



## HEAT AND ENERGY RECOVERY AIR HANDLING UNIT



*KOMFORT Ultra EC S2 300-H S2*  
*KOMFORT Ultra EC L2 300-H S2*  
*KOMFORT Ultra EC L2 300-E S2*  
*KOMFORT Ultra EC S2 300-E S2*  
*KOMFORT Ultra EC S2 300-H S14(S15)*  
*KOMFORT Ultra EC L2 300-H S14(S15)*  
*KOMFORT Ultra EC L2 300-E S14(S15)*  
*KOMFORT Ultra EC S2 300-E S14(S15)*

**EN**

**USER'S MANUAL**



**BLAUBERG**  
Ventilatoren

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This user's manual is a main operating document intended for technical, maintenance, and operating staff.

The manual contains information about purpose, technical details, operating principle, design, and installation of the KOMFORT UltraEC S2(L2) 300-H(E) S2(S14)(S15) unit and all its modifications.

Technical and maintenance staff must have theoretical and practical training in the field of ventilation systems and should be able to work in accordance with workplace safety rules as well as construction norms and standards applicable in the territory of the country.

The information in this user's manual is correct at the time of the document's preparation.

The Company reserves the right to modify the technical characteristics, design, or configuration of its products at any time in order to incorporate the latest technological developments.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means in any information search system or translated into any language in any form without the prior written permission of the Company.

**SAFETY REQUIREMENTS**

- Please read the user's manual carefully prior to installing and operating the unit.
- All user's manual requirements as well as the provisions of all the applicable local and national construction, electrical, and technical norms and standards must be observed when installing and operating the unit.
- 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.

**UNIT INSTALLATION 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.



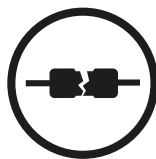
- While installing the unit, follow the safety regulations specific to the use of electric tools.



- 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.



- Do not allow children to operate the unit.



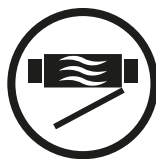
- Disconnect the unit from power mains prior to any technical maintenance.



- 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.



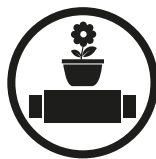
- Do not direct the air flow produced by the unit towards open flame or ignition sources.



- 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.



**THE PRODUCT MUST BE DISPOSED SEPARATELY AT THE END OF ITS SERVICE LIFE.  
DO NOT DISPOSE THE UNIT AS UNSORTED MUNICIPAL WASTE.**

**PURPOSE**



**THE UNIT SHOULD NOT BE OPERATED BY CHILDREN OR PERSONS WITH REDUCED PHYSICAL, MENTAL, OR SENSORY CAPACITIES, OR THOSE WITHOUT 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.**

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 stand-alone operation. The unit is designed to ensure continuous mechanical air exchange in houses, offices, hotels, cafés, 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 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 favorable for the formation of hazardous substances (toxic substances, dust, pathogenic germs).

**DELIVERY SET**

NAME	NUMBER
Air handling unit	1 pc.
User's manual	1 pc.
Control panel	1 pc.
Mounting box for wall flush mounting (only for the units with an S14 (S15) control panel)	1 pc.
Mounting box for wall surface mounting (only for the units with an S14 (S15) control panel)	1 pc.
Drain pipe	1 pc.
Installation kit	1 pc.
Packing box	1 pc.

**DESIGNATION KEY**

**Comfort Ultra EC S 2 300 E S14**

**Control device**

S2 – speed controller R-1/010  
 S14 - sensor control panel, white in colour  
 S15 - sensor control panel, black in colour

**Unit type**

H – ventilation with heat recovery  
 E – ventilation with energy recovery

**Rated air capacity [m³/h]**

**Unit modification**

**Spigot orientation**

S – vertical spigot orientation  
 L – horizontal spigot orientation

**Motor type**

EC - electronically commutated

**Compact design**

H – ventilation with heat recovery  
 E – ventilation with energy recovery

**Series**





**TECHNICAL DATA**

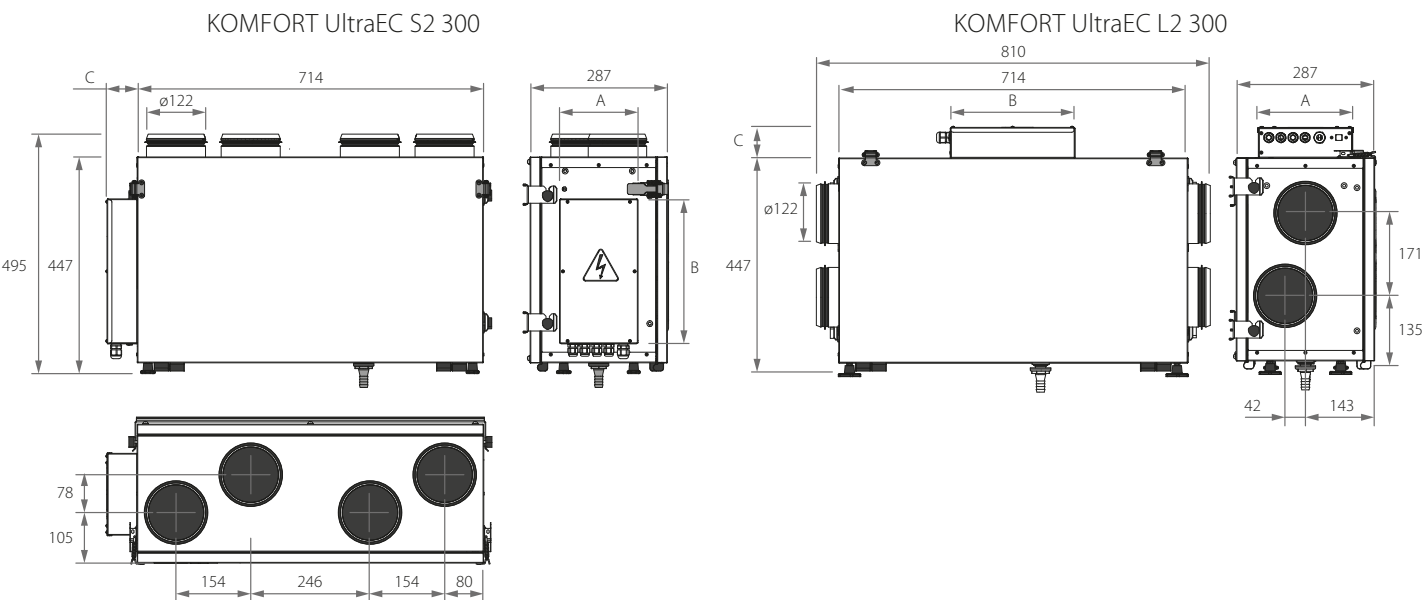
The unit is designed for indoor application with the ambient temperature ranging from +1 °C up to +40 °C and relative humidity up to 80 %. Hazardous parts access and water ingress protection rating:

- IP44 for the unit motors
- IP22 for the assembled unit connected to the air ducts

The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

**TECHNICAL DATA**

MODEL	KOMFORT UltraEC S2 300	KOMFORT UltraEC L2 300
Unit voltage [V /50 (60) Hz]	1~ 230	
Maximum unit power [W]	165	
Maximum unit current [A]	1.3	
Maximum air flow [m³/h]	300	
Sound pressure level at 3 m distance [dBA]	33	
Transported air temperature [°C]	from -25 up to +60	
Insulation	20 mm mineral wool	
Extract filter	G4	
Supply filter	G4, F7	
Connected air duct diameter [mm]	Ø125	
Weight [kg]	32	28
Heat recovery efficiency* [%]	55 - 79	51 - 73
Humidity recovery efficiency* [%]		26 - 45
Heat exchanger type	cross-flow	
Heat exchanger material	aluminium	polymerized cellulose

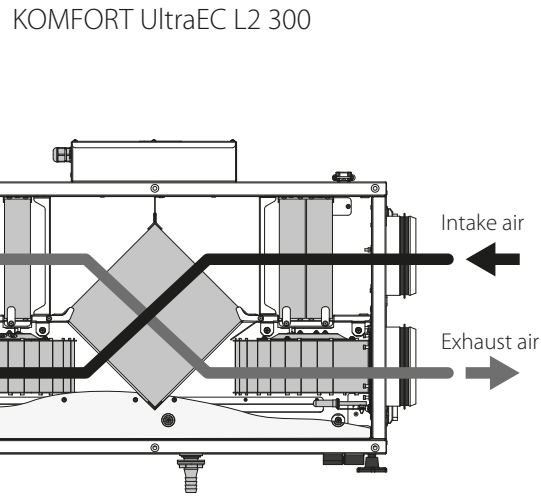
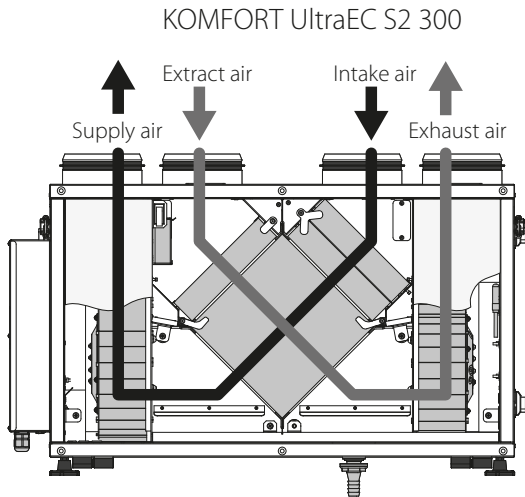


MODEL	A	B	C
KOMFORT UltraEC S2 300	150	110	43
KOMFORT UltraEC L2 300	150	110	43
KOMFORT UltraEC S2 300 S14(S15)	198	255	63
KOMFORT UltraEC L2 300 S14(S15)	164	295	63

**DESIGN AND OPERATING PRINCIPLE**

The unit has the following operating principle: warm stale extract air from the room flows into the unit, where it is filtered by the extract filters, then air flows through the heat exchanger and is exhausted outside by the extract fan. Cold fresh air from the outside flows into the unit, where it is cleaned by the supply filters. Then the air flows through the heat exchanger and is directed to the room with the supply fan. Heat energy of warm extract air is transferred to clean intake fresh air from the outside and warms it up. The air flows are fully separated while flowing through the heat exchanger. Heat recovery minimizes heat losses, which reduces the cost of space heating in the cold season.

**UNIT OPERATION LOGIC**

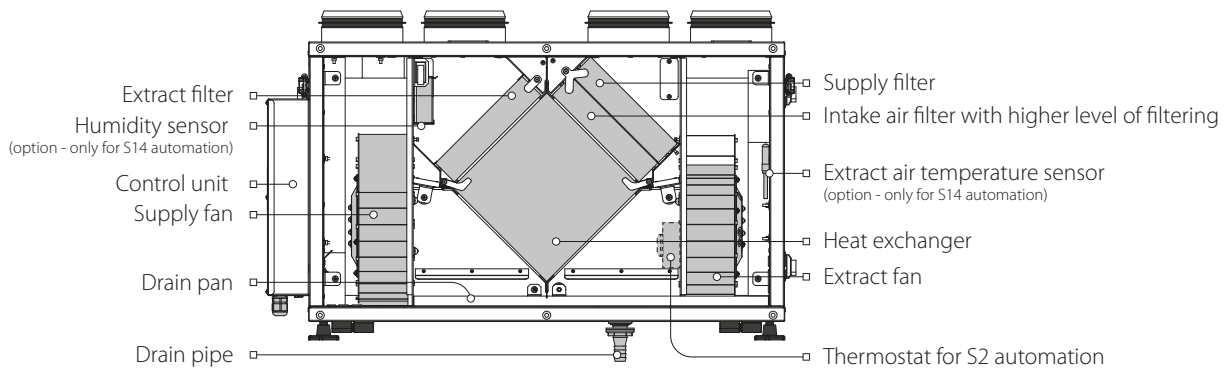


**Freeze protection**

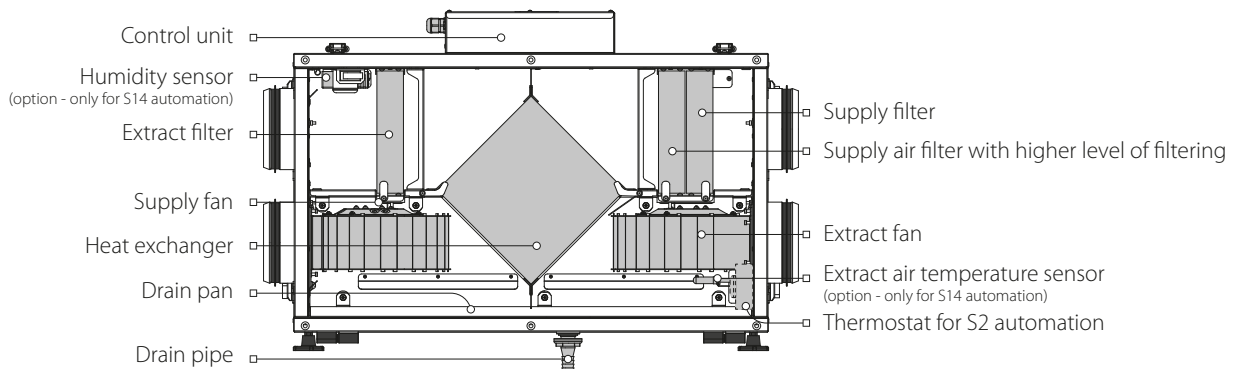
The heat exchanger freeze protection function of the unit is implemented with a temperature sensor (for units with an S14 (S15) control panel) or a thermostat (for units with an S2 control panel). The temperature sensor is installed in the exhaust air duct downstream of the heat exchanger. In case of 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 (exhaust air temperature). If necessary, this setting can be changed within the software. To set the thermostat temperature set point set the temperature control knob into a respective position.

**UNIT DESIGN**

KOMFORT UltraEC S2 300



KOMFORT UltraEC L2 300



## INSTALLATION AND SET-UP



**READ THE USER'S MANUAL BEFORE INSTALLING THE UNIT**



**THE UNIT MUST BE MOUNTED ON A PLANE SURFACE.  
MOUNTING OF THE UNIT TO AN UNEVEN SURFACE CAN LEAD TO THE UNIT CASING  
DISTORTION AND OPERATION DISTURBANCE.**

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 get the best performance of the unit and to minimize turbulence-induced air pressure losses, connect the straight air duct section to the spigots on both sides of the unit while installing.

Minimum straight air duct length:

- equal to 1 air duct diameter on the 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 fan 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.

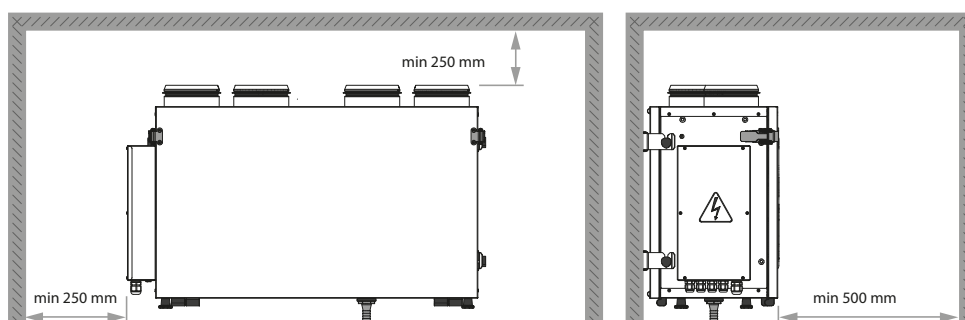
Installing the unit to an uneven surface could lead to the unit's casing distortion and operation disturbance.

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 set)

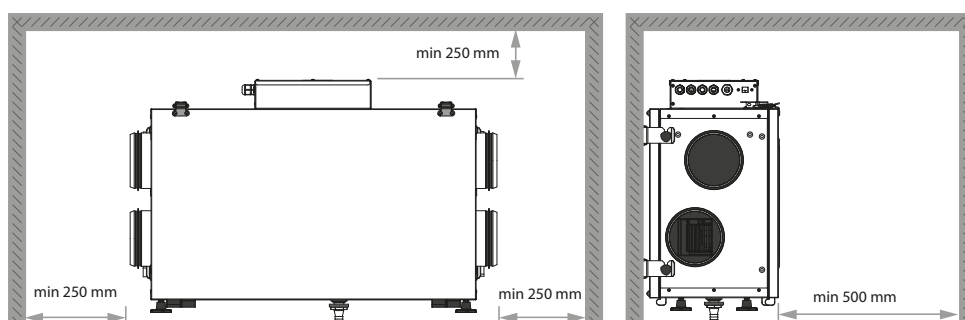
### UNIT WALL MOUNTING

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

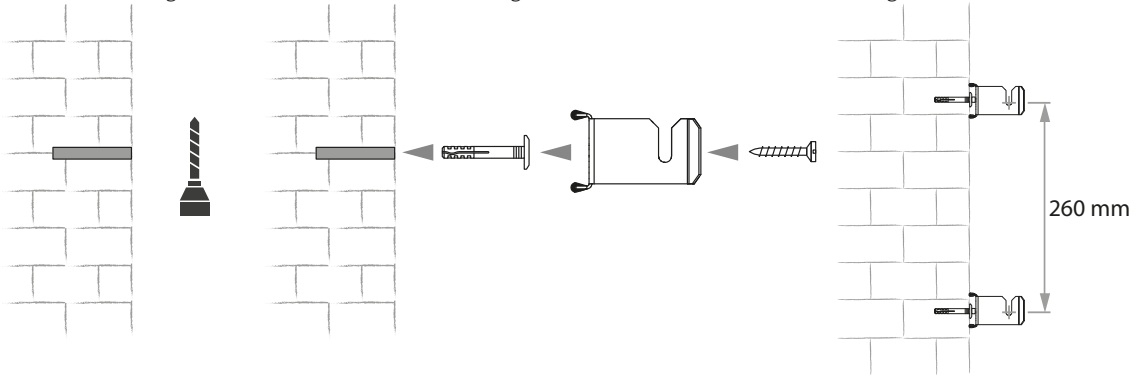
KOMFORT UltraEC S2 300



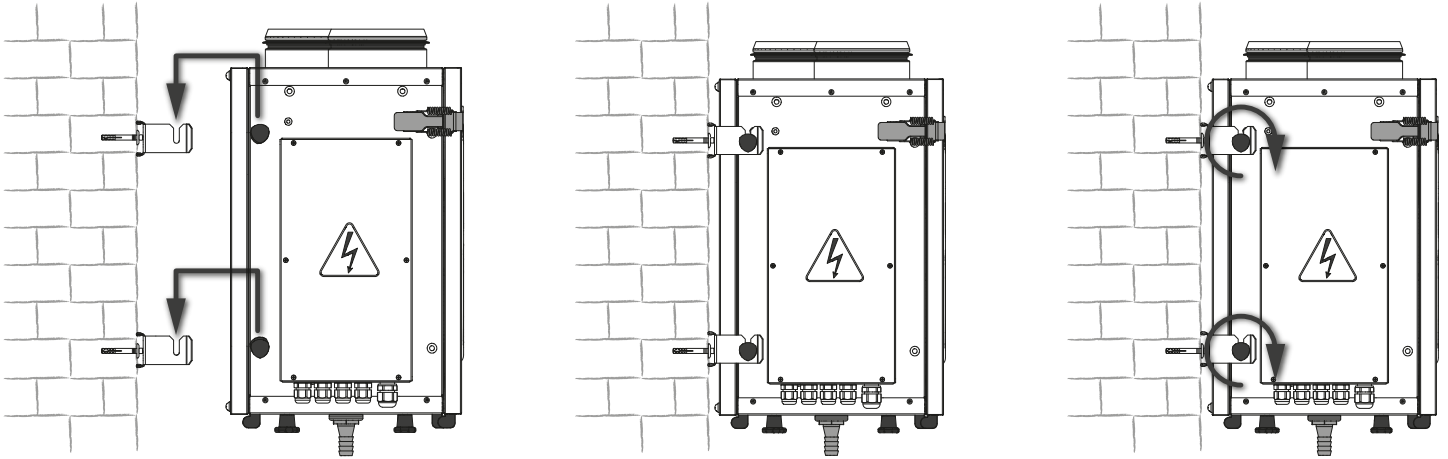
KOMFORT UltraEC L2 300



2. Attach the wall mounting brackets to the wall considering the wall material and the unit weight.



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

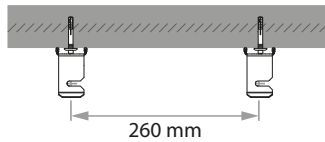


**SUSPENDED MOUNTING**

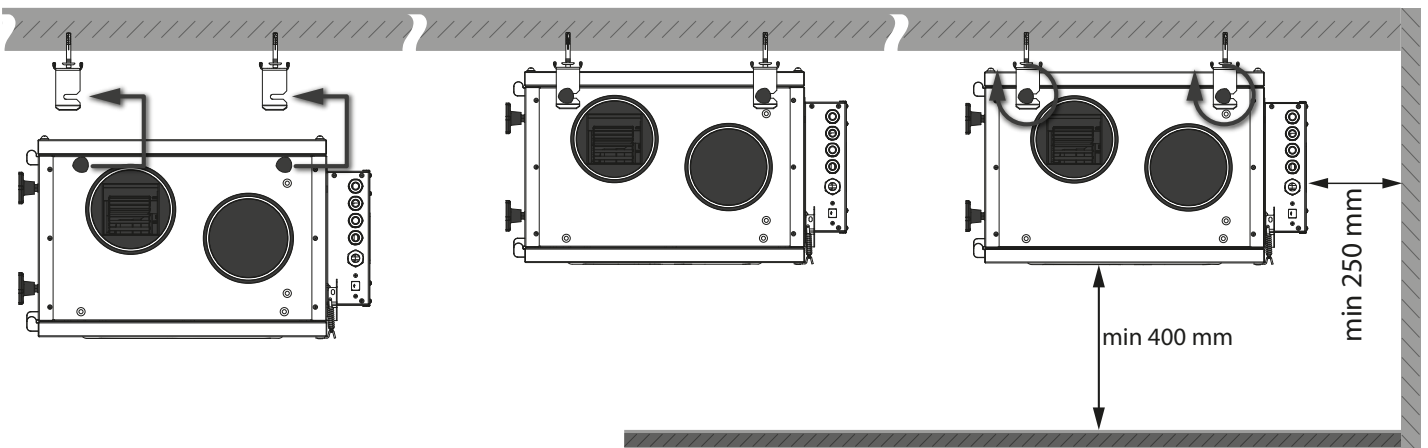
When selecting the installation site provide minimum allowed distances to the unit.

**Mounting using U-shaped brackets (only for the KOMFORT UltraEC S2(L2) 300 E units).**

Attach the wall mounting brackets to the ceiling considering the ceiling material and the unit weight.

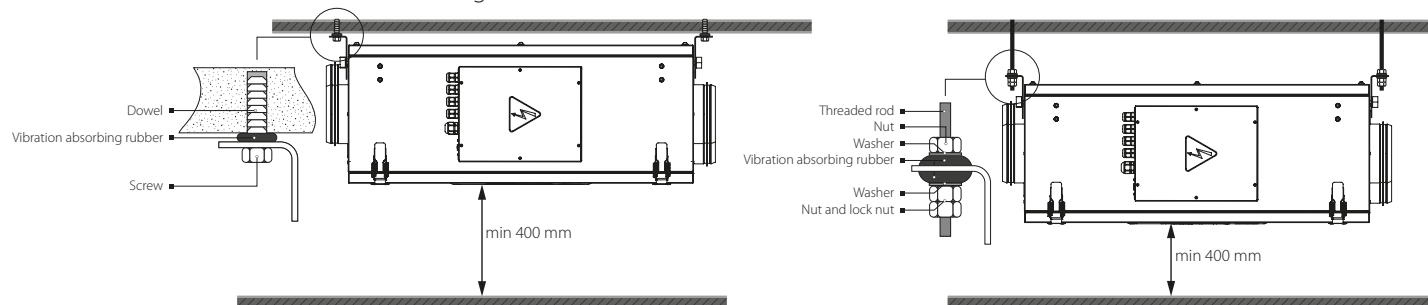


Install the unit on the mounting brackets. Tighten the triangular fixing screws on the mounting brackets.

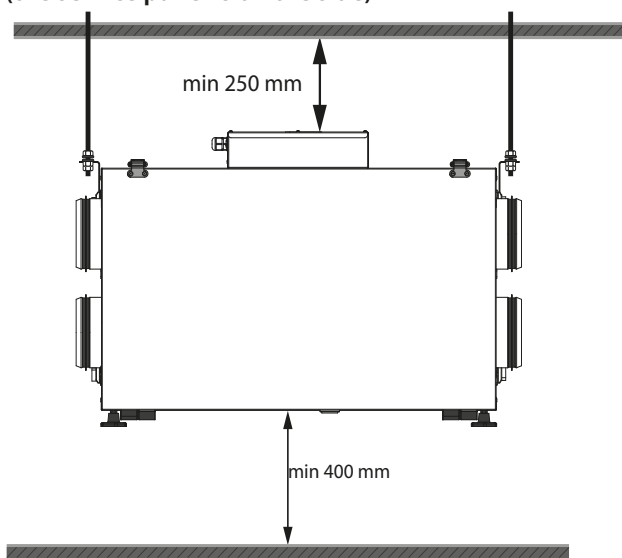


**Mounting using L-shaped brackets (the service panel is at the bottom, only for the KOMFORT UltraEC S2(L2) 300 E units).**

The unit can be mounted close to the ceiling or on the threaded rods.

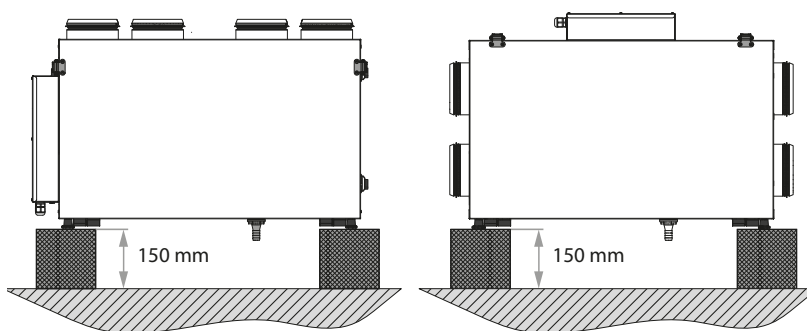


**Mounting using L-shaped brackets (the service panel is on the side)**



**UNIT FLOOR MOUNTING**

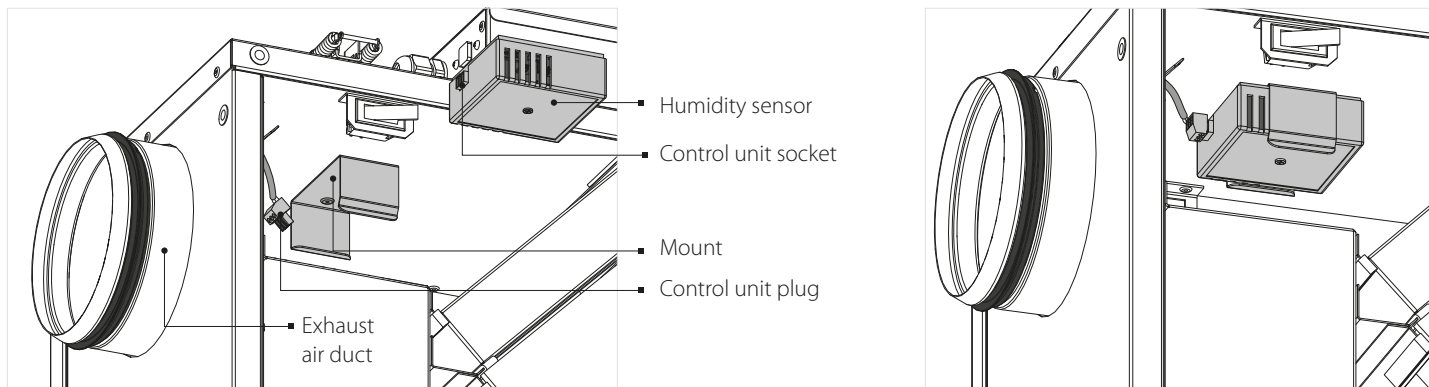
Install the unit on the pre-mounted floor supports, minimum 150 mm height, to ensure sufficient access for the drain pipe connection to the U-trap and for condensate drain system installation.



**FS2 HUMIDITY SENSOR MOUNTING (ONLY FOR AIR HANDLING UNITS WITH AN S14 (S15) AUTOMATION SYSTEM)**

The FS2 humidity sensor is not included in the delivery set and can be ordered separately. Install the humidity sensor into the mount on the extract air duct panel and connect the humidity sensor plug to the respective socket on the control unit, refer to the External wiring diagram.

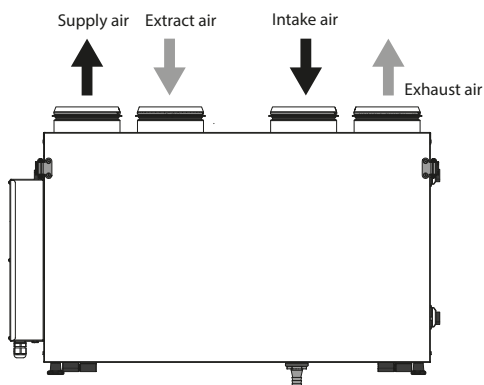
**Humidity sensor mounting based on KOMFORT UltraEC S2 300 unit example**



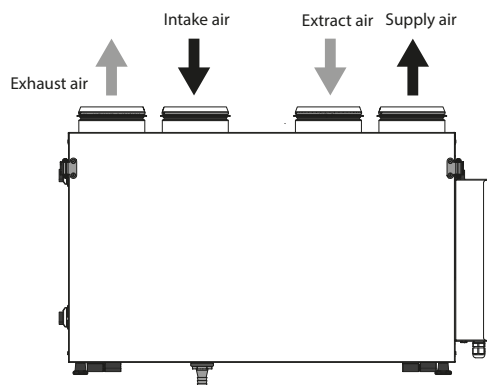
**SERVICE SIDE CHANGE**

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.

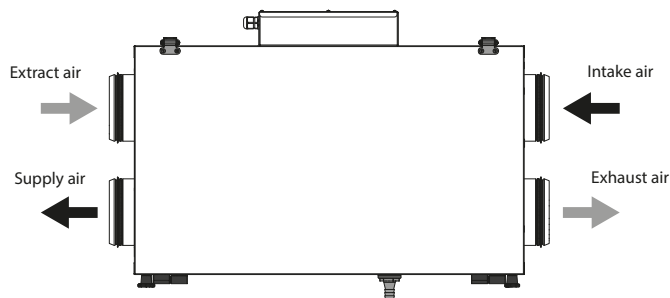
**KOMFORT UltraEC S2 300 (left-handed modification)**



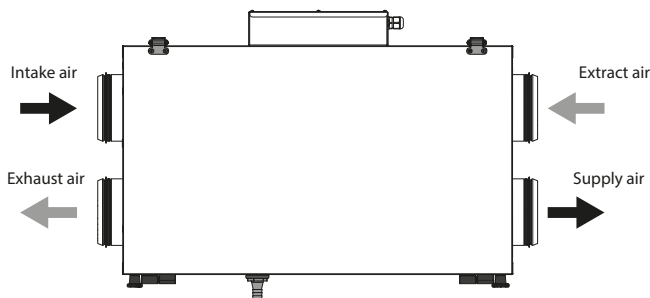
**KOMFORT UltraEC S2 300 (right-handed modification)**



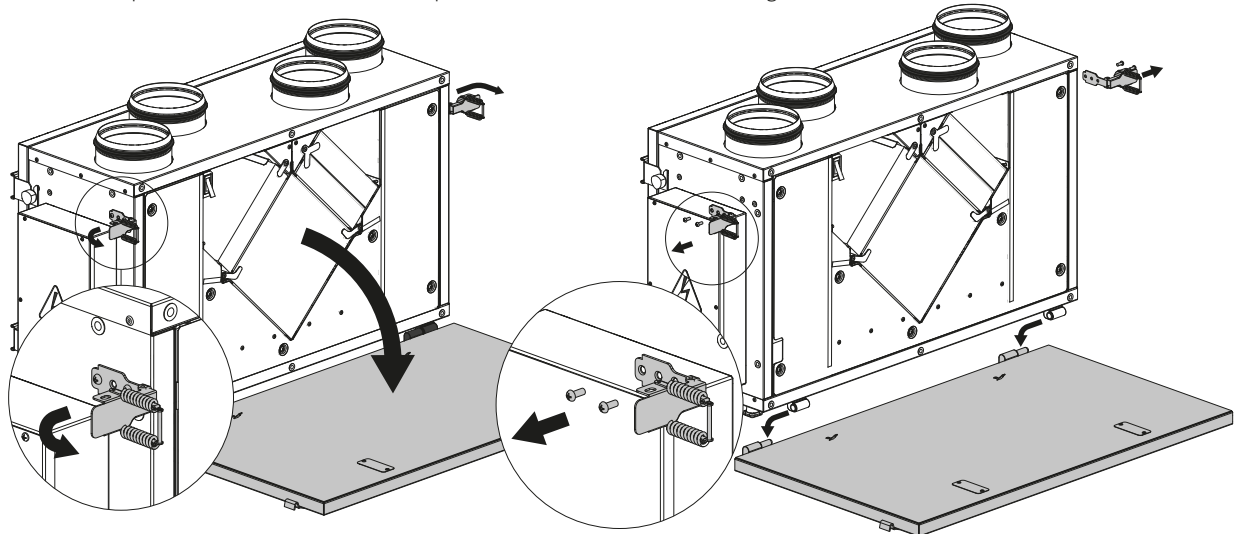
**KOMFORT UltraEC L2 300 (left-handed modification)**



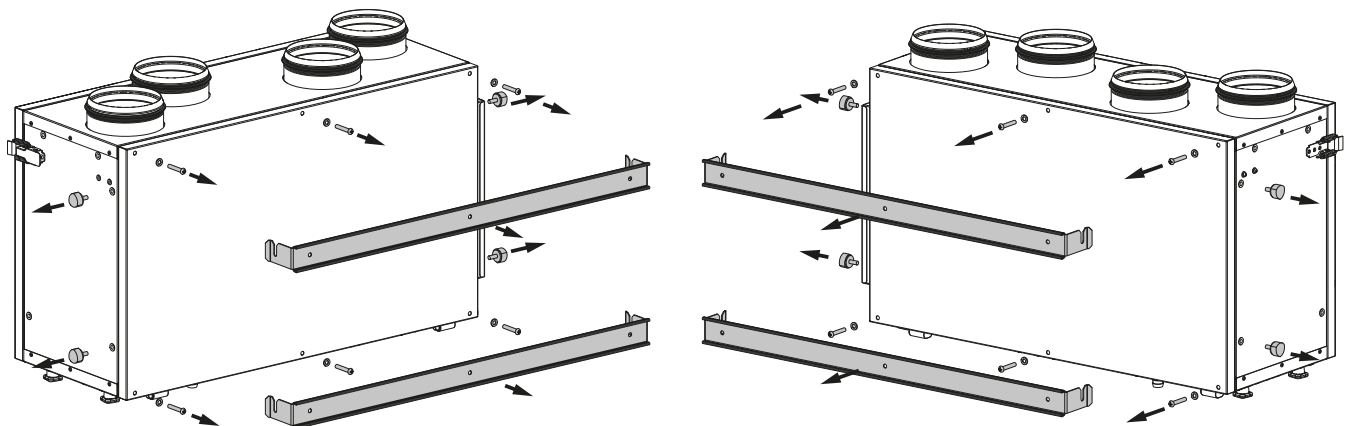
**KOMFORT UltraEC L2 300 (right-handed modification)**



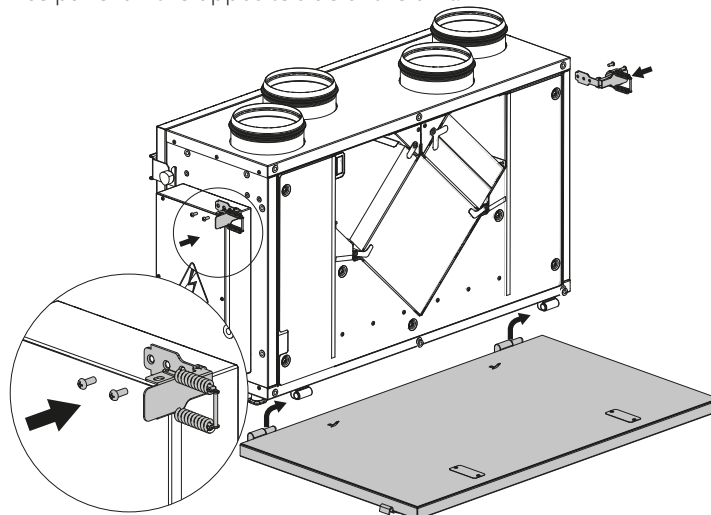
1. Press out on the latches. Open and remove the service panel. Undo the screws securing the latches and remove them.



2. Remove four hand screws and take off 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 latches and the service panel on the opposite side of the unit.

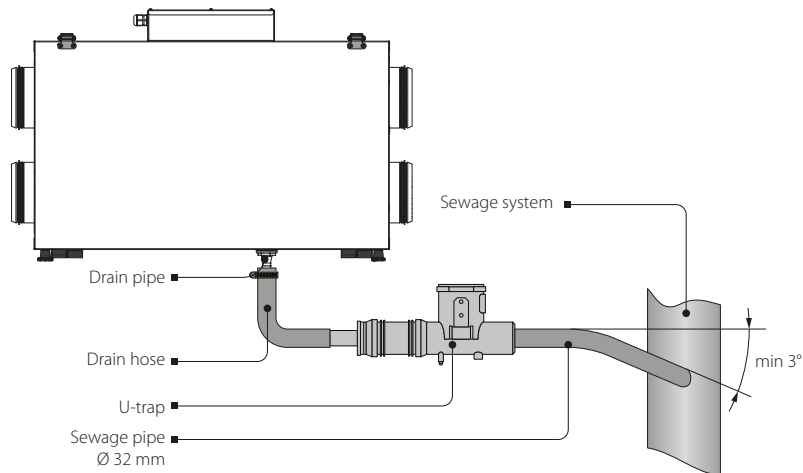
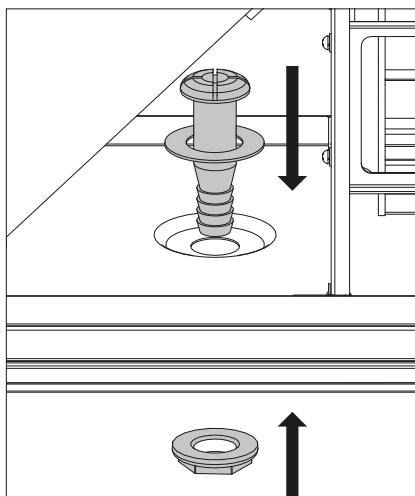


Service side change is shown by the example of the KOMFORT UltraEC S2(L2) 300 air handling unit. The procedure of the service side changing for KOMFORT UltraEC S2(L2) 300 is carried out in the same manner.



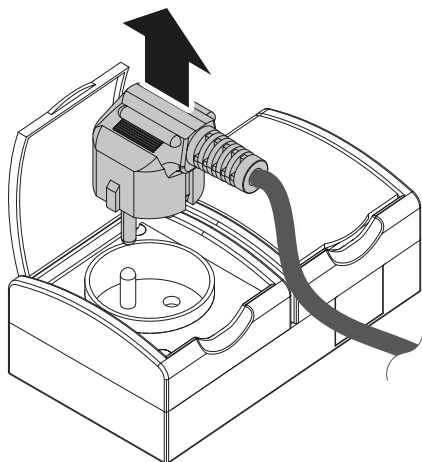
**CONDENSATE DRAINAGE SYSTEM CONNECTION**

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 SG-32 U-trap kit (available upon separate order).

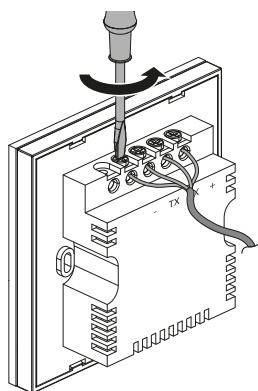


**S14(S15) SENSOR CONTROL PANEL MOUNTING**

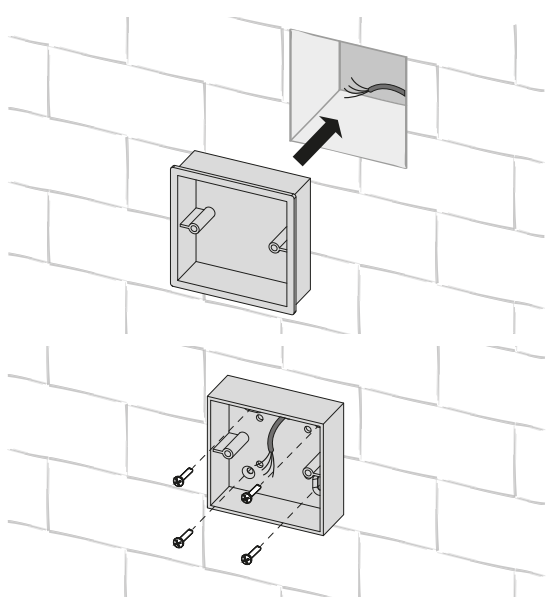
1. Disconnect the unit from power mains by taking the plug out of the socket.



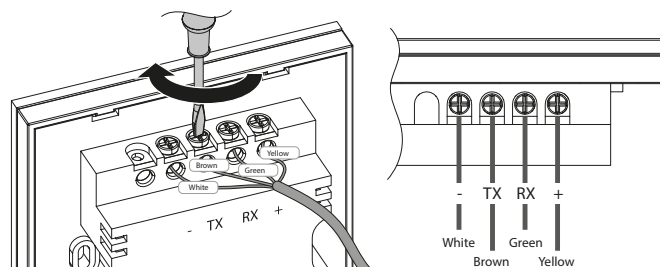
2. Disconnect the control cable from the control panel.



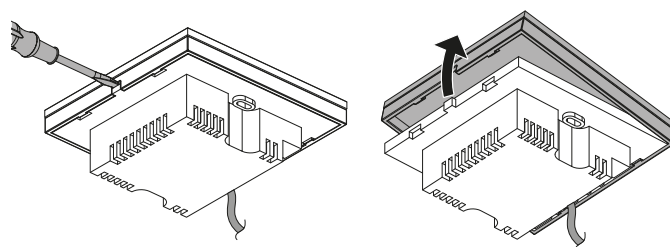
3. Install one of the mounting boxes at the control panel installation site. Lead the cable into the mounting box. Do not coil the cable from the control panel in loops while laying it.



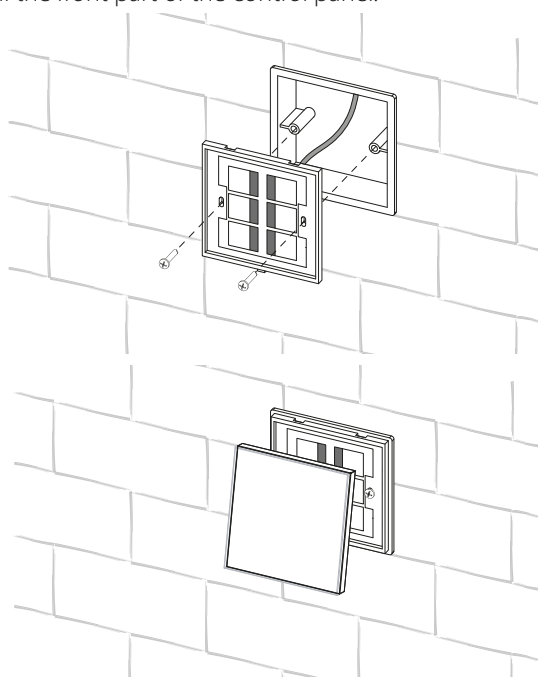
4. Connect the control cable to the control panel according to colour codes



5. Using a screwdriver, remove the front part of the panel.



6. Fix the control panel in the mounting box using the screws and reinstall the front part of the control panel.



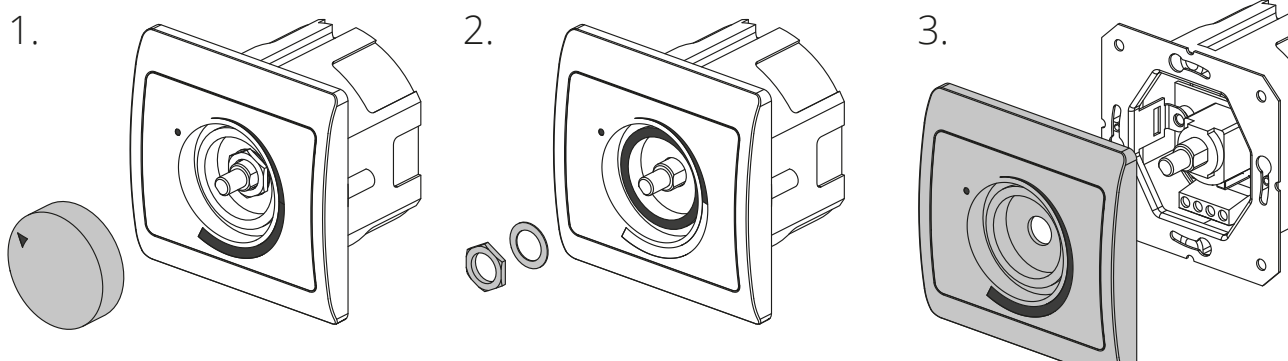
After installing the control panel and its front part you may connect the unit to power supply. The sensor control panel will then be initialized.



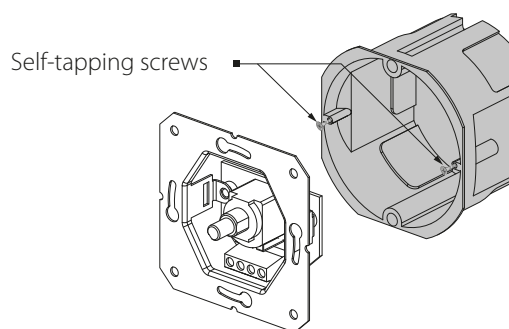
**DISCONNECT THE UNIT FROM POWER MAINS PRIOR TO ANY OPERATIONS!**

**S2 SPEED CONTROLLER INSTALLATION**

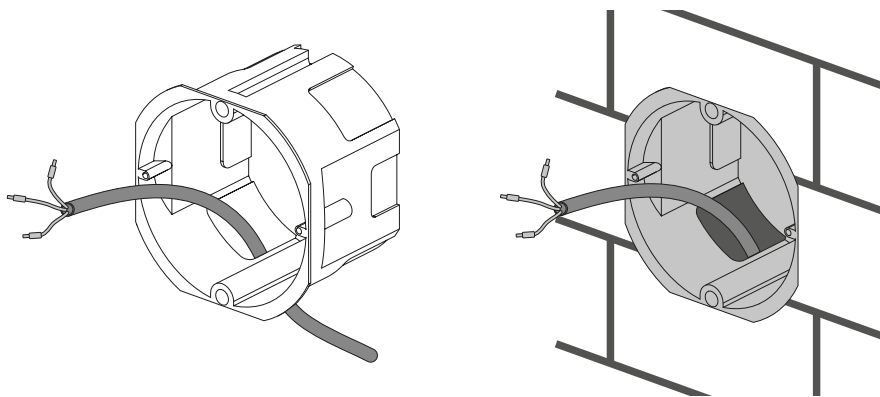
1. Disconnect the front panel from the speed controller: Remove the control knob. Remove the retaining nut that fixes the front panel. Remove the speed controller front panel.



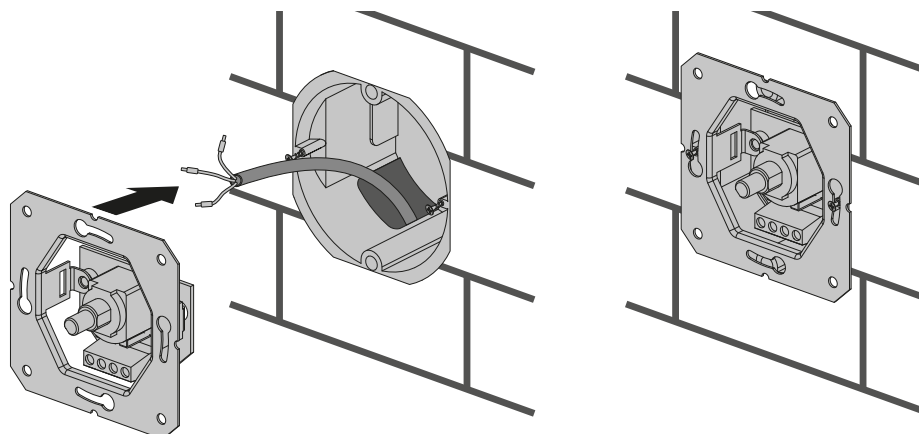
2. Loosen the two screws to disconnect the mounting box from the speed controller. Disconnect the control cable from the speed controller. Remember the colour marking of the wires and the terminals to enable their correct connection after completing the speed controller mounting.



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 mm<sup>2</sup> max. length 10 m.

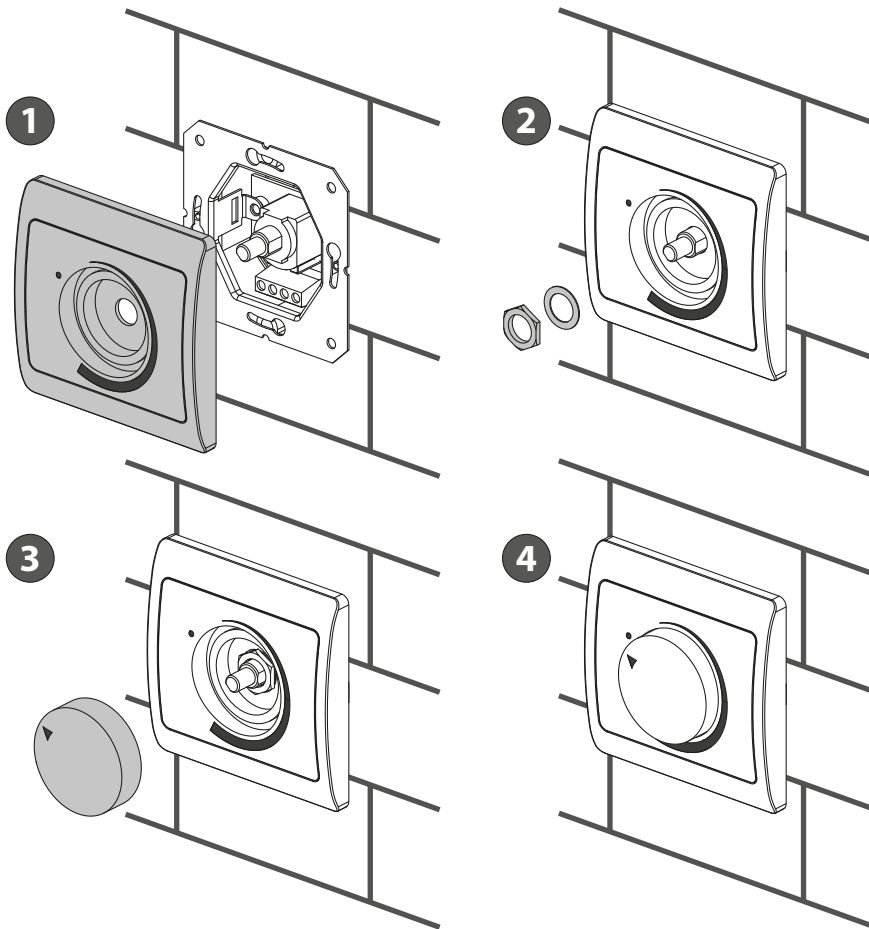


4. Connect the cable to the speed controller following the wiring diagram. Install the speed controller inside the mounting box using screws.



5. Mount the speed controller front panel as follows:

- Install the speed controller front panel
- Fix the front panel with a washer and a nut
- Install the control knob



**CONNECTION TO POWER MAINS**

**DISCONNECT THE UNIT FROM POWER MAINS PRIOR TO ANY OPERATIONS. THE UNIT MUST BE CONNECTED TO POWER MAINS BY A QUALIFIED ELECTRICIAN. THE RATED ELECTRICAL PARAMETERS OF THE UNIT ARE SHOWN ON THE RATING PLATE.**

**ANY TAMPERING WITH THE INTERNAL CONNECTIONS IS PROHIBITED AND WILL VOID THE WARRANTY.**

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 circuit breaker QF with a magnetic trip integrated into the fixed wiring system with the rated current not below the rated current consumption (refer to the Technical data).

**External connections diagram for S14 (S15) automation system**

**S14 (S15) SENSOR CONTROL PANEL MOUNTING.**

Technical requirements to a cable for connection of the control panel to the unit: type - 4x0.25 mm<sup>2</sup>, length - up to 10 m. The control panel should be connected to the terminals 8, 9, 10 ad 11 of the X2 terminal block (refer to the External wiring diagram).

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.

**Connection of the automatic fire fighting system contact (PK).**

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.

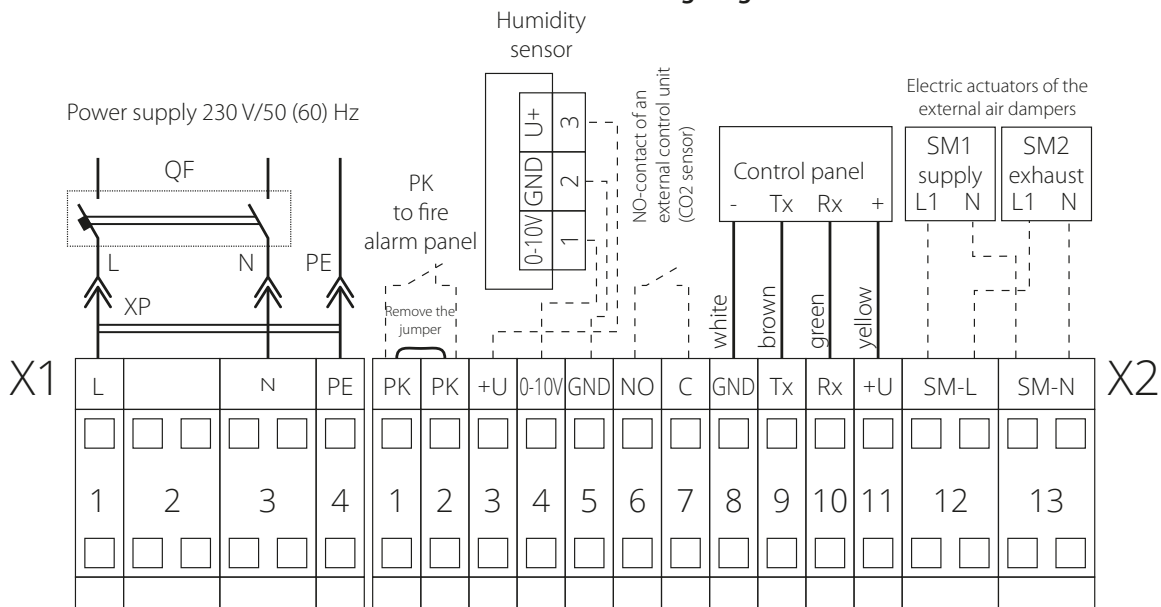
**Connection of the external control unit contact, such as CO2 sensor (NO, C).**

Connect the CO<sub>2</sub> sensor to the terminals 6 and 7 by using a normally open dry contact. If the dry contact is closed, the unit turns to the maximum speed. FS2 (+U, 0-10V, GND) humidity sensor connection. Connect the FS2 humidity sensor (not included in the delivery set, can be ordered separately) to the connector located on the side panel of the control unit from the side of the extract pipe as shown in the External wiring diagram.

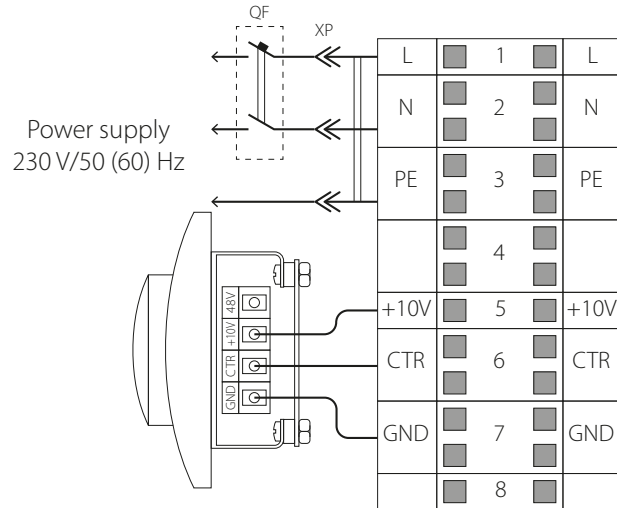
**Connection of outer air dampers (SM1 supply air damper, SM2 exhaust air damper).**

The air dampers and the actuator are not included in the delivery set 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



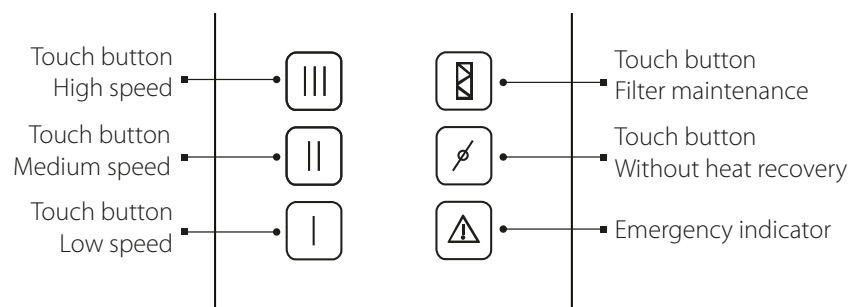
## UNIT CONTROL

## CONTROL OF THE UNIT WITH THE S14(S15) AUTOMATION SYSTEM

The unit is operated from the wall-mounted control panel by using the touch buttons. The activated button is highlighted. The signal from the control panel is sent to the control unit and the unit starts operation with a set operation mode. The control panel is not designed for standalone operation.

**WARNING!**

- The control panel must be fixed on a surface in operational position!
- Do not switch the buttons on the unsecured panel to avoid false speed switching!
- The control panel should be connected to a power supply only when all of the following conditions have been met: the panel casing is mounted on the work surface all necessary connections have been carried out the sensor display is fixed to the casing.
- Initialization of the control panel followed by triple blinking of all the buttons will occur after connection to a power supply.
- Pressing the buttons quickly and shortly may result in malfunction of the unit!
- Try to practise a firm press on the interface buttons with your finger cushion as the touch-sensitive panel is less sensitive compared to a typical mobile phone or tablet screen.
- Press the button precisely in the desired sector of the control panel to switch the speed.

**Control panel indication when the unit is off**

- The touch buttons on the control panel are not highlighted.
- Filter maintenance indicator and emergency indicator are highlighted in the respective cases.

**Turning the unit on**

Press one of three speed setting buttons. The selected button will be highlighted and the unit switches to the required speed.

**Speed selection**

Press the inactive speed setting button once. The button will be highlighted and the unit will switch to the selected speed.

**Turning the unit off**

To turn the unit off press the highlighted speed button.

**Summer Cooling mode**

Press the button once. Once the touch button is activated, only the extract fan operates while the supply fan turns off and the unit switches to the Summer Cooling mode. This mode is recommended to be used in the warm season with windows opened. 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 filter cleaning or replacement. To reset the motor meter after replacement or cleaning of the filters press and hold the filter replacement indicator for 5 seconds. After resetting the motor meter the filter replacement indicator goes down. When customizing the timer software for setting the number of hours refer to the Filter maintenance section.

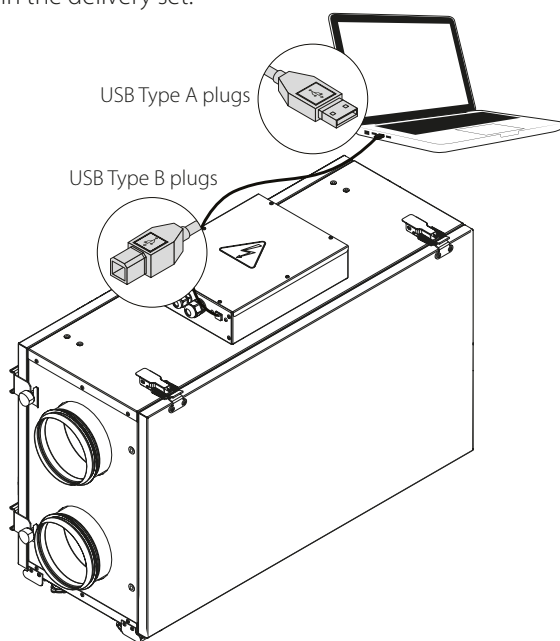
**Alarm**

In case of alarm, the alarm indicator is highlighted. To reset the alarm follow the troubleshooting table.



**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 plugs. The USB cable is not included in the delivery set.



The link for downloading the software

The software enables editing the unit parameters:

Parameter	Factory setting	Control 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.

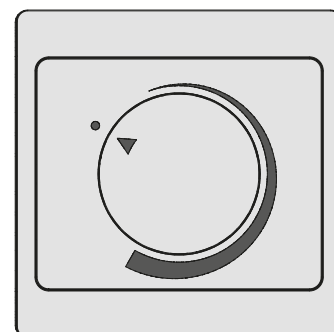
Setting, troubleshooting and upgrading of the software version is made by the service technician.

To download the software follow the link <https://blaubergventilatoren.de/en/download>.

Select the document type “**Software**” and then using the search bar find the software for the automation **S14** . Download the software file.

**CONTROL OF THE UNIT WITH THE S2 AUTOMATION SYSTEM**

Air flow is controlled with the R-1/0-10 speed controller. Set the control knob to a respective speed position to activate the required unit speed.



## TECHNICAL MAINTENANCE



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

Maintenance operations of the unit are required 3-4 times per year. This includes checking for visible damages and faults, regular cleaning 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. 21):

1. Press out on the latches.
2. Open the unit 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 on p. 21.

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

### **4. Technical maintenance of condensate drainage system (four times 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.

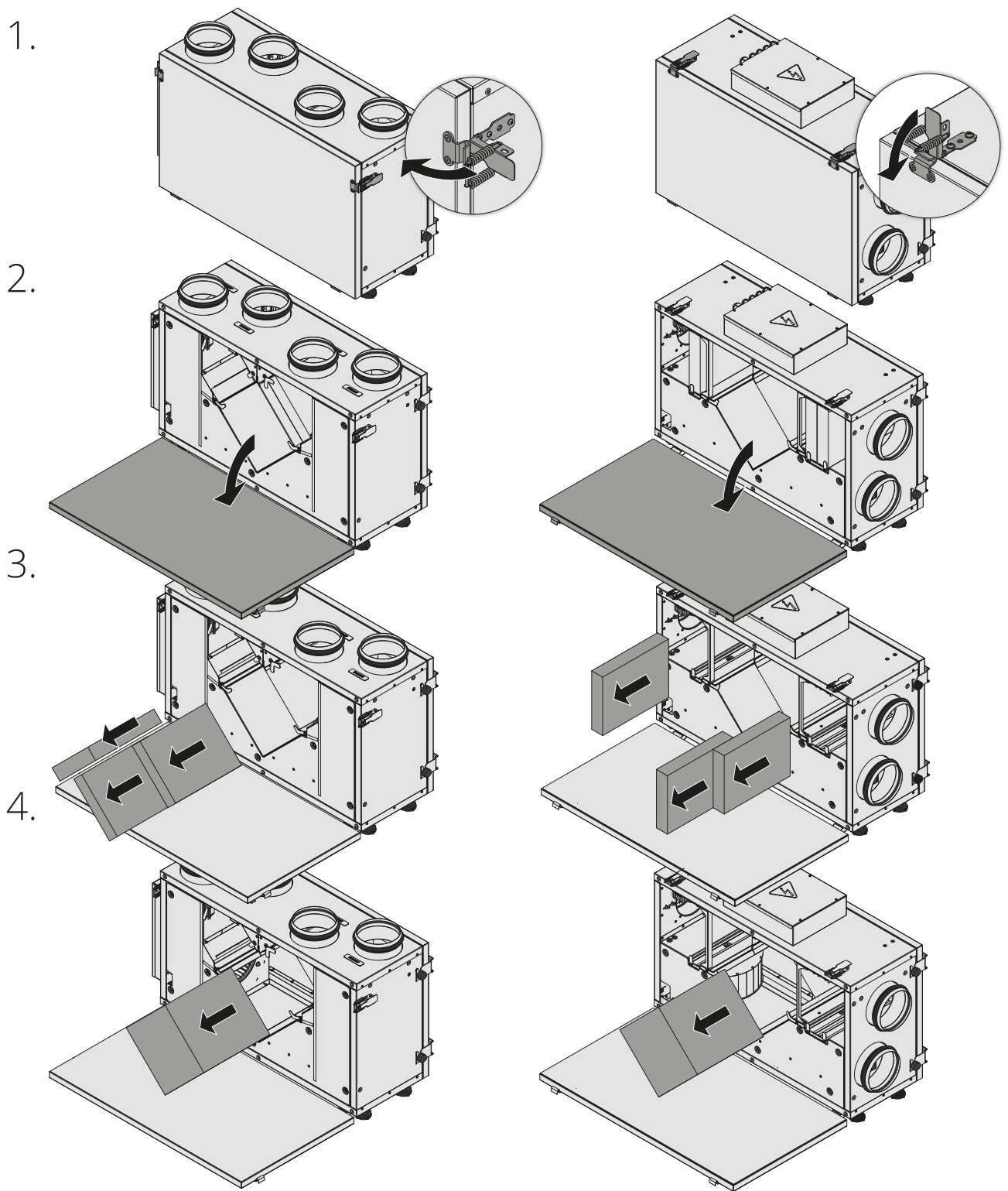
### **5. Supply air flow control (twice per year).**

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



**TROUBLESHOOTING**

<b>Problem</b>	<b>Possible reasons</b>	<b>Troubleshooting</b>
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.	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.
Noise, vibration.	Filters, fans or the heat exchanger are soiled.	Clean or replace the filters, clean the fans and the heat exchanger.
	The fan or casing screw connection is loose.	Tighten the screw connection of the fans or the casing against stop.
Water leakage.	The ventilation system is soiled or damaged.	Clean the ventilation system components. Replace the damaged components.
Noise, vibration.	The fan impeller is 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 installed incorrectly.	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.
The control panel displays an alarm indicator – 	Communication loss in connecting cable or wires between the control panel and the unit.	Check the power and connection cables and wires between the control panel and the air handling unit for integrity using a multimeter. If unassisted troubleshooting fails, please contact the product Seller.
	Wrong cable installing.	Make sure the cable installation is completed according to the requirements stated on page 14. Otherwise, install the cable as required.

**STORAGE AND TRANSPORTATION REGULATIONS**

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range from +5 °C to + 40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapours and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures allow the unit to warm up at room temperature for at least 3-4 hours.

**MANUFACTURER'S WARRANTY**

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Council Directive 2014/30/EU, Low Voltage Directive 2014/35/EU and CE-marking Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above. The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

**The warranty repair does not include:**

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

**The manufacturer's warranty does not apply to the following cases:**

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismantled by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



**FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT.**



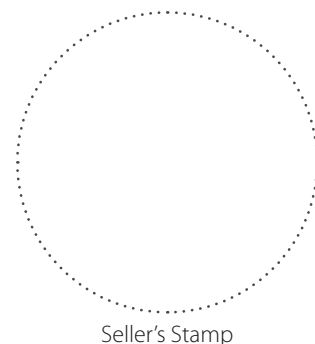
**USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP.**

**CERTIFICATE OF ACCEPTANCE**

<b>Unit Type</b>	Heat and energy recovery air handling unit
<b>Model</b>	KOMFORT UltraEC ___ 300 ___
<b>Serial Number</b>	
<b>Manufacture Date</b>	
<b>Quality Inspector's Stamp</b>	

**SELLER INFORMATION**

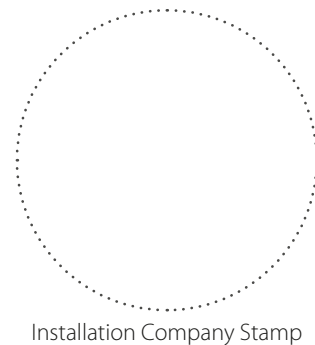
<b>Seller</b>	
<b>Address</b>	
<b>Phone Number</b>	
<b>E-mail</b>	
<b>Purchase Date</b>	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
<b>Customer's Signature</b>	



**INSTALLATION CERTIFICATE**

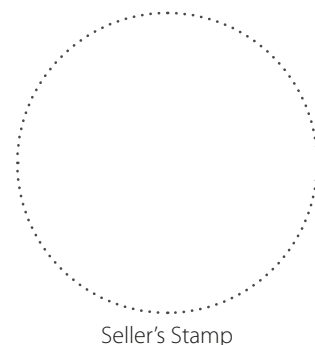
The KOMFORT UltraEC \_\_\_ 300 \_\_\_ unit has been connected to power mains pursuant to the requirements stated in the present user's manual.

<b>Seller</b>	
<b>Address</b>	
<b>Phone Number</b>	
<b>Installation Technician's Full Name</b>	
<b>Installation Date:</b>	<b>Signature:</b>
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.	
<b>Signature:</b>	



**WARRANTY CARD**

<b>Unit Type</b>	Heat and energy recovery air handling unit
<b>Model</b>	KOMFORT UltraEC ___ 300 ___
<b>Serial Number</b>	
<b>Manufacture Date</b>	
<b>Purchase Date</b>	
<b>Warranty Period</b>	
<b>Seller</b>	











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