



FANS VENTILIATORIAI WENTYLATORY ВЕНТИЛЯТОРЫ

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Online selection program: www.salda.lt



Circular duct fans

Apvalūs kanaliniai ventiliatoriai

Wentylatory do kanałów okrągłych

Круглые канальные вентиляторы



Circular duct fans are used for air supply or extract in ventilation and air conditioning systems. Are mounted into a system of round air ducts. Can be installed in any position. Not suitable for polluted air, aggressive and explosive gases.

Impeller with backward curved blades.

Motor: external rotor (EC), motor protection with built-in thermal-contact, maintenance free ball bearings.

The continuous control of motor speed is optionally provided. The speed of EC motors may be changed by connecting 10 kΩ potentiometer to the control circuit. At simplifies way the electrical connection is avoiding the need of expensive and large dimension speed regulators. The speed may be set via an external signal 0-10 VDC.

Mounting bracket LAV including.

VKA EKO with powder coating finishing RAL 7035.



Kanaliniai ventiliatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami į apvalių ortakių sistemą. Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, plastmasinė arba cinkuoto plieno.

Variklis: išorinis rotorius (EC), tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai.

Nuoseklus variklio valdymas komplektuojamas papildomai. Variklio greitis keičiamas į valdymo grandinę prijungus 10kΩ potenciometrą. Tai leidžia supaprastinti elektros jungimą ir išvengti brangių greičio reguliatorių. Taip pat greitis gali būti nustatomas išoriniu 0-10VDC signalu.

Komplektuojamas su laikikliu LAV.

VKA 125-315 EKO korpusas: dažytas RAL 7035 miltelinio būdu.



Okrągłe wentylatory stosowane są do nawiewu powietrza lub wy ciągu do instalacji wentylacyjnych i klimatyzacyjnych. Montowane są w systemie okrągłych kanałów wentylacyjnych. Mogą być instalowane w dowolnej pozycji. Nie nadaje się do zanieczyszczonego powietrza, gazów agresywnych i wybuchowych.

Wirnik z łopatkami pochylonymi do tyłu.

Silnik z zewnętrznym wirnikiem (EC), zabezpieczenie silnika z wbudowanym termicznym-contact, bezobsługowe łożyska kulkowe.

Płynna regulacja prędkości silnika jest optionally warunkiem. Prędkość silników EC można zmieniać, łącząc potencjometr 10 kW do obwodu sterującego. Na upraszcza sposób połączenie elektryczne jest uniknięcie konieczności drogich i dużych regulatorów prędkości wymiarów. Prędkość może być ustawiona za pomocą zewnętrznego sygnału 0-10 VDC.

Montaż LAV wspornik tym.

VKA EKO z powłoką proszkową wykończenie RAL 7035.



Канальные вентиляторы для систем вентиляции и кондиционирования, устанавливаются в систему круглых воздуховодов. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки.

Двигатель: наружный ротор (EC), прямая передача, встроенная термодатная защита двигателя, не требующие ухода подшипники с длительным сроком службы.

Возможно плавное управление скоростью двигателя. Изменить скорость ЕС-двигателей можно путем включения в цепь управления потенциометра 10 кОм. Это облегчает электрическое подключение и не требует дорогих и громоздких регуляторов скорости. Скорость также можно изменять внешним сигналом 0-10VDC или 10VDC PWM.

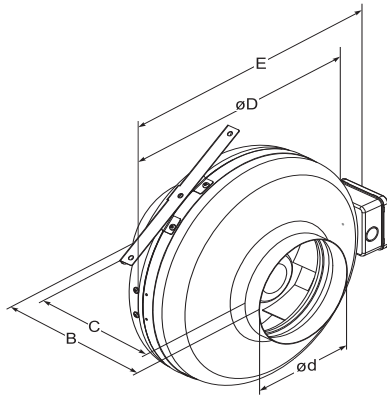
Прилагается монтажный кронштейн LAV.

VKA EKO окрашенный RAL 7035.

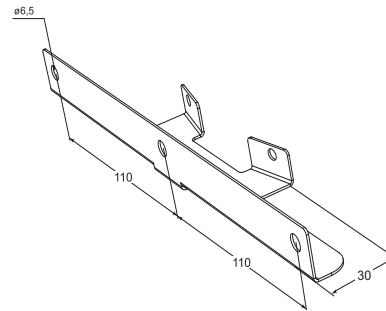
Accessories

0-10V speed controller	Mounting clamp	Guard grille	Back draft shutter	Circular duct silencer	Filter cassette
					
MTP010 p. 142	AP p. 152	AGO p. 212	RSK p. 205	AKS p. 198	FD p. 191

VKA EKO



LAV



Type	Dimensions [mm]				
	B	C	øD	ød	E
VKA 125 EKO	207 ± 2	175 ± 2	245	125	290
VKA 160 EKO	200 ± 2	160 ± 2	245	160	290
VKA 200 EKO	240 ± 2	190 ± 2	345	200	390
VKA 250 EKO	245 ± 2	185 ± 2	345	250	390
VKA 315 EKO	250 ± 2	180 ± 2	400	315	445

Type	Accessories									
	MTP 010	AP	AGO	RSK	AKS	FD	FDI	EKA	AVS	AVA
VKA 125 EKO	+	125	125	125	125	125	125	125	125	125
VKA 160 EKO	+	160	160	160	160	160	160	160	160	160
VKA 200 EKO	+	200	200	200	200	200	200	200	200	200
VKA 250 EKO	+	250	250	250	250	250	250	250	250	250
VKA 315 EKO	+	315	315	315	315	315	315	315	315	315

Accessories

Filter cassette



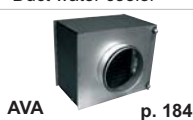
Electric duct heater



Heating coil



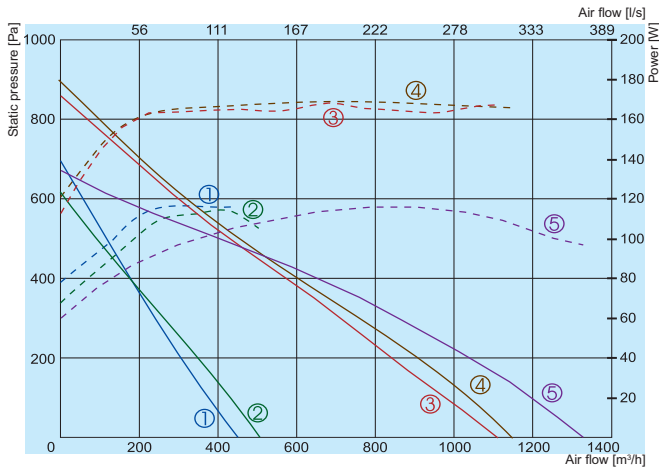
Duct water cooler



VKA EKO

SALDA

CIRCULAR DUCT FANS



- ① VKA 125 EKO
- ② VKA 160 EKO
- ③ VKA 200 EKO
- ④ VKA 250 EKO
- ⑤ VKA 315 EKO

— Performance
 - - - - Power consumption

		125 EKO	160 EKO	200 EKO	250 EKO	315 EKO
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,085	0,083	0,170	0,170	0,166
Current	[A]	0,87	0,88	1,59	1,32	1,56
Speed	[min ⁻¹]	3200	3200	3210	3210	2550
Max. airflow	[m³/h]	440	500	1100	1150	1320
Min./Max. air temperature	[°C]	-25/60	-25/60	-25/45	-25/45	-25/60
Weight	[kg]	2,36	2,66	4,33	4,33	5,61
Wiring diagram		No. 1	No. 1	No. 1	No. 1	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-54	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013;2015		+	+	+	+	+

125 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	69	47	54	62	65	64	57	42
Surrounding	55	30	32	46	53	49	42	34

Measured at 383 m³/h, 81 Pa

160 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	72	49	65	67	68	62	59	52
Surrounding	59	32	48	52	56	49	49	38

Measured at 445 m³/h, 82 Pa

200 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	75	56	63	69	71	66	62	58
Surrounding	59	27	35	48	55	53	49	47

Measured at 974 m³/h, 100 Pa

250 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	77	59	68	73	70	67	65	60
Surrounding	60	32	34	50	58	52	50	46

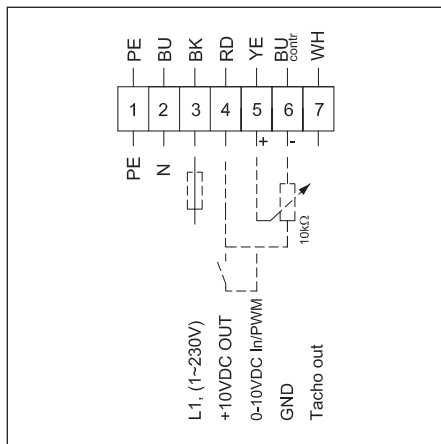
Measured at 1049 m³/h, 100 Pa

315 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	78	57	69	74	71	68	66	59
Surrounding	62	33	37	52	59	56	51	45

Measured at 1193 m³/h, 99 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



Wiring diagram No. 1 (1~230V)

PE - green - yellow

BU - blue

BK - black

RD - red

YE - yellow

WH - white

VKAP 2.0



NEW!

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Wentylatory do kanałów okrągłych

Круглые канальные вентиляторы



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Impeller with backward curved blades.

Motor: external rotor, motor protection with built-in thermal-contact with manual reset, maintenance free ball bearings.

The casing is manufactured from galvanised sheet steel and folded which ensures high air casing tightness.

All VKAP 2.0 range comply with ERP 2013 or higher ERP 2015

Mounting bracket LAV including.



Kanaliniai ventilatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami į apvalių ortakių sistemą. Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, plastmasinė arba cinkuoto plieno.

Variklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga su rankiniu atstatymu, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai.

Korpusas štampuotas iš cinkuotos skardos užtikrina aukštą oro sandarumą.

Visi VKAP 2.0 atitinka ERP 2013 reikalavimus ar aukštesnius ERP 2015.

Komplektuojamas su laikikliu LAV.



Wentylatory kanałowe okrągłe używane są do zasilania lub wyciągu powietrza w systemach wentylacyjnych i klimatyzacyjnych. Montowane są w system kanałów okrągłych. Mogą być instalowane w dowolnej pozycji. Nie nadają się do zanieczyszczonego powietrza, agresywnych i wybuchowych gazów.

Wirnik z łopatkami wygiętymi do tyłu.

Silnik: z zewnętrznym wirnikiem, zabezpieczenie silnika z wbudowanym zabezpieczeniem termicznym z ręcznym resetem, bezobsługowe łożyska kulkowe.

Obudowa wykonana jest z blachy stalowej ocynkowanej.

Wszystkie VKAP 2.0 zgodne są z ERP 2013 lub wyższej ERP 2015.

Wspornika montażowy LAV.



Канальные вентиляторы для систем вентиляции и кондиционирования, устанавливаются в систему круглых воздуховодов. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопасти.

Двигатель: наружный ротор, прямая передача, встроенная термодатная защита двигателя, не требующие ухода подшипники с длительным сроком службы.

Прилагается монтажный кронштейн LAV.

Accessories

Single phase speed controller



TGRV p. 138

Single phase speed controller



ETY p. 141

Mounting clamp



AP p. 152

Guard grille



AGO p. 212

Back draft shutter

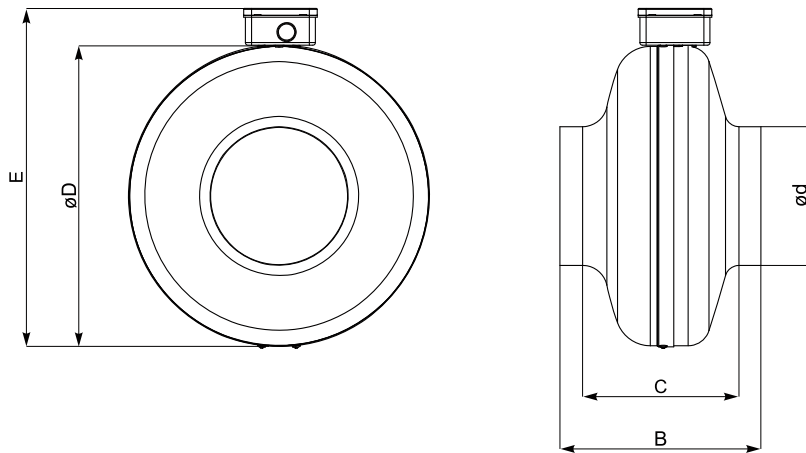


RSK p. 205

Circular duct silencer



AKS p. 198



Type	Dimensions [mm]				
	B	C	øD	ød	E
VKAP 100 MD/LD 2.0	189	152	244	100	287
VKAP 125 MD/LD 2.0	182	143	243	125	286
VKAP 160 MD 2.0	189	143	244	160	287
VKAP 160 LD 2.0	217	166	344	160	387
VKAP 200 MD 2.0	219	167	344	200	387
VKAP 200 LD 2.0	231	179	344	200	387
VKAP 250 MD 2.0	223	160	344	250	387
VKAP 250 LD 2.0	230	167	344	250	387
VKAP 315 MD 2.0	243	175	402	315	444
VKAP 315 LD 2.0	256	188	402	315	444

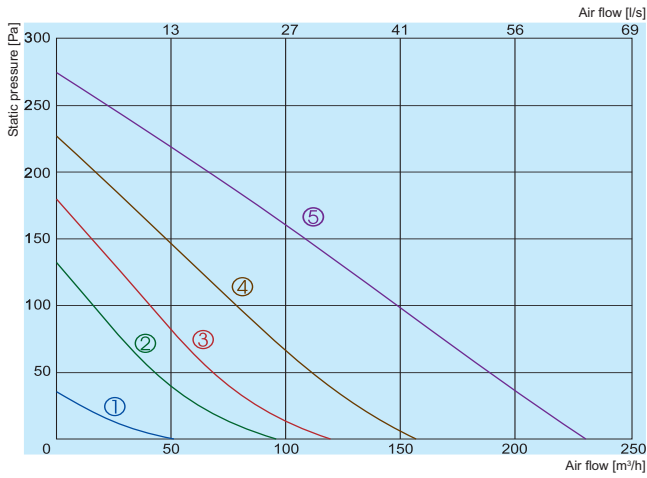
Type	Accessories										
	TGRV	ETY	AP	AGO	RSK	AKS	FD	FDI	EKA	AVS	AVA
VKAP 100 MD/LD 2.0	1,5	1,5	100	100	100	100	100	100	100	100	100
VKAP 125 MD/LD 2.0	1,5	1,5	125	125	125	125	125	125	125	125	125
VKAP 160 MD 2.0	1,5	1,5	160	160	160	160	160	160	160	160	160
VKAP 160 LD 2.0	1,5	1,5	160	160	160	160	160	160	160	160	160
VKAP 200 MD 2.0	1,5	1,5	200	200	200	200	200	200	200	200	200
VKAP 200 LD 2.0	1,5	1,5	200	200	200	200	200	200	200	200	200
VKAP 250 MD 2.0	1,5	1,5	250	250	250	250	250	250	250	250	250
VKAP 250 LD 2.0	1,5	1,5	250	250	250	250	250	250	250	250	250
VKAP 315 MD 2.0	1,5	1,5	315	315	315	315	315	315	315	315	315
VKAP 315 LD 2.0	1,5	1,5	315	315	315	315	315	315	315	315	315

Accessories



VKAP 2.0

VKAP 100 MD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

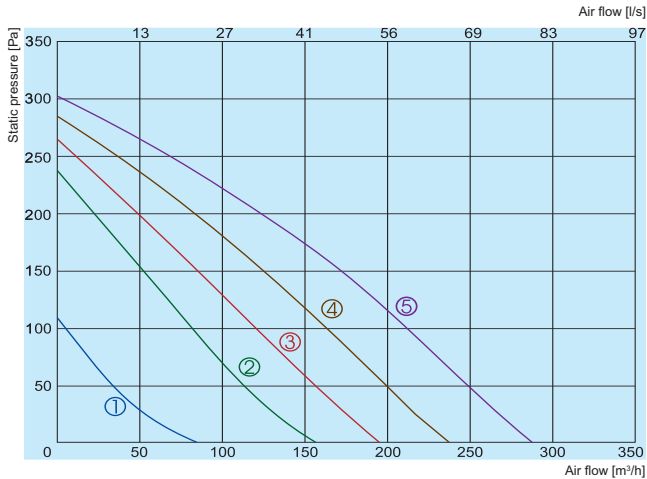
100 MD 2.0

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	61	43	58	51	55	50	39	30
Surrounding	46	24	25	35	44	41	28	20

Measured at 203 m³/h, 32 Pa

VKAP 100 LD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

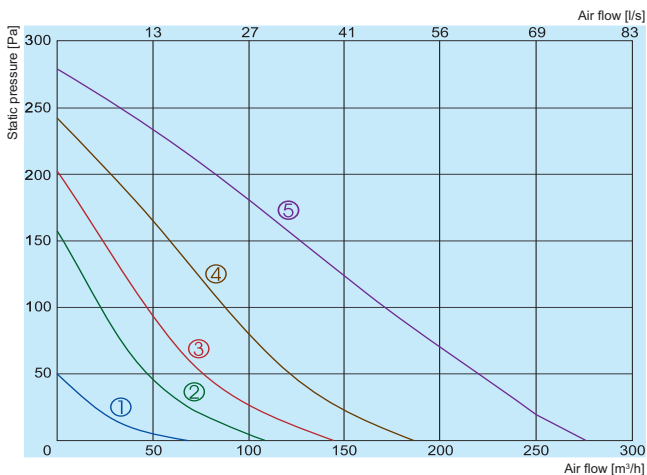
100 LD 2.0

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	70	53	60	60	67	65	57	48
Surrounding	58	33	26	43	55	54	47	36

Measured at 264 m³/h, 32 Pa

VKAP 125 MD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

125 MD 2.0

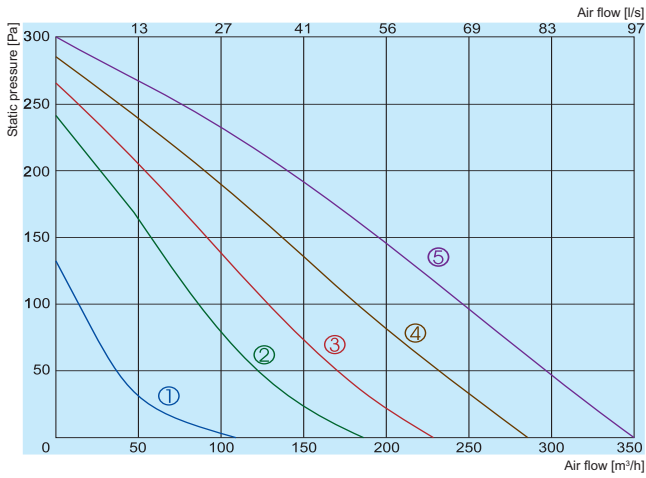
In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	59	42	54	52	53	52	39	31
Surrounding	44	20	29	35	41	40	28	17

Measured at 251 m³/h, 20 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAP 125 LD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

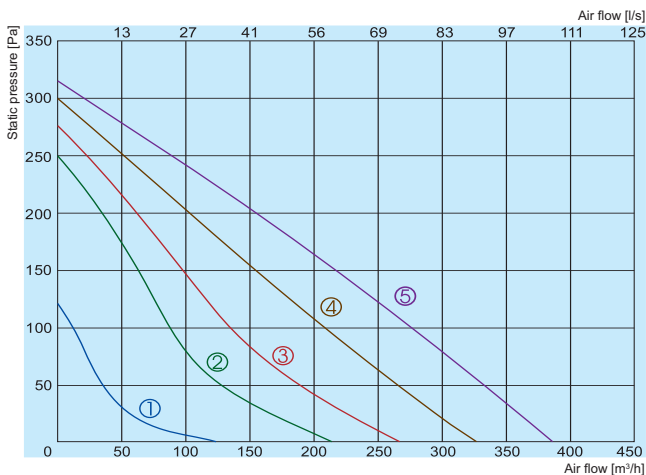
125 LD 2.0

In duct
Surrounding
Measured at 331 m³/h, 19 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	68	49	53	61	65	63	55	46
Surrounding	56	27	28	44	53	51	43	32

	100 MD 2.0	100 LD 2.0	125 MD 2.0	125 LD 2.0	
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,044	0,063	0,044	0,064
Current	[A]	0,19	0,27	0,19	0,28
Speed	[min ⁻¹]	1992	2400	1907	2400
Max. airflow	[m³/h]	232	290	278	350
Min./Max. air temperature	[°C]	-30/40	-30/70	-30/40	-30/70
Weight	[kg]	3	3	3	3
Wiring diagram		No.2	No.1	No. 2	No.1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+/+	+/+	+/+	+/+

VKAP 160 MD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

160 MD 2.0

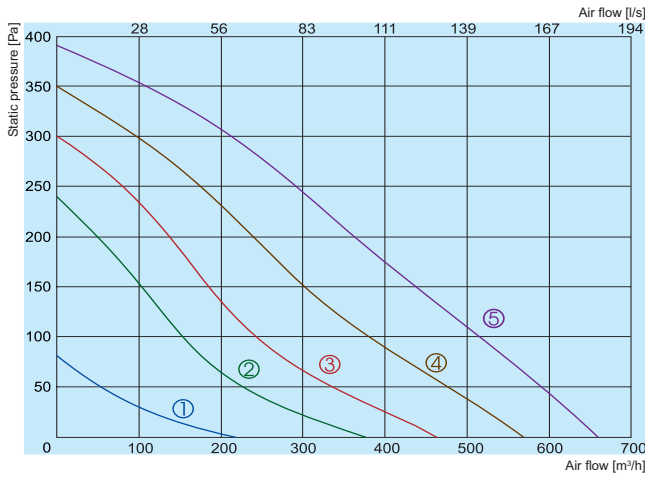
In duct
Surrounding
Measured at 365 m³/h, 20 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	68	47	50	56	64	63	62	49
Surrounding	56	25	20	39	52	51	50	34

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAP 2.0

VKAP 160 LD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

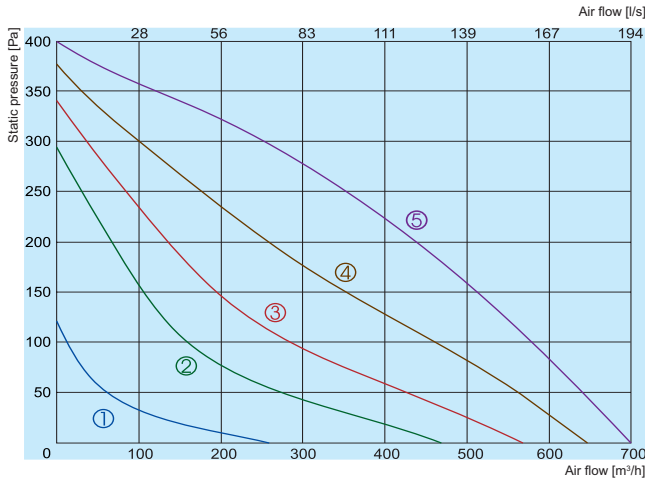
160 LD 2.0

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	51	67	67	71	63	49
Surrounding	61	29	48	50	59	51	34

Measured at 531 m³/h, 80 Pa

VKAP 200 MD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

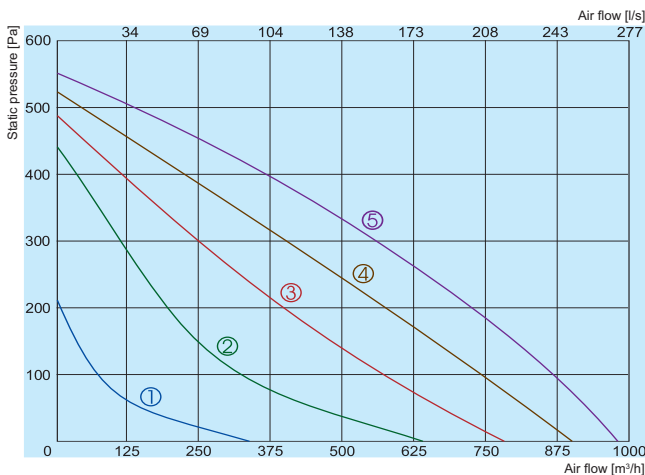
200 MD 2.0

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	70	44	53	60	67	64	52
Surrounding	55	14	23	40	49	53	38

Measured at 673 m³/h, 30 Pa

VKAP 200 LD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

200 LD 2.0

In duct
Surrounding

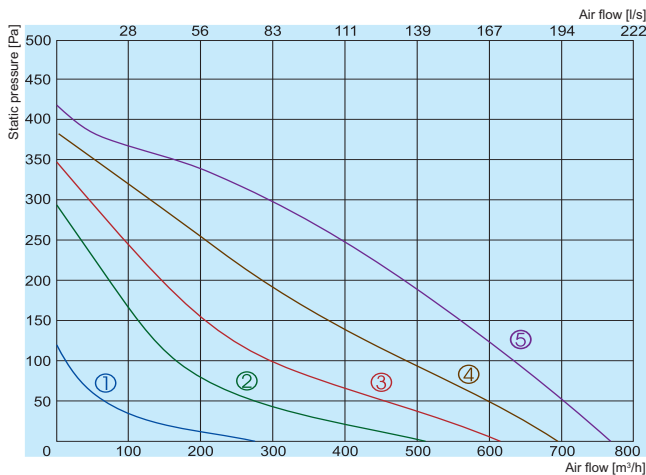
Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	53	61	65	69	66	62
Surrounding	58	23	31	45	51	46	48

Measured at 915 m³/h, 42 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		160 MD 2.0	160 LD 2.0	200 MD 2.0	200 LD 2.0
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,097	0,064	0,097	0,146
Current	[A]	0,42	0,28	0,42	0,65
Speed	[min ⁻¹]	2500	2400	2500	2560
Max. airflow	[m ³ /h]	386	673	700	960
Min./Max. air temperature	[°C]	-30/60	-30/70	-30/60	-30/70
Weight	[kg]	3	4	4,5	5,0
Wiring diagram		No.1	No.1	No.1	No.1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+/+	+/+	+/+	+/-

VKAP 250 MD 2.0



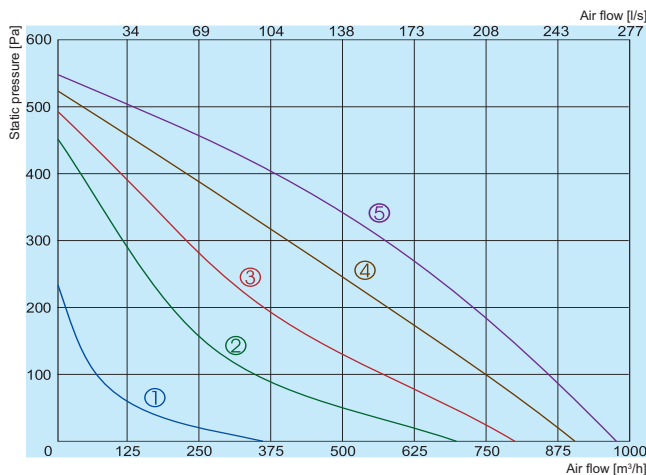
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

250 MD 2.0

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	71	42	52	59	67	64	56
Surrounding	51	19	29	39	47	44	38

Measured at 733 m³/h, 30 Pa

VKAP 250 LD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

250 LD 2.0

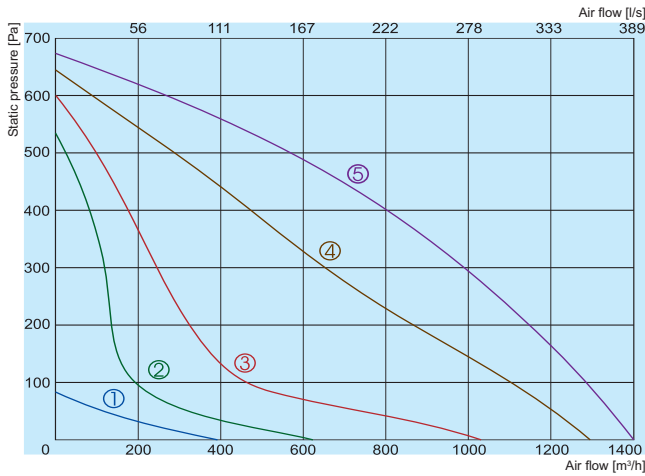
Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	54	62	66	69	67	66
Surrounding	55	31	39	46	49	47	48

Measured at 893 m³/h, 39 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAP 2.0

VKAP 315 MD 2.0



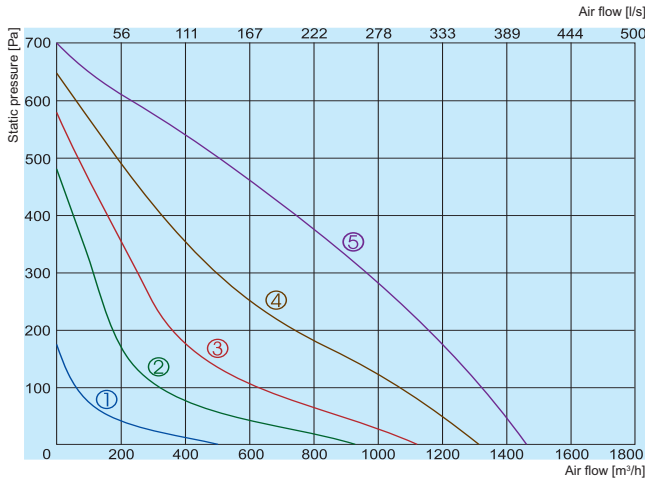
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

315 MD 2.0

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	78	53	62	70	75	68	67	68
Surrounding	57	32	40	49	54	49	47	44

Measured at 1195 m³/h, 100 Pa

VKAP 315 LD 2.0



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

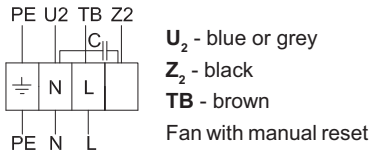
315 LD 2.0

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	75	51	61	67	67	68	68	69
Surrounding	54	30	39	46	46	49	48	45

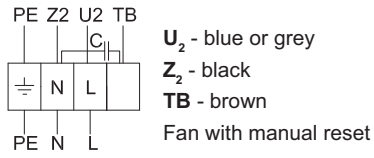
Measured at 1583 m³/h, 43 Pa

		250 MD 2.0	250 LD 2.0	315 MD 2.0	315 LD 2.0
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,099	0,143	0,245	0,270
Current	[A]	0,43	0,63	1,08	1,2
Speed	[min ⁻¹]	2500	2560	2730	2617
Max. airflow	[m³/h]	760	938	1310	1670
Min./Max. air temperature	[°C]	-30/60	-30/70	-30/60	-40/80
Weight	[kg]	4,5	4,5	6,5	6,5
Wiring diagram		No.1	No.1	No.3	No.1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+/+	+/-	+/-	+/-

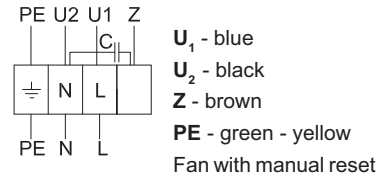
Wiring diagram No. 1 (1~230V)



Wiring diagram No. 2 (1~230V)



Wiring diagram No. 3 (1~230V)



VKA/VKAS

VKA



VKAS



Circular duct fans

Apvalūs kanaliniai ventilatoriai

Wentylatory do kanałów okrągłych

Круглые канальные вентиляторы



VKA

Circular duct fans are used for air supply or extract in ventilation and air conditioning systems. Are mounted into a system of round air ducts. Can be installed in any position. Not suitable for polluted air, aggressive and explosive gases.

Impeller with backward curved blades.

Motor: external rotor, motor protection with built-in thermal-contact, maintenance free ball bearings.

Mounting bracket LAV including.

VKAS

Circular duct fans used for air extract in ventilation and air conditioning systems. Are mounted on the walls. Not suitable for polluted air, aggressive and explosive gases.

VKA/VKAS with powder coating finishing RAL 7035.



VKA

Kanaliniai ventilatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami į apvalių ortakių sistemą. Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, plastmasinė arba cinkuoto plieno.

Variklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai.

Komplektuojamas su laikikliu LAV.

VKA/VKAS 100-315 korpusas: dažytas RAL 7035 miltelinio būdu.

VKAS

Kanaliniai ventilatoriai skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami ant sienos. Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.



VKA

Okrągłe wentylatory stosowane są do nawiewu i wyciągu powietrza w wentylacji i klimatyzacji. Montowane w układzie okrągłych kanałów wentylacyjnych. Mogą być instalowane w dowolnej pozycji. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinyowych. Wirnik z łopatkami pochylonymi do tyłu. Silnik z wirnikiem zewnętrznym oraz z wbudowanym termicznym zabezpieczeniem, bezobsługowe łożyska kulkowe. LAV wspornik montażowy w komplecie.

VKAS

Zastosowanie: jak wentylatory VKA. Przystosowane do montażu w ścianach.



VKA

Канальные вентиляторы для систем вентиляции и кондиционирования, устанавливаются в систему круглых воздуховодов. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки.

Двигатель: наружный ротор, прямая передача, встроенная термомоконтактная защита двигателя, не требующие ухода подшипники с длительным сроком службы.

Прилагается монтажный кронштейн LAV.

VKAS

Канальные вентиляторы для систем вентиляции и кондиционирования, настенные. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

VKA/VKAS окрашенный RAL 7035.

Accessories

Single phase speed controller



TGRV

p. 138

Single phase speed controller



ETY

p. 141

Mounting clamp



AP

p. 152

Guard grille



AGO

p. 212

Back draft shutter



RSK

p. 205

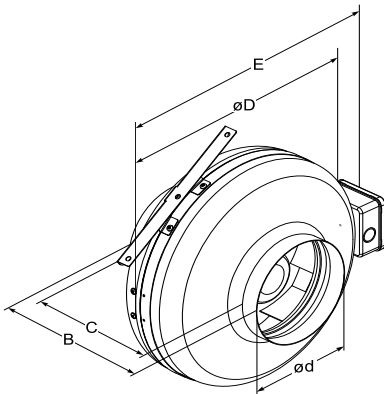
Circular duct silencer



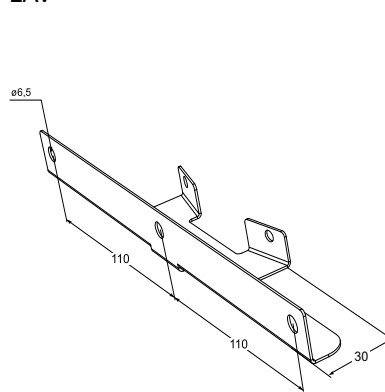
AKS

p. 198

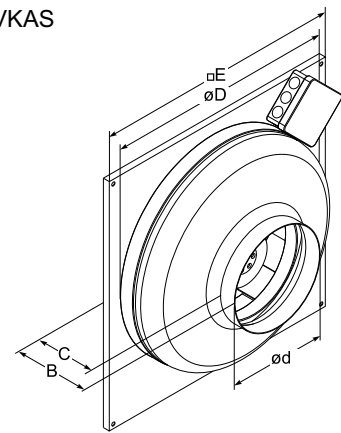
VKA



LAV



VKAS



VKA

Type	Dimensions [mm]				
	B	C	øD	ød	E
VKA 100 MD/LD	206±2	167±2	245	100	290
VKA 125 MD/LD	206±2	175±2	245	125	290
VKA 150 LD	227±2	176±2	345	150	390
VKA 160 MD	202±2	153±2	245	160	290
VKA 160 LD	227±2	176±2	345	160	390
VKA 200 MD	219±2	167±2	345	200	390
VKA 200 LD	227±2	175±2	345	200	390
VKA 250 MD	223±2	163±2	345	250	390
VKA 250 LD	230±2	170±2	345	250	390
VKA 315 MD	247±2	179±2	400	315	445
VKA 315 LD	257±2	189±2	400	315	445

VKAS

Type	Dimensions [mm]				
	B	C	øD	ød	□E
VKAS 100 MD/LD	122	103	242	100	310
VKAS 125 MD/LD	116	101	242	125	310
VKAS 150 LD	129	104	342	150	400
VKAS 160 MD	116	92	242	160	310
VKAS 160 LD	129	104	342	160	400
VKAS 200 MD	123	99	342	200	400
VKAS 200 LD	131	107	342	200	400
VKAS 250 MD	125	100	342	250	400
VKAS 250 LD	131	106	342	250	400
VKAS 315 MD	156	116	400	315	460
VKAS 315 LD	166	126	400	315	460

Type	Accessories										
	TGRV	ETY	AP	AGO	RSK	AKS	FD	FDI	EKA	AVS	AVA
VKA/VKAS 100 MD/LD	1,5	1,5	100	100	100	100	100	100	100	100	100
VKA/VKAS 125 MD/LD	1,5	1,5	125	125	125	125	125	125	125	125	125
VKA/VKAS 150 LD	1,5	1,5	150	150	150	150	-	-	-	-	-
VKA/VKAS 160 MD	1,5	1,5	160	160	160	160	160	160	160	160	160
VKA/VKAS 160 LD	1,5	1,5	160	160	160	160	160	160	160	160	160
VKA/VKAS 200 MD	1,5	1,5	200	200	200	200	200	200	200	200	200
VKA/VKAS 200 LD	1,5	1,5	200	200	200	200	200	200	200	200	200
VKA/VKAS 250 MD	1,5	1,5	250	250	250	250	250	250	250	250	250
VKA/VKAS 250 LD	1,5	1,5	250	250	250	250	250	250	250	250	250
VKA/VKAS 315 MD	1,5	1,5	315	315	315	315	315	315	315	315	315
VKA/VKAS 315 LD	1,5	1,5	315	315	315	315	315	315	315	315	315

Accessories

Filter cassette



FD p. 191

Filter cassette



FDI p. 192

Electric duct heater



EKA p. 156

Heating coil



AVS p. 174

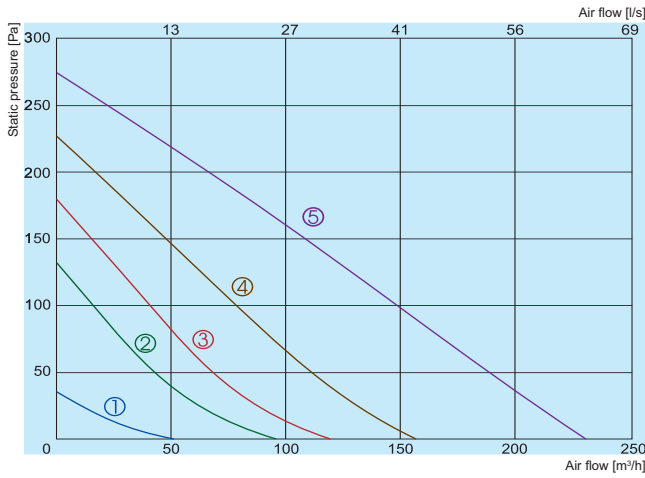
Duct water cooler



AVA p. 184

VKA/VKAS

VKA 100 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

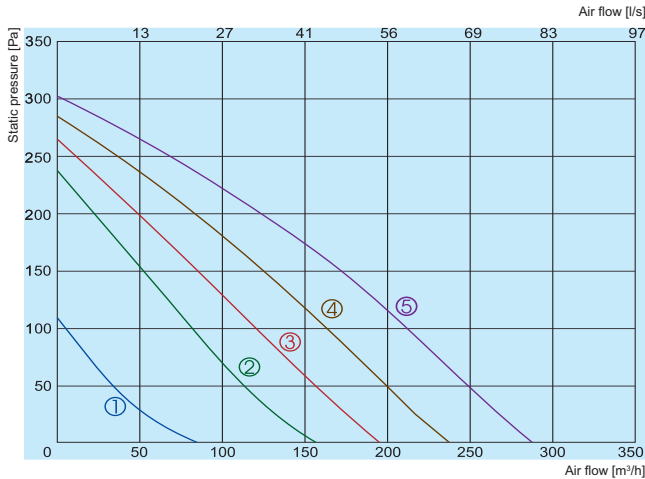
100 MD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	61	43	58	51	55	50	39
Surrounding	46	24	25	35	44	41	28

Measured at 203 m³/h, 32 Pa

VKA 100 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

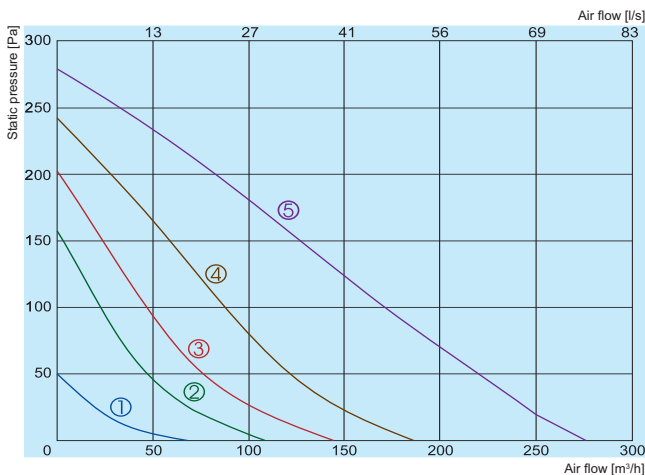
100 LD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	70	53	60	60	67	65	48
Surrounding	58	33	26	43	55	54	36

Measured at 264 m³/h, 32 Pa

VKA 125 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

125 MD

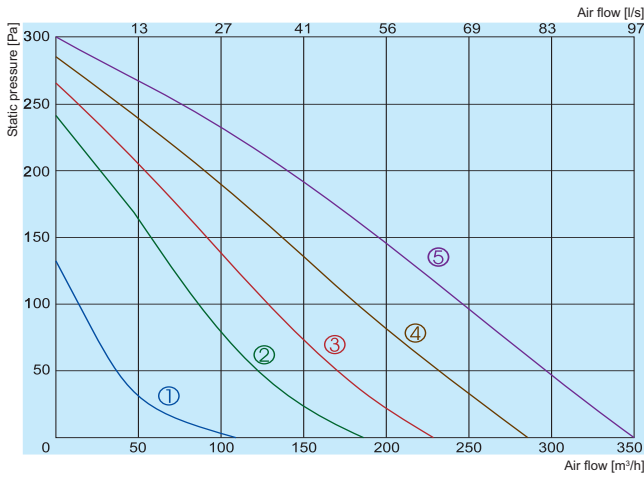
In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	59	42	54	52	53	52	39
Surrounding	44	20	29	35	41	40	28

Measured at 251 m³/h, 20 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKA 125 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

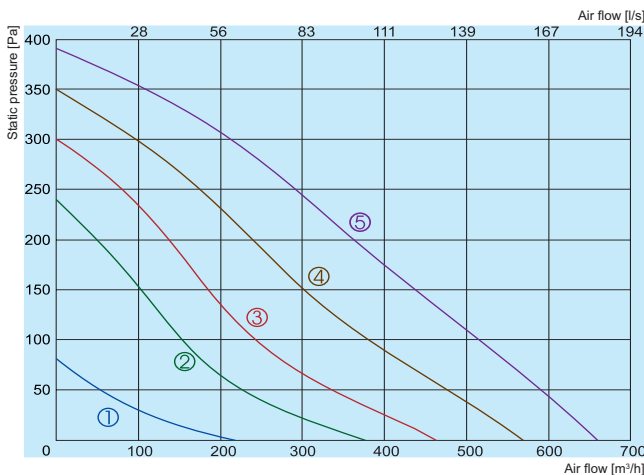
125 LD

In duct
Surrounding
Measured at 331 m³/h, 19 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	68	49	53	61	65	63	55	46
Surrounding	56	27	28	44	53	51	43	32

		100 MD	100 LD	125 MD	125 LD
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,044	0,063	0,044	0,067
Current	[A]	0,19	0,27	0,19	0,29
Speed	[min ⁻¹]	1992	2478	1907	2514
Max. airflow	[m³/h]	232	290	278	350
Min./Max. air temperature	[°C]	-30/40	-30/70	-30/40	-30/70
Weight	[kg]	3	3	3	3
Wiring diagram		No. 2	No. 1	No. 2	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		++	++	++	++

VKA 150 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

150 LD

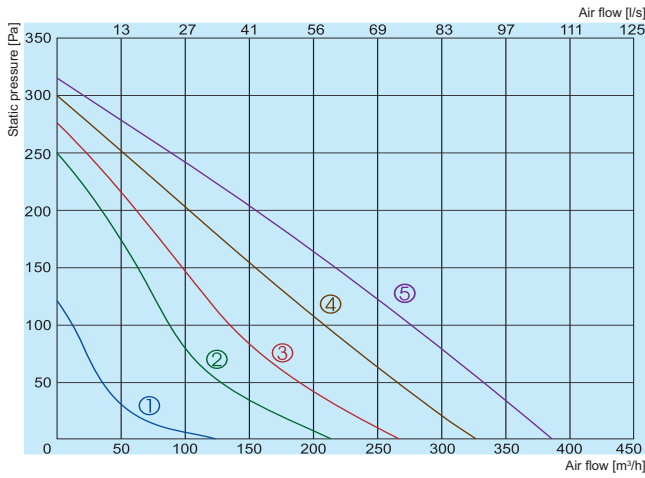
In duct
Surrounding
Measured at 530 m³/h, 86 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	74	51	67	67	71	63	62	49
Surrounding	61	29	48	50	59	51	50	34

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKA/VKAS

VKA 160 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

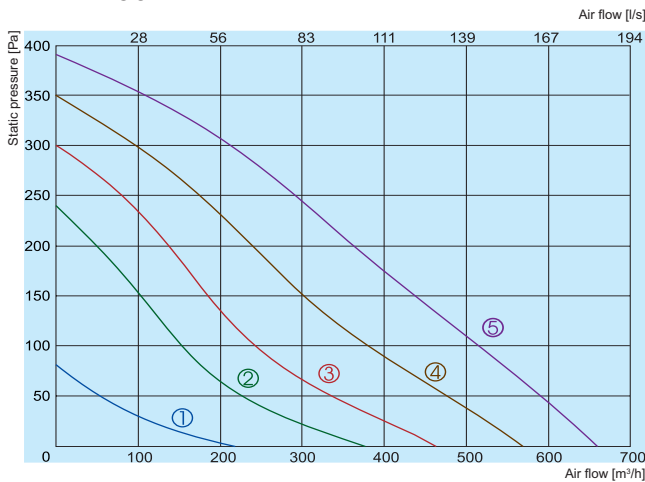
160 MD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	68	47	50	56	64	63	62	49
Surrounding	56	25	20	39	52	51	50	34

Measured at 365 m³/h, 20 Pa

VKA 160 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

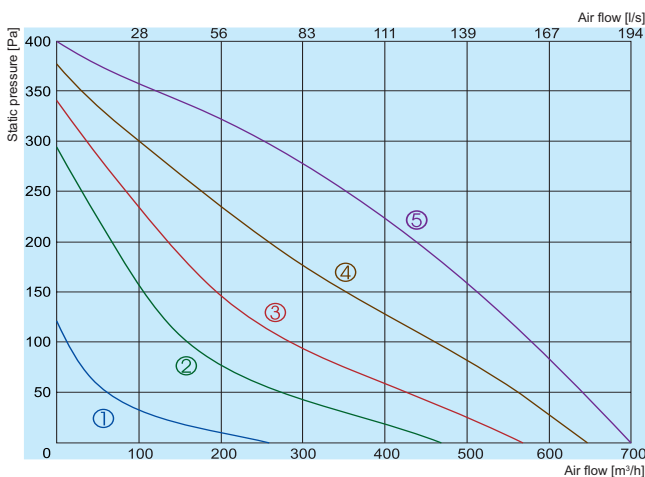
160 LD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	74	51	67	67	71	63	62	49
Surrounding	61	29	48	50	59	51	50	34

Measured at 531 m³/h, 80 Pa

VKA 200 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

200 MD

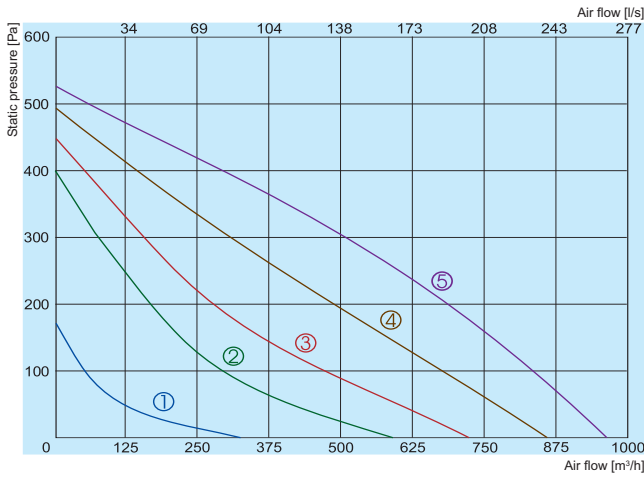
In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
In duct	70	44	53	60	67	62	64	52
Surrounding	55	14	23	40	49	42	53	38

Measured at 673 m³/h, 30 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKA 200 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

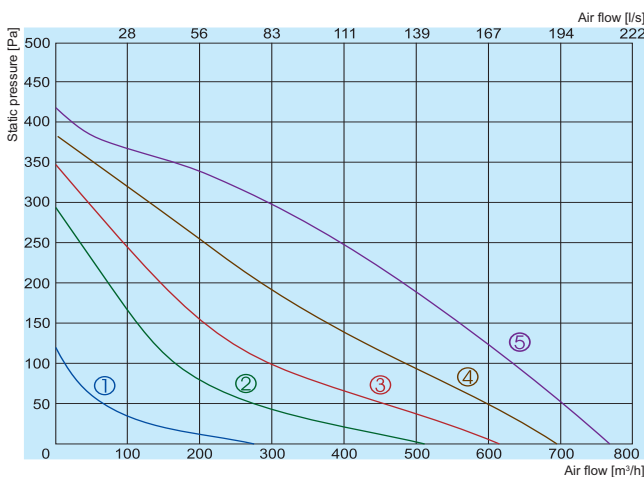
200 LD

In duct
Surrounding
Measured at 915 m³/h, 42 Pa

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	53	61	65	69	66	62
Surrounding	58	23	31	45	51	46	48

		150 LD	160 MD	160 LD	200 MD	200 LD
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,100	0,065	0,100	0,100	0,140
Current	[A]	0,42	0,28	0,41	0,42	0,62
Speed	[min⁻¹]	2503	2409	2503	2503	2590
Max. airflow	[m³/h]	657	386	673	700	960
Min./Max. air temperature	[°C]	-30/60	-30/70	-30/60	-30/60	-30/70
Weight	[kg]	4	3	4	4,5	5,0
Wiring diagram		No. 1	No. 1	No. 1	No. 1	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+ \+	+ \+	+ \+	+ \+	- \-

VKA 250 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

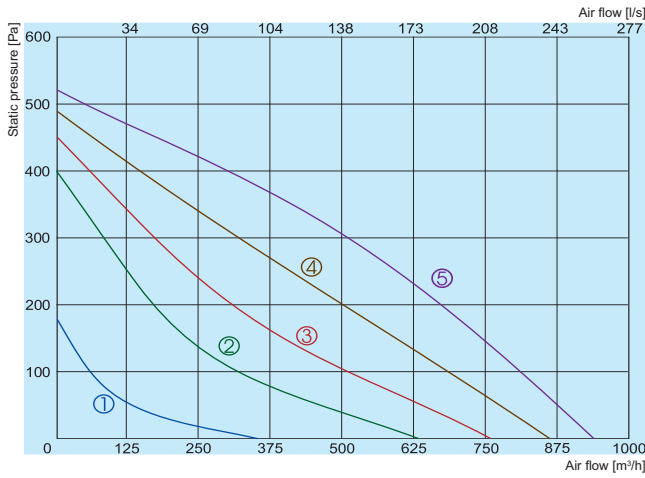
250 MD

In duct
Surrounding
Measured at 733 m³/h, 30 Pa

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	71	42	52	59	67	64	56
Surrounding	51	19	29	39	47	44	38

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKA 250 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

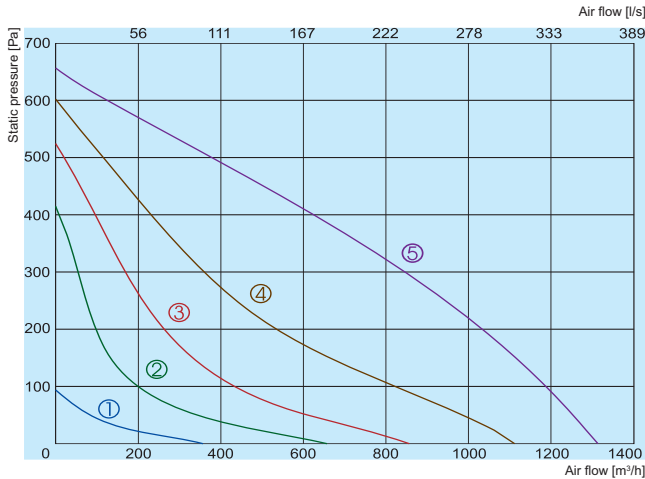
250 LD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	54	62	66	69	67	66
Surrounding	55	31	39	46	49	47	48

Measured at 893 m³/h, 39 Pa

VKA 315 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

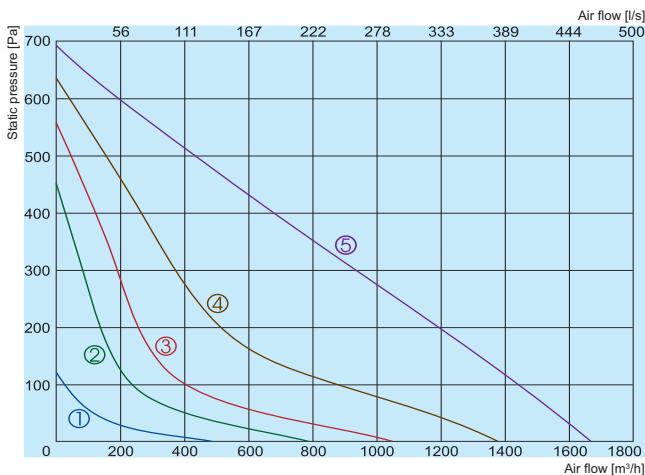
315 MD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	78	53	62	70	75	68	68
Surrounding	57	32	40	49	54	49	44

Measured at 1195 m³/h, 100 Pa

VKA 315 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

315 LD

In duct
Surrounding

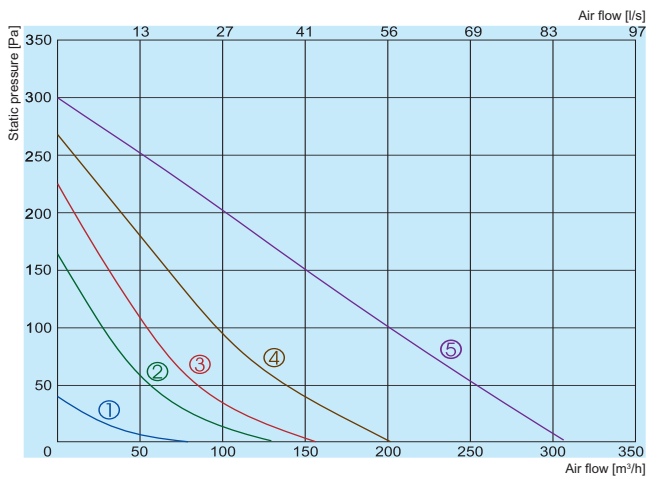
LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	75	51	61	67	67	68	69
Surrounding	54	30	39	46	46	49	45

Measured at 1583 m³/h, 43 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		250 MD	250 LD	315 MD	315 LD
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,100	0,136	0,214	0,292
Current	[A]	0,43	0,6	0,96	1,27
Speed	[min ⁻¹]	2505	2590	2500	2266
Max. airflow	[m ³ /h]	760	938	1310	1670
Min./Max. air temperature	[°C]	-30/60	-30/70	-25/70	-30/45
Weight	[kg]	4,5	4,5	6,5	6,5
Wiring diagram		No. 1	No. 1	No. 3	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		++	-	-	-

VKAS 100 MD



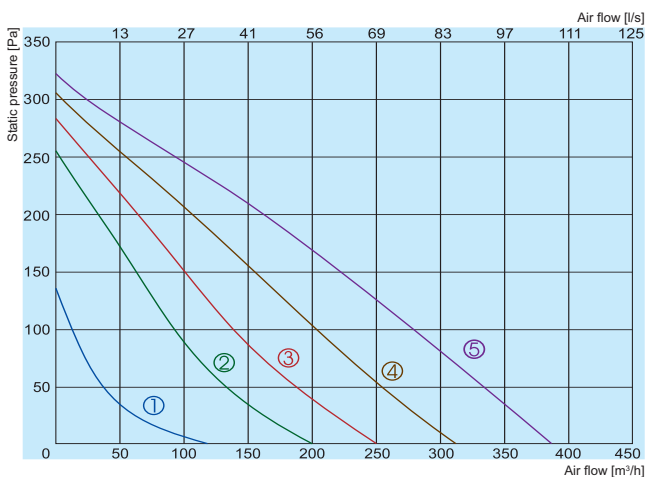
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

100 MD

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	61	43	58	51	55	50	39
Surrounding	46	24	25	35	44	41	28

Measured at 253 m³/h, 45 Pa

VKAS 100 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

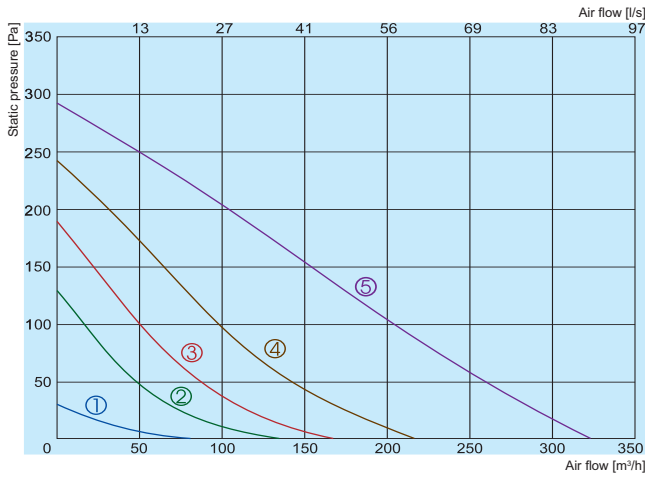
100 LD

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	70	53	60	60	67	65	57
Surrounding	58	33	26	43	55	54	47

Measured at 325 m³/h, 61 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAS 125 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

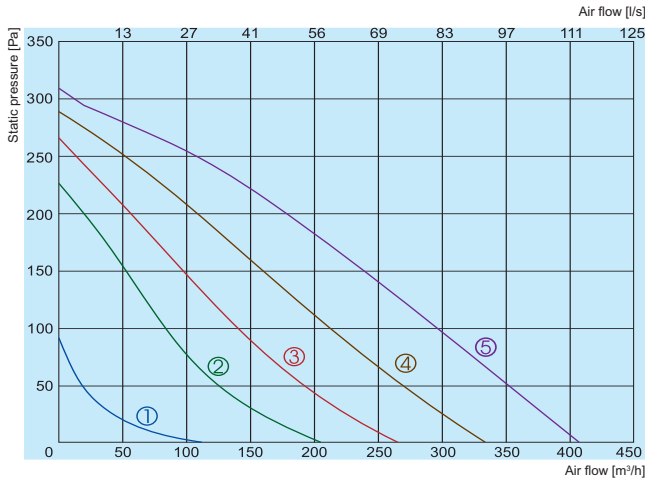
125 MD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	59	42	54	52	53	52	39
Surrounding	44	20	29	35	41	40	28

Measured at 262 m³/h, 46 Pa

VKAS 125 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

125 LD

In duct
Surrounding

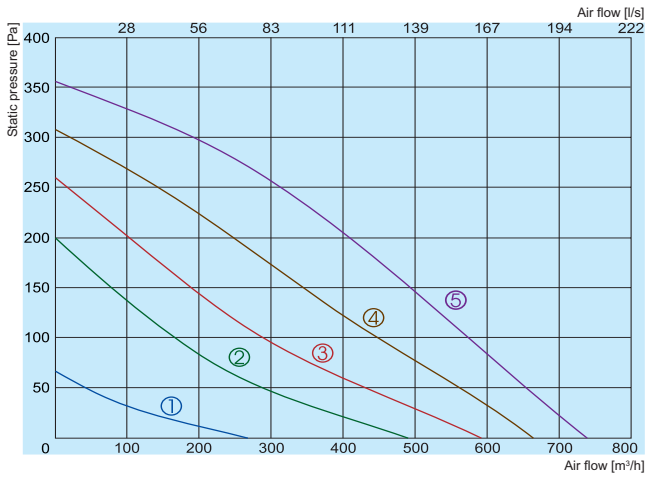
LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	68	49	53	61	65	63	46
Surrounding	56	27	28	44	53	51	43

Measured at 362 m³/h, 41 Pa

		100 MD	100 LD	125 MD	125 LD
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,045	0,064	0,045	0,066
Current	[A]	0,2	0,28	0,2	0,29
Speed	[min ⁻¹]	1992	2478	1907	2514
Max. airflow	[m³/h]	300	380	324	400
Min./Max. air temperature	[°C]	-30/40	-30/70	-30/40	-30/70
Weight	[kg]	2,5	2,5	2,5	2,5
Wiring diagram		No. 2	No. 1	No. 2	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+ \+	+ \+	+ \+	+ \+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAS 150 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

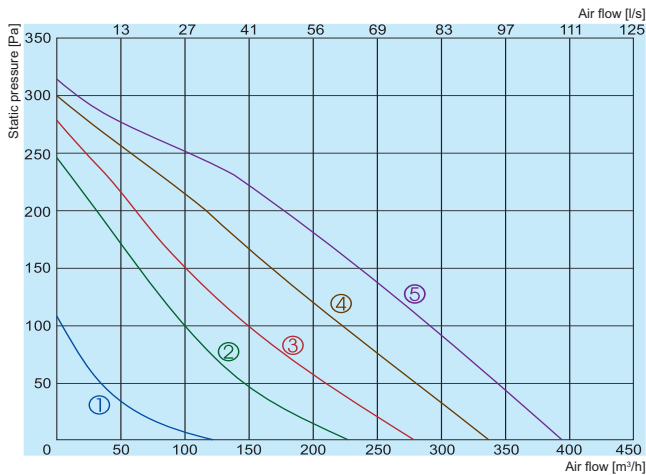
150LD

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	51	67	67	71	63	62
Surrounding	61	29	48	50	59	51	34

Measured at 600 m³/h, 81 Pa

VKAS 160 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

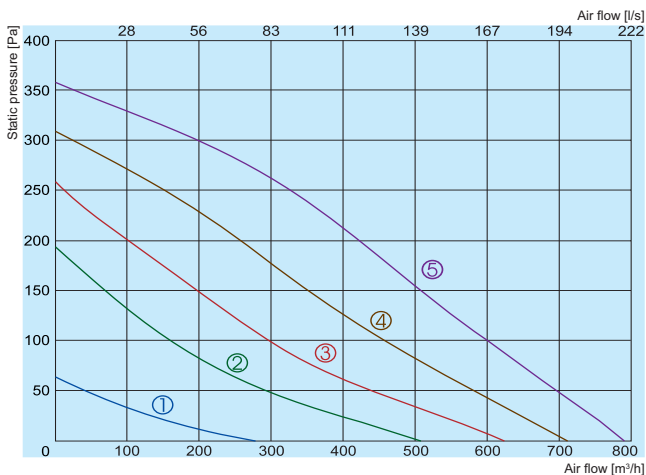
160 MD

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	68	47	50	56	64	63	49
Surrounding	56	25	20	39	52	51	34

Measured at 355 m³/h, 40 Pa

VKAS 160 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

160LD

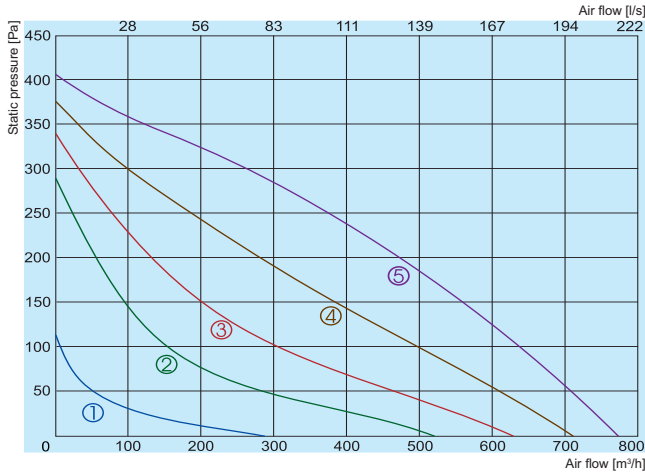
In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	51	67	67	71	63	62
Surrounding	61	29	48	50	59	51	34

Measured at 599 m³/h, 101 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAS 200 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

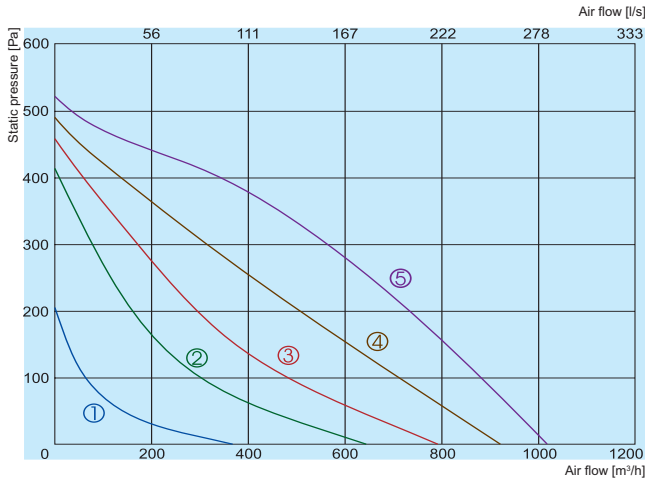
200 MD

In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	70	44	53	60	67	62	52
Surrounding	55	14	23	40	49	42	38

Measured at 670 m³/h, 80 Pa

VKAS 200 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

200 LD

In duct
Surrounding

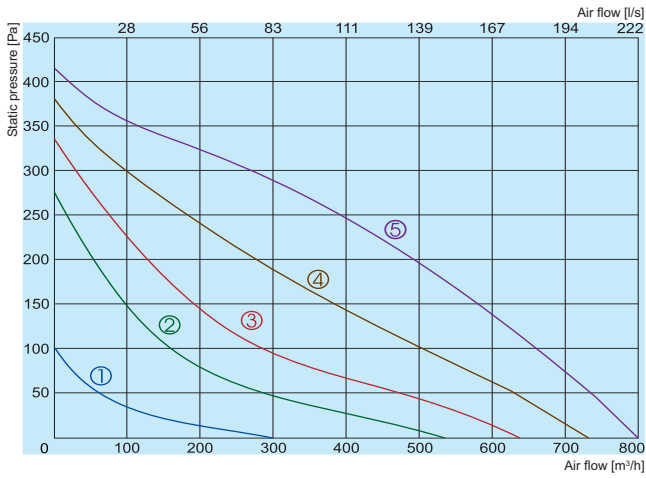
LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	53	61	65	69	66	62
Surrounding	58	23	31	45	51	46	48

Measured at 956 m³/h, 46 Pa

		150 LD	160 MD	160 LD	200 MD	200 LD
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,092	0,064	0,095	0,097	0,140
Current	[A]	0,40	0,28	0,41	0,42	0,62
Speed	[min ⁻¹]	2503	2409	2503	2503	2590
Max. airflow	[m³/h]	730	395	794	775	1000
Min./Max. air temperature	[°C]	-30/60	-30/70	-30/60	-30/60	-30/70
Weight	[kg]	4	2,8	4	4,1	4,8
Wiring diagram		No. 1	No. 1	No. 1	No. 1	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+ \+	+ \+	+ \+	+ \+	- \-

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAS 250 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

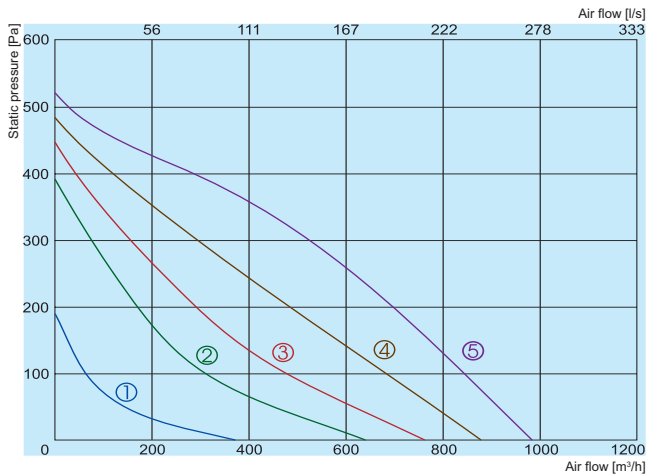
250 MD

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	71	42	52	59	67	64	66
Surrounding	51	19	29	39	47	44	38

Measured at 763 m³/h, 31 Pa

VKAS 250 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

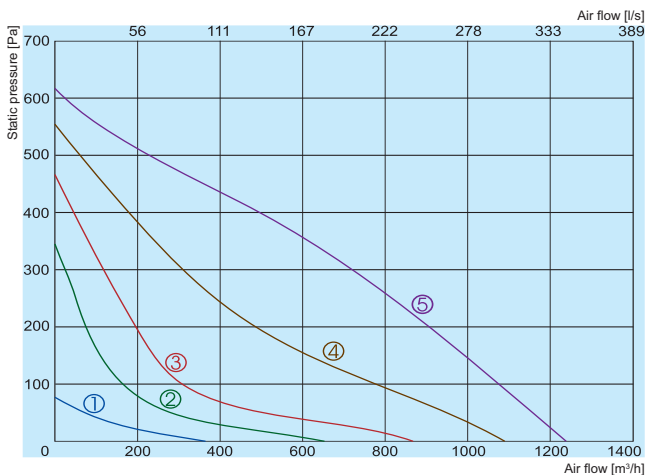
250 LD

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	74	54	62	66	69	67	66
Surrounding	55	31	39	46	49	47	48

Measured at 926 m³/h, 40 Pa

VKAS 315 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

315 MD

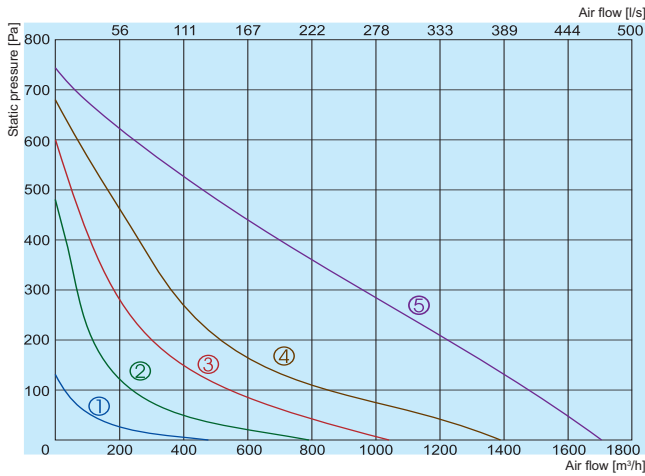
In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	78	53	62	70	75	68	68
Surrounding	57	32	40	49	54	49	44

Measured at 1257 m³/h, 50 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKAS 315 LD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

315 LD

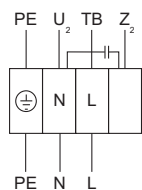
In duct
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	75	51	61	67	67	68	69
Surrounding	54	30	39	46	46	49	48

Measured at 1595 m³/h, 49 Pa

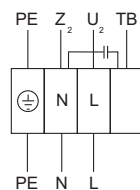
		250 MD	250 LD	315 MD	315 LD
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,099	0,136	0,214	0,303
Current	[A]	0,43	0,6	0,96	1,33
Speed	[min ⁻¹]	2505	2590	2500	2266
Max. airflow	[m ³ /h]	800	960	1310	1670
Min./Max. air temperature	[°C]	-30/70	-30/70	-25/70	-30/45
Weight	[kg]	4,1	4,9	5,6	6,0
Wiring diagram		No. 1	No. 1	No. 4	No. 1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013/2015		+ +	- -	- -	- -

Wiring diagram No. 1 (1~230V)



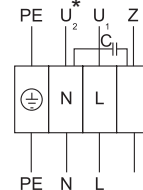
U₂ - blue or grey
Z₂ - black
TB - brown
PE - green - yellow

Wiring diagram No. 2 (1~230V)



U₂ - blue or grey
Z₂ - black
TB - brown
PE - green - yellow

Wiring diagram No. 3 (1~230V)



U₁ - blue
U₂* - black
Z - brown
PE - green - yellow

VKA 355



Circular duct fans

Apvalūs kanaliniai ventilatoriai

Wentylatory do kanałów okrągłych

Круглые канальные вентиляторы



VKA 355

Circular duct fans are used for air supply or extract in ventilation and air conditioning systems. Are mounted into a system of round air ducts. Can be installed in any position. Not suitable for polluted air, aggressive and explosive gases.

Impeller with backward curved blades.

Motor: external rotor, motor protection with built-in thermal-contact, maintenance free ball bearings.



VKA 355

Kanaliniai ventilatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami į apvalių ortakių sistemą. Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktasis sparneliais, plastmasinė arba cinkuoto plieno.

Variklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai.



VKA 355

Okrągłe wentylatory stosowane do nawiewu i wyciągu powietrza w wentylacji i klimatyzacji. Montaż w układach okrągłych kanałów wentylacyjnych. Mogą być instalowane w dowolnej pozycji.

Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych.

Wirnik z łopatkami pochylonymi do tyłu.

Silnik z wirnikiem zewnętrznym oraz z wbudowanym termicznym zabezpieczeniem, bezobsługowe łożyska kulkowe.



VKA 355

Канальные вентиляторы для систем вентиляции и кондиционирования, устанавливаются в систему круглых воздуховодов. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки.

Двигатель: наружный ротор, прямая передача, встроенная термомоментная защита двигателя, не требующие ухода подшипники с длительным сроком службы.

Accessories

Single phase speed controller



TGRV p. 138

Single phase speed controller



ETY p. 141

Mounting clamp



AP p. 152

Guard grille



AGO p. 212

Back draft shutter



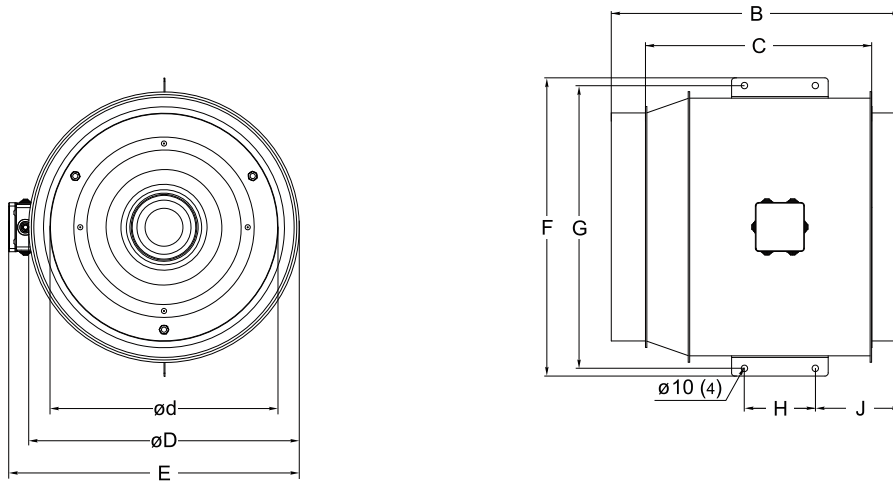
RSK p. 205

Circular duct silencer



AKS p. 198

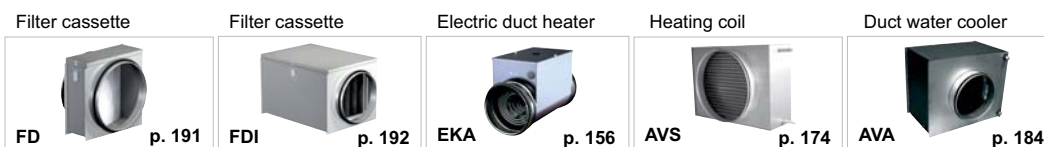
VKA 355



Type	Dimensions [mm]									
	B	C	øD	ød	E	F	G	H	J	ø10 ₍₄₎
VKA 355 SD	450	352	420	354	470	466	442	110	135	10
VKA 355 MD	450	352	420	354	470	466	442	110	135	10

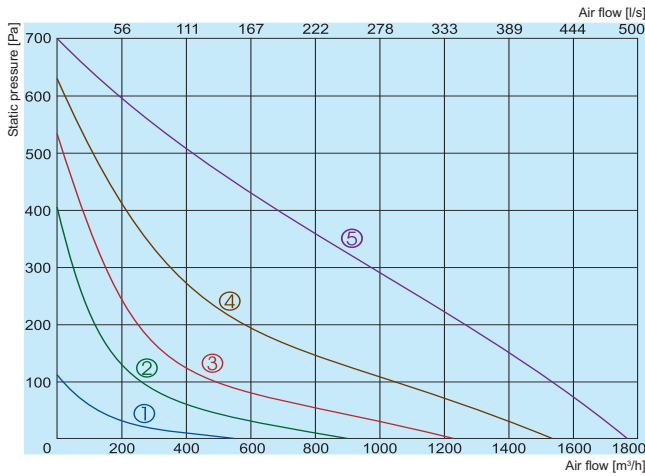
Type	Accessories										
	TGRV	ETY	AP	AGO	RSK	AKS	FD	FDI	EKA	AVS	AVA
VKA 355 SD	1,5	1,5	355	355	355	355	355	355	355	355	355
VKA 355 MD	2	2,5	355	355	355	355	355	355	355	355	355

Accessories



VKA 355

VKA 355 SD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

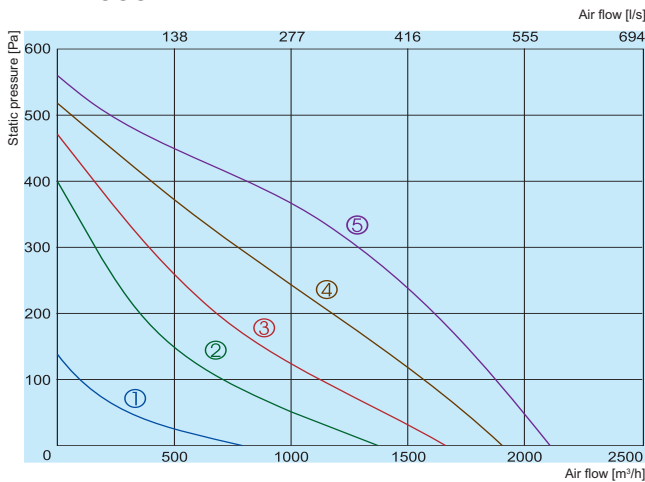
355 SD

In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	77	48	61	68	70	69	72
Surrounding	56	27	39	47	49	49	48

Measured at 1758 m³/h, 0 Pa

VKA 355 MD



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

355 MD

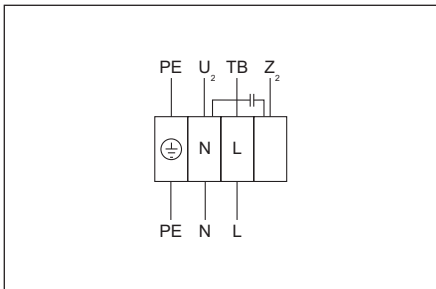
In duct
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
In duct	78	51	61	70	70	74	68
Surrounding	57	33	37	49	53	52	47

Measured at 2098 m³/h, 0 Pa

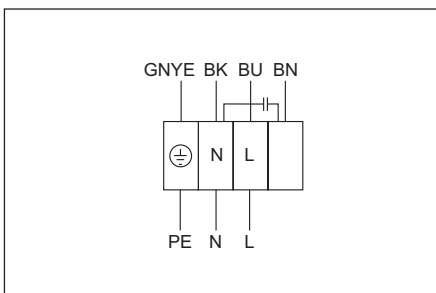
		355 SD	355 MD
Voltage/Frequency	[V/Hz]	230/50	230/50
Power consumption	[kW]	0,30	0,31
Current	[A]	1,33	1,56
Speed	[min ⁻¹]	2250	2650
Max. airflow	[m³/h]	1758	2098
Min./Max. air temperature	[°C]	-30/40	-25/50
Weight	[kg]	11,5	12,0
Wiring diagram		No. 1	No. 2
Protection class:	motor	IP-44	IP-44
	terminal box	IP-55	IP-55
Comply with ERP 2013/2015		-/-	-/-

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



Wiring diagram No. 1 (1~230V)

- U₂ - blue or grey
- Z₂ - black
- TB - brown
- PE - green - yellow



Wiring diagram No. 2 (1~230V)

- GNYE - green-yellow
- BK - black
- BU - blue
- BN - brown
- PE - green - yellow

AKU EKO



NEW!




Acoustically insulated fans

Akustiniai kanaliniai ventiliatoriai

Wentylatory izolowane akustycznie


Канальные акустические вентиляторы

 Acoustically insulated duct fans are made of galvanized steel. The fan casing has thermal and acoustic 50 mm insulation. These products can not be exploited in explosive environment and they can supply/extract only clean air. Centrifugal fans with EC motors with maintenance free ball bearings are used for the AKU EKO fans. Fans with EC motors are characterized by high efficiency and high static pressure.

The equipment has easily opening cover. It allows easy maintenance. The continuous control of motor speed is optionally provided. The speed of EC motors may be changed by connecting 10 kΩ potentiometer to the control circuit. This simplifies way the electrical connection is avoiding the need of expensive and large dimension speed regulators. The speed may be set via an external signal 0-10 VDC.

The maximum motor current and the rated power supply voltage are marked on the data plate, attached to on the unit.

Acoustically insulated fans can be mounted only indoors.

 Kanaliniai akustiniai ventiliatoriai, pasižymi žemu triukšmo lygiu įsiurbimo kanale ir į aplinką. Apžiūros dangtis lengvai atidaromas ir prie korpuso tvirtinamas vyriais ir užraktais, todėl ventiliatorių lengva prižiūrėti bei valyti. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.


Sparnuotė: atgal lenktais sparneliais.

Variklis: išorinis rotorius (EC), tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai. Ventiliatoriai su EC varikliu pasižymi efektyvumu ir aukštu slėgiu.

Nuoseklus variklio valdymas komplektuojamas papildomai. Variklio greitis keičiamas į valdymo grandinę prijungus 10kΩ potenciometrą. Tai leidžia supaprastinti elektros jungimą ir išvengti brangių greičio reguliatorių. Taip pat greitis gali būti nustatomas išoriniu signalu 0-10VDC.

Korpusas: iš cinkuotos skardos

Garso izoliacija: akmens vatos, akmens vatos su sustiprintu paviršiumi, 50mm storio, nedegi.

 Wentylatory izolowane akustycznie wykonane są z ocynkowanej blachy stalowej malowanej proszkowo. Obudowa wentylatora posiada izolację termiczną i akustyczną grubości 50 mm. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych. Wentylatory są przeznaczone do montażu w systemach kanałowych o przekroju kołowym/prostokątnym.


Wentylatory promieniowe z silnikami EC z bezobsługowymi łożyskami kulkowymi. Wentylatory z silnikami EC charakteryzują się wysoką wydajnością i wysokim ciśnieniem statycznym.

Wentylatory wyposażone w otwieraną pokrywę, umożliwiającą łatwą konserwację.

Płynna regulacja prędkości silnika jest możliwa dzięki regulatorom prędkości silników EC.

Maksymalny prąd silnika i napięcie znamionowe zasilania są oznaczone na tabliczce znamionowej znajdującej się na urządzeniu.

Wentylatory izolowane akustycznie mogą być montowane tylko w pomieszczeniach.

 Канальные акустические вентиляторы изготавливаются из оцинкованной жести. Корпус вентиляторов имеет 50 мм слой термической и акустической изоляции. Данные изделия не могут работать во взрывоопасной среде, они предназначены для подачи / вытяжки только чистого воздуха. Монтируется в системы круглых воздуховодов. В вентиляторах АКУ ЕКО используются центробежные вентиляторы, подшипники ЕС-двигателей которые не требуют ухода. Вентиляторы с ЕС-двигателями отличаются большой эффективностью и высоким статическим давлением.

Обзорная крышка устройства открывается легко, что обеспечивает удобное обслуживание.

Возможно плавное управление скоростью двигателя. Изменять скорость ЕС-двигателей можно путем включения в цепь управления потенциометра 10 кОм. Это облегчает электрическое подключение и не требует дорогих и громоздких регуляторов скорости. Скорость также можно изменять внешним сигналом 10VDC.

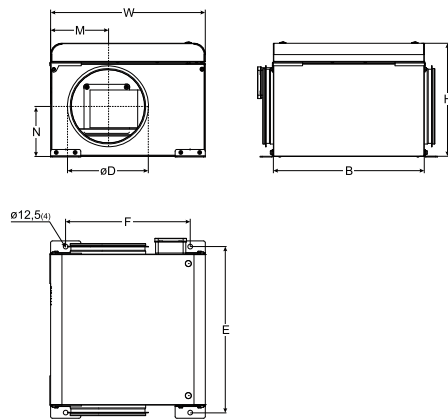
Максимальный ток и мощность двигателей указаны рядом с номинальным напряжением питания.

Акустические вентиляторы монтируются только в закрытых помещениях.

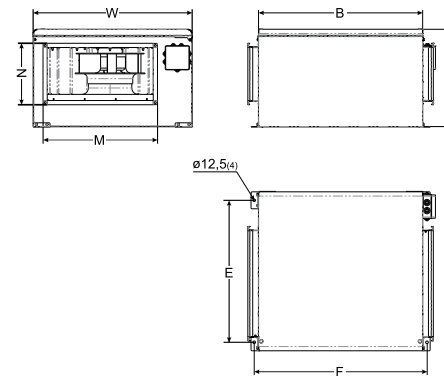
Accessories

0-10V speed controller	Mounting clamp	Guard grille	Back draft shutter	Circular duct silencer	Filter cassette
					
MTP010 p. 142	AP p. 152	AGO p. 212	RSK p. 205	AKS p. 198	FD p. 191

AKU 120 - 315 EKO



AKU 500 x 250 - 700 x 400S EKO



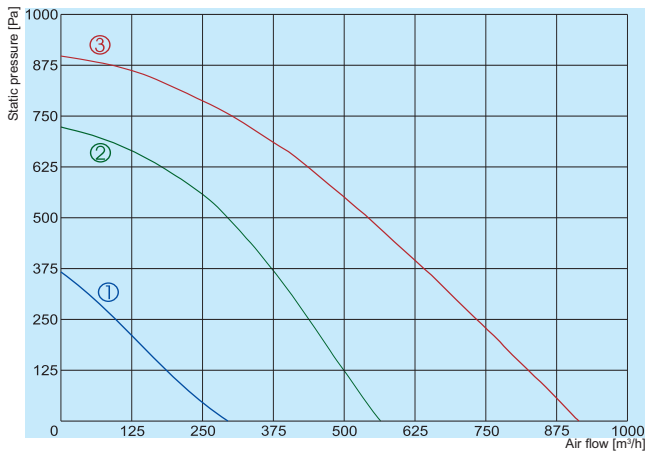
Type	Dimensions [mm]							
	B	W	H	M	N	øD	E	F
AKU 125 EKO	400	410	325	205	165,5	125	440	330
AKU 160 EKO	550	485	340	149	193	160	590	405
AKU 200 EKO	600	545	425	170	259,5	200	640	465
AKU 250 EKO	600	545	425	194	234,5	250	640	465
AKU 315 EKO	437	595	475	297,5	238	315	477	515
AKU 500x250 EKO	775	750	460	500	250	-	670	815
AKU 700x400 EKO	650	950	570	700	400	-	870	690
AKU 700x400S EKO	650	950	570	700	400	-	870	690

Type	Accessories												
	MTP010	AP	AGO	RSK	AKS	SKS	FD	FDI	FDS	EKA	EKS	AVS	SVS
AKU 125 EKO	MTP010	125	125	125	125	-	125	125	-	125	-	125	-
AKU 160 EKO	MTP010	160	160	160	160	-	160	160	-	160	-	160	-
AKU 200 EKO	MTP010	200	200	200	200	-	200	200	-	200	-	200	-
AKU 250 EKO	MTP010	250	250	250	250	-	250	250	-	250	-	250	-
AKU 315 EKO	MTP010	315	315	315	315	-	315	315	-	315	-	315	-
AKU 500x250 EKO	MTP010	-	-	-	-	500x250	-	-	500x250	-	500x250	-	500x250
AKU 700x400 EKO	MTP010	-	-	-	-	700x400	-	-	700x400	-	700x400	-	700x400
AKU 700x250S EKO	MTP010	-	-	-	-	700x400	-	-	700x400	-	700x400	-	700x400

Accessories



AKU EKO



- ① — AKU 125 EKO
- ② — AKU 160 EKO
- ③ — AKU 200 EKO

		125 EKO	160 EKO	200 EKO
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230	~1, 230
Power consumption	[kW]	0,053	0,111	0,192
Current	[A]	0,4	0,88	1,42
Speed	[min ⁻¹]	4480	3490	3380
Max. airflow	[m ³ /h]	296	577	900
Min./Max. air temperature	[°C]	-25/60	-25/60	-25/60
Weight	[kg]	12,0	19,0	24,0
Wiring diagram		No. 1	No. 1	No. 1
Protection class:	motor	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55
Impeller		backwards curved	backwards curved	backwards curved
Inlet		single	single	single
Comply with ERP 2013; 2015		+	+	+

125 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	59	41	54	56	45	45	40	44
Outlet	65	43	58	62	57	57	52	49
Surrounding	47	28	43	44	36	34	31	29

Measured at 207 m³/h, 95 Pa

160 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	65	49	63	60	49	51	48	46
Outlet	74	52	68	70	67	64	61	58
Surrounding	54	36	52	49	42	41	38	36

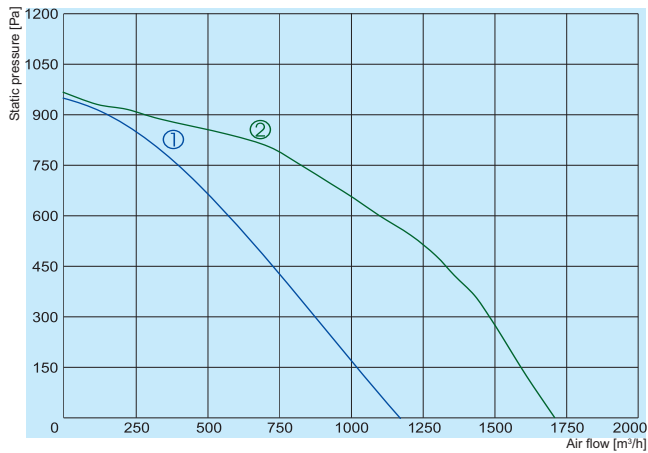
Measured at 413 m³/h, 211 Pa

200 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	68	52	66	60	56	54	51	52
Outlet	80	56	74	76	74	69	64	63
Surrounding	58	39	56	52	49	45	41	42

Measured at 805 m³/h, 170 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



① — AKU 250 EKO
 ② — AKU 315 EKO

		250 EKO	315 EKO
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230
Power consumption	[kW]	0,225	0,400
Current	[A]	1,74	3,0
Speed	[min ⁻¹]	3220	3400
Max. airflow	[m ³ /h]	1167	1642
Min./Max. air temperature	[°C]	-25/60	-25/55
Weight	[kg]	24,0	31,0
Wiring diagram		No. 1	No. 2
Protection class:	motor	IP-44	IP-54
	terminal box	IP-55	IP-55
Impeller		backwards curved	backwards curved
Inlet		single	single
Comply with ERP 2013; 2015		+	+

250 EKO

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	57	70	64	66	59	53	52
Outlet	84	62	77	80	78	73	68	64
Surrounding	63	45	60	56	56	49	44	42

Measured at 1049 m³/h, 120 Pa

315 EKO

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	76	59	73	67	68	65	58	55
Outlet	87	64	75	84	81	76	72	67
Surrounding	65	47	61	60	58	54	48	45

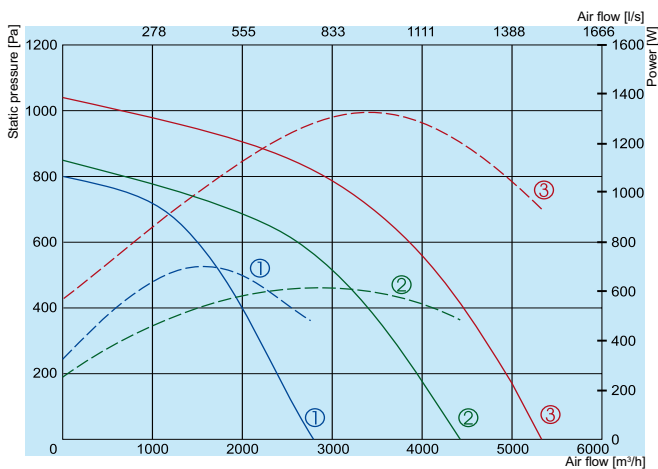
Measured at 1553 m³/h, 120 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

AKU EKO

SALDA

ACOUSTICALLY INSULATED FANS



NEW!

- ① AKU 500x250 EKO
- ② AKU 700x400 EKO
- ③ AKU 700x400S EKO

— Performance
- - - Power consumption



		500x250 EKO	700x400 EKO	700x400S EKO
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50
Power consumption	[kW]	0,540	0,95	1,330
Current	[A]	2,48	4,3	5,8
Speed	[min ⁻¹]	2600	2200	2390
Max. airflow	[m³/h]	2805	4436	5313
Min./Max. air temperature	[°C]	-25/40	-15/60	-25/40
Weight	[kg]	52,0	49,7	51,3
Wiring diagram		No.3	No.4	No.4
Protection class:	motor	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55
Impeller		backwards curved	backwards curved	backwards curved
Inlet		single	single	single
Comply with ERP 2013;2015		+	+	+

500x250 EKO	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	62	75	73	73	67	63	58
Outlet	90	66	81	87	83	81	77	70
Surrounding	69	49	64	64	62	57	53	48

Measured at 2529 m³/h, 116 Pa

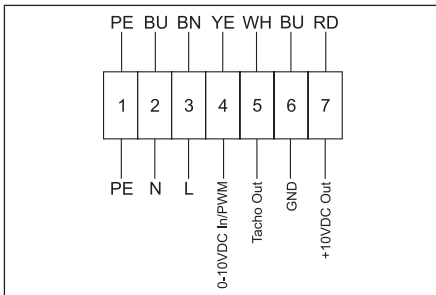
700x400 EKO	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	59	68	68	75	69	67	63
Outlet	85	62	72	72	78	78	75	66
Surrounding	66	66	46	56	61	57	54	49

Measured at 4135 m³/h, 121 Pa

700x400S EKO	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	83	56	73	78	76	75	73	69
Outlet	89	59	77	81	85	82	80	73
Surrounding	71	48	62	64	66	63	61	55

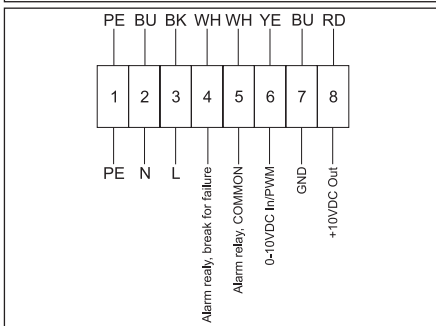
Measured at 5102 m³/h, 101 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



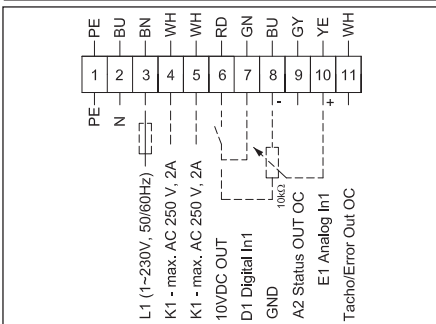
Wiring diagram No. 1 (1~230V)

- PE - yellow-green
- BU - blue
- BN - brown
- YE - yellow
- WH - white
- RD - red



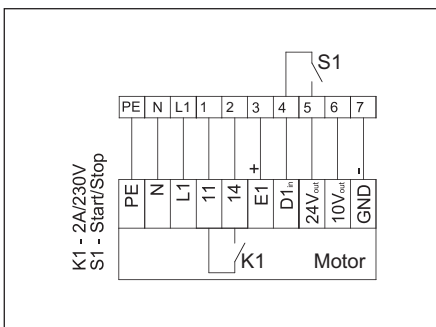
Wiring diagram No. 2 (1~230V)

- PE - yellow-green
- BU - blue
- BN - brown
- YE - yellow
- WH - white
- RD - red



Wiring diagram No. 3 (1~230V)

- PE - yellow-green
- BU - blue
- BN - brown
- YE - yellow
- WH - white
- RD - red
- GN - green
- BU - blue
- GY - grey



Wiring diagram No. 4 (1~230V)

AKU



Acoustically insulated fans

Akustiniai kanaliniai ventiliatoriai

Wentylatory izolowane akustycznie

Канальные акустические вентиляторы



Acoustically insulated duct fans are made of galvanized steel. The fan casing has thermal and acoustic 50 mm insulation. These products can not be exploited in explosive environment. Fans can supply/extract clean air. Fans are mounted into the round air duct systems. For the AKU units are used centrifugal fans and motors with maintenance-free ball bearings. Fans with TK terminals have integrated thermo-contact protection of the motor.

Fans have easily opening cover which ensures easy service.

The maximum motor current and the rated power supply voltage. If the control voltage is reduced, motor current can exceed the rated current. Considering this, we recommend respective speed controllers for every fan.

Acoustically insulated fans can be mounted only indoors.



Kanaliniai akustiniai ventiliatoriai, pasižymi žemu triukšmo lygiu įsiurbimo kanale ir į aplinką. Apžiūros dangtis lengvai atidaromas ir prie korpuso tvirtinamas vyriais ir užraktais, todėl ventiliatorių lengva prižiūrėti bei valyti. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais.

Variklis: išorinis rotorius, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai.

Korpusas: iš cinkuotos skardos

Garso izoliacija: akmens vatos, akmens vatos su sustiprintu paviršiumi, 50mm storio, nedegi.



Wentylatory izolowane akustycznie. Obudowa wentylatora jest malowana proszkowo i posiada izolację termiczną i akustyczną grubości 50 mm. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych. Wentylatory są zamontowane w systemach kanałowych o przekroju kołowym.

Wentylatory promieniowe z bezobsługowymi łożyskami kulkowymi, wyposażone w zintegrowaną termo-kontaktową ochronę silnika.

Wentylatory wyposażone w otwierane pokrywy, umożliwiające łatwą konserwację.

Regulatory obrotów prędkości wentylatora dla każdego wentylatora z typoszeregu.

Akustycznie izolowane wentylatory mogą być montowane tylko w pomieszczeniach zamkniętych.



Канальные акустические вентиляторы изготавливаются из оцинкованной жести. Корпус вентиляторов имеет 50 мм слой термической и акустической изоляции. Данные изделия не могут работать во взрывоопасной среде. Эксплуатируются в целях подачи и вытяжки чистого воздуха. Монтируются в системы круглых воздуховодов. В вентиляторах AKU используется центробежные вентиляторы, подшипники двигателей которые не требуют ухода. Двигатели оснащены автоматической теплозащитой. Вентиляторы с клеммами ТК имеют встроенную термоконтakтную защиту двигателя.

Обзорная крышка вентилятора открывается легко, что обеспечивает удобное обслуживание.

Максимальный ток двигателя указан рядом с номинальным напряжением питания. При снижении напряжения ток двигателя может превысить указанное значение. Поэтому для каждого вентилятора рекомендуем соответствующие регуляторы скоростей.

Акустические вентиляторы монтируются только в закрытых помещениях.

Accessories

Single phase speed controller



TGRV

p. 138

Single phase speed controller



ETY/MTY

p. 141

Mounting clamp



AP

p. 152

Guard grille



AGO

p. 212

Back draft shutter



RSK

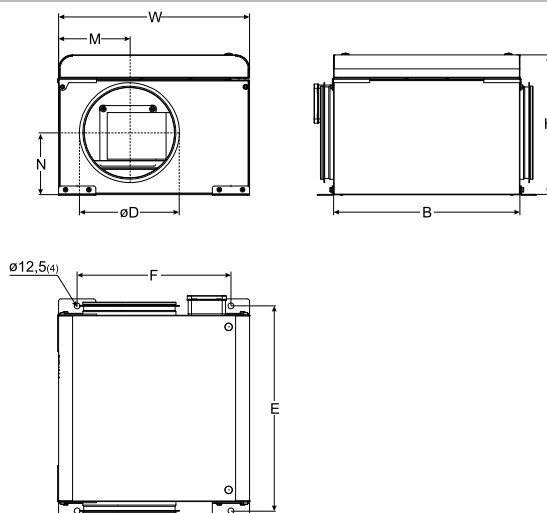
p. 205

Circular duct silencer



AKS

p. 198



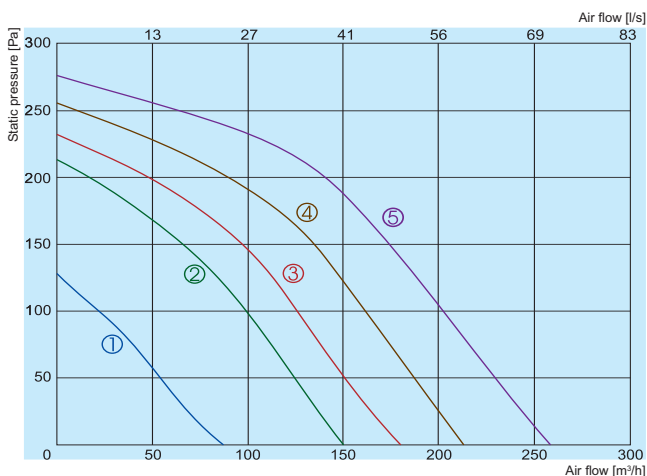
Type	Dimensions [mm]							
	B	W	H	M	N	øD	E	F
AKU 125 M	400	410	300	133	171,5	125	440	330
AKU 125 D	400	410	300	133	171,5	125	440	330
AKU 160 M	400	410	300	261,5	141	160	440	330
AKU 160 D	400	410	300	261,5	141	160	440	330
AKU 200 M	444	444	420	222	250	200	484	364
AKU 200 D	400	410	300	258	133	200	440	330
AKU 200 S	600	560	420	170	244,5	200	640	480
AKU 250 M	444	444	420	222	221,5	250	484	364
AKU 250 D	694	694	500	218	304	250	734	614
AKU 250 S	694	694	500	228	304	250	734	614
AKU 315 M	694	694	500	238	270	315	734	614
AKU 315 D	768	768	570	252	319,5	315	808	688
AKU 400 D	768	768	570	252	304,5	400	808	688
AKU 400 S	705	768	685	384	420	400	745	688

Type	Accessories										
	TGRV	ETY/MTY	AP	AGO	RSK	AKS	FD	FDI	EKA	AVS	AVA
AKU 125 M	1,5	1,5	125	125	125	125	125	125	125	125	125
AKU 125 D	1,5	1,5	125	125	125	125	125	125	125	125	125
AKU 160 M	1,5	1,5	160	160	160	160	160	160	160	160	160
AKU 160 D	1,5	1,5	160	160	160	160	160	160	160	160	160
AKU 200 M	1,5	1,5	200	200	200	200	200	200	200	200	200
AKU 200 D	1,5	1,5	200	200	200	200	200	200	200	200	200
AKU 200 S	1,5	1,5	200	200	200	200	200	200	200	200	200
AKU 250 M	2	1,5	250	250	250	250	250	250	250	250	250
AKU 250 D	4	4	250	250	250	250	250	250	250	250	250
AKU 250 S	2	1,5	250	250	250	250	250	250	250	250	250
AKU 315 M	7	-	315	315	315	315	315	315	315	315	315
AKU 315 D	11	-	315	315	315	315	315	315	315	315	315
AKU 400 D	11	-	400	400	400	400	400	400	400	400	400
AKU 400 S	11	-	400	400	400	400	400	400	400	400	400

Accessories



AKU 125 M



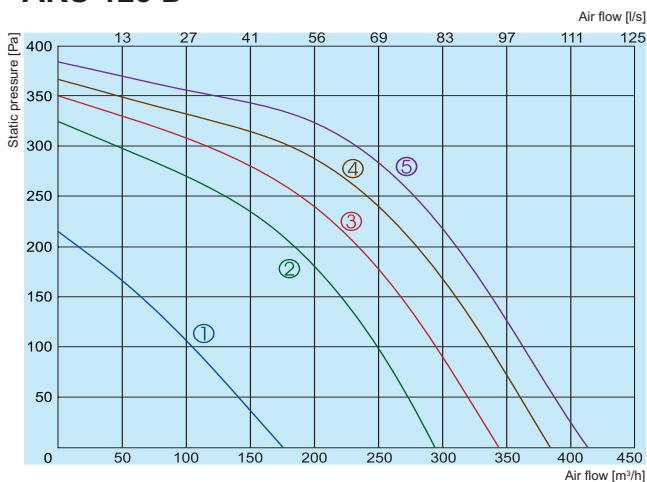
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

125 M

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	55	48	43	48	50	43	44	37
Outlet	67	47	52	57	64	62	56	48
Surrounding	45	33	34	37	41	36	33	26

Measured at 181 m³/h, 132 Pa

AKU 125 D



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

125 D

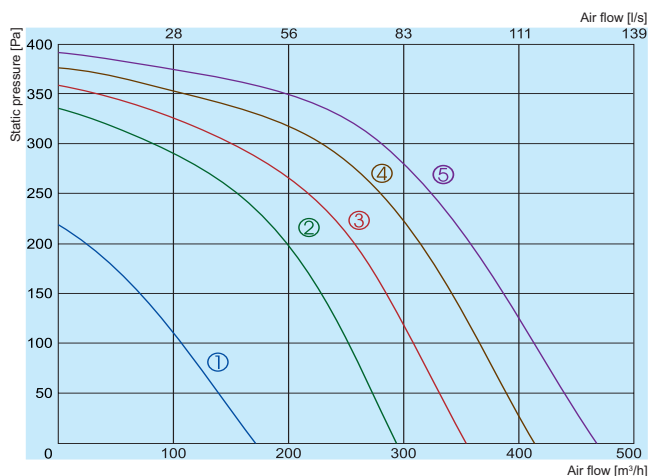
	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	61	56	50	55	52	52	51	47
Outlet	74	53	56	63	70	69	65	60
Surrounding	51	40	39	43	45	44	41	38

Measured at 288 m³/h, 231 Pa

		AKU 125 M	AKU 125 D
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230
Power consumption	[kW]	0,075	0,120
Current	[A]	0,33	0,53
Speed	[min ⁻¹]	2335	2480
Max. airflow	[m³/h]	258	411
Min./Max. air temperature	[°C]	-25/60	-25/65
Weight	[kg]	12,0	13,0
Wiring diagram		No. 2	No. 1
Protection class:	motor	IP-44	IP-44
	terminal box	IP-55	IP-55
Impeller		forward curved	forward curved
Inlet		single	single
Comply with ERP 2013		+	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

AKU 160 M



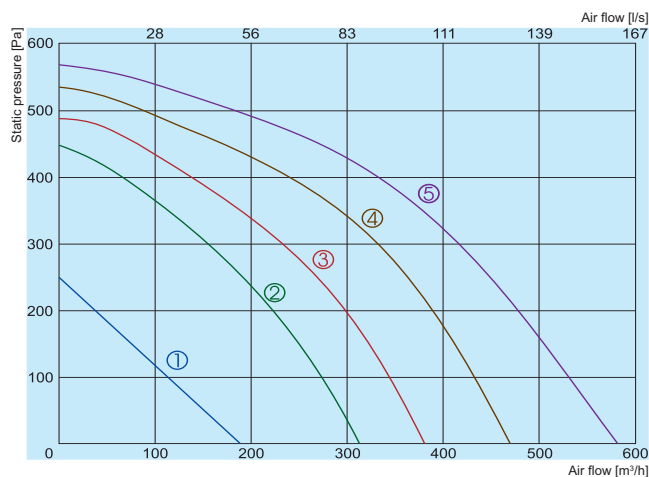
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

160 M

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	65	58	57	59	55	56	58	54
Outlet	76	55	62	66	72	71	67	64
Surrounding	54	42	46	47	48	47	46	43

Measured at 383 m³/h, 149 Pa

AKU 160 D



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

160 D

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	67	59	56	61	58	58	59	55
Outlet	79	57	61	70	75	75	69	66
Surrounding	57	43	45	50	51	50	47	45

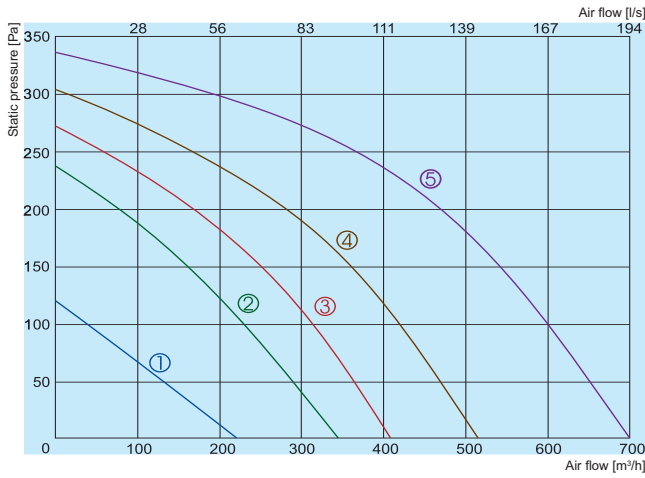
Measured at 492m³/h, 179 Pa

		AKU 160 M	AKU 160 D
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230
Power consumption	[kW]	0,135	0,215
Current	[A]	0,59	0,93
Speed	[min ⁻¹]	2480	2130
Max. airflow	[m³/h]	465	583
Min./Max. air temperature	[°C]	-25/65	-25/65
Weight	[kg]	13,0	14,0
Wiring diagram		No. 1	No. 1
Protection class:	motor	IP-44	IP-44
	terminal box	IP-55	IP-55
Impeller		forward curved	forward curved
Inlet		single	single
Comply with ERP 2013		+	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

AKU

AKU 200 M



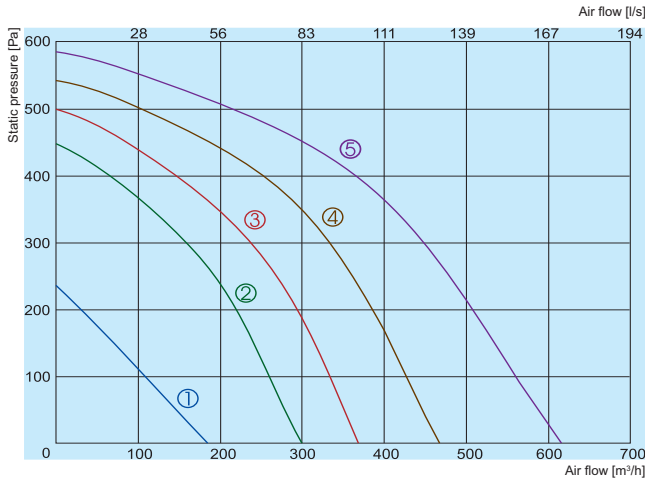
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

200 M

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	63	57	50	55	56	55	54	50
Outlet	73	56	58	62	69	68	66	61
Surrounding	52	42	40	43	47	45	43	40

Measured at 575m³/h, 122 Pa

AKU 200 D



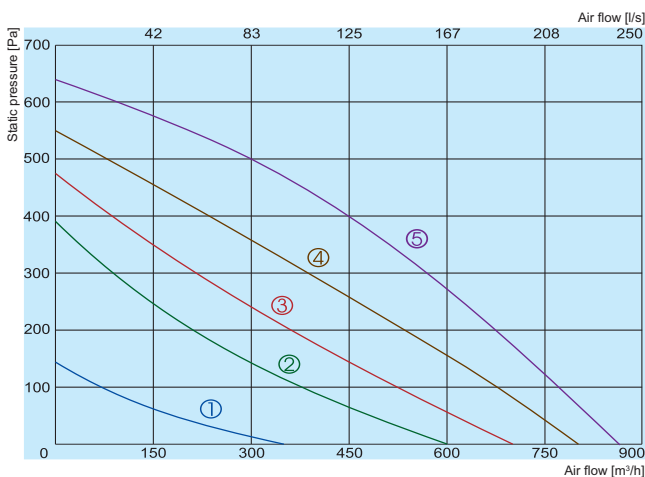
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

200 D

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	69	59	60	62	62	62	61	57
Outlet	78	55	63	69	74	72	70	66
Surrounding	56	41	47	49	51	49	48	45

Measured at 516 m³/h, 183 Pa

AKU 200 S



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

200 S

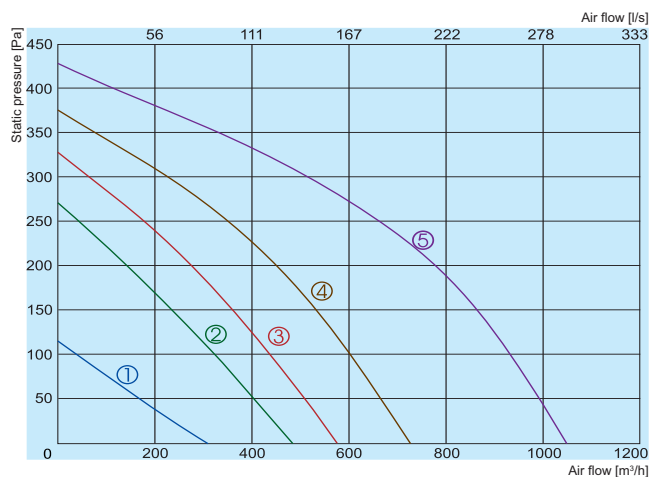
Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	64	54	61	57	54	52	53	52
Outlet	80	56	66	77	74	72	67	63
Surrounding	57	41	50	53	49	46	44	43

Measured at 755 m³/h, 117 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		AKU 200 M	AKU 200 D	AKU 200 S
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230	~1, 230
Power consumption	[kW]	0,167	0,239	0,145
Current	[A]	0,72	1,04	0,64
Speed	[min ⁻¹]	1550	2130	2510
Max. airflow	[m ³ /h]	697	611	870
Min./Max. air temperature	[°C]	-25/55	-25/65	-25/70
Weight	[kg]	17,0	13,0	26,0
Wiring diagram		No. 1	No. 1	No. 1
Protection class:	motor	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55
Impeller		forward curved	forward curved	backwards curved
Inlet		double	single	single
Comply with ERP 2013		+	+	+

AKU 250 M



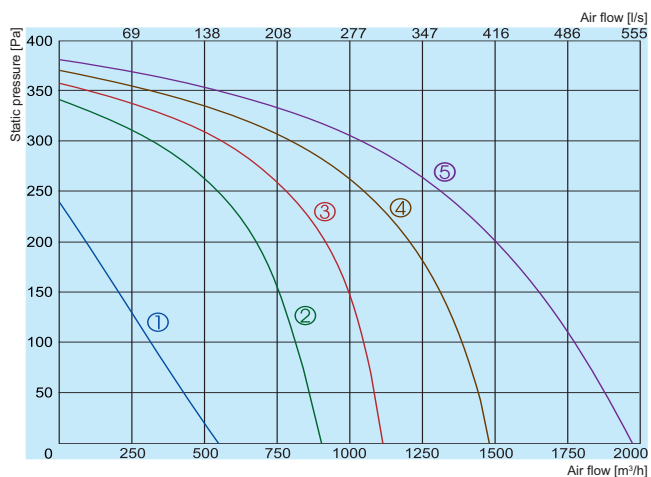
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

250 M

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	61	60	60	58	66	59
Outlet	82	59	64	70	72	80	65
Surrounding	59	45	48	49	49	56	43

Measured at 937 m³/h, 100 Pa

AKU 250 D



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

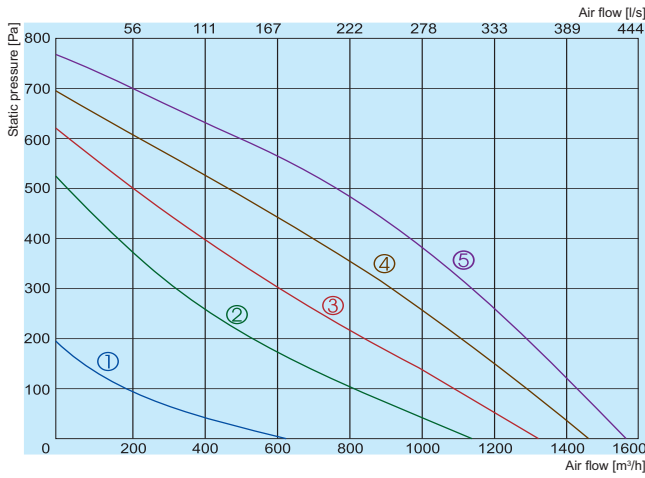
250 D

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	65	58	59	54	57	55	50
Outlet	79	59	65	73	75	71	63
Surrounding	57	45	49	50	51	47	42

Measured at 1380 m³/h, 241 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

AKU 250 S



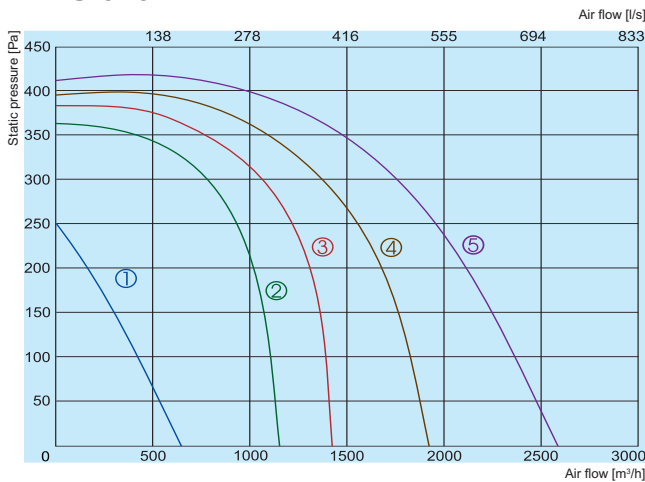
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

250 S

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	68	56	65	58	59	57	55
Outlet	81	67	73	77	75	72	64
Surrounding	59	47	55	52	51	48	44

Measured at 1349 m³/h, 161 Pa

AKU 315 M



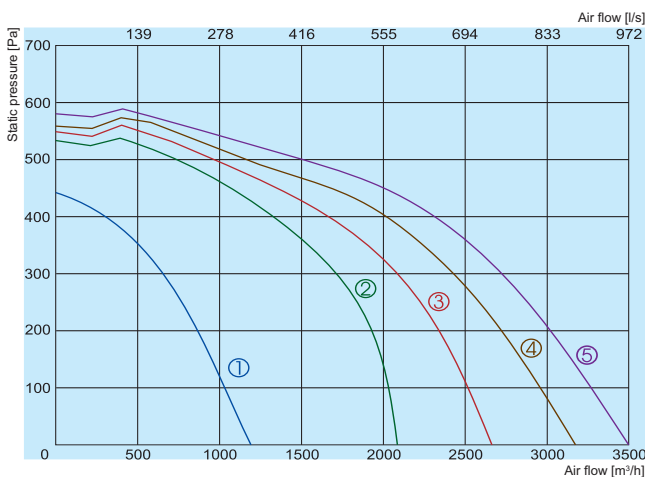
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

315 M

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	71	66	66	59	60	61	54
Outlet	82	65	71	78	77	73	65
Surrounding	60	51	55	53	53	50	44

Measured at 2304 m³/h, 130 Pa

AKU 315 D



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

315 D

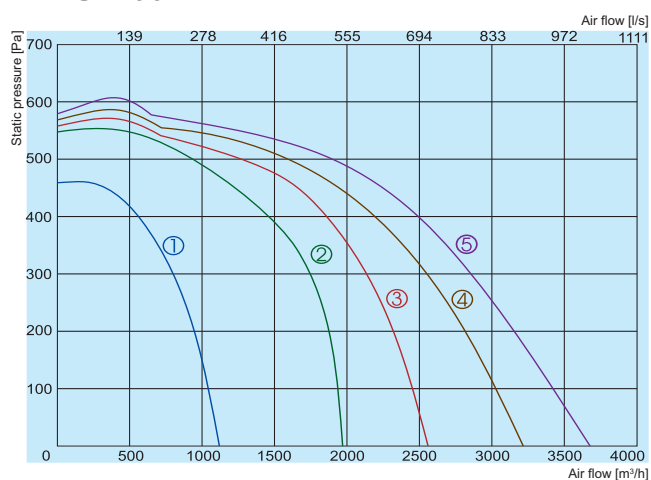
Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	65	67	61	65	64	58
Outlet	87	67	75	82	82	79	71
Surrounding	64	52	57	56	58	55	49

Measured at 3057 m³/h, 192 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		AKU 250 M	AKU 250 D	AKU 250 S	AKU 315 M	AKU 315 D
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230	~1, 230	~1, 230	~1, 230
Power consumption	[kW]	0,265	0,545	0,310	0,950	1,505
Current	[A]	1,15	2,56	1,35	4,79	6,61
Speed	[min ⁻¹]	2082	1190	2665	1210	1290
Max. airflow	[m ³ /h]	1045	1976	1563	2596	3499
Min./Max. air temperature	[°C]	-25/40	-25/40	-25/60	-25/40	-25/40
Weight	[kg]	18,0	39,0	37,0	47,0	63,0
Wiring diagram		No. 2	No. 3	No. 2	No. 3	No. 3
Protection class:	motor	IP-44	IP-54	IP-44	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55	IP-55
Impeller		forward curved	forward curved	backwards curved	forward curved	forward curved
Inlet		double	single	single	single	single
Comply with ERP 2013		+	-	+	+	+

AKU 400 D



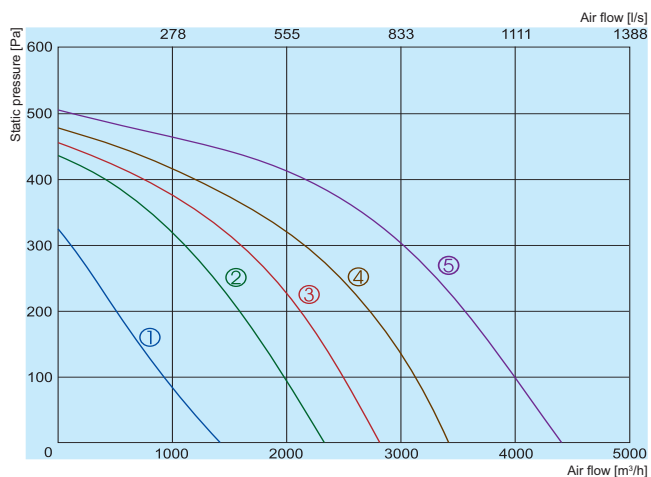
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

400 D

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	76	69	69	64	69	69	63
Outlet	89	70	78	84	83	82	75
Surrounding	66	55	60	58	60	59	53

Measured at 3259 m³/h, 161 Pa

AKU 400 S



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

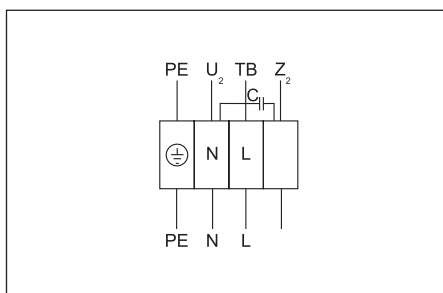
400 S

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	80	71	74	69	71	74	66
Outlet	91	74	81	83	86	85	75
Surrounding	71	58	64	66	63	62	55

Measured at 3884 m³/h, 124 Pa

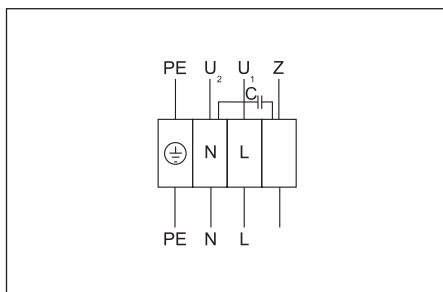
The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		AKU 400 D	AKU 400 S
Voltage/Frequency	[V/Hz]	~1, 230	~1, 230
Power consumption	[kW]	1,720	1,40
Current	[A]	7,63	6,14
Speed	[min ⁻¹]	1290	1150
Max. airflow	[m ³ /h]	3664	4391
Min./Max. air temperature	[°C]	-25/40	-25/40
Weight	[kg]	63,0	70,0
Wiring diagram		No. 3	No. 4
Protection class:	motor	IP-54	IP-54
	terminal box	IP-55	IP-55
Impeller		forward curved	backwards curved
Inlet		single	double
Comply with ERP 2013		+	+



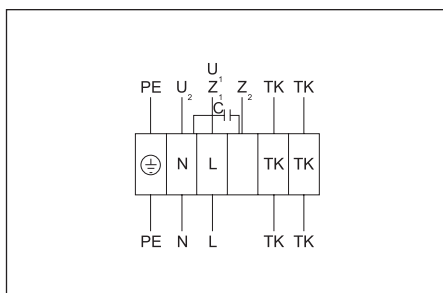
Wiring diagram No. 1 (1~230V)

PE - yellow-green
 U₂ - blue
 Z₂ - black
 TB - brown



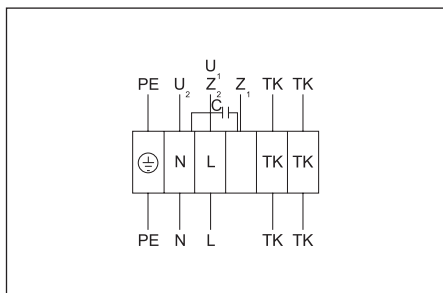
Wiring diagram No. 2 (1~230V)

PE - yellow-green
 U₂ - black
 U₁ - blue
 Z - brown



Wiring diagram No. 3 (1~230V)

PE - yellow-green
 U₁ - brown
 U₂ - blue
 Z₁ - black
 Z₂ - orange
 TK - white



Wiring diagram No. 4 (1~230V)

PE - yellow-green
 U₁ - brown
 U₂ - blue
 Z₁ - black
 Z₂ - orange
 TK - white

VKS/VKSA

VKS



VKSA



Rectangular duct fans

Stačiakampiai kanaliniai ventiliatoriai

Wentylatory do kanałów o przekroju prostokątnym

Прямоугольные каналные вентиляторы



VKS

Rectangular duct fans for ventilation and air conditioning systems, mounted into a system of rectangular air ducts. Used for the air supply or extract. Not suitable for polluted air, aggressive and explosive gases. Compact, with low noise level, mounted in any position, simple access to clean an impeller.

Impeller with forward curved blades made of galvanized steel.

Ziehl-Abegg motorized impeller.

Motor: external rotor, motor protection with built-in thermal-contact, maintenance free ball bearings.

Housing: made of galvanized steel.

VKSA

Sound insulation: mineral wool, 50 mm thickness.

Low noise level.



VKS

Stačiakampiai kanaliniai ventiliatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami į stačiakampių ortakių sistemą.

Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui. Kompaktiški, tyliai dirbantys, montuojami bet kokioje padėtyje, sparnuotė lengvai iškeliami valymui.

Sparnuotė: į priekį lenktais sparneliais, cinkuoto plieno.

Motorizuota Ziehl-Abegg sparnuotė.

Variklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys nereikalaujantys priežiūros guoliai.

Korpusas: iš cinkuotos skardos.

VKSA

Garsinė izoliacija: mineralinė vata, 50mm storio.

Žemas triukšmo lygis.



VKS

Wentylatory przystosowane do systemu prostokątnych kanałów nawiewnych i wywiewnych instalacji wentylacji i klimatyzacji. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych. Wentylatory o kompaktowych wymiarach, niskim poziomie hałasu, montowany w dowolnej pozycji, z prostym dostępem do wirnika. Wirnik firmy Ziehl-Abegg z łopatkami wygiętymi do przodu, wykonanymi z ocynkowanej blachy stalowej. Silnik z wirnikiem zewnętrznym, z wbudowanym zabezpieczeniem termicznym i bezolejowymi łożyskami kulkowymi.

Korpus: wykonany z ocynkowanej stali.

VKSA

Izolacja akustyczna: wełna mineralna, 50 mm grubości.

Niski poziom hałasu.



VKS

Прямоугольные каналные вентиляторы для систем вентиляции и кондиционирования, устанавливаются в систему прямоугольных воздуховодов. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов. Компактные, бесшумные, устанавливаются в любом положении, крыльчатка легко извлекается для чистки.

Крыльчатка: загнутые вперёд лопатки, оцинкованная сталь.

Двигатель: наружный ротор, прямая передача, встроенные термоконтакты двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: оцинкованной жести.

VKSA

Звукоизоляция: минеральная вата толщиной 50 мм.

Низкий уровень шума.

Accessories

Single phase speed controller



TGRV p. 138

Three phase speed controller



TGRT p. 139

Single phase speed controller



ETY/MTY p. 141

Flexible connection



LJ/E LJ/PG p. 150/151

Rectangular duct silencer



SKS p. 196

Filter cassette



FDS p. 190

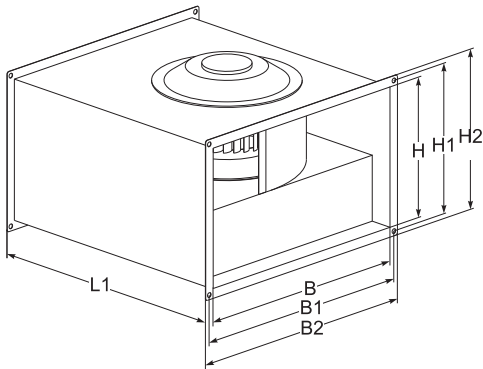
Electrical duct heater



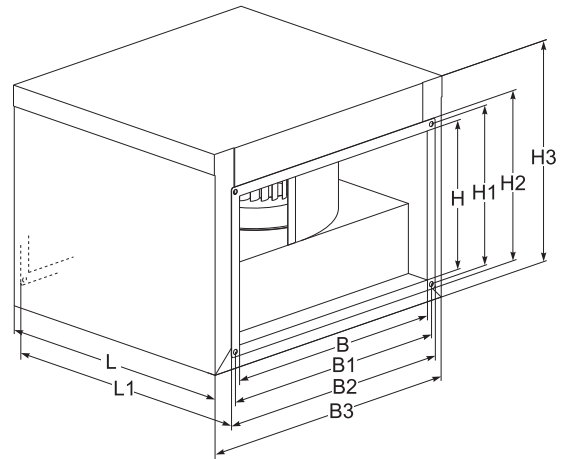
EKS p. 164

VKS/VKSA

VKS



VKSA



VKS

Type	Dimensions [mm]						
	B	B1	B2	H	H1	H2	L1
VKS 400x200	400	420	440	200	220	240	445
VKS 500x250	500	520	540	250	270	290	530
VKS 500x300	500	520	540	300	320	340	560
VKS 600x300	600	620	640	300	320	340	640
VKS 600x350	600	620	640	350	370	390	700
VKS 700x400	700	720	740	400	420	440	780
VKS 800x500	800	820	840	500	520	540	880
VKS 1000x500	1000	1020	1040	500	520	540	980

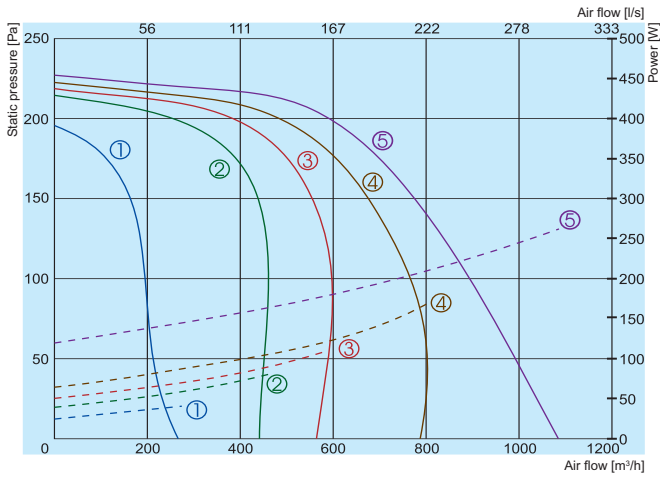
VKSA

Type	Dimensions [mm]									
	B	B1	B2	B3	H	H1	H2	H3	L	L1
VKSA 400x200	400	420	440	507	200	220	240	338	417	445
VKSA 500x250	500	520	540	605	250	270	290	393	502	530
VKSA 500x300	500	520	540	605	300	320	340	443	532	560
VKSA 600x300	600	620	640	705	300	320	340	443	612	640
VKSA 600x350	600	620	640	705	350	370	390	493	672	700
VKSA 700x400	700	720	740	825	400	420	440	565	752	780
VKSA 800x500	800	820	840	905	500	520	540	665	852	880
VKSA 1000x500	1000	1020	1040	1105	500	520	540	665	952	980

VKS/VKSA

Type	Accessories							
	TGRV	TGRT	ETY/MTY	LJ/E	LJ/PG	SKS	FDS	EKS
VKS/VKSA 400x200-4 L1	2	-	2,5	40x20	40x20	40-20	40-20	400x200
VKS/VKSA 400x200-4 L3	-	1	-	40x20	40x20	40-20	40-20	400x200
VKS/VKSA 500x250-4 L1	3	-	4	50x25	50x25	50-25	50-25	500x250
VKS/VKSA 500x250-4 L3	-	1	-	50x25	50x25	50-25	50-25	500x250
VKS/VKSA 500x300-4 L1	4	-	4	50x30	50x30	50-30	50-30	500x300
VKS/VKSA 500x300-4 L3	-	3	-	50x30	50x30	50-30	50-30	500x300
VKS/VKSA 500x300-6 L1	3	-	2,5	50x30	50x30	50-30	50-30	500x300
VKS/VKSA 600x300-4 L1	11	-	-	60x30	60x30	60-30	60-30	600x300
VKS/VKSA 600x300-4 L3	-	4	-	60x30	60x30	60-30	60-30	600x300
VKS/VKSA 600x300-6 L1	3	-	2,5	60x30	60x30	60-30	60-30	600x300
VKS/VKSA 600x300-6 L3	-	2	-	60x30	60x30	60-30	60-30	600x300
VKS/VKSA 600x350-4 L1	14	-	-	60x35	60x35	60-35	60-35	600x350
VKS/VKSA 600x350-4 L3	-	7	-	60x35	60x35	60-35	60-35	600x350
VKS/VKSA 600x350-6 L3	-	3	-	60x35	60x35	60-35	60-35	600x350
VKS/VKSA 700x400-4 L3	-	11	-	70x40	70x40	70-40	70-40	700x400
VKS/VKSA 700x400-6 L3	-	3	-	70x40	70x40	70-40	70-40	700x400
VKS/VKSA 800x500-4S L3	-	14	-	80x50	80x50	80-50	80-50	800x500
VKS/VKSA 800x500-4 L3	-	14	-	80x50	80x50	80-50	80-50	800x500
VKS/VKSA 800x500-6 L3	-	7	-	80x50	80x50	80-50	80-50	800x500
VKS/VKSA 800x500-8 L3	-	4	-	80x50	80x50	80-50	80-50	800x500
VKS/VKSA 1000x500-4S L3	-	14	-	100x50	100x50	100-50	100-50	1000x500
VKS/VKSA 1000x500-4 L3	-	14	-	100x50	100x50	100-50	100-50	1000x500
VKS/VKSA 1000x500-6 L3	-	7	-	100x50	100x50	100-50	100-50	1000x500
VKS/VKSA 1000x500-8 L3	-	4	-	100x50	100x50	100-50	100-50	1000x500

VKS/VKSA 400x200-4 L1



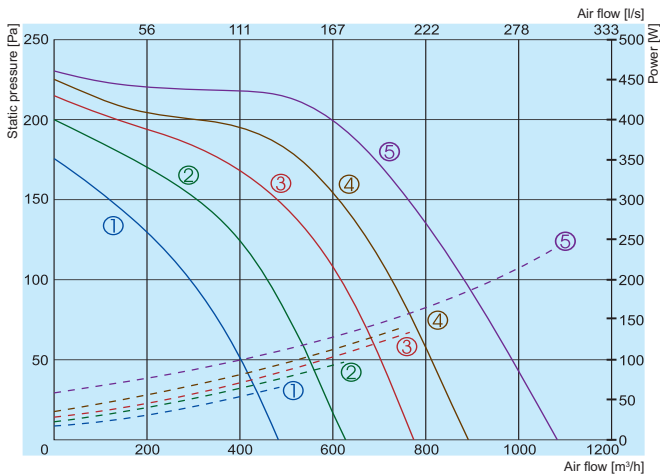
- Performance
- - - Power consumption
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

400x200-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	64	43	51	57	61	54	51	50
Outlet	68	44	53	58	65	59	57	56
VKS surrounding	54	29	38	47	51	47	43	41
VKSA surrounding	44	22	31	37	40	37	35	33

Measured at 452 m³/h, 217 Pa

VKS/VKSA 400x200-4 L3



- Performance
- - - Power consumption
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

400x200-4 L3

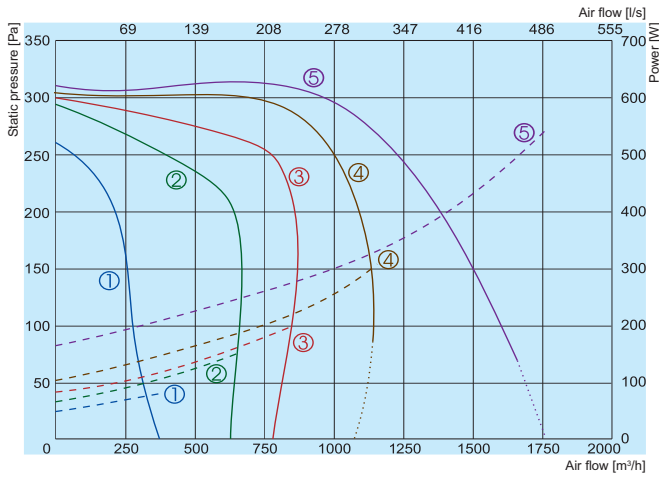
	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	62	37	49	55	59	53	49	47
Outlet	66	38	51	57	63	58	55	54
VKS surrounding	53	23	37	46	49	46	40	37
VKSA surrounding	42	17	30	35	38	37	32	28

Measured at 524 m³/h, 214 Pa

		400x200-4 L1	400x200-4 L3
Voltage/Frequency	[V/Hz]	230/50	400/50
Power consumption	[kW]	0,264	0,241
Current	[A]	1,35	0,44
Speed	[min ⁻¹]	1180	1230
Max. airflow	[m³/h]	1079	1078
Min./Max. air temperature	[°C]	-25 / 40	-25 / 70
Weight	[kg]	14 / 21	14 / 21
Wiring diagram		No. 1	No. 2
Protection class:	motor	IP-54	IP-44
	terminal box	IP-55	IP-55
Comply with ERP 2013		-	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 500x250-4 L1



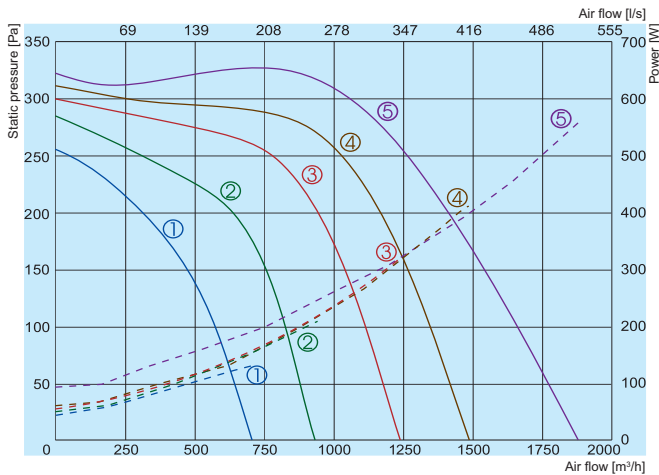
- Performance
Power consumption
Not operating zone
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

500x250-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	63	44	50	58	59	55	53	50
Outlet	70	45	51	63	67	61	60	56
VKS surrounding	57	32	40	53	51	44	49	45
VKSA surrounding	49	27	33	43	44	38	42	39

Measured at 882 m³/h, 311 Pa

VKS/VKSA 500x250-4 L3



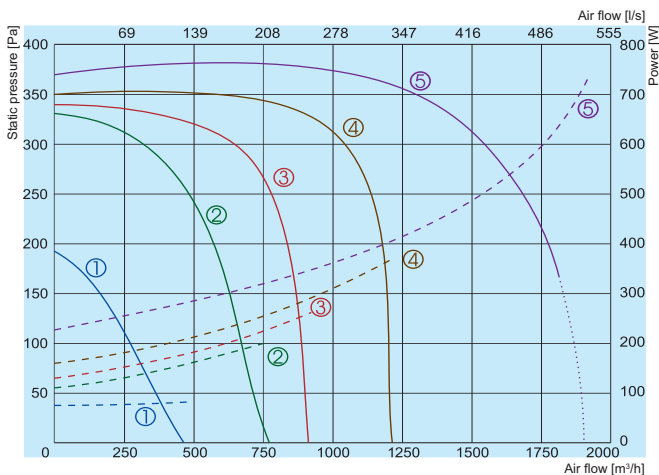
- Performance
Power consumption
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

500x250-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	66	47	53	59	62	59	56	52
Outlet	73	48	54	64	70	65	63	61
VKS surrounding	58	35	43	52	55	48	46	44
VKSA surrounding	50	30	35	44	47	41	40	39

Measured at 1058 m³/h, 301 Pa

VKS/VKSA 500x300-4 L1



- Performance
Power consumption
Not operating zone
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

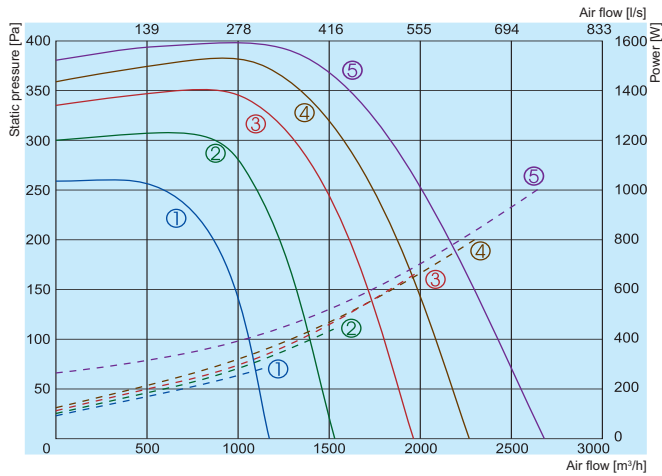
500x300-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	65	50	52	55	59	58	58	55
Outlet	71	51	55	62	67	63	64	60
VKS surrounding	57	37	50	50	54	47	46	42
VKSA surrounding	48	33	37	43	44	39	39	34

Measured at 1027 m³/h, 380 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 500x300-4 L3



— Performance
- - - Power consumption

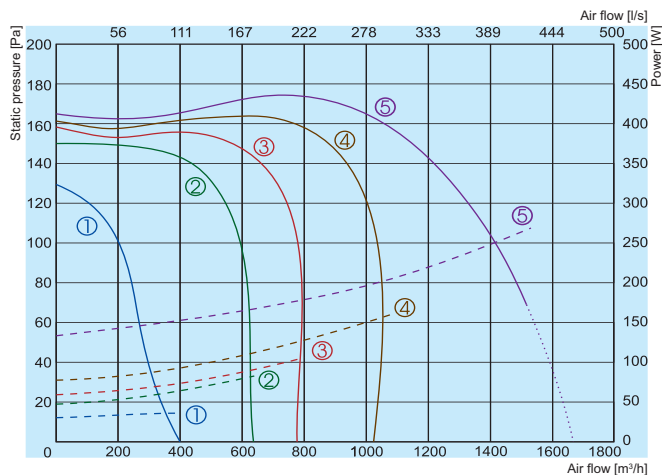
① 130V
② 170V
③ 220V
④ 270V
⑤ 400V

500x300-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	70	55	54	60	65	63	62	63
Outlet	75	54	57	65	71	67	67	65
VKS surrounding	59	38	50	50	55	51	49	47
VKSA surrounding	52	35	40	44	48	43	42	39

Measured at 1449 m³/h, 378 Pa

VKS/VKSA 500x300-6 L1



— Performance
- - - Power consumption
⋯ Not operating zone

① 80V
② 120V
③ 140V
④ 170V
⑤ 230V

500x300-6 L1

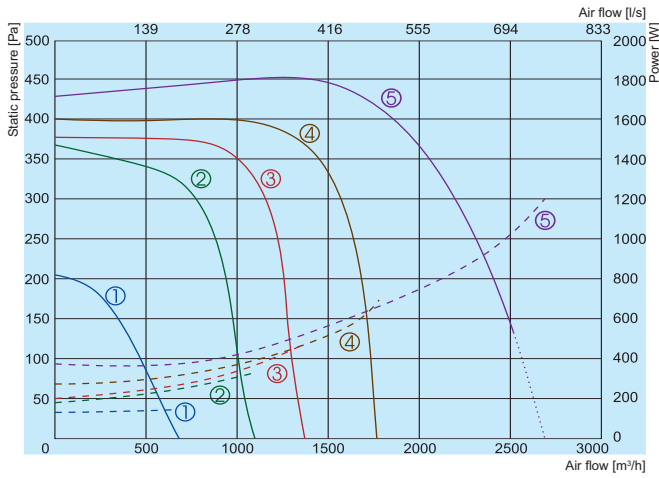
	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	72	61	55	62	67	66	63	59
Outlet	78	62	60	68	73	72	69	66
VKS surrounding	61	49	47	50	58	53	51	49
VKSA surrounding	55	41	41	45	52	47	44	42

Measured at 1385 m³/h, 109 Pa

		500x250-4 L1	500x250-4 L3	500x300-4 L1	500x300-4 L3	500x300-6 L1
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50	230/50
Power consumption	[kW]	0,50	0,56	0,63	1,007	0,267
Current	[A]	2,3	0,95	3,0	2,01	1,15
Speed	[min ⁻¹]	1250	1270	1190	1380	790
Max. airflow	[m³/h]	1651	1875	1824	2672	1518
Min./Max. air temperature	[°C]	-25 / 40	-25 / 40	-25 / 40	-25 / 50	-25 / 50
Weight	[kg]	16 / 23	16 / 23	21 / 28	21 / 28	21 / 28
Wiring diagram		No. 1	No. 2	No. 1	No. 2	No. 1
Protection class:	motor	IP-54	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	-	-	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 600x300-4 L1



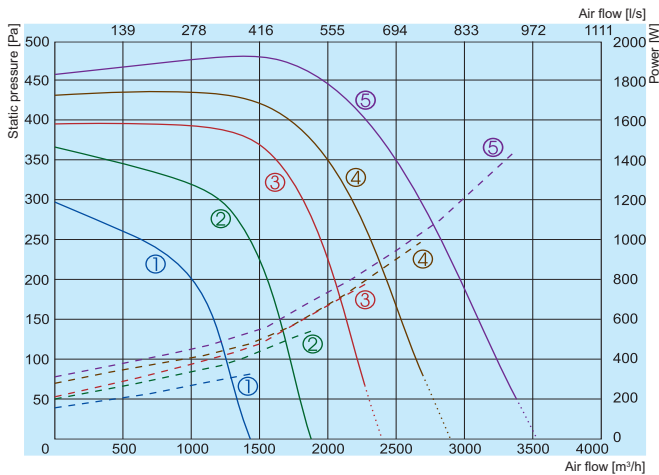
- Performance
Power consumption
Not operating zone
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

600x300-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	70	59	54	61	66	64	61	58
Outlet	74	59	57	65	70	67	66	64
VKS surrounding	60	44	49	52	57	50	47	44
VKSA surrounding	52	37	41	44	48	44	41	36

Measured at 1417 m³/h, 455 Pa

VKS/VKSA 600x300-4 L3



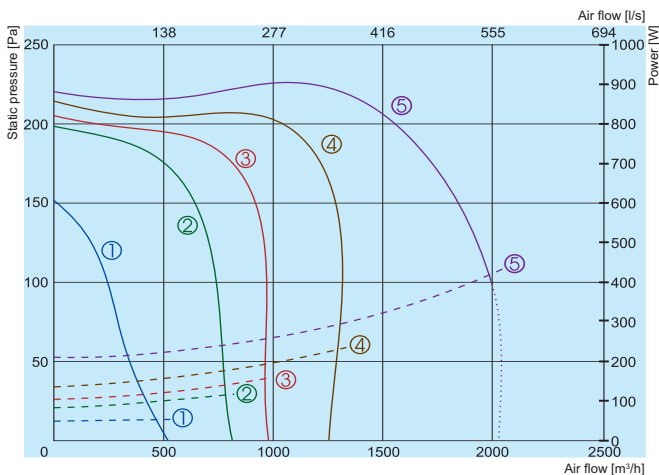
- Performance
Power consumption
Not operating zone
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

600x300-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	75	64	58	65	70	69	66	62
Outlet	79	64	61	69	74	72	71	68
VKS surrounding	63	49	49	52	61	55	52	50
VKSA surrounding	56	42	42	46	53	48	45	43

Measured at 1686 m³/h, 483 Pa

VKS/VKSA 600x300-6 L1



- Performance
Power consumption
Not operating zone
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

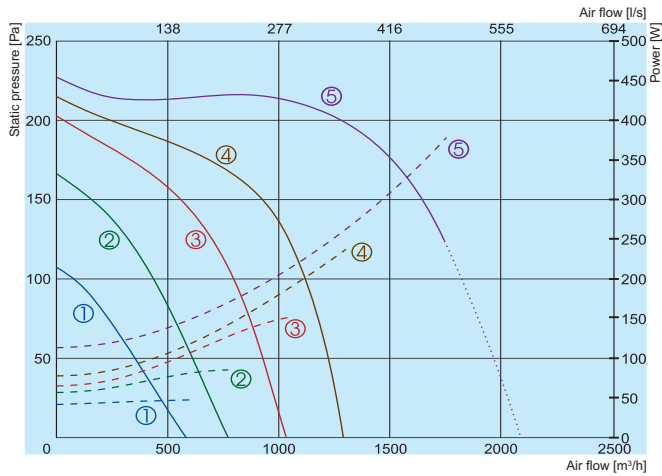
600x300-6 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	78	65	62	69	71	73	70	65
Outlet	82	66	62	74	78	73	75	70
VKS surrounding	67	51	50	57	65	56	56	52
VKSA surrounding	58	43	46	50	54	52	49	45

Measured at 1985 m³/h, 100 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 600x300-6 L3



- Performance
Power consumption
Not operating zone
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

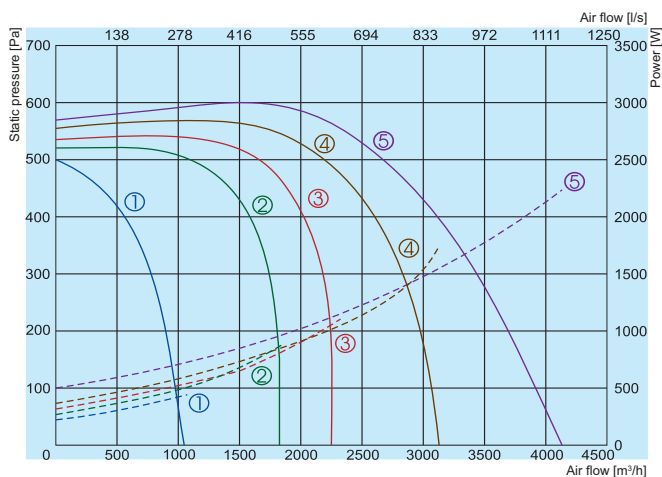
600x300-6 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	75	63	60	67	69	71	66	62
Outlet	80	64	60	72	76	71	73	68
VKS surrounding	64	53	50	55	62	54	52	53
VKSA surrounding	57	40	42	50	53	48	47	43

Measured at 1744 m³/h, 125 Pa

		600x300-4 L1	600x300-4 L3	600x300-6 L1	600x300-6 L3
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50
Power consumption	[kW]	1,011	1,50	0,422	0,378
Current	[A]	5,10	2,60	1,8	0,75
Speed	[min ⁻¹]	1210	1310	700	780
Max. airflow	[m³/h]	2514	3356	1985	1744
Min./Max. air temperature	[°C]	-25 / 40	-25 / 40	-25 / 40	-25 / 40
Weight	[kg]	29 / 37	29 / 37	31 / 38	25 / 32
Wiring diagram		No. 1	No. 2	No. 1	No. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+

VKS/VKSA 600x350-4 L1



- Performance
Power consumption
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

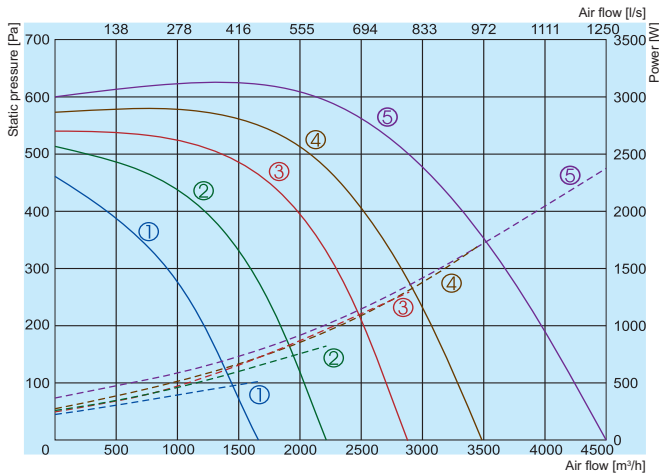
600x350-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	77	63	59	64	73	71	69	66
Outlet	81	63	62	70	78	74	73	70
VKS surrounding	64	50	47	54	61	57	56	53
VKSA surrounding	57	44	40	48	54	50	49	45

Measured at 2157 m³/h, 580 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 600x350-4 L3



Performance
Power consumption

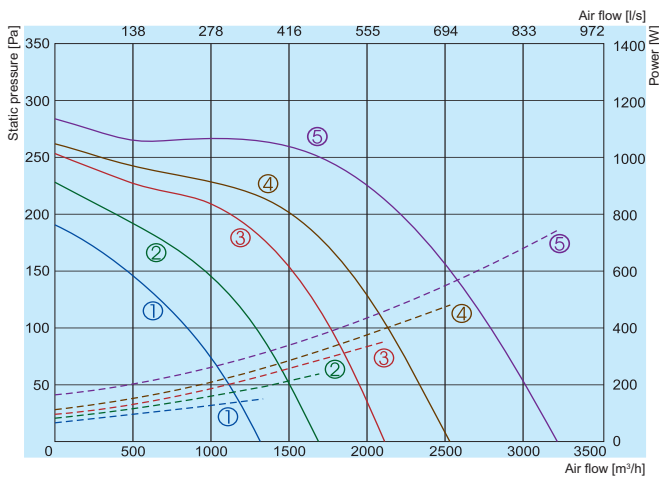
① 130V
② 170V
③ 220V
④ 270V
⑤ 400V

600x350-4 L3

Lwa total, dB(A)	Lwa, dB(A)						
	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	76	61	59	64	72	69	67
Outlet	80	62	62	70	77	72	69
VKS surrounding	63	49	47	54	60	55	53
VKSA surrounding	56	41	40	47	53	48	46

Measured at 2193 m³/h, 600 Pa

VKS/VKSA 600x350-6 L3



Performance
Power consumption

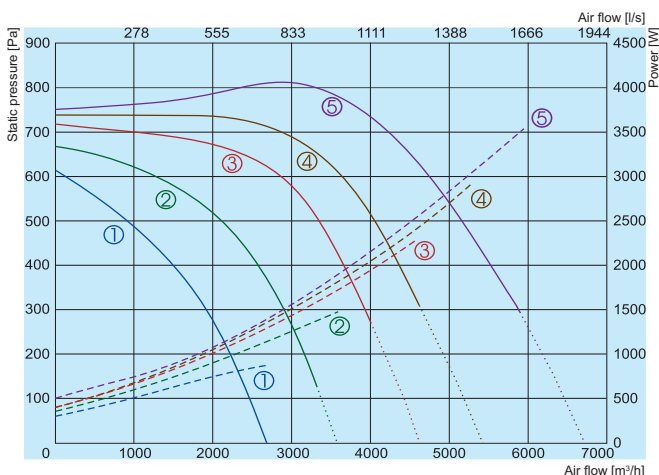
① 130V
② 170V
③ 220V
④ 270V
⑤ 400V

600x350-6 L3

Lwa total, dB(A)	Lwa, dB(A)						
	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	77	56	65	67	72	72	68
Outlet	82	60	64	74	77	76	71
VKS surrounding	68	43	57	64	63	60	59
VKSA surrounding	59	40	45	52	56	50	47

Measured at 2760 m³/h, 100 Pa

VKS/VKSA 700x400-4 L3



Performance
Power consumption
Not operating zone

① 130V
② 170V
③ 220V
④ 270V
⑤ 400V

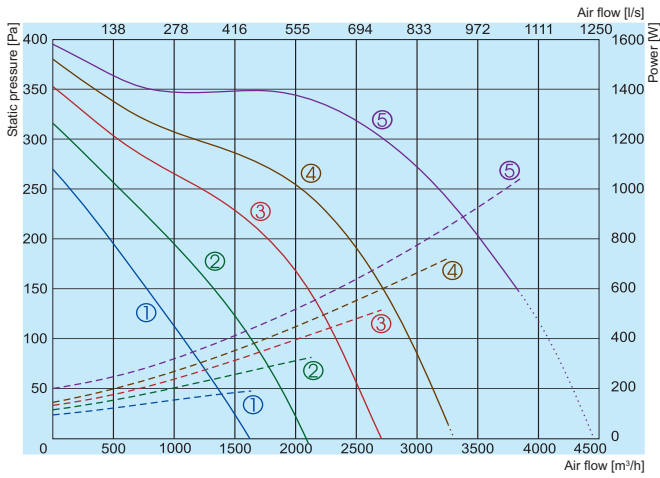
700x400-4 L3

Lwa total, dB(A)	Lwa, dB(A)						
	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	79	60	66	68	76	73	69
Outlet	84	63	68	74	81	77	74
VKS surrounding	71	46	58	65	67	61	57
VKSA surrounding	62	41	49	55	58	54	50

Measured at 2845 m³/h, 824 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 700x400-6 L3



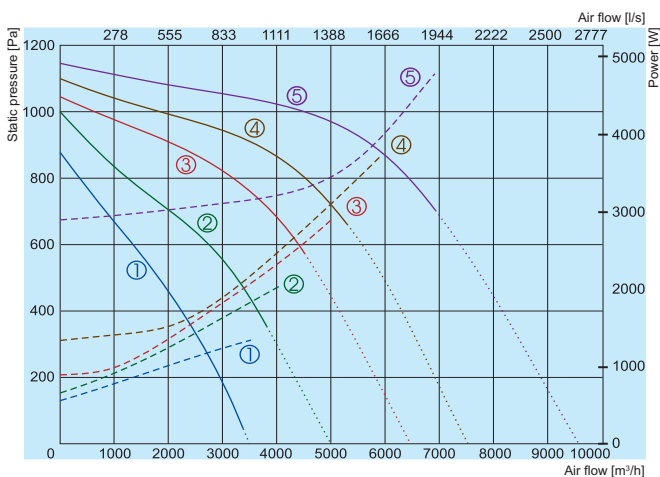
700x400-6 L3

	Lwa total, dB(A)	LWA, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	81	62	61	69	79	70	70	66
Outlet	85	64	68	77	81	78	76	71
VKS surrounding	72	53	55	63	70	64	60	56
VKSA surrounding	64	45	46	56	62	52	52	49

Measured at 3652 m³/h, 182 Pa

		600x350-4 L1	600x350-4 L3	600x350-6 L3	700x400-4 L3	700x400-6 L3
Voltage/Frequency	[V/Hz]	230/50	400/50	400/50	400/50	400/50
Power consumption	[kW]	2,249	2,353	0,739	3,49	1,043
Current	[A]	10,3	4,03	1,5	6,0	2,0
Speed	[min ⁻¹]	1340	1300	750	1320	790
Max. airflow	[m³/h]	4137	4535	3201	5901	3843
Min./Max. air temperature	[°C]	-25 / 40	-25 / 40	-25 / 40	-25 / 40	-25 / 40
Weight	[kg]	36 / 47	36 / 47	24/31	62 / 78	32 / 39
Wiring diagram		No. 1	No. 2	No. 2	No. 2	No. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+	+

VKS/VKSA 800x500-4 L3



800x500-4 L3

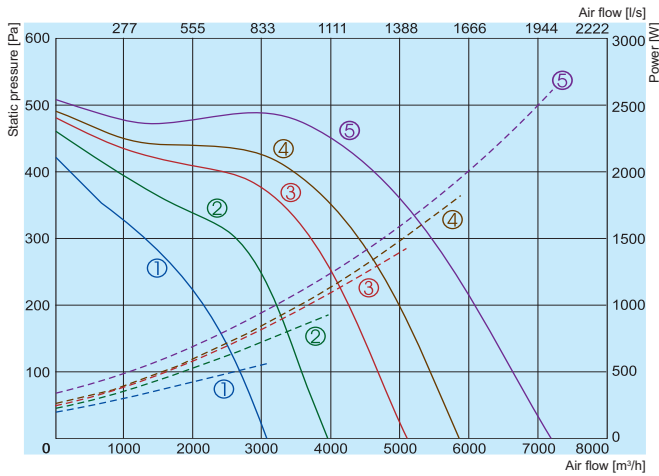
	Lwa total, dB(A)	LWA, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	82	65	64	69	80	74	71	69
Outlet	86	68	69	75	83	79	77	74
VKS surrounding	71	54	54	62	68	62	59	57
VKSA surrounding	65	48	50	56	63	56	53	52

Measured at 4129 m³/h, 660 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA

VKS/VKSA 800x500-6 L3



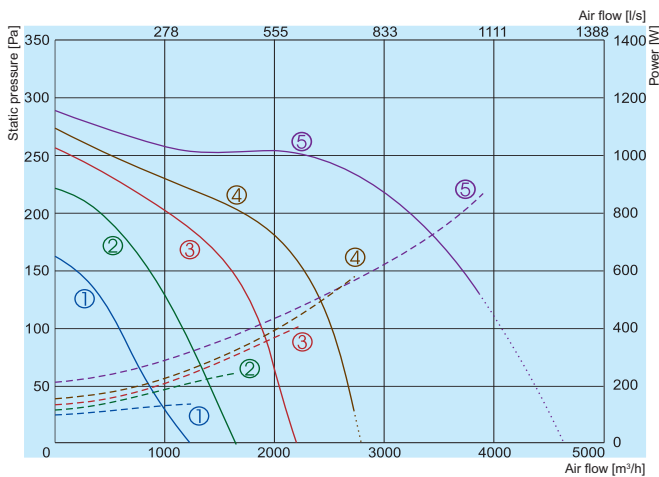
- Performance
Power consumption
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

800x500-6 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	89	75	69	76	87	79	74	78
Outlet	92	77	75	83	89	83	82	82
VKS surrounding	76	58	61	69	72	69	66	62
VKSA surrounding	72	53	54	64	70	60	60	57

Measured at 6622 m³/h, 100 Pa

VKS/VKSA 800x500-8 L3



- Performance
Power consumption
Not operating zone
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

800x500-8 L3

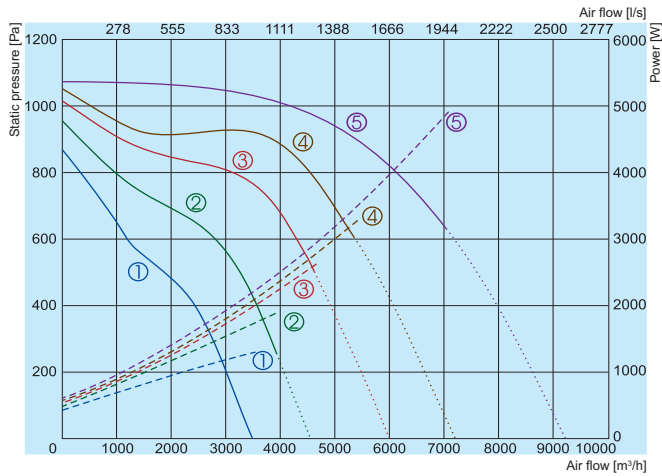
	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	81	64	63	67	79	73	72	68
Outlet	85	67	68	74	81	80	78	72
VKS surrounding	70	52	53	63	66	62	60	56
VKSA surrounding	64	47	49	54	61	57	54	50

Measured at 3893 m³/h, 130 Pa

		800x500-4 L3	800x500-6 L3	800x500-8 L3
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50
Power consumption	[kW]	4,745	2,6	0,865
Current	[A]	8,10	5,01	1,65
Speed	[min ⁻¹]	1330	830	580
Max. airflow	[m³/h]	4403	7184	3893
Max. air temperature	[°C]	-25 / 40	-25 / 40	-25 / 40
Weight	[kg]	85 / 99	52 / 59	63 / 70
Wiring diagram		No. 2	No. 2	No. 2
Protection class:	motor	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKS/VKSA 1000x500-4 L3



— Performance
 - - - Power consumption
 ····· Not operating zone

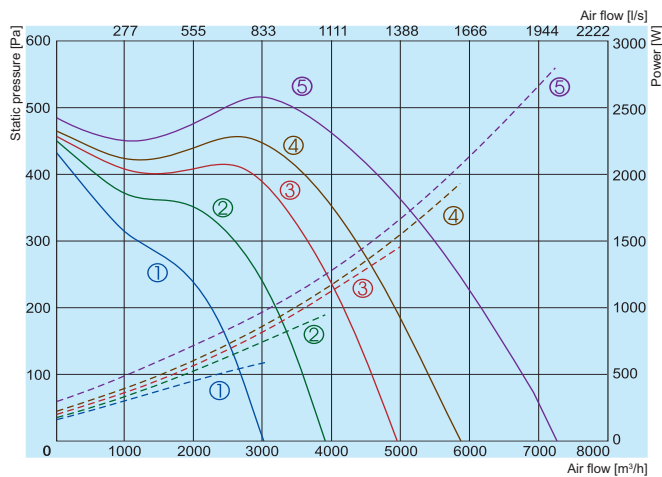
- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

1000x500-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	79	64	64	68	76	73	69	67
Outlet	86	67	69	77	83	79	76	72
VKS surrounding	72	55	55	65	69	62	59	57
VKSA surrounding	66	49	51	59	63	56	53	50

Measured at 6131 m³/h, 801 Pa

VKS/VKSA 1000x500-6 L3



— Performance
 - - - Power consumption

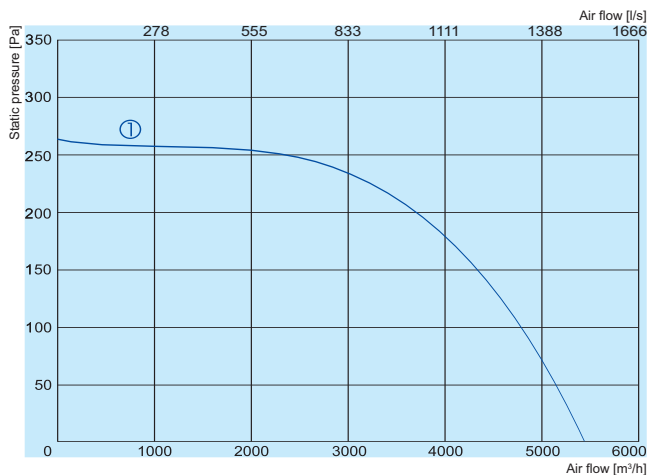
- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

1000x500-6 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	88	76	68	77	86	80	75	74
Outlet	92	80	75	85	89	84	81	81
VKS surrounding	76	57	62	70	70	70	67	61
VKSA surrounding	71	51	55	65	68	61	61	56

Measured at 6775 m³/h, 101 Pa

VKS/VKSA 1000x500-8 L3



- ① 400V

1000x500-8 L3

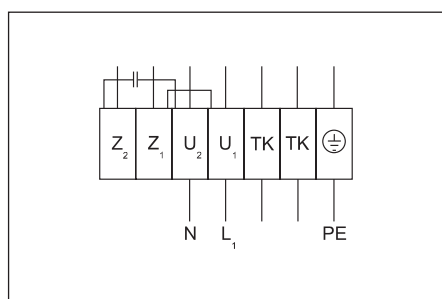
	Lwa total, dB(A)	Lwa, dB(A)						
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Inlet	83	66	65	70	81	75	72	70
Outlet	87	69	70	76	84	80	78	75
VKS surrounding	71	55	54	63	69	62	60	56
VKSA surrounding	66	49	51	56	64	57	53	50

Measured at 4380 m³/h, 130 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

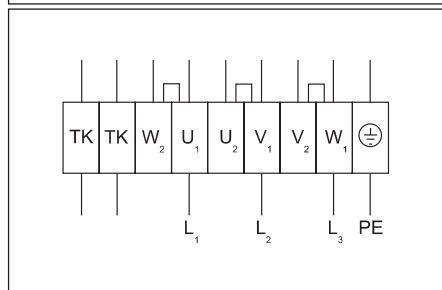
The company reserves the right to make changes of technical data without prior notice

		1000x500-4 L3	1000x500-6 L3	1000x500-8 L3
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50
Power consumption	[kW]	4,806	2,787	1,14
Current	[A]	8,10	5,2	2,40
Speed	[min ⁻¹]	1330	830	580
Max. airflow	[m ³ /h]	7030	7265	5380
Max. air temperature	[°C]	-25 / 40	-25 / 40	-25 / 40
Weight	[kg]	88 / 111	53 / 60	64 / 71
Wiring diagram		No. 2	No. 2	No. 2
Protection class:	motor	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+



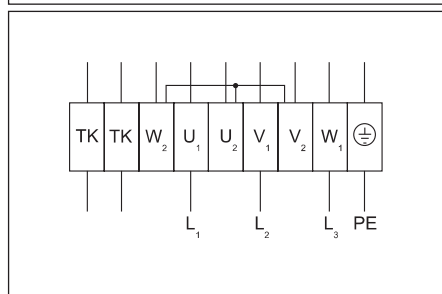
Wiring diagram No. 1 (1~230V)

- U₁ - brown
- U₂ - blue
- Z₁ - black
- Z₂ - orange
- TK - white
- PE - green-yellow



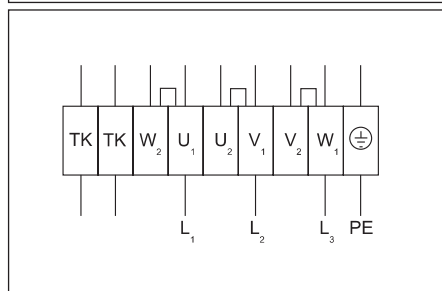
Wiring diagram No. 2 (Y - 3~400V)

- U₁ - brown
- U₂ - red
- V₁ - blue
- V₂ - grey
- W₁ - black
- W₂ - orange
- TK - white
- PE - green-yellow



Wiring diagram No. 2 (Δ - 3~230V)

- U₁ - brown
- U₂ - red
- V₁ - blue
- V₂ - grey
- W₁ - black
- W₂ - orange
- TK - white
- PE - green-yellow



Wiring diagram No. 3 (Δ - 3~400V)

- U₁ - brown
- U₂ - red
- V₁ - blue
- V₂ - grey
- W₁ - black
- W₂ - orange
- TK - white
- PE - green-yellow



Rectangular duct fans

Stačiakampiai kanaliniai ventiliatoriai

Wentylatory do kanałów o przekroju prostokątnym z otwieraną sekcją wirnika

Прямоугольные каналные вентиляторы



Rectangular ducts fans for ventilation and air conditioning systems, mounted into a system of rectangular air ducts. Used for the air supply or extract. Not suitable for polluted air, aggressive and explosive gases. Compact, mounted in any position. Easily opened doors for cleaning an impeller.

Impeller with backward curved blades, made of plastic or galvanized steel.

Motor: external rotor, motor protection with built-in thermal-contact, maintenance free ball bearings.

Housing: made of galvanized steel.



Stačiakampiai kanaliniai ventiliatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, montuojami į stačiakampių ortakių sistemą.

Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sproglių dujų transportavimui. Kompaktiški, tyliai dirbantys, montuojami bet kokioje padėtyje, sparnuotė lengvai iškeliami valymui.

Sparnuotė: atgal lenktais sparneliais, cinkuoto plieno arba plastikinė.

Variklis: išorinis rotorius, tiesioginė pavarą, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys nereikalaujantys priežiūros guoliai.

Korpusas: iš cinkuotos skardos.



Wentylatory prostokątne do instalacji wentylacji i klimatyzacji, montowane do systemów prostokątnych kanałów. Używany do instalacji nawiewnych i wywiewnych. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem.

Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych..

Wykonanie kompaktowe, montowane w dowolnej pozycji. Łatwo otwieralna pokrywa ułatwiająca czyszczenia wirnika.

Wirnik z łopatkami wygiętymi do tyłu, wykonany z tworzywa sztucznego lub galwanizowanej stali.

Silnik z wirnikiem zewnętrznym, silnik z wbudowanym termikiem, bezobsługowe łożyska kulkowe.

Korpus: wykonany z ocynkowanej stali.



Прямоугольные каналные вентиляторы для систем вентиляции и кондиционирования, устанавливаются в систему прямоугольных воздуховодов. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов. Компактные, бесшумные, устанавливаются в любом положении, крыльчатка легко извлекается для чистки.

Крыльчатка: загнутые назад лопасти, пластмасса или оцинкованная сталь.

Двигатель: наружный ротор, прямая передача, встроенные термомоменты двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: оцинкованной жести.

Accessories

Single phase speed controller



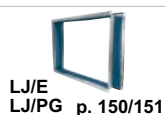
Three phase speed controller



Single phase speed controller



Flexible connection



Rectangular duct silencer

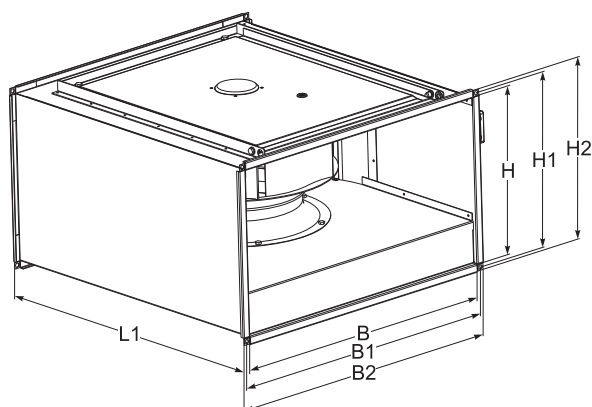


Filter cassette



Electrical duct heater

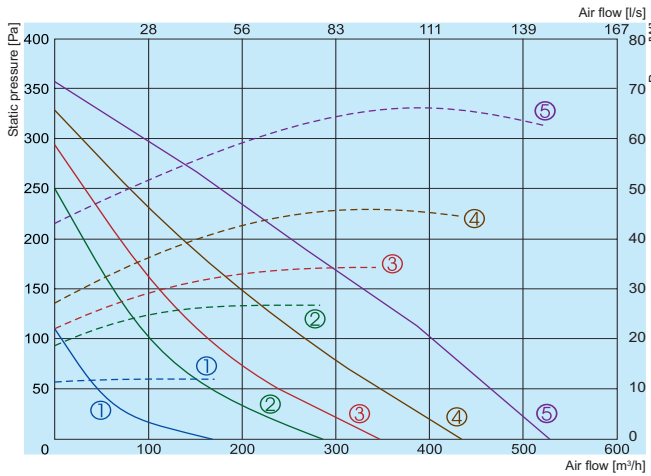




Type	Dimensions [mm]						
	B	B1	B2	H	H1	H2	L1
VKSB 300x150	300	320	340	150	170	190	400
VKSB 400x200	400	420	440	200	220	240	445
VKSB 500x250	500	520	540	250	270	290	530
VKSB 500x300	500	520	540	300	320	340	560
VKSB 600x300	600	620	640	300	320	340	640
VKSB 600x350	600	620	640	350	370	390	700
VKSB 700x400	700	720	740	400	420	440	780
VKSB 800x500	800	820	840	500	520	540	880
VKSB 1000x500	1000	1020	1040	500	520	540	980

Type	Accessories							
	TGRV	TGRT	ETY/MTY	LJ/E	LJ/PG	SKS	FDS	EKS
VKSB 300x150-2 L1	1,5	-	1,5	30x15	30x15	30-15	30-15	300x150
VKSB 400x200-2 L1	1,5	-	1,5	40x20	40x20	40-20	40-20	400x200
VKSB 400x200-2S L1	1,5	-	1,5	40x20	40x20	40-20	40-20	400x200
VKSB 500x250-2 L1	1,5	-	1,5	50x25	50x25	50-25	50-25	500x250
VKSB 500x250-2S L1	1,5	-	1,5	50x25	50x25	50-25	50-25	500x250
VKSB 500x300-2 L1	1,5	-	1,5	50x30	50x30	50-30	50-30	500x300
VKSB 500x300-2S L1	3	-	2,5	50x30	50x30	50-30	50-30	500x300
VKSB 500x300-4 L3	-	1	-	50x30	50x30	50-30	50-30	500x300
VKSB 600x300-4 L1	2	-	2,5	60x30	60x30	60-30	60-30	600x300
VKSB 600x300-4 L3	-	1	-	60x30	60x30	60-30	60-30	600x300
VKSB 600x350-4 L1	3	-	2,5	60x35	60x35	60-35	60-35	600x350
VKSB 600x350-4 L3	-	1	-	60x35	60x35	60-35	60-35	600x350
VKSB 700x400-4-L1	5	-	4	70x40	70x40	70-40	70-40	700x400
VKSB 700x400-4-L3	-	2	-	70x40	70x40	70-40	70-40	700x400
VKSB 800x500-4 L1	5	-	4	80x50	80x50	80-50	80-50	800x500
VKSB 800x500-4 L3	-	4	-	80x50	80x50	80-50	80-50	800x500
VKSB 1000x500-4 L3	-	5	-	100x50	100x50	100-50	100-50	1000x500

VKSB 300x150-2 L1



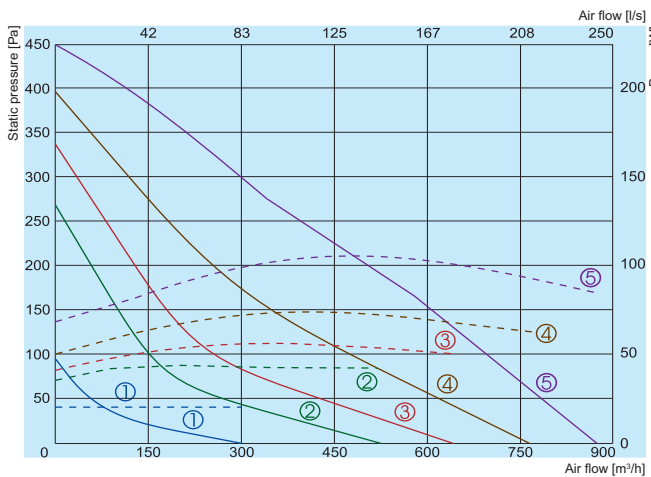
- ① — Performance — 80V
② — Power consumption — 120V
③ — 140V
④ — 170V
⑤ — 230V

300x150-2 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	70	41	52	68	62	60	60	52
Outlet	73	38	55	68	65	66	66	55
Surrounding	57	25	41	54	50	50	48	41

Measured at 328 m³/h, 152 Pa

VKSB 400x200-2 L1



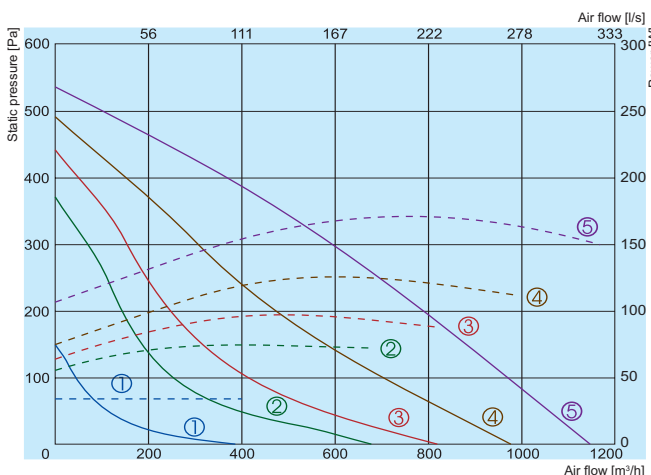
- ① — Performance — 80V
② — Power consumption — 120V
③ — 140V
④ — 170V
⑤ — 230V

400x200-2 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	52	53	64	65	60	61	55
Outlet	75	49	57	70	69	69	67	58
Surrounding	59	35	44	54	53	53	49	46

Measured at 527 m³/h, 192 Pa

VKSB 400x200-2S L1



- ① — Performance — 80V
② — Power consumption — 120V
③ — 140V
④ — 170V
⑤ — 230V

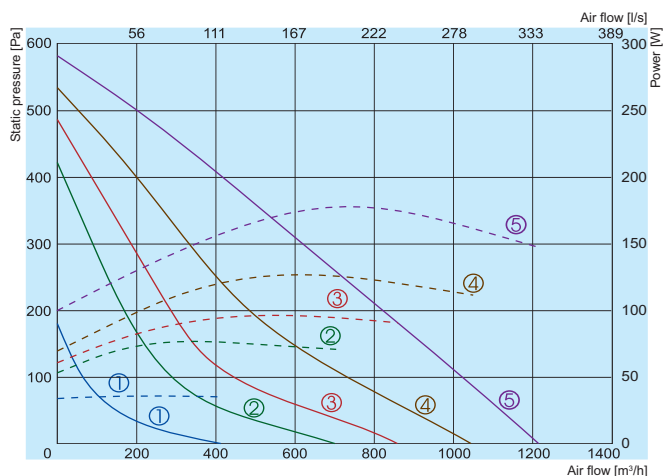
400x200-2S L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	80	61	62	75	74	74	71	66
Outlet	73	63	56	68	68	64	64	60
Surrounding	57	48	42	51	52	46	47	46

Measured at 860 m³/h, 165 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKSB 500x250-2 L1



Performance
Power consumption

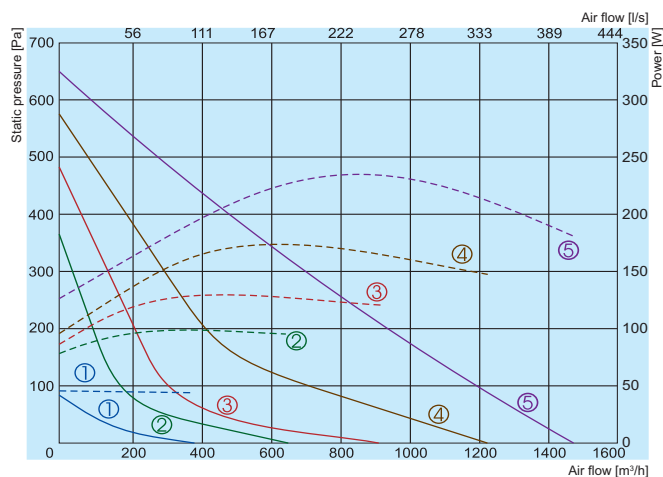
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

500x250-2 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	74	55	55	71	67	65	64	62
Outlet	80	52	62	76	73	73	70	66
Surrounding	65	37	50	60	56	57	59	57

Measured at 748 m³/h, 235 Pa

VKSB 500x250-2S L1



Performance
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

500x250-2S L1

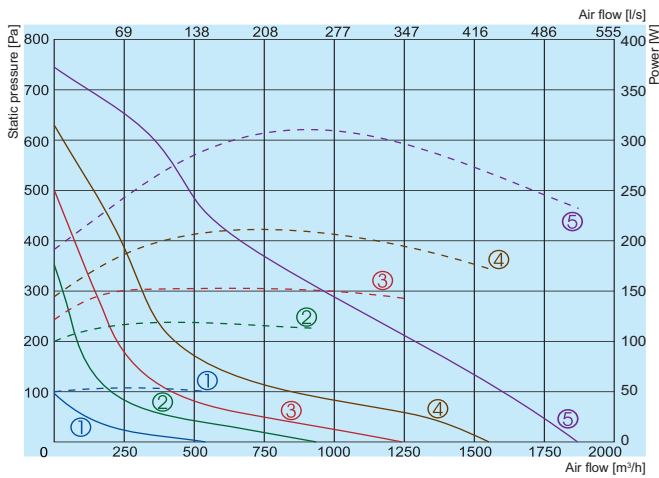
	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	78	56	63	73	71	71	69	63
Outlet	84	58	67	79	77	78	74	67
Surrounding	63	43	51	57	58	55	52	45

Measured at 1075 m³/h, 178 Pa

		300x150-2 L1	400x200-2 L1	400x200-2S L1	500x250-2 L1	500x250-2S L1
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,067	0,105	0,172	0,181	0,237
Current	[A]	0,29	0,46	0,76	0,79	1,03
Speed	[min⁻¹]	2467	2396	2458	2420	2401
Max. airflow	[m³/h]	527	879	1152	1215	1457
Min./Max. air temperature	[°C]	-30/50	-30/40	-30/60	-30/60	-30/50
Weight	[kg]	7,0	11,0	11,0	16,0	16,0
Wiring diagram		No. 4	No. 4	No. 4	No. 4	No. 4
Protection class:	motor	IP-44	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-54	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		+	+	+	+	-

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKSB 500x300-2 L1



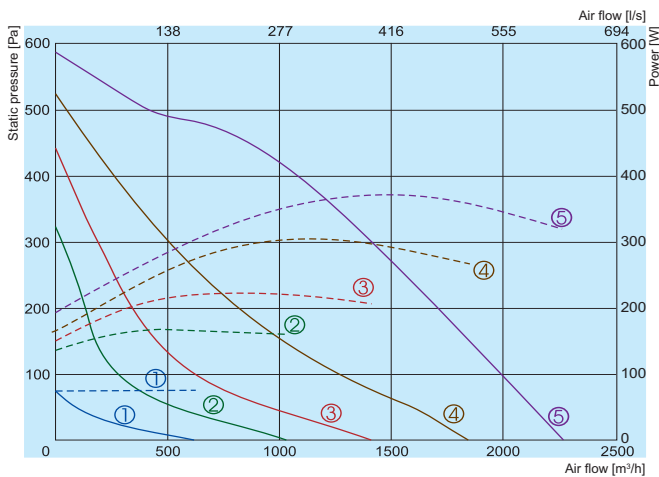
- Performance ———
 Power consumption - - - - -
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

500x300-2 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	74	61	56	69	66	67	65	60
Outlet	79	61	63	74	72	75	70	65
Surrounding	60	47	43	57	53	51	47	41

Measured at 889 m³/h, 300 Pa

VKSB 500x300-2S L1



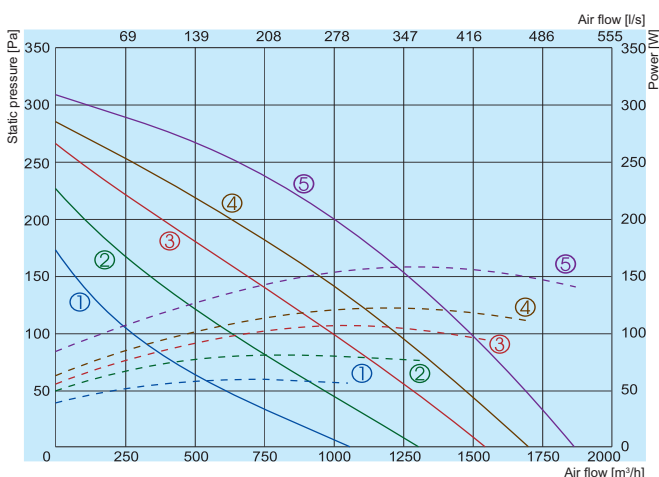
- Performance ———
 Power consumption - - - - -
- ① 80V
 - ② 120V
 - ③ 140V
 - ④ 170V
 - ⑤ 230V

500x300-2S L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	74	61	56	69	66	67	65	59
Outlet	80	61	63	74	72	75	70	67
Surrounding	60	47	43	57	53	51	47	40

Measured at 1009 m³/h, 413 Pa

VKSB 500x300-4 L3



- Performance ———
 Power consumption - - - - -
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

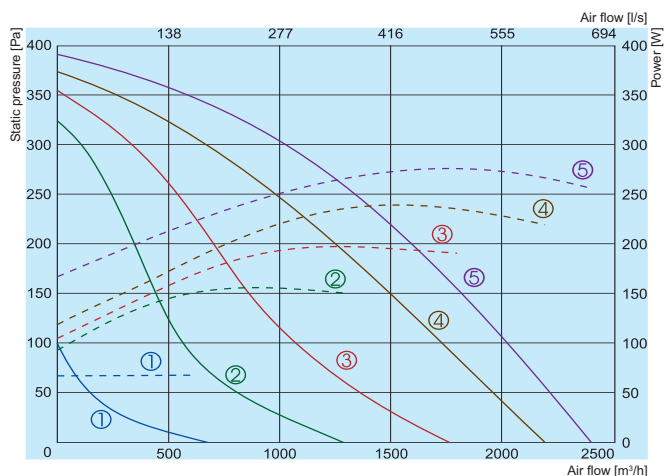
500x300-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	76	62	65	70	69	70	66	60
Outlet	80	65	68	72	75	73	70	69
Surrounding	63	49	51	55	59	55	52	50

Measured at 1476 m³/h, 104 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKSB 600x300-4 L1



Performance
Power consumption

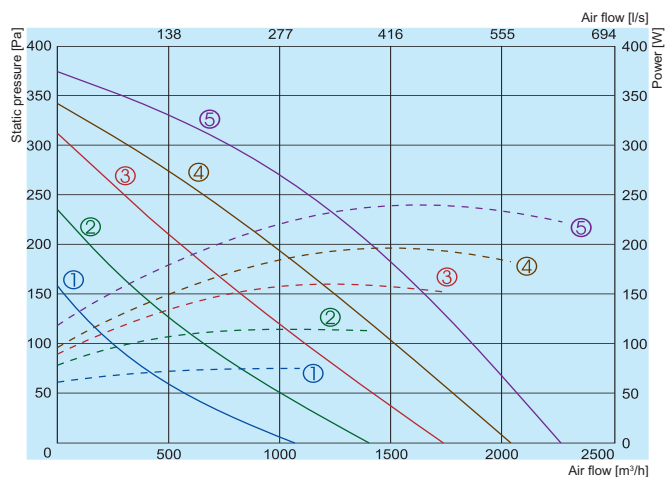
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

600x300-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	78	64	72	69	70	72	70	65
Outlet	81	67	74	73	75	74	72	68
Surrounding	63	46	52	59	58	56	51	48

Measured at 2013 m³/h, 100 Pa

VKSB 600x300-4 L3



Performance
Power consumption

- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

600x300-4 L3

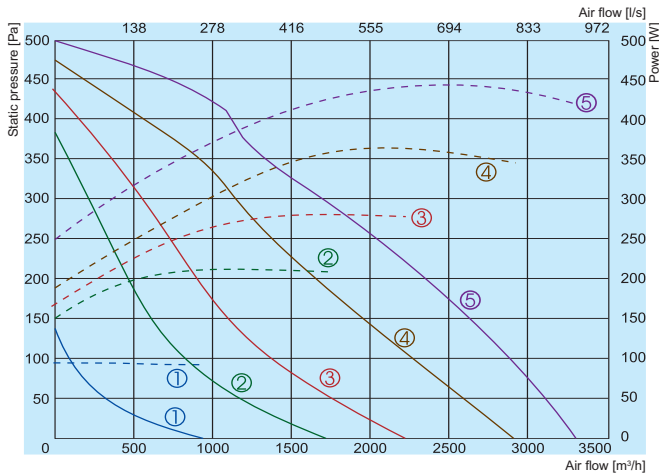
	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	77	62	70	68	69	71	70	64
Outlet	80	68	72	73	73	74	68	67
Surrounding	62	43	48	59	57	52	50	45

Measured at 1865 m³/h, 101 Pa

		500x300-2 L1	500x300-2S L1	500x300-4 L3	600x300-4 L1	600x300-4 L3
Voltage/Frequency	[V/Hz]	230/50	230/50	400/50	230/50	400/50
Power consumption	[kW]	0,313	0,388	0,16	0,28	0,24
Current	[A]	1,36	1,74	0,37	1,34	0,47
Speed	[min ⁻¹]	2225	2750	1370	1390	1340
Max. airflow	[m³/h]	1872	2264	1864	2390	2262
Min./Max. air temperature	[°C]	-25/40	-25/60	-25/70	-25/65	-25/60
Weight	[kg]	17,0	17,0	18,0	19,0	21,0
Wiring diagram		No. 4	No. 1	No. 3	No. 2	No. 3
Protection class:	motor	IP-44	IP-44	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		-	+	+	+	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKSB 600x350-4 L1



Performance
Power consumption

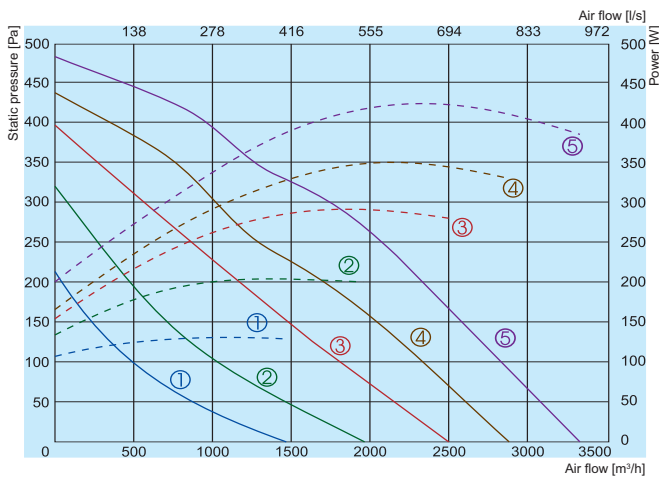
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

600x350-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	77	57	64	68	73	72	68	65
Outlet	82	61	64	74	78	75	73	70
Surrounding	65	46	52	57	61	59	56	53

Measured at 2748 m³/h, 124 Pa

VKSB 600x350-4 L3



Performance
Power consumption

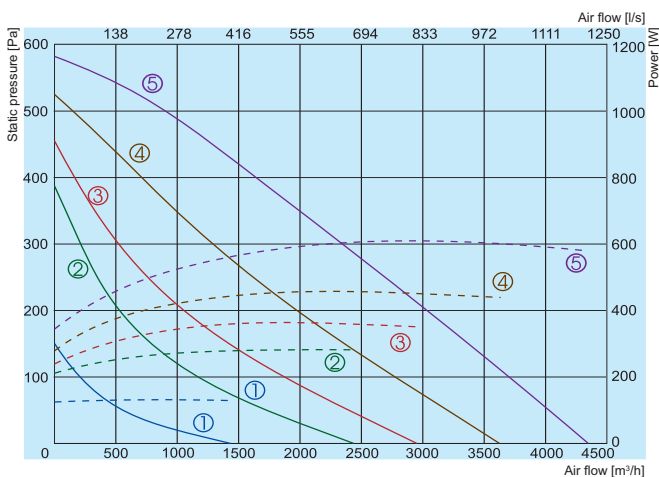
- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

600x350-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	77	57	64	68	73	72	68	65
Outlet	82	61	64	74	78	75	73	70
Surrounding	65	46	52	57	61	59	56	53

Measured at 2747 m³/h, 118 Pa

VKSB 700x400-4 L1



Performance
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

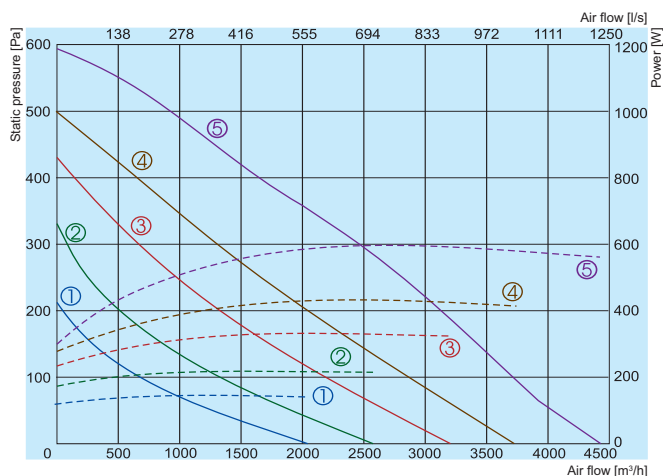
700x400-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	81	60	59	70	79	74	70	62
Outlet	84	61	68	74	80	77	76	69
Surrounding	68	48	52	58	66	61	58	52

Measured at 3550 m³/h, 119 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKSB 700x400-4 L3



Performance
Power consumption

- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

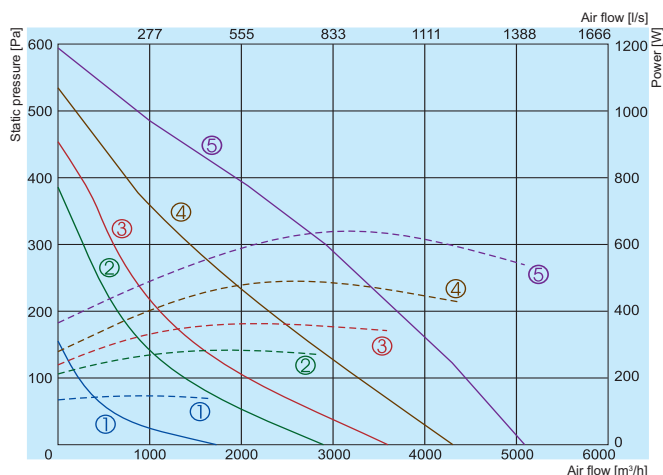
700x400-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	80	58	60	71	77	75	71	61
Outlet	84	60	66	76	78	78	77	68
Surrounding	69	52	51	59	67	60	55	54

Measured at 3608 m³/h, 114 Pa

		600x350-4 L1	600x350-4 L3	700x400-4 L1	700x400-4 L3
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50
Power consumption	[kW]	0,45	0,43	0,62	0,60
Current	[A]	2,14	0,83	2,85	1,28
Speed	[min ⁻¹]	1280	1320	1240	1250
Max. airflow	[m³/h]	3296	3315	4371	4426
Min./Max. air temperature	[°C]	-25/40	-25/55	-25/60	-25/40
Weight	[kg]	24,0	27,0	48,0	64,0
Wiring diagram		No. 2	No. 3	No. 2	No. 3
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		-	+	-	-

VKSB 800x500-4 L1



Performance
Power consumption

- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

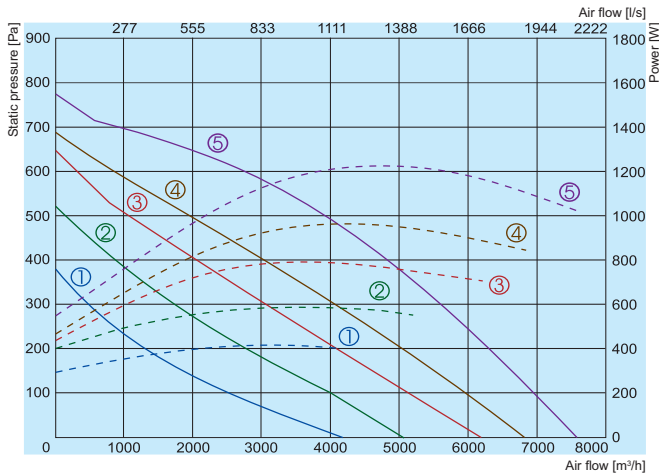
800x500-4 L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	81	63	65	70	78	75	72	68
Outlet	86	67	67	77	84	77	78	73
Surrounding	68	51	52	56	65	60	57	55

Measured at 4204 m³/h, 134 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VKSB 800x500-4 L3



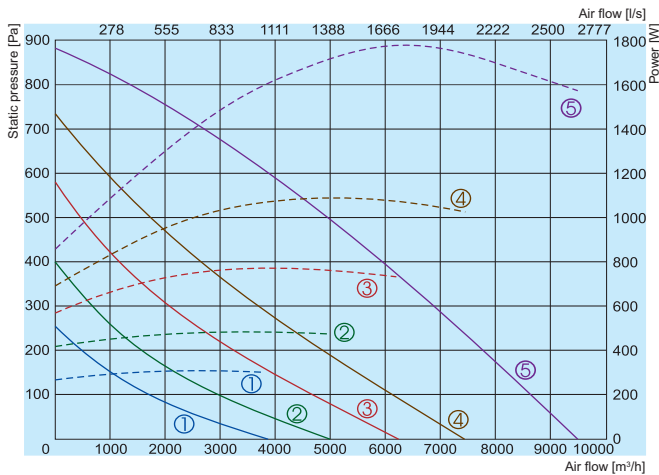
- Performance
Power consumption
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

800x500-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	88	79	68	78	86	78	74	75
Outlet	92	78	77	86	87	85	82	80
Surrounding	74	64	59	66	70	65	61	61

Measured at 7027 m³/h, 100 Pa

VKSB 1000x500-4 L3



- Performance
Power consumption
Not operating zone
- ① 130V
 - ② 170V
 - ③ 220V
 - ④ 270V
 - ⑤ 400V

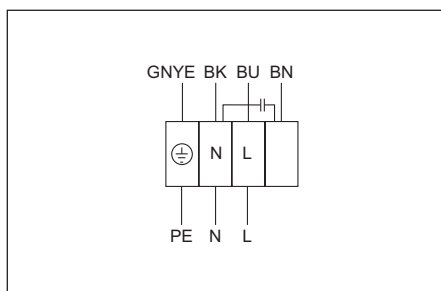
1000x500-4 L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	93	86	72	84	90	80	77	75
Outlet	96	80	82	91	89	90	87	83
Surrounding	78	68	63	72	74	68	65	63

Measured at 8622 m³/h, 102 Pa

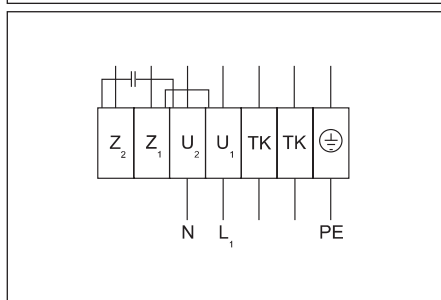
		800x500-4 L1	800x500-4 L3	1000x500-4 L3
Voltage/Frequency	[V/Hz]	230/50	400/50	400/50
Power consumption	[kW]	0,66	1,2	1,79
Current	[A]	3,0	2,31	3,43
Speed	[min ⁻¹]	1240	1330	1180
Max. airflow	[m³/h]	5084	7643	9494
Max. air temperature	[°C]	-25/60	-25/45	-25/40
Weight	[kg]	56,0	69,0	89,0
Wiring diagram		No. 2	No. 3	No. 3
Protection class:	motor	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54
Comply with ERP 2013		-	+	-

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



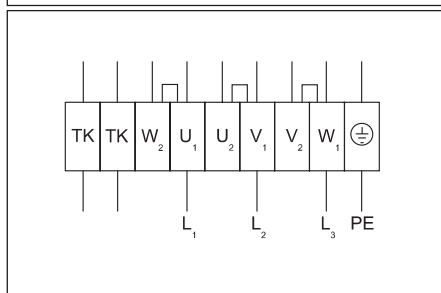
Wiring diagram No. 1 (1~230V)

GNYE - green-yellow
 BK - black
 BU - blue
 BN - brown



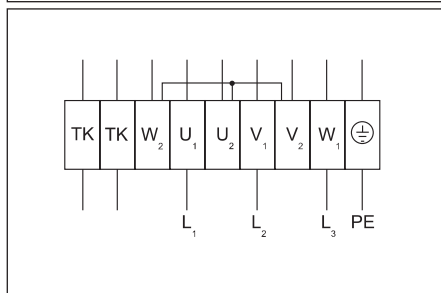
Wiring diagram No. 2 (1~230V)

U₁ - brown
 U₂ - blue
 Z₁ - black
 Z₂ - orange
 TK - white
 PE - green-yellow



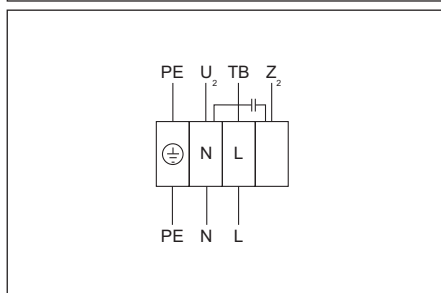
Wiring diagram No. 3 (Δ - 3~230V)

U₁ - brown
 U₂ - red
 V₁ - blue
 V₂ - grey
 W₁ - black
 W₂ - orange
 TK - white
 PE - green-yellow



Wiring diagram No. 3 (Y - 3~400V)

U₁ - brown
 U₂ - red
 V₁ - blue
 V₂ - grey
 W₁ - black
 W₂ - orange
 TK - white
 PE - green-yellow



Wiring diagram No. 4 (1~230V)

U₂ - blue or grey
 Z₂ - black
 TB - brown
 PE - green-yellow

KF T120



Kitchen fans

Virtuviniai ventiliatoriai

Wentylatory kuchenne

Кухонные вентиляторы



Kitchen exhaust units are used for installation where the air is slightly greasy or the air temperature is up to 120°C. Unit has a swing-out door for easy inspection and service. The direction of the door opening is from left to right. The fan is isolated from the casing via connectors and anti-vibration mounts.

Impellers: forward-curved blades made of galvanized sheet steel.
Motor: Maintenance free, speed controllable, motors safety class IP55, On/Off safety switch.

Housing: The casing is manufactured from double-skinned galvanized steel and is insulated with 50 mm mineral wool.



Ventiliatoriai skirti virtuvėms arba ištraukti riebaluotą orą, kur temperatūra ne aukštesnė nei 120°C. Įrenginyje sumontuotos darinėjamos durėlės iš kairės pusės - lengvam ir patogiam aptarnavimui. Ventiliatorius izoliuotas nuo korpuso specialia lankščia jungtimi ir antivibracinėmis kojelėmis.

Sparnuotė: į priekį lenktasis sparneliais, cinkuoto plieno.
Variklis: priežiūros nereikalaujantis, valdomas greičio regulatoriumi, variklio apsaugos klasė IP 55, kompletuojamas su saugos kirtikliu.
Korpusas: cinkuota skarda, dviguba izoliacija iš 50mm mineralinės vatos.



Wentylatory kuchenne są stosowane do instalacji, w której powietrze jest nieco tłuste lub temperatury powietrza dochodzą do 120 °C. Obudowa wentylatora otwieralna dla łatwej kontroli i obsługi. Kierunek otwierania drzwi - od lewej do prawej. Wentylator jest odizolowany od obudowy poprzez złącza i izolację akustyczną.

Wirnik: zakrzywione łopatki wykonane z ocynkowanej blachy stalowej.

Silnik: bezobsługowy, regulowana prędkość, klasa IP 55,
Włącznik / Wyłącznik bezpieczeństwa.

Obudowa: wykonana z galwanizowanej stali i jest izolowany wełną mineralną o grubości 50 mm.



Куханные вытяжные вентиляторы для систем вентиляции, устанавливаются в системы, где воздух немножко загрязнен или температура достигает 120°C. Вентилятор имеет двери, для удобного осмотра и обслуживания. Направление открытия двери - слева на право.

Вентилятор изолирован от корпуса с помощью соединителей и имеет антивибрационные крепления.

Крыльчатка – загнутые вперед лопасти, изготовлены из оцинкованной стали.

Двигатель – не требующий ухода, регулируемая скорость вращения, класс безопасности двигателя - IP 55, защитный выключатель On/Off.

Корпус - изготовлен из оцинкованной стали и двойных стенок, 50 мм изоляция, из минеральной ваты.

Accessories

Single phase speed controller



TGRV p. 138

Three phase speed controller



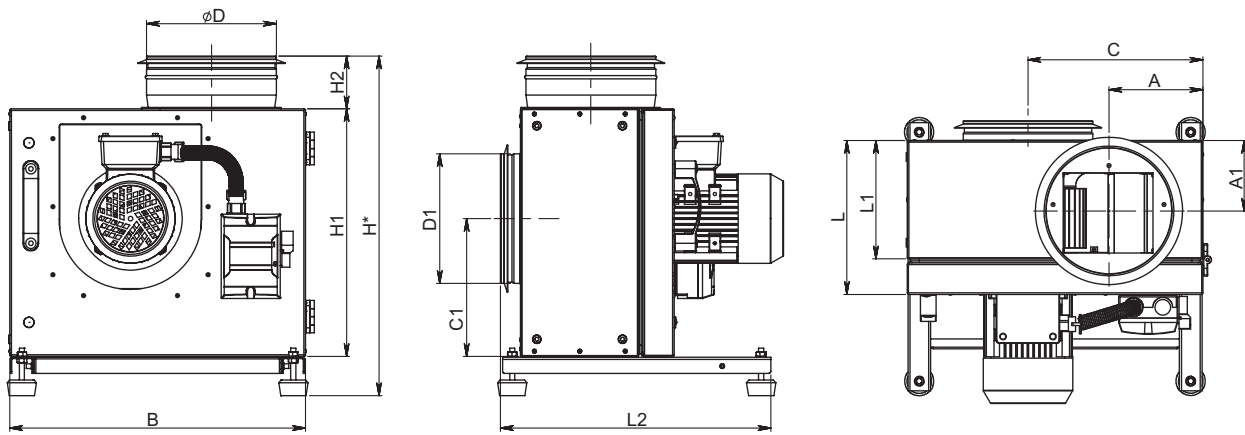
TGRT p. 139

Frequency inverter



FI p. 143

KF T120



SALDA

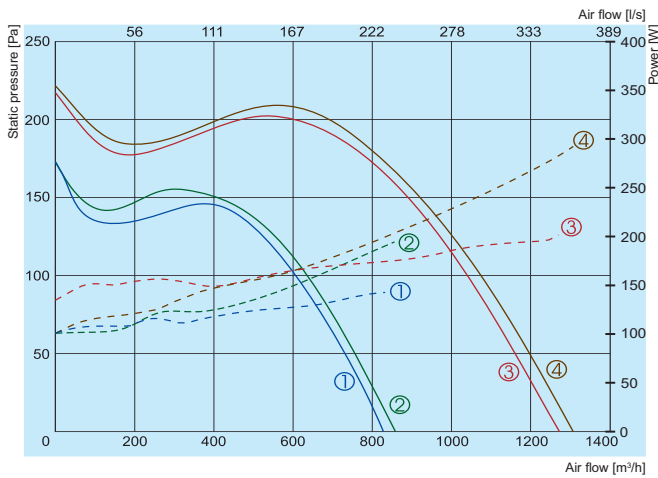
KITCHEN FANS

Type	Dimensions [mm]												
	ϕD	ϕD_1	L	L1	L2	H*	H1	H2	B	A	A1	C	C1
KF T120 160	200	200	228	173	414	496	355	80	413	123	109	237	195
KF T120 180	200	200	237	182	417	524	382	80	456	145	109	270	213
KF T120 200	200	200	250	196	500	548	407	80	484	145	117	287	228
KF T120 225	250	250	277	222	500	597	456	80	537	161	131	305	253
KF T120 250	315	315	290	136	620	651	500	90	577	170	146	342	278
KF T120 280	315	315	308	253	620	688	537	90	626	180	153	367	304
KF T120 315	315	315	298	242	620	752	600	90	695	195	142	410	339
KF T120 355	400	400	340	285	620	905	655	190	770	211	170	455	370
KF T120 400	400	400	358	298	620	890	640	190	750	202	170	450	355

Type	Accessories				
	TGRV	TGRT	Mains		
			1X230 V	3X230 V	3X400 V
KF T120 160-4L1	2	-	ODE-2-12037-1KB12-01	ODE-2-12037-1KB12-01	-
KF T120 160-4L3	-	1	ODE-2-12037-1KB12	ODE-2-12037-3K012	ODE-2-14075-3KA12
KF T120 180-4L1	4	-	ODE-2-12075-1KB12-01	ODE-2-12075-1KB12-01	-
KF T120 180-4L3	-	2	ODE-2-12037-1KB12	ODE-2-12075-3K012	ODE-2-14075-3KA12
KF T120 200-4L1	5	-	ODE-2-12075-1KB12-01	ODE-2-12075-1KB12-01	-
KF T120 200-4L3	-	3	ODE-2-12075-1KB12	ODE-2-12075-3K012	ODE-2-14075-3KA12
KF T120 225-4L1	11	-	ODE-2-22110-1KB42-01	ODE-2-22110-1KB42-01	-
KF T120 225-4L3*	-	-	ODE-2-12150-1KB12	ODE-2-12150-3K012	ODE-2-14150-3KA12
KF T120 250-4L1	14	-	-	-	-
KF T120 250-4L3*	-	-	ODE-2-22220-1KB42	ODE-2-22220-3KB42	ODE-2-24220-3KA42
KF T120 280-4L3	-	-	ODE-2-32040-1KB42	ODE-2-32040-3KB42	ODE-2-24400-3KA42
KF T120 315-4L1	3	-	ODE-2-12075-1KB12-01	ODE-2-12037-1KB12-01	-
KF T120 315-4L3	-	1	ODE-2-12037-1KB12	ODE-2-12037-3K012	ODE-2-14075-3KA12
KF T120 355-4L1	4	-	ODE-2-12075-1KB12-01	ODE-2-12075-1KB12-01	-
KF T120 355-4L3	-	2	ODE-2-12037-1KB12	ODE-2-12037-3K012	ODE-2-14075-3KA12
KF T120 400-4L1	5	-	ODE-2-12075-1KB12-01	ODE-2-12075-1KB12-01	-
KF T120 400-4L3	-	3	ODE-2-12075-1KB12	ODE-2-12075-3K012	ODE-2-14075-3KA12

* performance operating area is limited. Do not exceed the normal current, additional overload protection is required.

KF T120



- ① KF T120 160-4L1
 - ② KF T120 160-4L3
 - ③ KF T120 180-4L1
 - ④ KF T120 180-4L3
- Performance
- - - Power consumption

		160-4L1	160-4L3	180-4L1	180-4L3
Voltage/Frequency	[V/Hz]	~1,230/50	~3,400/50	~1,230/50	~3,400/50
Power consumption	[kW]	0,22	0,18	0,4	0,29
Current	[A]	1,19	0,57	2,57	1,0
Speed	[min ⁻¹]	1360	1310	1320	1340
Max. airflow	[m ³ /h]	829	849	1272	1303
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40	-40/+40	-40/+40
Weight	[kg]	22	22	25	25
Wiring diagram		No.1	No.3	No.1	No.3
Protection class:	motor	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+

160-4L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	65	64	69	60	55	54	48
Outlet	74	66	69	70	59	60	56	50
Surrounding	56	48	51	53	44	40	38	33

Measured at 601 m³/h, 100 Pa

160-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	62	64	72	60	55	54	48
Outlet	75	63	69	73	59	60	56	50
Surrounding	56	47	52	53	43	40	38	33

Measured at 621 m³/h, 103 Pa

180-4L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	75	66	69	73	62	60	56	52
Outlet	77	68	71	75	64	62	58	54
Surrounding	59	53	55	54	47	44	40	37

Measured at 1037 m³/h, 101 Pa

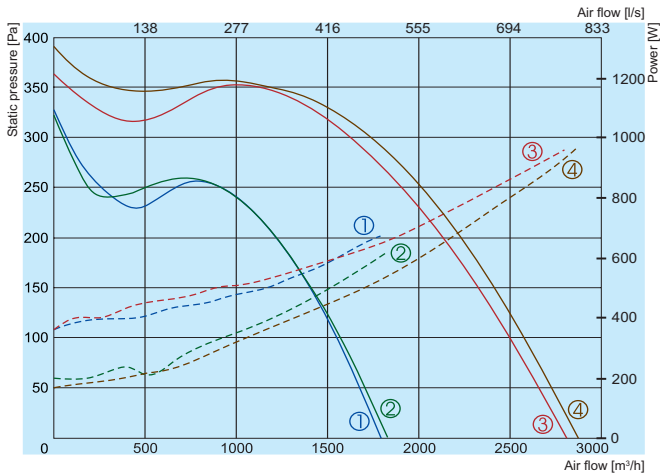
180-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	76	65	67	75	63	58	57	51
Outlet	78	68	70	76	65	61	58	53
Surrounding	60	51	54	57	48	42	40	36

Measured at 1052 m³/h, 106 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KF T120



- ① KF T120 200-4L1
- ② KF T120 200-4L3
- ③ KF T120 225-4L1
- ④ KF T120 225-4L3

— Performance
 - - - - Power consumption

		200-4L1	200-4L3	225-4L1	225-4L3
Voltage/Frequency	[V/Hz]	~1,230/50	~3,400/50	~1,230/50	~3,400/50
Power consumption	[kW]	0,57	0,54	0,97	0,92
Current	[A]	3,08	1,44	4,85	1,72
Speed	[min ⁻¹]	1360	1390	1350	1430
Max. airflow	[m ³ /h]	1794	1826	2800	2860
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40	-40/+40	-40/+40
Weight	[kg]	29	29	34	34
Wiring diagram		No. 1	No. 3	No. 1	No. 3
Protection class:	motor	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+

200-4L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	68	70	78	63	64	60	54
Outlet	81	73	74	79	67	63	60	59
Surrounding	63	55	57	61	49	46	43	40

Measured at 1541 m³/h, 100 Pa

200-4L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	69	72	77	65	63	58	55
Outlet	82	73	75	80	66	64	60	58
Surrounding	64	56	58	62	49	47	42	40

Measured at 1570 m³/h, 101 Pa

225-4L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	82	70	76	80	70	67	63	58
Outlet	84	74	77	82	71	68	64	60
Surrounding	68	57	62	65	54	50	46	43

Measured at 2492 m³/h, 100 Pa

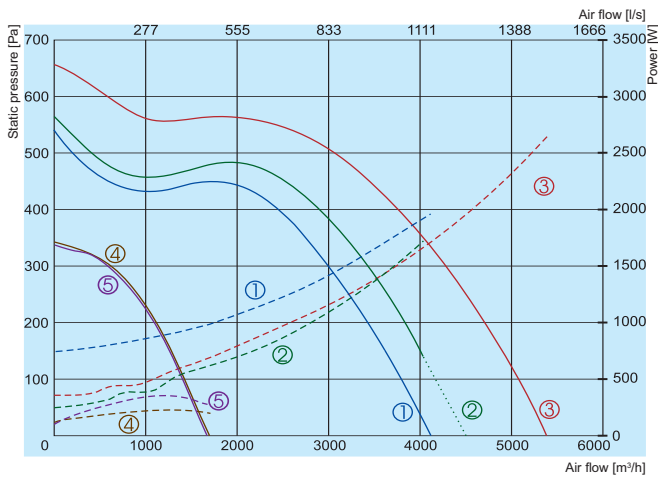
225-4L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	83	72	74	81	70	68	63	60
Outlet	85	75	79	82	71	69	65	61
Surrounding	69	59	63	66	54	51	47	44

Measured at 2585 m³/h, 102 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KF T120



- ① KF T120 250-4L1
- ② KF T120 250-4L3
- ③ KF T120 280-4L3
- ④ KF T120 315-4L1
- ⑤ KF T120 315-4L3

— Performance
 - - - Power consumption
 Not operating zone

		250-4L1	250-4L3	280-4L3	315-4L1	315-4L3
Voltage/Frequency	[V/Hz]	~1,230/50	~3,400/50	~3,400/50	~1,230/50	~3,400/50
Power consumption	[kW]	1,94	1,6	2,66	0,32	0,18
Current	[A]	9,3	3,37	4,7	1,77	0,68
Speed	[min ⁻¹]	1420	1430	1440	1350	1330
Max. airflow	[m ³ /h]	4106	3860	5236	1693	1676
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40	-40/+40	-40/+40	-40/+40
Weight	[kg]	44	55	45	45	45
Wiring diagram		No.2	No.3	No.3	No.1	No.3
Protection class:	motor	IP-55	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+	+

250-4L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	85	75	79	82	73	71	66	61
Outlet	87	77	81	84	75	72	68	65
Surrounding	71	61	66	67	58	54	50	47

Measured at 3824 m³/h, 100 Pa

250-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	86	78	80	83	73	70	67	63
Outlet	88	80	81	86	75	74	66	65
Surrounding	72	64	66	68	59	56	49	48

Measured at 3860 m³/h, 190 Pa

280-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	90	82	83	88	75	71	68	67
Outlet	92	85	83	89	78	76	68	69
Surrounding	74	67	68	71	60	56	51	50

Measured at 5077 m³/h, 100 Pa

315-4L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	78	68	73	74	66	63	57	54
Outlet	80	69	75	77	68	65	59	56
Surrounding	63	53	60	59	51	47	41	39

Measured at 1407 m³/h, 101 Pa

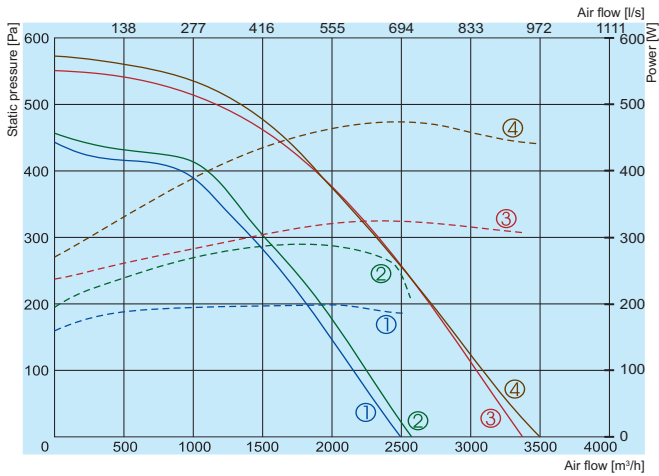
315-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	78	67	73	74	66	64	56	54
Outlet	80	69	74	77	67	65	59	55
Surrounding	63	53	59	59	50	47	40	38

Measured at 1401 m³/h, 100 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KF T120



- ① KF T120 355-4L1
- ② KF T120 355-4L3
- ③ KF T120 400-4L1
- ④ KF T120 400-4L3

— Performance
 - - - Power consumption

		355-4L1	355-4L3	400-4L1	400-4L3
Voltage/Frequency	[V/Hz]	~1,230/50	~3,400/50	~1,230/50	~3,400/50
Power consumption	[kW]	0,4	0,29	0,54	0,47
Current	[A]	2,5	0,98	3,05	1,45
Speed	[min ⁻¹]	1320	1340	1360	1390
Max. airflow	[m³/h]	2499	2561	3374	3487
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40	-40/+40	-40/+40
Weight	[kg]	53	53	56	56
Wiring diagram		No.1	No.3	No.1	No.3
Protection class:	motor	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+

355-4L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	84	74	77	82	70	69	63	58
Outlet	85	76	79	83	72	71	65	60
Surrounding	67	60	61	63	55	53	47	43

Measured at 2111 m³/h, 120 Pa

355-4L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	84	75	78	82	71	70	63	58
Outlet	86	77	79	83	73	72	65	61
Surrounding	67	61	62	63	56	54	47	43

Measured at 2219 m³/h, 104 Pa

400-4L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	86	77	75	82	79	74	68	67
Outlet	88	78	81	85	77	74	70	69
Surrounding	71	62	64	67	62	57	52	50

Measured at 2915 m³/h, 141 Pa

400-4L3

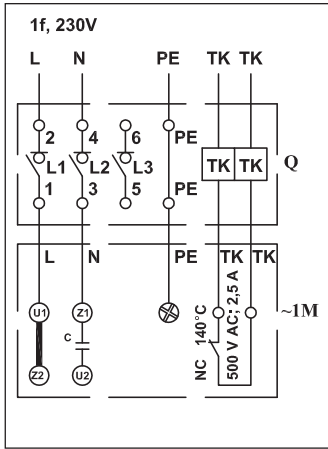
	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	86	77	76	82	80	74	69	68
Outlet	88	79	81	85	78	75	71	70
Surrounding	71	63	65	67	63	58	53	52

Measured at 2956 m³/h, 134 Pa

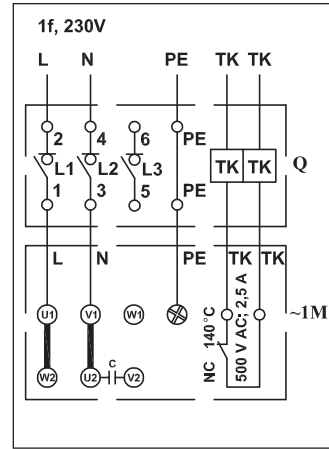
The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KF T120

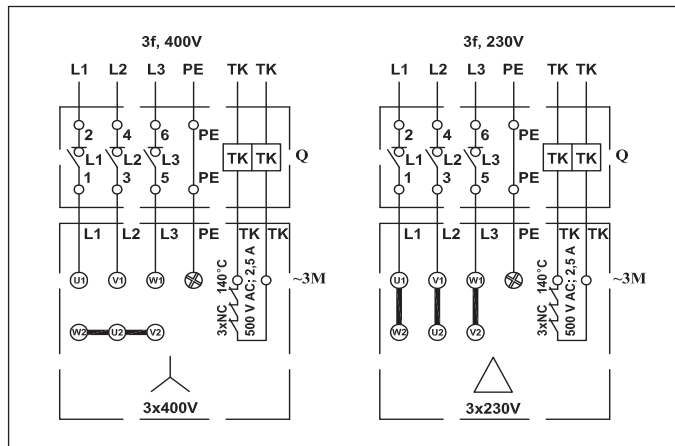
Wiring diagram No. 1



Wiring diagram No. 2



Wiring diagram No. 3



Q - switch
M - fan motor

KUB T120



Kitchen fans

Virtuviniai ventilatoriai

Wentylatory kuchenne

Кухонные вентиляторы



Kitchen exhaust units are used for installation where the air is slightly greasy or the air temperature is up to 120°C. Typical applications are to exhaust kitchens, production shops and other areas where polluted air has to be exhausted. Motors are outside of the air stream. Panels are removable, allowing flexible installation. Fans airflow direction is 90°.

Impellers: backward - curved blades.

Motor: IEC standard motor with external rotor, speed controllable, On/Off safety switch, built-in thermal-contacts.

Housing: The casing consists of an aluminium frame and double skin, galvanised steel panels with 25 mm mineral wool insulation.



Ventilatoriai skirti virtuvėms arba ištraukti riebaluotą orą, kur temperatūra ne aukštesnė nei 120°C. Dažniausiai naudojami virtuvių, gamyklų ir kitų užterštų patalpų orui ištraukti.

Variklis atskirtas nuo oro srauto.

Patogus montavimas - sienelės nuimamos ir keičiamos vietomis.

Ventiliatorių išpūtimo kryptis 90°.

Sparnuotė: atgal lenktais sparneliais, cinkuoto plieno.

Vatiklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga, atitinka IEC standartą, komplektuojamas su saugos kirtikliu. Valdomas greičio reguliatoriumi arba dažnio keitikliu.

Korpusas: cinkuota skarda, dviguba izoliacija iš 25 mm mineralinės vatos.



Jednostki kuchenne są stosowane do instalacji, w której powietrze jest lekko tłuste lub temperatura powietrza wynosi do 120 °C. Typowe zastosowania to kuchnie, hale produkcyjne i inne obszary gdzie za-nieczyszczone powietrze musi być wywiane. Silnik umieszczony jest poza strumieniem powietrza.

Wymienne panele umożliwiające elastyczność instalacji.

Kierunek przepływu powietrza 90 °.

Wirnik: do tyłu - zakrzywione ostrza.

Silnik: EC silnik z zewnętrznym wirnikiem, regulowana prędkość, Włącznik / wyłącznik bezpieczeństwa, wbudowane zabezpieczenie termiczne.

Obudowa: aluminiowa rama i ocynkowane panele stalowe z 20 mm warstwą wełny mineralnej.



Кухонные вытяжные вентиляторы для систем вентиляции, устанавливаются в системы, где воздух немного загрязнен или температура достигает 120°C. Эксплуатируются в целях вытяжки воздуха из кухни, производственных цехов и других мест, где нужна вытяжка загрязненного воздуха. Двигатели находятся снаружи от воздушного потока.

Легко разбираемый корпус, гарантирующий легкое монтирование.

Угол выдуваемого воздушного потока вентилятора - 90°.

Крыльчатка – загнутые назад лопатки.

Двигатель – IEC стандарта, наружный ротор, регулируется скорость, защитный выключатель On/Off, встроенная термозащита двигателя.

Корпус – из алюминиевой рамы и двойных стенок, оцинкованная стальная панель, 25 мм изоляция, из минеральной ваты.

Accessories

Single phase speed controller



TGRV p. 138

Three phase speed controller



TGRT p. 139

Frequency inverter



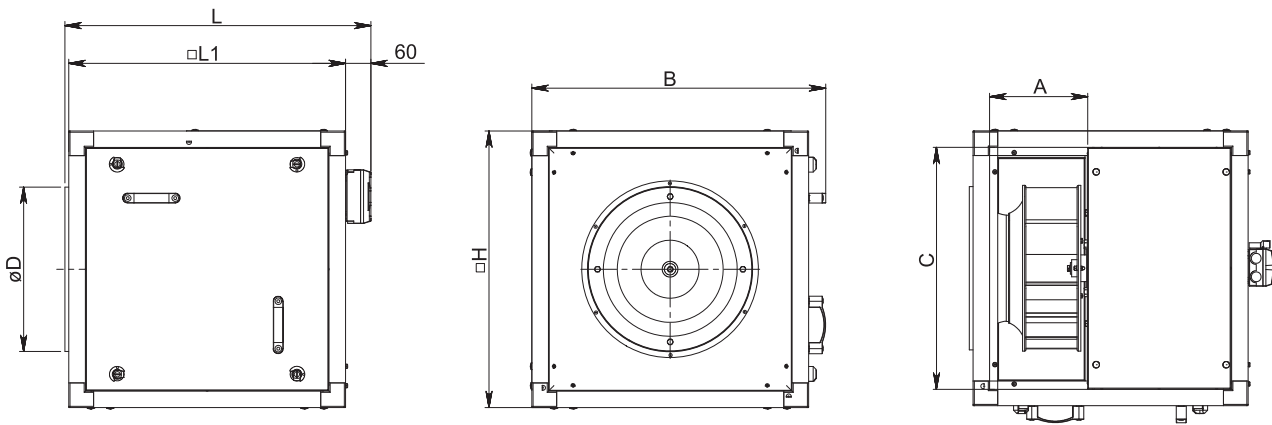
FI p. 143

Flange - adapter



PR p. 154

KUB T120

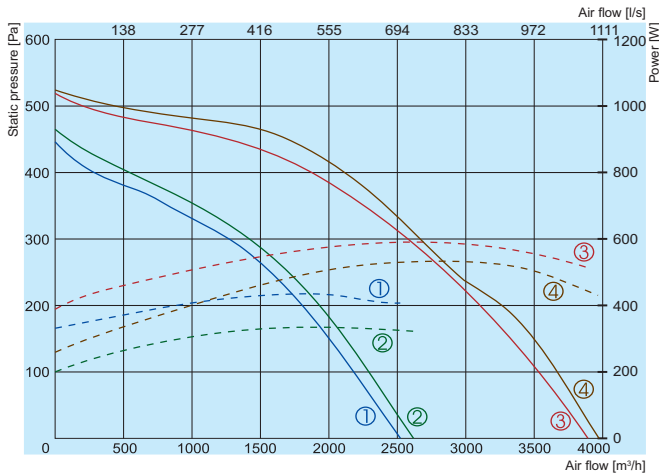


Type	Dimensions [mm]						
	øD	L	□ L1	□ H	A	B	C
KUB T120 355	355	570	500	500	225	540	420
KUB T120 400	400	740	670	670	240	712	590
KUB T120 450	450	740	670	670	275	712	590
KUB T120 500	500	740	670	670	310	712	590
KUB T120 560	560	870	800	800	355	840	720
KUB T120 630	630	940	865	865	385	905	785

Type	Accessories					
	TGRV	TGRT	Mains			PR
			1X230 V	3X230 V	3X400 V	
KUB T120 355-4L1	4	-	ODE-2-12075-1KB12-01	ODE-2-12075-1KB12-01	-	420x420-355
KUB T120 355-4L3	-	2	ODE-2-12037-1KB12	ODE-2-12075-3K012	ODE-2-14075-3KA12	420x420-355
KUB T120 400-4L1	5	-	ODE-2-12075-1KB12	ODE-2-12075-1KB12-01	-	590x590-400
KUB T120 400-4L3	-	2	ODE-2-12075-1KB12	ODE-2-12075-3K012	ODE-2-14075-3KA12	590x590-400
KUB T120 450-4L1	11	-	ODE-2-22110-1KB42-01	ODE-2-22110-1KB42-01	-	590x590-450
KUB T120 450-4L3*	-	-	ODE-2-12150-1KB12	ODE-2-12150-3K012	ODE-2-14150-3KA12	590x590-450
KUB T120 500-4L1	14	-	ODE-2-22220-1KB42	ODE-2-22220-3K042	-	590x590-500
KUB T120 500-4L3*	-	-	ODE-2-12150-1KB12	ODE-2-22150-3KB42	ODE-2-14150-3KA12	590x590-500
KUB T120 560-4L3*	-	-	ODE-2-32040-1KB42	ODE-2-32040-3K042	ODE-2-24400-3KA42	695x695-560
KUB T120 630-4L3*	-	-	-	-	ODE-2-34055-3KA42	790x790-630

* Speed is controlled only with the frequency inverter. Motors standard IE2.

KUB T120



- ① KUB T120 355-4L1
- ② KUB T120 355-4L3
- ③ KUB T120 400-4L1
- ④ KUB T120 400-4L3

— Performance
 - - - Power consumption

		355-4L1	355-4L3	400-4L1	400-4L3
Voltage/Frequency	[V/Hz]	~1,230/50	~3,400/50	~1,230/50	~3,400/50
Power consumption	[kW]	0,44	0,35	0,59	0,54
Current	[A]	2,55	1,06	3,17	1,38
Speed	[min ⁻¹]	1320	1340	1360	1390
Max. airflow	[m ³ /h]	2522	2619	3892	3976
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40	-40/+40	-40/+40
Weight	[kg]	33	33	55	55
Wiring diagram		No. 1	No. 3/4	No. 1	No. 3/4
Protection class:	motor	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+

The provided technical data is by using #3 el. connection scheme. Using #4 el. connection scheme, technical data will be different.

355-4L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	68	55	62	64	60	59	55	46
Outlet	71	58	61	67	65	60	56	48
Surrounding	55	42	48	51	47	43	39	35

Measured at 2113 m³/h, 120 Pa

355-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	68	56	62	64	60	59	56	47
Outlet	71	59	62	67	65	61	56	49
Surrounding	55	43	48	52	47	43	40	36

Measured at 2241 m³/h, 120 Pa

400-4L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	60	64	67	66	62	57	51
Outlet	74	62	66	70	68	64	59	52
Surrounding	59	48	53	55	53	48	43	37

Measured at 3482 m³/h, 121 Pa

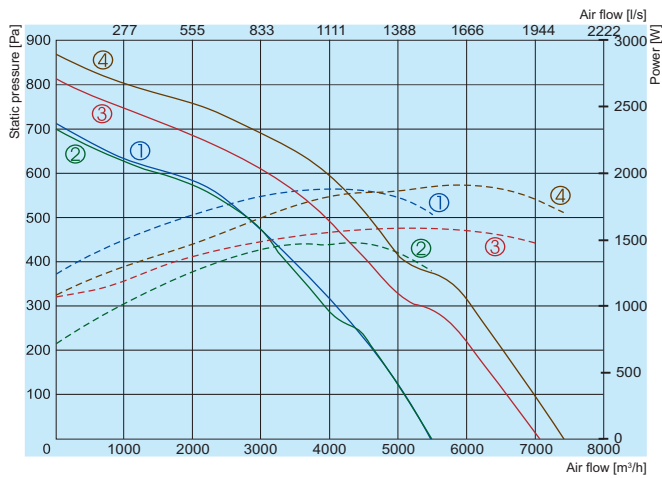
400-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	61	65	67	66	63	57	52
Outlet	76	63	66	74	68	65	60	54
Surrounding	59	47	54	55	52	49	43	37

Measured at 3583 m³/h, 120 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KUB T120



- ① KUB T120 450-4L1
- ② KUB T120 450-4L3
- ③ KUB T120 500-4L1
- ④ KUB T120 500-4L3

— Performance
 - - - - Power consumption

		450-4L1	450-4L3	500-4L1	500-4L3
Voltage/Frequency	[V/Hz]	~1,230/50	~3,400/50	~1,230/50	~3,400/50
Power consumption	[kW]	1,14	0,92	1,6	1,44
Current	[A]	6,55	2,13	7,95	3,08
Speed	[min ⁻¹]	1420	1430	1420	1430
Max. airflow	[m³/h]	5477	5645	7045	7404
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40	-40/+40	-40/+40
Weight	[kg]	62	62	66	66
Wiring diagram		No. 2	No. 3	No. 2	No. 3/4
Protection class:	motor	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+	+

The provided technical data is by using #3 el. connection scheme. Using #4 el. connection scheme, technical data will be different.

450-4L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	75	64	68	70	69	66	60	54
Outlet	77	66	70	72	70	68	64	57
Surrounding	62	51	56	57	54	50	45	40

Measured at 5080 m³/h, 101 Pa

450-4L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	76	65	70	72	69	67	61	55
Outlet	78	66	71	73	70	69	66	58
Surrounding	62	51	57	58	54	51	47	41

Measured at 5277 m³/h, 99 Pa

500-4L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	70	71	75	72	69	63	59
Outlet	81	73	72	76	75	70	63	62
Surrounding	64	56	57	60	58	53	46	44

Measured at 6472 m³/h, 119 Pa

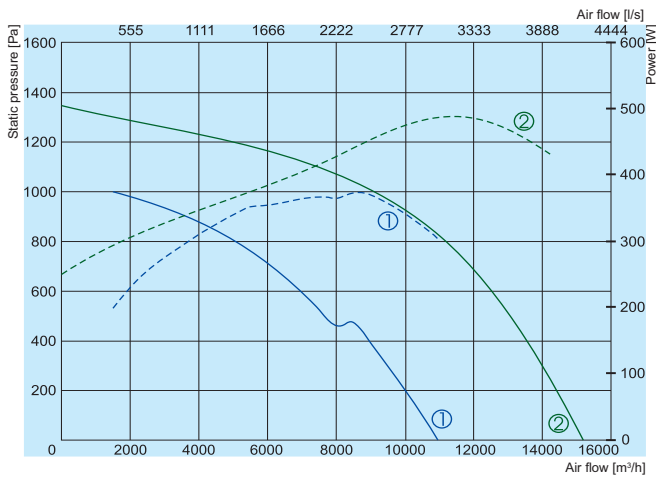
500-4L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	70	72	75	73	69	64	60
Outlet	81	73	73	76	75	72	65	63
Surrounding	65	56	58	60	58	54	47	45

Measured at 6881 m³/h, 122 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KUB T120



① — KUB T120 560-4L3
 ② — KUB T120 630-4L3
 — Performance
 - - - Power consumption

		560-4L3	630-4L3
Voltage/Frequency	[V/Hz]	~3,400/50	~3,400/50
Power consumption	[kW]	2,5	4,88
Current	[A]	5,04	8,9
Speed	[min ⁻¹]	1440	1450
Max. airflow	[m ³ /h]	10942	15100
Min/Max ambient air temperature	[°C]	-40/+40	-40/+40
Weight	[kg]	98	134
Wiring diagram		No. 3/4	No. 5
Protection class:	motor	IP-55	IP-55
Comply with ERP 2013		+	+

The provided technical data is by using #3 el. connection scheme. Using #4 el. connection scheme, technical data will be different.

560-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	85	74	78	80	79	76	61	64
Outlet	87	76	80	82	81	78	74	66
Surrounding	71	60	65	66	64	60	51	49

Measured at 10307 m³/h, 145 Pa

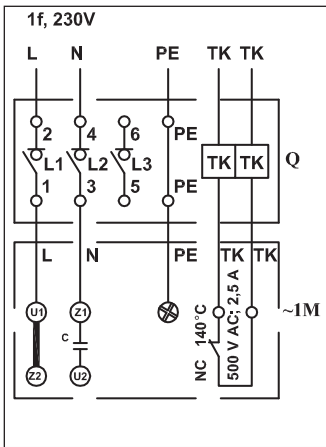
630-4L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	91	80	85	86	84	81	67	65
Outlet	94	82	87	90	87	84	78	73
Surrounding	78	68	72	73	70	65	59	55

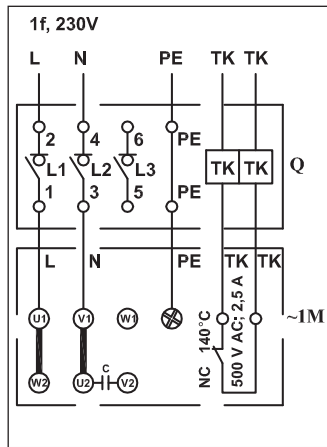
Measured at 14159m³/h, 239 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

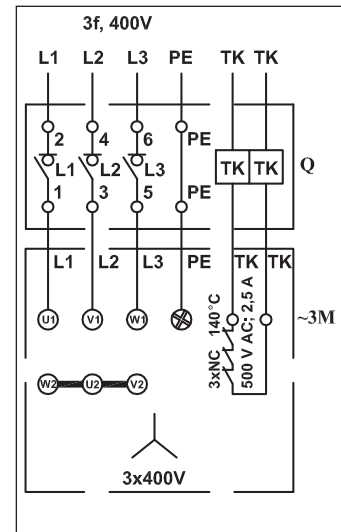
Wiring diagram No. 1



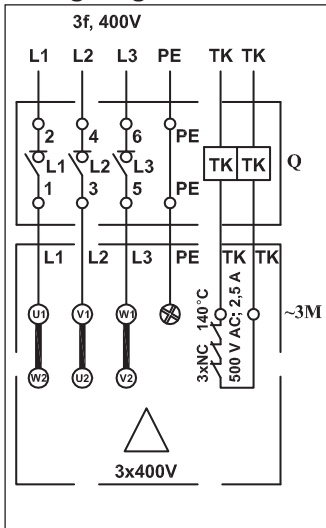
Wiring diagram No. 2



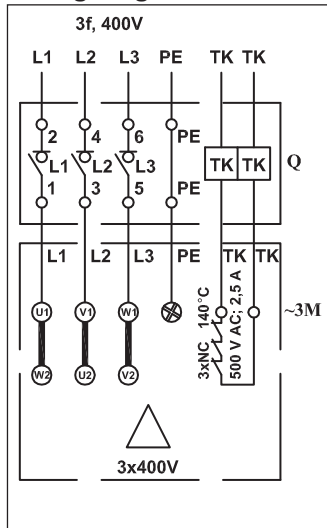
Wiring diagram No. 3



Wiring diagram No.4



Wiring diagram No. 5



KUB EKO



NEW!



Acoustically insulated fans

Kvadratiniai akustiniai ventiliatoriai

Wentylatory izolowane akustycznie

Канальные акустические вентиляторы



EC (energy-saving) technology motors. Suitable for every type of ventilation system. 7 models range: from 3.500 up to 15.000 m³/h. Suitable for every* type of ventilation system;

- Possible installation in any mounting position;
- *Note: not suitable for polluted air, aggressive and explosive gases.

Housing:

- Double skinned galvanized panels with non-flammable noise and temperature insulating (20mm) mineral wool;
- Rigid frame of aluminum profiles with reinforced corners made of polyurethane (PA6);
- Perforated internal panel sheet reducing noise;
- Integrated electronics in the motor housing;
- Highly shock-resistant;
- One connection side of the casing is open as standard (outlet).
- Speed control simply using 0-10V signal integrated into control system (EC controller).
- Five possible discharge directions, removable panels/changeable positions of the unit.
- Backward curved polymer blades;
- Impeller with the external rotor motors are balanced dynamically at two levels.
- Built-in thermal contacts for thermal overload protection;

One potential - free terminal for error message, suitable to be used for 50/60Hz.



Silniki EC (energooszczędne) . Nadaje się do każdego rodzaju systemu wentylacji. 7 modeli w przedziale : od 3.500 do 15.000 m³/h.

- Nadaje się do każdego rodzaju systemu wentylacji;
- Możliwość montażu w dowolnej pozycji;
- * Uwaga: nie nadaje się do zanieczyszczonego powietrza, agresywnych i wybuchowych gazów.

Obudowa:

- Dwuwarstwowe panele ocynkowane z niepalną i izolującą od hałasu i temperatury wełną mineralną (20mm);
- Sztywna rama z profili aluminiowych ze wzmocnionymi narożnikami wykonanymi z poliuretanu (PA6);
- Panel wewnętrzny wykonany z perforowanej blachy redukuje hałas ;
- Zintegrowana elektronika w obudowie silnika;
- Duża odporność na wstrząsy;
- Z jednej strony połączenie obudowy standardowo jest otwarte (wylot) .
- Regulacja prędkości za pomocą sygnału 0 - 10V;
- Pięć możliwych kierunków wylotu, zdejmowane panele / zmienne pozycje jednostki .
- Łopatkami polimerowe wygięte do tyłu;
- Wirnik z silnikiem jest wyważany dynamicznie w dwóch płaszczyznach .
- Wbudowane styki termiczne dla ochrony termicznej;
- Wolny punkt dla komunikatu o błędzie, nadaje się do stosowania dla 50/60Hz.



EC technologijos (energiją taupančios) varikliai. Tinka visiems ventiliacijos sistemų tipams. 7 modeliai: nuo 3.500 iki 15.000 m³/h.

- Tinka visų* vėdinimo sistemų tipui;
- Galima montuoti visomis padėtimis;
- * Pastaba: nenaudojami užteršto oro, agresyvių ir sprogių dujų transportavimui.

Korpusas:

- Dvigubos cinkuotos plokštės su nedegia, triukšmą ir temperatūrą izoliuojančia (20mm) mineraline vata;
- Standus aliuminio profilio rėmas su sustiprintais kampais iš poliuretano (PA6);
- Perforuotos vidinės sienelės - triukšmui sumažinti;
- Integruota elektronika variklio korpusė;
- Didelis atsparumas smūgiams;
- Standartiškai viena korpuso pusė yra atvira (išpūtimo).
- Greičio valdymas naudojant 0-10V signalą integruotą į valdymo sistemą (EC valdiklis).
- Penkios galimos oro išpūtimo kryptys, išimamos sienelės/keičiamos viso ventiliatoriaus montavimo padėtys.
- Atgal lenkti polimeriniai sparneliai;
- Sparnuotė su su išoriniu rotoriniu varikliu subalansuota dinamiškai dviejais lygiais.
- Įmontuota šiluminė perkrovos apsauga;
- Izoliacijos klasė F;
- Vienas laisvas pajungimo gnybtas – variklio klaidos indikacijai pajungti, tinkami naudoti 50/60Hz.



Двигатели по технологии EC (экономят энергию). Подходят для всех типов вентиляционных систем. 7 моделей: от 3.500 до 15.000 м³/час.

- Для подачи и удаления воздуха, разработан в соответствии с технологиями EC (экономит энергию);
- Подходит для всех* типов вентиляционных систем;
- Можно монтировать в любом положении;
- * Примечание: не предназначен для транспортировки загрязненного воздуха, агрессивных и взрывоопасных газов.

- Двойные оцинкованные панели с негорючей, звуко- и теплоизоляционной минеральной ватой (20 мм);
- Жесткая рама из алюминиевого профиля с укрепленными углами из полиуретана (PA6);

- Перфорированные внутренние стенки – для уменьшения шума;
- Интегрированная электроника в корпусе двигателя;
- Большая устойчивость к ударам;
- По стандарту одна сторона корпуса открыта (для выдувания).

- Управление скоростью:
- С использованием сигнала 0-10V, интегрированного в систему управления (контроллер EC).

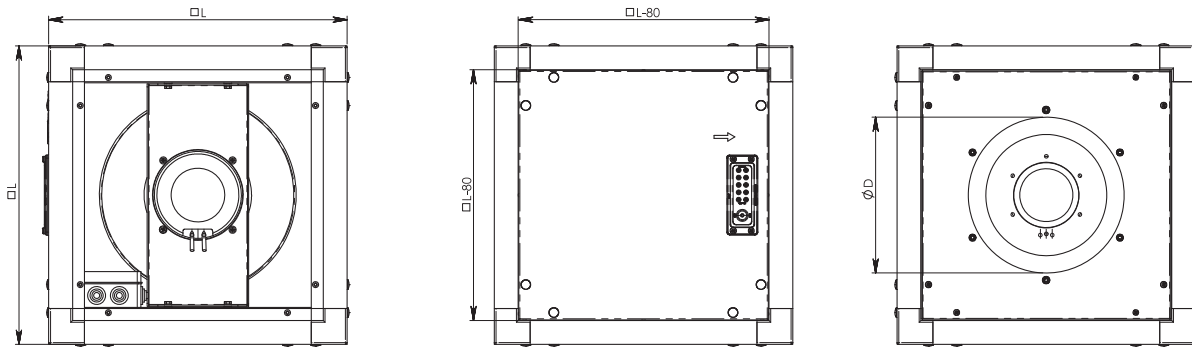
- Пять возможных направлений выдувания воздуха, съемные стенки/можно менять положения монтажа всего вентилятора.

- Отогнутые назад полимерные крылья;
- Крыльчатка с внешним роторным двигателем динамически сбалансирована на двух уровнях.
- Вмонтирована тепловая защита от перегрузки;

- Класс изоляции F;
- Одна свободная соединительная клемма – для подключения индикации ошибки двигателя, подходит для 50/60 Гц.

Accessories

<p>0-10V speed controller</p>  <p>MTP010 p. 142</p>	<p>Flexible connection</p>  <p>LJ/PG p. 151</p>	<p>Damper for rectangular ducts</p>  <p>SSK p. 204</p>	<p>Outdoor grilles</p>  <p>LGd p. 214</p>	<p>Rectangular duct silencer</p>  <p>SSP p. 197</p>	<p>Main switch</p>  <p>Main switch p. 144</p>
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Type	Dimensions [mm]	
	øD	□ L
KUB 50-355 EKO	261	500
KUB 67-400 EKO	325	670
KUB 67-500 EKO	412	670
KUB 80-500 EKO	410	800
KUB 80-560 EKO	461	800
KUB 80-630 EKO	512	800
KUB 100-630 EKO	510	1000

Type	Accessories						
	MTP010	LJ/PG	SSK	LGd	SSP	Main switch	PR
KUB 50-355 EKO	+	420x420	420x420	380x380	460x460	BWS316 Y TPN	420x420-355
KUB 67-400 EKO	+	590x590	590x590	550x550	630x630	BWS316 Y TPN	590x590-400
KUB 67-500 EKO	+	590x590	590x590	550x550	630x630	BWS316 Y TPN	590x590-450
KUB 80-500 EKO	+	720x720	720x720	680x680	760x760	BWS316 Y TPN	590x590-500
KUB 80-560 EKO	+	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-560
KUB 80-630 EKO	+	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-630
KUB 100-630 EKO	+	920x920	920x920	880x880	960x960	BWS316 Y TPN	920x920-710

Accessories

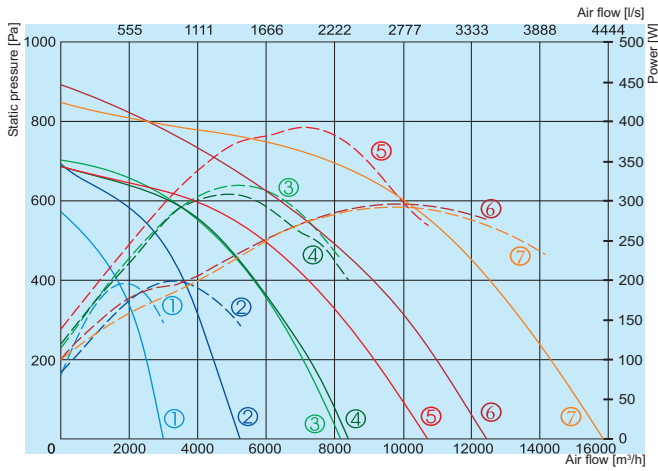
Flange - adapter



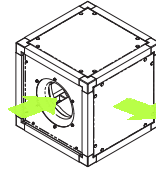
KUB EKO

SALDA

ACOUSTICALLY INSULATED FANS



Centrifugal discharge



- ① KUB 50-355 EKO
- ② KUB 67-400 EKO
- ③ KUB 67-500 EKO
- ④ KUB 80-500 EKO
- ⑤ KUB 80-560 EKO
- ⑥ KUB 80-630 EKO
- ⑦ KUB 100-630 EKO

— Performance
- - - Power consumption

		50-355	67-400	67-500	80-500	80-560	80-630	100-630
Voltage/Frequency	[V/Hz]	230/50	230/50	400/50	400/50	400/50	400/50	400/50
Power consumption	[kW]	0,407	0,764	1,286	1,250	1,573	2,956	2,900
Current	[A]	1,93	3,46	2,04	2,0	2,45	4,55	4,48
Speed	[min ⁻¹]	2010	1700	1400	1400	1230	1230	1230
Max. airflow	[m ³ /h]	3000	5220	8070	8370	10740	15000	15900
Max. air temperature in the duct	[°C]	60	60	60	60	60	60	60
Weight	[kg]	28	50	51	75	87	73	116
Protection class:	motor	IP-54	IP-54	IP-54	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013; 2015		+	+	+	+	+	+	+

80-560	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	80	68	72	73	73	72	69	67
Outlet	82	67	73	77	75	74	70	67
Surrounding	68	56	62	62	60	59	56	54

Measured at 8566 m³/h, 151 Pa

80-630	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	83	69	78	76	77	75	71	67
Outlet	85	68	76	81	79	78	73	71
Surrounding	73	58	67	67	66	64	59	57

Measured at 11073 m³/h, 183 Pa

100-630	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	85	69	79	78	77	76	74	73
Outlet	87	68	77	82	80	79	75	76
Surrounding	76	60	69	71	69	67	64	60

Measured at 13359 m³/h, 149 Pa

50-355	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	50	59	65	62	61	57	53
Outlet	73	51	62	68	69	66	61	55
Surrounding	56	38	47	51	50	47	42	39

Measured at 2366 m³/h, 150 Pa

67-400	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	59	62	68	65	62	63	61
Outlet	76	58	64	70	73	68	64	60
Surrounding	60	45	51	56	54	49	47	45

Measured at 4264 m³/h, 150 Pa

67-500	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	76	64	69	71	67	67	65	64
Outlet	80	61	72	75	75	71	67	65
Surrounding	62	48	57	57	55	52	50	49

Measured at 6138 m³/h, 150 Pa

80-500	Lwa total, dB(A)	LWA, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	67	72	74	70	69	67	65
Outlet	83	69	74	78	76	74	72	67
Surrounding	66	54	59	61	59	55	54	50

Measured at 6907 m³/h, 181 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KUB



Acoustically insulated fans

Kvadratiniai akustiniai ventiliatoriai

Wentylatory izolowane akustycznie

Канальные акустические вентиляторы



Acoustically insulated duct fans for ventilation and air conditioning systems. Used for the air supply or extract. Additional insulation of the fan box reduces noise level to the surroundings. Not suitable for polluted air, aggressive and explosive gases.

Impeller: backward curved wings.

Motor: external rotor, direct transmission, long-serving bearing with no maintenance requirements.

Housing: made of galvanized steel, housing frame made of aluminium profiles, perforated sheet, which reduces noise level in duct systems.

Sound insulation: mineral wool, 25 mm thickness.

Low noise level.



Kanaliniai, akustiniai ventiliatoriai, skirti vėdinimo ir oro kondicionavimo sistemoms, jungiami prie ortakių. Naudojami oro tiekimui ir šalinimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, cinkuoto plieno.

Variklis: išorinis rotorius, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys nereikalaujantys priežiūros guoliai.

Korpusas: iš cinkuotos skardos, korpuso rėmas iš aliuminio profilio.

Garso izoliacija: mineralinė vata su sustiprintu paviršiumi, 25 mm storio, nedegi

Žemas triukšmo lygis.



Wentylatory izolowane akustycznie z wyjściem okrągłym przystosowane do pracy w instalacjach wentylacji i klimatyzacji. Używane do instalacji nawiewnych i wywiewnych. Dodatkowa izolacja jaką stanowi skrzynka wentylatora zmniejsza poziom hałasu. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi. Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych.

Wirnik: łopatki zakrzywione do tyłu typu skrzydła.

Silnik: z wirnikiem zewnętrznym, bezpośrednia transmisja, brak wymogów konserwacji.

Obudowa: panele wykonane z blachy ocynkowanej, rama z profili aluminiowych, wewnątrz wykonane z blachy perforowanej, co zmniejsza poziom hałasu w kanale.

Izolacja akustyczna: wełna mineralna, 25 mm grubości.



Канальные акустические вентиляторы для систем вентиляции и кондиционирования, подключаются к воздуховодам. Эксплуатируются в целях подачи и вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки, оцинкованная сталь.

Двигатель: наружный ротор, встроенные термодатчики двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: оцинкованной жести, рама корпуса из алюминиевого профиля.

Звукоизоляция: минеральная вата с усиленной поверхностью, толщиной 25 мм, негорючая.

Низкий уровень шума.

Accessories

Single phase speed controller



TGRV

p. 138

Three phase speed controller



TGRT

p. 139

Single phase speed controller



ETY/MTY

p. 141

Flexible connection



LJ/PG

p. 151

Damper for rectangular ducts



SSK

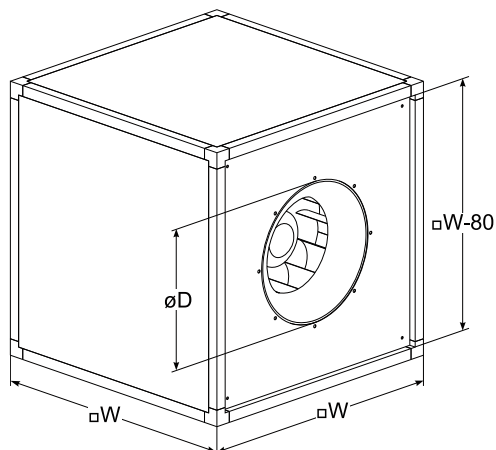
p. 204

Outdoor grilles



LGd

p. 214



Type	Dimensions [mm]		
	$\varnothing D$	Nominal diameter of impeller- $\varnothing d_n$	$\square W$
KUB 355	292	355	500
KUB 400	325	400	670
KUB 450	365	450	670
KUB 500	410	500	670
KUB 560	460	560	800
KUB 630	510	630	800
KUB 710	580	710	1000

Type	Accessories								
	TGRV	TGRT	ETY/MTY	LJ/PG	SSK	LGd	SSP	Main switch	PR
KUB 355-4-L1	2	-	2,5	420x420	420x420	380xx380	460x460	BWS316 Y TPN	420x420-355
KUB 355-4-L3	-	1	-	420x420	420x420	380xx380	460x460	BWS316 Y TPN	420x420-355
KUB 400-4-L1	3	-	4	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-400
KUB 400-4-L3	-	1	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-400
KUB 450-4-L1	4	-	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-450
KUB 450-4-L3	-	2	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-450
KUB 450-6-L1	1,5	-	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-450
KUB 450-6-L3	-	1	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-450
KUB 500-4-L3	-	3	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-500
KUB 500-6-L3	-	1	-	590x590	600x600	550x550	630x630	BWS316 Y TPN	590x590-500
KUB 560-4-L6	-	4	-	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-560
KUB 560-6-L3	-	2	-	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-560
KUB 630-4-L3	-	7	-	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-630
KUB 630-6-L3	-	3	-	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-630
KUB 630-8-L3	-	1	-	720x720	720x720	680x680	760x760	BWS316 Y TPN	695x695-630
KUB 710-6-L3	-	5	-	920x920	920x920	880x880	960x960	BWS316 Y TPN	920x920-710
KUB 710-8-L3	-	2	-	920x920	920x920	880x880	960x960	BWS316 Y TPN	920x920-710

Accessories

Rectangular duct silencer

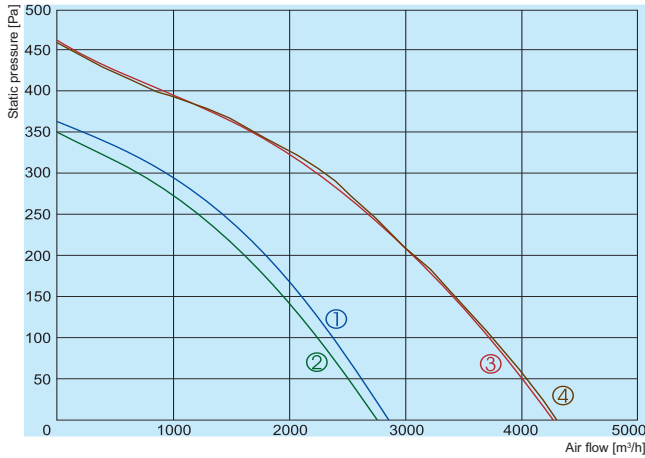


Main switch



Flange - adapter





- ① — KUB 355-4-L1
- ② — KUB 355-4-L3
- ③ — KUB 400-4-L1
- ④ — KUB 400-4-L3

		355-4-L1	355-4-L3	400-4-L1	400-4-L3
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50
Power consumption	[kW]	0,27	0,24	0,47	0,45
Current	[A]	1,32	0,46	2,27	0,83
Speed	[min ⁻¹]	1390	1340	1280	1320
Max. airflow	[m ³ /h]	2841	2761	4270	4297
Min./Max. air temperature	[°C]	-25/65	-25/60	-25/40	-25/55
Weight	[kg]	37	37	57	57
Wiring diagram		Nr. 1	Nr. 2	Nr. 1	Nr. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	-	+

355-4-L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	63	48	53	57	55	52	54	56
Outlet	67	49	55	60	62	59	56	55
Surrounding	50	36	42	45	44	42	40	39

Measured at 1968 m³/h, 175 Pa

355-4-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	63	46	54	58	53	53	55	55
Outlet	67	48	53	62	60	60	57	54
Surrounding	49	35	43	43	40	41	39	37

Measured at 1802 m³/h, 175 Pa

400-4-L1

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	57	60	65	60	59	56	63
Outlet	74	57	63	69	70	66	60	63
Surrounding	57	43	49	52	50	47	42	48

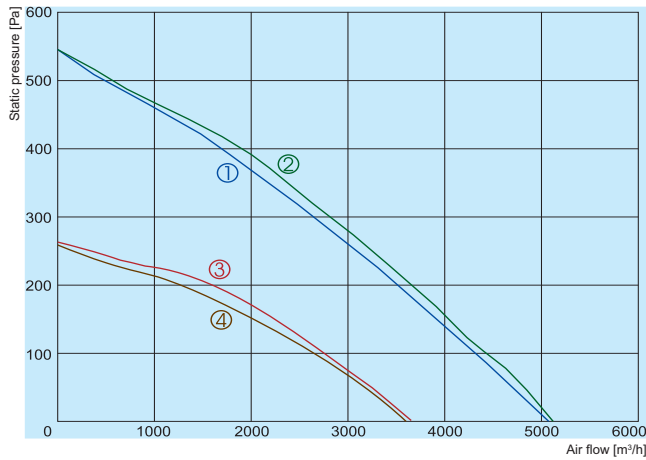
Measured at 3409 m³/h, 151 Pa

400-4-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	57	60	65	60	59	56	63
Outlet	74	57	63	69	70	66	60	63
Surrounding	57	43	49	52	50	47	42	48

Measured at 3429 m³/h, 149 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



- ① — KUB 450-4-L1
- ② — KUB 450-4-L3
- ③ — KUB 450-6-L1
- ④ — KUB 450-6-L3

		450-4-L1	450-4-L3	450-6-L1	450-6-L3
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50
Power consumption	[kW]	0,62	0,64	0,30	0,26
Current	[A]	2,84	1,35	1,40	0,62
Speed	[min ⁻¹]	1240	1250	920	880
Max. airflow	[m ³ /h]	5065	5138	3671	3606
Min./Max. air temperature	[°C]	-25/60	-25/40	-25/60	-25/60
Weight	[kg]	60	60	60	60
Wiring diagram		Nr. 1	Nr. 2	Nr. 1	Nr. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		-	-	-	-

450-4-L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	70	58	63	65	61	61	57	62
Outlet	76	58	66	71	71	67	60	59
Surrounding	59	45	53	54	52	49	44	47

Measured at 3827 m³/h, 159 Pa

450-4-L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	71	58	64	66	62	62	57	63
Outlet	77	58	67	72	73	68	61	62
Surrounding	60	45	54	55	54	50	44	49

Measured at 3983 m³/h, 161 Pa

450-6-L1

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	66	53	61	60	57	55	57	44
Outlet	70	54	63	65	63	61	57	46
Surrounding	54	41	50	49	46	43	42	32

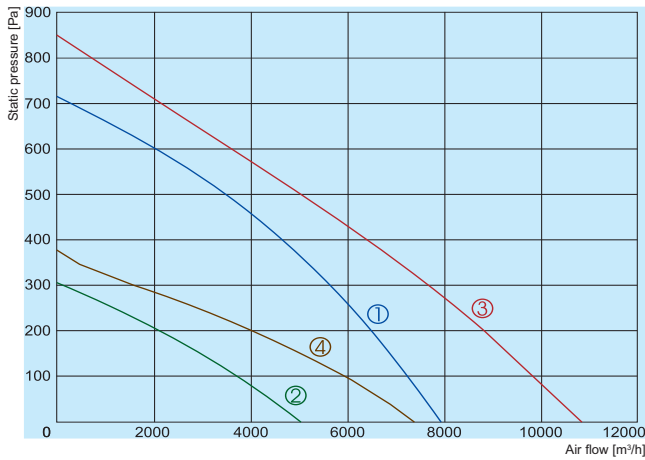
Measured at 2543 m³/h, 121 Pa

450-6-L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	63	50	57	56	55	53	57	40
Outlet	67	51	59	62	62	59	58	42
Surrounding	52	38	46	45	45	41	43	28

Measured at 2385 m³/h, 120 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



- ① KUB 500-4-L3
- ② KUB 500-6-L3
- ③ KUB 560-4-L3
- ④ KUB 560-6-L3

		500-4-L3	500-6-L3	560-4-L3	560-6-L3
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50	400/50
Power consumption	[kW]	1,21	0,39	1,75	0,61
Current	[A]	2,30	0,84	3,43	1,08
Speed	[min ⁻¹]	1330	840	1180	800
Max. airflow	[m ³ /h]	7886	5030	10855	7377
Min./Max. air temperature	[°C]	-25/45	-25/45	-25/40	-25/40
Weight	[kg]	70	66	117	110
Wiring diagram		Nr. 2	Nr. 2	Nr. 2	Nr. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013		+	-	-	-

500-4-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	77	64	70	73	67	68	63	70
Outlet	83	65	74	79	78	74	69	67
Surrounding	64	50	58	60	57	54	49	53

Measured at 6191 m³/h, 240 Pa

500-6-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	67	51	66	57	58	52	50	38
Outlet	69	52	66	61	62	57	51	40
Surrounding	55	39	54	45	46	40	36	25

Measured at 2865 m³/h, 160 Pa

560-4-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	83	71	75	76	74	74	69	78
Outlet	87	70	79	82	82	79	74	75
Surrounding	69	56	63	63	62	60	55	61

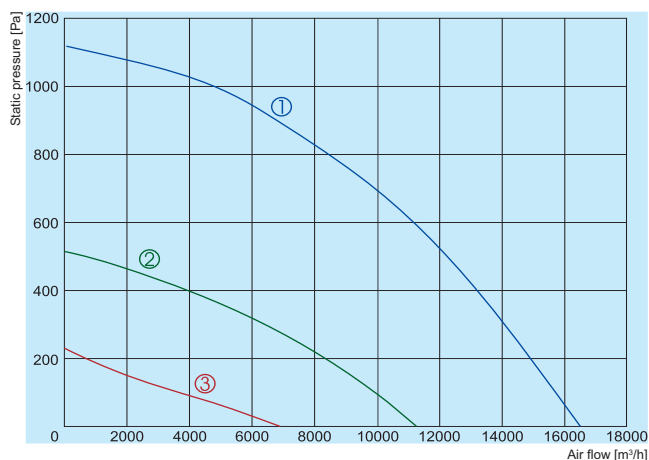
Measured at 8876 m³/h, 202 Pa

560-6-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	75	61	67	66	64	65	72	62
Outlet	79	62	70	73	72	70	72	62
Surrounding	63	49	57	56	54	53	57	48

Measured at 5099 m³/h, 149 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



- ① — KUB 630-4-L3
- ② — KUB 630-6-L3
- ③ — KUB 630-8-L3

		630-4-L3	630-6-L3	630-8-L3
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50
Power consumption	[kW]	4,25	1,25	0,38
Current	[A]	7,3	2,66	0,88
Speed	[min ⁻¹]	1360	880	520
Max. airflow	[m ³ /h]	16500	11288	6908
Min./Max. air temperature	[°C]	-25/40	-25/70	-25/60
Weight	[kg]	145	130	120
Wiring diagram		Nr. 2	Nr. 2	Nr. 2
Protection class:	motor	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-55
Comply with ERP 2013		+	+	+

630-4-L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	88	76	80	81	79	79	74	83
Outlet	92	75	84	87	87	84	79	80
Surrounding	74	61	68	68	67	65	60	66

Measured at 12887 m³/h, 439 Pa

630-6-L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	80	63	72	71	72	70	70	75
Outlet	85	65	74	78	77	75	80	72
Surrounding	67	46	59	59	61	56	58	58

Measured at 7896 m³/h, 236 Pa

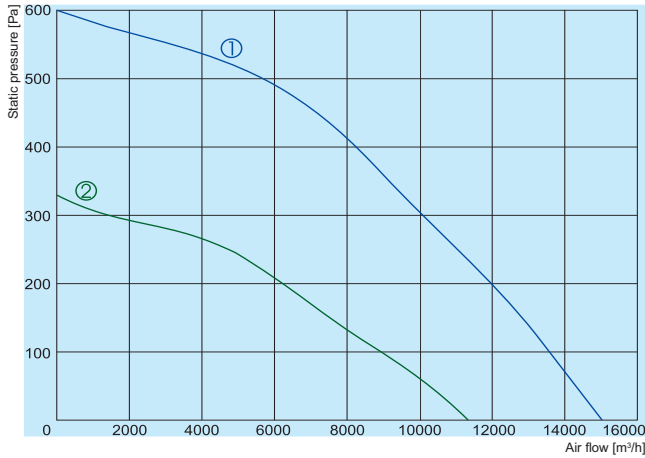
630-8-L3

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	46	56	51	54	64	67	41
Outlet	72	48	58	60	60	66	69	42
Surrounding	58	36	47	46	48	52	55	30

Measured at 4131 m³/h, 90 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

KUB



- ① — KUB 710-6-L3
- ② — KUB 710-8-L3

		710-6-L3	710-8-L3
Voltage/Frequency	[V/Hz]	400/50	400/50
Power consumption	[kW]	1,98	0,97
Current	[A]	3,77	2,0
Speed	[min ⁻¹]	890	650
Max. airflow	[m ³ /h]	15000	11326
Min./Max. air temperature	[°C]	-25/40	-25/40
Weight	[kg]	185	170
Wiring diagram		Nr. 2	Nr. 2
Protection class:	motor	IP-54	IP-54
	terminal box	IP-55	IP-55
Comply with ERP 2013		+	-

710-6-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	88	74	78	83	80	77	75	82
Outlet	93	75	82	89	88	82	80	79
Surrounding	74	60	66	70	68	62	61	65

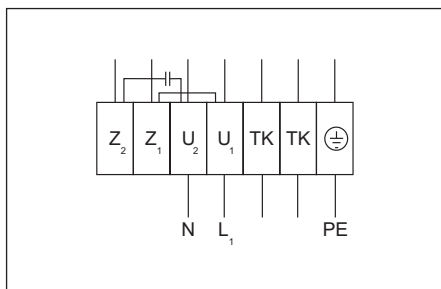
Measured at 12555 m³/h, 168 Pa

710-8-L3

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	79	70	69	72	75	68	65	68
Outlet	83	68	74	79	77	72	68	72
Surrounding	66	54	58	62	60	53	50	54

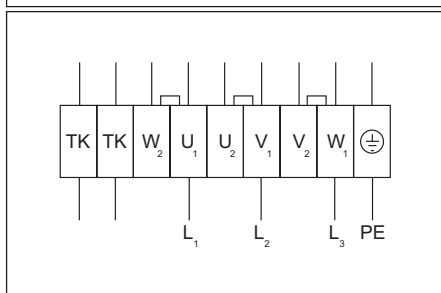
Measured at 7661 m³/h, 144 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



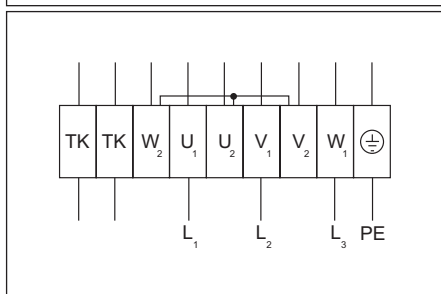
Wiring diagram No. 1 (1~230V)

- U₁ - brown
- U₂ - blue
- Z₁ - black
- Z₂ - orange
- TK - white
- PE - yellow-black



Wiring diagram No. 2 (Δ - 3~230V)

- U₁ - brown
- V₁ - blue
- W₁ - black
- U₂ - red
- V₂ - grey
- W₂ - orange
- TK - white
- PE - green-yellow



Wiring diagram No. 2 (Y - 3~400V)

- U₁ - brown
- V₁ - blue
- W₁ - black
- U₂ - red
- V₂ - grey
- W₂ - orange
- TK - white
- PE - green-yellow

VSV/VSVI EKO

VSV 311-630 EKO

VSVI 311-630 EKO



Roof fans

Stoginiai ventiliatoriai

Wentylatory dachowe - wyrzut pionowy

Крышные вентиляторы



Roof fans with vertical discharge are used to extract air from different premises. Motorised impeller is protected with a meshwork grille which protects from external objects that could cause mechanical damage to the impeller. Not suitable for polluted air, aggressive and explosive gases.

Plastic impeller with backward curved blades.

Efficient and low-noise EC fans.

VSVI EKO sound insulation: mineral wool, 50 mm thickness.

Motor: external rotor, motor protection with built-in thermal contact, maintenance free ball bearings.

Housing: made of galvanized steel. Optionally can be made of aluminium.



Stoginiai ventiliatoriai, naudojami oro ištraukimui iš patalpos. Sparnuotė uždengta tinklo grotelėmis, apsaugančiomis ją nuo pašalinųjų daiktų, galinčių patekti iš aplinkos ir pažeisti sparnuotę mechaniškai. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, plastikinė sparnuotė.

Variklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys nereikalaujantys priežiūros guoliai.

Efektyvūs ir tylūs EC ventiliatoriai.

Korpusas: iš cinkuotos skardos. Galima pasirinkti modelį VSV EKO AL, kuris pagamintas iš aliuminio.

VSVI ir VSVI AL EKO garso izoliacija: 50 mm mineraline vata.



Wentylatory dachowe z pionowym wyrzutem służą do wyciągu powietrza z różnych pomieszczeń. Wirniki są osłonięte blachą perforowaną która chroni przed zewnętrznymi czynnikami, które mogą powodować mechaniczne uszkodzenie wirnika. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi. Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych.

Wirnik: plastikowy z łopatkami wygiętymi do tyłu.

Silnik: wydajne i ciche silniki EC, silnik z wirnikiem zewnętrznym, zabezpieczenie z wbudowanym bezpiecznikiem termicznym, bezobsługowe łożyska kulkowe.

Korpus: wykonany z ocynkowanej stali - opcjonalnie wykonane z aluminium. VSVI EKO izolacja akustyczna: wełna mineralna 50 mm grubości.



Крышные вентиляторы для вытяжки воздуха из помещений. Крыльчатка закрыта сетчатой решёткой, защищающей её от попадающих извне посторонних предметов, способных механически повредить крыльчатку. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки, сделано из пластика.

Экономные и бесшумные ЕС вентиляторы.

VSVI EKO звукоизоляция: каменная вата, толщиной 50 мм.

Двигатель: наружный ротор, прямая передача, встроенные термоконтакты двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: оцинкованной жести. Может быть изготовлено и из алюминия.

Accessories

0-10V speed controller



Roof curb



Roof curb



Flange-adapter



Flexible connection



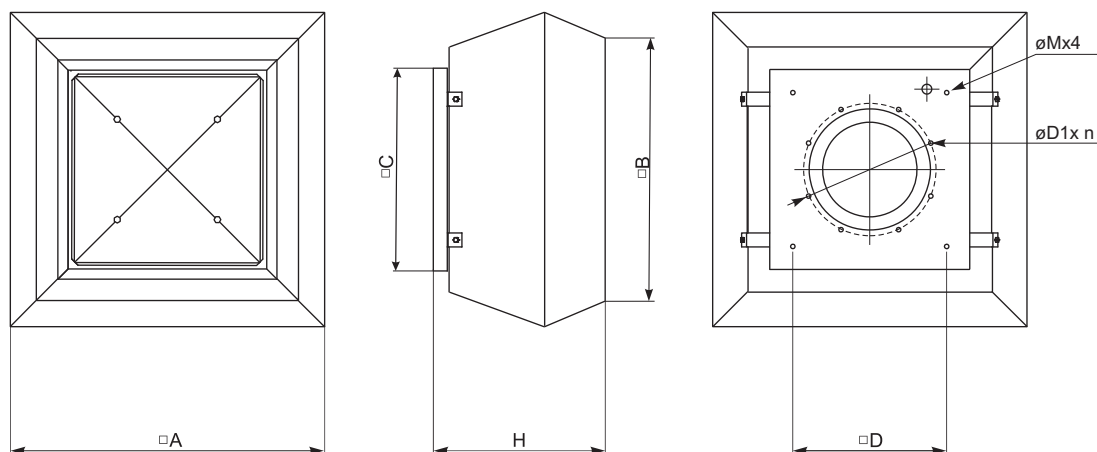
Back draft shutter



Main switch



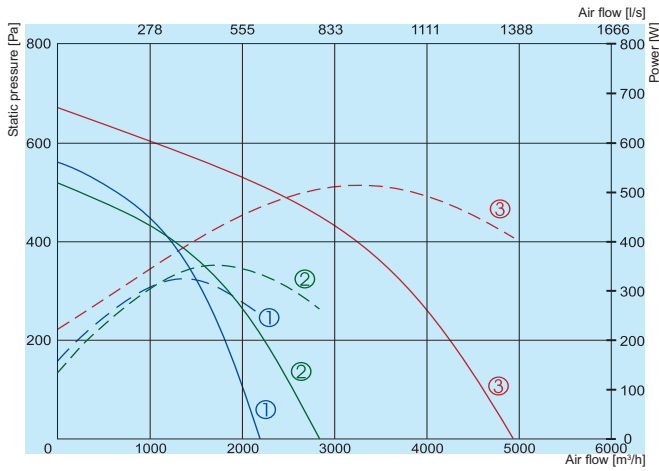
VSV/VSVI EKO



Type	Dimensions [mm]							
	□A [mm]	□B [mm]	□C [mm]	□H [mm]	∅M [mm]	□D [mm]	∅D1	n
VSV 311 EKO	555	470	435	323	M6	330	-	-
VSV 355 EKO	720	618	595	420	M10	450	-	-
VSV 400 EKO	720	618	595	420	M10	450	-	-
VSV 450 EKO	900	700	665	485	M10	535	-	-
VSV 500 EKO	900	700	665	485	M10	535	-	-
VSV 560 EKO	1150	972	939	609	M10	750	-	-
VSV 630 EKO	1150	972	939	609	M10	750	-	-
VSVI 311 EKO	675	567	435	370	M6	330	285	6
VSVI 355 EKO	844	716	595	420	M10	450	438	6
VSVI 400 EKO	844	716	595	420	M10	450	438	6
VSVI 450 EKO	966	817	665	488	M10	535	438	6
VSVI 500 EKO	966	817	665	488	M10	535	438	6
VSVI 560 EKO	1265	1033	939	611	M10	750	605	8
VSVI 630 EKO	1265	1033	939	611	M10	750	605	8

Type	Accessories					
	MTP010	KS-K	KSP-K	FSV	LSV	ATS
VSV/VSVI 311 EKO	+	311	311	311	311	311
VSV/VSVI 355 EKO	+	355/400	355/400	355/400	355/400	355/400
VSV/VSVI 400 EKO	+	355/400	355/400	355/400	355/400	355/400
VSV/VSVI 450 EKO	+	450/500	450/500	450/500	450/500	450/500
VSV/VSVI 500 EKO	+	450/500	450/500	450/500	450/500	450/500
VSV/VSVI 560 EKO	+	560/630	560/630	560/630	560/630	560/630
VSV/VSVI 630 EKO	+	560/630	560/630	560/630	560/630	560/630

VSV/VSVI EKO



- ① VSV/VSVI 311 L1 EKO
 - ② VSV/VSVI 355 L1 EKO
 - ③ VSV/VSVI 400 L1 EKO
- Performance
- - - Power consumption

		311 L1 EKO	355 L1 EKO	400 L1 EKO
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50
Power consumption	[kW]	0,323	0,350	0,772
Current	[A]	1,51	1,61	3,5
Speed	[min ⁻¹]	2270	2010	1700
Max. airflow	[m ³ /h]	2185	2835	4940
Min./Max. air temperature	[°C]	-25/60	-15/60	-25/60
Weight	[kg]	20/24	30/38	33/38
Wiring diagram		No.1	No.1	No.2
Protection class:	motor	IP-54	IP-54	IP-54
	terminal box	IP-55	IP-55	IP-54
Comply with ERP 2013; 2015		+	+	+

VSV 311 L1 EKO

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	75	51	63	72	68	67	64	61
Outlet	76	56	62	71	72	66	65	59
Surrounding	78	56	67	73	72	71	68	63

Measured at 1901 m³/h, 150 Pa

VSV 355 L1 EKO

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	75	51	63	70	67	70	65	60
Outlet	76	54	67	68	70	70	66	58
Surrounding	78	58	68	71	73	72	68	63

Measured at 2816 m³/h, 172 Pa

VSV 400 L1 EKO

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	79	62	74	75	71	66	66	60
Outlet	78	66	71	72	71	70	66	61
Surrounding	82	68	77	77	73	71	69	64

Measured at 4370 m³/h, 183 Pa

VSVI 311 L1 EKO

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	74	52	61	70	68	66	62	61
Outlet	74	56	63	69	70	67	63	59
Surrounding	77	57	65	73	72	70	66	63

Measured at 1901 m³/h, 150 Pa

VSVI 355 L1 EKO

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	74	49	62	69	67	68	65	59
Outlet	74	55	65	66	70	68	64	58
Surrounding	77	56	67	71	71	71	68	62

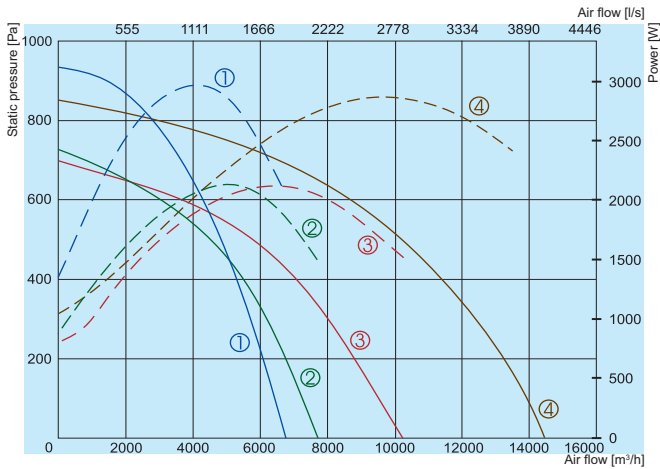
Measured at 2816 m³/h, 172 Pa

VSVI 400 L1 EKO

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	78	62	75	73	68	66	65	59
Outlet	77	64	70	71	71	68	66	60
Surrounding	81	66	76	75	73	70	69	63

Measured at 4370 m³/h, 183 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



- ① VSV/VSVI 450 L3 EKO
 - ② VSV/VSVI 500 L3 EKO
 - ③ VSV/VSVI 560 L3 EKO
 - ④ VSV/VSVI 630 L3 EKO
- Performance
- - - Power consumption

		450 L3 EKO	500 L3 EKO	560 L3 EKO	630 L3 EKO
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50	400/50
Power consumption	[kW]	1,418	1,28	1,595	2,87
Current	[A]	2,22	2,02	2,51	4,42
Speed	[min ⁻¹]	1800	1400	1230	1230
Max. airflow	[m³/h]	6760	7670	10220	14500
Min./Max. air temperature	[°C]	-25/60	-25/60	-25/40	-25/60
Weight	[kg]	50/60	50/60	82/100	103/121
Wiring diagram		No.2	No.2	No.2	No.2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013; 2015		+	+	+	+

VSV 450 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	83	66	77	80	74	73	71	69
Outlet	85	71	77	80	78	76	73	69
Surrounding	87	71	78	83	80	76	75	72

Measured at 6345 m³/h, 121 Pa

VSV 500 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	79	66	74	75	68	67	67	66
Outlet	80	69	74	75	73	70	68	64
Surrounding	83	70	75	79	76	72	71	68

Measured at 7139 m³/h, 120 Pa

VSV 560 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	78	69	73	72	70	68	66	62
Outlet	78	69	71	73	70	69	66	59
Surrounding	81	72	73	75	73	71	70	65

Measured at 9113 m³/h, 160 Pa

VSV 630 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	82	65	75	79	75	72	71	65
Outlet	83	70	74	80	76	72	72	68
Surrounding	85	72	77	82	76	75	75	69

Measured at 13018 m³/h, 230 Pa

VSVI 450 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	82	67	75	79	72	72	71	68
Outlet	84	69	76	79	78	74	73	68
Surrounding	86	71	79	82	79	76	75	71

Measured at 6345 m³/h, 121 Pa

VSVI 500 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	78	67	72	74	67	67	67	65
Outlet	79	67	73	74	73	68	68	62
Surrounding	82	70	76	77	74	71	71	67

Measured at 7139 m³/h, 120 Pa

VSVI 560 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	77	69	71	70	68	68	66	61
Outlet	77	67	70	72	70	68	66	58
Surrounding	80	71	74	74	72	71	69	63

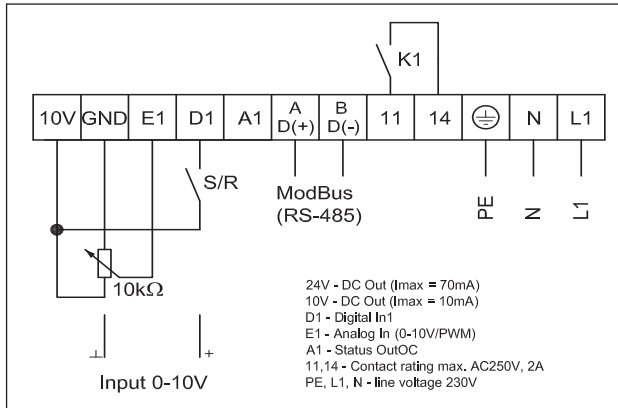
Measured at 9113 m³/h, 160 Pa

VSVI 630 L3 EKO

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	81	65	73	78	73	70	71	63
Outlet	82	69	74	78	74	71	72	67
Surrounding	84	70	76	81	76	74	75	68

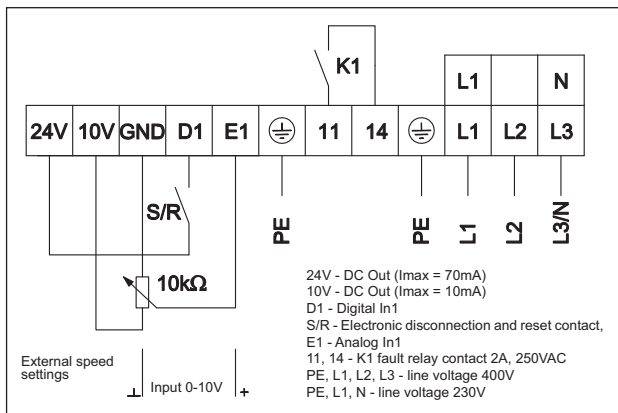
Measured at 13018 m³/h, 230 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



Wiring diagram No. 1

- PE - yellow - green
- BU - blue
- BN - brown
- RD - red
- GN - green
- YE - yellow
- WH - white
- GY - gray



Wiring diagram No. 2

VSV 250-710

VSVI 311-710



Roof fans

Stoginiai ventiliatoriai

Wentylatory dachowe - wyrzut pionowy

Крышные вентиляторы



Roof fans with vertical discharge are used to extract air from different premises. Motorised impeller is protected with a meshwork grill which offers protection against external objects that could cause mechanical damage to the impeller. Not suitable for polluted air, aggressive and explosive gases.

Plastic impeller with backward curved blades, VSV/VSVI 710 impeller made from steel.

VSVI sound insulation: mineral wool, 50 mm thickness.

Motor: external rotor, motor protection built-in thermal contact, maintenance free ball bearings.

Housing: made of galvanized steel. Optionally can be made of aluminium.



Stoginiai ventiliatoriai, naudojami oro ištraukimui iš patalpos. Sparnuotė uždengta tinklo grotelėmis, apsaugančiomis ją nuo pašalinių daiktų, galinčių patekti iš aplinkos ir pažeisti sparnuotę mechanškai. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, plastikinė sparnuotė.

Variklis: išorinis rotorius, tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys nereikalaujantys priežiūros guoliai.

Korpusas: iš cinkuotos skardos. Galima pasirinkti modelį VSV AL, kuris pagamintas iš aliuminio.

VSVI ir VSVI AL garso izoliacija: 50mm mineraline vata.



Wentylatory dachowe z pionowym wyrzutem służą do wyciągu powietrza z różnych pomieszczeń. Wirniki są osłonięte blachą perforowaną która chroni przed zewnętrznymi czynnikami, które mogą powodować mechaniczne uszkodzenie wirnika.

Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spaliniowych.

Wirnik: plastikowy z łopatkami wygiętymi do tyłu, dla modeli VSV / VSVI 710 wirnik wykonany ze stali.

Silnik: wydajne i ciche silniki z wirnikiem zewnętrznym, zabezpieczenie z wbudowanym bezpiecznikiem termicznym, bezobsługowe łożyska kulkowe.

Korpus: wykonany z ocynkowanej stali - opcjonalnie wykonane z aluminium.

VSVI - izolacja akustyczna : wełna mineralna o gr. 50 mm



Крышные вентиляторы для вытяжки воздуха из помещений. Крыльчатка закрыта сетчатой решёткой, защищающей её от падающих извне посторонних предметов, способных механически повредить крыльчатку. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки, сделано из пластика.

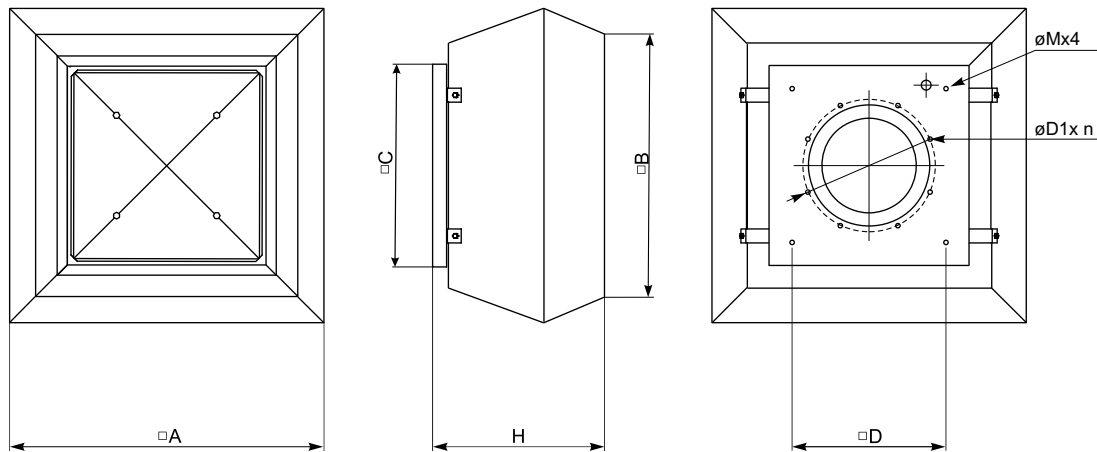
VSVI звукоизоляция: каменная вата, толщиной 50 мм.

Двигатель: наружный ротор, прямая передача, встроенные термомонтажные контакты двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: оцинкованной жести. Может быть изготовлено и из алюминия.

Accessories

Single phase speed controller	Three phase speed controller	Single phase speed controller	Roof curb	Roof curb	Flange-adapter
TGRV p. 138	TGRT p. 139	ETY/MTY p. 141	KS-K p.147	KSP-K p. 146	FSV p. 155



Type	Dimensions [mm]							
	□ A	□ B	□ C	H	øM	□ D	øD1	n
VSV 250	415	320	355	275	M6	245	230	6
VSV 311	555	470	435	323	M6	330	285	6
VSV 355	720	618	595	420	M10	450	438	6
VSV 400	720	618	595	420	M10	450	438	6
VSV 450	900	700	665	485	M10	535	438	6
VSV 500	900	700	665	485	M10	535	438	6
VSV 560	1150	972	939	609	M10	750	605	8
VSV 630	1150	972	939	609	M10	750	605	8
VSV 710	1350	1176	1040	717	M10	840	674	8

Type	Dimensions [mm]							
	□ A	□ B	□ C	H	øM	□ D	øD1	n
VSVI 311	675	567	435	369	M6	330	285	6
VSVI 355	844	716	595	422	M10	450	438	6
VSVI 400	844	716	595	422	M10	450	438	6
VSVI 450	966	817	665	488	M10	535	438	6
VSVI 500	966	817	665	488	M10	535	438	6
VSVI 560	1265	1033	939	611	M10	750	605	8
VSVI 630	1265	1033	939	611	M10	750	605	8
VSVI 710	1447	1178	1040	747	M10	840	674	8

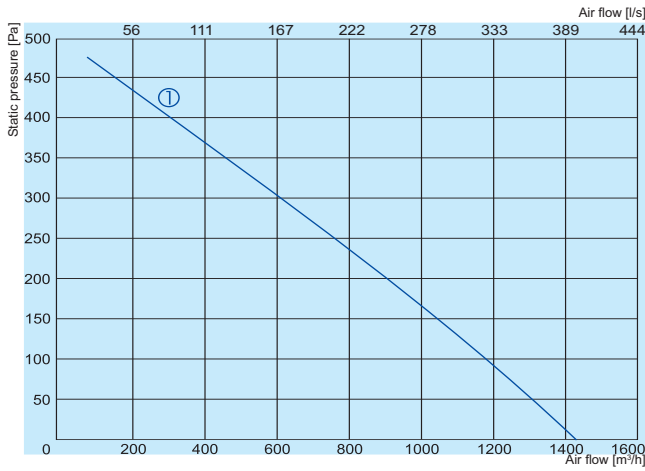
Type	Accessories									
	TGRV	TGRT	ETY/MTY	KS-K	KSP-K	FSV	LSV	ATS	Main switch	
VSV 250-2 L1	1,5	-	1,5	250	250	250	250	250	BWS316 Y TPN	
VSV 250-2S L1	1,5	-	1,5	250	250	250	250	250	BWS316 Y TPN	
VSV/VSVI 311-4 L1	1,5	-	1,5	311	311	311	311	311	BWS316 Y TPN	
VSV/VSVI 311-4 L3	-	1	-	311	311	311	311	311	BWS316 Y TPN	
VSV/VSVI 355-4 L1	2	-	2,5	355/400	355/400	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 355-4 L3	-	1	-	355/400	355/400	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 400-4 L1	3	-	4	355/400	355/400	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 400-4 L3	-	1	-	355/400	355/400	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 450-4 L1	5	-	-	450/500	450/500	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 450-4 L3	-	2	-	450/500	450/500	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 450-6 L1	-	-	-	450/500	450/500	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 450-6 L3	-	1	-	450/500	450/500	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 500-4 L3	-	4	-	450/500	450/500	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 500-6 L3	-	2	-	450/500	450/500	355-500	355/500	355/500	BWS316 Y TPN	
VSV/VSVI 560-4 L3	-	5	-	560/630	560/630	560-630	560/630	560/630	BWS316 Y TPN	
VSV/VSVI 560-6 L3	-	2	-	560/630	560/630	560-630	560/630	560/630	BWS316 Y TPN	
VSV/VSVI 630-4 L3	-	11	-	560/630	560/630	560-630	560/630	560/630	BWS316 Y TPN	
VSV/VSVI 630-6 L3	-	4	-	560/630	560/630	560-630	560/630	560/630	BWS316 Y TPN	
VSV/VSVI 630-8 L3	-	2	-	560/630	560/630	560-630	560/630	560/630	BWS316 Y TPN	
VSV/VSVI 710-6 L3	-	7	-	710	710	710	710	710	BWS316 Y TPN	
VSV/VSVI 710-8 L3	-	3	-	710	710	710	710	710	BWS316 Y TPN	

Accessories



VSV/VSVI

VSV 250-2 L1



① 230V

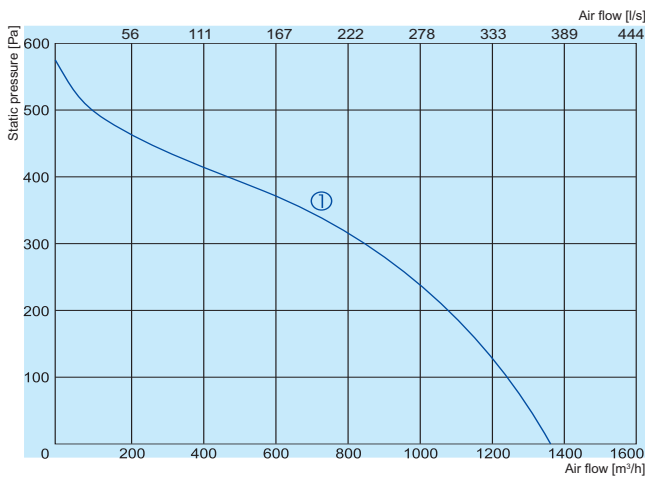
VSV 250-2 L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	67	54	56	61	62	60	59
Outlet	71	56	61	64	67	65	58
Surrounding	65	49	56	57	60	58	46

Measured at 1155 m³/h, 100 Pa

VSV 250-2S L1



① 230V

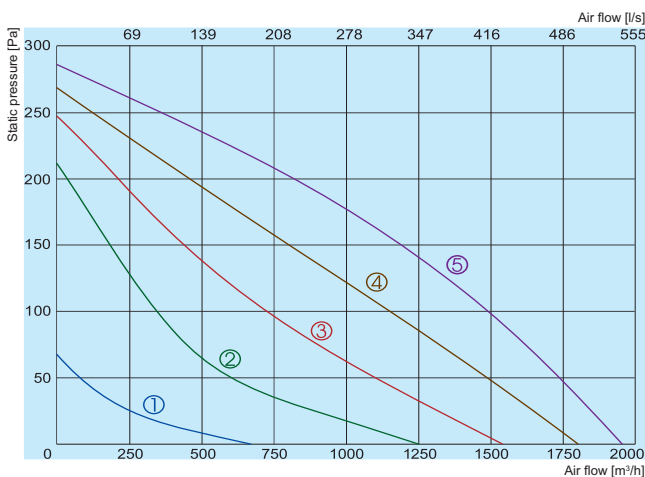
250-2S L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	67	54	56	61	62	60	59
Outlet	71	56	61	64	67	65	58
Surrounding	65	49	56	57	60	58	46

Measured at 1155 m³/h, 100 Pa

VSV/VSVI 311-4 L1



① 80V

③ 140V

⑤ 230V

② 120V

④ 170V

VSV 311-4 L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	52	64	66	56	55	51
Outlet	68	52	59	65	60	57	53
Surrounding	71	55	64	69	62	58	46

Measured at 1511 m³/h, 100 Pa

VSVI 311-4 L1

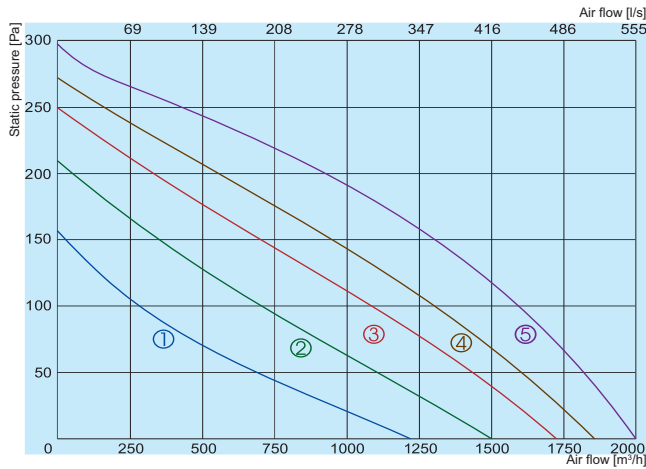
Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	68	50	63	65	56	53	51
Outlet	67	51	57	64	59	56	51
Surrounding	70	54	64	68	60	58	44

Measured at 1511 m³/h, 100 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV/VSVI 311-4 L3



- ① 130V
- ③ 220V
- ⑤ 400V
- ② 170V
- ④ 270V

VSV 311-4 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	70	51	62	68	60	52	54	43
Outlet	69	52	60	67	59	60	53	44
Surrounding	72	55	63	70	64	57	57	47

Measured at 1706 m³/h, 75 Pa

VSVI 311-4 L3

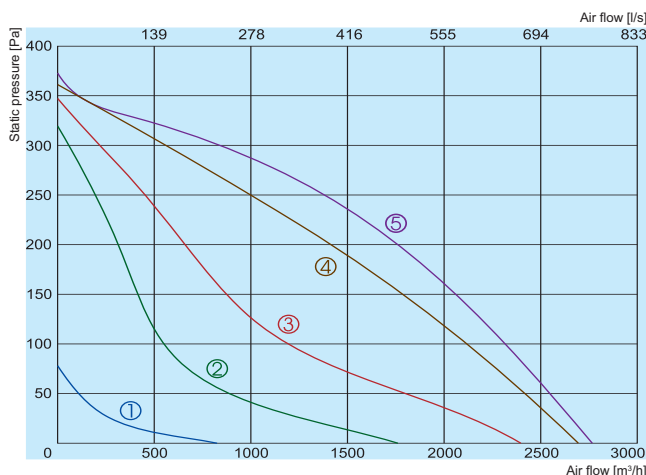
Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	69	50	62	67	58	52	53	41
Outlet	68	50	59	66	58	58	53	43
Surrounding	71	54	63	69	62	57	56	45

Measured at 1706 m³/h, 75 Pa

		250-2 L1	250-2S L1	311-4 L1	311-4 L3
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	400/50
Power consumption	[kW]	0,23	0,185	0,183	0,153
Current	[A]	1,00	0,81	0,83	0,35
Speed	[min ⁻¹]	2631	2650	1310	1370
Max. airflow	[m³/h]	1428	1350	1957	2010
Min./Max. air temperature	[°C]	-25/50	-25/50	-25/60	-25/60
Weight	[kg]	8,3	8,1	19/26	19/26
Wiring diagram		No. 4	No. 3	No. 1	No. 2
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		+	-	-	+

VSV/VSVI 355-4 L1



- ① 80V
- ③ 140V
- ⑤ 230V
- ② 120V
- ④ 170V

VSV 355-4 L1

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	64	49	57	59	56	55	51	50
Outlet	66	56	60	57	60	57	53	49
Surrounding	68	57	61	61	62	58	54	52

Measured at 2230 m³/h, 124 Pa

VSVI 355-4 L1

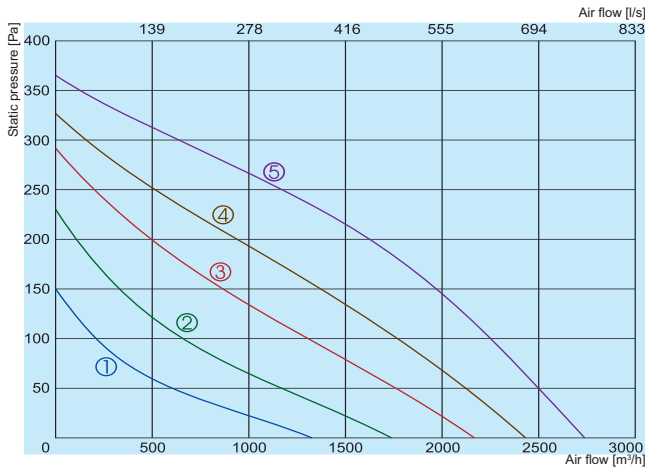
Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	63	48	55	59	55	54	49	48
Outlet	64	55	58	57	59	56	51	47
Surrounding	67	56	60	61	60	58	53	50

Measured at 2230 m³/h, 124 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV/VSVI 355-4 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 355-4 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	65	52	56	60	57	57	53	56
Outlet	66	55	57	60	59	59	51	55
Surrounding	69	56	58	64	63	59	55	58

Measured at 2278 m³/h, 102 Pa

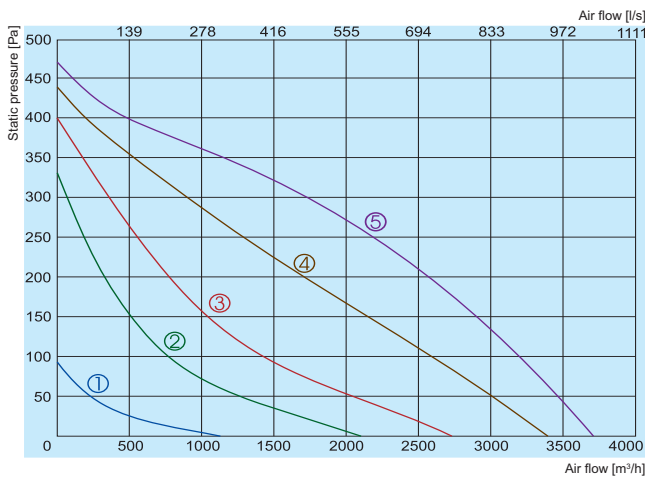
VSVI 355-4 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	64	51	54	60	56	56	51	56
Outlet	65	53	56	59	59	57	51	54
Surrounding	68	55	58	63	61	59	54	58

Measured at 2278 m³/h, 102 Pa

VSV/VSVI 400-4 L1



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

VSV 400-4 L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	70	56	67	64	59	57	56	52
Outlet	69	58	63	61	62	59	59	52
Surrounding	72	60	67	66	64	61	60	56

Measured at 2897 m³/h, 160 Pa

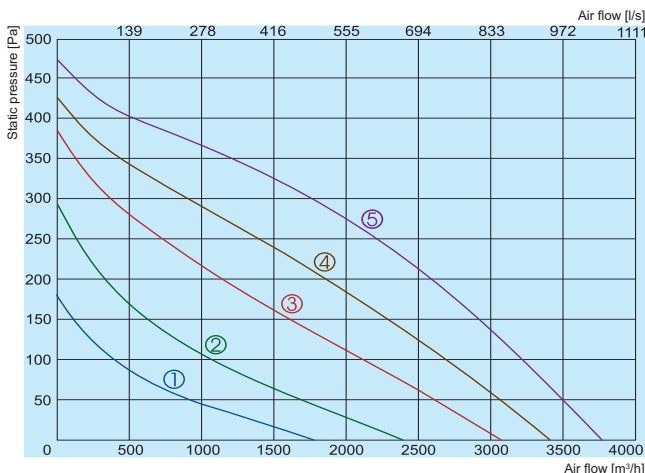
VSVI 400-4 L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	69	54	66	63	57	57	56	51
Outlet	67	57	61	61	60	58	57	50
Surrounding	71	59	67	65	62	61	59	54

Measured at 2897 m³/h, 160 Pa

VSV/VSVI 400-4 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 400-4 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	70	55	65	66	61	56	59	54
Outlet	70	57	65	63	60	61	61	52
Surrounding	73	59	69	67	64	63	61	55

Measured at 3009 m³/h, 145 Pa

VSVI 400-4 L3

Inlet
Outlet
Surrounding

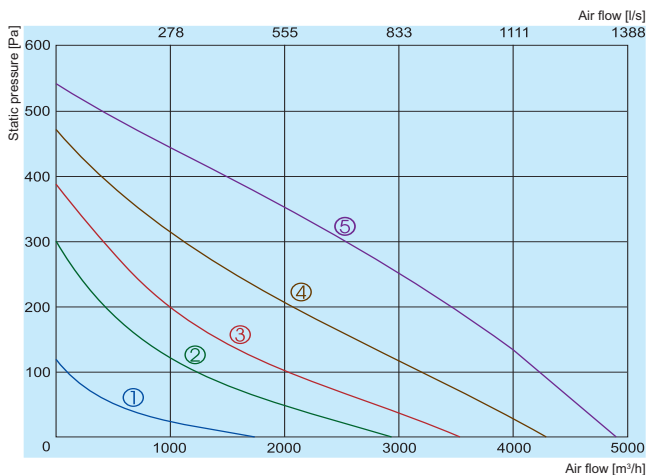
Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	69	54	65	65	59	56	58	52
Outlet	68	56	63	63	59	60	59	50
Surrounding	72	58	69	66	62	63	60	53

Measured at 3009 m³/h, 145 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		355-4 L1	355-4 L3	400-4 L1	400-4 L3
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50
Power consumption	[kW]	0,270	0,243	0,451	0,436
Current	[A]	1,3	0,48	2,15	0,81
Speed	[min ⁻¹]	1390	1340	1280	1320
Max. airflow	[m ³ /h]	2770	2740	3710	3770
Min./Max. air temperature	[°C]	-25/60	-25/60	-25/60	-25/60
Weight	[kg]	31/39	31/38	33/42	32/41
Wiring diagram		No. 1	No. 2	No. 1	No. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		+	+	-	+

VSV/VSVI 450-4 L1



- ① 80V
- ③ 140V
- ⑤ 230V
- ② 120V
- ④ 170V

VSV 450-4 L1

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	72	57	66	69	60	62	62	55
Outlet	73	59	66	68	61	65	65	55
Surrounding	76	61	71	71	68	64	65	57

Measured at 4111 m³/h, 118 Pa

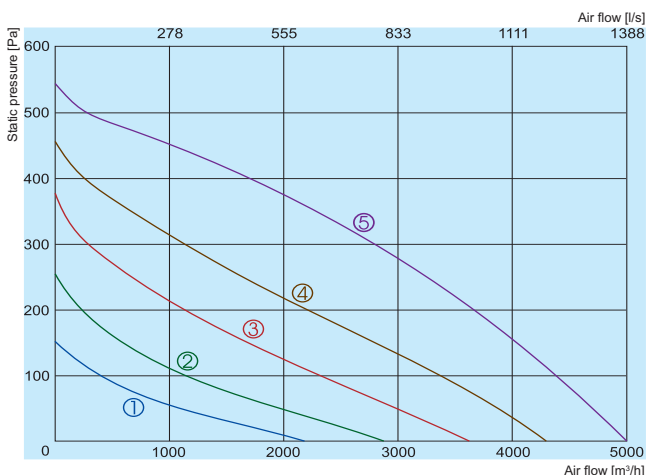
VSVI 450-4 L1

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	71	55	65	68	60	60	62	54
Outlet	72	58	64	68	60	64	63	52
Surrounding	75	60	71	70	66	64	64	55

Measured at 4111 m³/h, 118 Pa

VSV/VSVI 450-4 L3



- ① 130V
- ③ 220V
- ⑤ 400V
- ② 170V
- ④ 270V

VSV 450-4 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	73	56	64	71	61	60	63	54
Outlet	74	57	67	69	59	66	66	53
Surrounding	77	64	71	73	68	64	63	59

Measured at 4299 m³/h, 120 Pa

VSVI 450-4 L3

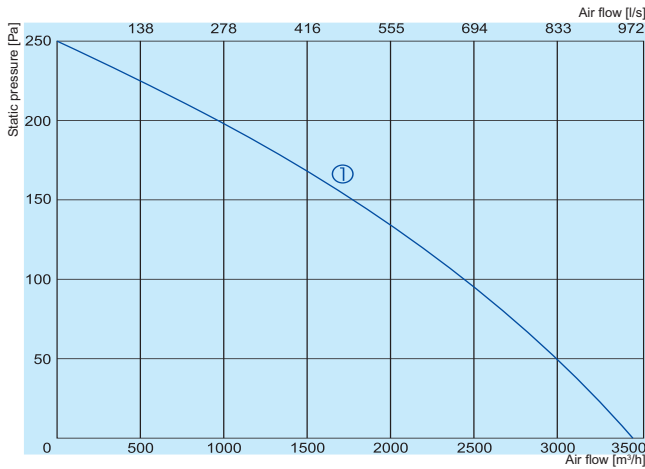
Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	72	54	63	70	61	58	63	53
Outlet	73	56	65	69	58	65	64	51
Surrounding	76	63	71	72	66	62	63	57

Measured at 4299 m³/h, 120 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV/VSVI 450-6 L1



① — 230V

VSV 450-6 L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	63	50	57	57	55	54	51
Outlet	64	52	56	58	58	57	49
Surrounding	66	54	58	61	62	57	53

Measured at 2287 m³/h, 116 Pa

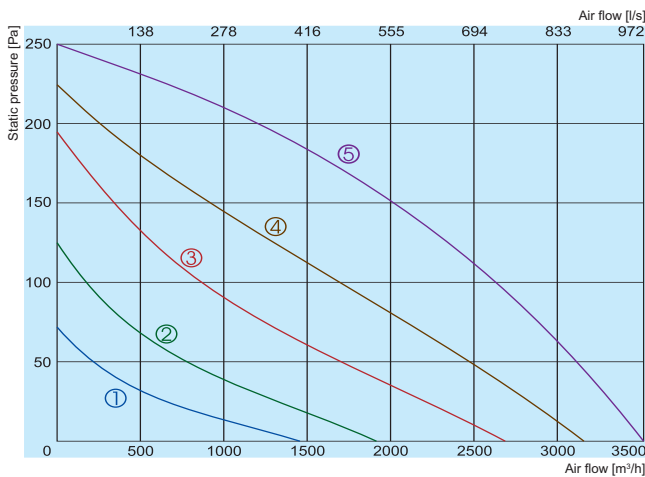
VSVI 450-6 L1

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	62	49	55	57	54	53	49
Outlet	63	50	55	57	58	55	49
Surrounding	65	53	58	60	60	57	52

Measured at 2287 m³/h, 116 Pa

VSV/VSVI 450-6 L3



① — 130V

③ — 220V

⑤ — 400V

② — 170V

④ — 270V

VSV 450-6 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	61	50	53	56	54	52	47
Outlet	63	51	57	57	55	56	48
Surrounding	65	53	60	59	58	57	52

Measured at 2033 m³/h, 150 Pa

VSVI 450-6 L3

Inlet
Outlet
Surrounding

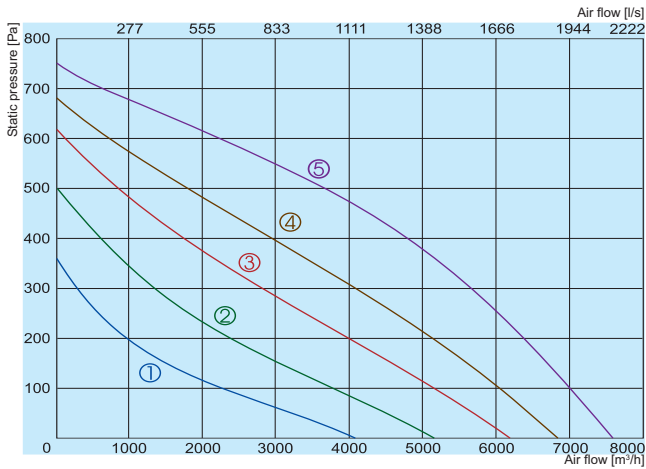
Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	60	49	53	55	52	52	46
Outlet	62	49	56	56	55	54	48
Surrounding	64	52	58	59	57	56	50

Measured at 2033 m³/h, 150 Pa

		450-4 L1	450-4 L3	450-6 L1	450-6 L3
Voltage/Frequency	[V/Hz]	230/50	400/50	230/50	400/50
Power consumption	[kW]	0,628	0,652	0,243	0,267
Current	[A]	2,87	1,32	1,06	0,61
Speed	[min ⁻¹]	1230	1250	920	880
Max. airflow	[m³/h]	4880	5050	3440	3530
Min./Max. air temperature	[°C]	-25/60	-25/60	-25/60	-25/60
Weight	[kg]	50/62,5	48/61	48,562,5	47/59,5
Wiring diagram		No. 1	No. 2	No. 1	No. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		-	-	-	-

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV/VSVI 500-4 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 500-4 L3

Inlet
Outlet
Surrounding

Measured at 6732 m³/h, 150 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	81	66	74	78	72	72	69	67
Outlet	83	67	77	78	75	73	73	68
Surrounding	85	70	77	81	79	74	73	72

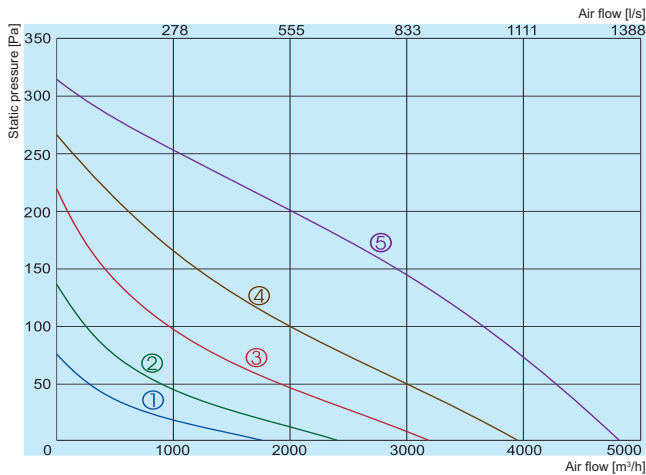
VSVI 500-4 L3

Inlet
Outlet
Surrounding

Measured at 6732 m³/h, 150 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	80	64	73	77	72	70	69	65
Outlet	82	66	75	78	74	72	71	66
Surrounding	84	69	77	80	78	74	72	70

VSV/VSVI 500-6 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 500-6 L3

Inlet
Outlet
Surrounding

Measured at 3152 m³/h, 137 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	62	53	57	54	54	55	50	46
Outlet	66	51	64	56	56	57	52	45
Surrounding	68	55	64	59	60	58	55	50

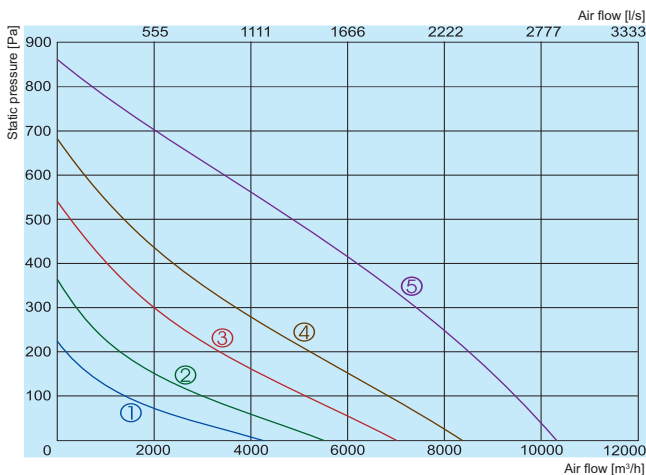
VSVI 500-6 L3

Inlet
Outlet
Surrounding

Measured at 3152 m³/h, 137 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	61	51	56	53	54	53	50	45
Outlet	65	49	63	55	56	55	52	44
Surrounding	67	53	64	57	58	57	54	48

VSV/VSVI 560-4 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 560-4 L3

Inlet
Outlet
Surrounding

Measured at 9047 m³/h, 152 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	77	69	70	72	69	65	63	62
Outlet	77	69	70	71	68	69	63	57
Surrounding	80	71	73	74	73	70	68	66

VSVI 560-4 L3

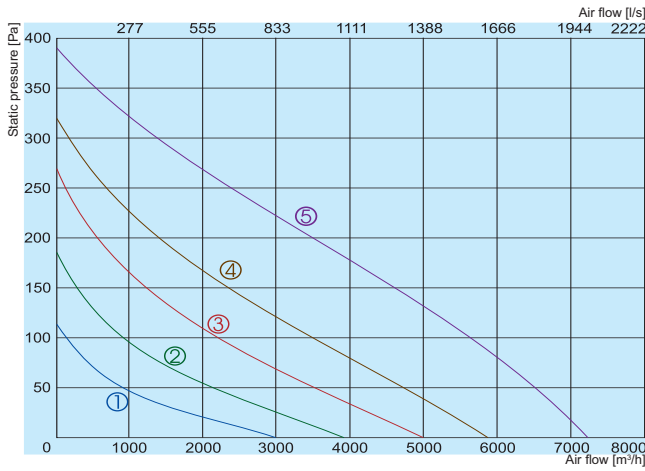
Inlet
Outlet
Surrounding

Measured at 9047 m³/h, 152 Pa

LWA total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	76	68	70	71	67	65	62	60
Outlet	76	67	69	70	68	67	63	56
Surrounding	79	70	71	74	72	69	66	64

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV/VSVI 560-6 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 560-6 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	63	52	57	53	55	55	56	50
Outlet	63	53	55	58	56	56	53	47
Surrounding	66	55	58	59	59	58	57	51

Measured at 4773 m³/h, 169 Pa

VSVI 560-6 L3

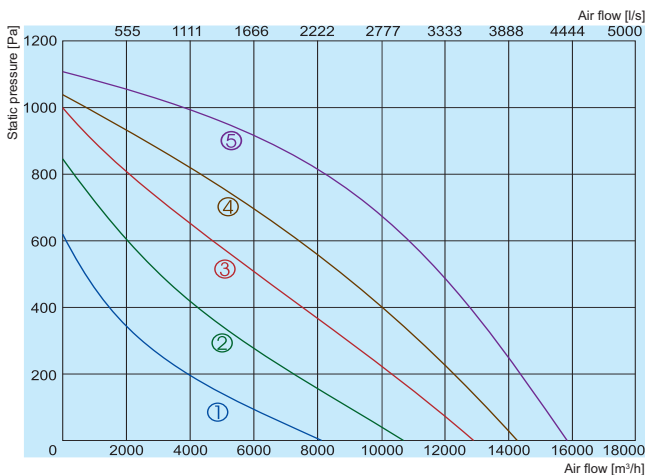
Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	62	51	55	53	54	54	54	48
Outlet	63	52	55	57	54	56	52	45
Surrounding	65	54	58	58	57	58	56	49

Measured at 4773 m³/h, 169 Pa

		500-4 L3	500-6 L3	560-4 L3	560-6 L3
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50	400/50
Power consumption	[kW]	1,242	0,388	1,798	0,628
Current	[A]	2,31	0,79	3,47	1,09
Speed	[min ⁻¹]	1330	840	1180	800
Max. airflow	[m³/h]	7584	4810	10330	7215
Min./Max. air temperature	[°C]	-25/55	-25/60	-25/50	-25/40
Weight	[kg]	55,5/65	49/59	90,5/109	80/98
Wiring diagram		No. 2	No. 2	No. 2	No. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		+	-	-	-

VSV/VSVI 630-4 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 630-4 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	85	72	77	82	77	77	72	69
Outlet	87	73	79	83	80	77	75	73
Surrounding	90	76	82	86	82	79	79	75

Measured at 14077 m³/h, 242 Pa

VSVI 630-4 L3

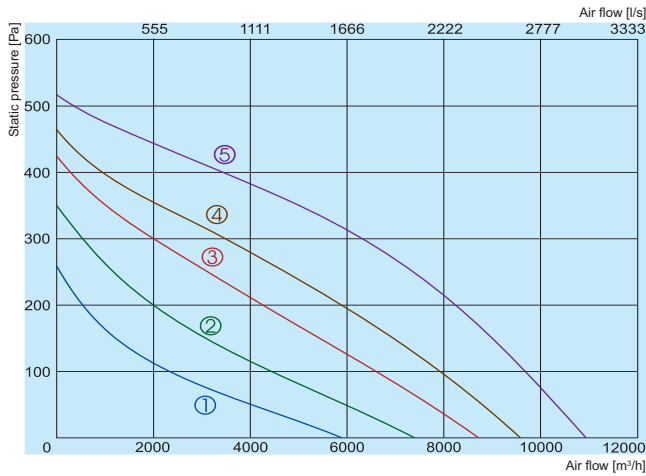
Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)							
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	
Inlet	84	70	76	81	77	75	72	68
Outlet	85	71	77	82	78	76	72	69
Surrounding	88	74	80	85	79	78	76	71

Measured at 14077 m³/h, 242 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSV/VSVI 630-6 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 630-6 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	58	69	68	59	62	58
Outlet	73	59	71	63	62	61	58
Surrounding	75	61	71	70	64	63	62

Measured at 8003 m³/h, 201 Pa

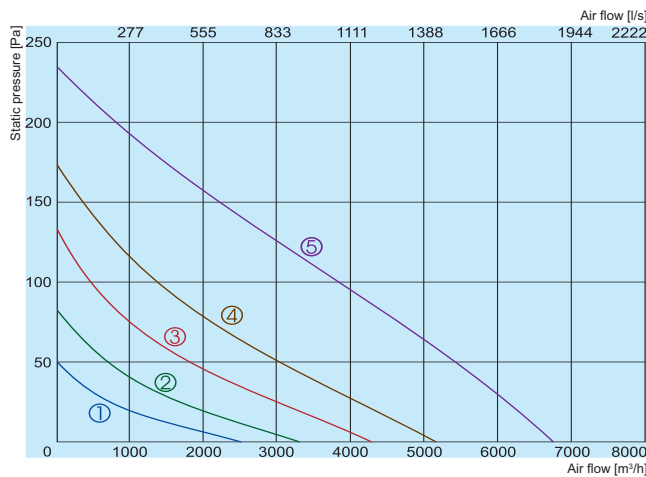
VSVI 630-6 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	72	56	68	67	59	60	57
Outlet	72	58	69	63	60	61	56
Surrounding	74	60	71	69	62	63	60

Measured at 8003 m³/h, 201 Pa

VSV/VSVI 630-8 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 630-8 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	63	44	59	45	49	50	37
Outlet	64	48	63	50	49	52	37
Surrounding	66	49	63	52	53	55	40

Measured at 5221 m³/h, 59 Pa

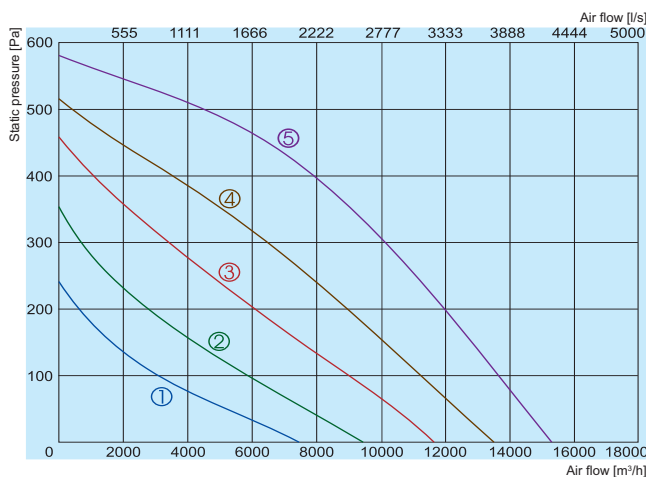
VSVI 630-8 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	61	43	57	45	48	49	35
Outlet	63	46	62	50	48	51	35
Surrounding	65	48	63	51	51	53	38

Measured at 5221 m³/h, 59 Pa

VSV/VSVI 710-6 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 710-6 L3

Inlet
Outlet
Surrounding

LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	84	70	76	80	75	75	69
Outlet	84	70	74	81	77	74	71
Surrounding	87	73	76	83	79	78	72

Measured at 12590 m³/h, 160 Pa

VSVI 710-6 L3

Inlet
Outlet
Surrounding

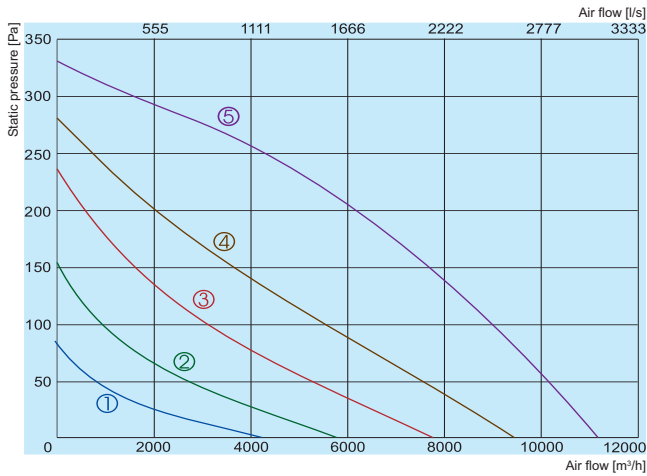
LWA total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	83	68	74	79	75	73	68
Outlet	83	69	74	80	75	74	69
Surrounding	85	71	75	82	77	76	71

Measured at 12590 m³/h, 160 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

The company reserves the right to make changes of technical data without prior notice

VSV/VSVI 710-8 L3



- ① 130V
- ② 170V
- ③ 220V
- ④ 270V
- ⑤ 400V

VSV 710-8 L3

Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	75	59	73	62	67	60	62
Outlet	75	60	73	65	67	62	59
Surrounding	78	63	76	67	69	66	63

Measured at 8948 m³/h, 100 Pa

VSVI 710-8 L3

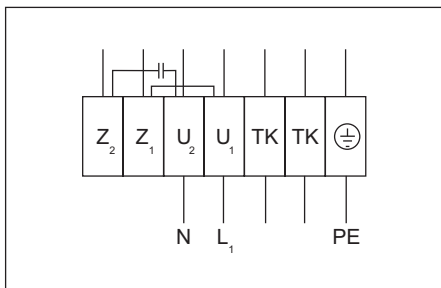
Inlet
Outlet
Surrounding

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	75	58	73	61	65	60	60
Outlet	74	59	71	65	66	61	57
Surrounding	77	61	75	66	69	64	62

Measured at 8948 m³/h, 100 Pa

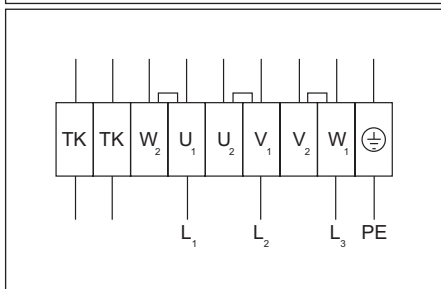
		630-4 L3	630-6 L3	630-8 L3	710-6 L3	710-8 L3
Voltage/Frequency	[V/Hz]	400/50	400/50	400/50	400/50	400/50
Power consumption	[kW]	4,137	1,240	0,393	2,00	0,99
Current	[A]	7,18	2,73	0,9	3,9	1,93
Speed	[min ⁻¹]	1360	880	520	890	650
Max. airflow	[m³/h]	15900	10890	6750	15300	11215
Min./Max. air temperature	[°C]	-25/50	-25/60	-25/60	-25/40	-25/40
Weight	[kg]	124/140	109/123,5	101/117,5	156/207	147,5/198,5
Wiring diagram		No. 2	No. 2	No. 2	No. 2	No. 2
Protection class:	motor	IP-54	IP-54	IP-54	IP-54	IP-54
	terminal box	IP-54	IP-54	IP-54	IP-54	IP-54
Comply with ERP 2013		+	-	-	-	-

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



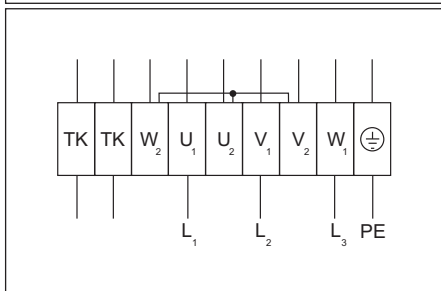
Wiring diagram No. 1 (1~230V)

- U₁ - brown
- U₂ - blue
- Z₁ - black
- Z₂ - orange
- TK - white
- PE - yellow-green



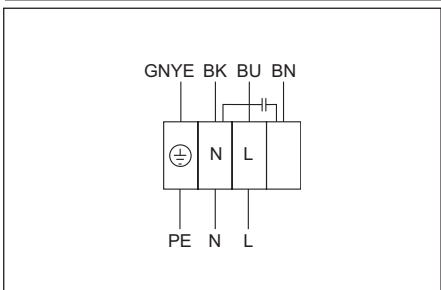
Wiring diagram No. 2 (Δ - 3~230V)

- U₁ - brown
- V₁ - blue
- W₁ - black
- U₂ - red
- V₂ - grey
- W₂ - orange
- TK - white
- PE - yellow-green



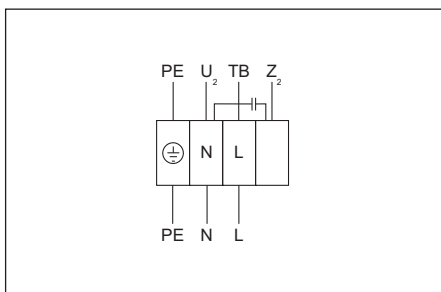
Wiring diagram No. 2 (Y - 3~400V)

- U₁ - brown
- V₁ - blue
- W₁ - black
- U₂ - red
- V₂ - grey
- W₂ - orange
- TK - white
- PE - yellow-green



Wiring diagram No. 3 (1~230V)

- GNYE - green-yellow
- BK - black
- BU - blue
- BN - brown
- PE - yellow-green



Wiring diagram No. 4 (1~230V)

- U₂ - blue or grey
- Z₂ - black
- TB - brown
- PE - yellow-green

VSA EKO



Roof fans

Stoginiai ventiliatoriai

Wentylatory dachowe - wyrzut pionowy

Крышные вентиляторы



VSA EKO are driven by EC - external rotor motors, characterized by high efficiency and energy saving. Roof fans with horizontal discharge are used to extract air from different premises. Easy access to clean an impeller. Not suitable for polluted air, aggressive and explosive gases.

Impeller with backward curved blades.

Motor: external rotor, motor protection built-in thermal-contact, maintenance free ball bearings.

Housing: powder coated painting RAL 9005.



Stoginiai ventiliatoriai, skirti oro ištraukimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktais sparneliais, plastmasinė plieno.

Variklis: išorinis rotorius (EC), tiesioginė pavara, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys, nereikalaujantys priežiūros guoliai. Ventiliatoriai su EC varikliu pasižymi efektyvumu ir aukštu slėgiu.

Korpusas: dažytas RAL 9005.



VSA EKO są napędzane przez zewnętrzne silniki wirnikowe typu EC, charakteryzujące się wysoką wydajnością i oszczędnościami energii. Wentylatory dachowe z poziomym wyrzutem powietrza. Służą do wyciągu powietrza z różnych pomieszczeń, łatwy dostęp do czyszczenia wirnika.

Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi.

Nie stosować w instalacjach oddymiania, przeciwpożarowych, spalinowych.

Wirnik z łopatkami pochylonymi do tyłu.

Silnik z zewnętrznym wirnikiem, ochrona silnika poprzez wbudowany czujnik termiczny, bezobsługowe łożyska kulkowe.

Obudowa: malowanie proszkowe RAL 9005.



VSA EKO - оборудованы энергозберегающими высокоэффективными ЕС-двигателями с внешним ротором. Крышные вентиляторы для вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов. Крыльчатка: загнутые назад лопатки.

Двигатель: наружный ротор, встроенная термодатная защита двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: окрашенный RAL 9005.

Accessories

0-10V speed controller



Curb skirt



Curb skirt



Roof curb



Flange-adapter

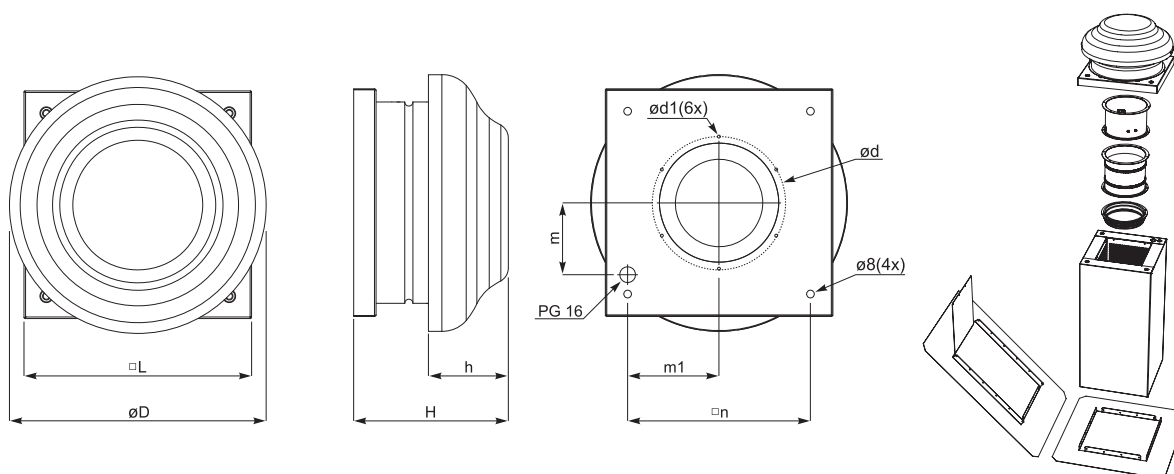


Back draft shutter



Flexible connection

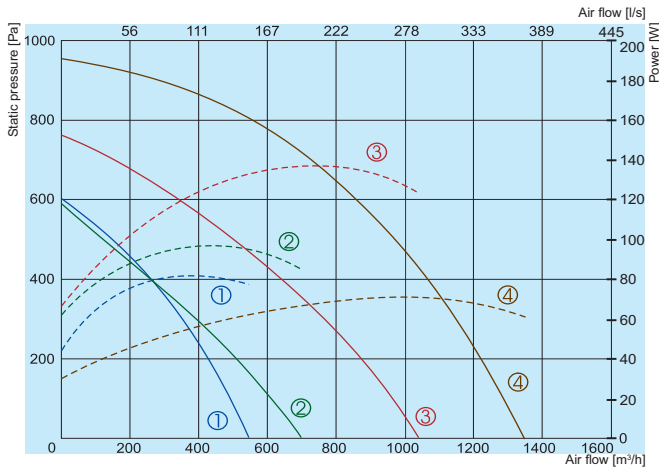




Type	Dimensions [mm]								
	øD	H	h	□L	ød	ød1	m	m1	□n
VSA 190 EKO	344	234	107	305	177	M4	96,5	123,5	245
VSA 220 EKO	450	241	109	405	230	M5	138	165	330
VSA 225 EKO	450	245	109	405	230	M5	138	165	330
VSA 250 EKO	450	315	109	405	230	M5	138	165	330

Type	Accessories						
	MTP010	SSA	SSA 45	KSV	FSV	ATS	LSV
VSA 190 EKO	+	300	300	300/600 300/800 300/900	160	190	160
VSA 220 EKO	+	400	400	400/600	250	250	250
VSA 225 EKO	+	400	400	400/800 400/900	250	250	250
VSA 250 EKO	+	400	400	400/1000	250	250	250

VSA EKO



- ① VSA 190 EKO
 - ② VSA 220 EKO
 - ③ VSA 225 EKO
 - ④ VSA 250 EKO
- Performance
- - - Power consumption

		190 EKO	220 EKO	225 EKO	250 EKO
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50	230/50
Power consumption	[kW]	0,084	0,097	0,170	0,360
Current	[A]	0,66	0,77	1,29	2,4
Speed	[min ⁻¹]	3150	2700	2860	3400
Max. airflow	[m³/h]	550	700	1040	1350
Min./Max. air temperature	[°C]	-25/60	-25/60	-25/60	-25/60
Weight	[kg]	4,4	7,0	7,6	8,0
Wiring diagram		No.1	No.1	No.1	No.1
Protection class:	motor	IP-44	IP-44	IP-44	IP-44
	terminal box	IP-55	IP-55	IP-55	IP-55
Comply with ERP 2013; 2015		+	+	+	+

190 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	49	55	65	65	60	59	53
Outlet	71	54	60	67	66	59	57	50
Surrounding	63	43	51	59	59	52	51	40

Measured at 480 m³/h, 120 Pa

220 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	50	57	64	62	63	57	51
Outlet	72	55	59	66	69	65	59	53
Surrounding	65	47	53	60	61	57	51	45

Measured at 589 m³/h, 121 Pa

225 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	75	59	65	69	68	68	67	60
Outlet	78	61	65	72	74	72	65	56
Surrounding	69	52	60	63	63	64	57	48

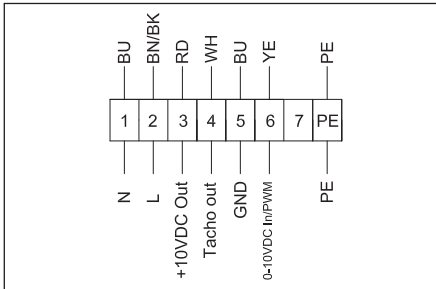
Measured at 928 m³/h, 149 Pa

250 EKO

	LWA total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	78	63	69	71	70	72	70	64
Outlet	81	64	68	74	77	75	69	61
Surrounding	71	56	62	65	66	65	59	52

Measured at 1274 m³/h, 120 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.



Wiring diagram No. 1 (1~230V)

- PE** - yellow-green
- BN** - brown
- BK** - black
- BU** - blue
- YE** - yellow
- WH** - white
- RD** - red



Roof fans

Stoginiai ventiliatoriai

Wentylatory dachowe - wyrzut pionowy

Крышные вентиляторы



Roof fans with horizontal discharge are used to extract air from different premises. Easy access to clean an impeller. Not suitable for polluted air, aggressive and explosive gases.

Impeller with backward curved blades.

Motor: external rotor, motor protection built-in thermal contact, maintenance free ball bearings.

Housing: powder coated painting RAL 9005.



Stoginiai ventiliatoriai, skirti oro ištraukimui. Nenaudojami užteršto oro, agresyvių, sprogių dujų transportavimui.

Sparnuotė: atgal lenktasis sparneliais, plastmasinė. Variklis: išorinis rotorius, integruota termokontaktinė variklio apsauga, ilgai tarnaujantys nereikalaujantys priežiūros guoliai.

Korpusas: dažytas RAL 9005.



Wentylatory VSA są napędzane przez zewnętrzne silniki wirnikowe. Wentylatory dachowe z poziomym wyrzutem powietrza. Służą do wyciągu powietrza z różnych pomieszczeń, łatwy dostęp do czyszczenia wirnika. Nie nadają się do zastosowań w środowiskach agresywnych chemicznie oraz zagrożonych wybuchem. Nie zaleca się stosować w instalacjach zanieczyszczonych cząstkami stałymi, pyłami i odpadami technologicznymi. Nie stosować w instalacjach odrywania, przeciwpożarowych, spalinowych.

Wirnik z łopatkami pochylonymi do tyłu.

Silnik z zewnętrznym wirnikiem, ochrona silnika poprzez wbudowany czujnik termiczny, bezobsługowe łożyska kulkowe.

Obudowa: malowanie proszkowe RAL 9005.



Крышные вентиляторы для вытяжки воздуха. Не используются при транспортировке загрязнённого воздуха, агрессивных, взрывоопасных газов.

Крыльчатка: загнутые назад лопатки.

Двигатель: наружный ротор, встроенная термодатная защита двигателя, не требующие ухода подшипники с длительным сроком службы.

Корпус: окрашенный RAL 9005.

Accessories

Single phase speed controller



TGRV

p. 138

Single phase speed controller



ETY

p. 141

Curb skirt



SSA

p. 148

Curb skirt



SSA 45

p. 148

Roof curb



KSV

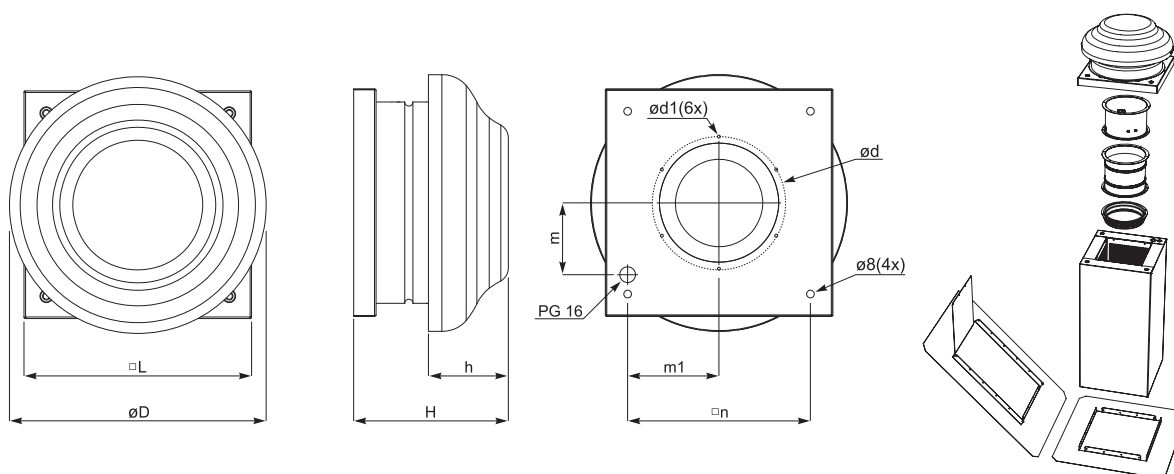
p. 145

Flange-adapter



FSV

p. 155



Type	Dimensions [mm]								
	øD	H	h	□L	ød	ød1	m	m1	□n
VSA 190S	344	207,3	107	305	177	M4	96,5	123,5	245
VSA 190L	344	207,3	107	305	177	M4	96,5	123,5	245
VSA 220S	450	214,35	109	405	230	M5	138	168	330
VSA 225L	450	245,55	109	405	230	M5	138	168	330
VSA 250L	450	245,55	109	405	230	M5	138	168	330

Type	Accessories							
	TGRV	ETY	SSA	SSA 45	KSV	FSV	ATS	LSV
VSA 190S	1,5	1,5	300	300	300/600	160	190	160
VSA 190L	1,5	1,5	300	300	300/800 300/900	160	190	160
VSA 220S	1,5	1,5	400	400	400/600	250	250	250
VSA 225L	1,5	1,5	400	400	400/800 400/900	250	250	250
VSA 250L	1,5	1,5	400	400	400/1000	250	250	250

Accessories

Back draft shutter



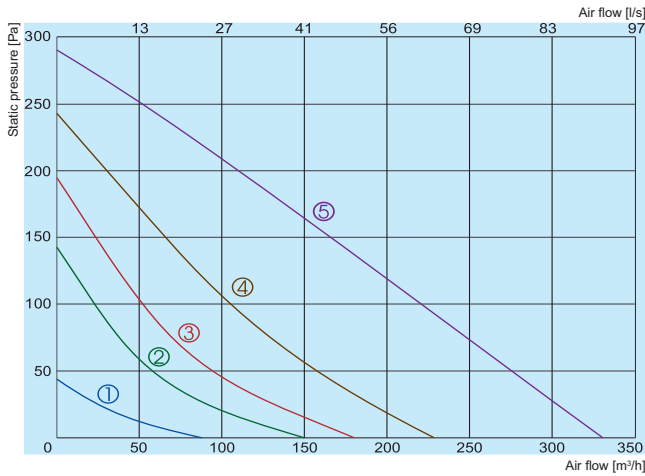
ATS p. 206

Flexible connection



LSV p. 149

VSA 190 S



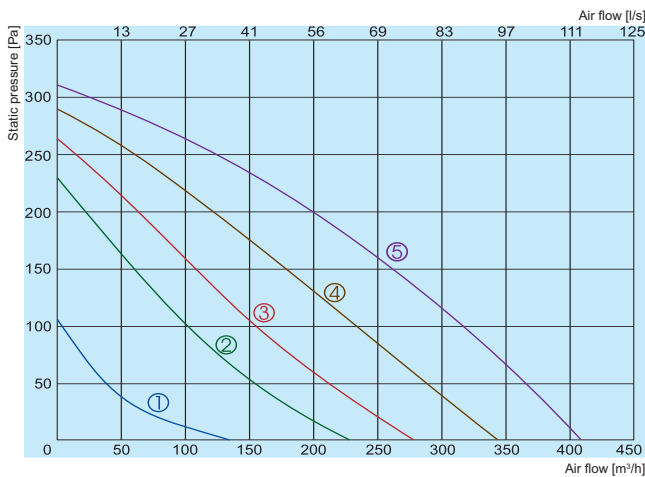
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

VSA 190 S

	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	61	43	51	53	57	54	48	41
Outlet	62	42	57	52	56	56	51	43
Surrounding	59	44	53	51	53	52	48	38

Measured at 233 m³/h, 85 Pa

VSA 190 L



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

VSA 190 L

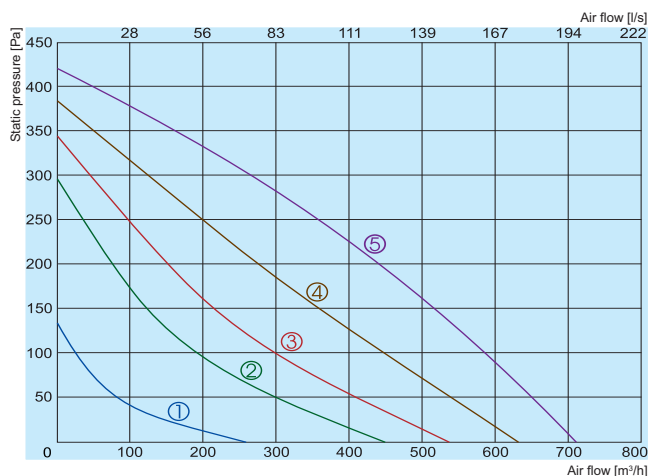
	Lwa total, dB(A)	Lwa, dB(A)						
		125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	66	44	54	59	60	61	57	41
Outlet	68	44	59	62	65	60	55	39
Surrounding	61	37	51	54	58	53	47	32

Measured at 278 m³/h, 140 Pa

		VSA 190 S	VSA 190 L
Voltage/Frequency	[V/Hz]	230/50	230/50
Power consumption	[kW]	0,044	0,065
Current	[A]	0,19	0,28
Speed	[min ⁻¹]	1962	2442
Max. airflow	[m³/h]	332	409
Min./Max. air temperature	[°C]	-25/50	-25/50
Weight	[kg]	4,4	4,4
Wiring diagram		No. 3	No. 2
Protection class:	motor	IP-44	IP-44
	terminal box	IP-54	IP-54
Comply with ERP 2013		+	+

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

VSA 220 S



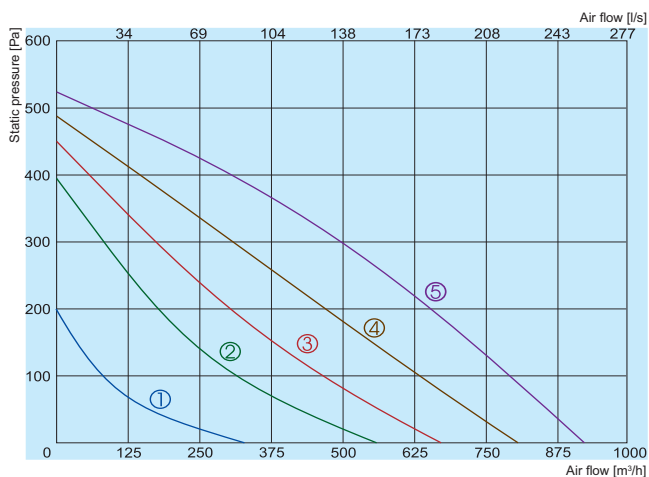
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

VSA 220 S

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	50	57	63	64	62	58
Outlet	70	51	60	65	66	61	58
Surrounding	62	44	53	57	58	54	40

Measured at 489 m³/h, 173 Pa

VSA 225 L



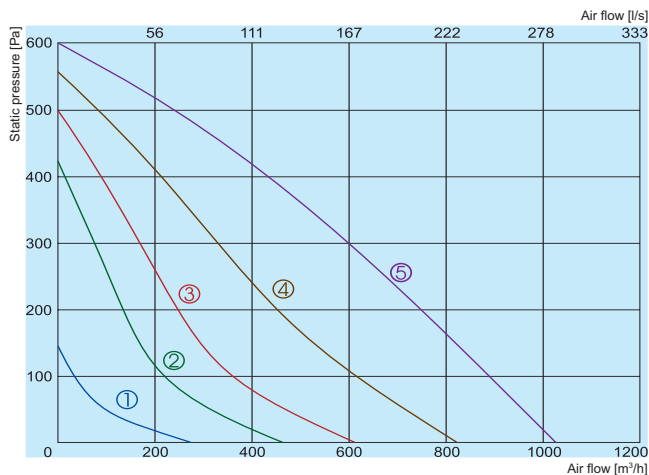
- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

VSA 225 L

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	69	52	56	63	64	56	51
Outlet	72	51	60	65	68	60	51
Surrounding	65	44	53	58	61	59	43

Measured at 585 m³/h, 251 Pa

VSA 250 L



- ① 80V
- ② 120V
- ③ 140V
- ④ 170V
- ⑤ 230V

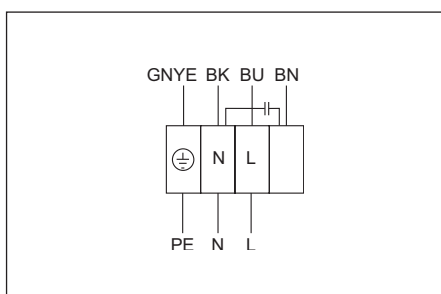
VSA 250 L

Lwa total, dB(A)	Lwa, dB(A)						
	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	70	57	59	64	65	63	57
Outlet	73	58	63	66	69	67	53
Surrounding	65	50	55	58	61	59	45

Measured at 696 m³/h, 240 Pa

The fan characteristic curves were determined in accordance with EN ISO 5801. The sound levels were determined in accordance with DIN 45635 resp. ISO 3744 at a distance of 1 m from the fan.

		VSA 220 S	VSA 225 L	VSA 250 L
Voltage/Frequency	[V/Hz]	230/50	230/50	230/50
Power consumption	[kW]	0,097	0,155	0,208
Current	[A]	0,42	0,68	0,90
Speed	[min ⁻¹]	2534	2542	2442
Max. airflow	[m ³ /h]	711	926	1024
Min./Max. air temperature	[°C]	-25/40	-25/60	-25/40
Weight	[kg]	6,8	7,6	8,0
Wiring diagram		No. 2	No. 2	No. 2
Protection class:	motor	IP-44	IP-44	IP-44
	terminal box	IP-54	IP-54	IP-54
Comply with ERP 2013		+	+	-



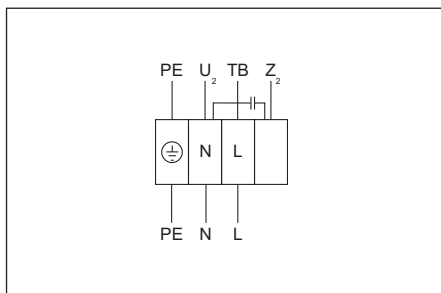
Wiring diagram No. 1 (1~230V)

GNYE - green-yellow

BK - black

BU - blue

BN - brown



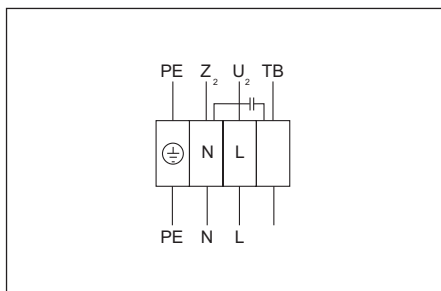
Wiring diagram No. 2 (1~230V)

U₂ - blue or grey

Z₂ - black

TB - brown

PE - yellow-green



Wiring diagram No. 3 (1~230V)

U₂ - blue or grey

Z₂ - black

TB - brown

PE - yellow-green



Fans heater

Oro šildytuvas

Fani podgrzewane

Тепловентилятор



Used for air heating within buildings. Characterized by high capacity and serviceable design. Painting can be applied at the request of the client. The housing of the device is made of galvanized steel. The heater is attached to a wall using brackets. The brackets can be dismantled if necessary. The direction of air flow (upwards or downwards) is regulated by means of adjustable flaps. The fan is mounted on a shaft, uses single-phase electric current. The heating element is made using copper tubing and aluminium plates.

Housing: powder coated painting RAL 7040.

Heating and cooling units may be selected according to available parameters, with the help of selection programme 'Heaters/coolers', which can be found in Internet page www.salda.it



Naudojamas oro pašildymui patalpose. Pagrindiniai šildytuvo privalumai – didelis našumas, praktiškas dizainas. Šildytuvas tvirtinamas prie sienos kronšteinų pagalba. Esant reikalui kronšteinai gali būti nuimami. Oro kryptis reguliuojama sparneliais, į viršų arba į apačią, galimos penkios padėties. Ventiliatoriaus ašinis, vienfazis arba trifazis. Šildymo elementas pagamintas iš varinių vamzdelių ir aliuminių plokštelių.

Korpusas: pagamintas iš cinkuotos skardos ir dažytas miltelinio būdu spalva RAL 7040.

Šildymo ir aušinimo įrenginius galima parinkti pagal turimus parametrus, naudojantis „Heaters coolers“ parinkimo programą, kurią galima rasti internetiniame puslapyje www.salda.it



Aparaty grzewczo-wentylacyjne stosowane do podgrzewania powietrza w budynku. Charakteryzują się wysoką wydajnością oraz łatwością obsługi. Na życzenie klienta mogą być malowane. Obudowa urządzenia wykonana ze stali galwanizowanej.

Nagrzewnica przymocowana do ściany za pomocą wsporników. Wsporniki mogą być demontowane jeśli to konieczne. Kierunek wypływu powietrza ustawiany w pięciu pozycjach (w górę lub w dół) za pomocą specjalnych kierownic przepływu. Wentylator montowany na wale 1 fazowego silnika. Wymiennik nagrzewnicy wykonany z węzownic miedzianych i aluminiowych lamel. SAV mogą być dobierane wg dostępnych parametrów lub w programie doborowym który dostępny jest na stronie internetowej www.salda.it



Используется для нагрева воздуха в помещении. Основные преимущества нагревателя – высокая производительность, практичный дизайн, по желанию клиента – может наноситься краска. Корпус изготовлен из оцинкованной жести. Нагреватель крепится к стене с помощью кронштейна. При необходимости кронштейны могут сниматься. Направление воздуха регулируется лопатками, вверх или вниз. Вентилятор осевой, однофазный. Нагревательный элемент изготовлен из медных трубок и алюминиевых пластинок.

Корпус: окрашенный RAL 7040.

Нагреватели и охладители можно подобрать в соответствии с имеющимися параметрами, используя программу подбора „Heaters/coolers“, которую можно найти на интернет-сайте www.salda.it

Accessories

Single phase speed controller



TGRV p. 138

Three phase speed controller



TGRT p. 139

Monophase speed controller



ETY p. 141

Thermic water valve actuator



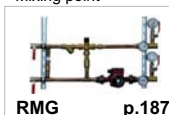
SSB/SSC p. 189

Electromotoric actuator



STA p. 189

Mixing point

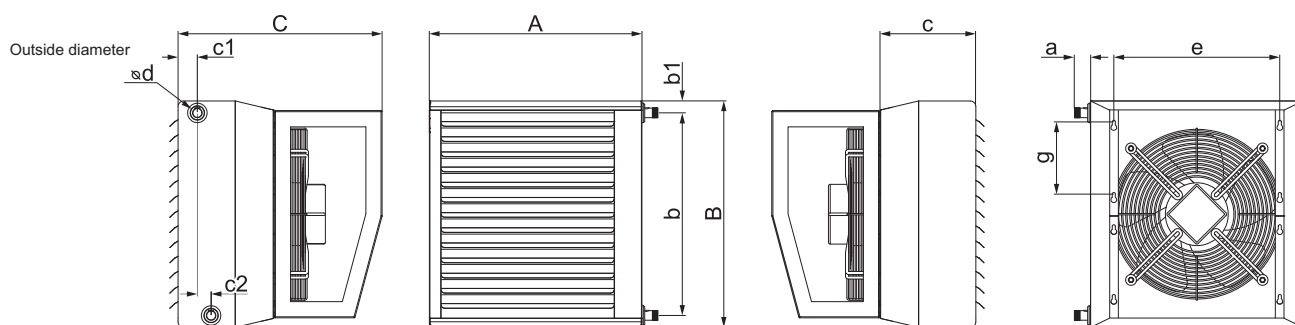


RMG p.187

2 - way valves



VVP p. 188



Type	Dimensions [mm]													Thread size*	Weight [kg]
	A	B	C	a	b	b1	c	c1	c2	g	e	ød			
SAV 2000	533	502	565	44	440	31	265	53	38	170	401	26,5	3/4"	21,0	
SAV 4000	588	627	565	44	561	33	265	53	38	220	455	26,5	3/4"	34,0	
SAV 6000	738	777	783	44	711	33	283	53	38	280	596	26,5	3/4"	45,0	
SAV 9000	818	852	818	44	786	33	318	57	45	280	676	26,5	3/4"	57,0	

* Male thread size

Type	Accessories						
	TGRV	TGRT	ETY	SSB/SSC	STA	RMG	2 way valve
SAV 2000	1,5	-	1,5	+	+	+	+
SAV 4000	4	-	2,5	+	+	+	+
SAV 6000	-	2	-	+	+	+	+
SAV 9000	-	3	-	+	+	+	+

Fan technical data

		SAV 2000	SAV 4000	SAV 6000	SAV 9000
Phase / Voltage	[50 Hz / V]	~1 / 230	~1 / 230	~3 / 400	~3 / 400
Power	[kW]	0,173	0,484	0,54	0,992
Current	[A]	0,8	2,32	1,1	1,9
Speed	[min ⁻¹]	1392	1410	1405	1415
Max. air temperature	[°C]	+60	+70	+70	+70
Capacitor	[µF]	8,0	8,0	-	-
Protection class		IP-44	IP-54	IP-54	IP-54
Speed controller		MTY1,5 / TGRV1,5	MTY2,5 / TGRV4	TGRT2	TGRT3

Heater technical data

Type	Air flow [m ³ /h]	Water temperature in/out 70/50°C											
		Air temp. in -15°C				Air temp. in 0°C				Air temp. in +15°C			
		Power [kW]	Air temp.out [°C]	Water flow [l/s]	Pressure drop (water) [kPA]	Power [kW]	Air temp.out [°C]	Water flow [l/s]	Pressure drop (water) [kPA]	Power [kW]	Air temp.out [°C]	Water flow [l/s]	Pressure drop (water) [kPA]
SAV 2000	570	11,1	42,8	0,1	3,6	8,7	45,5	0,1	2,3	6,3	47,8	0,1	1,3
	1080	18,0	34,7	0,2	8,5	14,2	39,0	0,2	5,6	10,3	43,2	0,1	3,1
	1330	20,9	31,8	0,3	11,2	16,5	36,8	0,2	7,3	12,0	41,5	0,2	4,1
	1630	24,1	29,0	0,3	14,5	19,0	34,5	0,2	9,4	13,8	39,9	0,2	5,3
	1900	26,7	26,86	0,32	17,44	21,01	32,85	0,3	11,3	15,2	38,7	0,2	6,3
SAV 4000	870	16,7	42,0	0,2	3,1	13,1	44,8	0,2	2,0	9,5	47,3	0,1	1,1
	1800	28,8	32,6	0,4	8,2	22,6	37,3	0,3	5,3	16,4	41,9	0,2	3,0
	2400	35,1	28,6	0,4	11,8	27,6	34,2	0,3	7,6	20,0	39,6	0,2	4,3
	3200	42,5	24,6	0,5	16,6	33,4	31,0	0,4	10,7	24,2	37,3	0,3	6,0
	3650	46,3	22,7	0,6	19,4	36,4	29,6	0,4	12,5	26,3	36,3	0,3	7,0
SAV 6000	2800	40,6	28,2	0,5	9,2	32,0	34,0	0,4	6,0	23,4	39,6	0,3	3,4
	3680	48,8	24,5	0,6	12,9	38,5	31,0	0,5	8,4	28,0	37,4	0,3	4,7
	4590	56,2	21,5	0,7	16,7	44,4	28,7	0,5	10,8	32,3	35,7	0,4	6,1
	5130	60,3	20,0	0,7	19,0	47,6	27,5	0,6	12,3	34,6	34,9	0,4	6,9
	5750	64,7	18,5	0,8	21,6	51,0	26,4	0,6	14,0	37,2	34,0	0,5	7,8
SAV 9000	4080	55,0	25,2	0,7	11,4	43,5	31,7	0,5	7,4	31,8	38,0	0,4	4,2
	5400	66,0	21,4	0,8	15,8	52,2	28,7	0,6	10,3	38,2	35,8	0,5	5,9
	6750	75,9	18,5	0,9	20,3	60,0	26,4	0,7	13,3	43,8	34,1	0,5	7,5
	7600	81,5	17,0	1,0	23,2	64,5	25,2	0,8	15,1	47,1	33,3	0,6	8,6
	8700	88,4	15,3	1,1	26,9	69,9	23,8	0,9	17,5	51,0	32,3	0,6	9,9

Heater technical data													
Type	Air flow [m³/h]	Water temperature in/out 80/60°C											
		Air temp. in -15°C				Air temp. in 0°C				Air temp. in +15°C			
SAV 2000	570	12,8	51,6	0,2	4,5	10,4	54,3	0,1	3,1	8,1	56,8	0,1	2,0
	1080	20,8	42,3	0,3	10,8	17,0	46,7	0,2	7,5	13,1	50,9	0,2	4,7
	1330	24,1	39,0	0,3	14,2	19,7	44,0	0,2	9,8	15,2	48,8	0,2	6,2
	1630	27,8	35,8	0,3	18,4	22,7	41,4	0,3	12,7	17,5	46,8	0,2	7,9
	1900	30,8	33,3	0,4	22,2	25,2	39,3	0,3	15,3	19,4	45,2	0,2	9,6
SAV 4000	870	19,2	50,7	0,2	3,9	15,7	53,5	0,2	2,7	12,2	56,1	0,2	1,7
	1800	33,2	39,9	0,4	10,4	27,1	44,7	0,3	7,2	21,0	49,3	0,3	4,5
	2400	40,6	35,3	0,5	14,9	33,1	40,9	0,4	10,3	25,6	46,4	0,3	6,5
	3200	49,1	30,7	0,6	21,2	40,1	37,2	0,5	14,6	31,0	43,5	0,4	9,1
	3650	53,5	28,6	0,7	24,7	43,6	35,5	0,5	17,0	33,7	42,2	0,4	10,6
SAV 6000	2800	46,8	34,8	0,6	11,7	38,3	40,6	0,5	8,1	29,7	46,3	0,4	5,1
	3680	56,2	30,5	0,7	16,3	46,0	37,1	0,6	11,3	35,7	43,5	0,4	7,1
	4590	64,9	27,1	0,8	21,2	53,1	34,3	0,7	14,7	41,1	41,4	0,5	9,2
	5130	69,6	25,4	0,9	24,2	56,9	32,9	0,7	16,7	44,1	40,3	0,5	10,5
	5750	74,7	23,7	0,9	27,5	61,1	31,5	0,8	19,0	47,3	39,2	0,6	11,9
SAV 9000	4080	63,4	31,3	0,8	14,3	51,9	37,8	0,6	10,0	40,4	44,1	0,5	6,3
	5400	76,0	26,9	0,9	20,0	62,3	34,2	0,8	13,9	48,4	41,4	0,6	8,8
	6750	87,4	23,6	1,1	25,7	71,6	31,5	0,9	17,9	55,6	39,3	0,7	11,3
	7600	94,0	21,8	1,2	29,4	77,0	30,1	0,9	20,4	59,8	38,2	0,7	12,9
	8700	101,9	19,9	1,2	34,1	83,4	28,5	1,0	23,7	64,8	36,9	0,8	14,9
Type	Air flow [m³/h]	Water temperature in/out 90/70°C											
		Air temp. in -15°C				Air temp. in 0°C				Air temp. in +15°C			
		Power [kW]	Air temp.out [°C]	Water flow [l/s]	Pressure drop (water) [kPA]	Power [kW]	Air temp.out [°C]	Water flow [l/s]	Pressure drop (water) [kPA]	Power [kW]	Air temp.out [°C]	Water flow [l/s]	Pressure drop (water) [kPA]
SAV 2000	570	14,4	60,3	0,2	5,5	12,1	63,0	0,2	4,0	9,8	65,5	0,1	2,7
	1080	23,5	49,9	0,3	13,3	19,7	54,3	0,2	9,6	15,9	58,5	0,2	6,5
	1330	27,3	46,2	0,3	17,5	22,9	51,2	0,3	12,7	18,5	56,0	0,2	8,6
	1630	31,5	42,6	0,4	22,6	26,4	48,1	0,3	16,4	21,3	53,5	0,3	11,1
	1900	34,9	39,8	0,4	27,4	29,3	45,8	0,4	19,8	23,6	51,7	0,3	13,4
SAV 4000	870	21,7	59,4	0,3	4,7	18,2	62,2	0,2	3,4	14,7	64,8	0,2	2,3
	1800	37,6	47,2	0,5	12,7	31,6	52,0	0,4	9,2	25,5	56,6	0,3	6,3
	2400	46,0	42,1	0,6	18,4	38,6	47,7	0,5	13,3	31,1	53,1	0,4	9,0
	3200	55,7	36,9	0,7	26,2	46,7	43,3	0,6	18,9	37,6	49,6	0,5	12,8
	3650	60,7	34,5	0,7	30,6	50,8	41,3	0,6	22,1	41,0	48,0	0,5	14,9
SAV 6000	2800	53,0	41,4	0,7	14,4	44,5	47,2	0,6	10,5	36,0	52,9	0,4	7,1
	3680	63,7	36,5	0,8	20,2	53,5	43,2	0,7	14,6	43,3	49,6	0,5	9,9
	4590	73,5	32,7	0,9	26,3	61,7	39,9	0,8	19,0	49,9	47,0	0,6	12,9
	5130	78,8	30,8	1,0	29,9	66,2	38,3	0,8	21,7	53,5	45,7	0,7	14,6
	5750	84,6	28,8	1,0	34,1	71,1	36,7	0,9	24,7	57,4	44,4	0,7	16,7
SAV 9000	4080	71,7	37,3	0,9	17,6	60,3	43,9	0,7	12,8	48,8	50,2	0,9	8,7
	5400	86,0	32,4	1,1	24,5	72,4	39,8	0,9	17,9	58,6	46,9	0,7	12,2
	6750	98,9	28,6	1,2	31,7	83,2	36,6	1,0	23,1	67,3	44,4	0,8	15,7
	7600	106,3	26,7	1,3	36,2	89,4	34,9	1,1	26,4	72,4	43,0	0,9	17,9
	8700	115,3	24,5	1,4	42,0	97,0	33,1	1,2	30,6	78,4	41,6	1,0	20,7