

SAVE VTC 300 L

Item no. 2481

Version: Filter G4-G4; Filter(s) included with the unit

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Description

- High efficiency heat recovery unit
- Energy efficient fan motors with modern EC technology
- Operation from user friendly control panel(s), type CD with LCD-display
- Separate setting of supply and extract airflow
- Changes automatically to summer operation with no heat recovery
- Automatic defrosting (built-in humidity sensor)
- Demand control regulation as standard by the built-in humidity sensor
- Modbus communication via RS-485

White painted model with EC fans, flexible control functions and modern control panel, designed for installation on the wall in dwellings with ventilated area up to apx. 300 m².

The SAVE VTC 300 is designed for installation on wall, in laundry room, storeroom. The unit is double skinned, fully insulated and with complete control functions, high efficiency counterflow heat exchanger 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 gives low SFP factor (Specific Fan Power).

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).

Airflow and supply air temperature can be set from one or more CD control panels.

Symbol and text in the display will indicate chosen settings; re-heater operating, summer operation and need for filter change. Commissioning of airflow on supply and extract, on each step, is set from the control panel. Timer-function for automatic change between day and night operation (installations in commercial buildings) is integrated. 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 connectors (modular plugs), alternatively via 4-pole terminal block.

The unit is equipped with outputs to control an external hot water battery and inputs prepared for demand controlled ventilation from external sensors, e.g. CO₂, presence or humidity sensor (potential free contact). Unit is delivered with built-in moisture sensor that not only provides you demand controlled ventilation as standard but also is used for detecting and control defrosting in colder climate.

The unit has an automatic defrost function with the built in moisture sensor that can be chosen in 3 different modes depending on the indoor environment as well as the outdoor conditions. Without preheater in tight houses / passive houses where unbalanced airflow is not allowed the unit works down to -5°C. Without preheater when unbalance is allowed the unit works down to -15°C. Below -15°C a preheater is needed.

The VTC 300 can be supplemented with a re-heater battery

G4 filters are delivered as standard. F7 and M5 are available as accessories.



Technical parameters

Unit	
Voltage	230 V
Frequency	50 Hz
Phase	1 ~
Weight	72 kg
Recommended fuse	10 A
Enclosure class	IP24 IP
Heat exchanger	
Exchanger type	Counter flow
Heater	

Heating type	None
Supply fan	
Voltage	230 V
Phase	1 ~
Input power (P1)	85 W
Extract fan	
Voltage	230 V
Phase	1 ~
Input power (P1)	85 W
Supply filter	
Filter, supply air	G4
Extract filter	
Filter, extract air	G4
Others	
Mounting type	Vertical
Supply side	Left
ErP	
Energy class, basic unit	A
Energy class, basic unit option	A
ErP ready	ErP 2016/ErP 2018

Eco design

Basic unit	
Trade name	Systemair
Product name	SAVE VTC 300 L
ErP compliance	2018
SEC Average	-37.3 kWh/(m ² .a)
SEC Cold	-79.7 kWh/(m ² .a)
SEC Warm	-13 kWh/(m ² .a)
SEC Class	A
Unit category	RVU
Unit type	BVU
Drive	Intergated VSD
Heat recovery type	Recuperative
Temperature ratio	83 %
qv max	106 l/s
P max	170 W
Sound power	40 dB
qv ref	74.2 l/s
Ps ref	50 Pa

SPI	0.315	W/ (m³/h)
CTRL	0.85	-
MISC	1.1	-
x-value	2	-
External Leakage	2	%
Internal Leakage	NA	%
Type of product	RAHU/AAHE	
AEC average	285	kWh
AEC cold	285	kWh
AEC warm	285	kWh
AHS Average	4440	kWh/a
AHS Cold	8686	kWh/a
AHS Warm	2008	kWh/a

Units with local demand control

Trade name	Systemair	
Product name	SAVE VTC 300 L	
ErP compliance	2018	
SEC Average	-41.3	kWh/ (m².a)
SEC Cold	-84.8	kWh/ (m².a)
SEC Warm	-16.4	kWh/ (m².a)
SEC Class	A	
Unit category	RVU	
Unit type	BVU	
Drive	Intergated VSD	
Heat recovery type	Recuperative	
Temperature ratio	83	%
qv max	106	l/s
P max	170	W
Sound power	40	dB
qv ref	74.2	l/s
Ps ref	50	Pa
SPI	0.315	W/ (m³/h)
CTRL	0.65	-
MISC	1.1	-
x-value	2	-
External Leakage	2	%
Internal Leakage	NA	%
Type of product	RAHU/AAHE	
AEC average	167	kWh
AEC cold	167	kWh
AEC warm	167	kWh

AHS Average

4548 kWh/a

AHS Cold

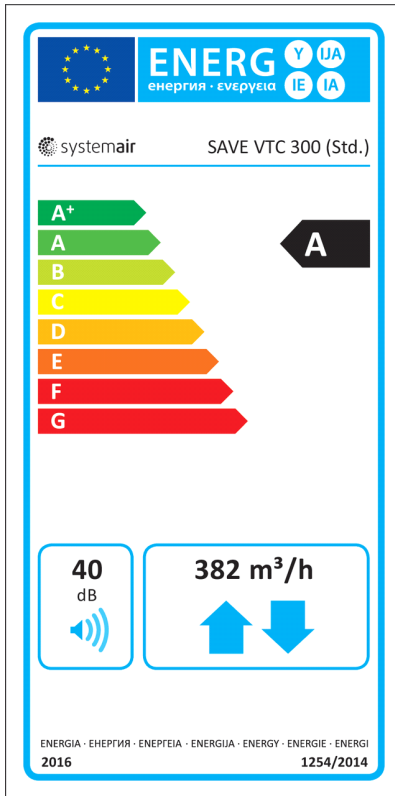
8898 kWh/a

AHS Warm

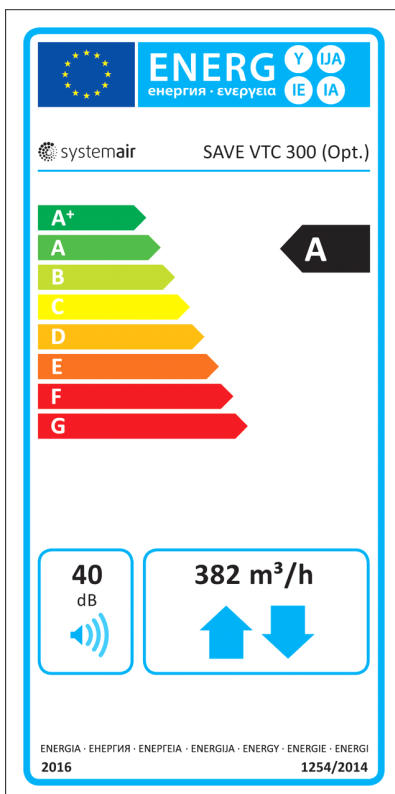
2057 kWh/a

Energy class label

Energy class, basic unit



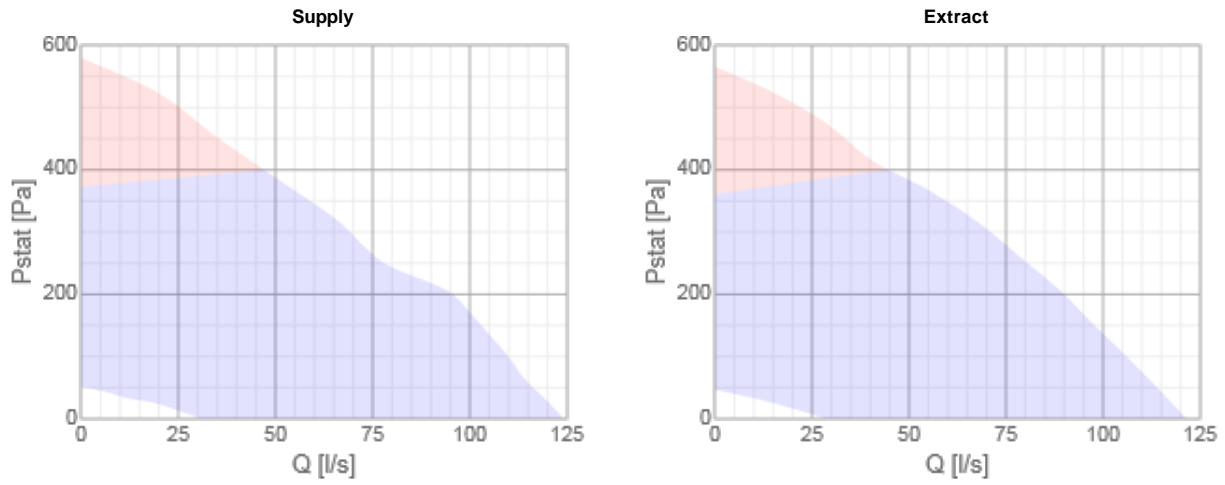
Unit with local demand control



EPS diagrams

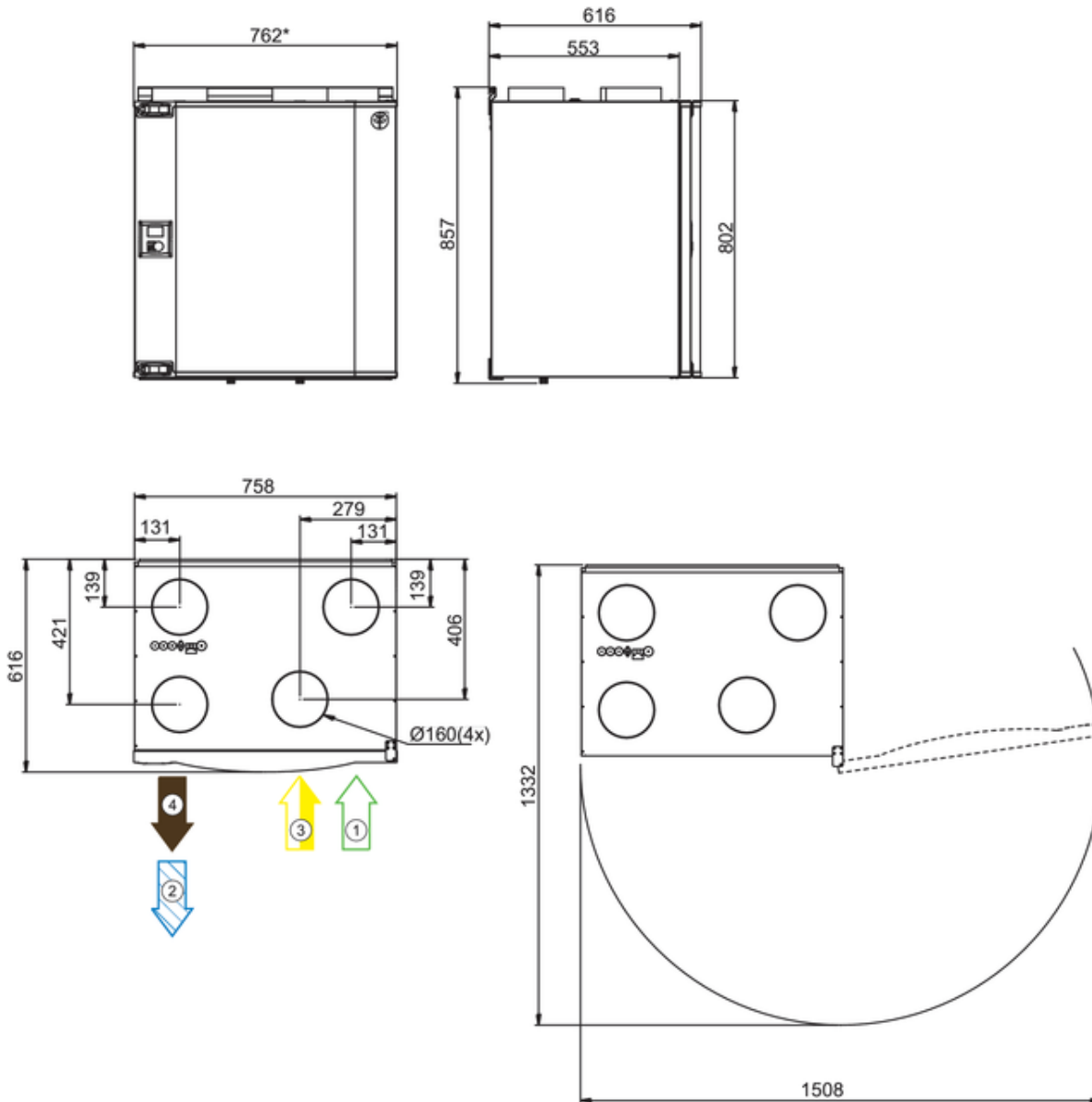
Performance

Diagrams



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

Dimensions



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

*) Hatch

Accessories

Electric accessories


- CE/CD-diverting plug (12399)
- JP Junction plug for cable (12428)
- TG-K360 Duct sensor 0-60°C (4846)
- F-T120 Timer frame (5137)
- TG-A130 Surface sensor 0-30°C (5159)
- T 120 Timer (5165)
- PSS48 Transformer 24V (204385)
- CEC Cable w/plug 15m (306594)
- EFD 160 Damper + TF230 motor (7122)
- RVAZ4 24A Actuator 0-10V (9862)


Accessories


- CWK 160-3-2,5 Duct cooler,circ (30022)
- VBC 160-2 Water heating batt (5458)
- LDC 160-600 Silencer (5192)


LDC 160-900 Silencer (5193)
FK 160 Fast clamp (1610)
THB 160 Hood w. cover pl. Red (2034)
THB 160 Hood w.cover pl. black (1764)
THS 160 Hood w.cover pl. black (1839)
THS 160 Hood w. cover pl. Red (2044)
ZTV 15-0,4 2-way valve (9829)
VBC 160-3 Water heating batt (9840)
ZTR 15-0,4 valve 3-way (9670)
Connectduct Ø 160/1,0 M/F (2558)
TUNE-R-160-3-M4 (311969)
RDR-80/15-50m³/h (37293)


Documentation


 VTC_300_Installation_and_Service_Instruction_207232_CE_en-GB (A008).pdf (1,77MB)


 VTC 300_User_manual_207233_en-GB (A004).pdf (539,04kB)


 SAVE_VTC300_Changing_the_bypass_damper_209238-en_GB (A002).pdf (6,90MB)


 CD panel Instruction for wall mounting 206858 GB_SE A002.pdf (342,61kB)


 Modbus_for_residential_D24810_User_manual_EN (A007).pdf (248,21kB)

 Quick_Guide 205821.pdf (80,62kB)

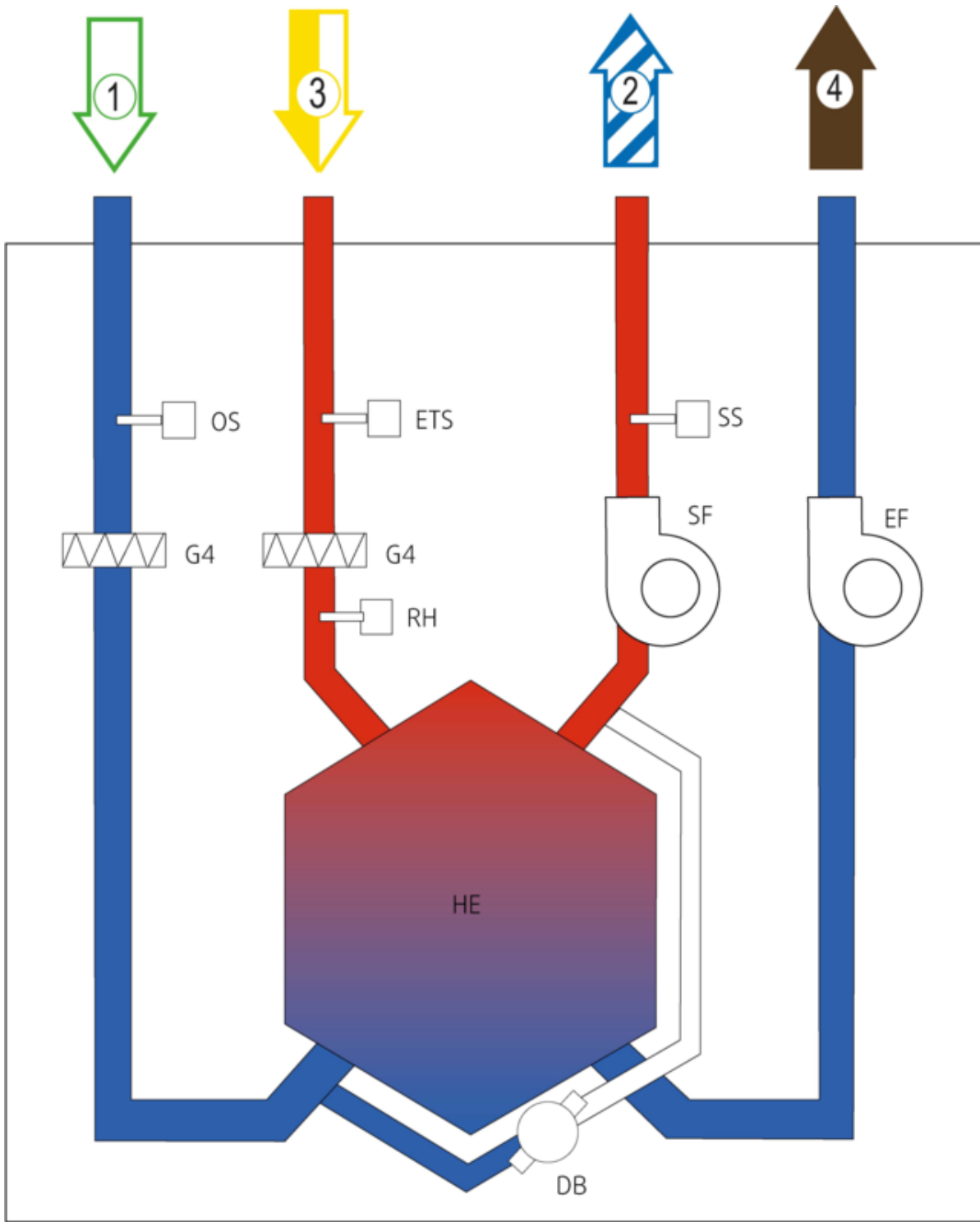
 207234_SAVE_VTC_300_Wiring_diagram_en-GB (A007).pdf (785,22kB)

 Eurovent Certification Diploma 20161215_145603,412.pdf (1,78MB)

 PHI certificate SAVE VTC 300 EN 2017.pdf (166,39kB)

 VTC 300 L.dxf (1,85MB)

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