

Series
VENTS VKPF



In-line centrifugal fans with the air capacity up to **9540 m³/h** for rectangular ducts

Series
VENTS VKPFI



In-line sound- and heat-insulated centrifugal fans with the air capacity up to **9540 m³/h** for rectangular ducts

■ **Applications**

Supply and exhaust ventilation systems for various premises with a limited mounting space. Designed for connection with 400x200, 500x250, 500x300, 600x300, 600x350, 700x400, 800x500, 900x500, 1000x500 mm rectangular air ducts.

■ **Design**

The fan casing is made of galvanized steel. VKPFI models are heat- and sound-insulated with 50 mm layer of mineral wool.

■ **Motor**

The impeller made of galvanized steel with forward curved blades is powered by means of 4- or

6-pole external rotor asynchronous motor. Such modification ensures high airflow capacity and relatively significant differential pressure. For thermal overheating protection the thermal contacts with leaded outside terminals are incorporated in the motor winding for connection with the external protection devices. The motor is equipped with the ball bearings for long service life. For precise features, safe operation and low noise, each impeller is dynamically balanced while assembly. Motor protection rating IP 44.

■ **Speed control**

Both smooth or step speed control is performed with thyristor or autotransformer controller. Several fans can be connected to one controller in case their

total power and operating current do not exceed the controller rated values.

■ **Mounting**

The fans are designed for in-line rectangular air duct mounting and require no special fixing in case of direct connection. In case of connection through the flexible connectors the fan is fixed to a building by means of supports, suspension brackets or fixation brackets. The fans can be mounted in any position with respect to the pointer direction on the casing. Access for the fan maintenance shall be provided. The fan is powered through the external terminals. The casing is provided with the removable access door for maintenance.

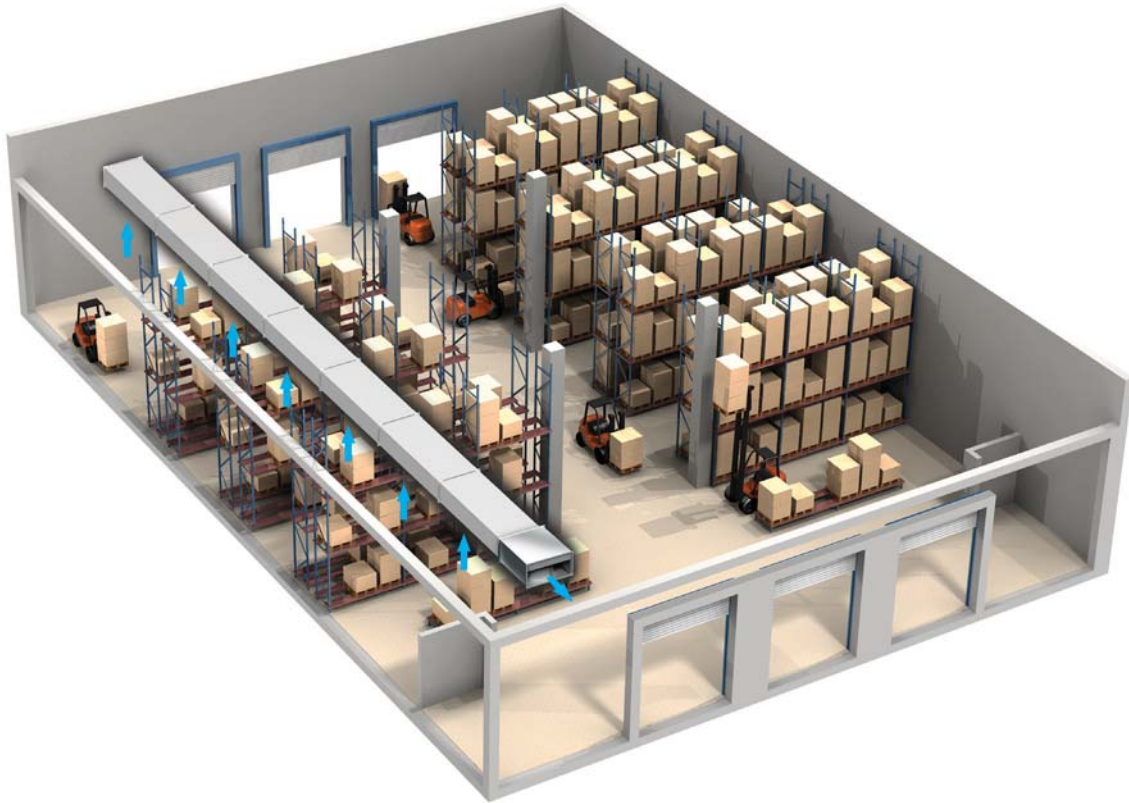
Designation key: _____

Fan series		Motor modification		Flange diameter [WxH]	
VENTS VKPF	I – modification with sound-insulated casing	Number of poles		Phase	
		4	E – single phase	400x200, 500x250, 500x300, 600x300, 600x350, 700x400, 800x500, 900x500, 1000x500	
		6	D – three phases		

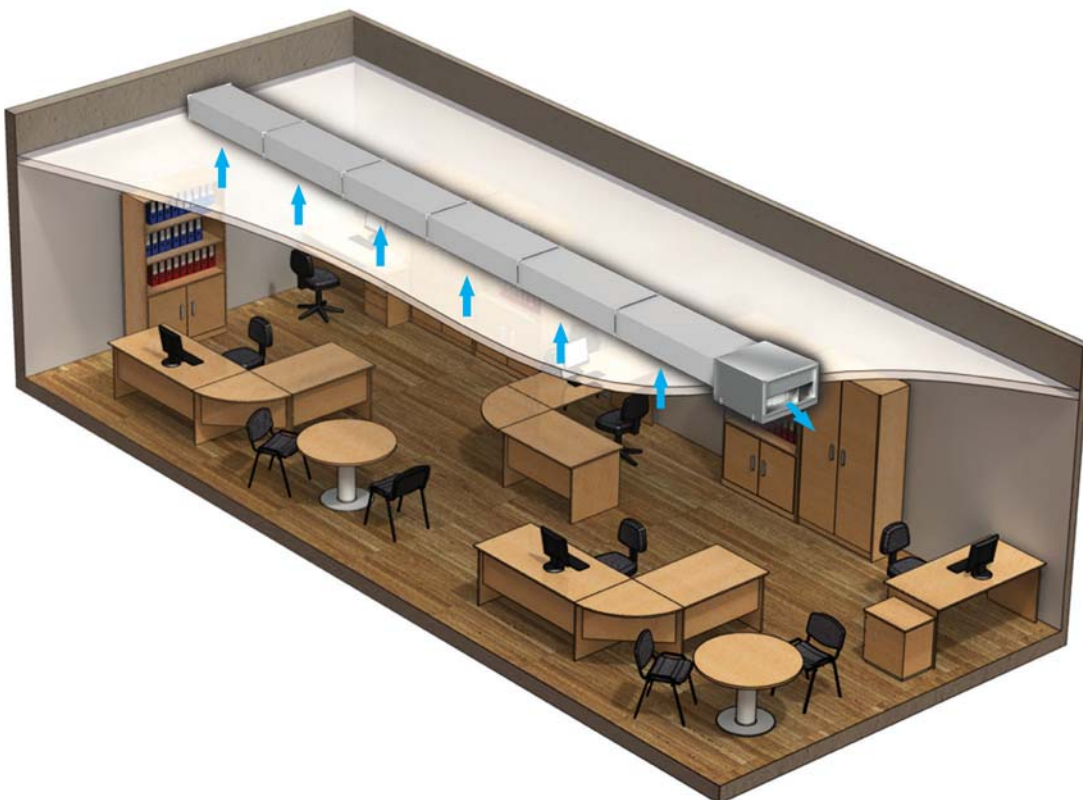
Accessories



page 280 page 290 page 293 page 296 page 302 page 312 page 342 page 344 page 345 page 346 page 358 page 359



VKPF fan warehouse ventilation example



VKPFI fan office ventilation example

RECTANGULAR DUCT FANS

Technical data:

	VKPF / VKPFI 4E 400x200	VKPF / VKPFI 4D 400x200	VKPF / VKPFI 4E 500x250	VKPF / VKPFI 4D 500x250
Voltage [V / 50 Hz]	230	400	230	400
Power [W]	295	282	535	570
Current [A]	1,32	0,60	2,49	0,94
Maximum air flow [m ³ /h]	1440	1470	1750	1850
RPM [min ⁻¹]	1350	1300	1250	1270
Noise level at 3 m [dBA]	50 / 42*	52 / 43*	53 / 44*	54 / 44*
Maximum operating temperature [°C]	-25 +40	-25 +45	-20 +40	-20 +40
Protection rating	IP X4	IP X4	IP X4	IP X4

* parameter for VKPFI model

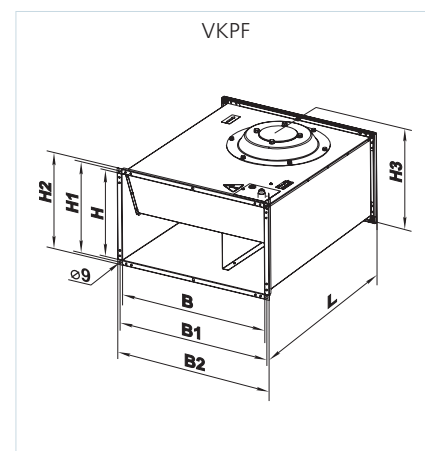
Technical data:

	VKPF / VKPFI 4E 500x300	VKPF / VKPFI 4D 500x300	VKPF / VKPFI 4E 600x300	VKPF / VKPFI 4D 600x300
Voltage [V / 50 Hz]	230	400	230	400
Power [W]	710	855	1240	1560
Current [A]	3,10	1,70	6,45	2,73
Maximum air flow [m ³ /h]	2350	2350	2950	3740
RPM [min ⁻¹]	1230	1300	1210	1310
Noise level at 3 m [dBA]	57 / 47*	56 / 47*	59 / 51*	57 / 50*
Maximum operating temperature [°C]	-25 +70	-20 +50	-25 +50	-25 +65
Protection rating	IP X4	IP X4	IP X4	IP X4

* parameter for VKPFI model

Fan overall dimensions:

Type	Dimensions [mm]								Mass [kg]
	B	B1	B2	H	H1	H2	H3	L	
VKPF 4E 400x200	400	420	440	200	220	240	255	500	17,5
VKPF 4D 400x200	400	420	440	200	220	240	255	500	17,5
VKPF 4E 500x250	500	520	540	250	270	290	335	640	24,0
VKPF 4D 500x250	500	520	540	250	270	290	335	640	24,0
VKPF 4E 500x300	500	520	540	300	320	340	365	680	33,0
VKPF 4D 500x300	500	520	540	300	320	340	365	680	33,0
VKPF 4E 600x300	600	620	640	300	320	340	375	680	35,0
VKPF 4D 600x300	600	620	640	300	320	340	375	680	35,0
VKPF 4E 600x350	600	620	640	350	370	390	425	735	49,5
VKPF 4D 600x350	600	620	640	350	370	390	425	735	49,5
VKPF 4D 700x400	700	720	740	400	420	440	480	780	60,0
VKPF 6D 800x500	800	820	840	500	520	540	580	820	70,0
VKPF 4D 800x500	800	820	840	500	520	540	580	820	74,0
VKPF 6D 900x500	900	920	940	500	520	540	580	954	90,0
VKPF 6D 1000x500	1000	1020	1040	500	520	540	580	954	95,0



Technical data:

	VKPF / VKPFI 4E 600x350	VKPF / VKPFI 4D 600x350	VKPF / VKPFI 4D 700x400	VKPF / VKPFI 6D 800x500
Voltage [V / 50 Hz]	230	400	400	400
Power [W]	2840	2460	3630	2790
Current [A]	13,90	3,93	6,00	5,18
Maximum air flow [m ³ /h]	4260	5020	6450	7610
RPM [min ⁻¹]	1260	1300	1320	830
Noise level at 3 m [dBA]	59 / 51*	60 / 52*	65 / 56*	59 / 53*
Maximum operating temperature [°C]	-20 +40	-20 +40	-25 +40	-20 +50
Protection rating	IP X4	IP X4	IP X4	IP X4

* parameter for VKPFI model

VENTS
VKPF /
VKPFI
FAN SERIES

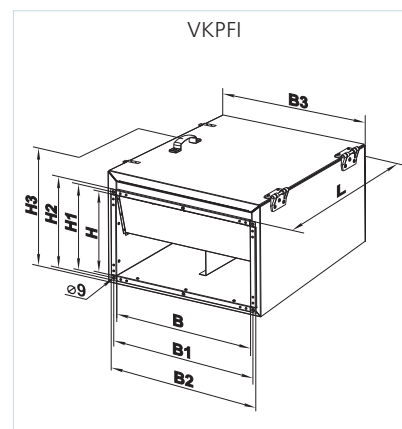
Technical data:

	VKPF / VKPFI 4D 800x500	VKPF / VKPFI 6D 900x500	VKPF / VKPFI 6D 1000x500
Voltage [V / 50 Hz]	400	400	400
Power [W]	5850	3870	3870
Current [A]	9,35	7,0	7,0
Maximum air flow [m ³ /h]	8120	9540	9540
RPM [min ⁻¹]	1140	930	930
Noise level at 3 m [dBA]	67 / 61*	61 / 55*	61 / 55*
Maximum operating temperature [°C]	-25 +40	-20 +55	-20 +55
Protection rating	IP X4	IP X4	IP X4

* parameter for VKPFI model

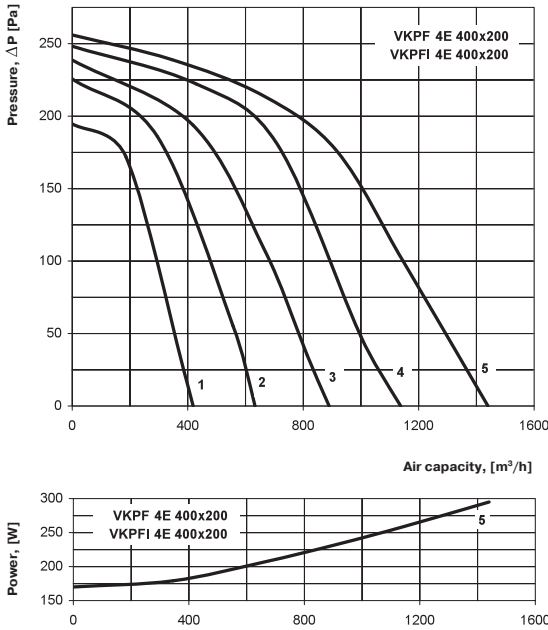
Fan overall dimensions:

Type	Dimensions [mm]									Mass [kg]
	B	B1	B2	B3	H	H1	H2	H3	L	
VKPFI 4E 400x200	400	420	440	470	200	220	240	360	500	29,0
VKPFI 4D 400x200	400	420	440	470	200	220	240	360	500	29,0
VKPFI 4E 500x250	500	520	540	570	250	270	290	410	640	40,5
VKPFI 4D 500x250	500	520	540	570	250	270	290	410	640	40,5
VKPFI 4E 500x300	500	520	540	570	300	320	340	460	680	52,5
VKPFI 4D 500x300	500	520	540	570	300	320	340	460	680	52,5
VKPFI 4E 600x300	600	620	640	670	300	320	340	480	680	56,0
VKPFI 4D 600x300	600	620	640	670	300	320	340	480	680	56,0
VKPFI 4E 600x350	600	620	640	670	350	370	390	530	735	72,0
VKPFI 4D 600x350	600	620	640	670	350	370	390	530	735	72,0
VKPFI 4D 700x400	700	720	740	800	400	420	440	620	880	103,0
VKPFI 6D 800x500	800	820	840	900	500	520	540	720	935	120,0
VKPFI 4D 800x500	800	820	840	900	500	520	540	720	935	127,0
VKPFI 6D 900x500	900	920	940	1000	500	520	540	720	1000	142,0
VKPFI 6D 1000x500	1000	1020	1040	1100	500	520	540	720	1000	150,0



RECTANGUAR DUCT FANS

VENTS VKPF / VKPFI



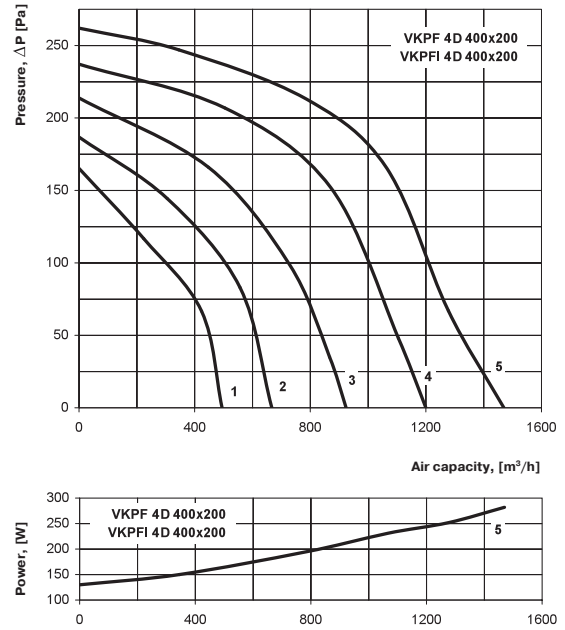
VKPF 4E 400x200

Sound-power level		Octave-frequency band [Hz]									
		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	69	58	68	63	59	56	53	53	45	
L_{WA} to outlet	dBA	70	53	63	67	62	65	63	58	55	
L_{WA} to environment	dBA	59	34	46	57	52	49	43	40	36	

VKPF 4E 400x200

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	66	50	60	58	54	50	49	46	39	
L_{WA} to outlet	dBA	67	48	60	62	58	60	57	54	49	
L_{WA} to environment	dBA	43	24	35	45	41	36	34	29	22	

VENTS VKPF / VKPFI



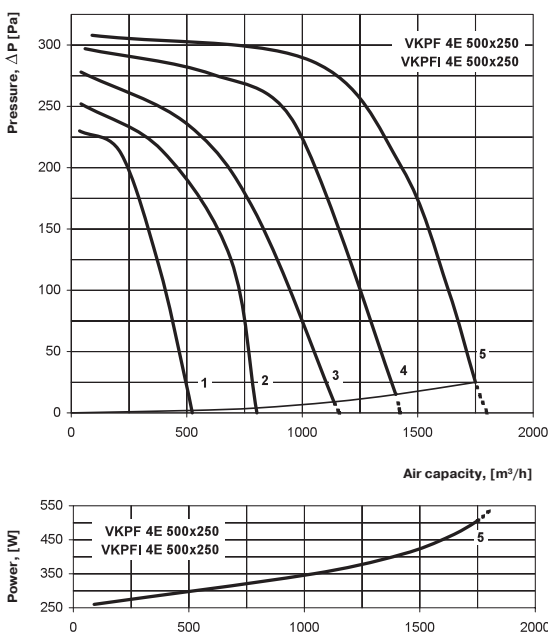
VKPF 4D 400x200

Sound-power level		Octave-frequency band [Hz]									
		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	72	56	69	65	57	58	57	53	48	
L_{WA} to outlet	dBA	74	54	65	66	61	63	60	61	55	
L_{WA} to environment	dBA	61	34	44	56	52	50	44	40	33	

VKPF 4D 400x200

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	65	53	62	60	54	52	50	46	41	
L_{WA} to outlet	dBA	66	48	59	62	58	58	58	53	47	
L_{WA} to environment	dBA	47	24	36	45	38	36	30	29	22	

VENTS VKPF / VKPFI



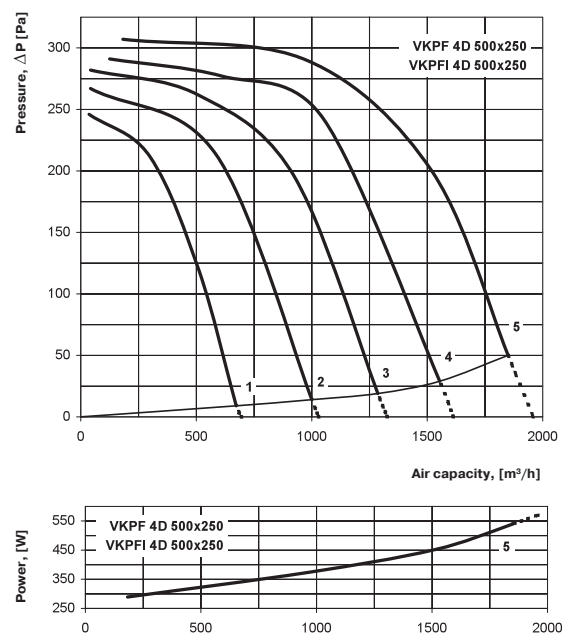
VKPF 4E 500x250

Sound-power level		Octave-frequency band [Hz]									
		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	72	58	67	62	57	62	64	62	60	
L_{WA} to outlet	dBA	77	57	63	62	66	72	69	68	63	
L_{WA} to environment	dBA	62	41	49	54	53	56	52	51	53	

VKPF 4E 500x250

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	68	57	62	58	54	57	58	59	53	
L_{WA} to outlet	dBA	72	50	60	61	60	66	66	61	62	
L_{WA} to environment	dBA	51	29	36	39	43	44	38	37	43	

VENTS VKPF / VKPFI

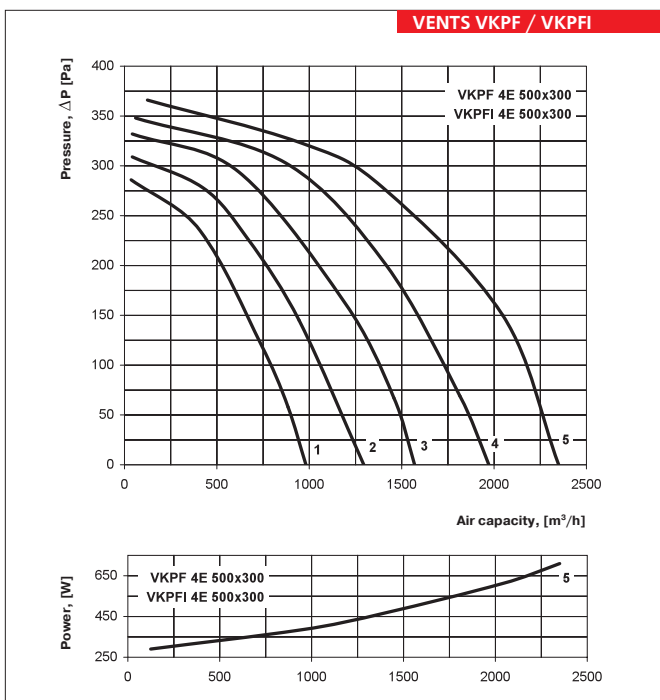


VKPF 4D 500x250

Sound-power level		Octave-frequency band [Hz]									
		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	74	60	67	64	61	64	62	60	58	
L_{WA} to outlet	dBA	76	57	65	65	67	69	69	68	63	
L_{WA} to environment	dBA	61	41	48	53	53	56	52	50	53	

VKPF 4D 500x250

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	67	55	61	57	52	61	58	57	54	
L_{WA} to outlet	dBA	71	49	58	60	62	67	66	61	60	
L_{WA} to environment	dBA	50	27	38	41	44	45	42	40	43	

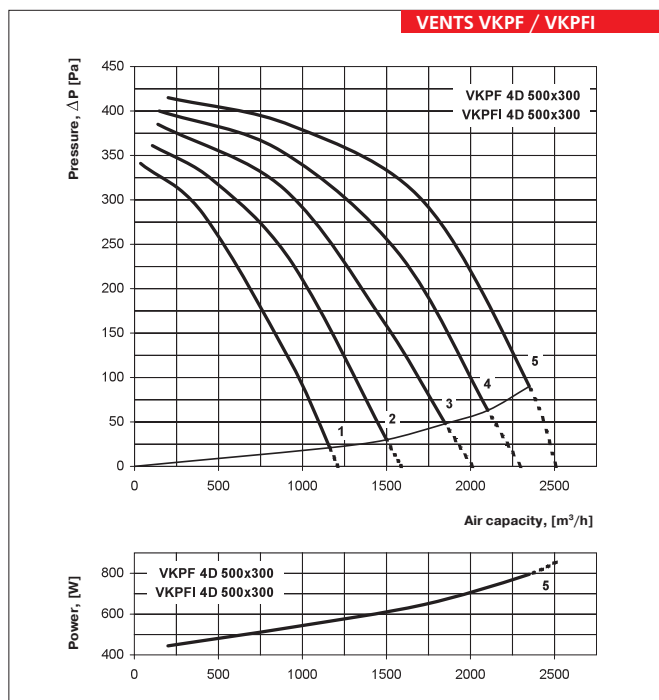


VKPF 4E 500x300

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	74	64	69	65	63	66	67	65	60
L_{WA} to outlet	dBA	79	62	69	66	72	73	72	71	64
L_{WA} to environment	dBA	64	46	53	59	54	58	56	49	50

VKPF 4E 500x300

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	69	59	65	59	58	64	63	60	56	
L_{WA} to outlet	dBA	74	57	62	63	65	69	68	65	61	
L_{WA} to environment	dBA	53	34	43	48	43	46	42	37	38	

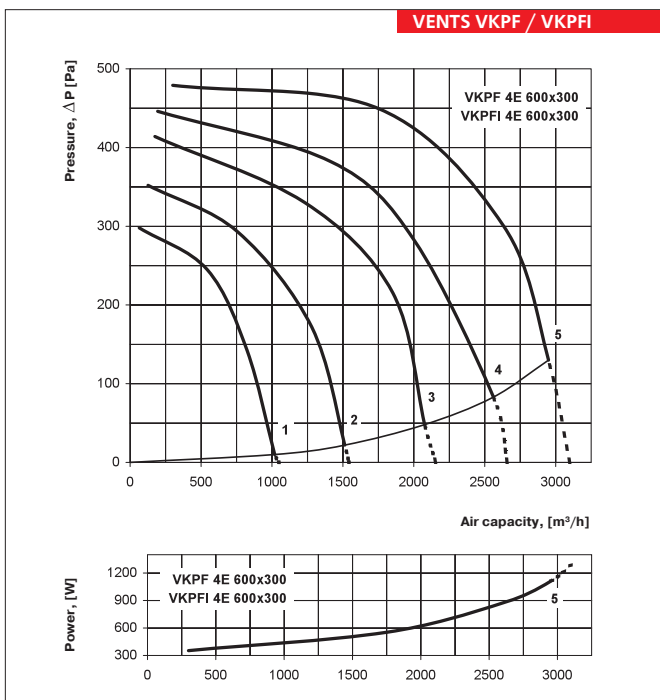


VKPF 4D 500x300

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	77	67	69	62	63	68	68	68	63
L_{WA} to outlet	dBA	79	61	68	69	71	75	74	73	68
L_{WA} to environment	dBA	65	46	55	58	56	60	54	48	47

VKPF 4D 500x300

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	71	62	64	59	60	62	63	63	56	
L_{WA} to outlet	dBA	72	58	62	63	65	71	66	67	63	
L_{WA} to environment	dBA	52	33	42	48	45	46	42	36	36	

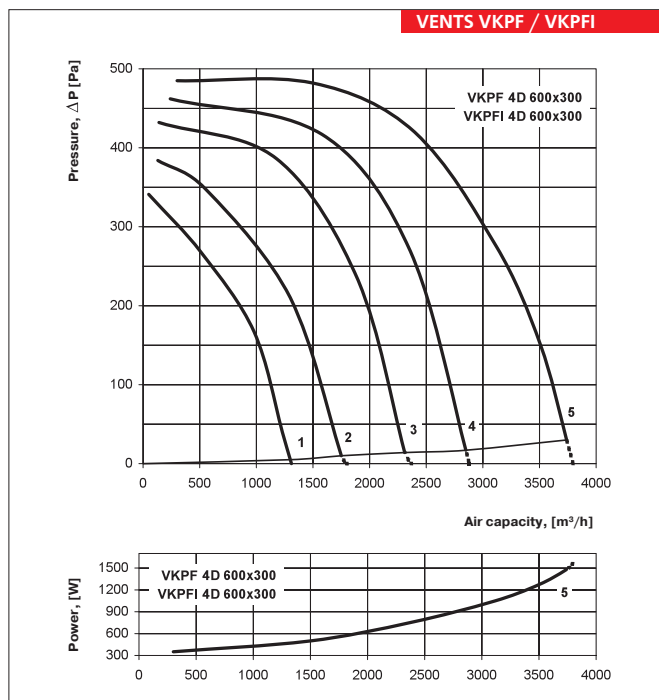


VKPF 4E 600x300

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	83	66	77	69	66	71	70	71	67
L_{WA} to outlet	dBA	85	62	77	71	74	79	76	73	67
L_{WA} to environment	dBA	69	42	65	66	61	61	56	53	47

VKPF 4E 600x300

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	78	61	72	63	62	68	68	65	66	
L_{WA} to outlet	dBA	80	55	74	65	72	74	70	68	66	
L_{WA} to environment	dBA	58	30	53	54	49	48	43	39	37	



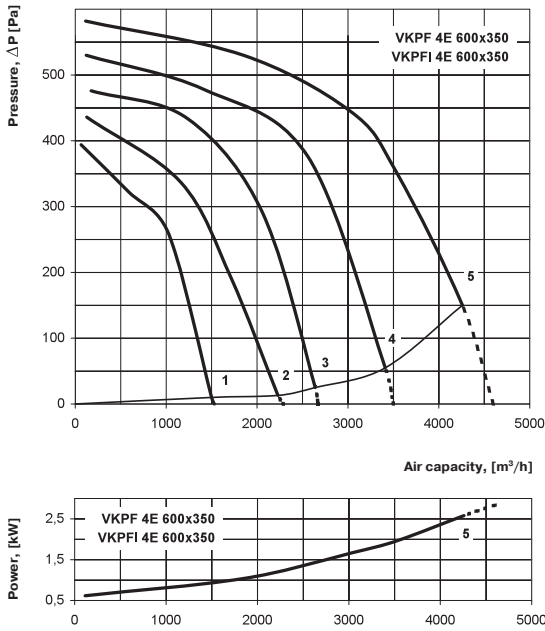
VKPF 4D 600x300

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	82	66	77	67	67	70	72	68	69
L_{WA} to outlet	dBA	82	62	77	71	76	79	75	76	67
L_{WA} to environment	dBA	71	43	63	62	64	62	55	49	51

VKPF 4D 600x300

		Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	75	65	72	62	62	67	66	62	64	
L_{WA} to outlet	dBA	79	57	72	66	70	72	70	67	65	
L_{WA} to environment	dBA	56	30	52	52	49	51	42	37	35	

VENTS VKPF / VKPFI



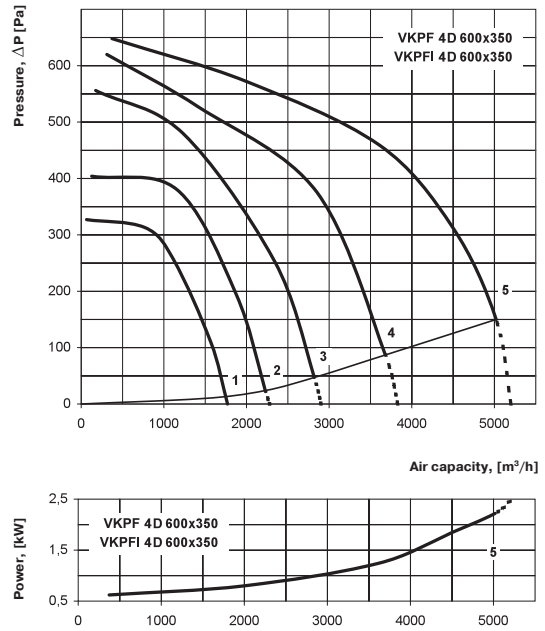
VKPF 4E 600x350

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	78	71	74	65	66	75	72	70	64
L _{WA} to outlet	dBA	86	69	73	74	74	78	76	77	68
L _{WA} to environment	dBA	67	54	60	63	58	62	55	51	48

VKPFI 4E 600x350

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	75	69	69	62	63	70	65	64	62
L _{WA} to outlet	dBA	78	62	68	67	71	76	73	69	66
L _{WA} to environment	dBA	54	40	51	51	48	48	43	40	35

VENTS VKPF / VKPFI



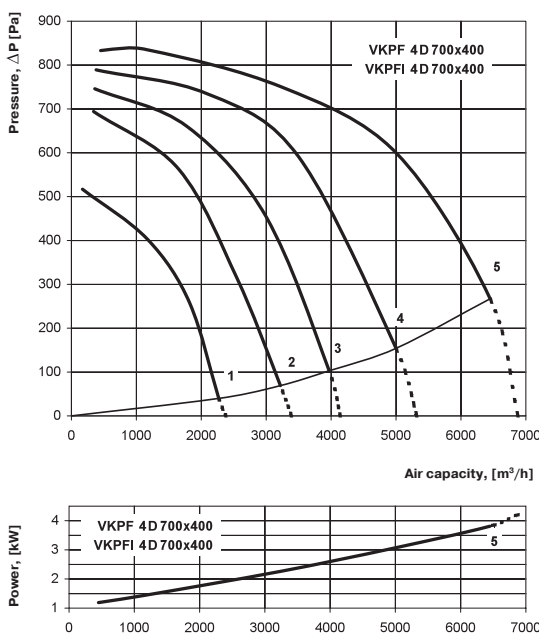
VKPF 4D 600x350

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	80	72	75	69	67	73	71	69	67
L _{WA} to outlet	dBA	84	66	74	70	76	79	76	74	68
L _{WA} to environment	dBA	68	52	62	65	61	58	56	52	48

VKPFI 4D 600x350

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	73	66	72	64	63	69	67	63	59
L _{WA} to outlet	dBA	80	64	67	67	69	76	71	69	65
L _{WA} to environment	dBA	56	40	48	49	49	48	43	41	38

VENTS VKPF / VKPFI



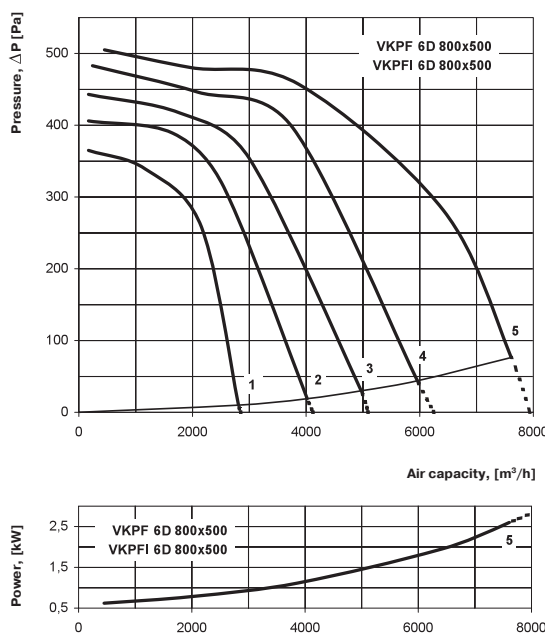
VKPF 4D 700x400

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	82	80	77	70	71	75	73	71	68
L _{WA} to outlet	dBA	86	74	77	75	78	83	81	77	71
L _{WA} to environment	dBA	71	55	64	69	67	70	63	62	59

VKPFI 4D 700x400

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	77	75	70	64	62	73	71	66	64
L _{WA} to outlet	dBA	79	68	70	70	72	76	72	74	67
L _{WA} to environment	dBA	61	41	54	57	53	56	52	53	47

VENTS VKPF / VKPFI



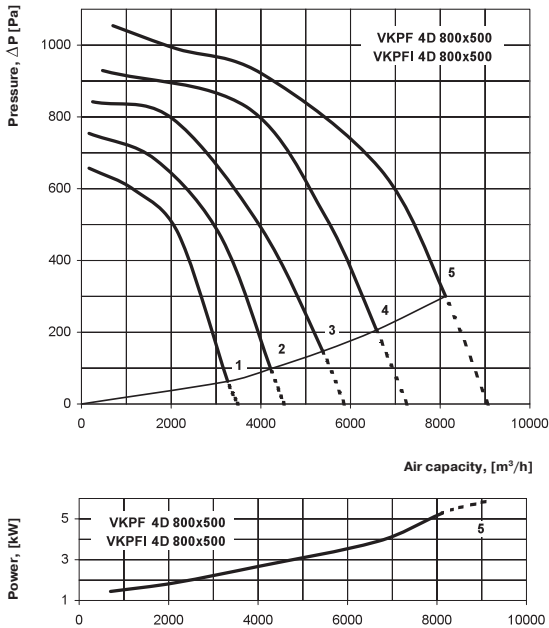
VKPF 6D 800x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	77	64	66	66	70	71	70	66	62
L _{WA} to outlet	dBA	82	64	66	69	76	74	73	73	64
L _{WA} to environment	dBA	64	51	59	58	61	60	55	50	49

VKPFI 6D 800x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L _{WA} to inlet	dBA	70	61	60	60	64	67	66	63	58
L _{WA} to outlet	dBA	79	58	63	64	72	73	70	69	62
L _{WA} to environment	dBA	54	37	45	45	50	48	41	37	39

VENTS VKPF / VKPFI



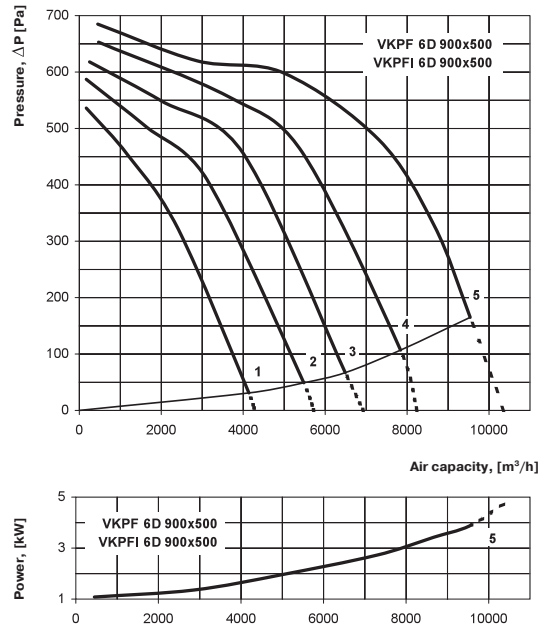
VKPF 4D 800x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	82	71	74	75	70	75	75	70	67
L_{WA} to outlet	dBA	90	72	77	76	82	86	85	80	78
L_{WA} to environment	dBA	73	61	68	67	65	70	66	61	60

VKPFI 4D 800x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	79	68	68	70	65	71	71	66	62
L_{WA} to outlet	dBA	84	65	72	73	77	81	80	75	71
L_{WA} to environment	dBA	64	49	56	55	53	59	50	48	48

VENTS VKPF / VKPFI



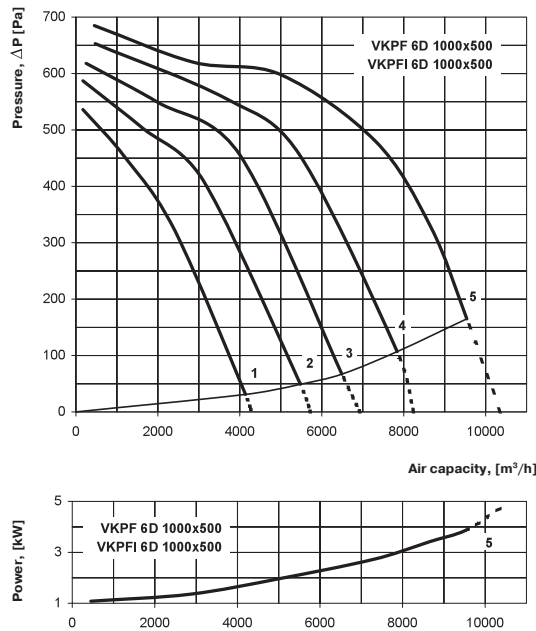
VKPF 6D 900x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	78	70	68	63	72	69	71	68	64
L_{WA} to outlet	dBA	83	71	70	70	80	78	79	74	68
L_{WA} to environment	dBA	65	56	64	60	63	58	56	52	51

VKPFI 6D 900x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	73	65	64	57	66	68	68	62	57
L_{WA} to outlet	dBA	80	62	66	66	71	74	72	69	65
L_{WA} to environment	dBA	55	45	51	46	52	48	47	41	43

VENTS VKPF / VKPFI



VKPF 6D 1000x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	80	73	68	64	74	71	72	69	66
L_{WA} to outlet	dBA	86	70	71	71	78	78	78	75	71
L_{WA} to environment	dBA	69	59	61	59	65	61	58	53	53

VKPFI 6D 1000x500

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	76	68	62	58	66	66	67	64	60
L_{WA} to outlet	dBA	80	64	64	67	74	75	73	67	67
L_{WA} to environment	dBA	59	46	51	50	53	48	46	42	40