

Series

RECOM 2S/2SE EPP EC L/R (21)

RECOM 3S/3SE EPP EC L/R (21)



Heat recovery air handling units
in sound- and heat-insulated casings.
Air flow up to **304 m³/h**.
Heat recovery efficiency up to **92 %**

Description

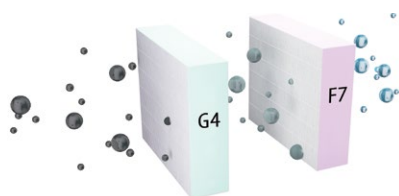
The air handling units are the fully featured ventilation units with heat recovery for air filtration, fresh air supply and stale air extract. The units offer energy-efficient ventilation for small appartments.

Casing

The casing is made of expanded polypropylene (EPP) possessing high heat- and sound-insulating properties.

Filter

Two built-in **Coarse 90% (G4)** filters provide efficient air filtration. **ePM1 65% (F7)** supply filter can be installed as an option.

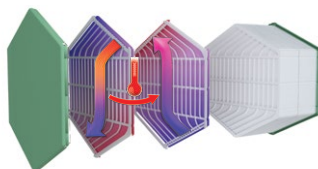


Fans

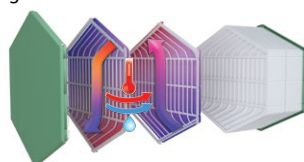
Units' fans are equipped with electronically commutated motors.

Heat Exchanger

Recom S units are equipped with a counter-flow polystyrene heat exchanger.



Recom SE units are equipped with an enthalpy heat exchanger.



Bypass

Units are equipped with a bypass for summer cooling.

Automation

RECOM (21) units are equipped with a built-in automation system. The **(21)** controller allows to integrate the unit into the **Smart Home system** or **BMS (Building Management System)**. To control the unit via Wi-Fi, download the **Blaubeerg Home** smartphone app. **RECOM (14)** units have an integrated control system with a wall-mounted control panel equipped with LED indication.



Frost protection

For **(14)** units the frost protection is realized by shutting down the supply fan. Optional duct pre-heater is available for units with **(21)** control system.

Mounting

The unit is designed for wall and floor mounting. The mounting position of the unit must provide service access for maintenance and repair.

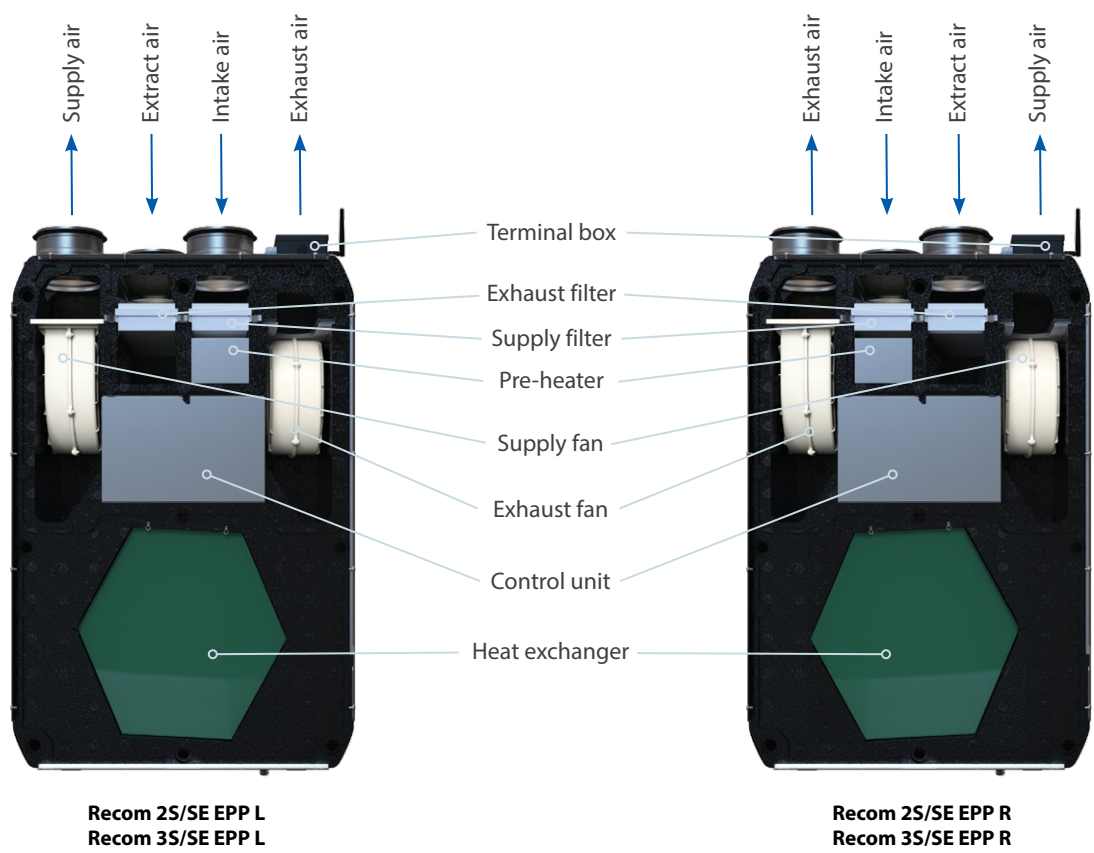
Control and automation

Functions	RECOM (21)	RECOM (14)
	FP (22)	FP (14)
Wired remote control pane		
Control via a wired remote LCD control panel	FPD	-
Wireless remote control panel	FP (22) Wi-Fi	-
BMS	ModBus RTU (RS-485) ModBus TCP/IP (Wi-Fi, Ethernet)	-
RECOM Cloud Server service	+	-
Control via Wi-Fi using a smartphone app	+	-
Frost protection	+	+
Bypass	Auto, manual	Manual
Week-scheduled operation	+	-
Filter replacement indication	Filter timer	+
Alarm indication	+	+
Speed selection	+	+
Timer	+	-
RH% sensor	Option	Option
CO2 sensor	Option	Option
VOC sensor	Option	Option
PM2.5 sensor	Option	Option
Boost mode	+	-
Fireplace mode	+	-
Preheater connection	+	-
Reheater connection	+	-
Cooler connection	+	-
Fire alarm sensor connection	+	+
Minimum supply air temperature control	+	-

Designation key

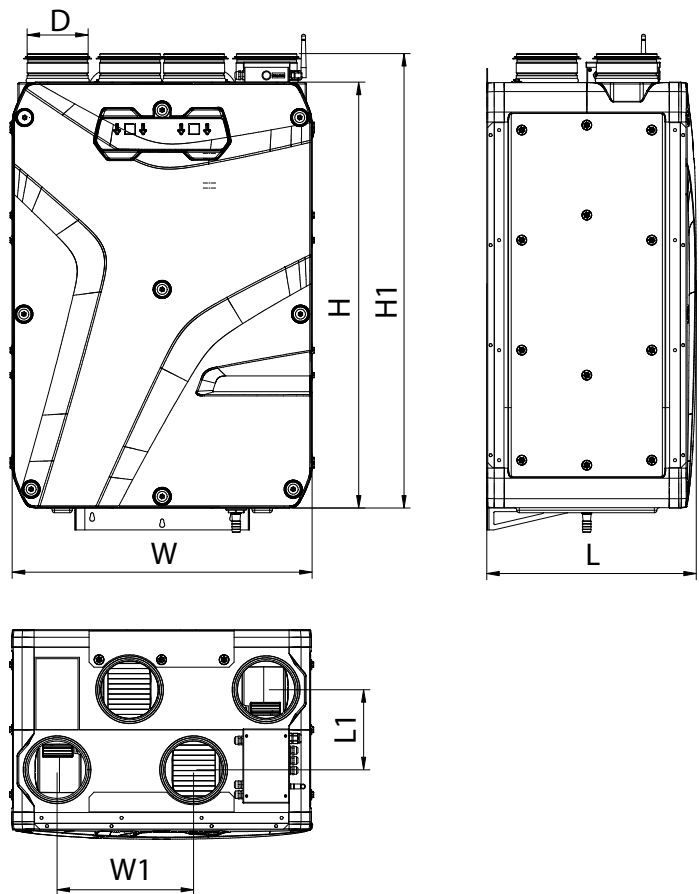
Model	Heat exchanger type	Nominal size	Modification	Casing type	Heater	Control system	Version
RECOM	S – heat recovery SE – energy recovery	Air flow m3/h /10	0 – standard	V - vertical	– w/o heater E – integrated pre-heater	(21) (14)	L – left R – right

Unit design



Overall dimensions

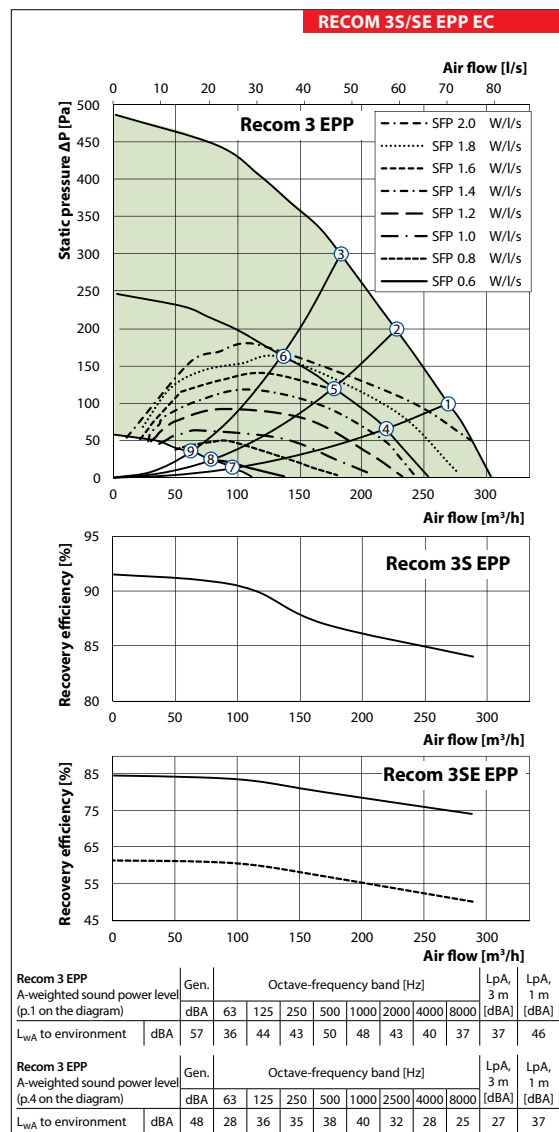
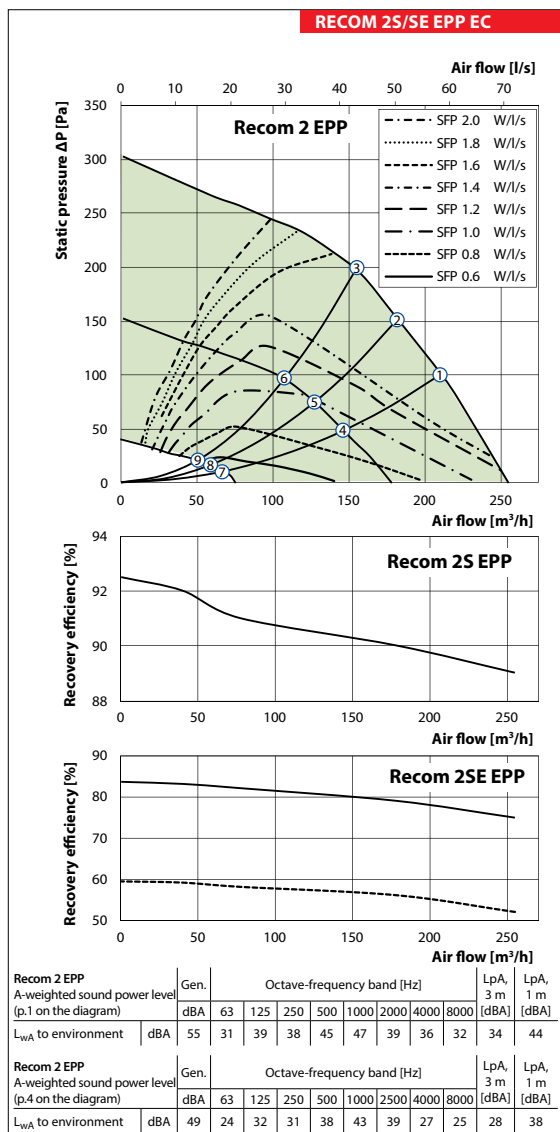
Model	Dimensions [mm]						
	H	W	L	H1	W1	L1	ØD
Recom 2/3 EPP	852	600	419	909	273	160	125



AIR HANDLING UNITS WITH HEAT RECOVERY

Technical data

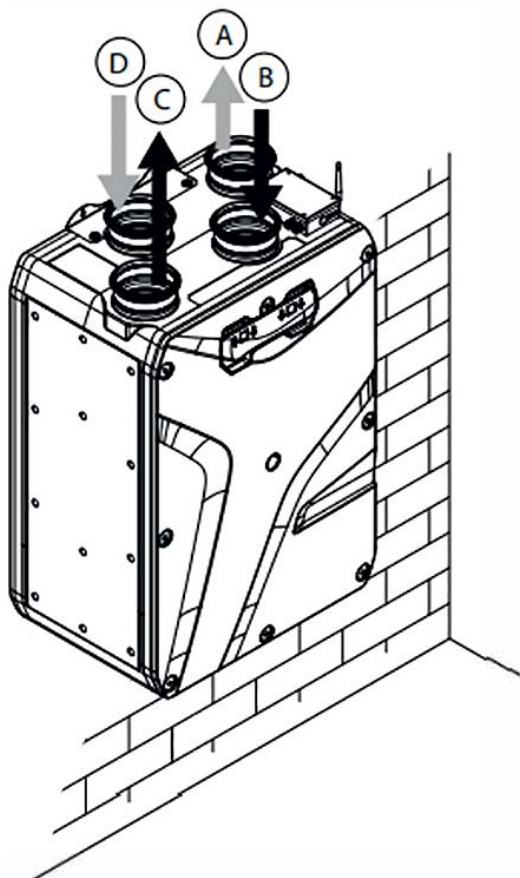
	Recom 2S EPP (14)	Recom 2SE EPP (14)	Recom 2S EPP (21)	Recom 2SE EPP (21)	Recom 3S EPP (14)	Recom 3SE EPP (14)	Recom 3S EPP (21)	Recom 3SE EPP (21)
Voltage [V / 50-60 Hz]	230							
Max. unit power without electric heater [W]	114				176			
Integrated electric heater power [W]	-	-	800	800	-	-	1400	1400
Max. unit power [W]	114	114	914	914	176	176	1576	1576
Max. unit current without electric heater [A]	0.92				1.34			
Integrated electric heater current [A]	-	-	3.55	3.55	-	-	6.21	6.21
Max. unit current [A]	0.92	0.92	4.47	4.47	1.34	1.34	7.55	7.55
Max air flow [m3/h]	255				304			
Sound pressure level at 3 m distance [dBA]	34				37			
Max. operating temperature [°C]	- 25...+40							
Case material	EPP							
Insulation [mm]	25							
Extract filter	G4 / Coarse > 60%							
Supply filters	G4 / Coarse > 60% (option F7 / ePM1 60%)							
Connected air duct diameter [mm]	125							
Weight [kg]	20				22			
Heat recovery efficiency [%]	92	83	92	83	91	84	91	84
Heat exchanger type	Counter-flow							
Heat exchanger material	Polystyrene	Enthalpy	Polystyrene	Enthalpy	Polystyrene	Enthalpy	Polystyrene	Enthalpy
SEC class	A+	A	A+	A	A	A	A	A



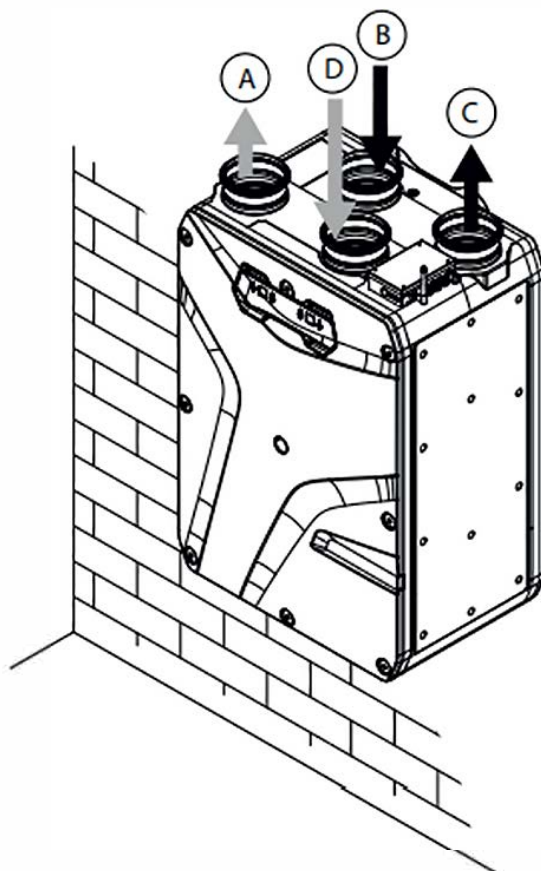
Unit design

To ensure comfortable installation and provide space for accessing the unit, left and right design types of the unit are designed.

RECOM 2/3 EPP „L“

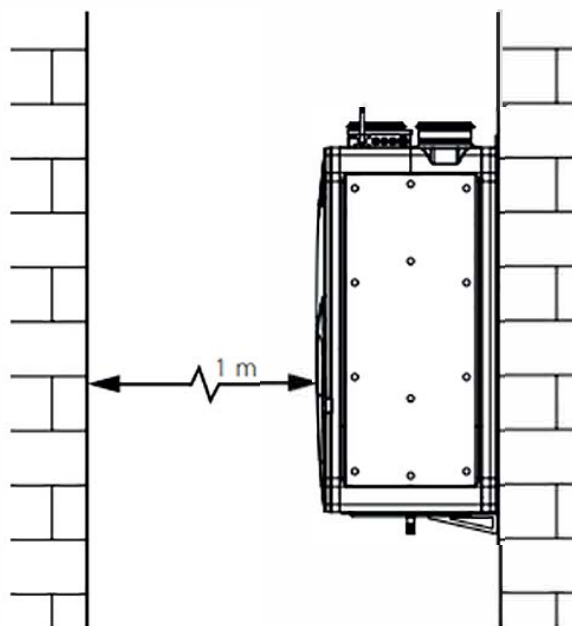


RECOM 2/3 EPP „R“



A - exhaust air, B - Intake air, C - supply air, D - extract air

Minimum distances to surfaces



Accessories for air handling units

	Filter G4	Filter F7	Control panel	Control panel	Wi-Fi Control panel	Internal humidity sensor	Internal CO2 sensor
							
Recom 2S (21)	SF 356x100x48 Coarse 90% G4	SF 356x100x48 ePM1 65% F7	FPD	FP (22)	FP (22) Wi-Fi	HV2	CO2-3
Recom 2SE (21)							
Recom 3S (21)							
Recom 3SE (21)							
Recom 2S (14)							
Recom 2SE (14)							
Recom 3S (14)							
Recom 3SE (14)							