ELTA TRADE

CE UK CA

HAVA 180H & 340H

Horizontally Mounted Heat Recovery Ventilation Unit

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 instructions contained in this booklet.

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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 condition. 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 double pole switch should be incorporated in the fixed wiring, in accordance with the wiring rules, to provide a full disconnection under overvoltage 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 carried out 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

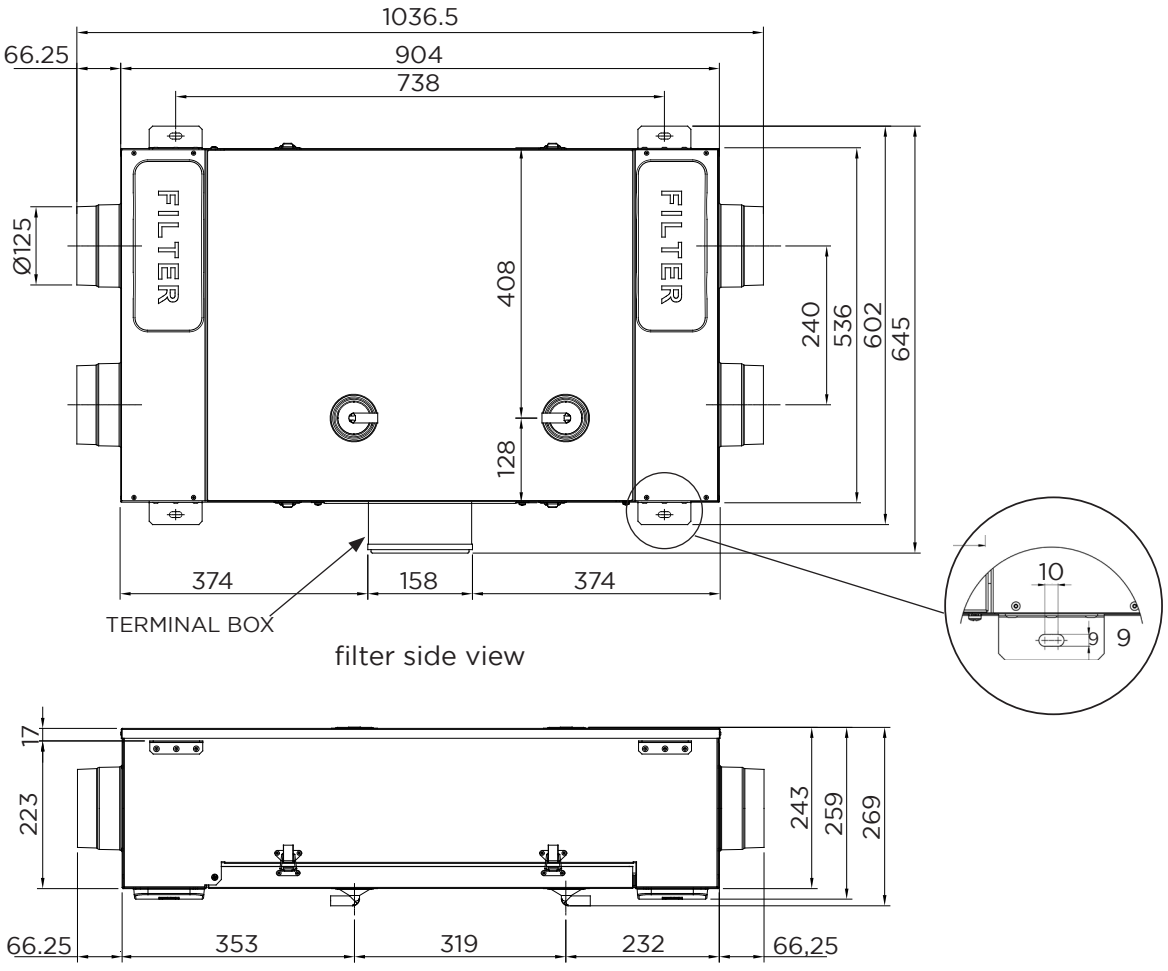
22. Although the mains supply to the unit has been disconnected there is still risk for injury due to rotating parts that have not come to a complete standstill.
23. Beware of sharp edges. Use protective gloves.
24. Use original spare parts only for repairs.

3. PRODUCT INFORMATION

3.1 GENERAL

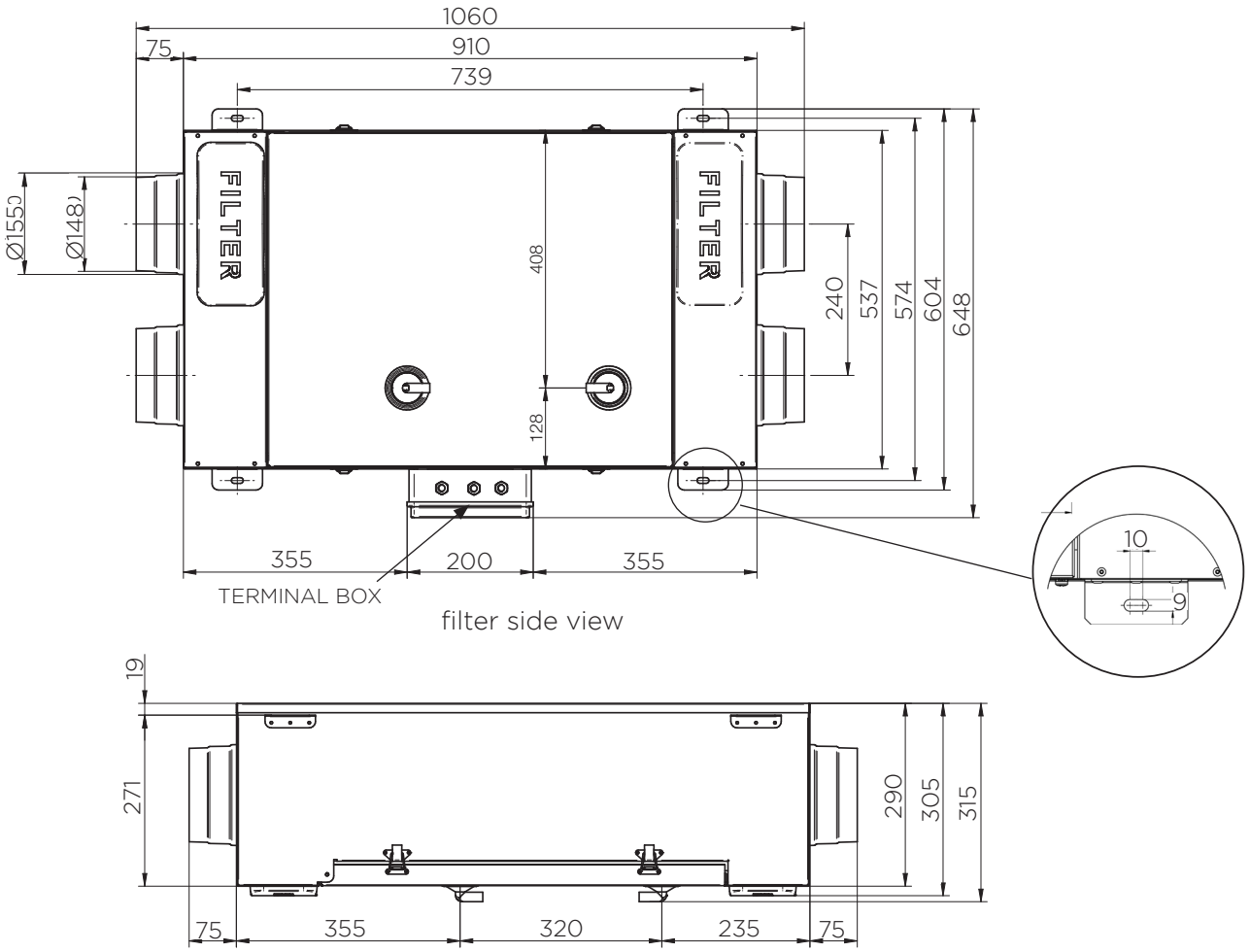
This is the Installation, Use and Maintenance Manual for the HAVA180H and HAVA340H units. This manual consists of basic information and recommendations concerning installation, commissioning, use and service operations to ensure a proper fail-free operation of the unit.
The key to proper, safe and smooth operation of the unit is to read this manual thoroughly, use the unit according to given guidelines and follow all safety requirements. The HAVA180H and HAVA340H units are supplied with the CTRL-DSP remote multifunction control panel as standard. The package also includes 2 condensation elbows and 2 plugs for the water drainage.

3.2 DIMENSIONS & WEIGHT - HAVA180H



Dimensions in mm.

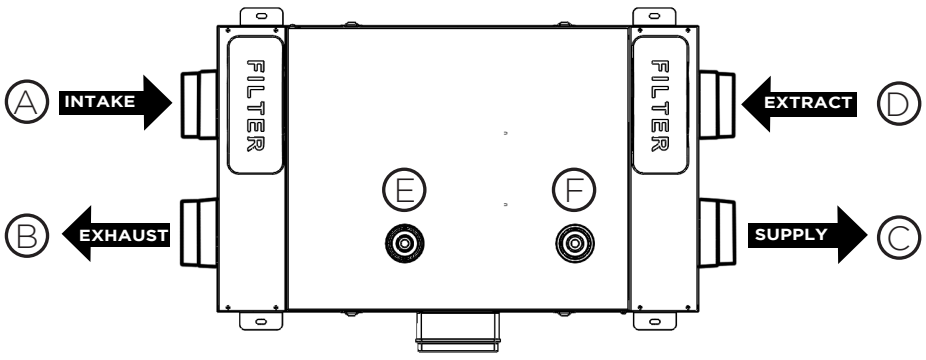
Weight 20kg



Dimensions in mm.

Weight 23.5kg

3.3 DUCT CONNECTIONS



filter side view

a) Intake air from outside
b) Exhaust air to outside
c) Supply air to inside
d) Extract air from inside
e) Winter condensation drainage
f) Summer condensation drainage

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.b Rating Label

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

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

5. INSTALLATION

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.
- The unit must always be mounted horizontally.
- Mount the unit onto flat a surface (ceiling).
- It’s important that the unit is completely levelled before it is put into operation.
- 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.
- 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 2 drainage holes to be used for condensation drainage. Make sure that the not-used hole is tightly closed with the supplied plugs to provide water and air tightness.

5.3 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.

Fig 5.a

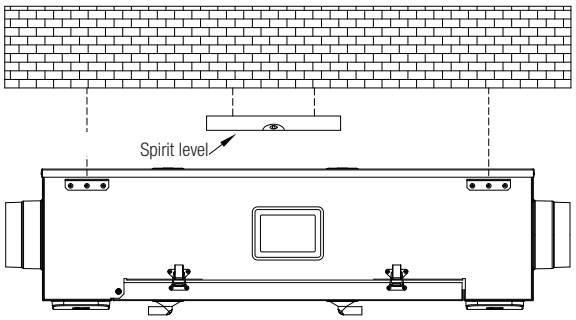


Fig 5.b

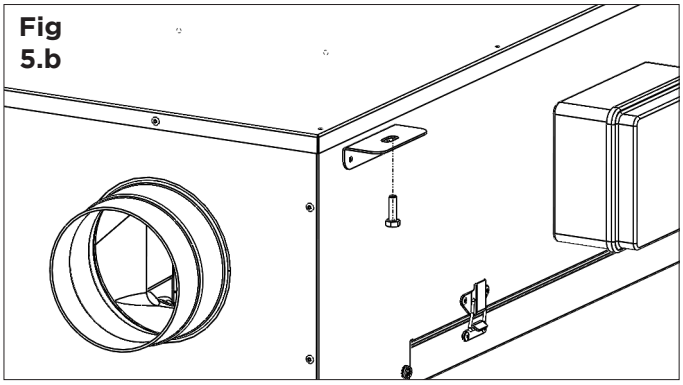


Fig 5.c

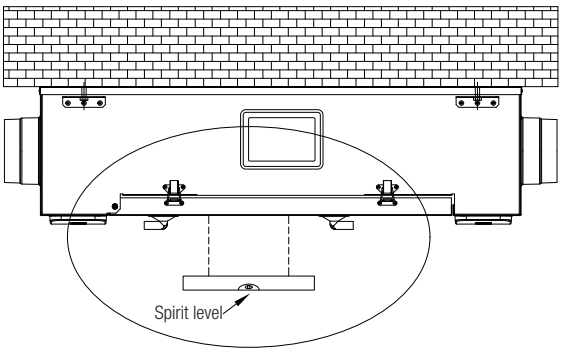


Fig 5.d

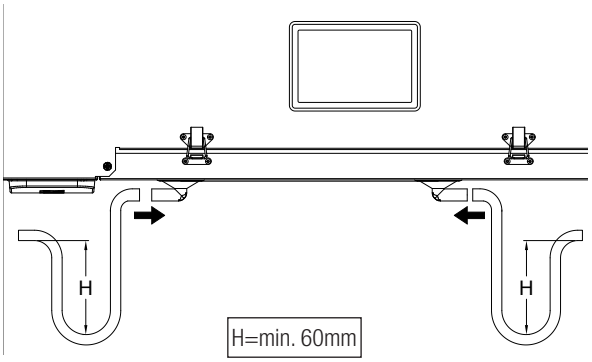
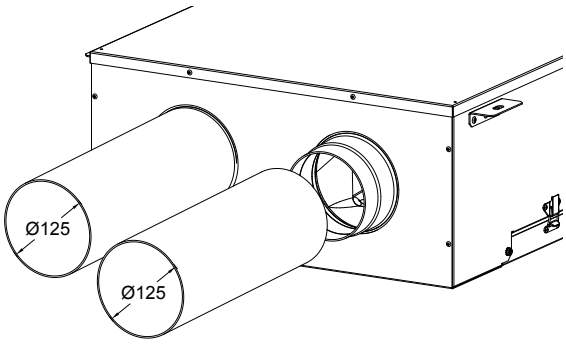
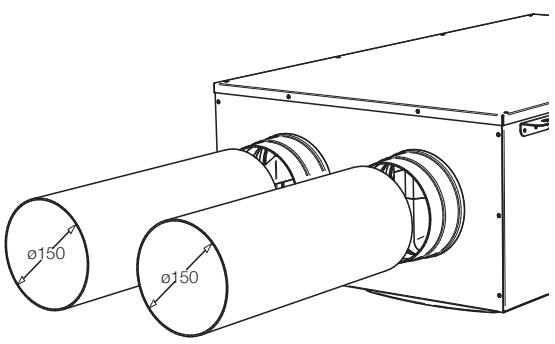


Fig. 5.e



HAVA180H

Fig. 5.f



HAVA340H

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 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 Assure that the unit is completely flat once mounted to the ceiling, for the condensation drainage to function properly.

5.d Connect the condensation elbow(s) to the drainage hole(s) on the access panel: in case close and seal the non-used hole with the supplied plugs (2 plugs each hole). Make sure of water and air tightness of all connections. The condensate drain needs to be connected into a dry trap before it

goes off to waste. This will stop drain smells getting into the system. The condensation pipe connection must be done in a way that makes it easy to remove the access panel for the service operation. It is recommended to use a U-bend (or similar) in the condensation drainage pipe.

5.e 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 PRE-CABLED 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 HAVA180H and HAVA340H are wired internally in the factory.

To connect the the CTRL-DSP to the mother board, use a 4 poles twisted-pair cable: 30m max length.

The unit comes pre-wired with:

- mains supply cable (3-core: brown, blue, yellow/green).
- control cable, for connection to CTRL-DSP (4-core: green, brown, yellow, white).
- cable for connection to remote sensor (2-core: blue, brown).

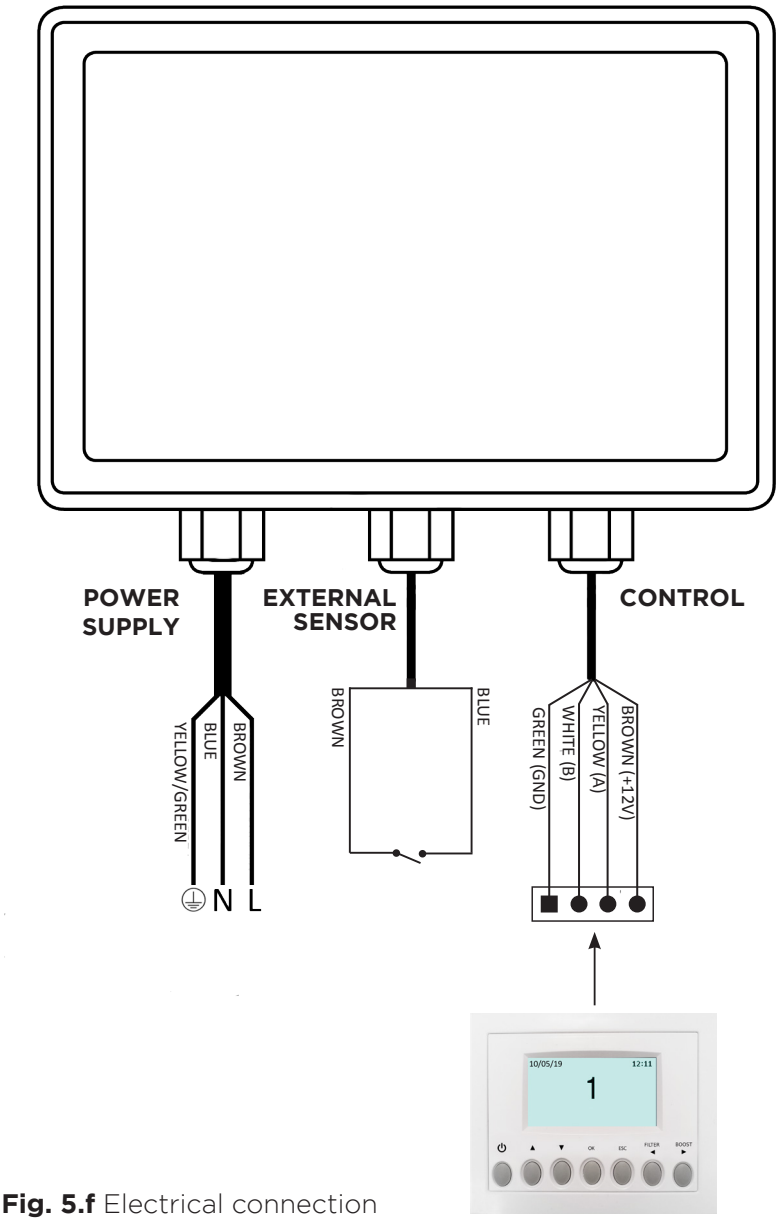


Fig. 5.f Electrical connection

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 authorised installer and in accordance with local rules and regulations.

The unit must be earthed.

The units are wired internally in the factory.

To connect the the CTRL-DSP to the motherboard use a 4 poles twisted-pair cable: 30m max length.

Figures below show the wiring diagram.

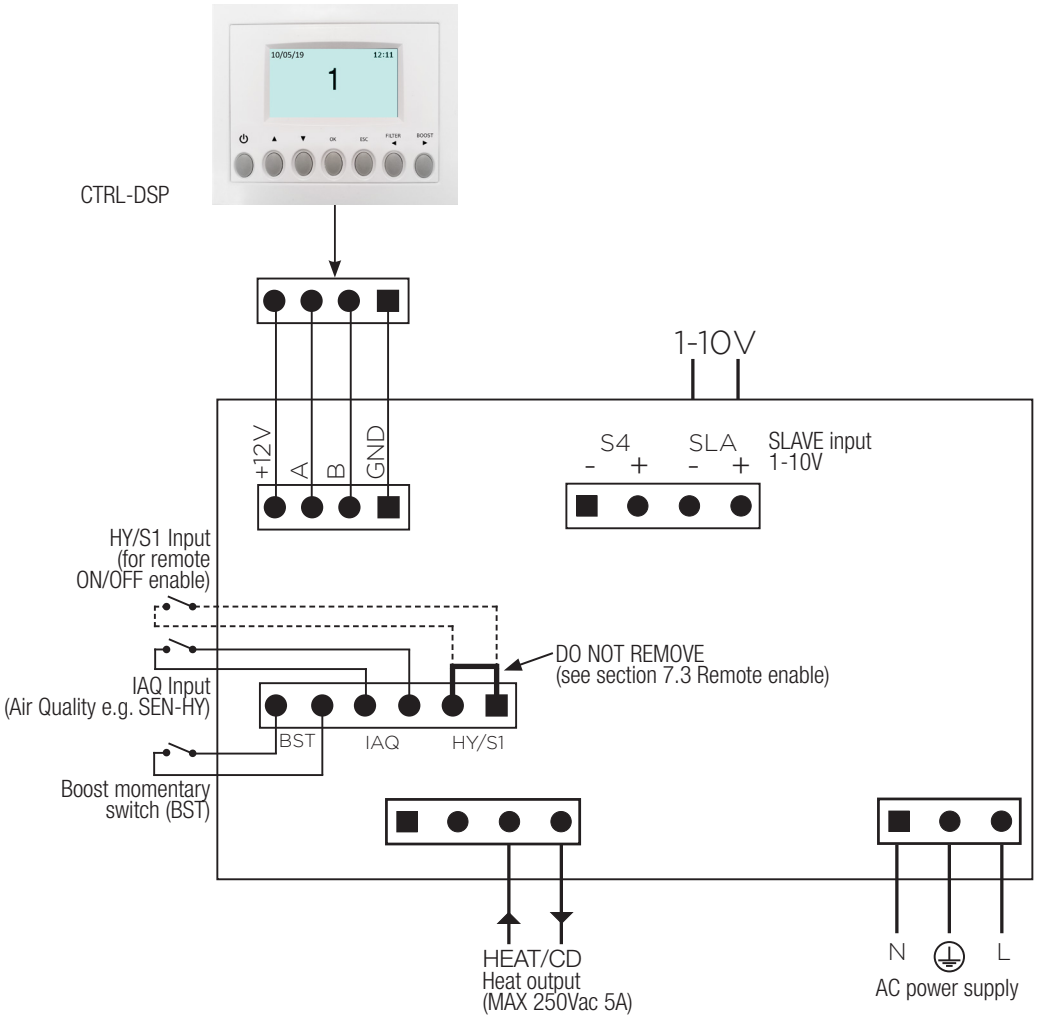


Fig. 5.g Electrical connections on the motherboard fitted in the terminal box.

Inputs/commands
1x AC supply connector.
3x on/off inputs (volt-free contacts), 1x for ambient sensors (named IAQ), 1x for boost momentary switch (named BST) and 1x for remote ON/OFF enable (named HY/S1).
1x 1-10V analogue input (named SLAVE).
1x 4-pole connector for CTRL-DSP (RS485 plus 12Vdc supply).

Outputs
N°1 on/off output for pre-heating/post-heating (relay contact – 250Vac 5A).

6. COMMISSIONING

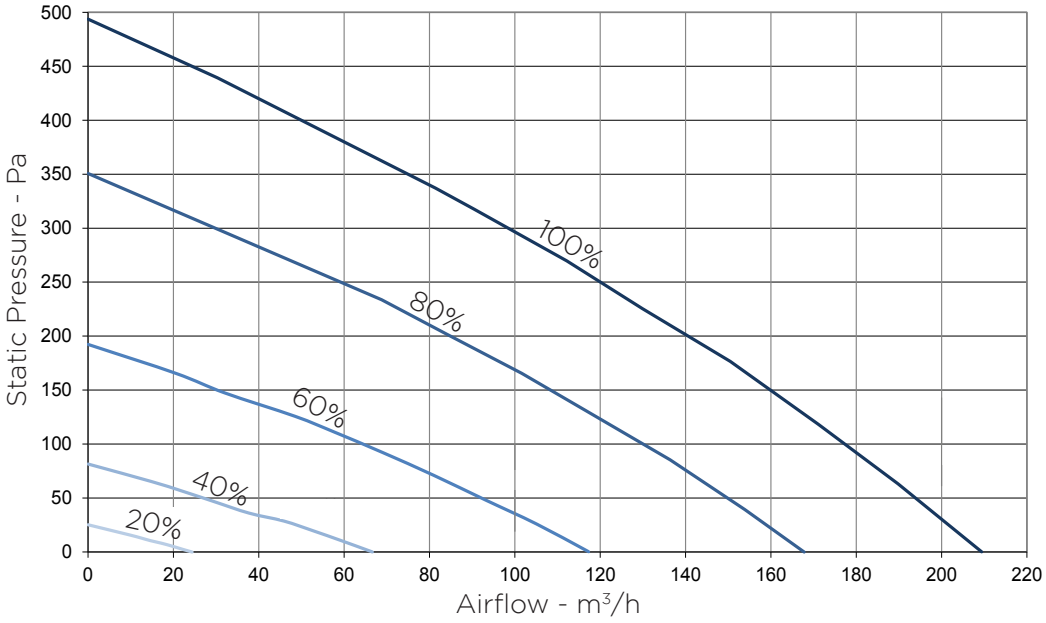
6.1 SETTING FAN SPEED

The speed of the unit can be adjusted during installation according to required ventilation rate.

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

Tables 6.
b+e indicates the efficiency of the heat exchanger and of the condensation produced in different climatic conditions, to help the installer or the designer of the ventilation system to decide if to connect one or both condensation drainages. High production of condensation is the direct consequence of a high efficiency level as well as of the humidity rate.

Tables 6.
c+f indicates the sound level at the different speeds.



Speed %	W max	m³/h max
20	10	24
40	18	67
60	36	117
80	77	178
100	105	209

Fig. 6.a
Intake curve according to Reg. 1253/2014 (ErP).

EXTERNAL		INTERNAL		50 m³/h		100 m³/h		150 m³/h		200 m³/h	
T °C	R. H. %	T °C	R. H. %	η %	H_2O kg/h	η %	H_2O kg/h	η %	H_2O kg/h	η %	H_2O kg/h
-18	60	20	30	94.5	0.16	86.5	0.27	83.3	0.38	77.0	0.46
-18	70	20	40	94.0	0.21	90.8	0.41	86.0	0.58	78.8	0.71
-18	80	20	50	94.1	0.27	89.6	0.52	86.1	0.75	81.6	0.95
-10	60	20	30	94.2	0.10	87.8	0.17	84.9	0.23	81.2	0.28
-10	70	20	40	92.9	0.15	90.6	0.29	85.9	0.40	80.1	0.49
-10	80	20	50	95.4	0.21	91.1	0.40	84.1	0.54	82.2	0.71
0	50	20	30	91.9	0.01	84.0	0.00	79.6	0.00	73.1	0.00
0	60	20	40	93.0	0.06	88.5	0.10	83.0	0.12	79.1	0.12
0	70	20	50	92.8	0.11	87.6	0.19	83.3	0.26	82.2	0.32
10	50	20	40	92.3	0.00	86.0	0.00	80.6	0.00	76.0	0.00
10	60	20	50	92.9	0.00	85.8	0.00	80.7	0.00	76.1	0.00
10	70	20	60	91.8	0.02	86.8	0.03	80.6	0.03	76.4	0.01
35	60	26	50	91.1	0.00	84.8	0.00	77.6	0.00	77.9	0.00
35	70	26	55	93.9	0.04	87.1	0.08	85.3	0.10	76.4	0.10
38	80	26	60	96.2	0.09	90.6	0.17	87.8	0.24	83.2	0.30
40	60	26	50	95.0	0.08	88.2	0.14	87.1	0.18	80.1	0.21

Table. 6.b Thermal efficiency of the heat exchanger and average production of condensation water.

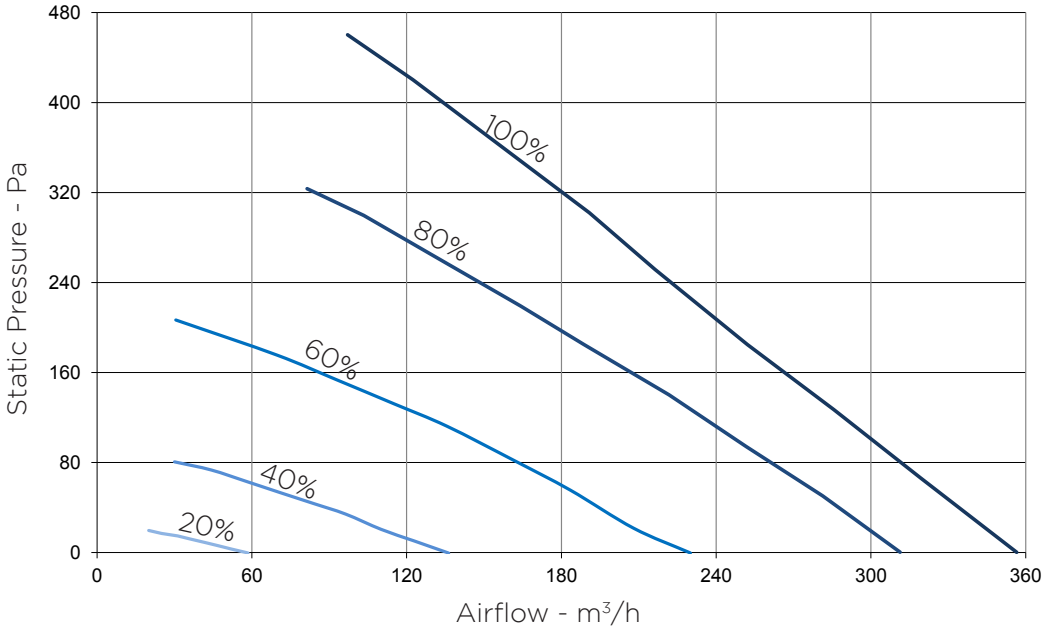
Speed 100%	Lw dB - SOUND POWER OCTAVE BAND									Lp dB(A)
	63	125	250	500	1K	2K	4K	8K	Tot	@3m
Intake	57	62	69	64	58	56	49	46	71	45
Supply	56	62	65	61	55	50	40	31	68	41
Extract	57	61	65	60	55	49	41	32	68	41
Exhaust	59	64	68	62	57	57	54	47	71	44
Breakout	56	61	64	59	58	50	40	35	68	41

Speed 80%	Lw dB - SOUND POWER OCTAVE BAND									Lp dB(A)
	63	125	250	500	1K	2K	4K	8K	Tot	@3m
Intake	55	59	65	60	53	50	44	40	67	41
Supply	55	59	62	57	51	44	35	28	65	37
Extract	55	58	62	55	51	43	35	28	65	37
Exhaust	58	61	65	58	53	52	49	41	68	40
Breakout	55	58	60	55	53	45	35	28	64	37

Speed 60%	Lw dB - SOUND POWER OCTAVE BAND									Lp dB(A)
	63	125	250	500	1K	2K	4K	8K	Tot	@3m
Intake	52	55	61	51	45	42	36	31	63	34
Supply	51	54	56	47	42	37	27	25	59	30
Extract	51	54	57	46	42	35	27	23	60	30
Exhaust	52	57	61	49	45	44	40	32	63	34
Breakout	51	54	55	45	44	37	29	24	59	29

Speed 40%	Lw dB - SOUND POWER OCTAVE BAND									Lp dB(A)
	63	125	250	500	1K	2K	4K	8K	Tot	@3m
Intake	47	50	50	42	35	32	25	22	54	24
Supply	47	48	48	38	33	27	22	20	53	21
Extract	47	49	48	37	33	25	20	20	53	21
Exhaust	49	51	54	40	36	34	28	23	57	26
Breakout	47	48	46	37	34	30	22	19	52	21

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



Speed %	W max	m³/h max
20	10	59
40	23	136
60	55	230
80	113	311
100	170	357

Fig.6.d
Intake curve according to Reg. 1253/2014 (ErP).

EXTERNAL		**INTERNAL**		50 m³/h		100 m³/h		150 m³/h		200 m³/h		250 m³/h		200 m³/h		250 m³/h	
T °C	R. H. %	T °C	R. H. %	η%	H_2O kg/h	η%	H_2O kg/h	η %	H_2O kg/h	η %	H_2O kg/h	η %	H_2O kg/h	η %	H_2O kg/h	η %	H_2O kg/h
-18	60	20	30	93.1	0.15	89.1	0.28	85.7	0.39	82.8	0.49	80.6	0.58	79.1	0.66	78.2	0.76
-18	70	20	40	94.0	0.21	90.5	0.41	87.6	0.59	85.2	0.75	83.4	0.91	82.1	1.07	81.4	1.23
-18	80	20	50	94.8	0.28	91.8	0.53	89.3	0.78	87.3	1.01	85.7	1.24	84.7	1.46	84.1	1.69
-10	60	20	30	92.6	0.09	88.2	0.16	84.4	0.21	81.1	0.25	78.5	0.27	76.7	0.30	75.6	0.33
-10	70	20	40	93.7	0.15	90.0	0.28	86.8	0.40	84.2	0.50	82.1	0.59	80.6	0.68	79.8	0.78
-10	80	20	50	94.6	0.21	91.5	0.40	88.9	0.57	86.7	0.73	85.0	0.89	83.8	1.05	83.2	1.21
0	50	20	30	90.7	0.00	85.5	0.00	81.1	0.00	77.6	0.00	74.9	0.00	73.1	0.00	72.1	0.00
0	60	20	40	92.3	0.05	87.7	0.08	83.4	0.10	79.7	0.09	76.6	0.08	74.3	0.06	72.9	0.05
0	70	20	50	93.7	0.10	89.9	0.19	86.6	0.25	83.8	0.31	81.6	0.36	80.0	0.41	79.1	0.46
10	50	20	40	90.7	0.00	85.5	0.00	81.1	0.00	77.6	0.00	74.9	0.00	73.1	0.00	72.1	0.00
10	60	20	50	90.7	0.00	85.5	0.00	81.1	0.00	77.6	0.00	74.9	0.00	73.1	0.00	72.1	0.00
10	70	20	60	91.8	0.02	86.5	0.02	81.5	0.01	77.6	0.00	74.9	0.00	73.1	0.00	72.1	0.00
35	60	26	50	90.8	0.00	85.7	0.00	81.4	0.00	77.9	0.00	75.1	0.00	73.2	0.00	72.1	0.00
35	70	26	55	93.5	0.04	89.3	0.07	85.3	0.08	81.6	0.08	78.3	0.07	75.7	0.06	74.0	0.05
35	80	26	60	96.1	0.09	93.8	0.17	91.7	0.25	90.0	0.32	88.6	0.39	87.6	0.45	87.0	0.52
40	60	26	50	93.9	0.08	90.1	0.13	86.5	0.17	83.3	0.19	80.5	0.19	78.3	0.20	76.9	0.20

Table. 6.e Thermal efficiency of the heat exchanger and average production of condensation water.

Speed 100%	Lw dB - SOUND POWER OCTAVE BAND								Lp dB(A)
	125	250	500	1K	2K	4K	8K	Tot	@3m
Breakout	59	59	61	55	55	48	37	66	41

Speed 80%	Lw dB - SOUND POWER OCTAVE BAND								Lp dB(A)
	125	250	500	1K	2K	4K	8K	Tot	@3m
Breakout	56	57	56	51	51	44	32	62	37

Speed 60%	Lw dB - SOUND POWER OCTAVE BAND								Lp dB(A)
	125	250	500	1K	2K	4K	8K	Tot	@3m
Breakout	50	56	48	43	43	35	22	58	31

Speed 40%	Lw dB - SOUND POWER OCTAVE BAND								Lp dB(A)
	125	250	500	1K	2K	4K	8K	Tot	@3m
Breakout	45	48	40	35	32	22	15	50	20

Speed 20%*	Lw dB - SOUND POWER OCTAVE BAND								Lp dB(A)
	125	250	500	1K	2K	4K	8K	Tot	@3m
Breakout	-	-	-	-	-	-	-	-	<9

Table 6.f Sound level: dB(A) figures are average spherical free-field, for comparitive use only.
*measurements comparable with test chamber background noise.

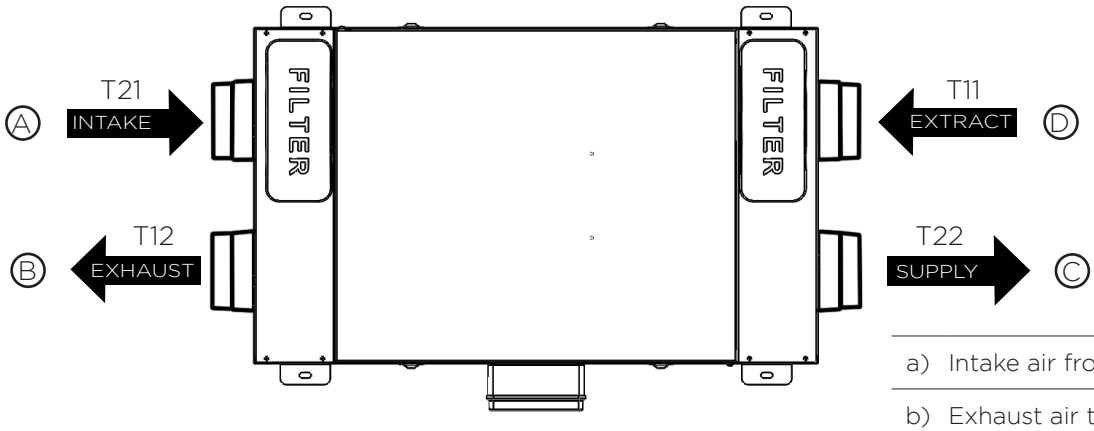
6.2 BEFORE STARTING THE SYSTEM

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.
- Outdoor and exhaust air dampers and silencers are installed and that the duct system is correctly connected to the unit (where installed).
- 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.



a)	Intake air from outiside
b)	Exhaust air to outside
c)	Supply air to inside
d)	Extract air from inside

Fig.7.a Temperature Probes (T11,12,21,& 22)

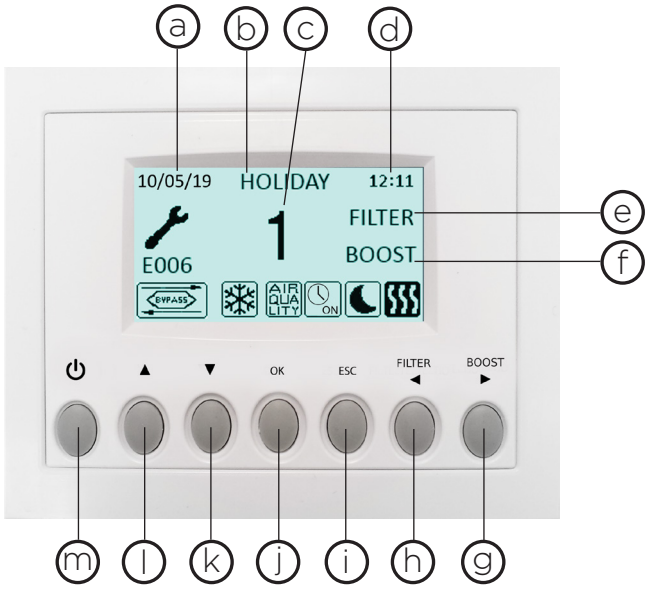


Fig. 7.b CTRL-DSP

a)	Date: shows the current date
b)	Mode: shows the operation mode
c)	SPEED: shows the selected speed
d)	TIME: shows the time
e)	FILTER ALARM: shows that filters need to be maintained/replaced
f)	BOOST: shows that BOOST speed is activated DISABLED: shows that the CTRL-DSP is disabled
g)	BOOST: to manually activate the BOOST speed to move to the right when setting the Weekly Timer
h)	FILTER: to reset the Filter Alarm to move to the left when setting the Weekly Timer
i)	ESC: to exit and go back to the previous menu
j)	OK: to enter the selected menu
k)	to go DOWN with the menu selection
l)	to go UP with the menu selection
m)	to power on/off the ventilation unit

	shows ERROR ALARM (see section 7.3 to check the type of error)
BYPASS	shows that the Bypass is active
	shows that ANTI-FROST is active
AIR QUALITY	shows that the IAQ input is activated (i.e. HY, CO2)
	shows that NIGHT MODE is activated
	shows that Heating output is activated
	shows that the Boost is active
ON	shows that the weekly timer is activated
OFF	shows that the weekly timer is deactivated
	shows that the SLAVE functionality is activated

Some operations can be selected either from the CTRL-DSP buttons or from the menu.

When powered on, the CTRL-DSP displays as follows:

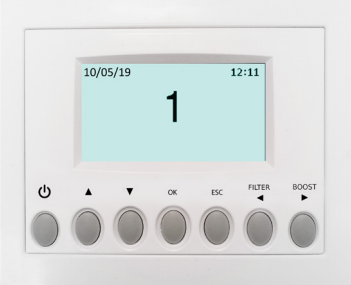


Fig. 7.c CTRL-DSP operation screen

The speed (1-2-3) can be manually changed using ▲ or ▼.

7.1 User Menu on CTRL-DSP

To enter the User Menu press OK or ESC.
To exit the User Menu press ESC or wait for about 60 seconds.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Mode
6 Weekly Timer
7 Installer Menu

Mode selection allows the choice between “Normal Mode” and “Holiday”.
Press OK to enter.
Choose the mode using ▲ or ▼.
Press OK to select.
Press ESC or wait for about 60 seconds to go back to the previous menu.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Mode
6 Weekly Timer
7 Installer Menu

Normal Mode 3V (DEFAULT)
Once powered on, the unit runs at the speed selected during the installation.
The speed number (1-2-3) is displayed on the LCD.
Factory setting (DEFAULT): speed 1.
The speed (1-2-3) can be manually changed using ▲ or ▼.
In case the IAQ sensor input is activated as per Fig. 5.g (e.g. HY or IAQ sensor), the unit speed increases by 15%, and the icon AIR QUALITY is displayed. Once the IAQ input is deactivated, the unit reverts back to selected speed.
In case the Night Mode is activated (- User Menu 5), the sensor logic described above is ignored (the sensors have no effect and the unit runs at speed 1).

Holiday mode
The unit works at Holiday speed, adjusted during the installation. The IAQ sensor logic described above is ignored (the sensors have no effect). The word HOLIDAY is displayed.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Mode
6 Weekly Timer
7 Installer Menu

Allows you to select the maximum speed (BOOST).
Press OK to select.
Choose NO or YES using ▲ or ▼.
Press OK to select and go back to the previous menu.
Factory setting (DEFAULT): NO.

Boost speed can be adjusted during the installation.
Boost speed can be activated if the Mode selection is 3V, Holiday or Slave.
Boost function can be enabled in these ways:
- from the User Menu (2 Boost function).
- pressing the BOOST button on the CTRL-DSP for at least 2 seconds (Fig. 7.b - ⓐ).
- using a remote momentary switch connected to the BST input (Fig. 5.g).
If Boost is active, the icon is displayed and the unit runs at the selected Boost speed, for the duration time set in the User Menu "3 Boost duration"; afterwards the unit reverts to selected speed.

Boost can be deactivated before time only by pressing the BOOST button on the CTRL-DSP for at least 2 seconds (Fig. 7.b - ⓖ).
If the Weekly timer is activated ON the Boost functionality can be activated.
If the Weekly timer is deactivated OFF the Boost functionality cannot be activated.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Mode
6 Weekly Timer
7 Installer Menu

Allows you to set the duration of the Boost speed.
Press OK to select.
Time setting options are 15 - 30 - 45 - 60 minutes.
Increase/decrease the minutes using ▲ or ▼.
Press OK to select and go back to the previous menu.
Factory setting (DEFAULT): 15 minutes.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Mode
6 Weekly Timer
7 Installer Menu

Allows you to reset the Filter Alarm after maintenance/replacement, only when FILTER is displayed (Fig. 7.b - ⓔ).
Timing can be set during the installation.
Factory setting (DEFAULT): 3 months.
Press OK to select and reset.
Press ESC to go back to the previous menu.
FILTER is no longer displayed.
The Filter Alarm can be also reset pressing the FILTER button on the CTRL-DSP (Fig. 7.b - ⓗ).

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Mode
6 Weekly Timer
7 Installer Menu

Allows you to deactivate the automatic operation of the speed increased via remote IAQ sensors: the unit operates at speed 1. When the “end time” is elapsed, the unit returns to operate at the selected speed.
Press OK to select.
Select the submenu item using ▲ or ▼:
1 Enabling: select ON or OFF - Factory setting (DEFAULT): OFF
2 Starting Time: set the time - Factory setting (DEFAULT): 20:00 o’clock (8 p.m.)
3 Ending Timer: set the time - Factory setting (DEFAULT): 08:00 o’clock (8 a.m.)
Change the time using ▲ or ▼: switch from hours to minutes pressing OK.
Press OK to confirm.
Press ESC to go back to the previous menu.

If the Night Mode is activated, the icon is displayed.
If both the Night Mode and the Weekly Timer are activated , the unit speed is the one set in the Weekly Timer program while any remote IAQ sensor is deactivated.
If the Night Mode is activated while the Weekly Timer is deactivated , the unit operates in Night Mode (speed 1 and remote IAQ sensors disabled).
If the user manually changes the speed using ▲ or ▼, or push the BOOST button (Fig. 7.b - ⓖ), the Night Mode is disabled and the icon vanishes.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Modet
6 Weekly Timer
7 Installer Menu

Allows you to set the time slots and the operating speeds throughout the week when the unit is set to Normal Mode 3V.
Press OK to select.
Choose NO or YES using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT): NO.

If “YES” is chosen, pressing OK the Monday time program is displayed.
Change the days using ◀ or ▶.
Press OK to set the daily time program (max 4 time slots).
Switch from hours-minutes-speeds using ◀ or ▶.
Change hours-minutes-speeds using ▲ or ▼.
The daily program can be copied in the following days pressing OK.
Save the setting pressing ESC and then OK.

If the Weekly Timer is activated, the icon 

is displayed.

Note: in the intervals not included in the 

programmed time slots the unit is OFF. The icon is displayed.

In case both the Weekly Timer and the Night Mode need to be used, make reference to the User Menu “5 Night Mode” for more details.
In case both the Weekly Timer and the Boost functionality need to be used, make reference to the User Menu “2 Boost” for more details.

User Menu
1 Mode Selection
2 Boost
3 Boost Duration
4 Reset FILTER Alarm
5 Night Modet
6 Weekly Timer
7 Installer Menu

It allows to select the Installer menu.

Enter installer menu?

Press OK to enter the Installer menu.
Press ESC to go back to the previous menu.

Installer Menu
1 Language
2 Date/time
4 Normal Mode
6 Bypass settings
8 Heating
10 Speed setting
11 Airflow Balancing
12 F7 filter
13 Filter Alarm interval
15 Constant Pressure
17 Periodic purge
18 Working Hours Counter
19 ModBus settings
20 Save settings
21 Load Settings
22 Restore Default Settings
23 Contrast
24 Backlight
25 Debug page

7.2 Installer Menu on CTRL-DSP

The Installer menu can be selected either by selecting point 7 in the User Menu or by pressing OK+ESC for about 7 seconds. To exit the Installer Menu press ESC or wait for about 60 seconds.

Select the menu item using ▲ or ▼.

Installer Menu
1 Language
2 Date/time
4 Normal Mode
6 Bypass settings

Allows you to select one language among English, Italiano, Deutsch, Čeština, Slovenský, Français, Español, Polish, 中国, Magyar and Русский.
Press OK to enter.
Select the language using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT) is: English.

Installer Menu
1 Language
2 Date/time
4 Normal Mode
6 Bypass settings

Allows you to set the date and the time.
Press OK to enter.
Select the item using ▲ or ▼ and press OK.
Set the date and the time using ▲ or ▼and press OK to confirm.
Press ESC to go back to the previous menu.

Installer Menu
1 Language
2 Date/time
4 Normal Mode
6 Bypass settings

Allows you to select one operation among Normal Mode 3V, Slave or Constant Pressure.
Press OK to enter.
Choose the operation mode using ▲ or ▼. Press OK to select.
Factory setting (DEFAULT): 3V

3V Mode
To adjust the speeds, refer to the paragraph “10 Speed setting” in the Installer Menu.

Slave Mode
Allows you to control the speed by means of the 0-10V analogic input: any other operation logic is ignored. If the Slave mode is activated, the icon and the word Slave are displayed.

Constant Pressure Mode
Currently not available.

Installer Menu
1 Language
2 Date/time
4 Normal Mode
6 Bypass settings

Allows you to set the Bypass operation parameters.
Press OK to enter.
Select the submenu item using ▲ or ▼ and press OK to confirm:
1 Desired Temperature: is the ambient temperature desired by the user.
2 Tmax Free Heating: is the maximum allowed outside temperature for free heating operation.
3 Tmin Free Cooling: is the minimum allowed outside temperature for free cooling operation.

The setting ranges are:
Desired Temperature: 15°C - 30°C. Factory setting (DEFAULT): 23°C.
Tmax Free Heating: 25°C - 30°C. Factory setting (DEFAULT): 28°C.
Tmin Free Cooling: 15°C - 20°C. Factory setting (DEFAULT): 18°C.

Increase/decrease the temperature using ▲ or ▼.
Press OK to select.
Press ESC to go back to the previous menu.
If the Bypass functionality is activated, the icon BYPASS is displayed.

Installer Menu
8 Heating
10 Speed setting
11 Airflow Balancing
12 F7 filter
13 Filter Alarm interval

To be selected only in case an external heating element (not supplied with the unit) is used.
Press OK to enter.

"1 Heater"
Press OK to enter.
Choose NO/PRE/POST using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT): NO.

If "NO": the HEAT output (Fig. 5.g) is never activated.

If "PRE": the heater is installed to the "intake air side - T21" (Fig. 7.a) and the HEAT output (Fig. 5.g) is activated.
"2 Heating threshold PRE":
it allows to set the heating threshold.
The setting range is: -20°C - +10°C.
Increase/decrease the temperature using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT): 0°C.
If the heater is activated, the icon is displayed.

If "POST": the heater is installed to the "supply air side T22" or "extract air side T11" (Fig. 7.a); use the submenu "4 POST Temperature input" to select the side. The HEAT output (Fig. 5.g) is activated.
"3 Heating threshold POST":
it allows to set the heating threshold.
The setting range is: +15°C - +25°C.
Increase/decrease the temperature using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT): +20°C.
If the heater is activated, the icon is displayed.

Installer Menu
8 Heating
10 Speed setting
11 Airflow Balancing
12 F7 filter
13 Filter Alarm interval

Allows you to adjust the speeds in Normal Mode 3V, Boost or Holiday.
Press OK to enter.
Choose speed 1, speed 2, speed 3, Boost or Holiday using ▲ or ▼.
Press OK to select.

The setting ranges are:
Speed 1: 20% - 80%. Factory setting (DEFAULT): 40%.
Speed 2: 20% - 90%. Factory setting (DEFAULT): 60%.
Speed 3: 30% - 100%. Factory setting (DEFAULT): 80%.
Boost: Speed 3 - 100%. Factory setting (DEFAULT): 100%.
Holiday: 20% - 40%. Factory setting (DEFAULT): 20%.

Increase/decrease the speed using ▲ or ▼.
Press OK to select.
Press ESC to go back to the previous menu.

Installer Menu
8 Heating
10 Speed setting
11 Airflow Balancing
12 F7 filter
13 Filter Alarm interval

It allows to adjust the balancing of the two airflows.
Press OK to enter.
Select the submenu item using ▲ or ▼: press OK to confirm.

1 Advanced Balancing
Allows you to set the airflow balancing at speed 1-2-3-Boost, in supply and extract, only if the unit operates in Normal Mode 3V.
Choose NO or YES using ▲ or ▼.
Press OK to confirm.
Factory setting (DEFAULT): NO

If “NO”, the submenu “2 Supply Airflow” is displayed.
It allows to adjust the supply airflow against the extract airflow: the selected value is applied to any speed.
The setting range is: -50% - +50%.
Factory setting (DEFAULT): 0%.
Increase/decrease the speed using ▲ or ▼.
Press OK to select.
Press ESC to go back to the previous menu.

If “YES”, new submenu items are displayed which allows to set the airflow balancing for each speed (1-2-3-Boost) and for each motor (supply/extract).
The setting range for any speed is: -50% - +50%.
Factory setting for any speed (DEFAULT): 0%.
Increase/decrease the speed using ▲ or ▼.
Press OK to select.
Press ESC to go back to the previous menu.

Installer Menu
8 Heating
10 Speed setting
11 Airflow Balancing
12 F7 filter
13 Filter Alarm interval

Allows you to select the F7 filter in case the unit is not equipped with it from factory.
The F7 filter should be installed to the “supply air side “T22” (Fig. 7.a).
Press OK to enter.
Choose NO or YES using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT): NO.

HAVA180H & HAVA340H
ISO Coarse 60% (G4)
ISO ePM1 60% (F7)

Installer Menu
8 Heating
10 Speed setting
11 Airflow Balancing
12 F7 filter
13 Filter Alarm interval

Allows you to set the Filter Alarm period: the system has a timer which activates the Filter warning (Fig. 7.b - ⓔ) on the LCD at regular intervals.
Press OK to enter.
Choose among 2-3-4-5-6 months using ▲ or ▼.
Press OK to select.
Factory setting (DEFAULT): 3 months

Installer Menu
15 Constant Pressure
17 Periodic purge
18 Working Hours Counter
19 ModBus settings
20 Save settings

Currently not available.

Installer Menu
15 Constant Pressure
17 Periodic purge
18 Working Hours Counter
19 ModBus settings
20 Save settings

Allows you to activate a short operation cycle of the fans at 100% speed twice in a day.
Press OK to enter.
Choose NO or YES using ▲ or ▼.
Factory setting (DEFAULT): NO.

If “YES” the following submenu items are displayed:
1 Periodic purge length
It allows you to set the purge duration.
Press OK to select.
The setting range is: 1 - 5 minutes.
Increase/decrease the minutes using ▲ or ▼.
Press OK to confirm.
Factory setting (DEFAULT): 2 minutes.

2 Activation time
It allows you to set two times to activate the cycle.
Press OK to select.
Increase/decrease the hours/minutes using ▲ or ▼.
Press OK to switch from hours to minutes.
Press OK to confirm.
Factory setting (DEFAULT): 8 a.m. and 8 p.m.

When activated, the BOOST word Flashes on the LCD (Fig. 7.b - ⓖ).

Press ESC to go back to the previous menu.

Installer Menu
15 Constant Pressure
17 Periodic purge
18 Working Hours Counter
19 ModBus settings
20 Save settings

The system keeps trace of the actual working hours of the unit. This value cannot be changed. Data is saved both on the motherboard and on the control panel CTRL-DSP, to be safe in case of fault.
The counter stops if the unit is powered OFF and if the Weekly Timer is OFF  .
Press OK to enter.
Press ESC to go back to the previous menu.

Installer Menu
15 Constant Pressure
17 Periodic purge
18 Working Hours Counter
19 ModBus settings
20 Save settings

The unit can be controlled via ModBus (ModBus RTU over RS485).

For specification, contact our customer service.

Installer Menu
15 Constant Pressure
17 Periodic purge
18 Working Hours Counter
19 ModBus settings
20 Save settings

Allows you to save the setting of the installation #1 (prototype) in the internal memory of the CTRL-DSP to be loaded afterwards on other units.
Press OK to enter. Choose the position where to save the setting using ▲ or ▼.
Up to 8 different settings can be saved.
Press OK to select.
Press OK to confirm.
Press ESC to go back to the previous menu.

Installer Menu
21 Load Settings
22 Restore Default Settings
23 Contrast
24 Backlight
25 Debug page

Allows you to load the saved setting on the next unit.
Press OK to enter.
Choose the desired saved setting using ▲ or ▼.
Press OK to select.
Press OK to confirm.
Press ESC to go back to the previous menu.

Installer Menu
21 Load Settings
22 Restore Default Settings
23 Contrast
24 Backlight
25 Debug page

Allows you to restore all the factory settings (DEFAULT).
Press OK to enter.
Press OK to confirm.

Installer Menu
21 Load Settings
22 Restore Default Settings
23 Contrast
24 Backlight
25 Debug page

Allows you to set the LCD contrast.
Press OK to enter.
Increase/decrease the contrast using ▲ or ▼.
Press OK to confirm.

Installer Menu
21 Load Settings
22 Restore Default Settings
23 Contrast
24 Backlight
25 Debug page

Allows you to set the LCD contrast.
Press OK to enter.
Increase/decrease the contrast using ▲ or ▼.
Press OK to confirm.

Installer Menu
21 Load Settings
22 Restore Default Settings
23 Contrast
24 Backlight
25 Debug page

This shows the internal functional parameters of the unit.
Press OK to enter.
Press ESC to go back to the previous menu.

7.3 Additional functionalities

REMOTE ENABLE

Allows you to activate/deactivate the unit from remote when the CTRL-DSP is not used (e.g. in case of ModBus). To enable this functionality, connect the HY/S1 input (Fig. 5.g) removing the bridge. With open contact, DISABLED flashes on the LCD (Fig. 7.b - ⓕ).

BYPASS

The HAVA units are equipped with a physical bypass which allows you to mitigate the heat exchange when the indoor and outdoor temperature combinations are such that the heat exchange is not recommended. If activated, the Bypass icon 

is displayed. (Fig. 7.b).

ANTI-FROST

Intake fan speed is reduced during very cold weather in order to prevent ice inside the unit which could damage the heat exchanger. If activated, the ANTI-FROST icon  is displayed (Fig. 7.b).

ERRORS WARNING DISPLAYED ON THE CTRL-DSP

Code error description (Fig. 7b -)

E000 no RS485 connection between the CTRL-DSP and the motherboard
E001 no rotation of the exhaust air fan (Fig. 8.a - 7)
E002 no rotation of the intake air fan (Fig. 8.a - 6)
E003 thermistor T11 broken/disconnected (Fig. 7.a)
E004 thermistor T12 broken/disconnected (Fig. 7.a)
E005 thermistor T21 broken/disconnected (Fig. 7.a)
E006 thermistor T22 broken/disconnected (Fig. 7.a)
E007 alarm BST input
E008 CTRL-DSP internal error

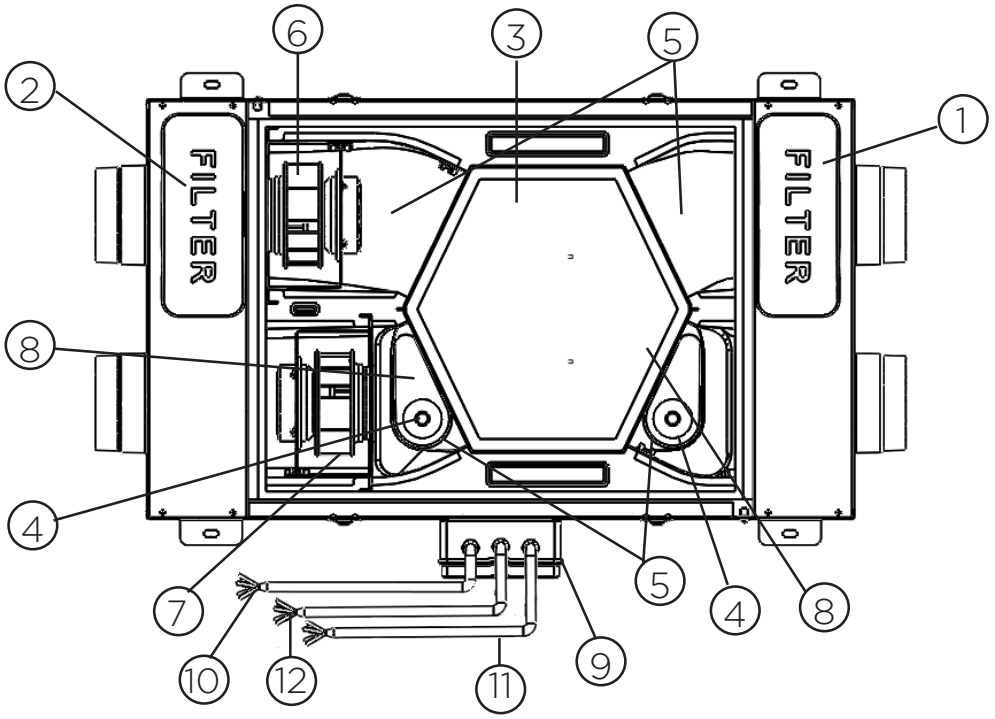
NOTE: If CTRL-DSP is absent (or faulty), the unit operates in the previously set mode.
The Weekly Timer, Night Mode and Filter Alarm functionalities do not work.

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



1	Filter G4, Extract Air
2	Filter G4, Intake Air
3	Heat Exchanger
4	Condensation Drains
5	Thermistors
6	Fan, Intake Air
7	Fan, Exhaust Air
8	Condensation Tray
9	Terminal Box
10	Control Cable
11	Power Supply Cable
12	External Sensor Cable

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 10-100%. 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 G4 filter quality for both the supply air and extract air filters.
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.

Heat exchanger
The unit is equipped with a highly efficient, counter-flow plate heat exchanger. 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, on one side in winter time, on the other side in summer time (Table 6.b).
The condensate water is lead out through drainage pipe.

Thermistors
Temperature probes 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.
- Clean the filters with a vacuum cleaner following the below illustrations (Fig. 8b,c,d+e) when the FILTER signal is displayed on LCD. Their maintenance may differ per situation depending on the internal and external environmental conditions.
- Press FILTER button (Fig. 7.b - Ⓗ) to reset the Filter Alarm.
- Filters must be replaced every year.

Fig. 8.b

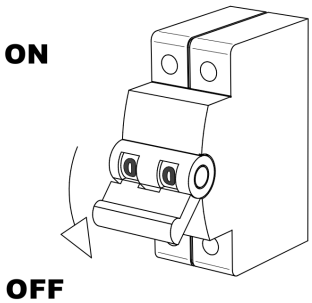


Fig. 8.c

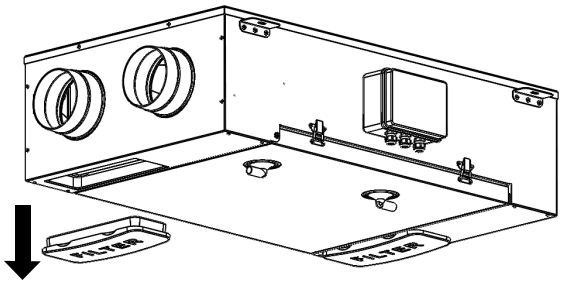


Fig. 8.d

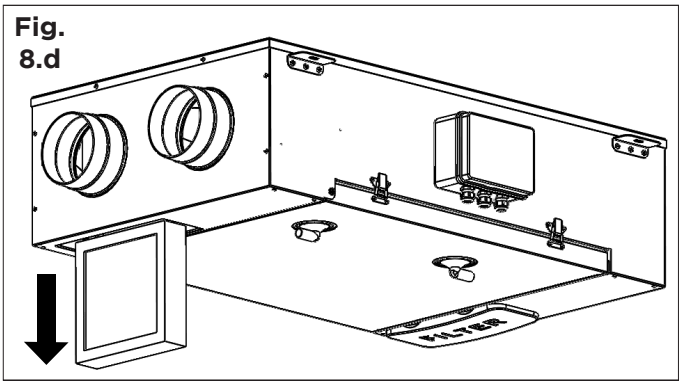
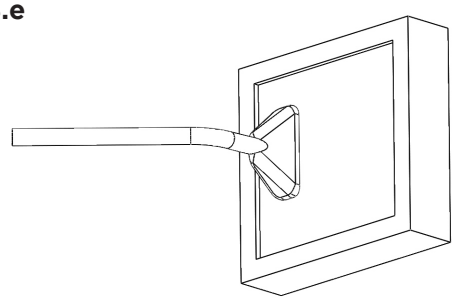


Fig. 8.e



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.
- Clean the filters with a vacuum cleaner following the following illustrations (Fig. 8f,g,h+i) when the FILTER signal is displayed on LCD. Their maintenance may differ per situation depending on the internal and external environmental conditions. Press FILTER button (Fig. 7.b -Ⓗ) to reset the Filter Alarm.
- Filters must be replaced every year.

Fig. 8.f

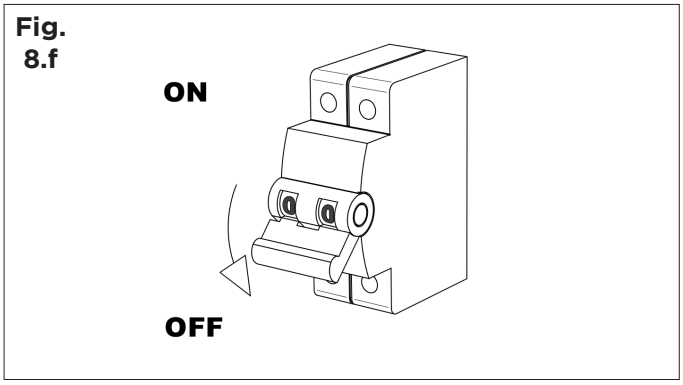


Fig. 8.g

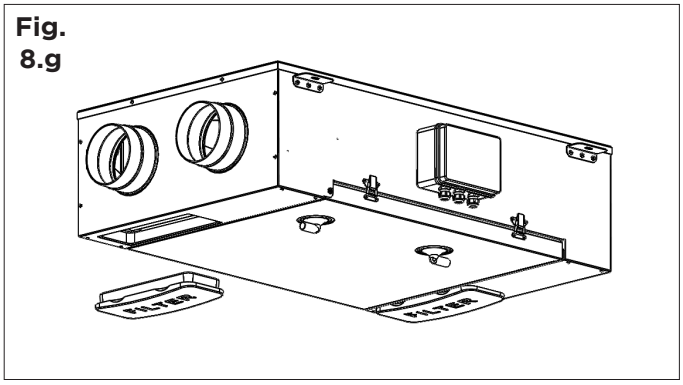


Fig. 8.h

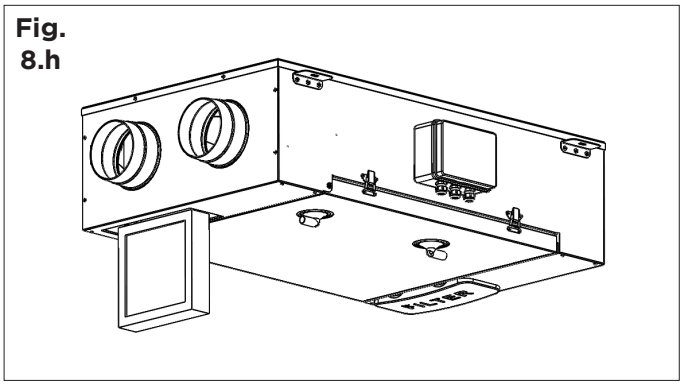
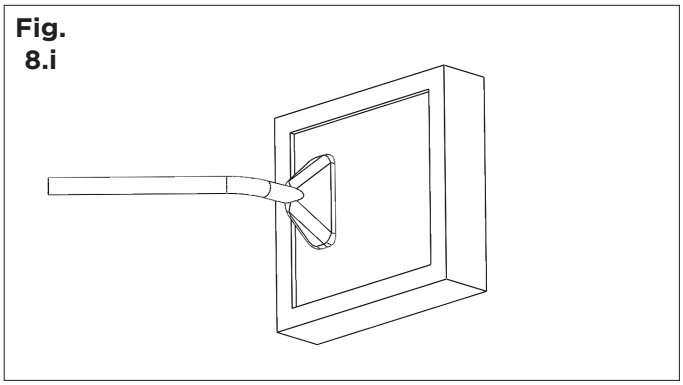


Fig. 8.i



- 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. To remove the heat exchanger unlock the specific bracket by turning the yellow screw (Fig. 8.f,j,k,l,m+n).

Fig. 8.j

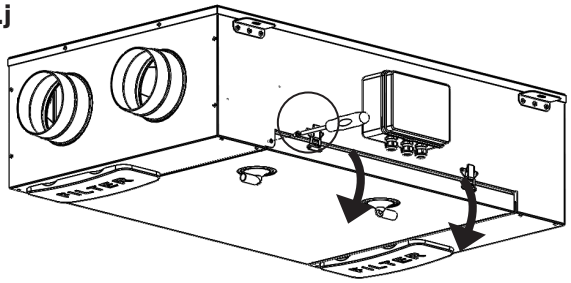


Fig. 8.k

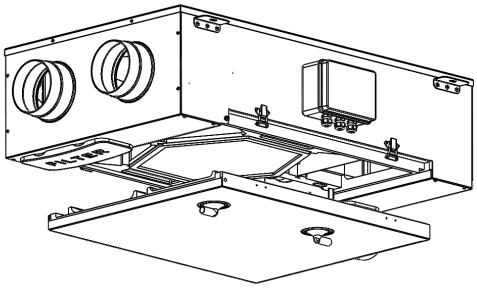


Fig. 8.l

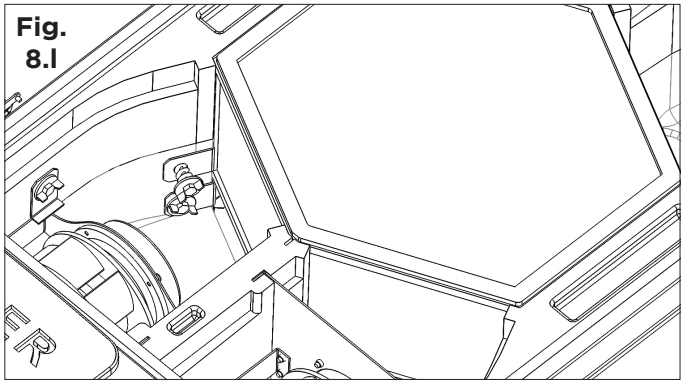


Fig. 8.m

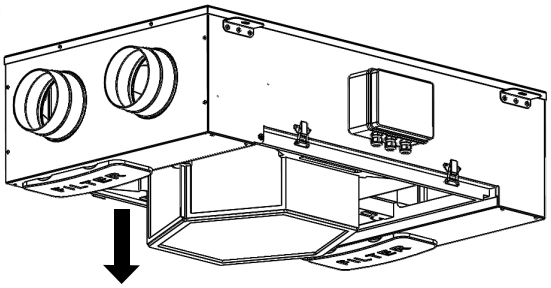


Fig. 8.n

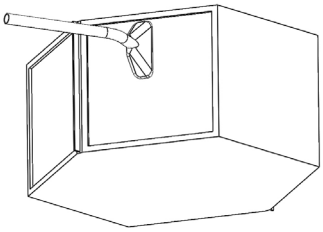
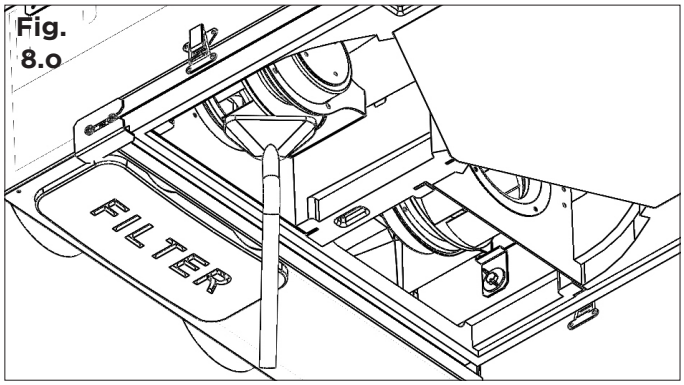


Fig. 8.o



- 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.f,j,k+o).

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).

Reduced airflow

1. Check setting of fan speed on the CTRL-DSP (controller supplied).
2. Check filters. Change of filters required?
3. Check diffusers. Re-setting or 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.
7. Check if Anti-frost icon  is displayed on LCD.

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 on the CTRL-DSP (controller supplied).
2. Check grilles and diffusers. Resetting or cleaning of grilles and diffusers required?

Gurgling noise

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

Unpleasant smell

1. Drain connections have not been installed correctly.
2. Drain connection below the unit 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			ELTA TRADE			
b)	Model	-	**HAVA180H**			**HAVA340H**			
c)	SEC class	-	A	A	B	A	A	B	
c1)	SEC warm climates	kWh/m².a	-15	-10.6	-6.7	-15.8	-12.0	-8.5	
c2)	SEC average climates	kWh/m².a	-39.4	-34.3	-29.9	-40.3	-35.8	-31.4	
c3)	SEC cold climates	kWh/m².a	-77.3	-71.1	-65.9	-83.2	-77.5	-66.8	
	Energy label	-	Yes			Yes			
d)	Unit typology	-	Residential - bidirectional			Residential - bidirectional			
e)	Type of drive	-	Variable speed drive			Variable speed drive			
f)	Type of Heat Recovery System	-	Heat recovery			Heat recovery			
g)	Thermal efficiency of heat recovery	%	82			80			
h)	Maximum flow rate	m³/h	177			300			
i)	Electric power input at maximum flow rate	W	105			170			
j)	Sound power level (L_{WA})	dBA	50			53			
k)	Reference flow rate	m³/h	124			210			
l)	Reference pressure difference B	Pa	50			50			
m)	Specific power input (SPI)	W/m³/h	0.412			0.343			
n1)	Control factor	-	0.65	0.85	1	0.65	0.85	1	
n2)	Control typology	-	Local demand control	Central demand control	Manual control (no DCV)	Local demand control	Central demand control	Manual control (no DCV)	
o1)	Maximum internal leakage rate	%	2.5			2.5			
o2)	Maximum external leakage rate	%	1			1			
p1)	Internal mixing rate	%	N/A			N/A			
p2)	External mixing rate	%	N/A			N/A			
q)	Visual filter warning	-	Visual filter warning on display			Visual filter warning on display			
r)	Instructions to install regulated grilles	-	N/A			N/A			
s)	Internet address for pre/disassembly instructions	-	www.eltatrade.co.uk			www.eltatrade.co.uk			
t)	Airflow sensitivity to pressure	%	N/A			N/A			
u)	Indoor/outdoor air tightness	m³/h	N/A			N/A			
v1)	AEC - Annual electricity consumption - warm climates	kWh	2.2	3.7	5.2	1.8	3.1	4.3	
v2)	AEC - Annual electricity consumption - average climates	kWh	2.6	4.2	5.6	1.8	3.1	4.7	
v3)	AEC - Annual electricity consumption - cold climates	kWh	8.0	9.6	11.0	1.8	3.1	10.1	
w1)	AHS - Annual heating saved - warm climates	kWh	20.5	19.9	19.6	20.3	19.7	19.3	
w2)	AHS - Annual heating saved - average climates	kWh	45.3	44.1	43.2	44.9	43.6	42.6	
w3)	AHS - Annual heating saved - cold climates	kWh	88.5	86.3	84.6	87.8	85.3	83.4	

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.

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info@eltatrade.co.uk
www.eltatrade.co.uk

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HAVA180H/340H 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?

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

HOW DOES IT WORK?

The unit 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.

HAVA180H & 340H USER GUIDE

FAN OPERATION

Installer to tick as appropriate.

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

- 3 speed settings (adjustable).
- Boost option.
- Holiday mode.
- Night mode.
- Weekly timer.
- Bypass setting.
- Airflow balancing.
- Filter replacement and fan failure indicator.
- Working hour counter

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

- 3 speed settings (adjustable).
- Boost option.
- Holiday mode.
- Night mode.
- Weekly timer.
- Bypass setting.
- Airflow balancing.
- Filter replacement and fan failure indicator.
- Working hour counter

The unit is also connected to a remote sensor or switch to activate or deactivate the unit.

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

- 3 speed settings (adjustable).
- Boost option.
- Holiday mode.
- Night mode.
- Weekly timer.
- Bypass setting.
- Airflow balancing.
- Filter replacement and fan failure indicator.
- Working hour counter

The unit is remotely controlled via a Building management System.

☐ Other (Installer to specify here)

_____

Scan the QR code for product and warranty information.

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