



## Centrifugal fans

# S-Vent

Air capacity – up to 19 000 m<sup>3</sup>/h

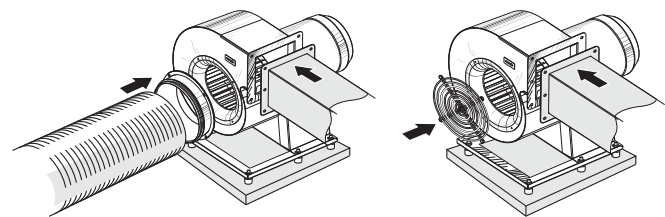


### Use

- ❑ Exhaust ventilation systems installed in various premises.
- ❑ Suitable for use as a component of an assembled air handling or conditioning unit.
- ❑ Compatible with Ø 140 up to 500 mm round air ducts or 125x125 up to 800x800 mm rectangular air ducts.

### Design

- ❑ Scroll casing is made of steel and is covered with a special polymer coating.
- ❑ The fan is equipped with a round intake flange and exhaust rectangular flange for connection to respective air ducts.
- ❑ The fan casing design provides several impeller rotating positions rightwards (R) or leftwards (L) with 45° angle pitch.
- ❑ The casing includes mounting brackets with a mount pad for to facilitate the fan installation to an even surface.



### Motor

- ❑ 2-, 4-, 6- or 8-pole three-phase asynchronous motor with centrifugal impeller and forward curved blades.
- ❑ Galvanized steel impeller.
- ❑ Equipped with ball bearings for longer service life.
- ❑ Dynamically balanced turbine.
- ❑ IP54 ingress protection rating.



SI-G



SI-F

### Speed control

- ❑ Smooth or step-up speed control with an external auto transformer or frequency inverter (both available upon separate order).

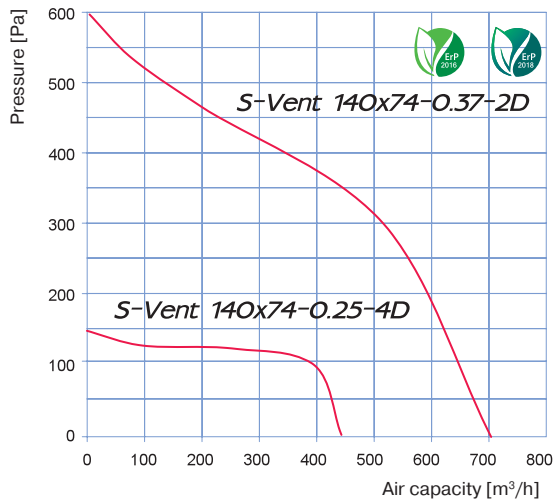
### Mounting

- ❑ The fan is designed for installation as a single unit or as a component unit of ventilation chambers or air conditioning units.
- ❑ The fan has a connection possibility for two air ducts, a rectangular discharge air duct through the flange on the casing as well as a round intake air duct through the connecting flange **FRZ-SV**. Available upon separate order.
- ❑ In case of rectangular discharge air duct connection a discharge vent must be covered with the **SG-SV** grille to protect the fan from foreign object ingress. Available upon separate order.
- ❑ The vibration isolators, either of rubber type **SI-G** or spring-loaded type **SI-F**, are recommended for noise and vibration attenuation. Vibration isolators reduce dynamic loads on the fan, enhance reliability and durability of the ventilation equipment. The vibration isolators are attached through holes in the mounting pad. Available upon separate order.

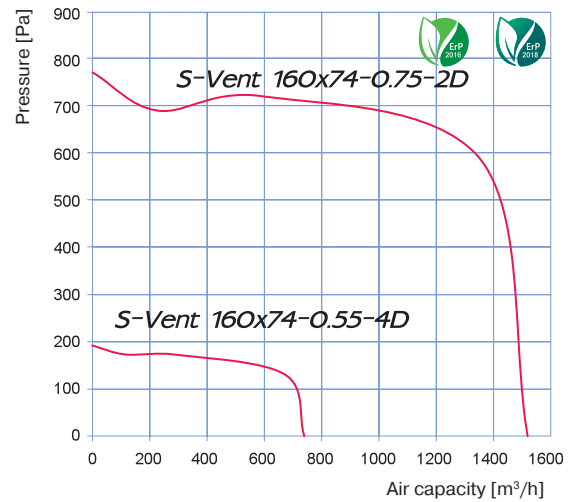
ErP data	
Overall efficiency	η, (%)
Measurement category	MC
Efficiency category	EC
Efficiency grade	N
Variable speed drive	VSD
Power	[kW]
Current	[A]
Air flow	[m <sup>3</sup> /h]
Static pressure	[Pa]
Speed	[n/min <sup>-1</sup> ]
Specific ratio	SR

## Specifications

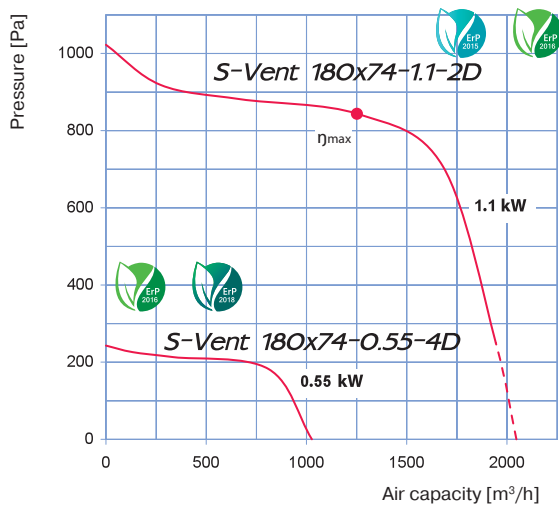
Parameters	S-Vent 140x74-0.25-4D		S-Vent 140x74-0.37-2D		S-Vent 160x74-0.55-4D		S-Vent 160x74-0.75-2D		S-Vent 180x74-0.55-4D		S-Vent 180x74-1.1-2D		S-Vent 200x93-0.55-4D		S-Vent 200x93-1.1-2D	
	EP 2016		EP 2016		EP 2016		EP 2016		EP 2016		EP 2016		EP 2016		EP 2016	
Voltage [V / 50 Hz]	400		400		400		400		400		400		400		400	
Power [kW]	0.25		0.37		0.55		0.75		0.55		1.1		0.55		1.1	
Current [A]	0.8		0.9		1.6		1.8		1.6		2.6		1.6		2.6	
Maximum air capacity [m³/h]	450		710		750		1540		1030		1950		1615		1900	
RPM [min <sup>-1</sup> ]	1350		2730		1360		2820		1360		2800		1360		2800	
Sound pressure level at 3 m distance [dBA]	60		65		62		68		64		70		67		73	
Max. operating temperature [°C]	60		60		60		60		60		60		60		60	
SEC class			D				-		D		-		-		-	
Ingress protection rating	IP54		IP54		IP54		IP54		IP54		IP54		IP54		IP54	



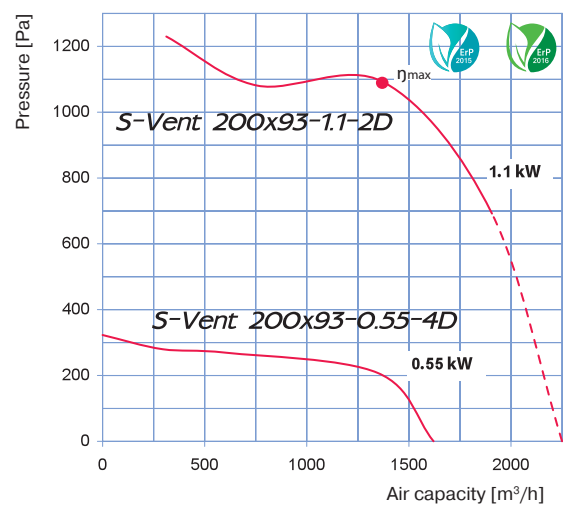
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 140x74-0.37-2D</b>									
L <sub>WA</sub> to environment, [dBA]	68	47	59	69	72	74	75	72	71
<b>S-Vent 140x74-0.25-4D</b>									
L <sub>WA</sub> to environment, [dBA]	61	43	58	64	61	68	68	65	63



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 160x74-0.75-2D</b>									
L <sub>WA</sub> to environment, [dBA]	67	48	60	69	74	74	78	73	72
<b>S-Vent 160x74-0.55-4D</b>									
L <sub>WA</sub> to environment, [dBA]	63	46	59	64	65	69	71	68	65



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 180x74-1.1-2D</b>									
L <sub>WA</sub> to environment, [dBA]	70	53	62	72	78	77	81	78	77
<b>S-Vent 180x74-0.55-4D</b>									
L <sub>WA</sub> to environment, [dBA]	62	50	63	68	67	73	75	69	67



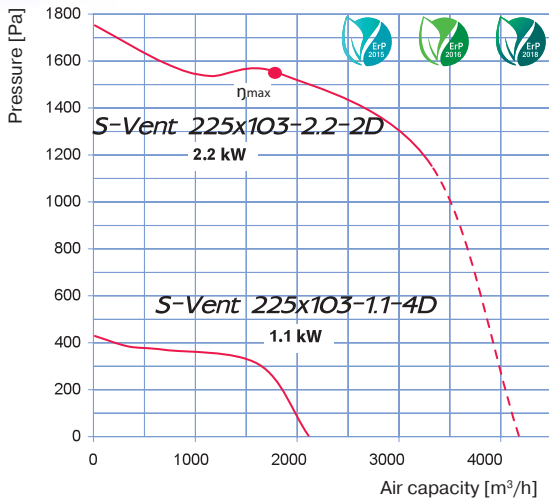
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 200x93-1.1-2D</b>									
L <sub>WA</sub> to environment, [dBA]	75	54	65	78	81	81	85	78	78
<b>S-Vent 200x93-0.55-4D</b>									
L <sub>WA</sub> to environment, [dBA]	65	51	64	71	72	75	77	72	70

η <sub>v</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
39.3	A	Static	46.3	No	0.769	1.67	1264	843	2940	1

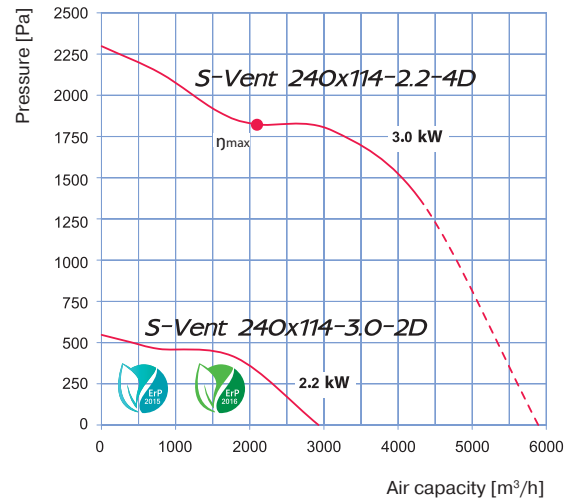
η <sub>v</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
41.1	A	Static	47.2	No	1.075	1.99	1373	1135	2895	1

## Specifications

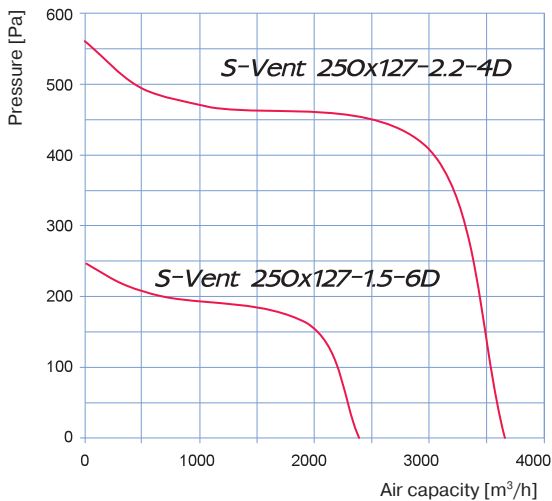
Parameters	S-Vent 225x103- 1.1-4D	S-Vent 225x103- 2.2-2D	S-Vent 240x114- 2.2-4D	S-Vent 240x114- 3.0-2D	S-Vent 250x127- 1.5-6D	S-Vent 250x127- 2.2-4D	S-Vent 250x127- 5.5-2D	S-Vent 280x127- 1.5-6D
Voltage [V / 50 Hz]	400	400	400	400	400	400	400	400
Power [kW]	1.1	2.2	2.2	3.0	1.5	2.2	5.5	1.5
Current [A]	2.8	4.7	5.1	6.1	4.2	5.1	10.7	4.2
Maximum air capacity [m <sup>3</sup> /h]	2125	3350	2930	4350	2415	3720	4820	3450
RPM [min <sup>-1</sup> ]	1420	2865	1420	2870	940	1420	2850	940
Sound pressure level at 3 m distance [dBA]	72	75	74	78	68	78	81	69
Max. operating temperature [°C]	60	60	60	60	60	60	60	60
Ingress protection rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54



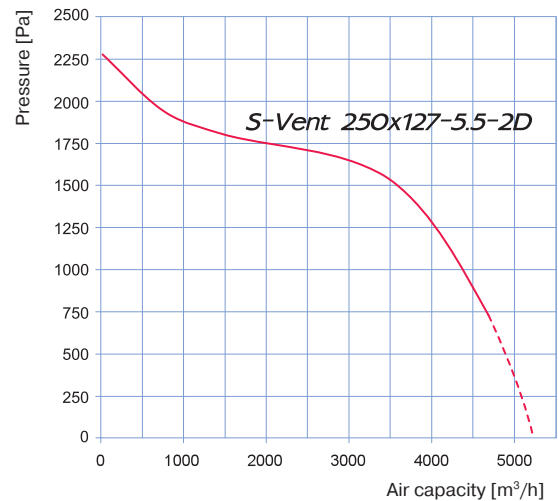
Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
<b>S-Vent 225x103-2.2-2D</b>										
L <sub>WA</sub> to environment, [dBA]	75	58	67	78	83	83	88	81	79	
<b>S-Vent 225x103-1.1-4D</b>										
L <sub>WA</sub> to environment, [dBA]	72	55	65	75	76	81	81	77	75	
η <sub>s</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
47.5	A	Static	52.4	No	1.680	3.17	1818	1547	2925	1



Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
<b>S-Vent 240x114-2.2-4D</b>										
L <sub>WA</sub> to environment, [dBA]	71	57	69	75	75	81	82	79	76	
<b>S-Vent 240x114-3.0-2D</b>										
L <sub>WA</sub> to environment, [dBA]	77	58	69	74	78	73	79	78	78	
η <sub>s</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
45.5	A	Static	49.5	No	2.369	4.39	2083	1826	2915	1



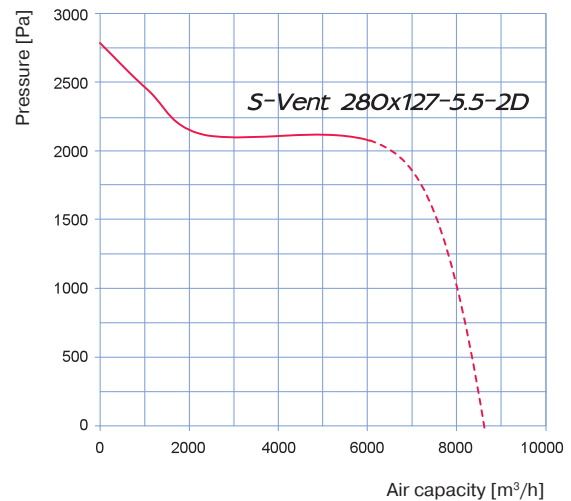
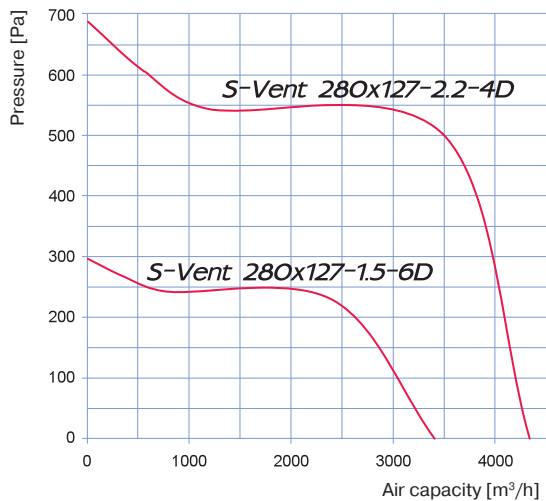
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 250x127-2.2-4D</b>									
L <sub>WA</sub> to environment, [dBA]	70	56	71	77	74	81	82	80	73
<b>S-Vent 250x127-1.5-6D</b>									
L <sub>WA</sub> to environment, [dBA]	65	50	62	68	68	73	71	72	65



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 250x127-5.5-2D</b>									
L <sub>WA</sub> to environment, [dBA]	78	57	71	79	84	85	89	83	81

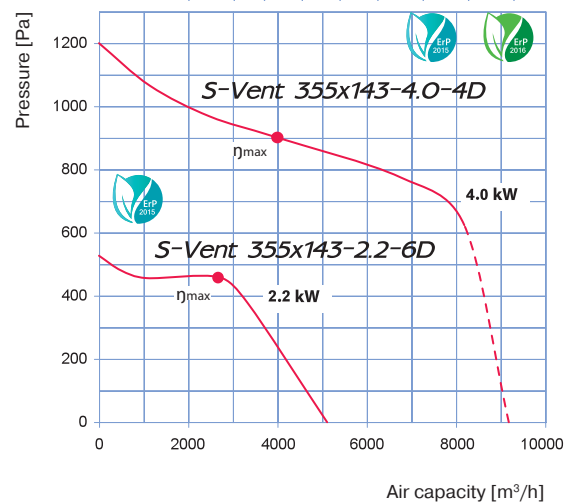
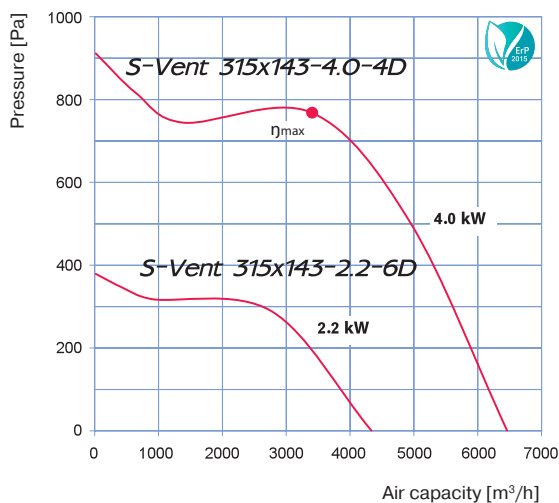
## Specifications

Parameters	S-Vent	S-Vent	S-Vent	S-Vent	S-Vent	S-Vent	S-Vent	S-Vent
	280x127-2.2-4D	280x127-5.5-2D	315x143-2.2-6D	315x143-4.0-4D	355x143-2.2-6D	355x143-4.0-4D	400x183-1.5-8D	400x183-2.2-6D
Voltage [V / 50 Hz]	400	400	400	400	400	400	400	400
Power [kW]	2.2	5.5	2.2	4.0	2.2	4.0	1.5	2.2
Current [A]	5.1	10.7	5.6	8.7	5.6	8.7	4.2	5.8
Maximum air capacity [m <sup>3</sup> /h]	4395	6330	4375	6530	5090	8150	6545	8100
RPM [min <sup>-1</sup> ]	1420	2865	940	1410	940	1410	700	940
Sound pressure level at 3 m distance [dBA]	75	81	70	79	71	79	62	73
Max. operating temperature [°C]	60	60	60	60	60	60	60	60
Ingress protection rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 280x127-2.2-4D</b>									
L <sub>WA</sub> to environment, [dBA]	73	61	74	76	81	82	83	81	77
<b>S-Vent 280x127-1.5-6D</b>									
L <sub>WA</sub> to environment, [dBA]	67	50	63	69	67	73	71	69	66








Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 280x127-5.5-2D</b>									
L <sub>WA</sub> to environment, [dBA]	80	63	72	81	88	86	91	87	86

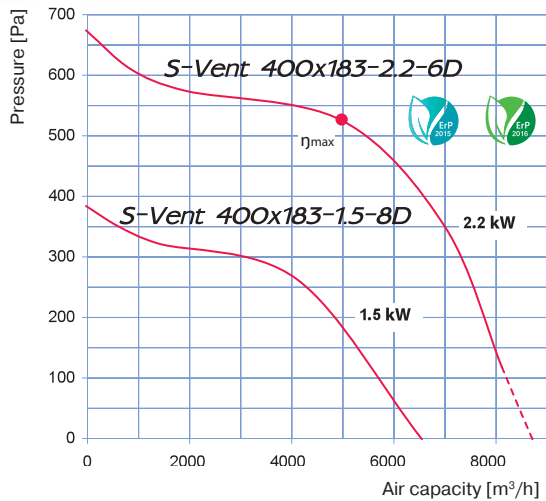


Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
<b>S-Vent 315x143-4.0-4D</b>										
L <sub>WA</sub> to environment, [dBA]	78	62	73	81	84	88	86	86	83	
<b>S-Vent 315x143-2.2-6D</b>										
L <sub>WA</sub> to environment, [dBA]	71	56	67	70	80	78	79	72	68	
η <sub>v</sub> , (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
36.3	A	Static	40.7	No	2.051	6.32	3429	767	1480	1

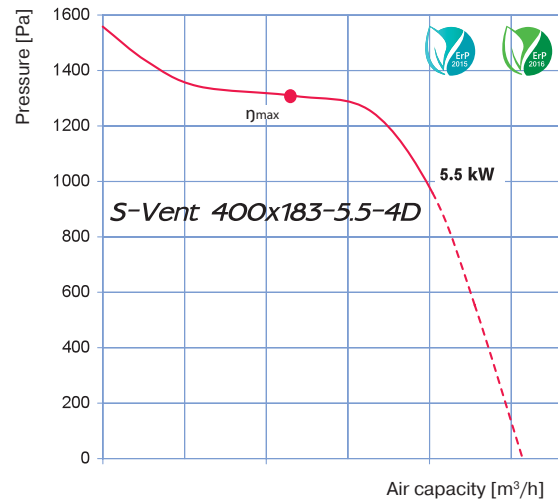
Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
<b>S-Vent 355x143-4.0-4D</b>										
L <sub>WA</sub> to environment, [dBA]	77	62	75	80	84	87	90	82	82	
<b>S-Vent 355x143-2.2-6D</b>										
L <sub>WA</sub> to environment, [dBA]	71	54	68	73	82	82	82	75	72	
<b>S-Vent 355x143-4.0-4D</b>										
η <sub>v</sub> , (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
41.3	A	Static	45.2	No	2.449	6.6	3948	904	1475	1
<b>S-Vent 355x143-2.2-6D</b>										
η <sub>v</sub> , (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
34.1	A	Static	40.3	No	1.026	4.19	2680	460	990	1

## Specifications

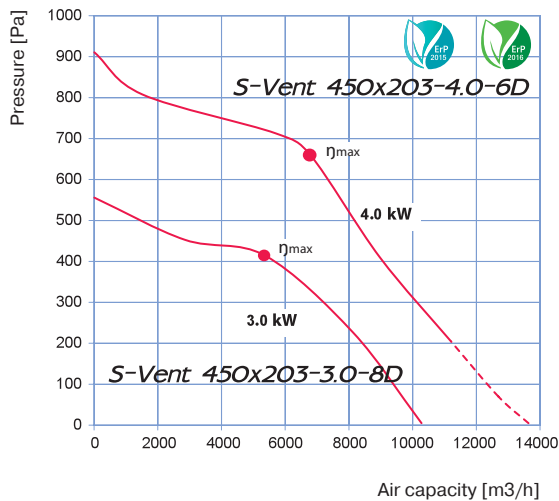
Parameters	S-Vent 400x183-5.5-4D 	S-Vent 450x203-3.0-8D 	S-Vent 450x203-4.0-6D 	S-Vent 450x203-11.0-4D 	S-Vent 500x229-5.5-8D 	S-Vent 500x229-7.5-6D 	S-Vent 500x229-11.0-4D 
Voltage [V / 50 Hz]	400	400	400	400	400	400	400
Power [kW]	5.5	3.0	4.0	11.0	5.5	7.5	11.0
Current [A]	11.0	7.8	9.1	24.0	14.8	17.0	24.0
Maximum air capacity [m <sup>3</sup> /h]	10175	10230	11150	19000	11550	14960	17250
RPM [min <sup>-1</sup> ]	1430	700	950	1450	700	955	1450
Sound pressure level at 3 m distance [dBA]	80	70	76	84	72	78	85
Max. operating temperature [°C]	60	60	60	60	60	60	60
Ingress protection rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54



Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
<b>S-Vent 400x183-2.2-6D</b>										
L <sub>WA</sub> to environment, [dBA]	75	57	72	75	81	80	81	78	76	
<b>S-Vent 400x183-1.5-8D</b>										
L <sub>WA</sub> to environment, [dBA]	68	53	65	69	74	76	77	73	67	
η <sub>a</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
40.6	A	Static	45.3	No	1.831	4.71	4992	526	965	1



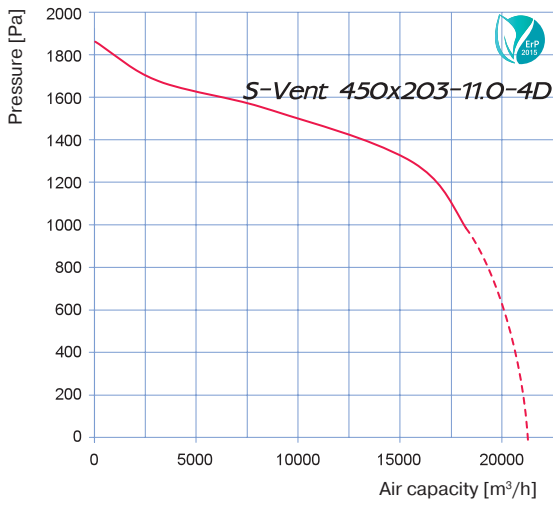
Sound-power level	Octave-frequency band [Hz]									
	Gen	63	125	250	500	1000	2000	4000	8000	
<b>S-Vent 400x183-5.5-4D</b>										
L <sub>WA</sub> to environment, [dBA]	75	57	72	75	81	80	81	78	76	
η <sub>a</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
47.7	A	Static	49.5	No	4.620	9.3	5931	1302	1465	1



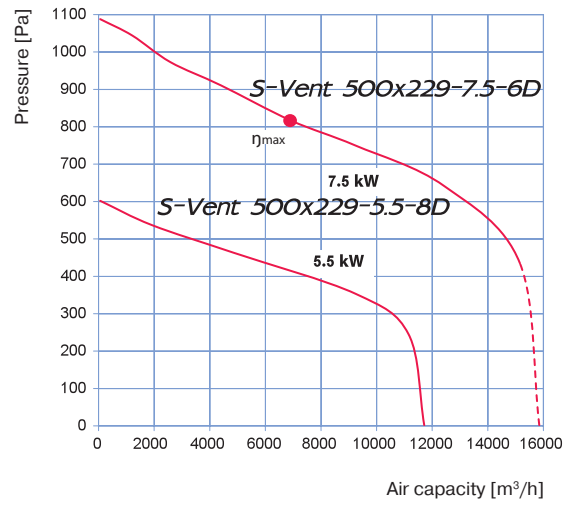
Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 450x203-4.0-6D</b>									
L <sub>WA</sub> to environment, [dBA]	76	59	74	75	83	83	85	81	77
<b>S-Vent 450x203-3.0-8D</b>									
L <sub>WA</sub> to environment, [dBA]	67	56	63	65	75	75	71	71	69

<b>S-Vent 450x203-4.0-6D</b>										
η <sub>a</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
42.5	A	Static	45.9	No	2.950	6.9	6755	655	980	1
<b>S-Vent 450x203-3.0-8D</b>										
η <sub>a</sub> (%)	MC	EC	N	VSD	[kW]	[A]	[m <sup>3</sup> /h]	[Pa]	[RPM]	SR
41.7	A	Static	47	No	1.486	6.18	5348	409	740	1

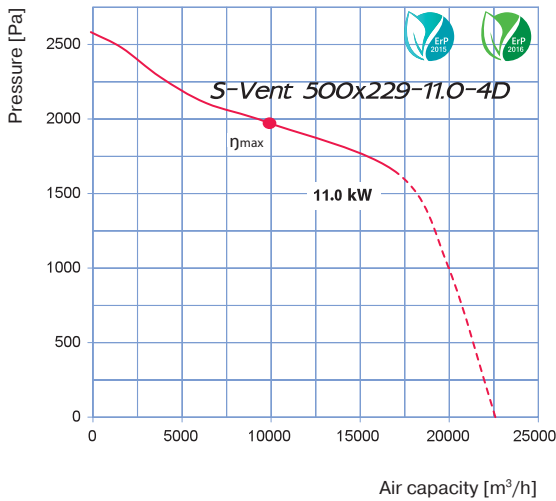
## Specifications



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 400x203-11.0-4D</b>									
L <sub>wA</sub> to environment, [dBA]	83	70	84	89	88	94	94	94	91



Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 500x229-7.5-6D</b>									
L <sub>wA</sub> to environment, [dBA]	83	68	79	85	85	93	92	86	85
<b>S-Vent 500x229-5.5-8D</b>									
L <sub>wA</sub> to environment, [dBA]	77	61	74	78	81	86	85	81	80

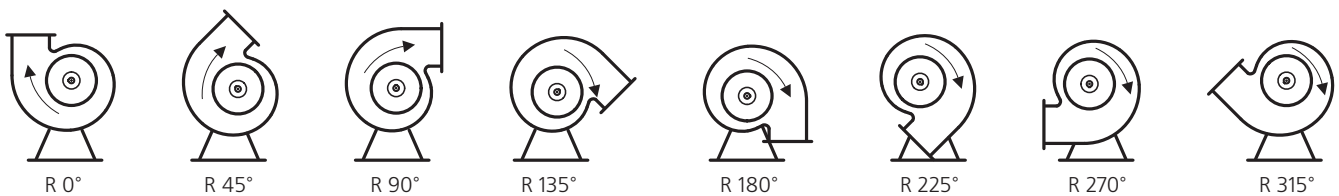


Sound-power level	Octave-frequency band [Hz]								
	Gen	63	125	250	500	1000	2000	4000	8000
<b>S-Vent 500x229-11.0-4D</b>									
L <sub>wA</sub> to environment, [dBA]	85	73	83	90	91	94	97	94	90

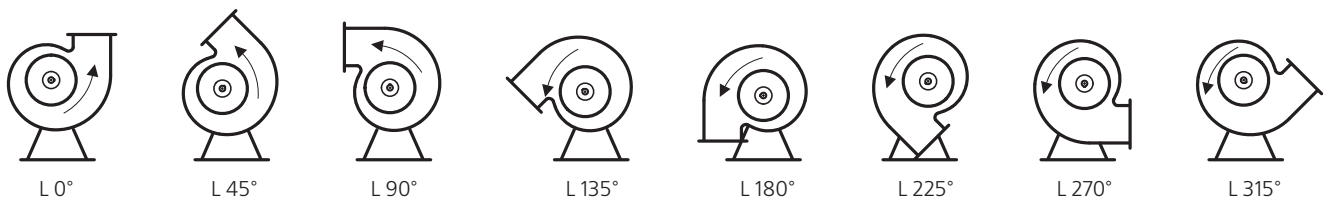
η <sub>i</sub> , (%)	MC	EC	N	VSD	[kW]	[A]	[m³/h]	[Pa]	[RPM]	SR
50.9	A	Static	50.6	No	10.5	23	10014	1972	1460	1

## Scroll orientation (view on the intake side)

### Right scroll orientation



### Left scroll orientation



■ Selection table for accessories:

Type	Rubber anti-vibration mounts	Spring-loaded anti-vibration mounts	Flange	Grille
S-Vent 140x74-0.25-4D	SI-G 8	SI-F 8	FRZ-SV 140	SG-SV 140
S-Vent 140x74-0.37-2D			FRZ-SV 160	SG-SV 160
S-Vent 160x74-0.55-4D				
S-Vent 160x74-0.75-2D				
S-Vent 180x74-0.55-4D				
S-Vent 180x74-1.1-2D				
S-Vent 200x93-0.55-4D				
S-Vent 200x93-1.1-2D				
S-Vent 225x103-1.1-4D				
S-Vent 225x103-2.2-2D				
S-Vent 240x114-2.2-4D	SI-G 16	SI-F 16	FRZ-SV 240	SG-SV 240
S-Vent 240x114-3.0-2D			FRZ-SV 250	SG-SV 250
S-Vent 250x127-1.5-6D				
S-Vent 250x127-2.2-4D				
S-Vent 250x127-5.5-2D				
S-Vent 280x127-1.5-6D				
S-Vent 280x127-2.2-4D				
S-Vent 280x127-5.5-2D				
S-Vent 315x143-2.2-6D	SI-G 26	SI-F 26	FRZ-SV 315	SG-SV 315
S-Vent 315x143-4.0-4D			FRZ-SV 355	SG-SV 355
S-Vent 355x143-2.2-6D				
S-Vent 355x143-4.0-4D				
S-Vent 400x183-1.5-8D	SI-G 35	SI-F 35	FRZ-SV 400	SG-SV 400
S-Vent 400x183-2.2-6D				
S-Vent 400x183-5.5-4D				
S-Vent 450x203-3.0-8D	SI-G 50	SI-F 50	FRZ-SV 450	SG-SV 450
S-Vent 450x203-4.0-6D				
S-Vent 450x203-11.0-4D				
S-Vent 500x229-5.5-8D	SI-G 75	SI-F 75	FRZ-SV 500	SG-SV 500
S-Vent 500x229-7.5-6D				
S-Vent 500x229-11.0-4D				

**Overall dimensions**

Type	Dimensions [mm]																	Weight [kg]
	∅D	∅d	∅d1	B	H	H1	H2	H3	L	L1	L2	P	M	I	G	K	S	
S-Vent 140x74-0.25-4D	140	8	10	242	323	125	92	144	309	125	95	124	220	234	18	253	80	9.3
S-Vent 140x74-0.37-2D	140	8	10	242	323	125	92	144	309	125	95	124	220	234	18	253	80	9.3
S-Vent 160x74-0.55-4D	160	8	10	277	373	134	106	173	356	134	104	141	220	260	17	252	90	12.7
S-Vent 160x74-0.75-2D	160	8	10	277	373	134	106	173	356	134	104	141	220	260	17	252	90	13.0
S-Vent 180x74-0.55-4D	180	10	10	311	414	143	120	193	365	143	114	146	270	270	22	314	90	13.5
S-Vent 180x74-1.1-2D	180	10	10	311	414	143	120	193	365	143	114	146	270	270	22	314	90	14.5
S-Vent 200x93-0.55-4D	200	10	10	345	436	160	134	193	380	160	129	158	270	284	24	315	90	15.2
S-Vent 200x93-1.1-2D	200	10	10	345	436	160	134	193	380	160	129	158	270	284	24	315	90	16.2
S-Vent 225x103-1.1-4D	225	10	12	388	507	178	151	232	432	172	141	174	275	316	27	330	100	21.2
S-Vent 225x103-2.2-2D	225	10	12	388	507	178	151	232	432	172	141	174	275	316	27	330	100	24.2
S-Vent 240x114-2.2-4D	240	10	12	414	568	186	161	282	461	186	156	195	275	362	27	330	125	30.5
S-Vent 240x114-3.0-2D	240	10	12	414	568	186	161	282	461	186	156	195	275	362	27	330	125	31.4
S-Vent 250x127-1.5-6D	250	10	12	431	594	202	168	292	473	202	166	206	300	373	27	355	125	33.0
S-Vent 250x127-2.2-4D	250	10	12	431	594	202	168	292	473	202	166	206	300	373	27	355	125	32.2
S-Vent 250x127-5.5-2D	250	10	12	431	614	202	168	312	517	202	166	213	300	397	27	355	140	40.0
S-Vent 280x127-1.5-6D	280	10	12	483	626	225	189	292	503	231	196	243	300	410	27	355	125	35.1
S-Vent 280x127-2.2-4D	280	10	12	483	626	225	189	292	503	231	196	243	300	410	27	355	125	34.2
S-Vent 280x127-5.5-2D	280	10	12	483	646	225	189	312	545	231	196	243	300	427	27	355	140	42.4
S-Vent 315x143-2.2-6D	315	10	15	543	731	250	213	353	568	255	216	268	350	452	27	405	140	46.8
S-Vent 315x143-4.0-4D	315	10	15	543	731	250	213	353	568	255	216	268	350	452	27	405	140	49.8
S-Vent 355x143-2.2-6D	355	10	15	611	817	275	241	403	566	255	214	253	350	442	32	405	140	49.0
S-Vent 355x143-4.0-4D	355	10	15	611	817	275	241	403	566	255	214	253	350	442	32	405	140	51.0
S-Vent 400x183-1.5-8D	400	10	15	689	870	310	272	403	619	310	268	313	400	497	27	455	140	57.1
S-Vent 400x183-2.2-6D	400	10	15	689	870	310	272	403	619	310	268	313	400	497	27	455	140	54.1
S-Vent 400x183-5.5-4D	400	10	15	689	882	310	272	414	662	330	289	341	400	525	27	455	140	69.5
S-Vent 450x203-3.0-8D	450	10	15	774	985	345	306	464	690	352	315	351	450	550	42	530	140	77.8
S-Vent 450x203-4.0-6D	450	10	15	774	985	345	306	464	690	352	315	351	450	550	42	530	140	76.5
S-Vent 450x203-11.0-4D	450	10	15	774	1005	345	306	484	722	352	315	371	450	608	42	530	178	105.0
S-Vent 500x229-5.5-8D	500	11	15	860	1115	390	341	534	761	401	353	408	500	645	42	580	178	85.0
S-Vent 500x229-7.5-6D	500	11	15	860	1115	390	341	534	761	401	353	408	500	645	42	580	178	86.0
S-Vent 500x229-11.0-4D	500	11	15	860	1115	390	341	534	761	401	353	408	500	645	42	580	178	107.0

