

SAVE VSR 300

Item no. 78967

Version: Filter F7-G3

Document type: **Product card**
Document date: **2017-01-18**
Generated by: **Systemair Online Catalogue**



Description

- High efficiency variable speed rotary heat exchanger
- Moisture transfer function with automatic freezing regulation
- Energy efficient RadiCal-fans, with modern EC-technology
- Separate settings of supply and extract air flow
- Start-up wizard for easy commissioning
- Automatic change to summer operation (without heat recovery)
- Demand control regulation as standard by the built-in humidity sensor
- Inspection hatch on both sides
- Modbus communication via RS-485

Heat recovery unit designed for dwellings where ventilated area is up to apx. 240 m².

The SAVE VSR 300 is double skinned, fully insulated and with complete control functions, high efficiency variable speed rotating heat exchanger with a moisture transfer function that regulates the rotation speed of the rotor due to freezing and moisture transfer back to supply air. Thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors.

Modern technology is contributing to a low SFP factor (Specific Fan Power) as well as an efficient design of the unit.

The unit will automatically alternate between normal operation with heat recovery and summer operation without heat recovery. This solution will also automatically recover chilled indoor air (from cooling).

Commissioning of the unit will be done from one or more CD panels. A start-up wizard will make the commissioning easier, which can avoid that the unit is running at wrong conditions. Symbols and text in the display will indicate chosen settings; Supply air temperature and fan speed.

Commissioning of airflow on supply and extract, will be done at start-up but can be set from the menu settings as well. Timer-function for automatic change between day and night operation is integrated. Setting of filter period is also available. Alarm signal will indicate possible malfunctions.

The CD panel also has a user level for authorized installers and service personnel. The CD panel is connected to the unit by means of cable with quick connector (modular plug), on the side of the unit.

The unit is provided with outputs for control of external hot water or cooling battery and comes with built-in humidity sensor in extract air that enables demand control regulation with respect to moisture. It also has functions available for external demand control that gives effective and economical operation. For instance, CO₂, presence or humidity sensor.

The unit can be installed in upright position on the floor or horizontally on the ceiling.

Ceiling mounting kit is available as accessory.

The unit is delivered with supply air filter F7 and extract air filter G3. Option for G3 supply air filter is available.

CD panel and cable are also supplied with the unit.



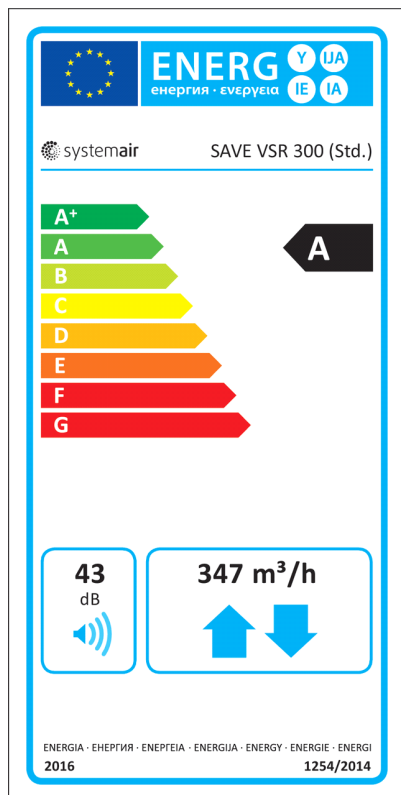
Technical parameters

Unit		
Frequency	50	Hz
Weight	61	kg
Recommended fuse	10	A
Enclosure class	IP24	IP
Voltage	230	V
Phase	1	~
Heat exchanger		
Exchanger type	Rotating	
Heater		
Heating type	Electric	

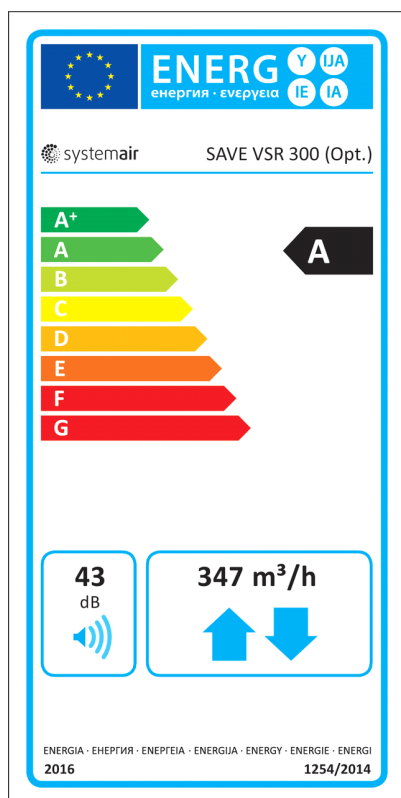
Supply fan		
Voltage	230	V
Phase	1	~
Input power (P1)	83	W
Supply filter		
Filter, supply air	F7	
Extract fan		
Voltage	230	V
Phase	1	~
Input power (P1)	83	W
Extract filter		
Filter, extract air	G3	
Others		
Mounting type	Horizontal	
Supply side	Right	
ErP		
Energy class, basic unit	A	
Energy class, basic unit option	A	
ErP ready	ErP 2018/ErP 2016	
Default group		
Input power, electrical heating battery	1,67	kW

Energy class label

Energy class, basic unit



Unit with local demand control



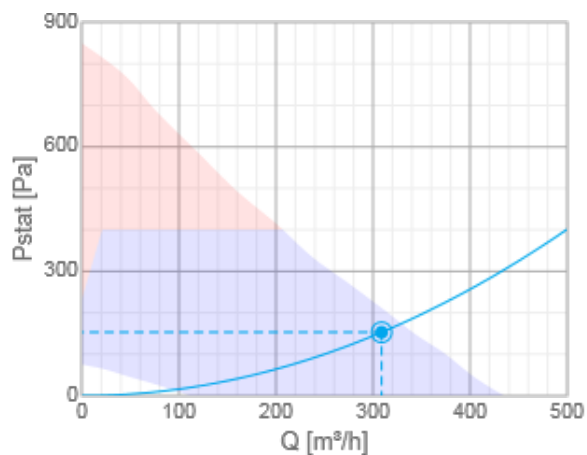
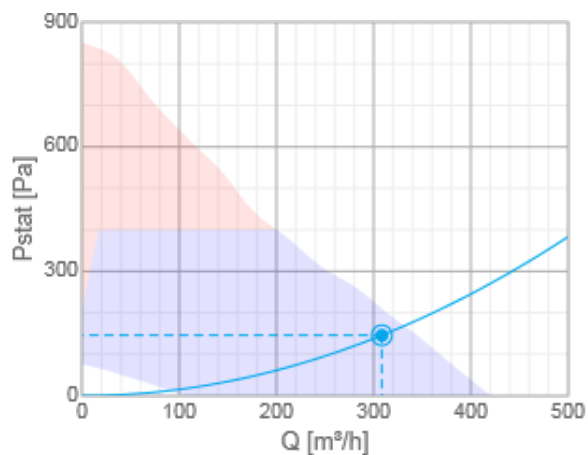
EPS diagrams

Performance

Diagrams

Supply

Extract



Diagrams and calculations are made for the performance with clean filters.

User

Unit	Supply	Extract
Required air flow	308	309 m ³ /h
Working air flow	308	309 m ³ /h
Required external pressure	146	153 Pa
Working air pressure	146	153 Pa
Power	71,2	71,9 W
Speed	2954	2948 r.p.m.
SFP (clean filters)	1,67	kW/(m ³ /s)
Supply air temperature	20	°C

Sound power level		63	125	250	500	1k	2k	4k	8k	Tot
Supply	dB(A)	49	54	60	62	61	61	55	49	68
Outdoor	dB(A)	41	43	55	60	36	36	33	26	61
Exhaust	dB(A)	51	54	61	62	61	61	55	48	68
Extract	dB(A)	43	42	56	59	44	43	35	28	61
Surrounding	dB(A)	25	36	43	44	38	36	29	31	48

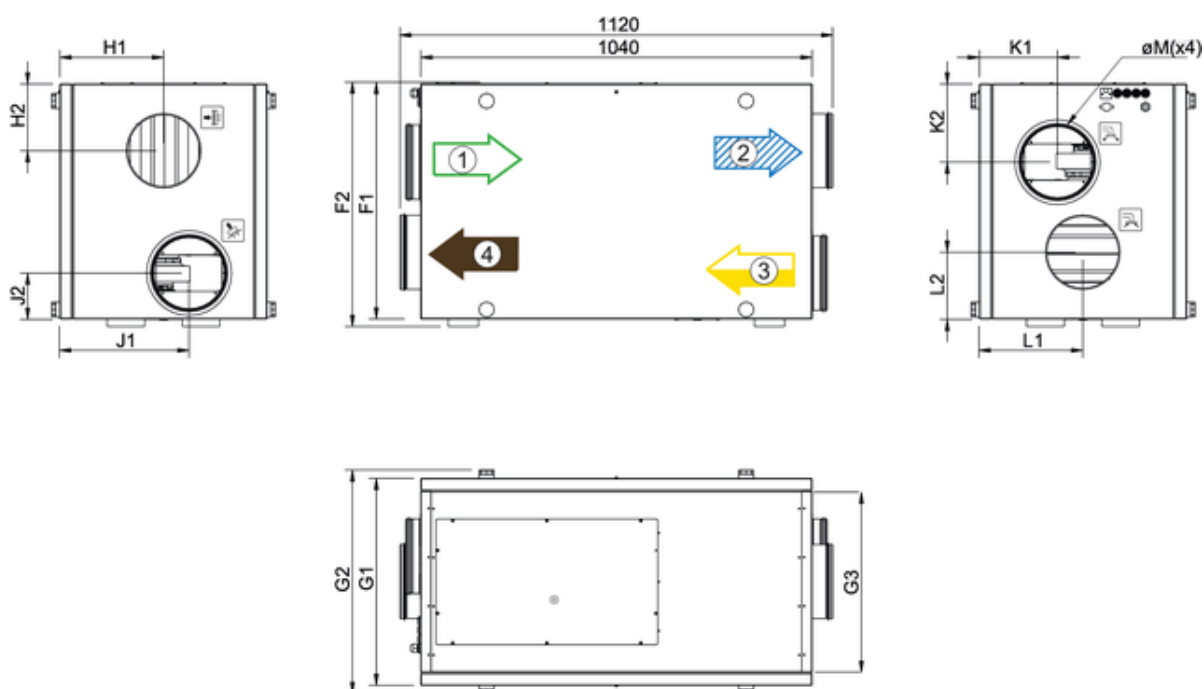
Sound pressure level (reverberant field)		Tot
Surrounding	(-7 dB) dB(A)	41

Heat recovery	Supply	Extract
Inlet air temperature	-20	22 °C
Outlet air temperature	12	-16 °C
Inlet air humidity	90	40 %
Outlet air humidity	0	0 %
Air pressure drop	78	87 Pa
Condensate	0	l/min
Transferred power	3,88	kW
Temperature efficiency	77	%
Dry efficiency according to EN 308	82	%
Exchanger type		

calculated at outdoor air +5°C, extract air +25°C and 27% RH

Electric heater	
Outlet air temperature	20 °C
Outlet air humidity	0 %
Nominal power	1,67 kW
Power output	49,2 %
Missing power	0 kW

Dimensions



	F1	F2	G1	G2	H1	H2	J1	J2	K1	K2	L1	L2	M	G3
VSR300	582	602	461	505	231	188	307	112	160	177	281	136	160	392
VSR500	632	652	551	595	276	178	345	123	207	208	276	179	200	482

- 1 Outdoor air
- 2 Supply air
- 3 Extract air
- 4 Exhaust air

CAD drawing



VSR300.dxf (453,40kB)