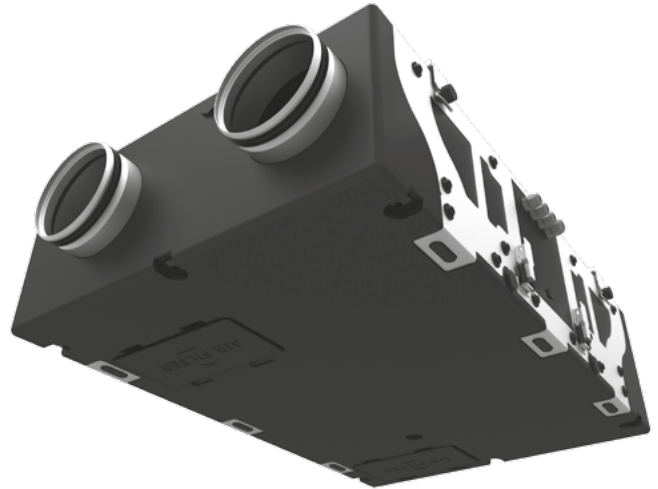


INSTALLATION GUIDE

Air handling unit

Komfort EC D5B180 S14

Komfort EC D5B180-E S14



INSTALLATION

Tools required



Pencil



Drill



Screwdriver



Dowel 6 pcs



Screws 6 pcs

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

Minimum straight air duct length:

equal to 1 air duct diameter on intake side

equal to 3 air duct diameters on outlet side

If the air ducts are too short or not connected, protect the unit parts from ingress of foreign objects.

To prevent uncontrollable access to the fans the spigots may be covered with a protecting grille or other protecting device with mesh width not more than 1/2 inch.

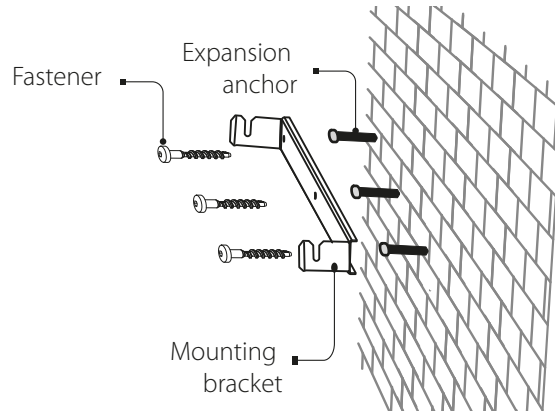
While installing the unit ensure convenient access for subsequent maintenance and repair.

The unit must be mounted on a plane wall (ceiling).

Mounting of the unit to an uneven surface can lead to the unit casing distortion and operation disturbance.

Fix the mounting brackets on the wall or the ceiling depending on the type of installation.





Fasteners for mounting are not included in the delivery set and should be ordered separately. While choosing fasteners consider the material of the mounting surface as well as the weigh of the unit, refer to the Technical Data section. Fasteners for unit mounting should be selected by the Customer Service technician. Unscrew the thumbscrews on the unit before attaching it to the mounting brackets. Set the unit thumbscrews into the mating cutouts in the mounting brackets and tighten the thumbscrews.

Unit mounting example

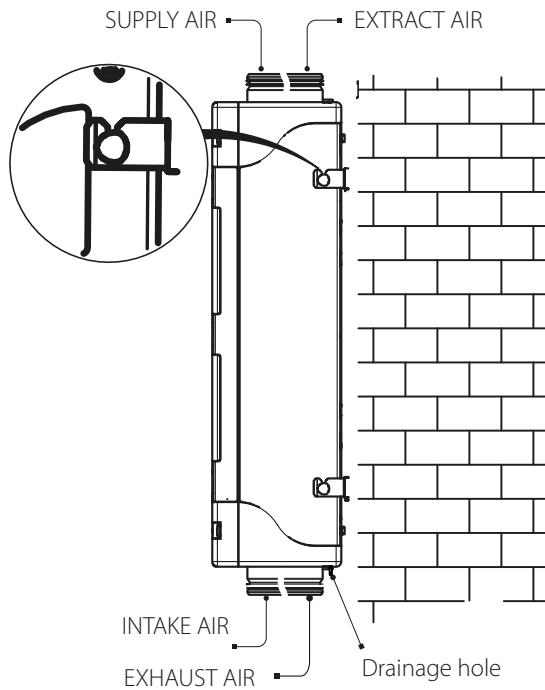


Diagram 1. Wall vertical installation

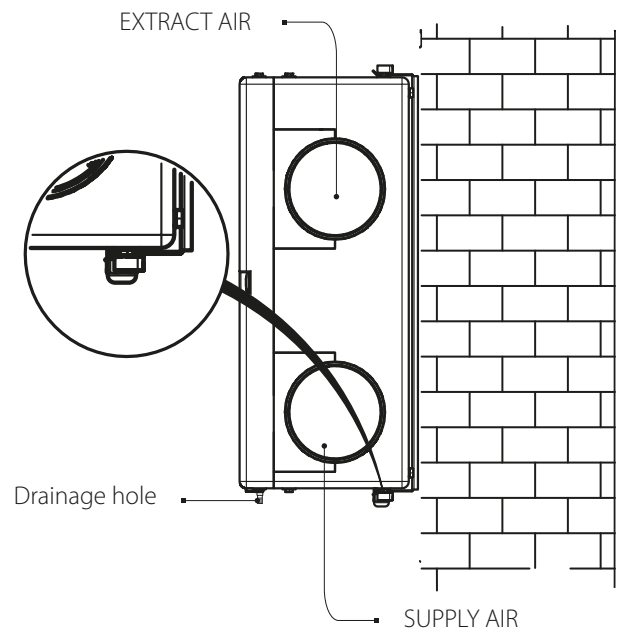


Diagram 2. Wall horizontal installation



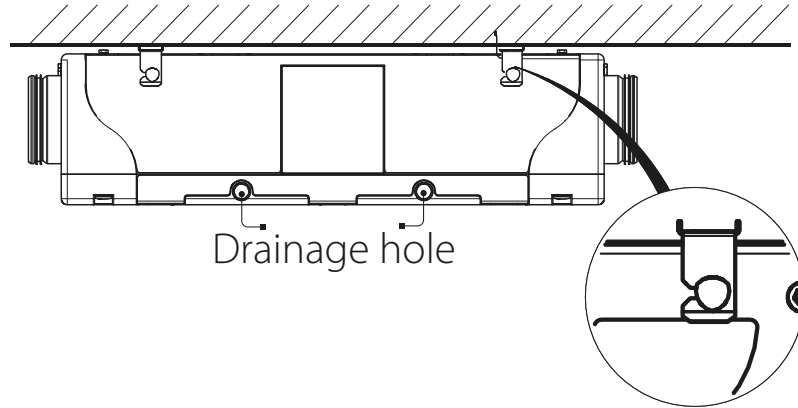


Diagram 3. Suspended mounting

Installation options according to diagrams 4-5 are possible for the Komfort EC D5B180-E modification.

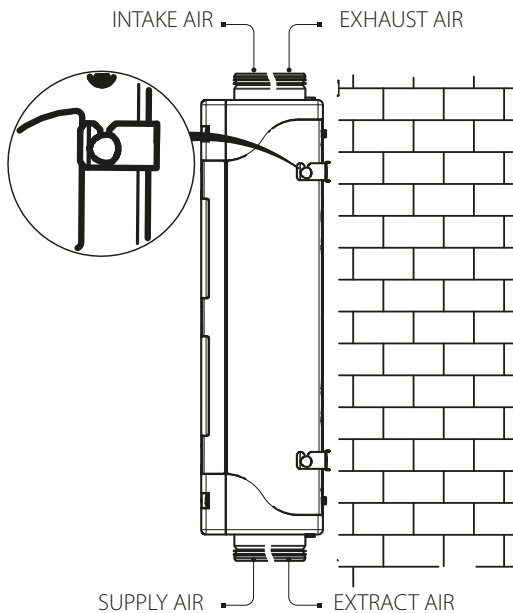


Diagram 4. Wall vertical installation

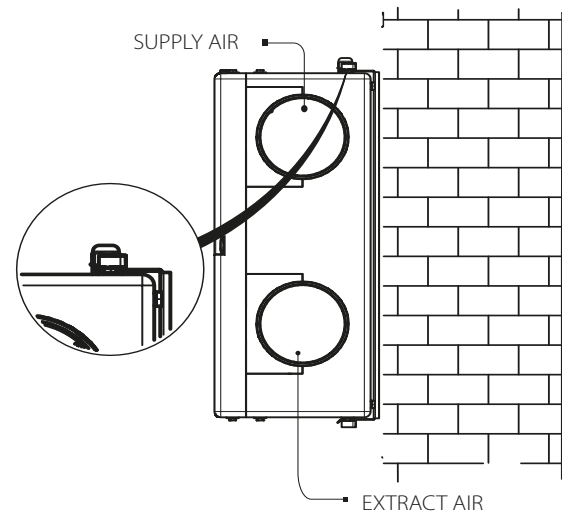


Diagram 5. Wall horizontal installation

CONDENSATE DRAINAGE

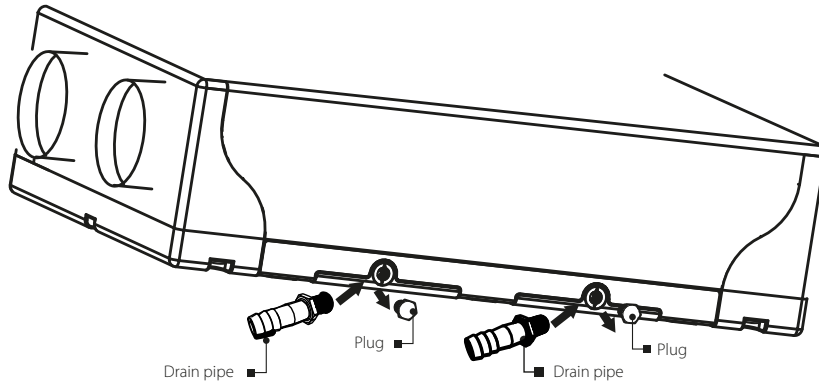
The Komfort EC D5B180 heat recovery units require condensate drainage.

The hole for the drain pipes is in the cover of the unit.

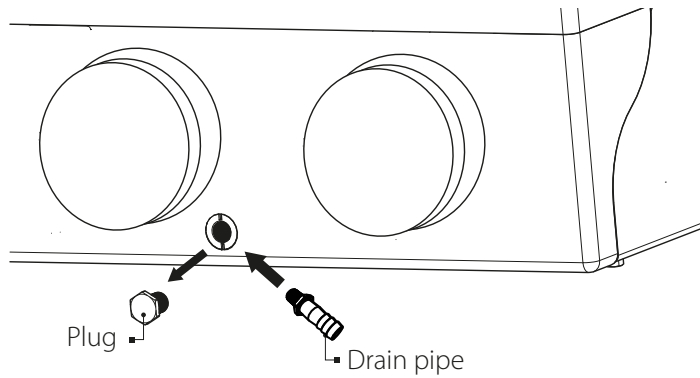
Remove the plug from the hole, open the service panel and install the drain pipe from the delivery set into the hole.

The drain pipes should be installed only in the holes indicated on the diagrams. For suspended and wall mounted horizontal installation use two holes on the side of the unit, for a wall-mounted vertical installation use a hole at the bottom of the unit. Do not mount the drain pipes in the holes not indicated on the installation diagram.



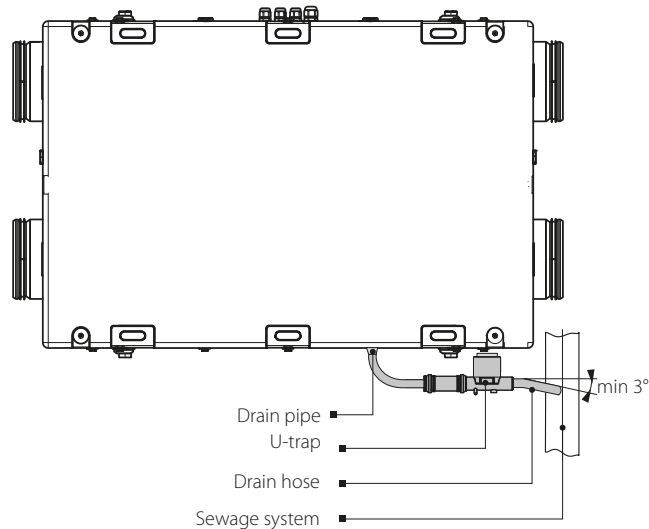


Drain hole location in case of installation according to the Diagrams 2 and 3



Drain hole location in case of installation according to the Diagram 1

Then connect the drain pipe to the sewage system using the SG-32 U-trap kit (available upon separate order). The pipes are required to have a minimum slope of 3°. Each drain pipe is connected to a different U-trap.



The condensate drainage system is designed for normal operation in premises with air temperatures above 0 °C! If the expected ambient air temperatures are below 0 °C, the condensate drainage system must be equipped with heat insulation and pre-heating facilities. Condensate drainage is not required for the Komfort EC D5B180-E modification.

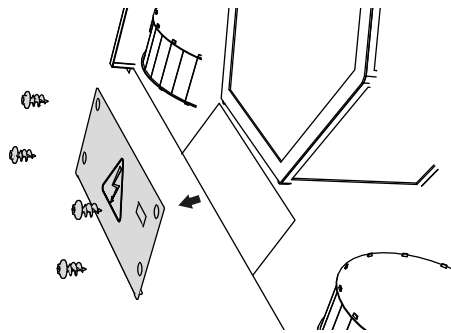
CONNECTION TO POWER MAINS

The air-handling unit is rated for connection to single-phase AC 120V/60 Hz power mains. The unit must be connected to power mains using durable, insulated and heat-resistant conductors (cables and wires) with minimum cross section not less than 20 AWG.

The external power input must be equipped with an automatic circuit breaker built into the stationary wiring to open the circuit in the event of overload or short-circuit. The position of the external automatic circuit breaker must ensure free access for quick power-off of the unit. The circuit breaker trip current must correspond to the unit current consumption, refer to the Technical data section.

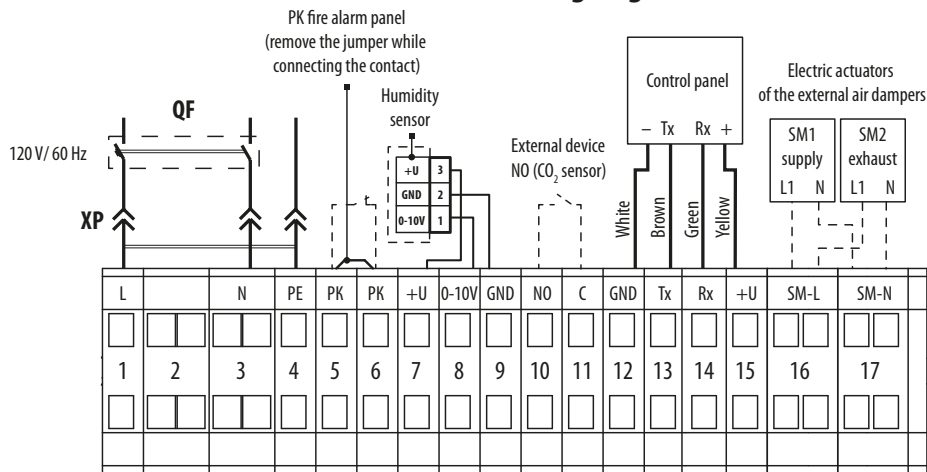
Connect the cables to the control unit using the electric lead-ins on the side of the unit.

Make the electric connections through the terminal block, located in the control unit, in compliance with the External wiring diagram.



Access to the control unit

External control units wiring diagram



X1

Designation	Name	Model	Wire**
N.o	External control unit contacts	LF230	2 x 20 AWG
SM1*	Supply air damper actuator	LF230	2 x 20 AWG
SM2*	Exhaust air damper actuator	LF230	2 x 20 AWG
PK*	Contact from fire alarm panel	NO	2 x 20 AWG

* Is not included in the delivery set.

** Maximum connecting cable length is 65 ft!

