

**INSTALLATION GUIDE**
**Air handling unit**
**Komfort EC S5B270 S14**
**Komfort EC S5B270-E S14**

**INSTALLATION**
**Tools required**

**Pencil**

**Drill**

**Screwdriver**

**Dowel**

**Screws**

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 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 fans, the spigots may be covered with a protecting grille or other protecting device with mesh width not more than  $\frac{1}{2}$  inch.

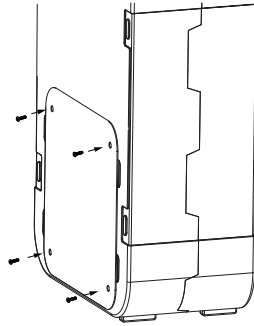
While installing the unit, ensure convenient access for subsequent maintenance and repair.

The unit must be mounted on a flat floor.

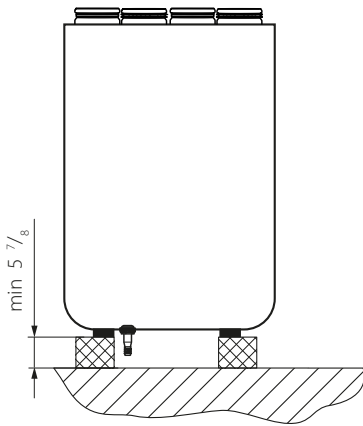
Installing the unit to an uneven surface could lead to the unit's casing distortion and operation disturbance.

Do not expose the unit to direct sunlight.



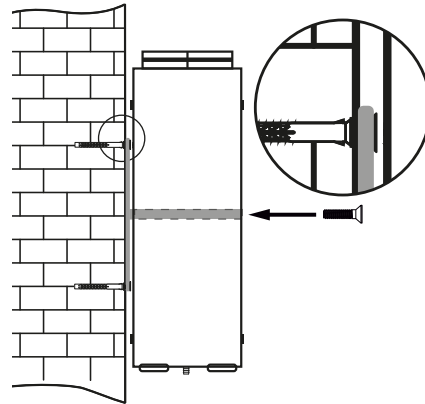


The plate opposite to the service side must be fixed with screws (included in the delivery set) before installation.



### Unit floor mounting

Install the unit on the pre-mounted floor supports, minimum  $5 \frac{7}{8}$  inch height, to ensure sufficient access for the drain pipe connection to the U-trap and for condensate drain system installation.



### Unit wall mounting

Fasteners (dowels, self-tapping screws) for wall mounting are not included in the delivery set and should be ordered separately.

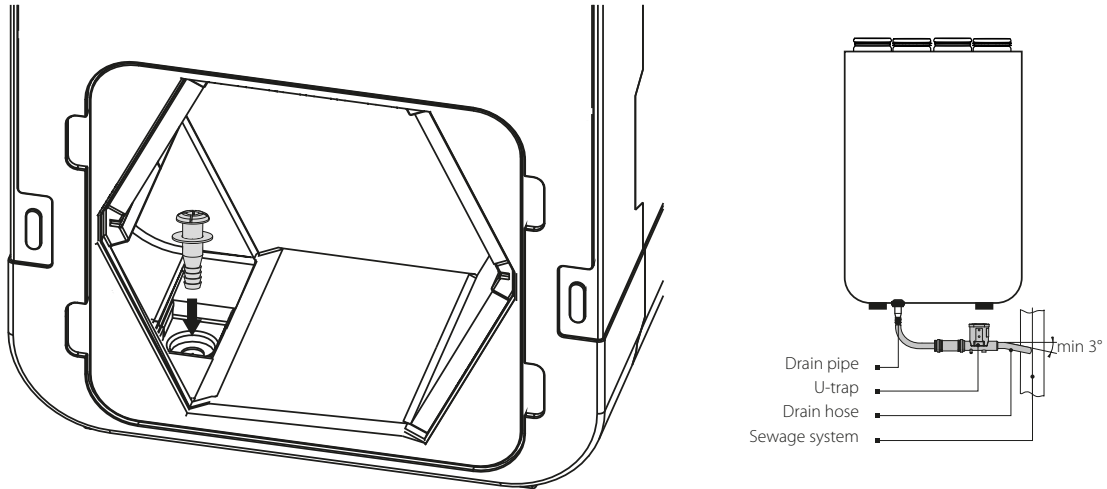
While choosing fasteners consider the material of the mounting surface as well as the weight of the unit, refer to the Technical data section. Fasteners for unit installation should be selected by a qualified technician.

Secure the wall bracket at required height. Hang the unit on the wall bracket and secure it with a screw.



### CONDENSATE DRAINAGE

Condensate drainage is required for the Komfort EC S5B270 S14 unit series. The Komfort EC S5B270-E S14 units are equipped with a heat exchanger with an enthalpy membrane at the core. No condensate is formed in heat exchangers of this type, therefore, no condensate drainage is required. The hole for the drain pipe connection is located at the bottom of the unit. Open the service panel, remove the heat exchanger and filters, drill a hole ( $\frac{7}{8}$  inch in diameter) in a plastic pan in the exhaust air duct and install the drain pipe (supplied) in the hole. Then connect the drain pipe to the sewage system using the SG-32 U-trap kit (purchased separately). The pipe slope downwards must be at least 3°.



The condensate drainage system is designed for normal operation in premises with air temperatures above 32 °F! If the expected ambient air temperatures are below 32 °F, the condensate drainage system must be equipped with heat insulation and pre-heating facilities.

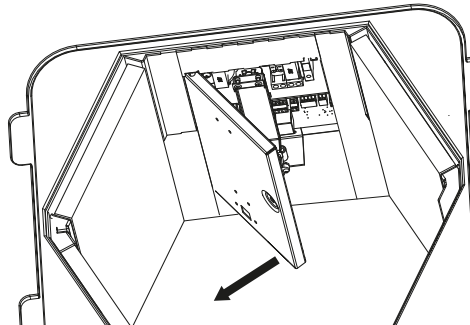


### CONNECTION TO POWER MAINS

The air-handling unit is rated for connection to single-phase AC 120V/60 Hz power mains. Connect the unit to power mains using the power cord with the IEC plug (included in the delivery set).

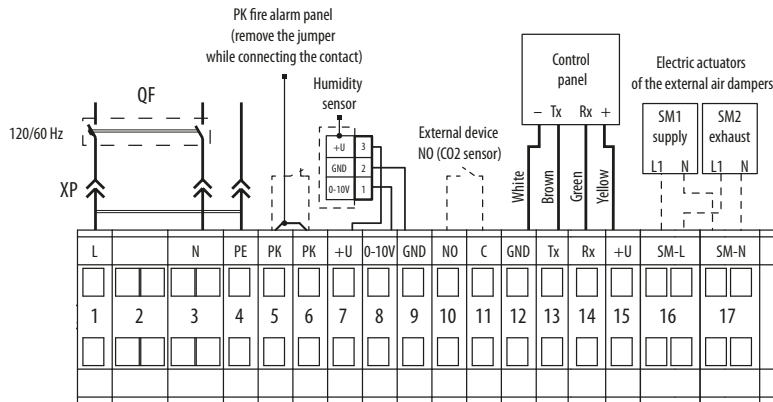
The external power input must be equipped with an automatic circuit breaker built into the stationary wiring to open the circuit in the event of overload or short-circuit. The position of the external circuit breaker must ensure free access for quick power-off of the unit. The trip current must be in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

Complete the electrical connections through the terminal block in the control unit as shown in the external wiring diagram.



Access to the control unit

### External control units wiring diagram:



v1

Designation	Name	Model	Wire**
N.o	External control device contacts	LF230	2 x 20 AWG
SM1*	Supply air damper actuator	LF230	2 x 20 AWG
SM2 *	Extract 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 20 m!

