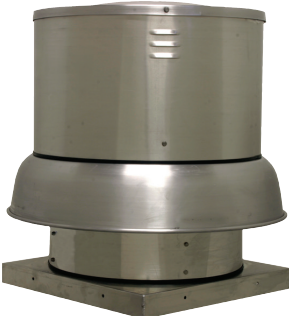




# MODEL DB

## BELT DRIVE CENTRIFUGAL ROOF EXHAUSTER



### **MODEL FEATURES**

- Exhaust air up to 28,000 CFM in high static pressure applications up to 1-1/4" w.g.
- Attractive spun aluminum exterior
- Belt drives permit easy performance adjustments when needed
- Non-overloading backward inclined wheel for efficiency at higher static pressures
- cULus 705 Listed


### **APPLICATION CONSTRUCTION OPTIONS**

MODEL NAME	TYPICAL APPLICATIONS
DB	Removal of clean air in general applications

### **MODEL OVERVIEW**

Model DB belt drive fans are designed to exhaust air up to 28,000 CFM in high static pressure applications to 1-1/4". The aluminum exterior provides an attractive appearance. Belt drive results in lower operating RPM and sound levels, making the Model DB well suited to applications where quiet operation is important. Belt drive also permits easy performance adjustments when needed to balance the total ventilation system. The non-overloading backward inclined wheel with its higher static pressure capability makes this unit suitable for either ducted or nonducted applications. It's roof mounting permits location near the area to be ventilated, allowing short duct runs and more efficient operation.

DBs are primarily used for the exhaust of relatively clean air from a wide range of commercial, industrial and institutional environments such as manufacturing and assembly plants, office buildings, schools, hospitals, restaurants, athletic facilities and many others

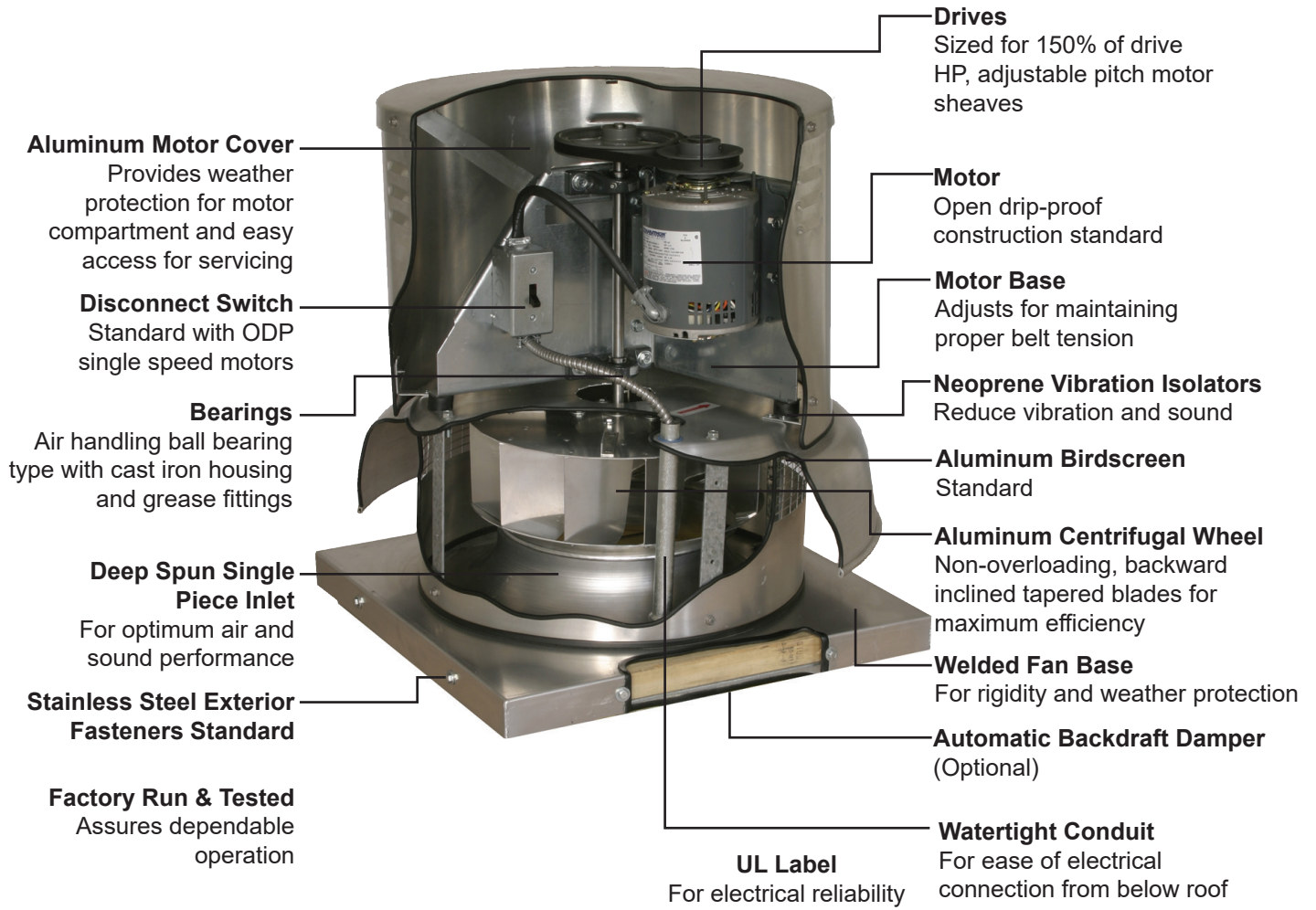


Model DB is available in our Quickship program. Size 36 is available for next day, 3-day or 10-day shipping from stock.

**Industry best 5 year fan housing warranty, 1 year motor warranty**



## CONSTRUCTION FEATURES AND OPTIONS





## **CONSTRUCTION/SPECIFICATION CHECKLIST**

### **Housing**

- Curb cap with integral deep spun inlet for efficient performance.
- Heavy-gauge aluminum for extra strength.
- Designed for maximum weather protection and attractive appearance.
- Heavy-gauge motor support for rigidity and strength.
- Neoprene isolators for reduction of vibration and sound.
- Quick-Release latches on motor cover for easy access to motor compartment.
- Water tight conduit tube for easy electrical connection from below roof.
- Aluminum birdscreen standard.
- Stainless steel fasteners on exterior.

### **Centrifugal Wheel**

- All aluminum wheel.
- Backward inclined for efficiency at higher static pressure.
- Non-overloading for safe operation in ducted systems.
- Tapered blades for efficiency and quiet operation.
- Heavy aluminum hub for extra strength.
- Statically and dynamically balanced for smooth operation.

### **Motors**

- 1 year warranty.
- Brands are nationally recognized and locally serviced.
- Single speed open drip-proof are standard.
- Explosion-proof, totally enclosed and two-speed motors are available.
- All motors are rated for continuous duty.
- 182T and larger motors shipped unmounted for field installation.
- Disconnect switch standard on single speed drip-proof and totally enclosed motors.

### **Drives**

- Sized for minimum 150% of drive horsepower.
- Machined cast iron adjustable motor pulleys.
- Adjustable base for belt tensioning.
- Non-static oil resistant V-Belts.

### **Bearings**

- Heavy-duty ball bearing type.
- Pre-lubricated and permanently sealed.
- 5 year warranty.

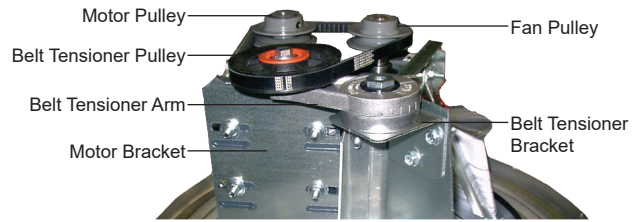
### **cULus Label**

- cULus 705 listing assures electrical safety and reliability.
- cULus 705 must be specified when required.

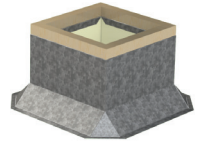


## **OPTIONS/ACCESSORIES**

**Automatic Belt Tensioner:** Available on sizes 6-24, The Automatic Belt Tensioners eliminate the need for regular manual retensioning of drives, and the risk of inadvertently over-tensioning drive components is avoided and overall drive operating efficiency is enhanced. Benefits include reduction in startup and maintenance costs, increased belt life, increased drive efficiency, and ensure drive components do not snag obstructions.



**Roof Curb:** Prefabricated heavy-gauge galvanized steel, welded construction, 12” high (other heights are also available) with 1-1/2” wood nailer. Assures perfect fit of exhauster to roof opening. Options include burglar bars, single or double pitch construction and hinged curbs for easy duct access.



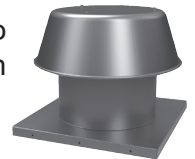
**Sound Curb:** Option of thermal acoustical lining or a complete maximum sound attenuating baffle system. Provision for mounting damper is available. Contact factory for information regarding effect on exhauster air performance and sound level.

**Motor Operated Damper:** Motor operated aluminum damper for positive closure against backdraft.



**Automatic Damper:** Automatic aluminum damper for ease in installation and effective backdraft protection.

**Companion Gravity Units:** Model RCX-II comes in a wide range of sizes and air capacities to provide relief or intake air to the system. Curbs and dampers are available to fit all sizes. Spun aluminum hoods provide a pleasing appearance, complementing the Model DB exhauster.



**Special Coatings:** Powered roof exhausters often require special coatings for protective and decorative purposes. Available coatings include: Synthetic Resin, Epoxy, and Heresite (air-dried phenolic). Contact your representative or the factory for more information on available coatings and colors.

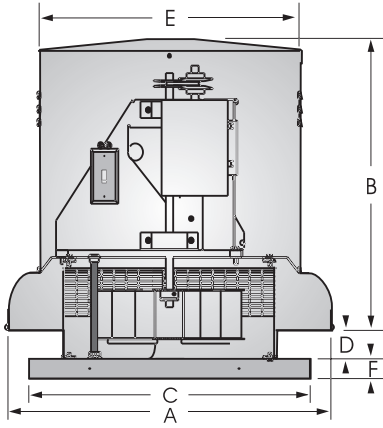
**Curb Hinge Arrangement:** The curb hinge arrangement provides easy access to the exhaust fan, backdraft damper, and duct for servicing and cleaning.



**MODEL DB**  
BELT DRIVE CENTRIFUGAL ROOF EXHAUSTER



**SIZE 36**



Dimensional Data										
Damper OD	Roof Opening	Curb OD	A	B	C	D	E	F	Fan Wt	Ship Wt
36	37-1/4	40-3/4	58-3/8	37	42-1/2	10	41	2-1/2	275	475

CFM / BHP @ Static Pressure / Sones											Drive Range	RPM	HP	Tip Speed
0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1-1/4	Catalog Number				
5995 .16/3.9	3550 .14/3.0	-	-	-	-	-	-	-	-	3601	DP61	210	1/2	1945
6708 .22/4.9	4887 .22/4.1	-	-	-	-	-	-	-	-	3602		235	1/2	2177
7422 .30/5.9	5964 .31/5.2	-	-	-	-	-	-	-	-	3603		260	1/2	2408
8136 .40/7.0	6868 .42/6.4	4443 .35/5.6	-	-	-	-	-	-	-	3604		285	1/2	2640
8849 .51/8.2	7708 .53/7.7	5686 .48/6.8	-	-	-	-	-	-	-	3605	DP62	310	1/2	2871
9420 .62/9.2	8361 .64/8.8	6793 .62/8.0	4157 .49/7.1	-	-	-	-	-	-	3606		330	3/4	3057
10134 .77/10.1	9166 .80/9.7	7936 .80/9.1	5730 .68/8.3	-	-	-	-	-	-	3607		355	3/4	3288
10562 .87/10.7	9646 .90/10.3	8521 .91/9.7	6450 .80/8.9	3321 .57/8.8	-	-	-	-	-	3608	DP63	370	1	3427
10990 .98/11.3	10122 1.02/10.8	9075 1.02/10.3	7268 .94/9.7	5137 .80/9.0	-	-	-	-	-	3609		385	1	3566
11418 1.10/11.9	10593 1.14/11.4	9607 1.15/10.9	8102 1.09/10.3	6133 .96/9.7	-	-	-	-	-	3610	DP64	400	1-1/2	3705
11846 1.23/12.6	11060 1.27/12.0	10120 1.28/11.6	8852 1.25/10.9	6860 1.10/10.4	3994 .84/10.2	-	-	-	-	3611		415	1-1/2	3844
12275 1.37/13.3	11524 1.41/12.8	10623 1.43/12.2	9521 1.41/11.6	7583 1.26/11.1	5709 1.11/10.5	-	-	-	-	3612	DP65	430	1-1/2	3983
12703 1.52/14.3	11985 1.56/13.6	11118 1.58/13.0	10124 1.57/12.4	8417 1.45/11.8	6731 1.31/11.3	-	-	-	-	3613		445	1-1/2	4122
13416 1.79/15.5	12747 1.83/15.0	11931 1.86/14.6	11059 1.86/14.0	9774 1.79/13.3	7958 1.62/12.7	6170 1.44/12.2	-	-	-	3614	DP66	470	2	4353
13987 2.03/16.7	13351 2.08/16.2	12574 2.10/15.7	11770 2.11/15.2	10712 2.08/14.6	8982 1.90/14.1	7516 1.76/13.5	4507 1.34/13.2	-	-	3615		490	2	4539
14558 2.29/17.9	13953 2.34/17.4	13218 2.37/17.0	12453 2.38/16.5	11540 2.37/15.9	10114 2.23/15.2	8485 2.05/14.7	6849 1.86/14.2	-	-	3616		510	3	4724
15272 2.64/19.4	14701 2.69/18.9	14015 2.73/18.5	13287 2.74/18.1	12489 2.74/17.6	11391 2.67/17.0	9739 2.47/16.4	8401 2.32/15.8	6406 2.03/15.6	-	3617	DP67	535	3	4955
15986 3.03/21	15445 3.09/21	14803 3.12/20	14106 3.14/19.7	13387 3.15/19.3	12494 3.12/18.7	11151 2.96/18.2	9603 2.75/17.6	8338 2.59/17.1	-	3618		560	3	5187
16556 3.36/22	16038 3.42/22	15427 3.47/22	14754 3.49/21	14078 3.50/21	13283 3.49/20	12187 3.38/19.5	10640 3.15/19.0	9371 2.99/18.5	-	3619	580	5	5372	
17698 4.11/25	17218 4.17/25	16663 4.22/24	16040 4.25/24	15416 4.27/24	14752 4.28/23	13951 4.25/23	12842 4.10/22	11372 3.85/21	8936 3.47/20	3620	620	5	5742	
18269 4.52/26	17806 4.59/26	17275 4.64/26	16680 4.67/25	16072 4.69/25	15450 4.70/25	14727 4.69/24	13803 4.60/24	12509 4.37/23	10068 3.97/22	3621	640	5	5928	
18840 4.96/28	18393 5.03/27	17884 5.08/27	17315 5.12/27	16722 5.14/27	16130 5.16/26	15470 5.15/26	14678 5.11/25	13586 4.93/25	11030 4.46/23	3622	660	5	6113	

Power Ratings (BHP) does not include drive losses.  
 Performance certified is for installation type A - free inlet, free outlet.  
 Performance ratings include the effects of birdscreen in the airstream.  
 The sound ratings shown are loudness values in fan sones @ 5' (1.5m) in a hemispherical free field. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

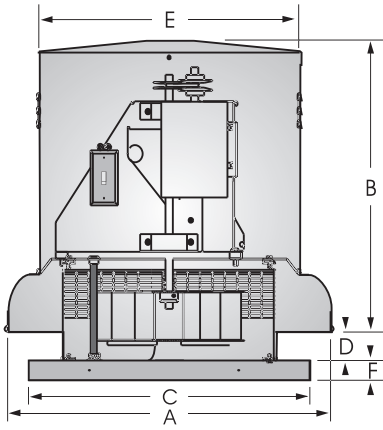




**MODEL DB**  
BELT DRIVE CENTRIFUGAL ROOF EXHAUSTER



**SIZE 42**



Dimensional Data										
Damper OD	Roof Opening	Curb OD	A	B	C	D	E	F	Fan Wt	Ship Wt
48	50-1/4	53-1/4	73	40-1/2	55	10	54-5/8	2-1/2	425	700

CFM / BHP @ Static Pressure / Sones											Drive Range	RPM	HP	Tip Speed
0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1-1/4	Catalog Number				
8498 .22/4.8	4889 .20/4.4	-	-	-	-	-	-	-	-	4201	DP68	180	1/2	1966
9206 .28/5.5	6287 .28/5.1	-	-	-	-	-	-	-	-	4202		DP69	195	1/2
9914 .36/6.3	7461 .36/5.9	-	-	-	-	-	-	-	-	4203	DP70		210	1/2
10622 .43/7.1	8475 .45/6.8	-	-	-	-	-	-	-	-	4204		DP71	225	1/2
11330 .52/7.9	9396 .55/7.6	4910 .40/7.4	-	-	-	-	-	-	-	4205	DP72		240	1/2
12275 .66/9.0	10579 .70/8.8	7451 .62/8.6	-	-	-	-	-	-	-	4206		DP73	260	3/4
12983 .78/9.8	11450 .83/9.5	8825 .78/9.2	-	-	-	-	-	-	-	4207	DP74		275	3/4
13691 .92/10.5	12288 .97/10.2	10034 .94/9.9	4980 .63/9.8	-	-	-	-	-	-	4208		DP74	290	1
14399 1.07/11.4	13101 1.12/11.0	11116 1.12/10.7	7740 .95/10.5	-	-	-	-	-	-	4209	DP74		305	1
15343 1.29/12.7	14142 1.35/12.3	12411 1.36/11.9	9744 1.25/11.7	-	-	-	-	-	-	4210		DP74	325	1-1/2
16051 1.48/13.6	14909 1.54/13.2	13323 1.56/12.9	11079 1.48/12.6	7073 1.16/12.6	-	-	-	-	-	4211	DP74		340	1-1/2
16760 1.68/14.6	15670 1.75/14.3	14209 1.78/13.9	12276 1.73/13.6	9251 1.51/13.5	-	-	-	-	-	4212		DP74	355	2
17468 1.91/15.7	16424 1.97/15.4	15097 2.01/15.1	13368 1.97/14.7	10756 1.81/14.6	-	-	-	-	-	4213	DP74		370	2
17940 2.07/16.4	16925 2.13/16.0	15681 2.18/15.8	14051 2.17/15.5	11690 2.02/15.4	7879 1.61/15.3	-	-	-	-	4214		DP74	380	2
18884 2.41/17.7	17921 2.47/17.5	16818 2.54/17.2	15321 2.54/16.9	13399 2.44/16.7	10674 2.19/16.6	-	-	-	-	4215	DP74		400	3
20064 2.89/19.6	19158 2.96/19.4	18187 3.04/19.1	16827 3.05/18.9	15279 3.01/18.6	13084 2.82/18.5	10122 2.46/18.5	-	-	-	4216		DP74	425	3
20536 3.10/20	19650 3.17/20	18722 3.26/19.9	17415 3.27/19.7	15970 3.25/19.4	13969 3.08/19.3	11354 2.79/19.2	-	-	-	4217	DP74		435	5
21245 3.43/22	20388 3.50/21	19503 3.59/21	18303 3.62/21	16950 3.61/21	15203 3.49/21	12874 3.23/20	9401 2.69/20	-	-	4218		DP74	450	5
21953 3.78/23	21123 3.85/23	20276 3.95/22	19182 4.00/22	17883 3.99/22	16350 3.91/22	14281 3.69/22	11720 3.34/22	-	-	4219	DP74		465	5
22897 4.29/24	22101 4.36/24	21297 4.47/24	20323 4.53/24	19089 4.53/24	17764 4.50/24	16014 4.33/23	13804 4.04/23	10779 3.51/23	-	4220		DP74	485	5
23605 4.71/26	22832 4.78/26	22057 4.88/25	21158 4.96/25	19975 4.96/25	18753 4.95/25	17204 4.82/25	15217 4.57/25	12857 4.20/25	-	4221	DP74		500	5
23841 4.85/26	23076 4.92/26	22309 5.02/26	21432 5.11/26	20267 5.11/25	19070 5.11/25	17584 4.99/25	15675 4.75/25	13399 4.40/25	-	4222		DP74	505	5

Power Ratings (BHP) does not include drive losses.  
 Performance certified is for installation type A - free inlet, free outlet.  
 Performance ratings include the effects of birdscreen in the airstream.  
 The sound ratings shown are loudness values in fan sones @ 5' (1.5m) in a hemispherical free field. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

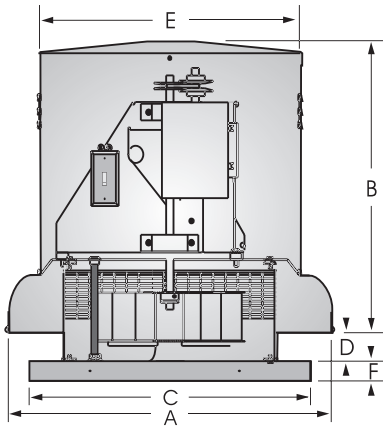




**MODEL DB**  
BELT DRIVE CENTRIFUGAL ROOF EXHAUSTER



**SIZE 48**



Dimensional Data										
Damper OD	Roof Opening	Curb OD	A	B	C	D	E	F	Fan Wt	Ship Wt
48	50-1/4	53-1/4	73	40-1/2	55	13	54-5/8	2-1/2	550	830

CFM / BHP @ Static Pressure / Sones											Drive Range	RPM	HP	Tip Speed
0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1-1/4	Catalog Number				
9953 0.34/4.5	5916 0.29/4.5	-	-	-	-	-	-	-	-	4801	DP75	165	1/2	2037
10557 0.41/5.0	6969 0.37/5.0	-	-	-	-	-	-	-	-	4802		175	1/2	2161
11462 0.52/5.9	8336 0.49/5.7	-	-	-	-	-	-	-	-	4803		190	1/2	2347
12065 0.61/6.4	9166 0.58/6.3	-	-	-	-	-	-	-	-	4804		200	3/4	2470
13271 0.81/7.6	10719 0.79/7.5	6702 0.64/7.5	-	-	-	-	-	-	-	4805	DP76	220	3/4	2655
13875 0.93/8.2	11459 0.91/8.1	7978 0.78/8.0	-	-	-	-	-	-	-	4806		230	1	2841
14478 1.06/8.9	12182 1.04/8.8	9095 0.93/8.6	-	-	-	-	-	-	-	4807	DP77	240	1	2964
15383 1.27/9.6	13243 1.25/9.6	10571 1.16/9.3	6153 0.9/9.6	-	-	-	-	-	-	4808		255	1-1/2	3149
16891 1.68/10.9	14963 1.67/10.9	12732 1.59/10.6	9568 1.4/10.8	-	-	-	-	-	-	4809	DP78	280	1-1/2	3335
17494 1.87/11.4	15638 1.85/11.4	13535 1.78/11.1	6483 1.62/11.2	6483 1.27/11.8	-	-	-	-	-	4810		290	2	3582
18399 2.17/12.2	16641 2.16/12.2	14696 2.1/12.0	12255 1.95/12.1	8622 1.65/12.6	-	-	-	-	-	4811	DP79	305	2	3705
19304 2.51/13.1	17632 2.5/13.1	15818 2.44/13.0	13645 2.32/12.9	10639 2.06/13.4	6682 1.66/13.7	-	-	-	-	4812		320	3	3952
19605 2.63/13.4	17961 2.62/13.4	16186 2.56/13.4	14085 2.44/13.3	11250 2.21/13.7	7354 1.8/14.1	-	-	-	-	4813	DP80	325	3	4014
20812 3.14/14.9	19267 3.14/14.9	17627 3.09/14.9	15762 2.98/14.7	13440 2.79/14.8	10204 2.44/15.3	-	-	-	-	4814		345	3	4261
22018 3.72/16.5	20560 3.72/16.5	19033 3.67/16.5	17344 3.58/16.3	15351 3.42/16.2	12772 3.14/16.6	9329 2.7/17.0	-	-	-	4815	DP81	365	5	4508
22622 4.03/17.3	21204 4.03/17.3	19726 3.99/17.3	18109 3.9/17.1	16240 3.75/16.9	13902 3.5/17.2	10767 3.09/17.7	-	-	-	4816		375	5	4631
23828 4.72/18.9	22483 4.72/18.9	21094 4.68/18.9	19600 4.6/18.8	17926 4.46/18.6	15941 4.25/18.6	13412 3.92/19.0	10186 3.43/19.3	-	-	4817	DP82	395	5	4878
25034 5.47/21	23755 5.47/21	22443 5.44/21	21051 5.36/21	19525 5.24/20	17782 5.06/20	15680 4.79/20	12999 4.37/21	9847 3.83/21	-	4818		415	5	5310
25939 6.08/22	24705 6.09/22	23445 6.06/22	22117 5.99/22	20682 5.88/22	19077 5.71/21	17201 5.47/22	14891 5.11/22	12003 4.6/22	-	4819	430	7-1/2	5434	
26543 6.52/23	25337 6.52/23	24108 6.49/23	22820 6.43/23	21438 6.32/23	19909 6.16/22	18154 5.94/22	16042 5.61/23	13404 5.14/23	-	4820	440	7-1/2	5619	
27447 7.21/25	26282 7.21/25	25097 7.19/25	23864 7.13/25	22551 7.03/24	21121 6.88/24	19514 6.67/24	17637 6.38/24	15351 5.98/24	9773 4.83/25	4821	455	7-1/2	5804	
28352 7.94/26	27224 7.95/26	26081 7.93/26	24896 7.87/26	23645 7.78/26	22297 7.64/25	20809 7.45/25	19114 7.19/25	17107 6.83/25	11869 5.73/26	4822	470	7-1/2	5990	

Power Ratings (BHP) does not include drive losses.  
 Performance certified is for installation type A - free inlet, free outlet.  
 Performance ratings include the effects of birdscreen in the airstream.  
 The sound ratings shown are loudness values in fan sones @ 5' (1.5m) in a hemispherical free field. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

