## MODEL DB

# DOWNBLAST BELT DRIVE CENTRIFUGAL ROOF EXHAUSTER

#### **APPLICATION**

Model DB belt drive units are 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.

The nonoverloading wheel with its higher static pressure capabilities 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.

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.

#### **CONSTRUCTION**

#### Housing

- Heavy-gauge aluminum for extra strength with prepunched mounting holes.
- Neoprene isolators for reduction of vibration and sound.
- · Cover easily removed for quick access to motor compartment.
- Water tight conduit tube for easy electrical connection.
- · Aluminum birdscreen and disconnect are standard.
- Stainless steel exterior fasteners.

#### **Centrifugal Wheel**

- · All aluminum backward inclined wheel.
- · Nonoverloading for safe operation in ducted systems.
- Statically and dynamically balanced for smooth operation.

#### **Drives**

- · Sized for minimum 150% of drive horsepower.
- · Machined cast iron adjustable motor pulleys.
- · Adjustable base for belt tensioning.
- · Nonstatic oil resistant v-belts.



#### **Motors**

- · Single speed open drip-proof are standard.
- · All motors are rated for continuous duty.
- 182T and larger motors shipped unmounted for field installation.
- Disconnect switch standard with single speed drip-proof motors.

#### **Bearings**

- · Heavy-duty ball bearing type.
- Prelubricated and permanently sealed.

### AMCA SEAL

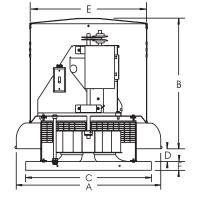


JencoFan, Div. of Soler & Palau Ventilation Group, certifies that the Models DB shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.



## **DIMENSIONAL DATA**

| MODEL<br>DB | А      | В      | С      | D     | E      | F     | ROOF<br>OPENING | Average<br>Ship Wt.<br>Lbs. |
|-------------|--------|--------|--------|-------|--------|-------|-----------------|-----------------------------|
| 18          | 32 1/2 | 24     | 29 1/2 | 4 1/2 | 26 1/4 | 2 1/2 | 24 3/4          | 160                         |
| 20          | 36 3/4 | 25     | 29 1/2 | 4 1/2 | 26 1/4 | 2 1/2 | 24 3/4          | 215                         |
| 24          | 41 1/4 | 26 1/2 | 35 3/4 | 8 1/2 | 30     | 2 1/2 | 30 3/4          | 290                         |
| 30          | 58 3/8 | 37     | 42 1/2 | 5 1/2 | 41     | 2 1/2 | 37 3/4          | 465                         |
| 36          | 58 3/8 | 37     | 42 1/2 | 10    | 41     | 2 1/2 | 37 3/4          | 475                         |



#### **ACCESSORIES**

| MODEL |        | ENDED 12" HIGH<br>NTING CURB |    | MMENDED<br>TY DAMPER | DAMPER MOTOR<br>(LOOSE) | AUTOMATIC BELT TENSIONER<br>(INSTALLED) |  |  |
|-------|--------|------------------------------|----|----------------------|-------------------------|---|--|--|
| DB    | OD     | STOCK NO.                    | OD | STOCK NO.            | STOCK NO.               | STOCK NO.                               |  |  |
| 18    | 27 3/4 | 611227 ●                     | 24 | 411024 •             | 411611 ●                | 100070 ●                                |  |  |
| 20    | 27 3/4 | 611227 ●                     | 24 | 411024 •             | 411611 ●                | 100070 ●                                |  |  |
| 24    | 33 3/4 | 611233 ●                     | 30 | 411030 •             | 411611 ●                | 100072 ●                                |  |  |
| 30    | 40 3/4 | 611240 ♦                     | 36 | 611036 ♦             | 411611 ♦                | N/A                                     |  |  |
| 36    | 40 3/4 | 611240 ♦                     | 36 | 611036 ♦             | 411611 ♦                | N/A                                     |  |  |

| Sh | Ship Schedules:              |  |  |  |  |  |  |  |
|----|------------------------------|--|--|--|--|--|--|--|
| •  | Next Day Shipment From Stock |  |  |  |  |  |  |  |
| •  | 3 Day Shipment From Stock    |  |  |  |  |  |  |  |
| •  | 10 Day Shipment              |  |  |  |  |  |  |  |

| MODEL DB |       |      |      |                      | Downblast Belt Drive<br>Centrifugal Roof Exhauster |       |           |                      |       |       |       |       | Ventilator with Open Drip-proof<br>Motor and Drive Assembly |            |            |
|----------|-------|------|------|----------------------|--|-------|-----------|----------------------|-------|-------|-------|-------|---|------------|------------|
| Model    |       | Max. | RPM  | Sones<br>@<br>1/4 SP |  |       | 115/1/60* | 208-230-<br>460/3/60 |       |       |       |       |   |            |            |
| DB       |       | ВНр  |      |                      | 0  | 1/8   | 1/4       | 3/8                  | 1/2   | 5/8   | 3/4   | 1     | 1 1/4   | Stock No.  | Stock No.  |
| 18       | 1/3   | 0.33 | 805  | 10.8                 | 3056   | 2838  | 2579      | 2274                 | 1873  | -     | -     | -     | -   | DB18PH1S ● | DB18PH3S ▲ |
|          | 1/2   | 0.52 | 940  | 14.0                 | 3568   | 3385  | 3183      | 2944                 | 2681  | 2358  | 1965  | -     | -   | DB18QH1S ● | DB18QH3S ● |
|          | 3/4   | 0.78 | 1075 | 17.8                 | 4080   | 3922  | 3752      | 3563                 | 3351  | 3123  | 2863  | 2167  | -   | DB18RH1S ● | DB18RH3S ● |
|          | 1     | 0.99 | 1165 | 21.0                 | 4422   | 4276  | 4123      | 3957                 | 3770  | 3570  | 3356  | 2824  | -   | DB18SH1S ● | DB18SH3S ● |
|          | 1 1/2 | 1.52 | 1345 | 26.0                 | 5105   | 4979  | 4849      | 4713                 | 4569  | 4408  | 4237  | 3873  | 3434  | DB18TH1S ● | DB18TH3S ● |
|          | 2     | 2.02 | 1480 | 31.0                 | 5618   | 5504  | 5386      | 5265                 | 5139  | 5005  | 4859  | 4546  | 4206  | DB18VH1S ▲ | DB18VH3S ● |
|          | 1/3   | 0.35 | 665  | 8.7                  | 3562   | 3318  | 3021      | 2658                 | 2145  | 1281  | -     | -     | -   | DB20PH1S ● | DB20PH3S ♦ |
|          | 1/2   | 0.52 | 760  | 10.7                 | 4071   | 3861  | 3625      | 3338                 | 3007  | 2567  | 1963  | -     | -   | DB20QH1S ● | DB20QH3S ● |
| 00       | 3/4   | 0.79 | 875  | 13.9                 | 4687   | 4506  | 4312      | 4091                 | 3838  | 3560  | 3210  | 2229  | -   | DB20RH1S • | DB20RH3S ● |
| 20       | 1     | 1.12 | 985  | 17.5                 | 5276   | 5117  | 4949      | 4768                 | 4562  | 4336  | 4098  | 3476  | 2589  | DB20SH1S ● | DB20SH3S ● |
|          | 1 1/2 | 1.56 | 1100 | 22.0                 | 5892   | 5750  | 5602      | 5447                 | 5280  | 5092  | 4889  | 4451  | 3874  | DB20TH1S ● | DB20TH3S ● |
|          | 2     | 2.08 | 1210 | 26.0                 | 6482   | 6353  | 6220      | 6082                 | 5937  | 5782  | 5610  | 5241  | 4821  | DB20VH1S ♦ | DB20VH3S ● |
| 24       | 1/3   | 0.33 | 490  | 8.6                  | 4879   | 4400  | 3751      | 2388                 | -     | -     | -     | -     | -   | DB24PH1S ● | DB24PH3S ♦ |
|          | 1/2   | 0.49 | 560  | 11.5                 | 5576   | 5169  | 4688      | 3972                 | 2614  | -     | -     | -     | -   | DB24QH1S ● | DB24QH3S ● |
|          | 3/4   | 0.75 | 645  | 14.3                 | 6422   | 6078  | 5683      | 5219                 | 4557  | 3374  | 1906  | -     | -   | DB24RH1S ● | DB24RH3S ● |
|          | 1     | 1.00 | 710  | 17.2                 | 7069   | 6761  | 6412      | 6033                 | 5549  | 4848  | 3773  | -     | -   | DB24SH1S ● | DB24SH3S ● |
|          | 1 1/2 | 1.54 | 820  | 22.0                 | 8164   | 7902  | 7613      | 7299                 | 6968  | 6567  | 6073  | 4360  | -   | DB24TH1S ● | DB24TH3S ● |
|          | 2     | 2.04 | 900  | 26.0                 | 8961   | 8723  | 8467      | 8190                 | 7899  | 7590  | 7218  | 6180  | 4490  | DB24VH1S ♦ | DB24VH3S ♦ |
|          | 1/2   | 0.52 | 410  | 6.6                  | 7098   | 6406  | 5512      | 4350                 | 2246  | -     | -     | -     | -   | DB30QH1S ♦ | DB30QH3S ♦ |
|          | 3/4   | 0.76 | 465  | 7.7                  | 8050   | 7456  | 6735      | 5866                 | 4743  | 2961  | -     | -     | -   | DB30RH1S♦  | DB30RH3S ♦ |
|          | 1     | 1.03 | 515  | 8.7                  | 8916   | 8388  | 7775      | 7074                 | 6215  | 5132  | 3571  | -     | -   | DB30SH1S ♦ | DB30SH3S ♦ |
| 30       | 1 1/2 | 1.55 | 590  | 10.6                 | 10214  | 9761  | 9257      | 8683                 | 8030  | 7315  | 6472  | 3860  | -   | DB30TH1S ♦ | DB30TH3S ♦ |
|          | 2     | 2.13 | 655  | 13.1                 | 11339  | 10936 | 10496     | 10010                | 9469  | 8871  | 8231  | 6617  | 4024  | DB30VH1S ♦ | DB30VH3S ♦ |
|          | 3     | 3.13 | 745  | 16.7                 | 12897  | 12546 | 12171     | 11768                | 11332 | 10857 | 10343 | 9220  | 7827  | N/A        | DB30WH3S ♦ |
|          | 3/4   | 0.80 | 355  | 9.1                  | 10134  | 9166  | 7936      | 5730                 | -     | -     | -     | -     | -   | DB36RH1S ♦ | DB36RH3S ♦ |
|          | 1     | 1.02 | 385  | 10.3                 | 10990  | 10122 | 9075      | 7268                 | 5137  | -     | -     | -     | -   | DB36SH1S ♦ | DB36SH3S ♦ |
| 36       | 1 1/2 | 1.58 | 445  | 13.0                 | 12703  | 11985 | 11118     | 10124                | 8417  | 6731  | -     | -     | -   | DB36TH1S ♦ | DB36TH3S ♦ |
|          | 2     | 2.11 | 490  | 15.7                 | 13987  | 13351 | 12574     | 11770                | 10712 | 8982  | 7516  | -     | -   | DB36VH1S ♦ | DB36VH3S ♦ |
|          | 3     | 3.15 | 560  | 20.0                 | 15986  | 15445 | 14803     | 14106                | 13387 | 12494 | 11151 | 8338  | -   | N/A        | DB36WH3S ♦ |
|          | 5     | 5.16 | 660  | 27.0                 | 18840  | 18393 | 17884     | 17315                | 16722 | 16130 | 15470 | 13586 | 11030   | N/A        | DB36XH3S ♦ |

Power ratings (BHP) do not include transmission 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 calculated per AMCA Standard 301.

Installation Type A: free inlet hemispherical sone levels.

<sup>\*</sup>Tri-voltage (115-208-230) is standard on 3/4 through 1 1/2 Hp Single phase motors. Tri-voltage is available for the 1/2 Hp motors. Inquire for price and delivery.