



**PRLS**

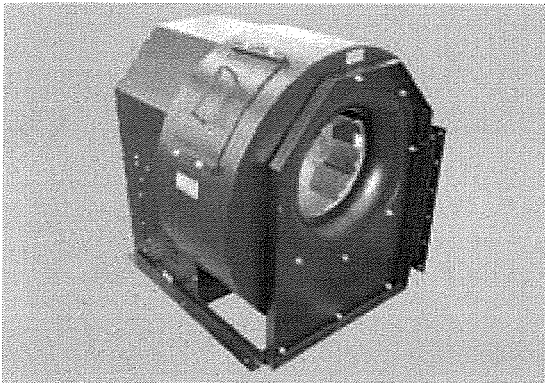
*Centrifugal Utility Fans*



**DYNAIR®**

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#### **PRODUCT FEATURES**

##### *Performance range*

*Impeller Diameter: 300 - 1000 mm*

*Easy access of pulley speed*

*Maximum Volume: 55,000m<sup>3</sup>/hr*

*Maximum Static Pressure: 1100 Pa*

##### *Fan Structure*

*Rigid welding housing*

*Rigid welding structure*

##### *Fan Application*

*Outdoor Installation with weather cover*

*High Temperature atmosphere*

##### *Compact Design*

*Reduced Fan size*

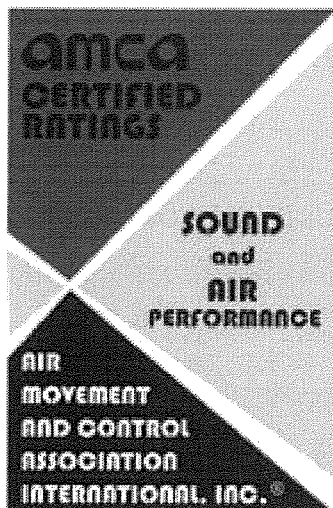
*Spacious Mechanical Drive Room*

*Belt Length reduced and increases belt life*

##### *Easy Maintenance*

*Motor chamber access door*

*Scroll access door available*



*AMCA Sound & Air Performance Seal*

*Dynaair Gulf FZCO Certifies that the model PRLS 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**

*PRLS series fans are designed for ducted system. These fans shall be single inlet centrifugal type and are suitable for return-air applications with clean air.*

**Casing:**

*The casing shall be constructed of steel, the thickness shall be adequate to support drive and motor. The scroll shall be fully welded. The fan surface shall be alkali cleaned and phosphated, electrostatically black epoxy powder applied [options: colour changes are available].*

**Impeller:**

*The impeller is backward curved centrifugal type and its directly inclined to airflow. The inlet cone 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 (Belt Driven Model):**

*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 (Belt Driven Model):**

*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. Motor pulleys shall be adjustable for final system balancing. 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, mounted on vibration isolators. The belt tension shall be adjusted through motor support plate, the design shall make sure the fan shaft and motor shaft is always parallel.*

**Protection Cover:**

*A shaft/bearing cover and a belt cover shall be provided as standard configuration for indoor application. If the fan is outdoor installed, the motor and other drive parts shall be covered by weatherhood to assure lasting durability.*

**Motor:**

*Motor shall be carefully matched to the fan load, IP 55, and insulation class F. The motor bearings shall be re-lubricable ball type.*

**Quality Standards:**

*SWSI Centrifugal fans shall be tested and approved according to AMCA Standards 210 & 300. Each fan shall have AMCA Sound & Air Performance Seal.*



PRLS



### OPTIONAL ACCESSORIES

#### Inlet / Outlet Safety Screen

Metal safety screen can be installed either on inlet or outlet of the fan. The screen with rigid strength can prevent debris into the fan and duct. The density of the screen is also qualified for labour protection. Either inlet or outlet screen can be ordered separately.

#### Weather Hood

PRLS belt drive fans are equipped for indoor installation, which include a shaft/bearing cover as well as belt cover. When the fan is outdoor installed, weatherhood shall be selected to prevent motor, pulley and bearing from sunshine, rain.

#### Drain

Located on the bottom of scroll to discharge contaminated substance such as condensed water, grease etc.

#### Inlet/Outlet Flange

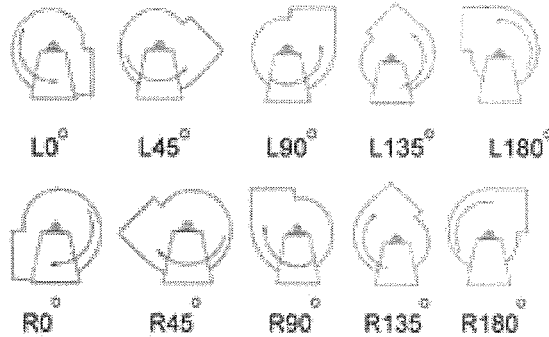
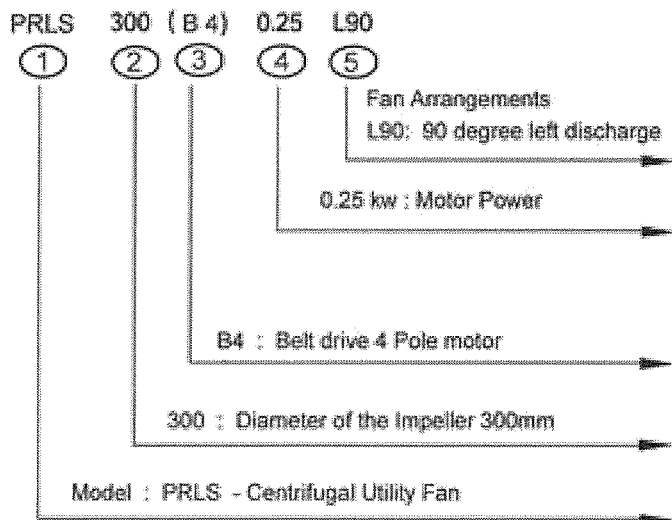
The companion flanges are attached to the ductwork to provide an exact mate to the flanged connection on the fan.

#### Coating

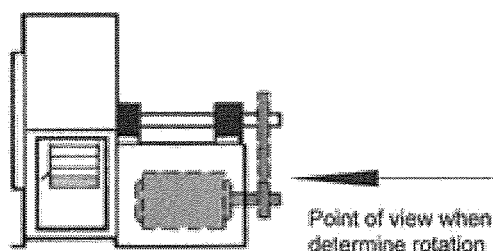
Poly-fluoro ethylene is done for special application on either impeller or complete fan.

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### REFERENCE CODE



Dwg. No.		L0	L45	L90	L135	L180
GB	L	0°	5°	90°	135°	180°
EUROPE	L/R	270	315	0	45	90
AMCA	CCW	BH	BAU	UB	TAU	Tie



Note:  
The rotation is identified from the view of motor side For example, a PRLS-300-2.2 with CCW-BH(AMCA) rotation



## EXAMPLE OF CURVE READING

### Terminology of Performance curve

Each Fan performance curve shows a group of different RPM.

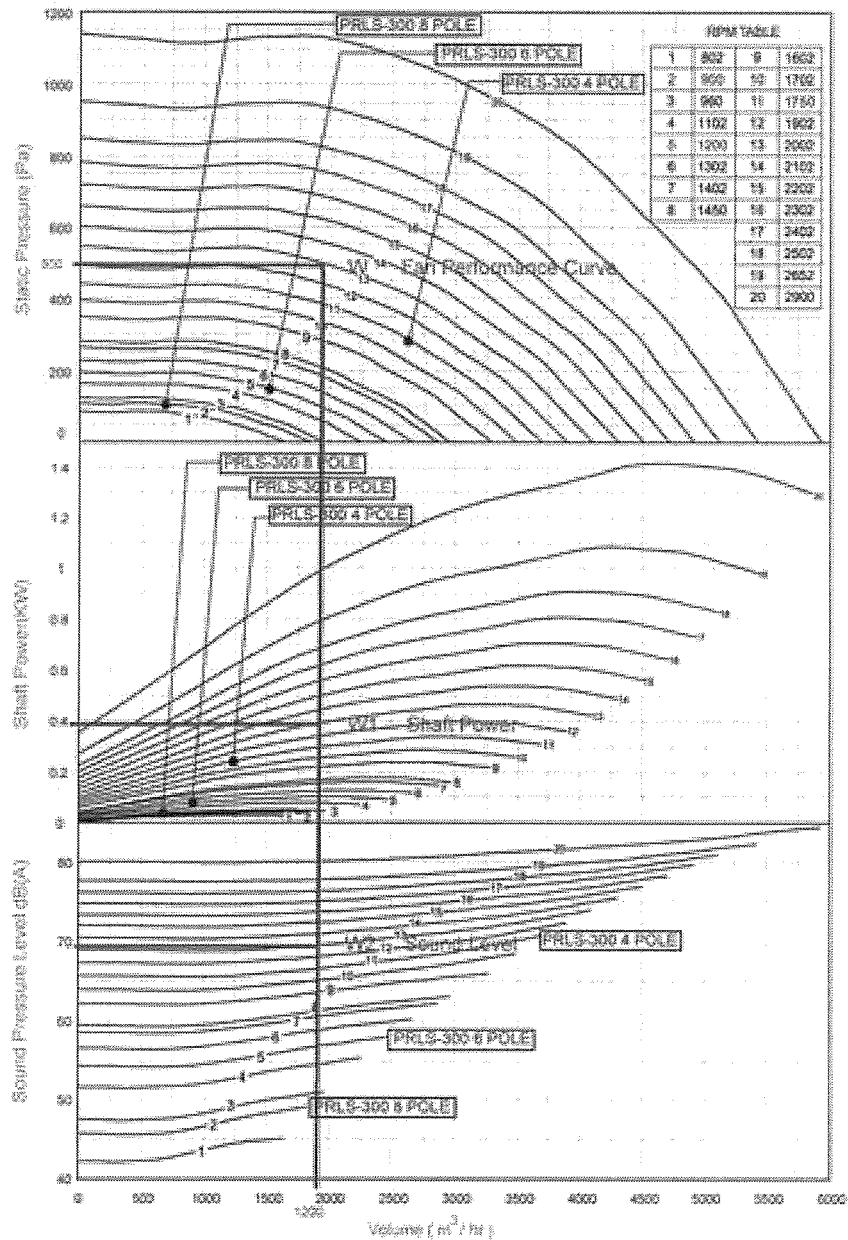
The dark curves shows the fan is direct drive which means the motor is fixed directly on the impeller. It is denoted with suffix letter D followed by motor pole number. The attached table shows the motor RPM at different number of poles.

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.

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Example : 1800 m<sup>3</sup> / hr , 500 Pa Static Pressure.

Step 1 : From the given Volume ( 1800 m<sup>3</sup> / hr ) draw a vertical line upwards and from given static Pressure 500 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. 13. As in RPM table its is the working point 2002 RPM.

Step 2 : The intersection point between vertical line on the curve No. 13 in Shaft Power is W1. Drawing a horizontal line towards shaft power, value will be (approx 0.39 Kw). According to Shaft Power, motor selected will be 0.55 Kw.

Step 3 : The intersection point the vertical line on the curve will be No. 13 in sound Pressure is W2. Drawing a horizontal line from towards the sound pressure, value will be (approx 69 dB ( A )). Its the fan sound Pressure level.

Step 4 : According to above 3 steps, fan selected is ( PRLS - 300 - 0.18 ) belt drive and the RPM selected is 2002.

Step 5 : Further the customer has the option of using direct drive (e.g) 4 POLE - 1750 rpm, the nearest rpm curve 11 can give respective static pressure and CFM characteristics.

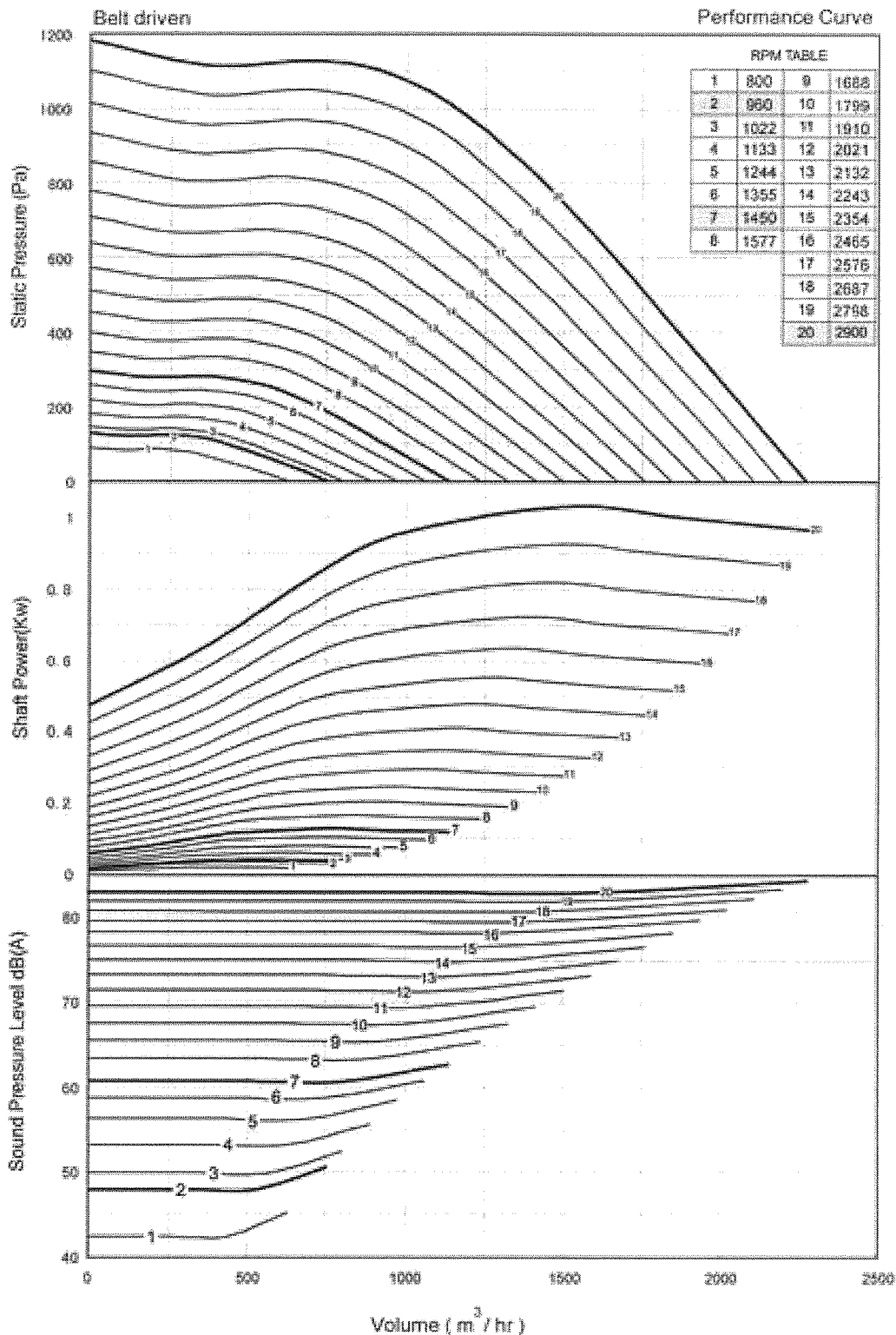


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PRLS - 300

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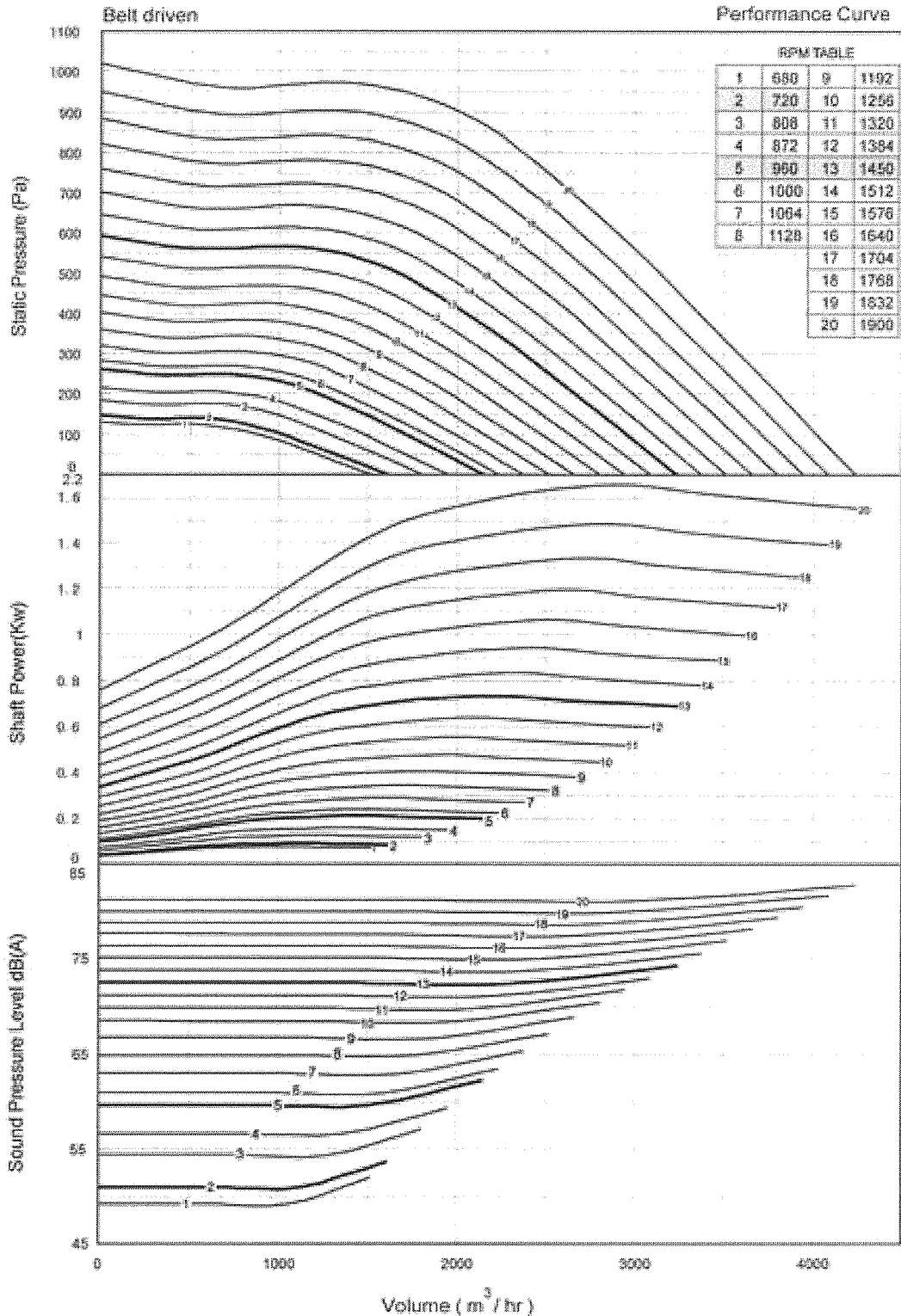


Performance certified is for installation type B - free inlet, duct outlet. Power rating (KW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LWA sound power levels for installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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.



## PRLS - 425

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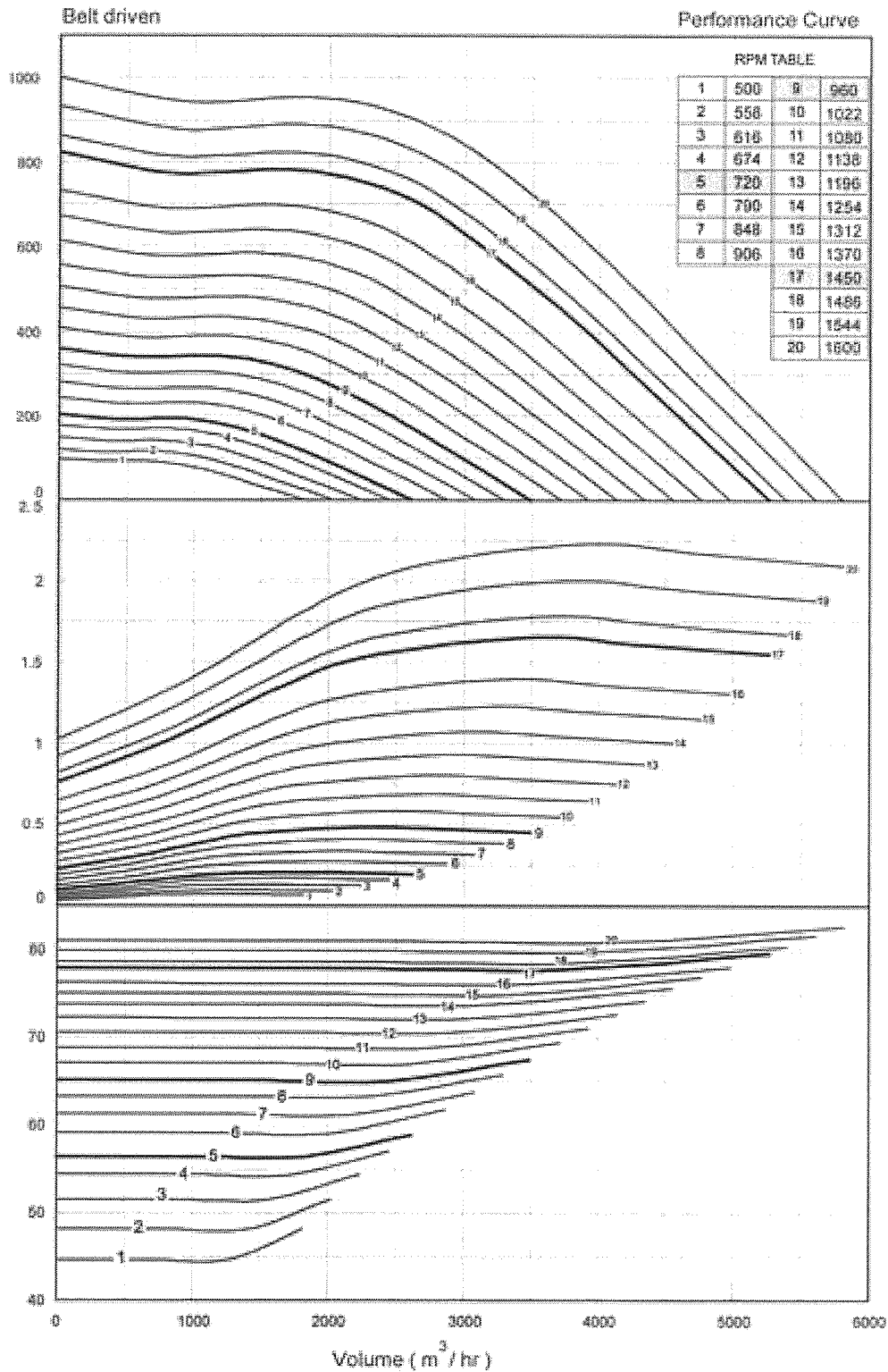
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Performance certified is for installation type B - free inlet, duct outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet Lw(A) sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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.

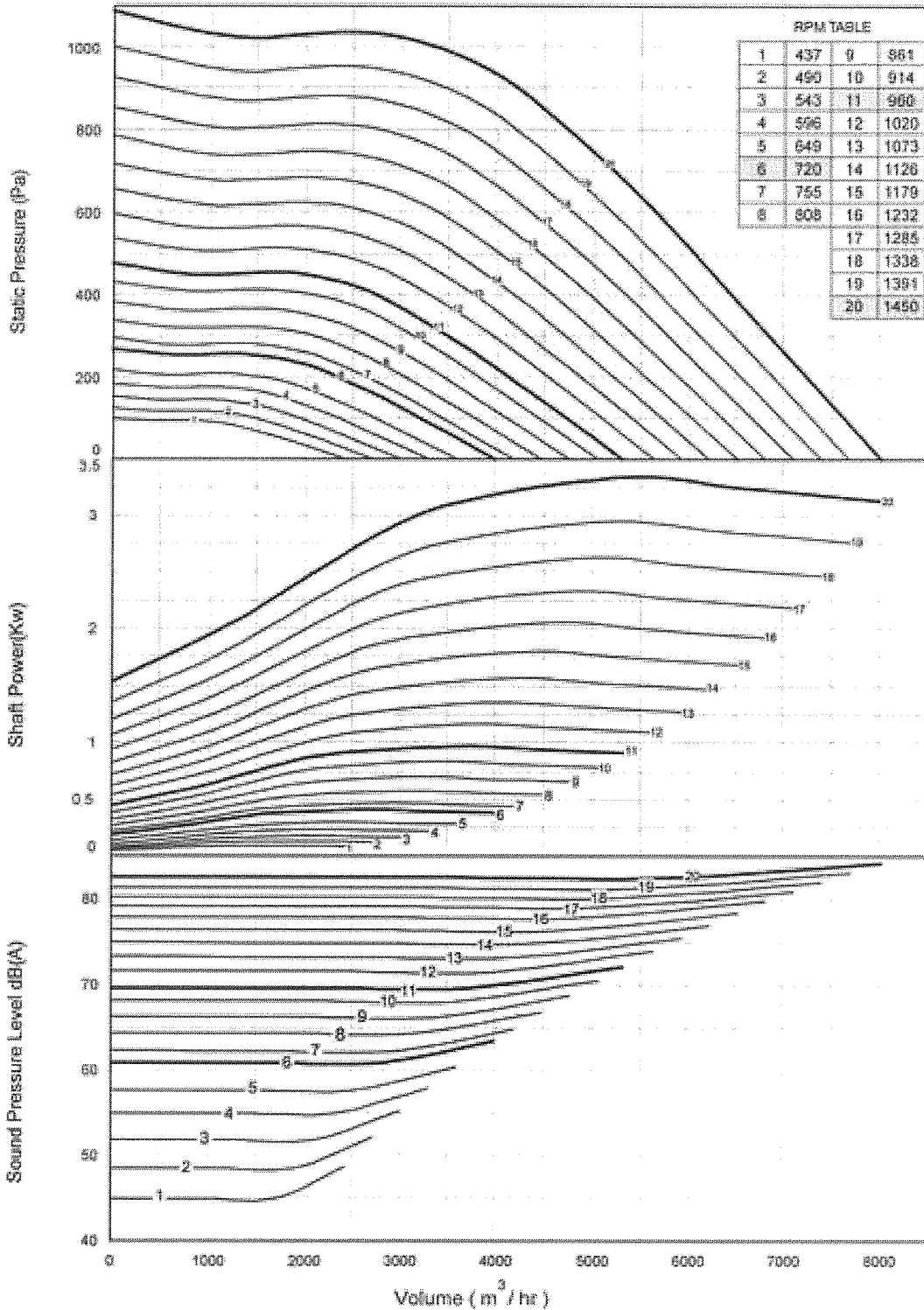


## PRLS - 575

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Belt driven

Performance Curve



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 LWA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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.



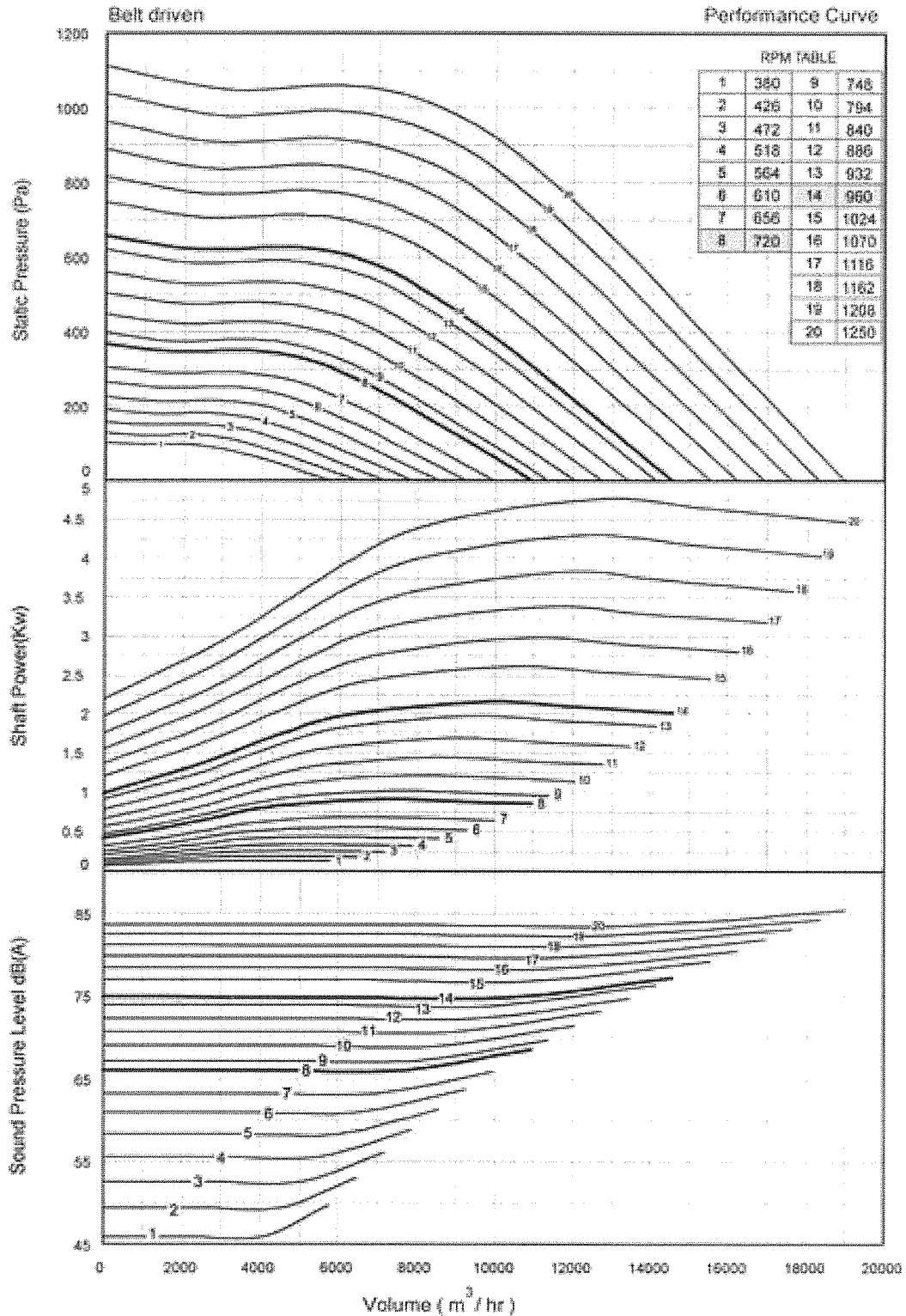


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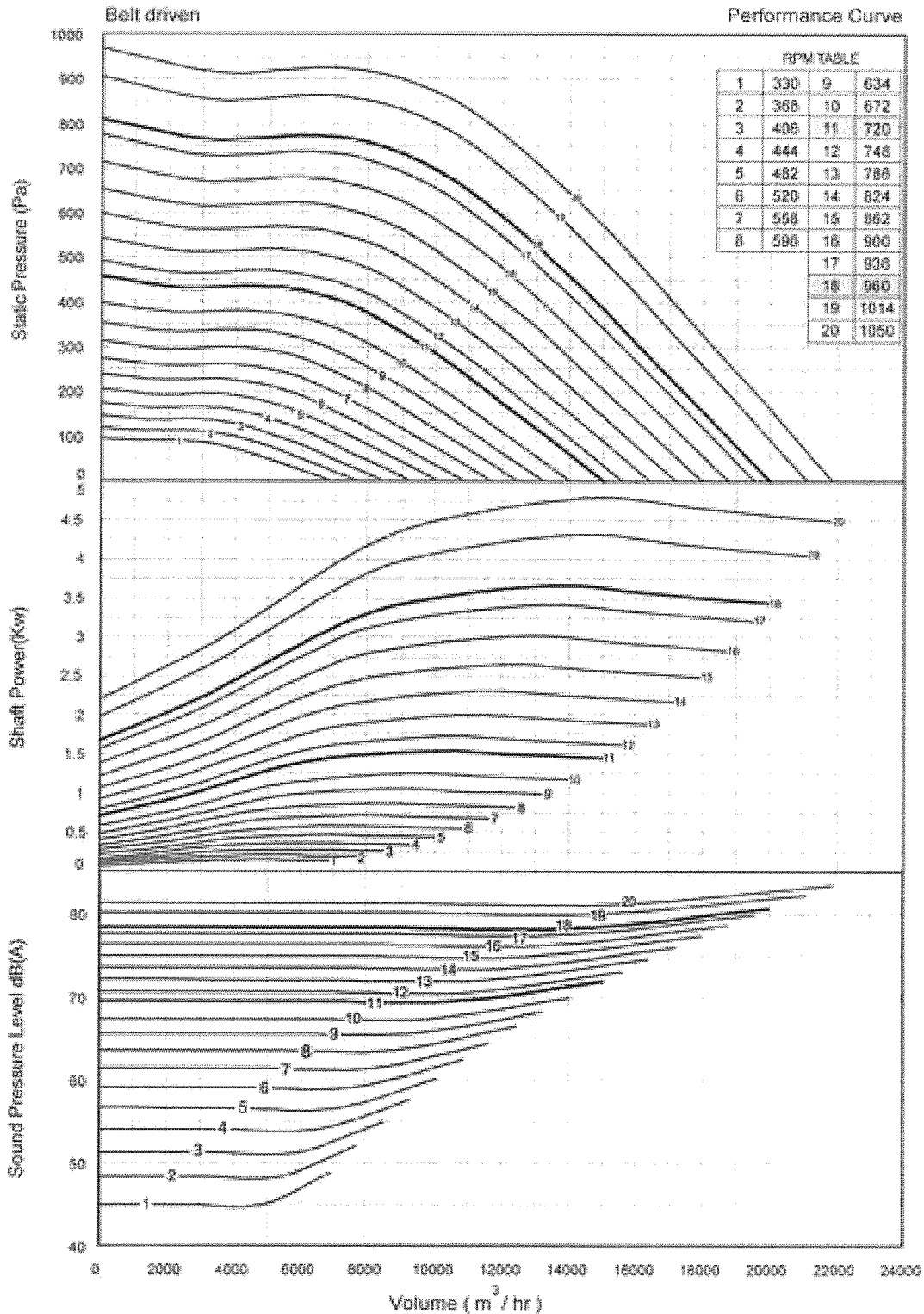


Performance certified is for installation type B - free inlet, duct outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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.



## PRLS - 750

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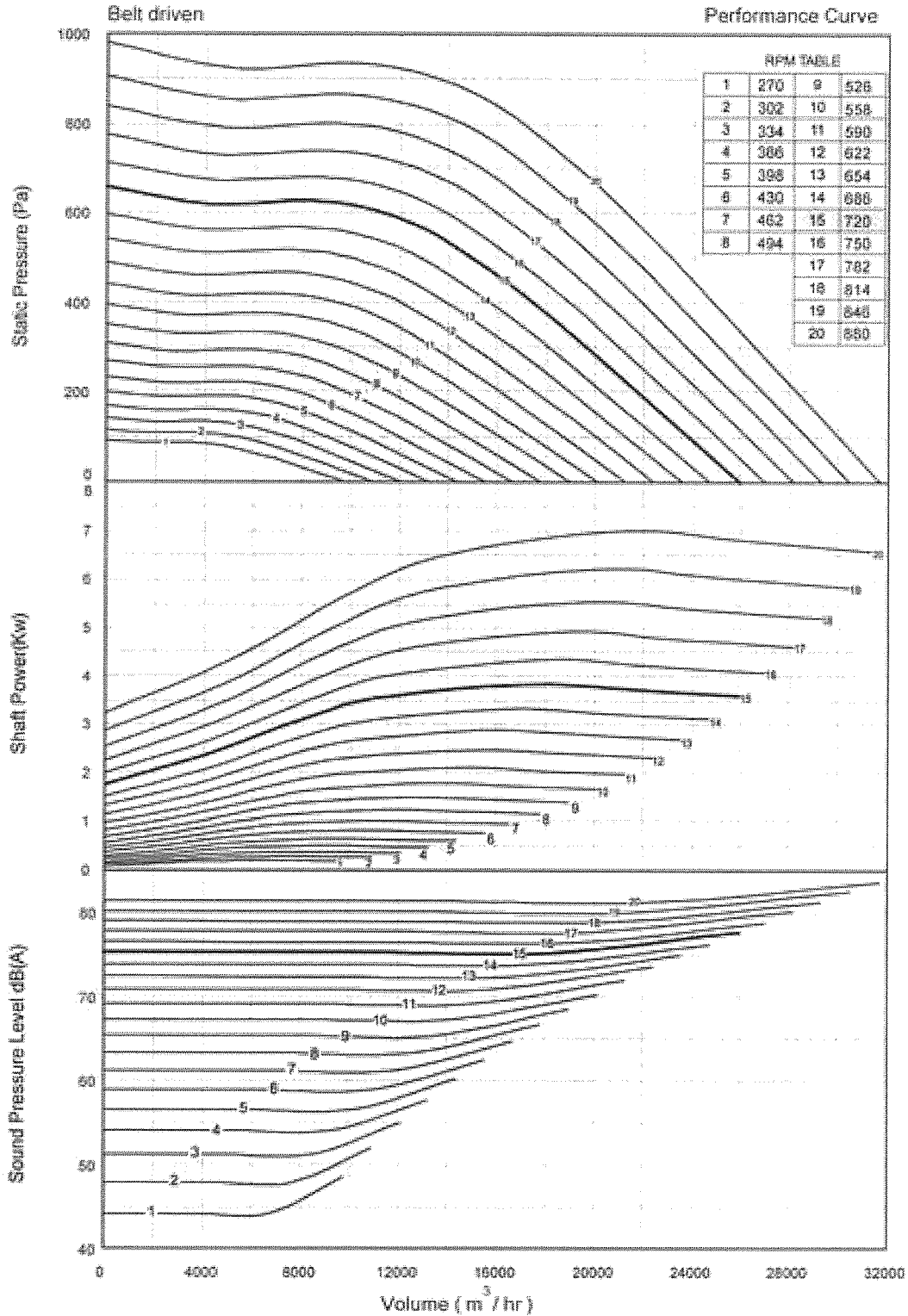
Performance certified is for installation type B - free inlet, duct outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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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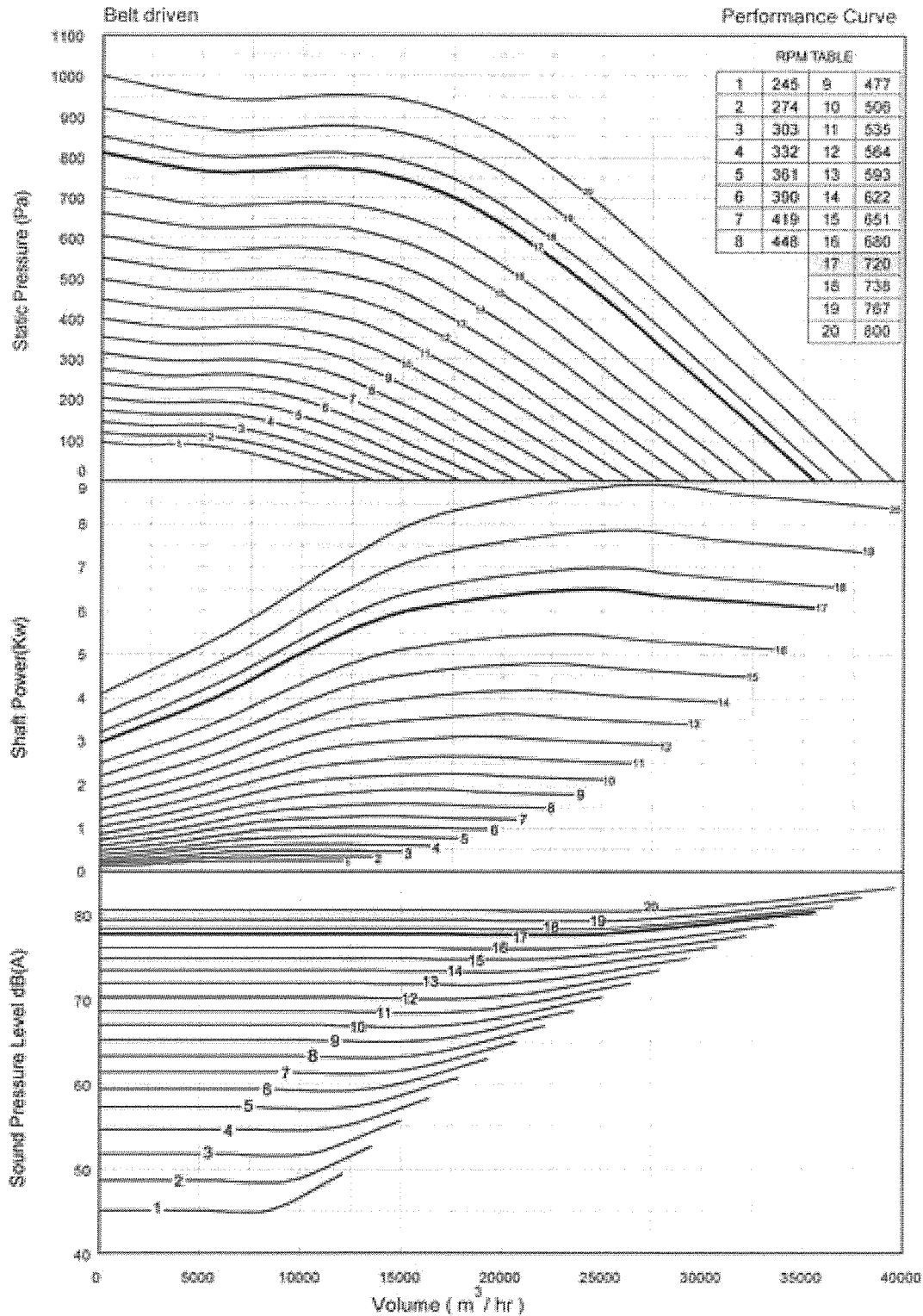
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Performance certified is for installation type B - free inlet, duct outlet. Power rating (kW) includes transmission losses. Speed (RPM or RPS) shown is nominal. Performance is based on actual speed of test. Values shown are for inlet LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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.



## PRLS - 1000

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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 LwA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10-12watts, 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.



PRLS

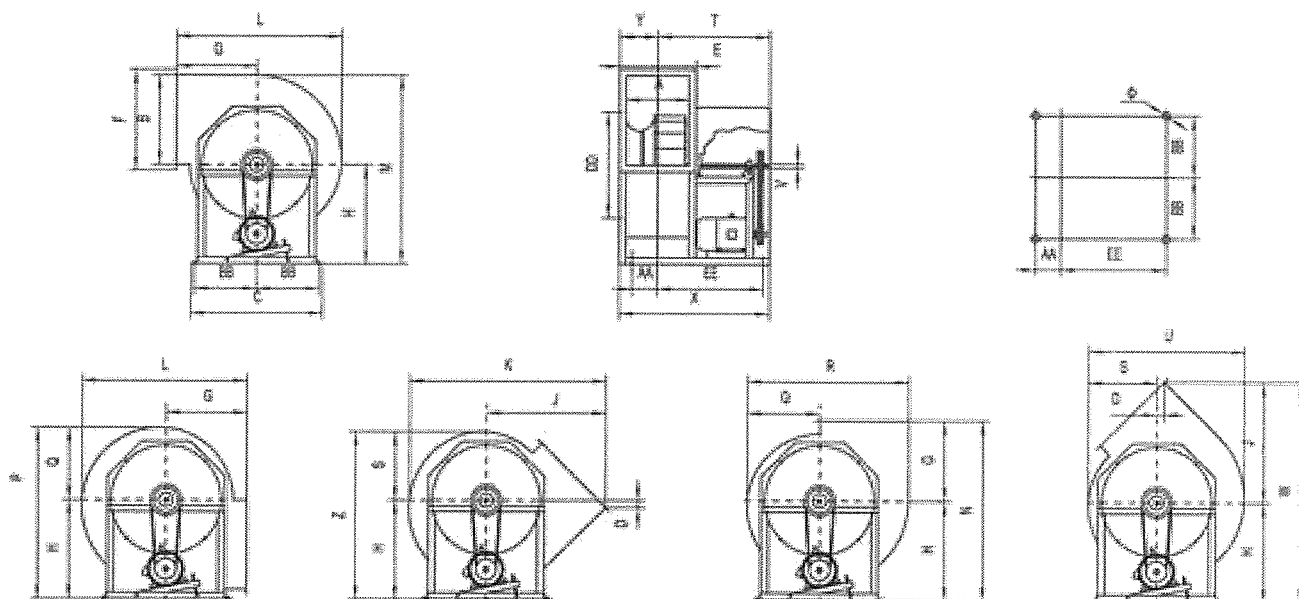


**BELT DRIVE**

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*Fan Arrangements and Dimensions*



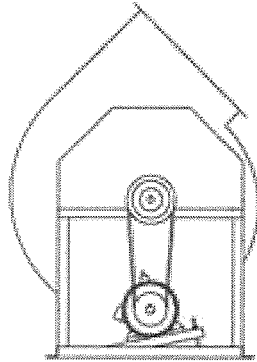
Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V		W	X	Y	Z	AA	BB	DD	EE	Φ	frame	weight kg
																				rad	100mm											
PRLS-300	215	305	430	44	295	385	250	390	398	650	528	688	630	608	228	536	207	470	507	20	100	778	820	150	587	75	195	380	425	12.5	90S	48
PRLS-300	305	432	650	65	350	555	335	510	540	900	730	930	845	830	220	748	362	540	718	20	100	1050	735	195	812	100	275	540	475	12.5	90L	76
PRLS-300	355	508	730	48	425	565	410	550	628	1035	850	1028	960	928	370	848	348	630	615	25	100	1178	840	215	898	125	340	615	550	12.5	112M	98
PRLS-300	413	584	800	58	480	640	480	615	708	1168	965	1150	1075	1040	425	968	400	650	630	25	100	1320	895	245	1015	150	375	690	575	12.5	112M	150
PRLS-300	485	686	910	65	530	715	525	690	808	1344	1102	1308	1215	1185	485	1113	465	735	1078	25	100	1498	1005	270	1155	175	430	795	650	12.5	132S	215
PRLS-300	535	762	980	55	575	775	600	750	905	1490	1235	1430	1350	1298	548	1225	516	840	1182	30	100	1655	1130	290	1268	200	465	870	750	12.5	132M	315
PRLS-300	647	914	1130	55	645	875	700	850	1046	1737	1425	1628	1550	1498	648	1426	618	875	1384	30	100	1896	1200	325	1488	225	540	1020	775	12.5	132M	440
PRLS-300	719	1016	1230	60	695	950	755	925	1145	1905	1573	1780	1690	1640	715	1570	683	1010	1525	35	100	2070	1360	350	1608	250	590	1120	875	12.5	160M	550

Note : The motor weight is not included in the above table

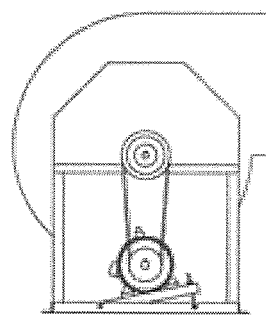


**BELT DRIVE**

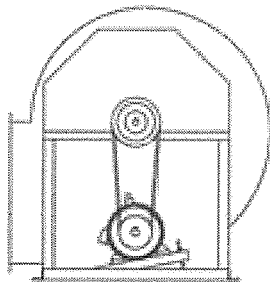
*Optional Discharge*



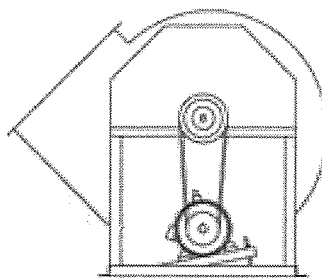
135°



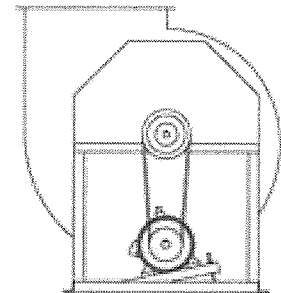
180°



0°



45°



90°

*Motor Weight Table*

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



PRLS

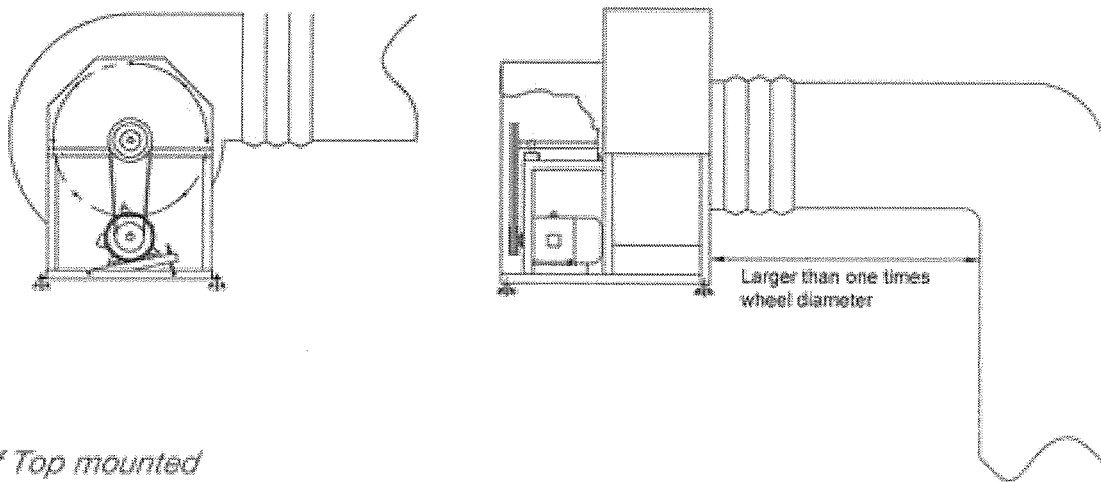


### INSTALLATION GUIDELINES

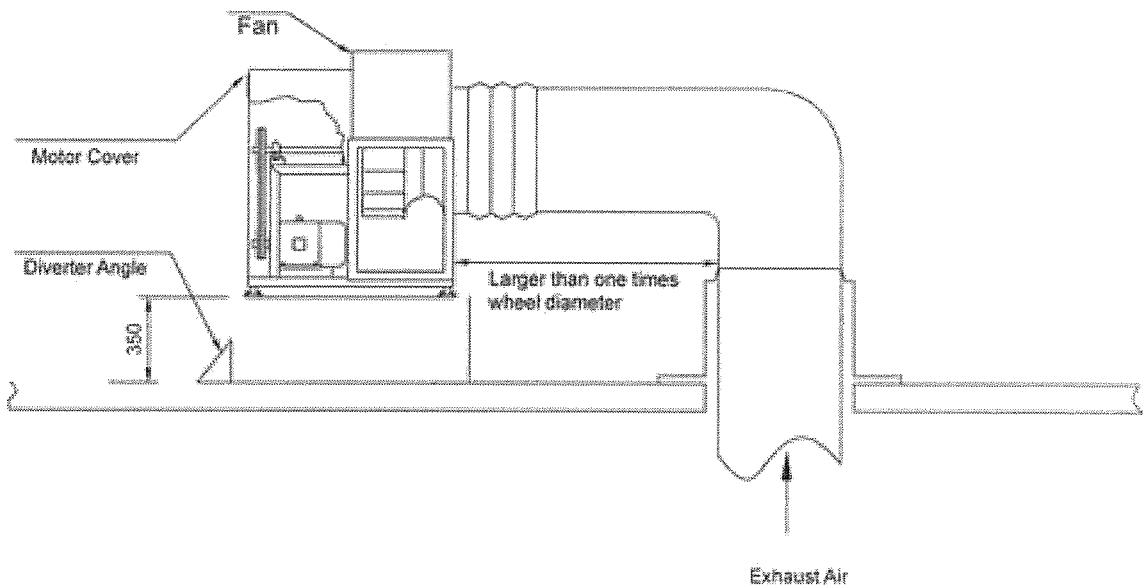
Dynair PRLS series fans are suitable for supply, exhaust and return air application. Tests were conducted to assure safe and reliable fans capable of withstanding severe conditions. Dynair series fans are designed for application ranging from clean air to contaminated air.

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#### *Floor mounted*



#### *Roof Top mounted*



Dynair series fans are designed to meet restaurant, hotel kitchen grease. Fans shall be checked & cleaned before installation to ensure wheels rotate freely. Ventilations shall not interfere with each other. For easy maintenance a reasonable space shall be left for disassembling & replacing wheels & bearings. Outdoor installed fans shall have weatherhood to make electrical equipment weather-protected.







PRLS



SOUND DATA

PRLS - 500

Table with columns: RPM, VOLU, Fq, 1, 2, 3, 4, 5, 6, 7, 8, LWA, (dB(A)). Rows include model numbers like 500, 508, 616, 674, 720, 790, 846, 906, 960, 1020, 1080, 1138, 1196, 1254, 1312, 1370, 1428, 1486, 1544, 1602, 1660, 1718, 1776, 1834, 1892, 1950, 2008, 2066, 2124, 2182, 2240, 2298, 2356, 2414, 2472, 2530, 2588, 2646, 2704, 2762, 2820, 2878, 2936, 2994, 3052, 3110, 3168, 3226, 3284, 3342, 3400, 3458, 3516, 3574, 3632, 3690, 3748, 3806, 3864, 3922, 3980, 4038, 4096, 4154, 4212, 4270, 4328, 4386, 4444, 4502, 4560, 4618, 4676, 4734, 4792, 4850, 4908, 4966, 5024, 5082, 5140, 5198, 5256, 5314, 5372, 5430, 5488, 5546, 5604, 5662, 5720, 5778, 5836, 5894, 5952, 6010, 6068, 6126, 6184, 6242, 6300, 6358, 6416, 6474, 6532, 6590, 6648, 6706, 6764, 6822, 6880, 6938, 6996, 7054, 7112, 7170, 7228, 7286, 7344, 7402, 7460, 7518, 7576, 7634, 7692, 7750, 7808, 7866, 7924, 7982, 8040, 8098, 8156, 8214, 8272, 8330, 8388, 8446, 8504, 8562, 8620, 8678, 8736, 8794, 8852, 8910, 8968, 9026, 9084, 9142, 9200, 9258, 9316, 9374, 9432, 9490, 9548, 9606, 9664, 9722, 9780, 9838, 9896, 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18248, 18306, 18364, 18422, 18480, 18538, 18596, 18654, 18712, 18770, 18828, 18886, 18944, 19002, 19060, 19118, 19176, 19234, 19292, 19350, 19408, 19466, 19524, 19582, 19640, 19698, 19756, 19814, 19872, 19930, 19988, 20046, 20104, 20162, 20220, 20278, 20336, 20394, 20452, 20510, 20568, 20626, 20684, 20742, 20800, 20858, 20916, 20974, 21032, 21090, 21148, 21206, 21264, 21322, 21380, 21438, 21496, 21554, 21612, 21670, 21728, 21786, 21844, 21902, 21960, 22018, 22076, 22134, 22192, 22250, 22308, 22366, 22424, 22482, 22540, 22598, 22656, 22714, 22772, 22830, 22888, 22946, 23004, 23062, 23120, 23178, 23236, 23294, 23352, 23410, 23468, 23526, 23584, 23642, 23700, 23758, 23816, 23874, 23932, 23990, 24048, 24106, 24164, 24222, 24280, 24338, 24396, 24454, 24512, 24570, 24628, 24686, 24744, 24802, 24860, 24918, 24976, 25034, 25092, 25150, 25208, 25266, 25324, 25382, 25440, 25498, 25556, 25614, 25672, 25730, 25788, 25846, 25904, 25962, 26020, 26078, 26136, 26194, 26252, 26310, 26368, 26426, 26484, 26542, 26600, 26658, 26716, 26774, 26832, 26890, 26948, 27006, 27064, 27122, 27180, 27238, 27296, 27354, 27412, 27470, 27528, 27586, 27644, 27702, 27760, 27818, 27876, 27934, 27992, 28050, 28108, 28166, 28224, 28282, 28340, 28398, 28456, 28514, 28572, 28630, 28688, 28746, 28804, 28862, 28920, 28978, 29036, 29094, 29152, 29210, 29268, 29326, 29384, 29442, 29500, 29558, 29616, 29674, 29732, 29790, 29848, 29906, 29964, 30022, 30080, 30138, 30196, 30254, 30312, 30370, 30428, 30486, 30544, 30602, 30660, 30718, 30776, 30834, 30892, 30950, 31008, 31066, 31124, 31182, 31240, 31298, 31356, 31414, 31472, 31530, 31588, 31646, 31704, 31762, 31820, 31878, 31936, 32000, 32060, 32120, 32180, 32240, 32300, 32360, 32420, 32480, 32540, 32600, 32660, 32720, 32780, 32840, 32900, 32960, 33020, 33080, 33140, 33200, 33260, 33320, 33380, 33440, 33500, 33560, 33620, 33680, 33740, 33800, 33860, 33920, 33980, 34040, 34100, 34160, 34220, 34280, 34340, 34400, 34460, 34520, 34580, 34640, 34700, 34760, 34820, 34880, 34940, 35000, 35060, 35120, 35180, 35240, 35300, 35360, 35420, 35480, 35540, 35600, 35660, 35720, 35780, 35840, 35900, 35960, 36020, 36080, 36140, 36200, 36260, 36320, 36380, 36440, 36500, 36560, 36620, 36680, 36740, 36800, 36860, 36920, 36980, 37040, 37100, 37160, 37220, 37280, 37340, 37400, 37460, 37520, 37580, 37640, 37700, 37760, 37820, 37880, 37940, 38000, 38060, 38120, 38180, 38240, 38300, 38360, 38420, 38480, 38540, 38600, 38660, 38720, 38780, 38840, 38900, 38960, 39020, 39080, 39140, 39200, 39260, 39320, 39380, 39440, 39500, 39560, 39620, 39680, 39740, 39800, 39860, 39920, 39980, 40040, 40100, 40160, 40220, 40280, 40340, 40400, 40460, 40520, 40580, 40640, 40700, 40760, 40820, 40880, 40940, 41000, 41060, 41120, 41180, 41240, 41300, 41360, 41420, 41480, 41540, 41600, 41660, 41720, 41780, 41840, 41900, 41960, 42020, 42080, 42140, 42200, 42260, 42320, 42380, 42440, 42500, 42560, 42620, 42680, 42740, 42800, 42860, 42920, 42980, 43040, 43100, 43160, 43220, 43280, 43340, 43400, 43460, 43520, 43580, 43640, 43700, 43760, 43820, 43880, 43940, 44000, 44060, 44120, 44180, 44240, 44300, 44360, 44420, 44480, 44540, 44600, 44660, 44720, 44780, 44840, 44900, 44960, 45020, 45080, 45140, 45200, 45260, 45320, 45380, 45440, 45500, 45560, 45620, 45680, 45740, 45800, 45860, 45920, 45980, 46040, 46100, 46160, 46220, 46280, 46340, 46400, 46460, 46520, 46580, 46640, 46700, 46760, 46820, 46880, 46940, 47000, 47060, 47120, 47180, 47240, 47300, 47360, 47420, 47480, 47540, 47600, 47660, 47720, 47780, 47840, 47900, 47960, 48020, 48080, 48140, 48200, 48260, 48320, 48380, 48440, 48500, 48560, 48620, 48680, 48740, 48800, 48860, 48920, 48980, 49040, 49100, 49160, 49220, 49280, 49340, 49400, 49460, 49520, 49580, 49640, 49700, 49760, 49820, 49880, 49940, 50000.

PRLS - 575

Table with columns: RPM, VOLU, Fq, 1, 2, 3, 4, 5, 6, 7, 8, LWA, (dB(A)). Rows include model numbers like 500, 508, 616, 674, 720, 790, 846, 906, 960, 1020, 1080, 1138, 1196, 1254, 1312, 1370, 1428, 1486, 1544, 1602, 1660, 1718, 1776, 1834, 1892, 1950, 2008, 2066, 2124, 2182, 2240, 2298, 2356, 2414, 2472, 2530, 2588, 2646, 2704, 2762, 2820, 2878, 2936, 2994, 3052, 3110, 3168, 3226, 3284, 3342, 3400, 3458, 3516, 3574, 3632, 3690, 3748, 3806, 3864, 3922, 3980, 4038, 4096, 4154, 4212, 4270, 4328, 4386, 4444, 4502, 4560, 4618, 4676, 4734, 4792, 4850, 4908, 4966, 5024, 5082, 5140, 5198, 5256, 5314, 5372, 5430, 5488, 5546, 5604, 5662, 5720, 5778, 5836, 5894, 5952, 6010, 6068, 6126, 6184, 6242, 6300, 6358, 6416, 6474, 6532, 6590, 6648, 6706, 6764, 6822, 6880, 6938, 6996, 7054, 7112, 7170, 7228, 7286, 7344, 7402, 7460, 7518, 7576, 7634, 7692, 7750, 7808, 7866, 7924, 7982, 8040, 8098, 8156, 8214, 8272, 8330, 8388, 8446, 8504, 8562, 8620, 8678, 8736, 8794, 8852, 8910, 8968, 9026, 9084, 9142, 9200, 9258, 9316, 9374, 9432, 9490, 9548, 9606, 9664, 9722, 9780, 9838, 9896, 9954, 10012, 10070, 10128, 10186, 10244, 10302, 10360, 10418, 10476, 10534, 10592, 10650, 10708, 10766, 10824, 10882, 10940, 11000, 11060, 11120, 11180, 11240, 11300, 11360, 11420, 11480, 11540, 11600, 11660, 11720, 11780, 11840, 11900, 11960, 12020, 12080, 12140, 12200, 12260, 12320, 12380, 12440, 12500, 12560, 12620, 12680, 12740, 12800, 12860, 12920, 12980, 13040, 13100, 13160, 13220, 13280, 13340, 13400, 13460, 13520, 13580, 13640, 13700, 13760, 13820, 13880, 13940, 14000, 14060, 14120, 14180, 14240, 14300, 14360, 14420, 14480, 14540, 14600, 14660, 14720, 14780, 14840, 14900, 14960, 15020, 15080, 15140, 15200, 15260, 15320, 15380, 15440, 15500, 15560, 15620, 15680, 15740, 15800, 15860, 15920, 15980, 16040, 16100, 16160, 16220, 16280, 16340, 16400, 16460, 16520, 16580, 16640, 16700, 16760, 16820, 16880, 16940, 17000, 17060, 17120, 17180, 17240, 17300, 17360, 17420, 17480, 17540, 17600, 17660, 17720, 17780, 17840, 17900, 17960, 18020, 18080, 18140, 18200, 18260, 18320, 18380, 18440, 18500, 18560, 18620, 18680, 18740, 18800, 18860, 18920, 18980, 19040, 19100, 19160, 19220, 19280, 19340, 19400, 19460, 19520, 19580, 19640, 19700, 19760, 19820, 19880, 19940, 20000.

Section 5 page 17

Values shown are for inlet LWA 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. Rating 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 1.5m. Note that dB(A) levels are not licensed by AMCA International.



### SOUND DATA

PRLS - 675

RPM	VOLUME	dB	SOUND POWER - OCTAVE BANDS								LWA	dB(A)
			1	2	3	4	5	6	7	8		
160	5170	0	88	88	88	88	88	88	88	88	88	88
	4362	0	87	87	87	87	87	87	87	87	87	87
	2728	0	87	87	87	87	87	87	87	87	87	87
426	5475	0	72	72	72	72	72	72	72	72	72	72
	4564	0	71	71	71	71	71	71	71	71	71	71
	2832	0	70	70	70	70	70	70	70	70	70	70
472	5134	0	75	75	75	75	75	75	75	75	75	75
	5048	0	74	74	74	74	74	74	74	74	74	74
	2862	0	74	74	74	74	74	74	74	74	74	74
558	5182	0	78	78	78	78	78	78	78	78	78	78
	4536	0	77	77	77	77	77	77	77	77	77	77
	3124	0	77	77	77	77	77	77	77	77	77	77
666	5222	0	80	80	80	80	80	80	80	80	80	80
	4620	0	79	79	79	79	79	79	79	79	79	79
	3486	0	78	78	78	78	78	78	78	78	78	78
810	5272	0	82	82	82	82	82	82	82	82	82	82
	4620	0	81	81	81	81	81	81	81	81	81	81
	3322	0	80	80	80	80	80	80	80	80	80	80
954	5322	0	84	84	84	84	84	84	84	84	84	84
	4620	0	83	83	83	83	83	83	83	83	83	83
	3486	0	82	82	82	82	82	82	82	82	82	82
1116	5372	0	86	86	86	86	86	86	86	86	86	86
	4620	0	85	85	85	85	85	85	85	85	85	85
	3486	0	84	84	84	84	84	84	84	84	84	84
1290	5422	0	88	88	88	88	88	88	88	88	88	88
	4620	0	87	87	87	87	87	87	87	87	87	87
	3486	0	86	86	86	86	86	86	86	86	86	86
1476	5472	0	90	90	90	90	90	90	90	90	90	90
	4620	0	89	89	89	89	89	89	89	89	89	89
	3486	0	88	88	88	88	88	88	88	88	88	88
1674	5522	0	92	92	92	92	92	92	92	92	92	92
	4620	0	91	91	91	91	91	91	91	91	91	91
	3486	0	90	90	90	90	90	90	90	90	90	90
1884	5572	0	94	94	94	94	94	94	94	94	94	94
	4620	0	93	93	93	93	93	93	93	93	93	93
	3486	0	92	92	92	92	92	92	92	92	92	92
2106	5622	0	96	96	96	96	96	96	96	96	96	96
	4620	0	95	95	95	95	95	95	95	95	95	95
	3486	0	94	94	94	94	94	94	94	94	94	94
2340	5672	0	98	98	98	98	98	98	98	98	98	98
	4620	0	97	97	97	97	97	97	97	97	97	97
	3486	0	96	96	96	96	96	96	96	96	96	96
2586	5722	0	100	100	100	100	100	100	100	100	100	100
	4620	0	99	99	99	99	99	99	99	99	99	99
	3486	0	98	98	98	98	98	98	98	98	98	98

PRLS - 750

RPM	VOLUME	dB	SOUND POWER - OCTAVE BANDS								LWA	dB(A)
			1	2	3	4	5	6	7	8		
160	5681	0	88	88	88	88	88	88	88	88	88	88
	4878	0	88	88	88	88	88	88	88	88	88	88
	3272	0	88	88	88	88	88	88	88	88	88	88
360	5872	0	77	77	77	77	77	77	77	77	77	77
	4974	0	76	76	76	76	76	76	76	76	76	76
	3110	0	75	75	75	75	75	75	75	75	75	75
420	5972	0	74	74	74	74	74	74	74	74	74	74
	5074	0	73	73	73	73	73	73	73	73	73	73
	3412	0	72	72	72	72	72	72	72	72	72	72
444	6072	0	77	77	77	77	77	77	77	77	77	77
	5174	0	76	76	76	76	76	76	76	76	76	76
	3574	0	75	75	75	75	75	75	75	75	75	75
480	6172	0	80	80	80	80	80	80	80	80	80	80
	5274	0	79	79	79	79	79	79	79	79	79	79
	3674	0	78	78	78	78	78	78	78	78	78	78
540	6272	0	82	82	82	82	82	82	82	82	82	82
	5374	0	81	81	81	81	81	81	81	81	81	81
	3774	0	80	80	80	80	80	80	80	80	80	80
600	6372	0	84	84	84	84	84	84	84	84	84	84
	5474	0	83	83	83	83	83	83	83	83	83	83
	3874	0	82	82	82	82	82	82	82	82	82	82
660	6472	0	86	86	86	86	86	86	86	86	86	86
	5574	0	85	85	85	85	85	85	85	85	85	85
	3974	0	84	84	84	84	84	84	84	84	84	84
720	6572	0	88	88	88	88	88	88	88	88	88	88
	5674	0	87	87	87	87	87	87	87	87	87	87
	4074	0	86	86	86	86	86	86	86	86	86	86
780	6672	0	90	90	90	90	90	90	90	90	90	90
	5774	0	89	89	89	89	89	89	89	89	89	89
	4174	0	88	88	88	88	88	88	88	88	88	88
840	6772	0	92	92	92	92	92	92	92	92	92	92
	5874	0	91	91	91	91	91	91	91	91	91	91
	4274	0	90	90	90	90	90	90	90	90	90	90
900	6872	0	94	94	94	94	94	94	94	94	94	94
	5974	0	93	93	93	93	93	93	93	93	93	93
	4374	0	92	92	92	92	92	92	92	92	92	92
960	6972	0	96	96	96	96	96	96	96	96	96	96
	6074	0	95	95	95	95	95	95	95	95	95	95
	4474	0	94	94	94	94	94	94	94	94	94	94
1020	7072	0	98	98	98	98	98	98	98	98	98	98
	6174	0	97	97	97	97	97	97	97	97	97	97
	4574	0	96	96	96	96	96	96	96	96	96	96
1080	7172	0	100	100	100	100	100	100	100	100	100	100
	6274	0	99	99	99	99	99	99	99	99	99	99
	4674	0	98	98	98	98	98	98	98	98	98	98
1140	7272	0	102	102	102	102	102	102	102	102	102	102
	6374	0	101	101	101	101	101	101	101	101	101	101
	4774	0	100	100	100	100	100	100	100	100	100	100
1200	7372	0	104	104	104	104	104	104	104	104	104	104
	6474	0	103	103	103	103	103	103	103	103	103	103
	4874	0	102	102	102	102	102	102	102	102	102	102
1260	7472	0	106	106	106	106	106	106	106	106	106	106
	6574	0	105	105	105	105	105	105	105	105	105	105
	4974	0	104	104	104	104	104	104	104	104	104	104
1320	7572	0	108	108	108	108	108	108	108	108	108	108
	6674	0	107	107	107	107	107	107	107	107	107	107
	5074	0	106	106	106	106	106	106	106	106	106	106

Values shown are for inlet LWA sound power levels for Installation Type B: Free inlet, duct outlet. The sound power level ratings shown are in decibels, referred to as 10<sup>-12</sup> watts, calculated per AMCA International Standard 301. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Rating *s* 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 1.5m. Note that dB(A) levels are not licensed by AMCA International.



PRLS



SOUND DATA

PRLS - 900

PRLS - 1000

RPM	VOLTAGE	Pa	SOUND POWER - OCTAVE BANDS									Leq(A)	dBA
			1	2	3	4	5	6	7	8	9		
320	0	69	66	64	62	60	58	56	54	52	50	48	46
	1042	61	60	64	61	53	48	38	32	28	26	24	22
	1624	56	54	54	51	43	38	28	22	20	18	16	14
	2	52	49	49	46	38	33	23	18	16	14	12	10
360	0	72	69	67	65	63	61	59	57	55	53	51	49
	1042	64	72	67	63	55	49	42	37	33	30	28	26
	1624	59	72	67	63	55	49	42	37	33	30	28	26
	2	55	68	64	61	53	48	42	37	33	30	28	26
400	0	75	72	70	68	66	64	62	60	58	56	54	52
	1042	59	75	69	65	57	51	44	39	35	32	30	28
	1624	54	75	69	65	57	51	44	39	35	32	30	28
	2	51	72	69	65	57	51	44	39	35	32	30	28
450	0	78	75	73	71	69	67	65	63	61	59	57	55
	1042	61	78	72	68	60	54	47	42	38	34	31	29
	1624	56	78	72	68	60	54	47	42	38	34	31	29
	2	53	75	72	68	60	54	47	42	38	34	31	29
500	0	81	78	76	74	72	70	68	66	64	62	60	58
	1042	64	81	75	71	63	57	50	45	41	37	34	32
	1624	59	81	75	71	63	57	50	45	41	37	34	32
	2	56	78	75	71	63	57	50	45	41	37	34	32
550	0	84	81	79	77	75	73	71	69	67	65	63	61
	1042	67	84	78	74	66	60	53	48	44	40	37	35
	1624	62	84	78	74	66	60	53	48	44	40	37	35
	2	59	81	78	74	66	60	53	48	44	40	37	35
600	0	87	84	82	80	78	76	74	72	70	68	66	64
	1042	70	87	81	77	69	63	56	51	47	43	40	38
	1624	65	87	81	77	69	63	56	51	47	43	40	38
	2	62	84	81	77	69	63	56	51	47	43	40	38
650	0	90	87	85	83	81	79	77	75	73	71	69	67
	1042	73	90	84	80	72	66	59	54	50	46	43	41
	1624	68	90	84	80	72	66	59	54	50	46	43	41
	2	65	87	84	80	72	66	59	54	50	46	43	41
700	0	93	90	88	86	84	82	80	78	76	74	72	70
	1042	76	93	87	83	75	69	62	57	53	49	46	44
	1624	71	93	87	83	75	69	62	57	53	49	46	44
	2	68	90	87	83	75	69	62	57	53	49	46	44
750	0	96	93	91	89	87	85	83	81	79	77	75	73
	1042	79	96	90	86	78	72	65	60	56	52	49	47
	1624	74	96	90	86	78	72	65	60	56	52	49	47
	2	71	93	90	86	78	72	65	60	56	52	49	47
800	0	99	96	94	92	90	88	86	84	82	80	78	76
	1042	82	99	93	89	81	75	68	63	59	55	52	50
	1624	77	99	93	89	81	75	68	63	59	55	52	50
	2	74	96	93	89	81	75	68	63	59	55	52	50
850	0	102	99	97	95	93	91	89	87	85	83	81	79
	1042	85	102	96	92	84	78	71	66	62	58	55	53
	1624	80	102	96	92	84	78	71	66	62	58	55	53
	2	77	99	96	92	84	78	71	66	62	58	55	53
900	0	105	102	100	98	96	94	92	90	88	86	84	82
	1042	88	105	99	95	87	81	74	69	65	61	58	56
	1624	83	105	99	95	87	81	74	69	65	61	58	56
	2	80	102	99	95	87	81	74	69	65	61	58	56

RPM	VOLTAGE	Pa	SOUND POWER - OCTAVE BANDS									Leq(A)	dBA
			1	2	3	4	5	6	7	8	9		
340	0	70	67	65	63	61	59	57	55	53	51	49	47
	1042	62	69	64	60	52	46	39	34	30	27	25	23
	1624	57	69	64	60	52	46	39	34	30	27	25	23
	2	53	66	61	57	49	43	36	31	27	24	22	20
374	0	74	71	69	67	65	63	61	59	57	55	53	51
	1042	66	74	68	64	56	50	43	38	34	31	29	27
	1624	61	74	68	64	56	50	43	38	34	31	29	27
	2	58	71	68	64	56	50	43	38	34	31	29	27
408	0	77	74	72	70	68	66	64	62	60	58	56	54
	1042	60	77	71	67	59	53	46	41	37	33	30	28
	1624	55	77	71	67	59	53	46	41	37	33	30	28
	2	52	74	71	67	59	53	46	41	37	33	30	28
442	0	80	77	75	73	71	69	67	65	63	61	59	57
	1042	63	80	74	70	62	56	49	44	40	36	33	31
	1624	58	80	74	70	62	56	49	44	40	36	33	31
	2	55	77	74	70	62	56	49	44	40	36	33	31
476	0	83	80	78	76	74	72	70	68	66	64	62	60
	1042	66	83	77	73	65	59	52	47	43	39	36	34
	1624	61	83	77	73	65	59	52	47	43	39	36	34
	2	58	80	77	73	65	59	52	47	43	39	36	34
510	0	86	83	81	79	77	75	73	71	69	67	65	63
	1042	69	86	80	76	68	62	55	50	46	42	39	37
	1624	64	86	80	76	68	62	55	50	46	42	39	37
	2	61	83	80	76	68	62	55	50	46	42	39	37
544	0	89	86	84	82	80	78	76	74	72	70	68	66
	1042	72	89	83	79	71	65	58	53	49	45	42	40
	1624	67	89	83	79	71	65	58	53	49	45	42	40
	2	64	86	83	79	71	65	58	53	49	45	42	40
578	0	92	89	87	85	83	81	79	77	75	73	71	69
	1042	75	92	86	82	74	68	61	56	52	48	45	43
	1624	70	92	86	82	74	68	61	56	52	48	45	43
	2	67	89	86	82	74	68	61	56	52	48	45	43
612	0	95	92	90	88	86	84	82	80	78	76	74	72
	1042	78	95	89	85	77	71	64	59	55	51	48	46
	1624	73	95	89	85	77	71	64	59	55	51	48	46
	2	70	92	89	85	77	71	64	59	55	51	48	46
646	0	98	95	93	91	89	87	85	83	81	79	77	75
	1042	81	98	92	88	80	74	67	62	58	54	51	49
	1624	76	98	92	88	80	74	67	62	58	54	51	49
	2	73	95	92	88	80	74	67	62	58	54	51	49
680	0	101	98	96	94	92	90	88	86	84	82	80	78
	1042	84	101	95	91	83	77	70	65	61	57	54	52
	1624	79	101	95	91	83	77	70	65	61	57	54	52
	2	76	98	95	91	83	77	70	65	61	57	54	52
714	0	104	101	99	97	95	93	91	89	87	85	83	81
	1042	87	104	98	94	86	80	73	68	64	60	57	55
	1624	82	104	98	94	86	80	73	68	64	60	57	55
	2	79	101	98	94	86	80	73	68	64	60	57	55
748	0	107	104	102	100	98	96	94	92	90	88	86	84
	1042	90	107	101	97	89	83	76	71	67	63	60	58
	1624	85	107	101	97	89	83	76	71	67	63	60	58
	2	82	104	101	97	89	83	76	71	67	63	60	58

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Values shown are for inlet LWA 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 and correction. dB(A) A-weighted sound pressure level is based on 11.5 dB sound attenuation per octave band at 1.5m. Note that dB(A) levels are not licensed by AMCA International.