

SAVE VTR 500 L

Item no. 19595

Version: Filter F7-G3

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Description

- High efficient rotary heat exchanger
- 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
- Low sound level
- Modbus communication via RS-485

Heat recovery unit designed for dwellings where ventilated area is up to apx. 400 m2.

Left and right handed models.

SAVE VTR 500 is a white painted model with an integrated control panel in the front door. The option for connecting one or more external control panels is also available.

The unit is double skinned, fully insulated and with complete control functions, high efficiency rotating heat exchanger, thermostat operated re-heater battery and filters. Energy efficient fans with EC motors will reduce energy consumptions. With these, up to 50% less energy consumption can be achieved in comparison to AC solutions, with the noise behavior decreased by one-half. Modern technology gives low SFP factor (Specific Fan Power).

Commissioning of the unit will be done from the CD control panel in the front door or a separate external panel. 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. An external CD panel is connected to the unit by means of cable with quick connectors (modular plugs), at the top 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 is delivered with supply air filter F7 and extract air filter G3. Option for G3 supply air filter is available.



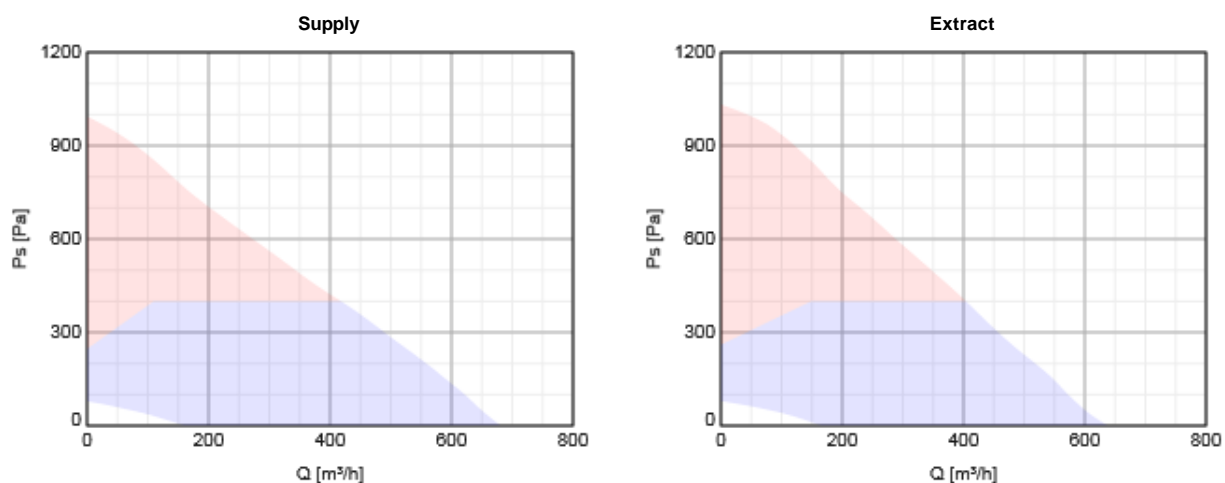
Technical parameters

Unit	
Frequency	50 Hz
Weight	81 kg
Recommended fuse	13 A
Enclosure class	IP24 IP
Voltage	230 V
Phase	1 ~
Heat exchanger	
Exchanger type	Rotating
Heater	

Heating type	Electric
Input power, electrical heating battery	1,67 kW
Supply filter	
Filter, supply air	F7 (Standard)
Extract filter	
Filter, extract air	G3 (Standard)
Supply fan	
Input power (P1)	170 W
Others	
Mounting type	Vertical
Supply side	Left
ErP	
Energy class, basic unit	A
Energy class, basic unit option	A
ErP ready	ErP 2018/ErP 2016
Extract fan	
Input power (P1)	170 W

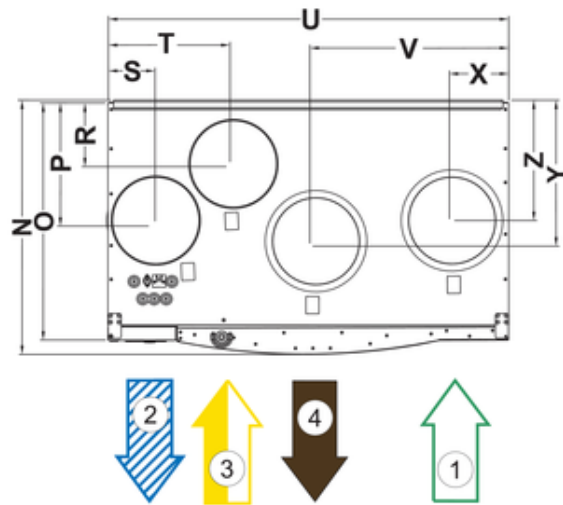
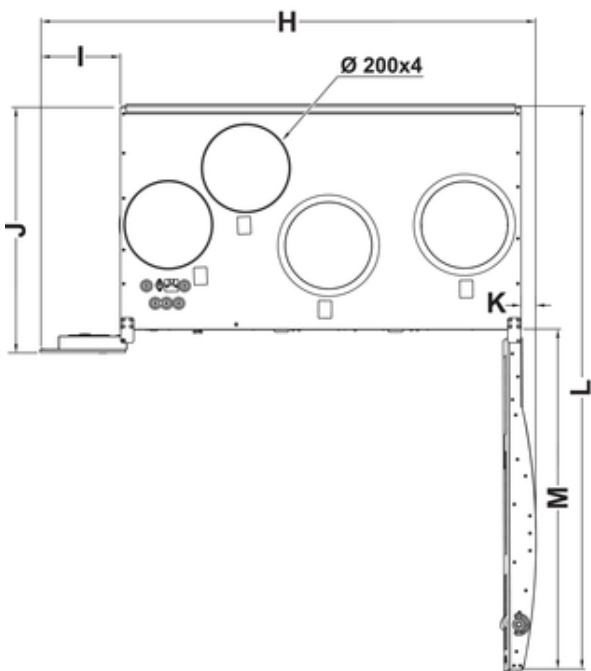
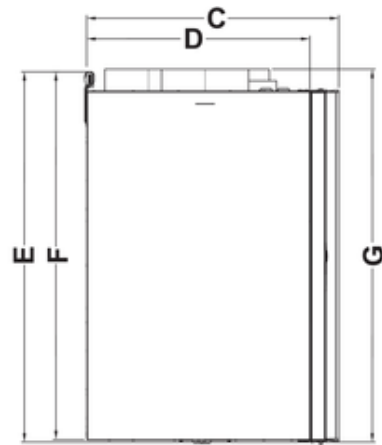
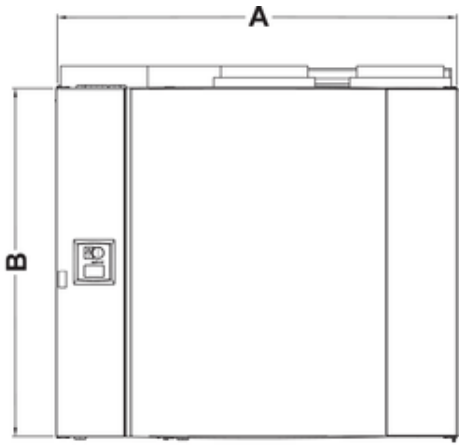
Performance

Diagrams



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

Dimensions

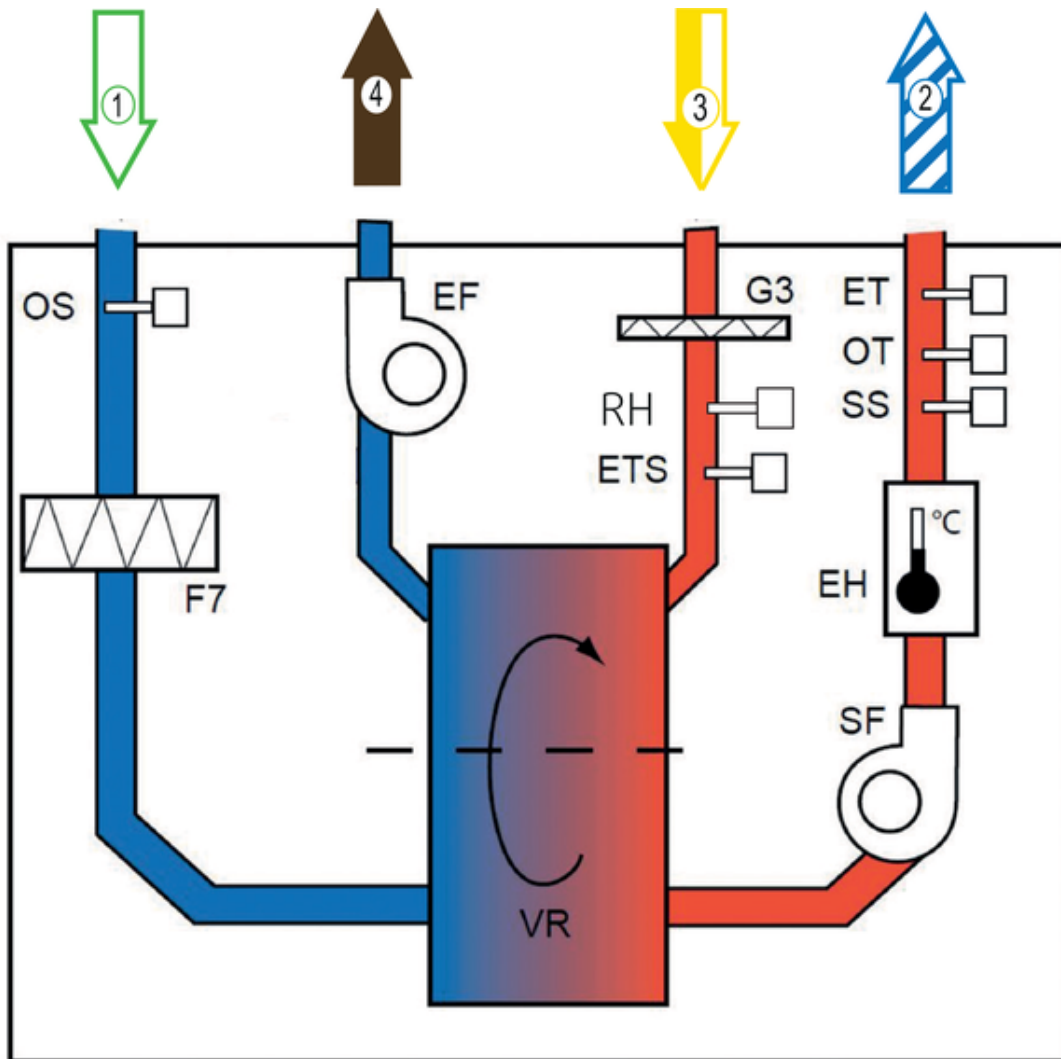


A	B	C	D	E	F	G	H	I	J	K	L
920	853 *	583 **	518	856	846	863	957	175	570	34	1297
M	N	O	P	R	S	T	U	V	X	Y	Z
780	582	554	270	140	106	288	920	442	130	317	270

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


* = Including hatch, ** = Including bracket

Wiring



- F7 = Filter outdoor air
- VR = Rotary heat recovery unit
- EF = Extract fan
- G3 = Filter extract air
- G4 = Extract/Supply filter (only for VTC unit)
- ETS = Extract air temp. sensor
- SF = Supply fan
- EH = Electric heater
- SS = Supply air temp. sensor
- OT = Overheating thermostat
- ET = Emergency thermostat
- EHS = Exhaust air sensor
- OS = Outdoor air sensor
- BP = Bypass cooker hood
- BD = Bypass integrated cooker hood
- DB = Bypass damper
- RH = Relative humidity sensor
- 1 = Outdoor air
- 2 = Supply air
- 3 = Extract air
- 4 = Exhaust air

Wiring diagram

 SAVE_VTR_200_300_500_WD_208063_en-GB (A006).pdf (303,54kB)

Accessories

Electric accessories

CO2RT-R-D Transmitter (6993)

Presence detector/IR24-P (6995)
 TG-A130 Surface sensor 0-30°C (5159)
 HR1 Room Humidistat IP21 (5150)
 F-T120 Timer frame (5137)
 T 120 Timer (5165)
 TG-K360 Duct sensor 0-60°C (4846)
 RVAZ4 24A Actuator 0-10V (9862)
 PSS48 Transformer 24V (204385)
 CEC Cable w/plug 12m (24782)
 CEC Cable w/plug 6m (24783)
 CO2 Sensor Wireless (25126)
 Humidity Sensor Wireless (25127)
 Input Module Wireless (25128)
 SmartDial (25129)
 RS485 Gateway Wireless (25130)
 CE/CD-diverting plug 4pin (37367)


Accessories


EFD 200 Damper + TF230 motor (7162)
 ZTR 15-1,0 valve 3-way (9672)
 VBC 200-2 Water heating batt (5459)
 ZTV 15-1,0 2-way valve (9823)
 VBC 200-3 Water heating batt (9841)
 ZTV 15-0,6 2-way valve (6571)
 ZTR 15-0,6 valve 3-way (6573)
 LDC 200-600 Silencer (5194)
 LDC 200-900 Silencer (5195)
 CWK 200-3-2,5 Duct cooler,circ (30023)
 Connectduct Ø 200/1,0 M/F (2560)
 FK 200 Fast clamp (1611)
 GEO heat exchanger box (312513)
 Drain pipe kit VTR 200/B (207999)
 Water coil SAVE VTR 500 (116520)
 BFVTR 500 F7 Supply Air (208283)
 BFVTR 500 G3 Extract Air (208284)
 BFVTR 500 G3 Supply air (208285)
 CVVX 200 Combi grille, black (25395)
 CVVX 200 Combi grille, white (25397)
 RDR-80/15-50m³/h (37293)

CAD drawing


 VTR500 L.DXF (1,39MB)


Documentation

 VTR500_Installation_and_service_208351_CE_en-GB (A007).pdf (2,06MB)

 VTR500_User_manual_208352_en-GB (A005).pdf (1,87MB)

 CD panel Instruction for wall mounting 206858 GB_SE.pdf (221,37kB)

 Eurovent Certification Diploma 20160125095348,227.pdf (1,78MB)

 Modbus for Residential units_D24810_User_manual (A005).pdf (263,77kB)

Eco design

Units with local demand control	
Trade name	Systemair
Product name	SAVE VTR 500 L
ErP compliance	2018
SEC Average	-40,8 kWh/(m².a)
SEC Cold	-84,5 kWh/(m².a)
SEC Warm	-15,8 kWh/(m².a)
SEC Class	A
Unit category	RVU

Unit type	BVU
Drive	Intergated VSD
Heat recovery type	Regenerative
Temperature ratio	84 %
qv max	0,159 m³/s
P max	325 W
Sound power	47 dB(A)
qv ref	0,111 m³/s
Ps ref	50 Pa
SPI	1,32 kW/ (m³/s)
CTRL	0,65 -
MISC	1,1 -
x-value	2 -
External Leakage	2 %
Internal Leakage	4 %
Type of product	RAHU/AARE
AEC average	195 kWh
AEC cold	195 kWh
AEC warm	195 kWh
AHS Average	4569 kWh/a
AHS Cold	8938 kWh/a
AHS Warm	2066 kWh/a

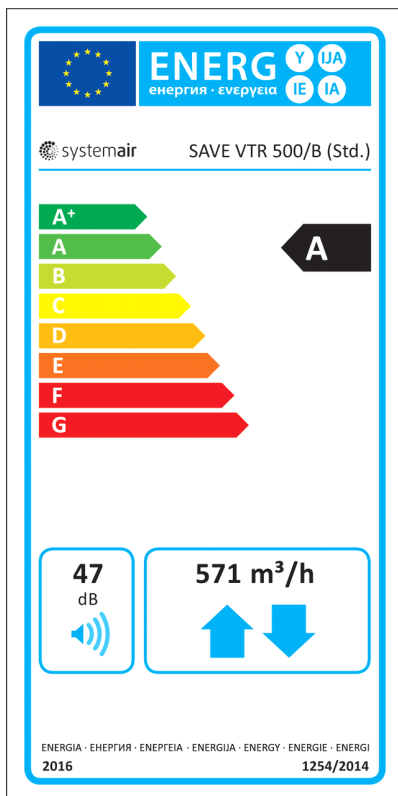
Basic unit

Trade name	Systemair
Product name	SAVE VTR 500 L
ErP compliance	2018
SEC Average	-36,3 kWh/ (m².a)
SEC Cold	-79,1 kWh/ (m².a)
SEC Warm	-11,9 kWh/ (m².a)
SEC Class	A
Unit category	RVU
Unit type	BVU
Drive	Intergated VSD
Heat recovery type	Regenerative
Temperature ratio	84 %
qv max	0,159 m³/s
P max	325 W
Sound power	47 dB(A)
qv ref	0,111 m³/s
Ps ref	50 Pa
SPI	1,32 kW/ (m³/s)

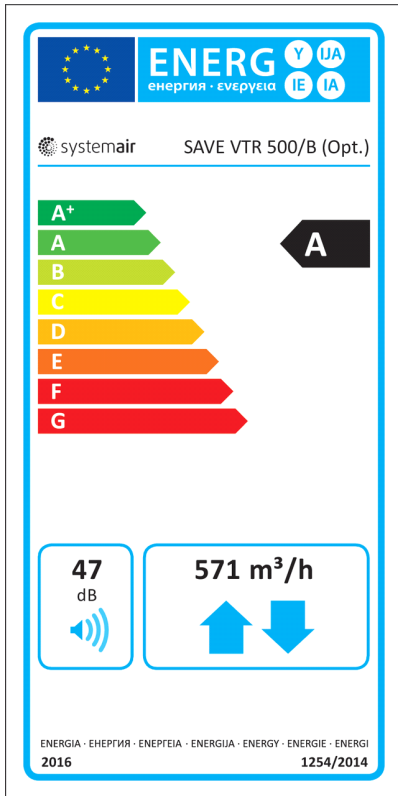
CTRL	0,85	-
MISC	1,1	-
x-value	2	-
External Leakage	2	%
Internal Leakage	4	%
Type of product	RAHU/AARE	
AEC average	333	kWh
AEC cold	333	kWh
AEC warm	333	kWh
AHS Average	4467	kWh/a
AHS Cold	8739	kWh/a
AHS Warm	2020	kWh/a

Energy class label

Energy class, basic unit



Unit with local demand control



EPS diagrams

Specification text