

KOMFORT ULTRA L250

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.
- Heat recovery minimises ventilation heat losses.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round Ø125 mm air ducts.



Air flow:
up to 250 m³/h
69 l/s



Heat recovery efficiency:
up to 78 %

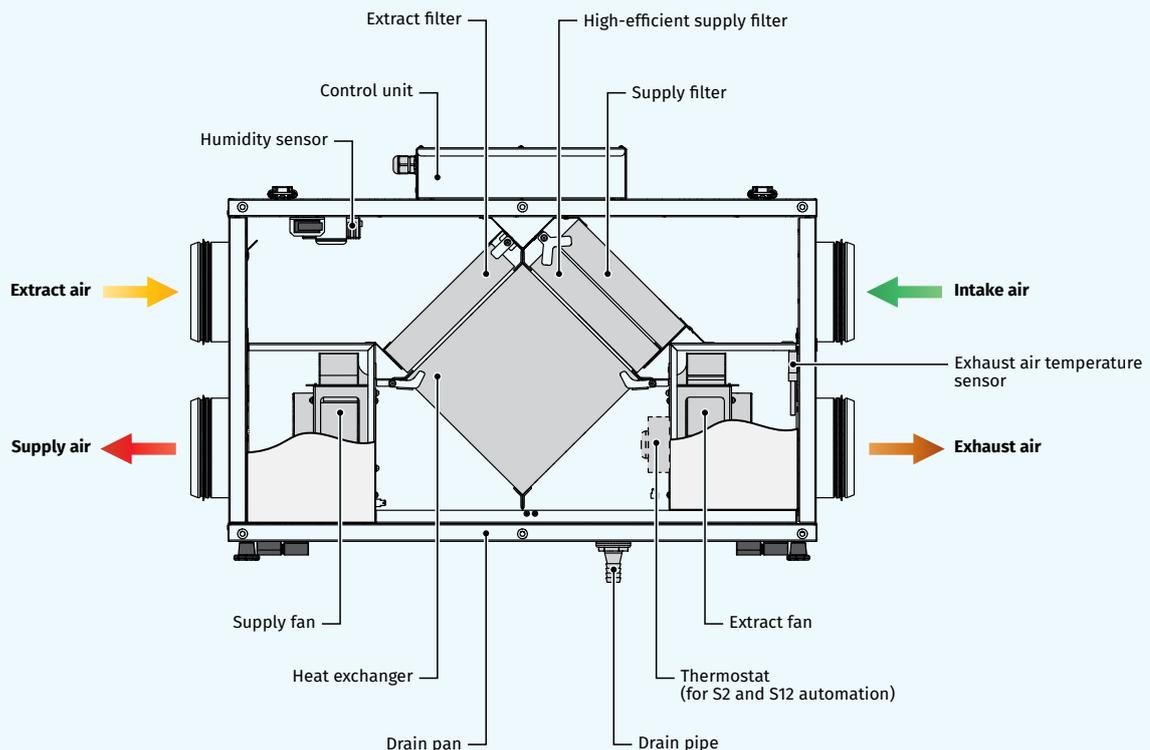


Design

- The casing of **KOMFORT Ultra L250 S12-H(E)** is made of double-skinned aluzinc panels, internally filled with 20 mm, mineral wool layer for heat and sound insulation.
- The casing of **KOMFORT Ultra L250-H(E) S12 white** is made of double-skinned white painted metal panels, internally filled with 20 mm, mineral wool layer for heat and sound insulation.
- The spigots for connection to the air ducts are located at the side of the unit.
- 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.
- Integrated motor overheating protection with automatic restart.
- Dynamically balanced impellers.
- Equipped with ball bearings for longer service life.
- Reliable and quiet operation.



COMPACT HEAT RECOVERY AIR HANDLING UNITS

Heat recovery

The **KOMFORT Ultra L250-H S12 (white)** unit is equipped with a plate cross-flow polystyrene heat exchanger that recovers heat. The drain pan under the heat exchanger block of the **KOMFORT Ultra L250-H S12 (white)** is used for condensate collection and drainage.



The **KOMFORT Ultra L250-E S12 (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.



Air filtration

- The built-in G4 supply filter and G4 extract filter provide air filtration.
- A F8 supply filter (specially ordered accessory) may be used for efficient supply air filtration.

Control and automation

- Smooth motor speed control from 0 up to 100 % by means of the thyristor speed controller SGS E1 (included in the delivery).

Mounting

- The units can be fixed to the wall or mounted on the floor using the mounting brackets. The **KOMFORT Ultra L250-E S12 (white)** unit is also suitable for ceiling mounting.
- The **KOMFORT Ultra L250-H S12 (white)** unit mounting position must provide condensate collection and drainage.
- 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.

- The air flows are fully separated within the heat exchanger. 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 cool extract air. This reduces load on air conditioners and saves electricity.
- When the indoor and outdoor temperature difference is small heat recovery is not reasonable. In this case the heat exchanger can be temporary replaced with a summer block for warm seasons (available separately).

FREEZE PROTECTION

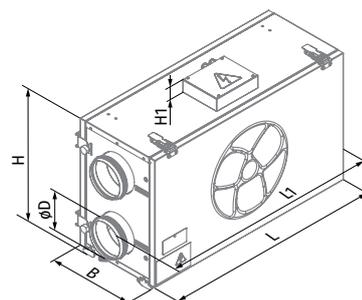
- The electronic freeze protection system is used to prevent the heat exchanger freezing in cold seasons. In case of freezing danger communicated by the temperature sensor the supply fan is stopped to let warm extract air warm up the heat exchanger. After that the supply fan is turned on and the unit reverts to the normal operation mode.

Designation key

Serie	Unit type	Spigot modification	Nominal air flow [m³/h]	Heat exchanger type	Control	Casing
KOMFORT	Ultra: compact unit	L: horizontal spigot orientation	250	– H: heat recovery E: energy recovery	S12: speed controller SGS E1	–: aluzinc white: white-painted steel

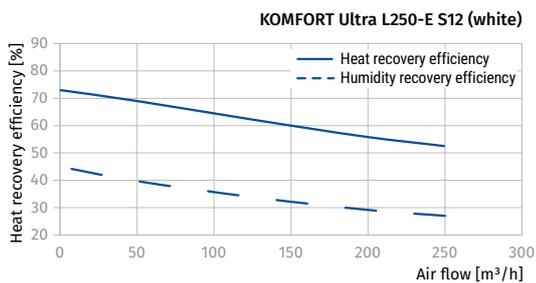
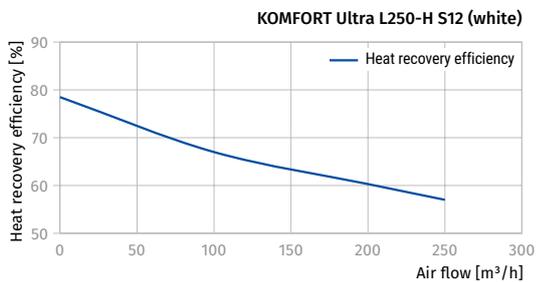
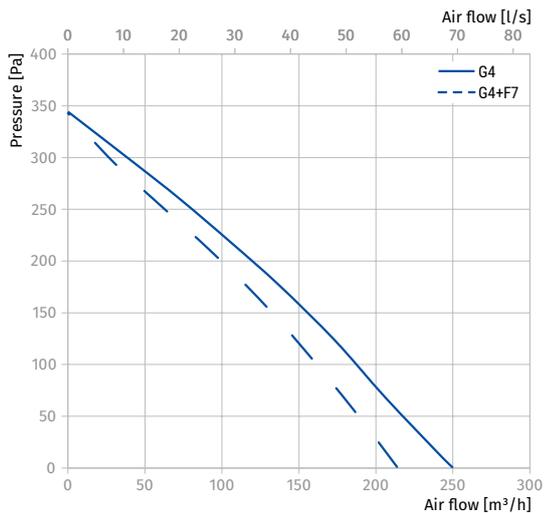
Overall dimensions [mm]

Model	D	B	H	H1	L	L1
KOMFORT Ultra L250-H(E) S12 (white)	125	300	443	43	713	810



Technical data

Parameters	KOMFORT Ultra L250-H S12 KOMFORT Ultra L250-H S12 white	KOMFORT Ultra L250-E S12 KOMFORT Ultra L250-E S12 white
Voltage [V/50 (60) Hz]	1 ~ 220-240	1 ~ 220-240
Power [W]	148	148
Current [A]	0.78	0.78
Maximum air flow [m ³ /h (l/s)]	250 (69)	250 (69)
RPM [min ⁻¹]	2700	2700
Sound pressure level at 3 m [dBA]	28-47	28-47
Transported air temperature [°C]	-25...+40	-25...+40
Insulation	20 mm, mineral wool	20 mm, mineral wool
Extract filter	G4	G4
Supply filter	G4 (Option: F8 PM2.5 > 81 %)	G4 (Option: F8 PM2.5 > 81 %)
Connected air duct diameter [mm]	125	125
Heat recovery efficiency [%]	55-78	52-73
Humidity recovery efficiency [%]	-	27-45
Heat exchanger type	cross-flow	cross-flow
Heat exchanger material	polysterene	polymerized cellulose
SEC class	B	B
ErP	2016	2016



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Accessories

		KOMFORT Ultra L250-H S12 KOMFORT Ultra L250-H S12 white	KOMFORT Ultra L250-E S12 KOMFORT Ultra L250-E S12 white
G4 panel filter		FP 240x184x40 G4	FP 240x184x40 G4
F8 panel filter		FP 240x184x40 F8	FP 240x184x40 F8
Silencer		SD 125	SD 125
Silencer		SDF 125	SDF 125
Backdraft air damper		VRV 125	VRV 125
Air damper		VK 125	VK 125
Summer block		SB C4 200/240	SB C4 200/240