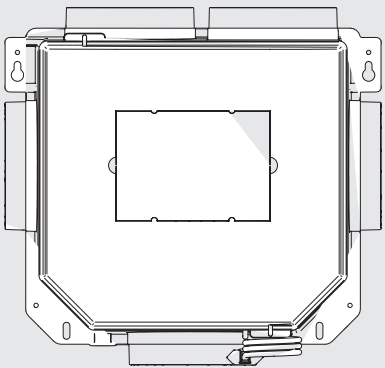
HEATRAE SADIA

SMARTER | CLEANER | WARMER

CVE ECO 2 FAN



Translation of the original document.

Introduction

This manual is intended for the user and the qualified installer of the appliance and contains important information about installation, use, maintenance and troubleshooting.

The installer is responsible for installing and commissioning the unit.

The following definitions are used in this manual to draw attention to hazards, instructions or indications related to people, products, installations and/or the surroundings.

⚠ Warning!

Indicates a hazard that can cause injury and/or severe damage to the product, system or surrounding area.

⚠ Caution!

Instructions important for the installation, functioning, operation or maintenance of the product. Failure to observe these instructions can result in minor injury and/or severe damage to the product, system or surrounding area.

Note

Instructions important for the installation, functioning, operation or maintenance of the product. Failure to observe these instructions can result in minor damage to the product, system or surrounding area.

Tip

Instructions that may be important for the installation, functioning, operation or maintenance of the product, but are not related to injury or material damage.

Tip

Do not forget to register the product via the Heatrae Sadia website www.heatraesadia.com.

Although this manual has been drawn up with the utmost care, no rights may be derived from this document.

Heatrae Sadia reserves the right to modify products and manuals without prior notice.

Due to our continuous product improvement process, this document may not match the appliance you received. You can download the latest version of the manual from www.heatraesadia.com.

Contents

1. Safety and other regulations

1.1. Safety

- Work may only be performed on the ventilation system by qualified installers [1] in accordance with the regulations mentioned in this manual. Only original accessories and parts as specified by the manufacturer may be used for these purposes.
- Do not use the product for purposes other than those for which it is intended, as described in this manual.
- Be careful when using electrical appliances:
  - Never touch the appliance with wet hands.
  - Never touch the appliance when barefoot.

- This product and/or system may be operated safely by children aged 8 years and older and by people with physical, sensory or mental disabilities or a lack of experience/knowledge if under supervision or after having received instructions regarding safe use, and if they are aware of the product and/or system hazards.
- Cleaning and maintenance by the user may not be done by children or people with physical, sensory or mental disabilities or a lack of experience/knowledge without supervision.
- Do not allow children to play with the product and/or system.
- Do not use the product in the vicinity of flammable or volatile substances such as alcohol, insecticides, petrol etc.

- The safety instructions must be followed in order to prevent physical injury and/or damage to the product.
- The product includes moving parts. Please therefore wait at least 10 seconds after disconnection prior to opening or touching the product as these parts will continue to move for some time.
- Secure the appliance against being switched on accidentally.
- Maintenance instructions must be followed to prevent damage and excessive wear and tear.
- The product may not be modified.
- The product is only suitable for use with a 230 V, 50 Hz AC power supply system.
- Ensure that the electrical system to which the product is connected meets the necessary conditions.
- Do not expose the product to the elements.
- Do not place any objects on top of the device.

- Inspect the product regularly for faults. In the event of faults, switch the product off and contact your installer or Heatrae Sadia Customer Service immediately.
- Switch the product off if:
  - The product is not working properly.
  - You want to clean the outside of the product.
- Ensure that the electrical circuit does not become damaged.
- Do not use the device to extract air from boilers, heating systems etc.
- Ensure that the device drains into a sewer system which leads outside, and is suitable and installed for this purpose.
- Ensure that air valves and grilles are not obstructed, and that they are clean.

1.2. Standards and guidelines

⚠ Warning!

The specifications and settings of the appliance comply exclusively with the standards and statutes of the country in which the appliance is sold.
Use outside this country may lead to very dangerous situations.

The installer must ensure that the entire installation complies with the legal requirements, regulations as

referred to in this document and other applicable documents provided by the manufacturer.

Supplements, amendments and legal requirements and regulations which come into force later on are deemed to be applicable at the moment of installation for all legal requirements and regulations.

After installation, no health, safety or environmental risks may be present in accordance with the applicable CE standards. This also applies to other products included in the installation.

1.3. CE mark

The unit complies with the CE mark requirements.

2. Product information

A comfortable living environment and energy conservation are becoming increasingly important in housing construction. Dwellings nowadays are better insulated. Unfortunately, good insulation often has an adverse effect on the indoor climate. Without good ventilation, there is nothing to stop damp, mould and dust mites, and the air in the dwelling can quickly start to feel stale due to the increasing carbon dioxide (CO_2) levels. Heatrae Sadia develops appliances which manage the indoor climate and take account of requirements for comfort and energy consumption in homes.

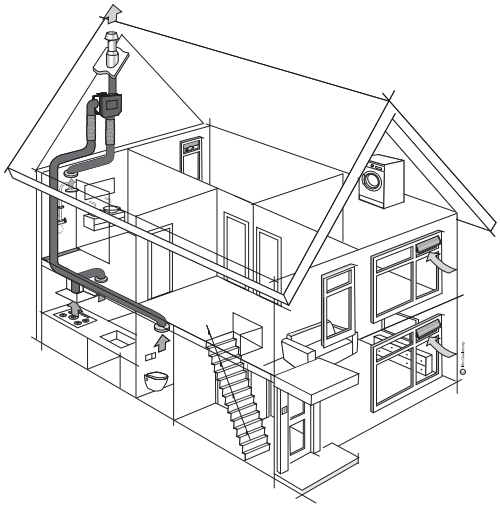
The **CVE ECO 2 FAN ventilation unit from Heatrae Sadia** is an example of these appliances.

The CVE ECO 2 FAN ventilation unit is used in individually controllable ventilation systems based on natural air supply in the outer wall and central mechanical air extraction from wet rooms.

The CVE ECO 2 FAN ventilates several rooms in the dwelling. The kitchen, bathroom, toilet, and any indoor storage spaces or washrooms are connected to the unit by ducts for air extraction. The system may include a motorless cooker hood.

To ensure good air distribution, extraction valves are fitted on the openings of the ventilation ducts in the ventilated rooms. Air is pulled out through these extraction points, while fresh air from outside flows in through air supply openings (such as grilles) in the outside walls of the living room and bedrooms.

The CVE ECO 2 FAN is equipped with a built-in humidity sensor as standard. Thanks to its smart control, this humidity sensor precisely measures the air humidity and automatically adjusts the ventilation according to the humidity level.. If the sensor detects a gradual or abrupt rise in the relative humidity, it will boost the automatic control of the ventilation unit to the maximum level. The RH sensor cannot be adjusted without special tools. For example, the unit helps reduce the humidity in your bathroom, keep the toilet smelling fresh and remove cooking odours from the kitchen.



2.1. Models

Item	Type	Description
03-00445	CVE ECO 2 FAN HP	High-performance ventilation unit with integrated RH sensor and five-wire power cable

2.2. Accessories

Item	Type	Description
95980003	RFT W	Wireless control switch with three settings and timer function.
95970204	RFT AUTO	Wireless RF control switch with 2 settings, an automatic mode and a timer function.
95970002	Wired Controller	Wired three-position switch for installation
95970201	RFT CO_2 230v	Wireless CO_2 sensor powered by 230 V
95970203	RFT-RV BAT	Wireless RH sensor powered by battery
95970202	RF-PIR BAT	Wireless PIR sensor powered by battery

2.3. Technical specifications

Description	Symbol	Unit	CVE ECO 2 FAN HP
DIMENSIONS AND WEIGHT			
Dimensions [HxWxD]	—	mm	350 x 355 x 294
Weight	—	kg	3.4
CONNECTIONS			
Connections from dwelling	—	mm	4x Ø 124
Connection to outside	—	mm	1x Ø 124
GENERAL			
IP classification	—	—	IP31
RF (built in)	—	—	30 m in free space, 868 MHz
Supply voltage	—	—	~ 230 V – 50 Hz
Power connection	—	—	5-wire power cable
TECHNICAL PARAMETERS			
Maximum power consumption	P	W	62

2.4. Capacity

HP model	Capacity [m^3/h]	Pressure [Pa]	Power [W]
Level 1 minimum	25	5	1.6
Level 1 standard	75	11	2.5
Level 1 maximum	125	31	5.2
Level 2 standard (*)	175	60	10.2
Level 3 minimum	175	60	10.2
Level 3 standard	275	100	31.6
Level 3 maximum	415	100	62

**) Level 2 is the automatic mode when sensors (CO_2, RH and/or PIR) are paired. The capacity is automatically regulated between low speed and high speed.*

2.5. Product fiche information

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Description	Symbol	Unit	CVE ECO 2 FAN
Specific energy consumption class	—	—	D
Specific energy consumption under average climate conditions	SEC	kWh/(m^2.a)	-20
Specific energy consumption under warm climate conditions	SEC	kWh/(m^2.a)	-8
Specific energy consumption under cold climate conditions	SEC	kWh/(m2.a)	-41
Type of ventilation unit	VU	—	Residential ventilation unit (RVU) Unidirectional ventilation unit (UVU)
Type of drive	—	—	Variable speed
Type of heat recovery system	HRS	—	None
Thermal efficiency of heat recovery	η_t	%	Not applicable
Maximum flow rate	q_{max}	m^3/h	325
Electric power input of fan drive at maximum flow rate	P_{max}	W	62
Sound power level	L_{WA}	dB	50
Reference flow rate	q_{ref}	m^3/s	0.800
Reference pressure difference	ΔP_{ref}	Pa	50
Specific power input	SPI	W/(m^3/h)	0.088
Ventilation control	—	—	Manual control (no DCV)
Control factor	CTRL	—	0.85
External leakage rates for unidirectional ventilation units with ducts	—	%	N/A
Instructions for installation of regulated inlet/extraction grilles in the wall for natural air supply/exhaust	—	—	Not applicable

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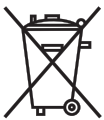
Description	Symbol	Unit	CVE ECO 2 FAN
Instructions for pre-assembly/disassembly	—	—	www.heatraesadia.com
Airflow sensitivity to pressure variations at +20 Pa and -20 Pa	—	—	Not applicable
Indoor/outdoor air tightness	—	—	Not applicable
Annual electricity consumption	AEC	kWh	0.79
Annual heating saved under average climate conditions	AHS	kWh	22
Annual heating saved under warm climate conditions	AHS	kWh	10
Annual heating saved under cold climate conditions	AHS	kWh	43

2.6. Recycling

This product was manufactured using sustainable materials. It should be disposed of in a responsible manner at the end of its life cycle. Your local authorities can provide you with information on how to do so.

The product's packaging can be recycled. These materials should be disposed of in a responsible manner in accordance with government regulations.



As a reminder of the need to dispose of batteries and electrical household appliances separately, the product features a symbol consisting of a crossed-out wheeled bin. This means that the product should not be disposed of with the rest of your domestic waste at the end of its life cycle. It must be taken either to a special separate waste collection centre operated by the local council or to an outlet specified by this service.

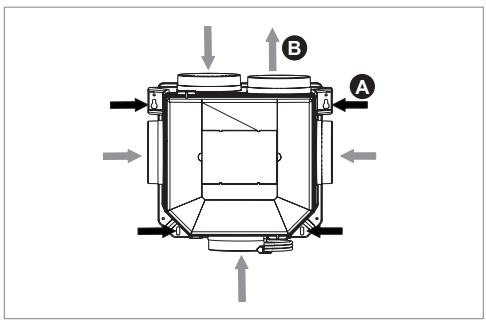
Any adverse effects on the environment and human health are minimised by handling batteries and household appliances separately. This ensures that the materials comprising the appliance can be recycled, thereby saving a significant amount of energy and raw materials.

3. Installation

3.1. Installing the ventilation unit

⚠ Warning!

When using the unit in multi-unit housing, a mechanical check valve must be fitted in the outlet duct to prevent backflow from the central duct.



Using suitable screws in the mounting holes, mount the ventilation unit on a vertical or sloping wall, ceiling or floor with sufficient load-bearing capacity (> 200 kg/m^2), preferably in a closed room. (**A**)

The ventilation unit has five air connection ports: one outlet nozzle for discharging air to the outside and four nozzles for intake of air extracted from the dwelling. (**B**)

a) Connect the outlet nozzle (1, diameter 124 mm) to the exhaust duct or roof duct to the outside.

b) Connect the inlet nozzles (1–4, diameter 124 mm) to the ducts from the rooms to be ventilated.

c) Close the unused nozzles on the unit with the included plugs.

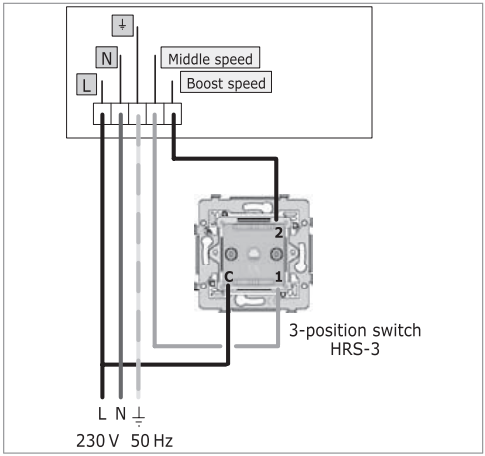
3.2. Electrical connection

The ventilation unit is fitted with a stripped five-wire power cable. This version can be connected to a wired three-position switch. It is operated via this wired switch and/or via wireless devices.

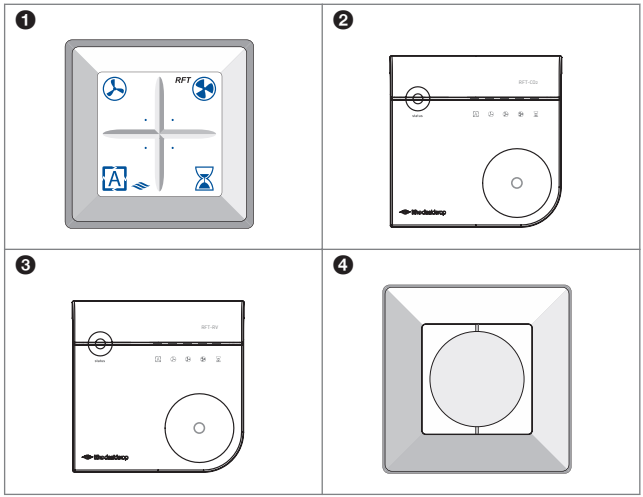
⚠ Warning!

Never use an extension cable for connection of the unit.

Five-wire cable connections				
Wire	Colour	Mode	Phase	From/To
⏚	Green/ Yellow		Earth	Supply/Unit
N	Blue		Neutral	Supply/Unit
L	Brown	Low	Unswitched lead	Supply/Unit/ Switch
B	Black	High	Switched lead	Switch/Unit
M	Grey	Mid/Auto	Switched lead	Switch/Unit



4. Operation



The ventilation unit has several pre-programmed modes. A number of control switches are available for active adjustment to the right mode and ventilation capacity:

1. Wireless control switch with three settings and timer function.
2. Wireless control switch with two levels, automatic mode and timer function
3. Wired three-position switch for installation.
4. A combination of the above options.

For pairing or unpairing a wireless control switch or sensor with the unit, see the section Pairing and unpairing RF remote controls on page 23.

Up to 20 wireless devices (switches and/or sensors) can be paired with the unit.

The ventilation unit can be set to any of the following speeds:

- Level 1, **low speed**: when just one person is present during the day or night, or nobody is present.
- Auto mode **automatic mode**; control based on connected sensors (CO_2, RH and/or PIR). The capacity is automatically regulated between low and high.
- Level 3, **high speed**: during cooking, showering or bathing, or when many people are present.

Note

Level 2 (medium speed) on the three-level control switch becomes automatic mode when a sensor (integrated or remote) is used.

- **Auto-Night**. **Auto-Night** raises the minimum ventilation speed to ensure sufficient ventilation during the night. You can set the unit to **Auto-Night** when you go to bed in the evening. Always ensure that the room grilles are open when using this setting.

To select **Auto-Night**, press the **Auto** button on the wireless control switch or sensor/control device *twice*. **Auto-Night** cannot be set with the wired three-position switch.

⚠ Caution!

Auto-Night does not switch off automatically after a defined time. You should manually switch to **Auto** (or another level) in the morning.

Caution!

Auto-Night is only available in combination with a single CO_2 sensor. With multiple CO_2 sensors, the ventilation is automatically adjusted in the bedrooms and **Auto-Night** is not necessary.

Note

When several devices are used, the ventilation speed on the wired control switch may not match the actual ventilation speed because the ventilation unit has been set to a different speed by another control or sensor.

Note

The actual ventilation speed can always be seen on the (optional) external CO_2 sensor or RH sensor.

4.1. Pairing and unpairing RF remote controls

4.1.1. Pairing wireless devices

Pairing a wireless control switch should be done in the vicinity of the ventilation unit.

a) Switch off power to the ventilation unit, wait 15 seconds, and then switch on power again.

b) Within two minutes, press two diagonally opposite buttons at the same time on the control switch.

The control switch is now paired with the ventilation unit. For information about pairing and unpairing optional controls, see the documentation included with the controls.

4.1.2. Unpairing RF devices

Unpairing a wireless control switch should be done in the vicinity of the ventilation unit.

a) Switch off power to the ventilation unit, wait 15 seconds, and then switch on power again.

b) Within two minutes, press the four buttons of the control switch at the same time.

Now the ventilation unit will no longer respond to the control switch(es). Unpairing one control switch automatically unpairs *all* switches, controls and sensors.

4.1.3. Pairing and unpairing wireless sensors

For information about optional sensors, see the data sheets included with the sensors.

5. Use

⚠ Caution!

Increasing the maximum motor speed results in increased noise levels and energy consumption.

⚠ Caution!

If power is interrupted while you are putting the unit into service, you must wait for at least two minutes after power has been restored. All ventilation units in the immediate vicinity will also be in pairing mode for the first two minutes.

Each remote device must be paired separately. You can pair and use up to 20 RF devices.
Before putting into service:

- The ventilation unit must be installed.
- The duct system must be installed.
- The room and/or façade grilles must be fully open.
- All exterior and interior doors must be shut.
- There must be enough space for air flow beneath the interior doors.
- The adjustable air valves in *all* rooms must be fully opened.

Follow the steps below to correctly put the ventilation unit into service:

a) Ensure that the ventilation unit has been switched off for 15 seconds.

b) Apply power to the ventilation unit.

c) Pair the RF remote device(s) with the ventilation unit by pressing two diagonally opposed buttons. The ventilation unit will briefly change speed to confirm the pairing.

d) Now switch the ventilation unit to high speed and adjust the ventilation capacity of each air valve according to the statutory requirements.

*If adjusting the air valves does not result in the desired air flow rates, you can increase the maximum speed of the ventilation unit by turning the knob of the maximum speed potentiometer to a higher level (see the section **Adjusting the capacity**).*

Note

After it is switched on, the ventilation unit remains in pairing mode for 2 minutes. The ventilation unit responds to all pairing requests received during this period, which means that another RF control switch or RF sensor may unintentionally pair with your ventilation unit. As a result, your ventilation unit will respond to your own RF control switch or RF sensor, but it may also respond to a control or sensor of a neighbouring dwelling.

Caution!

If an RF control switch of a neighbouring dwelling is unintentionally paired with your ventilation system, you can resolve the problem by unpairing and repairing an already paired control switch. Unpairing one control switch also unpairs all the rest, including those of neighbouring dwellings.

5.1. Adjusting the capacity

⚠ Caution!

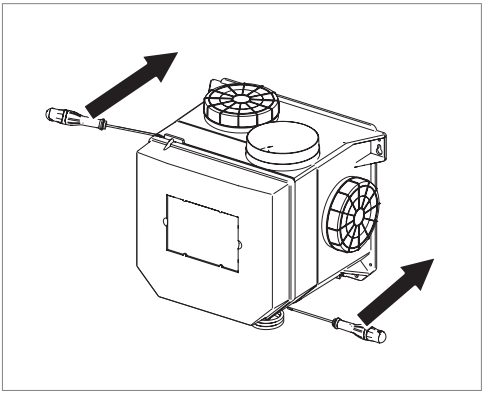
The capacities (high and low) of the ventilation unit must be set up during commissioning.

Tip

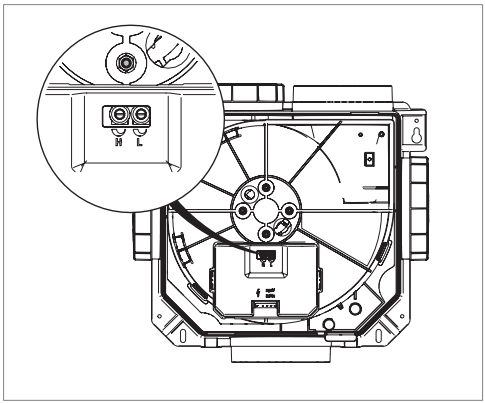
If the capacity needs to be increased, first try opening the air valves more to see if this helps achieve the required capacity. Increasing the motor speed results in higher energy consumption and an increased noise level.

There are two potentiometers on the main circuit board for adjusting the minimum and maximum capacity (low speed and high speed). The design calculations for the system or flow rate measurements will indicate whether these capacities need to be adjusted.

a) Remove the cover by using a flat screwdriver to release the latch tabs at the top and bottom. Now you can detach the cover.



b) The capacity at high speed (H) and low speed (L) can be adjusted with the two potentiometers.



5.1.1. High speed setting

If necessary, adjust the high speed setting with the left-hand potentiometer (H). The standard setting of this potentiometer is 275 m^3/h. The adjustment range is from 175 m^3/h to 325 m^3/h (at 100 Pa).

5.1.2. Low speed setting

If necessary, adjust the low speed setting with the right-hand potentiometer (L). The standard setting of this potentiometer is 75 m^3/h, and it has a lower limit so that it is not possible to have insufficient ventilation. The adjustment range is 25 m^3/h to 125 m^3/h.

6. Service & Maintenance

6.1. Inspection

Proper functioning of the ventilation system, its capacity and its service life can only be assured if the system is inspected and maintained in accordance with the following instructions. These instructions are based on normal operating conditions.

⚠ Caution!

If the ventilation system is being used under harsh operating conditions or in a very dirty environment, extra maintenance may be required.

6.1.1. Inspection of the ventilation unit

The ventilation unit must always be accessible for maintenance. The ventilation unit does not need extensive maintenance. Clean the outer plastic housing at regular intervals with a slightly damp cloth.

a) Check the unit on a regular basis for unusual noises.
b) Check the unit on a regular basis for response to manual operation.
c) Check the unit on a regular basis for response to the RH sensor.
d) Check the unit on a regular basis for response to the connected sensors.
e) Inspect the fan annually.
f) Contact an installer if the unit produces unusual noises, no longer responds, or when inspection shows that cleaning is necessary. Cleaning of the fan impeller may only be performed by an installer.

6.1.2. Fan inspection

Caution!

Replacement of parts or cleaning of the fan impeller may only be done by an qualified installer.

Proceed as follows to inspect the fan:

a) Disconnect power to the ventilation unit.

b) Remove one of the nozzle sealing plugs so that the fan impeller is visible.

c) Visually inspect the fan impeller for soiling. The fan impeller becomes soiled over the course of time and must be cleaned every four to five years in normal use. Slight soiling does not affect proper operation.

d) Depending on the result of the inspection, fan cleaning may be necessary.

e) Fit the plugs again to seal the nozzles.

f) Restore power to the ventilation unit.

If the appliance produces unusual noises, the fan wobbles or the fan is seriously soiled, it needs to be cleaned or replaced.

6.1.3. Inspection of RF device

Check the RF device on a regular basis for proper operation by switching the ventilation unit to a different speed. Contact a qualified installer if it no longer responds.

6.1.4. Inspection of air valves and grilles

Checks the air valves and grilles on a regular basis (around once every two months) for soiling. If the air valves and/or grilles are soiled, they must be cleaned. The air valves and grilles can be cleaned by the user according to the instructions under **Maintenance**.

6.2. Maintenance

To ensure the proper functioning, capacity and service life of the appliance, it must be maintained as described in the following sections.

⚠ Caution!

If the ventilation system is being used under harsh operating conditions or in a very dirty environment, extra maintenance may be required.

6.2.1. Maintenance of the ventilation unit

The ventilation unit does not need extensive maintenance. Clean the outer plastic housing at regular intervals with a slightly damp cloth.

The installer should perform an inspection every four years. Based on the inspection, it may be necessary to clean the fan impeller as described under Cleaning the fan impeller. The internal fan impeller may only be cleaned by a qualified installer.

6.2.2. RF remote control maintenance

The wireless control switch is battery powered. Under normal usage conditions, the battery has an estimated service life of around 7 years. Once the battery is fully drained, the control switch will no longer work, and it will no longer be possible to manually operate the ventilation unit. The battery (type CR2032 3V) must then be replaced. Inserting the battery incorrectly may damage the product. The batteries should not be exposed to excessive heat in the form of direct sunlight, fire, etc.
It is not necessary to pair the control switch again.

6.2.3. Inspecting and cleaning air valves

Check the air valves regularly (around once every three months) for soiling. If the air valves are dirty, they must be cleaned.

⚠ Caution!

When removing or replacing air valves and grilles, watch out for protruding duct sections. These can be very sharp.

⚠ Caution!

When cleaning, do not adjust the air valve settings, and replace the valves in their original ducts.

Proceed as follows to clean the air valves.
In case of light soiling, wipe the valves clean with a slightly damp cloth. If necessary, use a solution of a mild cleaning agent, such as washing-up liquid or all-purpose cleaner.
If the valves are soiled with stubborn deposits, remove them entirely from the duct.

a) Remove the foam rubber gaskets.
b) Fully immerse the valves in a solution of a mild cleaning agent, such as washing-up liquid or all-purpose cleaner. If necessary the valves can be cleaned in a dishwasher.
c) Wipe off the valves with a cloth or a soft brush.
d) Dry the valves. Fit the foam rubber gaskets back on the valves.
e) Place each valve back in the duct where it came from.

6.2.4. Inspecting/cleaning ducts

It is advisable to check the ducts in the housing once every four years. The ducts must be cleaned once every eight years.

⚠ Warning!

When cleaning the ducts, always block off the appliance or remove the motor plate so that the interior of the appliance (RH sensor) does not become soiled.

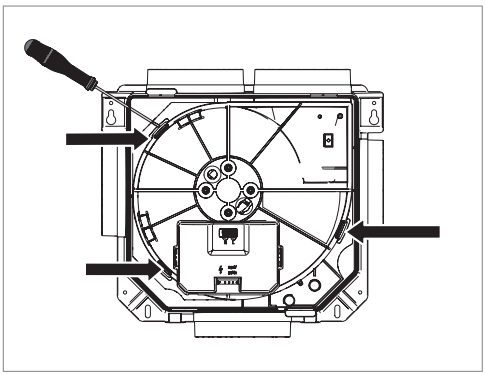
6.2.5. Cleaning the fan impeller

If the inspection shows that the impeller vanes are seriously soiled, the impeller must be cleaned by the installer.

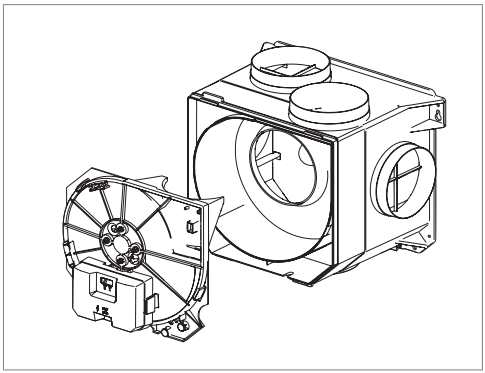
a) Disconnect power to the ventilation unit.

b) Remove the cover as described under Setting the high and low speeds.

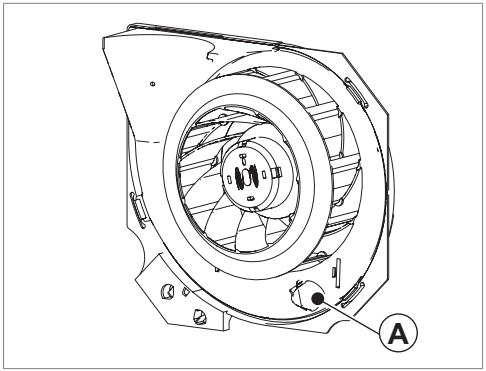
c) Loosen the motor plate by using a flat screwdriver to releasing the three latch tabs in the three slots on the plate.



d) Remove the motor plate with the motor, impeller and circuit board enclosure.

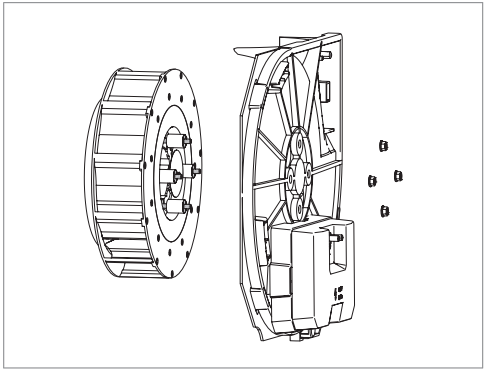


e) Clean the fan impeller with a soft brush. Be careful to avoid dislodging any balancing clips on the fan impeller.



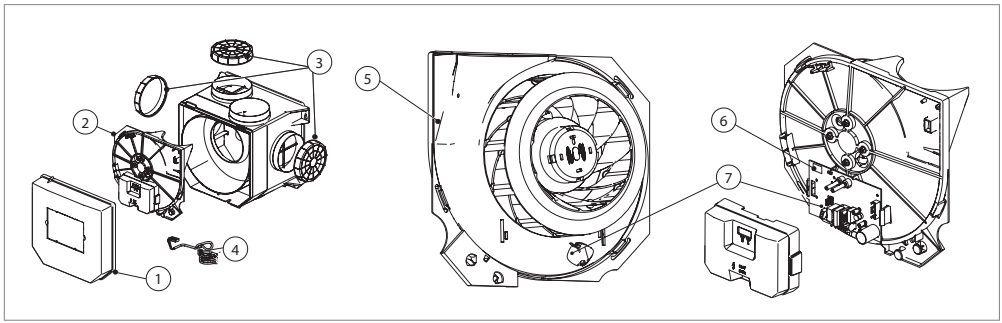
f) In case of serious soiling, it is recommended to also clean the RH sensor and the surrounding enclosure (A) with a soft brush. For this you must remove the circuit board from the enclosure.

g) If necessary, the impeller can be detached from the motor plate by unscrewing the four nuts.



7. Service parts

Visit our website for the latest information about service parts.



No.	Type	Description
1	CVE-S COVER WHITE	CVE-S ECO Front Cover
2	CVE-S SERVICE MODULE H	CVE-S ECO H Service Module
3	CVE-S CAP BLACK	Plastic plug, black
4	VK 1500 P	Five-wire power cable, stripped
5	M/W CVE ECO con	CVE ECO Motor/impeller connector
6	CVE-S PCB H	CVE-S ECO H Circuit board
7	RH SENSOR	RH sensor
	DAMPER 4X	Vibration damper, 4 ea.
—	CVE-S HOUSING SET, PLASTIC	Complete housing for CVE-SE ECO

8. Faults

⚠ Caution!

Troubleshooting may only be performed by a qualified installer.

The fan has stopped	
Cause	Solution
a) No voltage present at the connecting box.	● Restore voltage at the connecting box.
b) The fan is blocked or stuck due to heavy soiling.	● Clean the fan impeller. Watch out for the balance clips.
c) The fan is defective.	● Replace the entire motor module.
d) The ventilation unit PCB is faulty.	● Replace the PCB and carry out the commissioning procedure again.

The fan always runs at the same speed and does not respond to the remote devices	
Cause	Solution
a) The battery of a paired RF control or sensor is empty.	● Replace the battery.
b) The distance between the fan and the RF device is too large or there are too many obstacles interfering with the signal.	● Relocate the RF device if the wireless signal is affected by the presence of a large amount of steel and/or obstacles.
c) The ventilation unit PCB is faulty.	● Replace the PCB and carry out the commissioning procedure again.

The fan is noisy	
Cause	Solution
a) The fan is blocked or stuck due to heavy soiling.	● Clean the fan impeller. Watch out for the balance clips.
b) The fan is defective.	● Replace the entire motor module.
c) The fan is imbalanced.	● Replace the entire motor module.

The remote device is not working	
Cause	Solution
a) The battery of a paired RF control or sensor is empty.	• Replace the battery.
b) The distance between the fan and the RF device is too large or there are too many obstacles interfering with the signal.	• Relocate the RF device if the wireless signal is affected by the presence of a large amount of steel and/or obstacles.
c) The device is not paired with the fan.	• Redo the procedure for putting into service and pair the RF device. • Relocate the RF device if the wireless signal is affected by the presence of a large amount of steel and/or obstacles.
d) The RF device is faulty.	• Replace the RF device and pair the new device.
e) The brand names of the RF device and the ventilation unit are different.	• Replace the RF device by one with the same brand name as the ventilation unit. • Replace the motor module PCB with a PCB that has the correct OEM code.
f) The ventilation unit PCB is faulty.	• Replace the PCB and carry out the commissioning procedure again.

The fan suddenly starts running much faster or slower (for no apparent reason)	
Cause	Solution
a) After using the timer function, the ventilation unit switches back to the last selected speed before the timer was started.	• This is not a fault.
b) The RF remote control from a neighbouring property is paired with *this* ventilation unit.	• Disconnect power to the ventilation unit for 15 seconds. Unpair any paired RF devices (switches and/or sensors) and then pair them again.

The fan suddenly starts running much faster	
Cause	Solution
a) The RH sensor has detected a rise in the air humidity, causing the ventilation unit to automatically switch to a higher speed.	● This is not a fault.
b) The CO_2 sensor has detected a rise in the CO_2 concentration, causing the ventilation unit to automatically switch to a higher speed.	● This is not a fault.
c) The PIR sensor has detected motion, causing the ventilation unit to automatically switch to a higher speed.	● This is not a fault.
d) The RF remote control from a neighbouring property is paired with *this* ventilation unit.	● Disconnect power to the ventilation unit for 15 seconds. Unpair any paired RF devices (switches and/or sensors) and then pair them again.

The ventilation unit is not responding to the RF sensors (PIR sensor, 230 V CO_2 sensor, RV sensor)	
Cause	Solution
a) The system is not in Auto mode.	● If desired, place the system in 2/AUTO mode.
b) With a 230 V RF-CO_2 sensor: no power to the sensor.	● Restore power.
c) In the case of a PIR sensor: the sensor battery is empty.	● Replace the battery.
d) The RF sensor is not paired with the ventilation unit.	● Restart the commissioning procedure and pair the RF sensor.
e) The distance between the ventilation unit and the RF sensor is too large, or there are too many obstacles interfering with the signal.	● Try pairing the devices again. If this does not work, move the RF sensor to a location where there are fewer obstacles.
f) The brand names of the RF sensor and the ventilation unit are different.	● Replace the RF sensor by an RF sensor with the same brand name as the ventilation unit.
g) The RF sensor is faulty.	● Replace the RF sensor and re-pair it with the unit.
h) The RH sensor on the circuit board is faulty.	● Replace the sensor.
i) The ventilation unit PCB is faulty.	● Replace the PCB and carry out the commissioning procedure again.

The fan speed does not match the position of the control switch	
Cause	Solution
a) The RH sensor has detected a rise in the air humidity, causing the ventilation unit to automatically switch to a higher speed.	● This is not a fault.
b) The CO_2 sensor has detected a rise in the CO_2 concentration, causing the ventilation unit to automatically switch to a higher speed.	● This is not a fault.
c) The PIR sensor has detected motion, causing the ventilation unit to automatically switch to a higher speed.	● This is not a fault.
d) The ventilation unit has been set to a different speed by a wireless device.	● This is not a fault.
e) A wireless device (switch or sensor) of a neighbouring dwelling is paired with *this* fan.	● Disconnect power to the ventilation unit for 15 seconds. Pair the wireless device(s) (switches and/or sensors) again.

9. Warranty

CVE ECO 2 FAN is supplied with a two-year parts and labour warranty, protecting the product against faulty manufacture and materials. The warranty period applies from the date of installation.

Disclaimer

This warranty does not apply to:

- Disassembly and assembly costs.
- Faults which are caused by incorrect treatment.
- Negligence or accident.
- Faults that have been caused by repairs by third parties without authorisation from Heatrae Sadia.

If the appliance does not function correctly or develops a fault please contact Heatrae Sadia immediately.

Ensure that only genuine spares are used for repairs.

10. Declarations

EG-Verklaring van overeenstemming | Déclaration de conformité CE | EG-Konformitätserklärung | EC Declaration of Conformity

Heatrae Sadia
Hurricane Way
Norwich NR6 6EA
United Kingdom

Verklaart dat het product | Déclare que le produit | Erklärt dass das Produkt | Declares that the product:

- **CVE ECO 2 FAN ventilation unit**

Voldoet aan de bepalingen gesteld in de richtlijnen | Répond aux exigences des directives | Entspricht den Anforderungen in den Richtlinien | Complies with the requirements stated in the directives:

- Low Voltage Directive **2014/35/EU**
- Electromagnetic Compatibility (EMC) Directive **2014/30/EU**
- Directive **2009/125/EC** establishing a framework for the setting of ecodesign requirements for energy-related products
- Directive **2010/30/EU** on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products.

- **Commission Regulation (EU) No 1253/2014** of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units
- **Commission Delegated Regulation (EU) No 1254/2014** of 11 July 2014 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of residential ventilation units

Voldoet aan de geharmoniseerde Europese normen |
Répond aux normes Européennes harmonisées |
Entspricht den harmonisierten europäischen Normen |
Complies with the harmonized European standard:

- EN 60335-1:2012 | EN 60335-2-80:2003/A1:2004
  EN 60335-2-80:2003/A2:2009
- EN 60730-1:2012
- EN 55014-1:2007 | EN 55014-1:2007/C1:2009
  EN 55014-1:2007/A1:2009 | EN 55014-1:2007/A2:2010
  EN 55014-2:1998 | EN 55014-2:1998/C1:1998
  EN 55014-2:1998/A1:2002 | EN 55014-2:1998/IS1:2007
  EN 55014-2:1998/A2:2008
- EN 61000-3-2:2006/A1:2009 | EN 61000-3-2:2006/A2:2009
  EN 61000-3-3:2013 | EN 61000-6-1:2007
  EN 61000-6-3:2007/A1:2011 | EN 61000-6-3:2007/AC:2012

Voldoet aan de volgende nationale en internationale technische normen en specificaties |
Répond aux normes techniques nationales et internationales et aux spécifications nationales et internationales |
Entspricht den folgenden nationalen und internationalen technischen Normen und Spezifikationen |
Complies with the following national and international technical standards and specifications:

- Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment **2011/65/EU**

Norwich, 1 July 2017.

HEATRAE SADIA

SMARTER | CLEANER | WARMER

HEATRAE SADIA HEATING

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