VR 400 DC – SAP Appendix Q Approved – SFP 1.4, efficiency 80%

Specifically designed to meet the ventilation requirements of the larger family home as necessary, in order to meet Part F (Ventilation) of the current Building Regulations.

Description

- High efficiency heat recovery unit without need for defrosting will give the highest average efficiency over the year
- Energy efficient fan motors with modern EC technology
- Operation from user friendly control panel, type CD with LCD-display
- Separate setting of supply and extract airflow
- Constant airflow and balance between extract and supply air
- Changes automatically to summer operation with no heat recovery
- Flexible installation. No need for condensation drain
- Inspection hatch on both sides

Classical model with EC fans, flexible operation from modern control panel.
Designed for dwellings where ventilated area is up to apx. 200m2.

The VR 400 DC 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 consumption for transportation of ventilation air by apx. 50 % compared to traditional AC motors. Modern technology gives low SFP factor (Specific Fan Power) as well as constant airflow and balance between extract and supply air.

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. 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 VR 400 DC is provided with outlet for control of external hot water battery and inlets prepared for demand controlled ventilation from external sensors, f. inst. CO2 or presence sensor (potential free contact).

Technical parameters

Parameter	Value	Unit
Voltage	230	V
Frequency	50	Hz
Phase	1	~
Input power, fan motors	2 x 115	W
Input power, electrical heating battery	1,67	kW
Fuse	10	A
Weight	55,5	Kg
Filter, supply air	EU7	
Filter, extract air	EU3	

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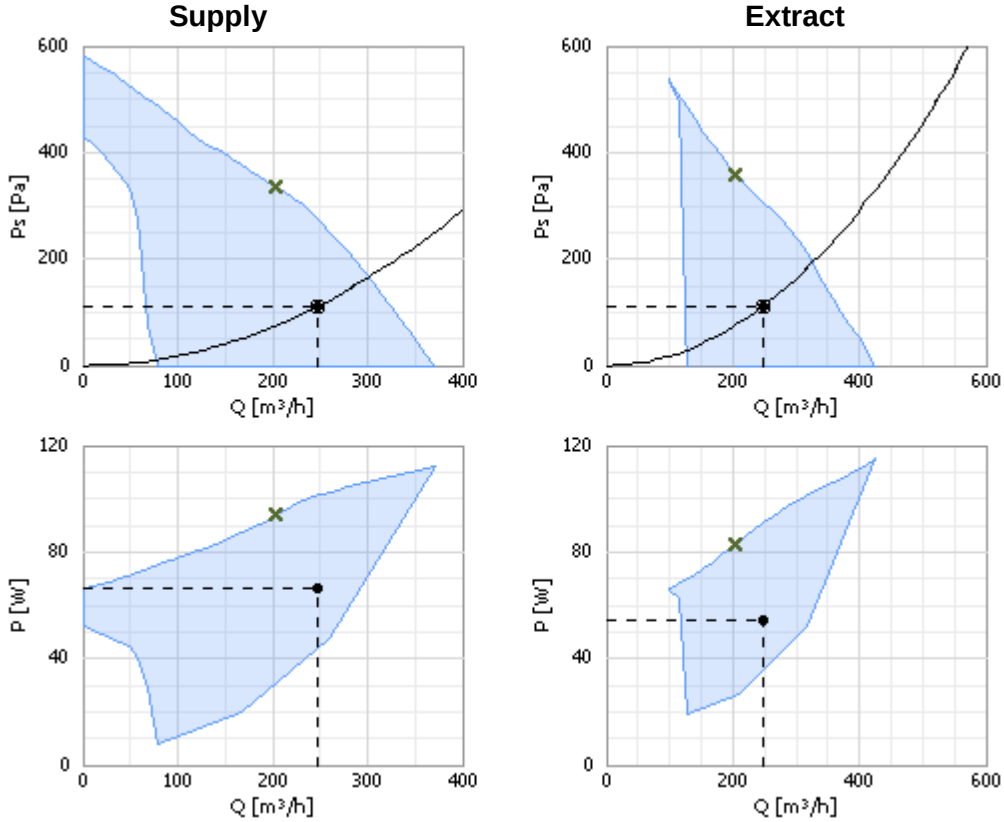
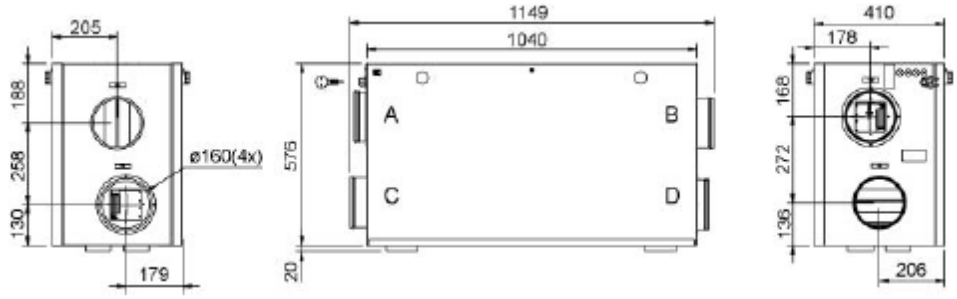
Diagrams



User selected data

Selected Point		Working Point						
		Q [m³/h]		Ps [Pa]		P [W]		SFP
Q [m³/h]	Ps [Pa]	Supply	Extract	Supply	Extract	Supply	Extract	[kW/m³/s]
247	**111**	**247**	**247**	**111**	**112**	**66,3**	**54,1**	**1,75**

	Mid frequency band								
	63	125	250	500	1k	2k	4k	8k	Tot
Supply dB(A)	55	63	63	62	63	62	55	49	70
Extract dB(A)	41	52	52	47	46	45	38	29	57
Surrounding Lw dB(A)	28	41	45	42	45	45	37	30	51



A = Supply Air B = Outdoor Air C = Extract Air D = Exhaust Air

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