

Series
VENTS VCU



Scroll-type single-inlet centrifugal fans powered by external rotor. Air flow up to **2000 m³/h**.

■ **Applications**

Designed for supply and exhaust ventilation systems for commercial, office and other public or industrial premises. The fan can be used as a components for ventilation and air conditioning systems and is suitable for outside mounting.

■ **Design**

The fan casing is made of steel with polymeric coating.

■ **Motor**

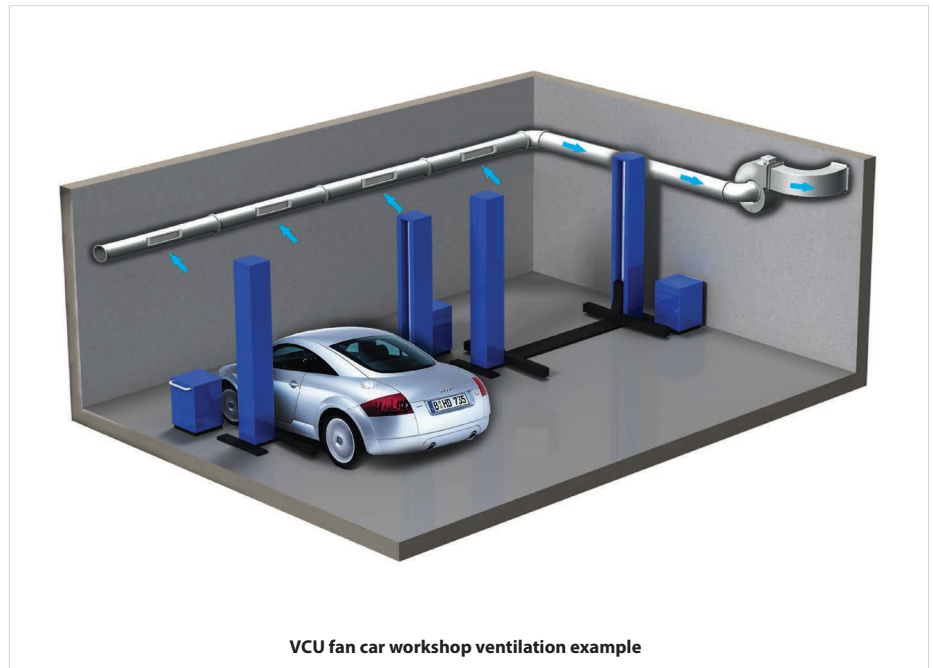
The impeller with forward curved blades made of galvanized steel is powered by 2- or 4-pole single phase external rotor asynchronous motor. The motors are equipped with incorporated thermal overheating protection with automatic restart as well as ball bearings for long service life. For precise features, safe operation and low noise, each turbine is dynamically balanced while assembling. Motor protection rating IP44.

■ **Speed control**

Both smooth and step speed control is performed with the symistor or autotransformer controller. Several fans can be connected to one controller in case the total power and operating current do not exceed the controller rated values.

■ **Mounting**

The fan is suitable for installation in ventilating chambers, air conditioning units or can be used individually. In case of independent operation it can be connected to air ducts by means of either both exhaust and inlet branch pipes or exhaust branch pipe only. The exhaust and intake branch pipes have rectangular or circular sections accordingly. Power is supplied by means of the external terminals.



VCU fan car workshop ventilation example

Designation key

Series	Motor modification		Impeller diameter, mm	Impeller width, mm
	Number of poles	Phase		
VENTS VCU	2 4	E: single phase	140; 160; 180; 200; 225; 250	60; 62; 80; 92; 102; 140

Accessories



Silencer

Filters

Heaters

Backdraft damper

Air shutter

Speed controllers

Technical data

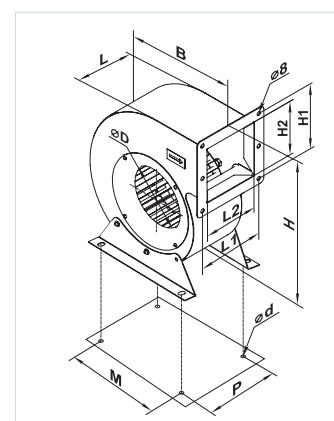
	VCU 2E 140x60	VCU 2E 160x62	VCU 4E 180x92	VCU 4E 200x80
Voltage [V/50 Hz]	1~230	1~230	1~230	1~230
Power [W]	148	264	160	125
Current [A]	0.64	1.17	0.7	0.55
Max. air flow [m ³ /h]	515	560	800	730
RPM [min ⁻¹]	2820	2630	1465	1430
Noise level at 3 m [dBA]	68	70	62	63
Transported air temperature [°C]	-25...+45	-25...+50	-25...+45	-25...+45
Protection rating	IPX4	IPX4	IPX4	IPX4

Technical data

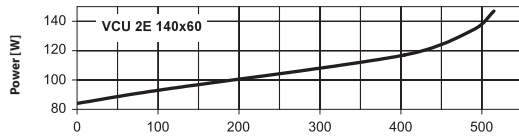
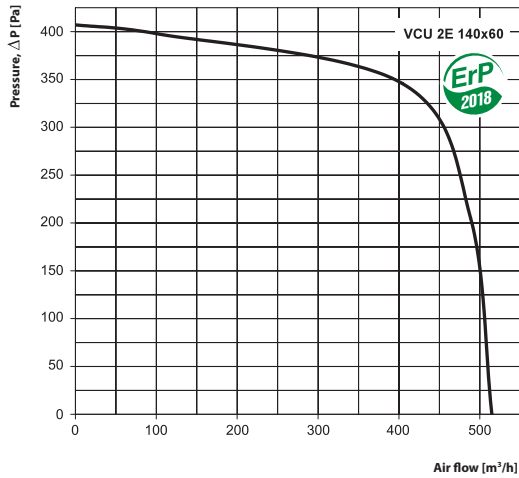
	VCU 4E 200x102	VCU 4E 225x102	VCU 4E 250x102	VCU 4E 250x140
Voltage [V/50 Hz]	1~230	1~230	1~230	1~230
Power [W]	280	395	810	570
Current [A]	1.25	1.98	3.65	2.48
Max. air flow [m ³ /h]	1350	1480	2000	2000
RPM [min ⁻¹]	1475	1330	1330	1310
Noise level at 3 m [dBA]	65	69	63	60
Transported air temperature [°C]	-25...+40	-40...+70	-40...+70	-40...+70
Protection rating	IPX4	IPX4	IPX4	IPX4

Fan overall dimensions

Type	Dimensions [mm]											Mass [kg]
	∅D	B	H	H1	H2	L	L1	L2	P	M	d	
VCU 2E 140x60	140	243	287	125	92,5	86	110	78,4	116	150	9	3.7
VCU 2E 160x62	160	277	324	136	106	106	130	98,4	139	200	9	4.8
VCU 4E 180x92	180	311	360	150	120	148	170	140,4	181	230	9	7.1
VCU 4E 200x80	200	345	398	165	134	116	140	108	150	240	9	7.5
VCU 4E 200x102	200	345	398	165	134	152	175	143	185	240	9	8.0
VCU 4E 225x102	225	365	441	210	171	145	170	137	178	250	11	11.9
VCU 4E 250x102	250	410	485	230	191	165	190	157	198	270	11	16.3
VCU 4E 250x140	250	410	485	230	191	205	230	197	238	270	11	16.3

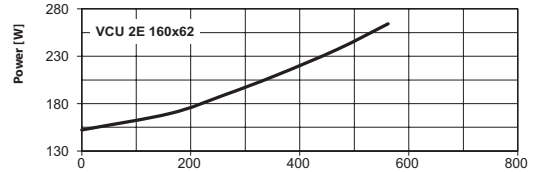
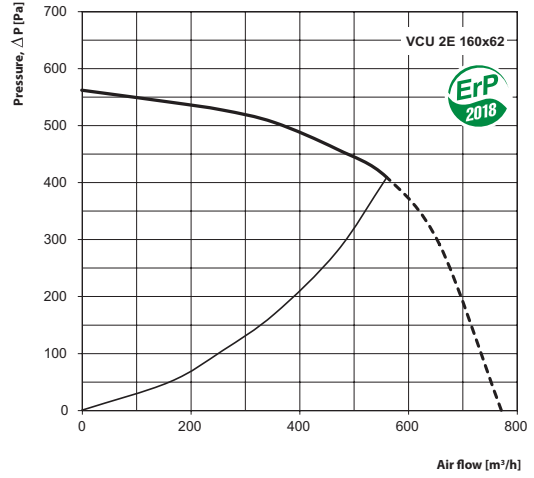


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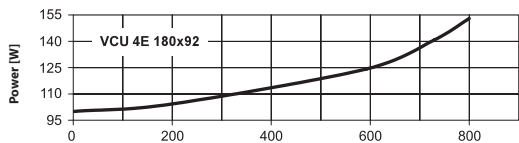
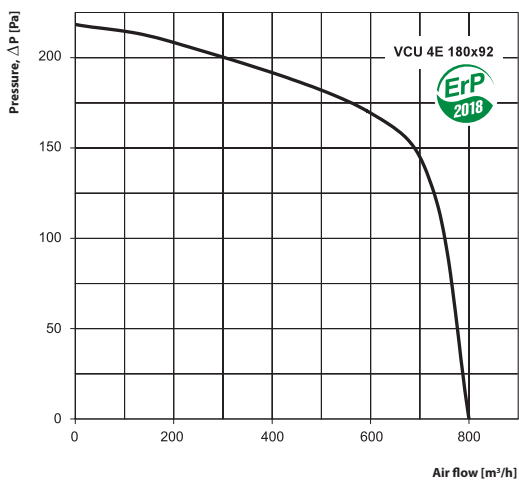
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	60	44	51	50	37	33	31	27	17
L_{WA} to outlet	dBA	58	45	53	44	43	38	31	26	19
L_{WA} to environment	dBA	50	41	48	44	35	31	24	20	15

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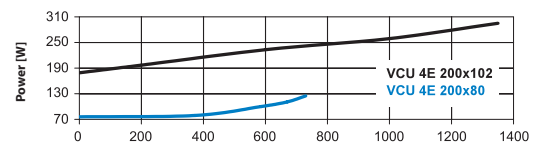
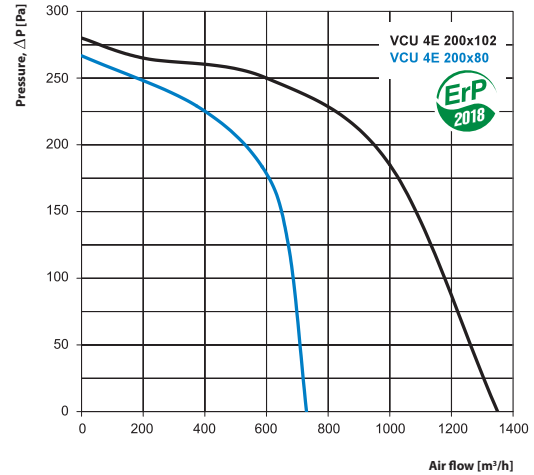
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	57	42	54	54	38	34	31	28	21
L_{WA} to outlet	dBA	57	46	57	45	42	38	31	26	20
L_{WA} to environment	dBA	49	37	48	42	33	29	25	19	16

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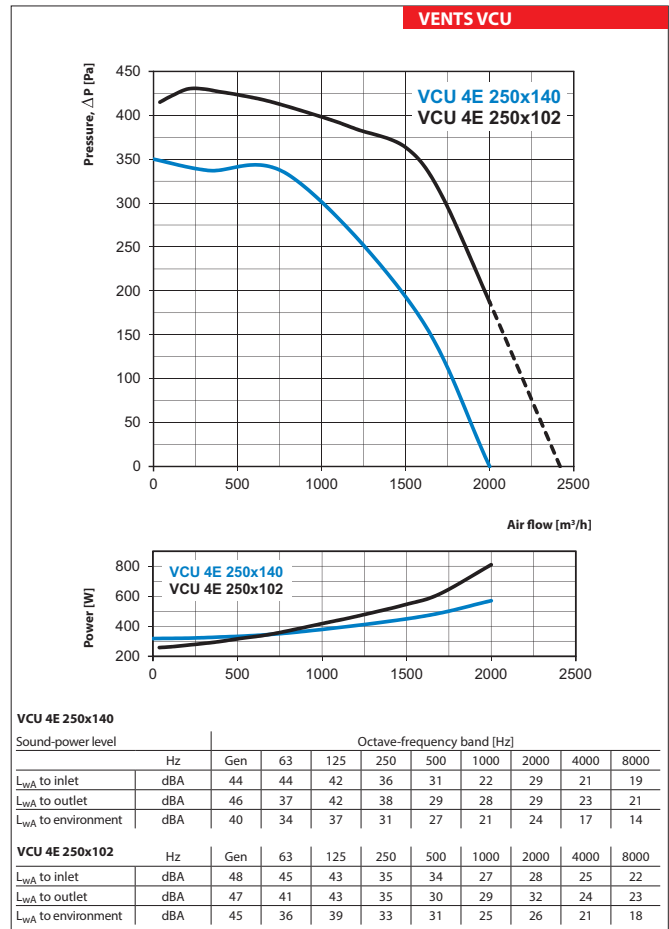
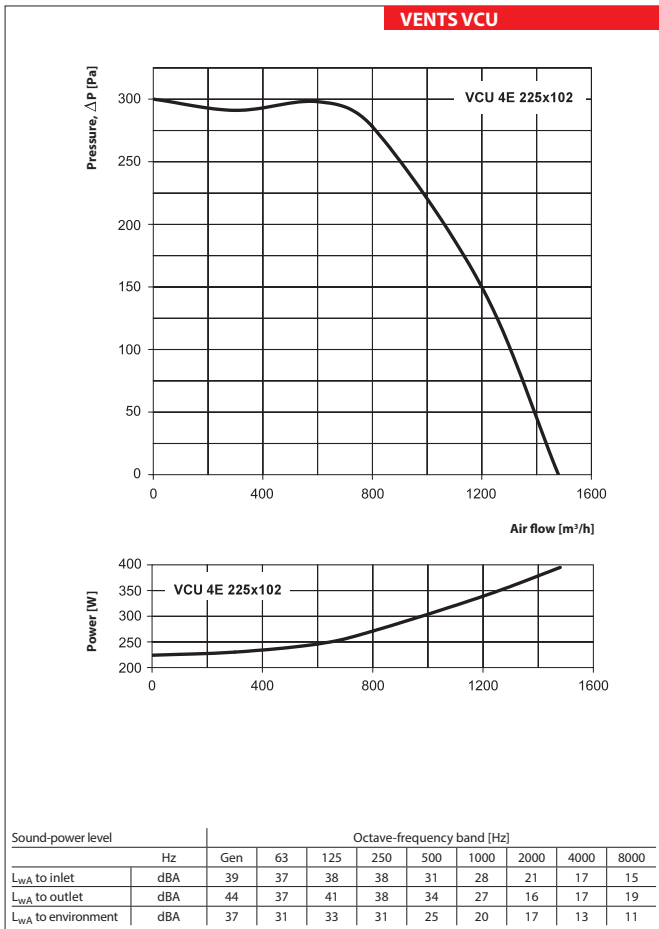
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	56	43	54	52	38	34	30	29	17
L_{WA} to outlet	dBA	56	46	55	45	42	35	30	27	21
L_{WA} to environment	dBA	52	39	47	46	35	28	24	18	17

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Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	41	37	38	37	30	26	19	17	14
L_{WA} to outlet	dBA	42	40	41	36	36	25	16	17	18
L_{WA} to environment	dBA	37	32	35	29	26	20	16	11	11

Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L_{WA} to inlet	dBA	41	38	39	34	31	29	20	18	13
L_{WA} to outlet	dBA	44	40	40	36	34	25	20	16	17
L_{WA} to environment	dBA	37	33	37	30	25	21	16	13	13



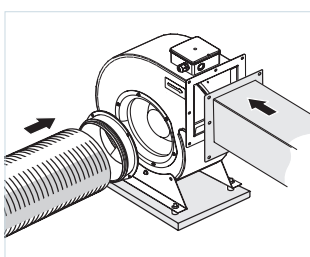
FAN SERIES VENTS VCU

Selection table for accessories

Type	Rubber anti-vibration mounts	Flange	Grille
VCU 2E 140x60	VVCr 8	FVC-VCU 140	RVC-VCU 140
VCU 2E 160x62	VVCr 8	FVC-VCU 160	RVC-VCU 160
VCU 2E 160x90	VVCr 8	FVC-VCU 160	RVC-VCU 160
VCU 4E 180x92	VVCr 8	FVC-VCU 180	RVC-VCU 180
VCU 4E 200x80	VVCr 8	FVC-VCU 200	RVC-VCU 200
VCU 4E 200x102	VVCr 8	FVC-VCU 200	RVC-VCU 200
VCU 4E 225x102	VVCr 16	FVC-VCU 200/FVC-VCU 225	RVC-VCU 200/RVC-VCU 225
VCU 4E 250x102	VVCr 16	FVC-VCU 250	RVC-VCU 250
VCU 4E 250x140	VVCr 16	FVC-VCU 250	RVC-VCU 250

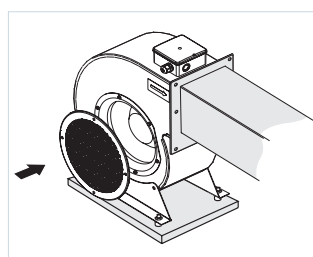
FVC-VCU Flange

designed to connect round ducts to VCU fans.



RVC-VCU Grille

designed for fan protection against foreign objects.



Anti-vibration mounts VVCr

Designed for noise reduction and vibration dampening produced by the fans. Provide dynamic loading decrease and increase reliability and durability of ventilation equipment.



Anti-vibration mount VVCr