Series
VENTS VKMz

Inline centrifugal fans in galvanized casing with the air flow up to **1540 m³/h**

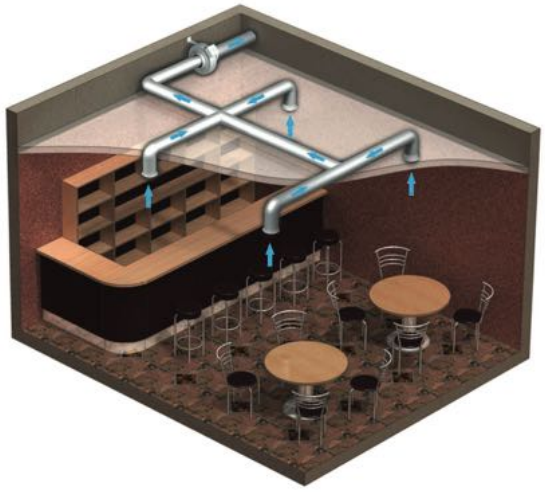
Applications
Supply and exhaust ventilation systems for commercial, office and other public or industrial premises. For premises with high requirements to noise level we offer units in low-noise modification (VKMz...Q).

Design
The fan casing is made of galvanized steel.

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



VKMz fan catering ventilation example

Designation key

Series		Air duct diameter	Options
VENTS VKMz	**S**: high-powered motor	100; 125; 150; 160; 200; 250; 315	**Q**: low-powered motor. **R1**: power cord with a mains plug.

Accessories


Silencer


Filters


Heaters


Backdraft damper


Air shutter


Clamp


Speed controllers

Technical data

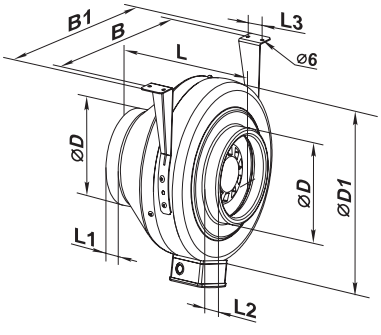
	VKMz 100 Q		VKMz 100		VKMz 125 Q		VKMz 125		VKMz 150		VKMSz 150	
Voltage, [V]	1~220-240		1~220-240		1~220-240		1~220-240		1~220-240		1~220-240	
Frequency [Hz]	50	60	50	60	50	60	50	60	50	60	50	60
Power [W]	42	51	62	77	60	61	78	79	64	78	127	174
Current [A]	0.19	0.23	0.28	0.34	0.37	0.37	0.34	0.34	0.29	0.34	0.56	0.77
Max. air flow [m³/h]	230	250	250	265	230	240	330	340	455	475	710	750
RPM [min⁻¹]	2732	3258	2812	3294	2605	2720	2820	2880	2780	3216	2760	3144
Noise level at 3 m [dBA]	35	36	46	47	35	36	46	46	44	45	48	49
Transported air temperature [°C]	-25...+55	-25...+50	-25...+55	-25...+50	-25...+55	-25...+50	-25...+55	-25...+50	-25...+50		-25...+60	
SEC class	C		C		C		C		C	-	C	-
Unit protection rating	IPX4		IPX4		IPX4		IPX4		IPX4		IPX4	
Motor protection rating	IP44		IP44		IP44		IP44		IP44		IP44	

	VKMz 160		VKMz 200 Q		VKMz 200		VKMz 250 Q		VKMz 250		VKMz 315 Q		VKMz 315	
Voltage, [V]	1~220-240		1~220-240		1~220-240		1~220-240		1~220-240		1~220-240		1~220-240	
Frequency [Hz]	50	60	50	60	50	60	50	60	50	60	50	60	50	60
Power [W]	78	81	139	177	157	202	134	175	152	202	151	205	185	238
Current [A]	0.34	0.35	0.61	0.78	0.69	0.88	0.59	0.77	0.66	0.88	0.66	0.89	0.81	1.04
Max. air flow [m³/h]	455	460	840	940	1000	1045	980	1030	1070	1100	1330	1370	1540	1580
RPM [min⁻¹]	2760	2820	2790	2850	2740	2840	2785	2880	2765	2560	2680	2750	2730	2870
Noise level at 3 m [dBA]	46	46	48	49	50	50	51	51	52	52	52	52	53	54
Transported air temperature [°C]	-25...+55	-25...+50	-25...+50	-25...+50	-25...+45	-25...+45	-25...+50	-25...+50	-25...+50	-25...+50	-25...+50	-25...+50	-25...+45	-25...+45
SEC class	B		B		B		B		B		-		-	
Unit protection rating	IPX4		IPX4		IPX4		IPX4		IPX4		IPX4		IPX4	
Motor protection rating	IP44		IP44		IP44		IP44		IP44		IP44		IP44	

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

Fan overall dimensions

Type	Dimensions [mm]								Mass [kg]
	ØD	ØD1	B	B1	L	L1	L2	L3	
VKMz 100 Q	98	237	253	293	202	23	22	30	2.5
VKMz 100	98	237	253	293	202	23	22	30	2.8
VKMz 125 Q	123	237	253	293	202	23	22	30	2.7
VKMz 125	123	237	253	293	202	23	22	30	2.9
VKMz 150	149	274	290	330	170	20	20	30	3.2
VKMSz 150	149	345	355	395	230	20	20	40	4.8
VKMz 160	158	278	294	334	200	25	23	30	3.2
VKMz 200 Q	198	332	340	380	245	25	29	40	5.2
VKMz 200	198	332	340	380	245	25	29	40	5.2
VKMz 250 Q	249	332	340	380	213	25	29	40	5.1
VKMz 250	249	332	340	380	213	25	29	40	5.1
VKMz 315 Q	313	402	410	450	308	33	55	40	6.5
VKMz 315	313	402	410	450	308	33	55	40	6.5

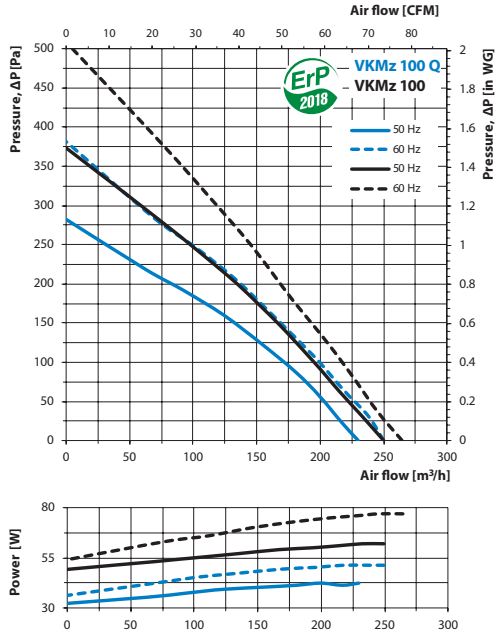


External terminal box for power supply

Fastening bracket for easy mounting supplied with the fan

VENTS VKMz...R is equipped with a power cable

VENTS VKMz



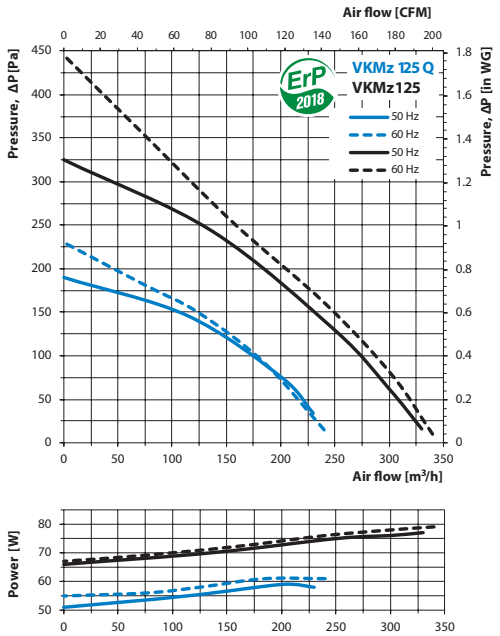
VKMz 100 Q

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	63	51	57	56	57	51	46	40	29
L_{wA} to outlet	dBA	65	54	62	58	61	57	50	45	33
L_{wA} to environment	dBA	55	19	14	21	34	42	41	29	17

VKMz 100

	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	72	47	67	68	67	60	54	53	42
L_{wA} to outlet	dBA	73	56	67	72	66	63	58	57	42
L_{wA} to environment	dBA	64	43	60	57	41	24	6	17	24

VENTS VKMz



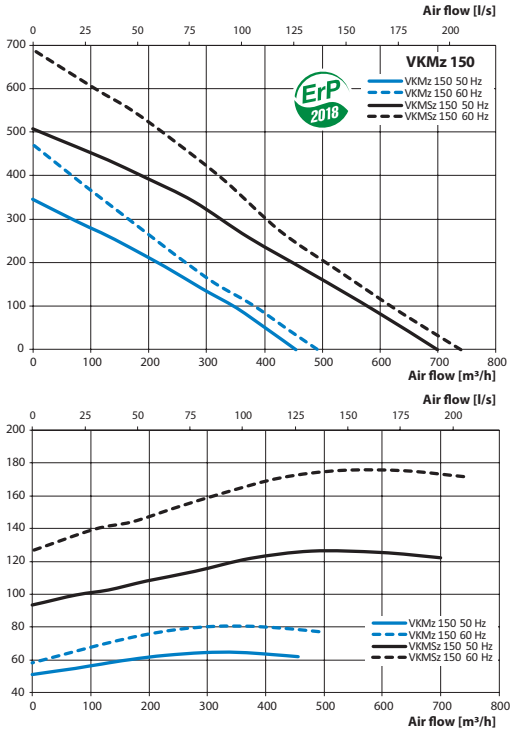
VKMz 125 Q

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	59	31	52	54	53	49	46	35	30
L_{wA} to outlet	dBA	61	35	53	56	60	51	49	35	34
L_{wA} to environment	dBA	64	46	60	59	43	33	15	30	28

VKMz 125

	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	75	56	63	68	69	64	61	52	41
L_{wA} to outlet	dBA	75	58	71	74	72	65	65	56	47
L_{wA} to environment	dBA	64	52	64	59	48	36	23	30	27

VENTS VKMz



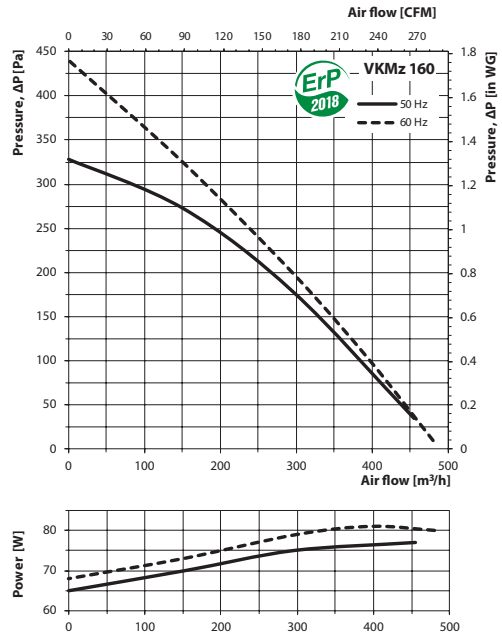
VKMz 150

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	80	57	72	78	70	64	60	54	44	59	69
L_{wA} to outlet	dBA	79	64	72	77	69	61	57	53	42	58	68
L_{wA} to environment	dBA	60	28	48	50	55	56	52	43	33	40	50

VKMSz 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

VENTS VKMz



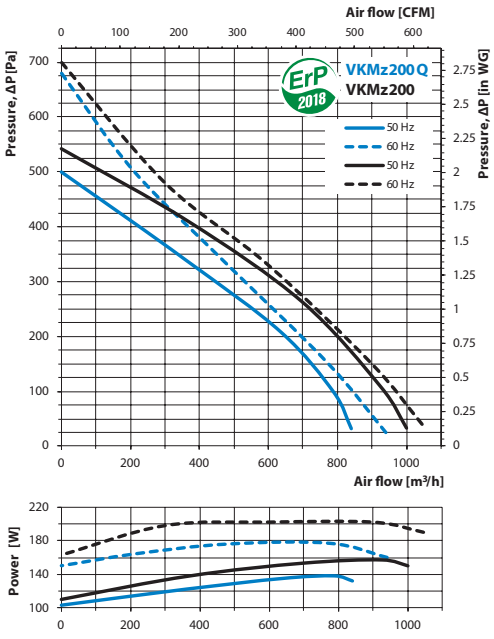
VKMz 150

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	72	42	65	64	64	61	60	48	38
L_{wA} to outlet	dBA	73	47	68	66	69	64	59	47	41
L_{wA} to environment	dBA	63	41	59	54	37	18	17	29	22

VKMz 160

	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	69	42	67	66	63	61	58	48	35
L_{wA} to outlet	dBA	72	46	69	65	68	64	63	50	40
L_{wA} to environment	dBA	60	41	60	53	36	20	18	30	24

VENTS VKMz



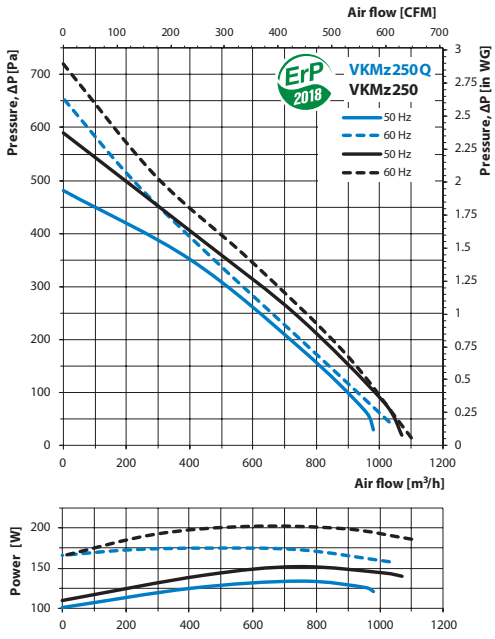
VKMz 200 Q

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	76	47	68	65	70	67	59	58	50
L_{wA} to outlet	dBA	76	49	71	69	72	63	63	60	53
L_{wA} to environment	dBA	64	46	61	57	48	32	27	48	42

VKMz 200

	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	73	51	66	68	71	67	64	58	52
L_{wA} to outlet	dBA	79	51	73	69	74	67	65	60	50
L_{wA} to environment	dBA	68	47	64	64	46	32	30	44	42

VENTS VKMz



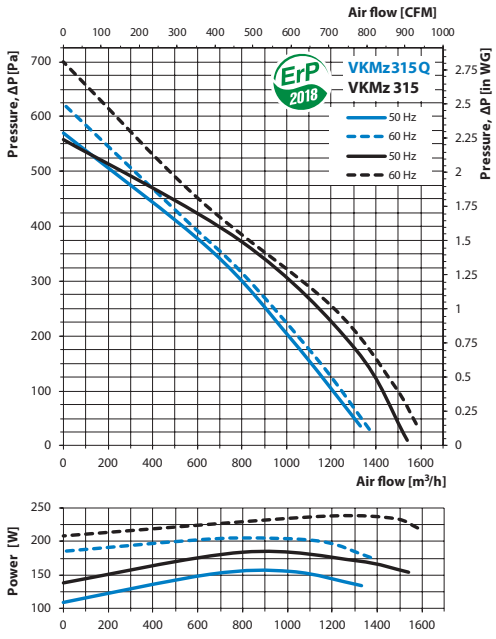
VKMz 250 Q

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	69	46	59	61	65	62	58	60	54
L_{wA} to outlet	dBA	74	49	59	63	66	67	62	64	56
L_{wA} to environment	dBA	60	42	54	54	44	37	37	52	45

VKMz 250

	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	75	60	66	67	67	67	63	56	45
L_{wA} to outlet	dBA	76	60	73	71	69	65	66	59	46
L_{wA} to environment	dBA	65	58	62	60	47	43	40	47	36

VENTS VKMz



VKMz 315 Q

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	70	35	53	61	65	67	61	58	56
L_{wA} to outlet	dBA	74	41	54	64	73	70	65	62	60
L_{wA} to environment	dBA	59	35	49	53	50	46	51	50	50

VKMz 315

	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L_{wA} to inlet	dBA	77	53	66	71	69	68	66	63	60
L_{wA} to outlet	dBA	78	58	71	74	72	71	71	63	63
L_{wA} to environment	dBA	70	55	66	61	57	48	54	56	51