KOMFORT L

Heat recovery air handling units



Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat recovery minimises ventilation heat losses.
- Control of air exchange for creating comfortable indoor microclimate.
- Compatible with round ∅ 125 to 315 mm air ducts.

Air flow:
up to 2200 m³/h
611 l/s

Heat recovery efficiency:
up to 88 %

ErP 2016

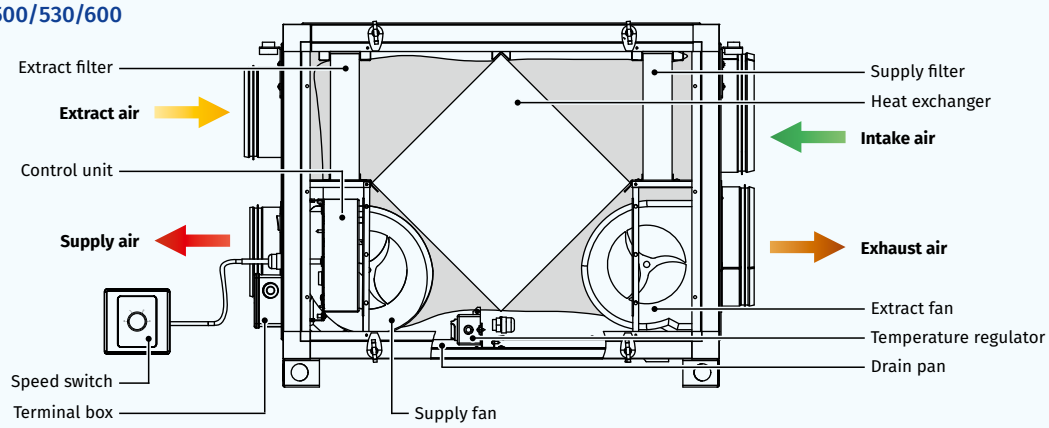
Design

- The casing is made of aluminium profile and double-skinned aluzinc panels, internally filled with mineral wool layer for heat and sound insulation.
- The casing has fixing brackets with vibration absorbing connectors for easy installation.
- The spigots for connection to the air ducts are located at the side of the unit and are rubber sealed for airtight connection to the air ducts.
- The hinged casing side panels ensure easy access to the internals for cleaning, filter replacement and other maintenance operations.

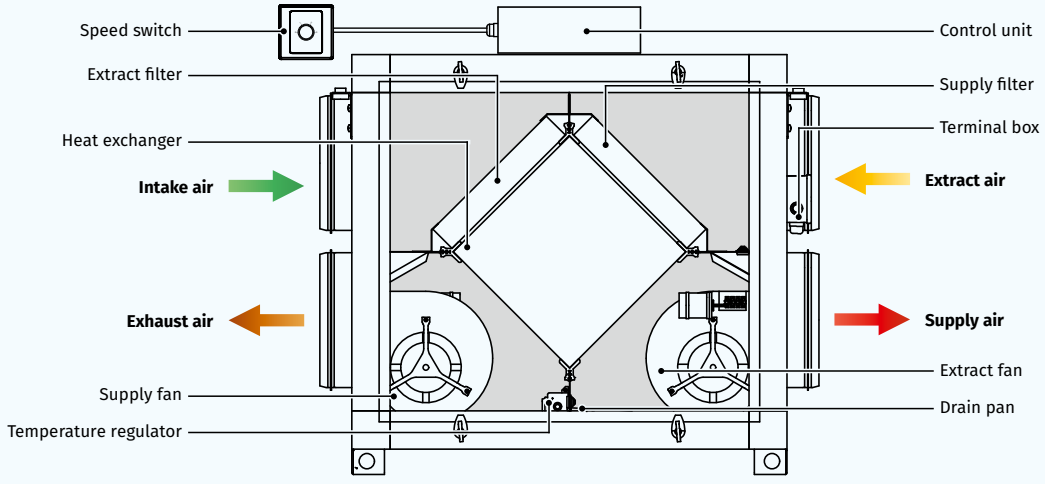
Fans

- Asynchronous external rotor motors and centrifugal double-intake impellers with forward 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.

KOMFORT L 350/500/530/600

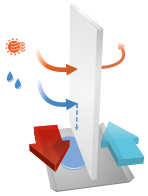


KOMFORT L 1200/2200



Heat recovery

- The unit is equipped with a plate cross-flow polystyrene heat exchanger for heat recovery. The unit condensate is collected and drained to the drain pan under the heat exchanger.



- The air flows are completely separated in the heat exchanger. Thus smells and contaminants are not transferred from the extract air to the supply air.
- Heat recovery is based on heat and/or humidity transfer through the heat exchanger plates. 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 ventilation heat losses and heating costs respectively.
- In the warm season the heat exchanger performs reverse and intake air is cooled in the heat exchanger by the cool extract air. That reduces operation load on air conditioners and saves electricity.
- When the indoor and outdoor temperature difference is insignificant, heat recovery is not reasonable. In this case the heat exchanger can be temporary replaced with a summer block for the warm season (available as a specially ordered accessory).

FREEZE PROTECTION

- The integrated automatic freeze protection is used to prevent freezing of the heat exchanger in the cold season. The supply fan turns off according to the temperature sensor to get the heat exchanger warmed up with extract air. After that the supply fan turns on and the unit continues to run in the standard mode.

Air filtration

- The built-in G4 supply filter and G4 extract filter provide air filtration.

Control and automation

- Speed control by means of the four-position speed switch CDP-3/5 that enables setting low, medium, maximum speed and turning the unit off.

Mounting

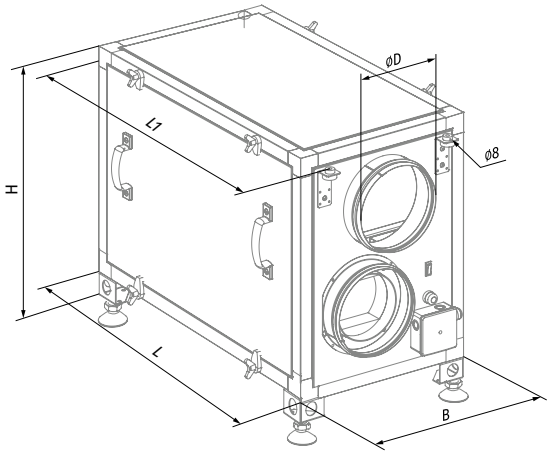
- Mounting to floor, ceiling or wall with fixing brackets.
- The correct mounted unit must provide condensate collecting and drainage and free access to the hinged side panel for servicing and filter replacement.

Designation key

Series	Spigot modification	Rated air flow [m³/h]
KOMFORT	**L:** horizontal spigot orientation	**350; 500; 530; 600; 1200; 2200**

Overall dimensions [mm]

Model	D	B	H	L	L1
KOMFORT L 350	124	416	603	722	768
KOMFORT L 500	149	416	603	722	768
KOMFORT L 530	159	416	603	722	768
KOMFORT L 600	199	416	603	722	768
KOMFORT L 1200	248	548	794	802	850
KOMFORT L 2200	313	846	968	1000	1050

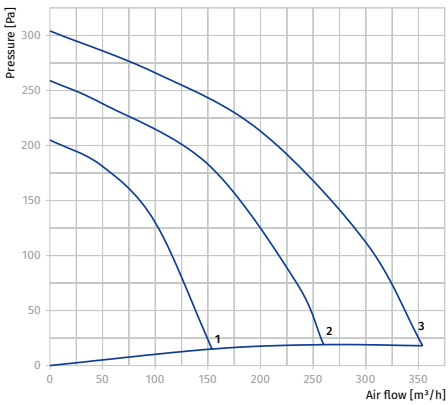


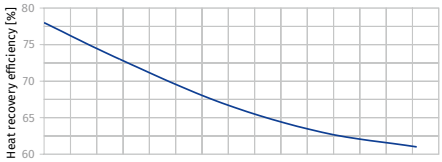
Technical data

Parameters	KOMFORT L 350	KOMFORT L 500	KOMFORT L 530	KOMFORT L 600	KOMFORT L 1200	KOMFORT L 2200
Voltage [V / 50 (60) Hz]	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230	1 ~ 230
Power [W]	260	300	300	390	820	1300
Current [A]	1.2	1.32	1.32	1.72	3.6	5.68
Maximum air flow [m³/h (l/s)]	350 (97)	500 (139)	530 (147)	600 (167)	1200 (333)	2200 (611)
RPM [min⁻¹]	1150	1100	1100	1350	1850	1150
Sound pressure level at 3 m [dBA]	24–45	28–47	28–47	32–48	60	65
Transported air temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40	-25...+40	-25...+40
Casing material	aluzinc	aluzinc	aluzinc	aluzinc	aluzinc	aluzinc
Insulation	25 mm mineral wool	25 mm mineral wool	25 mm mineral wool	25 mm mineral wool	50 mm mineral wool	50 mm mineral wool
Extract filter	G4	G4	G4	G4	G4	G4
Supply filter	G4	G4	G4	G4	G4	G4
Connected air duct diameter [mm]	125	150	160	200	250	315
Weight [kg]	45	49	49	54	85	96
Heat recovery efficiency [%]*	up to 78	up to 88	up to 88	up to 85	up to 88	up to 87
Heat exchanger type	cross-flow	cross-flow	cross-flow	cross-flow	cross-flow	cross-flow
Heat exchanger material	polystyrene	polystyrene	polystyrene	polystyrene	polystyrene	polystyrene
SEC class	E	E	E	E	NRVU**	NRVU**
ErP	2016	2016	2016	2016	–	–

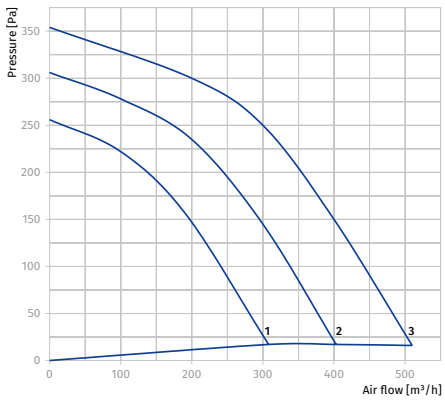
*Heat recovery efficiency is specified in compliance with the EN308 EU norms.
**Nonresidential Ventilation Unit.

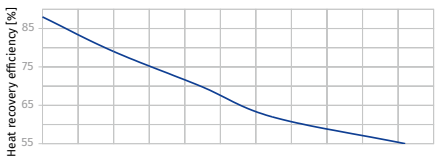
KOMFORT L 350



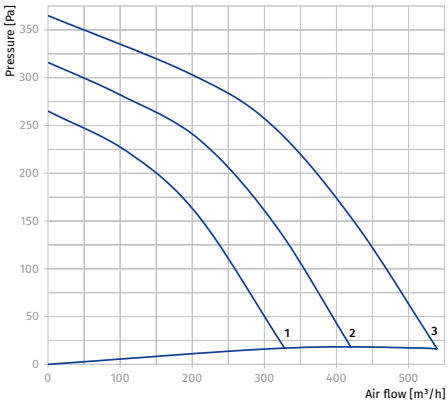


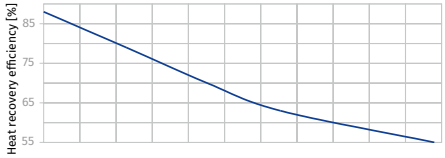
KOMFORT L 500



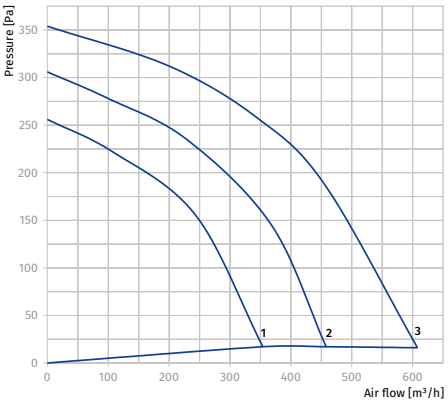


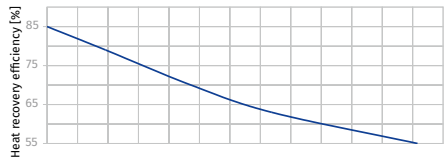
KOMFORT L 530



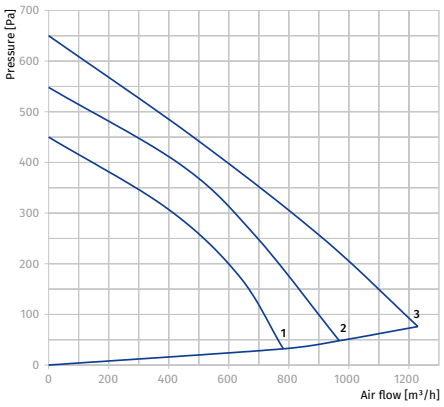


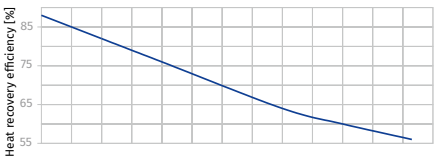
KOMFORT L 600



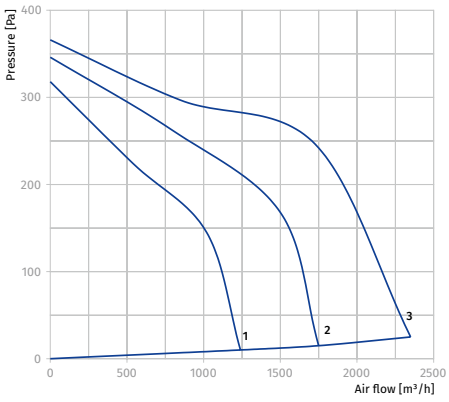


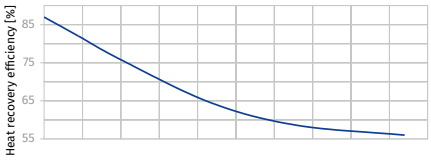
KOMFORT L 1200





KOMFORT L 2200





Accessories

		KOMFORT L 350	KOMFORT L 500	KOMFORT L 530	KOMFORT L 600	KOMFORT L 1200	KOMFORT L 2200
G4 panel filter		FP 378x210x47 G4	FP 436x215x48 G4	FP 436x215x48 G4	FP 436x215x48 G4	FP 450x295x48 G4	FP 750x295x48 G4
Silencer		SD 125	SD 150	SD 160	SD 200	SD 250	SD 315
Backdraft air damper		VRV 125	VRV 150	VRV 160	VRV 200	VRV 250	VRV 315
Air damper		VK 125	VK 150	VK 160	VK 200	VK 250	VK 315
Summer block		SB C4 200/384	SB C4 300/384	SB C4 300/384	SB C4 300/384	SB C4 300/450	SB C4 300/750