

Series
VENTS VPA



LCD control panel

Supply units with the air capacity up to **1520 m³/h** in the compact sound- and heat-insulated casing with electric heater.

■ **Description**

The fan unit provides filtration, heating and supply of fresh air to premises with the air capacity from 200 up to 1500 m³/h. All the models are compatible with 100, 125, 150, 200, 250, 315 mm round air ducts.

■ **Casing**

The casing is made of aluzink with internal heat- and sound-insulating 25 mm layer of mineral wool.

■ **Filter**

Integrated panel G4 filter ensures sufficient supply air purification.

■ **Heater**

Electric heating battery is designed for supply air heating during winter and off-season time.

■ **Fan**

Centrifugal fan with backward-curved blades and built-in overheating thermostat with automatic restart. Some size ranges are equipped with a high-powered fan (VPA-1). The fan motor and impeller are dynamically balanced in two planes. The motor ball bearings are maintenance-free and are designed for at least 40 000 hours service life.

■ **Control and automation**

The supply unit is available in two modifications:
1. No control and automation system supplied. Customer-defined and customer-selected control automation system.
2. Integrated control and automation system for air capacity control and setting supply air temperature. The unit may be controlled from the external control panel fixed on 10 m wire delivered as a standard.

■ **Control and protection functions**

- ▶ switching the unit on/off;
- ▶ maintaining supply air temperature set from the control panel by means of triac heating capacity regulation;
- ▶ fan speed control by means of the control panel (3 speed modes);
- ▶ working-out of the required patterns during the unit switching on and off;
- ▶ the unit daily or week timer operation;
- ▶ active overheating protection of heating elements;
- ▶ disabling electric air heating battery operation when the motor is not running;
- ▶ electric heater overheating protection by means of two thermostats;
- ▶ filter clogging control through the differential pressure sensor;
- ▶ actuating the air damper (refer KRA);
- ▶ relay input from an external sensor (humidistat, CO₂ sensor, motion sensor) to switch the fan to maximum speed;
- ▶ input for alarm fire fighting signal.

■ **Mounting**

Air supply unit can be mounted on the floor, attached to a ceiling with a seat angle with anti-vibration mounts or attached to a wall by means of the brackets. The unit can be mounted either in service spaces (balcony, storage room, underground floor, roof space etc.) or in the main space by placing the unit above the suspended ceiling or in the pocket. The unit can be mounted in any position except for the vertical one with vertical air downstream because tubular heating elements are not allowed under the fan. Free access to the unit shall be provided for maintenance and filter cleaning. The service panel is placed on the top. The control block is on the right.

Designation key:

Series		Air duct diameter	Electric heater power [kW]	Phase	Integrated control system
VENTS VPA	1 - high-powered motor	100; 125; 150; 200; 250; 315	1.8; 2.4; 3.4; 3.6; 5.1; 6; 9	1 – single phase; 3 – three phases	– no control system LCD – integrated control system

Accessories



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Technical data:

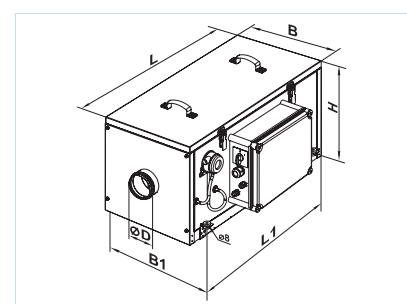
	VPA 100-1,8-1	VPA 125-2,4-1	VPA 150-2,4-1	VPA 150-3,4-1	VPA 150-5,1-3	VPA 150-6,0-3	VPA 200-3,4-1	VPA 200-5,1-3	VPA 200-6,0-3
Voltage [V / 50 Hz]	1~ 230		1~ 230		3~ 400		1~ 230		3~ 400
Maximum fan power [W]	73	75	98			193			
Fan current [A]	0.32	0.33	0.43			0.84			
Electric heater power [kW]	1.8	2.4	2.4	3.4	5.1	6.0	3.4	5.1	6.0
Electric heater current [A]	7.8	10.4	10.4	14.8	7.4	8.7	14.8	7.4	8.7
Number of electrical heating elements	3	3	2	2	3	3	2	3	3
Total unit power [kW]	1.873	2.475	2.498	3.498	5.198	6.098	3.593	5.293	6.193
Total unit current [A]	8.12	10.73	10.83	15.23	7.83	9.13	15.64	8.24	9.54
Air capacity [m³/h]	190	285	425			810			
RPM	2830	2800	2705			2780			
Noise level at 3m [dBA]	27	28	29			30			
Transported air temperature [°C]	-25 up to +55		-25 up to +55			-25 up to +45			
Casing material	aluzink		aluzink			aluzink			
Insulation	25 mm mineral wool		25 mm mineral wool			25 mm mineral wool			
Filter	G4		G4			G4			
Connected air duct size [mm]	100	125	150			200			
Weight [kg]	50		50			52			

Technical data:

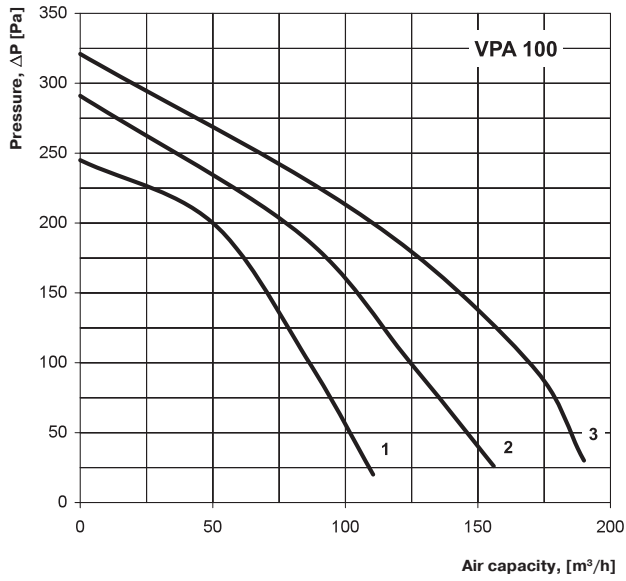
	VPA 250-3,6-3	VPA 250-6,0-3	VPA 250-9,0-3	VPA 315-6,0-3	VPA 315-9,0-3	VPA-1 315-6,0-3	VPA-1 315-9,0-3
Voltage [V / 50 Hz]	3~ 400			3~ 400			
Maximum fan power [W]	194		171		296		
Fan current [A]	0.85		0.77		1.34		
Electric heater power [kW]	3.6	6.0	9.0	6.0	9.0	6.0	9.0
Electric heater current [A]	5.3	8.7	13.0	8.7	13.0	8.7	13.0
Number of electrical heating elements	3	3	3	3	3	3	3
Total unit power [kW]	3.794	6.194	9.194	6.171	9.171	6.296	9.296
Total unit current [A]	6.15	9.55	13.85	9.47	13.77	10.04	14.34
Air capacity [m³/h]	990		1190		1520		
RPM	2790		2600		2720		
Noise level at 3m [dBA]	30		30		30		
Transported air temperature [°C]	-25 up to +50		-25 up to +50		-25 up to +45		
Casing material	aluzink			aluzink			
Insulation	25 mm mineral wool			25 mm mineral wool			
Filter	G4			G4			
Connected air duct size [mm]	250			315			
Weight [kg]	52			62			

Unit overall dimensions:

Type	Dimensions [mm]					
	∅D	B	B1	H	L	L1
VPA 100	99	382	421.5	408	800	647
VPA 125	124	382	421.5	408	800	647
VPA 150	149	455	496,5	438	800	647
VPA 200	199	487	526,5	513	835	684
VPA 250	249	487	526,5	513	835	684
VPA 315	314	527	566,5	548	900	750

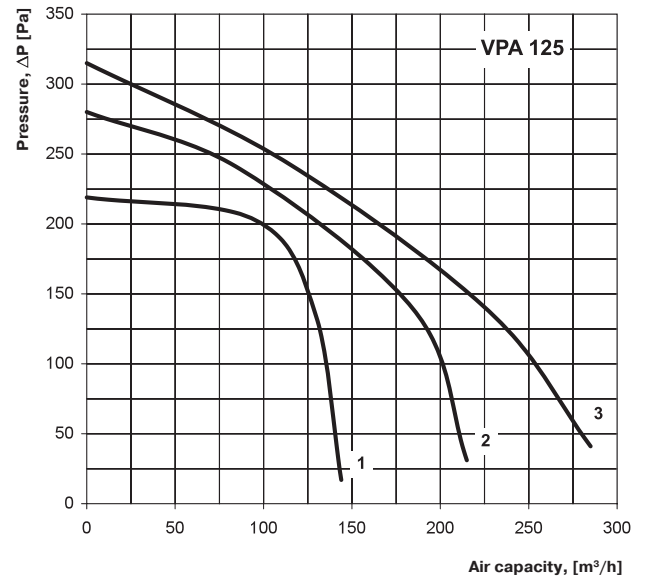


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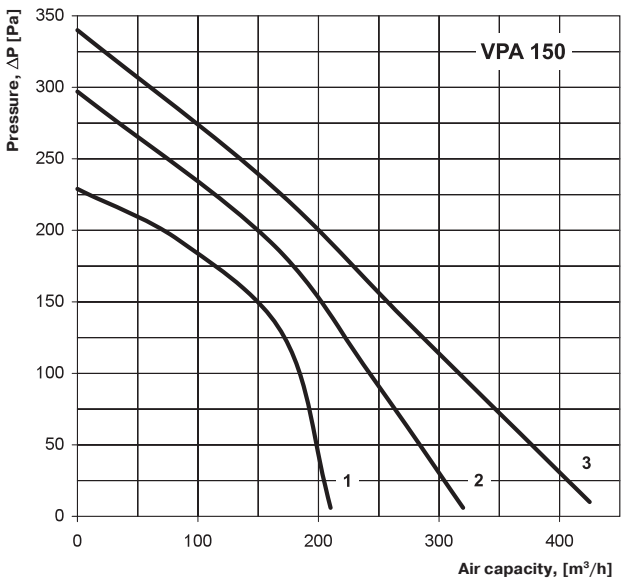
Sound-power level	Hz	Octave-frequency band [Hz]								
		Tot.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dB(A)	50	30	47	47	35	40	37	28	16
L _{WA} to outlet	dB(A)	58	39	50	56	49	45	42	33	23
L _{WA} to environment	dB(A)	31	5	21	28	24	19	13	4	0

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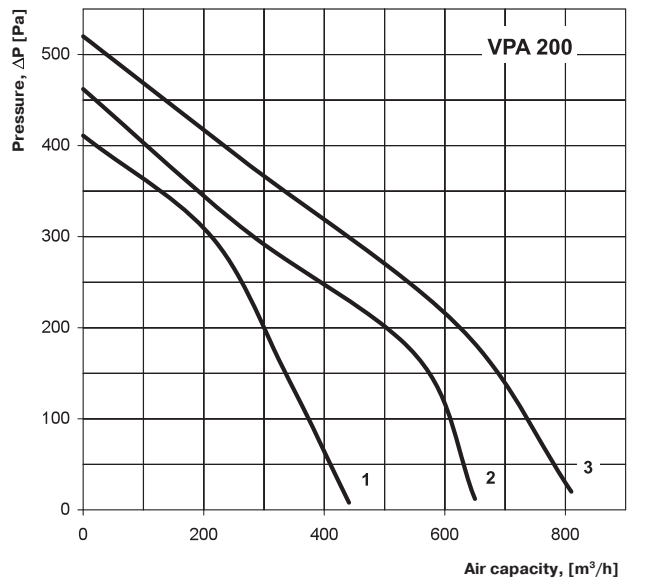
Sound-power level	Hz	Octave-frequency band [Hz]								
		Tot.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dB(A)	52	31	48	48	36	41	40	32	18
L _{WA} to outlet	dB(A)	62	40	53	56	52	47	47	37	23
L _{WA} to environment	dB(A)	33	9	24	33	26	17	16	3	4

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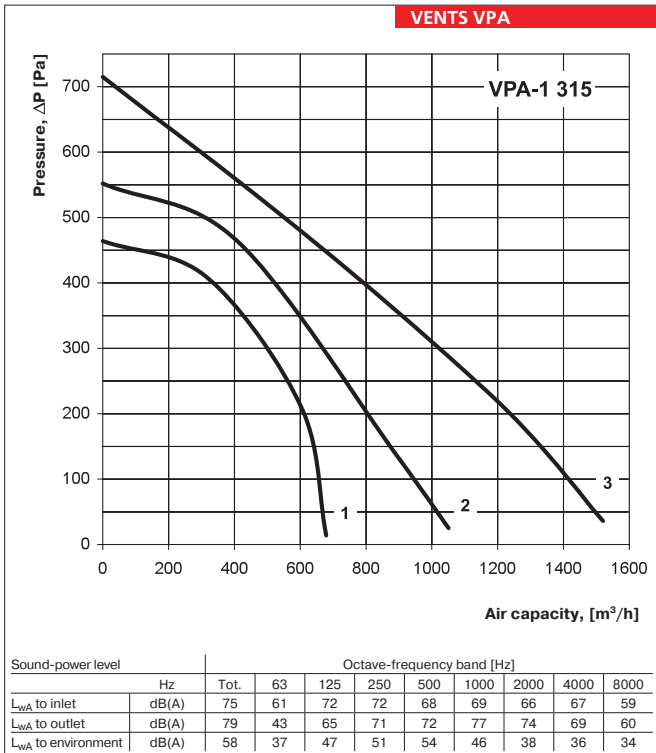
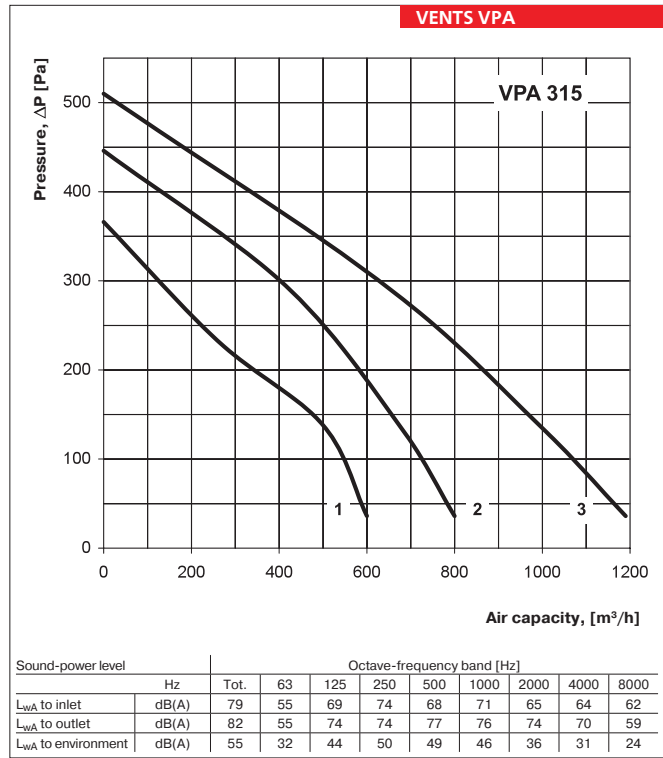
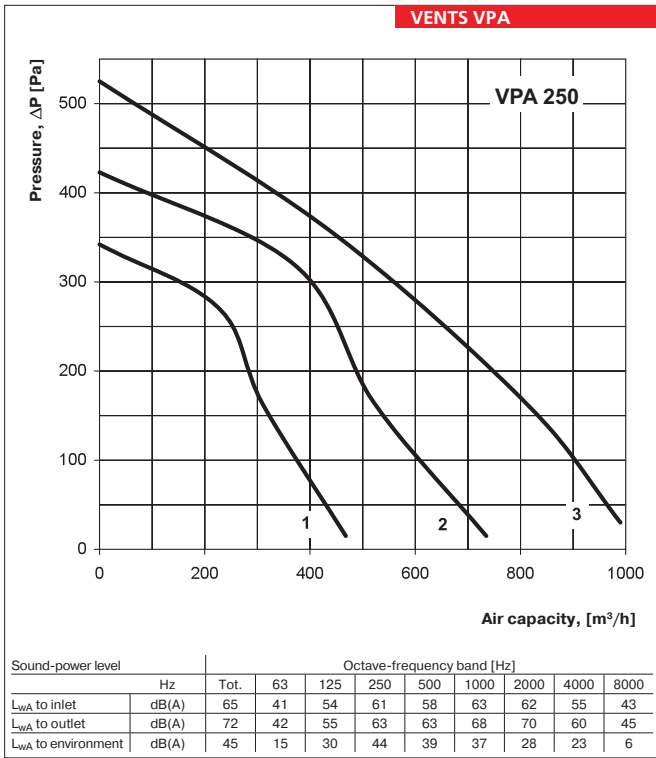


Sound-power level	Hz	Octave-frequency band [Hz]								
		Tot.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dB(A)	65	37	53	63	50	53	53	45	30
L _{WA} to outlet	dB(A)	63	22	43	53	52	57	57	46	36
L _{WA} to environment	dB(A)	41	14	34	39	19	27	19	7	0

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Sound-power level	Hz	Octave-frequency band [Hz]								
		Tot.	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dB(A)	65	41	58	59	56	60	62	56	41
L _{WA} to outlet	dB(A)	71	46	57	63	64	66	66	58	45
L _{WA} to environment	dB(A)	46	15	31	43	40	34	30	22	8



Accessories to supply units:

Type	Replaceable filter	Filter type
VPA 100-1,8-1	SF VPA 100/125 G4	panel filter
VPA 125-2,4-1		
VPA 150-2,4-1	SF VPA 150 G4	panel filter
VPA 150-3,4-1		
VPA 150-5,1-3		
VPA 150-6,0-3		
VPA 200-3,4-1	SF VPA 200/250 G4	panel filter
VPA 200-5,1-3		
VPA 200-6,0-3		
VPA 250-3,6-3		
VPA 250-6,0-3	SF VPA 315 G4	panel filter
VPA 250-9,0-3		
VPA 315-6,0-3		
VPA 315-9,0-3	SF VPA 315 G4	panel filter
VPA-1 315-6,0-3		
VPA-1 315-9,0-3		

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SUPPLY UNIT SERIES