

Series  
**RECOM 4S/SE EC EPP L/R**



Heat recovery air handling units in sound- and heat-insulated casings. Air flow up to **410 m³/h**. Heat recovery efficiency up to **93 %**

**Description**

The air handling units are the fully featured ventilation units with heat recovery for air filtration, fresh air supply and stale air extraction. 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.

**RECOM 4 S/SE L** – left-handed version.

**RECOM 4 S/SE R** – right-handed version.

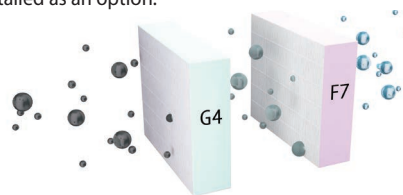
**Units RECOM EPP**

have flat service hatch design, suitable for decorative panel installation (delivered separately).



**Filter**

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

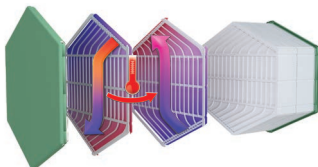


**Fans**

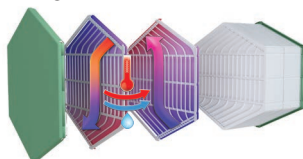
Units' fans are equipped with electronically commutated motors.

**Heat Exchanger**

**RECOM S** units are equipped with a counter-flow poly-styrene 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 **A21** controller allows to integrate the unit into the **Smart Home system** or **BMS (Build-ing Management System)**. To control the unit via Wi-Fi, download the **Blauberg Home** smartphone app. **RECOM (14)** units have an integrated control system with a wall-mounted control panel equipped with LED indication.



Google play



Download on the App Store



**Frost protection**

For **(14)** units the frost protection is implemented by shutting down the supply fan regularly. Optional duct pre-heater is available for units with **A21** 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.

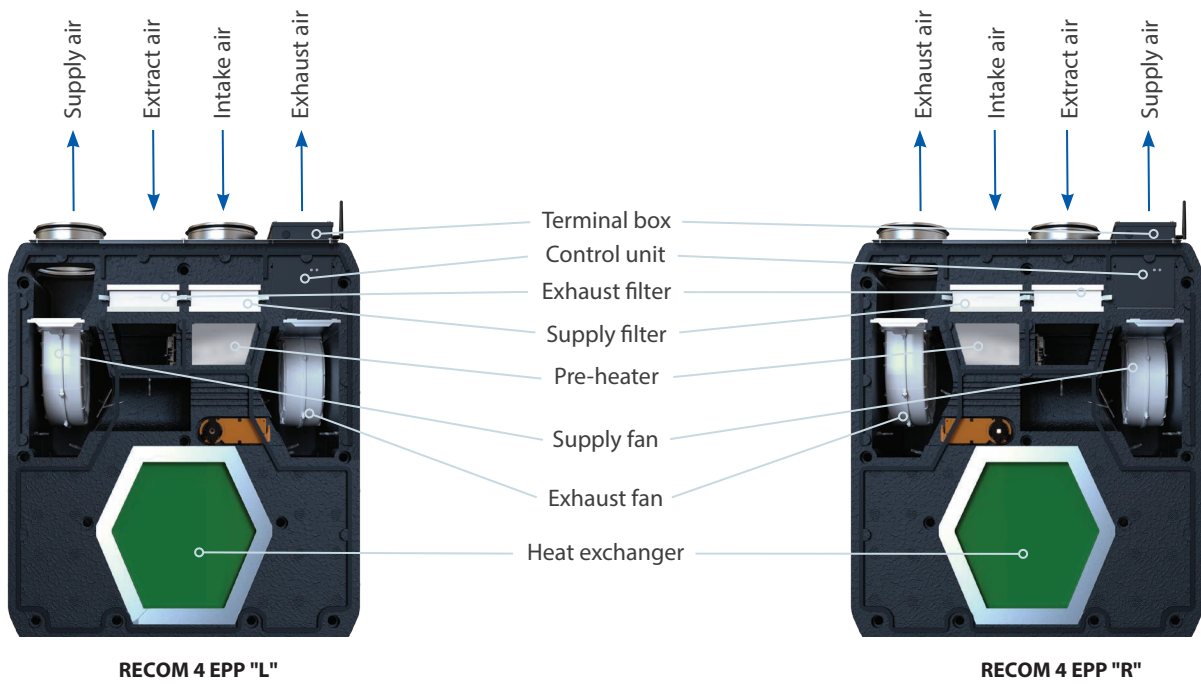
**Control and automation**

Functions	RECOM (21)	RECOM (14) FP (14)
Wired remote control panel	FP (22) (option)	FP (14)
Control via a wired remote LCD control panel	FPD (option)	-
Wireless remote control panel	FP (22) Wi-Fi (option)	-
BMS	ModBus RTU (RS-485) ModBus TCP/IP (Wi-Fi, Ethernet)	-
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
CO <sub>2</sub> 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**

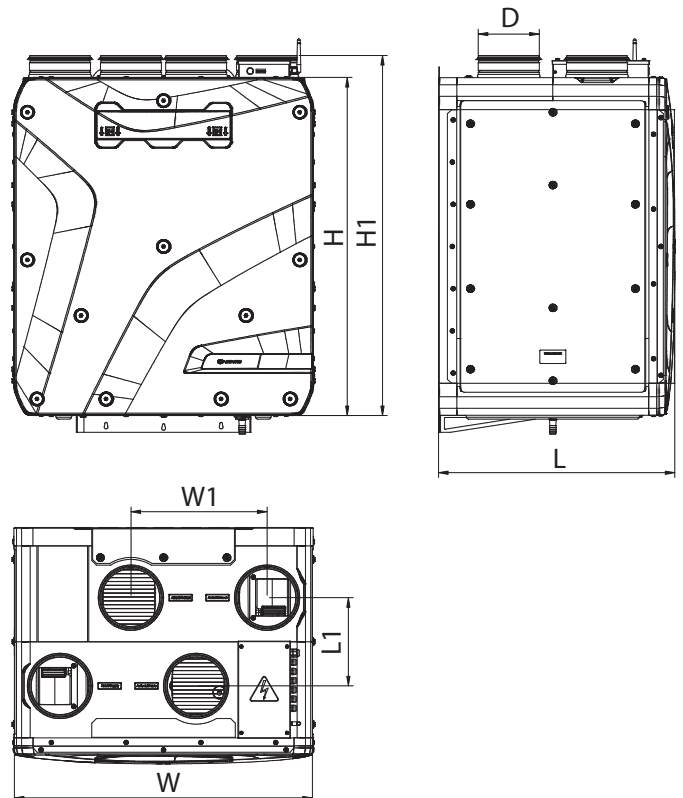
Model	Heat exchanger type	Nominal size	Modification	Casing type	Heater	Control system	Version
RECOM	S – heat recovery T SE– energy recovery	Air flow m³/h /10	0 – standard 1 – flat service hatch suitable for decorative panel installation	V – vertical	(14)– w/o heater (21) – integrated pre-heater	(14) (21)	L – left R – right

**Unit design**



**Overall dimensions**

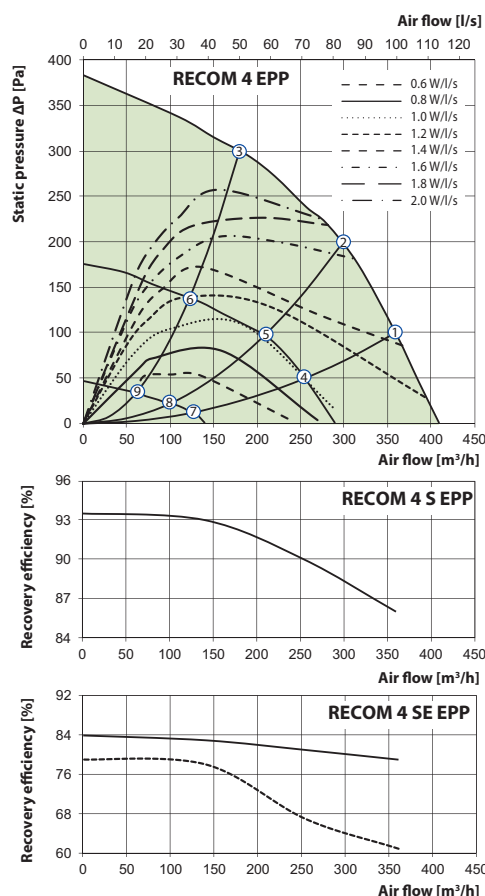
Model	Dimensions [mm]						
	H	W	L	H1	W1	L1	ØD
RECOM 4 EPP	880	770	616	939	355	230	160



# AIR HANDLING UNITS WITH HEAT RECOVERY

## Technical data

	RECOM 4 S EPP (14)	RECOM 4 SE EPP (14)	RECOM 4 S EPP (21)	RECOM 4 SE EPP (21)
Voltage [V / 50-60 Hz]			230	
Max. unit power without electric heater [W]			213	
Integrated electric heater power [W]	-			1050
Max. unit power [W]	213			1263
Max. unit current without electric heater [A]			1.62	
Integrated electric heater current [A]	-			4,66
Max. unit current [A]	1.62			6.28
Max air flow [m <sup>3</sup> /h]			410	
Sound pressure level at 3 m distance [dBA]			26	
Max. operating temperature [°C]			-25...+40	
Case material			EPP	
Insulation [mm]			45	
Extract filter			Coarse > 60 %	
Supply filters			Coarse > 60 % (option ePM1 60 %)	
Connected air duct diameter [mm]			160	
Weight [kg]			26	
Heat recovery efficiency [%]	93	83	93	83
Heat exchanger type		Counter-flow		
Heat exchanger material	Polystyrene	Enthalpy	Polystyrene	Enthalpy
SEC class	A+	A	A+	A



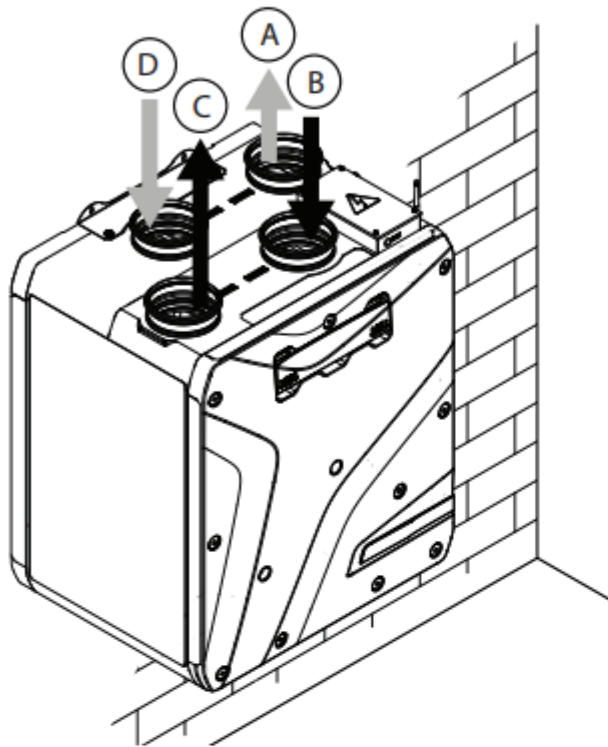
RECOM 4 EPP A-weighted sound power level (p.1 on the diagram)	Gen.	Octave-frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]	
		63	125	250	500	1000	2500	4000	8000			
L <sub>WA</sub> to supply inlet	dBA	61	35	38	42	48	53	48	43	45	40	50
L <sub>WA</sub> to supply outlet	dBA	64	37	40	44	51	56	50	45	47	43	53
L <sub>WA</sub> to exhaust inlet	dBA	50	33	36	40	40	39	33	28	26	29	39
L <sub>WA</sub> to exhaust outlet	dBA	48	31	34	38	38	37	31	27	25	27	37
L <sub>WA</sub> to environment	dBA	55	31	39	38	44	45	42	37	34	36	45

RECOM 4 EPP A-weighted sound power level (p.4 on the diagram)	Gen.	Octave-frequency band [Hz]								LpA, 3 m [dBA]	LpA, 1 m [dBA]	
		63	125	250	500	1000	2500	4000	8000			
L <sub>WA</sub> to supply inlet	dBA	55	29	31	35	42	50	39	35	35	34	44
L <sub>WA</sub> to supply outlet	dBA	57	30	33	37	44	53	41	37	37	36	46
L <sub>WA</sub> to exhaust inlet	dBA	41	24	27	31	30	32	20	19	23	20	30
L <sub>WA</sub> to exhaust outlet	dBA	43	25	28	33	32	34	21	20	24	22	32
L <sub>WA</sub> to environment	dBA	46	21	29	28	34	39	30	26	24	26	35

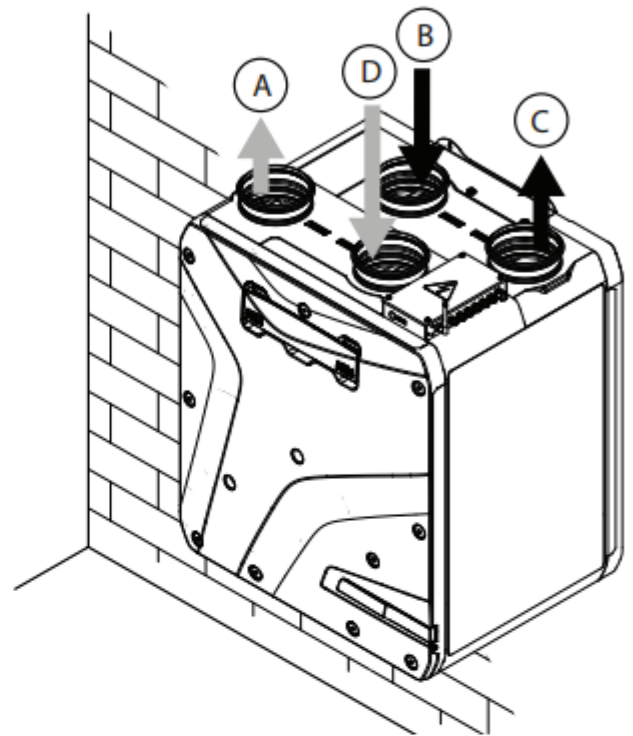
## Unit design

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

RECOM 4 EPP "L"

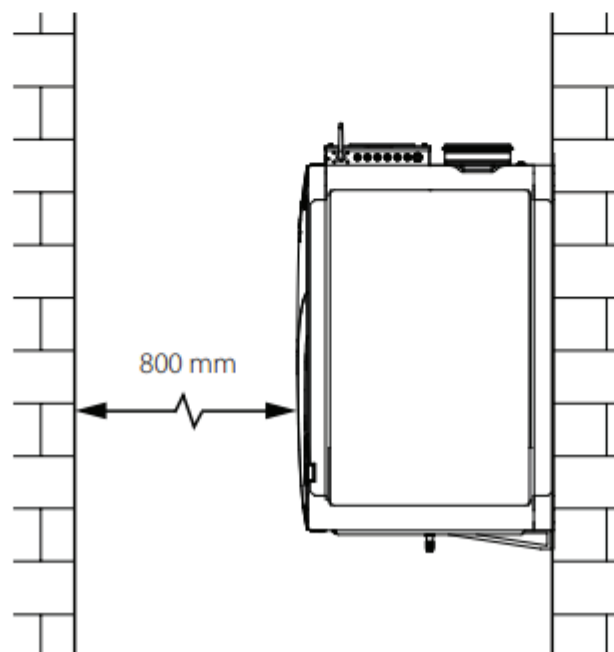


RECOM 4 EPP "R"










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 CO <sub>2</sub> sensor	
								
RECOM 4 S EPP (21) RECOM 4 SE EPP (21)	SF 496x150x60 Coarse 90% G4	SF 496x150x60 ePM1 65% F7	FPD	FP (22)	FP (22) Wi-Fi	HV2	CO2-3	
RECOM 4 S EPP (14) RECOM 4 SE EPP (14)			-	-	-	-	-	