

Vent-Axia[®]

GB

HRE 350 & HRE 350B

Heat Recovery Unit

Installation and User Instructions



CE

230V~50Hz

PLEASE READ INSTRUCTIONS IN CONJUNCTION WITH ILLUSTRATIONS. PLEASE SAVE THESE INSTRUCTION

Installation and User Instructions for the HRE 350 & HRE 350B Heat Recovery Units.



**IMPORTANT:
READ THESE INSTRUCTIONS
BEFORE COMMENCING THE
INSTALLATION**

SAFETY AND GUIDANCE NOTES

- All mains wiring must be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and **Must** be installed by a suitably qualified person.
- The Unit should be provided with a local double pole isolator switch having a contact separation of at least 3mm.
- Ensure that the mains supply (Voltage, Frequency and Phase) complies with the rating label.
- It is recommended that the connection to the unit is made with flexible cable.
- This Unit should not be used where it is liable to be subject to direct water spray from hoses etc.
- This HRU's condensate drain must be connected to the building foul water drainage system.
- If an extract grille associated with the HRU is sited in a room containing a fuel burning appliance, the installer must ensure that air replacement is adequate for both appliances.
- Ensure that the HRU's external grilles are located at least 600mm away from any flue outlet.
- If the ductwork passes through an unheated loft void or similar location, it should be insulated. Certain applications may require the installation of sound attenuation to achieve the sound levels required.

Technical Specification for the HRE 350/HRE 350B

Supply Voltage	230V~50Hz
Protection Rating	IP 32
Dimensions (WxHxD)[mm]	675x602x420
Duct diameter[mm]	150
External diameter condensate discharge [mm]	20
Mass [kg]	31
Filter class	G4
Ventilation capacity setting1, Factory setting [m3/h]	100
Ventilation capacity setting2, Factory setting [m3/h]	150
Ventilation capacity setting3, Factory setting [m3/h]	225
Permissible resistance duct system	150 pa at 300 m3/h

The HRE 350/B is a heat recovery unit with an efficiency of 95% and energy-saving constant-volume fans. The unit has the following functions:

steplessly adjustable air flow rates through a control panel;

filter indication on the unit and the possibility for filter indication on the multiple switch;

completely new frost protection system that ensures optimum performance of the unit, even at very low atmospheric temperatures;

limited sound production due to pressure fluctuation.

The unit comes ready for use. All control equipment has been mounted and checked in the factory. On installation, the appliance must be connected to the air ducts, the condensate discharge, the mains supply and the multiple switch.

The initialisation of the unit can be done as a stand-alone. The installer can change the desired air flow for every setting with the aid of the control panel on the unit. See Page 9 for a detailed description.

Bypass

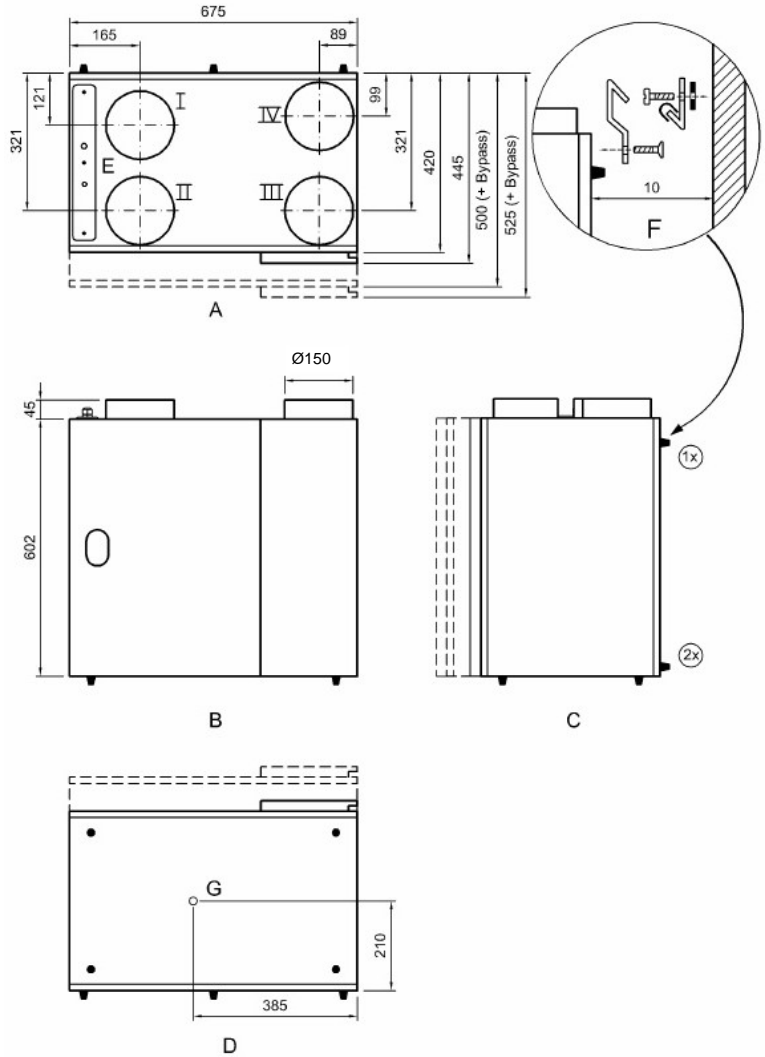
The HRE 350B unit is fitted with a summer bypass which can be used to interrupt the heat recovery, if desired, to just supply fresh, cool outside air. In this model the heat exchanger is equipped with a sliding grate that shuts off the airflow through the exchanger.

The operation and preconditions of the bypass control are explained in more detail on page 6.

Duct connections

All the duct connections for the HRE 350/B are in the top of the unit, For dimension details see Fig.1 below.

Fig.1

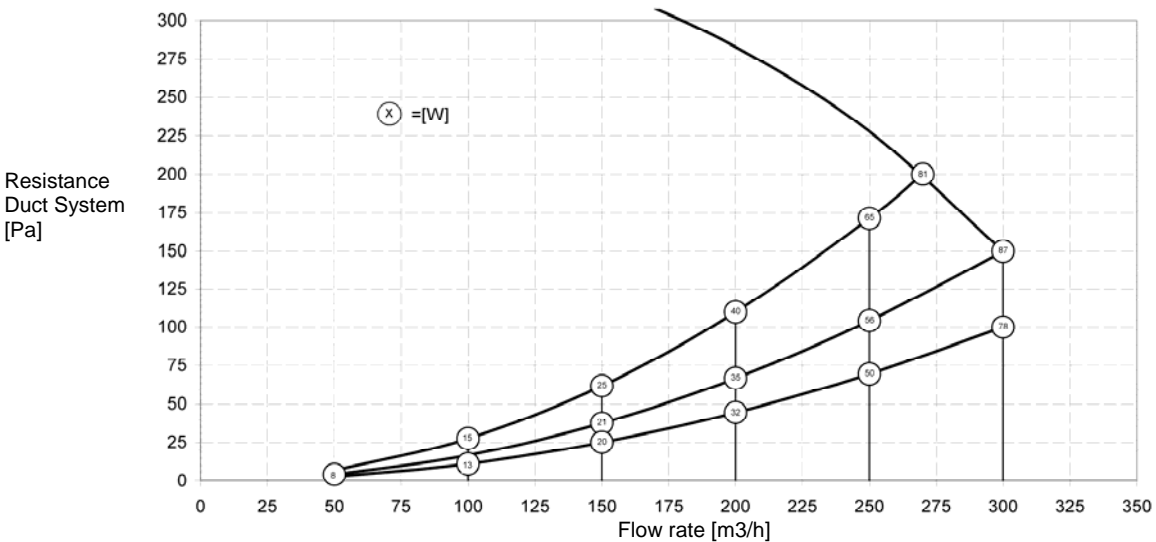


Drawing References: -

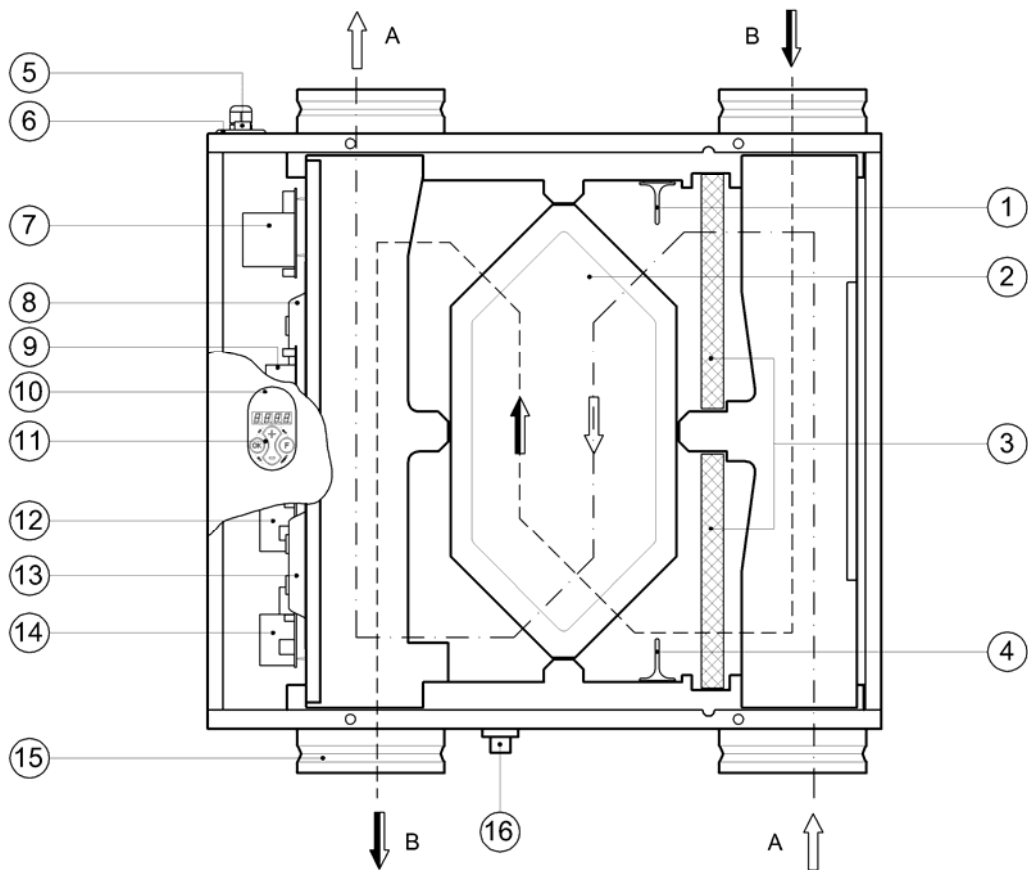
- I = Supply (Warmed fresh air)
- II = Exhaust (Cool stale air)
- III = Extract (Warm stale air)
- IV = Intake (Cool fresh air)

- A = Top view of HRE 350/B
- B = Front view of HRE 350/B
- C = Side view of HRE 350/B
- D = Bottom view of HRE 350/B
- E = Electrical connections
- F = Detail wall mounting (make sure to Correctly place the rubber strip, washers And caps).
- G = Connection condensate discharge 20mm external diameter.

Performance graph HRE 350/B



Exploded view of typical unit (All spigots are in the top on HRE 350/B Models)



Function components

- | | | |
|----|---------------------------------|--|
| 1 | Interior temperature sensor | Measures the temperature of the air from the dwelling. |
| 2 | Heat exchanger | Ensures heat transfer between inlet and outlet air. |
| 3 | Filters | Filter both air flows. |
| 4 | Atmospheric temperature sensor | Measures outside air temperature. |
| 5 | Communication port | Connection for cable to multiple switch, if desired with filter indicator. |
| 6 | Swivel plate | Plate fitted with swivels for feeding through various cables. |
| 7 | Option pcb (non-standard) | Contains various control inputs and outputs for provisions like a Preheater, a postheater, two control valves, CO ² sensor, H ² O sensor And an emergency setting. |
| 8 | Inlet fan | Feeds fresh air into the dwelling. |
| 9 | Basic pcb | Contains the control electronics for the basic functions. |
| 10 | Computer port | Computer connection for service purposes. |
| 11 | Control panel | Interface between user and control electronics. |
| 12 | Motor Control Unit inlet fan | Arranges communication between basic pcb and outlet fan. |
| 13 | Outlet fan | Discharges fouled air from the dwelling to the atmosphere. |
| 14 | Motor Control Unit outlet fan | Arranges communication between basic pcb and outlet fan. |
| 15 | Duct spigots | Connections for the inlet and outlet ducts.(in top on HRE 350/B) |
| 16 | Connection condensate discharge | Connection condensate discharge. |

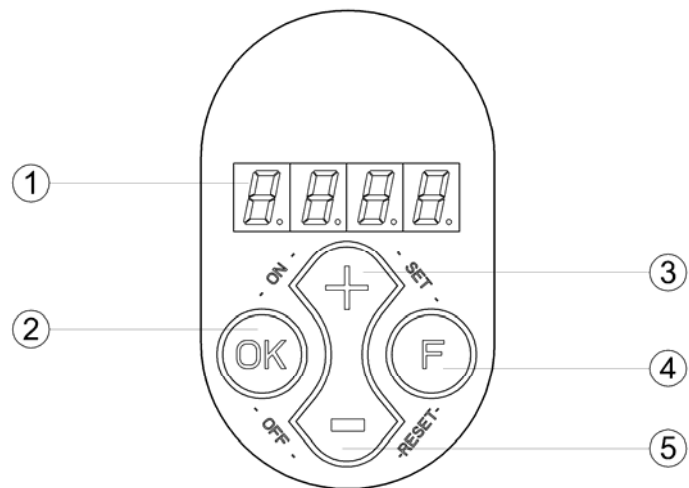
General description

The HRE 350/B is a highly advanced heat recovery unit, specially designed for minimum energy consumption and maximum comfort. This is achieved with the aid of various electronic control systems. A control unit with microprocessor controls which monitors the safe operation of the unit and ensures that the air quantities remain constant and at the preset values. The HRE 350/B comes with a control panel with display, enabling stepless adjustment of the volume without having to open the unit. Moreover, information regarding the operation can be read out from the outside of the unit.

LED display system and control panel

The HRE 350/B is fitted with a control panel. It can be used to retrieve and modify the settings in the control unit program. The control panel has four keys and a display.

- 1= Display
- 2= Key "OK" (confirm, ready)
- 3= Key increase parameter
- 4= Function Key
- 5= Key decrease parameter



Control Panel for HRE 350/B

On the left the display indicates the ventilation setting or the parameter type. On the right it shows the readout value, for instance the preset volume.

Example

The display now shows that the appliance is running at ventilation setting 3 at a flow rate of 280 m³/h.

The 4 keys have the following functions.

- F Function key / switching parameter menu on and off
- + Increase next parameter/value
- - Decrease previous parameter/value
- OK switching on and off settings menu / manual error reset

Other commands can be entered with key combinations.

- F & + (set), Confirm parameter value
- F & - (reset), filter indication reset, parameter value back to factory setting
- OK & + (ON), switch on appliance
- OK & - (OFF), switch off appliance

Everywhere in this booklet it applies that when a key has to be pressed, key in question is printed in quotation marks and in bold. Example - press key "**OK**".

Bypass conditions

The bypass, if mounted, makes it possible to supply fresh outside air that is not heated by the heat exchanger. Particularly during summer nights it is desirable to supply cooler outside air. Then the hot air in the dwelling is replaced by cooler outside air. The bypass damper opens when the interior temperature exceeds an adjustable temperature (standard 22°C) while the outside air is warmer than an adjustable temperature (standard 10°C) but colder than the interior air. Outside air supplied through the bypass is still being filtered, so the air quality is optimal, irrespective of the bypass setting. The installer can set the bypass for different situations at adjustable parameter 17. See tables on page 15 and page 17.

Frost protection

The frost protection system ensures that the secondary side of the heat exchanger (outlet side) does not freeze up by introducing an unbalance between the inlet and outlet air flows, dependent on the outside air temperature and the pressure across the heat exchanger.

Filter indication

The unit is fitted with a filter indication system. It indicates on the display when the filter requires cleaning/replacing. For more detailed information refer to page 18.

Installation

The HRE 350/B can directly be mounted to the wall using the suspension strips supplied for that purpose. For a vibration-free result the unit must be mounted to a solid wall with a minimum mass of 200 kg/m².

The following points must be taken into account.

- The unit must be placed level.
- The installation room must be such that a good condensate discharge with air trap and pitch for condensate can be made.
- The installation room must be frost-free.

Make sure there is a free space of at least 70 cm at the front of the unit and a free headroom of 1.8 m for cleaning the filters and carrying out maintenance.

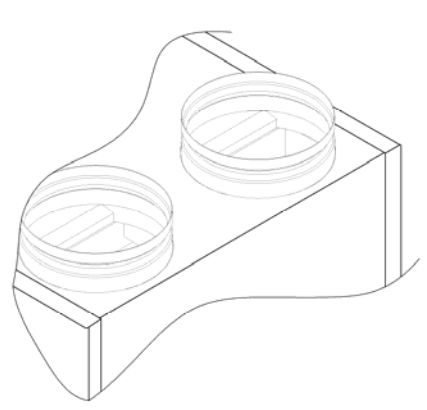
Connecting the ducts

The air outlet duct does not have to be fitted with a control valve. The unit itself controls the air quantities.

To prevent condensation on the outside of the outside air inlet duct and the air outlet duct from the HRE 350/B, these ducts must be insulated externally *vapour-proof* as far as the unit. For optimum fan noise damping, it is recommended to use acoustic hoses with a length of 1 m.

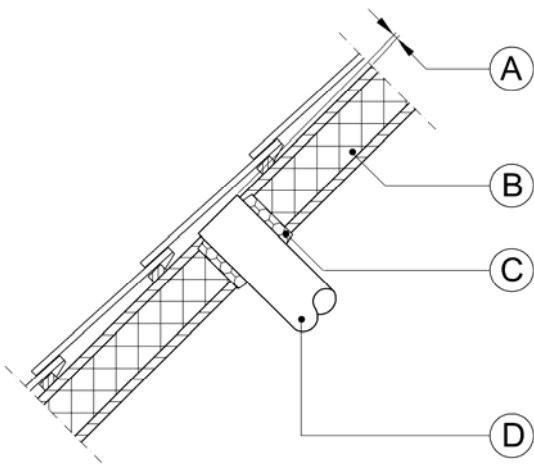
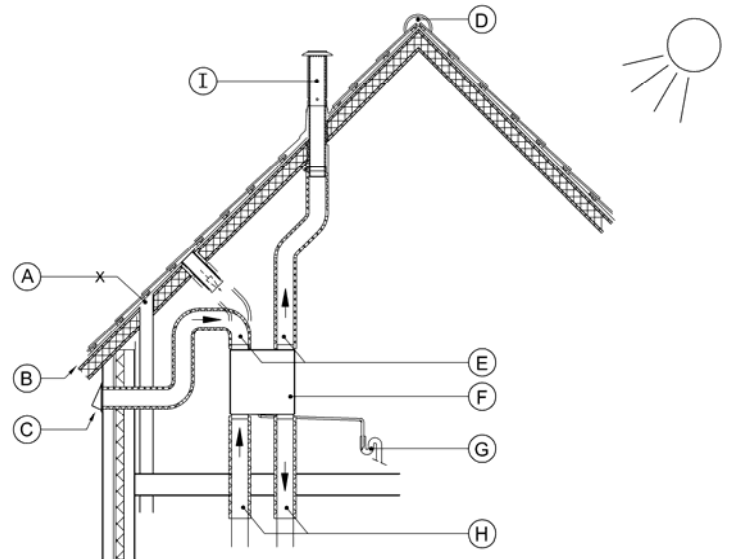
Pay attention to crosstalk and installation noise, also for incorporated ducts. Insulate the inlet ducts if necessary, for instance if they are installed outside the insulated shell.

A duct diameter of 150 mm is recommended for the HRE 350/B



- A = No soil stack vents in the same roof area as the ventilation inlet
- B = Ventilation inlet possibility at end roof area
- C = Preferred air inlet
- D = Ventilated ridge construction
- E = Connect inlet and outlet ducts flexibly insulated
- F = HRE 350 (place level)
- G = Connect condensate discharge according to installation instructions
- H = Connect inlet and outlet ducts flexibly insulated
- I = Insulated ventilation roof sleeve

Arrange the exterior air supply from the shadowed side of the dwelling, for instance from the wall or overhang. If the exterior air is sucked in from under the tiles, it must be ensured that no condensation develops in the roof boarding and no water can run in.

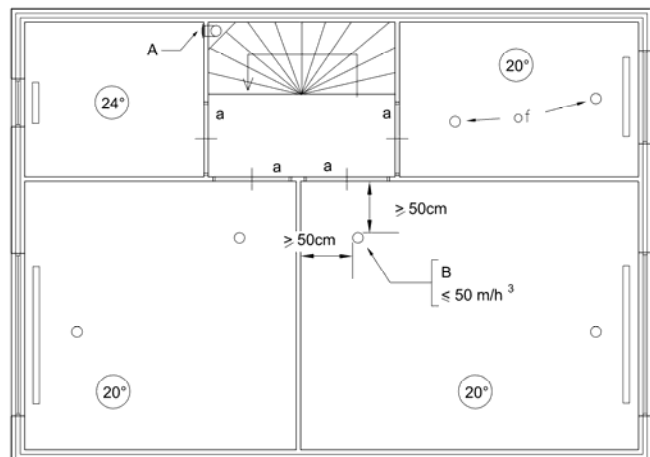


- A = 10 mm above roof boarding
- B = roof insulation
- C = seal with foam
- D = pipe for make-up air to be carefully sealed and finished vapour-tight

- Feed the discharge duct through the roof boarding in such a manner that no condensation develops in the roof boarding.
- Install the discharge duct between the HRE 350/B and the roof sleeve in such a manner that surface condensation is prevented.
- Always use an insulated ventilation roof sleeve.
- The maximum permissible resistance in the duct system is 150 Pa at the maximum ventilation capacity. If the resistance of the duct system is higher, the maximum ventilation capacity will be lower.
- The location of the mechanical ventilation outlet and the sewer stack vent relative to the inlet must be chosen to prevent nuisance.
- Choose the location of the inlet valves to prevent premature clogging of filters and draught.

- A = Outlet valve Ø125
- B = Inlet valve Ø100 or Ø125

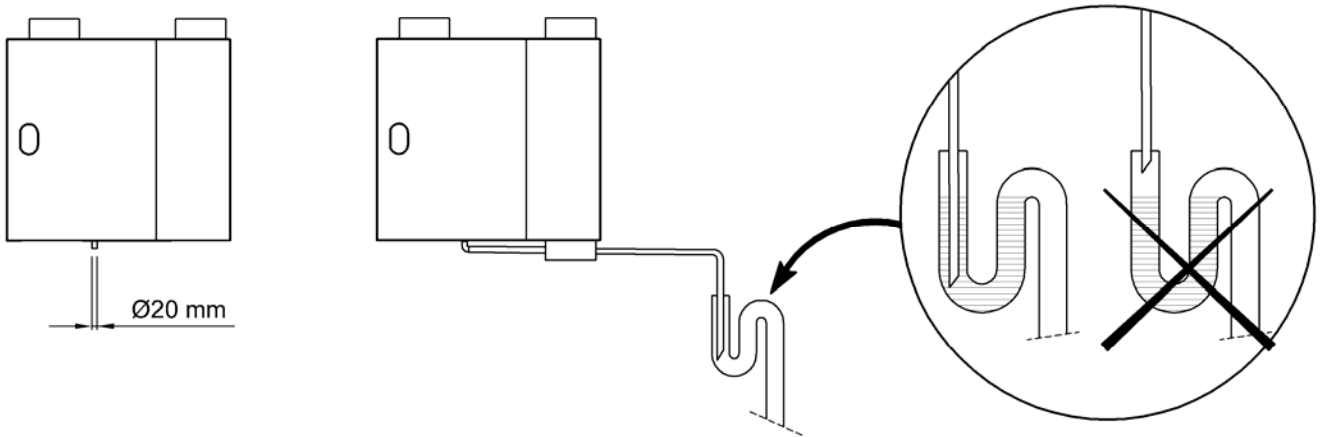
.a= Gap under the door 2cm.
(or door grilles) need to ensure there is sufficient air replacement with the rooms.



Connecting the condensate discharge

The condensate discharge line for the HRE 350/B is fed through the lower panel. The condensate must be discharged through a drainpipe. The condensate discharge comes separately with the unit and the installer must screw it into the underside of the appliance. This condensate discharge connection has a connecting diameter of 20 mm.

The condensate discharge line can be glued to it, if necessary using a square bend. The installer can glue the condensate discharge in the desired position in the lower part of the unit. See the drawing below for an example of a connection to a drainpipe. Pour water into the drip tray to create an air trap.



Electrical connections



WARNING: THE FAN AND ANCILLARY CONTROL EQUIPMENT MUST BE ISOLATED FROM THE POWER SUPPLY DURING THE INSTALLATION / OR MAINTENANCE

All mains wiring must be in accordance with the current I.E.E. Regulations, or the appropriate standards of your country and **Must** be installed by a suitably qualified person.

IMPORTANT:- THIS APPLIANCE MUST BE EARTHED

Ensure that the mains supply (Voltage, Frequency and Phase) complies with the rating label.

The Unit should be provided with a local double pole isolator switch having a contact separation of at least 3mm.

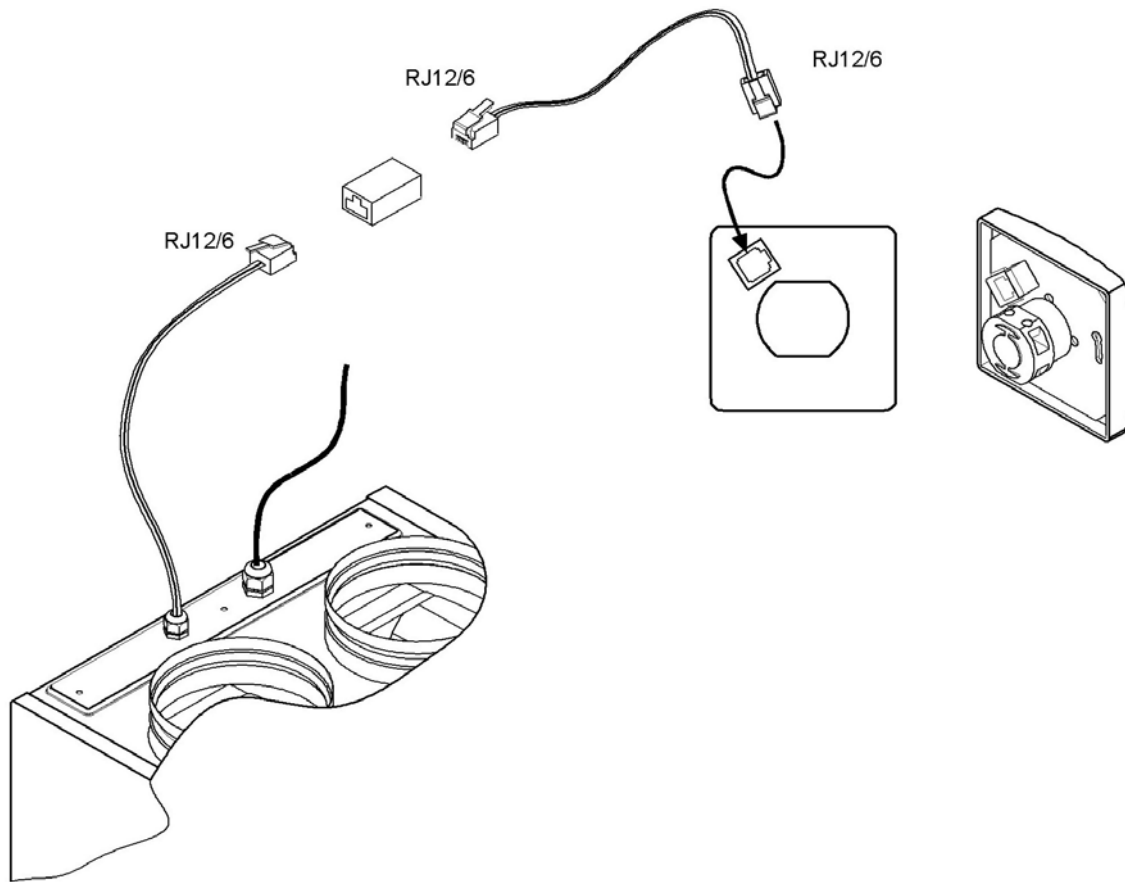
The wiring is as follows:- L (live) = Brown
N (neutral) = Blue
Pe(Earth) = Green/Yellow

For wiring details of the 3-way switch refer to page 9

For general wiring schematic refer to page 24

Connecting the multiple switch

The switch supplied with the HRE 350/B is the a RJ12/6 3-way switch with filter indication. The switch connects to the unit via a connector kit provided.



Wiring diagram 3-way switch with filter indication.

Operating the unit

Switching the unit on and off

There are two methods to switch the unit on or off.

1. Through software; the unit remains connected to the mains, when switching off only the fans are stopped.
2. Removing the mains lead from the power supply.

Switching on

- Mains power: connect the unit to the mains supply.(as per electrical connections section)

Through software; Simultaneously press keys "OK" and "+" to switch on the unit.

(Only possible after the unit has been switched off through software.)



The first digit on the display indicates the position of the 3-way switch.

Switching off

- Through software: simultaneously press keys "OK" and "-" to switch off the unit. The text **OFF** appears on the display.
- Mains power: isolate the unit from the supply



NOTE!

When working on the unit, always disconnect from the supply by first switching it off through the software within the unit and subsequently isolating from the mains supply.

Setting the air quantity

The air quantity of the HRE 350/B for settings 1, 2 and 3 have been adjusted in the factory at 100, 150 and 225. The performance of the HRE 350/B depends on the quality of the duct system as well as on the filter resistance.

Important:

Setting 1: must always be lower than setting 2;

Setting 2: must always be lower than setting 3;

Setting 3: adjustable between 50 and 300m³/h.

If these conditions are not complied with, the air quantity of the higher setting will automatically be adjusted.

The air quantities can be modified as follows (as an example here the air quantity for setting 3 will be changed from 300 to 280 m³/h).

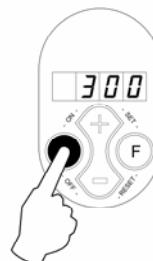
1. Press key "F" during 3 seconds to activate the settings menu.



2. Use key "+" to select the desired parameter (U1=setting 1, U2=setting 2, U3=setting 3)



3. Press key "OK" during 1 second to display the Selected Parameter value.



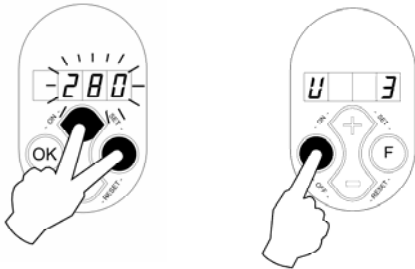
4. The selected parameter value can be changed Using keys "+" or "-".



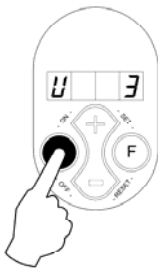
5. The modified setting can now:

- A be saved and stored;
- B not be saved;
- C be restored to factory setting.

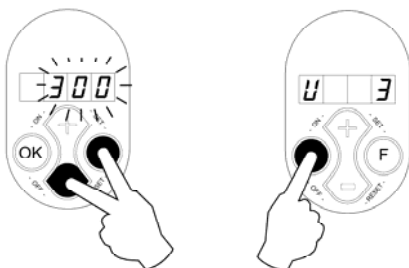
A Simultaneously press keys "F" and then "+" (first press F and then +) to change the modified setting; the modified value will now blink 3x as confirmation. The display readout will remain at this modified value. Press key "OK" to return to the settings menu; if required, several settings can now be modified (see item 2 to 5 inclusive). Now continue with item 6.



B Press key "OK" to return to the settings menu without saving the modified setting; the previous setting will be maintained. If required, several settings can now be modified (see item 2 to 5 inclusive). Now continue with item 6.



C Simultaneously press keys "F" and "-" to return to the factory setting. The factory setting will blink 3x as confirmation. The modified setting is removed. The factory setting remains on the display. Press key "OK" to return to the settings menu; if required, several settings can now be modified (see item 2 to 5 inclusive). Now continue with item 6.



6. Press key "F" during 1 second to leave the settings menu.



Installer settings

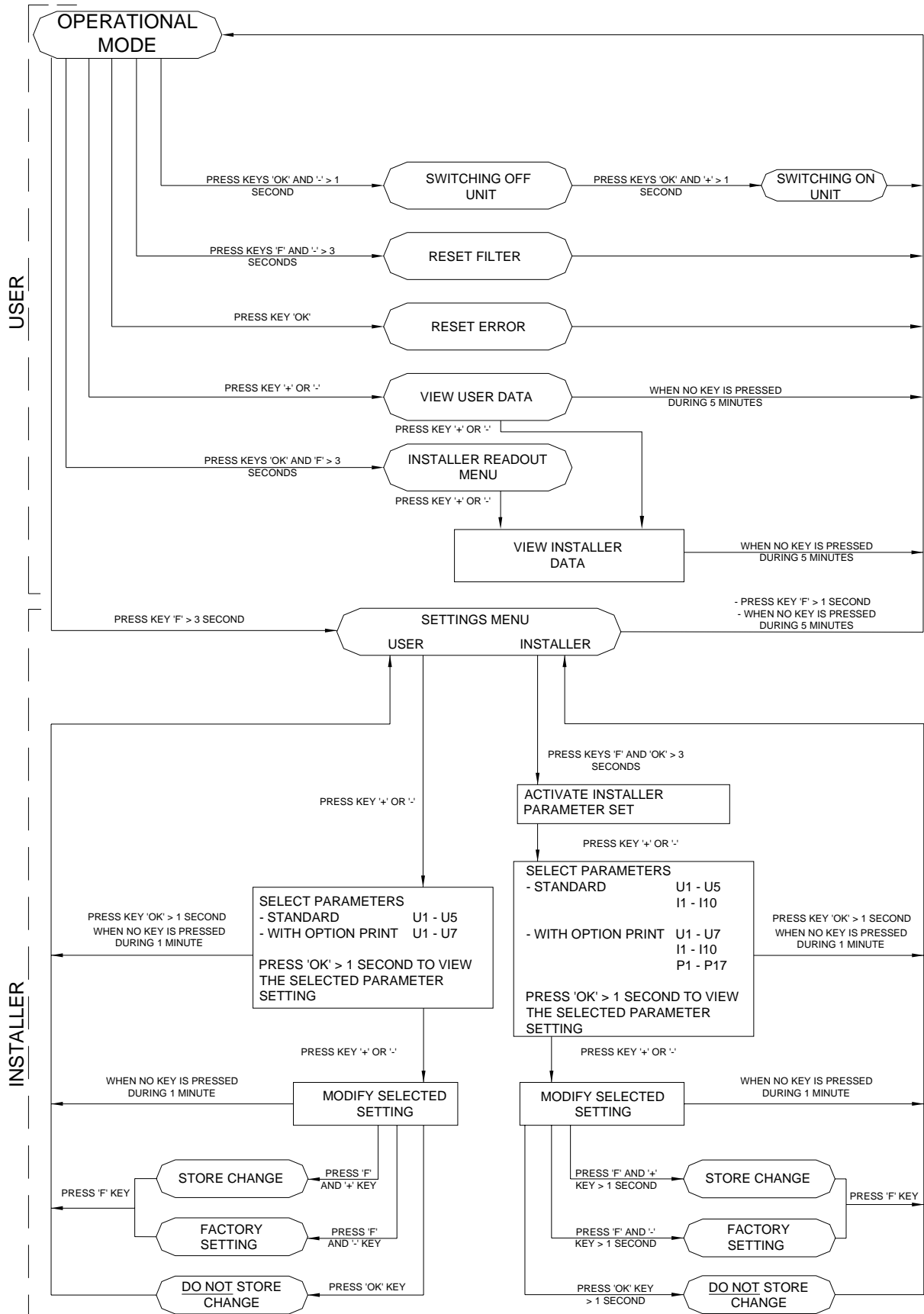
Various other settings of the control unit can also be modified. Because some settings have an influence on the correct operation of the unit, these have been placed in a separate installer parameters set. Consequently, these parameters can only be modified by the installer. How to modify them is explained on **page 15**.

- I1. Fixed imbalance. This can be used to keep the pressure in the dwelling at a higher (+) or lower (-) level than the atmospheric pressure.
Positive imbalance (+): the outlet fan ventilates the set value in [m³/h] less than the inlet fan.
Negative imbalance (-): the inlet fan ventilates the set value in [m³/h] less than the outlet fan.
- I2. No contact step
This setting determines the ventilation position when no switch contact is connected to position 1; the unit will start running at the ventilation position set here.
- I4. Switch line 1 step
Determines what position of the multiple switch matches line 1 on the control unit.
- I5. Switch line 2 step
Determines what position of the multiple switch matches line 2 on the control unit.
- I6. Switch line 3 step
Determines what position of the multiple switch matches line 3 on the control unit.
- I8. Bypass mode (if fitted)
Determines what the bypass has to do.
Mode 0 : Bypass valve will always be closed.
Mode 1 : Bypass valve will be opened if temperature conditions are correct.
Mode 2 : The inlet fan will run in the lowest possible flow if the temperature conditions are correct.
- I9. Hysteresis bypass (if fitted)
This setting determines how much the temperature "from indoors" may drop before the bypass valve will be closed or the inlet fan will run in the standard fan speed.
- I10. Constant pressure permissible
This determines whether there is a constant flow all the time or constant pressure if the resistance is too high.

Refer to the table on **page 17** for the factory setting installer.

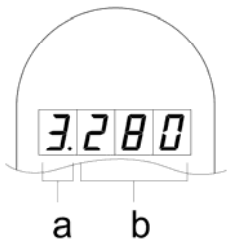
Menu Structure Display

The menu structure is divided into a readout section and a settings section. The number of visible parameters depends on the parameter set. The user has parameter set "user". The installer has the more comprehensive parameter set "installer", that can be activated and deactivated by simultaneously pressing key "F" and key "OK".



Readouts settings

As standard the current position of the multiple switch and the connected outlet volume are shown (Operational mode). On the left the position of the multiple switch (position 1, 2 or 3) is shown and to the right of the dot the volume of the outlet fan is shown.



a = Position multiple switch is set at.
b.=.Volume of outlet air [m3/hr]

Reading out settings by the user

The user can read out other relevant data using keys "+" and "-" (step 0 - step 4). Step numbers are not shown on the display! See the table below for user readout. When no key is operated during 5 minutes, the display automatically returns to operational mode. Use key "+" to scroll through the menu. Press key "-" to return to step 0. In this situation no settings can be modified.



Reading out settings by the installer

A more comprehensive readout programme is available for the installer. All installer data can be viewed after simultaneously pressing keys "F" and "OK" during 3 seconds. In this menu the values cannot be modified. Activating this menu always calls up step no. 5 (see table below); pressing key "+" calls up the installer and user data and pressing key "-" takes you back to step no. 0. After 5 minutes this menu automatically disappears and the display will show the operational situation again.



>3s

In the event of an error, the error code appears on the display; Refer to **page 18 & 19** for more information

STEP No.	READ OUT (EXAMPLE)	Description	Remarks
No.0	C0	Information code	C0 = No information C3 = Inlet fan constant pressure C6 = Outlet fan constant pressure C7 = Correction maximum air flow
No.1	2.200	Current position/outlet volume m ³ /h	
No.2	bp.1	Bypass status (Only if fitted)	0 = Bypass valve shut 1 = Bypass valve open 2 = Minimum flow inlet fan
No.3	tp.9	Temperature from atmosphere °C	At negative temperature (below 0°C) readout tp.9.
No.4	tS.21	Temperature from indoors °C	
No.5	In.1	HRE350/HRE350B Initialisation	In=0 no/ In=1 yes (Not applicable)
No.6	u.186	Current inlet flow m ³ /h	
No.7	u.186	Current outlet flow m ³ /h	
No.8	t.180	Current pressure inlet fan Pa	
No.9	A.180	Current pressure outlet fan Pa	
No.10	u0.0	Status frost protection	0 = not active 1-4 = imbalance 5 = inlet fan off
No.11	St.9	Temperature to atmosphere (Sensor not connected as standard). °C	Not present = St.80
No.12	Pt.18	Temperature to indoors (Sensor not connected as standard). °C	Not present = Pt.80

Modifying settings

A number of settings can be modified by both user and installer to adapt the appliance to the specific situation.

Modifying settings by the user

The user can modify a limited number of settings, that is U1 to U5 inc. (see table page 17); how to modify these settings is described in detail on page 10 and is also shown in the diagram menu structure on page 13

Modifying settings by the installer

The installer can modify more settings. When parameters are set incorrectly, the appliance can no longer perform up to standard, so make sure no parameters are modified incorrectly. Also refer to the diagram menu structure on page 13. The following actions are required to modify the settings from operational mode. (By way of example parameter 18 is changed from 1 to 2.)

- 1 Press key "F" during 3 seconds to activate the settings menu.



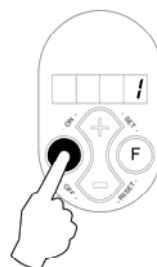
- 2 Press keys "F" and "OK" during 3 seconds to activate the comprehensive parameters section for the installer



- 3 The desired parameter can be found with the aid of keys "+" and "-".



- 4 The setting can be viewed by pressing key "OK".

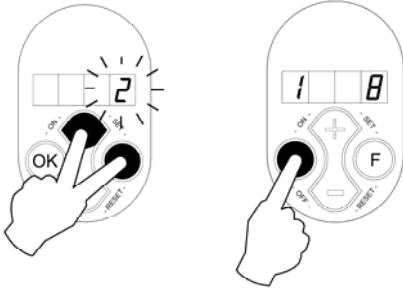


5 Use keys "+" and "-" to modify the value.



6 The modified setting can now:
A be saved and stored
B not be saved;
C be restored to factory setting.

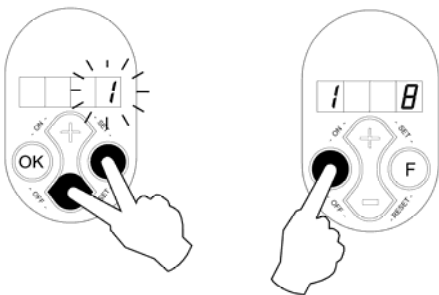
A Simultaneously press keys "F" and "+" (first press F and then +) to change the modified setting; this value now blinks 3x to confirm that this value has been stored. The value remains on the display. Press key "OK" to return to the settings menu; if required, other settings can now be modified (step 2 - step 5). Continue with step 7.



B press key "OK" to return to the settings menu without saving the modified setting; the previous setting will be maintained. Continue with step 7.



C Simultaneously press keys "F" and "-" (first press F and then -) to return to the factory setting. The factory setting will blink 3 times and remain at that value. The modified setting has now been removed. Press key "OK" to return to the settings menu. Continue with step 7.



7 Press key "F" during 1 second to leave the settings menu.



ADJUSTABLE SETTINGS	DESCRIPTION	ADJUSTING RANGE	FACTORY SETTING
U1	VOLUME STEP 1	50...(MAX.-10)	100
U2	VOLUME STEP 2	50...(MAX.-5)	150
U3	VOLUME STEP 3	50...300	225
U4	MINIMUM ATMOSPHERIC TEMPERATURE BYPASS (IF FITTED)	5...20	10
U5	MINIMUM INDOOR TEMPERATURE BYPASS (IF FITTED)	18...30	22
I1	FIXED IMBALANCE	-100...+100	0
I2	NO CONTACT STEP	0,1,2,3	1
I3	PERILEX L2 STEP	2,3	2
I4	SWITCH LINE 1 STEP	0,1,2,3	1
I5	SWITCH LINE 2 STEP	0,1,2,3	2
I6	SWITCH LINE 3 STEP	0,1,2,3	3
I7	IMBALANCE PERMISSIBLE	0,1	1 (YES)
I8	BYPASS MODE (IF FITTED)	0,1,2	1
I9	HYSTERESIS BYPASS (IF FITTED)	0...5	2
I10	Constant pressure permissible	0,1	0 (YES)

For a description of these settings refer to page 10 for U1-U3 and page 12 for I1-I10.

Note:- U4-U5 & I8-I9 ONLY apply to HRE 350B units.

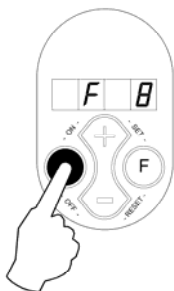
Trouble shooting

If the control detects an error, this is shown on the display by means of a number, preceded by a letter F (Failure). If a 3-way switch with filter indication is mounted, the LED on the 3-way switch will also start blinking. Error F9 is shown here as an example. This means something is wrong with the wiring to the atmospheric temperature sensor.



The appliance remains in this error mode until the problem in question has been solved. Then the unit will reset itself (auto reset) and the display will once more show operational mode.

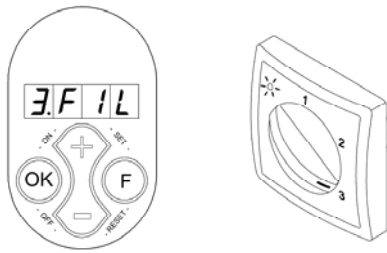
An exception to this is error "F8"; This means that an imbalance has been found in the system. When his imbalance has been remedied, first key "OK" must be pressed. Then the appliance once more goes through all inspections and then returns to operational mode



If the cause of the error has not been solved, the error message remains on the display. The table on page 18 & 19 gives an overview of the errors, possible courses and the actions to be undertaken.

Filter indication

If the display shows the message "FIL" then this means the filters have to be cleaned. If a multiple switch with filtering indication has been mounted, then simultaneously with this message on the display, the LED on the switch will go on.



When the filters have been cleaned or replaced, keys "F" and "-" (> 3 seconds) must be pressed to reset the filter indication. The text "FIL" will blink for a moment and then the display will return to operational mode.



Error code table

Error code	Cause	Action user	Action installer
F1	Communication with inlet fan interrupted. If the imbalance is impermissible, the outlet fan will stop as well.	Contact the installer.	<ul style="list-style-type: none"> • Check the wiring from the MCU to the inlet fan. • Check that the dip switch of the MCU of the inlet fan is at <OFF>. • Replace the MCU and the wiring.
F2	The inlet fan has stopped. If the imbalance is impermissible, the outlet fan will stop as well.	Contact the installer.	<ul style="list-style-type: none"> • Check the wiring from the MCU to the inlet fan. • Replace the MCU and the wiring.
F4	Communication with outlet fan interrupted.	Contact the installer.	<ul style="list-style-type: none"> • Check the wiring from the MCU to the outlet fan. • Check that the dip switch of the MCU of the inlet fan is at <OFF>. • Replace the MCU and the wiring.
F5	The outlet fan has stopped.	Contact the installer.	<ul style="list-style-type: none"> • Check the wiring from the MCU to the outlet fan. • Replace the MCU and the wiring.

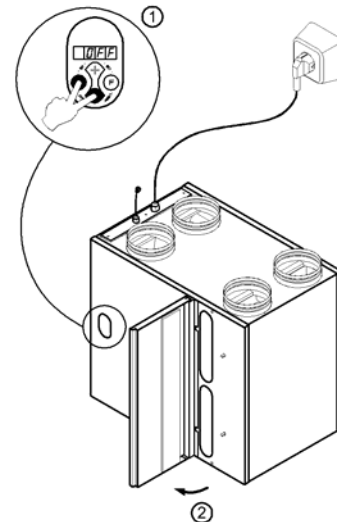
F8	An imbalance has been found while that has been set as impermissible. Unit does not respond to multiple switch as long as the error has not been lifted by pressing the key "OK"	<ul style="list-style-type: none"> • Check whether a different fan has been activated in the same duct system. • Clean the filters. • Contact the installer . 	<ul style="list-style-type: none"> • Check whether a different fan has been activated in the same duct system. • Carryout maintenance as stated in maintenance section • Read just the volumes per position. • Check the correct operation.
F9	The temperature sensor that measures the temperature of the input air is defective. The unit operates as expected, but the bypass is out of operation.	Contact the installer	<ul style="list-style-type: none"> • Check the wiring from the sensor to the basic pcb. • Check the sensor connection to the wiring. • Replace the sensor.
F10	The temperature sensor that measures the temperature of the output air is defective. The unit operates as expected. bypass	Contact the installer	<ul style="list-style-type: none"> • Check the wiring from the sensor to the basic pcb. • Check the sensor connection to the wiring. • Replace the sensor.

User Maintenance

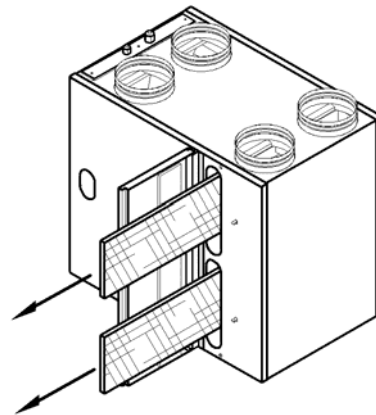
User maintenance is limited to periodically cleaning or replacing the filters. The filter only has to be cleaned when it is indicated on the display (it shows the text "FIL") or, if a multiple switch with filter indication is mounted, when the red LED at the switch lights up. An inspection of the filters is required on average every three months, and the filters should then be cleaned and/or replaced depending on the amount of dirt that has built up on the filters. It is not permitted to use the appliance without filters.

Note:- When the unit is fitted to a new build property the filters should be checked at one month intervals for the first six months.

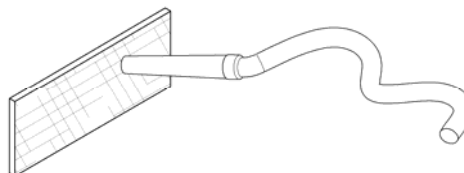
1. Switch off the appliance on the control panel (simultaneously press keys "OK" and "-" during 3 seconds)
Open the filter door.



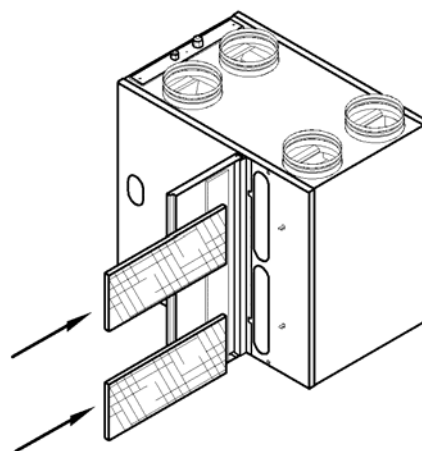
2 Remove the filters. Remember in what way the filters are taken out.



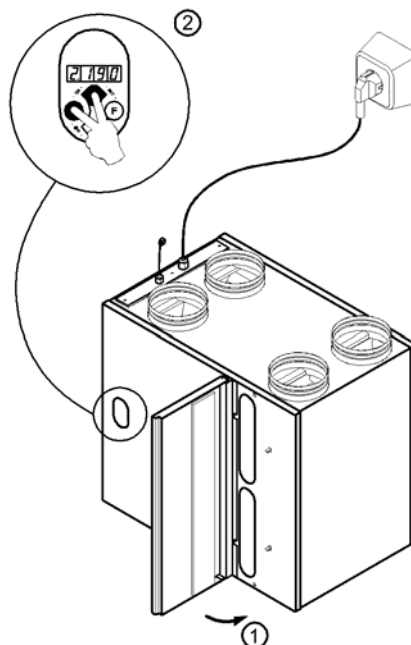
3 Use a vacuum cleaner to clean the filters .



4. Place the filters back the same way as they were taken out.



5. Close the filter door and switch on the unit on the control panel (simultaneously press keys "OK" and "+" during 3 seconds).



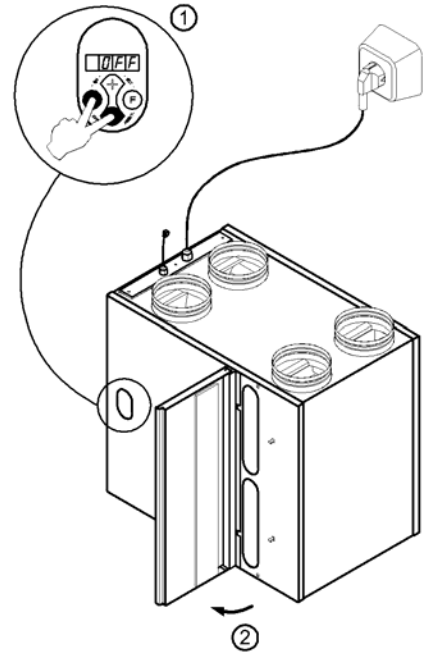
After cleaning the filter or replacing with a new filter, the filter indication must be reset by simultaneously pressing keys "F" and "-". The display will blink for a moment to confirm that the filter has been reset. The unit will return to operational mode.



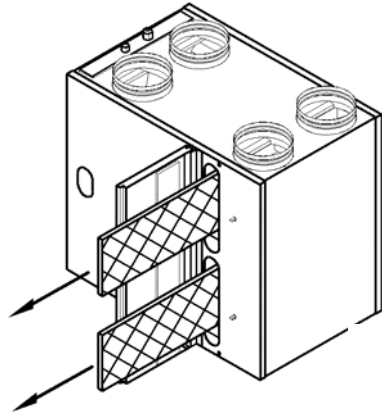
Installer maintenance

Installer maintenance includes cleaning the heat exchanger and fans. Dependent on the conditions, this must be done about once every three years.

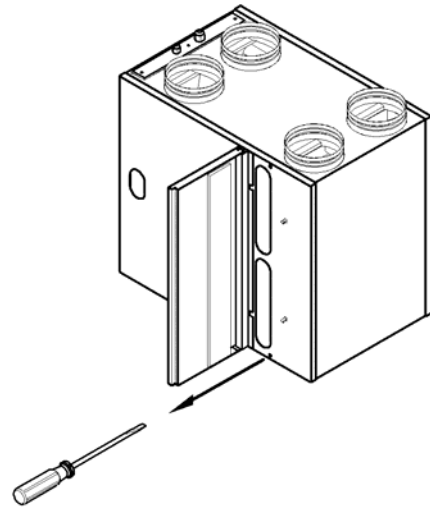
1. Switch off the unit on the control panel (simultaneously press keys "OK" and "-" during 3 seconds) and switch off the power supply. Open the filter door.



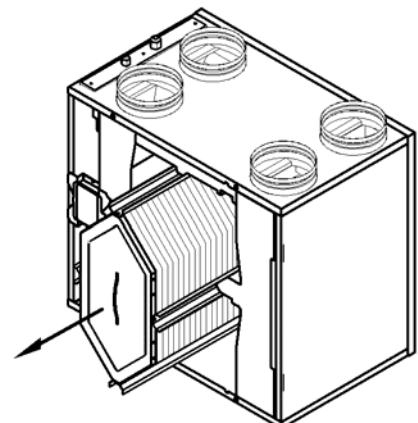
2. Remove the filters



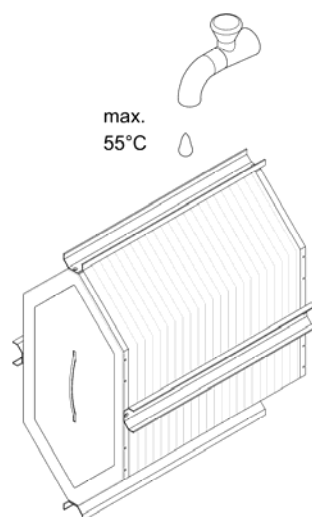
3. Remove the front cover and.



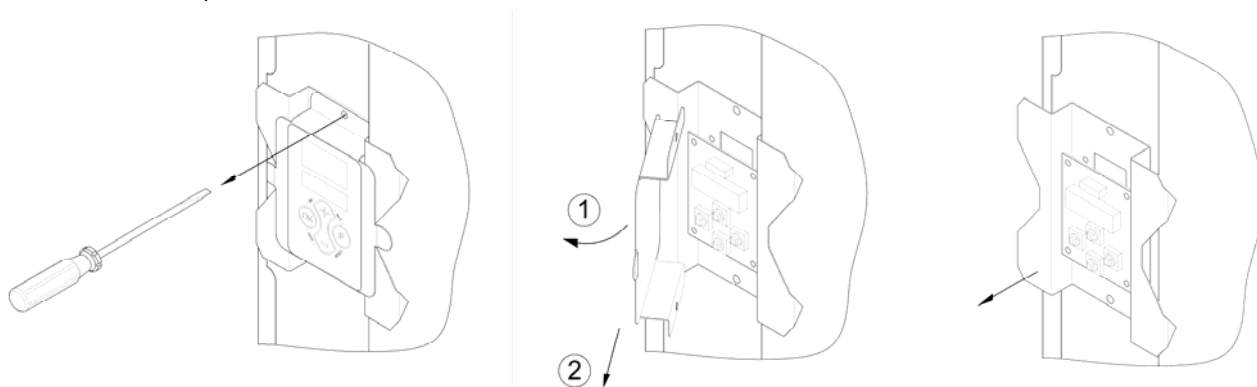
4. Remove the heat exchanger. Be careful not to damage the foam parts in the unit.



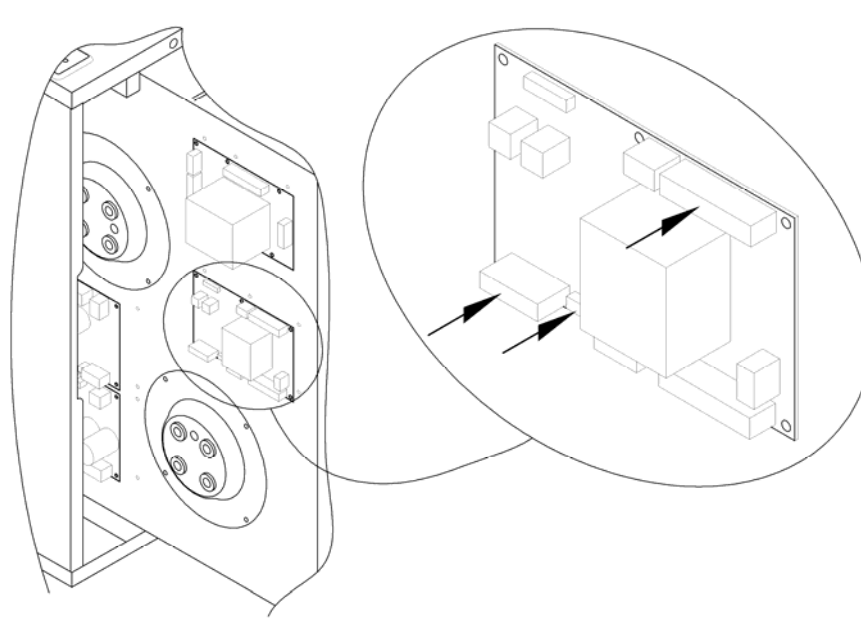
5. Clean the heat exchanger using hot water (55°C max.) and a regular detergent. Rinse the exchanger with hot water.
 Note:- If Bypass fitted (HRE350B Only), First remove actuator which is located on the heat exchanger.



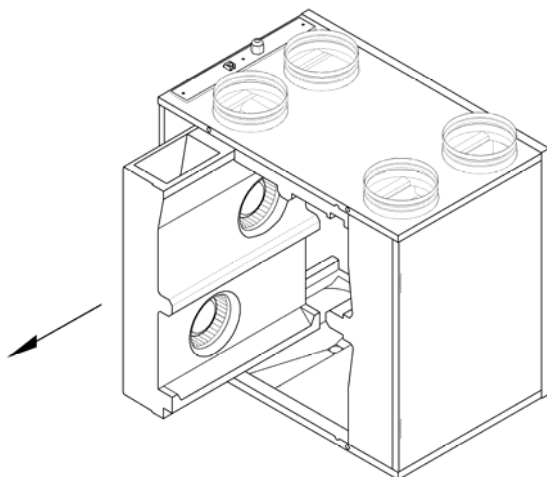
6 Remove the control panel



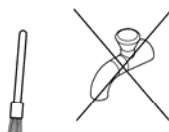
7. Pull all connectors from the basic pcb that are connected with the swivel plate. Take the earth wire from the housing.



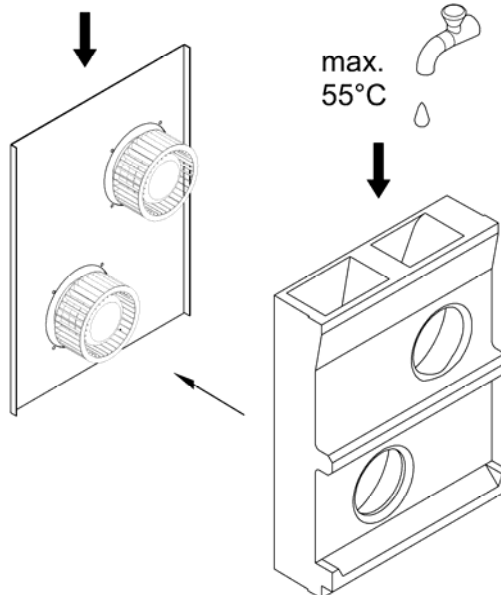
8 Remove the fan unit.



9. Remove the spiral casing.



10. Clean the fan with a soft brush make sure the balancing weights do not get moved.



11. Place the spiral casing back on the fan unit.

12. Place the fan unit back inside the HRE 350/B

13. Place the earth wire back and replace the connectors that were pulled.

14. Mount the control panel.

15. Place the heat exchanger back in the unit.

16. Place the front cover back on.

17. Place the filters back into the unit with the clean side facing the exchanger.

18. Close the filter door.

19. Switch on the power supply.

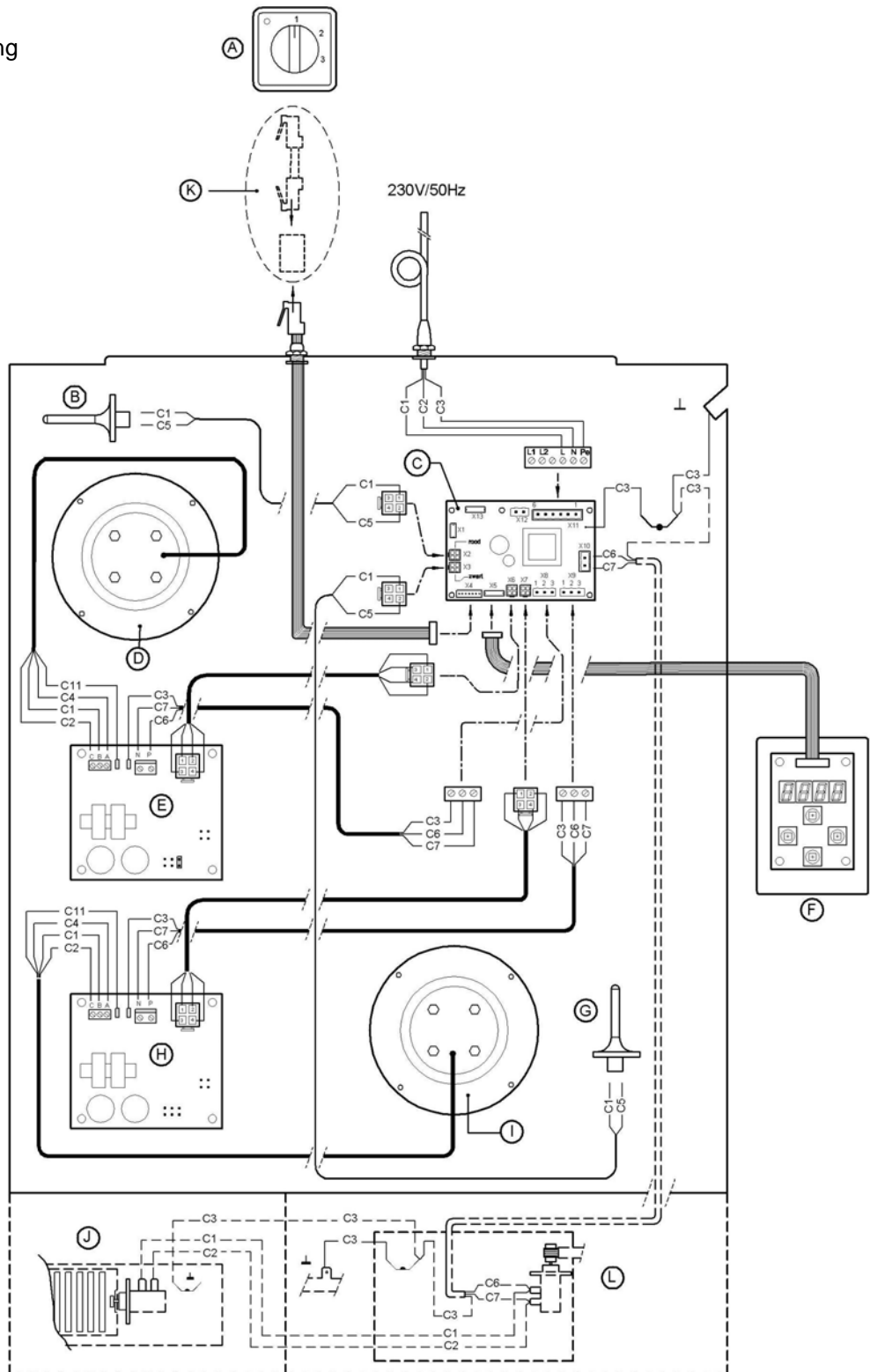
20. Switch on the appliance on the control panel (simultaneously press keys "OK" and "+" during 3 seconds).

21. If new filters have been placed in the unit, keys "F" and "-" must also be pressed to reset the filter!

Wiring Diagram HRE 350/B

1= Low speed setting
 2= Medium Speed setting
 3= High Speed Setting

C1 = BROWN
 C2 = BLUE
 C3 = GREEN/YELLOW
 C4 = BLACK
 C5 = WHITE
 C6 = Nr.1
 C7 = Nr.2
 C11 = GREEN

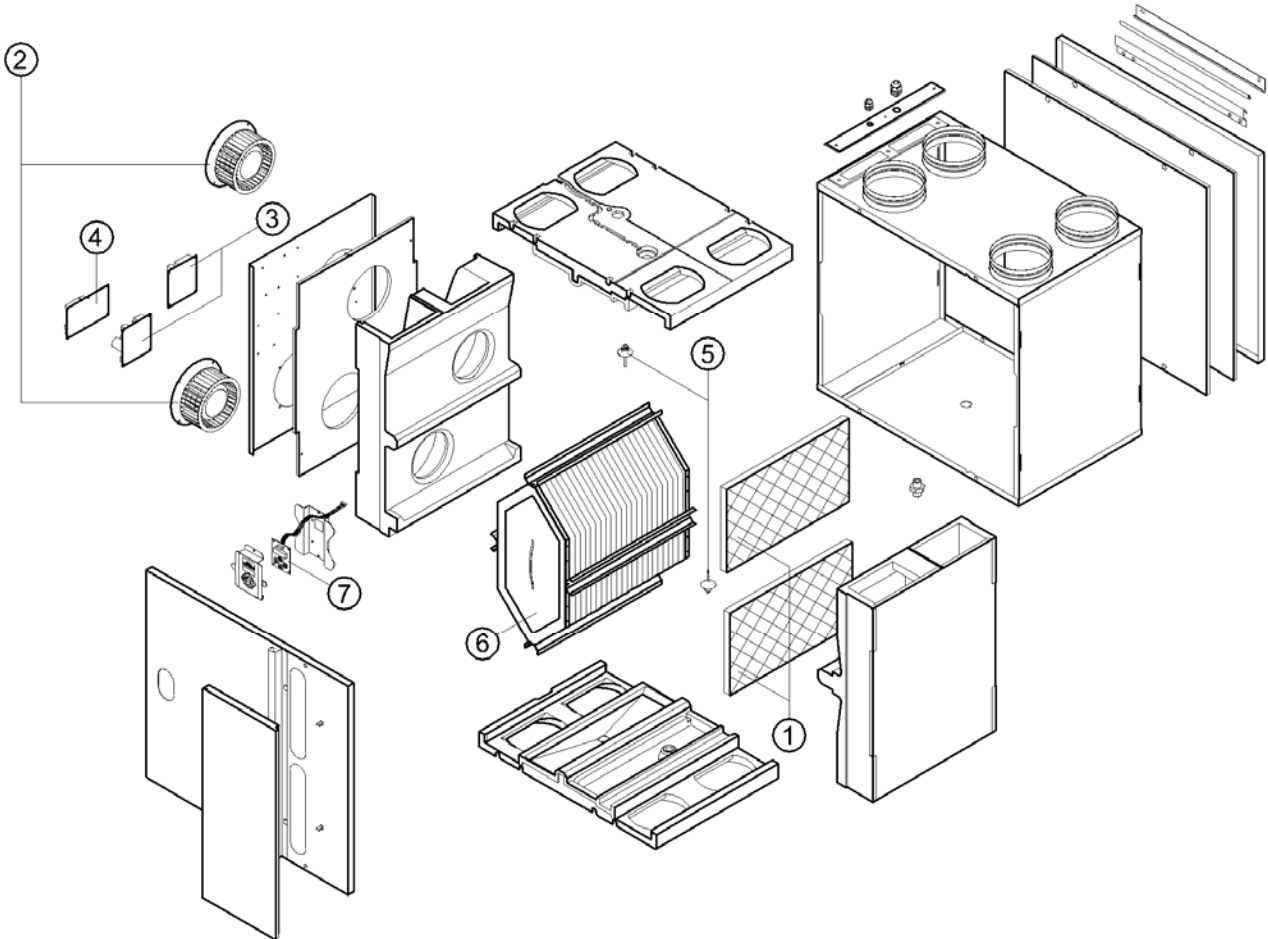


A = 3-way switch
 B = Interior temperature sensor
 C = Basic PCB
 D = Inlet fan
 E = Motor control unit inlet fan
 F = Control panel
 G = Atmospheric temperature sensor
 H = Motor control unit outlet fan
 I = Outlet fan
 J = Actuator shutter (if fitted) HRE350B Only.
 K = Controller to unit connection kit (Supplied)
 L = Actuator bypass valve (if fitted) HRE350B Only.

Service parts for HRE 350/B

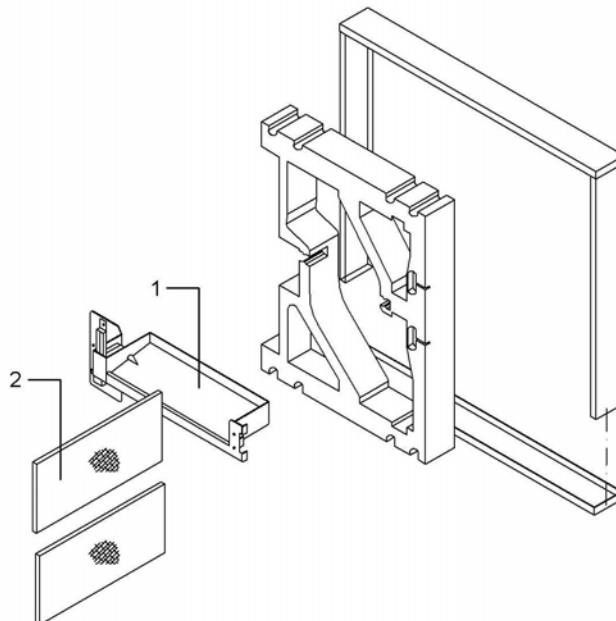
Refer to diagram below for part identification.

- | | |
|--|-------------------------------------|
| Item 1 = 432239 = Filter kit | (HRE350 Only For HRE350B see below) |
| Item 2 = 432240 = Fan impeller assembly | (For HRE350 & HRE350B) |
| Item 3 = 432241 = Control PCB fan (MCU) | (For HRE350 & HRE350B) |
| Item 4 = 432242 = Basic PCB | (For HRE350 & HRE350B) |
| Item 5 = 432243 = Temperature sensor | (For HRE350 & HRE350B) |
| Item 6 = 432244 = Heat exchanger | (For HRE350 & HRE350B) |
| Item 7 = 432245 = Control panel with display | (For HRE350 & HRE350B) |



Service parts for HRE350B Only (With bypass)

- Item 1 = 434791 = Bypass valve complete
- Item 2 = 434792 = Filter G4 bypass



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Did you find these instructions easy to use?

We value your comments, contact us via : Email:info@vent-axia.com

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Applicable only to products installed and used in the United Kingdom. For details of the Guarantee outside of the United Kingdom contact your local supplier.

Vent-Axia guarantees this product for two years from the date of purchase against faulty material or workmanship. In the event of any part being found to be defective, the product will be repaired, or at the Company's discretion the product will be replaced without charge, provided that the product:

- 1). Has been installed and used in accordance with the instruction given with each unit.
- 2). The electricity supply complies with the rating label.
- 3). Has not been misused, neglected or damaged.
- 4). Has not been modified or repaired by any person not authorised to do so by Vent-Axia.

IF CLAIMING UNDER THE TERMS OF THE GUARANTEE

Please return the complete product, carriage paid to your original supplier by post or in person. Please ensure that it is adequately packed and accompanied by a letter clearly marked 'Guarantee Claim' stating the nature of the fault and providing proof of the date and source of purchase.

As part of the policy of continuous product improvement Vent-Axia reserve the right to alter specifications without notice