

Series  
**VENTS VKPF**



Inline centrifugal fans with the air flow up to **9540 m<sup>3</sup>/h** for rectangular ducts

Series  
**VENTS VKPFI**



Inline sound- and heat-insulated centrifugal fans with the air flow up to **9540 m<sup>3</sup>/h** for rectangular ducts

■ **Applications**

Supply and exhaust ventilation systems for commercial, office and other public or industrial premises with limited installation space. Designed for connection with 400\*200, 500\*250, 500\*300, 600\*300, 600\*350, 700\*400, 800\*500, 900\*500, 1000\*500 mm rectangular air ducts.

■ **Design**

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

■ **Motor**

The impeller with forward curved blades made of galvanized steel is powered by 4- or 6-pole external rotor

asynchronous motor. Such modification ensures high air flow 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 IP44.

■ **Speed control**

Step speed control with an autotransformer speed controller. Several fans may be connected to one speed controller provided that the total power and operating current do not exceed the rated speed controller parameters.

■ **Mounting**

The fans are designed for inline 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**

Series		Motor modification		Flange diameter [W*H]
<b>VENTS VKPF</b>	I: sound- and heat-insulated casing	Number of poles	Phase	400*200; 500*250; 500*300; 600*300; 600*350; 700*400; 800*500; 900*500; 1000*500
		4 6	<b>E:</b> single phase <b>D:</b> three phases	

**Accessories**



Plate heat exchanger

Silencer

Filters

Heaters

Air flow controller

Mixing chamber

Gravity louvre shutter

Flexible connectors

Speed controllers  
RSA5D-...-M RSA5E-...-T

**Technical data**

	VKPF/ VKPFI 4E 400*200	VKPF/ VKPFI 4D 400*200	VKPF/ VKPFI 4E 500*250	VKPF/ VKPFI 4D 500*250	VKPF/ VKPFI 4E 500*300
Voltage [V/50 Hz]	1~230	3~400	1~230	3~400	1~230
Power [W]	295	282	535	570	710
Current [A]	1.32	0.60	2.49	0.94	3.10
Max. air flow [m <sup>3</sup> /h]	1440	1470	1750	1850	2350
RPM [min <sup>-1</sup> ]	1350	1300	1250	1270	1230
Noise level at 3 m [dBA]	50/42*	52/43*	53/44*	54/44*	57/47*
Transported air temperature [°C]	-25...+40	-25...+45	-20...+40	-20...+40	-25...+70
Protection rating	IPX4	IPX4	IPX4	IPX4	IPX4

\*Parameter for VKPFI model

**Technical data**

	VKPF/ VKPFI 4D 500*300	VKPF/ VKPFI 4E 600*300	VKPF/ VKPFI 4D 600*300	VKPF/ VKPFI 4E 600*350	VKPF/ VKPFI 4D 600*350
Voltage [V/50 Hz]	3~400	1~230	3~400	1~230	3~400
Power [W]	855	1555	1560	2840	2460
Current [A]	1.70	7.10	2.73	13.90	3.93
Max. air flow [m <sup>3</sup> /h]	2350	3700	3740	4260	5020
RPM [min <sup>-1</sup> ]	1300	1360	1310	1260	1300
Noise level at 3 m [dBA]	56/47*	58/51*	57/50*	59/51*	60/52*
Transported air temperature [°C]	-20...+50	-25...+50	-25...+65	-20...+40	-20...+40
Protection rating	IPX4	IPX4	IPX4	IPX4	IPX4

\*Parameter for VKPFI model

**Technical data**

	VKPF/ VKPFI 4D 700*400	VKPF/ VKPFI 4D 800*500	VKPF/ VKPFI 6D 800*500	VKPF/ VKPFI 6D 900*500	VKPF/ VKPFI 6D 1000*500
Voltage [V/50 Hz]	3~400	3~400	3~400	3~400	3~400
Power [W]	3630	5850	2790	3870	3870
Current [A]	6.00	9.35	5.18	7.0	7.0
Max. air flow [m <sup>3</sup> /h]	6450	8120	7610	9540	9540
RPM [min <sup>-1</sup> ]	1320	1140	830	930	930
Noise level at 3 m [dBA]	65/56*	67/61*	59/53*	61/55*	61/55*
Transported air temperature [°C]	-25...+40	-25...+40	-20...+50	-20...+55	-20...+55
Protection rating	IPX4	IPX4	IPX4	IPX4	IPX4

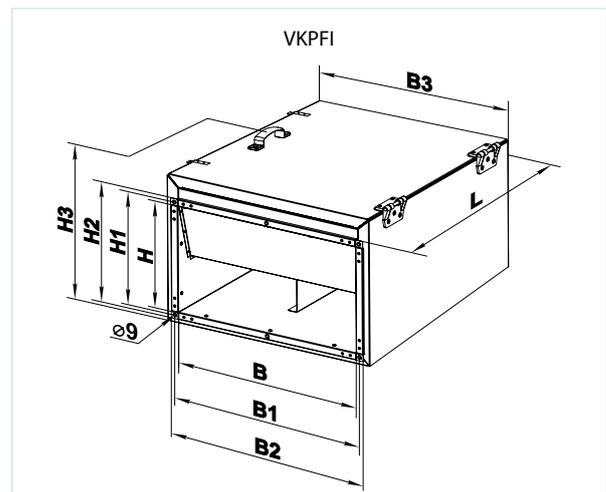
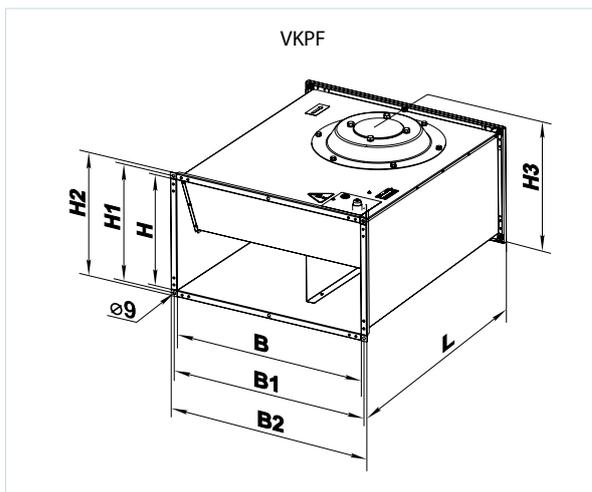
\*Parameter for VKPFI model

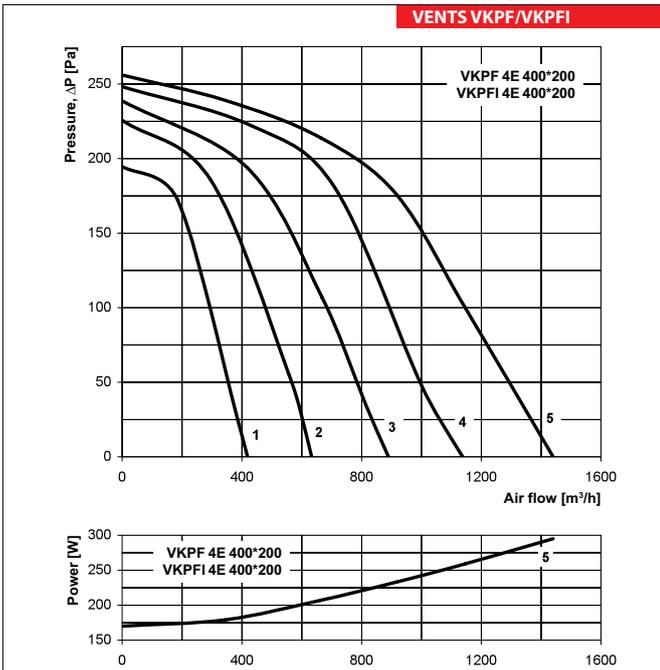
## RECTANGULAR INLINE FANS

### Fan overall dimensions

Type	Dimensions [mm]								Mass [kg]
	B	B1	B2	H	H1	H2	H3	L	
VKPF 4E 400*200	400	420	440	200	220	240	255	500	17.5
VKPF 4D 400*200	400	420	440	200	220	240	255	500	17.5
VKPF 4E 500*250	500	520	540	250	270	290	335	640	24
VKPF 4D 500*250	500	520	540	250	270	290	335	640	24
VKPF 4E 500*300	500	520	540	300	320	340	365	680	33
VKPF 4D 500*300	500	520	540	300	320	340	365	680	33
VKPF 4E 600*300	600	620	640	300	320	340	375	680	35
VKPF 4D 600*300	600	620	640	300	320	340	375	680	35
VKPF 4E 600*350	600	620	640	350	370	390	425	735	49.5
VKPF 4D 600*350	600	620	640	350	370	390	425	735	49.5
VKPF 4D 700*400	700	720	740	400	420	440	480	780	60
VKPF 4D 800*500	800	820	840	500	520	540	580	820	74
VKPF 6D 800*500	800	820	840	500	520	540	580	820	70
VKPF 6D 900*500	900	920	940	500	520	540	580	954	90
VKPF 6D 1000*500	1000	1020	1040	500	520	540	580	954	95

Type	Dimensions [mm]									Mass [kg]
	B	B1	B2	B3	H	H1	H2	H3	L	
VKPF 4E 400*200	400	420	440	470	200	220	240	360	500	29
VKPF 4D 400*200	400	420	440	470	200	220	240	360	500	29
VKPF 4E 500*250	500	520	540	570	250	270	290	410	640	40.5
VKPF 4D 500*250	500	520	540	570	250	270	290	410	640	40.5
VKPF 4E 500*300	500	520	540	570	300	320	340	460	680	52.5
VKPF 4D 500*300	500	520	540	570	300	320	340	460	680	52.5
VKPF 4E 600*300	600	620	640	670	300	320	340	480	680	56
VKPF 4D 600*300	600	620	640	670	300	320	340	480	680	56
VKPF 4E 600*350	600	620	640	670	350	370	390	530	735	72
VKPF 4D 600*350	600	620	640	670	350	370	390	530	735	72
VKPF 4D 700*400	700	720	-	800	400	420	-	620	880	103
VKPF 6D 800*500	800	820	-	900	500	520	-	720	935	120
VKPF 4D 800*500	800	820	-	900	500	520	-	720	935	127
VKPF 6D 900*500	900	920	-	1000	500	520	-	720	1000	142
VKPF 6D 1000*500	1000	1020	-	1100	500	520	-	720	1000	150



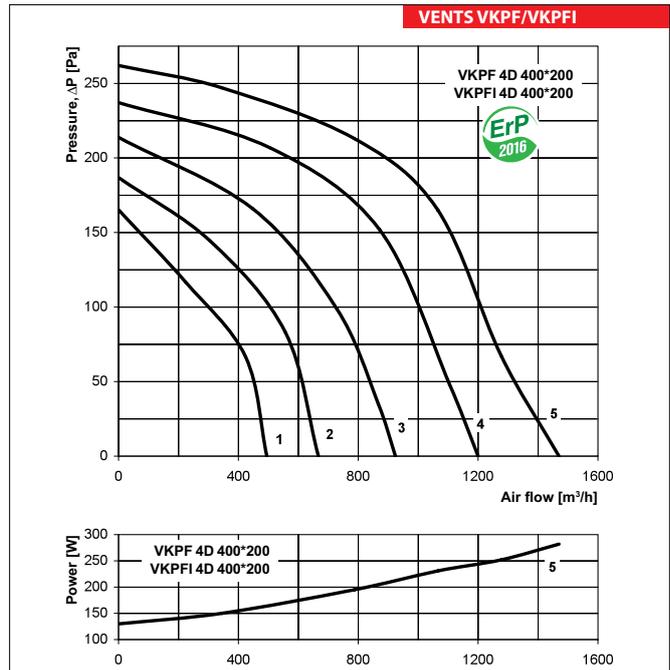


**VKPF 4E 400\*200**

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	69	58	68	63	59	56	53	53	45
L <sub>WA</sub> to outlet	dB(A)	70	53	63	67	62	65	63	58	55
L <sub>WA</sub> to environment	dB(A)	59	34	46	57	52	49	43	40	36

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	66	50	60	58	54	50	49	46	39
L <sub>WA</sub> to outlet	dB(A)	67	48	60	62	58	60	57	54	49
L <sub>WA</sub> to environment	dB(A)	43	24	35	45	41	36	34	29	22

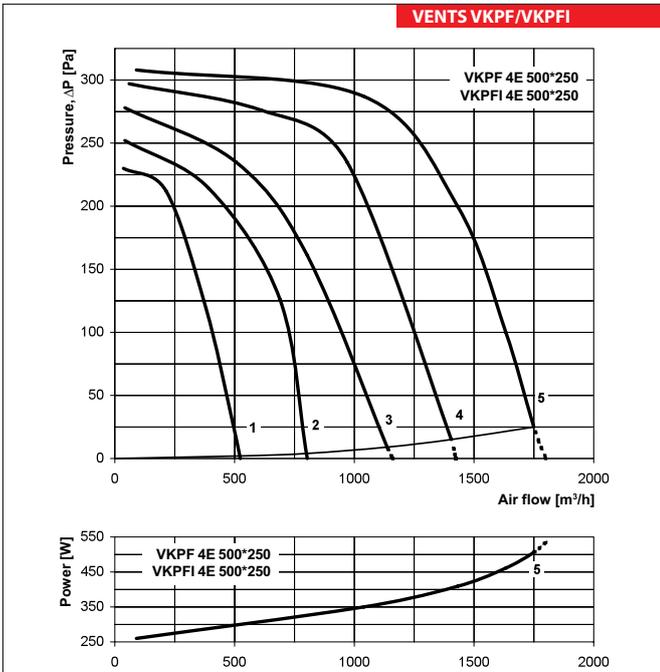


**VKPF 4D 400\*200**

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	72	56	69	65	57	58	57	53	48
L <sub>WA</sub> to outlet	dB(A)	74	54	65	66	61	63	60	61	55
L <sub>WA</sub> to environment	dB(A)	61	34	44	56	52	50	44	40	33

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	65	53	62	60	54	52	50	46	41
L <sub>WA</sub> to outlet	dB(A)	66	48	59	62	58	58	58	53	47
L <sub>WA</sub> to environment	dB(A)	47	24	36	45	38	36	30	29	22

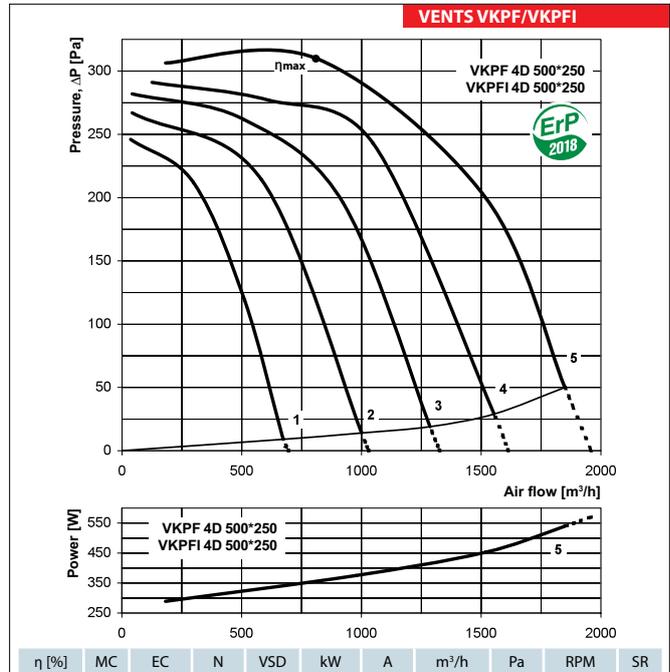


**VKPF 4E 500\*250**

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	72	58	67	62	57	62	64	62	60
L <sub>WA</sub> to outlet	dB(A)	77	57	63	62	66	72	69	68	63
L <sub>WA</sub> to environment	dB(A)	62	41	49	54	53	56	52	51	53

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	68	57	62	58	54	57	58	59	53
L <sub>WA</sub> to outlet	dB(A)	72	50	60	61	60	66	66	61	62
L <sub>WA</sub> to environment	dB(A)	51	29	36	39	43	44	38	37	43



**VKPF 4D 500\*250**

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	74	60	67	64	61	64	62	60	58
L <sub>WA</sub> to outlet	dB(A)	76	57	65	65	67	69	69	68	63
L <sub>WA</sub> to environment	dB(A)	61	41	48	53	53	56	52	50	53

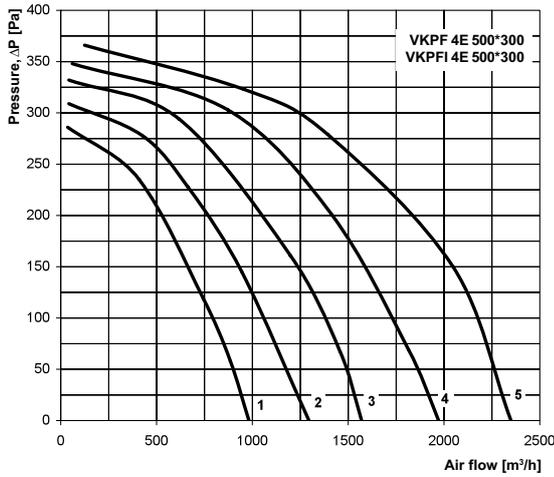
  

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dB(A)	67	55	61	57	52	61	58	57	54
L <sub>WA</sub> to outlet	dB(A)	71	49	58	60	62	67	66	61	60
L <sub>WA</sub> to environment	dB(A)	50	27	38	41	44	45	42	40	43

η [%]	MC	EC	N	VSD	kW	A	m³/h	Pa	RPM	SR
34.3	A	Static	44.9	No	0.210	0.6	820	310	1420	1

# RECTANGULAR INLINE FANS

## VENTS VKPF/VKPF1



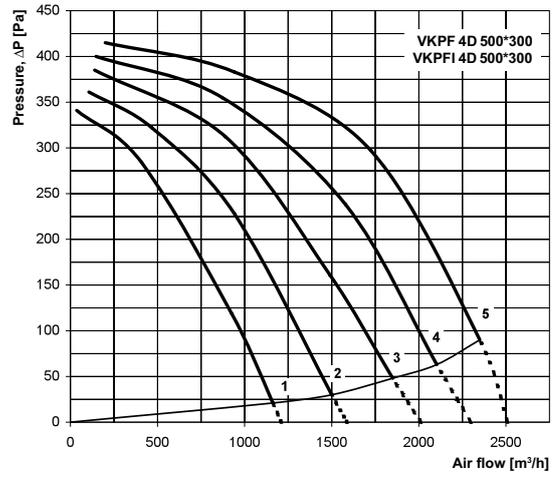
### VKPF 4E 500\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

### VKPF1 4E 500\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

## VENTS VKPF/VKPF1



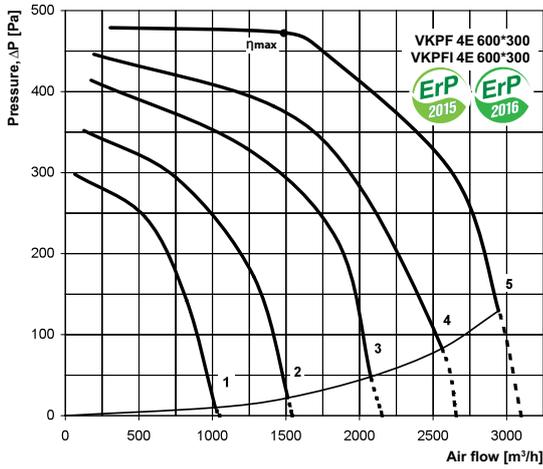
### VKPF 4D 500\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

### VKPF1 4D 500\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

## VENTS VKPF/VKPF1



$\eta$ [%]	MC	EC	N	VSD	kW	A	m³/h	Pa	RPM	SR
35.8	A	Static	43.7	No	0.555	2.33	1482	473	1425	1

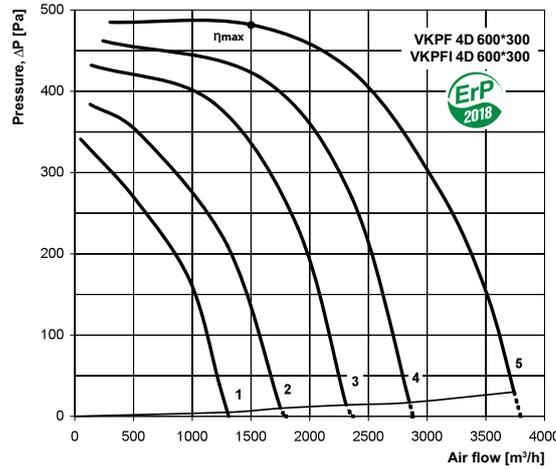
### VKPF 4E 600\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

### VKPF1 4E 600\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

## VENTS VKPF/VKPF1



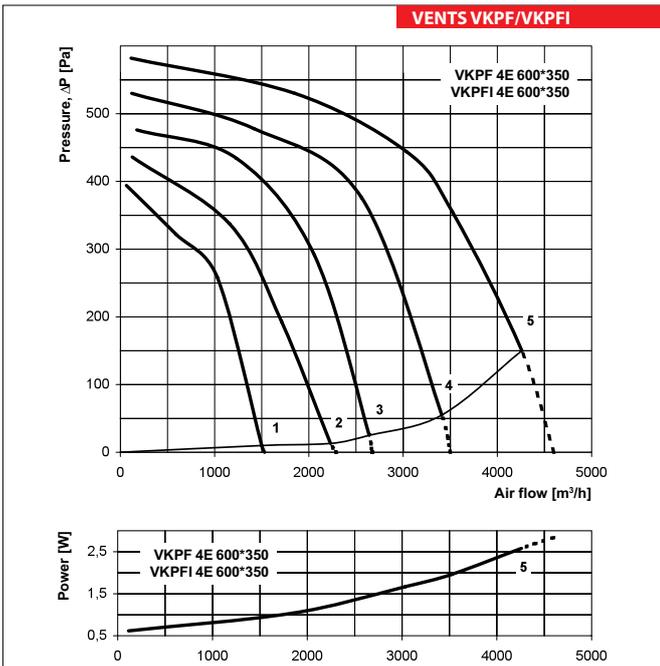
$\eta$ [%]	MC	EC	N	VSD	kW	A	m³/h	Pa	RPM	SR
40.6	A	Static	48.8	No	0.510	1.9	1508	485	1440	1

### VKPF 4D 600\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

### VKPF1 4D 600\*300

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			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

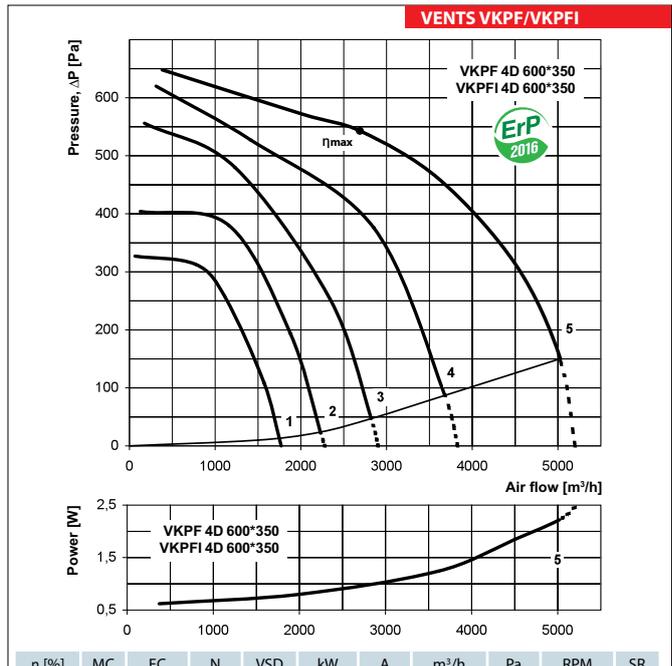


**VKPF 4E 600\*350**

Sound-power level		Octave-frequency band [Hz]								
	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

Sound-power level		Octave-frequency band [Hz]								
	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



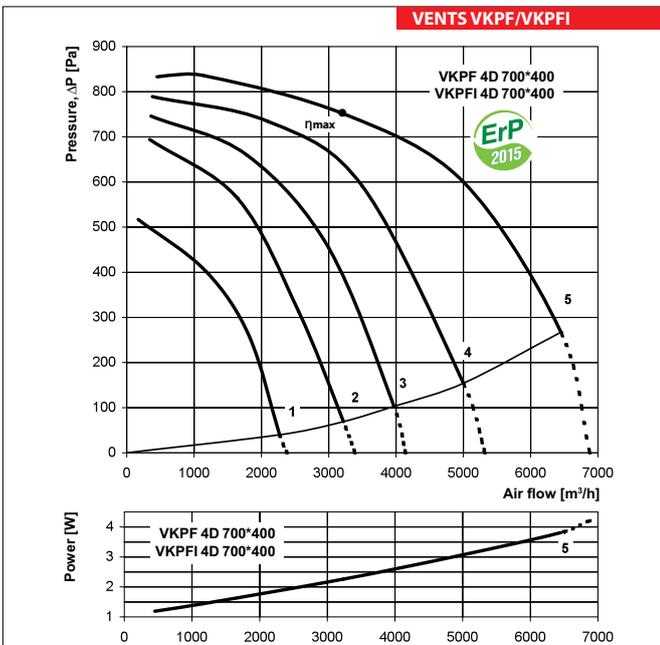
**VKPF 4D 600\*350**

Sound-power level		Octave-frequency band [Hz]								
	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

Sound-power level		Octave-frequency band [Hz]								
	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

$\eta$ [%]	MC	EC	N	VSD	kW	A	m³/h	Pa	RPM	SR
36.9	A	Static	43	No	1.120	2.56	2693	542	1410	1

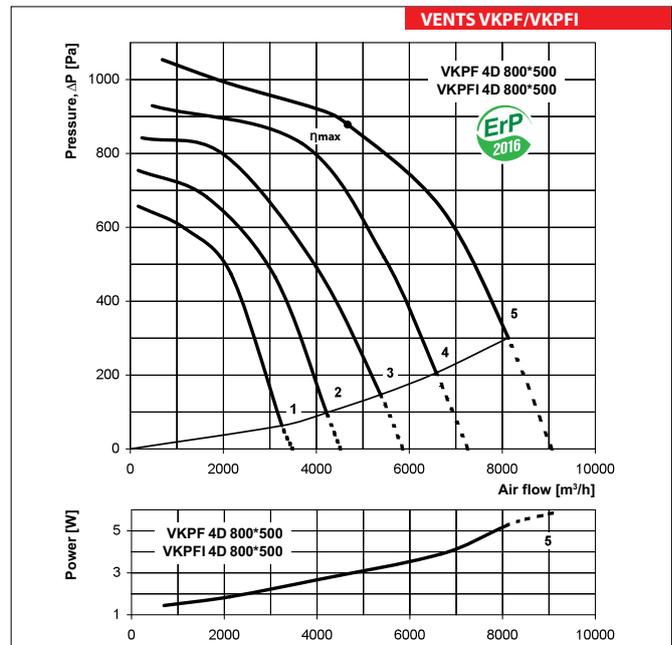


**VKPF 4D 700\*400**

Sound-power level		Octave-frequency band [Hz]								
	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

Sound-power level		Octave-frequency band [Hz]								
	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



**VKPF 4D 800\*500**

Sound-power level		Octave-frequency band [Hz]								
	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

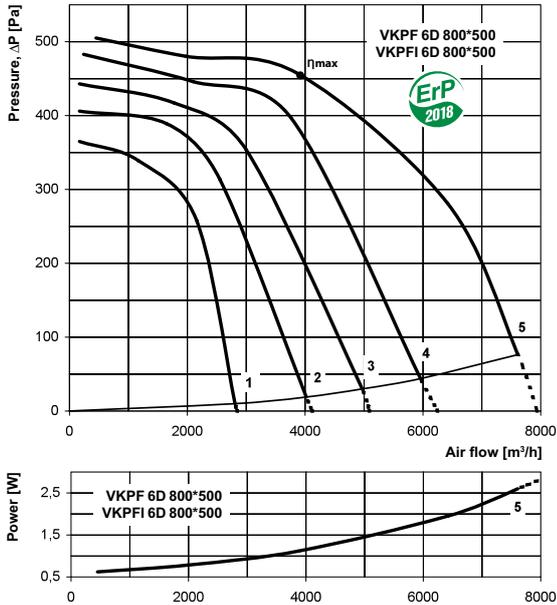
  

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	79	68	68	70	65	71	71	66	62
$L_{WA}$ to outlet	dBA	84	65	72	73	77	81	80	75	71
$L_{WA}$ to environment	dBA	64	49	56	55	53	59	50	48	48

$\eta$ [%]	MC	EC	N	VSD	kW	A	m³/h	Pa	RPM	SR
42.3	A	Static	45.9	No	2.743	4.9	4648	881	1330	1

# RECTANGULAR INLINE FANS

## VENTS VKPF/VKPI



η [%]	MC	EC	N	VSD	kW	A	m³/h	Pa	RPM	SR
43.6	A	Static	49.5	No	1.150	2.9	3870	457	940	1

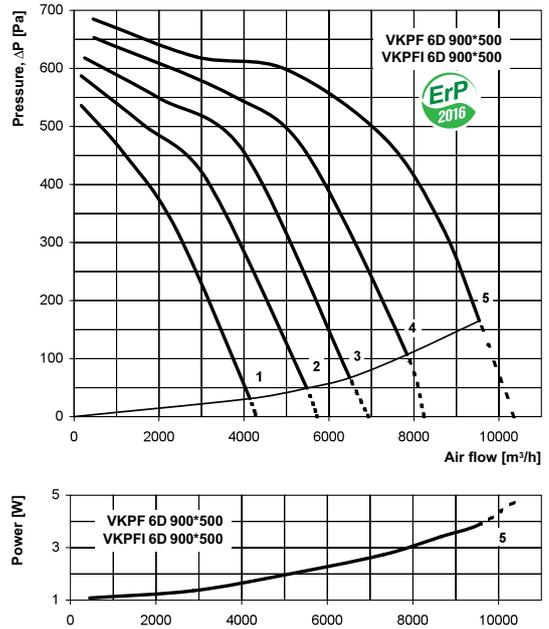
### VKPF 6D 800\*500

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

### VKPIFI 6D 800\*500

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

## VENTS VKPF/VKPI



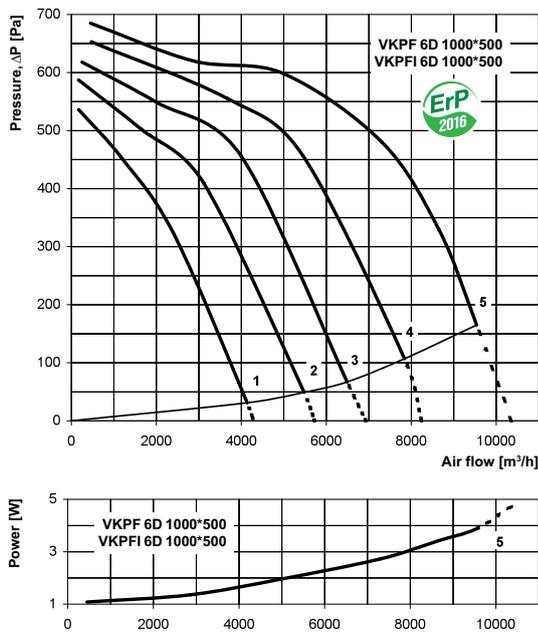
### VKPF 6D 900\*500

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

### VKPIFI 6D 900\*500

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

## VENTS VKPF/VKPI

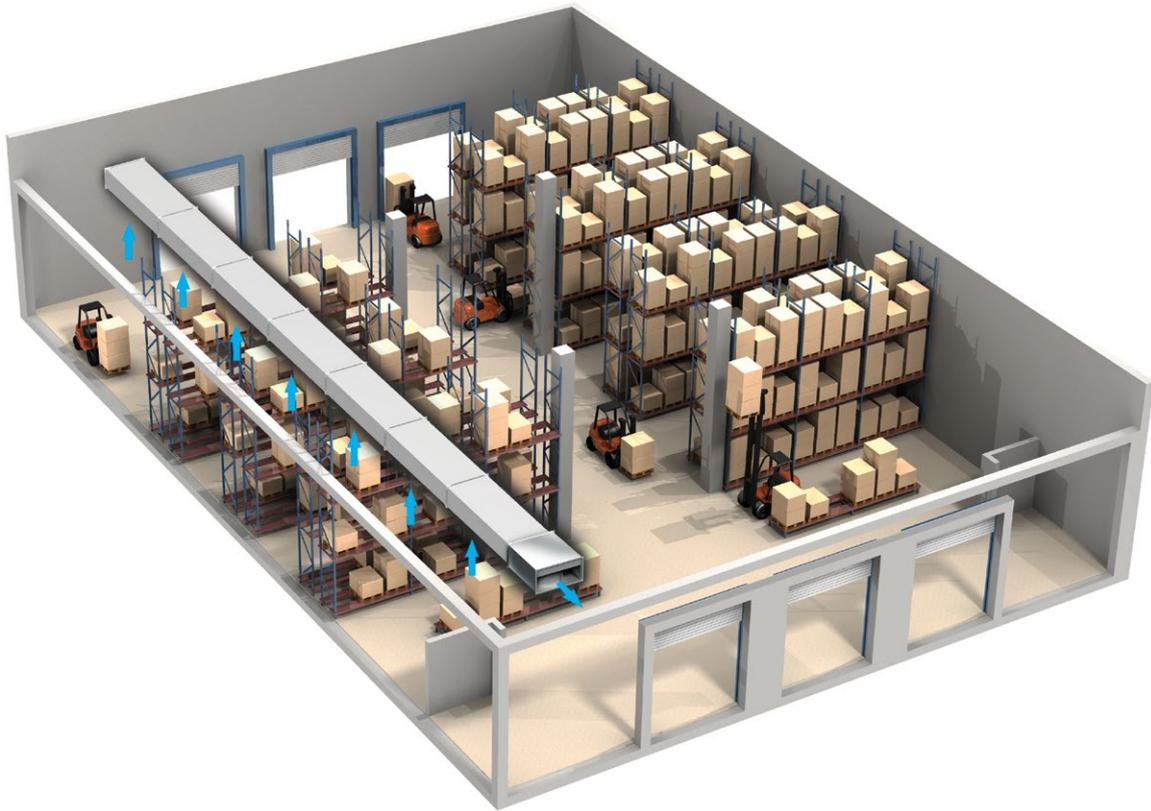


### VKPF 6D 1000\*500

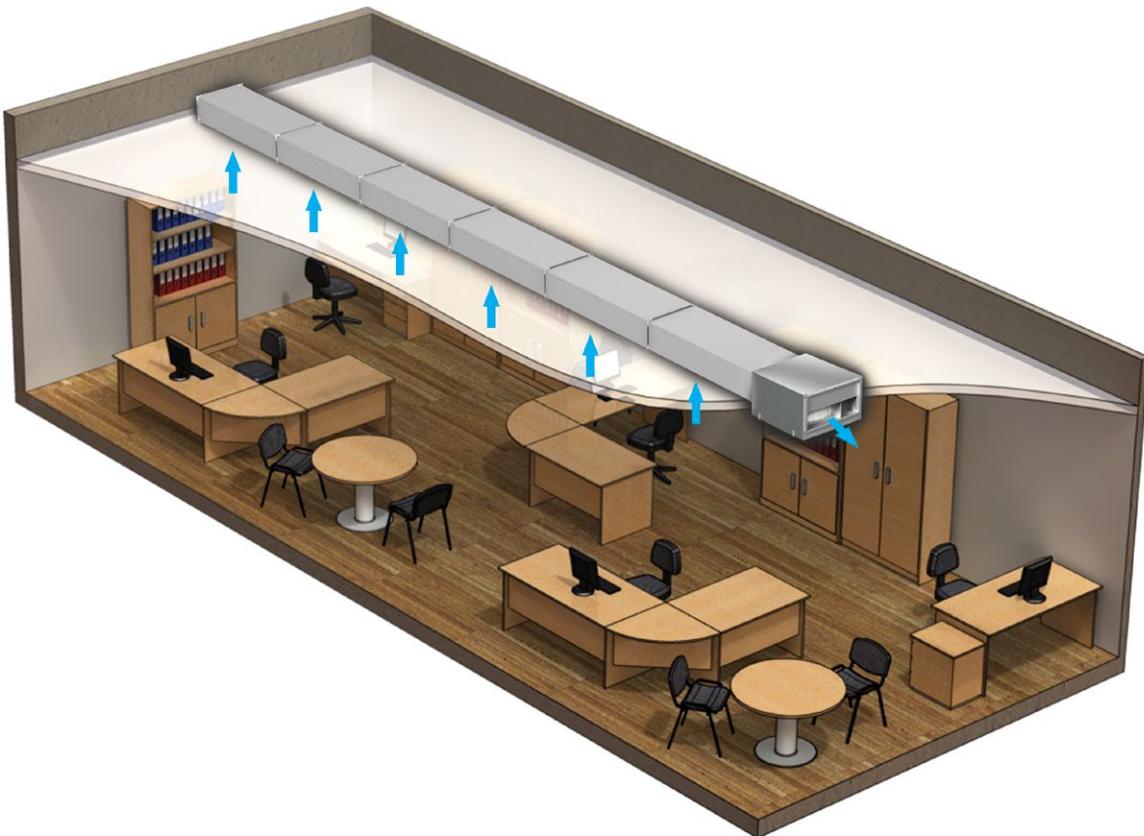
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	80	73	68	64	74	71	72	69	66
L <sub>WA</sub> to outlet	dBA	86	70	71	71	78	78	78	75	71
L <sub>WA</sub> to environment	dBA	69	59	61	59	65	61	58	53	53

### VKPIFI 6D 1000\*500

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



VKPF fan warehouse ventilation example



VKPF1 fan office ventilation example