

## Series VENTS VKM 100-125 E



## Series VENTS VKM 100-315



## Series VENTS VKM 355-450



Inline centrifugal fans in steel casing with the air capacity up to **5260 m<sup>3</sup>/h**

### ■ Applications

Supply and exhaust systems for various 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. For easy connection and operation the power cord with a plug can be provided (VKM...R).

### ■ Motor

The impeller with backward curved blades is powered by the single phase motor with external rotor and overheating protection with automatic reset. Some standard sizes are available in high-powered modifications (VKMS). **The VKM...E models are equipped with energy-efficient motor with low**

**energy demand.** The motor is equipped with ball bearings for long service life designed for at least 40 000 hours. For precise features, safe operation and low noise, each turbine 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. The VKM...P models are equipped with a built-in speed controller.

### ■ 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.

### ■ The fan with electronic temperature and control module (U option).

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 capacity) 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 / U1n option). The temperature sensor has mechanical protection.

### Designation key:

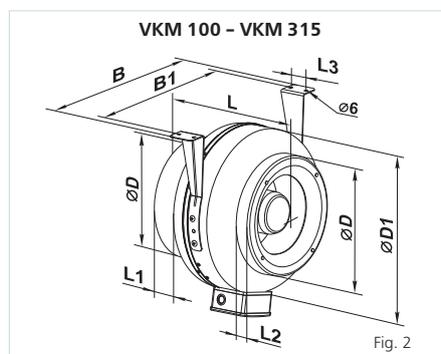
Series		Air duct diameter	Options	ErP data
VENTS VKM	S – high-powered motor	100; 125; 150; 160; 200; 250; 315; 355; 400; 450	<b>E</b> – low energy demand motor. <b>Q</b> – low-powered motor. <b>Un</b> – speed controller with electronic thermostat and external temperature sensor fixed on 4 m cable. Equipped with power cord and IEC C14 electric plug. <b>P</b> – built-in smooth speed controller and power cord with IEC C14 electric plug. <b>R</b> – power cord with IEC C14 electric plug.	Overall efficiency $\eta$ , [%] 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



**Fan overall dimensions:**

Type	Dimensions [mm]								Weight [kg]	Fig. no.
	∅D	∅D1	B	B1	L	L1	L2	L3		
VKM 100 E	100	204	–	–	195	20	20	258	2.1	1
VKM 100 Q	98	254	298	258	205	20	25	30	3.45	2
VKM 100	98	254	298	258	205	20	25	30	3.45	2
VKM 125 E	125	204	–	–	195	20	20	258	2.1	1
VKM 125 Q	123	254	298	258	205	20	25	30	3.58	2
VKM 125	123	254	298	258	205	20	25	30	3.58	2
VKM 150 Q	149	304	349	309	200	20	25	30	3.65	2
VKM 150	149	304	349	309	220	25	25	30	3.65	2
VKMS 150	149	340	386	346	226	20	20	40	4.7	2
VKM 160 Q	159	304	349	309	200	20	25	30	3.65	2
VKM 160	159	304	357	317	220	25	25	30	3.65	2
VKMS 160	159	340	386	346	226	20	20	40	4.7	2
VKM 200	198	344	390	350	240	25	29	40	5.7	2
VKMS 200	198	344	390	350	250	25	29	40	5.85	2
VKM 250 Q	248	344	390	350	249	25	31	40	5.1	2
VKM 250	248	344	390	350	249	25	31	40	5.1	2
VKM 315	314	404	454	411	288	25	40	40	7.3	2
VKMS 315	314	404	454	411	288	25	40	40	7.83	2
VKM 355 Q	353	460	522	522	506	60	60	70	18.8	3
VKM 400	398	570	663	634	570	60	60	70	25.1	3
VKM 450	448	608	700	670	644	60	60	80	27.26	3



## Technical data:

	VKM 100 E*		VKM 100 Q*		VKM 100*	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60	50	60
Power [W]	27	28	60	61	73	79
Current [A]	0,13	0,13	0,37	0,37	0,32	0,34
Max. air capacity [m³/h]	180	198	210	215	270	305
RPM [min⁻¹]	2745	3230	2620	2700	2830	2850
Noise level at 3 m [dBA]	32	34	36	36	47	48
Transported air temperature [°C]	-25 +50	-25 +50	-25 +55	-25 +50	-25 +55	-25 +50
SEC class	C		C		C	
Protection rating	IP X4		IP X4		IP X4	

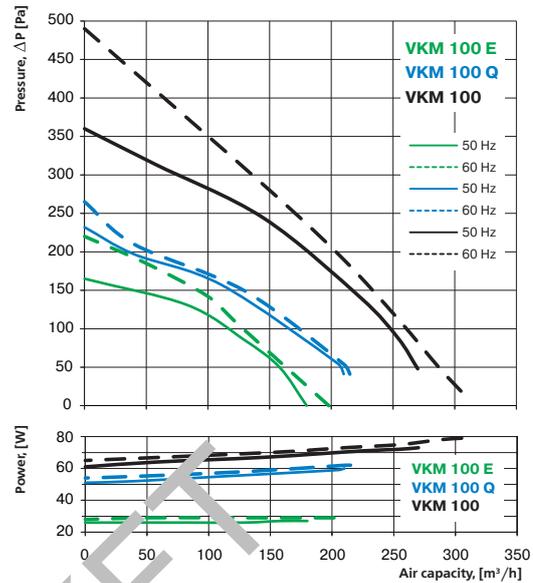
\* Compliant to the ErP-regulation (EC) 327/2011, the power consumption at optimum efficiency is < 125W.

## Technical data:

	VKM 125 E*		VKM 125 Q*		VKM 125*	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60	50	60
Power [W]	27	28	60	61	75	80
Current [A]	0,13	0,13	0,37	0,37	0,33	0,35
Max. air capacity [m³/h]	240	245	255	260	355	375
RPM [min⁻¹]	2780	3210	2535	2650	2800	2830
Noise level at 3 m [dBA]	32	34	36	36	47	47
Transported air temperature [°C]	-25 +50	-25 +50	-25 +55	-25 +50	-25 +55	-25 +50
SEC class	B		C		C	
Protection rating	IP X4		IP X4		IP X4	

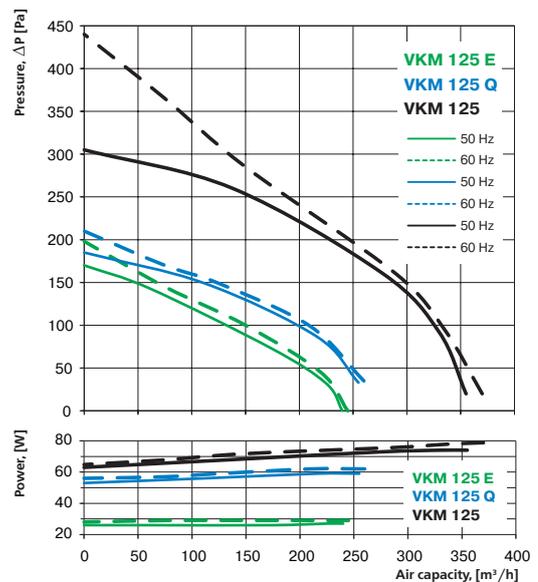
\* Compliant to the ErP-regulation (EC) 327/2011, the power consumption at optimum efficiency is < 125W.

## VENTS VKM



VKM 100 E	Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
				63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	50	40	44	44	46	40	39	34	24	
$L_{WA}$ to outlet	dBA	50	41	48	44	44	42	39	33	27	
$L_{WA}$ to environment	dBA	44	19	11	19	32	35	35	26	13	
VKM 100 Q		Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	64	48	57	57	59	51	47	40	28	
$L_{WA}$ to outlet	dBA	64	52	62	56	57	50	46	39	32	
$L_{WA}$ to environment	dBA	57	23	13	23	38	42	42	31	15	
VKM 100		Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	73	47	63	67	68	60	55	54	38	
$L_{WA}$ to outlet	dBA	77	54	66	73	66	66	60	55	46	
$L_{WA}$ to environment	dBA	63	45	60	55	41	25	7	18	22	

## VENTS VKM



VKM 125 E	Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
				63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	43	27	37	38	40	36	34	27	23	
$L_{WA}$ to outlet	dBA	45	26	37	42	42	37	39	32	25	
$L_{WA}$ to environment	dBA	47	35	44	42	34	24	13	24	22	
VKM 125 Q		Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	60	34	51	53	56	46	43	34	29	
$L_{WA}$ to outlet	dBA	62	33	52	59	58	51	49	41	32	
$L_{WA}$ to environment	dBA	65	44	61	59	43	30	17	30	28	
VKM 125		Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	73	54	67	68	67	64	61	51	41	
$L_{WA}$ to outlet	dBA	76	57	69	68	72	71	65	57	45	
$L_{WA}$ to environment	dBA	62	51	61	60	46	36	22	31	27	

**Technical data:**

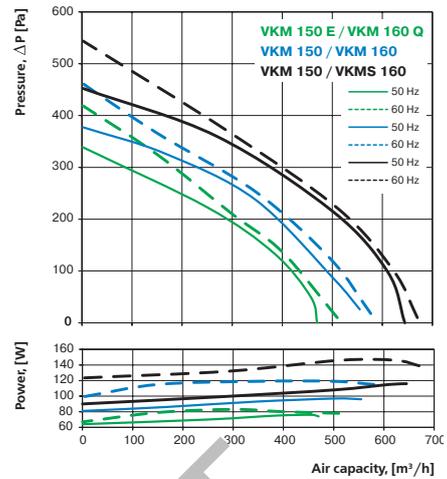
	VKM 150 Q* VKM 160 Q*		VKM 150* VKM 160*		VKMS 150* VKMS 160*	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60	50	60
Power [W]	75	83	98	119	116	146
Current [A]	0,33	0,36	0,43	0,52	0,52	0,65
Max. air capacity [m³/h]	470	510	555	580	645	670
RPM [min <sup>-1</sup> ]	2515	2750	2705	2855	2625	3095
Noise level at 3 m [dBA]	46	47	47	48	50	52
Transported air temperature [°C]	-25 +55	-25 +50	-25 +55	-25 +50	-25 +55	-25 +50
SEC class	B		B		B	
Protection rating	IP X4		IP X4		IP X4	

\* Compliant to the ErP-regulation (EC) 327/2011, the power consumption at optimum efficiency is < 125W.

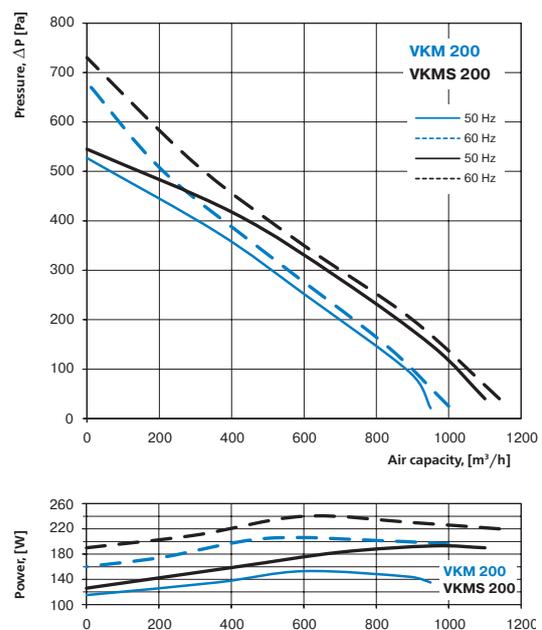
**Technical data:**

	VKM 200		VKMS 200	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60
Power [W]	154	205	193	240
Current [A]	0,67	0,9	0,84	1,05
Max. air capacity [m³/h]	950	1000	1100	1140
RPM [min <sup>-1</sup> ]	2375	2510	2780	2850
Noise level at 3 m [dBA]	48	50	51	53
Transported air temperature [°C]	-25 +50	-25 +50	-25 +45	-25 +50
SEC class*	B		-	
Protection rating	IP X4		IP X4	

\* The EC norm 1254/2014 does not apply if maximum air capacity is > 1000 m³/h

**VENTS VKM**

**VKM 150 Q / VKM 160 Q**

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	63	41	57	55	59	52	52	45	35
L <sub>WA</sub> to outlet	dBA	38	61	55	62	55	52	46	34	
L <sub>WA</sub> to environment	dBA	55	37	52	48	35	17	15	25	20
<b>VKM 150</b>	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	45	65	62	67	59	59	49	38	
L <sub>WA</sub> to outlet	dBA	74	42	69	63	71	63	59	50	37
L <sub>WA</sub> to environment	dBA	62	41	59	55	39	19	17	28	22
<b>VKM 160</b>	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	68	41	65	64	63	61	57	47	35
L <sub>WA</sub> to outlet	dBA	70	47	67	68	66	64	60	51	41
L <sub>WA</sub> to environment	dBA	60	40	61	55	39	18	16	28	22
<b>VKMS 150 / VKMS 160</b>	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	74	47	67	64	69	66	58	57	50
L <sub>WA</sub> to outlet	dBA	74	49	70	68	71	62	62	59	52
L <sub>WA</sub> to environment	dBA	63	46	60	56	48	32	27	48	42

**VENTS VKM**

**VKM 200**

Sound-power level	Hz	Gen	Octave-frequency band [Hz]							
			63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	75	47	68	65	72	65	61	59	49
L <sub>WA</sub> to outlet	dBA	75	51	72	68	75	67	65	59	50
L <sub>WA</sub> to environment	dBA	65	46	61	59	47	31	28	46	42
<b>VKMS 200</b>	Hz	Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	75	48	66	72	73	66	63	58	49
L <sub>WA</sub> to outlet	dBA	78	51	70	74	71	64	64	60	53
L <sub>WA</sub> to environment	dBA	66	49	64	60	45	35	28	46	41

## Technical data:

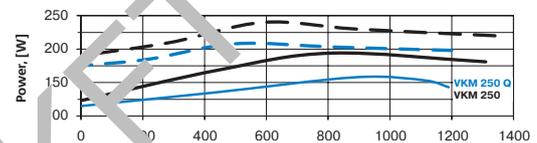
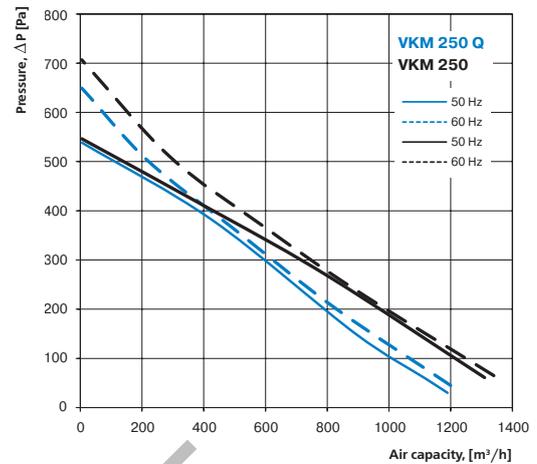
	VKM 250 Q		VKM 250	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60
Power [W]	158	208	194	240
Current [A]	0,69	0,91	0,85	1,05
Max. air capacity [m³/h]	1190	1200	1310	1340
RPM [min⁻¹]	2315	2430	2790	2860
Noise level at 3 m [dBA]	52	52	52	53
Transported air temperature [°C]	-25 +50	-25 +50	-25 +50	-25 +50
Protection rating	IP X4		IP X4	

## Technical data:

	VKM 315		KMS 315 	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60
Power [W]	171	241	296	413
Current [A]	0,77	1,05	1,34	1,8
Max. air capacity [m³/h]	1400	1440	1880	1920
RPM [min⁻¹]	2600	2850	2720	2780
Noise level at 3 m [dBA]	52	53	54	55
Transported air temperature [°C]	-25 +50	-25 +50	-25 +45	-25 +50
Protection rating	IP X4		IP X4	

$\eta$ , [%]	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
46.9	A	Static	64.2	No	0.226	0.99	702	470	2780	1

## VENTS VKM

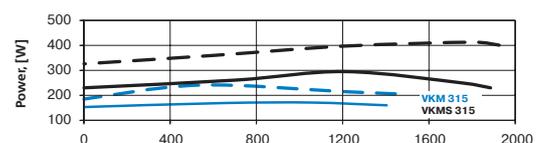
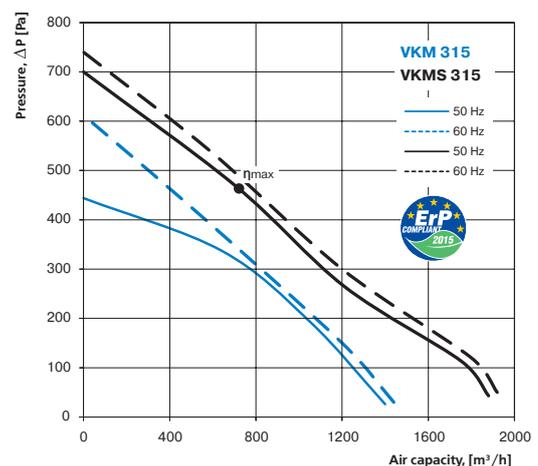


Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	68	46	57	60	65	62	58	60	54
$L_{WA}$ to outlet	dBA	75	44	59	64	65	67	65	68	59
$L_{WA}$ to environment	dBA	60	44	57	52	47	36	39	51	45

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	75	60	68	65	67	66	60	53	48
$L_{WA}$ to outlet	dBA	77	62	71	74	70	71	69	59	50
$L_{WA}$ to environment	dBA	65	57	62	60	50	43	37	45	38

## VENTS VKM



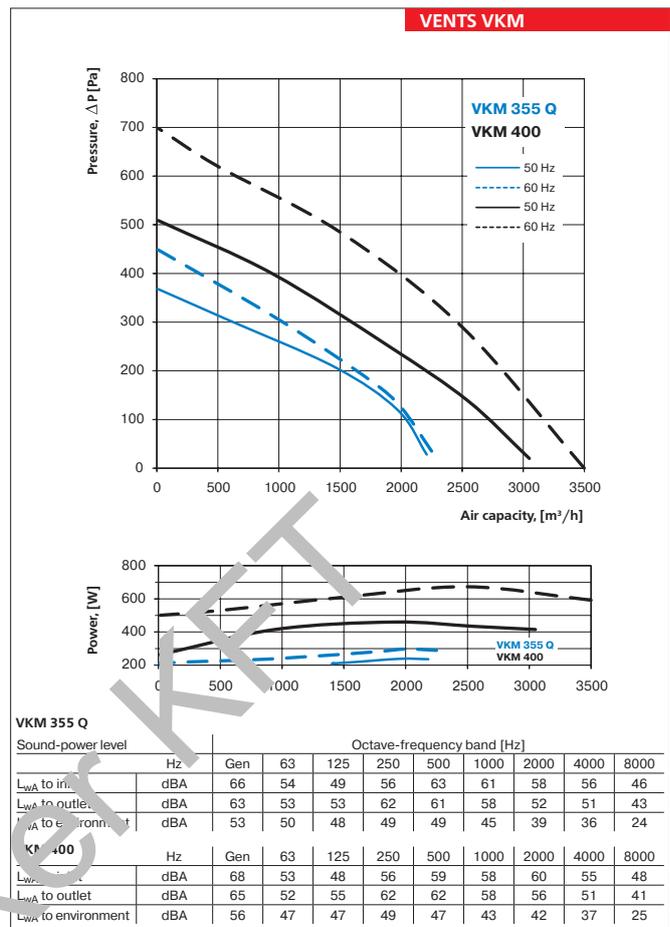
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	71	35	51	61	69	66	62	59	56
$L_{WA}$ to outlet	dBA	75	42	58	62	71	69	67	59	57
$L_{WA}$ to environment	dBA	60	34	49	56	50	44	49	53	50

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	77	54	67	72	70	67	67	64	56
$L_{WA}$ to outlet	dBA	81	54	71	72	71	69	72	64	60
$L_{WA}$ to environment	dBA	68	56	66	62	57	47	54	55	51

**Technical data:**

	VKM 355 Q		VKM 400	
Nominal voltage [VAC]	1~ 220-240		1~ 220-240	
Frequency [Hz]	50	60	50	60
Power [W]	233	297	460	673
Current [A]	1,06	1,3	2,23	3,05
Max. air capacity [m³/h]	2210	2250	3050	3500
RPM [min⁻¹]	1375	1620	1370	1585
Noise level at 3 m [dBA]	58	59	61	64
Transported air temperature [°C]	-25 +45	-25 +45	-40 +80	-40 +55
Protection rating	IP X4		IP X4	


**Technical data:**

	VKM 450	
Nominal voltage [VAC]	1~ 220-240	
Frequency [Hz]	50	60
Power [W]	665	1250
Current [A]	2,89	5,4
Max. air capacity [m³/h]	5260	6280
RPM [min⁻¹]	1265	1560
Noise level at 3 m [dBA]	65	73
Transported air temperature [°C]	-40 +70	-25 +60
Protection rating	IP X4	

