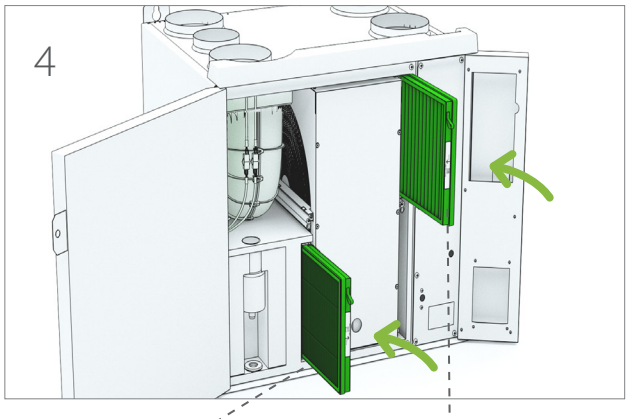
The recommended maximum maintenance period for cartridge filters is 6 months.

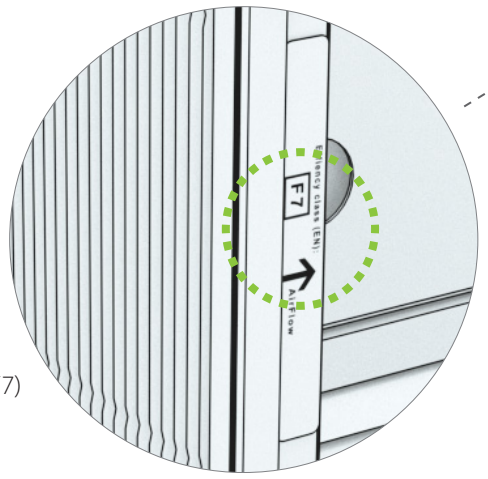
Changing filters



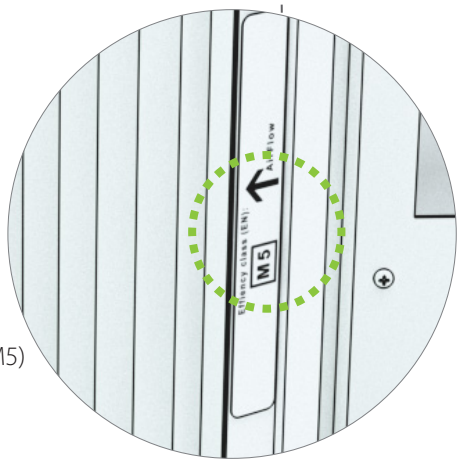








ISO ePM1 (F7)



ISO ePM10 (M5)

Fans

Inspecting

DANGER

Before opening the service hatch, always make sure that the unit's supply voltage is switched off.

1. Inspect the condition of the fans visually when changing the filters.

- If they look dirty, clean them.

TIP

Vacuum the inside of the unit for better performance and cleaner indoor air.

Cleaning

DANGER

Before opening the service hatch, always make sure that the unit's supply voltage is switched off.

1. Remove the fans from the unit.
2. Clean the fans with a toothbrush or pressurized air. Be careful not to disturb the balancing weights on the fanwheel
3. Place the fans back into the unit.

Make sure the heat recovery wheel and fans rotate when starting the unit after cleaning.

Heat exchanger

Inspecting

1. Check the condition of the heat exchanger visually when changing the filters.

- If it looks dirty, clean it.

TIP

Vacuum the inside of the unit for better performance and cleaner indoor air.

Cleaning

DANGER

Before opening the service hatch, always make sure that the unit's supply voltage is switched off.

1. Remove the heat exchanger from the unit.
2. Wash the heat exchanger with water and neutral detergent or use pressurized air.

WARNING

Do not submerge the heat exchanger in water. The electric motor inside the exchanger must not get wet.

The use of a pressure washer is strictly forbidden.

3. Dry the heat exchanger carefully.
4. Place the heat exchanger back into the unit.
5. Start up the unit to verify the rotation.
6. Close the service hatch.

Make sure the heat recovery wheel and fans rotate when starting the unit after cleaning.

Replacing heat exchanger belt

If the heat exchanger has stopped rotating, the reason for it may be a broken drive belt. Check the condition of the belt from the round opening at the front of the heat exchanger.

TIP

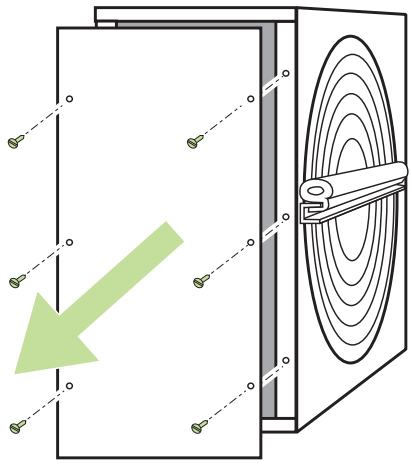
Visit the HelpCenter on our webpage www.enervent.com for videos showing the maintenance tasks.

To replace:

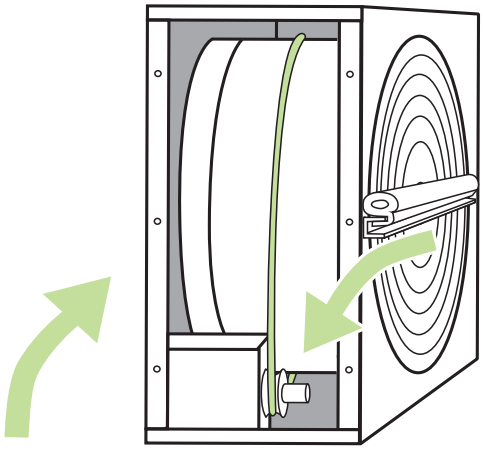
DANGER

Turn off the ventilation unit by switching off the main power supply, by removing the fuse or by disconnecting the wall plug.

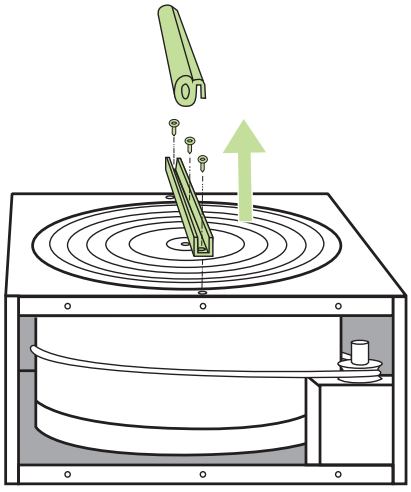
1. Detach the bayonet connector from the socket.
2. Remove the heat exchanger from the unit carefully.
3. Unscrew the six screws on the heat exchanger maintenance hatch lid at the front side of the heat exchanger.



4. Open the maintenance hatch with the help of a flat tool.
   - Use for example a Stanley knife.
5. Pull off the broken heat exchanger belt.

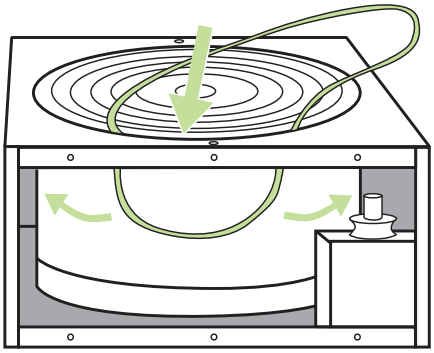


6. Inspect the belt wheel to make sure it is undamaged, in its place and rotating properly.
7. Clean the heat exchanger and the belt wheel.
   - Use degreaser with a soft, lint-free cloth.
   - Rotate the heat exchanger to make sure everything gets cleaned.
   - Make sure that the heat exchanger is rotating freely, without excessive force. You should be able to rotate the heat exchanger with only one finger.
8. Loosen the U-beam on one side of the heat exchanger by removing the screws under the U-beam rubber gasket.
9. Unscrew the hexagonal screw of the shaft in the middle of the U-beam and remove the beam.



10. Slide the new belt inside around the heat exchanger through the opening in the casing and the gasket.

11. Rotate the heat exchanger to get the belt properly in place.



12. Replace the U-beam and reattach the shaft and the U-beam screws.

13. Clean the new belt with the cleaning cloth to make sure it is free of dirt and any grease.

14. Pull the belt onto the belt wheel.

15. Rotate the heat exchanger and ensure that the belt is in its place and everything looks fine.

16. Vacuum clean the heat exchanger casing.

- Rotate the heat exchanger when you are vacuuming to be sure to clean everywhere.

17. Close the maintenance hatch.

18. Add some silicone lubricant onto the rubber strips outside the heat exchanger casing.

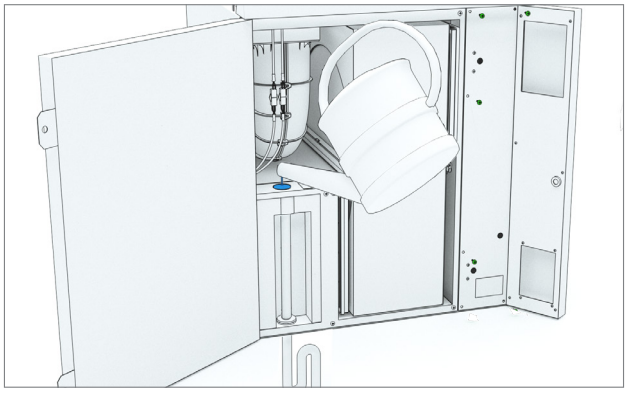
19. Place the heat exchanger back into the unit.

20. Reconnect the bayonet connector to the socket.

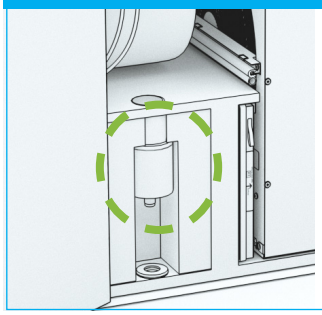
21. Reconnect the power.

22. Make sure the heat exchanger rotates.

Adding water to the water trap (draining the condensation water)



FOR YOUR INFORMATION



If the K900010010 water trap is used, no water needs to be added.

TROUBLESHOOTING

Alarm	Reason	Instruction	Solution
HRW supply air cold (TE-05 min)	Heat exchanger belt is broken	A green belt drives the heat exchanger. Check if the belt can be seen from the HRW round opening. If it cannot be seen, the belt is broken.	Change the belt.
	The heat exchanger belt is oily and slips	A green belt drives the heat exchanger. Check from the HRW round opening if the pulley is rotating even though the HRW rotor is not.	Change the belt.
	Extract air fan has stopped	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Contact Service. Change the fan.
	Extract air filter is blocked	Open the service hatch when the unit is off. Pull out the filter and check the condition of the filter.	Change the filters.
	Extract air valves adjusted incorrectly	Find out if the air flow and valves are correctly adjusted.	Contact the installer.
	Ducts have inadequate insulation	Check the thickness of the insulation in supply and extract air ducts, and add insulation if necessary.	Contact the installer.
	The pre-heater overheating protection has tripped.	Find out the cause for the failure and reset the protection against overheating (R® button in the radiator).	Contact service.
	The motor/gearbox in the heat exchanger is faulty	Open the service hatch while the unit is operating and listen, if the sound comes from the HRW.	Contact service.
	The HRW controller circuit board is faulty	The HRW motor is controlled by a separate circuit board that is located in the electric box of the unit.	Contact service.
	HRW pulley has separated from the shaft	Check from the HRW round opening if the shaft is rotating empty and the pulley is in its place.	Contact service. Tighten the screw on the pulley.
	TE-05 temperature sensor is faulty	Check from the measurements menu on the control panel if the supply air temperature after heat recovery measurement is off the charts.	Contact service.
Supply air cold (TE-10 min)	Heat exchanger belt is broken	A green belt drives the heat exchanger. Check if the belt can be seen from the HRW round opening. If it cannot be seen, the belt is broken.	Change the belt
	The heat exchanger belt is oily and slips	A green belt drives the heat exchanger. Check from the HRW round opening if the pulley is rotating even though the HRW rotor is not.	Change the belt
	Extract air fan has stopped	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Contact Service. Change the fan
	Extract air filter is blocked	Open the access door when the unit is off. Pull out the filter and check the condition of the filter.	Change the filters
	Extract air valves adjusted incorrectly	Find out if the air flow and valves are correctly adjusted.	Contact the installer.
	The pre-heater overheating protection has tripped.	Find out the cause for the failure and reset the protection against overheating (R® button in the radiator).	Contact service.
	TE-10 temperature sensor is faulty	Check from the measurements menu on the control panel if the supply air temperature measurement is off the charts.	Contact service.
	The motor/gearbox in the HRW motor is faulty	Open the service hatch while the unit is operating and listen, if the sound comes from the HRW.	Contact service.

Alarm	Reason	Instruction	Solution
Supply air cold (TE-10 min)	The HRW controller circuit board is faulty	The HRW motor is controlled by a separate circuit board that is located in the electric box of the unit.	Contact service.
	After heating is disabled	Check if after heating is allowed and eco-mode is off, and there is no heating block timer program active	Change settings if needed
	HRW pulley has separated from the shaft	Check from HRW round opening if the shaft is rotating empty and the pulley is in its place.	Contact service. Tighten the screw on the pulley.
	Ducts have inadequate insulation	Check the thickness of the insulation in supply and extract ducts, and add insulation if necessary.	Contact the installer.
Supply air hot (TE-10 max) Fire risk	Electrical after-heating faulty		Contact service.
	Water heating radiator has a faulty control valve actuator		Contact service.
	TE-10 temperature sensor faulty	Check from the measurements menu on the control panel if the supply temperature measurement is off the charts.	Contact service.
Hot room air (TE-20 max)	Fire risk		Contact service.
	TE-20 temperature sensor faulty	Check from the measurements menu on the control panel if the room temperature measurement is off the charts.	Contact service.
Extract air cold (TE-30 min)	Ducts have inadequate insulation	Check the thickness of the insulation in supply and extract air ducts, and add insulation if necessary.	Contact the installer.
	The pre-heater overheating protection has tripped.	Find out the cause for the failure and reset the protection against overheating (R® button in the radiator).	Contact service.
	The ventilation unit door is open		Close the door.
	Low room temperature		Raise the room temperature.
	TE-30 temperature sensor is faulty	Check from the measurements menu on the control panel if the extract air temperature measurement is off the charts.	Contact service.
Extract air hot (TE-30 max)	Fire risk		Contact service.
	TE-30 temperature sensor faulty	Check from the measurements menu on the control panel if the extract air temperature measurement is off the charts.	Contact service.
Electrical radiator overheated (SLP fault)	Electrical post-heating faulty		Contact service..
	Supply air fan has stopped	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Contact service. Change the fan.
	Supply air filter is blocked	Open the service hatch when the unit is off. Pull out the filter and check the dirtiness of the filter.	Change the filters
	Outdoor louvre blocked	Check if the louvre on the outside of the house is blocked.	Contact service. Clean the outdoor louvre.
	The heating controller circuit board is broken		Contact service. Change the heating controller circuit board.
Water radiator freezing risk (TE-45 min)	Heat exchanger belt has broken	A green belt drives the heat exchanger. Check if the belt can be seen from the HRW round opening. If it cannot be seen, the belt is broken.	Change the belt

Alarm	Reason	Instruction	Solution
Water radiator freezing risk (TE-45 min)	The heat exchanger belt is oily and slips	A green belt drives the heat exchanger. Check from the HRW round opening if the pulley is rotating even though the HRW rotor is not.	Change the belt
	Extract air fan has stopped	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Change fan
	Extract air filter is blocked	Open the service hatch when the unit is off. Pull out the filter and check the condition of the filter.	Change the filters
	The air valves adjusted incorrectly	Find out if the air flow and valves are correctly adjusted.	Contact the installer.
	Ducts have inadequate insulation	Check the thickness of the insulation in supply and extract air ducts, and add insulation if necessary.	Contact the installer.
	The pre-heater overheating protection has tripped.	Find out the cause for the failure and reset the protection against overheating (R® button in the radiator).	Contact service.
	The water heating radiator has a faulty control valve actuator		Contact service.
	The circulation pump has shut down	Check if the heating/cooling circulation pump is working.	Restart the pump. If the issue persists, contact service.
	The HRW controller circuit board is faulty	The HRW motor is controlled by a separate circuit board that is located in the electric box of the unit.	Contact service.
	HRW pulley has separated from the shaft	Check from HRW round opening if the shaft is rotating empty and the pulley is in its place.	Contact service. Tighten the screw on the pulley.
Cooling error	External cooling unit malfunction	Check that the safety switch of the external unit is switched on.	Restart the external unit. If the issue persists, contact service.
External emergency shutdown	Ventilation stopped with the emergency shutdown button.	If the building has an external shutdown switch, check if it has been pressed.	Contact service. Find the root cause before resetting
External fire risk	Ventilation shut down from the external fire alarm system.	If the building has a fire alarm system, check if it has been activated.	Contact service. Find the root cause before resetting.
Maintenance notice	Normal notice every 4 or 6 months (depending on the model)	Change the filters and clean the unit from inside. Check that the unit functions properly.	Reset the maintenance alarm from the eAir panel Settings menu -> Alarm -> Acknowledge service reminder.
Filter alarm: Supply (accessory)	Supply air filter is blocked.	Open the service hatch when the unit is off. Pull out the filter and check the condition of the filter.	Change the supply filter.
Filter alarm: Exhaust (accessory)	Extract air filter is blocked.	Open the service hatch when the unit is off. Pull out the filter and check the condition of the filter.	Change the extract filter.
Supply air fan rotation guard	Supply air fan has stopped.	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Contact service. Change the fan
Extract air fan rotation guard	Extract air fan has stopped.	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Contact service. Change the fan
PDS 10 alarm	Supply air fan has stopped.	Open the service hatch. Press the safety switch with a screwdriver and check, if the fan starts.	Contact service.
	Supply air filter blocked.	Open the service hatch when the unit is off. Pull out the filter and check the condition of the filter.	Change the filters
	Outdoor louvre blocked.	Check if the louvre on the outside of the house is blocked.	Contact service. Clean the outdoor louvre.
Compressor alarm	The internal alarm of the heat pump unit is active.		Restart the heat pump. If the issue persists, contact service.

Enervent Svea

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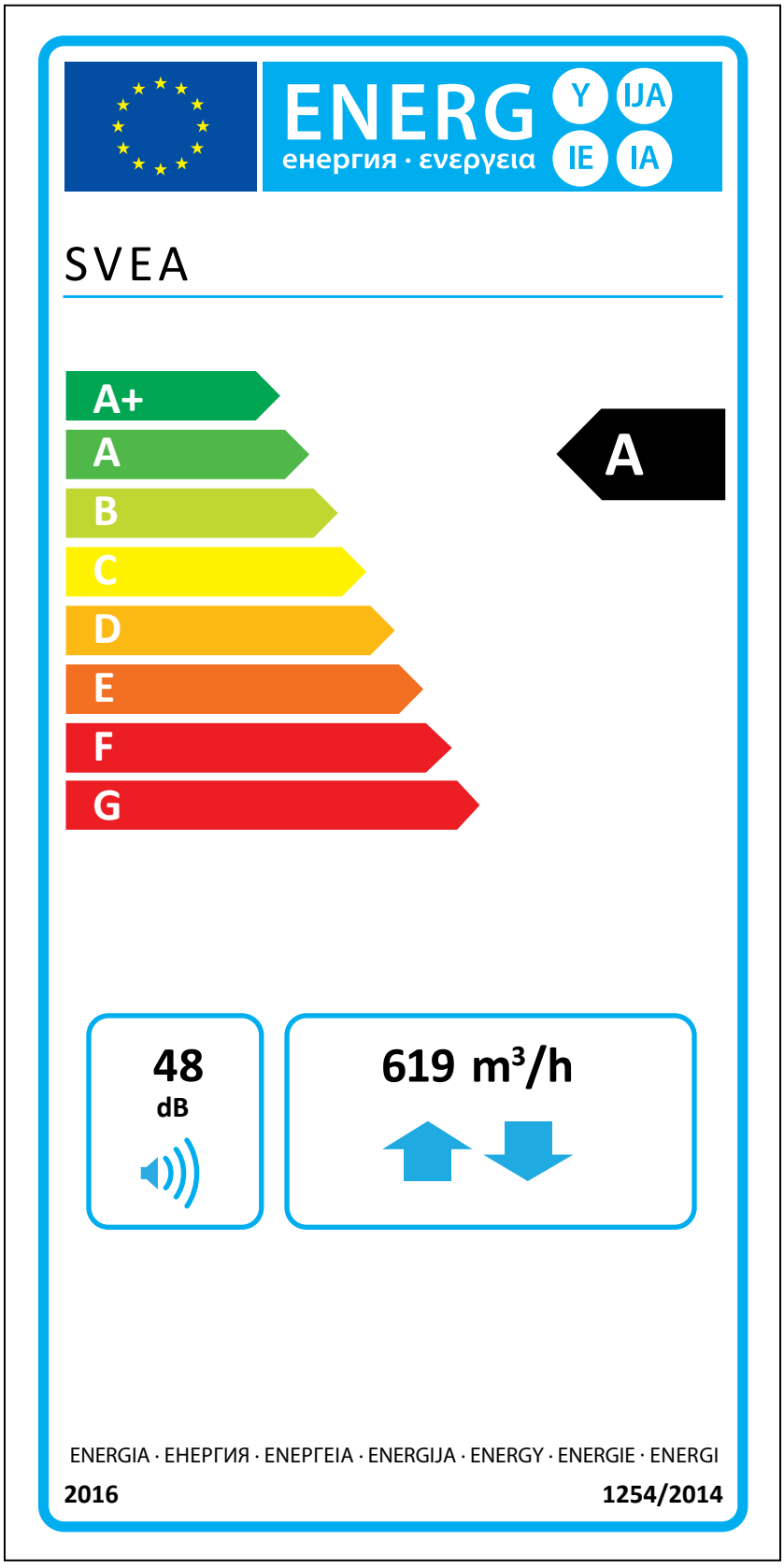
PRODUCT INFORMATION ACCORDING TO EU COMMISSION REGULATION NO 1253/2014 AND 1254/2014

Supplier's name or trade mark	Enervent
Supplier's model identifier	Svea
Specific energy consumption (sec) in kWh/(m^2.A)	
• Cold climate	-76,8
• Average climate	-37,3
• Warm climate	-14,6
Declared typology in accordance with article 2 of this regulation	RVU / BVU
Type of drive installed or intended to be installed	Multi-speed drive
Type of heat recovery system	Regenerative
Thermal efficiency of heat recovery	84,8
Maximum flow rate in m^3/h	619
Electric power input of the fan drive, including any motor control equipment, at maximum flow rate (W)	298
Sound power level (L_{WA}), rounded to the nearest integer	48
Reference flow rate in m^3/s	0,12
Reference pressure difference in Pa	50
SPI in W/(m^3/h)	0,31
Control factor and control typology in accordance with the relevant definitions and classification in annex VIII, table 1	0,65
Declared maximum internal and external leakage rates (%) for bidirectional ventilation units	<4% / <0,8%
Position and description of visual filter warning for rvus intended for use with filters, including text pointing out the importance of regular filter changes for performance and energy efficiency of the unit	Filter warning on control panel. Instructions in user manual.
Internet address for disassembly instructions as referred to in point 3	https://doc.enervent.com/out/out.ViewFolder.php?folderid=957
The annual electricity consumption (AEC) (in kWh electricity/a)	162
The annual heating saved (AHS) (in kWh primary energy/a) for each type of climate	
• Cold climate	8084
• Average climate	4132
• Warm climate	1869

The information on the energy label for this product has been defined with local demand control. Local demand control means that the ventilation unit continuously regulates the fan speed(s) and flow rates based on more than one sensor. Please remember to connect all local sensors (some sold as extra equipment) in order to achieve the declared energy class.

enervent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