BLAUBERG *Ventilatoren*

RENEO S 550
Heat and energy recovery air handling units

COMING SOON

Features

- Air handling units for efficient supply and exhaust ventilation in flats, houses, cottages and other buildings.
- Heat recovery minimizes ventilation heat losses during the cold season and reduces air conditioner load during the hot season.
- Controllable air exchange for creating the best suitable indoor microclimate.
- Compaitable with round 200 mm air ducts.

Air flow:
up to 660 m³/h
183 l/s

Heat recovery efficiency:
up to 91 %

EC motor

ErP 2018

WiFi READY

BMS

Design

- The casing is made of expanded polypropylene (**EPP**) with high heat- and sound-insulating properties.
- **Reneo S 550 L** – left-handed unit.
- **Reneo S 550 R** – right-handed unit.

Fans

- The unit is equipped with high-efficiency **EC** external rotor motors and centrifugal impellers with backward-curved blades.
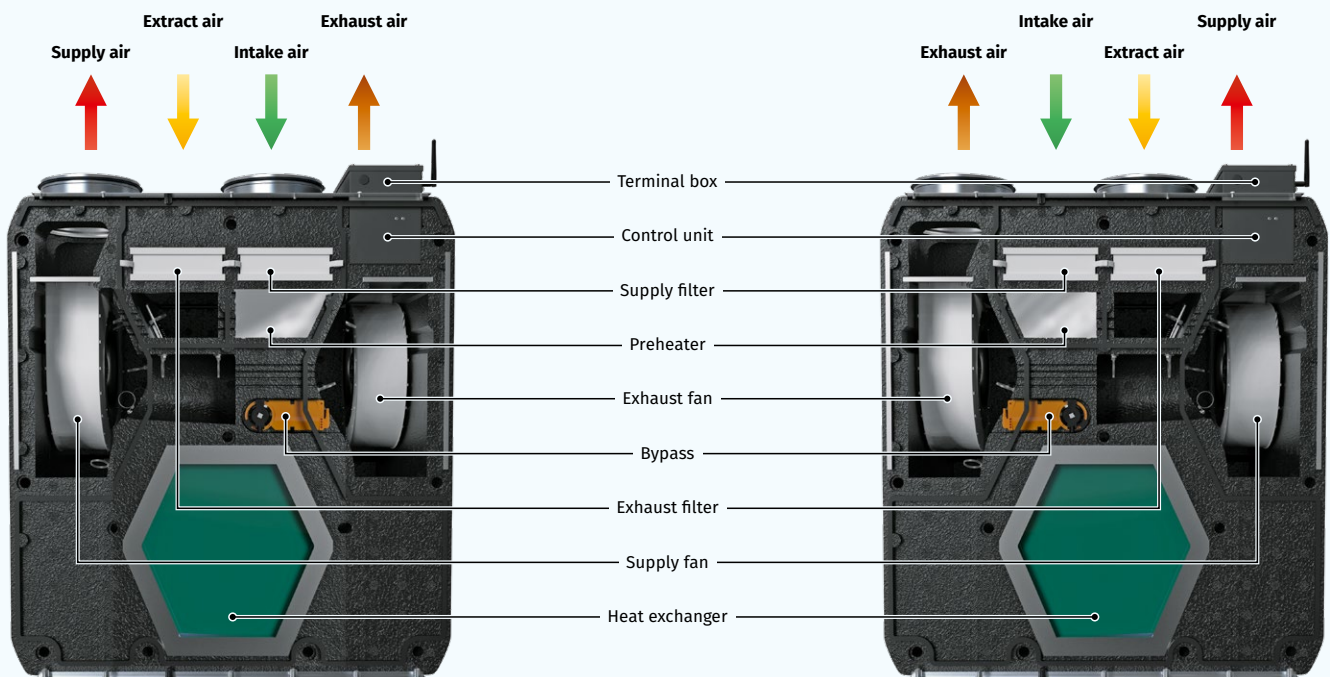
Air filtration

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

Bypass

- The **Reneo S** units are equipped with a bypass, which can be opened if there is a need to cool down the ventilated area with cool intake air.

RENEO S 550 L

Supply air | Extract air | Intake air | Exhaust air

RENEO S 550 R

Exhaust air | Intake air | Extract air | Supply air

- Terminal box
- Control unit
- Supply filter
- Preheater
- Exhaust fan
- Bypass
- Exhaust filter
- Supply fan
- Heat exchanger

EPP HEAT AND ENERGY RECOVERY AIR HANDLING UNITS

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Heat recovery

- The **Reneo S** unit is equipped with a counter-flow polysterene heat exchanger for heat recovery. The condensate is collected and drained to the drain pan under the heat exchanger.

- The **Reneo S...-E** unit is equipped with an enthalpy counter-flow heat exchanger for heat and humidity recovery.

Mounting

- The units are designed for suspended ceilling and floor mounting.

Control and automation

- **Reneo S S21** units are equipped with an integrated automation system. The remote control panel is not included in the delivery set.
- The S21 controller allows to integrate the unit into the **Smart Home** system or **BMS** (**Building Management System**).
- Unit control is done via Wi-Fi using the mobile application **Blauberg Home**.

Download the **Blauberg Home** app for Android

Download the **Blauberg Home** app for iOS

Modbus

- The **Reneo S S14** units are equipped with an integrated automation system and an S14 wall-mounted sensor control panel.

Automation functions

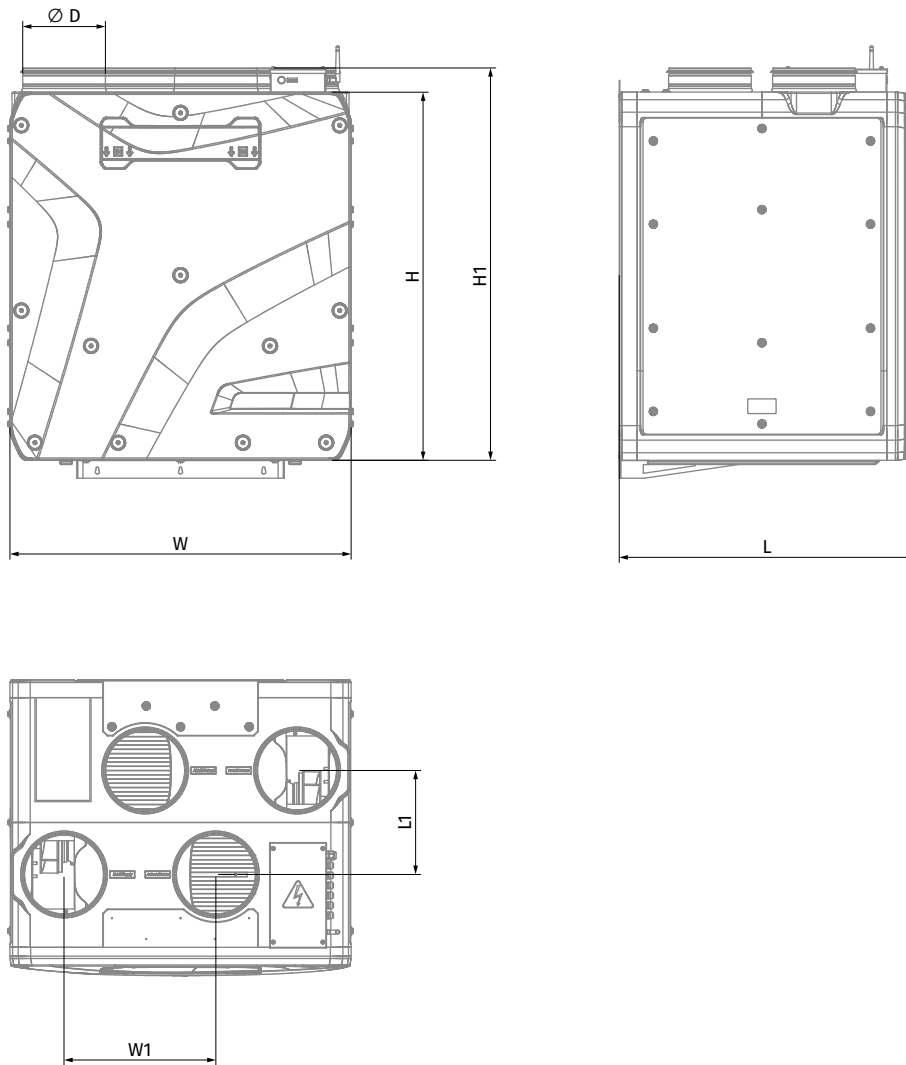| Functions	Reneo S S21	Reneo S S14
Unit control via Wi-Fi using a mobile application	+	–
Unit control via a wired remote control panel	S22 control panel (option)	S14 control panel
Unit control via a wireless remote control panel	S22 Wi-Fi control panel (option)	–
Unit control via a wired remote LCD control panel	S25 control panel (option)	–
BMS (Building Management System)	RS-485	–
	Wi-Fi	–
	Ethernet	–
	MODBUS (RTU, TCP)	–
Blauberg Cloud Server service	+	–
Speed selection	+	+
Filter replacement indication	by filter timer	by filter timer
	by filter clogging differential pressure switch	–
Alarm indication	full alarm description in the mobile application	LED alarm indication
Week-scheduled operation	+	–
Bypass	automatic	–
	manual	manual
Timer	+	–
Boost mode	+	–
Fireplace mode	+	–
Freeze protection	through cyclic stops of the supply fan	through cyclic stops of the supply fan
	through preheating (option)	–
Reheater connection	option	–
Cooler connection	option	–
Minimum supply air temperature control	+	–
Humidity control	option	option
CO_2 control	option	option
VOC control	option	–
PM2.5 control	option	–
Fire alarm sensor connection	option	option

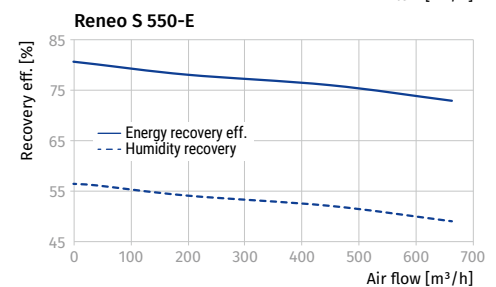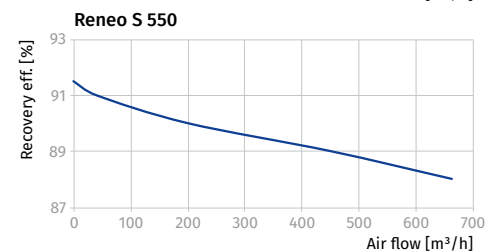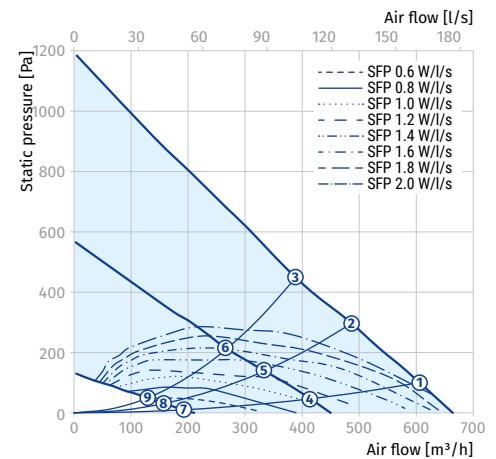Option: the function is available when purchasing the appropriate accessory (see the "Accessories" section).

EPP HEAT AND ENERGY RECOVERY AIR HANDLING UNITS

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Designation key

Series	Casing type	Heater		Nominal size	Modification		Heat exchanger type	Unit version	Controller type
Reneo	**S:** vertical	**_:** w/o heater		**55:** nominal airflow	**0:** standard	-	**_:** heat recovery	**L:** left-handed	**S21**
		E: integrated preheater					**E:** energy recovery	**R:** right-handed	**S14**

Overall dimensions [mm]

Model	∅ D	H	H1	L	L1	W	W1
Reneo S	200	885	943	711	250	820	365

Technical data

Parameters	Reneo S 550	Reneo S 550-E	Reneo SE 550	Reneo SE 550-E
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	347	347	347	347
Integrated electric heater power [W]	-	-	1400	1400
Max. unit power [W]	347	347	1747	1747
Max. unit current without electric heater [A]	2.4	2.4	2.4	2.4
Integrated electric heater current [A]	-	-	6.21	6.21
Max. unit current [A]	2.4	2.4	8.61	8.61
Max. air flow [m³/h]	660	660	660	660
Sound pressure level at 3 m distance [dBA]	57	57	57	57
Max. operating temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40
Case material	EPP	EPP	EPP	EPP
Insulation	45 mm	45 mm	45 mm	45 mm
Extract filter	Coarse >60 %	Coarse >60 %	Coarse >60 %	Coarse >60 %
Supply filters	Coarse >60 % (option: ePM1 60 %)	Coarse >60 % (option: ePM1 60 %)	Coarse >60 % (option: ePM1 60 %)	Coarse >60 % (option: ePM1 60 %)
Connected air duct diameter [mm]	200	200	200	200
Weight [kg]	28	28	28	28
Heat recovery efficiency [%]	91	80	91	80
Heat exchanger type	Counter-flow	Counter-flow	Counter-flow	Counter-flow
Heat exchanger material	Polysterene	Enthalpy membrane	Polysterene	Enthalpy membrane
SEC class	A+	A	A+	A

Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
Point 1											
LwA to environment [dBA]	**78**	53	61	60	64	63	57	51	39	**57**	**67**
Point 4											
LwA to environment [dBA]	**66**	57	65	64	52	51	39	37	26	**46**	**55**

Reneo S 550

Reneo S 550-E

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Accessories

EPP HEAT AND ENERGY RECOVERY AIR HANDLING UNITS

		Reneo S 550 S21	Reneo SE 550 S21	Reneo S 550 S14
G4 panel filter		FP 596x164x60 Coarse 90% G4	FP 596x164x60 Coarse 90% G4	FP 596x164x60 Coarse 90% G4
F7 panel filter		FP 596x164x60 ePM1 60% F7	FP 596x164x60 ePM1 60% F7	FP 596x164x60 ePM1 60% F7
LCD control panel		S25	S25	-
Control panel		S22	S22	-
Wireless control panel		S22 Wi-Fi	S22 Wi-Fi	-
Internal humidity sensor		FS2	FS2	FS2
Internal CO_2 sensor		CD-3	CD-3	CD-3
CO_2 sensor with indication		CD-1	CD-1	CD-1
CO_2 sensor		CD-2	CD-2	CD-2
Humidity sensor		HR-S	HR-S	HR-S
Electric preheater		EVH 200 S21 V.2	-	-
Electric reheater		ENH 200 S21 V.2	ENH 200 S21 V.2	-
Syphon kit (for the units without an enthalpy heat exchanger)		SFK 20x32	SFK 20x32	SFK 20x32
Silencer		SD 200	SD 200	SD 160
Air damper		VKA 200	VKA 200	VKA 160
Electric actuator		TF230	TF230	TF230