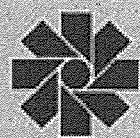
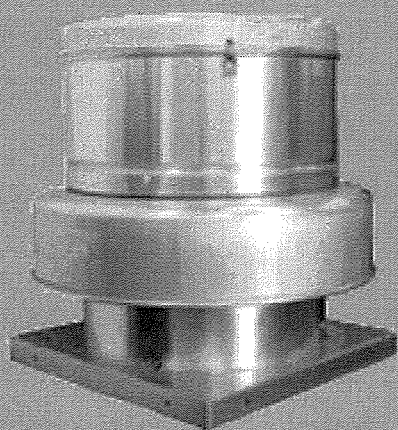
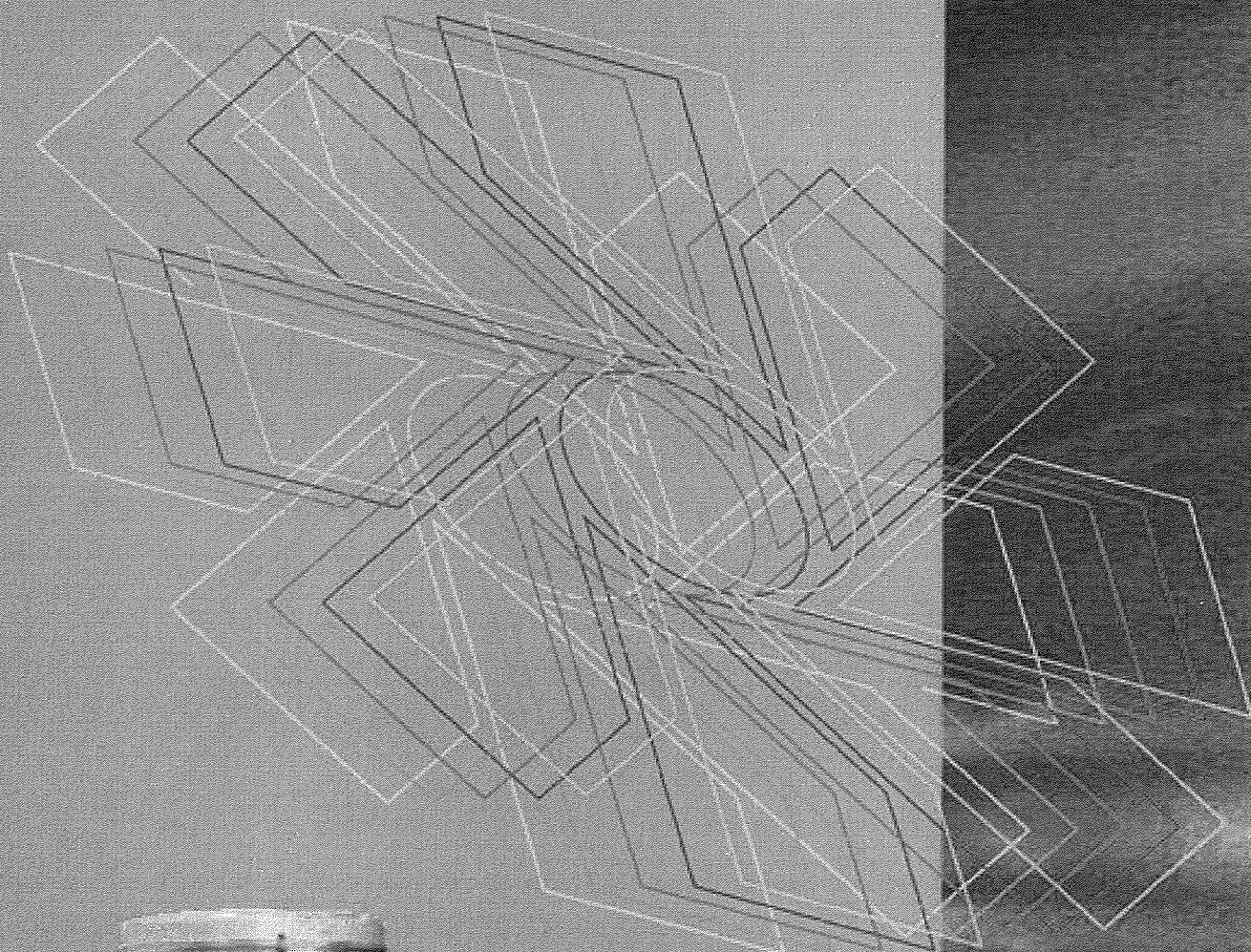


FCS

Roof Exhaust Centrifugal Fan



DYNAIR

CATALOGUE - FCS
APRIL 2009



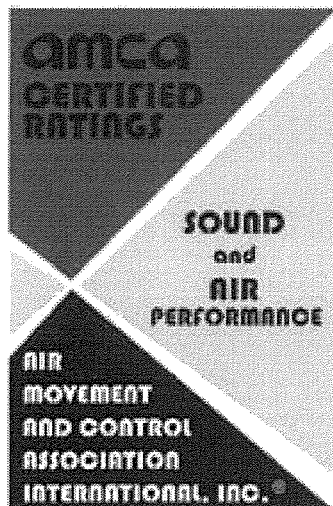
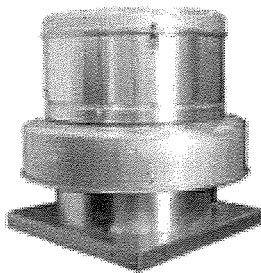
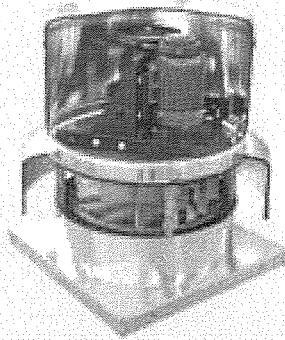
FCS

Roof Exhaust Centrifugal Fan



DYNAIR®

section 1
page 1



AMCA Sound & Air Performance Seal

PRODUCT FEATURES

Noise
Balancing G2.5
Extended Fan life
Quiet and Low Noise

Centrifugal Impeller
2nd Generation Wind, Surfer™ Centrifugal wheel:
Low noise while pressurizing compared with 1st
Generation
Auxiliary blades suck in air :negative pressure in drive
chamber

Active cooling
Long lasting motor and bearing
Fan away from polluted area
Fresh air cooling driven chamber

Fan design
Enhance building appearances
Silver white metallic lustre casing harmonious with build-
ing colors

Fan application
Drive out contaminated air
Fan away from polluted area
Ideal for lub grease,kitchen,dust
All aluminium construction, explosive resistant exhaust

Low weight
Casing and Impeller : Aluminium alloy material
Reduce of roof load reinforcement structure cost saved

Dynair Gulf FZCO Certifies that the model FCS shown
herein is licensed to bear the AMCA Seal. The ratings
shown are based on tests and procedures performed
with AMCA Publication 211 and AMCA 311 and
comply with the requirements of the AMCA Certified
Ratings Program

**GENERAL DESCRIPTION****Belt driven**

FCS Centrifugal roof exhaust fans are downblast configuration and suitable for roof mounted applications exhausting relatively clean air. This model has explosion proof option.

Housing

The fan housing and hood are made of heavy gauge aluminium alloy. The wind band has a rigid internal support structure of water tight during heavy rain.

Impeller

The impeller is backward curved centrifugal type made of heavy gauge aluminium alloy. The inlet venturi guide the air smoothly with low noise at inlet. The impeller is balanced statically and dynamically to level G2.5 as per ISO standard No. 1940.

Shaft

The fan shaft shall be sized for a minimum of 150% of driven horsepower. Pulleys shall be of cast iron keyed and securely attached to the impeller and the motor shafts. Conical (QD) type bushings shall be equipped for easy removal of the pulley.

Bearings

The bearing shall be selected for a minimum (L-10) life in excess of 80,000 hours at maximum catalogued operating speed. Bearing type shall be permanently sealed, re-lubricable pillow block metal ball bearings.

Drive Support:

Drive assemblies shall be supported by heavy gauge powder coated steel. The belt tension shall be adjusted through motor support plate, the design shall make sure the fan shaft is always parallel.

Pulleys

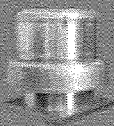
The fan pulleys shall be sized for a minimum of 150% of driven horsepower. Pulleys shall be of cast iron type, keyed and securely attached to the wheel and motor shafts. Conical (QD) type bushings shall be equipped for easy removal of the pulleys.

Motor

The motor shall be carefully matched to the fan load, IP 55 and insulation class F. The motor bearings shall be ball type and need not lubrication.

Quality Standards

Roof Exhaust Centrifugal fans shall be tested and approved according to AMCA standard 210 &

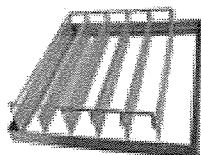


FCS



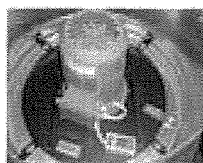
DYNAIR®

OPTIONAL ACCESSORIES



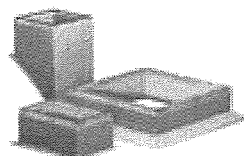
Gravity back-draft damper

Carefully designed back-draft damper with aluminum blades cross linked can stop the backflow or external air and it would not generate condensed water.



Service Switch

The service switch is to be installed inside the fan or on the roof close to the fan, the usage is only to make sure the power supply can be reliably shut off while repairing the fan, and it is not supposed to start/stop the fan for daily operation.



Curb Adapter

The curb adapter is to adapt ready-made roof curb to fit FCS fans when size does not match. The adapter can convert from smaller range to bigger range and viceversa. Existing roof curb is required when ordering.

REFERENCE CODE

FCS 300 B 4 0.25

①

②

③

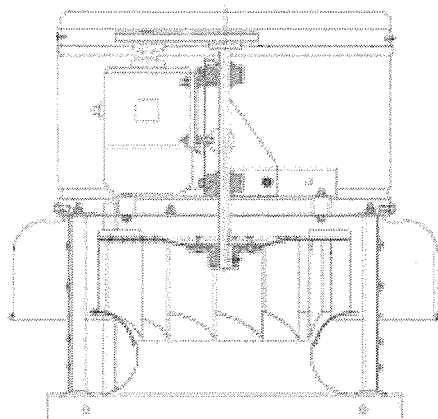
④

0.25kW : Motor Power

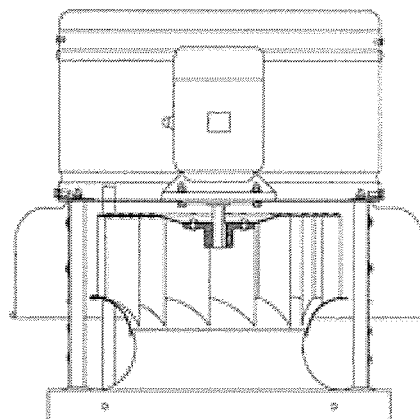
B4 : Belt drive 4 Pole motor

300 : Diameter of the Impeller 300mm

Model : FCS - Roof Exhaust Centrifugal Fan



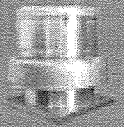
FCS - B (Belt - drive)



FCS - D (Direct - drive)

section 1

page 3



EXAMPLE OF CURVE READING

section 1
page 4

Terminology of Performance curve

Each Fan performance curve shows a group of different RPM.

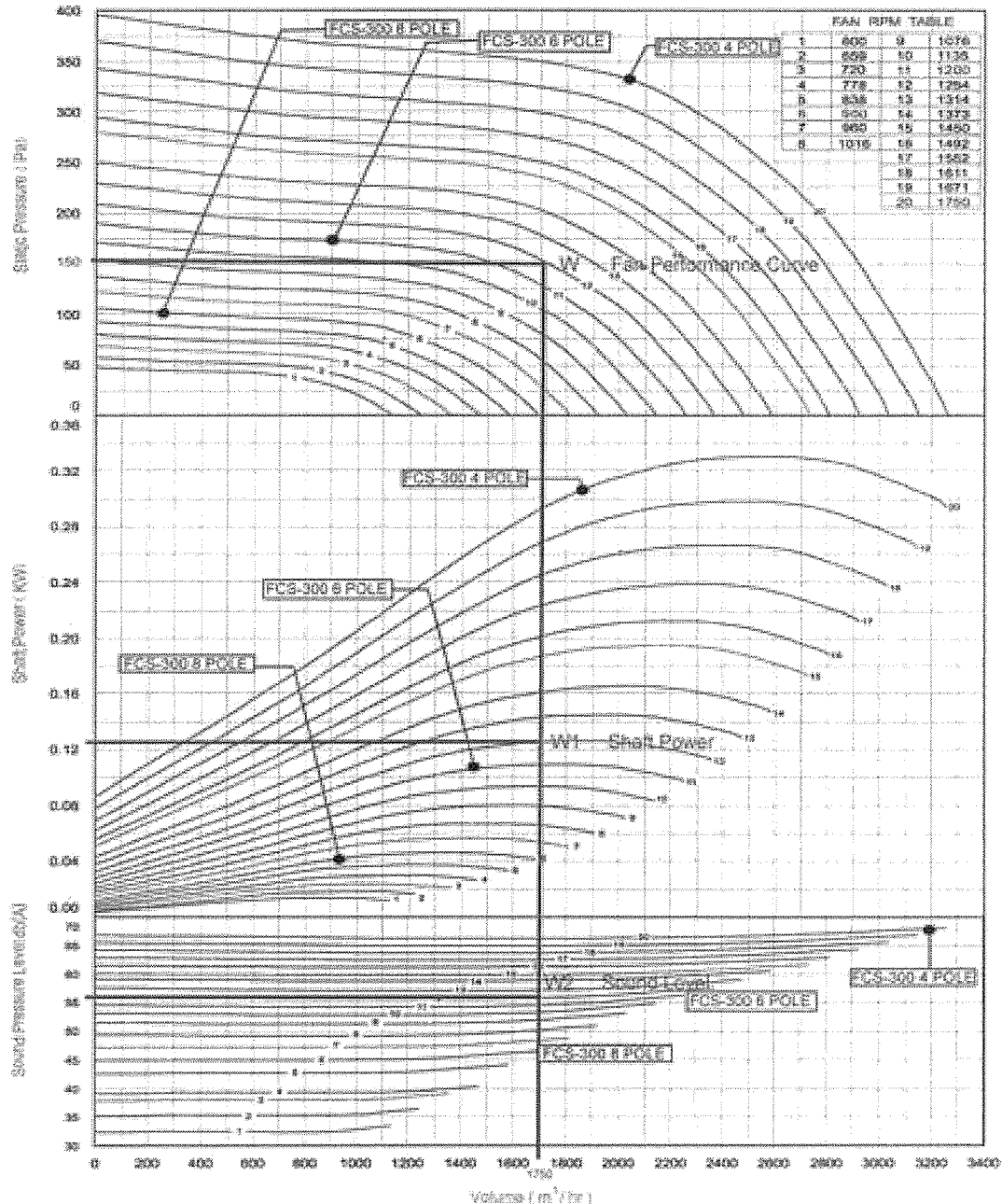
The dark curves shows the fan is direct drive which means the motor is fixed directly on the impeller. It is denoted with suffix letter D followed by motor pole number.

The attached table shows the motor RPM at different number of poles.

The other curves denotes of belt drive. Belt drive models achieved by variation of RPM using Motor and shaft Pulley, while the motor will be always 4 pole.

Second Table shows the curve of actual power consumption.

Third table shows the curve of noise level at a distance of 1.5 meter.



Example : 1750 m³ / hr , 150 Pa Static Pressure.

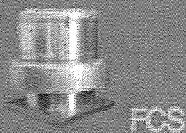
Step 1 : From the given Volume (1750 m³ / hr) draw a vertical line upwards and from given static pressure 150 Pa draw a horizontal line to the right intersection point W is the working point. Find a fan curve close to the point which be curve No.12. As in RPM table its the working point 1254.

Step 2 : The intersection point between vertical line on the curve No.12 in shaft Power is W1. Drawing a horizontal line towards shaft power, value will be (approx 0.13 Kw) According to Shaft Power, motor selected will be 0.25 Kw

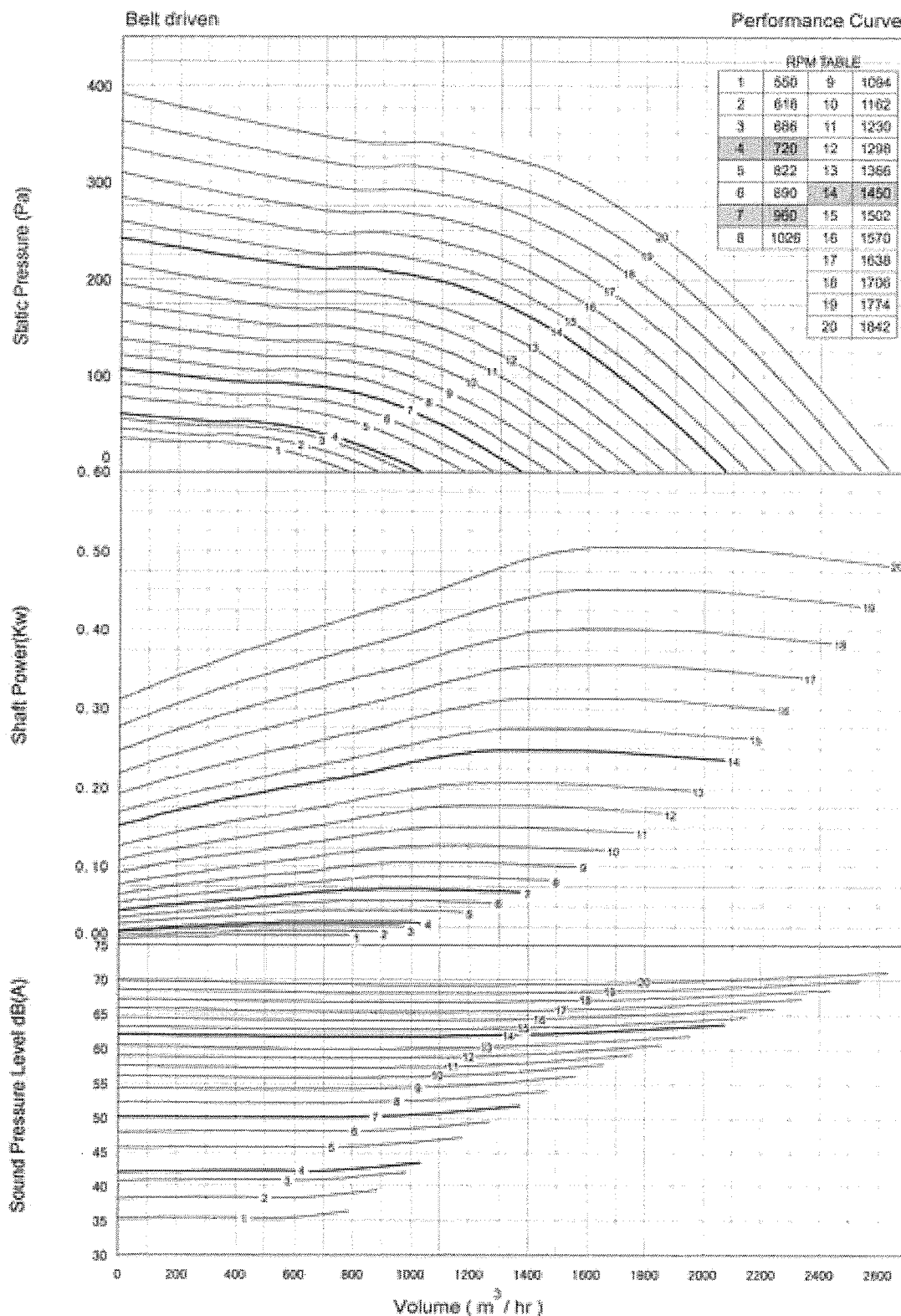
Step 3 : The intersection point the vertical line on the curve will be No.12 in sound Pressure is W2. Drawing a horizontal line from towards the sound pressure, value will be (approx 56 dB (A)). Its the fan sound Pressure level.

Step 4 : According to above 3 steps, fan selected is (FCS - 300 - 0.25) , belt drive and the RPM selected is 1254.

Step 5 : Further the customer has option of using direct drive (e.g) 4 POLE = 1750 rpm, the nearest rpm curve 20 can give the respective Pressure and CFM characteristics.



FCS - 300



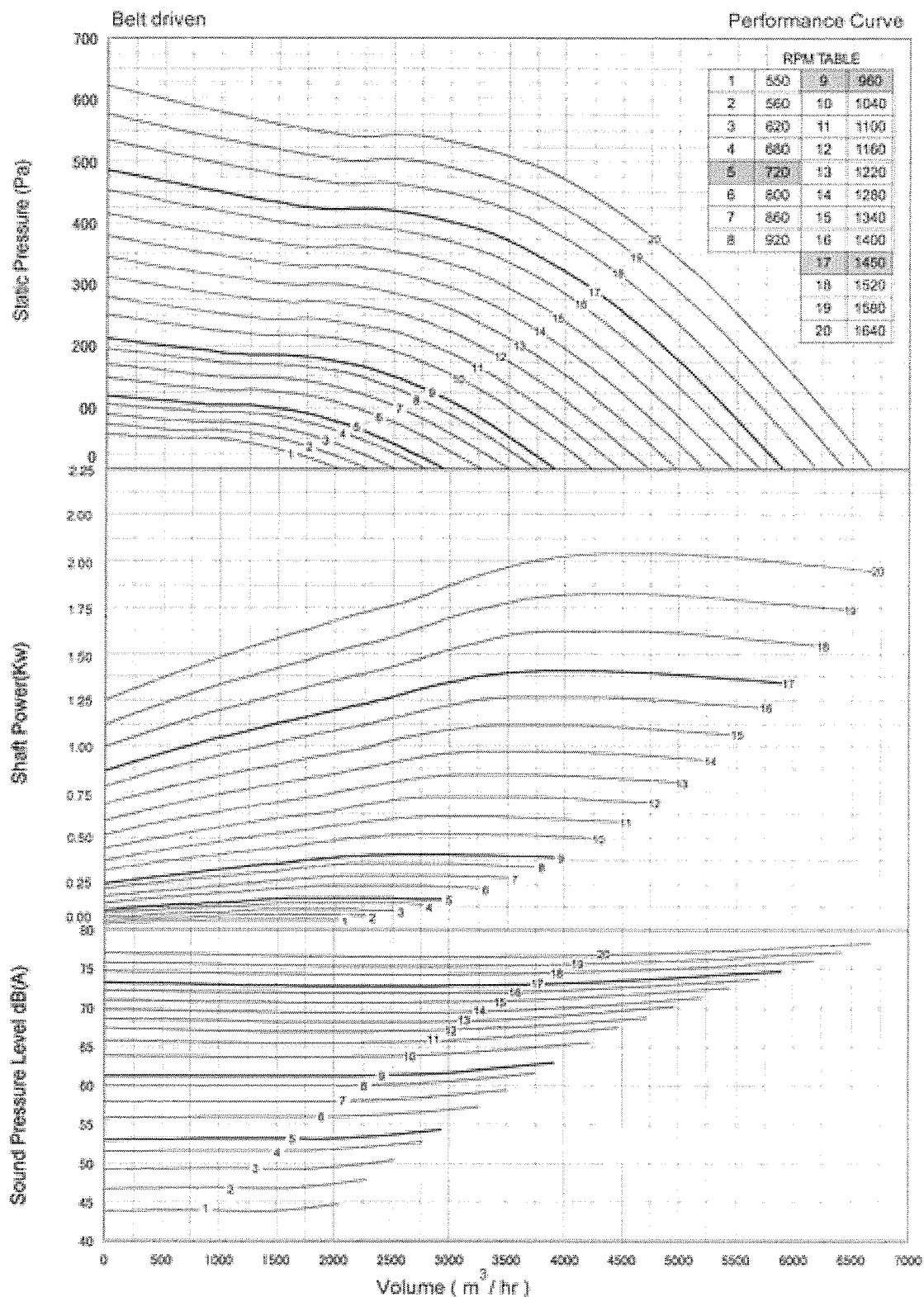
section **1**
page 5

Performance certified is for installation type A - free inlet, free outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LWA sound power levels for Installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

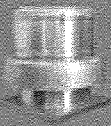


FCS - 425

section **1**
page **6**



Performance certified is for installation type A - free inlet, free outlet. Power rating (Kw) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet Lw(A) sound power levels for Installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

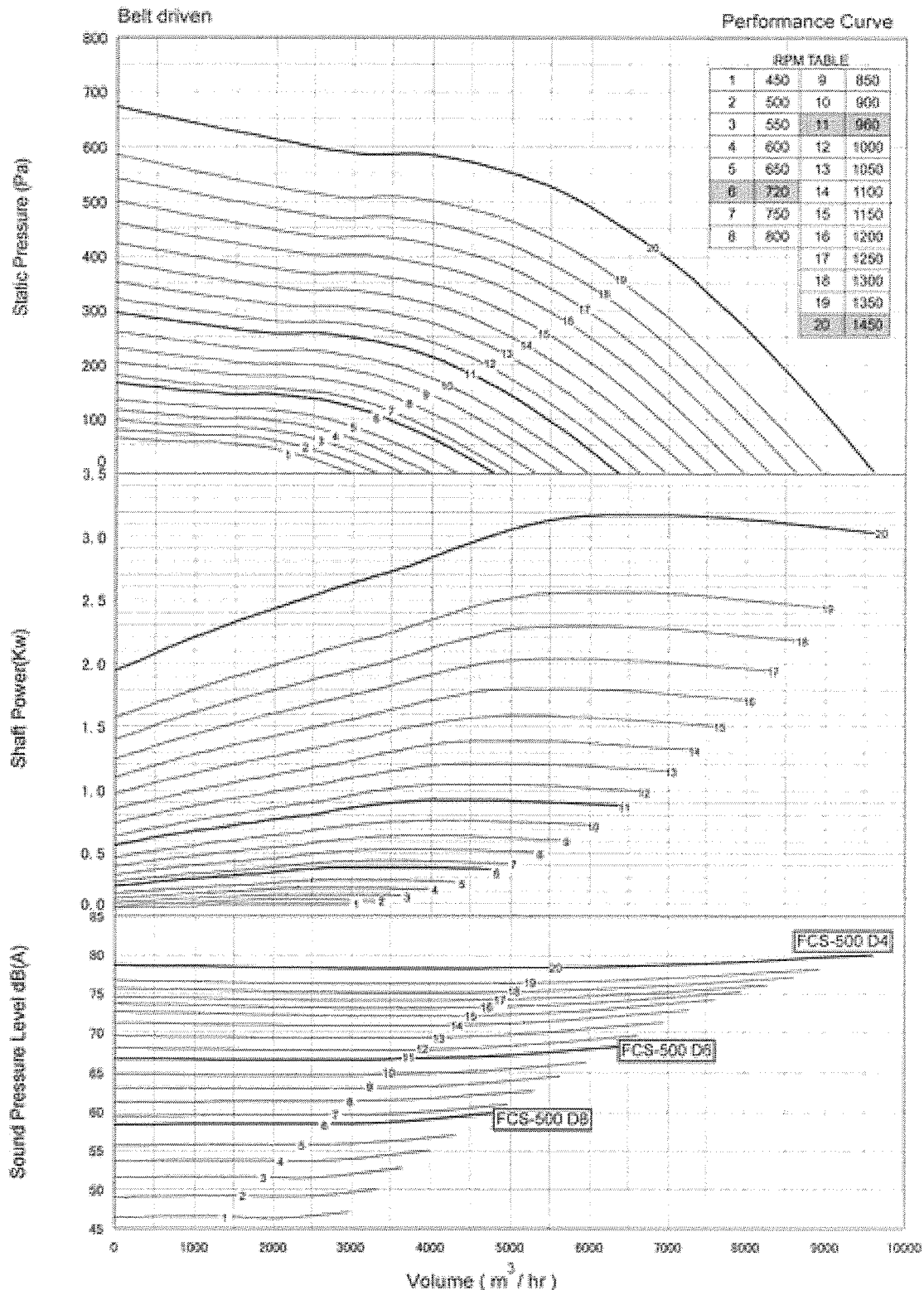


FCS



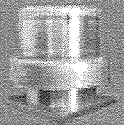
DYNNAIR®

FCS - 500



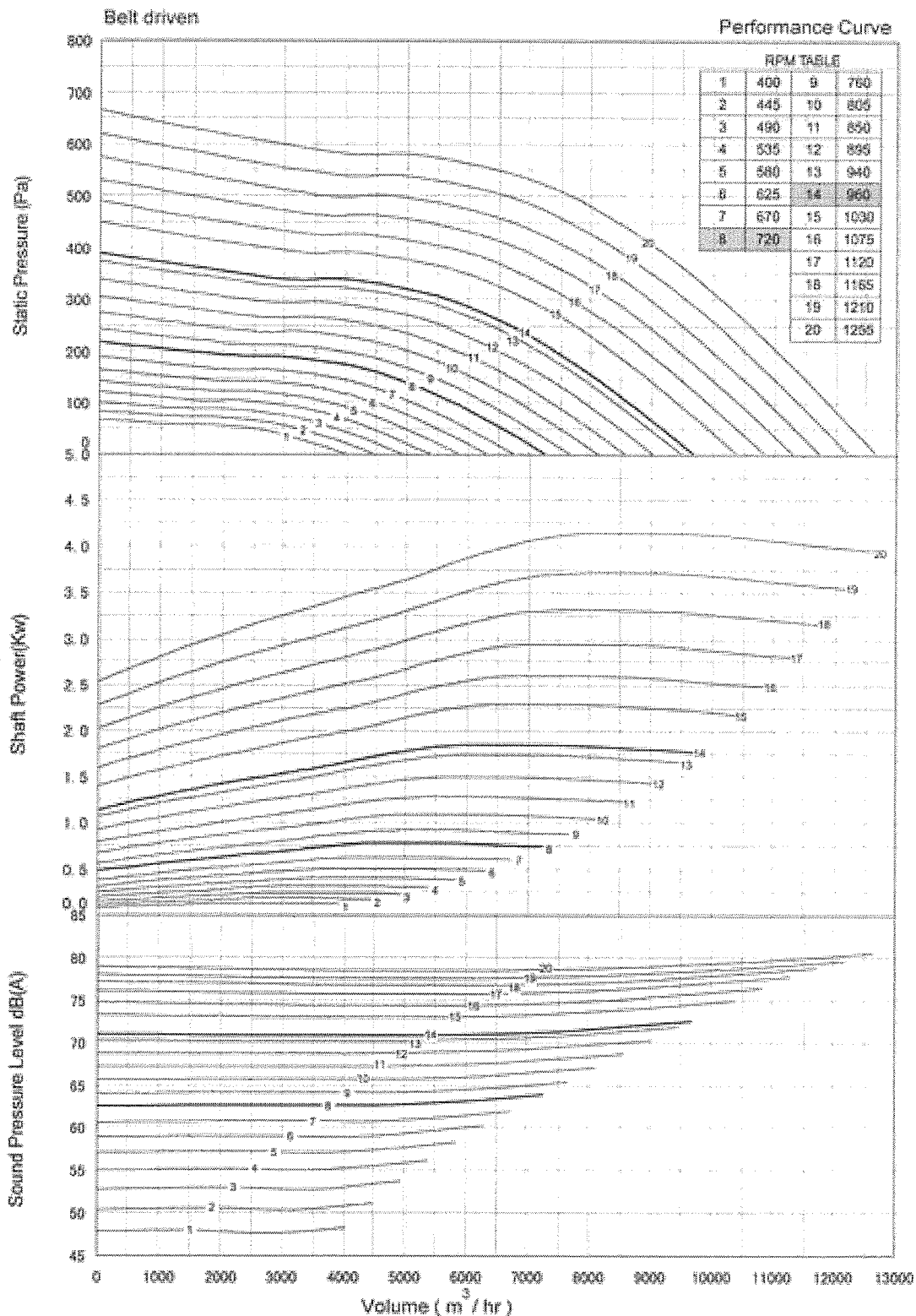
Section **1**
Page **7**

Performance certified is for installation type A - free inlet, free outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LWA sound power levels for Installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

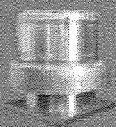


FCS - 575

section 1
page 8



Performance certified is for installation type A - free inlet, free outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.



FCS

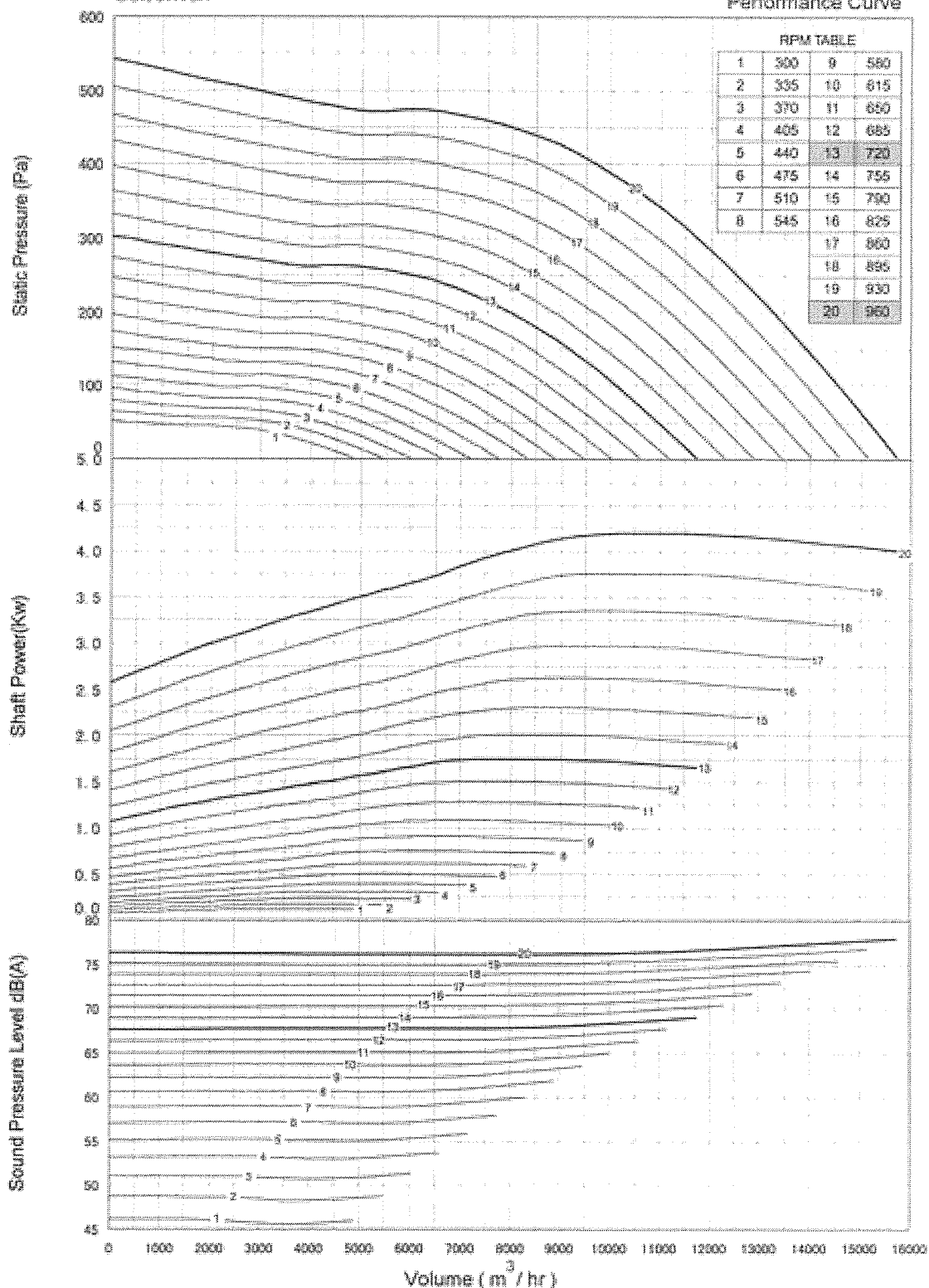


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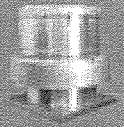
FCS - 675

Belt driven

Performance Curve

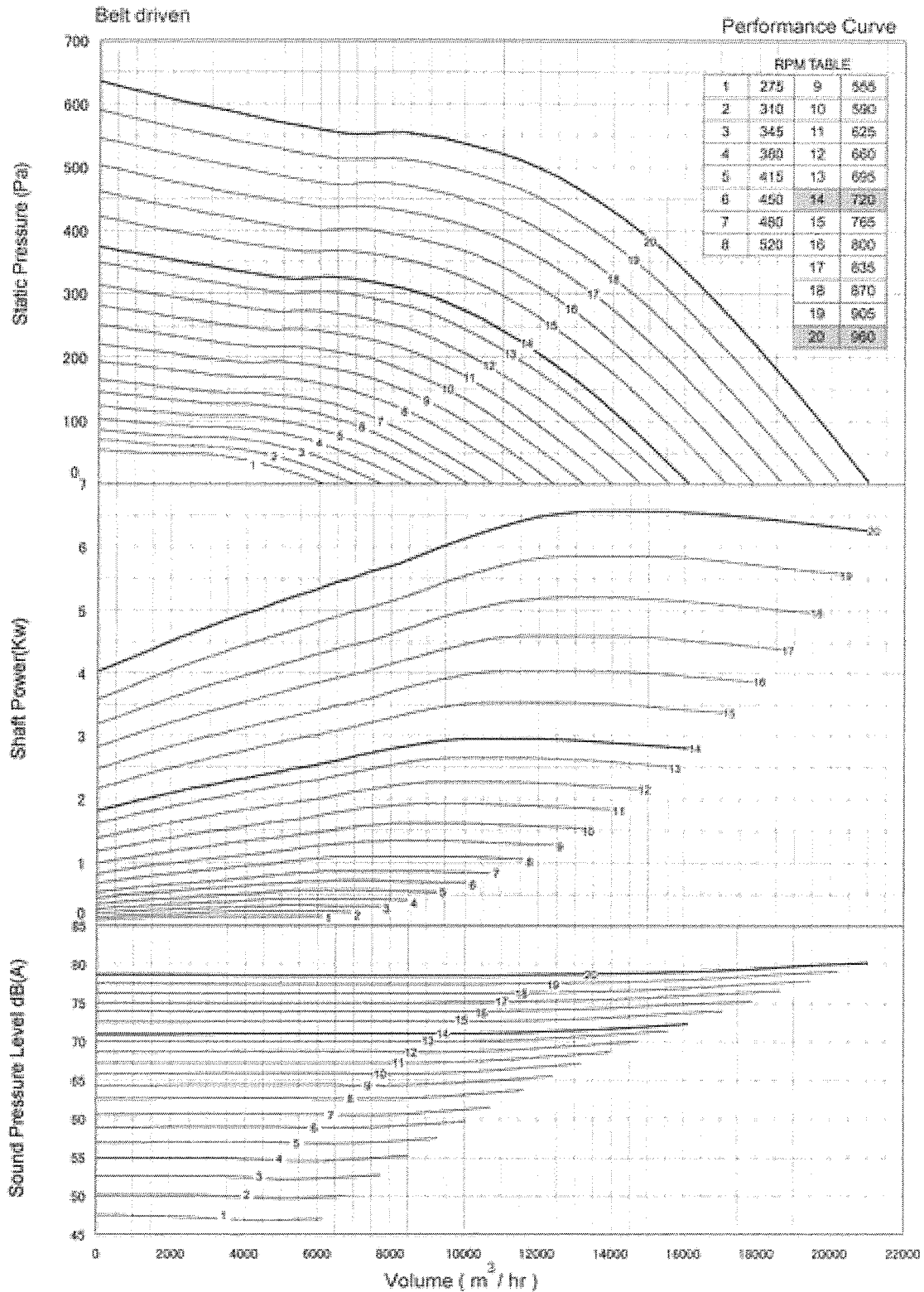

 section **1**
 page **9**

Performance certified is for installation type A - free inlet, free outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct and correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

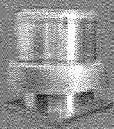


FCS - 750

Section 1
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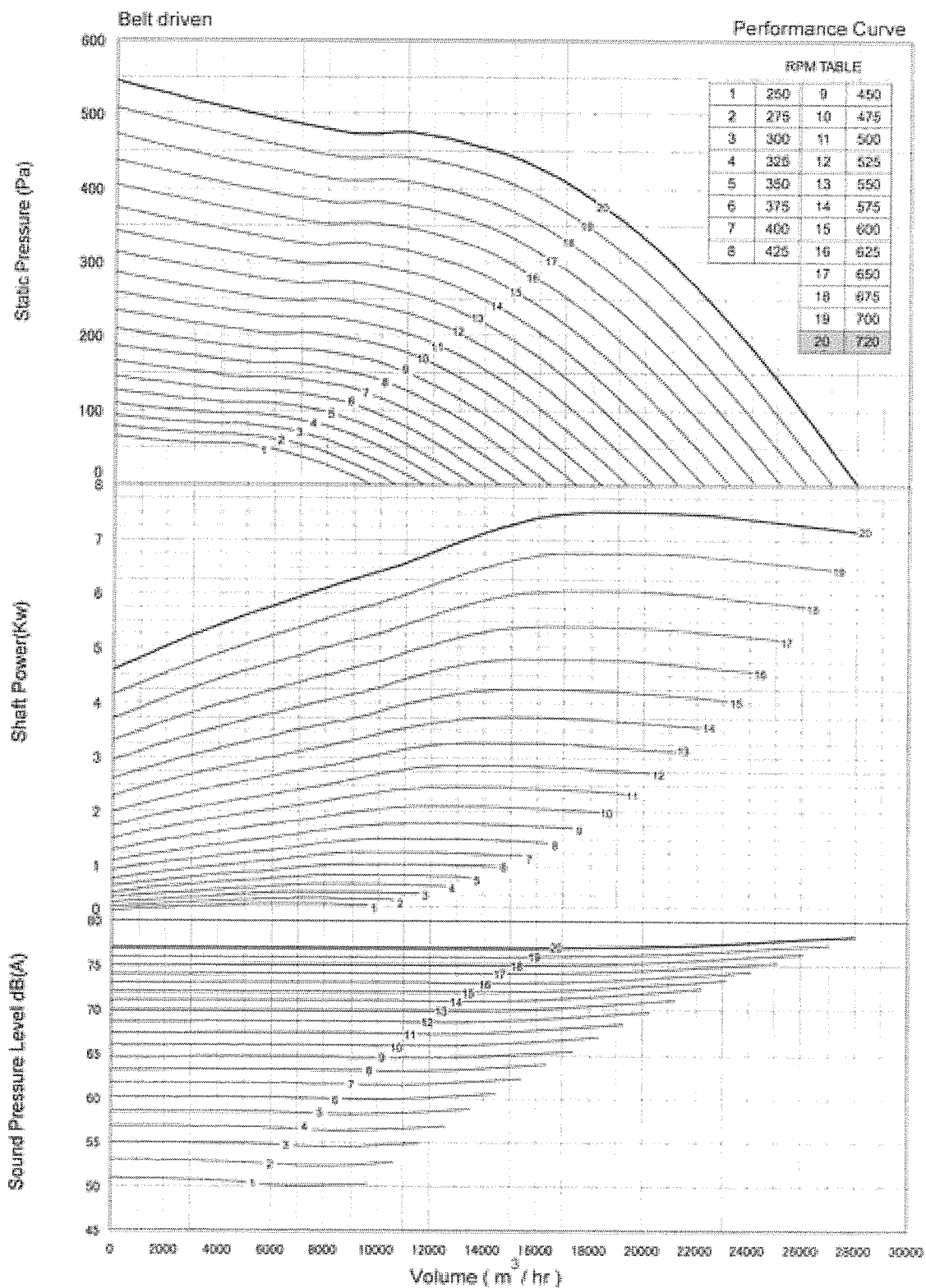
Performance certified is for installation type A - free inlet, free outlet. Power rating (Kw) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.



FCS

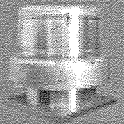


FCS - 900



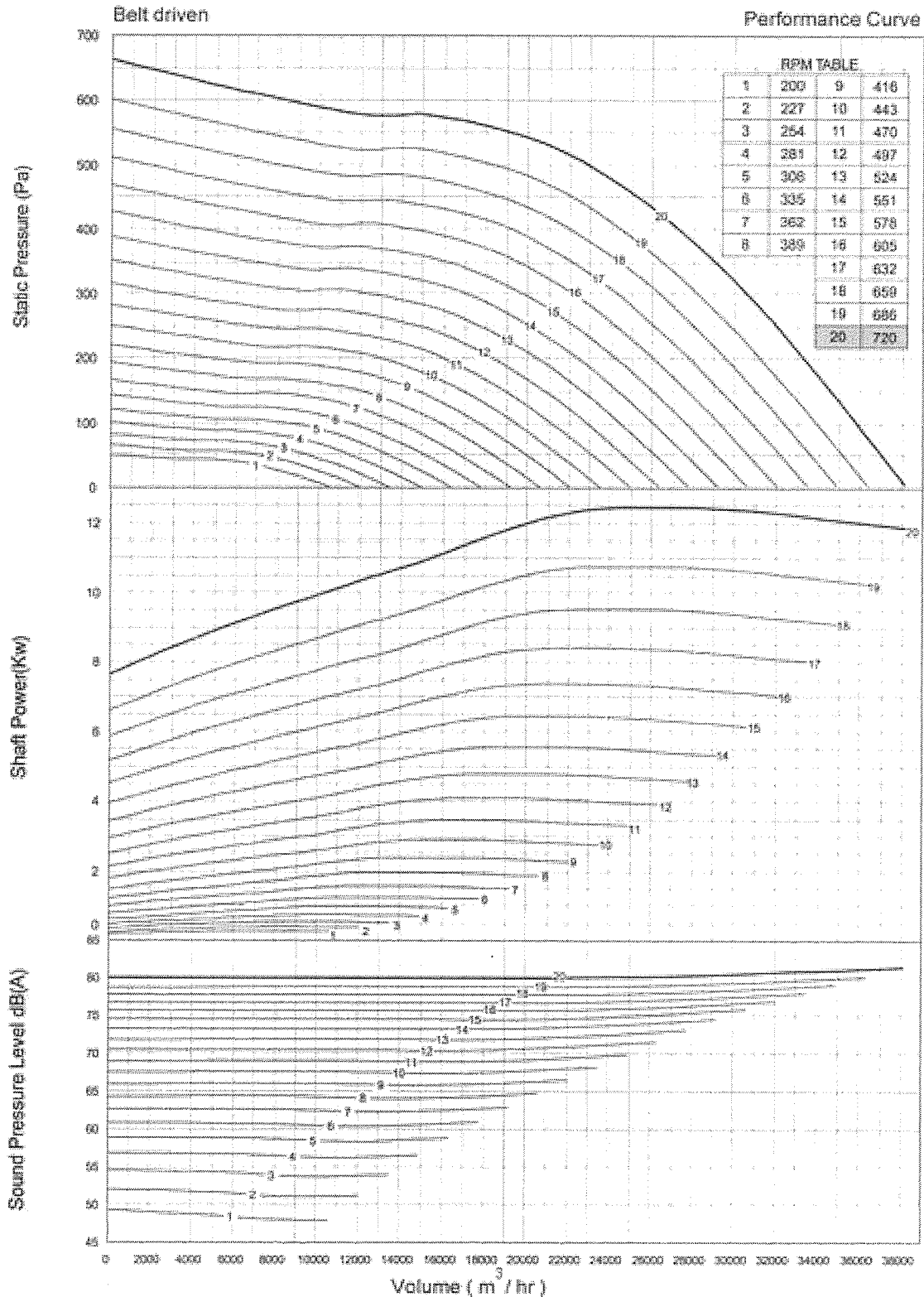
section 1
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Performance certified is for installation type A - free inlet, free outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type A. Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10^{-12} watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of duct and correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.

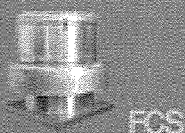


FCS - 1000

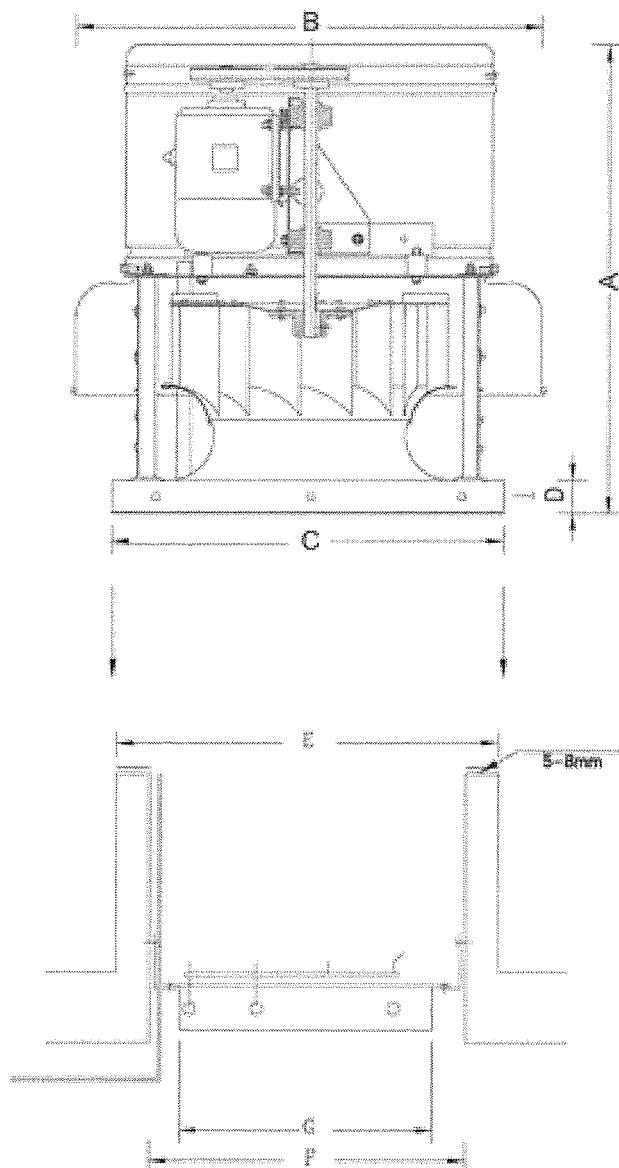
section **1**
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Performance certified is for installation type A - free inlet, free outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet Lw/A sound power levels for installation Type A: Free inlet, free outlet. The sound power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Ratings do not include the effects of dust end correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5 m. Note that dB(A) levels are not licensed by AMCA International.



FAN DIMENSION AND WEIGHT



Installation instructions

1. The roof curb height shall be defined by design engineer. We suggest the height shall be 400mm-600mm according to local rainfall.
2. Isolation pads, steel angles and screws in the drawings are not supplied by Dynair.
3. The elasticity of the isolation pads shall remain good when the fan load is applied, and shall not become soft even at summer high temperature situation in the roof.
4. The rubber isolation pads should be decided according to the weight of the fan. Typically the thickness of the pad is 5mm.

Roof fan dimensions

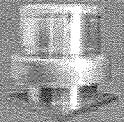
Model	A (mm)	B (mm)	C (mm)	D (mm)	Weight (kg)
FCS-300	600	540	500	50	17
FCS-425	720	725	600	50	30
FCS-500	830	830	750	75	35
FCS-575	920	940	750	75	41
FCS-675	970	1100	900	75	67
FCS-750	1030	1200	900	75	71
FCS-900	1170	1440	1100	75	82
FCS-1000	1260	1590	1200	75	91

The weight in the above table does not include motor, Refer motor weight in table listed below

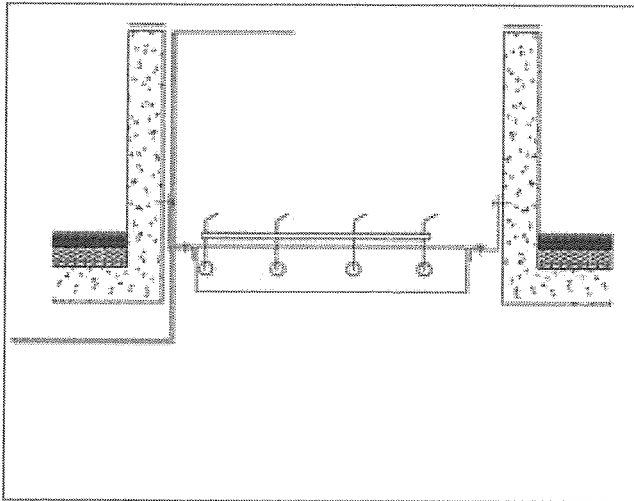
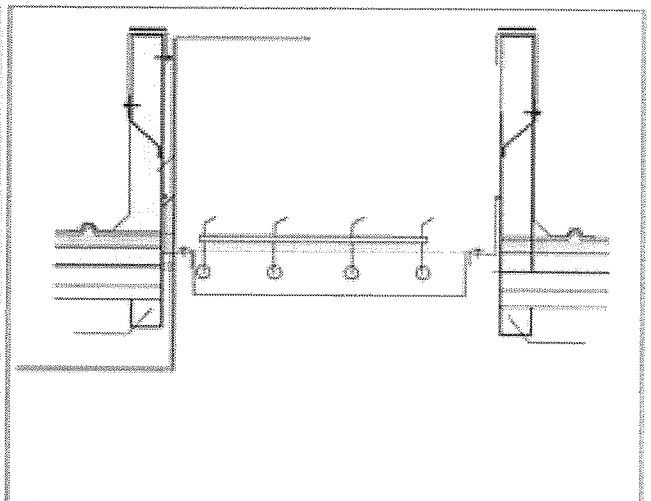
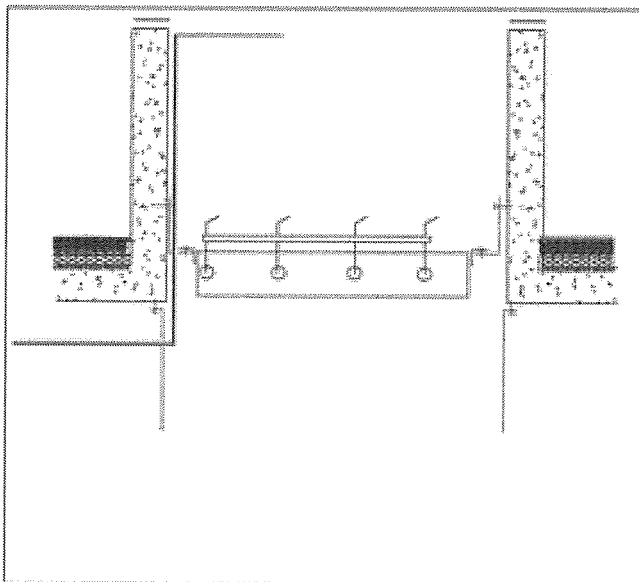
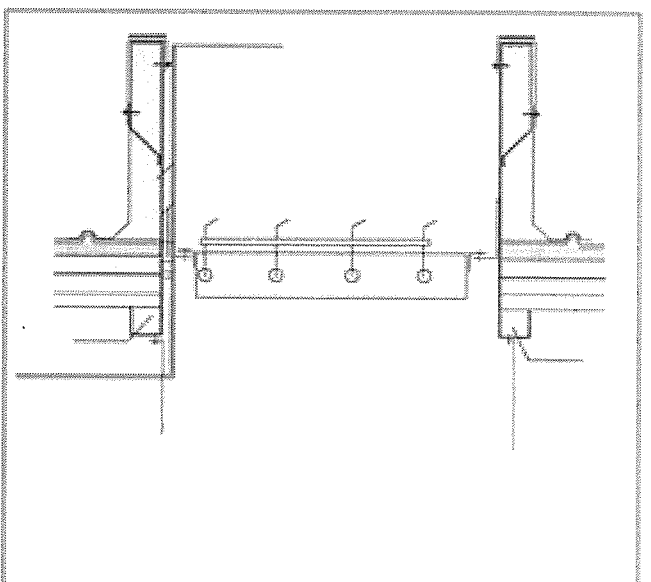
Roof curb opening size

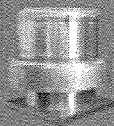
Size	Curb Edge Distance E	Roof Opening Size F	Damper Size G
FCS-300	495	335	300
FCS-425	595	435	400
FCS-500	745	585	550
FCS-575	745	585	550
FCS-675	895	715	650
FCS-750	895	715	650
FCS-900	1090	930	800
FCS-1000	1190	1030	900

Power (Kw)	Motor weight (Kg)			
	2P	4P	6P	8P
0.18	14	13.5	14	16
0.25	14.5	14	14.5	17
0.37	15	14.5	16	24
0.55	15.5	15	17	28
0.75	15	16	22	30
1.1	16	21	24	32
1.5	21	23	32	40
2.2	24	33	41	64
3	33	35	63	78
4	41	41	72	105
5.5	63	65	81	115
7.5	70	76	118	145
11	110	118	145	160


ROOF CURB FABRICATION DETAIL

section 1
page 14

NON DUCTED

NON DUCTED

DUCTED

DUCTED




FCS



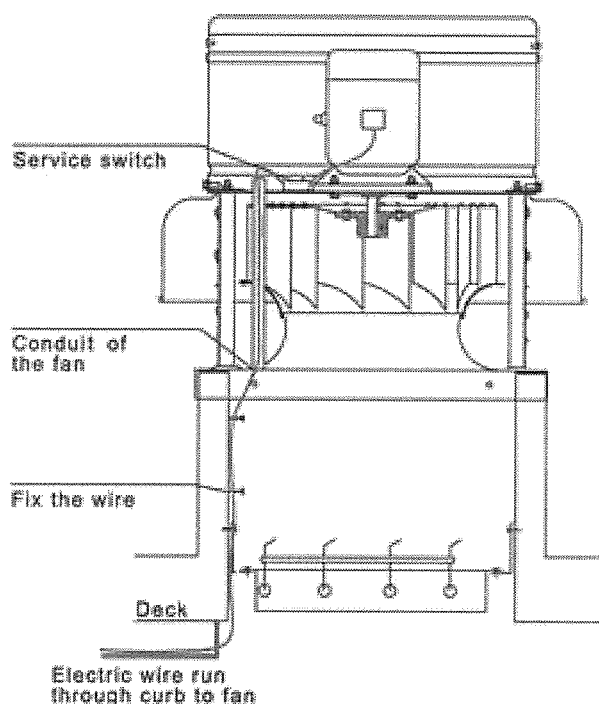
INSTALLATION INSTRUCTION

See attached drawing for fan size and Roof curb opening size. The roof opening size shall be provided to the contractor at early stage when the roof is under construction.

section 1
page 15

Roof curb fabrication

The contractor is the only party who is responsible for the fabrication and procedures to make a roof curb attached drawing is for reference only. The thickness of curb wall shall be different according to the material. concrete wall shall be between 70~80mm, steel structure shall be between 30~45mm.



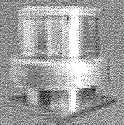
As to the metal where the fan contact the curb in the top, a linear rubber vibration isolation pad shall be applied, also acts as seal. The thickness of the pad shall be decided according to the fan weight, and the hardness shall make sure it still maintain proper elasticity after fan is seated. The pad can be cut from typical carpet type isolation pads and are to be provided by contractors.

Fan mounting

Pull the fan curb cap on to the curb, and fix it at all four sides by self-tapping screw, as per attached drawing. The fan must be kept leveled.

Back-draft damper mounting

Make sure the damper blades can be fully open to 90 degree when the fan starts, and shut down automatically by gravity after fan is stopped.



SOUND DATA

FCS - 300

FCS - 425

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RPM	VOLUME	SOUND POWER - OCTAVE BANDS									LWA	dBA
		1	2	3	4	5	6	7	8			
550	788	48	56	45	42	43	40	38	36	48	36	
	858	47	53	44	41	41	40	38	36	47	35	
	911	47	53	43	42	40	40	38	36	46	35	
	0	48	54	43	42	40	39	38	40	47	35	
	854	57	58	50	45	46	43	43	39	51	38	
618	924	57	56	49	44	44	42	41	40	50	38	
	950	57	55	48	43	43	42	41	40	50	38	
	0	52	56	48	45	43	42	42	42	50	38	
	861	56	50	54	48	48	44	44	42	54	42	
	893	56	50	53	47	48	45	44	43	53	41	
656	928	56	57	52	48	48	45	45	44	53	41	
	0	57	58	50	47	45	44	44	44	53	41	
720	1028	58	57	50	49	49	47	45	43	55	42	
	1077	58	56	50	49	47	46	45	44	54	42	
	408	57	58	54	49	47	46	46	45	54	42	
	0	58	59	54	49	47	46	45	45	54	42	
	1179	63	62	62	54	52	51	48	46	58	47	
802	830	63	62	60	53	50	48	48	47	58	48	
	460	63	61	59	53	50	49	48	48	58	48	
	0	63	63	55	50	50	49	48	48	58	48	
	1272	61	64	60	56	53	52	50	48	61	49	
	899	60	63	63	55	53	51	50	49	60	48	
890	104	60	62	63	55	52	51	50	49	60	48	
	0	60	62	63	54	52	50	49	50	60	48	
	1373	65	68	68	59	56	54	52	50	64	52	
	870	64	66	66	57	54	53	52	51	63	50	
	944	64	66	66	57	54	53	52	51	63	50	
960	0	65	65	58	54	52	51	51	51	65	50	
	1483	70	66	71	60	58	57	54	52	68	54	
	1036	72	68	69	59	55	55	53	52	65	52	
	881	72	65	66	59	56	54	54	53	64	52	
	0	74	68	69	58	55	54	52	52	64	52	
1004	1584	75	68	74	63	57	58	55	53	68	56	
	1100	74	72	71	61	57	58	55	54	67	55	
	618	73	67	71	60	57	57	55	54	66	54	
	0	73	69	72	62	57	55	54	54	66	54	
	1881	77	69	76	64	59	60	57	55	72	58	
1160	1104	78	68	73	63	58	58	55	55	68	56	
	858	77	68	73	62	58	57	57	56	68	56	
	0	78	69	74	62	58	57	55	55	68	56	
	1798	78	77	77	67	61	61	58	56	71	59	
	1242	77	71	74	66	60	59	57	56	70	58	
1230	856	78	71	74	65	60	59	57	56	69	57	
	0	80	73	75	64	62	59	57	57	70	58	
	1858	78	74	77	69	62	62	60	58	73	61	
	1361	78	74	76	68	61	60	58	58	71	59	
	735	79	73	75	67	62	60	59	58	73	59	
1398	0	81	74	76	67	62	60	58	58	75	59	
	1953	79	76	78	71	64	63	61	59	75	62	
	1386	79	76	78	70	63	61	60	58	73	60	
	772	80	75	76	69	63	62	60	58	73	60	
	0	79	76	77	70	63	61	60	58	73	61	
1490	2073	80	78	79	74	66	64	63	60	76	64	
	1485	80	76	78	72	65	63	62	60	74	62	
	821	81	78	77	71	62	62	61	61	74	62	
	0	82	79	78	71	65	62	60	60	74	62	
	2147	83	80	80	73	67	65	64	61	77	65	
1602	1313	82	78	78	74	66	62	62	61	75	63	
	850	81	78	78	73	66	62	62	62	75	62	
	0	84	81	79	73	66	65	61	61	75	63	
	2448	82	82	81	72	68	66	65	62	78	66	
	1386	81	81	79	75	67	64	63	62	77	65	
1700	888	82	81	79	75	67	64	63	62	76	64	
	0	84	82	80	75	67	64	62	62	77	65	
	2247	82	83	81	76	69	67	66	62	78	67	
	1828	82	83	80	77	69	66	64	63	78	66	
	0	83	84	80	77	69	66	63	63	78	66	
1806	2438	83	85	82	80	75	68	67	64	81	69	
	1723	82	84	81	79	69	68	65	64	79	67	
	984	83	85	80	78	69	68	65	65	78	67	
	0	85	85	81	78	69	68	64	64	78	67	
	2558	84	86	83	82	72	68	66	65	82	70	
1934	1792	83	86	82	80	71	67	66	65	80	68	
	1004	84	86	81	80	70	63	66	65	80	68	
	0	86	86	82	80	70	63	65	64	81	69	
	2634	85	88	83	84	73	68	68	68	83	71	
	1880	84	87	82	82	72	68	67	65	82	70	
1942	1043	85	88	82	81	71	68	67	66	81	69	
	0	87	90	83	81	71	68	68	65	82	70	

		SOUND POWER - OCTAVE BANDS											
RPM	VOLUME	1	2	3	4	5	6	7	8	LWA	(dBA)		
500	2003	58	64	54	51	51	48	47	45	57	45		
	1436	58	60	52	50	49	48	47	46	56	44		
	805	57	61	52	50	48	48	46	47	56	44		
	0	58	61	52	50	48	47	46	46	56	44		
560	2378	60	68	57	52	54	51	50	48	60	48		
	1698	60	66	56	52	52	51	50	49	59	47		
	901	59	65	55	51	51	51	50	50	59	47		
	0	60	66	55	51	51	50	50	51	59	47		
620	2520	64	70	62	58	58	54	52	50	62	50		
	1780	64	68	60	55	54	53	52	51	61	49		
	2028	63	67	59	56	54	54	52	52	61	49		
	0	64	68	58	56	54	52	52	52	61	49		
680	2764	68	72	62	59	59	57	54	52	65	51		
	1953	68	70	64	58	57	55	53	53	64	52		
	1095	67	69	63	58	58	56	55	54	64	52		
	0	68	70	63	58	58	54	54	54	65	52		
720	2927	70	73	65	61	60	58	56	54	68	54		
	2088	70	71	66	60	58	57	56	55	65	53		
	1158	70	70	65	60	58	57	56	55	65	53		
	0	71	71	65	60	57	56	55	55	65	53		
800	3182	74	74	72	64	62	61	58	57	69	57		
	2287	74	73	71	63	62	59	58	57	68	56		
	1388	74	72	70	63	62	59	58	58	68	56		
	0	76	73	70	63	60	58	58	58	69	56		
860	3486	77	76	76	68	63	62	60	58	71	59		
	2470	77	74	73	65	62	61	60	59	70	58		
	1284	77	74	75	67	62	61	60	59	70	58		
	0	78	75	75	67	62	60	59	59	70	58		
920	3140	80	77	76	68	65	64	62	60	74	62		
	2642	80	76	76	67	63	63	61	60	74	60		
	1481	80	75	75	67	64	62	62	61	73	60		
	0	82	78	76	68	62	62	61	61	72	60		
960	3650	82	77	80	68	65	64	63	61	75	63		
	2351	83	77	78	68	64	64	62	61	74	62		
	1545	82	76	77	68	65	63	62	62	73	61		
	0	84	77	78	67	65	63	62	62	73	61		
1040	4328	85	79	83	72	67	64	62	62	78	66		
	2887	84	78	81	71	68	66	64	63	78	64		
	1874	85	77	80	70	67	65	64	63	78	64		
	0	87	79	81	70	67	65	63	63	78	64		
1100	4472	87	80	83	73	68	66	64	64	79	67		
	3116	87	79	83	72	67	63	62	61	78	65		
	1771	88	79	83	71	68	66	65	65	79	65		
	0	90	80	83	72	68	66	65	65	79	65		
1160	4715	89	81	87	75	70	70	67	66	81	69		
	3261	89	81	85	76	69	68	67	66	79	67		
	1887	89	80	84	73	70	67	67	66	79	67		
	0	91	81	85	75	69	67	66	66	79	67		
1220	4893	90	85	88	77	71	71	69	67	82	70		
	3593	90	83	88	76	70	69	68	67	81	69		
	1954	90	82	87	75	71	69	68	67	80	68		
	0	92	83	86	75	71	69	67	67	81	69		
1280	5203	90	85	89	78	73	73	70	68	83	71		
	3676	90	85	87	76	72	70	69	68	82	70		
	2500	91	84	88	77	72	72	69	68	81	69		
	0	92	85	87	77	72	70	68	68	82	70		
1340	5447	93	87	90	81	74	73	71	69	85	72		
	3848	90	87	87	80	73	71	70	68	83	71		
	2157	92	88	87	78	73	71	70	69	83	71		
	0	94	88	88	78	73	71	69	69	83	71		
1400	5681	93	88	90	83	75	74	72	70	86	74		
	4590	91	88	88	80	74	72	71	70	84	72		
	2754	92	88	88	81	75	72	71	71	84	72		
	0	95	89	89	81	75	72	70	70	84	72		
1460	5894	93	90	91	85	76	75	73	71	87	75		
	4184	92	90	89	82	75	73	72	71	85	73		
	2324	93	90	88	82	76	73	72	71	85	73		
	0	95	91	89	82	76	73	71	71	85	73		
1520	6179	93	92	91	82	76	75	73	72	89	76		
	4365	92	92	90	85	77	74	73	72	87	75		
	2447	94	92	89	84	77	74	73	72	88	74		
	0	96	92	90	84	77	74	73	73	87	75		
1580	6423	94	94	92	86	78	77	75	73	90	77		
	4527	92	92	91	87	79	75	74	73	88	76		
	2543	94	93	90	86	78	75	74	73	87	75		
	0	97	95	91	86	79	75	73	73	88	76		
1640	6681	95	95	93	90	80	77	77	74	90	78		
	4710	94	95	91	88	79	76	75	74	89	77		
	2640	95	95	91	87	79	76	75	74	89	77		
	0	97	96	92	88	79	76	74	73	89	77		



FCS



DYNAIR®

SOUND DATA

FCS - 500

FCS - 575

RPM	VOLUME	SOUND POWER - OCTAVE BANDS								LWA	dB(A)
		1	2	3	4	5	6	7	8		
450	2378	63	65	58	54	54	51	48	47	59	48
	2154	63	64	56	53	52	51	50	49	58	48
	1180	62	63	55	53	51	51	50	50	59	47
	0	63	63	55	53	51	50	51	51	58	48
500	3310	65	70	60	56	56	54	52	50	62	50
	2328	65	68	58	55	54	52	52	51	61	49
	1311	64	67	58	55	54	54	53	52	61	49
	0	65	68	58	55	53	52	53	53	61	49
550	3641	67	74	62	58	58	56	54	52	65	53
	2512	68	72	61	57	57	55	54	53	64	52
	1442	68	71	60	58	56	56	55	54	64	52
	0	67	72	60	58	56	54	55	55	63	51
600	3872	70	78	66	60	61	58	56	54	67	55
	2805	69	74	63	60	59	57	56	55	66	54
	1673	69	73	64	60	58	58	57	56	66	54
	0	70	74	63	60	58	56	57	57	66	54
650	4302	73	77	69	63	62	60	58	56	69	57
	3028	72	76	68	62	61	59	58	57	68	56
	1704	72	74	67	63	61	60	59	58	68	56
	0	72	76	67	62	60	58	59	59	68	56
700	4186	71	79	72	66	65	62	61	59	72	60
	3167	72	77	72	65	63	62	61	59	71	59
	1867	72	76	71	65	63	62	61	60	70	58
	0	72	76	71	65	63	61	61	61	70	58
750	4884	73	80	75	67	66	64	62	60	73	61
	3607	74	78	74	66	64	63	61	60	72	60
	1986	73	77	72	66	64	63	62	61	72	60
	0	73	78	73	66	64	62	61	62	71	59
800	5295	81	81	78	69	67	66	63	61	75	63
	3741	81	79	76	68	66	64	63	62	74	61
	2097	81	79	75	68	66	64	63	62	73	61
	0	82	80	76	68	66	64	63	63	72	61
850	5826	84	82	80	71	69	67	65	63	78	64
	3975	83	80	78	70	67	66	64	63	76	63
	2326	82	80	78	70	67	66	64	64	75	63
	0	83	81	78	69	68	65	64	64	75	63
900	5867	86	83	83	73	70	68	66	64	78	66
	4206	85	82	81	71	68	67	65	63	77	65
	2598	85	81	80	71	68	67	65	65	77	65
	0	85	82	81	71	68	66	65	65	77	65
950	6794	89	84	85	74	70	67	65	63	77	66
	4489	88	83	84	73	69	68	67	66	76	65
	2616	88	82	83	73	70	68	66	67	76	65
	0	90	83	82	73	70	68	67	67	76	65
1000	6619	92	84	87	76	71	72	69	67	82	70
	4876	90	84	85	75	70	70	68	67	80	69
	2821	90	83	84	74	71	69	68	68	80	69
	0	92	84	85	74	71	69	67	68	80	69
1050	6925	92	85	88	77	72	72	70	68	83	71
	4920	92	85	87	76	71	71	69	68	82	70
	2922	92	84	86	75	72	72	70	69	81	69
	0	94	85	87	75	72	72	69	69	82	70
1100	7381	94	86	89	78	73	74	71	69	85	72
	5144	93	86	88	77	72	72	70	68	83	71
	3023	94	85	88	77	73	71	71	70	83	71
	0	95	86	89	78	73	71	70	70	83	71
1150	7812	95	87	92	80	74	75	72	70	86	74
	5376	95	87	90	79	74	73	71	70	85	73
	3214	96	88	90	78	74	72	72	71	84	72
	0	96	87	91	78	74	72	71	71	84	72
1200	7843	96	88	93	82	75	76	73	71	87	75
	5611	95	88	91	81	75	74	72	71	86	74
	3345	96	88	90	80	75	73	73	72	86	73
	0	96	88	91	79	75	73	72	72	86	74
1250	8214	97	91	94	84	77	77	74	72	88	76
	5845	96	90	92	82	76	75	73	72	87	75
	3476	97	90	91	81	77	74	74	73	86	74
	0	97	91	92	81	76	74	73	73	87	75
1300	8625	98	92	94	85	78	78	75	73	89	77
	6079	97	92	92	84	77	76	74	73	88	76
	3607	98	91	92	83	78	75	75	74	87	75
	0	100	93	93	83	77	75	73	73	88	76
1350	8826	98	94	95	87	79	78	75	74	90	78
	6312	97	93	93	85	78	77	75	74	89	77
	3829	98	93	93	85	79	78	75	75	89	77
	0	101	94	94	84	78	76	74	74	89	77
1400	9288	99	97	98	90	81	80	76	76	92	80
	6780	98	94	96	88	80	78	76	76	91	79
	3851	100	96	94	87	81	78	77	76	90	78
	0	102	97	95	87	80	78	76	76	91	79

		SOUND POWER - OCTAVE BANDS											
RPM	VOLUME	1	2	3	4	5	6	7	8	LWA	dB(A)		
400	4227	65	68	57	55	52	52	50	48	60	48		
	3845	64	63	56	54	53	52	51	50	60	48		
	1985	64	62	56	54	52	52	52	51	60	48		
	0	65	62	56	54	52	52	52	52	60	48		
445	4480	66	68	60	58	56	55	53	51	63	51		
	3185	67	67	59	57	55	55	54	53	63	50		
	1334	66	67	59	57	55	55	54	54	63	51		
	0	67	67	59	57	55	54	55	55	62	50		
490	4833	69	73	63	60	60	57	55	53	66	54		
	3485	68	71	62	59	58	57	56	55	65	52		
	1943	68	70	62	59	58	57	57	56	65	52		
	0	69	71	61	59	57	56	57	57	65	52		
535	5286	71	77	66	62	62	60	58	56	68	56		
	3893	70	75	65	61	60	58	58	57	67	55		
	2133	70	74	64	61	60	59	59	58	67	55		
	0	71	75	64	61	59	58	58	58	67	55		
580	5639	73	78	69	64	64	62	60	58	70	58		
	4125	72	77	67	63	62	61	60	59	69	57		
	2312	72	75	67	64	63	61	60	60	69	57		
	0	72	76	66	63	61	60	60	61	69	57		
625	6292	75	81	72	68	68	64	63	61	72	60		
	4445	75	78	70	66	64	63	61	60	71	59		
	2482	75	78	70	66	63	62	62	61	71	59		
	0	75	78	69	65	63	62	62	62	71	59		
670	6745	78	82	73	68	67	65	63	61	74	62		
	4785	78	80	73	67	66	64	63	62	73	61		
	2671	78	79	72	67	65	64	64	63	73	61		
	0	79	80	72	67	65	63	63	64	73	61		
720	7248	81	83	78	73	73	69	67	65	76	64		
	5120	81	81	76	69	67	66	65	64	75	63		
	2825	81	81	75	69	67	66	65	65	75	63		
	0	82	82	75	69	67	65	65	65	75	63		
760	7651	83	84	80	75	75	69	69	64	77	65		
	5485	83	82	78	71	69	67	66	65	76	64		
	3230	83	82	77	71	69	67	67	66	76	64		
	0	84	83	78	71	69	68	68	68	76	64		
805	8104	86	86	82	77	77	73	70	68	79	67		
	5725	85	84	81	72	70	69	67	66	78	66		
	3209	85	83	80	72	70	69	68	67	78	66		
	0	87	84	80	72	69	68	67	68	78	66		
850	8537	88	88	85	79	79	74	72	69	81	69		
	6045	87	85	83	74	71	70	69	68	79	67		
	3188	88	84	82	74	71	70	69	68	79	67		
	0	89	85	82	74	71	69	68	68	79	67		
895	9215	90	91	87	77	77	73	70	68	82	70		
	6385	89	88	85	78	77	73	70	68	81	69		
	3586	90	85	84	75	72	71	69	68	81	69		
	0	91	87	85	75	72	70	69	68	81	69		
940	9483	92	92	88	78	78	74	71	69	84	72		
	6685	91	91	87	77	77	73	70	68	83	70		
	3747	92	86	86	77	75	72	72	71	83	70		
	0	94	87	87	78	75	71	70	70	83	70		
980	9884	93	95	90	79	79	75	72	70	85	73		
	6887	92	91	88	78	74	73	71	69	83	71		
	3827	93	86	87	77	74	72	72	71	83	71		
	0	95	87	88	77	74	72	72	71	83	71		
1020	10360	96	98	93	81	81	77	74	72	85	73		
	7325	95	95	91	80	79	75	73	71	83	73		
	4164	96	88	90	79	76	74	74	73	85	73		
	0	96	88	90	79	76	74	74	73	85	73		
1075	10635	97	99	94	83	83	78	75	73	86	74		
	7845	97	95	92	81	81	76	74	72	85	73		
	4285	98	89	92	82	80	77	75	74	85	73		
	0	100	90	92	82	80	77	75	74	85	73		
1120	11270	99	99	94	83	83	78	75	73	86	74		
	7982	98	90	94	82	77	77	75	74	86	74		
	4465	99	90	93	81	78	76	76	75	86	74		
	0	101	91	94	81	78	76	76	75	86	74		
1160	11720	100	97	97	85	85	80	77	75	87	75		
	8285	99	92	95	85	79	79	77	76	87	75		
	4944	100	91	94	83	79	77	77	76	87	75		
	0	100	92	92	83	79	77	76	75	87	75		
1210	12181	101	93	95	85	80	80	78	76	88	76		
	6025	100	93	95	85	79	78	77	76	87	75		
	4824	101	92	95	84	82	78	77	76	87	75		
	0	103	94	96	84	82	77	76	76	86	76		
1250	12634	101	95	96	85	83	81	79	77	88	76		
	6278	100	95	96	87	80	79	78	77	87	75		
	5223	101	94	95	86	83	79	78	77	87	75		
	0	101	96	95	86	83	79	78	77	87	75		



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FCS



SOUND DATA

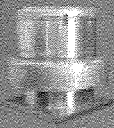
FCS - 675

FCS - 750

Section 1
Page 18

SOUND POWER - OCTAVE BANDS											
RPM	VOLUME	1	2	3	4	5	6	7	8	LWA	dB(A)
300	4698	87	58	54	53	52	50	48	48	58	46
	3451	85	57	53	52	51	50	49	48	58	46
	1935	84	56	54	52	51	50	49	48	58	46
	0	83	56	52	52	52	51	51	51	58	46
330	5458	89	62	57	57	55	53	51	49	61	49
	3854	87	61	56	55	54	52	50	51	60	48
	2160	86	61	57	55	54	54	52	53	61	49
	0	83	61	56	55	53	52	52	54	61	49
370	6328	91	67	60	59	58	55	53	51	63	51
	4527	89	66	59	58	56	54	52	53	62	51
	2738	88	65	59	57	56	55	54	53	61	51
	0	85	65	59	57	55	55	55	56	62	51
400	6986	92	71	63	61	60	58	56	54	66	54
	4929	90	69	62	60	59	57	55	53	65	53
	2812	89	68	62	60	58	56	54	53	65	53
	0	86	68	61	59	58	57	57	58	65	53
440	7168	94	75	65	63	62	60	58	56	68	56
	5052	92	73	64	62	61	59	56	57	67	55
	2928	91	72	64	62	60	59	56	57	67	55
	0	88	72	64	61	60	59	59	60	67	55
475	7738	96	78	68	64	64	62	60	58	70	58
	5455	94	76	67	63	63	61	60	59	69	57
	3263	93	75	66	64	63	61	60	59	69	57
	0	90	75	66	63	62	61	61	62	69	57
510	8328	98	81	70	66	66	63	61	59	72	60
	5858	96	79	69	65	64	62	61	60	71	59
	3528	95	78	68	65	64	62	61	60	71	59
	0	92	78	69	65	64	63	62	63	71	59
545	8828	99	83	72	67	67	64	62	60	74	62
	6272	97	81	71	66	66	64	62	61	73	61
	3818	96	81	70	67	66	64	62	61	73	61
	0	94	81	69	67	65	63	64	64	73	61
580	9468	99	85	74	69	69	66	64	62	76	64
	6672	97	83	72	68	67	65	64	63	74	62
	3740	96	82	72	68	67	65	64	63	74	62
	0	96	82	71	68	67	65	64	63	74	62
615	10016	101	88	76	70	70	66	64	62	77	65
	7078	99	86	74	70	69	67	65	63	76	64
	3988	98	85	74	70	69	67	65	63	76	64
	0	98	84	74	70	69	67	65	63	76	64
650	10568	103	91	79	72	72	68	66	64	79	67
	7478	101	89	77	71	71	68	66	64	78	66
	4162	100	88	76	72	71	68	66	64	78	66
	0	99	88	76	71	71	67	67	67	77	65
685	11158	105	93	81	74	74	70	68	66	81	69
	7882	103	91	79	73	73	69	67	65	79	67
	4618	102	90	78	73	72	69	67	65	79	67
	0	100	89	78	73	72	69	67	65	79	67
720	11728	107	95	83	75	75	71	69	67	83	71
	8284	105	93	81	74	74	70	68	66	81	69
	4842	104	92	81	74	73	70	68	66	81	69
	0	102	91	81	74	73	70	68	66	81	69
755	12298	109	97	85	77	77	73	71	69	85	73
	8888	107	95	83	76	76	72	70	68	83	71
	4882	106	94	82	75	75	71	69	67	83	71
	0	104	93	82	75	74	71	69	67	83	71
790	12868	111	99	87	78	78	74	72	70	87	75
	9088	109	97	85	77	77	73	71	69	85	73
	5022	108	96	84	77	76	73	71	69	85	73
	0	106	95	84	77	76	73	71	69	85	73
825	13438	113	101	89	79	79	75	73	71	89	77
	9482	111	99	87	78	78	74	72	70	87	75
	5320	110	98	86	78	77	74	72	70	87	75
	0	108	97	86	78	77	74	72	70	87	75
860	14008	115	103	90	80	80	76	74	72	91	79
	9884	113	101	89	79	79	75	73	71	89	77
	5542	112	100	88	79	78	75	73	71	89	77
	0	110	99	88	79	78	75	73	71	89	77
895	14578	117	105	92	82	82	78	76	74	93	81
	10082	115	103	90	81	81	77	75	73	91	79
	5722	114	102	89	80	80	76	74	72	91	79
	0	112	101	90	81	80	76	74	72	91	79
930	15148	119	107	94	83	83	79	77	75	95	83
	10700	117	105	92	82	82	78	76	74	93	81
	5922	116	104	91	81	81	77	75	73	93	81
	0	114	103	91	81	80	76	74	72	93	81
960	15718	121	109	96	84	84	80	78	76	97	85
	11102	119	107	94	83	83	79	77	75	95	83
	5722	118	106	93	82	82	78	76	74	95	83
	0	116	105	93	82	81	77	75	73	95	83

		SOUND POWER - OCTAVE BANDS											
RPM	VOL. (dB)	1	2	3	4	5	6	7	8	LWA	dB(A)		
375	6143	86	58	52	50	52	51	49	47	57	47		
	4340	84	57	50	48	50	50	51	50	56	47		
	2433	82	56	50	48	49	49	51	51	55	47		
	0	80	56	50	48	49	49	50	50	55	47		
410	6623	90	63	58	56	58	56	54	52	60	50		
	4822	88	62	57	55	56	56	57	57	60	50		
	2742	86	61	56	54	55	55	56	56	60	50		
	0	84	61	56	54	55	55	56	56	60	50		
445	7107	92	65	61	61	59	57	55	53	63	53		
	5443	90	64	60	59	58	56	54	53	62	52		
	3022	89	63	60	59	58	56	54	53	62	52		
	0	87	63	60	59	58	56	54	53	62	52		
480	7489	94	72	64	63	62	59	57	55	65	53		
	5527	92	70	62	61	60	58	56	54	64	53		
	3262	91	69	63	61	60	58	56	54	64	53		
	0	89	69	63	61	60	58	56	54	64	53		
515	8271	96	75	67	65	64	61	59	57	70	56		
	5842	94	74	66	63	62	61	60	59	69	57		
	3671	93	73	66	63	62	61	60	59	69	57		
	0	91	73	66	63	61	61	61	61	69	57		
550	8853	98	78	69	68	66	63	61	59	72	60		
	6227	96	77	68	65	64	63	62	61	71	59		
	3681	95	76	68	65	64	63	62	61	71	59		
	0	93	76	68	65	63	63	63	63	71	59		
585	9323	100	81	71	69	68	65	63	61	73	61		
	6705	98	79	70	67	66	64	62	60	72	61		
	4346	97	78	70	67	66	64	62	60	72	61		
	0	95	78	69	67	65	64	63	62	72	61		
620	9817	102	83	73	69	70	67	65	63	76	63		
	7027	100	81	72	68	69	66	64	62	74	62		
	4463	99	80	72	68	69	66	64	62	74	62		
	0	97	81	71	68	69	66	64	62	74	62		
655	10366	104	85	75	71	71	68	66	64	78	65		
	7522	102	83	74	70	69	66	64	62	76	64		
	4810	101	82	73	70	69	66	64	62	76	64		
	0	100	82	73	70	69	66	64	62	76	64		
690	10931	106	87	76	72	72	69	67	65	80	67		
	8211	104	85	75	71	70	67	65	63	78	66		
	4818	103	84	74	70	69	66	64	62	78	66		
	0	102	84	74	70	69	66	64	62	78	66		
725	11504	108	89	78	74	74	71	69	67	82	69		
	7882	106	87	77	73	73	70	68	66	79	67		
	5811	105	86	76	72	72	69	67	65	79	67		
	0	104	86	76	72	72	69	67	65	79	67		
765	12024	110	90	80	76	76	73	71	69	84	71		
	8504	108	88	78	73	73	70	68	66	79	67		
	5529	106	86	76	72	71	68	66	64	79	67		
	0	105	86	76	72	71	68	66	64	79	67		
800	12444	112	91	83	78	78	75	73	71	85	72		
	8248	110	89	81	76	75	72	70	68	81	69		
	5620	109	88	80	75	75	72	70	68	81	69		
	0	107	88	80	75	75	72	70	68	81	69		
835	12826	114	93	85	80	80	76	74	72	86	73		
	8568	112	90	83	78	78	75	72	70	82	70		
	6148	110	88	80	75	74	72	70	68	79	67		
	0	108	90	82	76	76	73	70	68	82	70		
870	13205	116	94	86	79	79	75	73	71	88	74		
	8723	114	92	85	78	77	75	73	71	84	72		
	6363	112	90	85	77	75	74	72	70	83	71		
	0	110	90	84	78	78	74	72	70	83	71		
905	13582	118	95	87	80	80	76	74	72	89	75		
	8750	116	93	86	79	78	75	73	71	85	73		
	6367	114	91	86	79	78	75	73	71	85	73		
	0	112	92	86	79	78	75	73	71	85	73		
940	13972	120	98	91	81	79	76	74	72	91	76		
	8825	118	94	88	81	79	77	75	73	87	74		
	6367	116	92	88	81	79	77	75	73	87	74		
	0	114	92	88	81	79	77	75	73	87	74		
975	14354	122	99	92	83	80	76	74	72	93	77		
	13178	120	96	91	82	79	76	74	72	90	76		
	7387	118	93	90	82	78	77	75	73	88	75		
	0	116	94	90	81	78	77	75	73	88	75		
1010	14738	124	101	94	84	81	76	74	72	95	78		
	13735	122	98	94	84	80	76	74	72	92	77		
	7595	120	96	91	83	80	76	74	72	90	76		
	0	118	95	92	83	79	78	75	73	90	76		
1045	15122	126	103	96	86	82	77	75	73	97	79		
	14283	124	99	95	84	81	76	74	72	93	78		
	8000	122	100	94	83	81	76	74	72	91	77		
	0	120	98	93	83	80	76	74	72	91	77		
1080	15505	128	105	97	86	82	77	75	73	99	80		
	14615	126	101	96	85	82	77	75	73	95	79		
	8316	124	100	95	85	82	77	75	73	93	79		
	0	122	99	95	85	82	77	75	73	93	79		



FCS



SOUND DATA

FCS - 900

RPM	VOLUME	SOUND POWER - OCTAVE BANDS								LWA	dBA
		1	2	3	4	5	6	7	8		
250	9651	71	82	88	88	88	84	82	80	82	80
	9918	89	81	88	87	84	85	84	82	82	80
	9932	88	89	88	87	88	88	88	84	83	81
	0	88	89	88	88	84	88	88	88	83	81
	10816	79	88	81	83	88	87	88	88	88	88
275	7500	73	84	89	89	88	87	86	88	84	82
	8204	73	83	81	88	88	88	87	86	85	84
	0	73	81	80	88	87	88	88	88	83	81
	11581	78	88	83	84	81	88	87	88	87	85
	8181	72	87	82	83	80	88	88	87	86	84
300	8588	78	88	83	81	80	88	88	87	88	88
	0	78	88	83	81	88	88	88	88	87	85
	12346	78	72	85	88	88	81	88	87	88	87
	8883	77	72	85	82	81	88	88	88	88	88
	4888	78	88	88	83	82	81	88	88	87	87
325	0	73	88	88	83	81	81	82	82	88	87
	13511	88	78	88	87	88	83	81	88	81	88
	8542	78	72	87	88	84	83	82	81	80	88
	5883	78	72	87	88	84	83	82	81	88	88
	0	78	72	87	88	83	83	83	83	81	88
350	14476	81	78	78	88	87	84	83	80	78	81
	10272	80	78	88	87	88	84	83	82	72	80
	8122	78	78	88	88	88	88	88	88	72	80
	0	82	78	88	88	84	84	88	88	72	80
	18441	82	88	72	70	88	88	84	82	74	82
400	10908	81	78	71	88	87	88	88	84	74	82
	8113	80	78	71	88	87	88	88	88	74	82
	0	81	78	70	88	88	88	88	88	74	82
	18446	82	83	71	71	88	88	88	84	76	84
	11283	82	72	72	70	88	87	88	88	72	82
425	4887	82	82	72	70	88	88	87	88	72	82
	0	82	82	72	88	87	87	87	88	72	82
	11271	84	85	78	72	88	87	88	87	72	82
	13272	83	83	74	71	88	87	88	87	72	82
	8878	83	83	74	71	88	88	88	87	72	82
450	0	84	83	73	71	88	88	88	88	72	82
	18287	88	87	73	73	88	88	88	88	78	87
	12284	84	85	78	72	71	88	88	88	78	88
	12841	84	85	78	72	71	88	88	88	78	88
	0	85	85	78	72	70	88	88	88	78	88
500	18302	88	88	78	74	74	88	88	88	88	88
	11825	88	88	77	73	72	75	78	88	78	87
	7843	88	87	73	74	78	78	78	78	78	87
	0	88	87	78	78	71	78	71	78	78	87
	25287	87	82	80	78	78	73	71	88	82	70
525	14317	88	88	78	74	74	72	71	70	81	88
	8023	88	88	78	78	78	72	71	81	88	88
	0	87	88	78	78	72	71	71	78	81	88
	21282	88	84	81	78	78	74	72	70	83	71
	14888	87	81	80	78	78	72	71	88	78	88
550	8488	87	81	78	78	78	74	72	72	82	70
	0	88	85	78	78	74	72	72	72	82	70
	22187	88	88	83	71	78	78	71	84	72	82
	15881	88	87	77	78	74	73	72	83	71	82
	8780	88	88	81	77	78	75	74	83	71	82
600	0	88	82	80	77	78	72	74	84	82	71
	23182	90	88	84	78	78	78	74	72	85	73
	16382	90	83	83	78	72	75	74	78	84	72
	8178	90	83	83	78	78	78	78	74	84	72
	0	81	84	82	78	78	74	72	75	84	72
625	24127	92	88	88	80	80	77	75	78	88	74
	17044	92	84	85	78	78	78	78	74	85	73
	8554	91	83	84	78	77	77	78	78	85	73
	0	82	84	84	78	77	75	75	78	85	73
	25282	94	87	88	81	80	78	78	74	87	75
650	11276	92	85	88	80	78	77	78	78	88	74
	8228	92	84	88	81	78	77	78	78	88	74
	0	94	88	88	80	78	78	78	77	88	74
	28287	95	87	88	82	81	78	77	78	88	78
	18408	95	88	81	78	78	77	78	81	88	78
675	10218	95	85	87	82	78	78	78	77	87	75
	0	98	88	87	81	78	77	77	87	87	75
	27022	97	88	81	85	82	85	78	78	88	77
	18288	98	88	88	82	80	78	78	78	88	78
	10200	98	88	88	82	80	78	78	78	88	78
700	0	97	82	88	82	80	78	78	78	88	78
	27887	98	88	82	84	83	81	77	77	90	78
	18771	98	87	82	81	82	78	78	88	77	88
	11083	98	88	80	82	81	80	78	78	88	77
	0	98	87	80	82	80	78	78	78	88	77

FCS - 1000

RPM	VOLUME	SOUND POWER - OCTAVE BANDS								LWA	dBA
		1	2	3	4	5	6	7	8		
200	12581	68	88	87	87	84	88	88	88	88	88
	7882	84	88	88	88	84	88	88	88	88	88
	8184	83	88	88	88	84	84	84	88	81	88
	0	83	87	88	84	84	84	84	88	81	88
	12021	71	83	80	80	87	85	83	81	83	81
225	8422	68	82	88	88	87	88	88	88	88	81
	4780	68	81	88	88	87	87	88	88	84	82
	0	68	81	88	87	86	87	87	88	84	82
	13480	78	88	82	83	88	88	88	88	88	84
	8200	74	85	81	81	88	88	88	88	88	84
250	8328	73	84	82	80	88	88	88	88	88	84
	0	74	84	82	80	88	88	88	88	88	84
	14880	80	88	84	88	82	81	88	87	88	87
	12812	78	88	84	83	82	81	88	88	88	88
	5882	72	87	84	83	82	82	81	80	88	87
300	0	78	87	84	82	81	81	82	82	88	87
	18315	82	72	87	87	88	88	81	88	81	88
	11832	80	71	88	88	84	83	82	81	70	88
	8484	78	71	87	88	84	84	82	82	71	88
	0	80	72	87	88	83	83	84	84	71	88
325	17740	83	78	70	88	87	88	83	81	73	81
	12512	81	75	88	87	88	88	88	88	72	80
	7028	80	74	88	87	88	88	88	88	73	81
	0	82	74	88	87	88	88	88	88	73	81
	18188	84	80	72	71	88	87	88	88	73	83
350	12842	83	78	71	88	88	87	88	88	74	82
	7881	82	77	71	88	88	87	88	88	73	83
	0	83	77	71	88	87	87	87	87	73	83
	25288	88	83	74	72	71	88	87	88	72	85
	14542	84	81	73	71	70	88	87	88	72	85
380	8187	83	80	73	71	88	88	88	88	71	88
	0	84	80	73	70	88	88	88	88	78	84
	22028	87	85	76	74	73	70	88	88	78	87
	12522	85	84	78	72	71	70	88	88	78	88
	8723	83	83	75	72	71	70	88	88	78	88
415	0	88	83	78	72	70	70	70	70	78	88
	28488	88	88	78	75	74	72	70	88	80	88
	12512	87	88	77	74	73	71	70	88	78	87
	8888	88	88	77	74	72	71	70	88	88	88
	0	87	88	78	74	72	71	71	72	78	87
440	24888	88	80	80	76	76	73	71	88	82	70
	12822	88	88	78	75	74	73	72	71	81	88
	8888	87	88	77	74	73	71	70	88	78	87
	8888	88	88	77	74	72	71	70	88	88	88
	0	87	88	78	74	72	71	71	72	78	87
470	24888	88	80	80	76	76	73	71	88	82	70
	12822	88	88	78	75	74	73	72	71	81	88
	8888	87	88	78	75	74	73	72	72	81	88
	0	88	88	78	75	74	73	73	73	81	88
	28318	80	93	81	77	77	75	73	71	88	72
490	12522	89	91	80	76	75	74	73	72	82	70
	12522	88	90	80	77	76	75	74	73	83	71
	0	88	91	78	77	74	73	74	74	82	70
	27748	91	95	83	78	78	76	74	73	85	73
	12502	90	92	82	78	77	75	74	73	84	72
524	12688	88	92	81	76	76	75	74	74	84	72
	0	90	93	81	78	78	76	75	75	84	72
	28178	91	97	84	79	80	77	75	73	82	73
	12512	91	95	83	79	78	76	75	74	85	73
	12584	90	94	82	79	77	77	76	75	85	73
558	0	91	95	83	79	77	76	75	75	85	73
	28637	93	98	86	81	81	78	76	74	88	76
	81622	92	98	85	80	79	78	76	75	87	75
	12120	92	95	84	81	78	77	77	76	86	74
	0	93	97	84	80	78	77	77	77	86	74
600	38077	95	99	88	82	82	80	77	75	89	77
	22672	94	97	87	81	80	79	76	77	88	76
	12688	94	98	86	82	79	79	78	77	88	76
	0	95	97	88	82	79	78	78	78	88	76
	33487	98	100	90	83	83	81	78	77	90	78
632	32642	98	99	89	82	81	80	79	78	89	77
	13262	98	97	88	83	80	80	79	78	89	77
	0	97	98	88	83	80	79	79	78	89	77
	34897	98	101	92	85	84	82	80	78	91	79
	24632	98	98	89	84	82	81	80	79	90	78
659	13818	97	98	89	84	82	81	80	79	90	78
	0	98	98	89	84	81	80	80	80	90	78
	28335	100	101	93	86	85	83	81	78	93	80
	12522	99	99	92	85	85	82	80	78	91	79
	14385	99	99	91	85	83	82	81	80	91	79
720	0	100	100	91	85	82	81	81	81	91	79
	38127	102	102	95	87	86	84	82	80	93	81
	28834	101	100	94	88	84	83	82	81	92	80
	15088	101	100	93	86	84	83	82	81	92	80
	0	102	101	93	86	83	82	82	82	92	80