

RENEO S 210/270, 240 CF

Heat and energy recovery air handling units

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.
- Compatible with round 125 mm air ducts.



Air flow:
up to 331 m³/h
91.9 l/s



Heat recovery efficiency:
up to 89 %



Design

- The casing is made of expanded polypropylene (EPP) with high heat- and sound-insulating properties.
- **Reneo S 210 / 270 L, Reneo S 240 L CF** – left-handed unit.
- **Reneo S 210 / 270 R, Reneo S 240 R CF** – right-handed unit.

Fans

- The unit is equipped with high-efficiency **EC** external rotor motors and centrifugal impellers with forward-curved blades.
- **Reneo S 240(-E) S21 CF** units are available with **Constant flow** function – the fans automatically maintain a constant air volume regardless of pressure changes in the duct system. Stable airflow is ensured up to 300 Pa external static pressure.

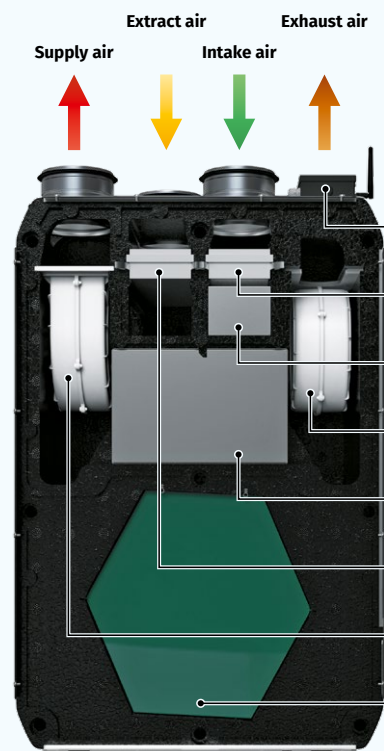
Air filtration

- Two built-in **Coarse 90% (G4)** filters provide efficient supply air filtration.
- Supply **ePM1 60% (F7)** filter is available as an option.

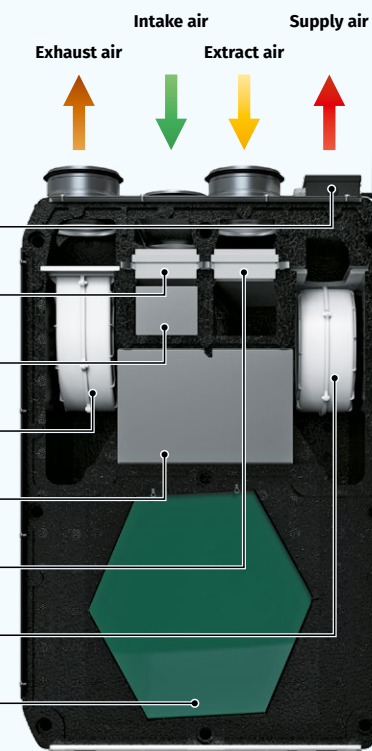
Bypass

- 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 210 / 270 L, RENE S 240 L CF



RENEO S 210 / 270 R, RENE S 240 R CF



Heat recovery

- The **Reneo S** unit is equipped with a counter-flow polystyrene 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.



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



Mounting

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

- 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 clogging differential pressure switch	by filter timer -
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	-
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	+	+

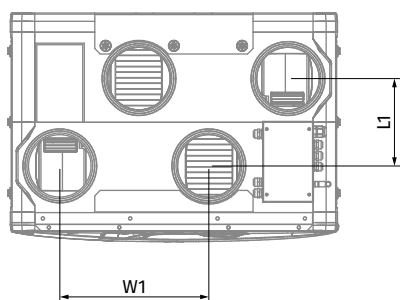
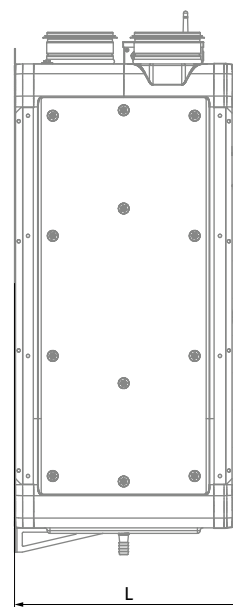
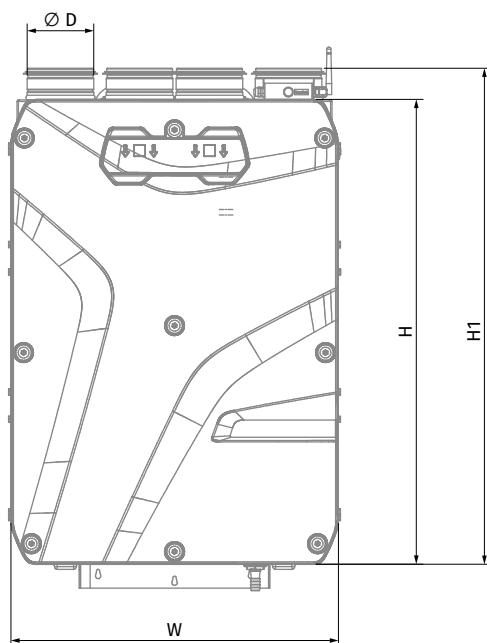
Option: the function is available when purchasing the appropriate accessory (see the "Accessories" section).

Designation key

Series	Casing type	Heater	Nominal size	Modification	Heat exchanger type	Unit version	Controller type	Airflow control
Reneo	S: vertical	_: w/o heater E: integrated preheater	21: nominal airflow	0: standard 1: flat service hatch suitable for decorative panel installation	_: heat recovery E: energy recovery	L: left-handed R: right-handed	S21 S14	_: standard CF: constant flow

Dimensions [mm]

Model	Ø D	H	H1	L	L1	W	W1
Reneo S	125	900	958	452	190	598	273

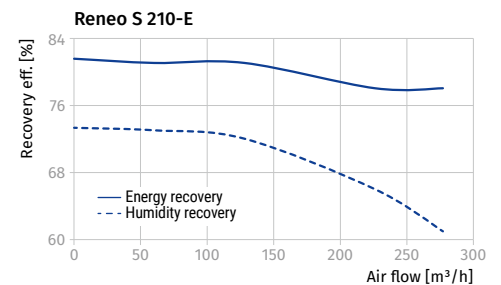
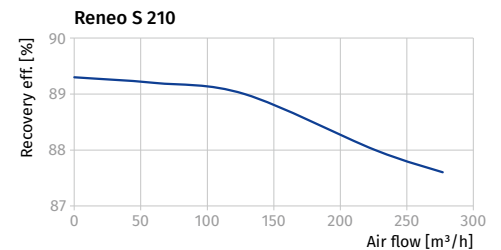
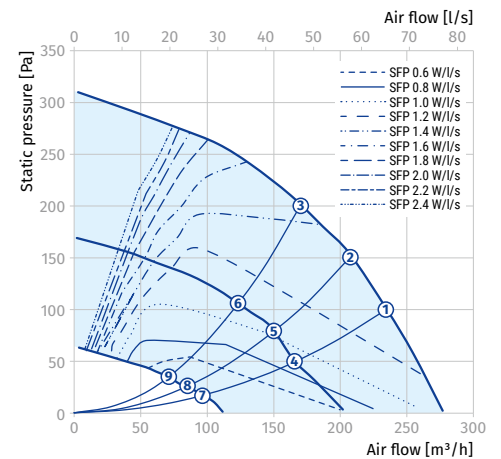


Technical data

Parameters	Reneo S 210	Reneo S 210-E	Reneo SE 210	Reneo SE 210-E
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	125	125	125	125
Integrated electric heater power [W]	-	-	800	800
Max. unit power [W]	125	125	925	925
Max. unit current without electric heater [A]	1.0	1.0	1.0	1.0
Integrated electric heater current [A]	-	-	3.55	3.55
Max. unit current [A]	1.0	1.0	4.55	4.55
Max air flow [m³/h]	277	277	277	277
Sound pressure level at 3 m distance* [dBA]	31	31	31	31
Max. operating temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40
Case material	EPP	EPP	EPP	EPP
Insulation	25 mm	25 mm	25 mm	25 mm
Extract filter	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%
Supply filters	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)
Connected air duct diameter [mm]	125	125	125	125
Weight [kg]	20	22	20	22
Heat recovery efficiency [%]	89	83	89	83
Heat exchanger type	Counterflow	Counterflow	Counterflow	Counterflow
Heat exchanger material	Polysterene	Enthalpy membrane	Polysterene	Enthalpy membrane
SEC class	A+	A	A+	A

* Sound pressure level at 3 m distance is specified at point 4 [dBA] in average spherical free-field, for comparative use only.

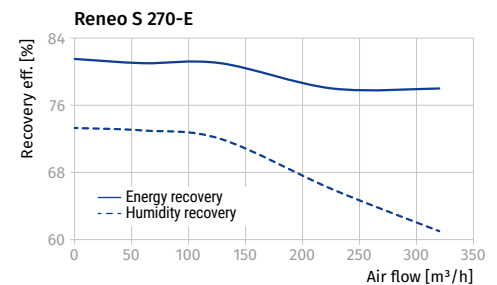
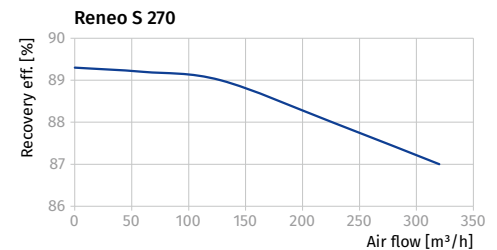
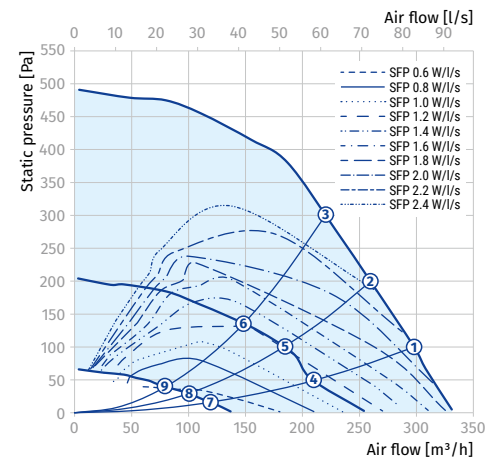
Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
Point 1											
L _{WA} to supply inlet [dBA]	63	41	44	48	53	56	43	44	46	44	52
L _{WA} to supply outlet [dBA]	66	43	46	50	56	59	45	46	48	46	55
L _{WA} to exhaust inlet [dBA]	47	30	33	37	37	41	30	25	25	27	36
L _{WA} to exhaust outlet [dBA]	49	32	35	39	39	43	32	26	26	28	38
L _{WA} to environment [dBA]	57	33	41	40	50	49	44	41	36	37	46
Point 4											
L _{WA} to supply inlet [dBA]	58	36	39	43	47	54	36	36	36	38	47
L _{WA} to supply outlet [dBA]	60	38	41	45	49	57	38	38	38	40	49
L _{WA} to exhaust inlet [dBA]	42	25	28	32	31	34	22	20	23	21	31
L _{WA} to exhaust outlet [dBA]	44	26	29	34	33	36	23	21	24	22	33
L _{WA} to environment [dBA]	52	29	37	36	42	46	37	33	27	31	41



Parameters	Reneo S 270	Reneo S 270-E	Reneo SE 270	Reneo SE 270-E
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	182	182	182	182
Integrated electric heater power [W]	-	-	1400	1400
Max. unit power [W]	182	182	1582	1582
Max. unit current without electric heater [A]	1.4	1.4	1.4	1.4
Integrated electric heater current [A]	-	-	6.21	6.21
Max. unit current [A]	1.4	1.4	7.61	7.61
Max air flow [m³/h]	331	331	331	331
Sound pressure level at 3 m distance* [dBA]	34	34	34	34
Max. operating temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40
Case material	EPP	EPP	EPP	EPP
Insulation	25 mm	25 mm	25 mm	25 mm
Extract filter	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%
Supply filters	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)
Connected air duct diameter [mm]	125	125	125	125
Weight [kg]	22	24	22	24
Heat recovery efficiency [%]	89	83	89	83
Heat exchanger type	Counterflow	Counterflow	Counterflow	Counterflow
Heat exchanger material	Polystyrene	Enthalpy membrane	Polystyrene	Enthalpy membrane
SEC class	A	A	A	A

* Sound pressure level at 3 m distance is specified at point 4 [dBA] in average spherical free-field, for comparative use only.

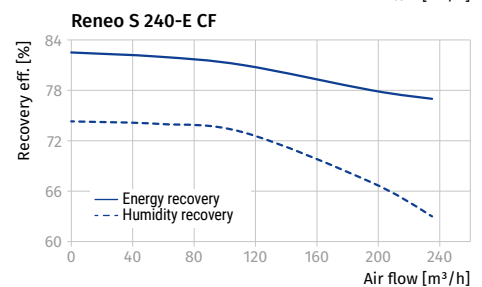
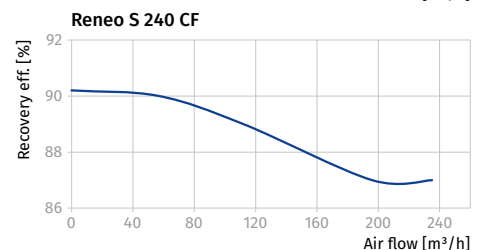
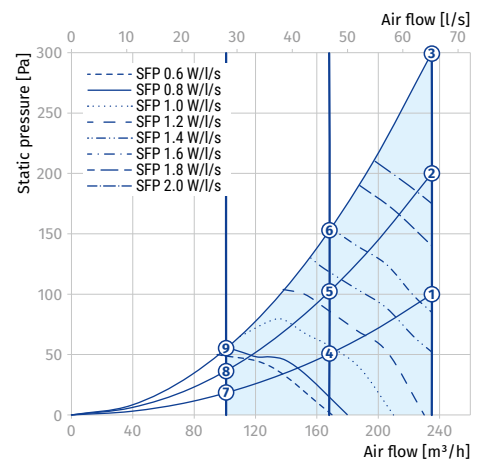
Sound power level, A-weighted	Total	Octave frequency band [Hz]								LpA 3 m	LpA 1 m
		63	125	250	500	1000	2000	4000	8000		
Point 1											
L _{WA} to supply inlet [dBA]	65	44	47	50	56	56	48	48	46	46	54
L _{WA} to supply outlet [dBA]	68	46	49	53	59	59	51	50	48	48	57
L _{WA} to exhaust inlet [dBA]	51	32	35	39	43	41	37	28	25	30	40
L _{WA} to exhaust outlet [dBA]	54	34	37	41	45	43	39	29	26	32	42
L _{WA} to environment [dBA]	58	33	41	40	50	48	44	42	37	37	47
Point 4											
L _{WA} to supply inlet [dBA]	63	39	42	46	53	54	44	44	42	42	51
L _{WA} to supply outlet [dBA]	65	41	44	48	56	57	46	46	44	44	54
L _{WA} to exhaust inlet [dBA]	48	29	32	36	38	40	35	25	24	27	37
L _{WA} to exhaust outlet [dBA]	50	30	34	38	40	42	37	26	25	28	39
L _{WA} to environment [dBA]	55	30	38	37	47	46	40	37	33	34	44



Parameters	Reneo S 240 CF	Reneo S 240-E CF	Reneo SE 240 CF	Reneo SE 240-E CF
Voltage [V / 50-60 Hz]	230	230	230	230
Max. unit power without electric heater [W]	190	190	190	190
Integrated electric heater power [W]	-	-	800	800
Max. unit power [W]	190	190	990	990
Max. unit current without electric heater [A]	1.4	1.4	1.4	1.4
Integrated electric heater current [A]	-	-	3.55	3.55
Max. unit current [A]	1.4	1.4	4.95	4.95
Max air flow [m³/h]	235	235	235	235
Sound pressure level at 3 m distance* [dBA]	28	28	28	28
Max. operating temperature [°C]	-25...+40	-25...+40	-25...+40	-25...+40
Case material	EPP	EPP	EPP	EPP
Insulation	25 mm	25 mm	25 mm	25 mm
Extract filter	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%	G4 / Coarse > 60%
Supply filters	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)	G4 / Coarse > 60% (option: F7 / ePM1 60%)
Connected air duct diameter [mm]	125	125	125	125
Weight [kg]	20	22	20	22
Heat recovery efficiency [%]	89	83	89	83
Heat exchanger type	Counterflow	Counterflow	Counterflow	Counterflow
Heat exchanger material	Polysterene	Enthalpy membrane	Polysterene	Enthalpy membrane
SEC class	A+	A	A+	A

* Sound pressure level at 3 m distance is specified at point 4 [dBA] in average spherical free-field, for comparative use only.

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 supply inlet [dBA]	66	40	43	47	56	58	47	48	48	46	55
LWA to supply outlet [dBA]	69	42	45	49	59	61	49	51	51	48	58
LWA to exhaust inlet [dBA]	45	26	29	33	35	36	32	24	25	25	34
LWA to exhaust outlet [dBA]	47	27	30	35	37	38	34	25	26	26	36
LWA to environment [dBA]	55	27	35	34	45	48	40	39	35	34	44
Point 4											
LWA to supply inlet [dBA]	60	34	37	41	48	54	38	38	36	39	48
LWA to supply outlet [dBA]	62	36	39	43	51	57	40	40	38	41	51
LWA to exhaust inlet [dBA]	39	20	23	27	29	28	21	19	23	18	28
LWA to exhaust outlet [dBA]	41	21	24	28	30	29	22	20	24	19	29
LWA to environment [dBA]	49	21	29	28	38	44	32	30	26	28	38



Accessories

		Reneo S 210 S21	Reneo SE 210 S21	Reneo S 210 S14
G4 panel filter		FP 356x100x48 Coarse 90% G4	FP 356x100x48 Coarse 90% G4	FP 356x100x48 Coarse 90% G4
F7 panel filter		FP 356x100x48 ePM1 60% F7	FP 356x100x48 ePM1 60% F7	FP 356x100x48 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	-
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 reheater		ENH 125 S21 V.2	ENH 125 S21 V.2	-
Syphon kit (for the units without an enthalpy heat exchanger)		SFK 20x32	SFK 20x32	SFK 20x32
Silencer		SD 125	SD 125	SD 125
Air damper		VKA 125	VKA 125	VKA 125
Electric actuator		TF230	TF230	TF230

		Reneo S 270 S21	Reneo SE 270 S21	Reneo S 270 S14	Reneo S 240 S21 CF	Reneo SE 240 S21 CF
G4 panel filter		FP 356x100x48 Coarse 90% G4	FP 356x100x48 Coarse 90% G4	FP 356x100x48 Coarse 90% G4	FP 356x100x48 Coarse 90% G4	FP 356x100x48 Coarse 90% G4
F7 panel filter		FP 356x100x48 ePM1 60% F7	FP 356x100x48 ePM1 60% F7	FP 356x100x48 ePM1 60% F7	FP 356x100x48 ePM1 60% F7	FP 356x100x48 ePM1 60% F7
LCD control panel		S25	S25	–	S25	S25
Control panel		S22	S22	–	S22	S22
Wireless control panel		S22 Wi-Fi	S22 Wi-Fi	–	S22 Wi-Fi	S22 Wi-Fi
Internal humidity sensor		FS2	FS2	FS2	FS2	FS2
Internal CO ₂ sensor		CD-3	CD-3	–	CD-3	CD-3
CO ₂ sensor with indication		CD-1	CD-1	CD-1	CD-1	CD-1
CO ₂ sensor		CD-2	CD-2	CD-2	CD-2	CD-2
Humidity sensor		HR-S	HR-S	HR-S	HR-S	HR-S
Electric reheater		ENH 125 S21 V.2	ENH 125 S21 V.2	–	ENH 125 S21 V.2	ENH 125 S21 V.2
Syphon kit (for the units without an enthalpy heat exchanger)		SFK 20x32	SFK 20x32	SFK 20x32	SFK 20x32	SFK 20x32
Silencer		SD 125	SD 125	SD 125	SD 125	SD 125
Air damper		VKA 125	VKA 125	VKA 125	VKA 125	VKA 125
Electric actuator		TF230	TF230	TF230	TF230	TF230