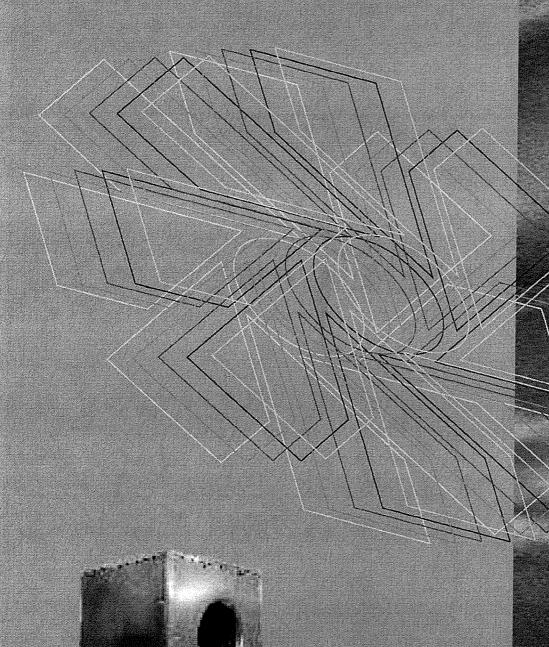
SCUBE Square Inline Centrifugal Fan





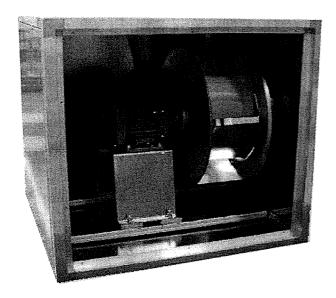
CATALOGUE -SCUBE APRIL 2009



SCUBE Square Inline Centrifugal Fan







PRODUCT FEATURES

Wide performance range and more

economic 2nd Generation Wind-Surfer TM Centrifugal Wheel: Low noise while pressurising as compared to 1st

Generation.

Maximum Wheel Diameter is 1 meter, reduce fan quantity and primary investment.

The scroll is saved and the cabinet size is reduced.

Centrifugal In-line: Low Noise

Compare with axial/mixed flow fans rotation speed is reduced by 20-30%.

The sound pressure level range is reduced by 10-15dB (A).

Fundamental way to reduce noise.

Plug Fan Structure

Plug Fan directly suck air into wheel and pressurize: air flow pattern improved.

AMCA Seal: Sound and Air Performance Certified

The sound and air performance is approved by AMCA.

Sound and Air Performance Seal is applied to each fan.

Design

Square inlet/outlet sleeve flange as standard accessories: round/sqaure convention duct is not needed.

Duct Connection cost reduced, and jobsite working time saved.

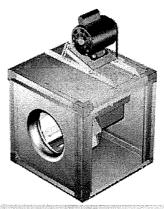
Motor can be multi-position.

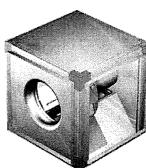
Multi- Discharge: More convenient and flexible for design and construction.



AMCA Sound & Air Performance Seal

Dynair Gulf FZCO Certifies that the model SCUBE 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











PRODUCT SPECIFICATION

Belt Driven

SCUBE series fans are designed to provide ventilation solution for ducted system. These fans are widely use in square duct as clean air booster for both supply or exhaust system.

Housing

The Housing is constructed of aluminium panel and aluminum profile with a rigid internal steel member. The panel can able to with stand the weight of motor and drive. The profile of the housing shall be square basically, with regular sleeves flange to avoid round/square transducer duct. The housing have optional discharge direction. The motor can be replaced easily from the larger acess door without removing the ready made duct.

Impeller

The impeller is backward curved centrifugal type and its directly inclined to airflow. The venturi guides the airflow smoothly with low noise at inlet. The impeller is balanced statically and dynamically to level G2.5 as per ISO standards No. 1940

Shaft

The fan shaft shall be heat treated through soaking furnace to the hardness level of HB370, and the surface shall be hard film corrosion treated. The fan shaft shall be balanced together with the wheel. And the shaft design speed shall at least exceed 25% of the maximum fan operation speed.

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.

Bearings

The bearings shall be selected for a minimum (L-10) life in excess of 80,000 hours at maximum cataloged 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 and motor shaft is always parallel.

Motor

Motor shall be carefully matched to the fan load, IP 55, and insulation class F. The motor bearings shall be ball type and need no lubrication.

Quality Standards

Square Inline Centrifugal fans shall be tested and approved according to AMCA standard 210 & 300,each Fan shall have AMCA Sound & Air Performance Seal. The manufacturer shall be certified by ISO9001:2000.





OPTIONAL ACCESSORIES

Back-draft Damper

Professional back-draft damper include inlet/outlet flange and combined box which insures the blade open properly. The damper is installed separately from the fan body.





45° Weather Cover (With bird screen)

When fan mounted outdoor, it prevents rain into indoor effectively from inlet or outlet



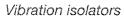
Motor Cover (Belt drive only)

With discharge window to exhaust heat, extend motor life and reduce motor noise.



Acoustical Housing

Apply high class acoustical material inside the fan casing to reduce sound pressure level at about 6~8 dB(A).



Vibration isolators can be hung or floor-mounted, material can be neoprene or spring type.



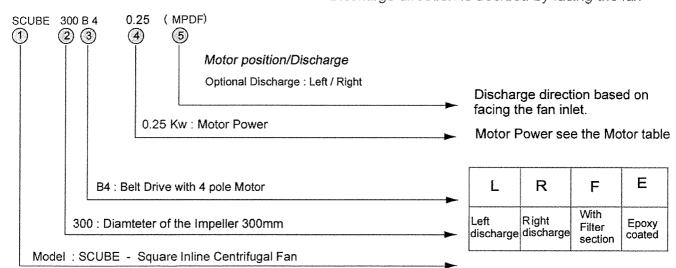






REFERENCE CODE

Discharge direction is decided by facing the fan







EXAMPLE OF CURVE READING

section 6

page 4

Terminology of Performance curve

1000

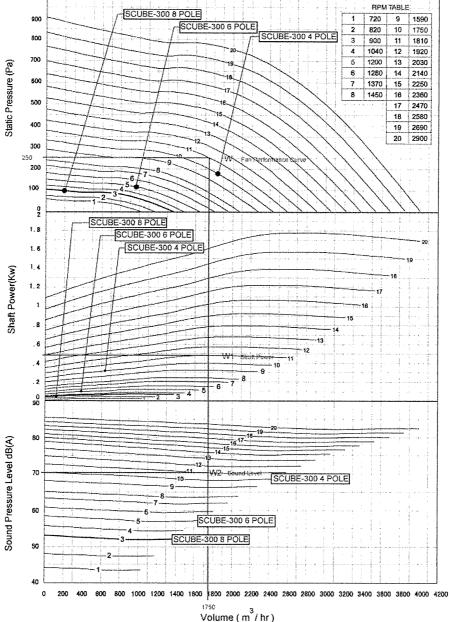
Each Fan performance cuve shows a group of different RPM.

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 variotion 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 , 250 Pa Static Pressure.

Step 1: From the given Volme (1750 m3 / hr) draw a vertical line upwards and from given static static Pessure 250 Pa draw a horizotal line to the right intersection point W is the working point. Find a fan curve close to the point, which be curve No.11.As in RPM table its s the working point 1810. Step 2: The intersection point between vertical line on the curve No 11 in shaft Power is W1.Drawing a horizontal line towards shaft power, value will be

(approx 0.50 Kw) According to Shaft Power ,motor selected will be 0.75 Kw.
Step 3: The intersection point the vertical line on the curve will be No.11 in sound Pressure is W2.Drawing a horizontal line from towards the sound

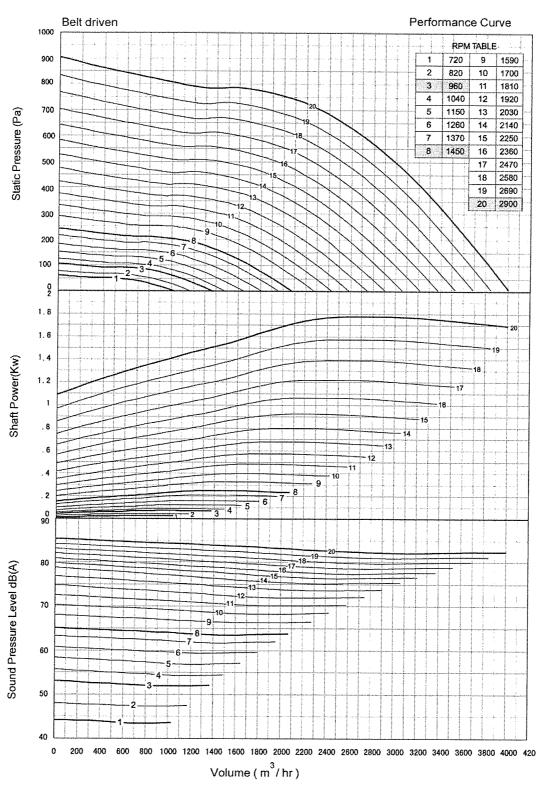
pressure, value will be (approx 70 dB (A). Its the fan sound Pressure level.

Step 4: According to above 3 steps, fan selected is (FCS - 300 - 0.75), belt drive and the RPM selected is 1810.

Step 5: Further customer has option of using direct drive (e.g) 4 POLE -1750 rpm, the nearest rpm curve 10 can give the respective static pressure and CFM characteristics.







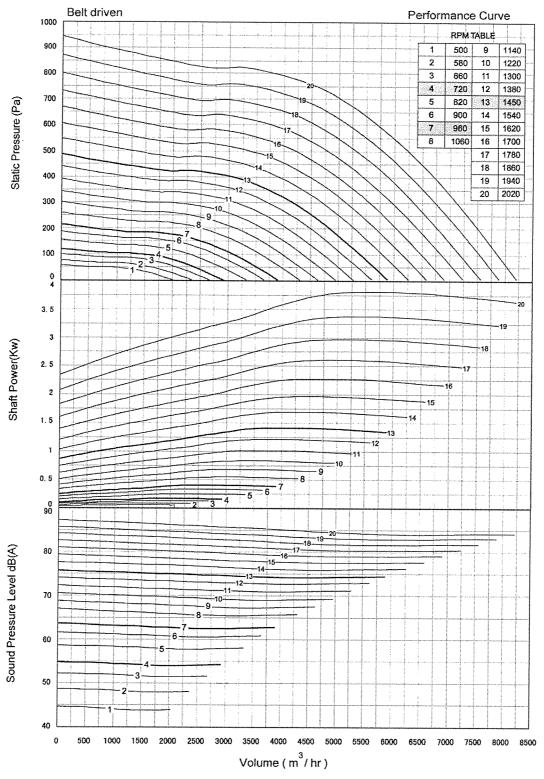






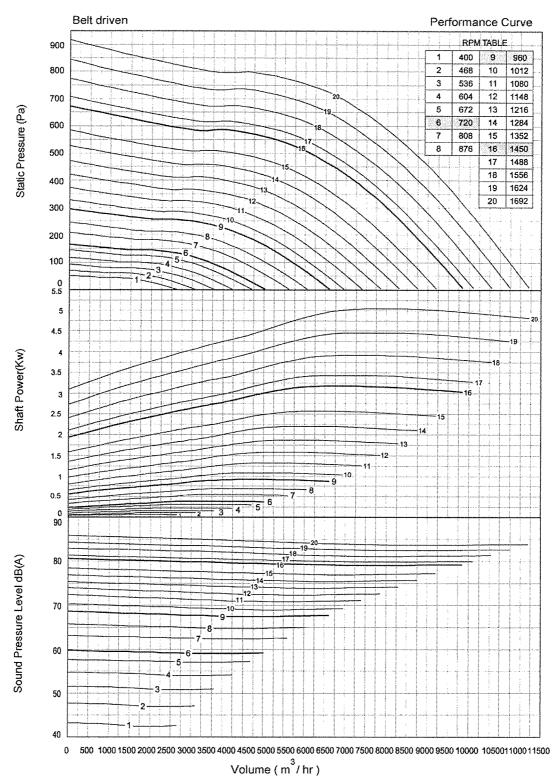










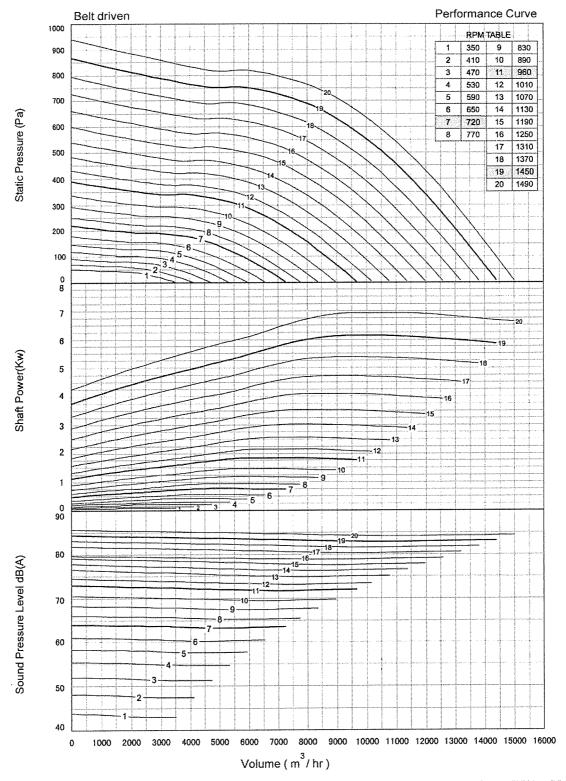






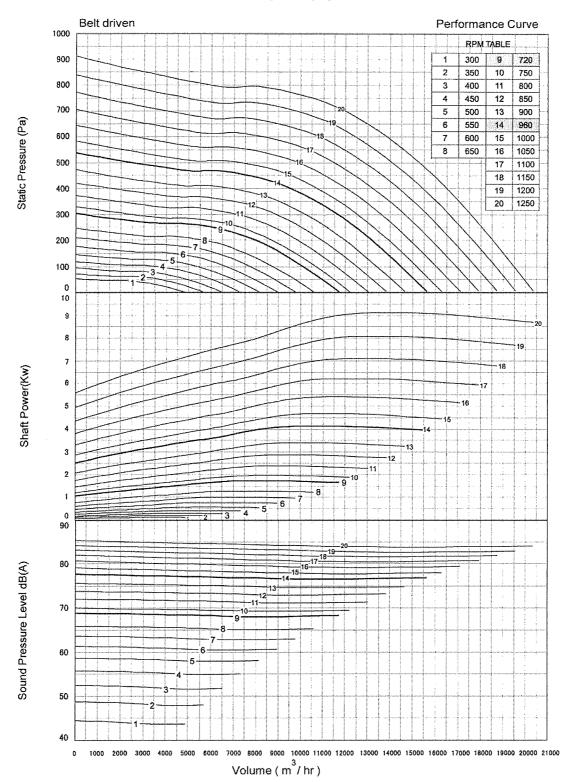












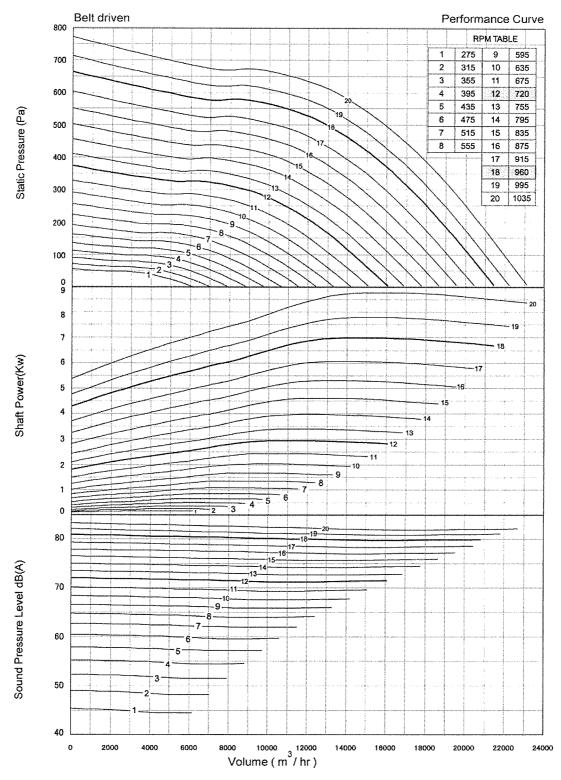
section 6

page 9





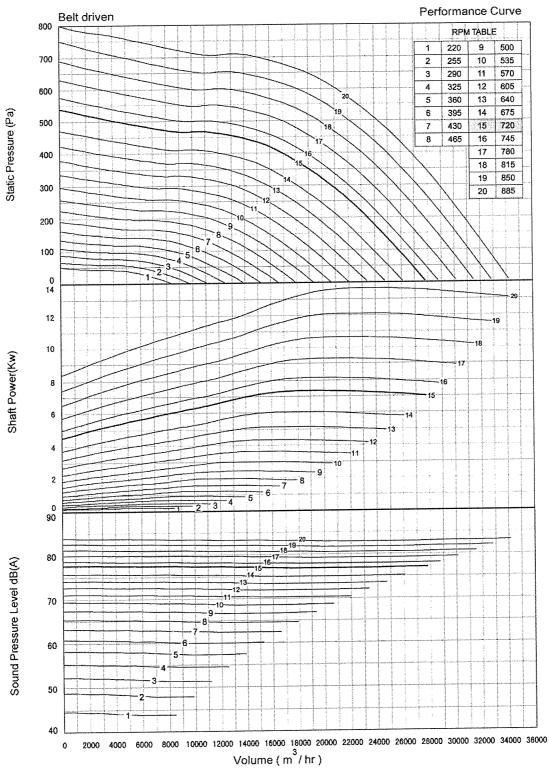










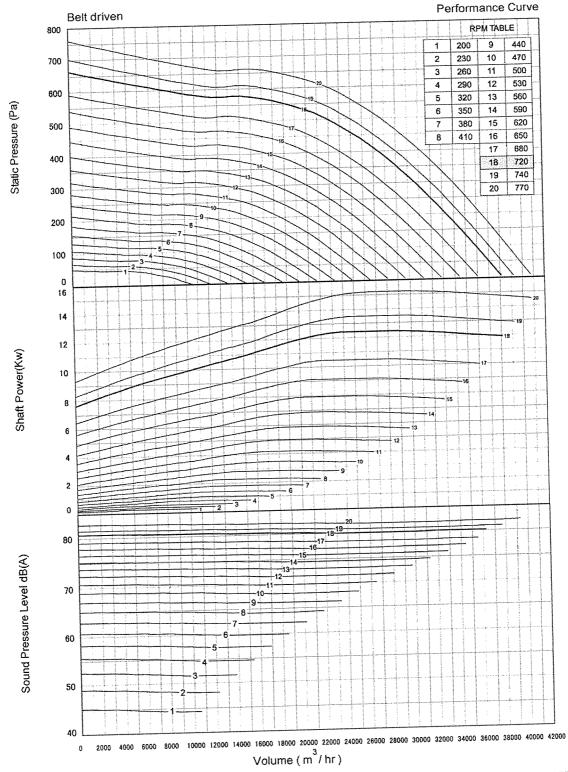










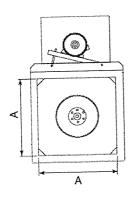


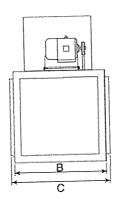


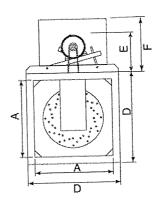


BELT DRIVE

Horizontal Discharge







Unit: mm

SCUBE-B	Α	В	С	D	E _{Max}	F	KG*
SCUBE-300	400	500	550	470	380	420	32
SCUBE-425	550	650	700	650	420	460	62
SCUBE-500	650	780	830	750	460	500	85
SCUBE-575	750	880	950	850	460	500	102
SCUBE-675	900	950	1020	1000	500	550	129
SCUBE-750	1000	980	1050	1100	500	550	143
SCUBE-900	1200	1030	1100	1300	550	600	199
SCUBE-1000	1350	1080	1050	1450	550	600	222

The weight in the above table does not include motor weight

Motor Weight Table

		Motor W	eight (Kg)	
Power(Kw)	2 P	4 P	6 P	8 P
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
15	122	137	180	235
18,5	142	170	231	290

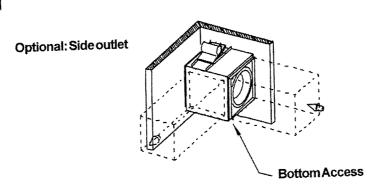


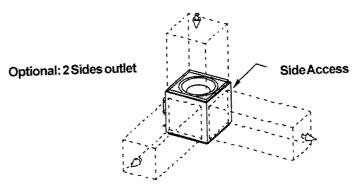




INSTALLATION





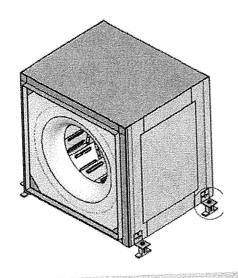


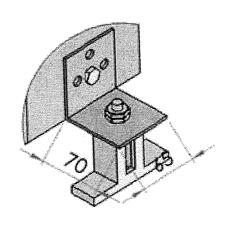
Mounting SCUBE fan

SCUBE is provided with four universal mounting feet, which can be mounted on the top of the fan to connect hanging vibration isolators through threaded rods. The feet can also be mounted on the bottom of the fan for floor-mounted vibration isolators. Meanwhile, the motor can be located on top, side or bottom.

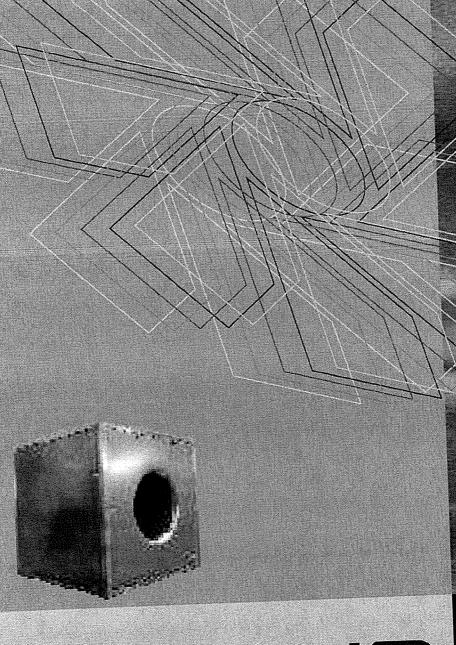
These feet are shipped loose for field installation in the desired location.

SCUBE configuration allows air to exit from any one side except the motor & motor oppsite side of the unit at jobsite. Remove the side panel of the desired outlet direction, change it to flange, and seal the original flange, all the above can be easily finished by contractors at jobsite.





SCUBE Square Inline Centrifugal Fan





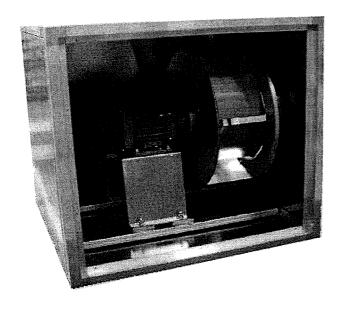
CATALOGUE -SCUBE APRIL 2009



CUBE Square Inline Centrifugal Fan



section 6



PRODUCT FEATURES

Wide performance range and more

2nd Generation Wind-Surfer TM Centrifugal Wheel: Low noise while pressurising as compared to 1st Generation.

Maximum Wheel Diameter is 1 meter, reduce fan quantity and primary investment.

The scroll is saved and the cabinet size is reduced.

Centrifugal In-line: Low Noise

Compare with axial/mixed flow fans rotation speed is reduced by 20-30%.

The sound pressure level range is reduced by 10-15dB (Å).

Fundamental way to reduce noise.

Plug Fan Structure

Plug Fan directly suck air into wheel and pressurize: air flow pattern improved.

AMCA Seal: Sound and Air Performance

Certified

The sound and air performance is approved by

Sound and Air Performance Seal is applied to each fan.

Design Square inlet/outlet sleeve flange as standard accessories: round/sqaure convention duct is not

needed. Duct Connection cost reduced, and jobsite working time saved.

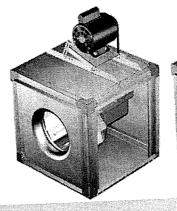
Motor can be multi-position.

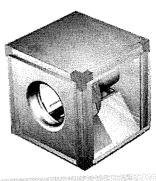
Multi- Discharge: More convenient and flexible for design and construction.



AMCA Sound & Air Performance Seal

Dynair Gulf FZCO Certifies that the model SCUBE 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











PRODUCT SPECIFICATION

Belt Driven

SCUBE series fans are designed to provide ventilation solution for ducted system. These fans are widely use in square duct as clean air booster for both supply or exhaust system.

The Housing is constructed of aluminium panel and aluminum profile with a rigid internal steel member. The panel can able to with stand the weight of motor and drive. The profile of the housing shall be square basically, with regular sleeves flange to avoid round/square transducer duct. The housing have optional discharge direction. The motor can be replaced easily from the larger acess door without removing the ready made duct.

The impeller is backward curved centrifugal type and its directly inclined to airflow. The venturi guides the airflow smoothly with low noise at inlet. The impeller is balanced statically and dynamically to level G2.5 as per ISO standards No. 1940

The fan shaft shall be heat treated through soaking furnace to the hardness level of HB370, and the surface shall be hard film corrosion treated. The fan shaft shall be balanced together with the wheel. And the shaft design speed shall at least exceed 25% of the maximum fan operation speed.

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.

Bearings

The bearings shall be selected for a minimum (L-10) life in excess of 80,000 hours at maximum cataloged 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 and motor shaft is always parallel.

Motor shall be carefully matched to the fan load, IP 55, and insulation class F. The motor bearings shall be ball type and need no lubrication.

Square Inline Centrifugal fans shall be tested and approved according to AMCA standard 210 & 300,each Fan shall have AMCA Sound & Air Performance Seal. The manufacturer shall be certified by ISO9001:2000.





OPTIONAL ACCESSORIES

Professional back-draft damper include inlet/outlet flange and combined box which insures the blade open properly. The damper is installed separately from the fan body.

45° Weather Cover (With bird screen)

When fan mounted outdoor, it prevents rain into indoor effectively from inlet or outlet

Motor Cover (Belt drive only)

With discharge window to exhaust heat, extend motor life and reduce motor noise.

Apply high class acoustical material inside the fan casing to reduce sound pressure level at about 6~8 dB(A).

Vibration isolators can be hung or floor-mounted, material can be neoprene or spring type.







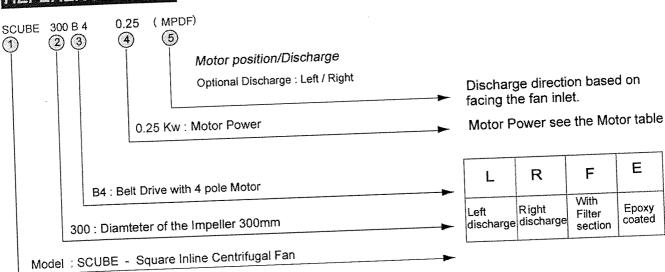






REFERENCE CODE

Discharge direction is decided by facing the fan







EXAMPLE OF CURVE READING

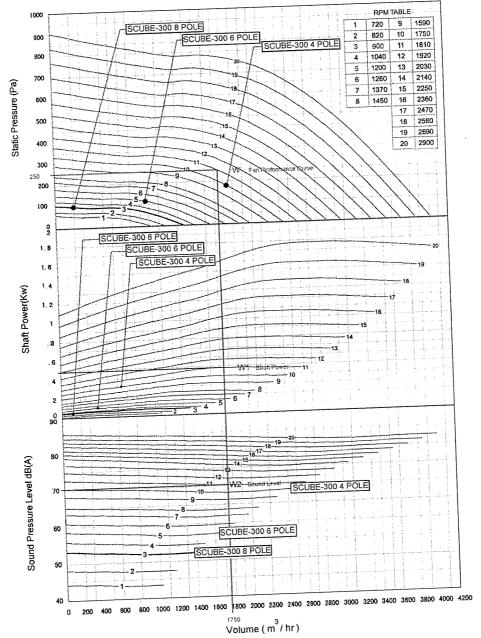
section 6 page 4

Terminology of Performance curve

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 variotion 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.



Step 1 : From the given Volme (1750 m3 / hr) draw a vertical line upwards and from given static static Pessure 250 Pa draw a horizotal line to the right intersection point W is the working point. Find a fan curve close to the point, which be curve No.11. As in RPM table its s the working point 1810. Step 2: The intersection point between vertical line on the curve No 11 in shaft Power is W1.Drawing a horizontal line towards shaft power, value will be

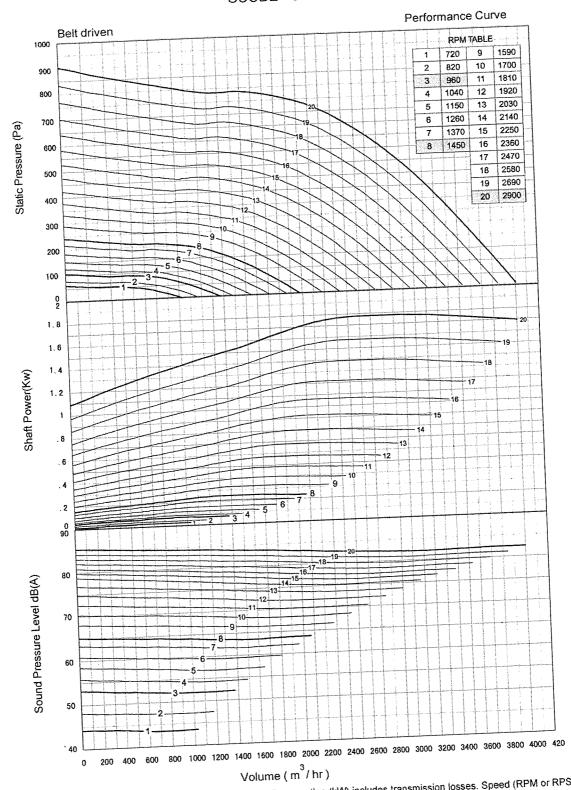
(approx 0.50 Kw) According to Shaft Power ,motor selected will be 0.75 Kw. Step 3 : The intersection point the vertical line on the curve will be No.11 in sound Pressure is W2.Drawing a horizontal line from towards the sound pressure, value will be (approx 70 dB (A). Its the fan sound Pressure level.

Step 4: According to above 3 steps, fan selected is (FCS - 300 - 0.75), belt drive and the RPM selected is 1810.

Step 5: Further customer has option of using direct drive (e.g) 4 POLE -1750 rpm, the nearest rpm curve 10 can give the respective static pressure and CFM characterstics.







Performance certified is for installation type B - free inlet, duct 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 LwiA sound power levels for Installation Type B: Free inlet, duct 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 power level ratings shown are in decibels, referred to as 10⁻¹² watts, calculated per AMCA International Standard 301. Ratings do not include the effects of duct end correction. dB(A) sound ratings shown have been calculated per AMCA International 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.

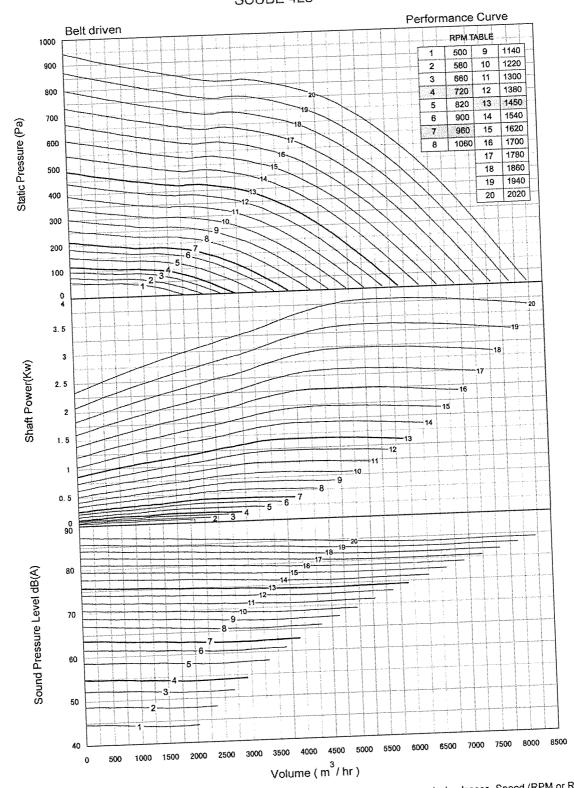






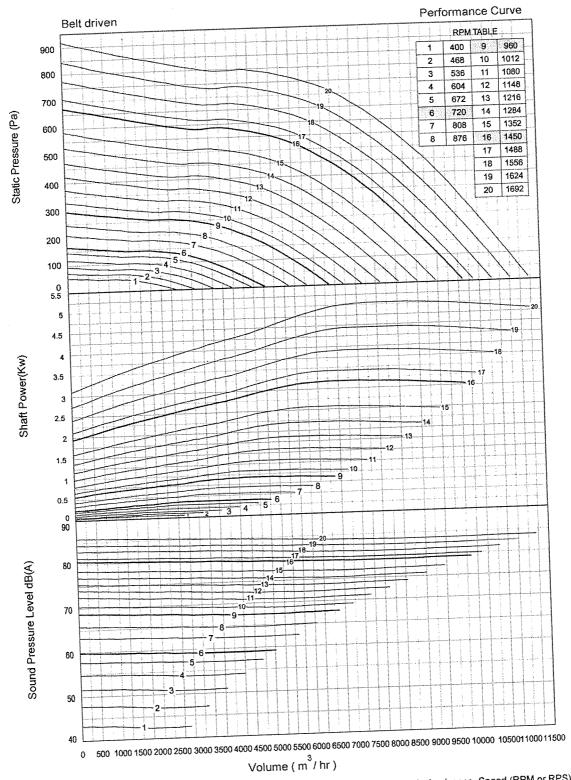


section 6



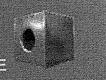




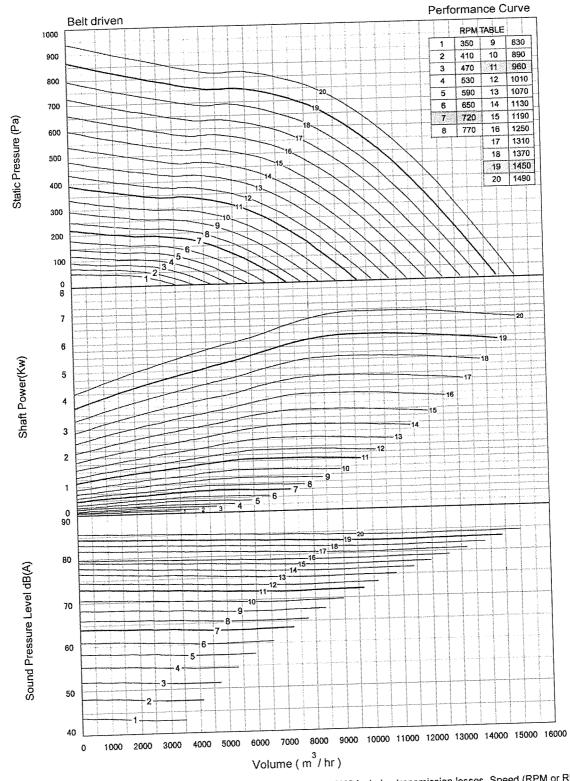






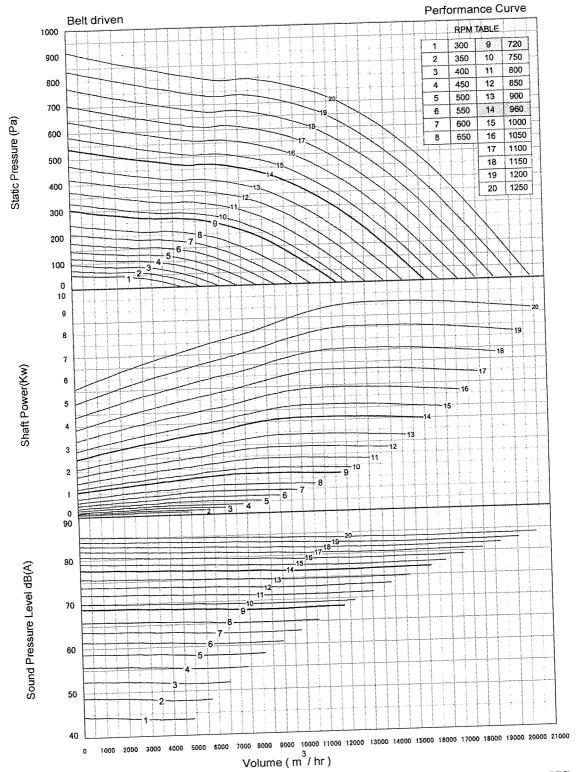












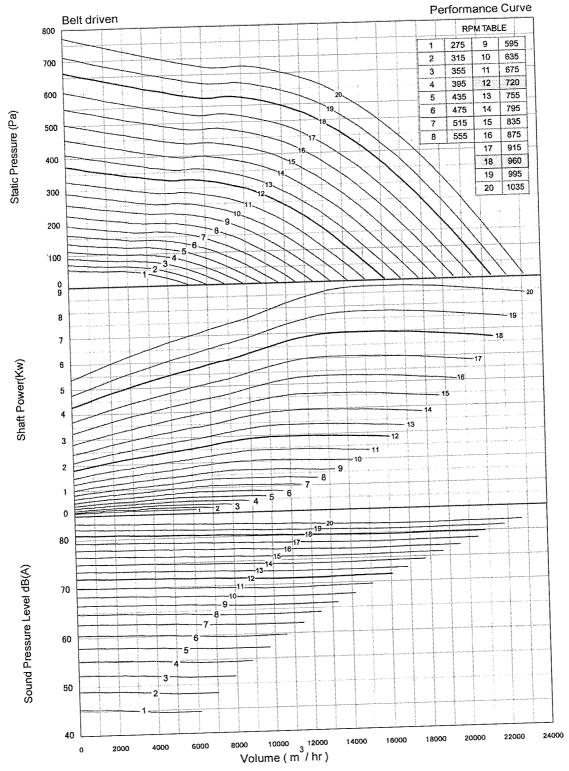






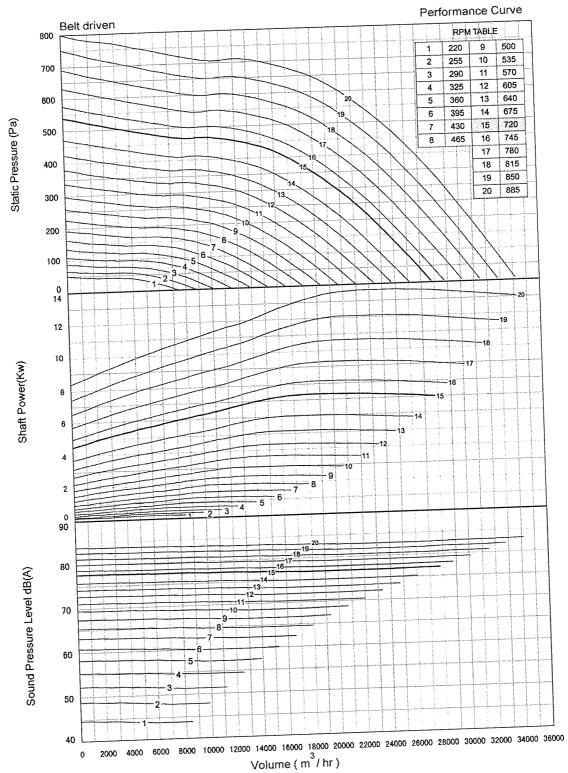


section 6







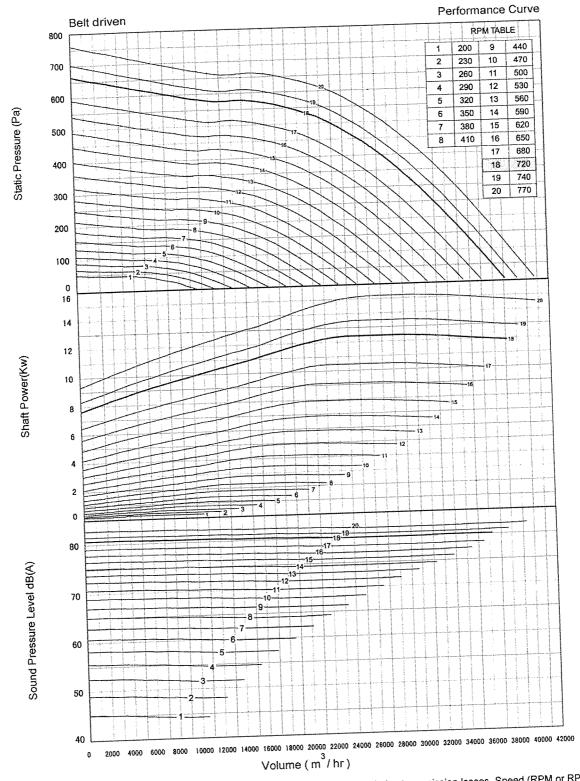










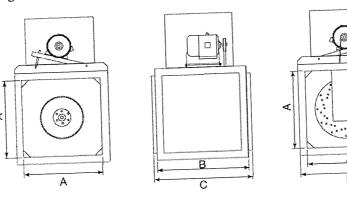






BELT DRIVE

Horizontal Discharge



Unit: mm

SCUBE-B	Α	В	С	D	Емах	FOptional	KG*
	400	500	550	470	380	420	32
SCUBE-300	550	650	700	650	420	460	62
SCUBE-425		780	830	750	460	500	85
SCUBE-500	650	880	950	850	460	500	102
SCUBE-575	750	950	1020	1000	500	550	129
SCUBE-675	900	980	1050	1100	500	550	143
SCUBE-750	1000	1030	1100	1300	550	600	199
SCUBE-900	1200	1080	1050	1450	550	600	222
SCUBE-1000	1350	1000		1 1	l		

The weight in the above table does not include motor weight

Motor Weight Table

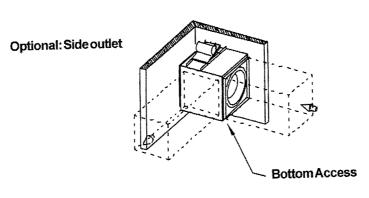
		Motor W	eight (Kg)	
Power(Kw)	2 P	4 P	6 P	8 P
0,18	14	13,5	14	16
0,10	14,5	14	14,5	17
	15	14,5	16	24
0,37	15,5	15	17	28
0,55	15,5	16	22	30
0,75	16	21	24	32
1,1		23	32	40
1,5	21		41	64
2,2	24	33		78
3	33	35	63	105
4	41	41	72	
5,5	63	65	81	115
7,5	70	76	118	145
11	110	118	145	160
15	122	137	180	235
18,5	142	170	231	290

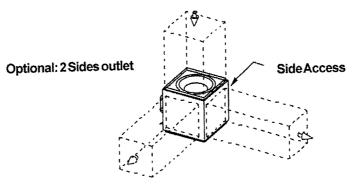




INSTALLATION





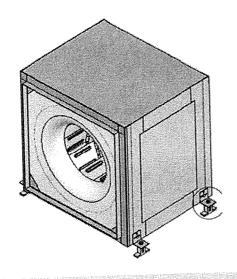


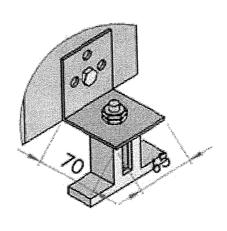
Mounting SCUBE fan

SCUBE is provided with four universal mounting feet, which can be mounted on the top of the fan to connect hanging vibration isolators through threaded rods. The feet can also be mounted on the bottom of the fan for floor-mounted vibration isolators. Meanwhile, the motor can be located on top, side or bottom.

These feet are shipped loose for field installation in the desired location.

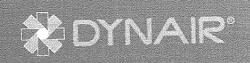
SCUBE configuration allows air to exit from any one side except the motor & motor oppsite side of the unit at jobsite. Remove the side panel of the desired outlet direction, change it to flange, and seal the original flange, all the above can be easily finished by contractors at jobsite.











SOUND DATA

SCUBE - 300

SCUBE - 425



			SOL	JND PO	WER - C	CTAVE	BAND					
11.	VOLUME	1	2	3	4	5	6	7		8	LWIA	dB(A)
PM .	1029	69	63	58	52	48	44	40		6	56	44
F	727	69	62	57	52	48	44	40		17	55	43
20 -	408	70	62	57	52	50	45	40		16	56	44
ŀ	0	72	62	57	53	50	45	40		16	56	44
\dashv	1172	73	67	62	56	51	48	44		10	59	47
r	828	73	66	62	56	52	48	44		40	59	47
20	464	76	66	61	56	53	49	44		40	60	48
H	0	78	66	61	56	54	49	44	***************************************	40	60	48
	1373	77	72	67	61	55	52	48		44	64	52
ŀ	970	78	71	67	60	56	52	48	managemen	44	64	52
260	544	82	71	66	59	57	54	48		44	64	52
ł	0	85	71	68	59	58	54	48		44	65	53
	1487	79	74	69	53	58	54	50		47	67	55
1	1050	81	73	69	62	58	55	50		47	66	54
040	589	85	73	69	61	59	56	50		48	67	55
1	0	88	73	69	61	60	57	50	***************************************	45	68	56
	1644	81	77	71	66	61	57	50		49	69	57
	1162	83	77	71	65	51	57	5	3	49	69	57
150	651	87	77	71	65	62	59	5		49	70	58
	-	91	77	71	64	62	60	5	3	49	70	58
	1901	83	80	73	59	63	60	5		52	72	60
	1801	84	80	73	68	64	50	5	6	52	71	59
1260	1273	89	80	73	58	64	61	5	6	52	72	60
	713	92	81	73	67	65	62	5	6	51	73	61
	1050	84	82	76	72	56	62	- 5	8	54	74	62
	1959	-	82	76	71	56	62	5	8	54	74	62
1370	1384	86	4	76	70	66	63	5		54	74	62
	776	90	84	75	70	66	84		9	54	75	53
	0	94	85	78	74	67	63		0	56	76	64
	2073	85	84	77	73	87	64		0	55	75	63
1450	1465	87	84	77	72	87	85		0	55	76	84
	821	91	86	77	72	68	66		11	55	77	65
	0	95	87		76	70	86		2	58	79	67
	2273	87	87	81	76	70	56		2	58	78	66
1590	1606	88	87	80	75	70	67		33	58	79	67
,	900	93	90	80		70	68		3	58	80	68
	0	96	91	80	75 78	72	87		34	60	81	69
	2431	88	89	83		72	68		54	60	80	68
1700	1717	89	89	82	78		69		65	60	81	69
3 700	952	94	92	82	78	71	70		66	60	82	70
	0	97	94	82	77	71	89		66	62	82	70
	2588	89	91	85	80	74	70		66	61	82	70
1810	1828	91	91	84	80	73	71		67	62	83	71
1010	1025	95	95	84	80	73	72		68	61	85	73
	0	99	97	84	79	73				63	84	72
	2745	90	92	87	82	76	71		67 67	63	84	72
1920	1939	92	93	86	82	75	71	+	69	63	85	73
1921	1087	96	97	88	82	74	72	-	69	63	87	75
	0	100	100	86	81	74	73	-+-	69	65	86	74
	2902	91	94	89	84	78	72			65	86	74
	2050	93	95	88	84	76	73	-	70	65	87	75
2030	1149	97	99	87	83	76	74	+	71	64	89	77
	0	101	102	87	83	76	75	-	70	66	87	75
	3060	92	95	90	85	79	73		71	66	87	75
nes	2161	93	96	89	85	78	74		72	66	89	77
214	1212	98	101	89	85	177	75 76		73	66	91	79
	0	101	104	89	85	77	75	-+	72	68	89	77
	3217	93	96	92	86	81	76		72	67	88	76
225	2273	94	97	91	86	79	76		73	68	90	78
443	1274	99	102	91	86	79	77		74	68	92	80
L	0	102	105	1 91	86	78	76		73	69	90	78
T	3374	94	97	93	87	82			73	69	90	78
236	2384	95	98	92	87	B1	77		75	69	91	79
230	1336	100			87	80	78		75	69	99	·······
	0	103			87	80			74	70	91	
	3531	95	98	94	88	84			74	70	91	mmsmm
247	2495		99	94	88	82			76	70	92	
241	1398				88	82			77	70	94	
1	0	104			88	82			75	71	91	
Г	3689				89	85			76	71	9	
25	2600				89	84			77	72	9	
25	1461				89	83				72	9	
1	0	10			89	83			78	73		
-	384	96			90				76	72		
1	271				90			•	77	73		
28	90 152		2 10						78			
ı	0	10		8 99					79	73		
_	400						-	2	77	74		
1	282	-				***********		1	78	72		4 8 6 8
29	100 158		3 10					2	79 80	7/		7 8
			6 10		1 91	8		12				

		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ടവ	JND PC	WER -	OCTA	VE BAI	NDS		Т		
	(10) 1 1 1 1 1 m	 _		3	4	5	6	7		В	LwiA	dB(A)
PM L	VOLUME	1	2 64	58	52	49	45	41		7	56	44
-	2033	69	64	56	53	49	45	41		17	56	44
00 -	1436	68		56	54	50	45	41	3	17	56	44
-	805	68	64		55	51	45	41	3	17	57	45
_	0	67	63	56		_	49	45		11	60	48
L.	2358	73	67	62	56	53	49	45		1	60	48
580	1666	72	67	61	57	53				ii	60	48
100	934	73	67	60	58	55	49	45		***************************************		49
r	ū	73	67	60	58	<u> 55</u>	49	45		1	61	
	2683	77	70	66	60	58	53	49		45	64	52
- 1	1895	77	70	65	61	57	52	48		45	64	52
660		76	70	65	61	58	53	48	1	44	64	52
-	1062			64	61	59	53	48		44	64	52
	0	79	70		***************************************		55	51	mandana	47	66	54
- 1	2927	79	73	69	63	59				47	66	54
720	2068	79	73	68	63	59	55	51		47	86	54
720	1159	81	73	58	63	60	56	51			67	55
	0	82	73	67	63	61	56	5		47	***************************************	58
	3333	83	77	73	67	62	59	5		51	70	
		84	77	72	66	63	59	5		51	70	58
820	2355		77	72	66	64	60	5	,	50	70	58
	1320	86			7	64	80	5		50	71	59
	0	88	76	72	66	***************************************		5		53	73	61
	3659	86	80	76	70	84	61				73	61
۸۸۸	2585	87	80	75	69	65	61	5		53		61
900	1449	90	79	75	68	66	62	5		53	73	
	0	92	79	75	69	67	63	5		53	74	62
		88	82	78	72	66	83	5	9	55	75	63
	3902			77	70	67	63	5		55	74	62
960	2757	69	82		- -		64	15	······································	55	75	63
	1545	85	81	77	70	68				55	76	64
	0	95	81	77	70	69	65	1.5				66
	4309	91	86	81	75	69	66	-	2	58	78	
	3044	92	85	81	73	70	66	- 6		58	77	65
1060	1708	96	84	80	72	70	87	e	1	57	78	66
			84	80	72	71	68		1	57	79	67
	0	100			77	71	88		4	80	80	68
	4634	92	88	82			68		13	60	79	67
1140	3274	93	87	82	75	72				59	80	68
1140	1835	97	87	82	75	72	69		4			69
	0	101	87	82	75	1 73	70		14	59	81	
	4959	93	90	83	79	73	69		35	62	81	69
			89	83	78	73	70		35	61	81	69
1220	3503	94			77	74	71		35	61	82	70
	1954	99	90	83	77	74	72		36	61	83	71
	1 0	102	90	83					***************************************	83	83	71
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5285	94	92	85	81	75	71		67		83	71
	3733	95	91	85	80	75	71		67	63		72
1300	2093	100	92	85	79	75	73		8.	83	84	
	0	103	93	84	79	76	1 73		88	63	84	72
		95	93	87	83	77	73		69	65	85	73
	5610		93	87	82	77	73	Т	69	65	85	73
1380	3963	96			81	77	74		69	65	85	73
	2221	101	95	36		77	7.5		70	55	86	
	0	104		86	81		74		70	86	86	***************************************
	5894	96	95	88	84	78				,		
	4164	97	95	88	83	78	74		70	66	86	
1450	2334	102	97	88	83	78	78		71	66	87	
	0	105		88	83	78	76	<u> </u>	71	66	88	
		97	96		86	80	7.5	3	72	68	88	
	6260				85	80			72	68	88	76
154	0 4422	98				80			73	68	89	77
٠- "	24/9	100			85		***********		73	68	90	
	0	106				80			73	69	90	
	6585	98									89	
	4652	99	91	91	87	81			73	69	***************************************	*******
152	2608	10	4 10	1 91	87	81			74	69	90	
1	0	10			86	8			75	69	9	-
		99					1 7	8	75	71	9	
1	6911								75	70	9	1 79
170	4882	10							76	70		2 80
1	2736							0	76	70		
L_	0	10			_					72		3 81
Г	7236	10						2	76			
1	5112		1 10	11 9				0	76	1 72		
178	2865				4 91	8 0		1	77	72		3 81
1	0	10		07 9			3 8	32	78	177	***************************************	5 83
-				02 9				30	77	7:	3 9	4 82
1	7561							11	77	73		4 82
18	60 534			03 9				32	78	7		5 83
1 "	2994			96 9						7		36 84
1	0		0 1	09 9	-			33	79		-	
-	788	3 15)1 1	03 9	8 9	3 8	*******	<u> </u>	78	12		
1	EE2	***************************************		04 9		3 8	8	82	78	7		95 83
19								83	80	7	4 :	96 84
1	312							84	80	7		98 86
١	0								79			96 84
	821	1 10		Annual Course				83				96 84
		1 1	03 1			····	**********	83	80			
	580											
20	20 580			09 1	8 8	14		84 85	81			98 8

Values shown are for inlet LwiA sound power levels for Installation Type B: Free inlet, duct 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.





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SOUND DATA

SCUBE - 500

SCUBE - 575



				soul	ND PO	WER -	OCT/	AVE 8	ANDS	\$		L			
	170×	UME	1 1	2	3	4	5	1	<u>.</u> T	7	8		_	部(A)	
PM					56	51	48	4		40	36		55	43	
1		48	66	62	55	52	48	4	4	40	36		54	42	
400		70	66	61	55	53	49	4		40	36		55	43	
		148	66	61		54	49	4		39	35		55	43	
		0	66	51	56	55	52	1 4		44	40	-	59	47	
	30	98	71	67	81		-	1 4		44	41		59	47	
468	21	88	71	67	60	56	52		8	44	40		59	47	
400	12	227	70	68	59	57	53			44	40		60	48	
		0	70	66	59	58	54	****	8				63	51	
	3	548	76	71	65	59	56		2	48	44			51	
		506	75	71	63	60	55	5	1	48	44		63		
538		405	75	71	63	61	58	5	52	48	44		63	51	
	-	0	74	71	62	61	58		31	47	43		64	52	
	+ -	998	79	73	68	63	59		35	51	4		66	54	ı
			79	73	67	63	59		55	51	4		66	54	ı
604		824	***************************************		67	64	61		55	51	4	1	66	54	ı
	1	583	79	73			61	-	55	51	4		67	55	1
	1	0	80	73	66	64		and the same	58	54	5		69	57	I
	4	448	82	78	72	66	61				1 5		69	57	١
A 15 A	3	142	82	76	71	66	- 6		58	54			***************************************	57	1
672		761	83	76	70	66	6		59	54	- 5		69		1
		0	84	75	70	67	1 6	4	59	54	5		70	58	1
	+-	***************************************	84	76	74	68	6	3	60	56	5		71	59	4
		1766	84	78	73	68	6		60	56	5	2	71	59	4
720		367		78	72	68	6		61	56	5	2	71	59	1
	-	1887	86		72	68	1 6		61	56	1 5	2	72	60	1
	4	0	87	78				_	63	59		5	75	63	J
		5348	88	85	77	71			63	59		5	74	62	1
600		3778	88	81	77	71		7	***************************************	4		5	75	63	1
808		2118	90	81	76	71		8	64	59			75	63	1
		0	92	81	76	71		9	64	59	***************************************	55	77	65	1
	_	5798	90	84	80	74		9	65	61	*****	57		65	1
		4096	91	84	79	73		9	65	61		57	77		4
876	-	2296	94	84	79	73		0	67	61	***********	57	77	65	4
	-	***************************************		83	79	73		71	67	6		57	78	66	4
	-		-	-	****			11	68	6		60	80	68	4
					~~				68	6		60	79	67	
960	ļ						***************************************					60	80	68	
											-	59	81	69	_1
		0	100	_			****				*****	61	81	69	٦
	T	6699	94	89									81	69	٦
	. [4732	95	88	84							61		70	-
1053	2		99	88	84		-		71			<u>61</u>	82		
	-					7	6	75 l	72			61	82	70	-
					*****			74	71	6	7	63	83	71	_
l	-							75	71	6	7	63	83	71	
108	0 -							76	73	6	7	63	83	71	_
	-								74			63	84	72	
	-											65	85	73	
1	-											65	84	72	
114	ıs L	5368										65	85	73	
l '''	~ L	3009										64	86	74	
L	[0		93			***************************************			****		68	86	74	
	T	8049	98	95	8								86	74	
1	٦	5686	99	94								66	87	75	
121	16			95	8	3	32					66	-		
1	r	0				3 L	<u> 1</u>	79				66	87	75	****
-					***************************************		85	79	76	entropy control	constitution of	68	88	76	
1	F			things become	arrent frances	***************************************	84	80	76			68	87	75	
128	84 -							80	77		72	68	88	76	
1	-							81	78		72	67	89	77	
-									77	Т	73	69	89	77	
1	-	***************************************				******	**************	***************************************		1		69	89	77	
12	52	***************************************								-		69	90	78	
1 "	~ L	3544								\neg		69	90	78	1
L		0		***************************************	-	*****			_	*****		71	91	75	
		9598	10	1 10	0 5	3						71	91		
1		6780			-						******	71	92	-	****
1 14	100	3801	10	7 11			88						93		
1	1	***************************************			3 1	3	88	83				71			-
-						14	90	84				72	92	·	
1	Ì					14	89	84				72	97		
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	556	7276						·				73			
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1		0	1				***********					74			3
-					03	97	93								
						96	92	86				74			12
11	624						92	88	8	3	79	74			33
1				-				86			80	74			34
<u></u>					-			***************************************			79	78	9	6 8	34
1080					75		6 8	34							
- 1		1 7017	1 1	עט []	UD			***************************************				75			85
١,	692				առաց ք		O.	1 07							22

						UND F		crs -	5	6	7	7	T	3	LWIA	di	(A)
RPM	VOL		1	_	2	3	52.	-	48	44	十	40	3	********	55		3
1	35	AMERICAN	66	6	1	58 58	53		48	44	_	41	3		55	- 2	3
350	24		66			56	54		49	44		40	3	6	55		13
	13		66			57	55		49	44		40	3	6	56		14
	41		71		7	61	56		53	49		45		1	60	-	18
	29		71	mméa	66	60	57		53	48		45		1	59		47
410		34	71	77	36	60	58		54	49		45		1	60		48
	-	0	71		36	60	59		54	48		44	***	0	60		51
***************************************	47		76		71	65	60	_	56	52	-	48		5	63 63		51
470		43	75		71	64	61	-	57	52		49		15	54		52
470	18	374	75		71	64	62		58	52		48		14	64		52
		0	75		70	64	62		58	52	_	48			67	+	55
	53	336	80		75	69	63	~~~~~	60	5		52		48	67		55
530	3	769	79		75	67	64		60	5		52		48 48	67		55
334	2	113	78	<u> </u>	75	67	65		61	50		52 51		47	87	_	55
		0	78		74	66	6		62	5		55		51	70		58
		940	83		77	72	8		63	5		55		51	70	_	58
590	4	196	82	2	77	71	5		63	1 5		55		51	70		58
200	2	352	83		77	70	6		64	15		54	+	50	70		58
	1	0	83		77	70	6	-	65	5 6		57	+	53	72		60
		544	8		79	75	16		65	************		57	+	54	72		60
650		823	8		79	74	1 5		65	6		57	十	53	73		61
550	2	591	8		79	73	13		67 68	~~ { ~~~	2	57	-	53	73		61
	4-	0	8	_	79	73	7		68		4	60	\top	56	75		63
	-	248	8		82	78		2	68		34	60		56	7.5		63
720		120	1 8		82	77		2	69		35	60		56	71	3	64
		2870	1 9		82	76		3	70		35	60		56	71		84
		0	1 9	**********	82 84	80		4	69		16	62		58	7	7	65
	· ·	7752	19		84	79		4	70	****	66	62	******	58	7	7	65
770		2070		3	84	79		14	.71		57	62		58	7.		66
		3070 0		15	84	79		74	72		67	63		58	7	***************************************	66
	-			23	87	82		76	71		68	6		60	8	0	68
		8356	-	93	86	82		76	72		68	6		60	1.7	9	67
830		5903 2200		96	86	81		76	73		69	6	:	60	1_8	0	68
	-	3309		98	86	81		76	74	T	70	6	4	60	8	0	68
		0	-	95	89	85	-	79	73	-	70	6	6	62	- 8	2	70
		8960 6329		95	89	84		78	74	7	70_	6	6	62		1	- 69
890		3548		98	88	84		77	75		71	6	6	62		2	70
	-	0		101	86	84		77	76		72	6	6	62		12	70
		9864		97	92	87	Т	81	75		72	6	8	64		14	72
		6827		98	91	87		80	76		72	6	8	64		34	72_
960	· -	3827		101	91	86		79	77		74	-	8	64		34	72
	H	0		104	90	86		79	78		74	-	8	64	-	35	73
-	_	10168	T	98	93	88		82	77		73	~-	9	66		35	73
١		7183	T	99	92	88		81	78		74		9	66		85	73
101	٧ -	4026		103	92	88	_	80	78		75		9	65		86 87	75
		0	L	107	92	88		80	79		76		9	65		87	75
		10772		100	95	90		84	78		75	-	71	67		B7	75
107	, C	7610	1	101	94	90		83	75		75		71 71	67	+	87	75
1 ,07	" [4265	1	106	94	90		82	80	-	77		71	67	+	80	77
		0		109	94	90	,,,,,,,,,,,, ,	82	8		78 76	**********	73	69	-	89	77
		11376	_	101	97	91		86	B(····	77		72	69	十	88	76
113	30 L	8036	4	102	96	91		84	8		78	十	73	58	十	89	77
1	_	4505	4	107	96	9		84	8		79	+	72	68	+	90	78
	_	0	-+	110	96	9:		87	8		78	+	74	70	1	90	78
1	-	11980		102	98			86	8		78	_	74	70		90	78
111	90 H	8463	-+	103	98			85	8		80		74	70		90	78
1	-	4744	-	107	98			85	8		80	I	74	70		91	79
-		0 12584	-1	103	10	***************************************		89	8	_	79	I	75	71	_	91	79
	H	8890	-1	104	99		3	88		3	79		75	71		91	79
12	50	4983		106	10		3	87	8	13	80	1	76	121		91	79
1	۲	0		109	10		3	87	8	14	81	_	76	71		92	80
-	-	13188		104	10		4	90		34	80		77	73		93	81
	t	9316		105	10		4	89		34	81		76	173		92	80
1 13	110	5222		109	10		14	89		35	82		77	173		93	81
1	t	0		113	10	3 9	14	88		85	83	_	77	17		94	82 82
		13792		104		2 !	36	92		96	82		78	17		94	82
1	ا مر	9743		105	10	******	95	91		86	82	-	78	7		94	82
113	370 þ	5461		110			95	90		86	183		78	1		95	83
1	1	0		113			95	90		86	8	-	79		5	95	83
		14396		105			97	93		87	8		79		5	95	83
1.	4EA	10170		106		***************************************	97	92		87	B		79		5	96	84
1	450	5701		111			97	92		87	B		80		5	96	84
L		0		11/		******	96	91		87	18		80 80		6	96	84
-		1500		100	-		98	9	-	88	1 8		80		8	96	84
1		1000	7	10	1 1		98	9		88	8		81		6	97	85
1	490	1059 5940		11		07	98										

Values shown are for inlet LwiA sound power levels for Installation Type B: Free inlet, duct 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.





SOUND DATA

SCUBE - 675





		T		SOUN	ID P	3VVC	₹-0	CTA	/E B	AND	5							_	
RPM	VOL	IME:	1 T	2	3	1 4	Т	5	6	7	I	8	Lw	*****	(A)		RPA		DLUM
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	34		67	61	57	53		19	45	41	****	38	56	***************************************	44		275		2433
300	193	35	67	61	57	55		48	45	41		37 37	56 56		44				0
	0		67	60	58 61	5	***************************************	49 53	49	45	****	41	60		48			Τ	7037
	57		71 71	67 66	61	5		53	49	45		42	60		48		315	-	4971
350	40		71	66	61	51		54	49	45		41	60		48			-	2787 0
			71	65	62	ŝ)	54	49	45		41	5		49		-	-	7931
	65		75	71	65	6		57	53	49		45 45	6		52 52		١		5603
400	46	02	75	71	65	6		57	53 53	49		45 45	1 6		52		355	, [3140
700	25		75	70	65	6		58 58	53	48		45	6		52		<u></u>		0
		000	75 79	70 75	69	6		60	58	52	*****	48	6		55			_	8824
		29 77	79	74	68	6		60	58	52	2	49	6		55		39	5 -	5234
450		02	78	74	67	6	5	61	55	5		48	16		55		1	-	3494 0
		0	78	74	67	- 6		62	56	5		48 51	1 5	0	56 58		_	-	9718
	81	43	83	78	72		5	63	59 59	5		51		o l	58		43	" L	6865
500		752	82	78	70		7	63 65	59	5		51		o l	58		43	°Ľ	384B
		224	82	78 77	70		9	65	59	5		51	-	1	59		_	_	0
		0	81 86	80	75		9	66	62	- 5		54		3	61		1	-	10611
		957 328	85	80	72		0	66	61	5	8	54		3	61		47	5 -	7496
550		547	85	80	72		70	67	62			53	-	3	61	l		-	4202 0
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	9	771	88	82	7		72	68	64		<u>_</u>	56	-	15	63 63	1	١.	_	8128
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		0	88	82	7:		73 74	70	61		2	58		77	65	1			1239
		0586	90	84	7		74	70	66		12	59		77	65]	5	55	8759
650		478	90	84	7		75	72	6		32	58	I	78	66	1		-	4910
		192	92	64	7	-	75	72	6		32	58	_	78	66	4	-		0
	+,	1726	93	87	8		77	73	6		35	61	4	80	68	4		ŀ	1329 9390
350		3284	93	87	8	2	77	73	6		65	61	+	08	88	-	5	95	5264
720		1643	95	87	8		77	74	7		65	61	-	80	69	1	1		0
		0	96	87	8	-	77_	75	13		65	61 62	+	81 82	70	1	-		1418
		2214	95	89	18		78	74	7		66 66	62		81	69	1	١.	35	1002
750		8629	95	88		3	78 78	75	+ 7		86	62		82	70	7	1 9	02	561
	-	4837	97	88		3	78	78	1;		86	62		82	70]			0
		0	98	88 91		6	80	75	7		68	64		83	71	1			1507
		3029 9204	97	90		5	80	76		2	68	6/		83	71	_	- 1	75	1065
800		5159	99	90		5	80	77	7	3	68	64		84	72	-	- 1		597 0
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		13843	98	93		18	82	177		4	70	6		85 85	73	-			113
850	0	9779	99	92		17	81	78		15	69 69	6		85	73	7	-	720	636
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	-	14657 10354	101	9,		39	83	79		75	71	8	7	87	75			755	119
900	ᅄ	5804	104	94		99	83	80		76	71	6		87	75	-			667
1	-	0	106	9:	3	89	83	81	-	77	71	- 6	************	88	76	-	H		177
		15834	102			92	86	80		77	73		9	89	77	-		465	125
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	H	0	11			92	85	8/		80	74		0	91	79		-		195
-		17100	10		9	94	88	83		79	75		11	91	79				138
1.,	., E	12080	10	5 9	8	94	87	83		80	75		71	91	79 80		- 1	875	777
10	130 C	6771	110		8	94	86	8		81	75 75		71 71	93	81		- 1		
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	703	***************************************	71	67	61	57	53	50	1	46	42	6	0	48	1
ŀ	497	***************************************	71	66	61	58	53	49	1	46	42	6	0	48	1
15	278		71	65	62	59	54	49		45	41	6		49	4
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55	314		74	59	65	62	57	53		49	45	5	4	52	1
			74	69	65	63	58	52		48	44	1 8	4	52	4
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	1	-		77	71	88	62	50		54	50		9	57	1
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515	81	28	86	82	74	71	67		3	59 60	55	+	74	62	7
410	4	556	86	82	74	72	69		3	59	55	+	75	63	-
		0	85	82	74	73	69		3	59	57	+	76	64	
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595	5	264	91	85	78	76	73		57	63	59		78		
		0	91	85	78	76	73		67	63	59		79	67	
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	14	0021	93	86	81	77			69	55	61		80	68	
635		617	93	86	81	77			69	65	61	_	80	68	
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	1	1363	97	90	85	84	3 7	6	72	58	- 8		33	71	
720		6369	98	90	85	8	0 7	8	73	88			84	72	
		0	100	90	85	8	1 7	8	73	68	5	4	84	73	
 		6867	98	92	88	8	2 7	7	74	70		6	85	73	
		11915	98	92	87		1 7	8	73	89	1 6	6	85	73	
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l	-	0	102	91	86		2 8	0	75	59		5	85	7:	
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87 91	75	7387 0 19547 13809 7741 0 20441 14440 8094 0 21446 15151 8492 0 22228	104 106 102 103 106 108 104 104 108 110 106 106 111 106 111	94 97 96 96 96 99 97 9 9 9 9 10 9 9 10 9 10 9 10 9 10	8 9 6 9 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9 8 2 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	34 36 35 35 85 86 86 86 88 88 87 87 90	32 81 82 83 83 84 85 83 84 85 88 88 88 88 88	78 78 78 79 79 79 79 79 80 81 80 82 82	7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7	2 4 3 3 3 3 5 5 5 5 5 6 6 6 6 6 7 6 7 8	70 70 69 69 71 71 71 70 72 72 72	89 89 90 91 91 91 92 93 93 93	77 77 77 77 77 77 77 77 77 77 77 77 77	77 77 78 79 79 80 80 81 81
91	75	7387 0 19547 13809 7741 0 20441 14440 8094 0 21446 15151 8492 0 22228 15703	104 106 102 103 106 108 104 104 108 110 105 106 117 106 107	94 97 96 96 98 97 91 10 99 10 10 10 10 10 10 10 10 10 10 10 10 10	8 9 6 9 6 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9	34 36 35 35 35 35 35 36 36	32 81 82 83 83 82 83 84 85 86 86 86 86	78 78 78 79 79 79 79 79 80 81 80 80 81 80 81 81	7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7: 7	2 4 4 3 3 3 3 5 5 5 5 74 16 76 76 77	70 70 59 69 71 71 71 72 72 72 72 73	89 89 90 91 91 91 91 91 91 91 91 91	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	77 77 78 79 78 79 80 80 81 81 81
91	75 -	7387 0 19547 13809 7741 0 20441 14440 8094 0 21445 15151 8492 0 22228 15703 8802	104 106 102 103 106 108 104 108 110 106 106 106 116 106 116 116 116 116	94 97 96 96 98 97 97 99 10 99 99 10 10 10 10 10 10 10 10 10 10 10 10 10	8 9 1 1 1 1 1 1 1 1 1	9	34 36 35 35 35 85 87 86 86 88 88 87 87 87 90 88 88	32 81 82 83 83 84 85 83 84 85 86 86 86	78 78 78 79 79 79 79 79 80 81 80 82 82	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7	2 4 3 3 3 3 5 5 5 5 5 6 6 6 6 6 6 6 6 6 6 7 6 7 7 7 7	70 70 69 71 71 71 70 72 72 72 72 73 73	89 89 90 91 91 92 93 93 93 94 99	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	7 77 78 79 78 80 80 81 81 81 81
91	75 -	7387 0 19547 13809 7741 0 0 20441 14440 8094 0 21446 15151 8492 0 22228 15703 8802 0	104 106 102 103 106 104 104 108 110 105 106 107 107 111 111	94 97 96 96 98 99 91 10 10 10 10 11 10 11 11 11	8 9 1 1 1 1 1 1 1 1 1	9 6 2 8 2 8 2 1 1 11 1 13 13 13 13 13 13 13 13 13 13 13 13 13 1	34 36 35 35 35 85 87 86 86 88 88 87 87 90 89 88 88 88 88 88	32 81 82 83 83 82 83 84 85 83 84 85 86 86 87	78 78 78 79 79 79 79 79 80 81 80 82 82 81 81 83	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7	2 4 4 3 3 3 3 3 5 5 5 5 6 6 6 6 6 6	70 70 69 69 71 71 71 72 72 72 72 73 73 73	89 89 90 91 91 92 93 93 93 94 99	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	7 77 78 79 78 80 80 81 81 81 81
91	75 -	7387 0 19547 13809 7741 0 0 20441 14440 8094 0 21446 15151 8492 0 22228 15703 8802 9 23122	104 106 102 103 106 108 104 104 105 106 105 106 116 107 116 117 107 107 107 107 107 107 107 107 107	94 97 96 96 98 99 91 10 10 10 10 11 10 11 11 11 11 11 11 11	8 9 1	9	34 36 35 35 35 85 86 86 86 88 88 87 87 87 90 88 88 88 88 88 88	32 81 82 83 83 84 85 86 86 86 87 85	78 78 78 79 79 79 79 79 80 81 80 82 82 81 81 81 83 83	7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.	2 4 4 3 3 3 3 3 5 5 5 5 5	70 70 69 69 71 71 71 72 72 72 72 73 73 73 73	89 89 90 91 91 92 92 92 93 94 99 99 99	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	7 77 78 79 78 79 80 80 80 81
9:	75 -	7387 0 19547 13809 7741 0 0 20441 14440 8094 0 21446 15151 8492 0 22228 15703 8802 0	104 106 102 103 106 104 104 108 110 105 106 107 107 111 111	94 97 96 96 97 97 97 97 10 10 10 10 10 10 10 10 10 10 10 10 10		9 6 2 8 2 8 2 1 1 11 1 13 13 13 13 13 13 13 13 13 13 13 13 13 1	34 36 35 35 35 85 87 86 86 88 88 87 87 90 89 88 88 88 88 88	32 81 82 83 83 82 83 84 85 83 84 85 86 86 87	78 78 78 79 79 79 79 79 80 81 80 82 82 81 81 83	7; 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	2 4 4 3 3 3 3 3 5 5 5 5 5	70 70 59 69 71 71 71 70 72 72 72 73 73 73 74	89 89 90 91 91 92 93 93 93 94 99 99 99 99	7 7 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	77 77 78 79 79 79 80 80 81 81 81 82 82

Values shown are for inlet LwiA sound power levels for Installation Type B: Free inlet, duct 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.





SOUND DATA

SCUBE - 900

SCUBE - 1000



				SOUNI) POV	VER -	oct.	AVE	BAN	ID\$			_	
РМ	VOI	UME	1 1	2 1	3	4	5	I	3 I	7	8	LWIA		(A)
** 185	-	******************			57	53	49	4	5	41	37	56	,	4
				61	57	53	49	4	5	42	38	56		4
220			67	61	58	54	49			41	37	50		4
			67	81	59	55	49	4	5	41		57	_	5
	-	_		66	60	57	53	4	9		********	60		8
				85	61	58	53	4	9			60		18
255			72	54	62	59	53				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	60		18
	3		72	64	63	60	53	4	9	***************************************		61	****	19
	11	195	75	70	64	61	57				*****	63		1
			75	69	65	61	56	5	i3			63		51
290			78	58	65	63	57					64		52
	}		75	68	56	63	57	. 5	32	48	44	64		52
************	12	546		74	58	64	60	15	56	52	48	67		55
			77	72	68	64	60	1:	56			67		55
325			77	72	68	65	60		56	52		67	~~~	55
	+	······································	77	72	59	66	60		56	52		67		55
	13	897	81	77	71	66	63		59	55		69		57
				76	71	67	63		59	55	Married Street	69	***************************************	57
360					71	68	63		59	55	51	70		58
	-	T			71	69	64		58	54	50			58
***************************************		and the same of th		Control or	73	69	65		61	57	53	72		60
				79	73	69	65		61	57	54	72		60
395			83	78	73	71	66		61	57	53	72		60
	1-3			78	73	71	60		61	57	53	73		őĭ
	15			82	76	71	68		64	60	58	74		62
				82	75	72	68	\Box	63	60	56	74	-	62
430		***************************************		81	75	73			63	59	55	75		63
				81	75	74	65		63	59	55	75		63
	+,		89	85	78	73			66	62	58	77		85
				84	77	74	71	\perp	65	62	58	17		85
465				84	77	75			66	62	58	7		65
			,		77	76	***		65	61	57	7		65
***************************************		***************************************			81	75	7	2	68	64	60	75	9	67
	1		***************************************						67	84	60	79	9	67
500			1			77			68	84	60	7:	9	67
				w		77			67	63	59	7	9	67
	-					77			70	66	62	8	1	69
	3,,,,,,,								69	66	62	8	1	69
535			***************************************	·		79			69	65	61	8	1	69
	<u> </u>					79			69	65	61	8	<u>1</u>	69
		***************************************	*******	-		79	****	****	71	67	63	8	2	70
	1					79			71	67	64	- 8	2	70
570						80			71	67	63	8	3	71
	-			90	82	81			71	67	63	*****	3	71
-				***************************************	_	81			73	59	65	1 8	4	72
					85	81		7	73	59	65		4	72
608) }			***************************************		82			73	69	65		14	72
					84	82			73	69	65	<u> </u>	35	73
-					-	82			75	71	67		36	74
						83		79	74	70	67		35	73
64	()				-				75	70	66		86	74
	-					83		************	75	70	68	5 L	86	74
-	-								76	72	61	8 1	87	75
-									76	72	6	8	87	75
67									77	72	6		87	75
1		************			***************************************	************************			77	72	6	8	88	76
-	+		_	_	_		_	81	78	74	7		89	77
1									78	74	7		89	77
72								83	78	74	7		89	77
	-								79				90	78
-								82	79				90	78
		20317							79	75	7		90	78
74	15	11388	105						79	75			90	78
	-				-			85	80		******		91	79
-				······································	******	4 8	8	83	80			2	91	79
	. · ·			***************************************		3 8	8	84				2	91	79
78	50 -						8	85	81			2	92	80
	٣	0					8	86	81			12.	92	80
-	_						0	85	81			73	93	81
	_						9	85				73	92	80
8	15							86				73	93	81
	-							87			7 L	73	93	81
-								86			8 T	74	94	82
	-	***************************************						86			8	75	94	82
8	50 -				-			87			8	74	94	82
RPM VOLUME 1					88			8	74	95	83			
Section Sect					75	95	83							
1	H		_									76	95	83
1 8	85 -										9	75	95	83
			4 4 7			-	***************************************				_ 1	75	96	84

	T		SOUNE	POW	ER - C	CTAV	E BAN	IDS			-
RPM	VOLUME	1 1	2 1	3	4	5	6	7	8	LwiA	dB(A)
DE IVI	10591	68	62	57	54	50	46	42	38	56	44
h	7482	67	62	58	54	50	46	42	39	56	44
200	4194	67	62	59	55	50	46	42	38	57	45
t	0	67	62	60	55	49	45	41	37	57	45
	12179	72	66	61	58	54	50	46	42	60	48
- I	8604	72	65	82	58	53	50	46	43	60	48
230	4823	72	65	53	59	53	49	45	41	61	49
ı	0	71	65	63	60	53	49	45	41	61	49
	13768	78	70	64	61	57	53	49	45	64	52
	9726	76	68	65	61	57	59	49	46	64	52
260	5452	78	68	66	63	57	53	49	45	64	52
-	0	75	68	67	63	57	53	49	45	65	53
		78	73	67	64	60	56	52	48	67	55
	15357	444000000000000000000000000000000000000	72	68	64	60	56	52	49	67	55
290	10849	78	71	69	68	60	56	52	48	67	55
	6081	78 78	71	69	66	60	56	52	48	67	55
	0	*******************************	75	70	67	63	59	55	51	69	57
	16945	80		71	67	62	59	55	51	69	57
320	11971	80	75		***************************************	63	59	65	51	70	58
	6710	80	75	71	68		58	54	50	70	58
		80	74	71_	69	63		57	53	72	60
	18534	83	79	73	69	65	61	57	54	72	60
350	13093	83	78	73	69	65	61		53	72	60
~~0	7339	83	78	73	71	66	61	57	53	73	81
	0	83	77	74	71	66	61		_	74	62
	20122	86	82	75	71	67	63	59	55	·	62
380	14215	85	81	75	72	67	63	60	56	74	63
ადს	7968	85	80	75	73	88	63	59	55	75	-
	0	85	80	75	74	68	63	59	55	75	63
***************************************	21711	88	84	78	73	69	66	62	58	76	64
,	15338	88	83	77	74	69	65	62	58	76	64
410	8597	88	83	77	75	70	65	61	57	77	65
	0	87	83	77	76	71	65	61	57	77	65
	23300	90	86	80	75	71	67	63	60	78	66
	16460	90	88	79	76	71	87	54	60	78	86
440	9226	90	85	79	77	73	87	63	59	79	67
l	0	89	85	79	77	73	67	63	59	79	67
		93	88	82	77	73	69	65	61	80	68
l	24888		88	81	777	73	69	65	62	80	68
470	17582	92	87	80	78	75	69	65	61	81	69
	9855	92	-		79	75	69	85	61	81	69
	0	91	87	80	_	75	71	67	63	82	70
	26477	95	90	84	78 79	75	71	67	63	82	70
500	18704	94	90	82		76	71	67	63	82	70
1	10485	94	90	82	80	77	71	67	63	93	71
	0	93	89	82	81	77	73	69	65	84	72
1	28065	96	92	86	80	77	72	69	65	84	72
530	19827	95	92	84	81	-	72	68	64	84	72
1	11114	95	91	83	81	78	72	83	64	84	72
L	0	95	91	83	B2	79 78	_		66	85	73
1	29654	98	93	87	81		74	70			
560	20949	97	93					70	1 66	95	
""	11743			86	82	78	74	70	66	85 85	73
1	\$14000000000000000000000000000000000000	97	93	85	83	78 60	74 74	70	66	85	73 73
	0	97	92	85 85	83 84	78 60 80	74 74 74	70 70	66 66	85 86	73 73 74
 	31243		92 94	85 85 89	83 84 83	78 60 80 79	74 74 74 78	70 70 72	66 66 68	85 86 87	73 73 74 75
500	31243	97 100 99	92 94 94	85 85 89 87	83 84 83 84	78 60 80 79 80	74 74 74 76 75	70 70 72 71	66 66 68 68	85 86 87 86	73 73 74 75 74
590	31243	97 100 99 99	92 94 94 93	85 85 89 87 87	83 84 83 84 84	78 60 80 79 80 81	74 74 74 76 75 76	70 70 72 71 71	66 66 68 68	85 86 87 86 87	73 73 74 75 74 75
590	31243 22071	97 100 99	92 94 94 93 93	85 85 89 87 87	83 84 83 84 84 85	78 60 80 79 80 81 82	74 74 76 76 76 76	70 70 72 71 71 71	66 66 68 68 67 67	85 86 87 86 87 87	73 73 74 75 74 75 75 75
590	31243 22071 12372	97 100 99 99	92 94 94 93	85 85 89 87 87 87 90	83 84 83 84 84 85 84	78 60 80 79 80 81 82 81	74 74 74 76 75 76 76	70 70 72 71 71 71 73	66 68 68 67 67 69	85 86 87 86 87 87 87 88	73 73 74 75 74 75 75 75 75
-	31243 22071 12372 0 32831	97 100 99 99 100 101 101	92 94 94 93 93 94 94	85 85 89 87 87 87 90 89	83 84 83 84 84 85 88	78 60 80 79 80 81 81 81	74 74 74 76 75 76 76 77 77	70 70 72 71 71 71 71 73 73	66 66 68 68 67 67 69	85 86 87 86 87 87 88 88	73 23 74 75 74 75 75 76 76
590 620	31243 22071 12372 0 32831	97 100 99 99 100 101	92 94 94 93 93 94 94 94	85 85 89 87 87 87 90 89	83 84 83 84 84 85 84 85	78 60 80 79 80 81 82 81 81 82	74 74 76 76 75 76 76 77 77	70 70 72 71 71 71 73 73 73	66 68 68 67 67 69	85 86 87 86 87 87 87 88 88	73 74 75 74 75 75 75 76 76
-	31243 22071 12372 0 32831 23193	97 100 99 99 100 101 101	92 94 94 93 93 94 94	85 85 89 87 87 87 90 89 89	83 84 83 84 84 85 84 85 86	78 60 80 79 80 81 82 81 81 82	74 74 74 76 76 76 76 77 77	70 70 72 71 71 71 73 73 73 73	66 68 68 67 67 69 69	85 86 87 86 87 87 87 88 88 88	73 23 74 75 74 75 75 76 76 76 76
-	31243 22071 12372 0 32831 23193 13001	97 100 99 99 100 101 101	92 94 94 93 93 94 94 94 94	85 89 87 87 87 90 89 89	83 84 83 84 84 85 85 86 86 86	78 60 80 79 80 81 82 81 81 82 81 81	74 74 74 76 75 76 76 77 77 77 77	70 70 72 71 71 71 73 73 73 73 74	66 68 68 68 67 67 69 69 69	85 86 87 86 87 87 88 88 88	73 23 74 75 74 75 75 76 76 76 76
620	31243 22071 12372 0 32831 23193 13001 0 34420	97 100 99 99 100 101 101 101	92 94 94 93 93 94 94 94 94 98	85 85 89 87 87 87 90 89 89 88 92	83 84 83 84 84 85 86 86 86 86	78 60 80 79 80 81 82 81 81 82 82 83	74 74 76 75 76 76 77 77 77 77 77 78 78	70 70 72 71 71 73 73 73 73 74 74	66 68 68 67 67 69 69 69 70	85 86 87 86 87 88 88 88 88 88	73 73 74 75 74 75 75 76 76 76 76 77
-	31243 22071 12372 0 32831 23193 13001 0 34420	97 100 99 99 100 101 101 101 102	92 94 94 93 93 94 94 94 94 98 98	85 89 87 87 87 90 89 88 92 91	83 84 83 84 84 85 84 85 86 86 86	78 60 80 79 80 81 82 81 81 82 83 82 82 82	74 74 76 75 76 76 77 77 77 77 77 78 78	70 70 72 71 71 71 73 73 73 74 74 74	66 66 68 68 67 67 69 69 69 70	85 86 87 86 87 87 88 88 88 88 88 88	73 73 74 75 74 75 75 76 76 76 76 77 77
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316	97 100 99 99 100 101 101 102 102 102	92 94 94 93 93 93 94 94 94 95 98	85 85 89 87 87 87 90 89 89 88 92	83 84 83 84 84 85 84 85 86 86 86	78 60 80 79 80 81 81 81 82 83 82 83 82 83 82 84 84	74 74 76 75 76 76 77 77 77 77 77 78 78 79	70 70 72 71 71 71 73 73 73 74 74 74 74	66 68 68 67 67 69 69 69 70 70	85 86 87 86 87 87 87 88 88 88 88 88 88 89 89	73 73 74 75 74 75 75 76 76 76 76 77 77 77
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630	97 100 99 99 100 101 101 102 102 102 104	92 94 94 93 93 94 94 94 95 98 98	85 89 87 87 87 90 89 88 92 91	83 84 84 84 85 85 86 86 86 86	78 60 80 79 80 81 81 81 82 83 83 82 83 84 82 84 84	74 74 74 76 76 76 76 77 77 77 77 77 78 78 79 79	70 70 72 71 71 71 73 73 73 73 74 74 74 74	66 68 68 67 67 69 69 70 70 70	85 86 87 86 87 87 88 88 88 88 88 89 89 89	73 73 74 75 74 75 75 76 76 76 76 77 77 77
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630 0 36009 25438	97 100 99 99 100 101 101 102 102 103 104 104	92 94 94 93 93 94 94 94 95 98 98 98	85 85 87 87 87 90 89 89 88 92 91 90 90	83 84 84 84 85 84 85 86 86 86 86 87	78 60 80 79 80 81 81 81 82 83 83 82 83 82 83 82 83 82 83 83	74 74 74 76 76 76 76 77 77 77 77 77 78 78 79 79	70 70 72 71 71 73 73 73 73 74 74 74 75 75	66 68 68 67 67 69 69 70 70 70 70 71	85 86 87 87 87 87 88 88 88 88 89 89 90 91	73 73 74 75 74 75 75 76 76 76 76 77 77 77 77 77 77 78
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630 0 36009 25438	97 100 99 99 100 101 101 102 102 102 104 104 104 104 104 104 104 104 104 104	92 94 94 93 93 94 94 94 95 98 98 98 98	85 85 87 87 87 90 89 89 88 92 91 90 90	83 84 84 84 85 85 86 86 86 86 86 87	78 60 80 79 80 81 82 81 81 82 83 82 82 82 84 84 84 83 84 84 85	74 74 76 75 76 76 77 77 77 77 77 78 78 79 79 79	70 70 72 71 71 71 73 73 73 73 74 74 74 75 75	66 68 68 67 67 69 69 70 70 70 70 71 71	85 86 87 86 87 88 88 88 88 89 89 90 91	73 73 74 75 76 76 76 76 77 77 77 77 77 77
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630 0 36009 25438 14259	97 100 99 99 100 101 101 102 102 102 104 104 104 104 104 104 104 104 104 104	92 94 94 93 93 94 94 94 95 95 98 98 98 98 97	85 85 87 87 87 90 89 89 88 92 91 90 90	83 84 84 84 85 85 85 86 86 86 86 87 87	78 60 80 79 80 81 82 81 81 82 83 82 82 82 84 84 84 83 84 84 83 84 84 88 88 88 88 88 88 88 88 88 88 88	74 74 76 75 76 76 77 77 77 77 77 78 78 79 79 79	70 70 72 71 71 71 73 73 73 73 74 74 74 74 75 75	66 68 68 67 67 69 69 69 70 70 70 71 71 71	85 86 87 86 87 88 88 88 88 88 89 89 89 91	73 73 74 75 76 76 76 76 77 77 77 77 77 77
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630 0 36009 0 14255 0 0	97 100 99 99 100 101 101 102 102 103 104 104 104 104 104 104 104 104 104 104	92 94 94 93 93 94 94 94 95 95 95 97 97 97 97	85 85 89 87 87 87 90 89 89 88 92 91 90 90 93	83 84 83 84 84 85 85 85 86 86 86 87 87 87	78 60 60 79 80 81 82 81 81 82 82 82 82 83 82 84 84 84 83 84 84 83 84 83 84 84 84 84 84 84 84 84 84 84 84 84 84	74 74 76 76 75 76 76 77 77 77 77 77 78 78 79 79 79 79 80 80 80 80 80 80 80 80 80 80 80 80 80	70 70 72 71 71 71 73 73 73 74 74 74 74 75 75 75 75 75	66 68 68 67 67 69 69 69 70 70 70 71 71 77	85 86 87 86 87 87 87 88 88 88 88 88 89 89 89 89 89 89 89 89	73 73 74 75 75 76 76 76 76 77 77 77 77 77 78 79 79 79 79 79
620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630 0 56009 0 38127 983312	97 100 99 99 100 101 101 102 102 103 104 105 106 106 106 106 107 107 107 107 107 107 107 107 107 107	92 94 94 93 93 94 94 94 95 98 98 98 98 98 98 98 98 98 98 98 98 98	85 85 89 87 87 90 89 88 92 91 90 93 92 92 92	833 844 833 844 844 855 864 865 866 866 867 877 877 877 877 877 877 877	78 60 60 79 80 81 82 81 81 82 83 82 83 82 83 84 84 83 83 83 84 83 83 83 84 83 84 84 84 84 85 86 86 86 86 86 86 86 86 86 86 86 86 86	74 74 76 76 75 76 76 77 77 77 77 77 78 80 99 99 99 99 99 99 99 99 99 90 90 90 90	70 70 72 71 71 71 71 73 73 73 74 74 74 74 75 75 75 75 75 75 75 75 75 75 75 75 75	66 66 68 68 68 67 67 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	85 86 87 86 87 87 88 88 88 88 98 99 91 91 91 91 91 91	73 73 74 75 75 76 76 76 77 77 77 77 78 79 79 79 80 79 80 80 80 80 80 80 80 80 80 80
620	31243 22071 12372 32831 32831 3001 34420 24315 13630 0 25438 14259 0 38121 28334	97 100 99 99 100 101 101 102 102 102 104 104 104 104 104 104 104 104 104 104	92 94 94 93 93 94 94 94 94 95 95 95 97 5 97 5 99 5 99	85 85 89 87 87 87 87 87 89 89 89 88 89 92 91 92 92 92 92 92 92 92 92 92 92 92 92 92	833 844 833 844 845 85 86 86 86 87 87 87 87 87 87 88 88 88 88 88 88 88	78 60 60 79 80 81 81 81 81 82 82 82 82 84 84 85 85 85 85 85 85 85 85 85 85 85 85 85	74 74 74 76 76 76 75 76 76 77 77 77 77 78 78 79 79 79 79 866 866 81 81	70 70 72 71 71 71 73 73 73 74 74 74 74 75 75 75 75 75 77 77 77 77	66 66 68 68 68 67 67 69 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	85 86 87 86 87 87 88 88 88 88 98 99 91 91 91 91 91 91	73 73 74 75 75 76 76 76 76 77 77 77 77 77 77 77 77 77
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620	31243 22071 12372 0 32831 23193 13001 0 34420 24316 13630 0 25438 14299 0 38127 0 38127 0 38127 0 38127 0 38127 0 0 0 0 0 0 0 0 0 0 0 0 0	97. 1000 99. 99. 99. 99. 1000 1011 1021 1021 1022 1022 1022 102	92 94 94 94 93 93 93 94 94 94 94 95 96 96 96 96 96 96 96 96 97 97 98 98 98 98 98 98 98 98 98 98 98 98 98	85 85 89 87 87 87 87 87 87 87 87 87 87 87 87 87	833 844 85 85 86 86 86 87 88 88 88 88 88 88 88 88 88 88 88 88	78 60 80 80 81 82 81 82 82 83 82 82 83 82 83 82 83 82 83 82 83 84 83 85 86 86 86 86 86 86 86 86 86 86 86 86 86	74 74 76 76 76 76 77 77 77 77 77 78 80 80 80 81 81 83 83 84 85 85 85 85 86 86 88 88 88 88 88 88 88 88 88 88 88	70. 70. 70. 70. 70. 70. 70. 70. 70. 70.	66 66 68 68 68 68 68 68 68 68 69 69 69 70 70 70 70 70 70 70 70 70 70 70 70 70	95 86 86 87 87 87 87 87 87 87 87 87 87 87 87 87	73 73 74 75 75 75 75 76 76 76 76 76 76 77 77 77 78 8 79 9 9 9 9 9 9 9 9 9 9 9
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Values shown are for inlet LwiA sound power levels for Installation Type B: Free inlet, duct 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.