

Series  
**VENTS VCU**



Scroll-type single-inlet centrifugal fans powered by the motors with external rotor. The air capacity up to 2000 m<sup>3</sup>/h . The fan is designed for supply and exhaust ventilation systems.

■ Applications

Designed for supply and exhaust ventilation of various 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

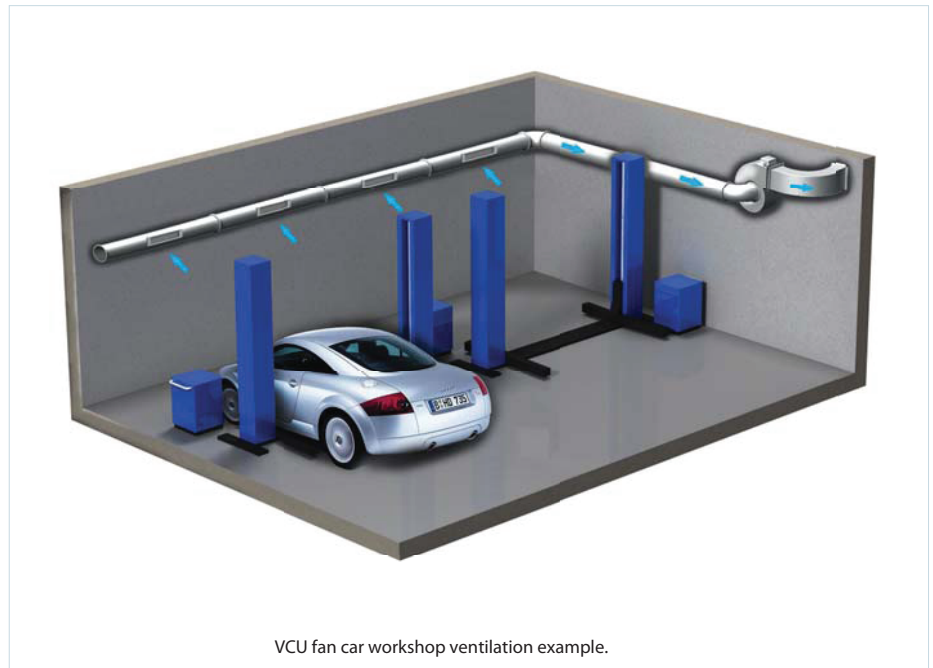
The impeller with forward-curved blades of galvanized steel is powered by 2- and 4-pole asynchronous motor with external rotor. The motors are equipped with incorporated thermal overheating protection with automatic restart as well as ball bearings for long service life. For precise features, safe operation and low noise, each turbine is dynamically balanced while assembling. Motor protection rating IP 44.

■ 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 separately. 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.



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; 90; 92; 102; 140

Accessories



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Technical data:

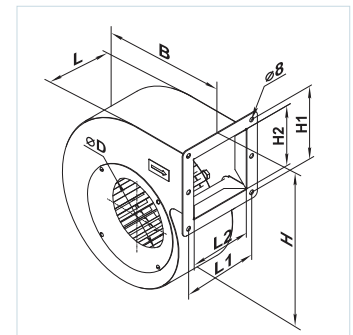
	VCU 2E 140x60	VCU 2E 160x62	VCU 2E 160x90	VCU 4E 180x92
Voltage [V / 50 Hz]	230	230	230	230
Power [W]	148	240	320	160
Current [A]	0,64	1,05	1,48	0,7
Maximum air flow [m <sup>3</sup> /h]	515	600	730	800
RPM [min <sup>-1</sup> ]	2820	2100	2745	1465
Noise level at 3 m [dBA]	68	68	70	62
Maximum operating temperature [ °C]	-25 +45	-25 +50	-25 +45	-25 +45
Protection rating	IP X4	IP X4	IP X4	IP X4

Technical data:

	VCU 4E 200x80	VCU 4E 200x102	VCU 4E 225x102	VCU 4E 250x140
Voltage [V / 50 Hz]	230	230	230	230
Power [W]	125	280	395	570
Current [A]	0,55	1,25	1,98	2,48
Maximum air flow [m <sup>3</sup> /h]	730	1350	1480	2000
RPM [min <sup>-1</sup> ]	1430	1475	1330	1310
Noise level at 3 m [dBA]	63	65	69	60
Maximum operating temperature [ °C]	-25 +45	-25 +40	-40 +70	-40 +70
Protection rating	IP X4	IP X4	IP X4	IP X4

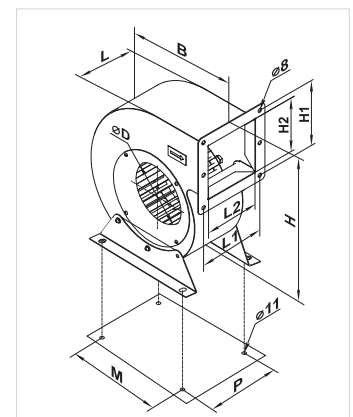
Fan overall dimensions:

Type	Dimensions [mm]								Mass [kg]
	∅D	B	H	H1	H2	L	L1	L2	
VCU 2E 140x60	140	243	287	125	93	85	107	75	3,2
VCU 2E 160x62	160	277	324	136	106	89	112	82	4,2
VCU 2E 160x90	160	277	324	136	106	136	158	127	5,1
VCU 4E 180x92	180	311	360	150	120	145	166	137	6,5
VCU 4E 200x80	200	335	398	165	134	121	140	113	6,8
VCU 4E 200x102	200	335	398	165	134	157	175	148	7,3



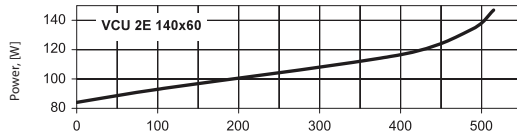
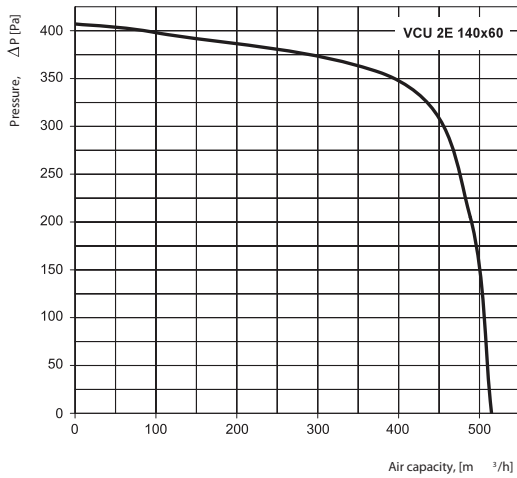
Fan overall dimensions:

Type	Dimensions [mm]										Mass [kg]
	∅D	B	H	H1	H2	L	L1	L2	P	M	
VCU 4E 225x102	225	365	441	210	171	145	170	137	178	250	11,2
VCU 4E 250x140	250	410	485	230	191	205	230	197	238	270	15,5



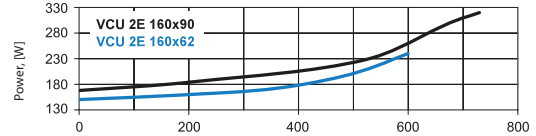
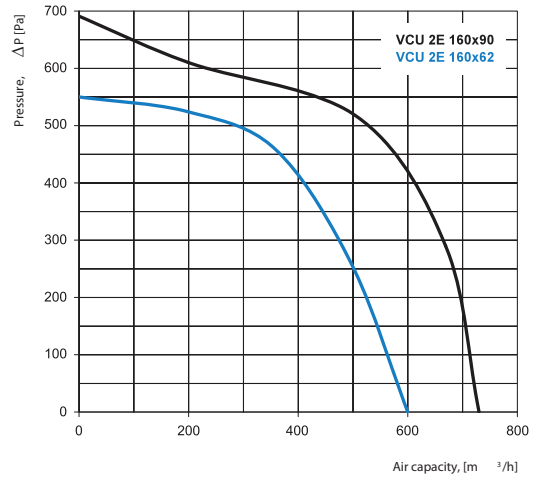
# CENTRIFUGAL FANS

## VENTS VCU



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

## VENTS VCU

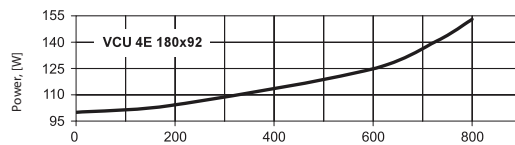
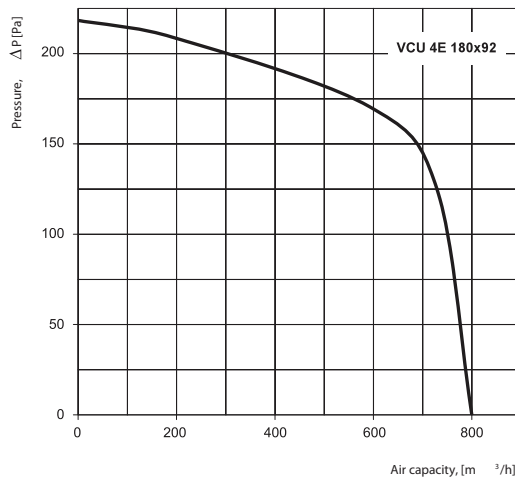


Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	58	41	55	53	40	33	33	25	21
L <sub>WA</sub> to outlet	dBA	57	45	56	46	43	36	30	26	21
L <sub>WA</sub> to environment	dBA	51	39	48	45	36	32	25	20	17

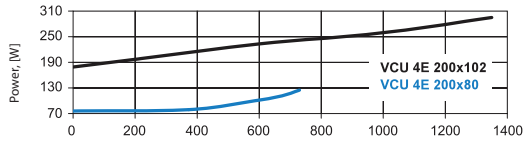
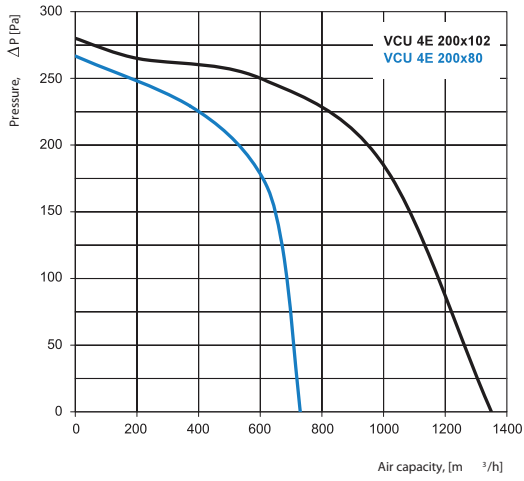
Sound-power level	Hz	Octave-frequency band [Hz]								
		Gen	63	125	250	500	1000	2000	4000	8000
L <sub>WA</sub> to inlet	dBA	57	42	54	54	38	34	31	28	21
L <sub>WA</sub> to outlet	dBA	57	46	57	45	42	38	31	26	20
L <sub>WA</sub> to environment	dBA	49	37	48	42	33	29	25	19	16

## VENTS VCU



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

**VENTS VCU**



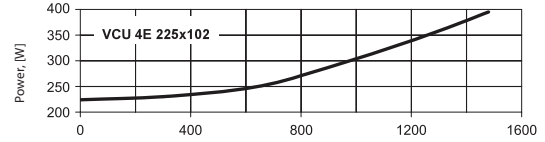
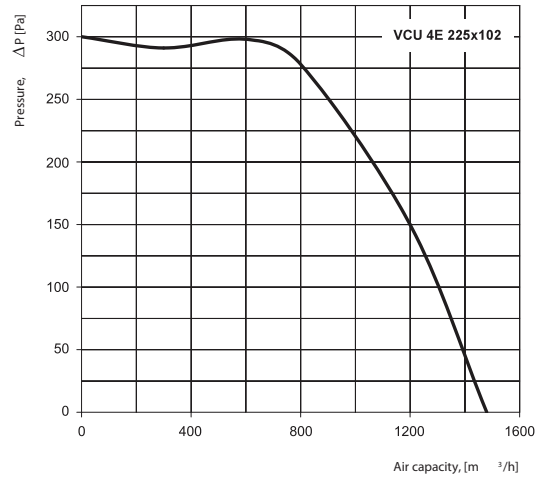
VCU 4E 200x102

Sound-power level		Octave-frequency band [Hz]								
	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	25	16	17	18	
$L_{WA}$ to environment	dBA	37	32	35	29	26	20	16	11	11

VCU 4E 200x80

Sound-power level		Octave-frequency band [Hz]								
	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

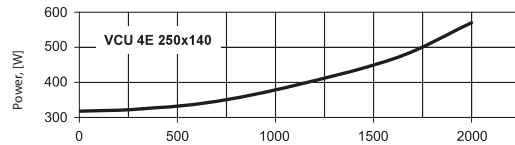
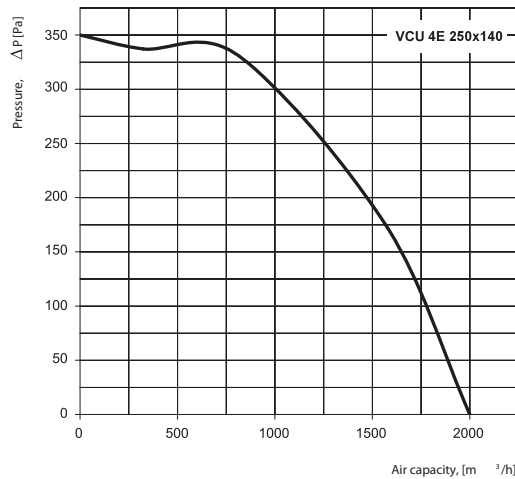
**VENTS VCU**



Sound-power level

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	39	37	38	38	31	28	21	17	15
$L_{WA}$ to outlet	dBA	44	37	41	38	34	27	16	17	19
$L_{WA}$ to environment	dBA	37	31	33	31	25	20	17	13	11

**VENTS VCU**



Sound-power level

Sound-power level		Octave-frequency band [Hz]								
	Hz	Gen	63	125	250	500	1000	2000	4000	8000
$L_{WA}$ to inlet	dBA	44	44	42	36	31	22	29	21	19
$L_{WA}$ to outlet	dBA	46	37	42	38	29	28	29	23	21
$L_{WA}$ to environment	dBA	40	34	37	31	27	21	24	17	14