

KOMFORT ERV D S41

Suspended heat and energy recovery air handling units

Features

- Air handling unit for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat and energy recovery enables reduction of air conditioning load in hot climate conditions and heat losses in cold climate conditions.
- Controllable air exchange ensures the best suitable indoor microclimate.
- Compatible with round Ø 100 or 150 mm air ducts.



Air flow:
up to 500 m³/h
139 l/s



Heat recovery efficiency:
up to 80 %

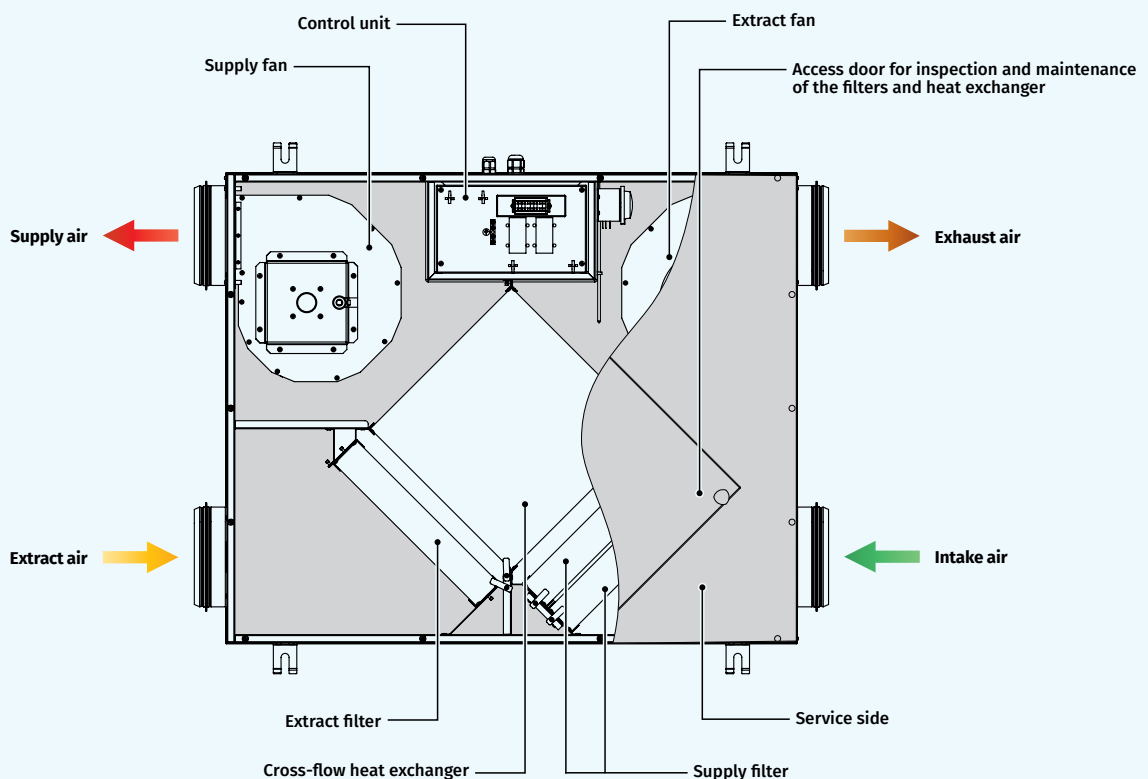


Design

- The casing is made of polymer coated steel panels, internally heat- and sound insulated with 5–10 mm (depend on modification) polyurethane foam.
- The bottom service panel provides easy access for maintenance of the filters and the heat exchanger.
- The spigots for connection to the air ducts are located on the sides of the unit and are rubbed sealed for airtight connection to the air ducts.
- The mounting brackets on the casing ensure easy installation under the ceiling.

Fans

- The units are equipped with three-speed external rotor motors with centrifugal impellers and forward curved blades.
- Integrated overheating protection with automatic restart.
- Ball bearings for longer service life.
- Dynamically balanced impellers.
- Distinguished with reliable and low noise operation.



Air Filtration

- Two built-in G4 and F7 filters provide efficient supply air filtration.
- The G4 filter is used for extract air filtration.

Heat Recovery

- The unit is equipped with a plate cross-flow enthalpy aluminium heat exchanger.
- Heat recovery is based on heat and moisture transfer between the extract and supply air streams through the heat exchanger plates. The air flows are fully separated while flowing through the heat exchanger.
- The process of heat transfer proceeds in the heat exchanger where extract air transfers most of its heat to the intake air flow. This reduces heat energy losses in cold seasons. In summer heat recovery acts reverse: the cooled extract air transfers part of cold to the warm intake air. This contributes to better performance of the air conditioner in ventilated premises.



Control and Automation

- The unit has the integrated S41 control panel with the functions:
 - Unit On/Off
 - Speed selection
 - Setting indoor air temperature
 - Setting week scheduled operation



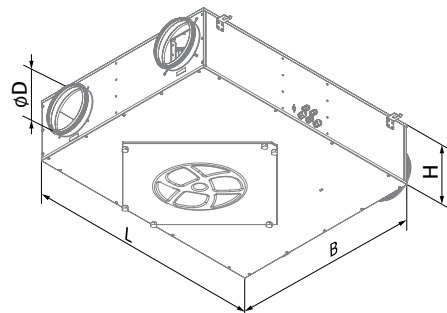
Mounting

- Due to the low casing height the unit perfectly fits for mounting in the limited space behind the suspended ceiling.
- The unit mounting position must provide access for service maintenance.

Designation key					
Series	Unit type	Mounting type	Rated air flow [m³/h]	Modification	Control
KOMFORT	ERV: energy recovery ventilation unit	D: suspended mounting, horizontally oriented spigots	350; 450	P	S41: control panel with LCD display

Overall Dimensions [mm]

Model	D	B	H	L
KOMFORT ERV D350P S41	150	704	227	854
KOMFORT ERV D450P S41	150	704	227	1020



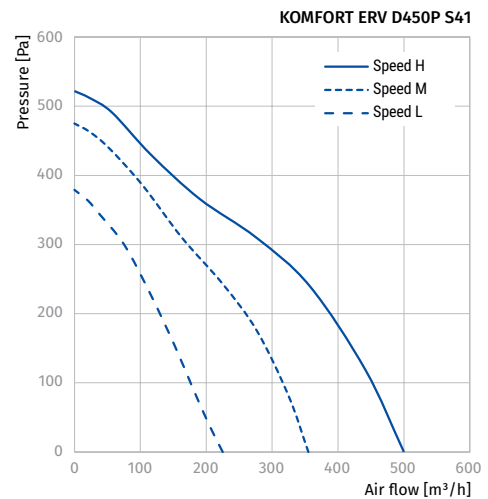
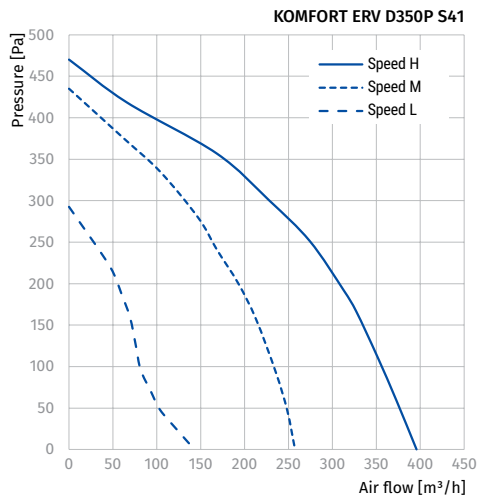
Ordering Information

Part Number	Model	Description
BLAKOMFORTD350PS41	KOMFORT ERV D350P S41	CEILING MOUNTED ENERGY RECOVERY AHU
BLAKOMFORTD450PS41	KOMFORT ERV D450P S41	CEILING MOUNTED ENERGY RECOVERY AHU




Technical Data

Parameters	KOMFORT ERV D350P S41			KOMFORT ERV D450P S41		
	L	M	H	L	M	H
Speed						
Voltage [V/50 Hz]		220		220		
Power [W]	181	231	330	250	292	354
Current [A]	0.82	1.05	1.50	1.10	1.30	1.60
Maximum air flow [m ³ /h (l/s)]	140 (39)	260 (72)	400 (111)	225 (63)	355 (99)	500 (139)
RPM [min ⁻¹]	800	1100	1450	900	1250	1650
Sound pressure level at 3 m [dBA]	40	49	58	42	51	59
Transported air temperature [°C]		-25...+40		-25...+40		
PM2.5 filtration efficiency	96	95	95	96	95	94
Casing material		polymer coated steel			polymer coated steel	
Connected air duct diameter [mm]		150		150		
Mass [kg]		32		39		
Heat recovery efficiency [%]	76	72	66	78	75	70
Heat exchanger type		cross-flow			cross-flow	
Heat exchanger material		aluminium			aluminium	

* Heat recovery efficiency is specified in compliance with EN 13141-7.



Accessories

		KOMFORT ERV D350P S41	KOMFORT ERV D450P S41
G4 panel filter		FP 300×220×48 G4	FP 300×270×48 G4
F8 panel filter		FP 300×220×48 F8	FP 300×270×48 F8
Summer block		SB C4 300/270	SB C4 300/270