

RECTANGULAR INLINE FANS

Series  
**VENTS VKP**



Centrifugal fans with the air capacity up to **2970 m<sup>3</sup>/h** for rectangular ducts

Series  
**VENTS VKP 4D 1000x500**



Centrifugal fans with the air capacity up to **15000 m<sup>3</sup>/h** for rectangular ducts

Series  
**VENTS VKPI**



Centrifugal sound- and heat-insulated fans with the air capacity up to **2970 m<sup>3</sup>/h** for rectangular ducts

■ **Applications**

Supply and exhaust ventilation systems for various premises with a limited mounting space. For connection with 400x200, 500x250, 500x300, 600x300, 600x350, 1000x500 mm the rectangular ducts.

■ **Design**

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

■ **Motor**

Impellers with backward curved impeller blades made of galvanized steel are powered by means of the 2- or 4-pole asynchronous motors with external rotor. Motors are supplied with incorporated overheating

protection with automatic restart or the thermal protection terminals leaded outside for connection to the external protection devices depending on the model, see the wiring diagram motor is equipped with 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**

Smooth or step speed control with a thyristor or 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**

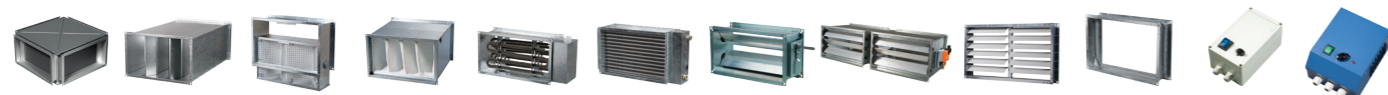
The fans are mounted into the rectangular ducts and require no special fixing in case of direct connection. In case of connection through the flexible connectors the fan is fixed to a building by means of supports, suspension brackets or fixation brackets. Fans can be mounted in any position with respect to the airflow direction (indicated with an arrow on the casing). Access for the fan maintenance shall be provided. The fan is powered through the external terminals. The casing is equipped with the removable access cover for maintenance purposes.

**Designation key:**

Series	Motor modification		Flange diameter [WxH]
	Number of poles	Phase	
<b>VENTS VKP</b>	<b>I</b> – sound- and heat-insulated casing	<b>E</b> – single phase	400x200, 500x250, 500x300, 600x300, 600x350, 1000x500
		<b>D</b> – three phase	


ErP data	
Overall efficiency	η, [%]
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m <sup>3</sup> /h]
Static pressure	[Pa]
Speed	[n/min <sup>-1</sup> ]
Specific ratio	SR

**Accessories**





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**Technical data:**

	VKP / VKPI 2E 400x200 	VKP / VKPI 2E 500x250	VKP / VKPI 4E 500x300	VKP / VKPI 4D 500x300
Voltage [V]	1~ 220-240	1~ 220-240	1~ 220-240	3~ 400
Frequency [Hz]	50	50	50	50
Power [W]	138	305	140	165
Current [A]	0.60	1.32	0.57	0,53
Max. air capacity [m3/h]	930	1720	1700	1620
RPM [min-1]	2600	2550	1390	1600
Noise level at 3 m [dBA]	59 / 51*	61 / 53*	53 / 45*	53 / 45*
Transported air temperature [°C]	-25 +45	-25 +45	-25 +45	-25 +55
Protection rating	IPX4	IPX4	IPX4	IPX4



\* parameter for VKPI fan

**Technical data:**

	VKP / VKPI 4E 600x300	VKP / VKPI 4D 600x300 	VKP / VKPI 4E 600x350 
Voltage [V]	1~ 220-240	3~ 400	1~ 220-240
Frequency [Hz]	50	50	60
Power [W]	220	230	235
Current [A]	0,9	0,52	0,53
Max. air capacity [m3/h]	2470	2530	2630
RPM [min-1]	1400	1360	1600
Noise level at 3 m [dBA]	55 / 47*	53 / 46*	53 / 46*
Transported air temperature [°C]	-25 +45	-25 +70	-25 +65
Protection rating	IP X4	IPX4	IPX4

\* parameter for VKPI fan

**Technical data:**

	VKP / VKPI 4D 600x350 	VKP 4D 1000x500 
Voltage [V]	3~ 400 Δ	3~ 400 Y
Frequency [Hz]	50	60
Power [W]	510	750
Current [A]	1,41	1,44
Max. air capacity [m3/h]	2970	3410
RPM [min-1]	1415	1610
Noise level at 3 m [dBA]	64 / 55*	64 / 55*
Transported air temperature [°C]	-40 +60	-40 +60
Protection rating	IPX4	IP X4

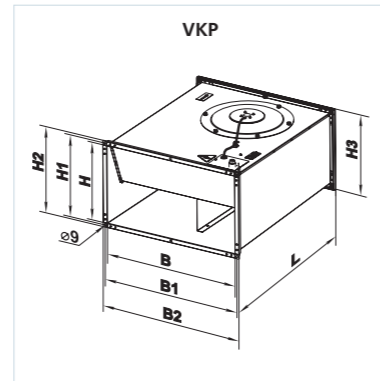
\* parameter for VKPI fan

VENTS VKP / VKPI FAN SERIES

RECTANGULAR INLINE FANS

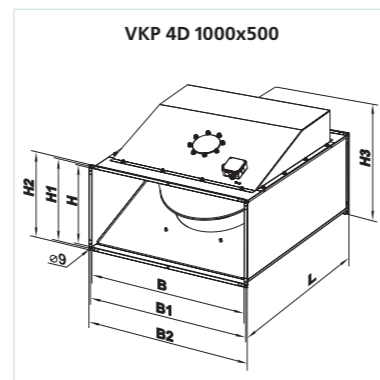
Fan overall dimensions:

Type	Dimensions [mm]								Weight [kg]
	B	B1	B2	H	H1	H2	H3	L	
VKP 2E 400x200	400	420	440	200	220	240	240	500	11.25
VKP 2E 500x250	500	520	540	250	270	290	290	640	17.88
VKP 4E 500x300	500	520	540	300	320	340	340	680	19.8
VKP 4D 500x300	500	520	540	300	320	340	340	680	19.8
VKP 4E 600x300	600	620	640	300	320	340	342	680	27.77
VKP 4D 600x300	600	620	640	300	320	340	342	680	27.77
VKP 4E 600x350	600	620	640	350	370	390	390	735	36.38
VKP 4D 600x350	600	620	640	350	370	390	390	735	36.38



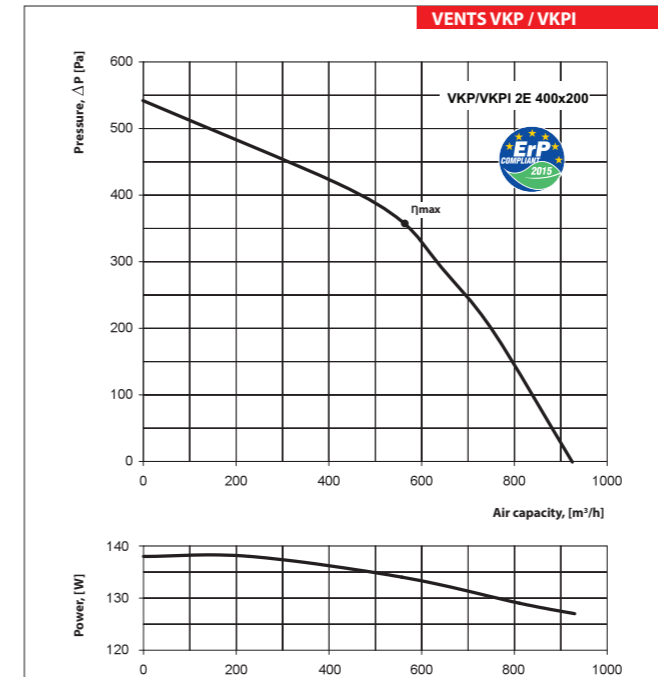
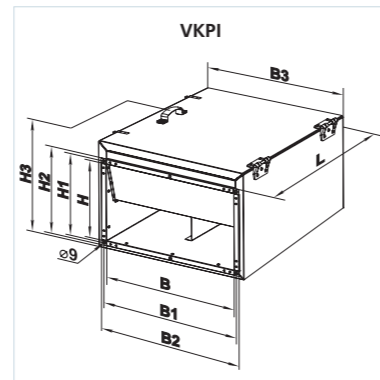
Fan overall dimensions:

Type	Dimensions [mm]								Weight [kg]
	B	B1	B2	H	H1	H2	H3	L	
VKP 4D 1000x500	1000	1020	1040	500	520	540	720	1150	126.0



Fan overall dimensions:

Type	Dimensions [mm]									Weight [kg]
	B	B1	B2	B3	H	H1	H2	H3	L	
VKPI 2E 400x200	400	420	440	500	200	220	240	360	500	24.5
VKPI 2E 500x250	500	520	540	600	250	270	290	410	640	27.6
VKPI 4E 500x300	500	520	540	600	300	320	340	460	680	37.2
VKPI 4D 500x300	500	520	540	600	300	320	340	460	680	37.2
VKPI 4E 600x300	600	620	640	700	300	320	340	460	680	43.5
VKPI 4D 600x300	600	620	640	700	300	320	340	460	680	43.5
VKPI 4E 600x350	600	620	640	700	350	370	390	530	735	56.2
VKPI 4D 600x350	600	620	640	700	350	370	390	530	735	56.2

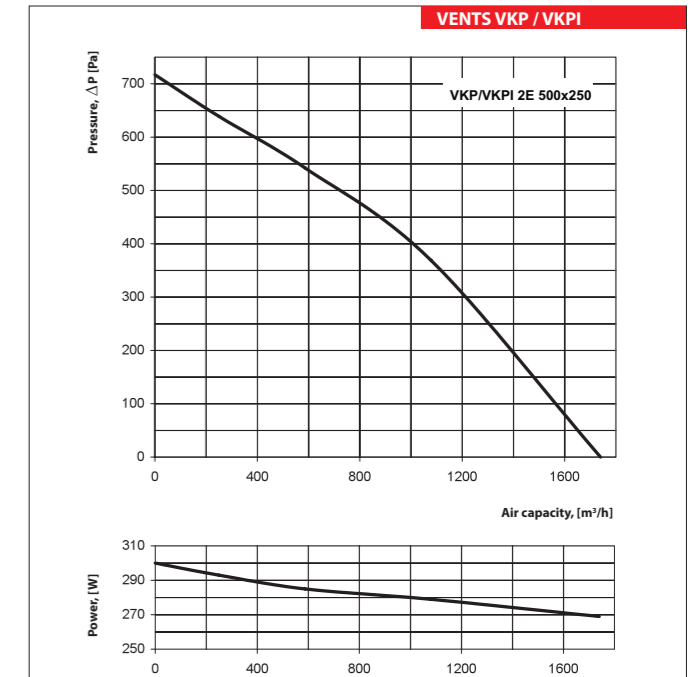


**VKP 2E 400x200**  
Sound-power level

	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	71	54	63	68	64	64	58	54	45
L <sub>WA</sub> to outlet	dBA	75	53	62	66	68	69	66	60	48
L <sub>WA</sub> to environment	dBA	58	36	48	56	54	50	46	41	32

**VKPI 2E 400x200**

	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	65	45	57	60	60	57	53	49	43
L <sub>WA</sub> to outlet	dBA	70	47	59	61	66	64	60	55	43
L <sub>WA</sub> to environment	dBA	48	26	37	45	43	35	32	29	22

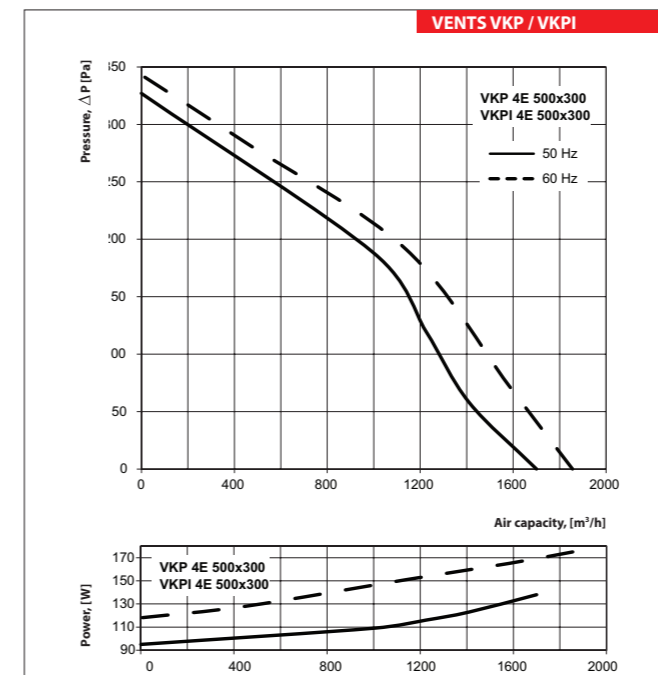


**VKP 2E 500x250**  
Sound-power level

	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	69	60	68	60	56	56	49	46	46
L <sub>WA</sub> to outlet	dBA	70	54	65	64	63	60	56	49	44
L <sub>WA</sub> to environment	dBA	53	41	48	47	44	40	38	33	35

**VKPI 2E 500x250**

	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	62	52	60	56	51	50	43	42	40
L <sub>WA</sub> to outlet	dBA	63	48	59	60	55	57	53	45	39
L <sub>WA</sub> to environment	dBA	41	27	35	37	31	29	27	25	27



**VKP 4E 500x300**  
Sound-power level

	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	69	58	63	64	55	57	58	51	46
L <sub>WA</sub> to outlet	dBA	73	57	60	72	65	65	64	57	48
L <sub>WA</sub> to environment	dBA	56	44	52	51	51	49	48	43	33

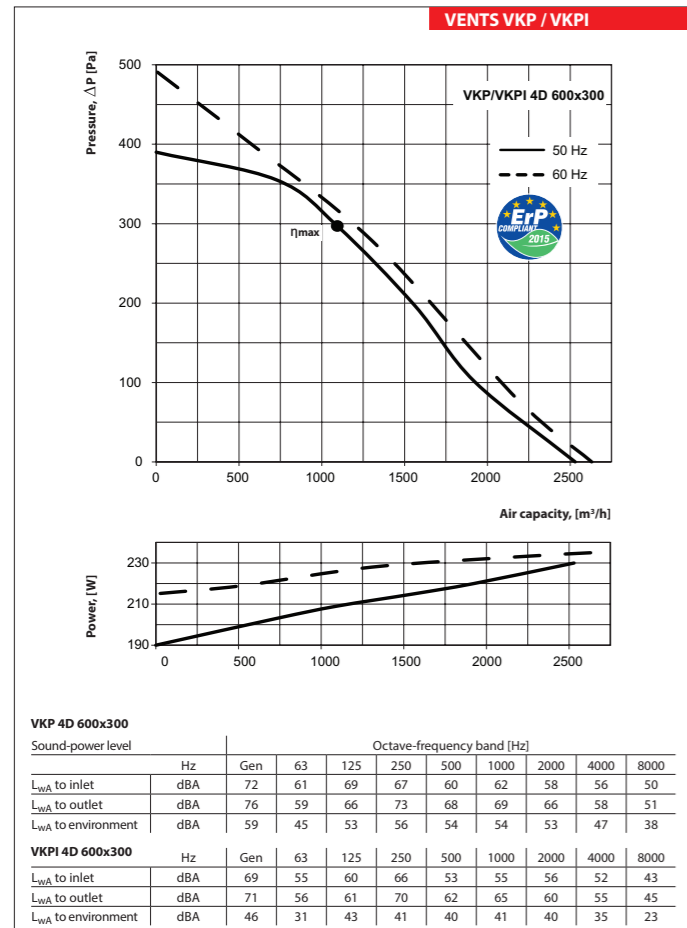
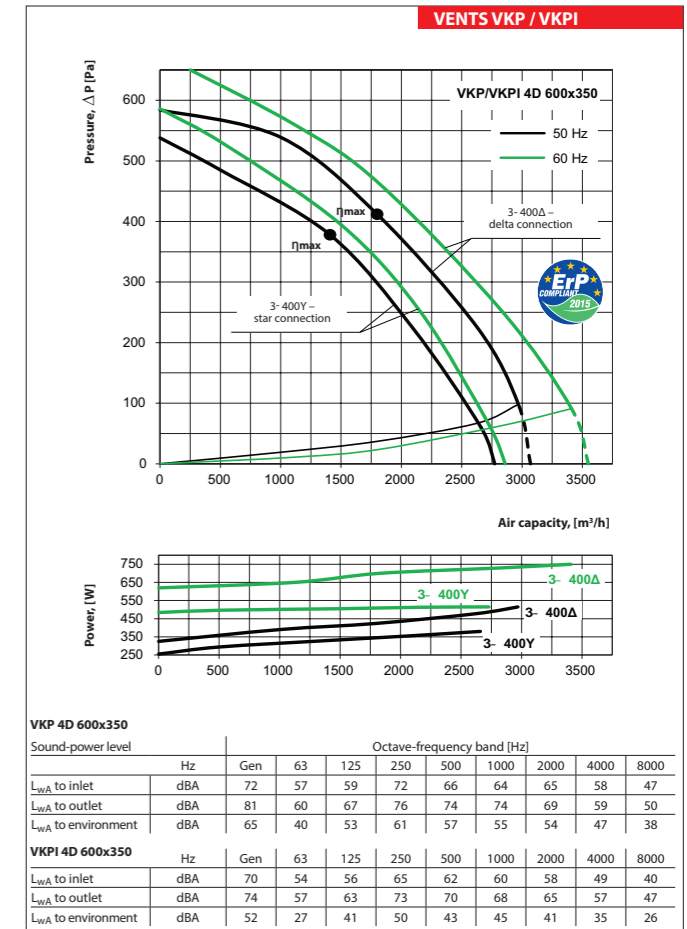
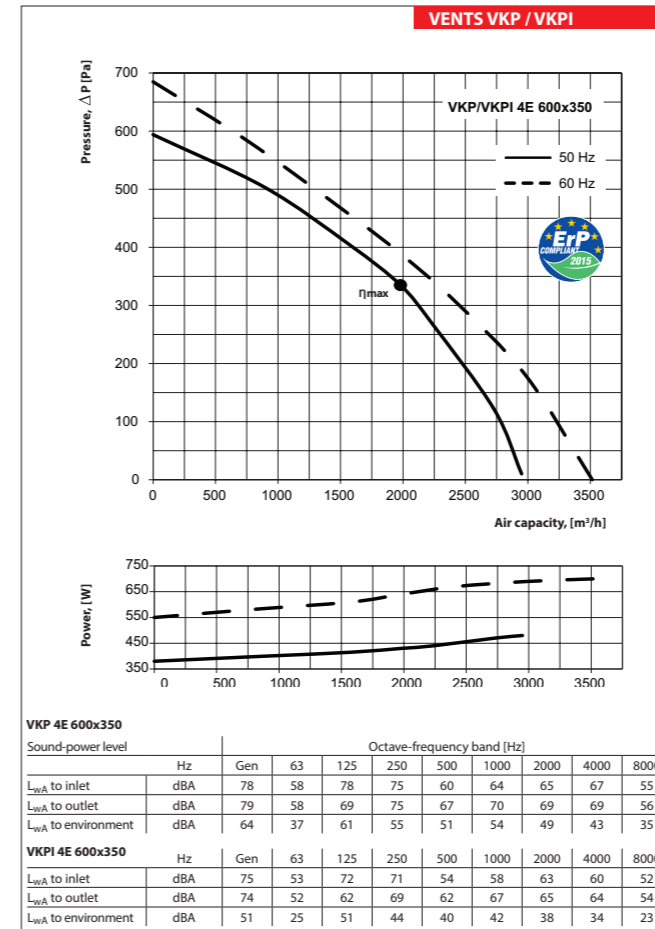
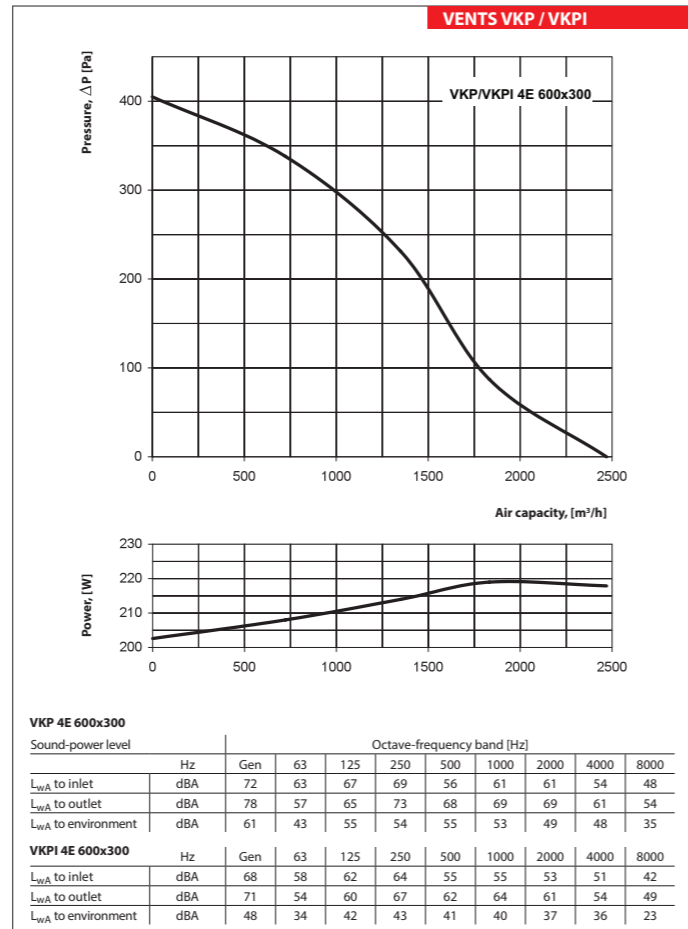
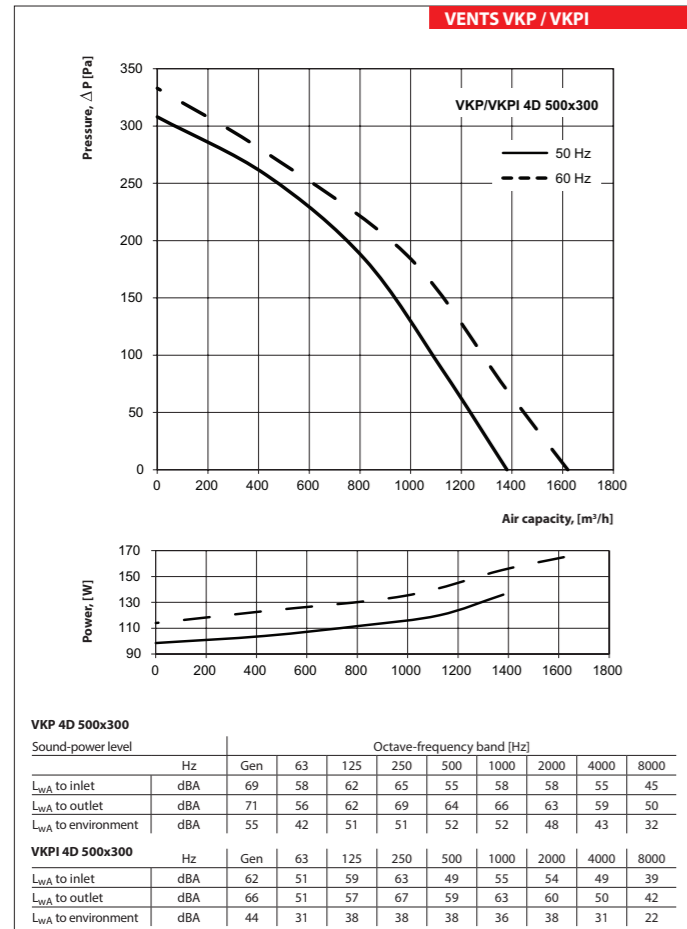
**VKPI 4E 500x300**

	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	64	51	59	60	48	55	51	49	40
L <sub>WA</sub> to outlet	dBA	70	50	55	64	59	62	59	50	43
L <sub>WA</sub> to environment	dBA	44	31	37	40	39	38	35	32	20

**VKP 2E 400x200**

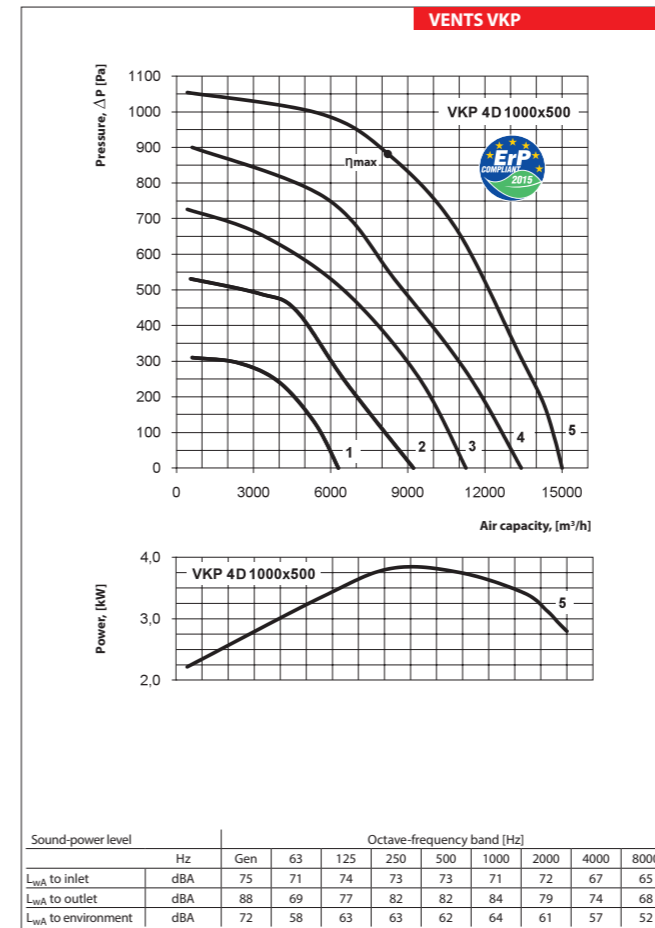
η <sub>v</sub> [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
38.9	A	Static	58.1	No	0.148	0.65	560	362	2550	1

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**VKP 4D 600x300**

η <sub>p</sub> [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
44.1	A	Static	61.7	No	0.209	0.65	1094	297	1375	1



**VKP 4E 600x350**

η <sub>p</sub> [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
43.7	A	Static	58.1	No	0.430	2.17	1980	335	1390	1

**VKP 4D 600x350**

η <sub>p</sub> [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
49.5	A	Static	64	No	0.424	1.32	1799	412	1415	1
45.7	A	Static	61.3	No	0.330	0.55	1409	378	1380	1

**VKP 4D 1000x500**

η <sub>p</sub> [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
55.5	A	Static	60.1	No	3.710	6.1	8260	880	1360	1

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