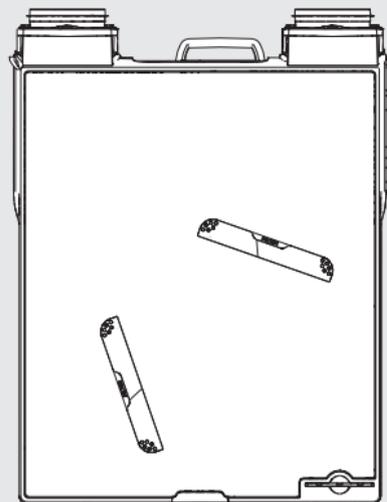


HEATRAE SADIA

SMARTER | CLEANER | WARMER

Advance / Advance Plus User manual



Introduction

This manual is intended for the user of the device and contains important information about safe and correct use, maintenance and troubleshooting of the appliance.

The installer is responsible for installing and commissioning the ventilation 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/warranty_registration)

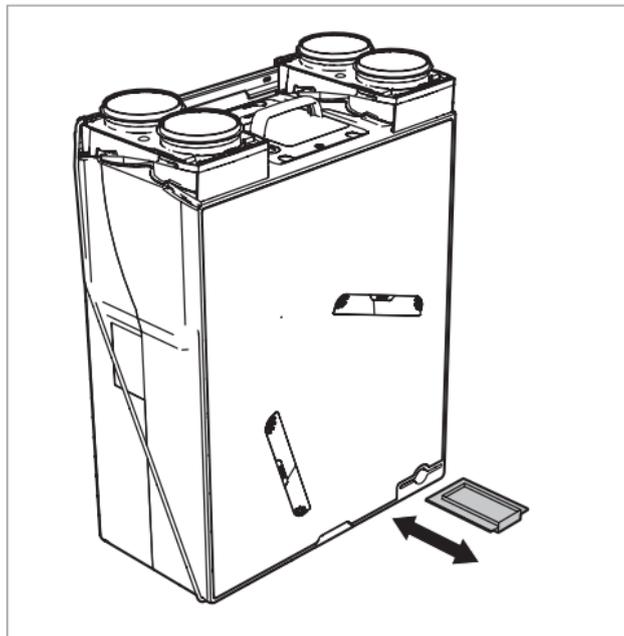
Although this manual has been drawn up with the utmost care, no rights may be derived from this document.

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

Due to our continuous product improvement process, the illustrations in this document may not match the delivered product. The latest version (if available) can be downloaded from our website via www.heatraesadia.com.

Tip

Please keep the manual in its designated storage slot on the ventilation unit.



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1. Safety and other regulations



Warning!

- The specifications and settings of the ventilation system comply exclusively with the standards and statutes of the country in which the ventilation system is sold. Applications outside this country can lead to very dangerous situations.
- The entire system must comply with the current regulations as referred to in this document and other applicable documents provided by the manufacturer.
- All supplements, amendments and regulations effective at the time of installation are applicable for all 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 system.
- 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 12 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.
- Work may solely be performed on the system by Heatrae Sadia or recognised installers in accordance with the provisions laid down in this manual. Only original accessories and parts produced by the manufacturer may be used for these purposes.
- The system includes parts which may be live. The installer should take the following steps before carrying out work on an open system:

- Disconnect power to the appliance or system by unplugging the power cord at the wall socket.
- Secure the appliance or system against being switched on accidentally.
- The appliance includes moving parts. When the plug is removed from the wall socket, these parts will continue moving for a few seconds. Therefore, you should wait a minimum of 10 seconds before opening the appliance after removing the plug.



Important!

- The safety instructions must be followed in order to prevent physical injury and/or damage to the product.
- 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, immediately contact your installer or Heatrae Sadia.
- 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.
- Watch out for sharp and protruding duct sections during periodic cleaning of air valves and grilles.

2. Product information

2.1. A comfortable living environment and energy conservation

A comfortable living environment and energy conservation are becoming increasingly important in housing construction. The insulation of modern dwellings is getting better all the time, but unfortunately good insulation often comes at the expense of 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 CO₂ (carbon dioxide) levels. Heatrae Sadia develops appliances which manage the indoor climate and take account of requirements for comfort and energy consumption in homes.

The **Advance and Advance Plus** ventilation systems from **Heatrae Sadia** are examples of these advanced appliances.

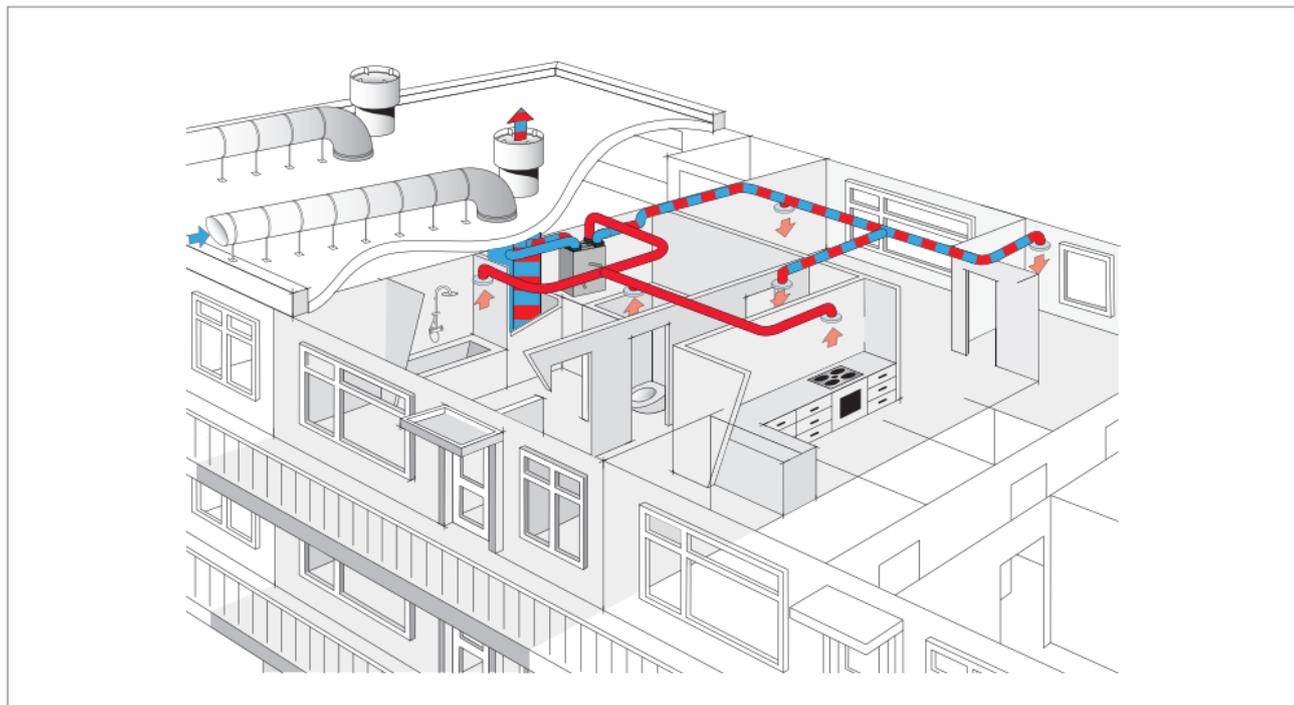
The Advance and Advance Plus are balanced ventilation systems with heat recovery. These ventilation units have separate air streams for supply air and exhaust air.

The units ventilate several rooms in the dwelling. Stale or humid air is extracted from the kitchen, bathroom, toilet, and any indoor storage spaces or washrooms ("wet rooms") through ducts.

The living room, bedrooms and hallway can also be connected with ductwork, but in these areas there is no air exhausted, just fresh air supplied.

To ensure good air distribution, the extraction and supply points in the ventilated rooms are fitted with extractor valves and supply grilles.

The Advance and Advance Plus help to reduce humidity in your bathroom, keep the toilet smelling fresh and remove cooking odours from the kitchen.



2.2. Heat recovery

Before the stale air is discharged outside, it is filtered and passes through the heat exchanger. The fresh outside air is also filtered and passes through the heat exchanger before entering the dwelling. In the heat exchanger, the two air streams pass alongside each other but are not mixed together. This allows heat from the exhaust air to be transferred to the fresh supply air, so this energy is not lost.

This heat recovery process is very efficient. On average, around 90% of the extracted heat is returned to the dwelling. This means that only around 10% of the heat is lost.

Note

Despite the heat exchange process whereby Supply air from outside is pre-heated, the balanced ventilation system may not be regarded as a heating system. It is a ventilation system that contributes to a comfortable and healthy living environment in a dwelling.

2.3. Filters

The Advance and Advance Plus have two filters, one for each air stream. Both filters are positioned in the ventilation unit so that they protect the exchanger against soiling. In addition, the filter in the air supply channel protects the user against dust and other impurities found in the air drawn in from outside. Various types of filter are available for the ventilation units.

During the product's lifetime the filters will become dirty, which reduces the capacity of the ventilation unit. It is therefore essential that the filters are cleaned regularly and replaced when necessary. For more information, see Inspecting, cleaning and replacing filters on page 34.

2.4. Controls

The Advance and Advance Plus come as standard with three-position control which allows the flow rates at low and high speed to be adjusted as desired with the potentiometers on the unit. It is also possible to pair RF sensors with the ventilation unit for automatic ventilation control. In addition, the ventilation units have some controls that operate continuously in the background.

The Advance Plus also has a bypass control which controls the bypass valve (see Bypass control on page 17).

2.4.1. Optional sensors

A number of optional RF sensors are available for the Advance and Advance Plus. When the ventilation unit is in Auto mode, the capacity is adjusted continuously and automatically.

RF CO₂ sensor

To ensure a healthy indoor climate and to prevent the air in the dwelling from becoming stale, it is important that the CO₂ (carbon dioxide) concentration does not become too high.

The sensor can be placed in any room (except the bathroom), but should preferably be placed in the living room or bedroom.

The sensor measures the CO₂ concentration in the room. It translates this CO₂ concentration into a ventilation demand and communicates this wirelessly to the ventilation unit paired with the sensor. This allows ventilation to be continuously and automatically adjusted,

and it ensures that a good indoor climate is achieved in the most effective and energy efficient manner.

This sensor can be used for "living area control", which causes the ventilation capacity to be increased gradually in response to a rising CO₂ concentration. A "sleeping area control" is also available. In this mode the ventilation capacity is increased more quickly in the event of rising CO₂ concentration because the extraction points are generally further away from the sleeping area.

In addition, the user can choose between ECO or COMFORT mode on the sensor. In COMFORT mode the system starts increasing the capacity at relatively low CO₂ concentration, resulting in more ventilation.

Once the CO₂ concentration has fallen sufficiently, the capacity is automatically decreased.

RF-RH sensor

To ensure a healthy indoor climate and to prevent patches of damp and mould in the dwelling, it is important that the relative humidity does not stay high for too long.

The RF-RH sensor can be placed in any room, but preferably in the bathroom and/or washroom.

This sensor measures the relative humidity in the room. The sensor translates this relative humidity value into a ventilation demand and communicates this wirelessly to the ventilation unit with which the sensor is paired, or to a DF/QF controller with the room where it is registered. This allows ventilation to be continuously and automatically adjusted, and it ensures that a good indoor climate is achieved in the most effective and energy efficient manner.

This sensor can be used for "bathroom control", which causes the ventilation capacity to be increased quickly when there is a sudden rise in relative humidity (for example during showering). Another option is "washroom control", which causes the ventilation capacity to increase gradually in response to rising relative humidity.

As soon as the relative humidity has fallen sufficiently, the capacity is automatically decreased.

RF-PIR sensor

To ensure a healthy indoor climate and to prevent unpleasant odours in the dwelling, it is important that there is enough ventilation when people are present.

The RF-PIR sensor can be placed in any room, for example in the toilet or in a bathroom with a toilet.

The sensor detects the presence (or absence) of people in the room and communicates this wirelessly to the ventilation unit with which it is paired. If the ventilation unit is in Auto mode, the capacity is continuously and automatically adjusted.

If the sensor detects movement, the ventilation system runs at increased capacity for a defined period. If the sensor detects continuous occupancy of the room, the capacity will be increased even more. If the motion sensor does not detect any movement within a set period, the capacity will automatically be decreased again.

This allows ventilation to be continuously and automatically adjusted, and it ensures that a good indoor climate is achieved in the most effective and energy efficient manner.

2.4.2. Bypass control

Solely the Advance Plus is equipped with a bypass valve in the exhaust air line. This makes it possible to control what happens to the (warm) exhaust air from the dwelling.

When the valve is in the normal position (closed), the exhaust air from the dwelling passes through the heat exchanger and exchanges heat with the cold supply air from outside.

If the valve is opened, the exhaust air no longer passes through the heat exchanger, so there is no heat exchange. Although the outside air still passes through the exchanger, the supplied outside air is not warmed. This is desirable when it is warmer inside than outside in the summer.

If in the summer it is cooler inside than outside, it is desirable to cool the incoming air ("cold recovery"). In this case, the valve is closed so that the relatively cool indoor air again passes through the exchanger.

The position of the bypass valve is automatically determined using the measured outdoor temperature and the measured exhaust air temperature.

2.4.3. Frost control

The Advance and Advance Plus have an automatic control which protects the heat exchanger against freezing. If the measured outside air temperature is lower than -1°C , the fan is gradually slowed down and eventually brought to a standstill. In this case, the unit will still respond to the timer (see "Operation"). The ventilation unit also checks whether the temperature has risen sufficiently for the fan to be switched back on.

Note

If the ventilation unit must continue running when the outside temperature is lower than -1°C in order to ensure sufficient ventilation, Heatrae Sadia advises using an external heater in the supply duct for outside air. The temperature setpoint for this must be -1°C .

2.4.4. Dirty filter control

The control of the Advance and Advance Plus uses a smart counter to keep track of when the filters need to be cleaned or replaced. This counter takes into account air quality, the service life of the filter and the fan speed. If the system detects that a filter is dirty, the ventilation unit sends a wireless message to this effect. This message can be displayed on specific paired devices, such as the RFT-L or the RF-VI (ventilation interface).

2.5. Grilles

The quantity of air that must be extracted is legally regulated, and the quantity of air supplied must stand in proportion to this. This means that the same amount of air must be supplied as is extracted. The minimum air quantity per room is also legally regulated. The quantities have been selected to ensure that no unnecessary energy is wasted whilst still achieving an optimal indoor climate. This is why the air extraction and supply valves differ in size between rooms. Each of the extraction and supply grilles therefore has a specific fixed position and setting.

Note

It is very important that you do not adjust the grilles in any way, to ensure proper operation of the entire ventilation system. Grilles and air valves should not be swapped around.

2.6. Accessories

Accessories		
Item no.	Type	Description
95970200	RF-VI TRANSMITTER	Wireless RF-VI remote with LED signals, three modes and timer function
95970003	RFT- TRANSMITTER W	Wireless RF control switch with three settings and a timer function (White)
95970204	RFT-AUTO CO2	RF control switch with two positions, automatic and timer functions
95970002	HRS-3I C	Conventional wired switch with three settings
95970201	RF-CO2	230 V RF CO ₂ -sensor
95970203	RF-RH [BAT]	RF-RH battery-powered sensor
95970202	RF-PIR	RF-PIR battery-powered presence sensor

3. Operation

3.1. Control options

The ventilation unit has several pre-programmed modes. A number of control switches are available for actively setting the correct mode/ventilation capacity:

- Wireless RF-VI remote control with LED indicator for status and ventilation functions
- Wireless RF control switch with three settings and a timer function
- Wireless RF control switch with two settings, an automatic setting and a timer function
- Conventional wired switch with three settings
- A combination of the above options.

For pairing or unpairing a wireless RF remote control with/from the unit, consult Pairing and unpairing RF remote controls on page 30

Note

Do not attach wireless control switches to metal surfaces. This can interfere with the wireless control switch or cause it to stop working entirely.

Note

The wireless control switches have a range of 100 metres in free space (no obstacles). The distance at which the switch can function properly is reduced depending on the obstacles interfering with the signal.

Note

When using a wireless control switch in the bathroom, it should not be located in zone 0 (floor of the shower base) or zone 1 (up to 2.5 metres above the shower base) due to the effects of moisture.

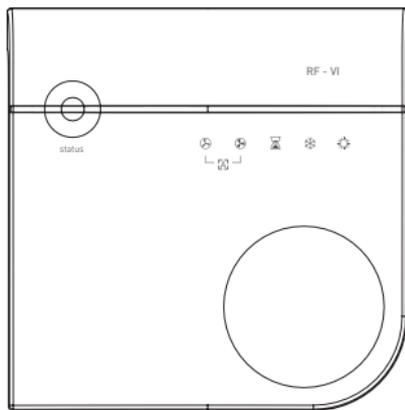
 **Caution!**

If the fan runs at high speed when low speed is selected or at low speed when high speed or timer mode is selected, the ventilation unit is faulty.

See Faults on page 38 for possible causes of problems and potential solutions.

3.2. RF-VI wireless remote control

This RF-VI wireless remote control always displays the status of the ventilation unit with which it is paired.



The three-colour LED (Status) on the RF-VI indicates the status of the ventilation unit.

- Red (continuously blinking once per second) = RF-VI not paired
- Red (continuously blinking in error code pattern) = Ventilation unit is reporting an error (see error code table in the RF-VI manual)

- Orange (continuously on) = Dirty filter
- Green (continuously on) = No errors, filter okay (everything in order)
- White (continuously blinking once per second) = The RF-VI is paired but has not been in communication with the ventilation unit for one hour

If you press and hold the touch button for 10 to 12 seconds* during normal operation (until the three-colour LED flashes orange), the RF-VI sends a "Reset dirty filter" message (3 times).

** If the button is held for longer than 12 seconds, the three-colour LED will go dark and nothing will happen.*

The user can switch between ventilation modes by pressing the touch button. Each time it is pressed, the mode switches to the next one in the cyclical order shown below. The corresponding LED is lit (green).

LED	Activity	Meaning
	On	Ventilation unit in Mode 1
	On	Ventilation unit in Mode 2
	On	Ventilation unit in Auto Mode
	On/ blinking	Ventilation unit is in Mode 3 or Timer Mode *
Above signals off		Ventilation unit is in Not at Home Mode
	On	Frost control of the ventilation unit is active
	On	Bypass control of the ventilation unit is active **

* When timer mode is selected, the corresponding LED blinks for 10 seconds in a particular pattern (see RF-VI manual) and then stay lit continuously

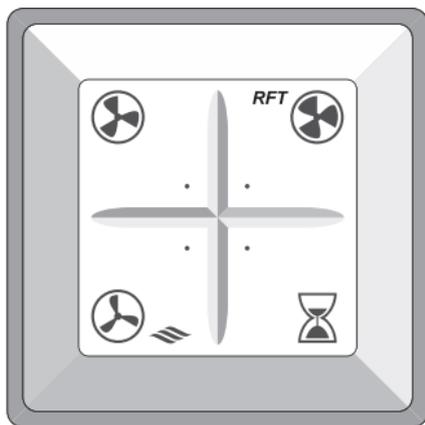
** Only applies to Advance Plus

Usually, the RF-VI interface is always switched on. The interface can also be switched off for normal operation, and all LEDs automatically go out after this is done.

- If the touch button is held for 5 seconds during normal operation (the RF-VI has been on for more than 2 minutes), all LEDs will go out and the interface will be switched off.
- If the interface is off and the touch button is pressed briefly, the active LEDs will light up for 10 seconds, after which the interface will switch off again.
- If the interface is off and the touch button is pressed for 5 seconds, the interface will switch on again and the ventilation unit information will be displayed.
- Error messages and the dirty filter message are always displayed, regardless of whether the interface is on or off.
- The interface setting (on or off) is recorded in the memory of the RF-VI.

3.3. Wireless control switch with timer

This wireless RF control switch can easily be placed in any room by applying double-sided tape to the back of the switch.



This wireless control switch allows you to select the ventilation speed (capacity) of the unit:

	Level 1, low speed ; when one person is present during the day or night, or when no-one is present.
	Level 2, medium speed ; during the day or night when more than one person is present.
	Level 3, high speed ; during cooking, showering or bathing, or when a lot of people are present.
	Timer ; high speed for switching the unit to high speed for an adjustable period.

High speed remains active for a maximum of 24 hours, after which the unit switches back to medium or low speed, depending on which of these was selected last.

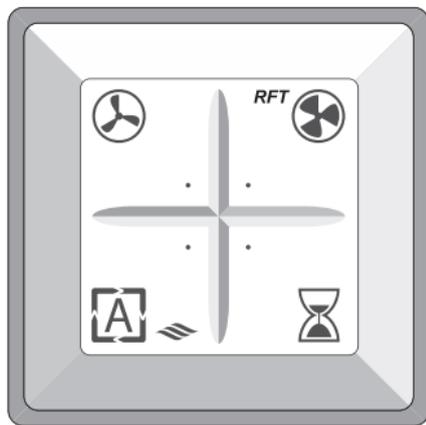
Once the timer has run out, the unit switches back to the last selected speed before the timer was started, unless that was high speed. In that case the unit switches back to medium or low speed, depending on which of these was selected last.

The duration of the timer can be set as follows:

- Press the timer button once: 10 minutes at high speed
- Press the timer button twice: 20 minutes at high speed
- Press the timer button three times: 30 minutes at high speed.

The timer can be stopped at any time by pressing the button for low, medium or high mode.

3.4. Wireless control switch with automatic control/timer



This wireless control switch allows you to select the ventilation speed (capacity) of the unit:

	Auto setting, automatic mode ; sensor-based control (CO ₂ , RV and/or PIR). The capacity is regulated between low and high.
	Level 1, low speed ; when one person is present during the day or night, or when no-one is present.
	Level 3, high speed ; during cooking, showering or bathing, or when a lot of people are present.
	Timer ; high speed for switching the unit to high speed for an adjustable period.

High speed remains active for a maximum of 24 hours, after which the unit switches back to medium or low speed, depending on which of these was selected last.

Once the timer has run out, the unit switches back to the last selected speed before the timer was started, unless that was high speed. In that case the unit switches back to medium or low speed, depending on which of these was selected last.

The duration of the timer can be set as follows:

- Press the timer button once: 10 minutes at high speed
- Press the timer button twice: 20 minutes at high speed
- Press the timer button three times: 30 minutes at high speed.

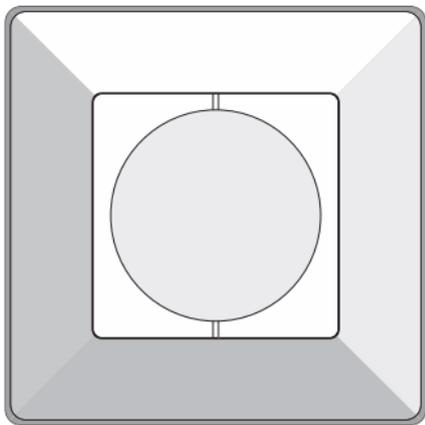
The timer can be stopped at any time by pressing the button for low speed, high speed or automatic mode.

Note

If sensors have been paired with the ventilation unit, low speed or high speed will remain active for a maximum of one day, after which automatic mode will be activated.

3.5. Wired three-position switch

This control switch is connected directly using connecting wires. The wired control switch can be combined with one or more wireless control switches.



Using the wired three-position switch, the unit can be put into three different ventilation modes (capacities) by turning the switch:

1	Level 1, low speed ; when one person is present during the day or night, or when no-one is present.
2	Level 2, medium speed ; during the day or night when more than one person is present.
3	Level 3, high speed ; during cooking, showering or bathing, or when a lot of people are present.

High speed remains active for a maximum of 24 hours, after which the unit switches back to medium or low speed, depending on which of these was selected last.

Note

If the wired control switch is combined with a wireless control switch, there is a risk that the ventilation unit may be set to high by the wired switch and then to low by the wireless switch. In this case, the wired switch will indicate high speed when the ventilation unit is actually running at low speed.

In order to re-activate the wired control switch in this situation, you should first switch it to another speed.

Note

For ventilation units with which sensors have been paired (CO₂, RV and/or PIR), Mode 2 operates as an automatic mode.

Note

If sensors have been paired with the ventilation unit, low speed or high speed will remain active for a maximum of one day, after which automatic mode will be activated.

3.6. Pairing and unpairing RF remote controls

3.6.1. Pairing an RF-VI remote control

Consult the manual supplied with the RF-VI for information on pairing this wireless remote control.

3.6.2. Pairing RF remote controls

It is best to pair wireless switches with a ventilation unit in the vicinity of that unit.

- a) Disconnect power to the ventilation unit.
- b) Wait for at least 15 seconds.
- c) Restore power to the ventilation unit.
- d) Within two minutes after powering up the ventilation unit, press two diagonally opposite buttons on the RF control switch at the same time.

The control switch is paired, and the ventilation unit briefly changes the motor speed to confirm the pairing. The ventilation unit is now ready to be operated using the wireless control switch.

3.6.3. Unpairing an RF-VI remote control

Consult the manual supplied with the RF-VI for information on unpairing this wireless remote control.

3.6.4. Unpairing RF remote controls

It is best to unpair wireless RF remote controls from a ventilation unit in the vicinity of that unit.

- a) Disconnect power to the ventilation unit.
- b) Wait for at least 15 seconds.
- c) Restore power to the ventilation unit.
- d) Within two minutes after powering up the ventilation unit, press the four buttons on the control switch at the same time.

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

Note

If several wireless switches, controls and/or RF sensors were paired with the unit in question, they must be individually re-paired after being unpaired.

3.7. Pairing and unpairing RF sensors

3.7.1. Pairing RF sensors

Pair wireless sensors with the ventilation unit as follows:

- a) Disconnect power to the ventilation unit.
- b) Wait for at least 15 seconds.
- c) Restore power to the ventilation unit.
- d) Ensure that a pairing message is sent from the RF sensor within two minutes after power to the ventilation unit is switched on. For more information, consult the documentation for the relevant sensor.

The RF sensor is paired, and the ventilation unit briefly changes the motor speed to confirm the pairing. The ventilation unit is now ready to respond to the signals of the wireless sensor.

3.7.2. Unpairing RF sensors

RF sensors can only be unpaired at the same time as an RF remote control. For more information, see the procedure Unpairing an RF-VI remote control or Unpairing RF remote controls on page 30.

Note

If several wireless switches, controls and/or RF sensors were paired with the unit in question, they must be individually re-paired after being unpaired.

4. Inspection and maintenance

Proper functioning of the ventilation unit, its effectiveness and its service life can only be assured if the system is inspected and maintained in accordance with the provisions below. These provisions 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.

4.1. Inspection and maintenance schedule

Inspection schedule Advance and Advance Plus		User	Installer
Noise	Check for unusual noises coming from the ventilation unit, air valves and ducts	6 months	1 year
Filter G3	Check for soiling	1 week	—
Filter G4		9 months	1 year
Filter F7		6 months	1 year
Ventilation unit	Check for soiling and condensation leakage	6 months	1 year
Motor module	Check for soiling/imbalance	—	1 year
Bypass valve *	Check functioning and for soiling	—	1 year
Air valves	Check for soiling	3 months	1 year
Ducts	Check for soiling	—	4 years

* Only applies to Advance Plus

Maintenance schedule for Advance and Advance Plus		User	Installer
Filter G3	Clean (first 3 months)	1 week	Where necessary
	Replace (with G4 or F7)	3 months	Where necessary
Filter G4	Clean	9 months	Where necessary
	Replace	18 months	Where necessary
Filter F7	Clean	6 months	Where necessary
	Replace	12 months	Where necessary
Ventilation unit	Clean outside	3 months	1 year
	Clean condensate hose	—	1 year
Motor module	Clean	—	4 years
Bypass valve *	Clean	—	1 year
Air valves	Clean	3 months	1 year
Ducts	Clean	—	8 years
Battery for RF remote control	Replace	Where necessary	Where necessary

* Only applies to Advance Plus

Note

It is not possible to remove the heat exchanger from the ventilation unit. Under normal conditions, and if the correct filters are used, it should not be necessary to clean the heat exchanger.

4.2. Inspecting, cleaning and replacing filters

Note

The ventilation unit comes with G3 filters as standard. These filters are very suitable for use as "construction dust filters" after initial completion of the dwelling. After around three months, these filters should be replaced with G4 or F7 filters.

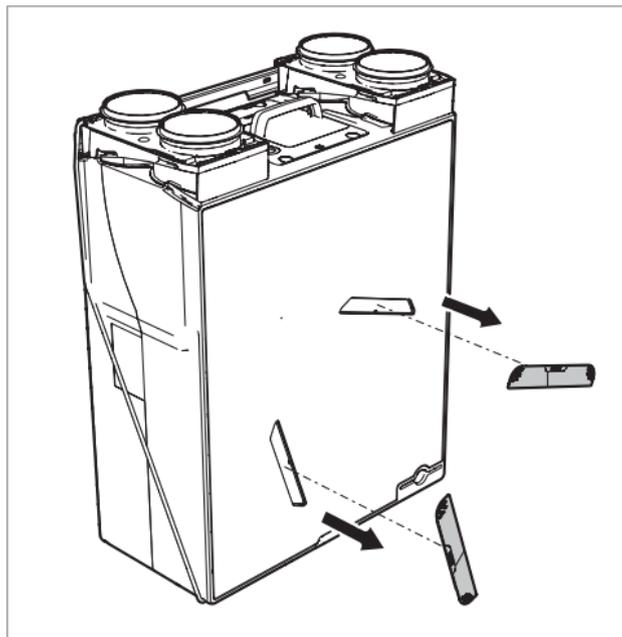
⚠ Caution!

G4 and F7 filters can be cleaned once, after which they must be replaced at the next maintenance interval.

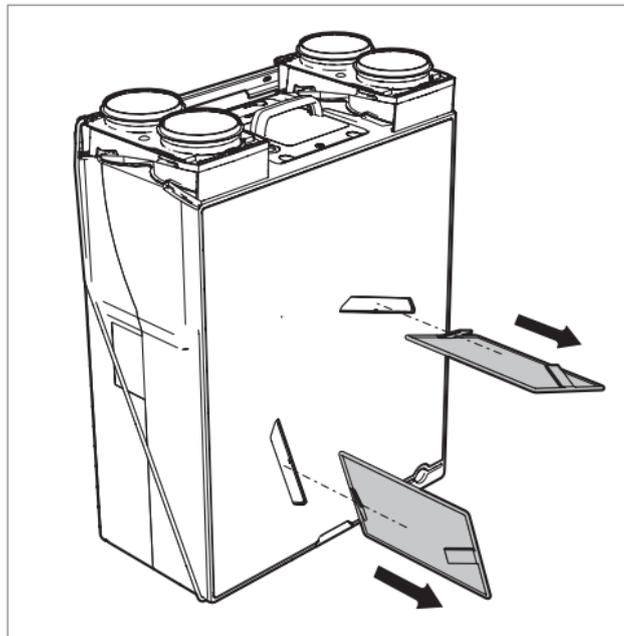
Inspect and clean or replace the filters as follows:

a) Disconnect power to the ventilation unit.

b) Pull both filter caps out of the front panel.

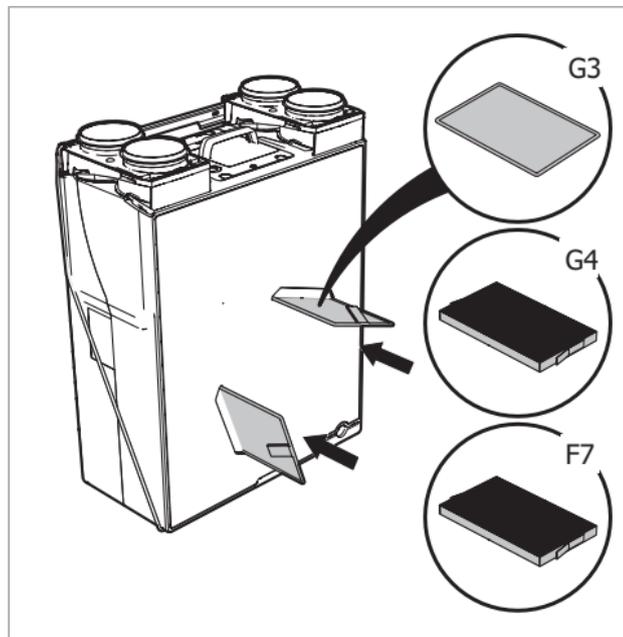


- c) Remove the filters from the ventilation unit. There are tabs at the front of the filters for this purpose.

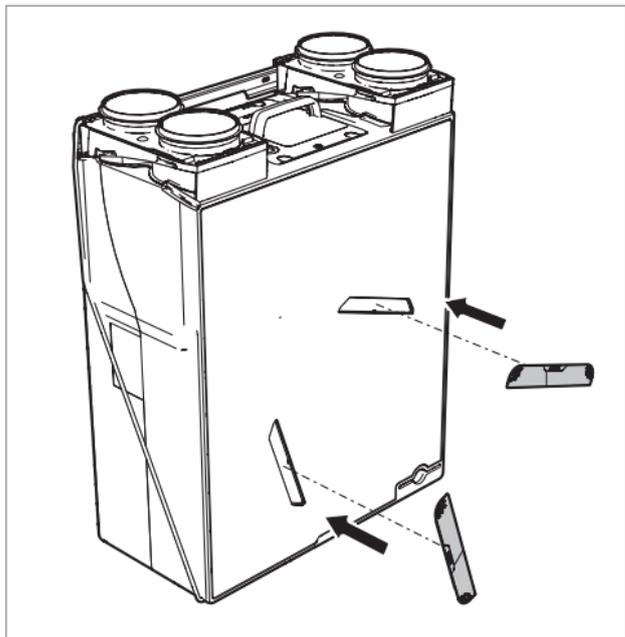


- d) Visually inspect the filters for soiling. If the filters are dirty, they must be cleaned or replaced.

- e) Clean or replace the filters. To clean the filters, gently tap them to remove the dirt or use a vacuum cleaner.
- f) Insert the cleaned filters or new filters in the ventilation unit.



- g) Put both filter covers back in the front panel.



- h) Put the ventilation unit back into operation by switching on the power.

4.3. Maintenance

The RF-VI remote control is mains powered, so it does not have any batteries that need to be replaced. The only maintenance to be done consists of cleaning the outside of the device with a damp cloth if necessary. Do not use chemical cleaning agents.

4.4. RF remote control maintenance

The RF remote control is battery powered. Under normal use conditions, the battery has an estimated service life of around 10 years. Once the battery is empty, the remote control will no longer work, and it will no longer be possible to manually operate the ventilation unit. At this point, the battery (CR2032) must be replaced. It is not necessary to re-pair the remote control.

4.5. Inspection of additional RF sensors

For inspection and maintenance of the RF-RH sensor, the RF-PIR sensor or the RF CO₂ sensor, consult the information provided with the relevant sensor.

4.6. 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.

5. Faults

The tables below contain a complete overview of all possible problems and solutions. As a user, you can correct some problems yourself, but some you cannot. For more information, consult the Inspection and

maintenance schedule on page 32. For problems you cannot resolve yourself, contact Heatrae Sadia or the installer of the appliance.

The fan has stopped	
Cause	Solution
a) The frost protection system is active.	<ul style="list-style-type: none">• When the outside temperature rises above -1°C, the fan will start running again.• Install a pre-heater in the supply duct for outside air.
b) The power is switched off.	<ul style="list-style-type: none">• Switch the power back on.
c) No power.	<ul style="list-style-type: none">• Restore power.
d) The fan is blocked or stuck due to heavy soiling.	<ul style="list-style-type: none">• Clean the fan impeller. Watch out for the balance clips.
e) The fan is defective.	<ul style="list-style-type: none">• Replace the entire motor module.
f) The ventilation unit PCB is faulty.	<ul style="list-style-type: none">• Replace the PCB and carry out the commissioning procedure again.

The ventilation unit is noisy	
Cause	Solution
a) The fan is blocked or stuck due to heavy soiling.	<ul style="list-style-type: none"> ● Clean the fan impeller. Watch out for the balance clips.
b) The fan is imbalanced.	<ul style="list-style-type: none"> ● Replace the entire motor module.
c) The unit is mounted on a wall/ceiling/floor with insufficient load-bearing capacity.	<ul style="list-style-type: none"> ● If the ventilation unit cannot be relocated, try using vibration dampers to decouple it from the wall, ceiling or floor.
d) The ducts are not correctly connected to the unit.	<ul style="list-style-type: none"> ● Check the connections and ensure that fixed ducts are clamped to the wall, ceiling or floor.
e) The second condensate drain is open and not connected (hissing sound).	<ul style="list-style-type: none"> ● Close the second condensate drain by folding back the tab with the plug and clicking it into the condensate drain.
f) The bypass valve is blocked (rattling noise). (*)	<ul style="list-style-type: none"> ● Inspect the valve. Clean it if it has become blocked with dirt. Replace the valve if there is a different cause of the fault.

* Applies exclusively to Advance Plus

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.	<ul style="list-style-type: none"> ● If desired, place the system in Auto mode.
b) The frost protection system is active.	<ul style="list-style-type: none"> ● When the outside temperature rises above -1°C, the fan will start running again. ● Install a pre-heater in the supply duct for outside air.
c) With a 230 V RF-CO ₂ sensor: no power to the sensor.	<ul style="list-style-type: none"> ● Check whether power has been switched off or interrupted. Restore power.
d) If using an RF-RH or RF-PIR sensor: the RF sensor battery is empty.	<ul style="list-style-type: none"> ● Replace the battery.
e) The RF sensor is not paired with the ventilation unit.	<ul style="list-style-type: none"> ● Restart the commissioning procedure and pair the RF sensor.
f) The distance between the ventilation unit and the RF sensor is too large, or there are too many obstacles interfering with the signal.	<ul style="list-style-type: none"> ● Try pairing the devices again. If this does not work, move the RF sensor to a location where there are fewer obstacles.
g) The OEM codes of the RF sensor and the ventilation unit are different.	<ul style="list-style-type: none"> ● Replace the RF sensor with one that has the correct OEM code. ● Replace the motor module PCB with a PCB that has the correct OEM code.
h) The RF sensor is faulty.	<ul style="list-style-type: none"> ● Replace the RF sensor and re-pair it with the unit.
i) The ventilation unit PCB is faulty.	<ul style="list-style-type: none"> ● Replace the PCB and carry out the commissioning procedure again.

The ventilation unit is not responding to the RF remote controls

Cause	Solution
a) The frost protection system is active.	<ul style="list-style-type: none"> ● When the outside temperature rises above -1°C, the fan will start running again. ● Install a pre-heater in the supply duct for outside air.
b) The battery of the RF remote control is empty.	<ul style="list-style-type: none"> ● Replace the battery.
c) The RF remote control is not paired with the ventilation unit.	<ul style="list-style-type: none"> ● Restart the commissioning procedure and pair the RF remote control.
d) The distance between the ventilation unit and the RF remote control is too large or there are too many obstacles interfering with the signal.	<ul style="list-style-type: none"> ● Try pairing the devices again. If this does not work, move the RF remote control to a location where there are fewer obstacles to interfere with it.
e) The OEM codes of the RF remote control and the ventilation unit are different.	<ul style="list-style-type: none"> ● Replace the RF remote control with one that has the correct OEM code. ● Replace the motor module PCB with a PCB that has the correct OEM code.
f) The ventilation unit PCB is faulty.	<ul style="list-style-type: none"> ● Replace the PCB and carry out the commissioning procedure again.

The fan runs at high speed when low speed is selected and at low speed when high speed or timer mode is selected	
Cause	Solution
a) One of the RF sensors has a problem.	<ul style="list-style-type: none"> See table "The ventilation unit is not responding to the RF sensors".
b) One of the ventilation unit's internal temperature sensors is faulty.	<ul style="list-style-type: none"> Replace the faulty temperature sensor.

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.	<ul style="list-style-type: none"> If desired, change the system setting.
b) If sensors have been paired with the ventilation unit, it switches back to automatic mode 24 hours after being set to low or high speed.	<ul style="list-style-type: none"> If desired, change the system setting.
c) The RF remote control from a neighbouring property is paired with <i>this</i> ventilation unit.	<ul style="list-style-type: none"> Disconnect power to the ventilation unit for 15 seconds. Unpair any paired RF remote controls (and any RF sensors) and re-pair the remote controls (and any RF sensors).

The ventilation unit is not responding to the three-position switch

Cause	Solution
a) The frost protection system is active.	<ul style="list-style-type: none"> • When the outside temperature rises above -1°C, the fan will start running again. • Install a pre-heater in the supply duct for outside air.
b) The power is switched off.	<ul style="list-style-type: none"> • Switch the power back on.
c) No power.	<ul style="list-style-type: none"> • Restore power.
d) The switch wires of the three-position switch are connected incorrectly.	<ul style="list-style-type: none"> • Connect the switch wires correctly (see wiring diagram).
e) The ventilation unit PCB is faulty.	<ul style="list-style-type: none"> • Replace the PCB and carry out the commissioning procedure again.

The ventilation unit is leaking water

Cause	Solution
a) The condensate drain is not connected.	<ul style="list-style-type: none"> • Connect one of the two condensate drains.
b) The condensate drain is blocked.	<ul style="list-style-type: none"> • Unblock the condensate drain and try to identify the cause of the problem.
c) The second condensate drain is open and not connected (hissing sound).	<ul style="list-style-type: none"> • Close the second condensate drain by folding back the tab with the plug and clicking it into the condensate drain.

The ducts leading outside are wet (on the outside) and/or are leaking water	
Cause	Solution
a) The ducts leading outside are not thermally insulated or vapour-tight.	<ul style="list-style-type: none"> • Ensure that the ducts that lead outside are thermally insulated and vapour-tight over their entire length.
b) The roof feedthrough is not rainproof or vapour-tight.	<ul style="list-style-type: none"> • Replace the existing roof feedthrough(s) with rainproof and vapour-tight roof feedthrough(s).

The valves are noisy	
Cause	Solution
a) No Heatrae Sadia noise dampening hose has been installed in the ducts leading into the dwelling.	<ul style="list-style-type: none"> • Install noise damping hoses on the ducts leading into the dwelling.
b) The air valves are not correctly adjusted.	<ul style="list-style-type: none"> • Put the ventilation unit in commissioning mode and readjust the system settings.

The air quality in the dwelling is not good / air supply and extraction in the dwelling are not working properly

Cause	Solution
a) One or both filters are dirty or blocked.	<ul style="list-style-type: none">● Clean or replace dirty/blocked filters.
b) The valves are dirty or blocked.	<ul style="list-style-type: none">● Clean the valves.
c) The air valves are not correctly adjusted.	<ul style="list-style-type: none">● Put the ventilation unit in commissioning mode and readjust the system settings.
d) The fan is not running.	<ul style="list-style-type: none">● See "The ventilator is not running".
e) The ventilation unit is not responding to the RF sensors (PIR sensor, CO ₂ sensor, RV sensor).	<ul style="list-style-type: none">● See "The ventilation unit is not responding to the RF sensors".

Cold air is being supplied to the dwelling	
Cause	Solution
a) The filter in the extraction outlet is blocked.	<ul style="list-style-type: none"> ● Clean or replace the filter in the air outlet.
b) The air valves are not correctly adjusted.	<ul style="list-style-type: none"> ● Put the ventilation unit in commissioning mode and readjust the system settings.
c) The bypass valve is in bypass mode when it should not be. (*)	<ul style="list-style-type: none"> ● Clean the bypass valve if it is dirty. ● Replace the entire bypass valve if it is defective. (*)
d) One of the temperature sensors is faulty.	<ul style="list-style-type: none"> ● If the supply air temperature sensor is faulty, replace the wiring harness with the temperature sensor in the motor module. ● If the exhaust air temperature sensor is faulty, replace the entire bypass module. (*)

* Only applies to Advance Plus

6. Warranty

The warranty is valid for 2 years after the installation date.

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.

7. Declarations

Inbouwverklaring | Déclaration d'incorporation |
Einbauerklärung | Declaration of incorporation

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:

- **Ventilation unit with heat recovery
Advance – 95060001**
- **Ventilation unit with heat recovery
Advance Plus – 95060007**

Must be considered as a partly completed machine and may not be put into service until the end machine into which it will be integrated has been declared as being in conformity with the provisions of the Machinery Directive **2006/42/EC** |
Doit être considéré comme une machine non terminée et ne peut pas être mise en service tant que la machine finale, installée à son emplacement définitif, n'est pas déclarée conforme aux dispositions des directives relatives aux machines **2006/42/CE** |

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 **2006/95/EC**
- Electromagnetic Compatibility (EMC) Directive **2004/108/EG**
- Directive 2011/65/EU (RoHS)

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

Norwich, December 1, 2014.

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