

HAVA 120HV

Heat Recovery Ventilation Unit with Enthalpic Heat Exchanger

INSTALLATION, MAINTENANCE & USER GUIDE

Read this manual carefully before using the product and keep it in a safe place for reference. This product was constructed up to standard and in compliance with regulations relating to electrical equipment and must be installed by technically qualified personnel. The manufacturer assumes no responsibility for damage to persons or property resulting from failure to observe the regulations contained in this booklet.

2. PRECAUTIONS FOR INSTALLATION, USE & MAINTENANCE

WARNING - Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work!

WARNING - The installation and service of the unit and complete ventilation system must be performed by an authorised installer and in accordance with local rules and regulations.

WARNING - If any abnormality in operation is detected, disconnect the device from the mains supply and contact a qualified technician immediately.

TRANSPORT & STORAGE

01. Do not leave the device exposed to atmospheric agents (rain, sun, snow, etc.).
02. Duct connections/duct ends must be covered during storage and installation.

INSTALLATION

03. After removing the product from its packaging, verify its conditions. Do not leave packaging within the reach of children or people with disabilities.
04. Beware of sharp edges. Use protective gloves.
05. The device should not be used as an activator for water heaters, stoves, etc., nor should it discharge into hot air/fume vent ducts deriving from any type of combustion unit or tumble dryer.
06. If the environment in which the product is installed also houses a fuel-operating device (water heater, methane stove etc., that is not a "sealed chamber" type), it is essential to ensure adequate air intake, to ensure good combustion and proper equipment operation.
07. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
08. The electrical system to which the device is connected must comply with local regulations.
09. Before connecting the product to the power supply or the power outlet, ensure that:
 - the data plate (voltage and frequency) correspond to those of the electrical mains;

- the electrical power supply/socket is adequate for maximum device power.

10. For installation, a omnipolar switch should be incorporated in the fixed wiring, in accordance with the wiring rules, to provide a full disconnection under over voltage category III conditions (contact opening distance equal to or greater than 3mm).
11. Ensure adequate air return into the room in compliance with existing regulations in order to ensure proper device operation.

USE

12. The device should not be used for applications other than those specified in this manual.
13. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance.
14. Cleaning and user maintenance shall not be made by children without supervision.
15. Do not touch the appliance with wet or damp hands/feet.
16. The device is designed to intake clean air only, i.e. without grease, soot, chemical or corrosive agents, or flammable or explosive mixtures.
17. Do not use the product in the presence of inflammable vapours, such as alcohol, insecticides, gasoline, etc.
18. The system should operate continuously, and only be stopped for maintenance/service.
19. Do not obstruct ducts or grilles to ensure optimum air passage.
20. Do not immerse the device or its parts in water or other liquids.
21. Operating temperature: 0°C up to +40°C.

SERVICE

22. Although the mains supply to the unit has been disconnected there is still risk for injury due to rotating parts that have not come to a complete standstill.
23. Beware of sharp edges. Use protective gloves.
24. Use original spare parts only for repairs.

01384 275771

info@eltatrade.co.uk

www.eltatrade.co.uk

3. PRODUCT INFORMATION

3.1 GENERAL

This is the Installation, Use and Maintenance Manual of the heat recovery ventilation units, model HAVA 120HV. This manual consists of basic information and recommendations concerning installation, commissioning, use and service operations to ensure a proper fail-free operation of the unit.

The key to proper, safe and smooth operation of the unit is to read this manual thoroughly, use the unit according to given guidelines and follow all safety requirements.

The HAVA 120HV is equipped with an enthalpic heat exchanger and is supplied with the CTRL-V1 control panel. The package also contains no. 2 spacers for ceiling installation, no. 1 filter cap removal bracket.

3.2 DIMENSIONS & WEIGHT

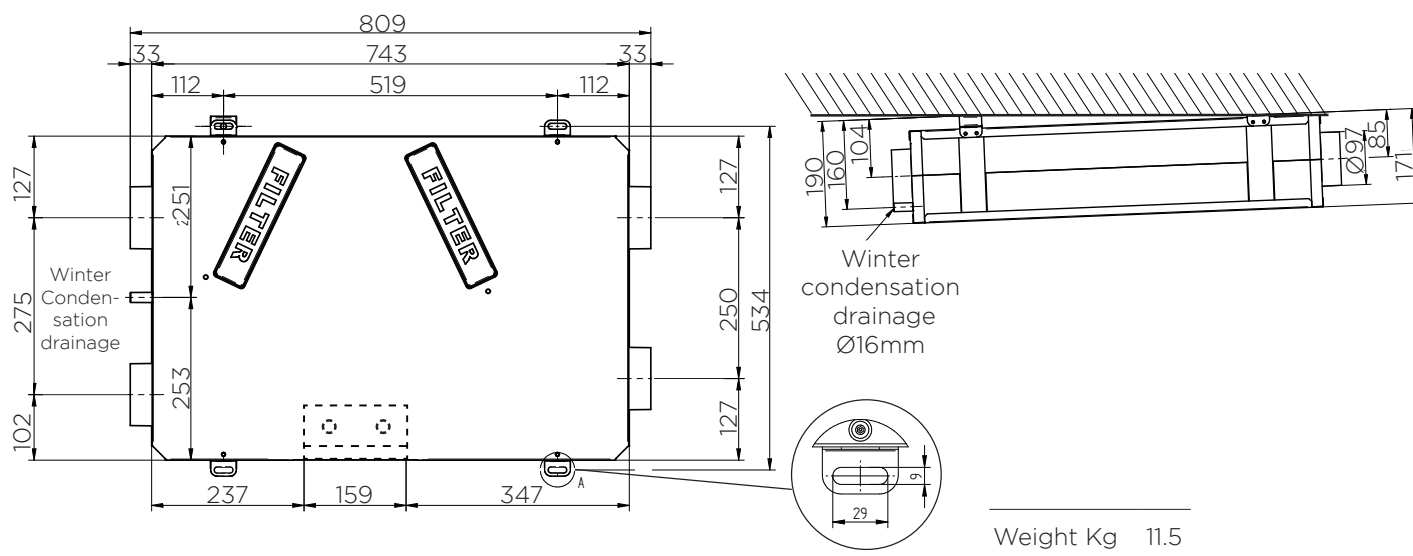
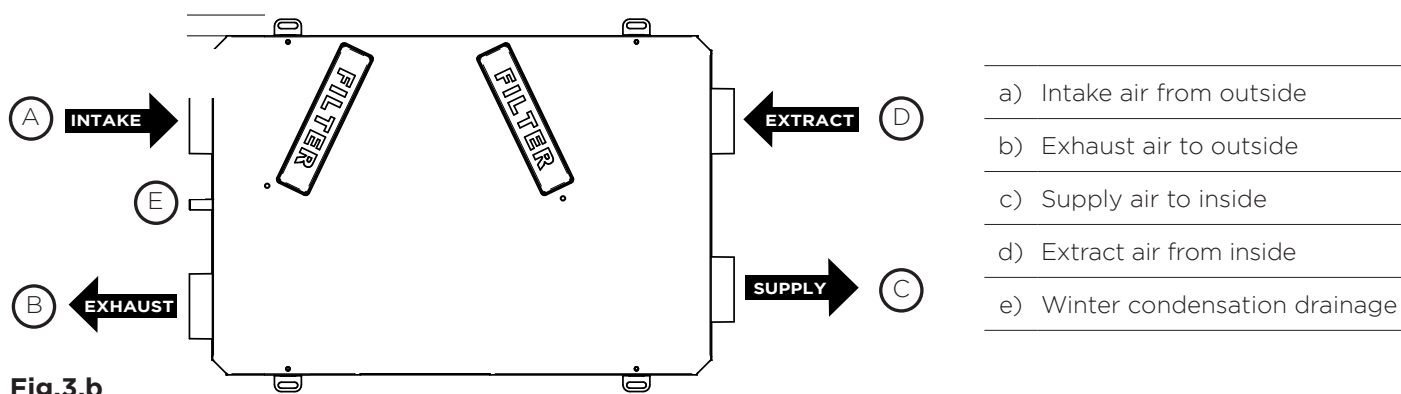


Fig.3.a

Dimensions in mm.

3.3 DUCT CONNECTIONS



01384 275771

info@eltatrade.co.uk

www.eltatrade.co.uk

3.4 SPACE REQUIRED

Make sure that enough space is left around the unit to allow easy maintenance (access to filters, terminal box and inspection panel removal).

3.5 RATING LABEL



Fig.3.c Rating Label

WARNING - Make sure that specific warnings and cautions in 2. “Precautions For Installation, Use & Maintenance” are carefully read, understood and applied.

4. TRANSPORT AND STORAGE

The appliance is delivered in one box.

The appliance should be stored and transported in such a way that it is protected against physical damage that can harm spigots, casing, control panel etc.

It should be covered so that dust, rain and snow cannot enter and damage the unit and its components.

5. INSTALLATION

WARNING - Make sure that specific warnings and cautions in 2. “Precautions For Installation, Use & Maintenance” are carefully read, understood and applied.

This section describes how to install the unit correctly.

The unit must be installed according to these instructions.

5.1 UNPACKING

Verify that the unit delivered is according to your order before starting the installation. Any discrepancies from the ordered equipment must be reported to the supplier.

5.2 WHERE/HOW TO INSTALL

- All HAVA units are meant for indoor installation in a heated space.
- Mount the unit on flat surface.
- Place the unit preferably in a separate room (e.g. storage, laundry room or similar).
- When choosing the location it should be kept in mind that the unit requires maintenance regularly and that the inspection door should be easily accessible.
- Leave free space for opening the removable panel and for removal of the main components (see section 3.4).
- The outdoor air intake of the building should if possible be put in the northern or eastern side of the building and away from other exhaust outlets like kitchen fan exhausts or laundry room outlets.
- The unit casing is provided with 1 winter condensation drainage.

01384 275771

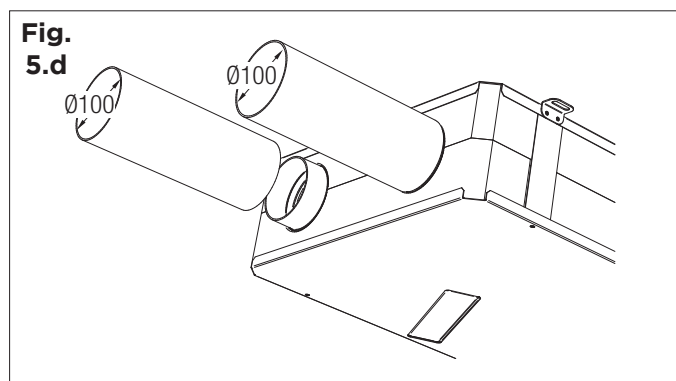
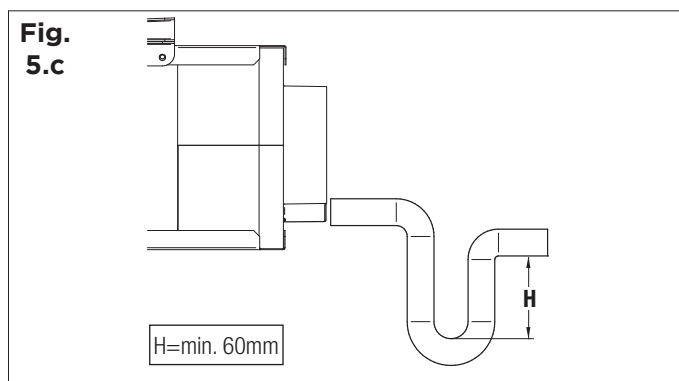
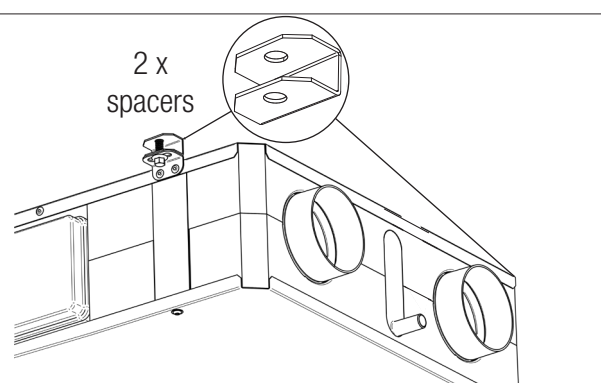
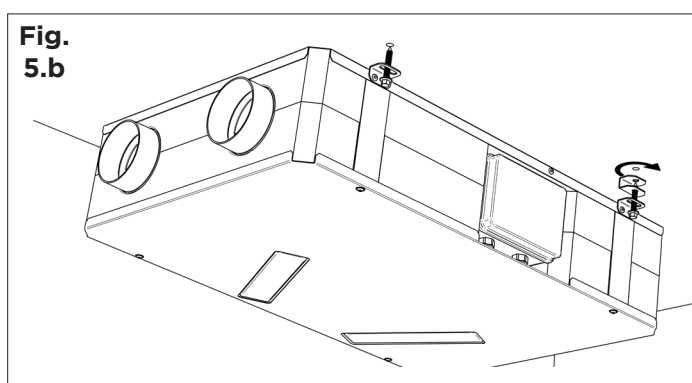
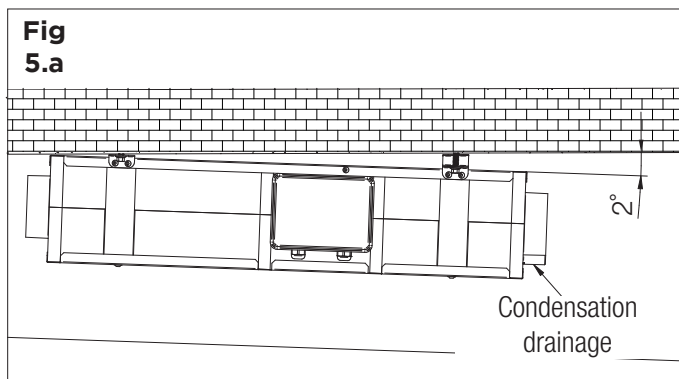
info@eltatrade.co.uk

www.eltatrade.co.uk

5.3.1 CEILING INSTALLATION

The unit must be installed in the following position.

It is important that the unit is mounted with the supplied spacers for condensation drainage to work properly.

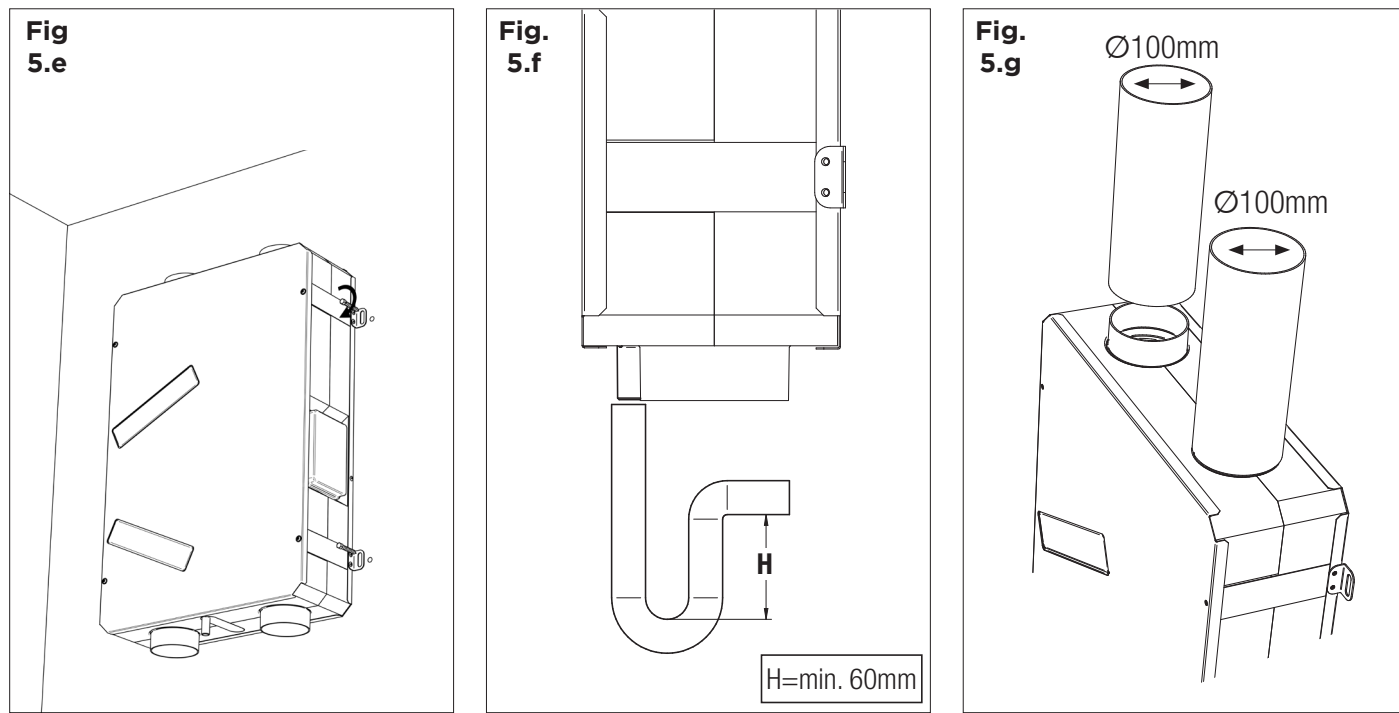


- 5.a Prepare the surface where the unit is to be mounted. Make sure that the surface is flat, levelled and that it supports the weight of the unit. Perform the installation in accordance with local rules and regulations.
- 5.b It is important that the unit is tilted by 2° in order for the condensate drain to function properly: use the spacers supplied which must be mounted on the fixing brackets of the side with the condensate drain.
Use appropriate plugs and rods or screws (not supplied) to fix the unit to the ceiling. It is recommended to fit the unit with anti-vibration mounts (not supplied).
- 5.c Connect the winter condensation drainage (Ø16mm) to the drainage pipe. Make sure of water and air tightness of all connections. It is recommended to use a U-bend (or similar) in the condensation drainage pipe.

- 5.d Connect the unit to the duct system. Make sure that all necessary accessories are used to create a functional ventilation solution. Connect the unit electrically according to section 5.4. Check that it starts up correctly.

5.3.2 Wall installation

The unit must be installed in the following position:



- 5.e Prepare the surface where the unit is to be mounted. Make sure that the surface is flat, levelled and that it supports the weight of the unit. Perform the installation in accordance with local rules and regulations.
- Use appropriate plugs and rods or screws (not supplied) to fix the unit to the ceiling. It is recommended to fit the unit with anti-vibration mounts (not supplied).
- 5.f Connect the winter drain connection (Ø16mm) to the drainage hole. Make sure of water and air tightness of all connections. It is recommended to use a U-bend (or similar) in the condensation drainage pipe.
- 5.g Connect the unit to the duct system. Make sure that all necessary accessories are used to create a functional ventilation solution. Connect the unit electrically according to section 5.4. Check that it starts up correctly.

5.4 Precabled electric connections

WARNING - Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work.

WARNING - The installation and service of the unit and complete ventilation system must be performed by an authorised installer and in accordance with local rules and regulations.

The unit must be earthed.

The unit is wired internally in the factory.

Unit comes pre-wired with:

- Power supply cable (3-core: brown, blue, yellow/green).
- Control cable, for connection to CTRL-V1 supplied (6-core: brown, yellow, white, green, grey, pink).
Factory setting: speed 1 at 40%, speed 2 at 70% and speed 3 at 100%.

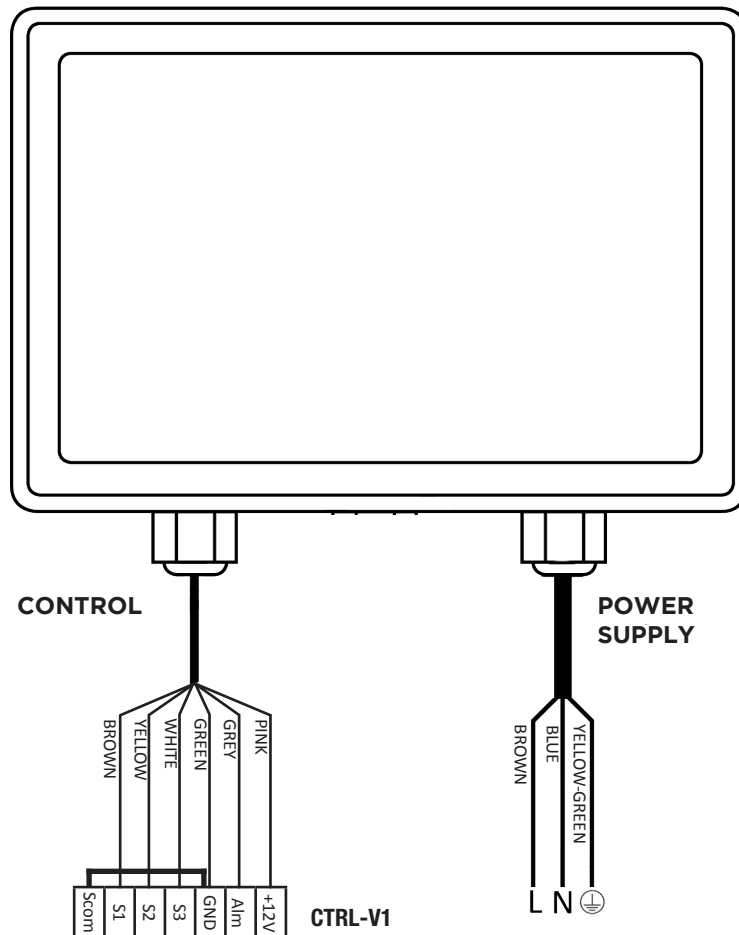


Fig. 5.h Pre-cabling



Fig. 5.i CTRL-V1
(supplied as standard)

5.5 Additional electric connections

WARNING - Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work!

WARNING - The installation and service of the unit and complete ventilation system must be performed by an authorized installer and in accordance with local rules and regulations.

The unit must be earthed.

The unit is wired internally from factory.

To connect the the CTRL-V1 to the mother board use a 6-core cable: 30m max length.

Figures below show the wiring diagram.

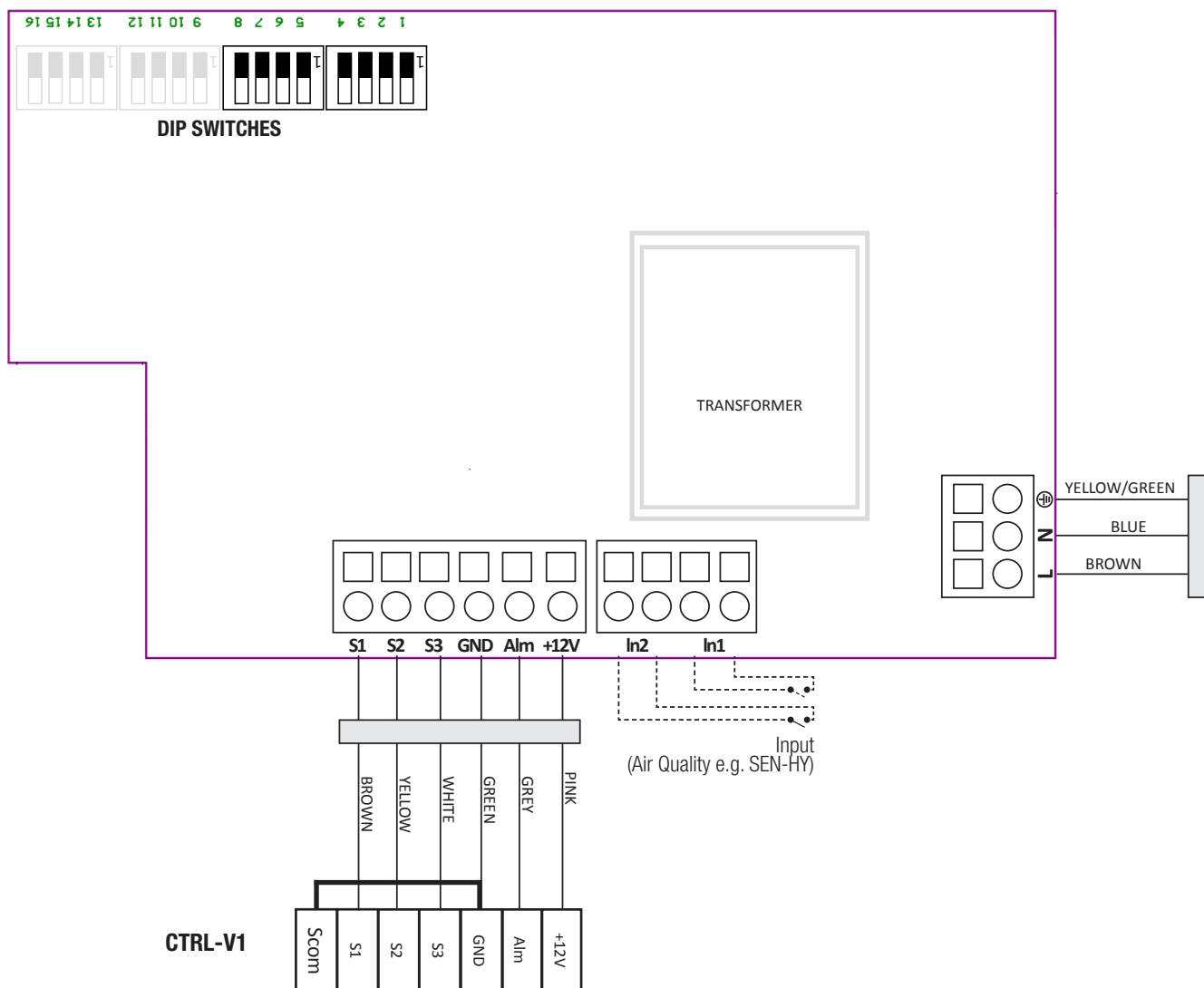


Fig. 5.j Electrical connections on the motherboard fitted in the terminal box.

Inputs/commands

N°1 AC supply connector.

N°2 on/off inputs (volt-free contacts), for ambient sensors (named In1, In2).

N°1 6-pole connector for CTRL-V1.

01384 275771

info@eltatrade.co.uk

www.eltatrade.co.uk

6. COMMISSIONING

6.1 SETTING FAN SPEED

The speed of the unit can be adjusted during installation according to required ventilation rate, by setting the relevant dip switch.

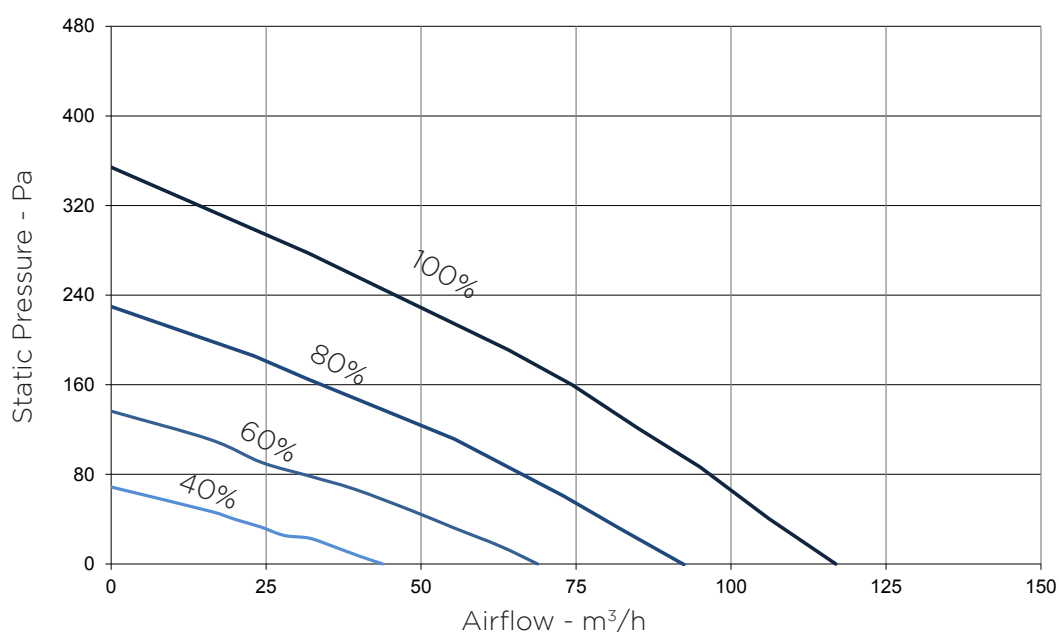
Figure 6. a below shows performance curve at different settings of the 0-10V signal to the motors. Consumption refers to the 2 motors.

Table 6. b indicates the sound level at the different speeds.

DIP1	DIP2	DIP3	Speed I
0	0	0	40%
0	0	1	25%
0	1	0	30%
0	1	1	35%
1	0	0	45%
1	0	1	50%
1	1	0	55%
1	1	1	60%

DIP5	DIP6	DIP7	Speed II
0	0	0	70%
0	0	1	40%
0	1	0	50%
0	1	1	55%
1	0	0	60%
1	0	1	65%
1	1	0	80%
1	1	1	90%

DIP4	Speed III
0	100%
1	95%



Speed %	W max	m³/h max
40	13	48
60	20	71
80	32	96
100	56	114

Fig. 6.a Intake curve according to Reg. 1253/2014 (ErP) and dip switch setting.

Speed 100%	Lw dB - SOUND POWER OCTAVE BAND								LwA dB(A)	Lp dB(A) @3m
	125	250	500	1 K	2 K	4 K	8K	Tot		
	48	52	58	54	47	43	36	61		
Speed 80%	Lw dB - SOUND POWER OCTAVE BAND								LwA dB(A)	Lp dB(A) @3m
	125	250	500	1 K	2 K	4 K	8K	Tot		
	43	52	53	49	42	37	28	57		
Speed 60%	Lw dB - SOUND POWER OCTAVE BAND								LwA dB(A)	Lp dB(A) @3m
	125	250	500	1 K	2 K	4 K	8K	Tot		
	38	46	45	43	36	29	18	50		
Speed 40%	Lw dB - SOUND POWER OCTAVE BAND								LwA dB(A)	Lp dB(A) @3m
	125	250	500	1 K	2 K	4 K	8K	Tot		
	34	40	37	35	26	18	14	43		

Table. 6.b Sound level: dB(A) figures are average spherical free-field, for comparative use only.

6.2 Before Starting the System

When the installation is finished, check that:

- Filters are mounted correctly.
- The unit is installed in accordance with the instructions.
- The unit is correctly wired.
- Eventual outdoor and exhaust air dampers and silencers are installed and that the duct system is correctly connected to the unit.
- All ducts are sufficiently insulated and installed according to local rules and regulations.
- Outdoor air intake is positioned with sufficient distance to pollution sources (kitchen ventilator exhaust, central vacuum system exhaust or similar).
- The unit is correctly set and commissioned.

7. OPERATION

WARNING - Make sure that specific warnings and cautions in 2. "Precautions For Installation, Use & Maintenance" are carefully read, understood and applied.

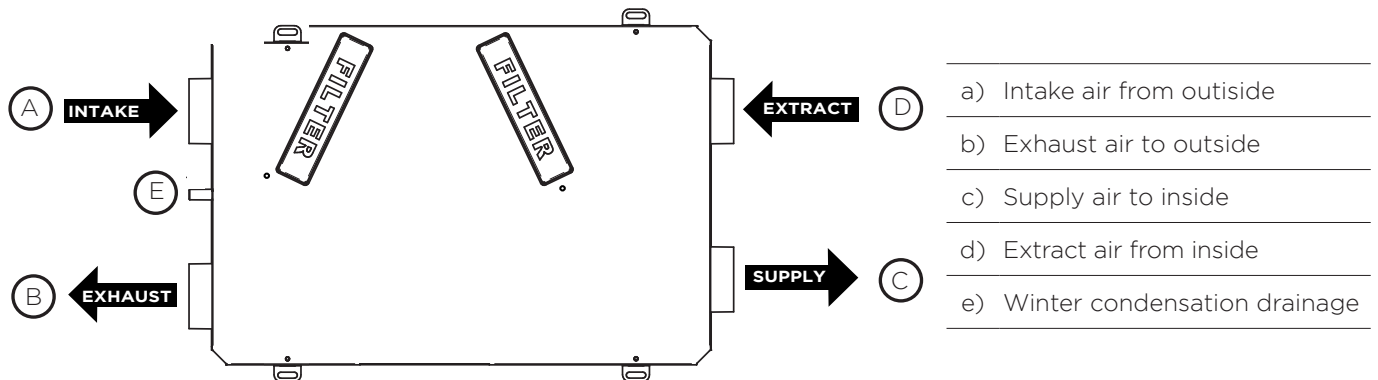


Fig.7.a

7.1 3-Speed operation with CTRL-V1 control panel (supplied as standard)

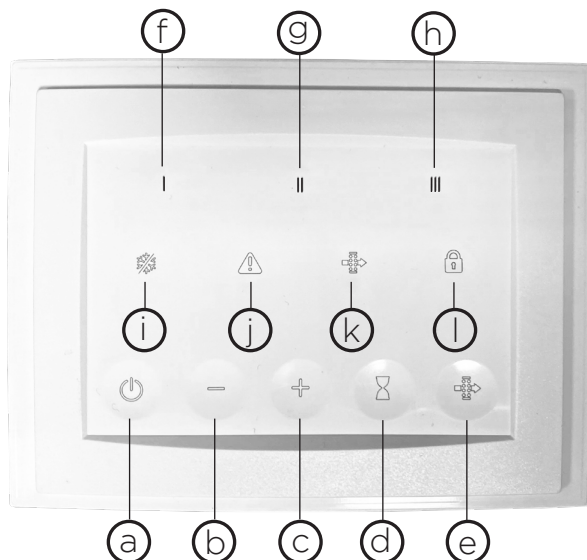









Fig.7.b CTRL-V1

- a) To activate/deactivate the unit
- b) To change the speed
- c) To change the speed
- d) To manually activate the boost function
- e) To reset the filter alarm
- f) Green LED: speed 1 indicator
- g) Green LED: speed 2 indicator
- h) Green LED: speed 3 indicator
- i) Blue LED: anti-frost activation indicator
- j) Red LED: malfunction indicator
- k) Yellow LED: filter maintenance/replacement indicator
- l) Yellow LED: keypad lock indicator

FUNCTIONALITY	DESCRIPTION	TOUCH BUTTON	ICON	LED COLOUR
On/Off	Pressing the touch button, activates/deactivates the unit		-	-
Continuous running speed	Speed I factory set is 40%: if necessary it can be adjusted using the dip switch inside the terminal box as indicated in Fig. 6.a	+ and — to change the speed	I	Green
	Speed II factory set is 70%: if necessary it can be adjusted using the dip switch inside the terminal box as indicated in Fig. 6.a	+ and — to change the speed	II	Green
	Speed III factory set is 100%: if necessary it can be adjusted using the dip switch inside the terminal box as indicated in Fig. 6.a	+ and — to change the speed	III	Green
BOOST	The unit will run at speed III for a fixed period of 15'. At the end of this time, the unit returns to the previously set speed.		III	Green flashing
Filter reset	Every 3 months the controller alerts the user to perform filter maintenance. Press the button for at least 1 second, to reset.			Yellow
Antifrost	The unit is equipped with a thermistor that, when necessary, reduces the speed of the inlet fan to prevent the formation of ice in the exchanger, which would irreparably damage the exchanger itself. When conditions return to normal, the function is automatically deactivated.	-		Blue
Motor anomaly	In case of a motor malfunction, the red LED lights up and you will need to contact technical assistance.	-		Red
Keypad lock	The CTRL-V1 control panel buttons can be blocked. Keep both the + and — buttons pressed for at least 5 seconds. Repeat this operation to unlock.	+ and — (keep pressed for at least 5 seconds)		Yellow

In the absence of alarms, the CTRL-V1 control panel goes into standby mode (no LEDs on) 3 minutes after the last button press.

7.2 Remote Enable

Allows you to activate/deactivate the unit from remote by means of a volt-free contact by connecting the In1 input as per fig.5.j.

To enable this function, use dip switch 8.

DIP8 Remote Enable	
0	disable
1	enable

7.3 Modbus control

The unit can be controlled via Modbus (Modbus RTU over RS485). For specification, contact our customer service.

01384 275771

info@eltatrade.co.uk

www.eltatrade.co.uk

8. MAINTENANCE AND SERVICE

WARNING - Make sure that specific warnings and cautions in 2. "Precautions For Installation, Use & Maintenance" are carefully read, understood and applied.

Maintenance can be carried out by the user.

Service must be performed only by an authorised installer and in accordance with local rules and regulations.

Questions regarding installation, use, maintenance and service of the unit should be answered by your installer or place of purchase.

8.1 Components list

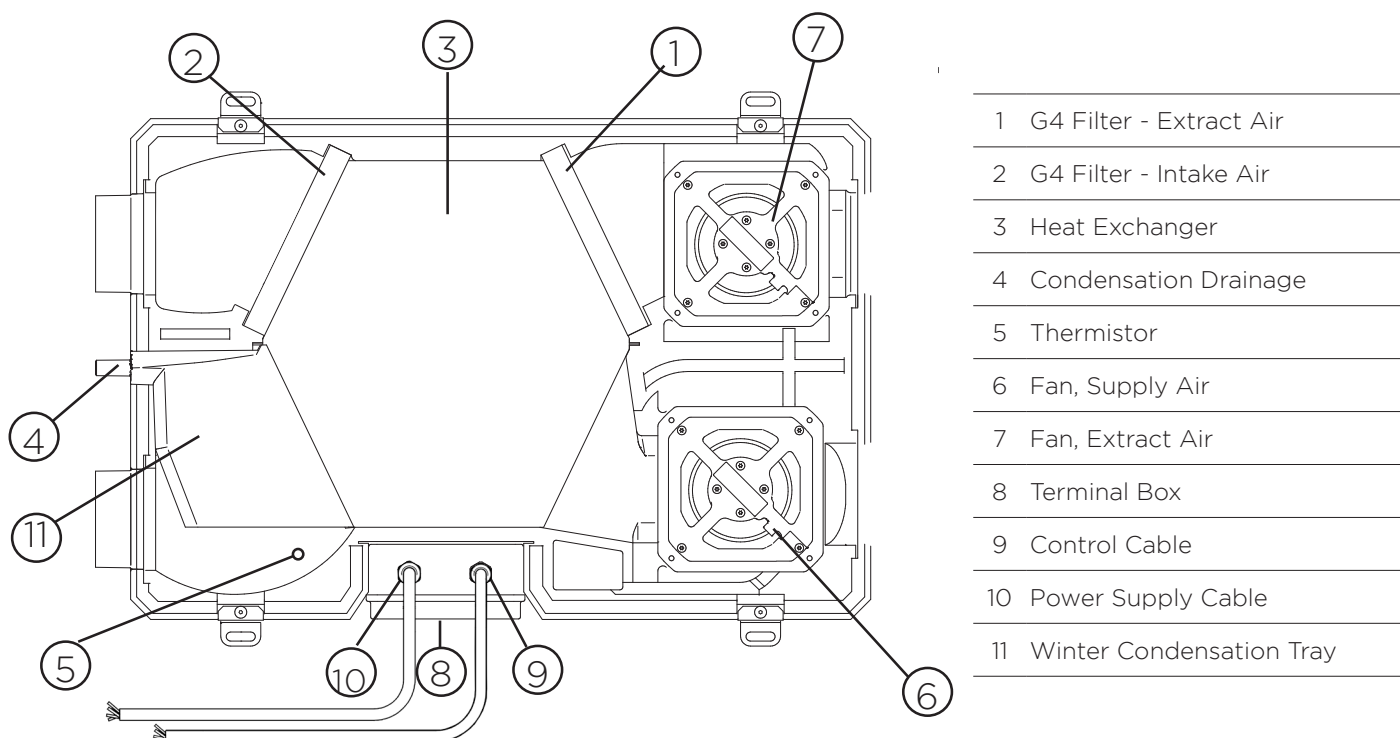


Fig. 8.a Internal components

8.2 Description of Components

Fans

The fans have external rotor motors of EC type which can be steplessly controlled individually between 25-100%. The motor bearings are life time lubricated and maintenance free. It is possible to easily disconnect and replace the fans if necessary.

Filters

The 2 filters are of filter quality G4 for both the intake air and extract air.

The filters need to be cleaned regularly (and replaced when polluted) during maintenance. New sets of filters can be acquired from your installer or wholesaler.

ISO Coarse 60% (G4)

Heat exchanger

The unit is equipped with a counter-flow plate heat exchanger. Supply air temperature is therefore normally maintained without adding additional heat. The heat exchanger is removable for cleaning and maintenance during service.

Condensation drainage

Depending on the relative humidity in the extract air, condensation may occur on the cold surfaces of the heat exchanger.



The condensate water is led out through drainage pipe.

Thermistor

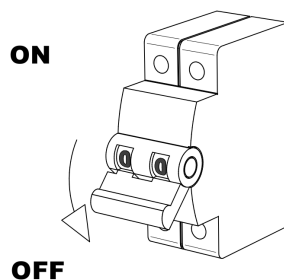
Temperature probe to implement temperature dependent functions.

8.3 Maintenance

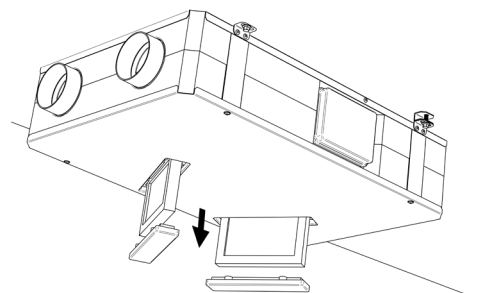
WARNING - Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work.

- Keep the unit surface free from dust.
- Once every 3 months (fixed period), the unit warns the user to perform the filter maintenance (Fig. 7.b - ). The actual need to perform this operation may vary depending on indoor and outdoor ambient conditions.
- Clean the filters every 3 months with a vacuum cleaner (Fig. 8.b-c-d).
- Press the CTRL-V1 button  (Fig. 7.b) to reactivate the filter alarm.
- Replace the filters every year.

**Fig.
8.e**

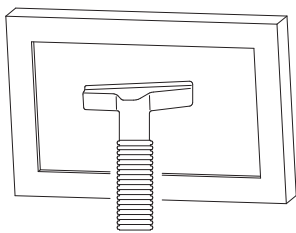


**Fig.
8.f**



Remove the filter cap by means of the supplied bracket.



**Fig.
8.g**



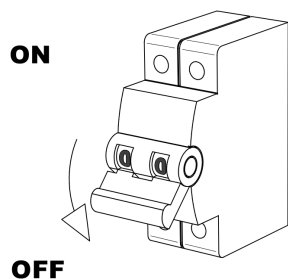
8.4 Service

WARNING - Make sure that the mains supply to the unit is disconnected before performing any installation, service, maintenance or electrical work.

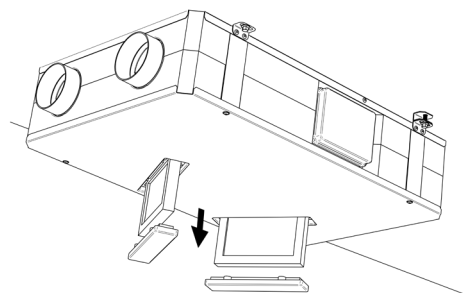
WARNING - The installation and service of the unit and complete ventilation system must be performed by an authorised installer and in accordance with local rules and regulations.

- Keep the unit surface free from dust.
- Once every 3 months (fixed period), the unit warns the user to perform the filter maintenance (Fig. 7.b - ). The actual need to perform this operation may vary depending on indoor and outdoor ambient conditions.
- Clean the filters every 3 months with a vacuum cleaner (Fig. 8.e-f-g).
- Press the CTRL-V1 button  (Fig. 7.b) to reactivate the filter alarm.
- Replace the filters every year.

**Fig.
8.e**

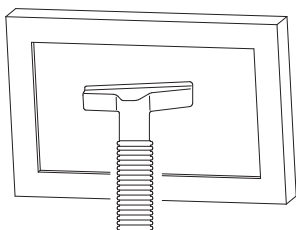


**Fig.
8.f**



Remove the filter cap by means of the supplied bracket.

**Fig.
8.g**

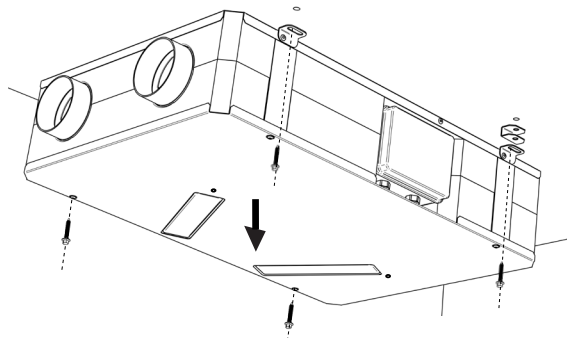


Continued on page 16...

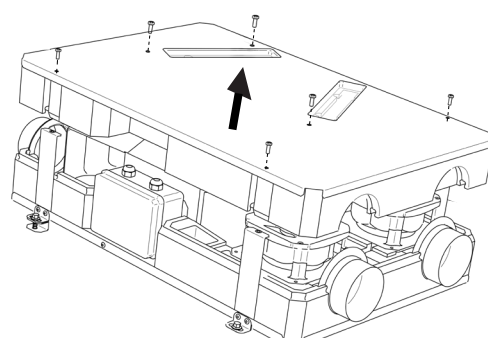
- Clean the heat exchanger every year with a vacuum cleaner. This may differ per situation depending on internal and external environmental conditions and on frequency of filter cleaning (Fig. 8.e-f-h-i-j-k-l).

ATTENTION - after cleaning, ensure the heat exchanger and condensation tray are correctly positioned back in place.

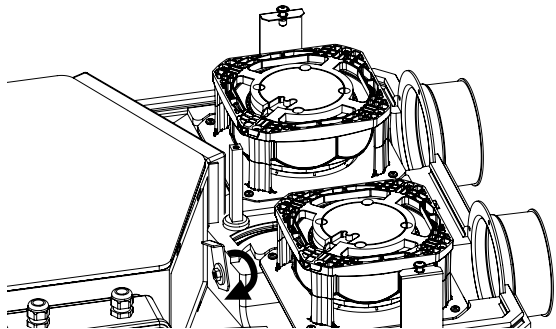
**Fig.
8.h**



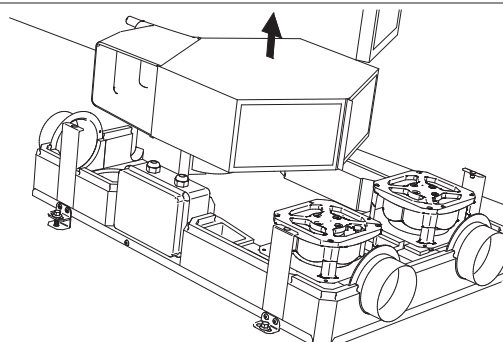
**Fig.
8.i**



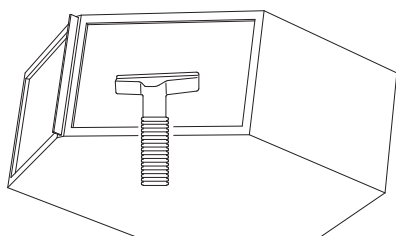
**Fig.
8.j**



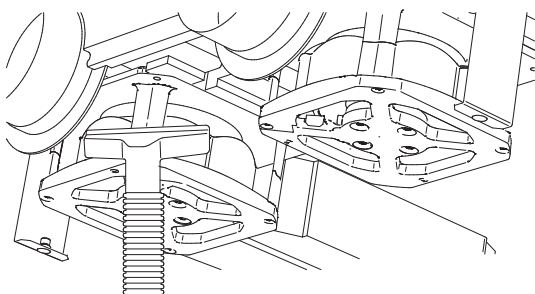
**Fig.
8.k**



**Fig.
8.l**



**Fig.
8.m**



Clean the fans every year with a vacuum cleaner. This may differ per situation depending on internal and external environmental conditions and on frequency of filter cleaning. Do not move the balance clips of the fan (Fig. 8.e-f-h-i-m).

8.5 Troubleshooting

Fans do not start

1. Check that main supply gets to the unit.
2. Check that all connections are working (all connections in terminal box and fast couplings of intake and exhaust air fans).

LED on CTRL-V1 control panel lights on

1. Check paragraph 7

Reduced airflow

1. Check setting of fan speed in the terminal box or control panel.
2. Check filters. Change of filters required?
3. Check diffusers. Cleaning of grilles and diffusers required?
4. Check fans and heat exchange block. Cleaning required?
5. Check if air intake and exhaust have been clogged.
6. Check ducting system for damage and/or dirt accumulation.

Fan noise/vibrations

1. Clean fan impellers. Cleaning required?
2. Check that the fans are firmly in place within the unit.

Excessive air noise

1. Check setting of fan speed in the terminal box or remote controller.
2. Check grilles and diffusers. Re-setting or cleaning of grilles and diffusers required?

Gurgling noise

1. Drain connections have not been installed correctly.
2. Drain connection has a too low water level, fill it up with water.

Unpleasant smell

1. Drain connections have not been installed correctly.
2. Drain connection has a too low water level, fill it up with water.
3. Check filters. Change of filters required?
4. Check ducting system and grilles and diffusers. Cleaning required?

Water leakage near the unit

1. Drain connections have not been installed correctly. Checking necessary?
2. Drain connections are dirty. Cleaning necessary?

ErP DIRECTIVE - REGULATIONS 1253/2014 - 1254/2014

a) Mark	-	ELTA TRADE	
b) Model	-	HAVA120HV	
c) SEC class	-	A	B
c1) SEC warm climates	kWh/m ² .a	10.8	-7.9
c2) SEC average climates	kWh/m ² .a	34.0	-30.6
c3) SEC cold climates	kWh/m ² .a	-70.0	-65.5
Energy label	-	Yes	
d) Unit typology	-	Residential - bidirectional	
e) Type of drive	-	Multi-speed drive	
f) Type of Heat Recovery System	-	Heat recovery	
g) Thermal efficiency of heat recovery	%	79	
h) Maximum flow rate	m ³ /h	91	
i) Electric power input at maximum flow rate	W	56	
j) Sound power level (L _{WA})	dBA	50	
k) Reference flow rate	m ³ /h	64	
l) Reference pressure difference B	Pa	50	
m) Specific power input (SPI)	W/m ³ /h	0.359	
n1) Control factor	-	0.85	1
n2) Control typology	-	Central demand control	Manual control (no DCV)
o1) Maximum internal leakage rate	%	0.9	
o2) Maximum external leakage rate	%	2.8	
p1) Internal mixing rate	%	N/A	
p2) External mixing rate	%	N/A	
q) Visual filter warning	-	Visual filter warning on display	
r) Instructions to install regulated grilles	-	N/A	
s) Internet address for pre/disassembly instructions	-	www.eltatrade.co.uk	
t) Airflow sensitivity to pressure	%	N/A	
u) Indoor/outdoor air tightness	m ³ /h	N/A	
v1) AEC - Annual electricity consumption - warm climates	kWh	3.5	4.5
v2) AEC - Annual electricity consumption - average climates	kWh	4.0	5.0
v3) AEC - Annual electricity consumption - cold climates	kWh	9.4	10.3
w1) AHS - Annual heating saved - warm climates	kWh	19.6	19.1
w2) AHS - Annual heating saved - average climates	kWh	43.3	42.3
w3) AHS - Annual heating saved - cold climates	kWh	84.7	82.7

01384 275771

info@eltatrade.co.uk

www.eltatrade.co.uk

[illegible]

[illegible]

[illegible]



WARRANTY

Our 5 year warranty is provided only to customers who purchased directly from us. If you purchased elsewhere then please contact them directly and they will let you know their warranty procedure. Our warranty covers repair or replacement of defective goods only. It does not cover any labour costs associated with defective product or component removal or installation, nor does it cover the cost of sending goods back to us for inspection. Our warranty is subject to storage, installation, commissioning, inspection and maintenance having been carried out in accordance with our Installation and Maintenance Instructions (supplied with each product) and which are also available to view, save or print from our website.

Scan the QR code or visit **www.eltatrade.co.uk/warranty** to view further warranty information.



DISPOSAL AND RECYCLING

Information on disposal of units at the end of life.

This product complies with EU Directive 2002/96/EC. The symbol of the crossed-out dustbin indicates that this product must be collected separately from other waste at the end of its life. The user must, therefore, dispose of the product in question at suitable electronic and electro-technical waste disposal collection centres, or else send the product back to the retailer when purchasing a new, equivalent type device.

Separate collection of decommissioned equipment for recycling, treatment and environmentally compatible disposal helps to prevent negative effects on the environment and on health and promotes the recycling of the materials that make up the equipment.

Improper disposal of the product by the user may result in administrative sanctions as provided by law.

ELTA >>>
TRADE

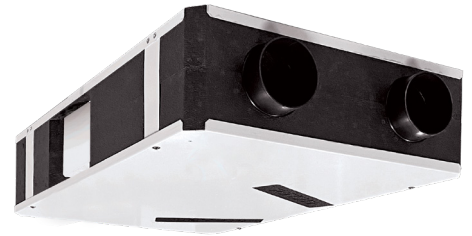
Elta Trade is brought to you by Elta-UK Ltd. 46 Third Avenue,
Kingswinford, West Midlands, DY6 7US. Manufactured in Italy.

01384 275771

info@eltatrade.co.uk

www.eltatrade.co.uk

A MEMBER OF  ELTA
GROUP



HAVA 120HV USER GUIDE

NOTE: The installer should go through the user guide with the home occupants and leave this with them for their reference.

WHAT IS A HAVA?

HAVA is a whole house centralised mechanical ventilation heat recovery unit or MVHR.

HOW DOES IT WORK?

The unit is designed to transfer thermal energy and humidity from extracted humid air from rooms such as kitchens, utility rooms, bathrooms, shower rooms, en-suites and toilets, to warm incoming air into habitable rooms such as bedrooms, living spaces. Please see “fan operation” confirmed by installer.

WHAT ARE THE BENEFITS?

The HAVA can help improve air quality and recover thermal energy within your home for the health and wellbeing of occupants and reduce heating costs.

HOW DO I OPERATE THE FAN?

Your HAVA will have been set up by the Installer to operate in one of a number of ways. The Installer should indicate the method of “Fan operation” by ticking the appropriate box on the back of this sheet.

DOES IT NEED SERVICING?

The fan should be inspected regularly, and cleaning should be carried out as and when required but please note intervals between cleaning should not exceed 12 months.

HOW MUCH DOES IT COST TO RUN?

There are several variables that can determine the annual electrical running costs of HAVA, however, at typical electricity costs as of June 2023, you should expect the fan to cost between £2-3 per year to run under normal conditions.

WHAT IF I THINK THERE IS A PROBLEM WITH THE FAN?

If you are a tenant, please report it to your landlord. If you are not, please contact the company you purchased the fan from.

IMPORTANT NOTE

HAVA fans are designed to run continuously. The power supply to the fan should only be disconnected if a fault is detected or suspected or when the fan is being maintained. Prolonged and/or repeated power interruption can create a health and safety risk and invalidate the fan warranty.



HAVA 120HV USER GUIDE

FAN OPERATION

Installer to tick as appropriate.

- ☐ The unit is supplied with a multi-function control panel for control and convenience, providing:

- 3 speed settings (to be set during installation)
- BOOST option
- Filter reset
- On/off
- Keypad lock
- Anti-frost indicator
- Failure indicator
- Filter replacement indicator

- ☐ The unit is supplied with a multi-function control panel (CTRL-V1) for control and convenience, providing:

- 3 speed settings (to be set during installation)
- BOOST option
- Filter reset
- On/off
- Keypad lock

- Anti-frost indicator
- Failure indicator
- Filter replacement indicator

The unit is also connected to a remote sensor or switch to activate or deactivate the unit. Other (Installer to specify here)

- ☐ The unit is supplied with a multi-function control panel for control and convenience, providing:

- 3 speed settings (to be set during installation)
- BOOST option
- Filter reset
- On/off
- Keypad lock
- Anti-frost indicator
- Failure indicator
- Filter replacement indicator

The unit is remotely controlled via a Building management System.

- ☐ Other (Installer to specify here)



Scan the QR code for product and warranty information.