

KOMFORT Ultra S3 250 S3 white

Compact heat recovery air handling units

Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat and humidity recovery reduces ventilation heat losses in the cold season and the load on the air conditioners in the hot season.
- Control of air exchange for creating comfortable indoor microclimate.
- o Compatible with round ∅ 125 mm air ducts.



Air flow: up to $290 \text{ m}^3/\text{h}$ 81 l/s



Heat recovery efficiency: up to 73 %





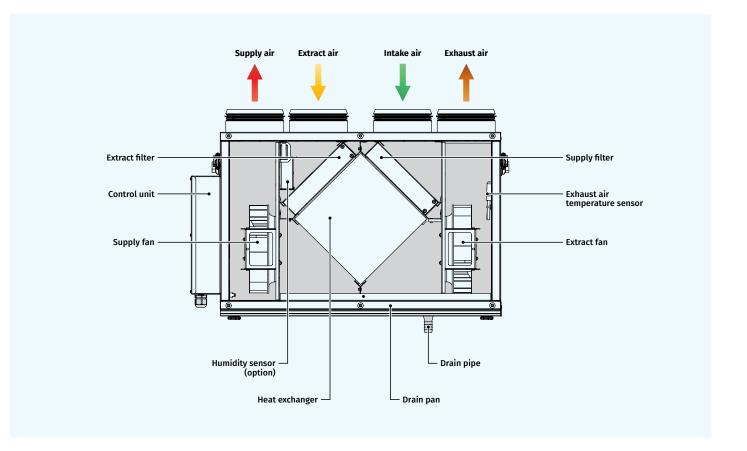


Design

- o The casing of the unit is made of double skinned white painted metal panels, internally filled with 20 mm, mineral wool layer for heat and sound insulation.
- The spigots are located at the top of the unit and are rubber sealed for airtight connection to the air ducts.
- The hinged panel of the casing ensures easy access to the unit internals for service works including cleaning, filter replacement, etc.

Fans

- Asynchronous external rotor motors and centrifugal impellers with backward curved blades are used for air supply and exhaust.
- o Integrated motor overheating protection with automatic restart.
- Dynamically balanced impellers.
- Equipped with ball bearings for longer service life.
- Reliable and quiet operation.





Heat Recovery

- The KOMFORT Ultra S3 250-E S3 white unit is equipped with a plate enthalpy cross-flow heat exchanger made of polymerized cellulose that recovers heat and humidity.
- Due to humidity recovery the enthalpy heat exchanger produces no condensate.



- The air flows are fully separated within the heat exchangers. Odours and contaminants contained in the extract air are not transferred to the supply air flow.
- Heat recovery is based on heat and/or humidity transfer through the plates of the heat exchanger. In the cold season supply air is heated in the heat exchanger by transferring the heat energy of warm and humid extract air to the cold fresh air. Heat recovery minimizes heat losses, which reduces the cost of space heating.
- In summer the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cooled extract air. This reduces load on air conditioners and saves electricity.
- In summer, when the indoor and outdoor temperature difference is low heat recovery is not reasonable. In this case the heat exchanger can be temporary replaced with a summer block for warm seasons (available separately).

Air Filtration

- Two built-in G4 and F8 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

Control and Automation

- Turning the unit on/off from the control panel.
- Selecting ventilation mode three speeds: minimum, medium. maximum.
- Freeze protection of the heat exchanger by means of turning off the supply fan during defrosting.



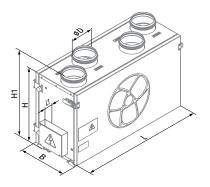
Mounting

- The units can be fixed to the wall, ceiling or mounted on the floor using the mounting brackets.
- While mounting provide free access to the service panel for filter replacement and servicing.
- Due to universal casing design both left and right mounting is possible. It requires swapping the service and the back panel.

Designation ke	у							
Serie	Unit type	Spigot modification	Modification	Rated air flow [m³/h]		Heat exchanger type	Control	Casing
KOMFORT	Ultra: compact unit	S: vertical spigot orientation	3	250	-	E: energy recovery	S3: multi speed switch	white: painted steel

Overall Dimensions [mm]

Model	D	В	Н	H1	L	L1
KOMFORT Ultra S3 250-F S3 white	125	300	443	490	713	43



Ordering Information

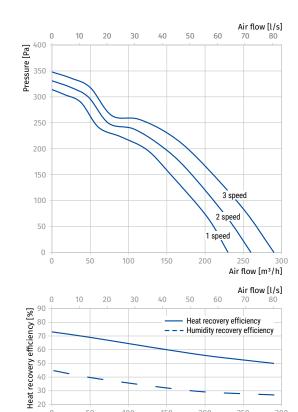
Part Number	Model	Description
BLAKOMFORTULTRAS3250-ES3	KOMFORT Ultra S3 250-E S3 white	WALL/FLOOR MOUNTED COMPACT ENERGY AHU

HVAC VENTILATION | 2020 85



Technical Data

Parameters	KOMFORT Ultra S3 250-E S3 white		
Voltage [V/50 (60) Hz]	1 ~ 220-240		
Power [W]	176		
Current [A]	0.8		
Maximum air flow [m³/h (l/s)]	290 (81)		
RPM [min-1]	1550		
Sound pressure level at 3 m [dBA]	28-47		
Transported air temperature [°C]	-25+60		
Insulation	20 mm, mineral wool		
Extract filter	G4		
Supply filter	F8+G4		
Connected air duct diameter [mm]	125		
Heat recovery efficiency [%]	50-73		
Humidity recovery efficiency [%]	27-45		
Heat exchanger type	cross-flow		
Heat exchanger material	polymerized cellulose		



50

100

150

200

250

Air flow [m³/h]

300



Accessories

	KOMFORT Ultra S3 250-E S3 white
G4 panel filter	FP 240x184x40 G4
F8 panel filter	FP 240x184x40 F8
Silencer	SD 125
Silencer	SDF 125
Backdraft air damper	VRV 125
Air damper	VK 125
Summer block	SB C4 200/240

HVAC VENTILATION | 2020 87