Operating Manual
SupraBox DELUXE 750H

Extract air module (top part)

Main module (middle part)

Supply air module (lower part)

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1. Safety

1.1. Warning notices on occupational safety

The following symbols indicate certain hazards or provide you with information on the safe operation of the ventilation unit:

Attention! Danger zone! Safety instruction!

Danger due to electric current or high voltage!

Crush hazard!

Caution! Hot surface!

Danger! Do not step under hanging load!

Important note, information

1.2. Safety instructions

Rosenberg compact appliances in the SupraBox DELUXE 750H series are designed and manufactured according to the latest state of the art at the time of delivery. Extensive material, function and quality tests ensure a high level of utilisation and a long service life. Nevertheless, these machines can be dangerous if they are used improperly or not as intended by untrained personnel.

Read these instructions carefully before unpacking the goods, before carrying out installation work and before any maintenance work!

Only operate the air handling unit when it is installed and with properly fitted guards or protective grilles. Rosenberg Ventilatoren GmbH supplies suitable and tested protective grilles mounted at the specified points.

The following work may only be carried out by trained specialists:

- Installation work
- Electrical connection
- Installation of outdoor air and exhaust air duct
- Installation of the condensate drain
- Commissioning
- Service work

Before working on electrically powered machines, disconnect all poles from the mains.

ATTENTION! All metal parts of the optionally available PTC are under voltage during operation! The associated connection plugs are also exposed! Before opening the appliance with the special spanner, it must therefore be disconnected from the mains!
DANGER TO LIFE!

The PTC and neighbouring surfaces in the appliance may still be hot shortly after operation! Risk of burns!

Authorised persons must be trained in accordance with the current accident prevention regulations of the relevant trade associations and instructed in the work area.

Please also observe any applicable regulations:

DGUV 1	„Principles of prevention“
DGUV 3	„Electrical systems and equipment“
DGUV 109-017	„Operation of load handling attachments and slings in hoist operation
DGUV 68	„ Industrial trucks “

2. Unit description

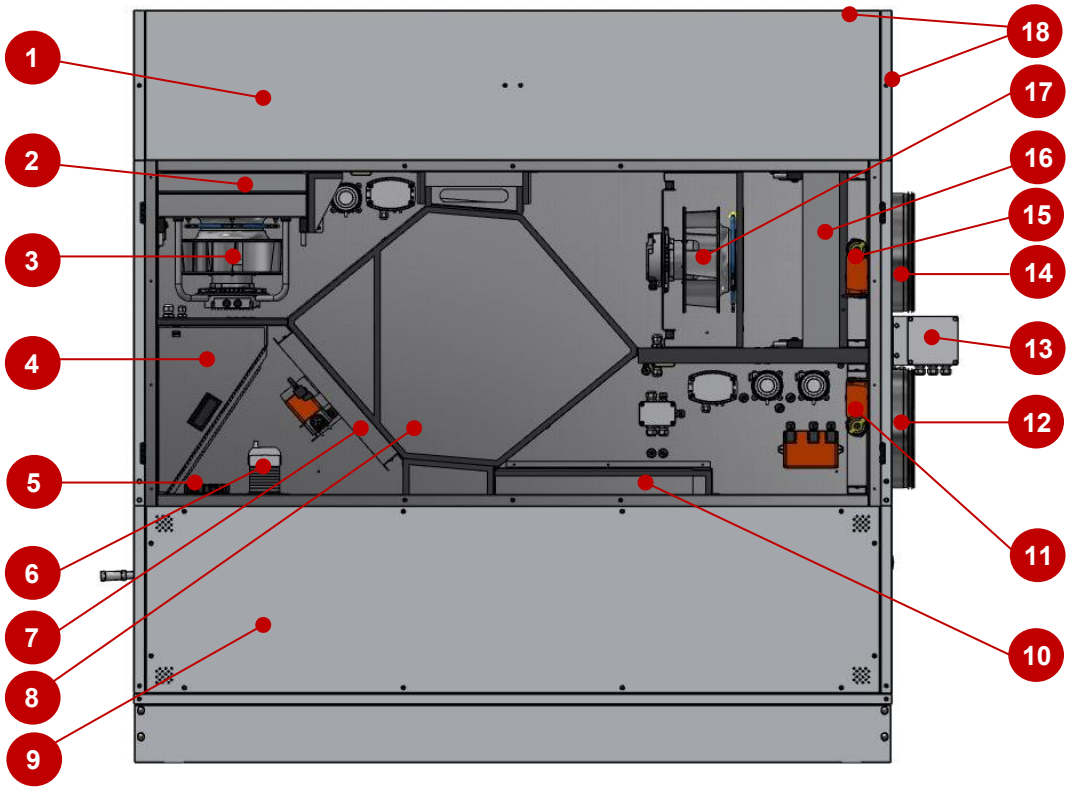
2.1. Technical features

The SupraBox DELUXE 750H:

- is a decentralised compact ventilation unit for highly efficient ventilation of a single room with outdoor air and simultaneous heat recovery from the extract air. The Unit is primarily used to minimise the CO2 content of the room air and can be operated with a maximum of 750 m^3/h (900 m^3/h in power mode) at 50 Pa external pressure loss in the fresh air duct and extract air duct. The sound pressure level at a distance of 1 m is not exceeded at any time at the specified operating point. The heat recovery function can be bypassed with an integrated complete bypass.
- Hygienic unit design and choice of materials in accordance with VDI 3803 Sheet 2 Decentralised ventilation units.
- has installed a highly efficient aluminium counterflow plate heat exchanger for heat recovery. Any condensate that occurs must be collected in a condensate tray in accordance with VDI 3803 Sheet 2 / Part 2 Point 7.3.1.3 and drained away safely.
- has direct-drive fans with backward-curved radial impellers that are installed in the unit with vibration damping. Each fan is equipped with an energy-saving and infinitely variable EC motor from Rosenberg
- is modularly constructed from 3 parts for easy transport. The lower section is equipped with four height-adjustable feet to compensate for uneven floors.
- has a compact housing made of corrosion-resistant powder-coated zinc and aluminium sheet (various RAL colours, coating thickness 60 µm).
- has double-skinned side walls, appliance base, appliance lid, front panel and doors with internal sound and heat insulation with an insulation thickness of 60 mm (min. 33 kg/m^3; λ = 0.042 W/mK). It also has a rear wall with an insulation thickness of 40 mm.
- is equipped with electrical cabling with flame-retardant cables.
- is supplied complete with integrated control unit. The control unit is mounted on a maintenance-friendly slide-in unit behind a maintenance door and is function-tested. The appliance is fully wired except for the connection of external components.
- Is equipped with an easy-to understand surface-mounted control panel.

2.2. Position of the components

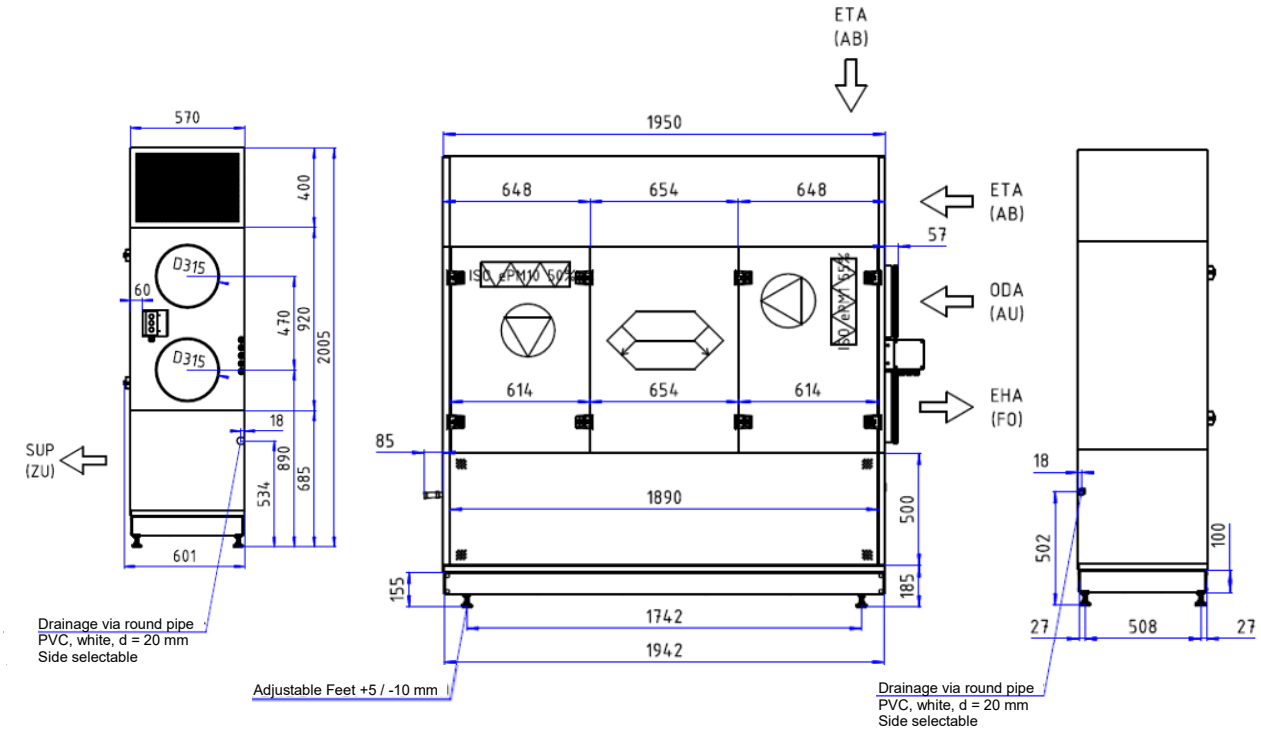
The following illustration shows the installation position of the Unit components for a Unit with 'connection on the right'. An appliance with 'left-hand connection' is a mirror image. The maintenance doors and the front panel are not shown. The condensate tray complies with VDI 3803 sheet 2.

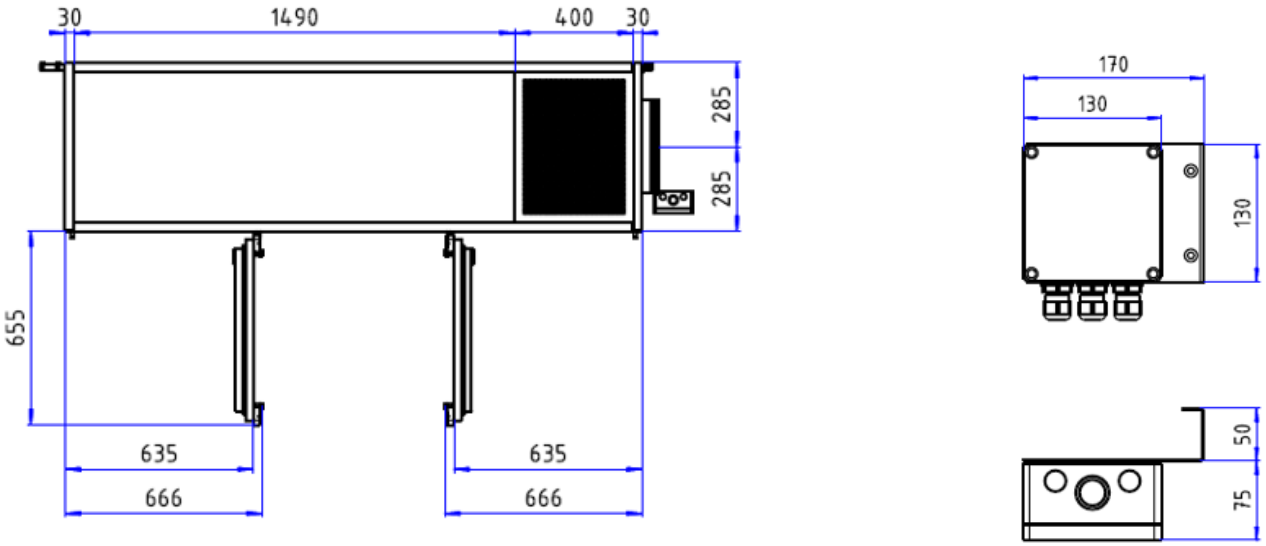


1. Extract air section
2. Extract air filter
3. Extract air fan
4. Control
5. PTC post-heating (optional)
6. Semiconductor contactor
7. Bypass damper (via WRG)
8. Counter-flow heat exchanger
10. Condensate tray
11. Exhaust air damper with servomotor
12. Exhaust air connection DN315
13. Terminal box
14. Connection piece outside air DN315
15. Outside air damper with servomotor
16. Outdoor air filter
17. Supply air fan

2.3. External dimensions of the appliance

The illustration shows a appliance with a right-hand connection. A Unit in the 'left-hand connection' version is a mirror image with the same dimensions.





2.4. Technical Data

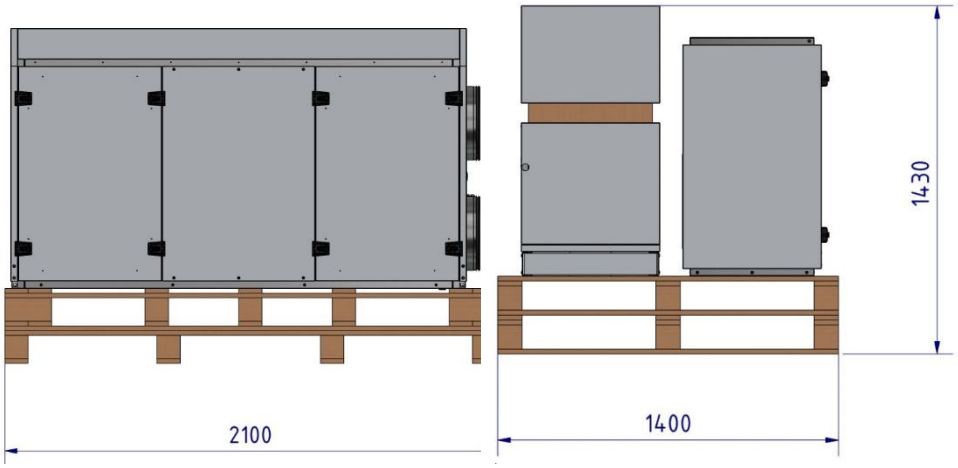
Housing	Double-skinned 60 mm frameless
Dimensions (L x T x H) [mm]	1950 x 601 x 2005 [mm]
Nominal operating point	750m³/h, constant volume flow
Fans	Backward curved, free-running, Drive via highly efficient Rosenberg – EC external rotor motors with integrated electronics
Power consumption at nominal point	Supply air 120 W/extract air: 105 W
SFP value at nominal point	576 Ws/m³
SFP class at nominal point	SFP 0
Heat recovery Efficiency	Counterflow plate heat exchanger with complete bypass, up to η=92%*, according to WRG classes H1 * Maximum values for condensation; eat recovery coefficient depending on operating status
Air filter	Supply air panel filter: ISO ePM1 ≥50% (F7) 468 x 428 x 96 [mm] dP(End): 200 Pa Extract air panel filter: ISO ePM10 ≥50% (M5) 381 x 464 x 47 [mm] dP(End): 150 Pa
Air connections	Horizontal DN 315
Control	3-stage. Co2 demand-controlled
Total current consumption Max.	1.08 A
Sound pressure level (1m distance in the room)	35 dB(A)
Weight incl. control	355 Kg

3. Transport and installation

3.1. Delivery and transport to the installation site

The Rosenberg SupraBox DELUXE must be visually inspected upon delivery to ensure that it is undamaged. This should be done before the box is unloaded from the transport vehicle. Furthermore, the completeness of the scope of delivery must be checked against the freight documents. Any missing parts or damage must be recorded immediately on the shipping documents and confirmed by the driver of the transport vehicle.

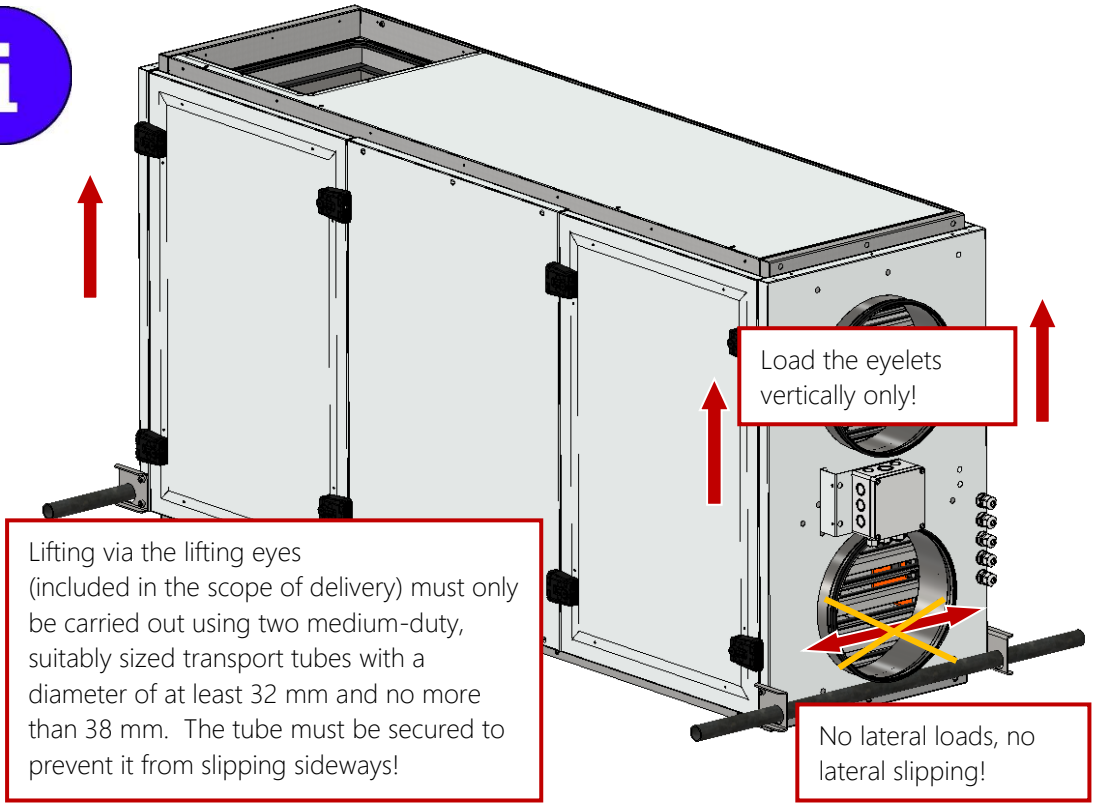
The unit has a split body for easy transport and is delivered on a pallet. The appliance can easily be placed on the pallet using a pallet truck or forklift truck

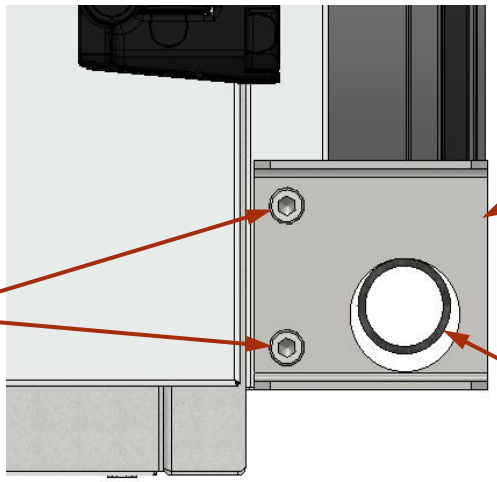


If the building areas to be passed through are too narrow for this, the appliance parts must be removed from the pallet and transported individually to the installation site. Please refer to the following paragraph for tips on lifting the main module (centre section). Upon receipt of the goods, the packaging, film and adhesive tape must be removed immediately to prevent condensation from forming.

In accordance with VDI 3803 Sheet 2 / Part 2, Point 8.1, the nozzles of the SupraBox DELUXE 750 H are covered with foil for dust protection and then the entire appliance is wrapped in foil. This packaging should only be removed shortly before commissioning.

3.1.1 Lifting aid for carrying inside





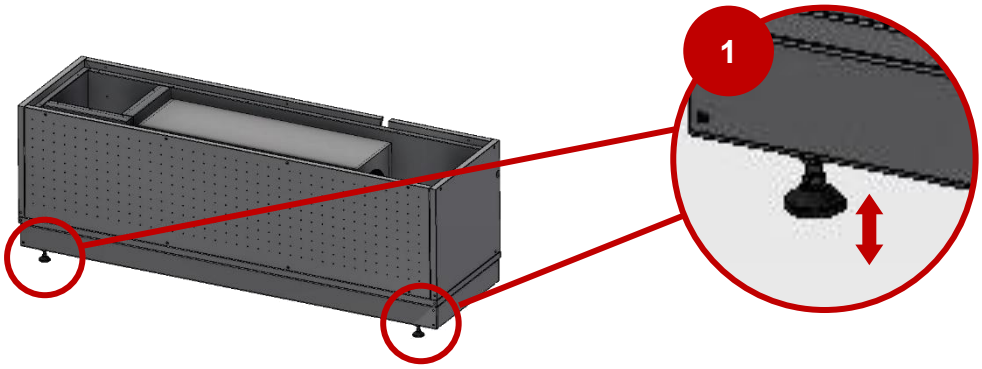
Crushing hazard!

Danger to life! Do not step under a suspended load!

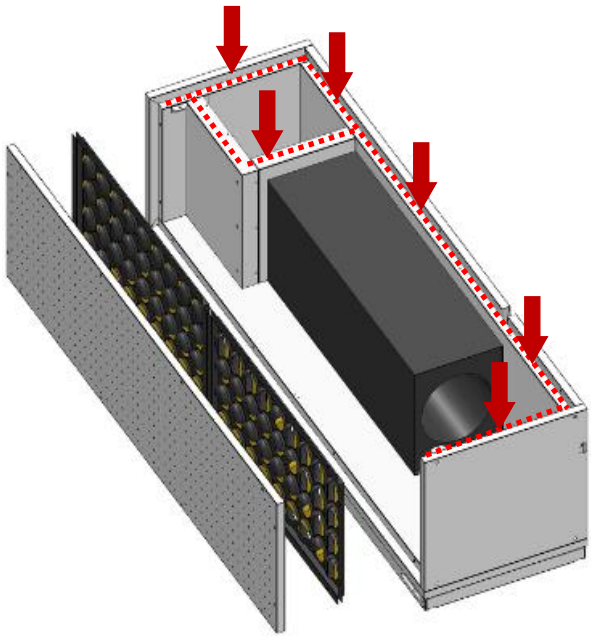
3.1.2 Mounting the SupraBox DELUXE at the installation site

The following order must be observed when installing the SupraBox DELUXE:

- Set up and align the supply air module (lower section) using the 4 levelling feet (1) in the base frame area (SW19 & 14) in the installation area. For the version with design door, a distance of 54 - 58 mm must be maintained from the floor to the underside of the base frame.



- Move the supply air module (lower section) to a location with sufficient installation clearance all round
- Removing the supply air grille from the supply air module (lower section) (M6 Allen key)
- Apply the supplied sealing tape 3x15 mm to the inner contact surface of the supply air module (lower section) (red dotted contour)

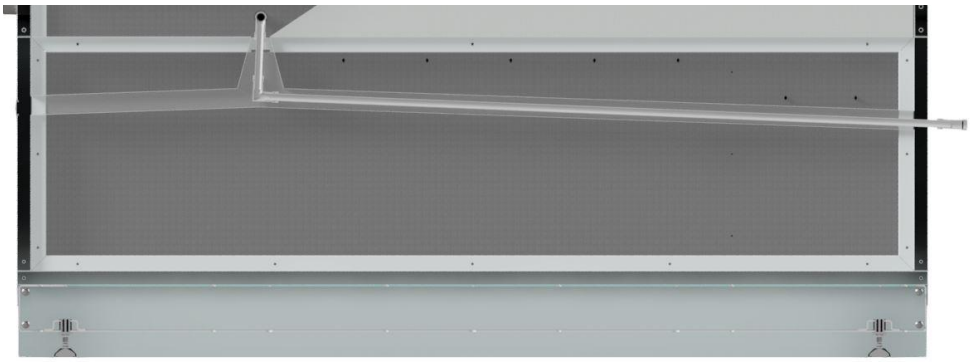


- Attach the main module (middle section). The direction of the condensate drain can be selected depending on the local conditions.

The condensate pipe of the SupraBox DELUXE 750H is made from a white PVC round pipe Ø20 mm and is fitted on the side with a connection piece including a sleeve in accordance with the appliance drawing. These are not fitted on delivery but are supplied loose.

During the heating period, the strong cooling of the humid extract air in the counterflow panel heater causes condensate to form on the exhaust air side, which must be discharged into the waste water network via the condensate drain. The quantity to be removed depends on the humidity in the room and the temperature of the outdoor air.

To prevent exhaust air from being blown into the room via the condensate drain, a DN20 siphon must be connected on site (not included with the unit).



The minimum value for the dimension H in mm is calculated from the overpressure in Pa above the tray divided by 10, i.e.:
H [mm] = P [Pa] / 10, 40-60 mm is completely sufficient for the SupraBox DELUXE 750H.
For reasons of hygiene, the siphon on the appliance must not be connected directly to a waste water pipe, but must have a free outlet. A floor drain in the room or a collecting funnel with a subsequent second siphon as an odour trap to the waste water network is suitable for this purpose.
For longer pipes between the siphon and the outlet point, ensure sufficient ventilation, diameter and gradient in accordance with sanitary engineering standards. Before commissioning the ventilation unit, the installed siphon must be filled with
water via the filling opening. The function of the drainage system must be checked before commissioning the ventilation unit.

The RDP 20 pipe from Linum Europe nv is used, which is connected using fittings. In the SupraBox DELUXE 750H series, a sleeve for the pipe end is supplied loose as standard to ensure a watertight connection between the PVC round pipe, which is also supplied, and the pipe (Ø 20 mm) connected by the installer.

The dimensions of the PVC round pipe:

- ⌀ Outside: 20 mm
- ⌀ Wall thickness: 1,25 mm

the moulded part:

- ⌀ Inside: 20 mm

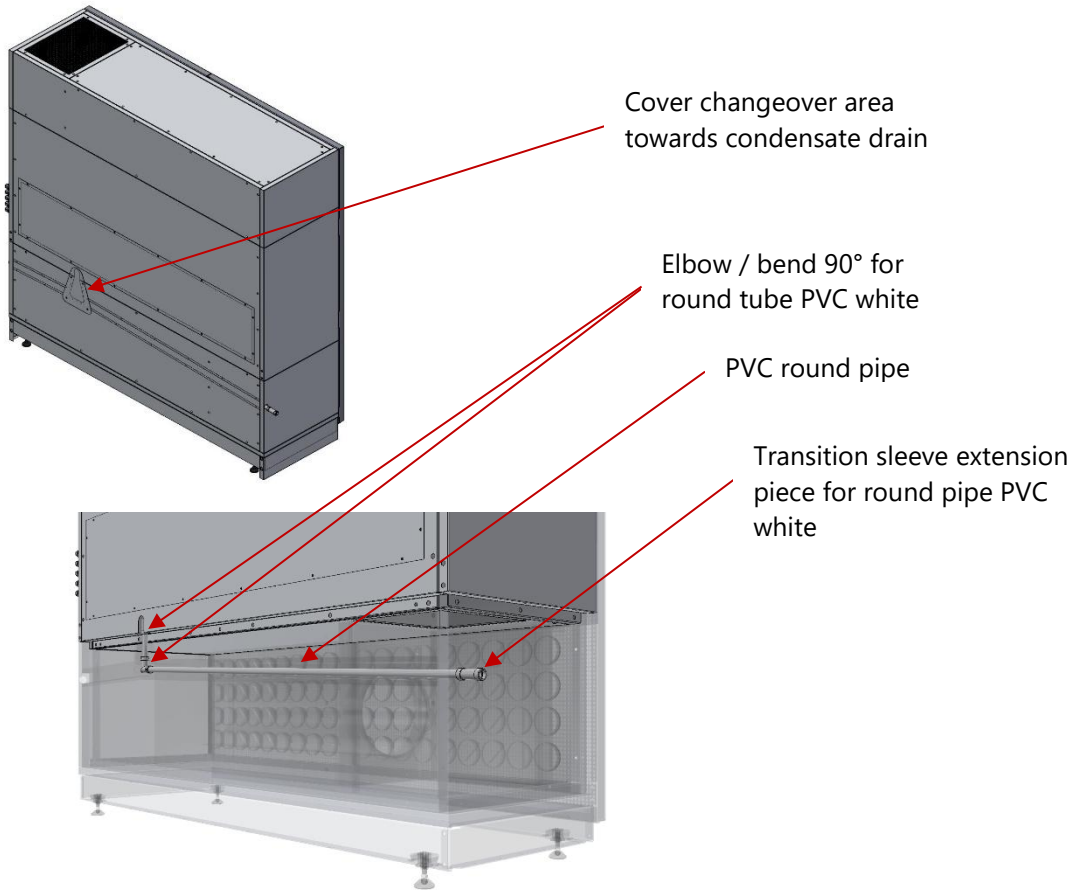
Moulded parts and pipes, which are included in the scope of delivery:

- Elbow/bend 90° for round tube PVC white
- Extension piece for round tube PVC white
- PVC round tube, white (2 metre length)

These are supplied loose with the delivery. They must be fitted by the customer. ATTENTION: No additional pipes or hoses are supplied.

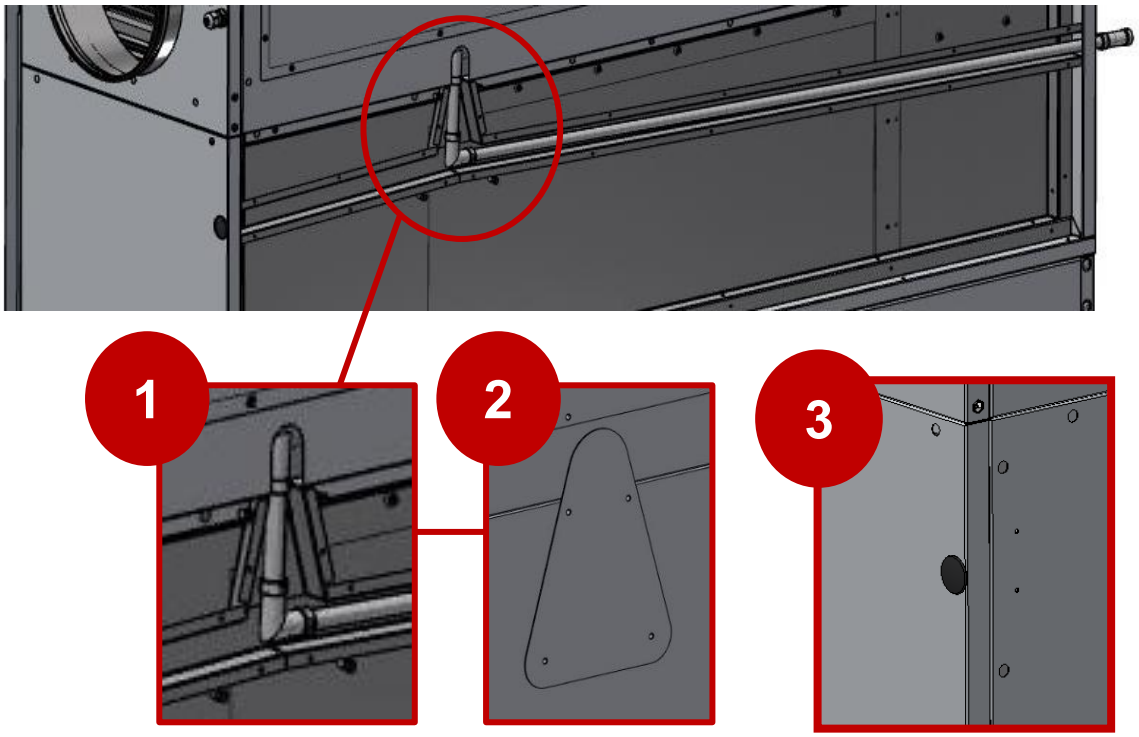
The outlet side of the condensate drain can be selected by the customer.
The PVC round pipe can be cut from the length.

The pipe is pushed into the rear wall of the housing at the selected side opening, from the side. Up to the exchange area. The condensate drain of the condensate tray is connected to the condensate pipe. The cover (2) is screwed onto the rear wall of the housing.

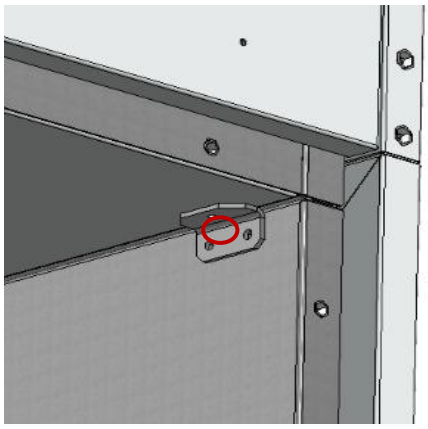


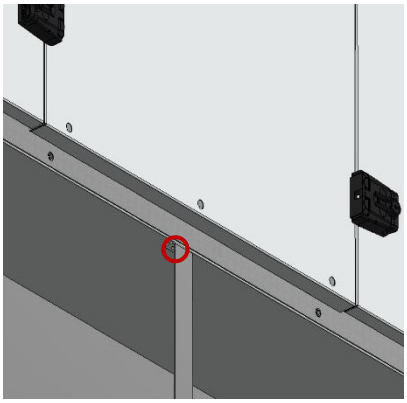
The PVC round pipe is supplied in 2 pieces. One piece has a length of approx. 145 mm and one of approx. 1854 mm.
The 145 mm piece is fitted with an elbow piece on both sides, one of which is already mounted on the tub. This may need to be removed again. This assembly is then pushed back onto the tube, with the lower elbow pointing in the desired direction.
The remaining 1854 mm piece is then pushed into the supply air box from the desired side and then inserted into the elbow.
Finally, the pipe can be shortened if necessary and the extension piece pushed on.

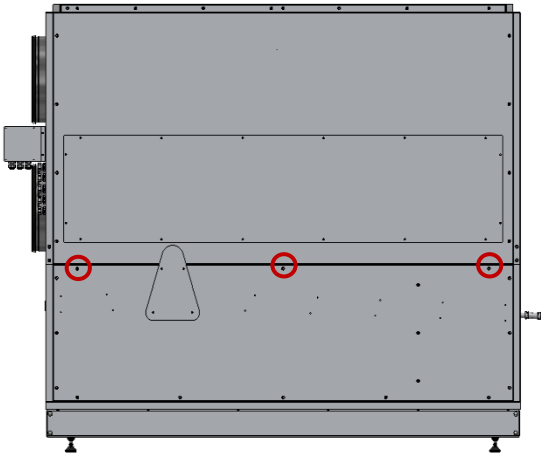
- After connecting (1) the condensate pipe, attach the cover (2) using Allen screws (M6x20). The unused hole in the side wall of the supply air box must be closed with the enclosed plug (3).



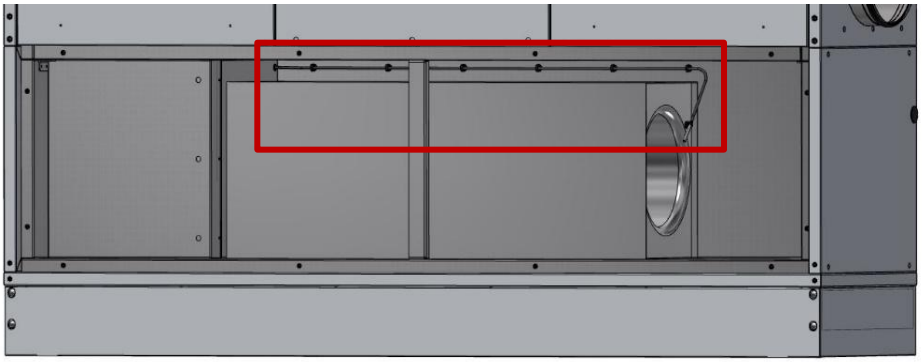
- Attach the internal securing brackets (1) and screw the rear panel (2) with Allen screws (M6x20) and the transom plate (3) with self-tapping screws (4.8x19).







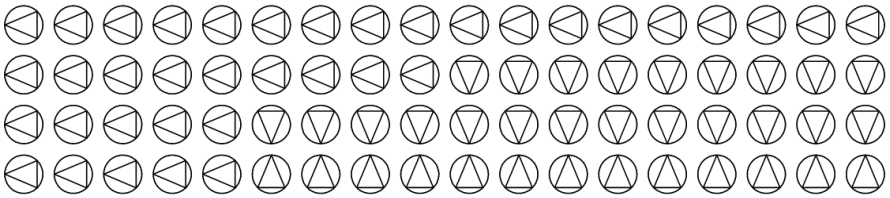
- The supply air temperature sensor is located at the silencer outlet. The cable is already laid in the marked area and only needs to be connected to the control unit.



Adapt the nozzles to the installation location of the appliance:

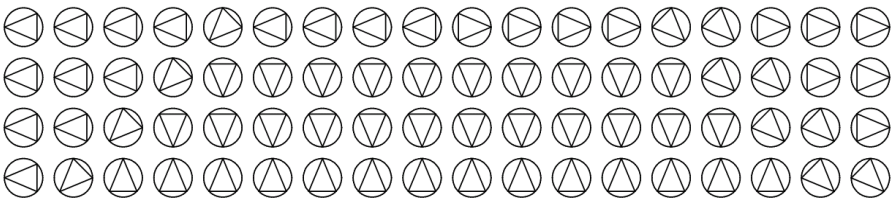
- Outdoor air and exhaust air spigot on the **right**, location on the **right on the wall**

Variant 1



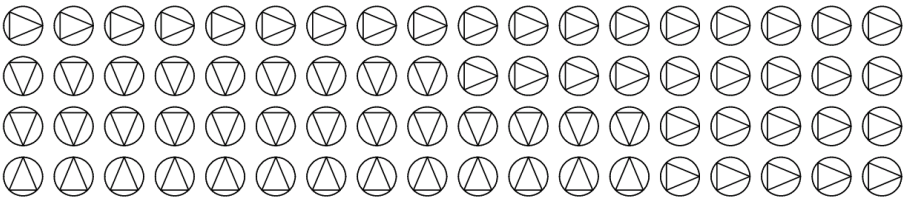
- Outdoor air and exhaust air spigot on the **right**, **centre of the wall**

Variant 2

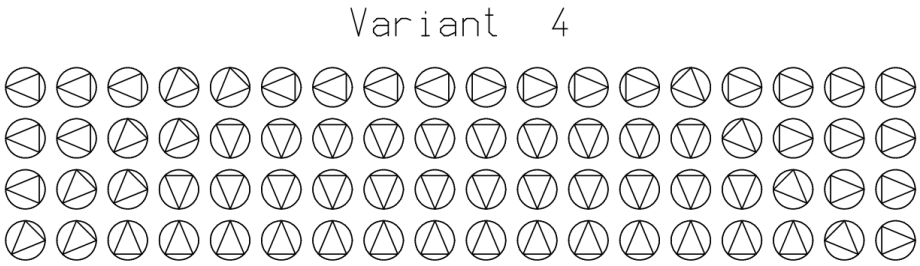


- Outdoor air and exhaust air spigot on the **left**, location on the **left on the wall**

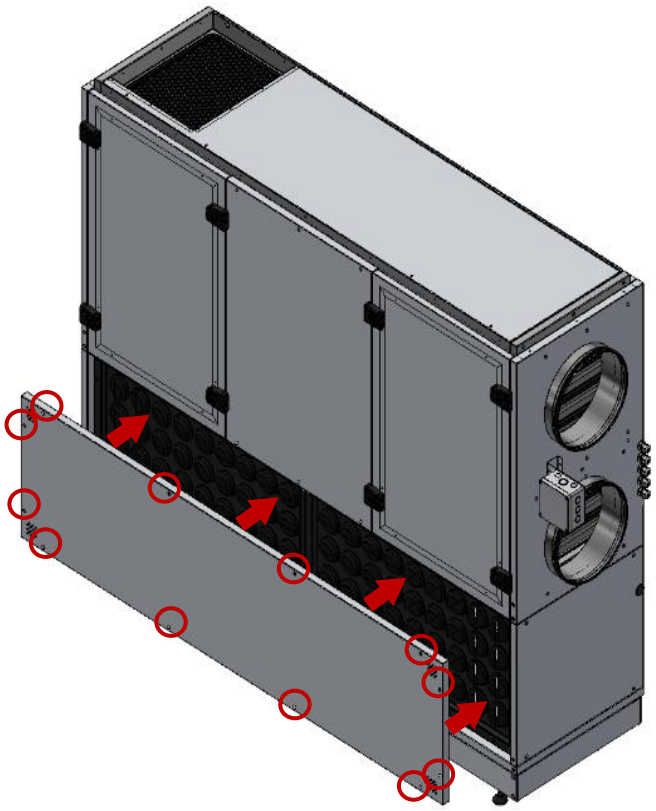
Variant 3



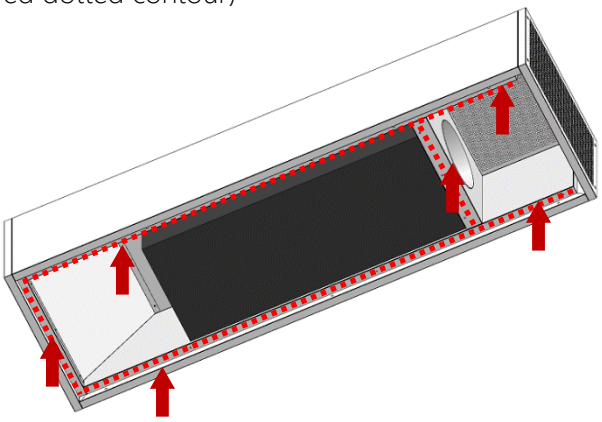
- Outdoor air and exhaust air spigot on the **left**, **centre of the wall**



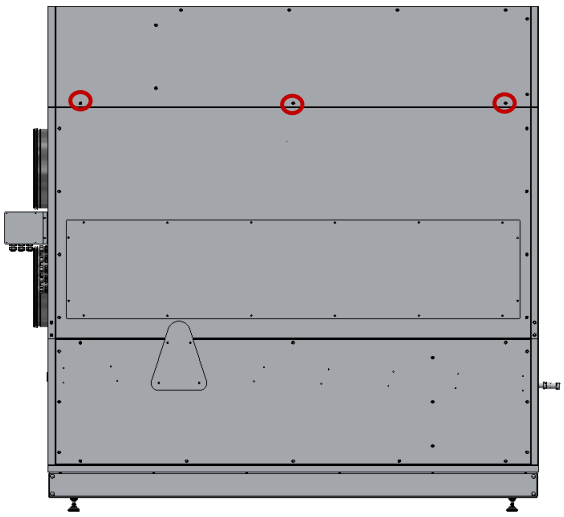
- Replace the displacement air distribution plates (with the nozzles) and the displacement air outer plate and fasten with the M6x20 Allen screws. The displacement air outer panel is not required for rear wall installation or when using the design door. In this case, the displacement air distribution plates (with the nozzles) are fastened directly with the Allen screws.

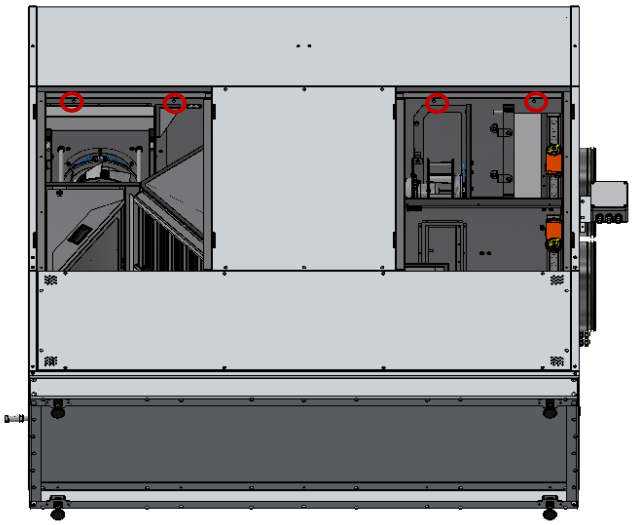


- Apply the supplied 3x15 mm sealing tape to the inner contact surface of the extract air module (red dotted contour)



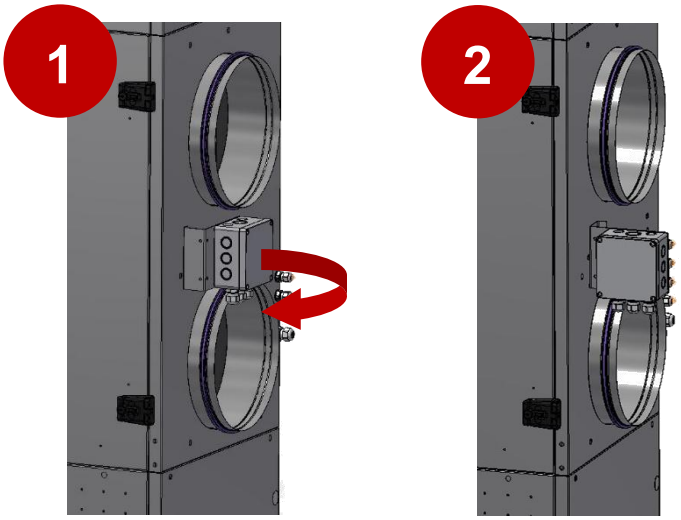
- Place the extract air module on the main module (middle section), screw the modules together at the marked points (.....) using M6x20 Allen screws, screwing the rear panel first and then above the doors.





- Close all open screw entries Ø12mm using the cover caps supplied.

- Moving the SupraBox DELUXE 750H to the intended location
- Remount terminal box.
  The terminal box is factory-fitted to the side for transport purposes. Once the extract air, main air and supply air modules have been assembled, the terminal box with terminal box cover is mounted to the front to allow easy inspection at a later date.



3.2. Storage of devices

- Units and unit components must be unpacked, protected against dirt and damage, and stored in a dry place. Prolonged exposure to moisture from condensation must be avoided at all times due to the risk of white rust forming!
- Cover open pallets with tarpaulins. Protect functional parts from contamination (e.g. metal scraps, stones, wire, etc.).
- Unused openings and screw connections for cables, as well as module connections, connection sockets, doors, inspection hatches, etc., must be sealed. Any ingress of moisture may lead to faults; no liability is accepted for this.
- Maintain the storage temperature between -30°C and +40°C.
- To prevent white rust from forming, ensure sufficient ventilation.
- For storage periods exceeding 12 months, check that the fan bearings move freely before assembly.

Turn the impeller by hand.
Warning! Risk of getting caught in the impeller!

3.3. Setting up the appliance and making the air connections

The SupraBox DELUXE must only be installed in a suitable location with the following characteristics.

- The unit must only be placed on a solid surface with sufficient load-bearing capacity
- The substrate must be level and torsion-free
- The inclination of the substrate to the horizontal must not exceed 2%

The assumption of static or dynamic building functions by the SupraBox DELUXE is not permitted. If this results in damage or consequential damage to the building, the warranty obligation of Rosenberg Ventilatoren GmbH expires.

Uneven floors can be levelled out using the height-adjustable feet on the appliance.

When positioning the SupraBox DELUXE, sufficient clearance must be provided between the operating side of the appliance and the spatial boundaries for maintenance purposes. Permanent accessibility of the appliance must be guaranteed.

There is a risk of cutting and crushing injuries when working on and with sheet metal parts. Suitable gloves must be worn!

3.4. Electrical installation

Installation and electrical work may only be carried out by trained and instructed specialist personnel and in accordance with the applicable regulations!

The electrical connection may only be carried out by an authorised electrician in accordance with the VDE regulations and the guidelines of the local power supply company. The connection must be carried out exactly according to the circuit diagram and the wiring diagram. All screw connections must be checked before commissioning and tightened if necessary.

The Rosenberg SupraBox DELUXE has a terminal box with connection options for the following components:

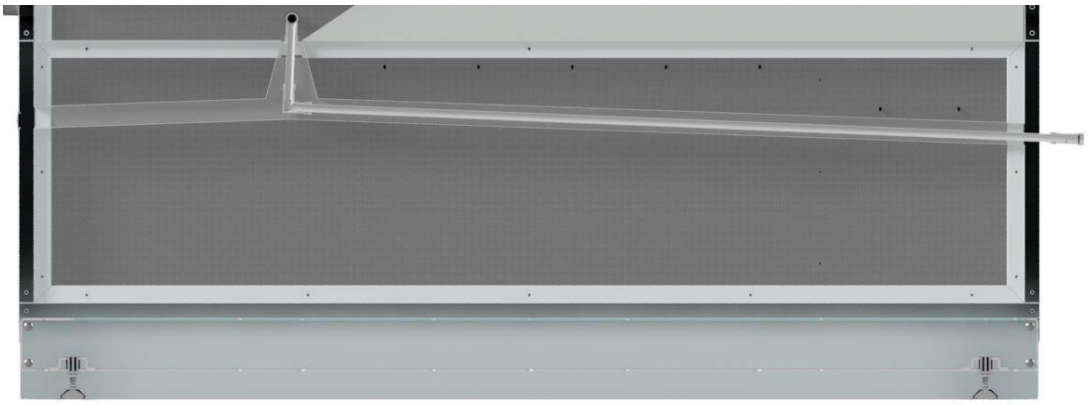
- Control panel
- CO2 Sensor
- Smoke detector/fire alarm contact for complete switch-off of the appliance
- Outside temperature sensor
- Room temperature sensor
- Modbus RTU & RJ45 interface

When connecting the individual components, it is essential to follow the enclosed wiring diagram.
The two terminals for the smoke detector/fire alarm contact must be bridged in the event that no smoke detector/fire alarm contact is connected. The maximum permissible cable length to the CO2 sensor and the control panel is 100 metres.

3.5. Installation of the condensate drain

During the heating period, the strong cooling of the humid extract air in the counterflow panel heater causes condensate to form on the extract air side, which must be discharged into the wastewater network via the condensate drain. The quantity to be removed depends on the humidity in the room and the temperature of the outside air

To prevent exhaust air from being blown into the room via the condensate drain, a DN20 siphon must be connected on site (not included with the appliance).



The minimum value for dimension H in mm is calculated from the overpressure in Pa above the tray divided by 10, i.e:
H [mm] = P [Pa] / 10 For the SupraBox DELUXE 750H, 40-60 mm is completely sufficient.
For reasons of hygiene, the siphon on the appliance must not be connected directly to a wastewater pipe but must have a free outlet. A floor drain in the room or a collecting funnel with a subsequent second siphon as an odour trap to the wastewater network is suitable for this purpose.
For longer pipes between the siphon and the outlet point, ensure sufficient ventilation, diameter and gradient in accordance with sanitary engineering standards. Before commissioning the ventilation unit, the installed siphon must be filled with water via the filling opening. The function of the drainage system must be checked before commissioning the ventilation unit.

3.6. Information about the condensate drain

The condensate pipe of the SupraBox DELUXE 750H is made from a white PVC round pipe Ø20 mm and is fitted with a connection piece on the side including a sleeve as shown in the appliance drawing. These are not fitted on delivery but are supplied loose.

The RDP 20 pipe from Linum Europe nv is used, which is connected using fittings. In the SupraBox DELUXE 750H series, a sleeve for the pipe end is supplied loose as standard to ensure a watertight connection between the PVC round pipe, which is also supplied, and the pipe (Ø 20 mm) connected by the installer.

The dimensions of the PVC round pipe:

- ø Outside: 20 mm
- ø Wall thickness: 1.25 mm

dem Formteil:

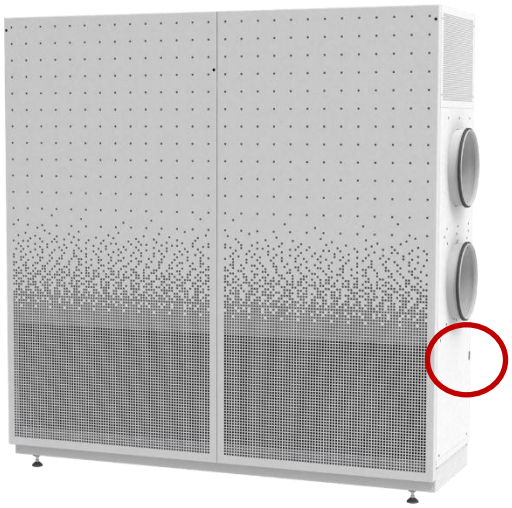
- ø Inside: 20 mm

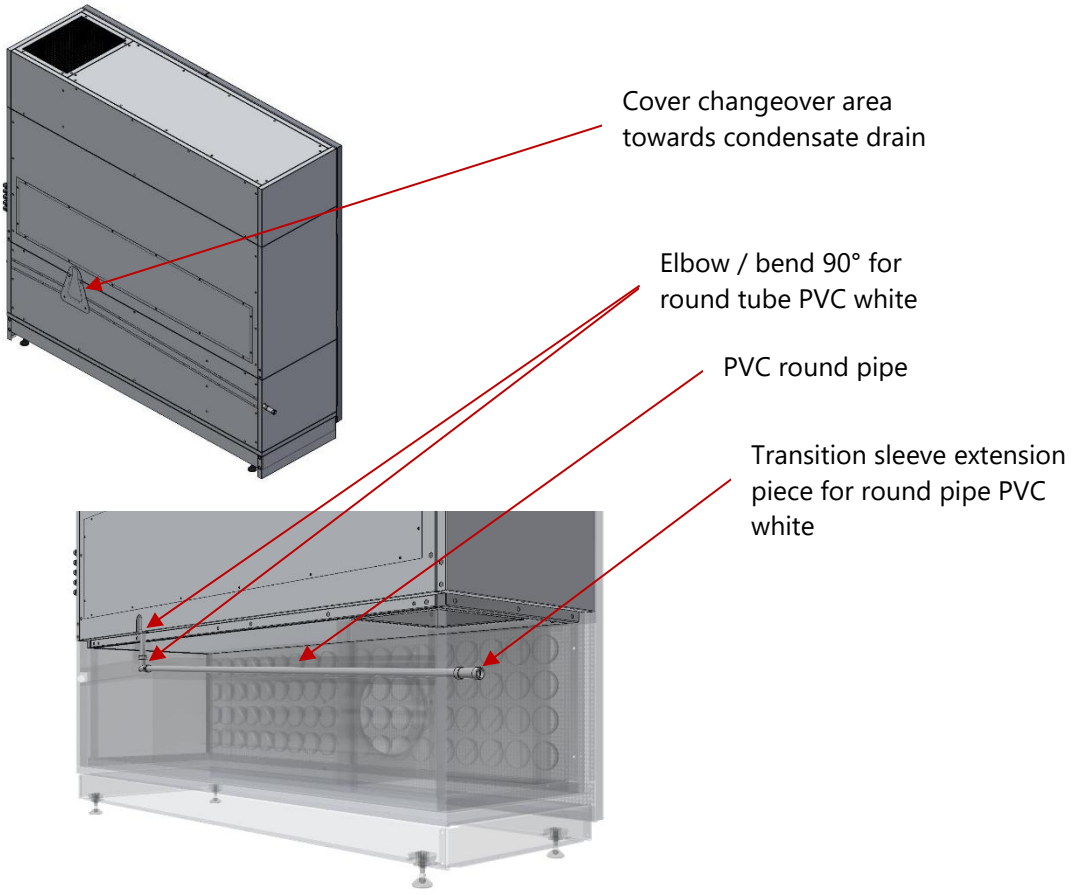
Moulded parts and pipes, which are included in the scope of delivery:

- Elbow/bend 90° for round tube PVC white
- Extension piece for round tube PVC white
- Round tube PVC white (2 metre length)

These are supplied loose with the delivery. They must be fitted by the customer. ATTENTION: No additional pipes or hoses are supplied.

The following picture shows an example of a SupraBox 750H. It shows an assembled box to which no condensate pipe including sleeve has yet been attached:





3

4. Commissioning the SupraBox DELUXE

Before commissioning the SupraBox Deluxe units, the following points must be checked:

- Check that the unit has been correctly positioned, connected and installed.
- Ensure air inlets are unobstructed, and intake openings are clear.
- Check that the fan impellers rotate freely.
- Check the screw connections on all connections.
- Only switch on the electric heater after the fan has been switched on.
- Remove any protective films.
- Visually inspect the unit seals for damage.
- Readjust the service doors at the hinges.
- Ensure the doors are closed.
- Test the fans for proper operation.
- The pressure monitoring for the plate heat exchanger is preset at the factory. However, it may be necessary to make adjustments. If the differential pressure switch is triggered shortly after the system is switched on, we recommend the following procedure:

1. Set the trigger threshold to 400 Pa directly on the differential pressure switch (rotary knob).
2. If the system operates fault-free at 100% of the air flow rate without any icing or fouling of the heat exchanger, reduce the trigger threshold by 50 Pa and start up the system.
3. Repeat step 2 until the anti-icing protection is triggered. If this occurs, for example, at 250 Pa, set the threshold to 300 Pa.

Warning! If the points listed above are not checked, dangerous system conditions may arise during the subsequent initial commissioning, which could compromise the functionality and safety of the system.

Warning! When taking the system out of service, ensure that it is de-energised and, if optional heat exchangers are fitted, drain the water to prevent freezing.

5. Operation and function

5.1. Operation

The SupraBox DELUXE is operated using a simple surface-mounted control panel.

Further operating options and information can be found in the separate operating instructions for controlling the SupraBox DELUXE 750H.

5.2. PTC post-heater (optional accessory)

On request, the SupraBox DELUXE 750H can be equipped with a PTC reheater. The desired supply air temperature is set via the control panel of the SupraBox DELUXE. If the SupraBox DELUXE 750 H is equipped with PTC, the heating output is regulated via the supply air temperature sensor integrated in the appliance and the control unit in the form of a 0-10V signal.
Please also refer to the following installation instructions.

CAUTION! The new PTC post-heaters are not compatible with SupraBox DELUXE Units before 01 April 2021. The updated control with article number H42-73050VZ (SBD 500V) and H42-73075HZ (SBD 750H) is required.

5.3. Safety instructions for PTC post-heater

Installation and electrical works may only be carried out by trained and instructed specialist personnel and in accordance with the applicable regulations!

All metallic surfaces of the PTC reheater and all blade terminals of the wiring are under voltage during operation!

The unit doors may therefore only be opened with the special spanner supplied when the unit is disconnected from the network!

The PTC reaches a temperature of up to 220°C!

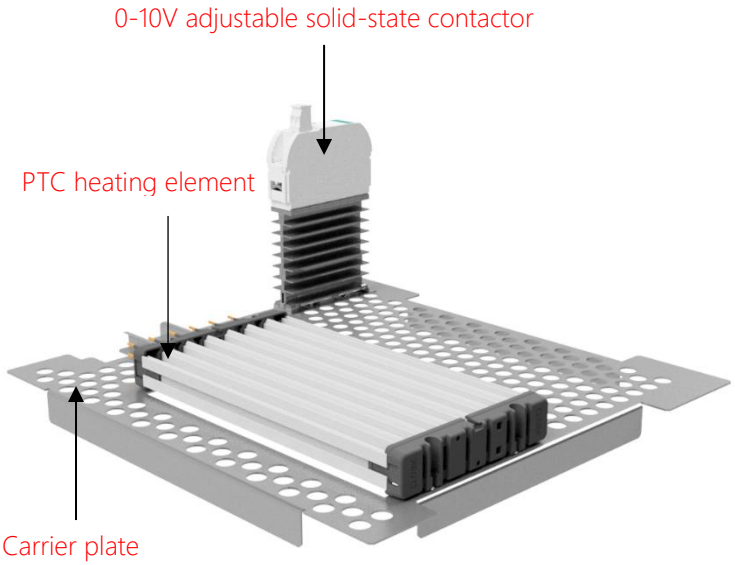
Let the PTC to cool down before opening the unit!

Risk of burn!

5.4. Structure of the PTC post-heater

The PTC post-heater is installed in the area between the counterflow plate heat exchanger and the control unit and consists of:

- Carrier plate
- PTC element, electrically insulated
- 0-10V adjustable Semiconductor protection
- Terminals with connected connection cables

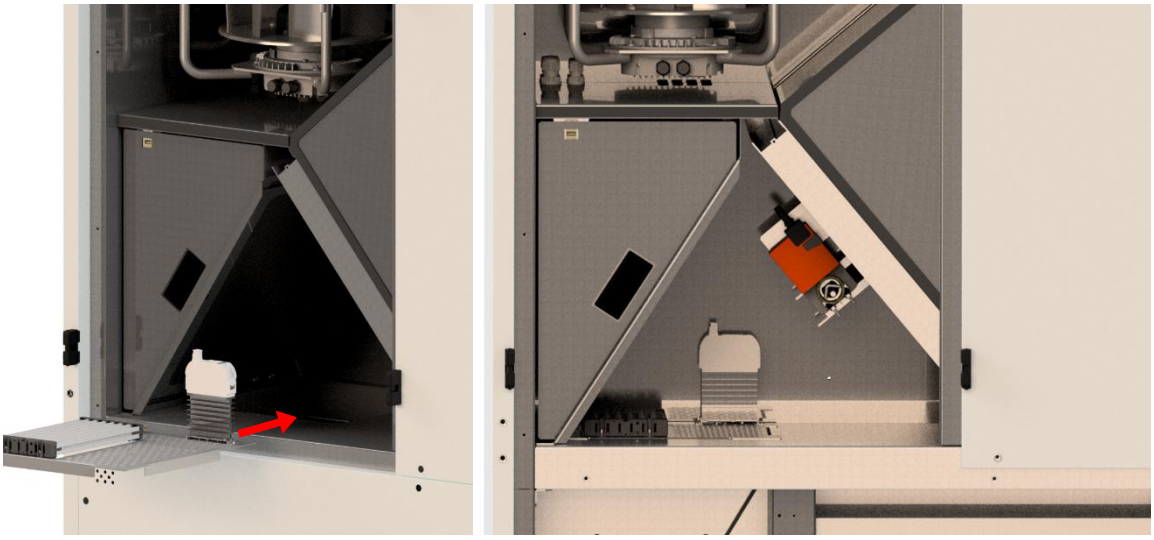


The PTC element is supplied with voltage and the signal for the heating power via the control unit. The great advantage of the PTC electronic reheater is its high operational reliability, which is why no flow monitor or safety temperature limiter is required. If the PTC electronic reheater is operated without air flow, it automatically limits its power consumption as the temperature rises.

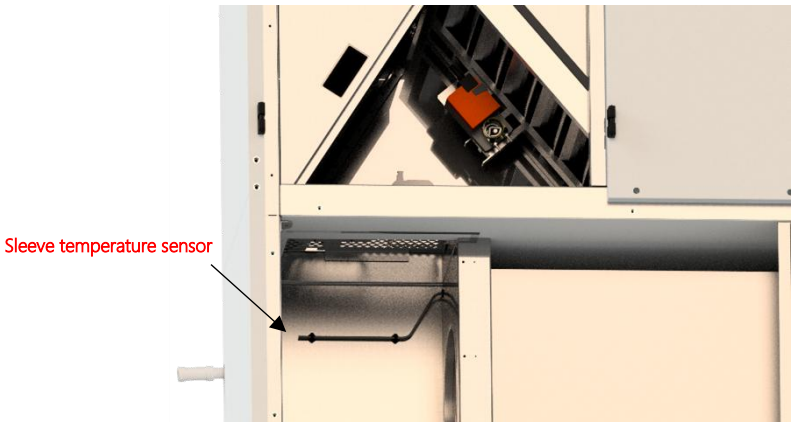
5.5. Installation of the PTC post-heater

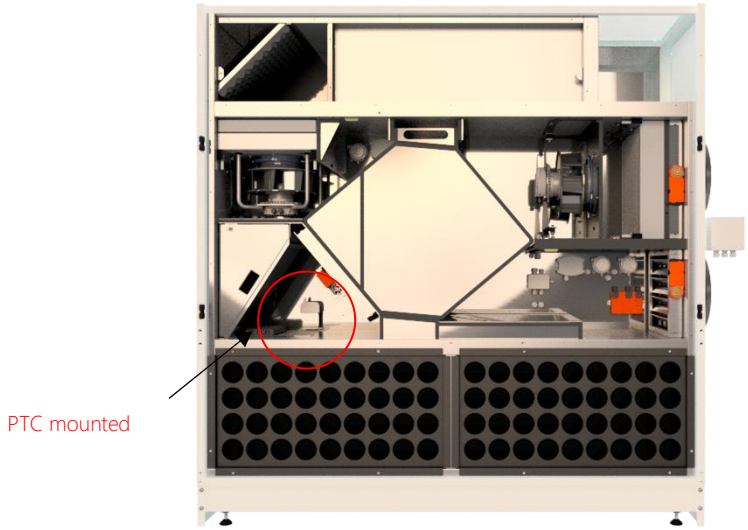
The assembly here using the example of the SupraBox DELUXE 750 H (SBD075HGXIS00E):

- All-pole disconnection of the SupraBox DELUXE 750 H power supply
- Opening the maintenance doors on the side of the SupraBox DELUXE 750 H facing away from the nozzle
- Carefully insert the retrofit kit into the base cut-out of the middle module.

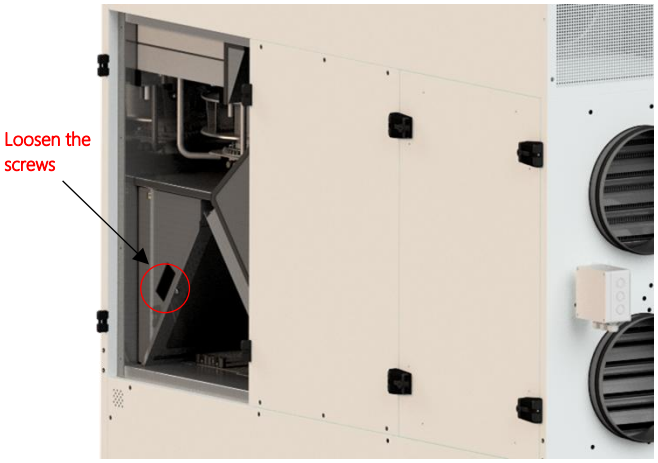


- CAUTION! It is important not to disconnect the sleeve temperature sensor H42-09934 in the supply air. This must be fed through the opening provided for this purpose in the support plate in order to transmit the current supply air temperature, following PTC reheater, to the control system.

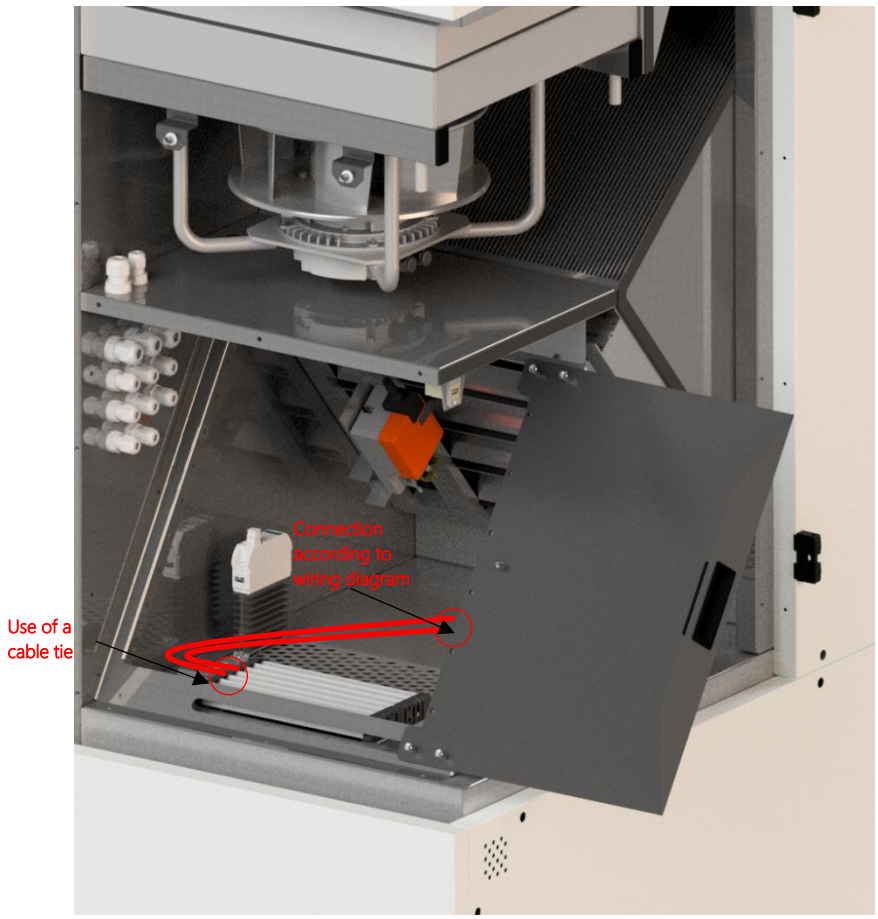




- Once the PTC electric reheater is correctly positioned and secure in the cut-out in the base of the main module, the screws securing the protective bulkhead of the control module must be loosened using a tool. To allow easier access to the control board, it can be pulled out by the handle provided via a bracket. A locking mechanism prevents the control unit from being pulled out completely.



- The PTC electric reheater can now be connected to the SupraBox DELUXE 750 H control unit. Please refer to the supplied wiring diagram for the SupraBox DELUXE 750 H. The cables should be routed using the cable ties already fitted, as shown below. The cable must be routed loosely through the unit and must not be clamped or placed on top of the PTC element when the control unit is inserted.

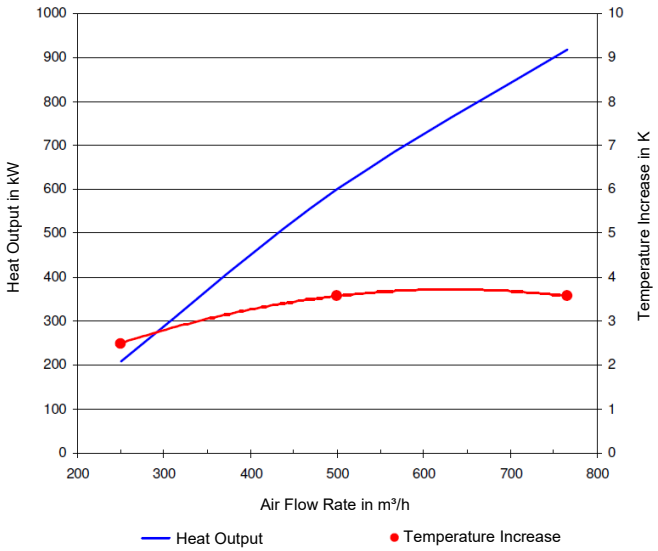


- CAUTION! The setpoint on the control panel should be at least 2K below the room's extract air temperature to prevent a short-circuit between the supply and extract air flows upstream of the unit. Excessively high temperatures cause unnecessary energy consumption and therefore operating costs.
- The maintenance doors can now be closed, secured, and the unit can be finally put back into operation.

The PTC element is supplied with voltage and the signal for the heating output via the control system. The major advantage of the PTC is its high level of operational reliability, which is why a flow monitor is not required. If the PTC is operated without an air flow, it automatically limits its power consumption as the temperature rises.

5.6. Heat output of the PTC post-heater

Depending on the air volume flow rate, the PTC electronic reheater I in the SupraBox DELUXE 750H is able to raise the supply air temperature downstream of the counterflow plate heat exchanger by approx. 7 K. This is generally sufficient to ensure thermal comfort even at very low outside temperatures. This is generally sufficient to ensure thermal comfort even at very cold outside temperatures and low room temperatures.



6. Mounting of the design elements (optional accessories)

6.1. Safety instructions for installation and maintenance

Installation and electrical work may only be carried out by trained and instructed specialist personnel and in accordance with the applicable regulations!

Caution: Crush hazard!

6.2. Installation of the design elements

The design elements of the SupraBox DELUXE 750H are offered as optional accessories and can be attached to the right and left SupraBox DELUXE 750H variants. In addition to the design element, a powder-coated plinth panel is also supplied.

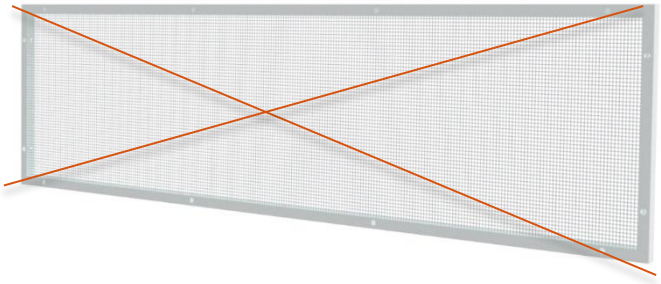
It is important to always store, transport and install the front of the design panel carefully and without scratching it.

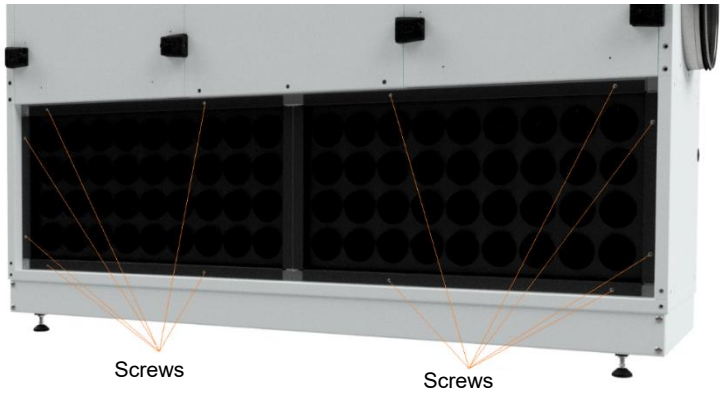
During installation, the design panel should be provided with sufficient space and an environment that is as unobstructed as possible.

The air outlet plate on the design element has hole widths of 8x8 mm. This means that the openings comply with the maximum permissible opening sizes of 8 mm in accordance with Section 5 of the Occupational Health and Safety Act.

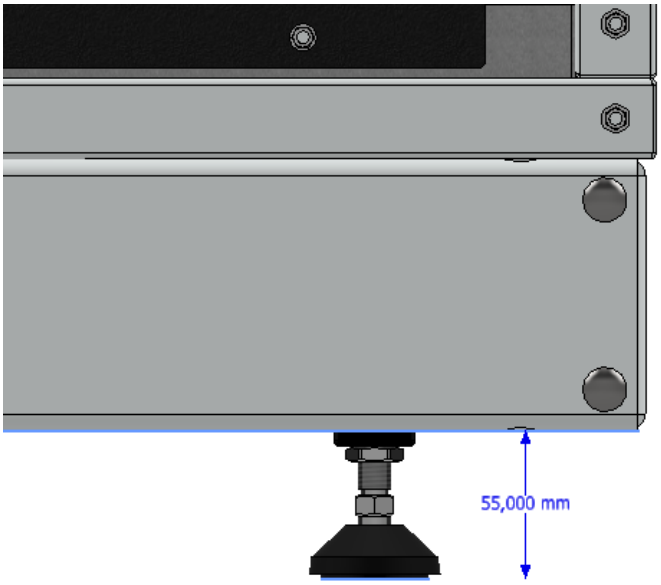
Instructions for installing the design element:

1. The outer panel of the supply air outlet is not required when using the design element and must be removed if necessary. The black nozzle plates must be reattached to the unit using the Allen screws provided.

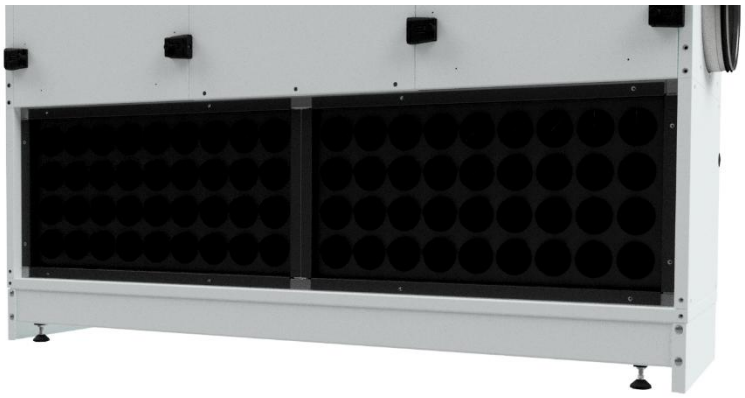




2 Adjust the base frame feet to 55 mm (+3mm / -1mm).

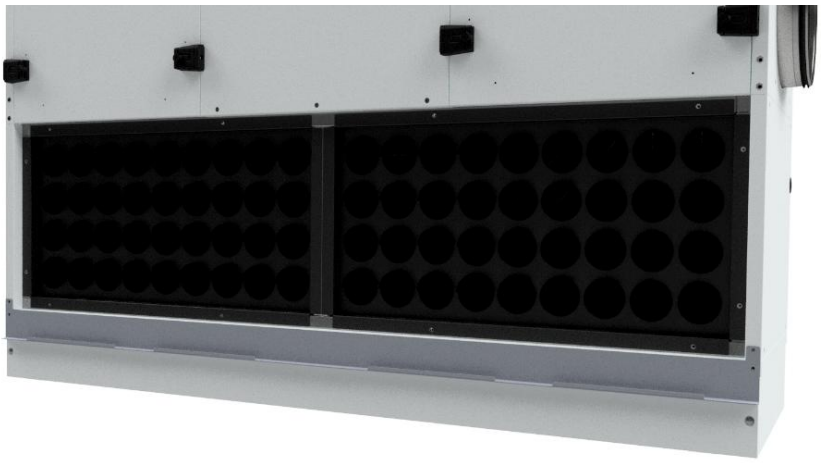


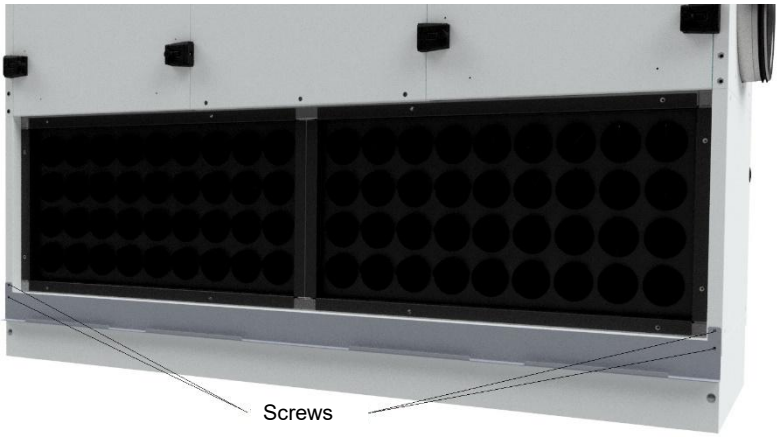
3 Attach the side plinth panels so that the screw heads of the base frame sit in the slotted holes of the plinth panels.



4 Position the front plinth panel, sliding the lower tab under the tabs of the side plinth panels.

5 Installation of the guide rail using M6 Allen screws.





6 Insert the right-hand design door into the guide rail and fix it to the extract air module using the M6 Allen screw.

7 Insert the left-hand design door into the guide rail and fix it to the extract air module using the M6 Allen screw.

7. Maintenance / Cleaning

7.1. Safety instructions for maintenance

Installation and electrical works may only be carried out by trained and instructed specialist and in accordance with the applicable regulations!

Disconnect the appliance from the network before starting any works!!!

Wait for the fan impellers to come to a standstill!

Secure the Unit against being switched on again!

All metallic surfaces of the PTC and all blade terminals of the cabling are under voltage during operation!

The appliance doors may therefore ONLY be opened with an Allen key when the appliance is disconnected from the mains!

The PTC reaches a temperature of up to 220°C! Allow the PTC to cool down before opening the unit!

Danger of burn!

7.2. Maintenance intervals according to VDI 6022

Maintenance activities and intervals for heaters and coolers in accordance with VDI 6022

	Every 3 months	Every 6 months	Every 12 months	If required	Hygiene inspection (every 3 years)
Air filter:					
Check air filter for unacceptable contamination, damage (leakage) and odours	X				
Change filter at the latest			X		
Plate heat exchanger:					
Check plate heat exchanger for soiling, damage and corrosion		X			
Check condensate drain and siphon for function, top up siphon level if necessary	X				
*Check **fan** for soiling, damage, corrosion*		X			
*Check **silencer** for soiling, damage and corrosion.* *If necessary, take contact samples*			X		
Casing of Unit					
Check the appliance housing for dirt, damage and corrosion			X		
Check appliance housing for water condensation		X			
*Check **air diffusers** and any perforated plates installed for dirt, damage and corrosion*			X		
General:					
Clean, repair or replace components				X	
Checking the hygiene status					X

7.3. Maintenance checklist according to VDI 3803 Sheet 2

Pos	*Task*	*Measures to be taken if necessary*	*Every 3 months*	*Every 6 months*	*Every 12 months*	*Every 24 months*
1	Check air diffusers in the facade for damage and corrosion.	Cleaning and maintenance			X	
2	Check the heat exchanger without dehumidification for dirt and leaks.	Clean, seal connections.		X		
3	Check heat exchanger with dehumidification, condensate tray and drain for corrosion and hygienic condition.	Cleaning	X*			
4	Check dampers for leaks and closing in the event of a power failure.	Repair the damper.			X	
5	Check the hygienic condition and seal of the air filter.	Replace filter medium, clean filter chamber.			X	
6	Check the heat recovery unit for dirt, leaks and condensate drainage.	Replace seals, clean heat recovery unit and condensate drain		X		
7	Check fan for function.	Maintenance.				X
8	Check frost protection triggering for heat exchanger.	Maintenance.			X	
9	Check the control panel.	Maintenance.				X

*During dehumidification time

The fields marked with an 'X' indicate the following activities:

- Testing random samples as part of an inspection
- Function-preserving cleaning, lubrication, readjustment
- Replacement in case of wear, consumption or defect

7.4. Filter replacement

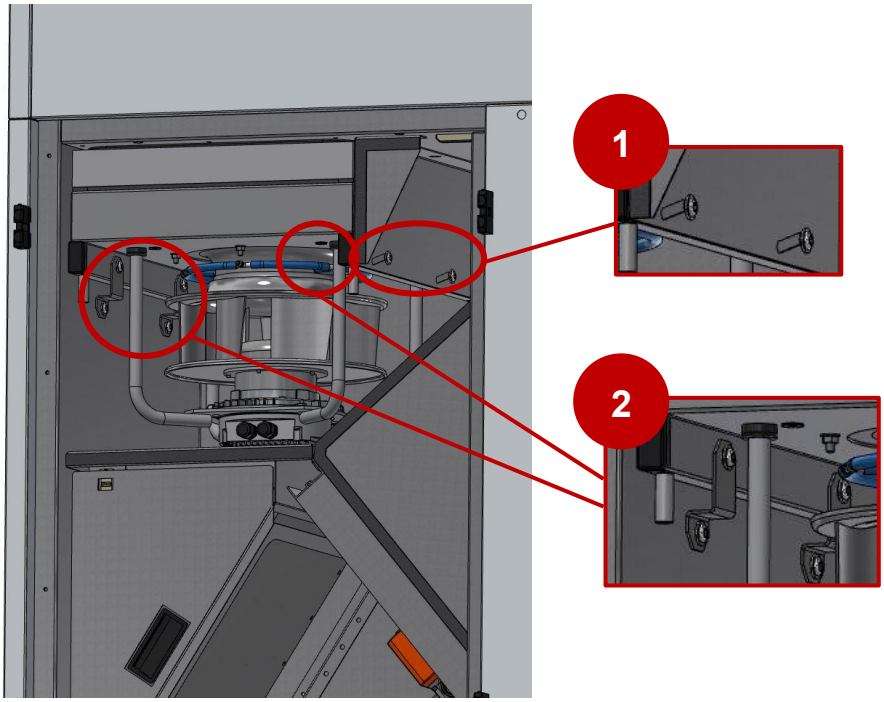
7.4.1. General information

If one of the filters become contaminated to the specified final pressure loss, this is signalled by the control unit on the control panel (see separate operating instructions for the control unit).
The filters are maintained via the unit's door.

There is an ISO ePM10 ≥50% (formerly M5) panel filter in the extract air and an ISO ePM1 ≥50% (formerly F7) in the outdoor air. For dimensions, see chapter 3.4 Technical data.
Panel filters must not be cleaned and must be completely replaced. The filter material is considered hazardous waste and must therefore be disposed of properly. Protective equipment in accordance with VDI6022 must be worn when changing the filter (at least FFP2 mask and rubber gloves).

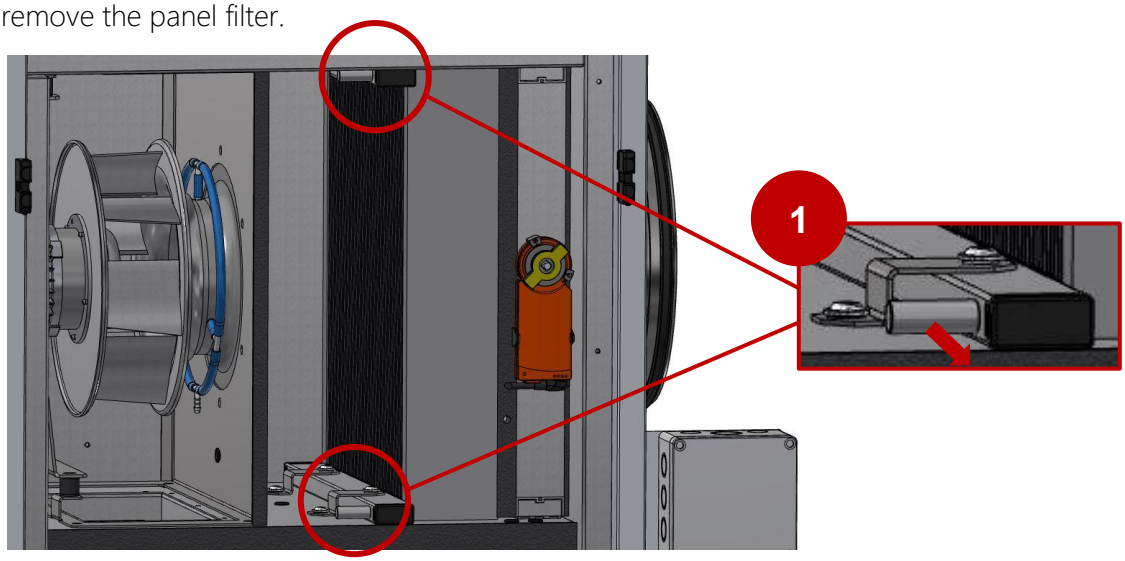
7.4.2. Removal of the extract air filter

To remove the extract air filter, loosen the two round-head screws with pressed-on washer (1) (maximum one turn / do not unscrew completely). Then pull the two clamping rails forwards with the aluminium handles (2) pointing downwards. This lowers the extract air fan and the extract air filter can be removed.



7.4.3. Removal of the supply air filter

To remove the supply air filter, release the two clamping rails (1) with the aluminium handles and remove the panel filter.



7.4.4. Installation of the new filters

The base of the housing must be cleaned before installing the new filter. See chapter 8.5 Cleaning the unit.
When inserting a new filter, observe the printed air direction arrow. The filters are fixed in place in the reverse order to that described for removal.

7.5. Cleaning the unit

Cleaning work may only be carried out by qualified and specially trained personnel (in Germany in accordance with VDI 6022).

7.5.1. Cleaning of surfaces

Coarse contamination on the surfaces in the unit can be removed dry with a hoover.
Damp cloths can be used for other contaminations on the inside and outside of the unit. The water used for this and, if necessary, the cleaning agent should have a neutral pH value (6-8).

Recommended cleaning agents for surface disinfection:

- Dismozon pur (Bode Chemie)
- Melsitt (B.Braun)
- Antifect (Schülke & Mayr)
- Clorina (Lysoform)

7.5.2. Cleaning surfaces of counterflow heat exchanger

Coarse contamination on the surfaces in the unit can be removed dry with a hoover.
The suction pipe must not be placed on the fins of the plate heat exchanger, as these are very sensitive.

The fins of the counterflow plate heat exchanger are very sensitive! They can be easily deformed by mechanical cleaning! Therefore, ONLY clean with extreme carefulness!

7.6. Inspection of the silencers

7.6.1. Supply air silencer

The installed PTC support plate may need to be removed for a visual inspection. The silencer can then be checked using a mirror and a light.
For a thorough check of the silencer, the air outlet plate for the supply air must also be removed.
If the supply air silencer needs to be replaced, this must be obtained from Rosenberg.

7.6.2. Extract air silencer

To carry out a visual inspection, first remove the extract air filter. Then disconnect the extract air fan cables at the plugs, remove the measuring hoses from the fan and then remove the fan. A visual inspection or contact test can then be carried out via the opening above the extract air filter. After this step, everything must be reassembled in reverse order.
If the extract air silencer needs to be replaced, this must be obtained from Rosenberg.

8. Customer service, service, manufacturer's address

Rosenberg products are subject to constant quality control and comply with the applicable regulations.

If you have any questions in connection with our products, please contact the installer of your ventilation system, one of our branches or contact us directly:

Rosenberg Ventilatoren GmbH
Maybachstraße 1
D-74653 Künzelsau-Gaisbach

Phone: +49 (0)7940/ 142-0
Fax: +49 (0)7940/ 142-125

Email: info@rosenberg-gmbh.com
Internet: www.rosenberg-gmbh.com

9. Certifications

9.1. EU Declaration of Conformity (Low voltage and EMC)

EU-Konformitätserklärung / *EU-Declaration of conformity*

Im Sinne der Niederspannungsrichtlinie 2014/35/EU und der EMV-Richtlinie 2014/30/EU
as defined by the low voltage directive 2014/35/EU and the EMC-directive 2014/30/EU

KE_103BB0416A4_Kompaktgeräte

Hersteller / *Manufacturer*

Rosenberg Ventilatoren GmbH
Maybachstraße 1
D- 74653 Gaisbach

Für die nachfolgende Maschine / *For the following machine*

Produktbezeichnung / *Designation of the machine*:	**Typ- oder Serienbezeichnung / *Model or type of machine***
WRG-Gerät / *HRS-Unit*	SupraBox COMFORT ... / SupraBox DELUXE...
Kompakt Lüftungsgerät / *Compact Air Handling Unit*	CompactAir-Center...

erklären wir in alleiniger Verantwortung, dass sie den grundlegenden Anforderungen entsprechen, die in den nachfolgend bezeichneten Harmonierungsrechtsvorschriften festgelegt sind.

we declare under our sole responsibility, that they meet the basic requirements that are laid down in the harmonization legislation designated below.

- **Niederspannungsrichtlinie (2014/35/EU) / low voltage directive (2014/35/EU)**
- **EMV-Richtlinie (2014/30/EU) / *EMC-Directive (2014/30/EU)***

Folgende harmonisierte Normen wurden angewandt / *The following harmonized standards were applied:*

EN 60204-1	EN 61000-6-2	EN 61000-6-3

Diese Konformitätserklärung zur Einhaltung der EMV-Richtlinie bezieht sich ausschließlich auf gemäß der Betriebsanleitung angeschlossene und eigenständig betriebene Ventilatoren bei sinusförmiger Stromversorgung. Beim Einbau der Maschine in eine Anlage sowie sonstige Ergänzungen (z.B. Anschluss von Reglern) ist der Hersteller der Anlage für die Einhaltung der EU-Richtlinien verantwortlich.

This declaration of conformity to the compliance with EMC-Directive is valid only for fans which are connected according to the operating instructions and operated independently in reference to sinusoidal current supply. The Manufacturer of this completed system is responsible for the compliance with the EU-directives in case of integration in it or to other component such as controllers.

Die EU-Konformitätserklärung wurde ausgestellt / *EU-Declaration of conformity was issued:*

Gaisbach, Germany, 20.04.2016
Ort, Datum / Place, Date

ppa. M. Müller

ppa. Manfred Müller
(Technischer Leiter AHU /
Technical Director AHU)

9.2. EU Declaration of Conformity (ERP Directive)

EG-Konformitätserklärung / EC *declaration of conformity*

im Sinne der ErP-Richtlinie 2009/125/EG
as defined by the ErP directive 2009/125/EC

KE_SupraBox_ErP_Lot6.doc

Hersteller / *Manufacturer* **Rosenberg Ventilatoren GmbH**
Maybachstraße 1
D- 74653 Gaisbach

Hiermit erklären wir in alleiniger Verantwortung, dass die nachfolgend bezeichneten Maschinen den Anforderungen aus der Verordnung 1253/2014/EU zur Durchführung der ErP-Richtlinie 2009/1525/EG entsprechen.

Herewith we declare under our sole responsibility that the machines designated below meet the requirements of the regulation 1253/2014/EU to perform the ErP-directive 2009/125/EC.

Bezeichnung der Maschine ***/ Designation of machinery***:

Kompakt-Lüftungsgerät/ ***Compact Air Handling Unit***

Maschinentyp ***/ Machinery type***:

SupraBox COMFORT… ; SupraBox DELUXE… ***SupraBox COMFORT… ; SupraBox DELUXE…***

Angewandte technische Normen, insbesondere/
Applied technical standards, in particular: *EN 13053*

Wichtiger Hinweis:
Diese Konformitätserklärung zur Einhaltung der ErP-Richtlinie 2009/125/EG und der Verordnung 1253/2014/EU ist nur in Verbindung mit den ErP-bezogenen Daten in der Produktinformation gültig. Die Verwendung eines Mehrstufenantriebs oder Drehzahlreglers ist nach Verordnung 1253/2014/EU vorgeschrieben und muss, falls nicht bereits im Lieferumfang enthalten, bauseits entsprechend den Anforderungen aus der Verordnung sichergestellt werden.

Important Remark:
This declaration of conformity related to the ErP Directive 2009/125/EC and the regulation 1253/2014/EU is valid only in combination with the ErP related data on the product information. The usage of a multi-speed drive or variable speed drive is required according regulation 1253/2014/EU and must be ensured, either within the delivery scope or provided by customer according regulation's requirements.

Gaisbach, Germany, 09.02.2016
Ort, Datum / Place, Date

ppa.
ppa. Manfred Müller
(Technischer Leiter AHU /
Technical Director AHU)

9.3. EU Declaration of Conformity (EC Declaration of Incorporation)

EG-Einbauerklärung / EC-*declaration of Incorporation*

im Sinne der EG-Maschinenrichtlinie 2006/42/EG
as defined by the EC-Machinery Directive 2006/42/EC

EE103BB0416A5_Kompaktgeräte

Hersteller / *Manufacturer*

Rosenberg Ventilatoren GmbH
Maybachstraße 1
D- 74653 Gaisbach

Hiermit erklären wir, dass die unvollständige Maschine / *Herewith we declare that the incomplete machine*

Produktbezeichnung: / ***Designation of the machine:***	**Typ- oder Serienbezeichnung: /** ***model or type of machine:***	**ab Baujahr: /** ***since year of manufacture:***
WRG-Gerät / *HRS-Unit*	SupraBox COMFORT ... / SupraBox DELUXE...	2016
Kompakt Lüftungsgerät / Compact Air Handling Unit	CompactAir-Center	2016

den grundlegenden Anforderungen der Richtlinie 2006/42/EG entspricht, insbesondere: / *meets the basic requirements of the guideline 2006/42/EC, in particular:*

Anhang I, Artikel 1.1.2, 1.1.5, 1.3.2, 1.4.1, 1.5.1, 1.7.3

Des Weiteren den einschlägigen Bestimmungen nachfolgender Richtlinien / *Furthermore, in accordance with the requirements of the following directives:*

Niederspannungsrichtlinie (2014/35/EU) / *Low voltage directive (2014/35/EU)*

EMV-Richtlinie (2014/30/EU) /*EMC-Directive (2014/30/EU)*

ErP-Richtlinie (2009/125/EG) / *ErP-Directive (2009/125/EC)*

Ferner erklären wir, dass die speziellen technischen Unterlagen nach Anhang VII Teil B erstellt wurden und verpflichten uns diese auf Verlangen den Marktaufsichtsbehörden über unsere Dokumentationsabteilung in schriftlicher oder elektronischer Form zu übermitteln.
Moreover, we declare that the relevant technical documentation according to Appendix VII, Part B, have been issued and we commit ourselves to forward the documents on request to the market regulators as written documents or electronically.

Die Inbetriebnahme der unvollständigen Maschine wird solange untersagt, bis diese in eine Maschine eingebaut wurde, welche dann den Bestimmungen der EG-Maschinenrichtlinie 2006/42/EG entspricht.
The commissioning of the incomplete machine is prohibited until the incomplete machine has been installed in a machine which then meets the requirements of the EC Machinery Directive 2006/42/EC.

Name des Dokumentationsbevollmächtigten: /
Name of representative for documentation: David Schubert

Adresse der benannten Person: /
Address of the nominated Person: Siehe Herstelleradresse /
see manufactures address

Die EG-Einbauerklärung wurde ausgestellt / *EC-declaration of incorporation was issued:*

Gaisbach, Germany, 20.04.2016
Ort, Datum / *Place, Date*

ppa. M. Müller

ppa. Manfred Müller
(Technischer Leiter AHU /
Technical Director AHU)

9.4. ERP data sheet

Rosenberg Ventilatoren GmbH
Maybachstraße 1
D-74653 Künzelsau-Gaisbach

SupraBox DELUXE 750 H Höhe: 1900 mm Breite: 1950 mm Tiefe: 570 mm Gewicht: 335 kg 60 mm Wandst.

Gerätetyp:	**NWLA** (Nicht-Wohnraum-Lüftungsanlage)	Gerätebauart:	**ZLA** (Zwei-Richtung-Lüftungsanlage)
Art des Antriebs:	Drehzahlregelung		

SVL int:	**925** W/(m³/s)
SVLint Limit (2016):	**1613** W/(m³/s)
SVLint Limit (2018):	**1333** W/(m³/s)

Gesamtgeräteeigenschaften:	
Art des WRS:	**Gegenstrom-Plattenwärmetauscher**
Thermischer Übertragungsgrad (nach EN13053):	**81** %

Zuluft-Eigenschaften:		**Abluft-Eigenschaften:**	
Volumenstrom:	**0,208** m³/s	Volumenstrom:	**0,208** m³/s
dpsext:	**50** Pa	dpsext:	**50** Pa
el. Eingangsleistung:	**0,135** kW	el. Eingangsleistung:	**0,135** kW
dpsint:	**175** Pa	dpsint:	**185** Pa
dpsadd:	**35** Pa	dpsadd:	**10** Pa
Luftgeschwindigkeit:	**1,04** m/s	Luftgeschwindigkeit:	**1,18** m/s
Etastat(327/2011/EU):	**56,3** %	Etastat(327/2011/EU):	**56,3** %
Filtereinstufung:	**F7**	Filtereinstufung:	**M5**
Schalldruckpegel $L_{pA2(1m)}$:	**35** db(A)	Schalldruckpegel $L_{pA2(1m)}$:	**35** db(A)

Allgemeine Eigenschaften:	
Filterwarnanzeige:	Zur Erfüllung der Verordnung 1253/2014/EU müssen die eingebauten Filter mit einer optischen Anzeige- oder akustischen Warnvorrichtung in der Steuerung ausgestattet werden, die ausgelöst wird, sobald der Druckabfall am Filter den höchstzulässigen Wert überschreitet.
Thermischer Bypass:	Der nach der Verordnung 1253/2014/EU geforderte thermische Bypass des WRS wird über einen am WRS angebrachten Bypass realisiert
Antrieb:	Wird ein Lüftungsgerät ohne Regelung bestellt und geliefert, so ist zur Erfüllung der Verordnung 1253/2014/EU ein Mehrstufenantrieb oder Drehzahlregler vorzusehen.
Entsorgungshinweise:	zu finden unter www.rosenberg-gmbh.com
Eingebaute Ventilatoren entsprechen der Richtlinie 2011/125/EU	

10. Notes