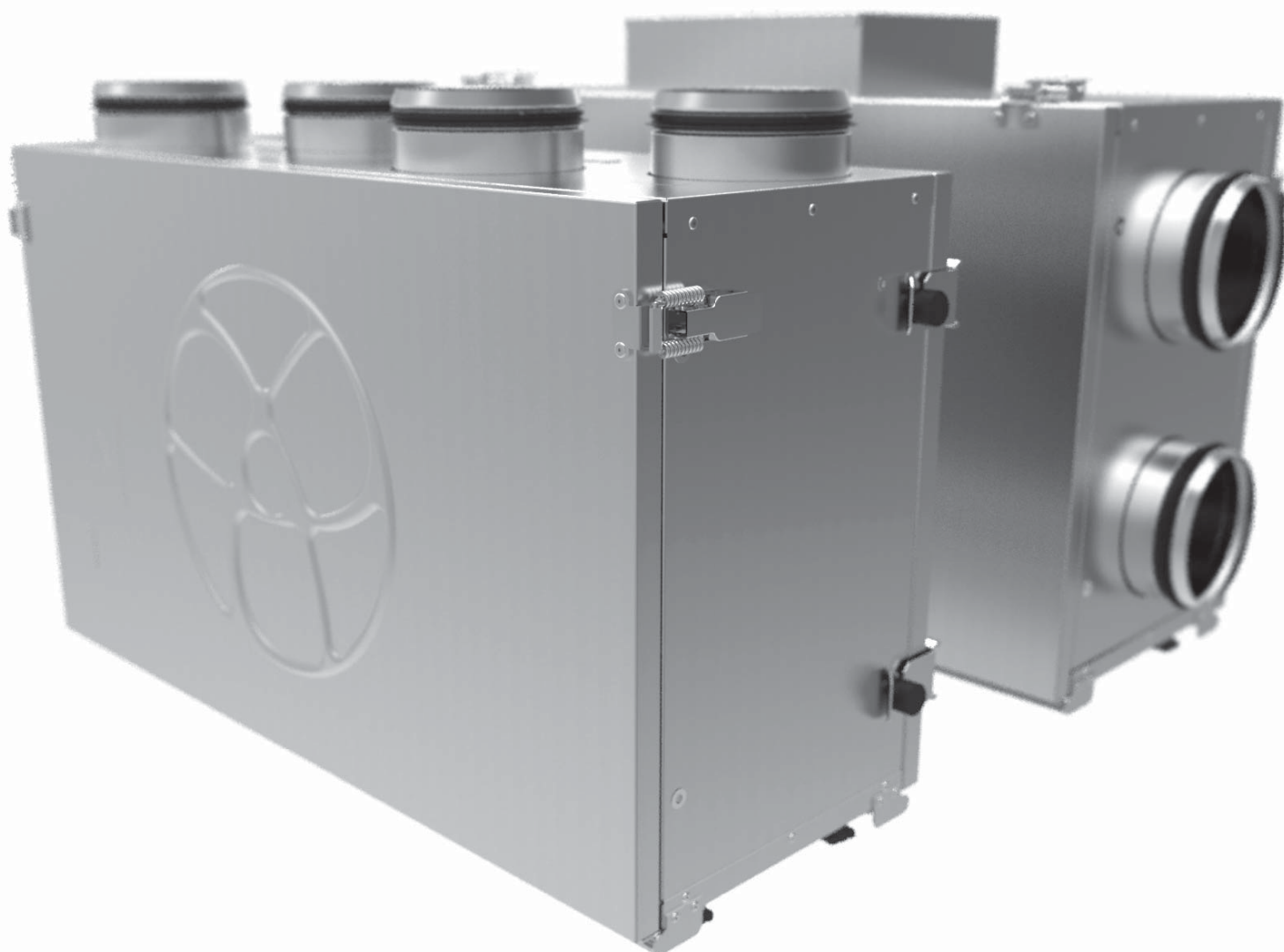


USER'S MANUAL

Komfort Ultra EC L 300-H(E) S2
Komfort Ultra EC S 300-H(E) S2
Komfort Ultra EC L 300-H(E) S14
Komfort Ultra EC S 300-H(E) S14
Komfort Ultra L 250-H(E) S12
Komfort Ultra S 250-H(E) S12



Heat recovery
air handling unit

CONTENTS

Safety requirements	2
Purpose	4
Delivery set	4
Designation key	4
Technical data	5
Unit design and operating logic	6
Mounting and set-up	7
Connection to power mains	14
Unit control	16
Technical maintenance	18
Fault handling	20
Storage and transportation regulations	20
Manufacturer's warranty	20
Acceptance certificate	21
Seller information	21
Installation certificate	21
Warranty card	21

This user's manual consisting of the technical details, operating instructions and technical specification covers the installation and mounting of the Komfort Ultra S(L) 350-H(E) heat recovery air handling unit (hereinafter referred to as «the unit»).

SAFETY REQUIREMENTS

Read the user's manual carefully prior to installing and operating the unit.

Fulfil the user's manual requirements as well as the provisions of all the applicable local and national construction, electrical and technical norms and standards.



The warnings contained in the user's manual must be considered most seriously since they contain vital personal safety information.

Failure to follow the rules and safety precautions noted in this user's manual may result in an injury or unit damage.

After a careful reading of the manual, keep it for the entire service life of the unit.

While transferring the unit control the user's manual must be turned over to the receiving operator.

Symbol legend:

	WARNING!
	DO NOT!

UNIT MOUNTING AND OPERATION SAFETY PRECAUTIONS



- Disconnect the unit from power mains prior to any installation operations.



- The unit must be grounded!



- Do not lay the power cable of the unit in close proximity to heating equipment.



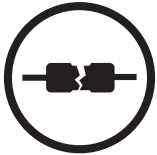
- While installing the unit follow the safety regulations specific to the use of electric tools.



- Do not change the power cable length at your own discretion.
Do not bend the power cable.
Avoid damaging the power cable.
Do not put any foreign objects on the power cable.



- Unpack the unit with care.



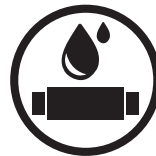
- Do not use damaged equipment or cables when connecting the unit to power mains.



- Do not operate the unit outside the temperature range stated in the user's manual.
Do not operate the unit in aggressive or explosive environments.



- Do not touch the unit controls with wet hands.
Do not carry out the installation and maintenance operations with wet hands.



- Do not wash the unit with water.
Protect the electric parts of the unit against ingress of water.

UNIT MOUNTING AND OPERATION SAFETY PRECAUTIONS



- Do not allow children to operate the unit.



- Disconnect the unit from power mains prior to any technical maintenance.



- Do not store any explosive or highly flammable substances in close proximity to the unit.



- When the unit generates unusual sounds, odour or emits smoke disconnect it from power supply and contact the Seller.



- Do not open the unit during operation.



- Do not direct the air flow produced by the unit towards open flame or ignition sources.



- Do not block the air duct when the unit is switched on.



- In case of continuous operation of the unit periodically check the security of mounting.



- Do not sit on the unit and avoid placing foreign objects on it.



- Use the unit only for its intended purpose.

PURPOSE

Due to the ability to save heating energy by means of energy recovery the unit is an important element of energy-efficient premises. The unit is a component part and is not designed for independent operation.

The unit is designed to ensure continuous mechanical air exchange in houses, offices, hotels, cafes, conference halls and other utility and public spaces as well as to recover the heat energy contained in the air extracted from the premises to warm up the filtered stream of supply air.



THE UNIT MAY NOT BE OPERATED BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, MENTAL OR SENSORY CAPACITIES, OR LACKING THE APPROPRIATE TRAINING.

THE UNIT MUST BE INSTALLED AND CONNECTED ONLY BY PROPERLY QUALIFIED PERSONNEL AFTER THE APPROPRIATE BRIEFING.

THE CHOICE OF UNIT INSTALLATION LOCATION MUST PREVENT UNAUTHORIZED ACCESS BY UNATTENDED CHILDREN.

The unit is designed for floor and suspended mounting.

The unit is rated for continuous operation.

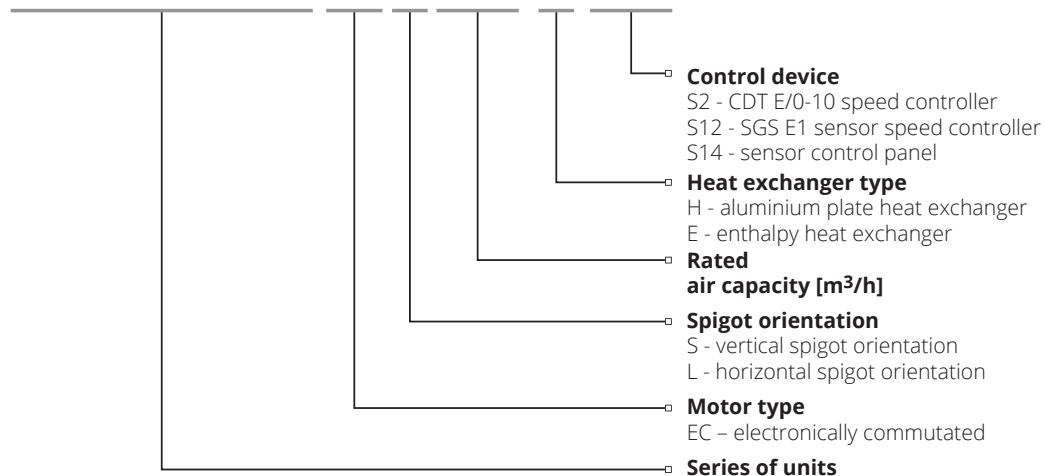
Transported air must not contain any flammable or explosive mixtures, evaporation of chemicals, sticky substances, fibrous materials, coarse dust, soot and oil particles or environments favourable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).

DELIVERY SET

Name	Number
Air handling unit	1 item
User's manual	1 item
Control panel	1 item
Mounting box for wall flush mounting (only for Komfort Ultra EC S(L)300-H(E) S14)	1 item
Mounting box for wall surface mounting (only for Komfort Ultra EC S(L)300-H(E) S14)	1 item
Drain pipe	1 item
Fastening kit	1 item
Packing box	1 item

DESIGNATION KEY

Komfort Ultra EC S 300-H S12



TECHNICAL DATA

The unit is designed for indoor application with the ambient temperature ranging from +1 °C up to +40 °C and relative humidity up to 80 %.

The unit is rated as a Class I electrical appliance.

Hazardous parts access and water ingress protection rating:

- IP 44 for the unit motors
- IP 22 for the assembled unit connected to the air ducts

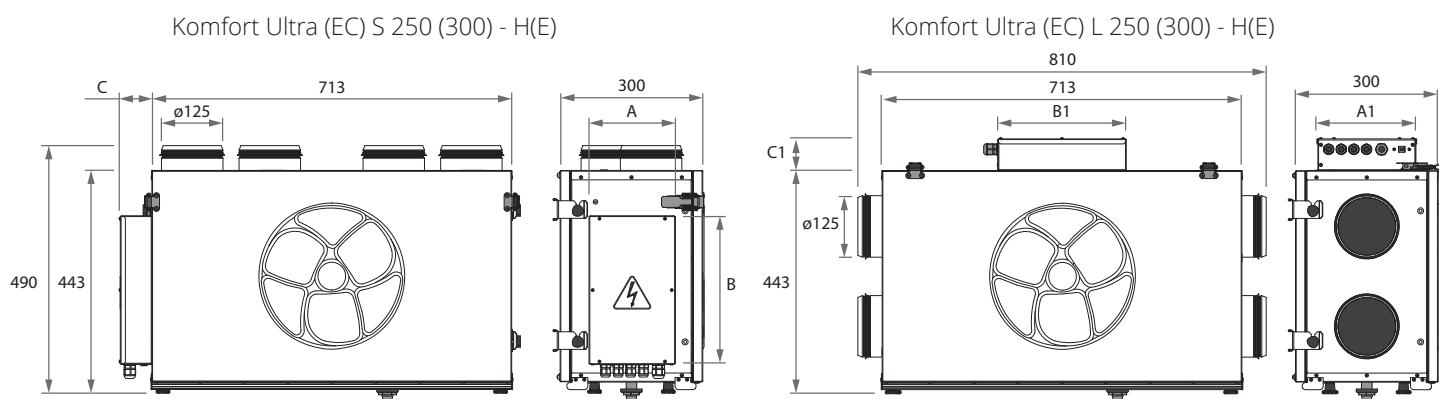
The unit design is constantly being improved, so some models can slightly differ from those ones described in this manual.

TECHNICAL DATA

Model	Komfort Ultra EC L(S) 300-H	Komfort Ultra EC L(S) 300-E	Komfort Ultra L(S) 250-H	Komfort Ultra L(S) 250-E
Unit voltage [V /50-60 Hz]	1~ 230			
Maximum unit power [W]	156		148	
Maximum unit current [A]	1,17		0.78	
Maximum air capacity [m³/h]	300		250	
R.p.m.	3200		2700	
Sound pressure level at 3 m distance [dB(A)]	28-47		28-47	
Transported air temperature [°C]	from -25 to +60		from -25 to +40	
Insulation	20 mm mineral wool			
Extract filter	G4			
Intake filter	G4 (F8 PM2.5 81 %)*			
Connected air duct diameter [mm]	ø125			
Weight [kg]	26	25	26	25
Heat recovery efficiency, %	from 52 to 78	from 50 to 73	from 55 to 78	from 52 to 73
Humidity recovery efficiency, %		from 25 to 45		from 27 to 45
Heat exchanger type	Cross flow			
Heat exchanger material	aluminium	polymerized cellulose	aluminium	polymerized cellulose

* - Option

OVERALL DIMENSIONS OF THE UNIT, MM

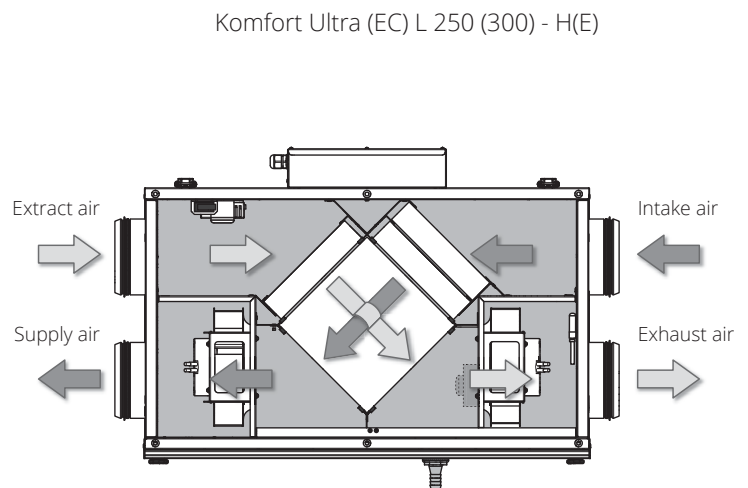
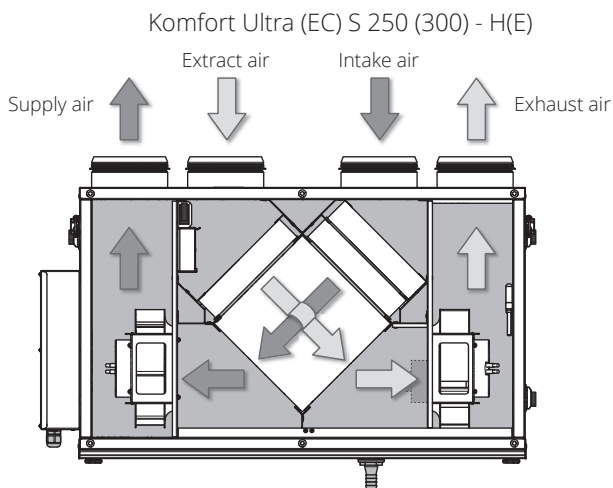


Model	A	A1	B	B1	C	C1
Komfort Ultra EC L300-H(E) S2	-	87	-	110	-	43
Komfort Ultra EC S300-H(E) S2	87	-	110	-	43	-
Komfort Ultra EC L300-H(E) S14	-	198	-	255	-	63
Komfort Ultra EC S300-H(E) S14	172	-	295	-	63	-
Komfort Ultra L250-H(E) S12	-	129	-	157	-	43
Komfort Ultra S250-H(E) S12	157	-	129	-	43	-

DESIGN AND OPERATING LOGIC

The unit has the following operating logic:
 Warm stale extract air from the room flows to the unit, where it is filtered, then air flows through the heat exchanger and is exhausted outside by the extract fan. Clean cold air from outside is moved to the supply filter. Then filtered air flows through the heat exchanger and is moved to the room with the supply fan.
 Heat energy of warm extract air is transferred to clean intake fresh air from outside and warms it up. Heat recovery minimizes thermal energy losses and space heating expenses in cold seasons.

UNIT OPERATION LOGIC

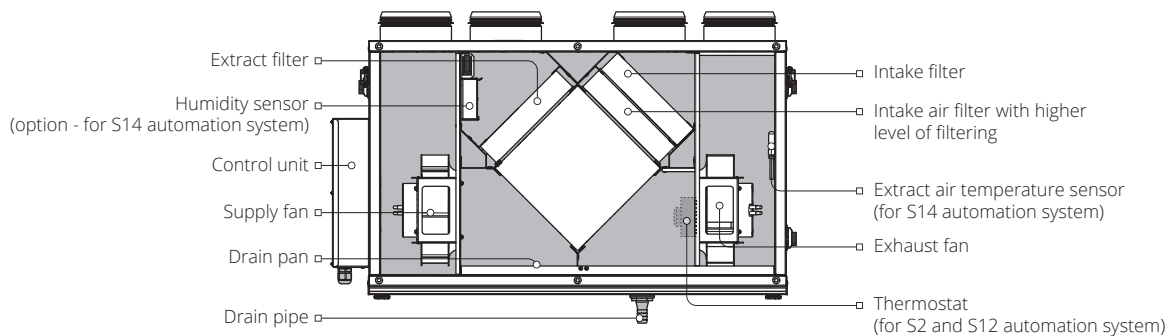


Freeze protection

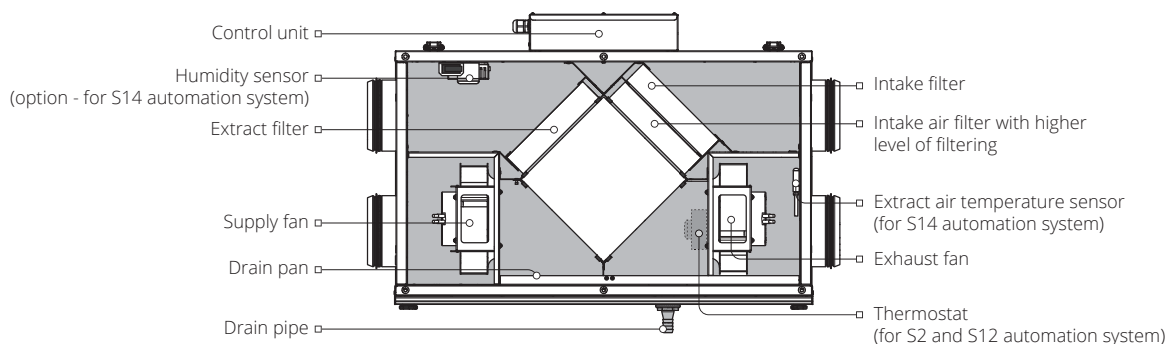
The heat exchanger freeze protection function of the unit is implemented with a temperature sensor or a thermostat depending on model. The temperature sensor is installed in the exhaust air duct downstream of the heat exchanger. In case of a freezing danger the supply fan is turned off and the heat exchanger is warmed up with warm extract air flow. The recommended sensor or thermostat operating temperature is +3 °C (factory setting). If necessary, this setting can be changed within the software (see p. 16). To set the thermostat temperature set point set the temperature control knob into a respective position.

UNIT DESIGN

Komfort Ultra (EC) S 250 (300) - H(E)



Komfort Ultra (EC) L 250 (300) - H(E)



MOUNTING AND SET-UP



READ THE USER'S MANUAL PRIOR TO MOUNTING THE UNIT.



THE UNIT MUST BE MOUNTED BY A QUALIFIED EXPERT ONLY, PROPERLY TRAINED AND HAVING THE REQUIRED TOOLS AND MATERIALS.

While mounting the unit provide enough access for maintenance or repair work.
When selecting a mounting location of the unit provide free opening of the service panel.

To attain the best performance of the unit and to minimise turbulence-induced air pressure losses connect the straight air duct section to the spigots on both sides of the unit while mounting.

Minimum straight air duct length:

- equal to 1 air duct diameter on intake side
- equal to 3 air duct diameters on outlet side

If the air ducts are too short or not connected, protect the unit parts from ingress of foreign objects. To prevent uncontrollable access to the fans the spigots may be covered with a protecting grille or other protecting device with mesh width not more than 12.5 mm.

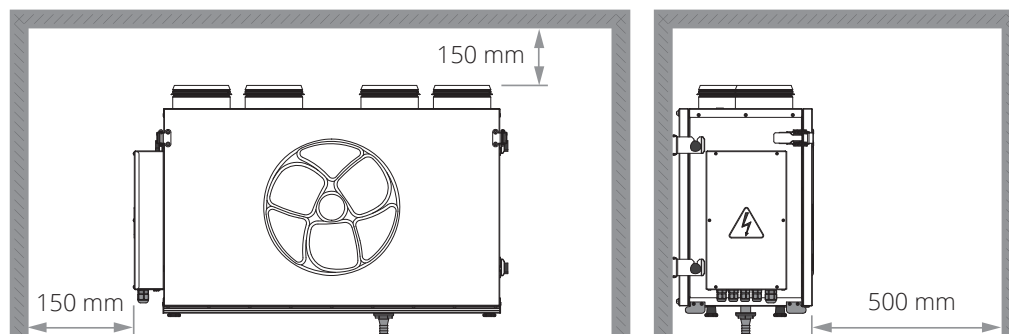
While installing the unit ensure convenient access for subsequent maintenance and repair. The unit must be mounted on a plane wall. Mounting of the unit to an uneven surface can lead to the unit casing distortion and operation disturbance.

The unit is designed for mounting on a horizontal plane as well as for wall mounting with a fixing bracket that is fastened with three screws and dowels (not included in the delivery).

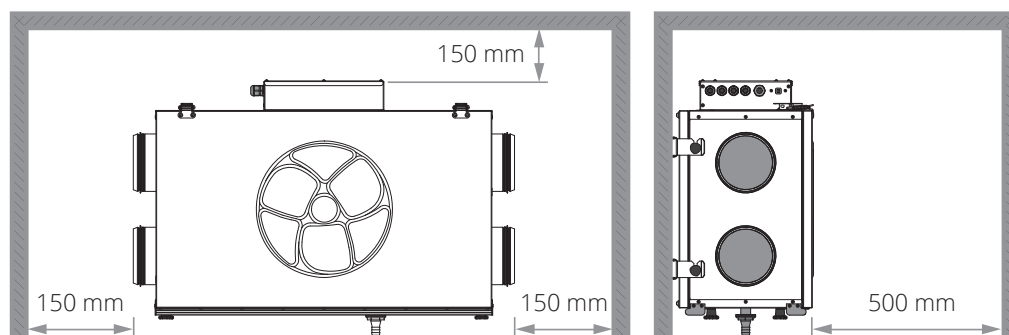
UNIT WALL MOUNTING

1. When selecting the installation site provide minimum allowed distances to the unit.

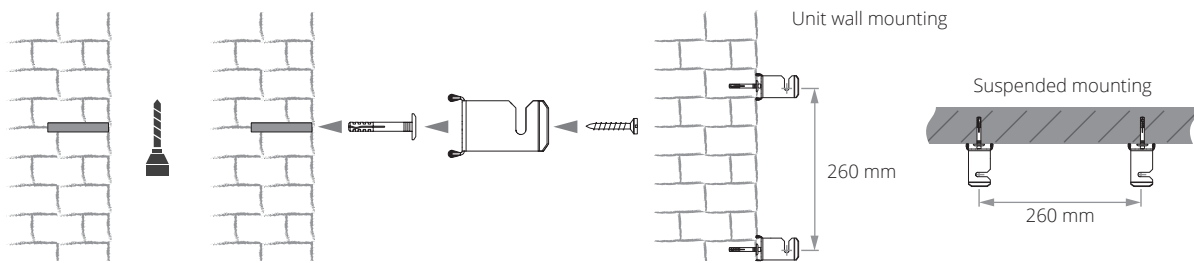
Komfort Ultra (EC) S300 (250)-H(E)



Komfort Ultra (EC) L300 (250)-H(E)

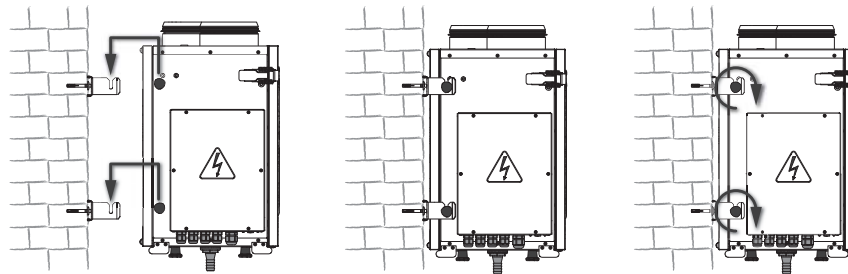


2. Attach the wall mounting brackets to a wall or to a ceiling. While mounting the bracket consider the wall material and the unit weight.
Attention! Ceiling mounting is only available for the units with a polymerized cellulose heat exchanger.

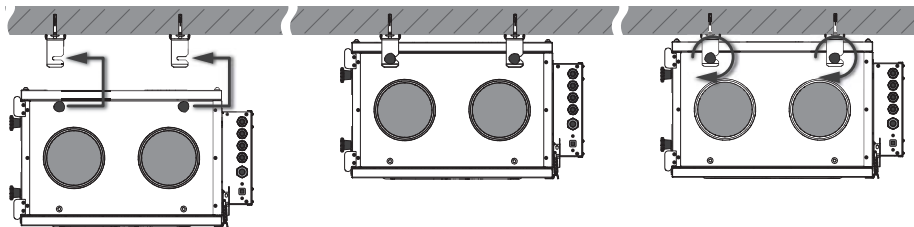


3. Install the unit on the mounting brackets. Tighten the triangular fixing screws on the mounting brackets.

Wall mounting using mounting brackets

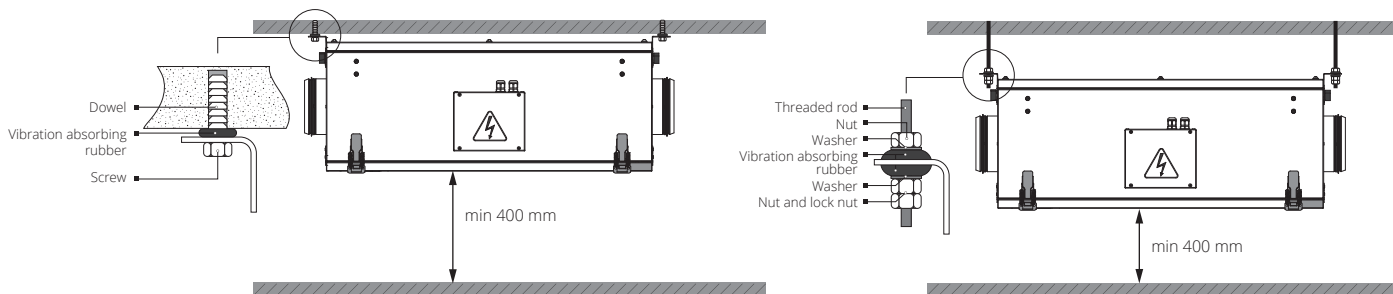


Ceiling mounting using mounting brackets



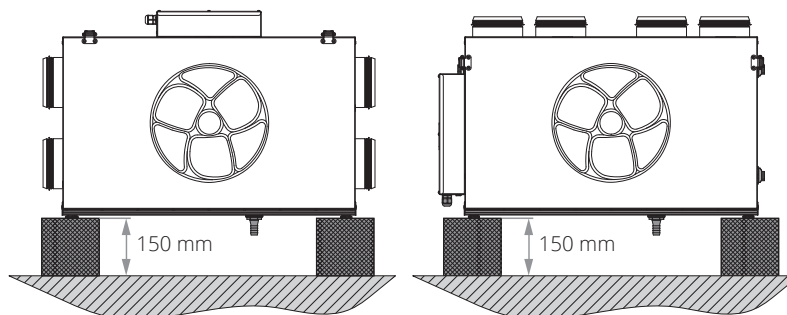
SUSPENDED MOUNTING USING L-SHAPED BRACKETS

When using the L-shaped brackets the unit can be mounted close to the ceiling or on the threaded rods.



UNIT FLOOR MOUNTING

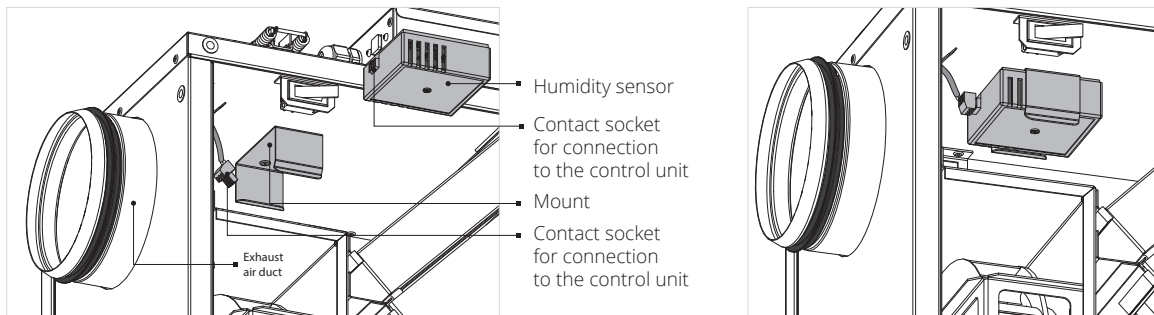
Install the unit on the pre-mounted floor supports, minimum 150 mm height, to ensure sufficient access for the drain pipe connection to the U-trap and for condensate drain system mounting.



HV2 HUMIDITY SENSOR MOUNTING (ONLY FOR AIR HANDLING UNITS WITH S14 AUTOMATION SYSTEM)

The HV2 humidity sensor is not included in the delivery and can be ordered separately.
 Install the humidity sensor into the mount on the extract air duct panel and connect the humidity sensor contact socket to the respective contact socket on the control unit, refer to the External wiring diagram.

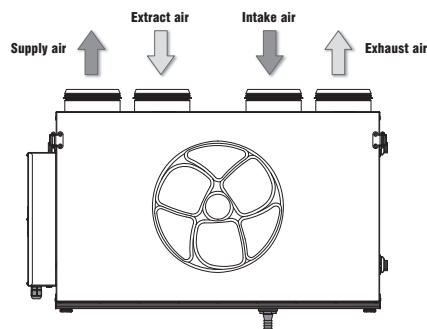
Humidity sensor mounting based on Komfort Ultra EC L350-H(E) unit example



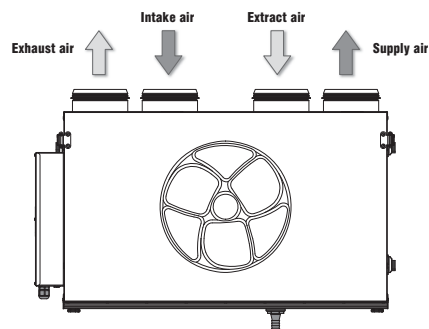
SERVICE SIDE CHANGE

Make sure of the correct unit service side selection. Unit mounting position should enable free access to the service panel for maintenance and service operations.

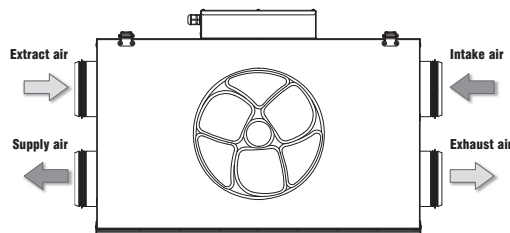
Komfort Ultra (EC) S 250 (300)-H(E) — left-handed modification



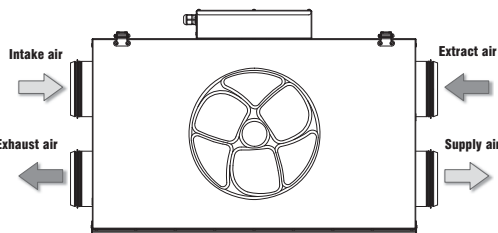
Komfort Ultra (EC) S 250 (300)-H(E) — right-handed modification



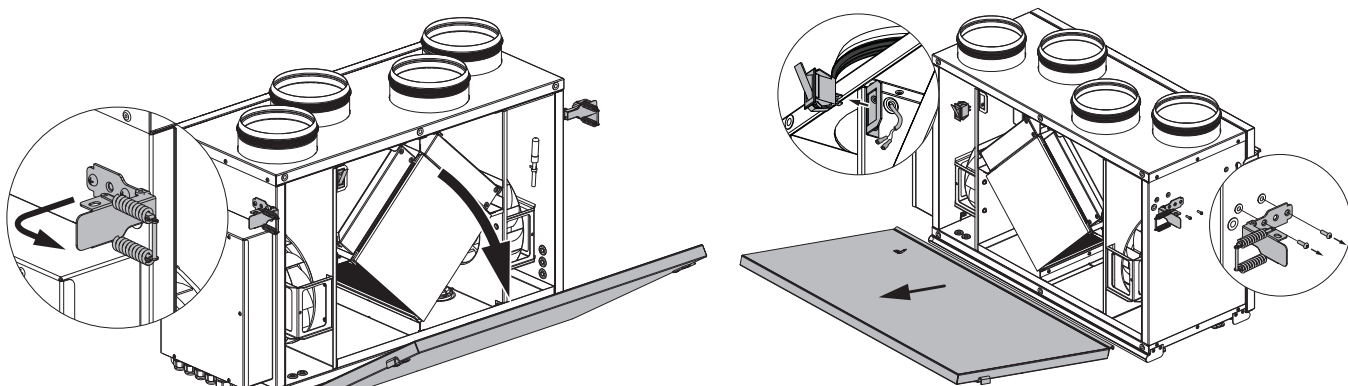
Komfort Ultra (EC) L 250 (300)-H(E) — left-handed modification



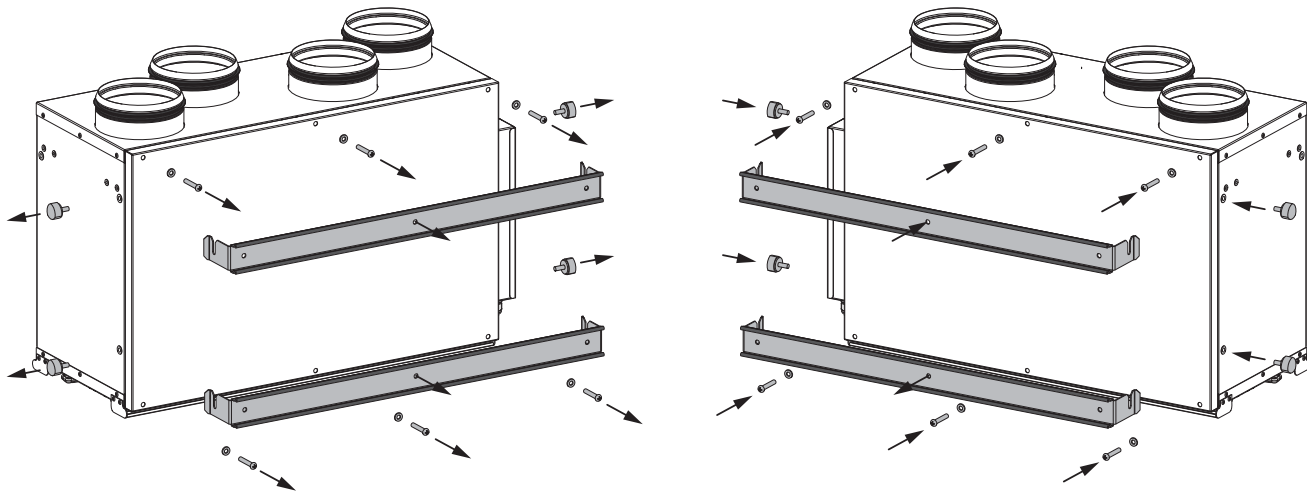
Komfort Ultra (EC) L 250 (300)-H(E) — right-handed modification



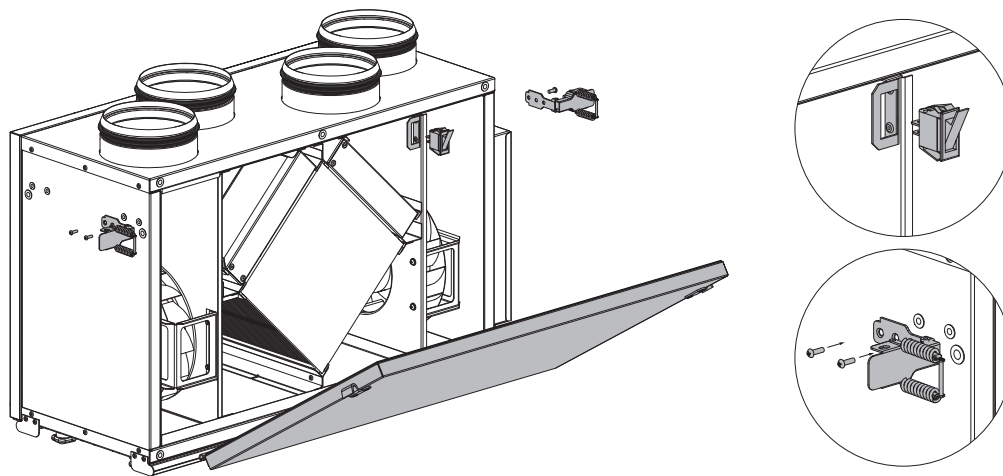
1. Unlatch and open the service panel. Remove the service panel, and then remove the latches. Disconnect the limit switch and remove it from the opening in the holder.



2. Remove four triangular screws and suspend the suspension brackets. Then unscrew six fixing screws from the back panel and remove the panel. Install the back panel on the opposite side of the unit.



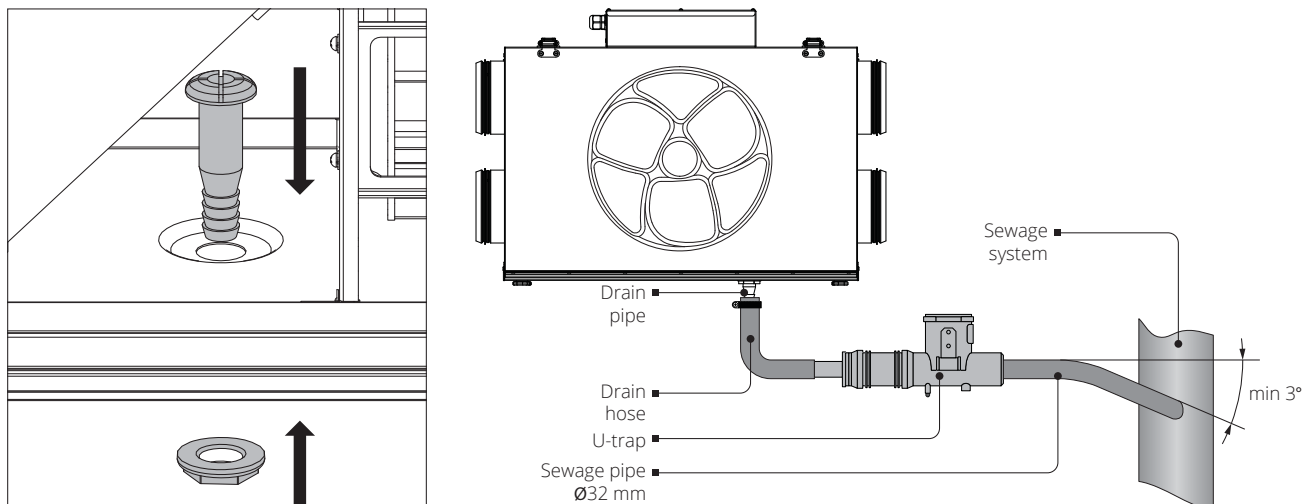
3. Install the limit switch, the latches and the service panel on the opposite side of the unit.



Service side change is shown by the example of the Komfort Ultra (EC) S 250(300)-H(E) air handling unit. The procedure of the service side changing for Komfort Ultra (EC) L 250(300)-H(E) is carried out in the same manner.

CONDENSATE DRAINAGE SYSTEM CONNECTION

The hole for the drain pipe is at the bottom of the unit. Remove the plug from the hole, open the service panel and install the drain pipe from the delivery set into the hole, then connect the drain pipe to the sewage system using the KIT SFK 20x32 U-trap kit (available upon separate order). While laying the hoses provide the slope downward min. 3°.



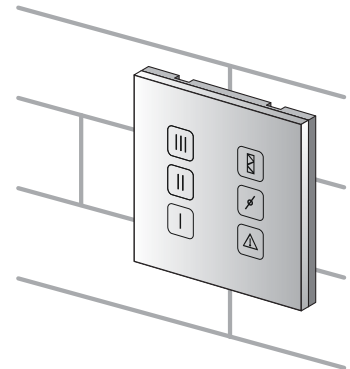
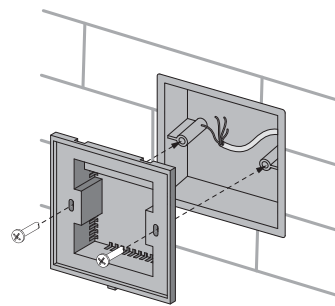
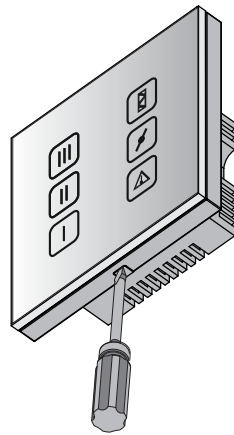
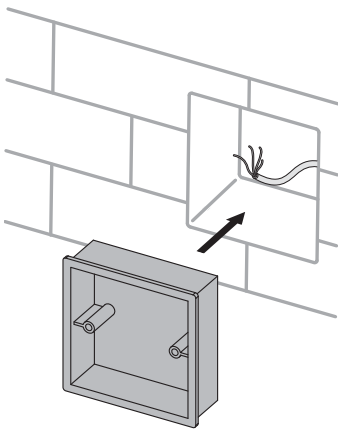
S14 SENSOR CONTROL PANEL MOUNTING



MAKE SURE THAT THE CONTROL PANEL IS NOT DAMAGED. DO NOT USE A DAMAGED CONTROL PANEL! DO NOT INSTALL THE CONTROL PANEL ON AN UNEVEN SURFACE! WHILE TIGHTENING THE SCREWS, DO NOT APPLY EXCESSIVE FORCE TO PREVENT THE CONTROL PANEL CASING DEFORMATION.

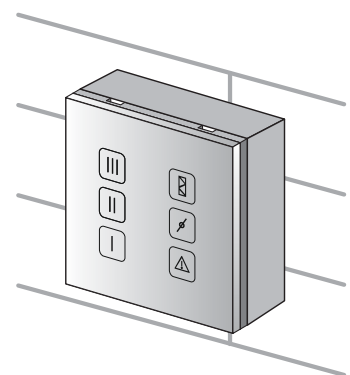
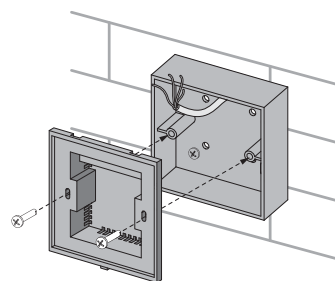
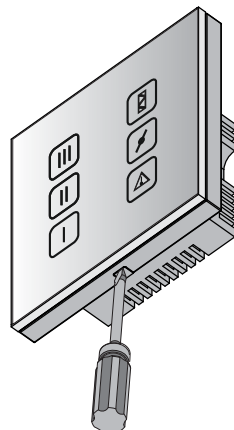
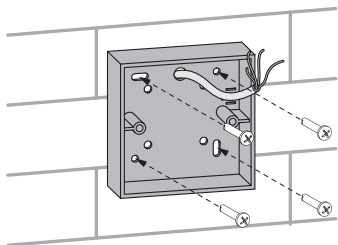
Control panel wall flush mounting:

1. Make a hole in the wall to install the control panel. Insert all the necessary cables and wires into the hole, install the mounting box from the delivery set in the wall.
2. Use a screwdriver to carefully undo the clips on the backside of the control panel and remove the back cover.
3. Fix the back side of the casing to the mounting box through the mounting holes, then connect the cable to the control panel in accordance with the Wiring diagram.
4. Fix the front side of the control panel using the latches.



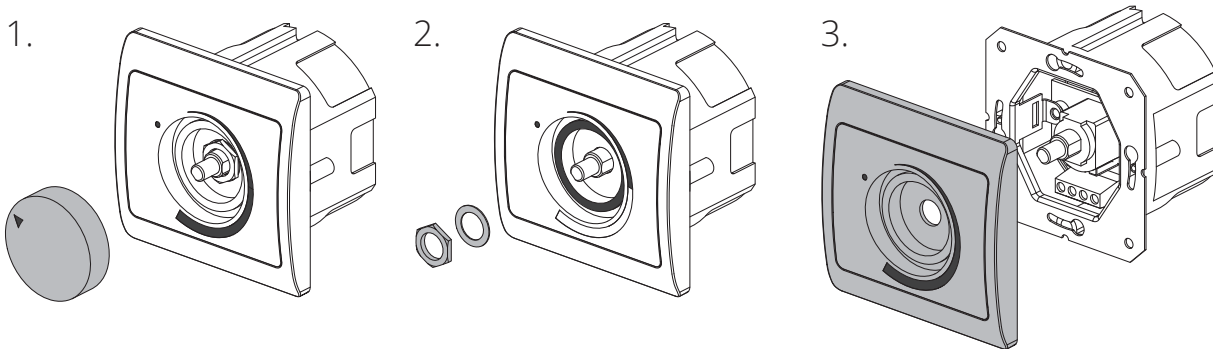
Control panel wall surface mounting:

1. Lead all necessary cables and wires to the control panel mounting place and install the mounting box from the delivery set on the wall.
2. Use a screwdriver to carefully undo the clips on the backside of the control panel and remove the back cover.
3. Fix the back side of the casing to the mounting box through the mounting holes using two screws from the delivery set. Then connect the cable to the control panel in accordance with the Wiring diagram.
4. Fix the front side of the control panel using the latches.

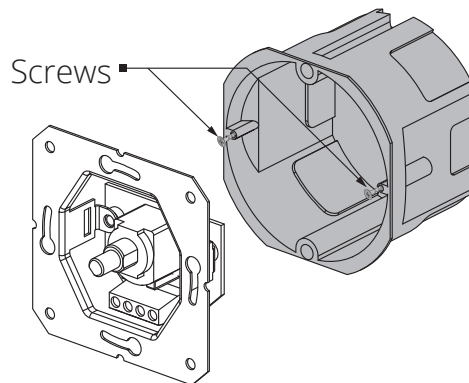


S2 SPEED CONTROLLER MOUNTING

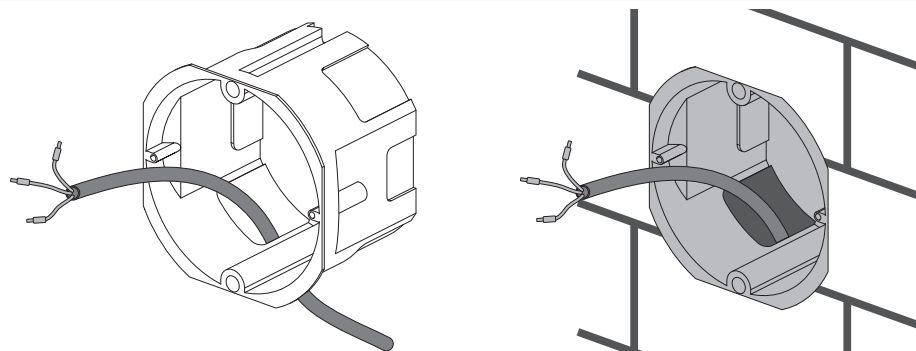
1. Disconnect the front panel from the speed controller:
- Remove the control knob.
 - Remove the retaining nut that fixes the front panel.
 - Remove the speed controller front panel.



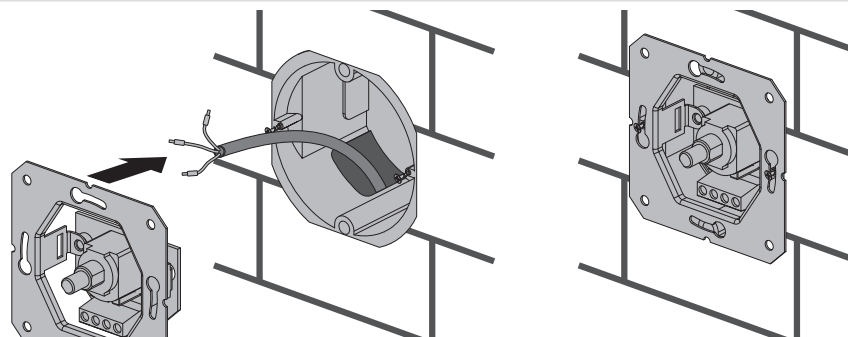
2. Loosen the two screws to disconnect the mounting box from the speed controller. Disconnect the control cable from the speed controller. Remember the colour marking of the wires and the terminals to enable their correct connection after completing of the speed controller mounting.



3. Insert the mounting box in the wall. The cable from the delivery set may be replaced with a cable of required length, type 3x0.5 mm², max. cable length 10 m.

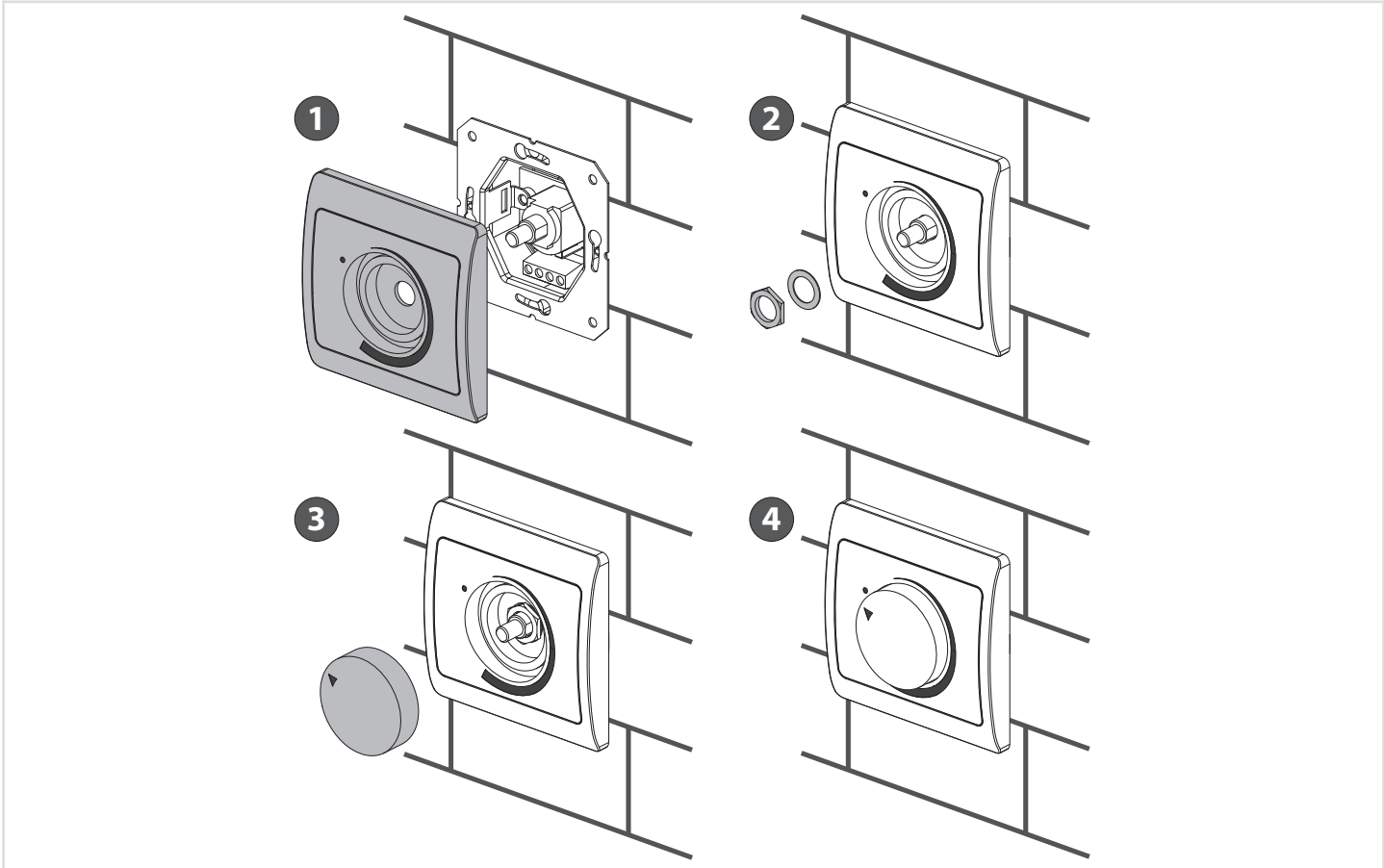


4. Connect the cable to the speed controller following the wiring diagram at page 15. Install the speed controller inside the mounting box using screws.



5. Mount the speed controller front part:

- Install the speed controller front panel.
- Fix the front panel with a washer and a nut.
- Install the control knob.
- The speed controller mounting is completed.



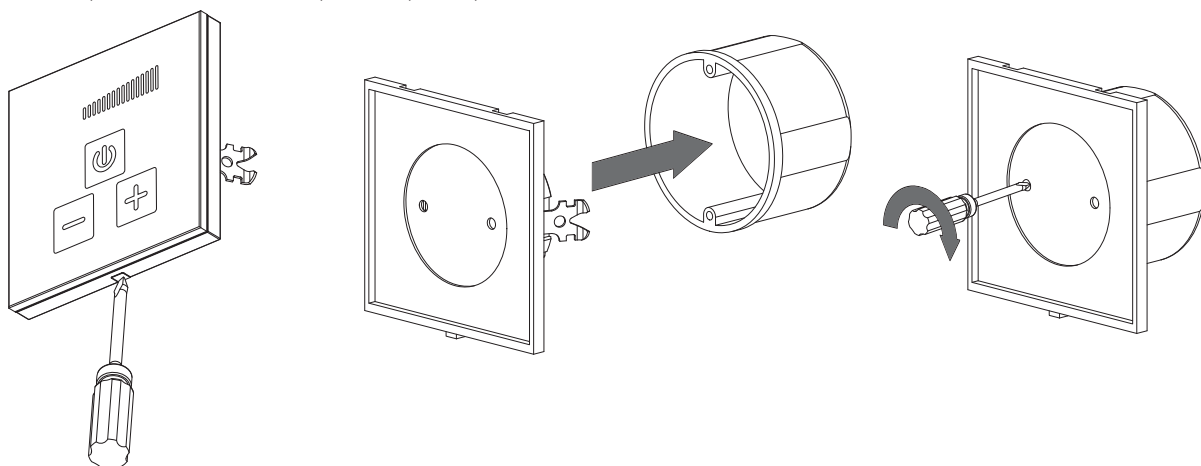
S12 SENSOR SPEED CONTROLLER MOUNTING

WARNING!


Makes sure that the speed controller is intact. Do not use damaged speed controllers. Do not mount the speed controller onto an uneven surface. While tightening the self-tapping screws do not apply excessive force to prevent speed controller casing deformation.

The sensor speed controller is installed as follows:


- Use a screwdriver to carefully undo the clips of the speed controller front panel.
- Remove the back panel.
- Lay the cable in the wall to the speed controller installation site and install the mounting box.
- Attach the back panel in the mounting box through the holes on the circuit board.
- To install the speed controller front panel clip it in place.




CONNECTION TO POWER MAINS




DISCONNECT THE UNIT FROM POWER MAINS PRIOR TO ANY OPERATIONS. THE FAN MUST BE CONNECTED TO POWER MAINS BY A QUALIFIED ELECTRICIAN. THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE GIVEN ON THE MANUFACTURER'S LABEL.



DO NOT LAY THE CABLE IN CLOSE PROXIMITY TO THE CONTROL PANEL CABLE! DO NOT COIL THE CABLE FROM THE CONTROL PANEL IN LOOPS WHILE LAYING IT.





ANY INTERNAL CONNECTION MODIFICATIONS ARE NOT ALLOWED AND RESULT IN WARRANTY LOSS.

Connect the unit to a single-phase AC 230 V / 50-60 Hz power mains by using the pre-wired power cord with the Euro Plug XP. Connect the unit to power mains through the external automatic switch QF with a magnetic trip integrated into the fixed wiring system with the rated current not below the rated current consumption (refer to Technical data).

EXTERNAL CONNECTION DIAGRAM FOR S14 AUTOMATION SYSTEM

Technical requirements to a cable for connection of the control panel to the unit:

- type - 4x0,25 mm²;
- length - up to 10 m.

The unit has an option of additional external controls connection to the X2 terminal block, which is located on the hinged electrical mounting plate of the control unit. Extra connections to the unit are shown in dotted lines in the External wiring diagram.

PK - connection of the automatic fire extinguishing system contact.

Upon connecting the automatic fire extinguishing system contact remove the jumper between the terminals 1 and 2. In case of fire the normally closed dry contact breaks the control circuit from the central fire-fighting board and cuts off power supply to the unit.

Connection of the external control unit contact, such as CO₂ sensor (NO, C).

Connect the CO₂ sensor to the 6 and 7 terminals by using a normally closed dry contact. If the dry contact is closed, the unit turns to the maximum speed.

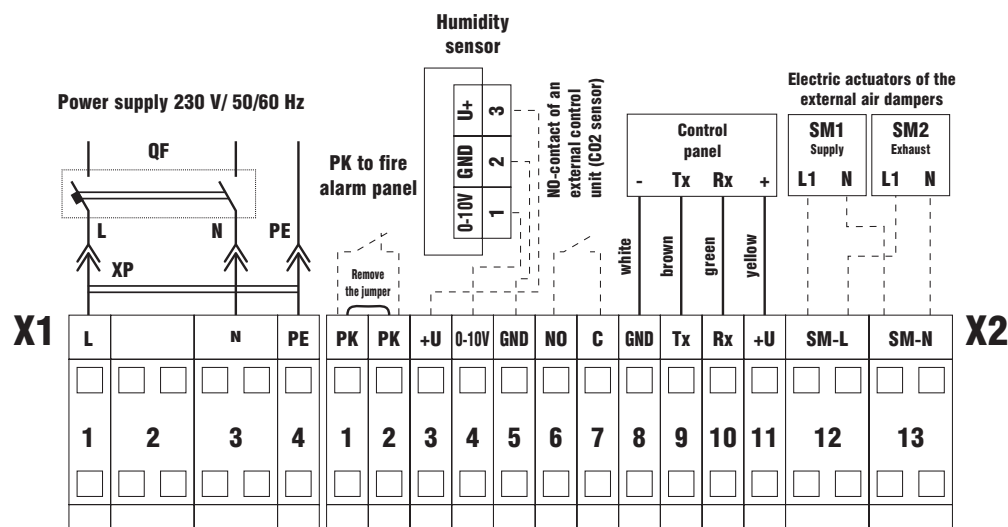
HV2 (+U, 0-10 V, GND) humidity sensor connection.

Connect the HV2 humidity sensor (not included in the delivery, can be ordered separately) to the contact socket located on the side panel of the control unit from the side of the extract pipe in accordance with the External wiring diagram.

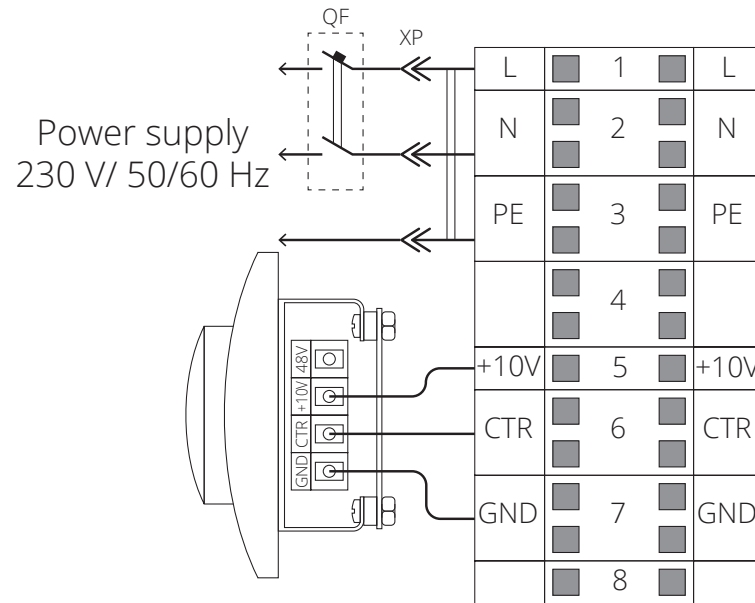
Connection of outer air dampers (SM1 supply air damper, SM2 exhaust air damper).

The air dampers and the actuator are not included in the delivery and can be purchased separately. For controlling the air dampers use the LF 230 BELIMO electric actuator with a voltage of 230 V and an open-close controlling. Connect the electric actuators to the 12 and 13 terminals (refer to the External wiring diagram).

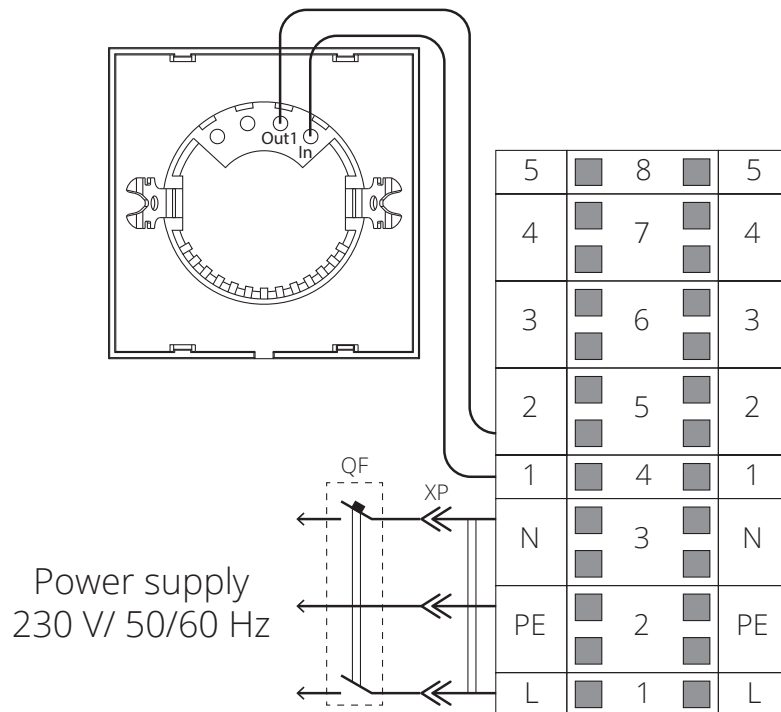
External control units wiring diagram:



EXTERNAL CONNECTION DIAGRAM FOR S2 AUTOMATION SYSTEM



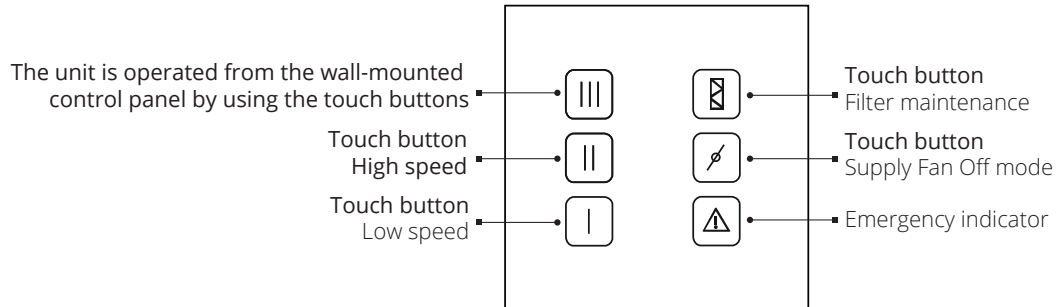
EXTERNAL CONNECTIONS DIAGRAM FOR S12 AUTOMATION SYSTEM









UNIT CONTROL

UNIT CONTROL

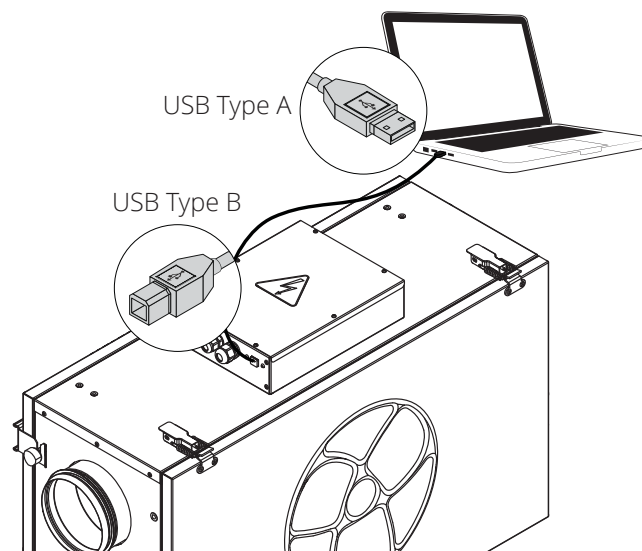
Control of the unit with the S14 automation system



	Indication variants when the unit is off: <ul style="list-style-type: none"> The touch buttons on the control panel are not highlighted. Filter maintenance indicator and emergency indicator are highlighted in the respective cases.
	Unit activation: Press one of three speed setting buttons. The selected button will be highlighted and the unit switches to the required speed.
	Speed changeover: Press the inactive speed setting button once. The selected button will be highlighted and the unit will switch to the required speed.
	Unit deactivation: To turn the unit off press the highlighted speed setting button.
	Supply Fan Off mode Press the touch button once. When the touch button is activated the supply fan is turned off and only the exhaust fan is in operation. Each time a touch button is pressed, the current unit status is changed and saved in the control panel memory.
	Filter maintenance As the unit reaches the set value of operating hours, the touch button is highlighted to remind about cleaning or replacing of the filters. After filter replacement or cleaning, reset the motor hours. Press and hold the touch button for 5 seconds. Resetting of the timer is confirmed by the touch button light turning off. When customizing the timer software for setting the number of hours refer to Filter maintenance section.
	Alarm In case of alarm, the alarm indicator is highlighted. In case of alarm indication, contact the Seller!

Operation using software

To work with the pre-installed software connect the unit to a laptop or to a PC via a USB cable with the Type A and Type B contact sockets. The USB cable is not included in the delivery.



The software enables editing the unit parameters:

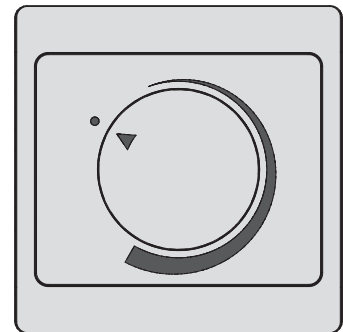
Parameter	Factory setting	Adjustment range
Zero speed (the unit is off), %	0	0 - 100
Low speed [%]	40	0 - 100
Medium speed [%]	70	0 - 100
High speed [%]	100	0 - 100
Unit speed with the closed dry contact of the external control unit, %	100	0 - 100
Filter cleaning (replacement) interval, h	2160 (3 months)	0 - 10000
Humidity level, %	60	30 - 80

The list of the adjustable parameters can be expanded in new versions of the software. Setting, troubleshooting and upgrading of the software version is made by the service technician.

CONTROL OF THE UNIT WITH THE S2 AUTOMATION SYSTEM












Air flow is controlled with the CDT E/O-10 speed controller. Set the control knob to a respective speed position to activate the required unit speed.

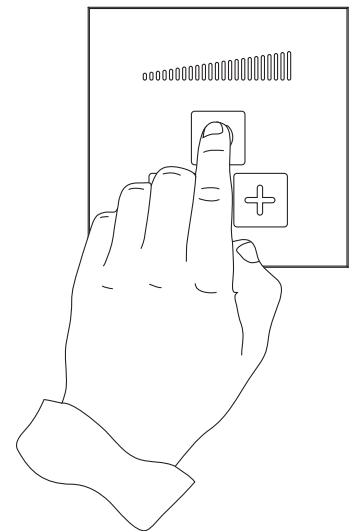
The speed controller view is shown below.



CONTROL OF THE UNIT WITH THE S12 AUTOMATION SYSTEM

The unit is operated from the sensor speed controller by using the touch buttons.

Operation	Button
When the system is powered on the button lights up a faint blue.	
Press to switch on the unit.	
Press again to switch the unit off.	
Press to decrease the speed of the unit.	
Press to increase the speed of the unit.	
Setting the desired minimum speed is as follows:	
1. Press and hold the button for 5 seconds until the LED indicator reaches 50 % of its operating range (this helps differentiate the setup mode from the operation mode). The unit operates at maximum power.	
2. Setting the desired minimum speed is as follows:	
Press repeatedly to increase the speed	
Press repeatedly to decrease the speed	
The set speed level is indicated by the LED display	
Press to save the selected value	
Press to switch on the fan and to activate its operation	
When selecting the minimum value the set value will be saved	



TECHNICAL MAINTENANCE

**DISCONNECT THE UNIT FROM POWER SUPPLY
BEFORE ANY MAINTENANCE OPERATIONS.**

Maintenance operations of the unit are required 3-4 times per year. Maintenance includes general cleaning of the unit and the following operations:

1. Filter maintenance (3-4 times per year).

Dirty filters increase air resistance in the system and reduce supply air volume. The filters require cleaning not less than 3-4 times per year. Vacuum cleaning is allowed. After two consecutive cleanings filters must be replaced. For new filters contact the Seller. The steps to replace the filters are as follows (refer to the figure on p. 13):

1. Press out on the latches.
2. Open the service panel.
3. Remove the filters from the unit.

2. Fan maintenance (once a year).

Even in case of regular maintenance of the filters, some dust may accumulate inside the fans and reduce the fan performance and supply air flow. Clean the fans with a soft brush or cloth. Do not use water, aggressive solvents or sharp objects as they may damage the impeller.

3. Heat exchanger maintenance (once a year).

Some dust may accumulate on the heat exchanger block even in case of regular maintenance of the filters. To maintain the high heat recovery efficiency, regular cleaning is required. To clean the heat exchanger pull it out, flush the heat exchanger with warm detergent solution. After cleaning install the dry heat exchanger back to the unit. To remove the filters and the heat exchanger follow the operation in Fig. 13:

1. Release the latches and remove the bottom panel.
2. Open the service panel.
3. Remove the heat exchanger.

4. Technical maintenance of condensate drainage system (once a year).

The condensate drainage (drain line) may get clogged by dirt and dust particles contained in the exhaust air. Check the drain line operation by filling the drain pan under the unit with water, clean the U-trap and the drain line, if necessary.

5. Supply air flow control (twice per year).

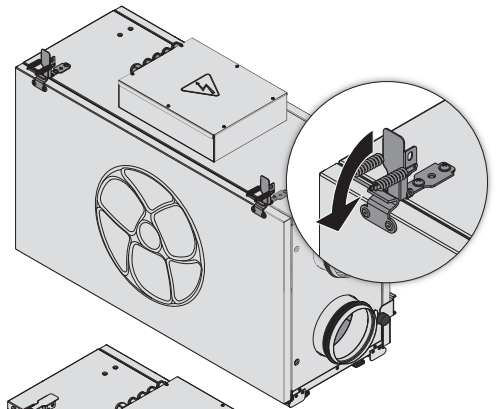
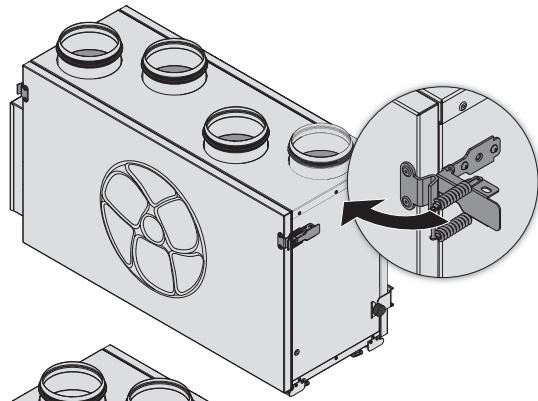
The supply duct grille may get clogged with leaves and other objects reducing the unit performance and supply air delivery. Check the supply grille twice per year and clean it as required.

6. Technical maintenance of air duct system (every 5 years).

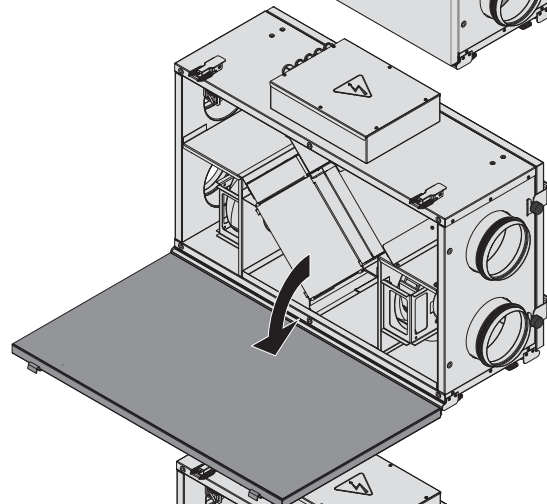
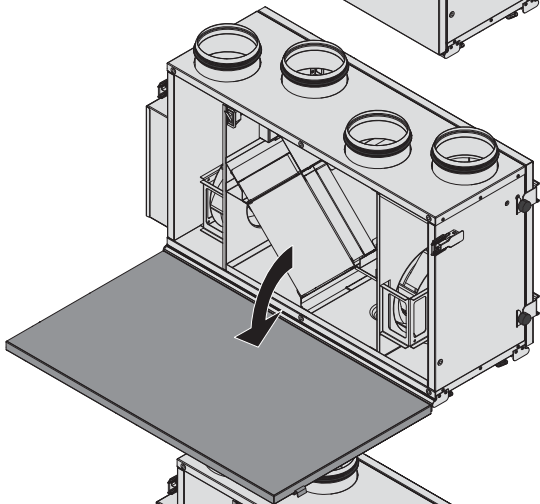
Even regular fulfilling of all the prescribed above maintenance operations may not completely prevent dirt accumulation in the air ducts which reduces the unit capacity. Duct maintenance means regular cleaning or replacement.

TECHNICAL MAINTENANCE OF THE UNIT

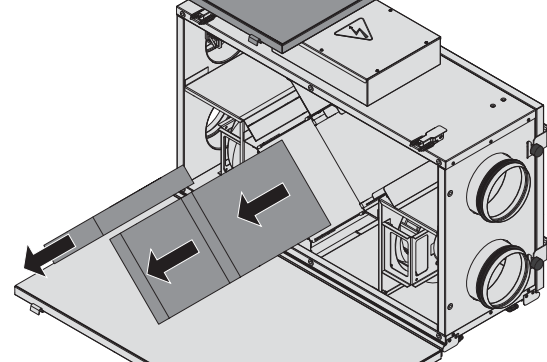
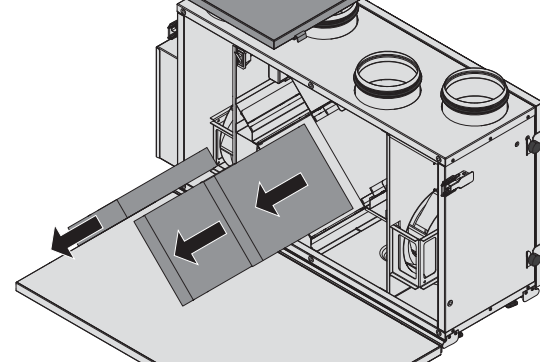
1.



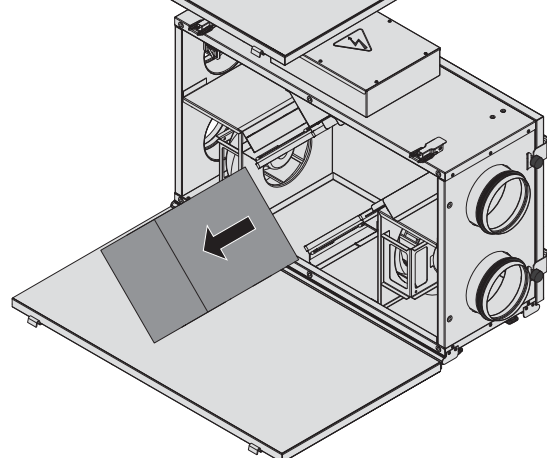
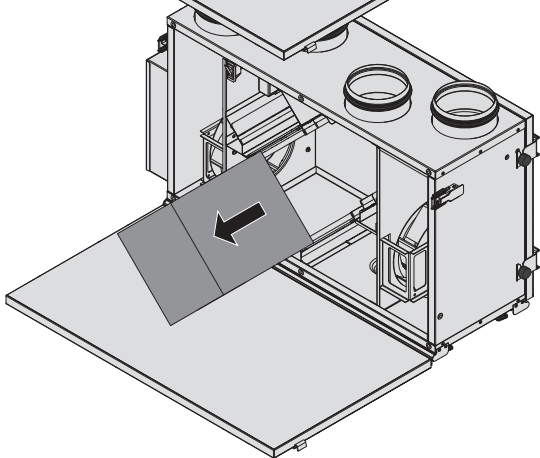
2.



3.



4.



TROUBLESHOOTING

Problem	Possible reasons	Troubleshooting
The fan(s) do(es) not get started.	No power supply.	Make sure the power supply line is connected correctly, otherwise troubleshoot a connection error.
Cold supply air	Extract filter clogging.	Clean or replace the extract filter.
	The heat exchanger is frosted.	Check the heat exchanger for icing. Switch the unit off if required and turn it on after the freezing danger is no longer imminent.
Low air flow	Filters, fans or the heat exchanger are soiled.	Clean or replace the filters, clean the fans and the heat exchanger.
	The ventilation system is soiled or damaged.	Clean the ventilation system components. Replace the damaged components.
Noise, vibration	The impellers are soiled.	Clean the impellers.
	The fan or casing screw connection is loose.	Tighten the screw connection of the fans or the casing against stop.
Water leakage	The drainage system is soiled, damaged or arranged not correctly.	Clean the drain line. Check the drain line slope angle. Make sure that the U-trap is filled with water and the drain pipes are frost protected.

STORAGE AND TRANSPORTATION REGULATIONS

Store the unit in the manufacturer's original packing box in a dry ventilated premise at the temperatures from +5 °C up to +40 °C. Storage environment must not contain aggressive vapours and chemical mixtures provoking corrosion, insulation and sealing deformation. Use hoist machinery for handling and transportation to prevent possible mechanical damages of the unit. Follow the applicable moving regulations specific to the particular cargo type while loading and unloading. Use any vehicle types for the unit transportation provided that it is protected against mechanical or weather damage. Avoid any mechanical shocks and strokes during handling operations.

MANUFACTURER'S WARRANTY

The unit complies with the requirements according to the EU norms and directives, to the relevant EU-Low Voltage Equipment Directives, EU-Directives on Electromagnetic Compatibility.

We hereby declare that the unit complies with the essential protection requirements of Electromagnetic Council Directive 2004/108/EC, 89/336/EEC and Low Voltage Directive 2006/95/EC, 73/23/EEC and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility, which relate to electrical appliances used in set voltage classes. The manufacturer hereby warrants normal operation of the unit over the period of two years from the retail purchase date provided observance of the installation and operation regulations.

In case of a failure due to a manufacturing fault during the warranty period the consumer has the right to exchange it.

The replacement is offered by the Seller.

In case of no confirmation of the purchase date, the warranty period shall be calculated from the manufacturing date.

The MANUFACTURER is not responsible for any damage resulting from any misuse of or gross mechanical interference with the unit.

The MANUFACTURER is not responsible for the damages resulted due to the use of third party equipment or to third party equipment.



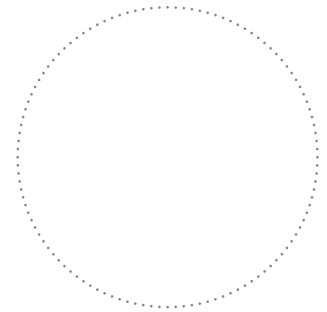
WARNING!
DO NOT DISPOSE IN DOMESTIC WASTE.
THE UNIT CONTAINS IN PART MATERIALS THAT CAN BE RECYCLED AND IN PART SUBSTANCES THAT SHOULD NOT END UP AS DOMESTIC WASTE.
DISPOSE OF THE UNIT ONCE IT HAS REACHED THE END OF ITS WORKING LIFE ACCORDING TO THE REGULATIONS VALID IN YOUR COUNTRY.

ACCEPTANCE CERTIFICATE

Unit Type	Heat recovery air handling unit
Model	Komfort Ultra _____ H(E) S_____
Serial Number	
Manufacture Date	
<p>We hereby declare that the product complies with the essential protection requirements of Electromagnetic Council Directive 2004/108/EC, 89/336/EEC and Low Voltage Directive 2006/95/EC, 73/23/EEC and CE-marking Directive 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. This certificate is issued following test carried out on samples of the product referred to above.</p>	
Quality Inspector's Stamp	

SELLER INFORMATION

Seller	
Address	
Phone Number	
E-mail	
Purchase Date	



This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.

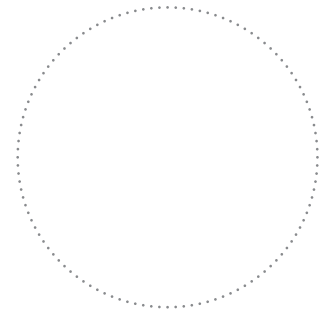
Customer's Signature	
-----------------------------	--

Seller's Stamp

MOUNTING CERTIFICATE

Komfort Ultra H(E) S heat recovery air handling unit has been connected to power mains pursuant to the requirements stated in the present user's manual.

Company Name	
Address	
Phone Number	
Installation Technician's Full Name	
Installation Date:	Signature:



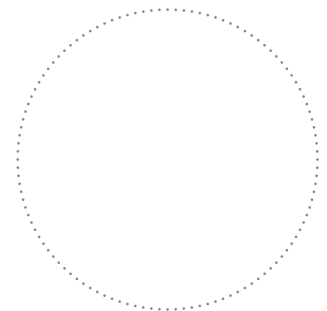
Seller's Stamp

The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.

Signature:	
-------------------	--

WARRANTY CARD

Unit Type	Heat recovery air handling unit
Model	Komfort Ultra _____ H(E) S_____
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	



Seller's Stamp



Komfort_Ultra(EC)_S(L)_300(250)_v.2(0)_EN

