Series
VENTS VKM 100-315



Series
VENTS VKM 355-450



Inline centrifugal fans in steel casing with air flow
up to **5300 m³/h**

Applications
Supply and exhaust ventilation systems for commercial, office and other public or industrial premises. The steel casing provides reliable operation in case of outdoor installation. For premises with high requirements to the noise level we suggest units in low-noise modification (VKM...Q).

Design
The fan casing is made of steel with polymeric coating.

Motor
The impeller with backward curved blades is powered by the single phase motor with external rotor and overheating protection with automatic restart. Some standard sizes are available with high-powered motors (VKMS). **The VKM...E models are equipped with an energy-efficient motor with low energy demand.** The motor is equipped with ball bearings for long service life designed for at least 40000 hours. For precise features, safe operation and low noise, each turbine is dynamically balanced while assembly. Motor protection rating is IP44.

Speed control
Smooth or step speed control with a thyristor or 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. The VKM...P models are equipped with a built-in speed controller (available for diameters 100...315).

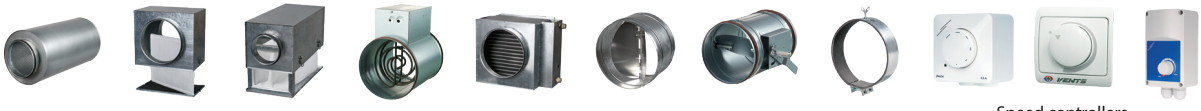
Mounting
Mounting to wall or ceiling at any angle is performed with fastening brackets supplied with the unit. The fan is powered through the external terminal box. Electric connection and installation shall be performed in compliance with the manual and wiring diagram on the terminal box.

VKM fan with electronic temperature and control module
The ideal solution for ventilation of the premises requiring permanent temperature control, i.e. greenhouses. The fan with the electronic temperature and speed control module provides automatic control of the motor speed (air flow) depending on air temperature in the air duct or in the room.
The front panel of the electronic module has the following control knobs:
– speed control knob for setting the motor speed
– thermostat control knob for setting the temperature set point
– thermostat indicator light
VKM...Un - the model with an external temperature sensor fixed on a 4 m cable (Un/U2n option). The temoerature sensor has mechanial protection.

Designation key

Series		Air duct diameter	Options
VENTS VKM	**S**: high-powered motor	100; 125; 150; 160; 200; 250; 315; 355; 400; 450	**E**: low energy demand motor. **Q**: low-powered motor. **Un**: speed controller with an electronic thermostat and a temperature sensor fixed on a 4-meter cable. Temperature-based operation logic. **U2n**: speed controller with an electronic thermostat and a temperature sensor fixed on a 4-meter cable. Temperature-based switching on/off. **R1**: power cord with a mains plug. **P**: integrated smooth speed controller.

Accessories



Silencer | Filters | Heaters | Backdraft damper | Air shutter | Clamp | RS...PS | Speed controllers RS-1-400 | RS-...-T

Fan overall dimensions

Type	Dimensions [mm]								Weight [kg]	Fig. no.
	ØD	ØD1	B	B1	L	L1	L2	L3		
VKM 100 Q	99	245	299	259	195	20	20	30	2.9	1
VKM 100	99	245	299	259	190	20	20	30	3.2	1
VKM 125 Q	123	255	310	270	205	20	25	30	2.9	1
VKM 125	123	255	310	270	205	20	25	30	3.2	1
VKM 150	149	274	330	290	170	20	20	30	5.1	1
VKMS 150	149	345	395	355	230	20	20	40	5.6	1
VKM 160	159	305	360	320	220	25	25	30	5.0	1
VKMS 160	158	340	390	350	245	25	20	40	6.4	1
VKM 200	198	345	395	355	245	25	25	40	6.6	1
VKMS 200	198	345	395	355	245	25	25	40	8.3	1
VKM 250 E	248	345	395	355	250	25	30	40	6.2	1
VKM 250	248	345	395	355	245	25	25	40	8.4	1
VKM 315	314	405	455	415	260	30	30	40	8.0	1
VKMS 315	314	405	455	415	290	30	30	40	8.8	1
VKM 355 Q	353	460	522	522	506	60	60	70	18.8	2
VKM 400	398	570	663	634	570	60	60	70	25.1	2
VKM 450	448	608	700	670	644	60	60	80	27.26	2

VKM 100 – VKM 315

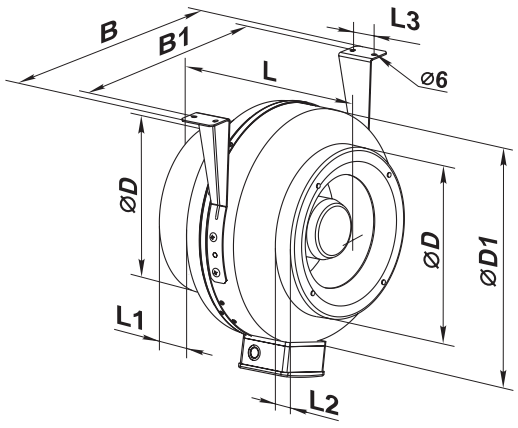


Fig. 1

VKM 355 – VKM 450

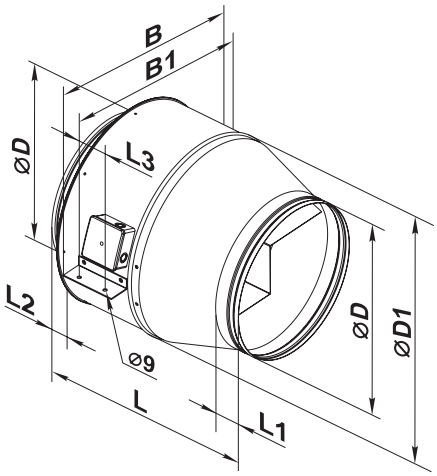


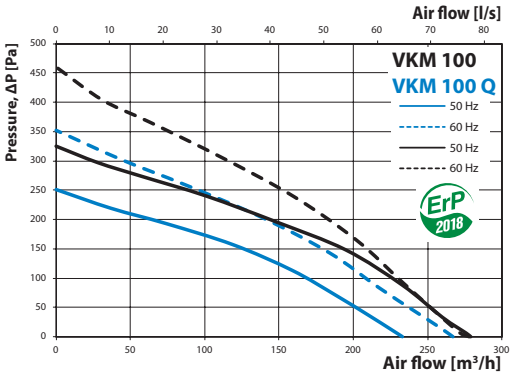
Fig. 2

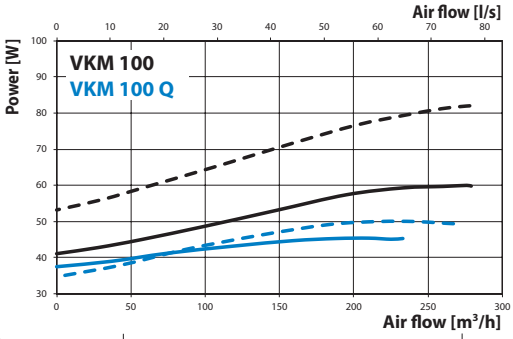
Technical data

	VKM 100 Q		VKM 100	
Nominal voltage [VAC]	1~220-240			
Frequency [Hz]	50	60	50	60
Power [W]	45	50	60	82
Current [A]	0.24	0.23	0.28	0.36
Max. air flow [m³/h]	233	267	279	278
RPM [min⁻¹]	2780	3300	2840	3320
Sound pressure level @3m [dB(A)]	38	39	40	41
Transported air temperature [°C]	-25...+45			
SEC class	C	-	C	-
Protection rating	IPX4			
Motors protection rating	IP44			

To meet the requirements of ErP 2018, a speed controller and local demand control typology must be applied (connect a sensor).

VENTS VKM





VKM 100 Q Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	78	56	70	77	68	63	59	53	43	58	68
L_{WA} to outlet	dBA	77	63	70	75	67	60	56	52	41	57	67
L_{WA} to environment	dBA	59	27	47	49	53	54	51	42	32	38	48

VKM 100 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	84	56	76	82	72	68	65	59	50	63	73
L_{WA} to outlet	dBA	83	63	76	81	71	65	62	57	49	62	72
L_{WA} to environment	dBA	60	29	44	52	55	54	54	44	31	40	50

Technical data

	VKM 125 Q		VKM 125	
Nominal voltage [VAC]	1~220-240			
Frequency [Hz]	50	60	50	60
Power [W]	47	54	64	85
Current [A]	0.25	0.24	0.29	0.37
Max. air flow [m³/h]	326	370	360	357
RPM [min⁻¹]	2760	3240	2840	3300
Sound pressure level @3m [dB(A)]	37	38	40	42
Transported air temperature [°C]	-25...+45			
SEC class	C	-	C	-
Protection rating	IPX4			
Motors protection rating	IP44			

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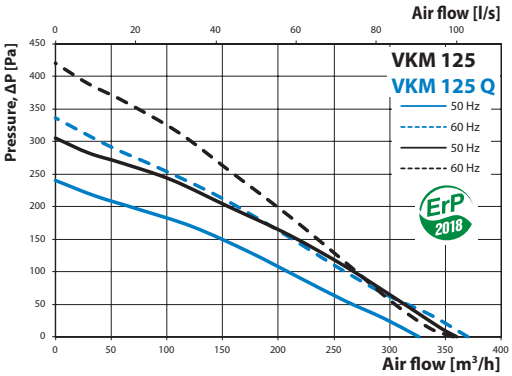
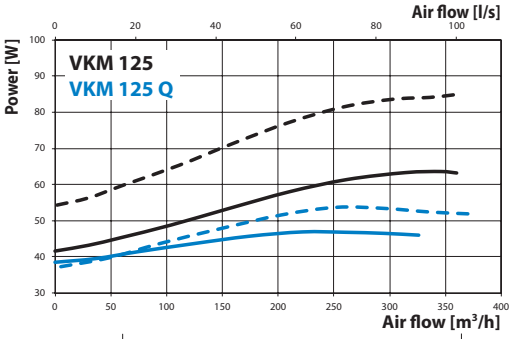
VENTS VKM





VKM 125 Q Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	79	57	71	77	69	64	60	54	43	58	68
L_{WA} to outlet	dBA	78	64	71	76	68	61	57	53	41	58	68
L_{WA} to environment	dBA	58	27	46	48	52	53	50	41	32	37	47

VKM 125 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	83	60	75	81	73	67	63	57	46	62	72
L_{WA} to outlet	dBA	82	67	75	80	72	64	60	55	44	61	71
L_{WA} to environment	dBA	61	28	49	51	55	57	53	44	34	40	50

Technical data

	VKM 150		VKMS 150	
Nominal voltage [VAC]	1~220-240			
Frequency [Hz]	50	60	50	60
Power [W]	100	125	127	174
Current [A]	0.45	0.55	0.55	0.76
Max. air flow [m³/h]	580	610	710	750
RPM [min⁻¹]	2700	3100	2760	3150
Sound pressure level @3m [dB(A)]	45	46	48	49
Transported air temperature [°C]	-25...+45			
SEC class	C	-	C	-
Protection rating	IPX4			
Motors protection rating	IP44			

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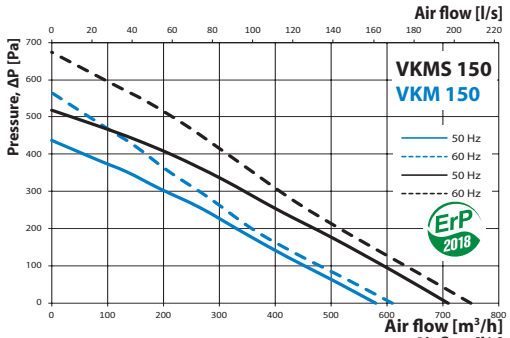
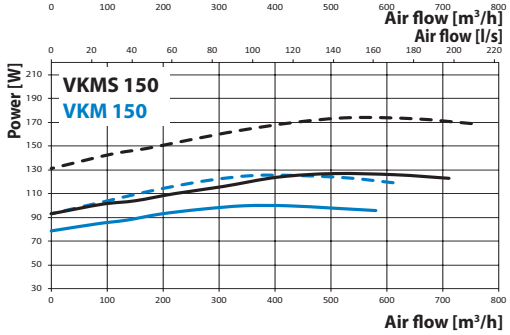
VENTS VKM





VKM 150 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	90	53	87	86	75	74	71	68	54	69	79
L_{WA} to outlet	dBA	90	53	88	85	72	71	66	65	52	69	79
L_{WA} to environment	dBA	66	28	49	58	60	60	60	50	37	45	55

VKMS 150 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	94	56	91	90	79	78	75	71	57	74	84
L_{WA} to outlet	dBA	94	56	92	89	76	75	69	68	55	74	84
L_{WA} to environment	dBA	68	29	51	61	63	63	63	52	39	48	58

Technical data

	VKM 160		VKMS 160	
Nominal voltage [VAC]	1~220-240			
Frequency [Hz]	50	60	50	60
Power [W]	99	137	121	170
Current [A]	0.44	0.61	0.53	0.75
Max. air flow [m³/h]	567	575	690	730
RPM [min⁻¹]	2770	3160	2800	3210
Sound pressure level @3m [dB(A)]	45	47	48	49
Transported air temperature [°C]	-25...+45			
SEC class	C	-	C	-
Protection rating	IPX4			
Motors protection rating	IP44			

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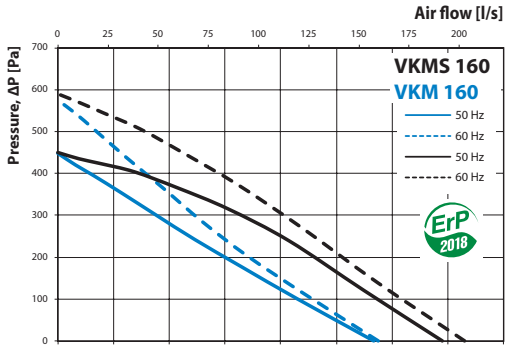
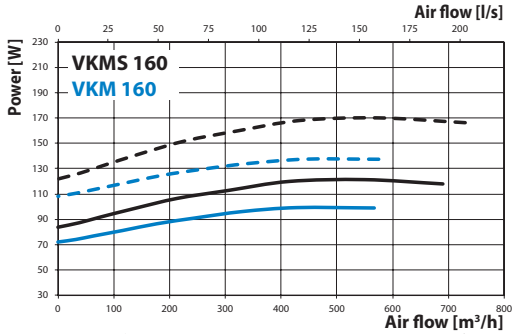
VENTS VKM





VKM 160 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	88	52	85	84	74	73	70	67	53	68	78
L_{WA} to outlet	dBA	87	51	85	82	70	69	64	63	50	67	77
L_{WA} to environment	dBA	65	28	48	58	58	60	59	51	38	45	55

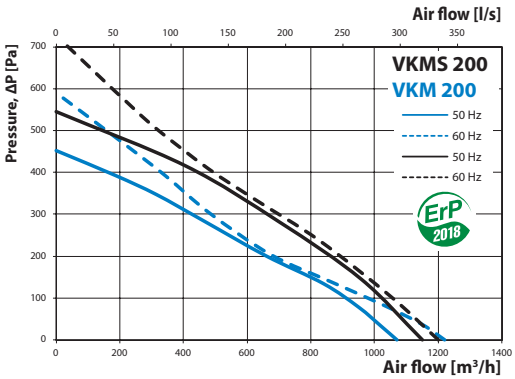
VKMS 160 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	93	55	90	89	78	77	74	71	56	73	83
L_{WA} to outlet	dBA	93	55	92	88	75	74	69	68	54	73	83
L_{WA} to environment	dBA	68	29	51	60	63	63	63	52	38	48	58

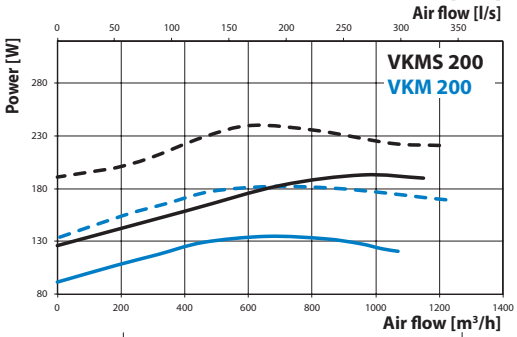
Technical data

	VKM 200		VKMS 200	
Nominal voltage [VAC]	1~220-240			
Frequency [Hz]	50	60	50	60
Power [W]	135	182	193	240
Current [A]	0.59	0.79	0.84	1.05
Max. air flow [m³/h]	1070	1220	1150	1200
RPM [min⁻¹]	2710	3120	2780	2850
Sound pressure level @3m [dB(A)]	48	50	49	49
Transported air temperature [°C]	-25...+45			
SEC class	C	-	-	-
Protection rating	IPX4			
Motors protection rating	IP44			

To meet the requirements of ErP 2018, a speed controller and local demand control typology must be applied (connect a sensor).

VENTS VKM





VKM 200 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	90	49	78	87	81	81	82	74	63	69	79
L_{WA} to outlet	dBA	87	46	77	81	79	79	82	74	64	67	77
L_{WA} to environment	dBA	68	29	52	60	63	63	62	53	39	48	58

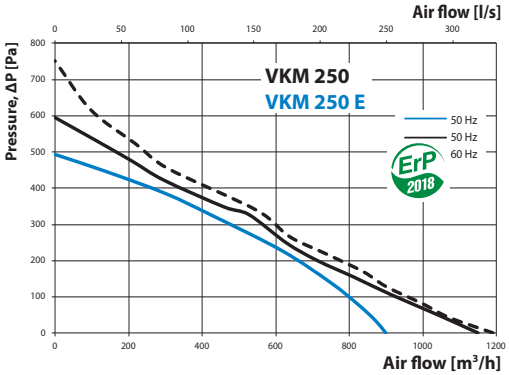
VKMS 200 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	95	56	92	91	79	78	75	72	57	74	84
L_{WA} to outlet	dBA	94	56	92	89	75	74	69	68	54	74	84
L_{WA} to environment	dBA	70	29	52	62	64	64	64	53	39	49	59

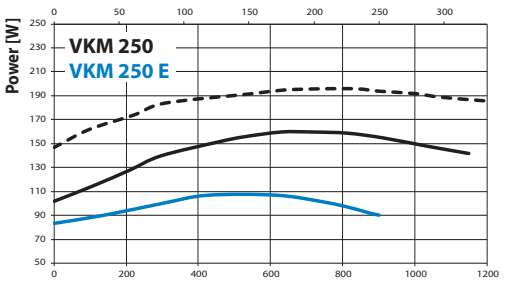
Technical data

	VKM 250 E	VKM 250	
Nominal voltage [VAC]	1~220-240		
Frequency [Hz]	50	50	60
Power [W]	95	160	196
Current [A]	0.47	0.70	0.86
Max. air flow [m³/h]	900	1150	1190
RPM [min⁻¹]	2050	2721	3065
Sound pressure level @3m [dB(A)]	47	50	51
Transported air temperature [°C]	-25...+45		
SEC class	C	-	-
Protection rating	IPX4		
Motors protection rating	IP44		

To meet the requirements of ErP 2018, a speed controller and local demand control typology must be applied (connect a sensor).

VENTS VKM





VKM 250 E Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	89	60	76	83	81	83	79	75	64	68	78
L_{WA} to outlet	dBA	87	63	75	72	80	82	80	75	62	66	76
L_{WA} to environment	dBA	67	34	48	59	62	62	60	49	38	47	57

VKM 250 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	90	61	78	85	83	85	81	77	65	70	80
L_{WA} to outlet	dBA	88	64	77	73	82	84	82	77	63	68	78
L_{WA} to environment	dBA	71	38	52	62	66	65	64	58	44	50	60

Technical data

	VKM 315		VKMS 315	VKMS 315 (220V/60Hz)
Nominal voltage [VAC]		1~220-240		
Frequency [Hz]	50	60	50	60
Power [W]	183	237	295	285
Current [A]	0.79	1.03	1.34	1.23
Max. air flow [m³/h]	1340	1380	1920	1655
RPM [min⁻¹]	2765	3124	2720	3024
Sound pressure level @3m [dB(A)]	53	54	54	56
Transported air temperature [°C]		-25...+45		-25…+50
SEC class		-		
Protection rating		IPX4		IPX4
Motors protection rating		IP44		IP44

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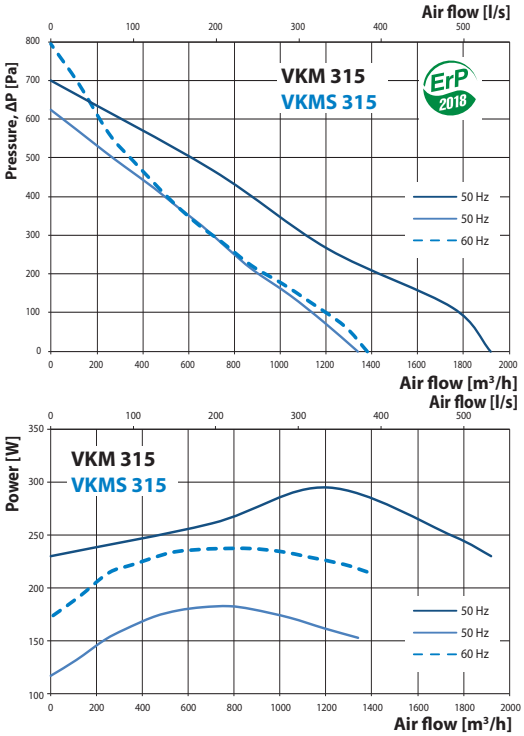
VENTS VKM



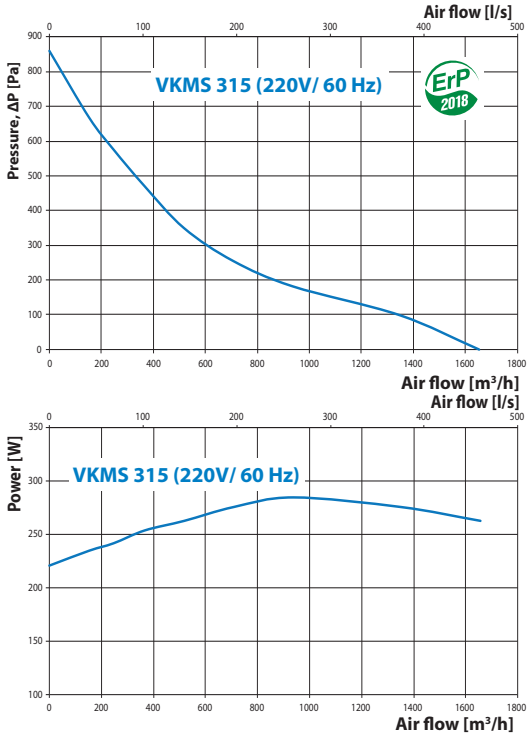
VKM 315
Sound-power level

	Hz	Octave-frequency band [Hz] Gen.	63	125	250	500	1000	2000	4000	8000	LpA, 3 m dBA	LpA, 1 m dBA
L_{WA} to inlet	dBA	92	62	80	87	85	87	83	79	66	71	81
L_{WA} to outlet	dBA	91	66	79	75	84	87	84	79	65	70	80
L_{WA} to environment	dBA	72	37	51	64	67	67	65	53	41	52	62

VKMS 315
Sound-power level

	Hz	Octave-frequency band [Hz] Gen.	63	125	250	500	1000	2000	4000	8000	LpA, 3 m dBA	LpA, 1 m dBA
L_{WA} to inlet	dBA	92	67	81	77	86	88	86	81	66	72	82
L_{WA} to outlet	dBA	92	62	80	87	85	87	83	79	66	71	81
L_{WA} to environment	dBA	75	60	72	70	63	61	52	39	33	54	64

VENTS VKMS



VKMS 315 (220V/60Hz)
Sound-power level

	Hz	Octave-frequency band [Hz] Gen.	63	125	250	500	1000	3150	4000	8000	LpA, 3 m dBA	LpA, 1 m dBA
L_{WA} to inlet	dBA	92	67	81	77	86	88	86	81	66	72	82
L_{WA} to outlet	dBA	92	62	80	87	85	87	83	79	66	71	81
L_{WA} to environment	dBA	77	55	75	71	57	48	41	41	34	56	66

Technical data

	VKM 355 Q		VKM 400	
Nominal voltage [VAC]	1~220-240			
Frequency [Hz]	50	60	50	60
Power [W]	233	297	460	673
Current [A]	1.06	1.30	2.23	3.05
Max. air flow [m³/h]	2250	2350	3090	3500
RPM [min⁻¹]	1375	1620	1370	1585
Sound pressure level @3m [dB(A)]	58	59	61	64
Transported air temperature [°C]	-25...+45		-40...+80	-40...+55
SEC class	-	-	-	-
Protection rating	IPX4			
Motors protection rating	IP54			

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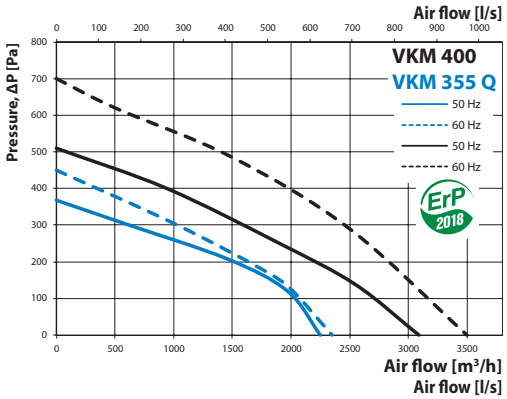
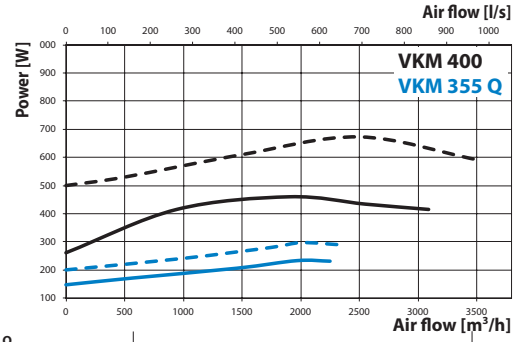
VENTS VKM





VKM 355 Q Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	92	62	80	87	85	87	83	79	66	71	81
L_{WA} to outlet	dBA	91	66	79	75	84	87	84	79	65	70	80
L_{WA} to environment	dBA	72	37	51	64	67	67	65	53	41	52	62

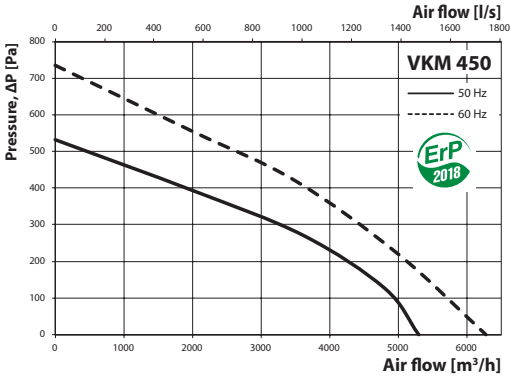
VKM 400 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	97	59	84	82	86	92	93	88	78	77	87
L_{WA} to outlet	dBA	96	61	75	85	82	90	94	86	78	76	86
L_{WA} to environment	dBA	81	35	57	66	75	77	77	66	58	61	71

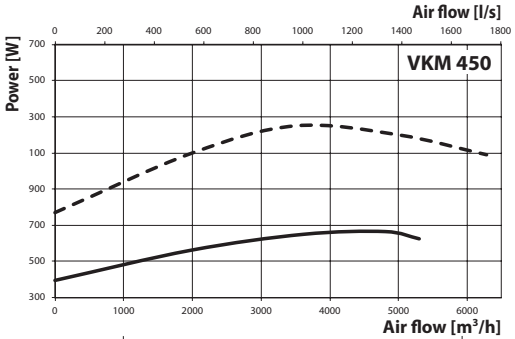
Technical data

	VKM 450	
Nominal voltage [VAC]	1~220-240	
Frequency [Hz]	50	60
Power [W]	665	1250
Current [A]	2.89	5.40
Max. air flow [m³/h]	5300	6280
RPM [min⁻¹]	1265	1560
Sound pressure level @3m [dB(A)]	65	73
Transported air temperature [°C]	-40...+70	-25...+60
SEC class	-	-
Protection rating	IPX4	
Motors protection rating	IP54	

To meet the requirements of ErP 2018, a speed controller and local demand control typology must be applied (connect a sensor).

VENTS VKM





VKM 450 Sound-power level		Octave-frequency band [Hz]									LpA, 3 m dBA	LpA, 1 m dBA
	Hz	Gen.	63	125	250	500	1000	2000	4000	8000		
L_{WA} to inlet	dBA	98	59	85	83	87	93	94	89	78	78	88
L_{WA} to outlet	dBA	98	63	76	87	84	92	95	88	80	78	88
L_{WA} to environment	dBA	86	37	60	70	79	81	81	70	61	65	75