

Vent-Axia Sentinel D-Box Twin Fan

Features and Benefits

- Duct Sizes 100 – 500mm
- Performance - Airflow 0.01 to 1.2m³/s, Pressure up to 650Pa
- Sentinel demand ventilation fan controller with lockable isolator
- Latest energy saving EC/DC motors
- Internal or external models (IPX2 or IPX5)
- Manufactured controlled to BS EN ISO 9001
- Performance tested to BS848 Part 1 & 2

The Sentinel twin in-line duct fans are as supplied from Vent-Axia Ltd. Manufactured from prime quality galvanised sheet steel, Sentinel fan units are internally treated with an 'O' class rated, BS476 part 6 & 7, acoustic foam, which offers the benefits of high sound absorption, good thermal insulation properties in addition to self extinguishing properties and resistant to ignition.

Weatherproof external units incorporate controller shrouds and are coated externally with a polyurethane finish.

The housing is designed to be as compact as possible for concealed false ceiling applications and Sentinel casings are specially designed to allow the unit to be mounted via its unique mounting bracket, ensuring a quick and easy solution to installation.

The unit is suitable for ceiling or floor mounting, non-return dampers can be easily rotated on site to suit.

Impellers

All Sentinel units feature a low energy, Class 1, EC/DC external rotor motor and backward curved impeller assembly specifically chosen for performance and non-overloading characteristics. The assembly is dynamically balanced to DIN ISO 1940 Grade 6.3, duct size 500mm rated IP54, all other sizes, IP44 according to BS EN 60529. Ball bearings are greased for life. Insulation is Class 'B' (from -25°C to +60°C).

All models incorporate internal electronic overload protection and soft start function.

Electrical

Every Sentinel unit is fitted with a purpose designed common PCB controller incorporating a 16-character backlit alphanumeric x 2 line display with 4 button membrane keypad for fan status & commissioning set up. The enclosure is fitted with a 4-pole 10A isolator that is suitable for fitting a locking device to prevent accidental operation.

The twin unit controller features automatic 6hr duty/share and run/standby in the event of motor failure.

Motors are single phase 230V +/- 10% / 50/60Hz / 1ph (size 100-400mm) or 400V +/- 10% / 50/60Hz / 3ph (size 500mm), (4 wire systems only).

24V DC power is provided from the controller for powering the matched range of Sentinel switches and sensors.

Performance/Sound

Extensively tested to BS848 parts 1 & 2. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at reference level of 2x10⁻⁵Pa. The inlet/outlet sound power level spectra figures are dB with a reference of 10⁻¹² watts.

Weatherproof Typical Ordering Designation

Ordering Codes are similar to existing units with Suffix.... /WP which denotes Weatherproof finish.

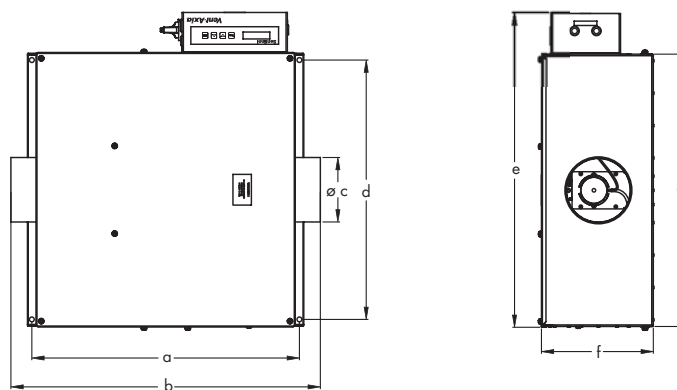
Example SENT100T/CP/WP

Accessories

For duct accessories see Ducting and Fitting Section.



Fan Dimensions (mm)



Hierarchy	Constant	Duct Diameter mm							Weight
Model	Pressure Model	c	a	b	d	e	f	g	Kg
SENT100T	SENT100T/CP	100	610	705	591	717	256	622	26
SENT125T	SENT125T/CP	125	610	705	591	717	256	622	26
SENT150T	SENT150T/CP	150	610	705	591	717	256	622	26
SENT200T	SENT200T/CP	200	801	896	703	830	343	734	39
SENT250T	SENT250T/CP	250	925	1020	798	925	354	829	48
SENT315T	SENT315T/CP	315	1255	1353	1145	1272	536	1176	88
SENT400T	SENT400T/CP	400	1255	1353	1145	1272	536	1176	90
SENT500T	SENT500T/CP	500	1492	1590	1533	1661	675	1564	175

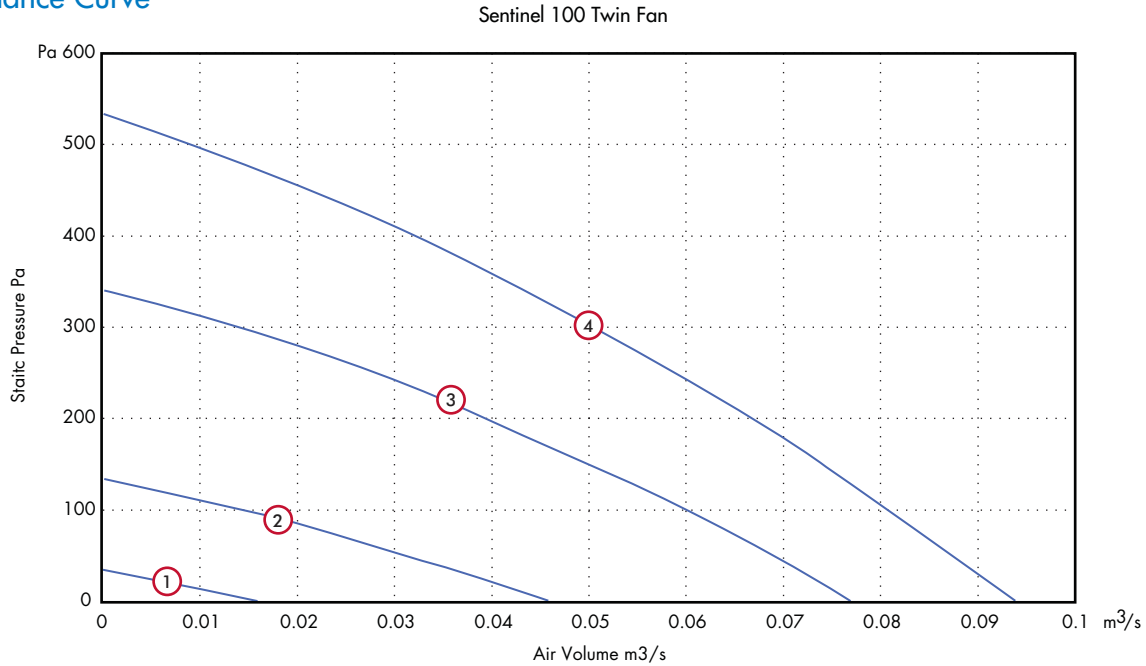
Accessories

Hierarchy	Anti-Vibration	*Duct	Heat	
Model	Mounts	attenuator 600mm	exchange unit	
Model	Stock Ref.	Stock Ref.	Stock Ref.	
SENT100T	SENT100T/CP 10523033	10531100T1	10532100A 10533100 10535100	-
SENT125T	SENT125T/CP 10523033	10531125T1	10532125A 10533125 10535125	-
SENT150T	SENT150T/CP 10523033	10531150T1	10532150A 10533150 10535150	-
SENT200T	SENT200T/CP 10523033	10531200T1	10532200A 10533200 10535200	10538290 +10577315 +10578315
SENT250T	SENT250T/CP 10523033	10531250T1	10532250A 10533250 10535250	10538290 +10577315 +10578315
SENT315T	SENT315T/CP 10523033	10531315T1	10532315A 10533315 10535315	10538290 +10577315
SENT400T	SENT400T/CP 10523033	10531400T3	10532400A 10533400 10535400	-
SENT500T	SENT500T/CP 10523033	10531500T3	10532500A 10533500 10536500*	-

*For alternative attenuator lengths, refer to Accessories and Controllers section

Vent-Axia Sentinel D-Box Twin Fan

Performance Curve



Performance Guide

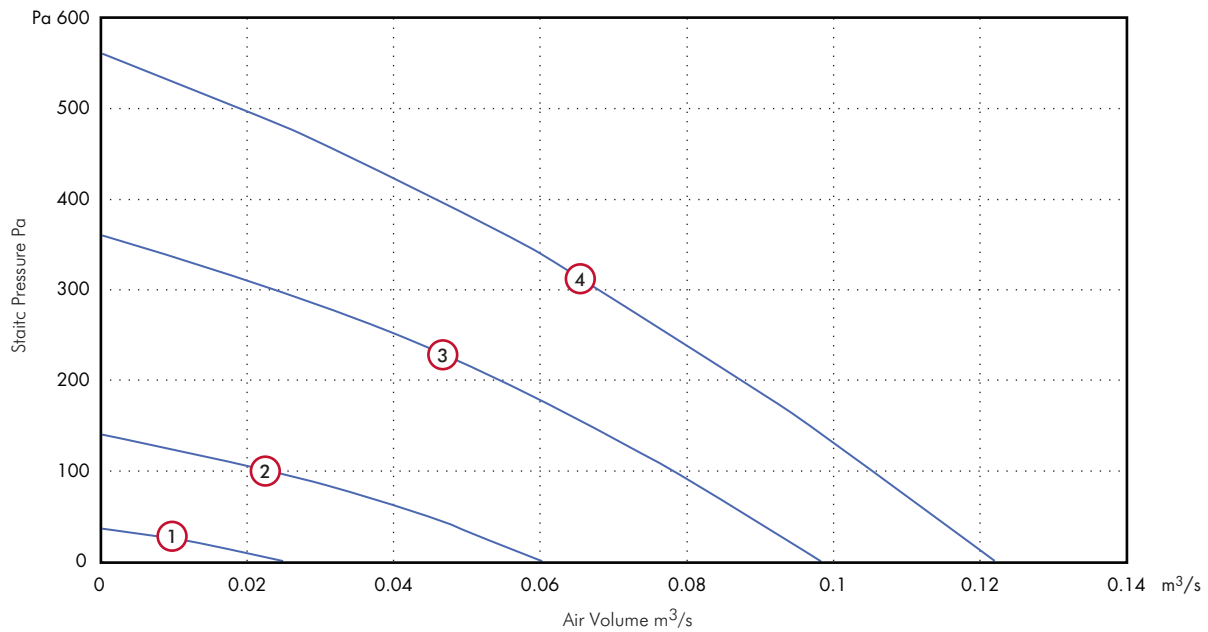
Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																Amps F.L.C
				0	25	50	75	100	125	150	200	250	300	350	400	450	500	550		
100%	1	Airflow	4	0.094	0.091	0.087	0.084	0.081	0.077	0.074	0.067	0.059	0.051	0.042	0.032	0.021	0.009	0.002	0.69	
100%	1	SFP		0.9	0.93	0.97	1.01	1.04	1.1	1.14	1.26	1.43	1.66	2.01	-	-	-	-	0.69	
80%	1	Airflow	3	0.077	0.073	0.069	0.064	0.06	0.055	0.05	0.039	0.027	0.014	0.007					0.5	
80%	1	SFP		0.5	0.53	0.56	0.6	0.64	0.7	0.77	0.99	1.43	2.75	-					0.5	
50%	1	Airflow	2	0.046	0.039	0.031	0.023	0.014	0.004										0.16	
50%	1	SFP		0.46	0.55	0.69	0.92	1.52	-										0.16	
25%	1	Airflow	1	0.016	0.004														0.08	
25%	1	SFP		0.49	1.95														0.08	

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	54.7	61.5	61.3	60.5	51.1	47.2	40.5	36.6	34.2
100%	Outlet	58.6	63.8	58.4	57.3	53.8	55.5	49.1	41.3	38.4
100%	Breakout	58.4	64	62.6	55.7	45.7	42.7	39.4	37.6	37
80%	Inlet	49.8	56.6	56.5	55.7	46.3	42.4	35.7	31.7	29.4
80%	Outlet	53.7	58.9	53.5	52.5	48.9	50.6	44.3	36.4	33.6
80%	Breakout	53.5	59.2	57.8	50.8	40.9	37.9	34.5	32.7	32.2
50%	Inlet	39.6	46.4	46.3	45.5	36.1	32.1	25.5	21.5	19.1
50%	Outlet	43.5	48.7	43.3	42.3	38.7	40.4	34.1	26.2	23.3
50%	Breakout	43.3	49	47.6	40.6	30.7	27.6	24.3	22.5	22
25%	Inlet	24.5	31.3	31.2	30.4	21	17.1	10.4	6.5	19.7
25%	Outlet	28.4	33.6	28.2	27.2	23.6	25.3	19	11.1	14.9
25%	Breakout	28.2	33.9	32.5	25.5	15.6	12.6	9.2	7.4	20.4

Performance Curve

Sentinel 125 Twin Fan



Performance Guide

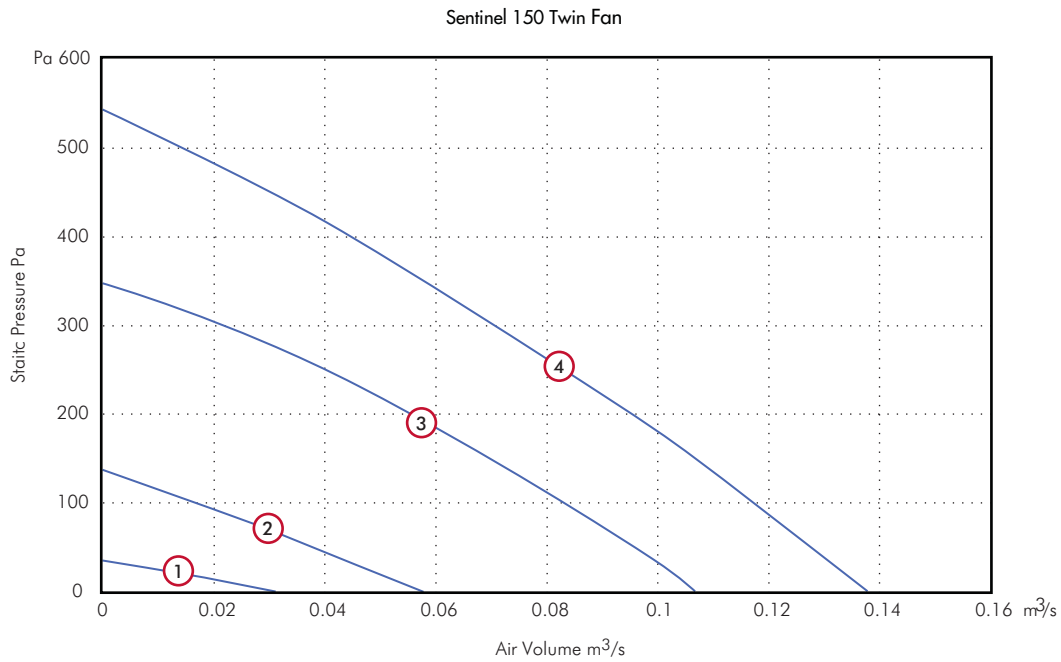
Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																Amps F.L.C
				0	25	50	100	125	150	200	250	300	350	400	450	500	550			
100%	1	Airflow	4	0.122	0.118	0.114	0.106	0.101	0.097	0.088	0.078	0.068	0.057	0.046	0.033	0.019	0.004	0.72		
100%	1	SFP		0.71	0.73	0.76	0.81	0.85	0.89	0.98	1.11	1.27	1.51	1.88	-	-	-	0.72		
80%	1	Airflow	3	0.098	0.093	0.088	0.078	0.072	0.066	0.054	0.04	0.024	0.004					0.51		
80%	1	SFP		0.4	0.42	0.45	0.51	0.55	0.6	0.73	0.99	1.64	-					0.51		
50%	1	Airflow	2	0.06	0.052	0.044	0.023	0.01										0.18		
50%	1	SFP		0.36	0.42	0.5	0.95	2.19										0.18		
25%	1	Airflow	1	0.025	0.009													0.09		
25%	1	SFP		0.33	0.92													0.09		

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	62.6	64	66.6	64.1	54	49.7	40.8	38.4	37.3
100%	Outlet	61.9	65.7	63.5	62.4	58.4	60.4	53.7	47.3	43.3
100%	Breakout	69.7	61.5	62.4	56	47.2	45.2	38.3	33.8	37.2
80%	Inlet	57.8	59.1	61.8	59.2	49.2	44.8	36	33.6	32.5
80%	Outlet	57.1	60.8	58.7	57.5	53.5	55.5	48.9	42.4	38.4
80%	Breakout	64.8	56.7	57.6	51.2	42.4	40.4	33.4	28.9	32.4
50%	Inlet	47.6	48.9	51.6	49	39	34.6	25.8	23.4	22.3
50%	Outlet	46.9	50.6	48.5	47.4	43.3	45.3	38.7	32.2	28.2
50%	Breakout	54.6	46.5	47.4	41	32.2	30.2	23.2	18.7	23.2
25%	Inlet	32.5	33.9	36.5	34	23.9	19.6	10.7	8.3	18.8
25%	Outlet	31.8	35.6	33.4	32.3	28.3	30.3	23.6	17.2	14.5
25%	Breakout	39.6	31.4	32.3	25.9	17.1	15.1	8.2	3.7	22.3

Vent-Axia Sentinel D-Box Twin Fan

Performance Curve



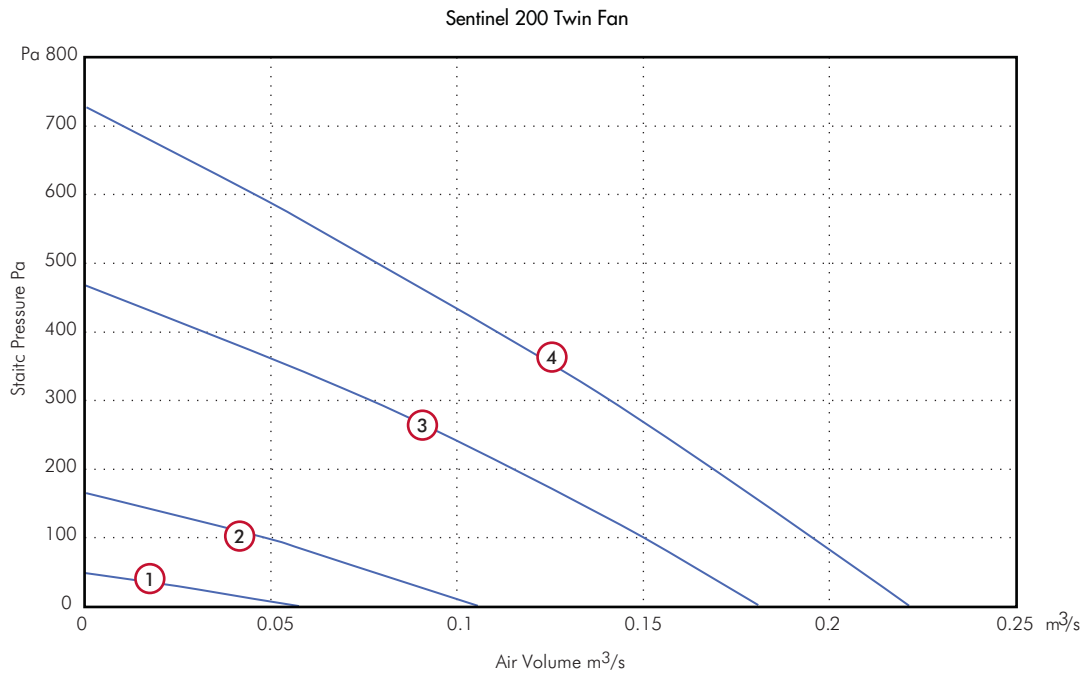
Performance Guide

Speed	Phase	Performance	Curve	Airflow, m³/s @ Pa																Amps
				Ref.	0	25	50	100	125	150	200	250	300	325	350	400	450	500	525	
100%	1	Airflow	4	0.138	0.133	0.128	0.117	0.112	0.106	0.095	0.083	0.071	0.065	0.058	0.044	0.03	0.014	0.006	0.71	
100%	1	SFP		0.62	0.64	0.66	0.73	0.76	0.8	0.9	1.03	1.2	1.31	1.47	1.93	-	-	-	0.71	
80%	1	Airflow	3	0.107	0.101	0.096	0.083	0.077	0.07	0.056	0.04	0.021	0.011						0.48	
80%	1	SFP		0.37	0.39	0.41	0.48	0.51	0.57	0.71	0.99	1.89	-						0.48	
50%	1	Airflow	2	0.058	0.048	0.038	0.016	0.005											0.17	
50%	1	SFP		0.37	0.45	0.57	1.35	-											0.17	
25%	1	Airflow	1	0.031	0.011														0.08	
25%	1	SFP		0.26	0.73														0.08	

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	58.6	65.9	68.1	65.8	54.1	50.6	42.9	41.5	39.7
100%	Outlet	59.3	68.7	66.8	63.5	60	61.9	56	49.5	45.2
100%	Breakout	66	62	61.9	59.8	50.8	48.4	40.2	37.1	39.2
80%	Inlet	53.7	61.1	63.2	61	49.2	45.8	38.1	36.7	33.8
80%	Outlet	54.5	63.8	62	58.7	55.2	57.1	51.1	44.7	40.4
80%	Breakout	61.1	57.2	57	55	45.9	43.6	35.3	32.3	34.4
50%	Inlet	43.5	50.9	53	50.8	39	35.6	27.8	26.5	24.6
50%	Outlet	44.3	53.6	51.8	48.5	45	46.9	40.9	34.5	30.1
50%	Breakout	50.9	47	46.8	44.8	35.7	33.4	25.1	22.1	24.2
25%	Inlet	28.5	35.8	38	35.7	24	20.6	12.8	11.4	17.2
25%	Outlet	29.2	38.6	36.7	33.5	30	31.8	25.9	19.4	15.1
25%	Breakout	35.9	32	31.8	29.7	20.7	18.3	10.1	7	19.6

Performance Curve



Performance Guide

Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																	Amps F.L.C
				0	25	50	100	150	200	250	300	350	400	450	500	550	600	650	700		
100%	1	Airflow	4	0.222	0.216	0.209	0.196	0.182	0.168	0.154	0.14	0.125	0.11	0.094	0.079	0.062	0.046	0.028	0.011	1.4	
100%	1	SFP		0.77	0.79	0.82	0.87	0.94	1.02	1.11	1.22	1.37	1.56	1.82	2.17	-	-	-	-	1.4	
80%	1	Airflow	3	0.181	0.173	0.165	0.149	0.132	0.115	0.096	0.076	0.056	0.033	0.009						1.07	
80%	1	SFP		0.47	0.5	0.52	0.57	0.65	0.74	0.89	1.13	1.53	2.6	-						1.07	
50%	1	Airflow	2	0.106	0.092	0.077	0.046	0.011												0.2	
50%	1	SFP		0.27	0.31	0.37	0.62	2.58												0.2	
25%	1	Airflow	1	0.058	0.029															0.09	
25%	1	SFP		0.15	0.3															0.09	

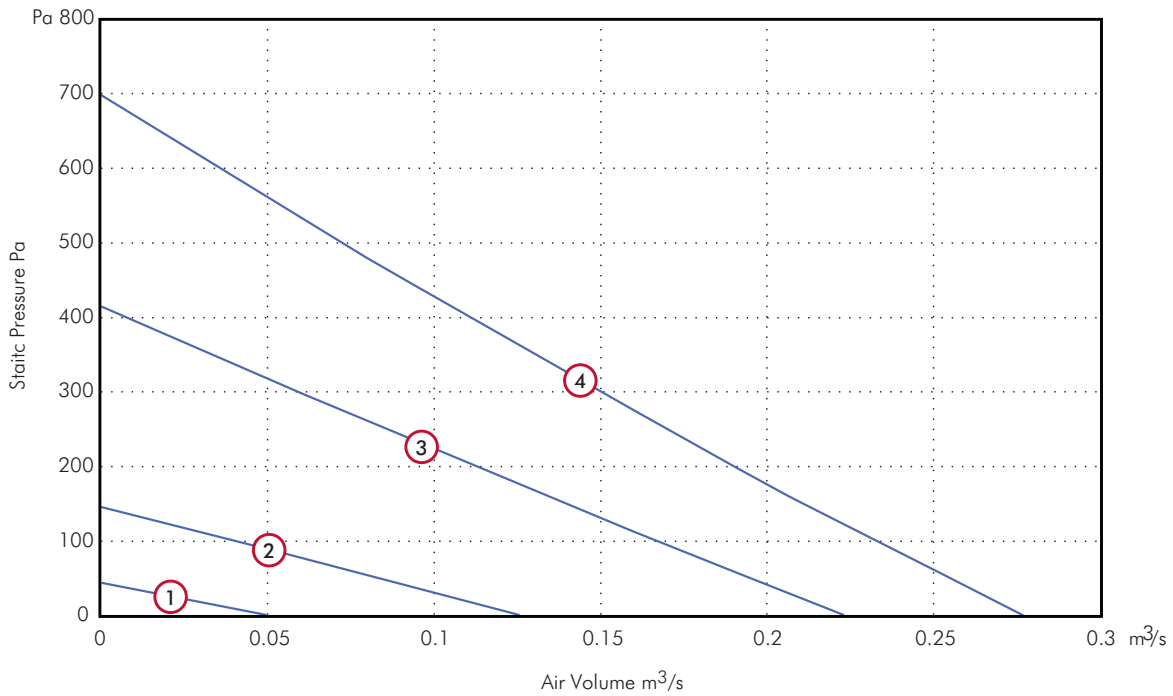
Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	60.6	71.5	66.8	70.7	64.1	57.3	53.2	49	46
100%	Outlet	63.3	74.7	66.6	80.4	70.2	68.6	64.6	58	55
100%	Breakout	66	69	63.2	66.3	57.4	52.6	45.5	37	44.7
80%	Inlet	55.8	66.7	61.9	65.8	59.3	52.5	48.4	44.2	41.1
80%	Outlet	58.4	69.8	61.7	75.6	65.4	63.7	59.8	53.2	50.3
80%	Breakout	61.2	64.2	58.4	61.4	52.5	47.8	40.6	32.1	39.9
50%	Inlet	45.6	56.5	51.7	55.6	49.1	42.2	38.2	34	30.9
50%	Outlet	48.2	59.6	51.5	65.3	55.2	53.5	49.6	43	40.1
50%	Breakout	51	54	48.2	51.2	42.3	37.6	30.4	21.9	29.7
25%	Inlet	30.5	41.4	36.7	40.6	34	27.2	23.1	18.9	15.9
25%	Outlet	33.2	44.6	36.5	50.3	40.1	38.5	34.5	27.9	25
25%	Breakout	36	38.9	33.2	36.2	27.3	22.6	15.4	6.9	19.2

Vent-Axia Sentinel D-Box Twin Fan

Performance Curve

Sentinel 250 Twin Fan



Performance Guide

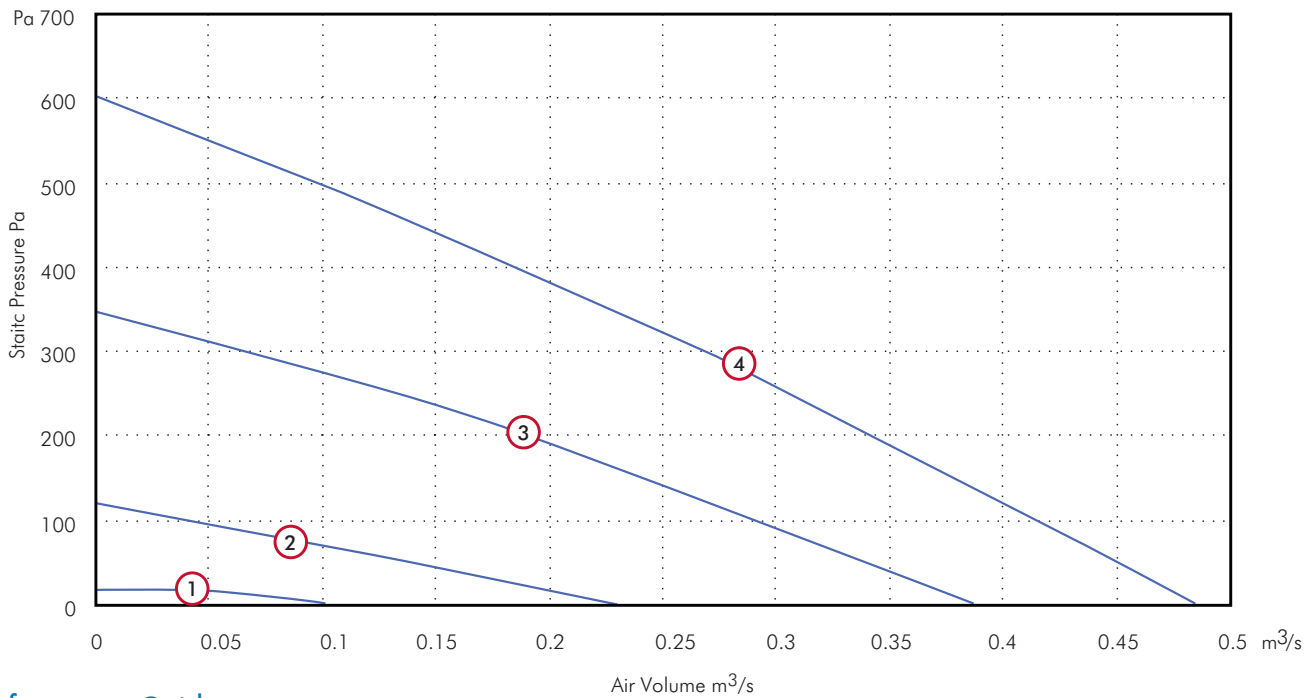
Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																Amps F.L.C
				0	25	50	100	125	150	200	250	300	350	400	450	500	550	600	650	
100%	1	Airflow	4	0.277	0.265	0.254	0.232	0.221	0.211	0.189	0.169	0.148	0.129	0.109	0.09	0.071	0.053	0.035	0.017	1.4
100%	1	SFP		0.56	0.58	0.61	0.66	0.7	0.73	0.81	0.91	1.04	1.19	1.41	1.71	2.17	-	-	-	1.4
80%	1	Airflow	3	0.223	0.209	0.194	0.166	0.152	0.139	0.111	0.085	0.059	0.033	0.008						0.92
80%	1	SFP		0.34	0.37	0.39	0.46	0.5	0.55	0.69	0.9	1.29	2.31	-						0.92
50%	1	Airflow	2	0.126	0.104	0.082	0.039	0.017												0.2
50%	1	SFP		0.22	0.27	0.34	0.72	1.65												0.2
25%	1	Airflow	1	0.05	0.021															0.09
25%	1	SFP		0.18	0.43															0.09

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	61.7	70.5	62.2	70.9	60.2	51.8	51.2	47.8	45.1
100%	Outlet	63.9	74.3	63.6	76.2	67.5	66.2	60.9	55.9	52.4
100%	Breakout	66.7	66.8	62.3	67.8	56.3	52.3	44.2	39.9	45.4
80%	Inlet	56.9	65.7	57.3	66	55.4	46.9	46.3	43	40.2
80%	Outlet	59.1	69.5	58.8	71.3	62.6	61.4	56	51.1	47.6
80%	Breakout	61.8	62	57.4	62.9	51.4	47.5	39.3	35	40.5
50%	Inlet	46.8	55.6	47.3	56	45.3	36.8	36.2	32.9	30.1
50%	Outlet	49	59.4	48.7	61.2	52.5	51.3	46	41	37.5
50%	Breakout	51.7	51.9	47.4	52.8	41.4	37.4	29.2	25	30.4
25%	Inlet	31.6	40.4	32.1	40.8	30.1	21.6	21	17.7	16.7
25%	Outlet	33.8	44.2	33.5	46.1	37.3	36.1	30.8	25.8	22.3
25%	Breakout	36.6	36.7	32.2	37.6	26.2	22.2	14.1	9.8	18.3

Performance Curve

Sentinel 315 Twin Fan



Performance Guide

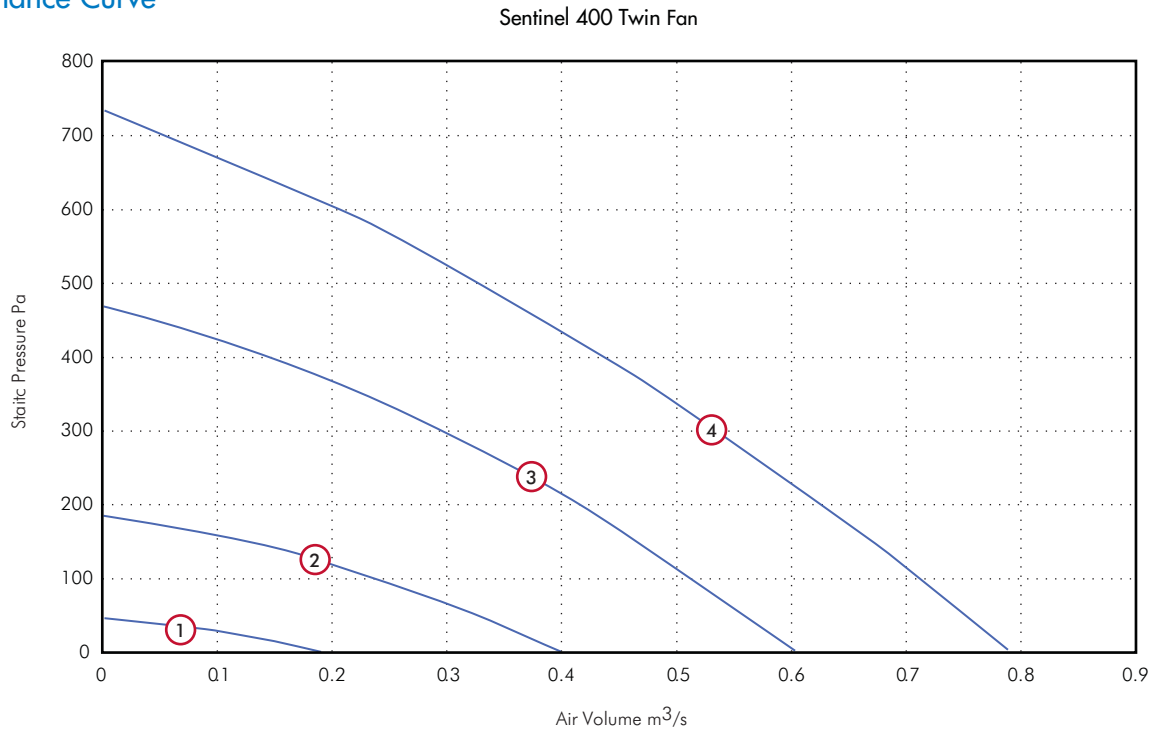
Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																Amps FLC
				0	50	100	150	200	250	300	325	350	400	450	500	525	550	600		
100%	1	Airflow	4	0.485	0.451	0.416	0.381	0.344	0.306	0.268	0.248	0.228	0.186	0.143	0.098	0.075	0.051	0.002	1.40	
100%	1	SFP		0.36	0.39	0.43	0.46	0.51	0.58	0.66	0.71	0.78	0.95	1.24	1.81	2.36	-	-	1.40	
80%	1	Airflow	3	0.387	0.342	0.295	0.246	0.192	0.134	0.07	0.036								0.60	
80%	1	SFP		0.23	0.26	0.30	0.36	0.46	0.66	1.27	2.47								0.60	
50%	1	Airflow	2	0.233	0.143	0.041													0.20	
50%	1	SFP		0.13	0.22	0.77													0.20	
25%	1	Airflow	1	0.106															0.09	
25%	1	SFP		0.13															0.09	

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	64.4	70	65.8	64.6	58.6	50.3	47.4	44.6	41.5
100%	Outlet	65.7	72	64.5	71.9	64.7	64.2	58.1	51.9	49.7
100%	Breakout	68	65.9	64	60.1	53.3	48.9	41.3	34.1	40.5
80%	Inlet	59.6	65.1	61	59.7	53.7	45.4	42.5	39.7	36.7
80%	Outlet	60.8	67.2	59.7	67.1	59.9	59.3	53.2	47.1	44.9
80%	Breakout	63.1	61.1	59.2	55.2	48.4	44	36.5	29.3	35.7
50%	Inlet	49.3	54.9	50.7	49.5	43.5	35.2	32.3	29.5	26.4
50%	Outlet	50.6	56.9	49.4	56.8	49.6	49.1	43	36.8	34.6
50%	Breakout	52.8	50.8	48.9	45	38.2	33.7	26.2	19	25.4
25%	Inlet	34.3	39.9	35.7	34.5	28.5	20.2	17.3	14.5	14.8
25%	Outlet	35.6	42	34.4	41.8	34.6	34.1	28	21.8	19.6
25%	Breakout	37.9	35.8	33.9	30	23.2	18.8	11.2	4	20.4

Vent-Axia Sentinel D-Box Twin Fan

Performance Curve



Performance Guide

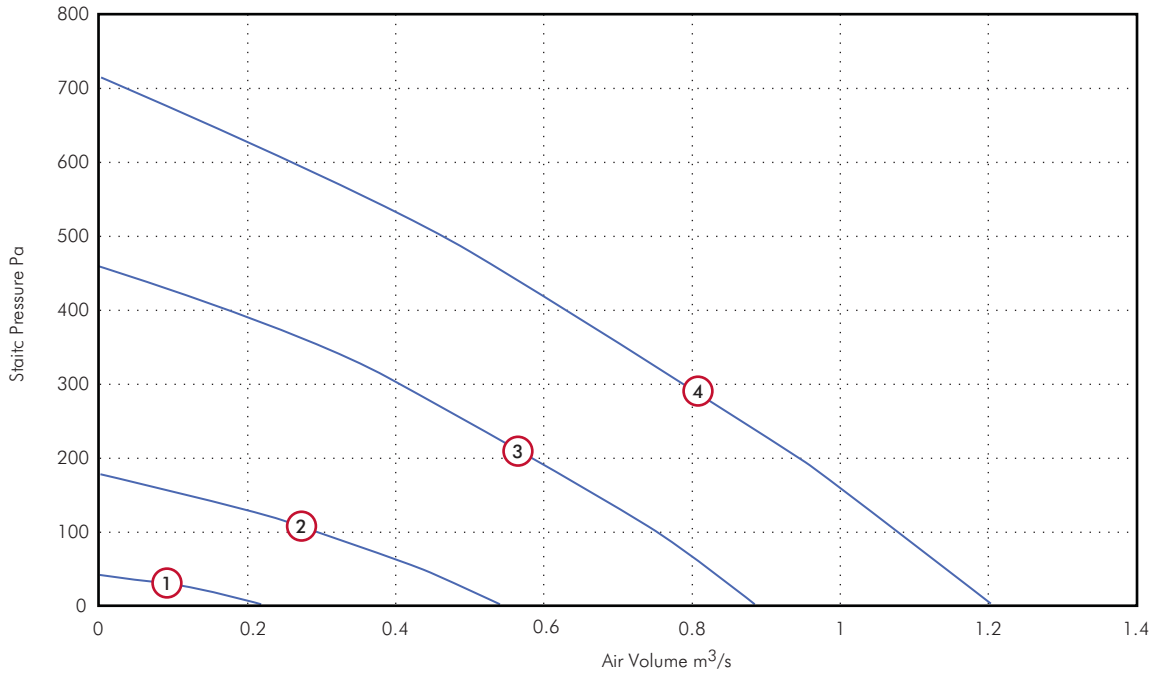
Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																Amps F.L.C
				0	25	50	100	125	150	200	250	300	350	400	450	500	550	600	650	
100%	1	Airflow	4	0.79	0.771	0.751	0.711	0.669	0.648	0.626	0.582	0.536	0.488	0.437	0.384	0.328	0.269	0.205	0.136	2.86
100%	1	SFP		0.58	0.59	0.61	0.64	0.68	0.71	0.73	0.79	0.85	0.94	1.05	1.19	1.4	1.7	2.23	-	2.86
80%	1	Airflow	3	0.605	0.583	0.561	0.515	0.466	0.44	0.414	0.357	0.295	0.226	0.146	0.048					2.02
80%	1	SFP		0.35	0.36	0.37	0.41	0.45	0.48	0.5	0.59	0.71	0.93	1.43	-					2.02
50%	1	Airflow	2	0.399	0.363	0.325	0.236	0.121	0.038											0.77
50%	1	SFP		0.27	0.3	0.34	0.46	0.9	-											0.77
25%	1	Airflow	1	0.193	0.113															0.19
25%	1	SFP		0.11	0.19															0.19

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	73	82.9	75.8	69.4	63	55.9	53.6	49.8	49.2
100%	Outlet	75.5	83.8	79.5	78.5	74.7	71	64.8	57.3	58.7
100%	Breakout	77.6	80.7	80.5	72.8	66.6	60.4	50.9	41.7	54.7
80%	Inlet	68.2	78.1	71	64.6	58.2	51.1	48.8	44.9	44.3
80%	Outlet	70.6	78.9	74.6	73.7	69.9	66.1	59.9	52.4	53.6
80%	Breakout	72.7	75.9	75.6	68	61.7	55.5	46.1	36.9	49.9
50%	Inlet	58	67.9	60.7	54.4	47.9	40.9	38.6	34.7	34.1
50%	Outlet	60.4	68.7	64.4	63.5	59.7	55.9	49.7	42.2	43.6
50%	Breakout	62.5	65.6	65.4	57.8	51.5	45.3	35.9	26.7	39.7
25%	Inlet	42.9	52.9	45.7	39.4	32.9	25.8	23.6	19.7	19.1
25%	Outlet	45.4	53.7	49.4	48.4	44.6	40.9	34.7	27.2	28.6
25%	Breakout	47.5	50.6	50.4	42.8	36.5	30.3	20.8	11.6	24.9

Performance Curve

Sentinel 500 Twin Fan



Performance Guide

Speed	Phase	Performance	Curve Ref.	Airflow, m³/s @ Pa																Amps F.L.C
				0	25	50	100	150	175	200	250	300	350	400	450	500	550	600	650	
100%	3	Airflow	4	1.203	1.173	1.141	1.077	1.01	0.976	0.942	0.871	0.797	0.72	0.64	0.555	0.466	0.371	0.269	0.159	2.1
100%	3	SFP		0.54	0.55	0.57	0.6	0.64	0.66	0.68	0.74	0.81	0.9	1.01	1.16	1.38	1.74	-	-	2.1
80%	3	Airflow	3	0.887	0.853	0.819	0.746	0.669	0.629	0.588	0.499	0.403	0.296	0.173	0.024					1.6
80%	3	SFP		0.3	0.31	0.33	0.36	0.4	0.43	0.46	0.54	0.67	0.91	1.55	-					1.6
50%	3	Airflow	2	0.544	0.489	0.43	0.297	0.129	0.018											0.67
50%	3	SFP		0.36	0.4	0.46	0.67	1.53	-											0.67
25%	3	Airflow	1	0.224	0.115															0.39
25%	3	SFP		0.36	0.71															0.39

Sound Data

Speed	Test Mode	Octave Band Frequency SWL								dB(A) @3m
		63	125	250	500	1k	2k	4k	8k	
100%	Inlet	74.9	86.2	77.4	72.7	62.3	56.4	52.6	52.5	52.1
100%	Outlet	78.6	85.1	84.5	78	74.3	69	63.5	58.5	59.2
100%	Breakout	68.5	63.6	60.3	54.5	47.6	41.1	30.4	30.9	35.8
80%	Inlet	70	81.4	72.6	67.9	57.4	51.6	47.7	47.7	47.3
80%	Outlet	73.7	80.3	79.6	73.2	69.4	64.2	58.7	53.6	54.3
80%	Breakout	63.6	58.8	55.4	49.7	42.7	36.3	25.6	26.1	31
50%	Inlet	59.8	71.2	62.4	57.7	47.2	41.4	37.5	37.5	37.1
50%	Outlet	63.5	70.1	69.4	63	59.2	54	48.5	43.4	44.1
50%	Breakout	53.4	48.6	45.2	39.5	32.5	26.1	15.4	15.9	21.4
25%	Inlet	44.8	56.1	47.3	42.6	32.1	26.3	22.5	22.4	22
25%	Outlet	48.5	55	54.3	47.9	44.2	38.9	33.4	28.4	29
25%	Breakout	38.3	33.5	30.1	24.4	17.4	11	10.7	9.9	21