envirovent®

SLIMLINE 150
INSTALLATION GUIDE FOR ENGINEER / INSTALLER

UK
CA

Safety

IMPORTANT

Be sure to have read and understood these instructions before beginning the installation process.

PRE-INSTALLATION CHECK LIST

Make sure that the unit can physically fit in to the desired location.

Electrical Connection

The unit requires a continuous electrical power supply. Connection to the fixed wiring must be made outside the unit in a suitable location. The unit must be able to be disconnected from the mains supply after installation. The unit must be earthed and a suitable isolator having a minimum contact separation of 3.0mm must be used to provide isolation for the unit.

The power cable running into the unit must remain the supplied flexible cable. If the power cable becomes damaged, it must be replaced by EnviroVent, an authorised service agent for your region/ country, or a similarly qualified person in order to avoid a hazard. Do not remove or tamper with any electronic components inside the unit.

All wiring must comply with Building Regulations and the current IET Wiring Regulations (BS7671 in the UK) or equivalent standards for other countries. The final installation should be examined and tested by a qualified electrician.

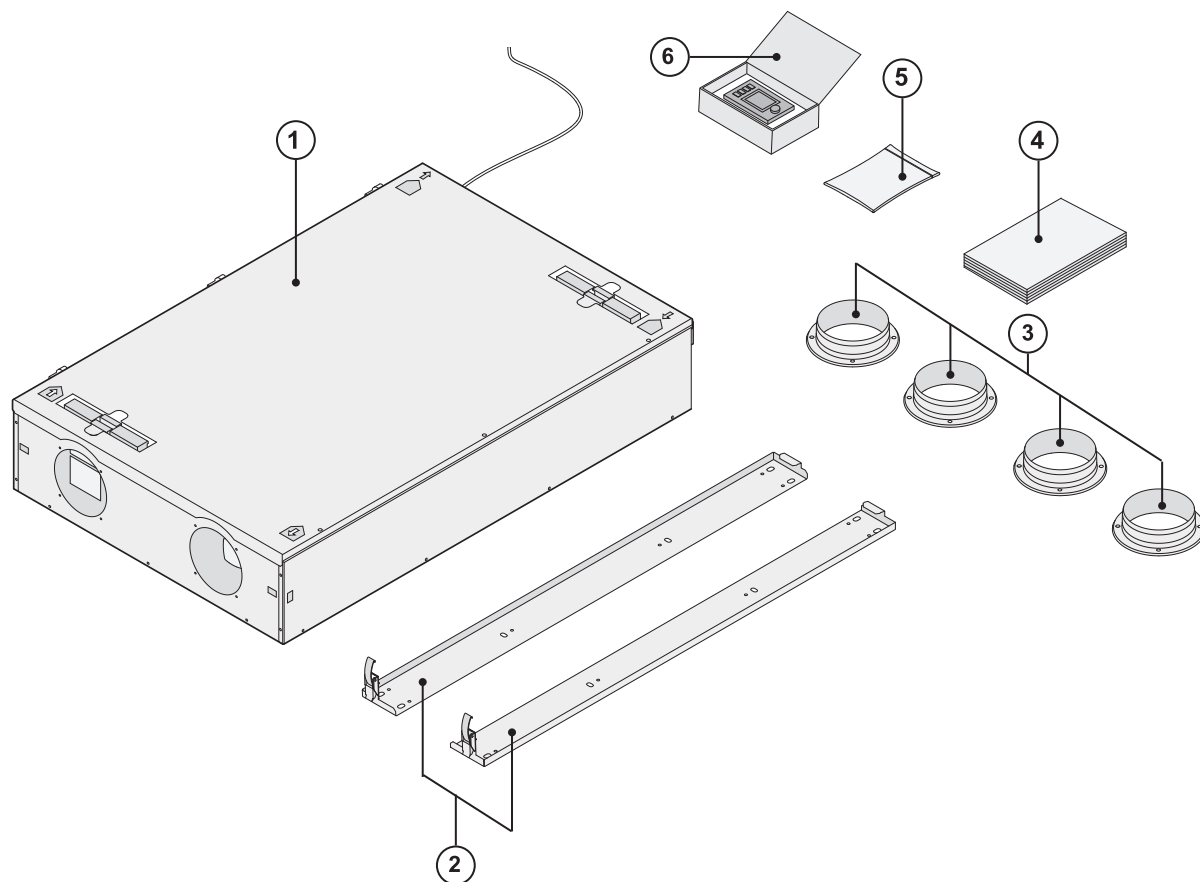This product is not suitable for use with a Type AC RCD $\sim$

SAFETY AND RECOMMENDATIONS

- 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. Cleaning and user maintenance shall not be made by children without supervision.

Installation must take place under:

- Quality requirements ventilation systems dwellings.

- Quality requirements balanced ventilation in dwellings.

- The regulations for ventilation of dwellings and residential buildings.

- The safety regulations for low-voltage installations.

- The regulations for connection to interior sewers in dwellings and residential buildings.

- Any additional regulations of the local utilities.

- The installation instructions for the Slimline 150

Before you begin to install the heat recovery unit, check that it has been supplied complete and undamaged. The Slimline 150 unit should include the following components:

1. Heat recovery appliance

2. Wall mounting bracket kit;   - 2x suspension strips

3. Duct connecting kit;   - 4x collars Ø125 mm

4. Documentation set;   - 1x installation instructions

5. Connecting kit;   - Mounting material collars, including 16 fixing screws

    - Connectors : 2-pole screw connector (eBus) and 9-pole screw connector only for Plus version)

6. Control unit with operating manual (packaged separately)

02 Technical Specifications

The EnviroVent Slimline 150 is a ventilation unit with heat recovery with a maximum ventilation capacity of 150 m^3/h and low-energy fans.

Slimline 150 Features:

- Steplessly adjustable air flow rates through a control unit (supplied with appliance, packaged separately).
- Filter indication on the control unit / multiple switch.
- A completely new intelligent frost protection system. This ensures that even at low outdoor temperatures the appliance's performance remains optimal and that, if necessary, it activates the standard preheater.
- Low sound level
- Comes as standard with automatic bypass valve
- Constant flow control
- Low energy consumption
- High efficiency

Slimline 150 is available in two types:
- Slimline 150
- Slimline 150 Plus

Compared to the Slimline 150, the Slimline 150 Plus has a more extensive control board which increases the connection options.

These installation instructions describe both the standard Slimline 150 and the Slimline 150 Plus.

With the aid of the supplied mounting brackets, the Slimline 150 (Plus) can be mounted either on the wall or on the ceiling. For the correct position of the connection ducts and dimensions see page 6.

When ordering an appliance always state the correct type; subsequent conversion to a different version is highly labour-intensive.

The Slimline 150 comes ready to wire into the 230V mains fused spur.

The settings of the appliance are programmed so the control unit can be used, but connection of a simple 4-way switch is possible as well.

If a 4-way switch is installed instead of a control unit, the settings of the appliance can only be changed with a laptop.

Connecting a combination of control unit and multiple switch is another option.
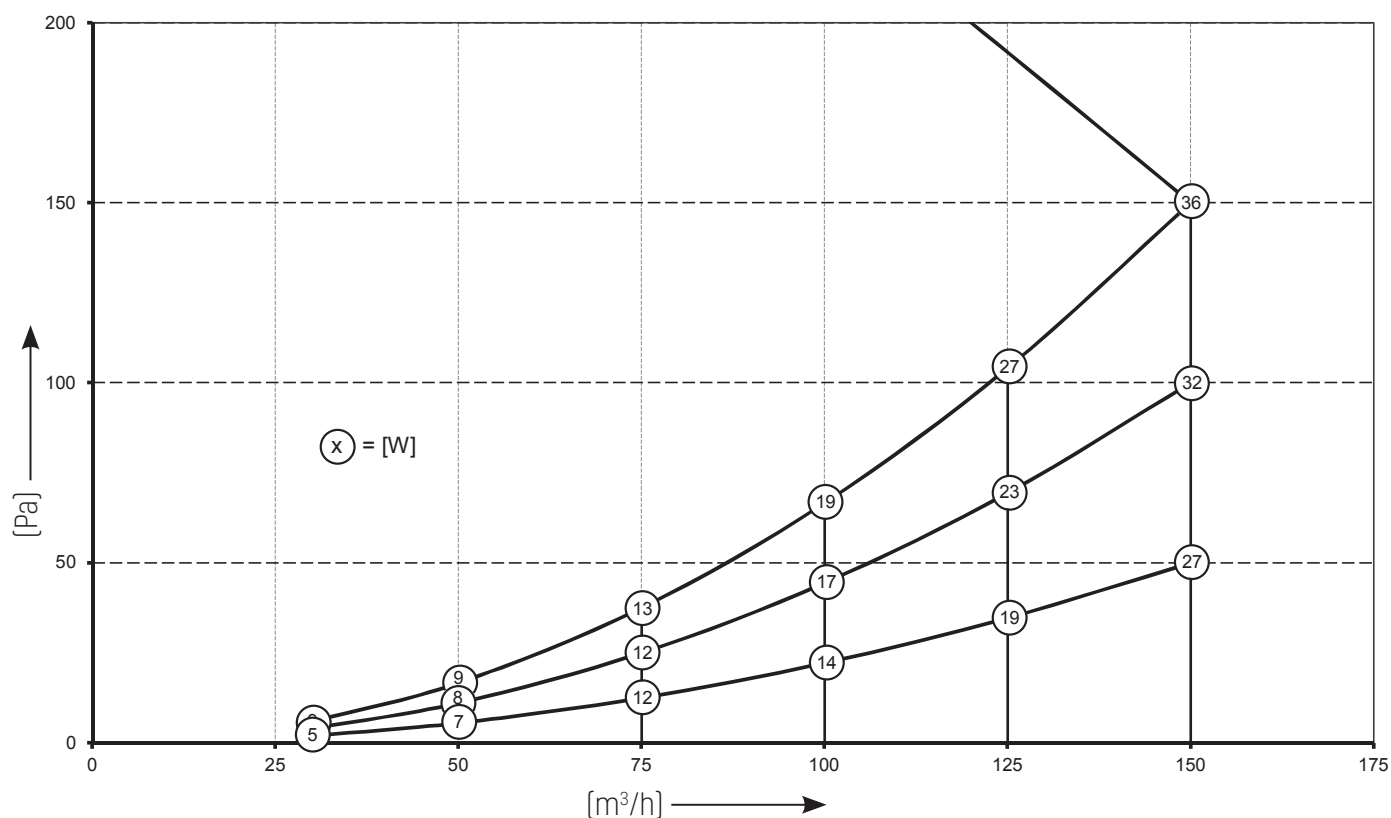
02 Technical Specifications

Supply voltage (V/Hz)	230/50	Protection degree	IP30
Dimensions (w x d x h) (mm)	1000 x 660 x 198	Duct diameter (mm)	Ø125
External discharge	3/4	Weight (kg)	24.5
Filter class	G4/G4 or G4/F7		

Fan factory setting (control unit)					MAX
4-Way switch		1	2	3	
Ventilation capacity (m³/h)	30	75	100	125	150
Permissible resistance ducts system (Pa)	2-6	13-38	22-66	35-105	50-150
Rated power (excl. pre-heater) (W)	11-12	19-27	27-37	38-52	53-72
Rated current (excl. pre-heater) (A)	0.14-0.15	0.20-0.28	0.27-0.35	0.36-0.47	0.49-0.64
Rated current (incl. optional pre-heater) (A)	2.4				
Cos φ	0.34	0.42	0.44-0.47	0.46-0.48	0.47-0.49

Sound Power										
Ventilation capacity (m³/h)		45			75			105		150	
Sound power level Lw [A]	Static pressure (Pa)	10	50	100	25	50	100	50	100	50	100
	Housing emission dB[A]	24	33	39	33	35	40	38	41	44	45
	Duct "from dwelling" dB[A]	27	36	42	34	37	42	40	43	46	47
	Duct "to dwelling" dB[A]	41	49	58	50	53	57	57	60	62	64

Note: In practice, the value may deviate 1 dB[A] as a result of measuring tolerances.

Note: The value stated in the circle is the capacity per fan (in Watt)

1. To dwelling	⬇
2. To atmosphere	⬆
3. From dwelling	⬆
4. From atmosphere	⬇
5. Electric connections	
6. Connection condensate discharge	

02 Technical Specifications

1.	Extract air filter
2.	Indoor temperature sensor
3.	Bypass
4.	Condensate bin
5.	Extract fan
6.	Locking screw front panel (mounted in front panel)
7.	Connector X14
8.	Control board
9.	Connector X4
10.	Condensate discharge
11.	Supply air filter
12.	Preheater
13.	Outdoor temperature sensor
14.	Heat exchanger
15.	Supply fan
16.	Modular connector multiple switch
17.	Service connector
18.	Sleeve low voltage cable
19.	Sleeve cable 230V postheater or extra preheater
20.	Mains cable 230V
21.	9-pole connector (only for Plus version)
22.	Connector eBus
23.	Fall protection front panel

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

The appliance is supplied ready to wire into the fuse spur and operates fully automatically. The extracted indoor air heats up the fresh, clean outdoor air. That saves energy and fresh air is sent to the required rooms.

The control system has four ventilation modes. The air flow rate can be adjusted per ventilation mode. The constant volume control system ensures that the air flow rate of the supply and extract fans is always delivered despite any resistance encountered in the ductwork.

The standard bypass valve 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. In this mode the hot air in the dwelling is replaced by cooler outside air as far as possible.

The bypass valve opens and closes automatically when a number of conditions are satisfied (refer to the table below for bypass conditions).

The operation of the bypass valve can be adjusted in step number 5, step number 6 and step number 7 in the settings menu (see pages 39-41).

To prevent freezing of the heat exchanger at extremely low outdoor temperatures, the Slimline 150 features an intelligent frost control. Temperature sensors measure the temperatures across the heat exchanger and, if necessary, the preheater is switched on. This guarantees a proper ventilation balance, even at very low outdoor temperatures.
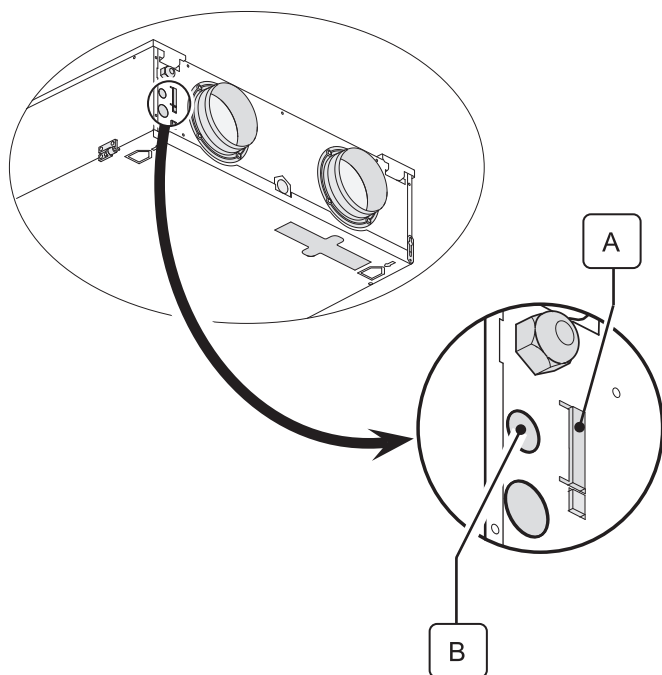
If, with switched on standard preheater(s), the exchanger temperature still starts to drop below zero, stepless unbalance is created in the appliance.

The user information menu shows when the Slimline 150 frost control system is activated (see page 19).

Bypass valve open	-The outdoor temperature is higher than 10°C **and** -The outdoor temperature is lower than the indoor temperature in the dwelling **and** -The temperature in the dwelling is higher than the temperature set at step no.5 in the settings menu (set a standard at 24°C).
Bypass valve closed	-The outdoor temperature is lower than 10°C **or** -The outdoor temperature is higher than the indoor temperature in the dwelling **or** -The temperature from the dwelling is lower than the temperature set at step no. 5 in the settings menu minus the set temperature by the hysteresis (tolerance) (step no. 6), this temperature is factory set at 22°C (24.0°C minus 2.0°C).

02 Technical Specifications

Slimline 150 Plus

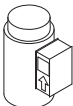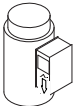| A. 9-pole connector |
|---|
| B. Hole for gland to be mounted by installer (for sleeve cable postheater/ extra preheater). |

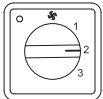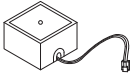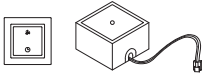The Slimline 150 is also available as a Plus version. This version is equipped with a different control board with 2 additional connectors (X14 & X15) with more connection options for various applications.

Only the Plus is equipped with a 9-pole connector (connected to X15 on control board) that is accessible from the outside of the appliance.

If a postheater or extra preheater is connected to connector X14 (accessible after opening the front panel) the installer must feed the connected 230 Volt cable to outside the appliance through a strain reliever. For this strain reliever (not supplied with the appliance) a plug must be removed from the position where this strain relief must be placed.

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

Electric post-heater		Kit wireless remote control 4 positions (1 transmitter & 1 receiver)	
Electric pre-heater		4-way switch with filter indication; flush mounted; modular connection	
Splitter RJ12		Service tool	
CO_2 sensor, flush mounted eBus or surface mounted 0-10V proportional (PLUS version only)		Slimline 150 Filter kit G4= Coarse 60% f7= ePM1 50%	
RH sensor		Slimline 150 Plus Filter kit G4= Coarse 60% f7= ePM1 50%	
Transmitter wireless remote control 2 positions (with battery)		Please contact EnviroVent for order codes	
Transmitter wireless remote control 4 positions (with battery)			
Receiver wireless remote control (for battery version)			
Kit wireless remote control 2 positions (1 transmitter & 1 receiver)			

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The Slimline 150 can be mounted directly to the wall or ceiling using the mounting brackets supplied for that purpose.

⚠ **Because of the appliance's weight, mounting the appliance must always be done by two people.**

For a vibration-free result the appliance must be mounted to a solid wall with a minimum mass of 200 kg/m². A gypsum block or metal stud wall will not suffice. Additional measures such as double panelling or extra studs are required in that case. In addition, the following aspects must be taken into account.

- The appliance must be placed level; both lengthwise and laterally.
- The installation room must be such that a good condensate discharge with air trap and pitch for condensate can be made.

⚠ **Make sure that under no condition the condensate discharge is installed at a pitch towards the appliance.**

⚠ **The appliance is only suitable for ceiling or wall mounting! Never mount the appliance flat on the floor because of the position of the condensate discharge bin.**

- The installation room must be frost-free.
- When mounting flexible ducts, bear in mind that it must be possible to replace them in due course.
- Make sure there is sufficient free space at the appliance to allow cleaning of the filters and maintaining the appliance. It must be possible to swing the door open.

Ceiling mounting:

At least 70 cm at the underside of the appliance and a free headroom of 1.8 m; if 70 cm free space is not available, for instance when mounting on top of a suspended ceiling, there must be sufficient room to partly open and remove the front panel.

The front panel can be detached after removing a lock screw at the hinge.

Make sure the filters can always be freely removed, so there is no frame or other obstacle at the level of the filters!
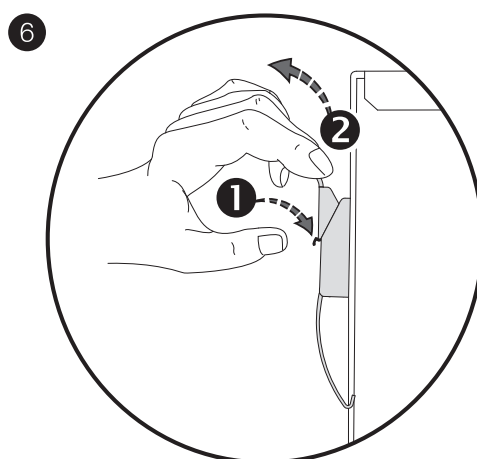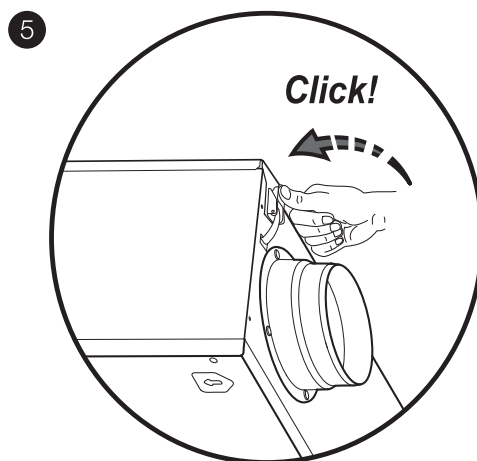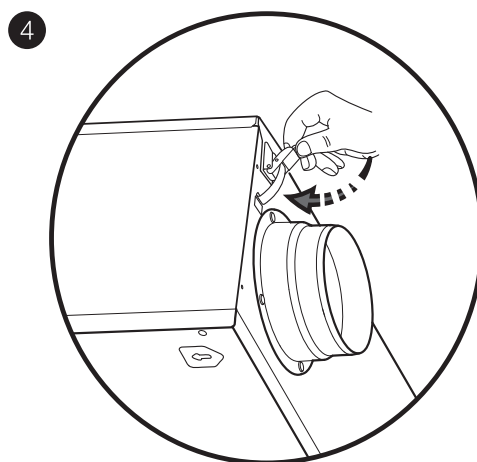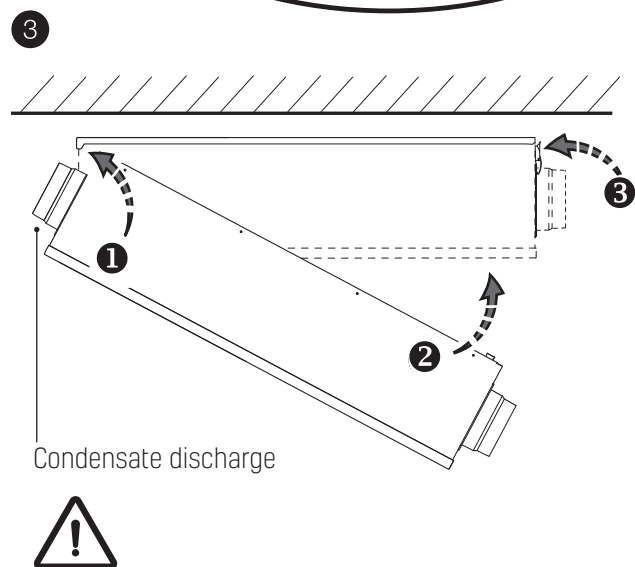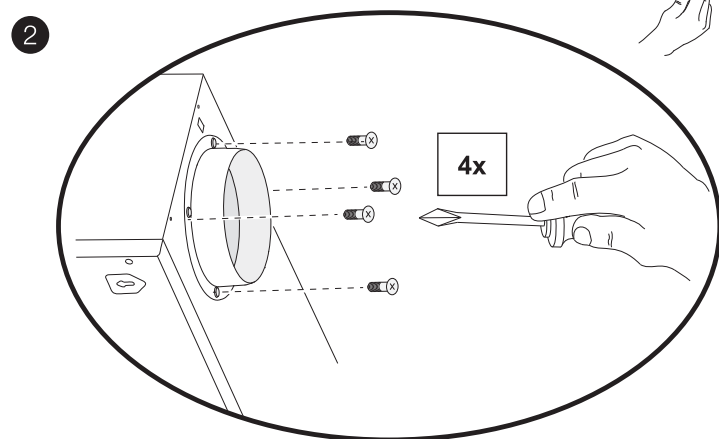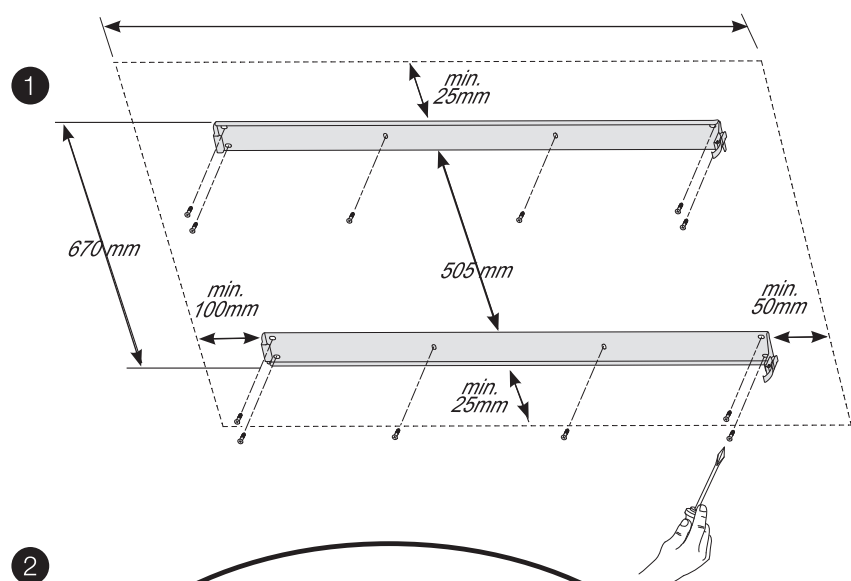
Wall mounting:

Make sure there is a free space of at least 70 cm at the front of the appliance and a free headroom of 1.8 m.

Make sure there is at least 20 cm free space at the appliance side where the electric connections are located, so connectors and sleeves remain accessible.

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

Placing the appliance for ceiling mounted

1

min.
25mm

670 mm

min.
100mm

505 mm

min.
50mm

min.
25mm

2

4x

3

Condensate discharge

⚠️

4

5

Click!

6

Appliance disconnecting from
mounting bracket

envirovent

Placing the appliance for wall mounted

1

min. 50mm

min. 25mm

min. 25mm

505 mm

1005 mm

min. 100mm

670 mm

2

4x

3

3

2

1

⚠

Condensate discharge

4

5

Click!

6

1

2

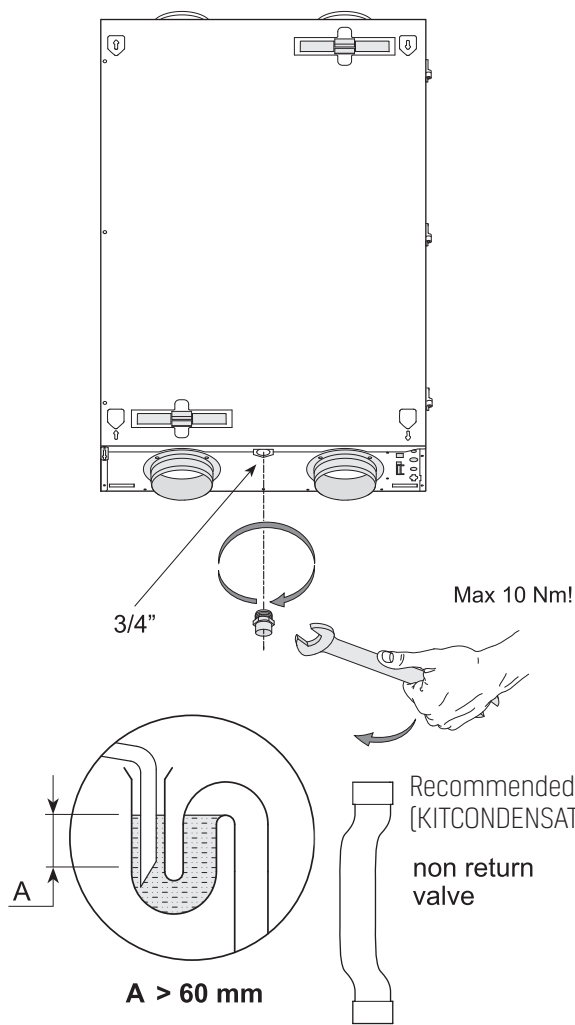Appliance disconnecting from mounting bracket

The Slimline 150 must always be fitted with a condensate discharge. The condensate must be discharged through a drainpipe. EnviroVent recommend using **KITCONDENSATE-BK.**

The condensate discharge connection with 3/4" mail thread (not supplied with the appliance) must be screwed into the appliance's condensate bin by the installer.

Important:

⚠️ **Always install a detachable coupler in the condensate discharge line as closely as possible to the appliance, otherwise the condensate bin cannot be removed from the appliance for service purposes.**
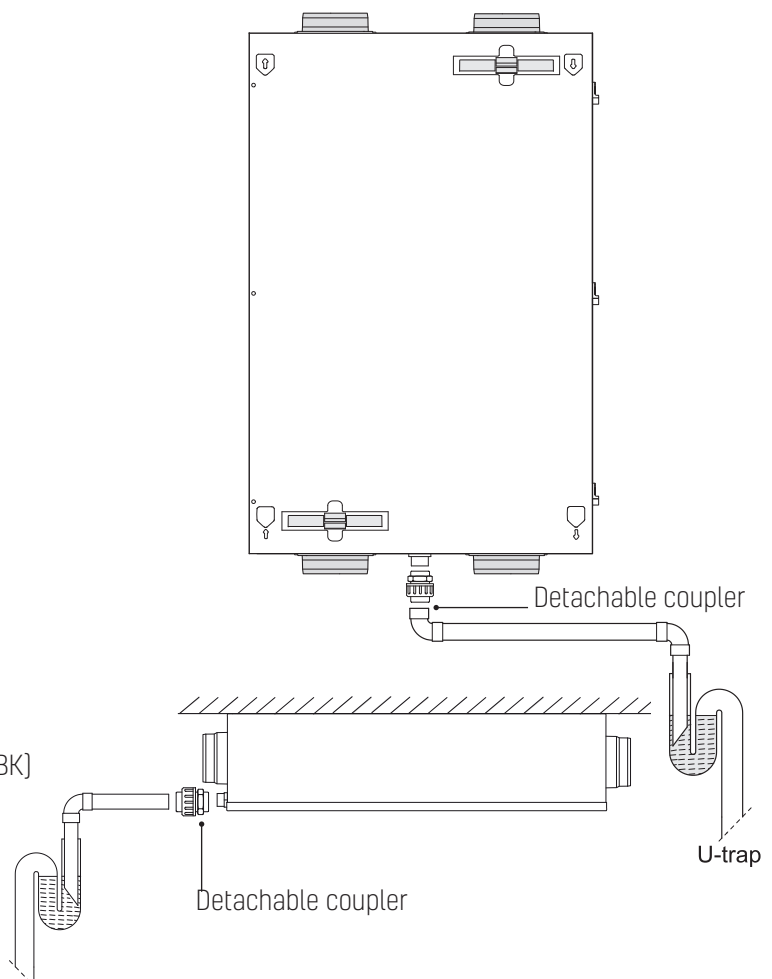
The condensate discharge line can be mounted to it, preferably glued, if necessary using a square bend. The installer can glue the condensate discharge to the appliance in the desired position. The drain must discharge under the water level in the U-trap. Use a condensate discharge line with a diameter of 32 mm.

Particularly for ceiling mounting, make sure the condensate discharge is below the level of the condensate bin in the Slimline 150.

Before connecting the condensate discharge to the appliance, pour water into the U-trap to create an air trap.

Note: Add a teaspoon of oil to prevent drying out. Alternatively use a non return valve in place of the U-trap.

3/4"

Max 10 Nm!

Recommended (KITCONDENSATE-BK)

non return valve

A

A > 60 mm

Detachable coupler

Detachable coupler

U-trap

The appliance can be connected to an easily accessible fused spur. The electric installation must comply with the wiring regulations.
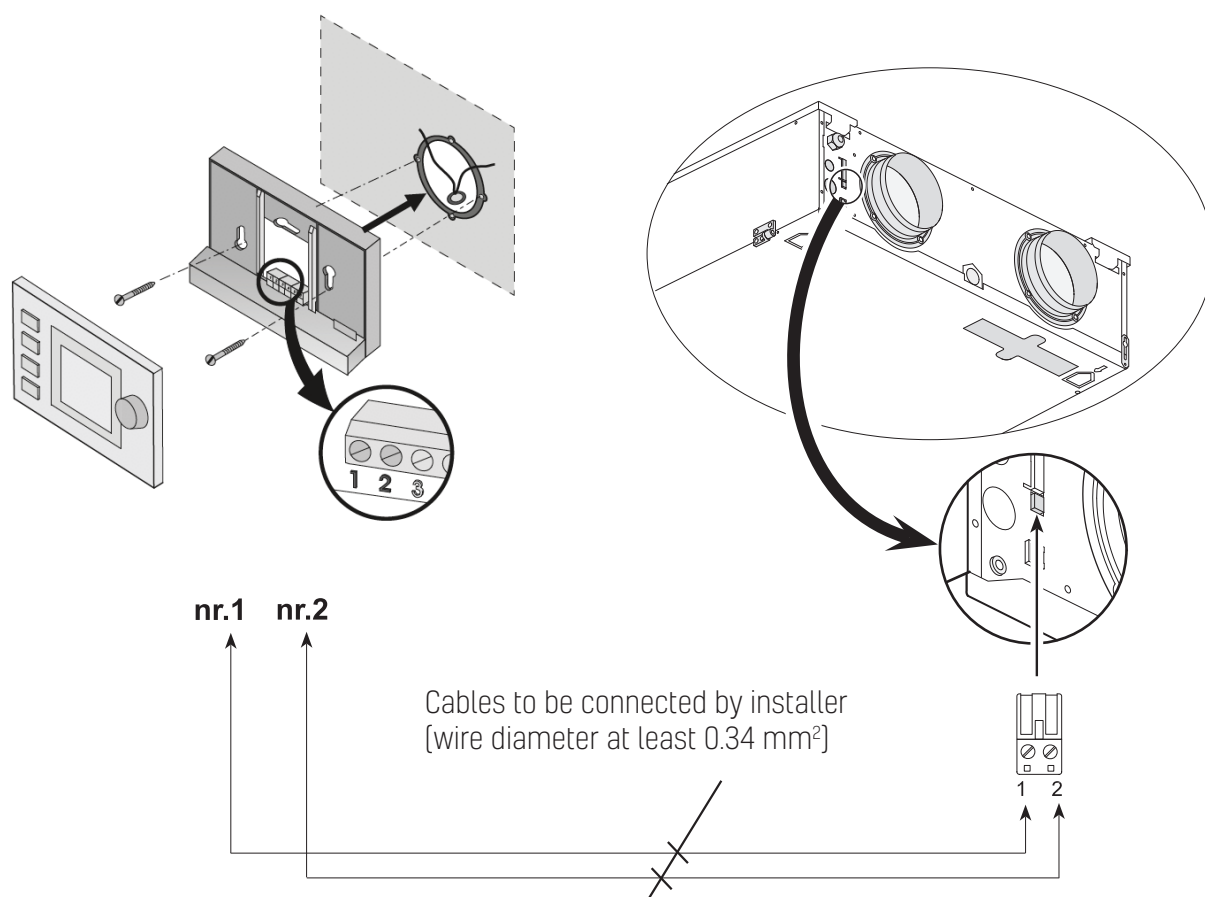
The appliance

Make allowance for the 375 W preheater; if in addition also a postheater or extra preheater is installed, the rated power increases to 447W.
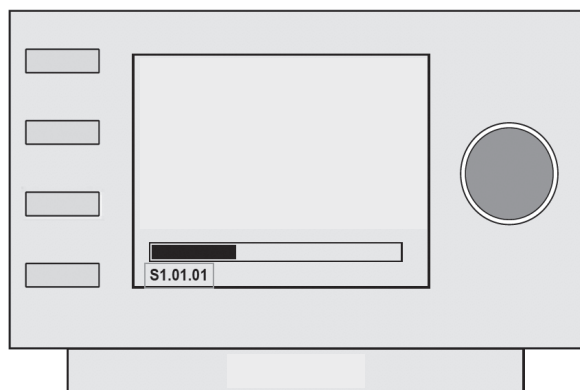
Warning

⚠ **The fans and control board carry a high voltage. Always remove the voltage from the appliance by isolating power when working on the appliance.**

The control unit that comes as standard with the appliance must be connected to the eBus connector. This (detachable) 2-pole eBus connector is mounted on the outside of the appliance (see page 33).
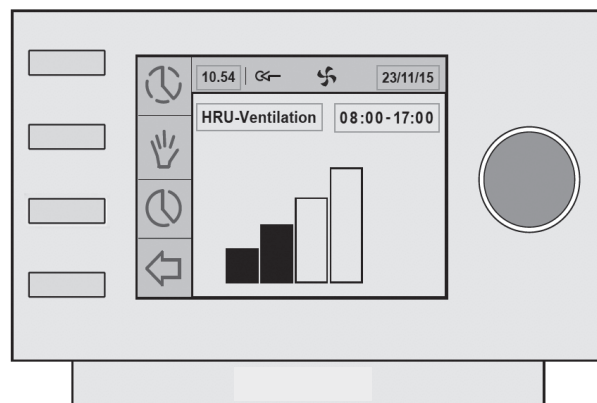
nr.1   nr.2

Cables to be connected by installer
(wire diameter at least 0.34 mm²)

1   2

05 Control Display

Switching the appliance ON/OFF

S1.01.01

> ± 25 sec

10.54   23/11/15

HRU-Ventilation   08:00-17:00

Warning
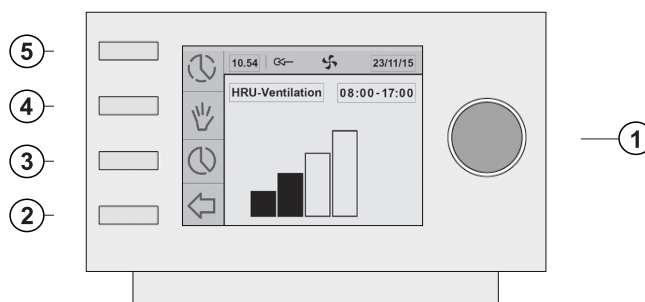
When working on the appliance, always remove the voltage from the appliance by isolating the power.
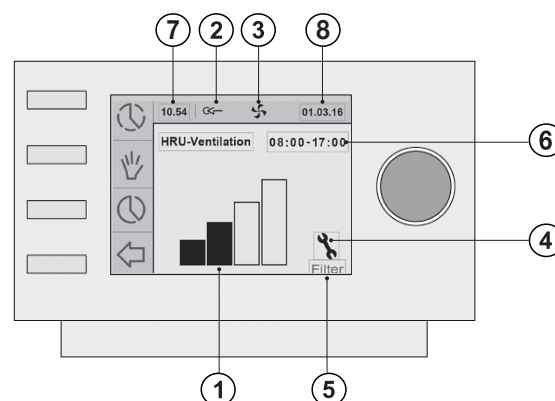
General explanation of control unit

The control unit display shows what the operating mode of the appliance is. Settings in the control unit software of the Slimline 150 can be called up and changed with the aid of the operating keys. Ex factory the control module is set for the English language. In the setting menu control unit, (see page 21) you can choose a language.

1. Setting knob	2. Return key	3. Setting & activating timer programme
Pressing the 'Right-hand setting knob' takes you to the Main Menu of the Sky appliance (see page 19).	Press the Return key (⇐) to close any selected menu.	Use this key (⊙) to select a type of timer programme; the set times and the connected airflow rates.

4. Manual control key	5. Bypassing timer programme
After pressing the key manual control (✋) the timer control can be overruled. At the position of the current time block, the display shows the message 'manual'. The appliance will remain running in this manual mode until it is cancelled by pressing the 'Return' key (⇐).	Pressing the key (⊙) takes you to a temporary main screen; then the airflow during one time cycle can manually be modified using the right-hand setting knob.

View on display

When the Slimline 150 is in operating mode, the control unit display indicates a number of different values:

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

05 Control Display

A				
B		1	2	3
	The supply and extract fans are running at 30 m³/h or they are stopped (step 1)	The supply and extract fans are running in ventilation mode 1 (step 2)	The supply and extract fans are running in ventilation mode 2 (step 3)	The supply and extract fans are running in ventilation mode 3 (step 4)

A = Flow rate indicator
B = 4-way switch

1. Flow rate indicator	2. eBus connection indicator	3. Fan indicator
The display shows a bar chart (flow rate indicator) of the current ventilation rate.	This eBus indicator appears when the eBus connection is active; if it is not visible, no communication is possible between the control unit and the Slimline appliance.	This ventilation indicator appears when the fans in the appliance are running.

4. Fault symbol	5. Filter message	6. Current time block
This fault symbol appears when an appliance fault has occurred.	When the text "Filter" appears on the control unit display, the filters in the appliance must be cleaned or replaced.	This indicates in what (preprogrammed) time interval the appliance is. When the manual control key (✋) or temporary bypassing of the timer programme (🕙) is activated, the time interval picture disappears and is replaced by the message "Manual or Temporary".

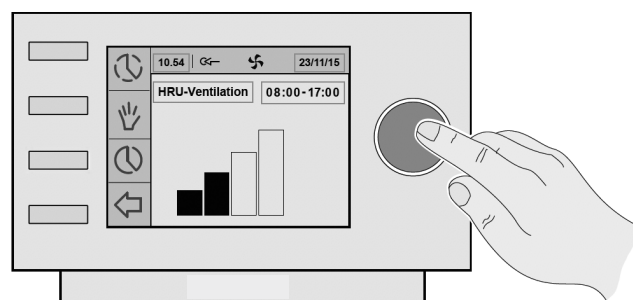| 7. Current time	8. Current date (day/month/year)	
The current time is shown at this position. It is important for proper performance of the appliance that the time is set correctly.	The current date is shown at this position.	

Main menu

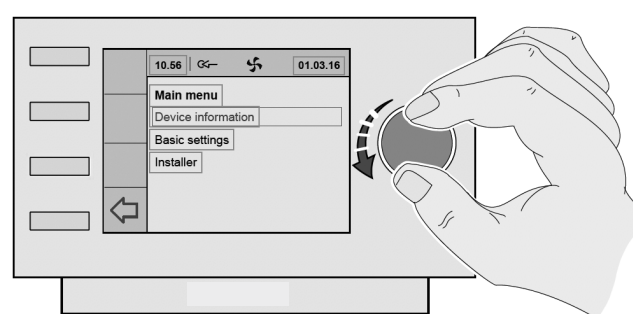Pressing the right-hand setting knob on the control unit takes you to the MAIN MENU.

In this main menu you can use the right-hand setting knob to select one of the 3 available menus (rotate to select and press to confirm) including:

• Device information

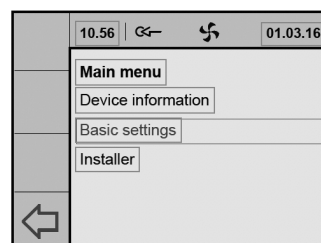• Basic Settings

• Installer

Selected menus can be closed by pressing the return key (⇐); if the return key (⇐) is not pressed, the display will return to the main screen some 5 minutes after the last time a key is operated.
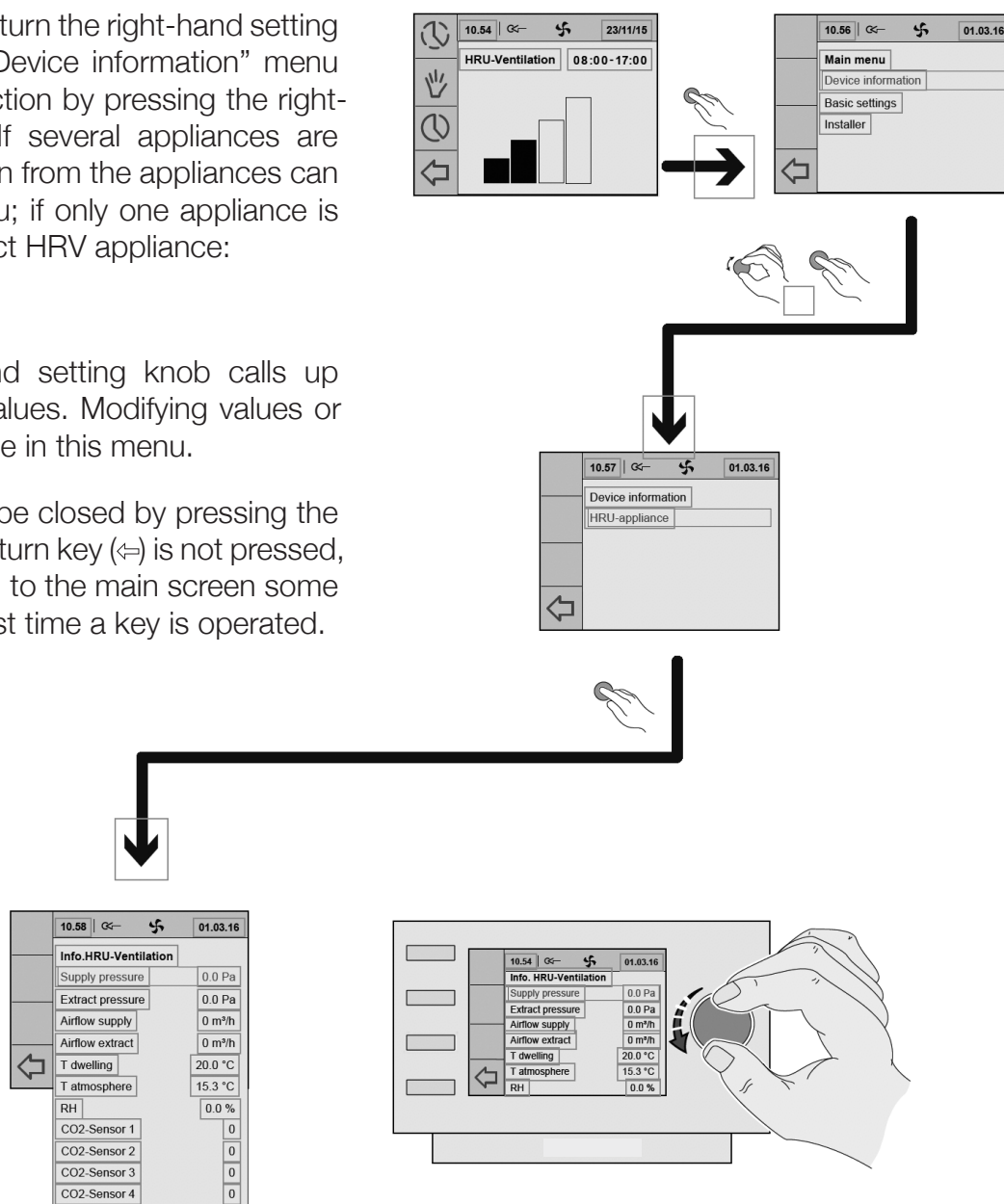

MAIN SCREEN

MAIN MENU

Device information menu

From the main menu, turn the right-hand setting knob to select the "Device information" menu and confirm the selection by pressing the right-hand setting knob. If several appliances are connected, a selection from the appliances can be made in this menu; if only one appliance is connected, then select HRV appliance:

- HRU-appliance

Turning the right-hand setting knob calls up the various current values. Modifying values or settings is not possible in this menu.

Selected menus can be closed by pressing the return key (⇦); if the return key (⇦) is not pressed, the dis-play will return to the main screen some 5 minutes after the last time a key is operated.

05 Control Display

Basic settings menu

From the main menu, turn the right-hand setting knob to select the "Basic settings" menu and confirm the selection by pressing the right-hand setting knob. In this menu, you can select from five submenus, including:

- Language
- Clock
- Date
- Backlight
- Key lock

(A) Language
In this menu you can choose a language; ex factory the Control is set for the English language.

(B) Clock
The current time must be set in this menu. The time is always shown in 24 hours mode.

(C) Date
The current date must be set in this menu; the day, month and year must be entered.
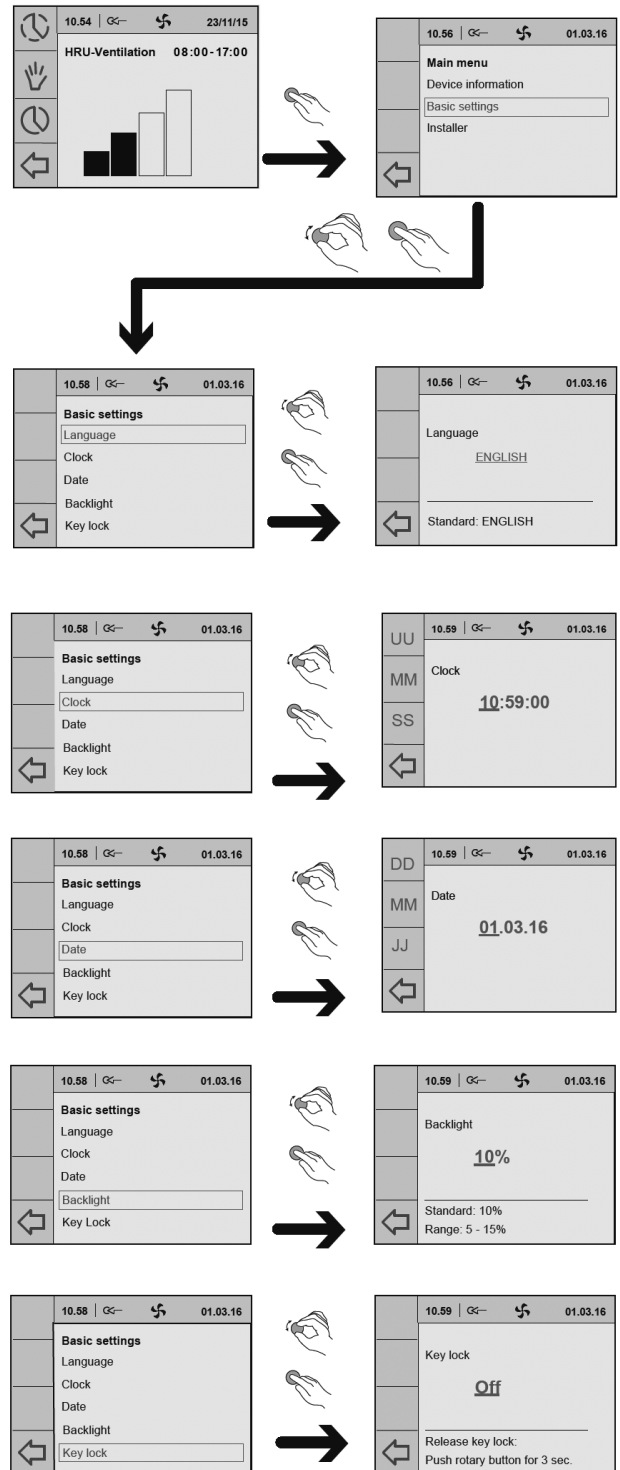
(D) Backlight
In this menu the backlight can be adjusted.

(E) Key lock
This can be used to prevent unwanted use and the changing of settings.

It will become active 1 minute after the last setting has been made.

Deactivate the key lock once-only by holding down the right-hand setting knob for 3 seconds! Permanently deactivate it by changing the setting in the key lock menu.

Installer menu

From the main menu, turn the right-hand setting knob to select the "Installer" menu and confirm the selection by pressing the right-hand setting knob.

If several appliances are connected, a selection from the appliances can be made in this menu; if only one appliance is connected, then select HRV appliance:

- HRU-appliance

In this menu choose from:

- Device settings
- Factory settings

Ⓐ **Device settings**

Selecting parameter takes you to the overview of all step numbers of the appliance as described on pages 40-42. In this menu you can view these values and, if necessary, modify them.

⚠️ **Incorrect settings may seriously affect the proper performance of the appliance**

Ⓑ **Factory setting)**

Selecting factory setting will restore all step numbers to the original factory setting. All fault messages will be deleted as well.
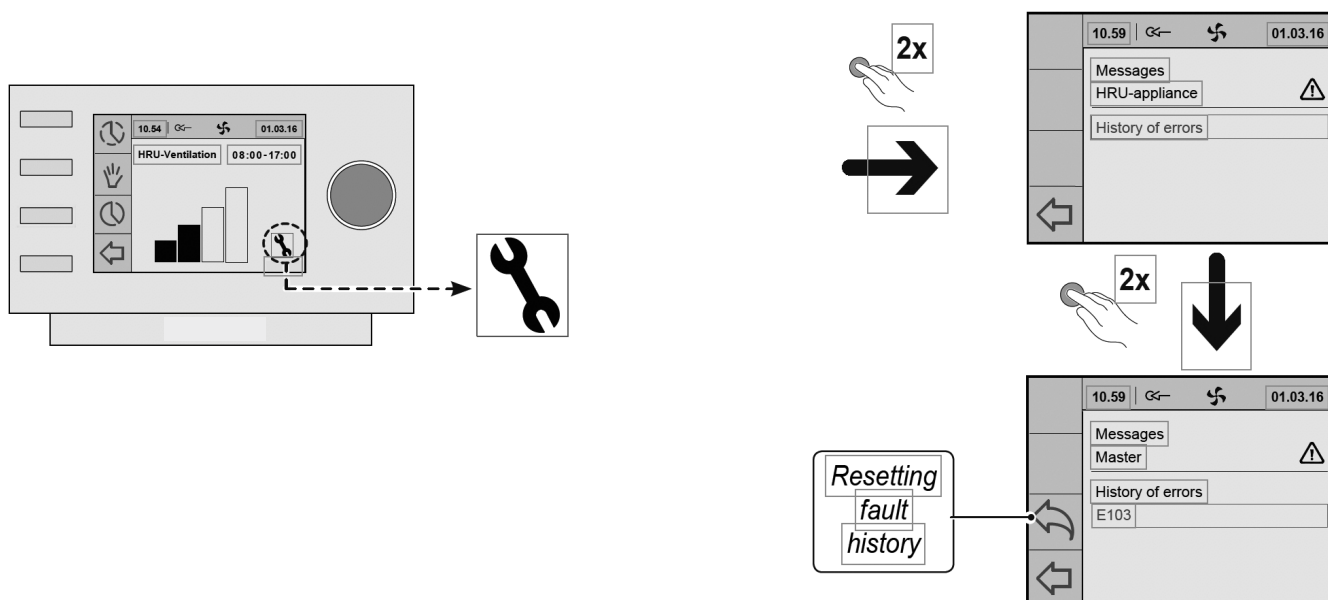
06 Trouble Shooting

When the appliance control system detects a fault, it is indicated on the display of the control unit with a spanner symbol, possibly together with a fault code.

Non-locking fault

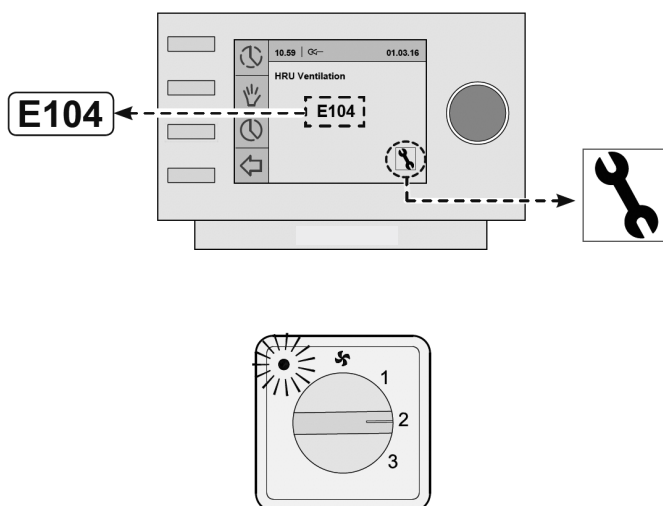When the appliance detects a non-locking fault, it will still keep running (limitedly).

The display does show the fault symbol (spanner). This fault can be read out in the menu "Messages".
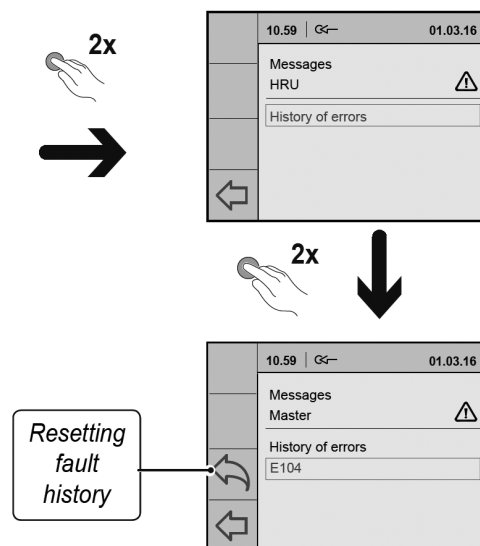
Locking fault

When the appliance detects a locking fault, it will no longer work. The (permanently lighted) display shows the fault symbol (spanner) together with fault code. The red LED on the multiple switch (if applicable) will be blinking. Contact the installer to remedy this fault. A locking fault cannot be remedied by taking the voltage from the appliance; first the fault must be solved.

Warning

When working on the appliance, always remove the voltage from the appliance by isolating the power.

Fault Code	Cause	Action Appliance	Action Installer
E103	Bypass fault	· None. · (Current too low stepper motor not correctly connected or effective; current too high short-circuit in wiring or stepper motor)	· Disconnect unit from power · Check connection stepper motor; replace wiring or stepper motor
E104	Extract fan defective	· Both fans are switched off. · Preheater is switched off. · If applicable: Postheater is switched off. · Restart every 5 minutes.	· Disconnect unit from power · Replace extract fan. · Put voltage back on appliance; Fault will automatically be reset. · Check cabling.
E105	Supply fan defective	· Both fans are switched off. · Preheater is switched off. · If applicable: Postheater is switched off. · Restart every 5 minutes.	· Disconnect unit from power · Replace · Reconnect unit to power; Fault will automatically be reset. · Check cabling.
E106	The temperature sensor that measures the outdoor temperature is defective	· Both fans are switched off. · Preheater is switched off. · Bypass closes and is blocked.	· Disconnect unit from power · Replace temperature sensor · Put voltage back on appliance; fault will automatically be reset.
E107	The temperature sensor that measures the temperature of the extract air is defective	· Bypass closes and is blocked.	· Disconnect unit from power · Replace indoor temperature sensor
E108	If present: The temperature sensor that measures the external temperature is defective	· Postheater is switched off. · If applicable: Geo heat exchanger is switched off.	· Replace external temperature sensor
E111	If present: The RH-sensor that measures the humidity is defective	· Appliance continues to operate	· Disconnect unit from power · Replace RH-sensor.
	Dip switches on control board not set correctly.	· Appliance does nothing; red fault LED on multiple switch is not activated either.	· Put dip switches in correct position (see page 32).

Note: If mode 2 of a multiple switch does not work, the modular connector of the multiple switch has been connected the wrong way round. Cut off one of the RJ connectors to the multiple switch and mount a new connector the other way round.
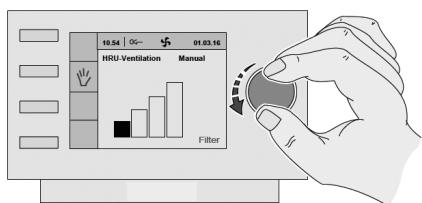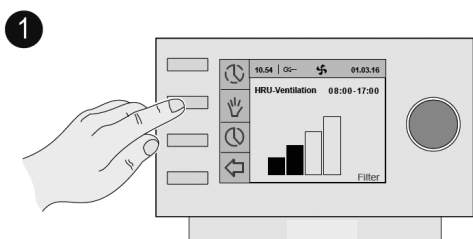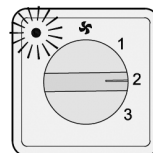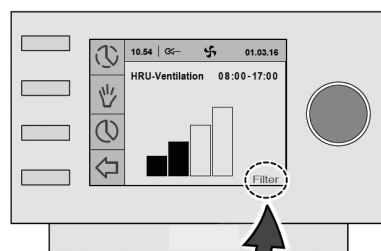
SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: 01423 810 810
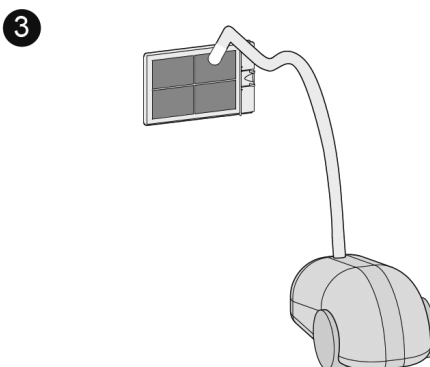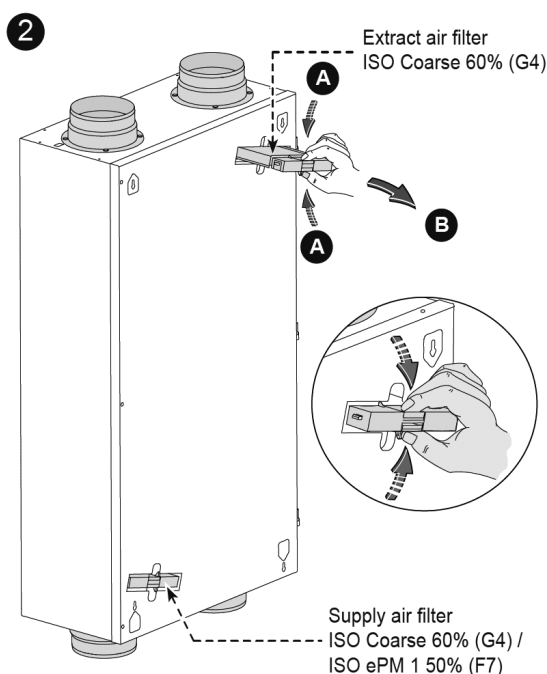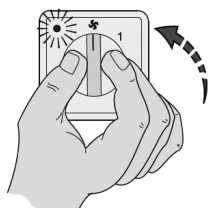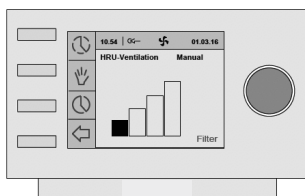
User maintenance

User maintenance is limited to periodically cleaning or replacing the filters. The filter only has to be replaced when that is indicated on the display (it shows the text "FILTER") or, if a multiple switch with filter indication is mounted, when the red LED at the switch lights up.

The filters must be replaced every year.

⚠ **It is not permitted to use the appliance without filters!**

1

ca. 10 sec.

2

Extract air filter
ISO Coarse 60% (G4)

A

A   B

Supply air filter
ISO Coarse 60% (G4) /
ISO ePM 1 50% (F7)

3

4

A

B

5

Click!

6

10.54 | GG— | 01.03.16
HRU-Ventilation   Manual
Filter

5 sec.

Filter reset

A

B

10.54 | GG— | 01.03.16
HRU-Ventilation   08:00 - 17:00

Installer maintenance

1 Isolate power

2

A

B

A

3

4

3x

!

5 Swing open the front panel (can also be taken from the hinges, if required).

6

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

7

4x

8

⚠ For ceiling mounting, carefully remove the condensate bin; there may still be some condensate left in the condensate bin

10

11 max. 55 ºC

⚠ **Rinse the exchanger with warm water and a regular detergent.**

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

12

14

4x

13

15

16

17

3x

19

Click!

18

20 Switch on Appliance

> ± 25 sec

Filter reset; (see page 20)

Press the Return key [↺] to leave any selected menu and the appliance will return to operating mode.

Filter reset;

Press the Return key (⇐) to leave any selected menu and the appliance will return to operating mode.

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

Wiring diagram

C1	C2	C3	C5	C6	C7	C10	C11
Brown	Blue	Green/yellow	White	nr.1	nr.2	Green	Yellow

A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	Z
Multiple switch	Pre-heater	Outdoor temp. sensor	Control board	Supply fan	Extract fan	Indoor temp. sensor	Service connector	Motor bypass valve	Control unit	Not applicable	Post-heater	Output 0-10V	Sensor post-heater	24V.	0-10 V input	External switch contact	RH-sensor (optional)

Connecting wireless remote control

1	Service connector
2	Modular connector for rpm control
3	Additional cable feed option
4	EBus connector
5	Nine-pole screw connector
6	Cable feed option for postheater
7	Power lead 230V

Note: When several remote controls are used, the appliance will always run according to the remote control with the highest set ventilation mode.

The 4-way switch can also be used to activate a 30-minutes boost mode by putting the switch to setting 3 for less than 2 seconds and directly turning it back to setting 1 or 2. The boost mode can be reset by putting the switch to setting 3 for longer than 2 seconds or by switching it to absence mode (🌀).

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

09 Electric Connections Accessories

Coupling several Slimline appliances

Master

Slave

The slave appliances must be set as slaves before the appliances are interconnected through eBus! Refer to the supplied service tool manual for further instructions. There must be a separate 230V fused spur/isolator for every appliance.

nr.1   nr.2

Master

**C1
Slave 1**

⚠️ **Important:**
Because of polarity sensitivity, always connect contacts X1-1 to X1-1 and contacts X1-2 to X1-2. Never connect X1-1 and X1-2. A maximum of 10 appliances (1 Master + 9 Slave max.)

09 Electric Connections Accessories

Connection RH (humidity)-sensor

← X4

⚠ Setting parameter 28 & 29 (see page 41)

Cable sleeve

Connection postheater or extra preheater

X14

The postheater or extra preheater (only possible for Slimline 150 Plus) are electrically connected to connector X14; just for a postheater there is also a temperature sensor that must be connected to no. 7 and 8 of the 9-pole connector that is only installed in the Plus version.

When using a postheater or extra preheater, step number 11 is applied (and for extra preheater also step number 12). Please refer to the mounting instructions that came with the heater for more extensive information regarding installation of the post-heater or the extra preheater.

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

09 Electric Connections Accessories

Connection postheater

*)

230V 50Hz spur

X14

II

IV

III

I

230V 50Hz spur

X14

7 & 8

1 2 3 4 5 6 7 8 9

1 2 3 4 5 6 7 8 9

Temperature sensor postheater 7 - 8.

*)

230V 50Hz spur

X14

Connection extra preheater

230V 50Hz spur

X14

⚠ Setting parameter 11 & 12 (see page 39)

The strain reliever to be installed by the installer (not supplied with the appliance) for feeding the 230 volt cable to the postheater or extra preheater.

09 Electric Connections Accessories

Connecting external switch contact

Connections no. 1 and no. 2 standard external switch contact; connections no. 3 and no. 4 can optionally be used as external switch contact as well.

⚠ Setting parameter 16, 17 & 18 (pages 39-40)

An external switch contact (e.g. switch or relay contact) can be connected to the Slimline 150 Plus.

If a second input is required as external switch contact, if necessary connections no. 3 and no. 4 can be reprogrammed.

Connection to 0-10 V input

Connections no. 3 and no. 4 standard 0-10 volt input; connections no. 1 and no. 2 can optionally be used as 0-10 volt input as well.

⚠ Setting parameter 19, 20 & 21 (page 40)

The Slimline 150 Plus can be equipped with an external provision with 0-10 volt control. Connections X15-3 and X15-4 are set as standard as 0 - 10 V input; it is activated as standard.

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

10 Servicing

Service parts

		Code
1	Air duct connections (4 pcs)	
2	Fan (1 pcs)	
3	Bypass valve	
4	Motor bypass valve	
5	Temperature sensor (1 pcs)	
6	Heat exchanger	
7	Front cover with hinges	Please contact EnviroVent for order codes
8	Filter holder set (2 pieces)	
9	Filter kit 2x G4 filter (standard version)	
10	Control board (Plus version) When replacing, note the correct dip switch settings	
11	Cable 230V*	
12	Heating coil 375 W preheater	
13	Control unit	

When ordering parts, (see exploded view), please state the type of the heat recovery appliance, the serial number, the year of production and the name of the part:

N. B.:

Appliance type, serial number and year of production are stated on the identification plate on the top of the appliance.

* When replacing a mains cable, always order a replacement mains cable from EnviroVent to avoid danger. A damaged mains should only be replaced by a qualified person.

AFTER INSTALLING THIS UNIT, PLEASE PASS ONTO END USER   **DO NOT THROW AWAY**

11 Setting Values

STEP NO.	DESCRIPTION	FACTORY SETTING Slimline 150	ADJUSTING RANGE	STEP
1	Air flow rate mode	30 m³/h	0 m³/h of 30 m³/h	
2	Air flow rate mode 1 /	75 m³/h	30 m³/h t/m 300 m³/h	5 m³/h
3	Air flow rate mode 2 /	100 m³/h	30 m³/h t/m 300 m³/h	5 m³/h
4	Air flow rate mode 3 /	125 m³/h	30 m³/h t/m 300 m³/h	5 m³/h
5	Bypass temperature	22,0 °C	15,0 °C - 35,0 °C	0,5 °C
6	Bypass hysterese	2,0 °C	0,0 °C - 5,0 °C	0,5 °C
7	Operation bypass valve	0	0 (= Automatic) 1 (= Bypass valve closed) 2 (= Bypass valve open)	
8	Central heating + heat recovery	OFF	OFF (=Central heating+heat recovery off) ON (= Central heating+heat recovery on)	
9	Imbalance permissible	ON	OFF (= flow rate supply equals extract) ON (= imbalance permissible)	
10	Fixed imbalance	0 m³/h	-100 m³/h t/m 100 m³/h	1 m³/h
STEP NO.	DESCRIPTION	FACTORY SETTING Slimline 150 Plus	ADJUSTING RANGE	STEP
11	Heater	0	0 (= no additional heater) 1 (= additional preheater) 2 (= postheater)	
12	Temperature postheater	21,0 °C	15,0 °C t/m 30,0 °C	0,5 °C

13	Selection input 1	0	0 (= normally open contact)
			1 (= 0 - 10V input active)
			2 (= normally closed contact)
			3 (= input 1/ bypas open 12V;
			    bypass closed 0V)
			4 (= input 1/ bypas open 0V;
			    bypass closed 12V)	

14	Minimum voltage input 1	0,0 V	0 Volt - 10 Volt	0,5 V
15	Maximum voltage input 1	10,0 V	0 Volt - 10 Volt	0,5 V
16	Conditions switching input 1	0	0 (off) 1 (on) 2 (= On if conditions bypass open satisfied) 3 (= Bypass control) 4 (= Bedroom valve)	
17	Supply fan mode switching input 1	5	0 (= Input fan off) 1 (= Absolute min. flow rate 30m³/h) 2 (= Flow rate mode 1) 3 (= Flow rate mode 2) 4 (= Flow rate mode 3) 5 (= Multiple switch) 6 (= Maximum flow rate) 7 (= No input fan activation)	

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

11 Setting Values

STEP NO.	DESCRIPTION	FACTORY SETTING Slimline 150 Plus	ADJUSTING RANGE	STEP
18	Extract fan mode switching input 1	5	0 [= Extract fan off] 1 [= Absolute min. flow rate 30 m³/h] 2 [= Flow rate mode 1] 3 [= Flow rate mode 2] 4 [= Flow rate mode 3] 5 [= Multiple switch] 6 [= Maximum flow rate] 7 [= No extract fan activation]	

19	Selection input 2	1	0 [= normally open contact]
			1 [= 0 - 10V input active]
			2 [= normally closed contact]
			3 [= input 2/ bypass open 12V;
			    bypass closed 0V]
			4 [= input 2/ bypass open 0V;
			    bypass closed 12V]	

20	Minimum voltage input 2	0,0 V	0,0 Volt - 10,0 Volt	0,5 V
21	Maximum voltage input 2	10,0 V	0,0 Volt- 10,0 Volt	0,5 V
22	Conditions switching input 2	0	0 [off] 1 [on] 2 [= On if conditions bypass open satisfied] 3 [= Bypass control] 4 [= Bedroom valve]	
23	Supply fan mode switching input 2	5	0 [= Input fan off] 1 [= Absolute min. flow rate 30 m³/h] 2 [= Flow rate mode 1] 3 [= Flow rate mode 2] 4 [= Flow rate mode 3] 5 [= Multiple switch] 6 [= Maximum flow rate] 7 [= No input fan activation]	
24	Extract fan mode switching input 2	5	0 [= Extract fan off] 1 [= Absolute min. flow rate 30m³/h] 2 [= Flow rate mode 1] 3 [= Flow rate mode 2] 4 [= Flow rate mode 3] 5 [= Multiple switch] 6 [= Maximum flow rate] 7 [= No extract fan activation]	
25	Geo heat exchanger	UIT	OFF [= Valve control geo heat exchanger off] ON [= Valve control geo heat exchanger on]	
26	Minimum temperature geo heat exchanger [Below this temperature the valve opens]	5,0 °C	0,0 °C - 10,0 °C	0,5 °C
27	Maximum temperature geo heat exchanger [Above this temperature the valve opens]	25,0 °C	15,0 °C - 40,0 °C	0,5 °C

11 Setting Values

STEP NO.	DESCRIPTION	FACTORY SETTING Slimline 150	ADJUSTING RANGE	STEP
28	RH-sensor	OFF	OFF (= RH-sensor not active) ON (= RH-sensor active)	
29	Sensitivity RH-sensor	0	+2 most sensitive +1 0 default setting RH-sensor -1 -2 least sensitive	

STEP NO.	DESCRIPTION	FACTORY SETTING Plus version	ADJUSTING RANGE	STEP
35	Switching on and off eBUS CO_2 sensor	OFF	ON - OFF	
36	Min.PPM eBUS CO_2 -sensor 1	400	400 - 2000	25
37	Max.PPM eBUS CO_2 -sensor 1	1200		
38	Min.PPM eBUS CO_2 -sensor 2	400		
39	Max.PPM eBUS CO_2 -sensor 2	1200		
40	Min.PPM eBUS CO_2 -sensor 3	400		
41	Max.PPM eBUS CO_2 -sensor 3	1200		
42	Min.PPM eBUS CO_2 -sensor 4	400		
43	Max.PPM eBUS CO_2 -sensor 4	1200		
44	Flow correction	100%	90% - 110%	
45	Default position switch	1	0 - 1	

SHOULD YOU ENCOUNTER ANY PROBLEMS INSTALLING THIS UNIT, CALL US ON: **01423 810 810**

Product data sheet conform Ecodesign (EU), nr. 1254/2014 (Annex IV)					
Supplier:		EnviroVent			
Model:		Slimline 150			
Climate zone	Type of control	SEC-Value in kWh/m²/a	Energy class (SEC)	The annual electricity consumption (AEC) in kWh	The annual heating saved (AHS) in kWh
Average	Clock	-34,08	A	418	4386
	1 Sensor (RH/CO2/VOC)	-36,48	A	344	4440
	2 or more Sensors (RH/CO$_2$/VOC)	-40,67	A+	220	4548
Cold	Clock	-70,65	A+	955	8580
	1 Sensor (RH/CO2/VOC)	-73,57	A+	881	8686
	2 or more Sensors (RH/CO2/VOC)	-78,79	A+	757	8898
Warm	Clock	-10,51	E	373	1983
	1 Sensor (RH/CO2/VOC)	-12,61	E	299	2008
	2 or more Sensors (RH/CO2/VOC)	-16,20	E	175	2057
Type of ventilation unit:		Ventilation unit with heat recovery			
Fan:		Variable speed EC fan			
Type of heat exchanger:		Recuperative plastic cross-counterflow heat exchanger			
Thermal efficiency:		83%			
Maximum flow rate:		150 m³/h			
Electric power input:		64 W			
Sound power level Lwa:		38 dB(A)			
Reference flow rate :		105 m³/h			
Reference pressure difference:		50Pa			
Specific Power Input (SEL):		0,33 W/m³/h			
Control factor:		1,0 in combination with manual switch			
		0,95 in combination with clock			
		0,85 in combination with 1 sensor			
		0,65 in combination with 2 or more sensors			
Leakage*:	Internal	0,9%			
	External	2,3%			
Filter warning:		On the display of the ventilation unit / Manual switch / clock control. Attention! For optimal energy efficiency and a proper operation a regular filter inspection, cleaning or replacement is necessary.			
Internet address for Assembly instructions:		www.envirovent.com			
Bypass:		Yes; 100% Bypass			

*Measurements executed by TNO according to the EN 13141-7 standard (TNO-report TNO 2014 R10659, April 2014)

13 Warranty

We appreciate you choosing this quality EnviroVent product, which is designed and manufactured in Harrogate, North Yorkshire. We are confident that you will be delighted with the performance of the system and the resulting improvement in air quality in your home after it has been installed.

This unit is covered by a 2-year warranty, subject to the replacement of filters every 12 months, or more frequently as required, dependant on the environmental conditions. You should not dismantle or remove any parts of the product other than those instructed in this guide. Tampering with the unit will void the warranty. The valves should be checked periodically to ensure there is air flowing through the system.

ENVIROVENT SUPPLY & INSTALLATION

If your product has been supplied and installed by EnviroVent Ltd it is covered with a two-year parts and labour warranty. If you detect a fault, please contact us on **01423 810810**. You will be given guidance over the phone, or an arrangement may be made for a member of our team to visit (call-out charges may apply if a fault cannot be identified).

SUPPLY ONLY

If your product has been supplied by EnviroVent and installed by a third party it is covered by a two-year parts only warranty. If you detect a fault and the product has been installed in accordance to the fitting/wiring instructions, relevant guidance documents and by a competent and qualified person (proof may be required), please return the product to the place of purchase for a replacement.

WARRANTY CONDITIONS & EXCLUSIONS

Please note that a receipt will be required as proof of purchase. Products bought from an unapproved source, including but not limited to auction websites, are not covered by the warranty.

The system must be correctly installed and operated according to the instructions contained in the user guide supplied.

The warranty will be rendered invalid if the system has been serviced, maintained, repaired, taken apart or tampered with by any person not authorized, which in any way contradicts the instruction guide set out by EnviroVent.

The warranty does not cover accidental damage, misuse or abuse.

The warranty is in addition to your statutory or legal rights.

Your unit serial number:

For warranty conditions and exclusions, visit **www.envirovent.com/warranty**

AFTER COMPLETING INSTALLATION, PASS THIS GUIDE
ONTO THE END USER FOR FUTURE REFERENCE
DO NOT THROW AWAY

envirovent.

Leading Manufacturer & Supplier of
Innovative & Sustainable Ventilation Systems

EnviroVent Ltd
Harrogate West Business Park
Unit 1 Bardner Bank
Killinghall
Harrogate
HG3 2SP

T / 01423 810 810
E / info@envirovent.com
W / envirovent.com

Boxed unit weight:
25kg

Unboxed unit weight:
24.5kg

We want to hear from you

Your feedback is important to us as we strive to improve our
products, services, and overall customer experience. Please email
us to help us serve you better: **feedback@envirovent.com**