PENNBARRY™

*Moving Your Way*

# DOMEX

## Centrifugal Roof Exhausters

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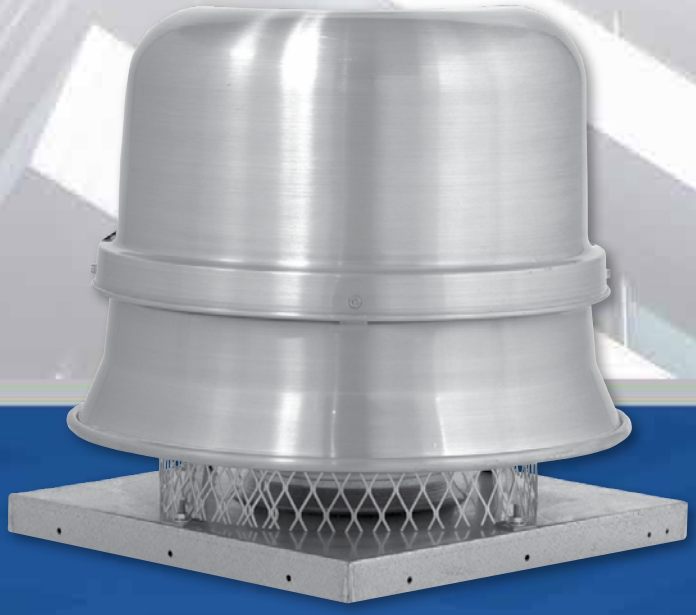


BULLETIN DX15

*Belt Drive Domex*

*Direct Drive Domex*

## INTRODUCTION

### Domex Series of Centrifugal Fans

Domex fans are ideal for general purpose exhaust applications including: bathrooms, garages, general kitchen areas, offices, churches, dormitories, factories, large warehouses and other relatively clean air applications.

They feature a weather-resistant, seamless spun aluminum housing which works in conjunction with a patented wheel design and deeply spun inlets to provide smooth quiet air flow through the ventilator. The centrifugal wheels are aluminum, nonoverloading, backward inclined, robotically welded, and dynamically balanced. The optional high wind construction makes Domex fans particularly suited for high wind hurricane zones.

### Direct Drive Units

**Model: DX (V/S/R/Q/Q1/Q2)**

- Static pressure up to 1.25” wg.
- Flow capacity up to 4,561 CFM.
- High wind construction (-HW) option available.

### Standard Duty Belt Drive Units

**Model: DX (B)**

- Static pressure up to 1.5” wg.
- Flow capacity up to 19,442 CFM
- High wind construction (-HW) option available.

### High Capacity Belt Drive Units

**Model: KB, JB, MB**

- Static pressure up to 1.5” wg.
- Flow capacity up to 39,169 CFM

## CERTIFICATIONS & LISTINGS

### AMCA Certification

PennBarry certifies that the Domex direct drive and belt drive models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA publication 311 and comply with the requirements of the AMCA Certified Ratings Program. DX27B is not AMCA Certified.

PennBarry certifies that the Domex high capacity models shown on pages 25 - 27 are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

### UL and cUL Certification

Domex fans carry the UL label, UL705, (ZACT / ZACT7), file #E28413.

## FEATURES & BENEFITS

### Motor Selection

Both direct drive and belt drive models are available with a wide range of voltages and enclosures (see Motor Selection for a complete listing). Standard belt drive Open Drip Proof (ODP) ball bearing motors are selected using a conservative portion of the NEMA service factor. Standard direct drive ODP motors have Class B insulation and internal thermal overload protection. Each size is carefully engineered to match the motor to the wheel capacity.

### Internal Wiring

All direct drive models with ODP motors feature a polarized disconnect plug between the motor and junction box. This provides a positive method of electric shut-off. Belt drive units with ODP motors are factory-wired between the motor and junction box. For either direct drive or belt drive models, an electric disconnect is available.

### Sound Performance

Units deliver outstanding air performance with minimal noise.

### Curb Caps (Base)

Curb caps for direct drive and standard duty belt drive models are available in galvanized steel (standard) or aluminum (optional). Curb caps for high capacity belt drive models are available only in aluminum. All curb caps have fully welded corners and are pre-punched to ensure both a leak-tight and easy installation.

### Forced Motor Cooling

Breather slots between the motor dome and discharge apron enable fresh air to be drawn into the motor housing during fan operation. This positive cooling promotes longer life for motor and drive components.

### Easy Maintenance Access

By removing the fasteners, the motor dome lifts off for complete access to all the drive train components.

### Structural Integrity

Durable housings of spun aluminum have a high strength-to-weight ratio and incorporate a rolled bead for additional strength. There are no welds to break or seams to leak. The heavy-gauge motor mounting platform provides positive rigidity between all components of the power train assembly.

### Solid Steel Shafts

Sized so the first critical speed is a minimum of 200% of maximum cataloged operating speed, shafts are precision ground and polished.

### Internal Bracing

Tri-Strut™ supports transfer the weight of the motor mounting platform directly to the curb mounting surface. The aluminum spun housing, therefore, is not used to support any weight.

### Self-Aligning Bearings

Heavy-duty bearings are sized for a minimum L50 life in excess of 200,000 hours of operation. 100% factory tested, they are designed for air handling applications.

### Drives and Belts

Pulleys are pre-set to the specified RPM. Cast iron variable pitch pulleys are adjustable, allowing for field balancing based on actual field conditions. All pulleys are sized for at least 150% of the driven horsepower.

### Vibration Isolators

Multidirectional, rubber-in-shear vibration isolators are used to mitigate residual vibration transmission from the motor and bearings support unit to the building.

### Conduit

Both direct and belt drive units include a large 1” nominal conduit chase for easy installation of wiring from the motor dome to below the curb cap.

### Reverse Venturi

Reverse venturi reduces turbulence and improves distribution of the air as it enters the wheel inlet and is “captured” by the blades.

### Aluminum Wheels

Domex fans offer patented wheel designs. Carefully matched highly-tooled venturis enhance the performance of these backward inclined and non-overloading centrifugal wheels. Made of advanced alloys, the various wheel components provide superior strength and durability.

### Silent Wheel (Direct Drive)

- Blades’ highly curved leading edge provide unsurpassed low sound numbers with excellent air performance.
- Back plate and inlet are punched for consistency, plus dynamic balancing assure smooth, vibration-free operation.
- Riveted and/or welded construction ensure superior dependability over other wheel designs.

### Standard Duty, All Welded Wheel

(Standard Duty Belt Drive)

- Blades are curved for improved air performance while increasing their strength and rigidity.
- Back plate and inlet are stamped for consistency. They include a perimeter rim which enhances strength and improves balancing.
- Wheel assembly is robotically welded to provide extremely durable and consistent performance.
- Wheel is dynamically balanced. Balancing weights are mechanically attached to the inside of the rims of both the back plate and wheel inlet. This allows a precise placement of the weights anywhere within a full 360º range on two separate planes, without the possibility of detachment.

# OPTIONS & ACCESSORIES

## Finishes

Coatings such as Polyester Powder Coat, Epoxy Powder Coat, Phenolic Epoxy Powder Coat, and others are available. See the coatings brochure for details.

## Mounting Pedestal

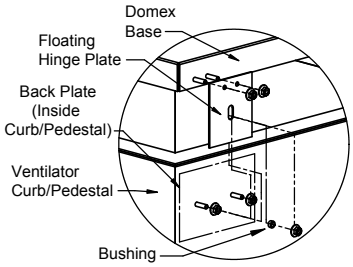
The 12" high mounting pedestal, available in aluminum or galvanized steel, incorporates a removable access panel for easy inspection and service of motor operated backdraft dampers. It provides solid ventilator support and a weather resistant seal that does not injure or disturb flashing.

## Hinged Sub-Base

Hinged sub-bases provide access to the curb well for damper service or to clean out. Constructed with a rustproof hinge arrangement and low height (3 ½") the assembly is easily manipulated and reduces the impact on overall installation height. This accessory is available for use with most all models for either factory built or existing roof curbs.

## Floating Hinge Kit

A floating hinge kit is available for field installation. This assembly connects the exhauster directly to the roof curb and provides the same level of access as the hinged sub-base.




## Aluminum Bird and Insect Screen

Bird screens are available for all direct and belt drive models. An aluminum insect screen with a smaller mesh than the standard bird screen is also available.

## Backdraft Dampers

Backdraft dampers are available for either gravity or motorized operation (motor kit optional). Dampers feature square galvanized steel frame, multi-leaf, roll formed aluminum blades with nylon bearings.

## Safety Disconnect Switch

Safety disconnect switches are available to allow positive electrical shut-off and safety. NEMA 1 switches are factory mounted when factory wiring is requested, others will be shipped loose. Wiring is only run from the motor to the junction box. (Factory wiring of explosion proof applications is not available.) A wide range of NEMA rated enclosures with disconnect switches are available for indoor, outdoor, and explosion proof installations. Disconnects are to be field wired by a licensed electrician.

## Firestat Switch

Firestat switch automatically disconnects the unit when the temperature of the air being exhausted exceeds a preset rating.

## Time-Delay Switch

(Selected direct drive models only.) The Airminder Model AM12 switch is a UL recognized and CSA certified time-delay relay that operates both the fan and room light to ventilate an area even after the occupants depart. In the "On" position, the Airminder turns the light and fan on immediately. In the "Off" position, the light goes off immediately and the fan is in operation for a period of time as preset from 1 to 60 minutes. Suitable only for 1/3 HP maximum at 120/1/60.

## Speed Controllers

The Lektrol™ controller allows adjustment in speed to a maximum of 50% reduction, which results in a very cost effective means for system balancing. The device can be located under the fan dome to prevent unauthorized tampering or on the wall for ease of operation by the building occupants. (Available on direct drive units with ODP motors and some select TE motors. See reference table under Motor Availability)

## Automatic Belt Tensioner

The factory mounted Automatic Belt Tensioner accessory eliminates the need for re-tensioning the belt after start-up. It is constructed from 10 gage galvanized steel and incorporates five torsion springs to automatically position the motor and maintain proper belt tension. Additional benefits include reduced belt and pulley wear and simplified belt replacement without tools. The Automatic Belt Tensioner is available for Domex models DX11B, DX12B, and DX14B with 1/4, 1/2, 3/4 and 1 HP ODP motors. It can also be used with 1.5 HP, 3-phase ODP motors.

## Internal Wiring

NEMA 3R wiring is available for both direct and belt drive models.

## Spark Resistant Construction

AMCA 'B' construction is available on belt drive and is optional on direct drive units with a special quote. If required, an explosion proof motor and disconnect may be selected as options.

## Prefabricated Curb

A variety of sizes of prefabricated roof curbs are available. Galvanized steel unibeam curbs are the most popular. For a complete listing of all curb types and sizes available, please consult the latest PennBarry Curb brochure.

# OPTIONS & ACCESSORIES

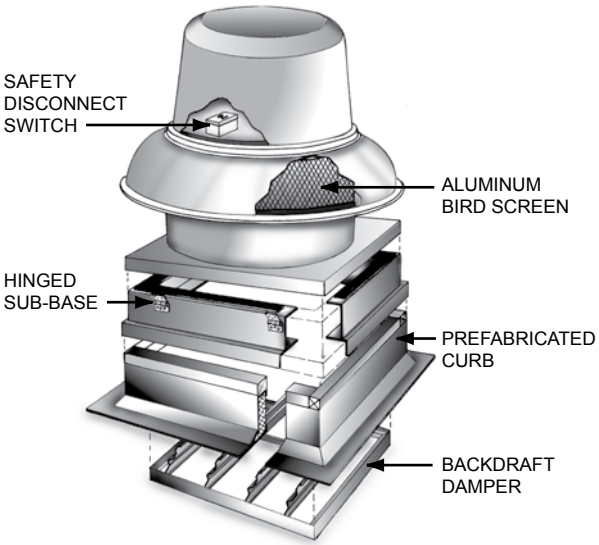
## High Wind Construction

High wind construction Domex fans are specifically designed for high velocity hurricane zones (HVHZ). The Domex models are designed to withstand 150 MPH winds in accordance with Miami-Dade and Florida Building Code standards. The units are 3rd party tested and certified through a 3rd party Professional Engineer (P.E.) to meet these strict standards. Installation details are provided and since there are no tie downs or external braces required for attaching the unit to the roof or curb this makes installation simple and easy. A wide range is offered to meet all of your ventilation needs which includes all belt and direct drive sizes 36 and under.

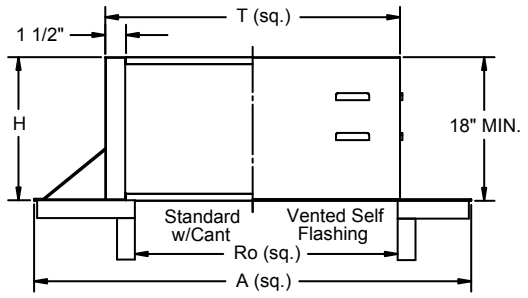
## Product Certifications:

- Miami-Dade NOA # 14-0311.03
- Florida Product Approval #12339
- Texas Department of Insurance #RV-48

## Domex Exploded View




## Domex Curb Dimensions




*All dimensions in inches.*
*(1)Standard heights "H" are 8", 12", and 18" including wood nailer.*
*(2)"T" dimension of curb is 1 1/2" less than the dimension of inside base of fan ("E").*
*(3)"Ro" refers to Roof Opening. (4)"E" dimension is inside base of fan.*

| Model | E(4) SQ | T(2) SQ | A SQ | Ro(3) SQ | Damper Size SQ | Galv. Steel Gauge |
|---|---|---|---|---|---|---|
| DX06R | 18.5 | 17 | 25 | 9 | 8.75 | 18 |
| DX08V/S/R/Q | 18.5 | 17 | 25 | 9 | 8.75 | 18 |
| DX10V/S/R/Q | 18.5 | 17 | 25 | 11.5 | 11.25 | 18 |
| DX11V/S/R/Q | 18.5 | 17 | 25 | 11.5 | 11.25 | 18 |
| DX13V/S/R/Q | 18.5 | 17 | 25 | 11.5 | 11.25 | 18 |
| DX16V/S/R/Q1/Q2 | 20.5 | 19 | 27 | 16 | 15.75 | 18 |
| DX18V | 28.5 | 27 | 35 | 20 | 19.75 | 18 |
| DX06B/DX08B | 18.5 | 17 | 25 | 11.5 | 11.25 | 18 |
| DX11B | 20.5 | 19 | 27 | 16 | 15.75 | 18 |
| DX12B/DX14B | 24.75 | 23.25 | 31.25 | 16 | 15.75 | 18 |
| DX16B/DX18B | 28.5 | 27 | 35 | 20 | 19.75 | 18 |
| DX24B | 33.5 | 32 | 40 | 25 | 24.75 | 18 |
| DX27B/DX30B | 36.5 | 35 | 43 | 28 | 27.75 | 18 |
| DX36B | 44.5 | 43 | 51 | 36 | 35.5 | 18 |
| KB420 | 52.5 | 51 | 59 | 44 | 43.5 | 18 |
| JB48 | 59 | 57.5 | 65.5 | 50 | 49.5 | 18 |
| MB542 | 63.5 | 62 | 70 | 55 | 54.5 | 18 |

# MOTOR AVAILABILITY

## Fixed Speed Motor Control

Two-speed motors, used in conjunction with external switches or sensors (gas concentration, odor, temperature), are used to quickly adjust the airflow through the ventilator by changing from one fixed speed to another. Normally, 2-speed motors operate at 1800 and 1200 RPM (2-speed, 2-windings). However, 1800/900 RPM (2-speed, 1 winding) motors are available for 3-phase power only. A single operating voltage must be specified because dual-voltage versions are not available in a 2-speed motor.

## Variable Speed Motor Control

PennBarry offers Lek-Trol™ solid state controllers to reduce the high speed of most direct drive motors by as much as 50%. If variable speed is required, check the Lek-Trol™ availability table below to verify that controllers exist for the fan model selected. Remember, Lek-Trol™ controllers are currently only available for direct drive motors including all standard Open Drip Proof (ODP) 60 Hz motors. Not all totally enclosed motors are currently available with variable speed control. Inverter rated motors suitable for use with variable frequency drives can be supplied for belt drive models. Contact your local PennBarry representative for availability.

## Available Lek-Trol™ Speed Controls

| Model | 60 Hz | | | | | 50 Hz | | |
|---|---|---|---|---|---|---|---|---|
| | ODP | Totally Enclosed | | | | Totally Enclosed | | |
| | 115V | 115V | 200V | 208V | 230V | 110V | 220V | 240V |
| DX06R | LT25 | - | - | - | - | - | - | - |
| DX08V | - | - | - | - | - | - | - | - |
| DX08S | - | - | - | - | - | - | - | - |
| DX08R | LT25 | - | - | - | - | - | - | - |
| DX08Q | - | - | - | - | - | - | - | - |
| DX10V | - | - | - | - | - | - | - | - |
| DX10S | - | - | - | - | - | - | - | - |
| DX10R | LT30 | LT30 | LT35 | LT35 | LT35 | LT30 | LT35 | LT35 |
| DX10Q | - | - | - | - | - | - | - | - |
| DX11V | - | - | - | - | - | - | - | - |
| DX11S | - | - | - | - | - | - | - | - |
| DX11R | LT30 | - | - | - | - | - | - | - |
| DX11Q | LT50 | - | - | - | - | - | - | - |
| DX13V | LT55 | - | - | - | - | - | - | - |
| DX13S | LT30 | - | - | - | - | - | - | - |
| DX13R | LT30 | LT30 | LT35 | LT35 | LT35 | LT50 | LT35 | LT35 |
| DX13Q | LT45 | LT50 | LT35 | LT35 | LT35 | LT50 | LT35 | LT35 |
| DX16V | LT55 | - | - | - | - | - | - | - |
| DX16S | LT50 | - | - | - | - | - | - | - |
| DX16R | LT50 | - | - | - | - | - | - | - |
| DX16Q1 | LT40 | - | - | - | - | - | - | - |
| DX16Q2 | LT75 | - | - | - | - | - | - | - |
| DX18V | LT60 | - | - | - | - | - | - | - |

*Belt Drive Domex Cutaway*

*Direct Drive Domex Cutaway*

## MOTOR AVAILABILITY


### Green Plus Electronically Commutated Motor

The Green Plus (GP) option utilizes EC motors to provide significantly greater efficiency, flexibility, and controllability over standard direct drive permanent split capacitor (PSC) motors. Using the included potentiometer, the Green Plus motors can be turned down to as low as 80% the max operating speed while maintaining 90% efficiency through the operating range. Additionally, the Green Plus can accept 0-10V input to tie to building management systems, allowing for savings in not only direct fan energy consumption but reducing the exhaust of conditioned air during off peak hours as well. All Green Plus motors come in open enclosure or totally enclosed for usage with 115V-208V/230V or 460V, single phase, 50/60 Hz applications.

| Model | Size | Tap | ECM HP |
|---|---|---|---|
| DX | 8 | V | 1/6 |
| | 8 | S | 1/6 |
| | 8 | R | 1/6 |
| | 8 | Q | 1/6 |
| | 10 | V | 1/6 |
| | 10 | S | 1/6 |
| | 10 | R | 1/6 |
| | 10 | Q | 1/6 |
| | 11 | V | 1/6 |
| | 11 | S | 1/6 |
| | 11 | R | 1/6 |
| | 11 | Q | 1/4 |
| | 13 | V | 1/6 |
| | 13 | S | 1/6 |
| | 13 | R | 1/6 |
| | 13 | Q | 1/4 |
| | 16 | V | 1/6 |
| | 16 | S | 1/3 |
| | 16 | R | 1/3 |
| | 16 | Q1 | 1/2 |
| | 16 | Q2 | 3/4 |
| | 18 | V | 3/4 |

### Belt Drive Motor Availability

The chart below lists horsepowers, voltages, and enclosure types. After selecting a model and horsepower that meets performance requirements, an engineer should verify that the desired voltage and enclosure are the same (or smaller) as the maximum NEMA motor frame shown for each model.

| HP | 1 Phase | | | | | 200V, 230V, 460V OR 575V 3 Phase | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ODP | | Totally Enclosed | Explosion Proof | 2 Speed 2 Winding | ODP | Totally Enclosed | Explosion Proof | 2 Speed 2 Winding | 2 Speed 2 Winding |
| | 115V | 230V | 115V/230V | | | | | | | |
| 1/4 | 48 | 48 | 48 | 48/56 | 48 | 48 | 48 | 48 | 56 | - |
| 1/3 | 48/56 | 48/56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | - |
| 1/2 | 48/56 | 48/56 | 56 | 56 | 56 | 56 | 56 | 56 | 143T | 56 |
| 3/4 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 143T | 56 |
| 1 | 56 | 56 | 56 | 56 | 56 | 145T | 145T | 145T | 143T | 145T |
| 1 1/2 | 56 | 56 | 145T | 184T | - | 145T | 145T | 145T | 145T | 182T |
| 2 | 145T | 145T | 182T | 182T | - | 145T | 145T | 145T | 145T | 182T |
| 3 | 184T | 184T | 184T | 215T | - | 145T | 182T | 182T | 184T | 184T |
| 5 | - | - | - | - | - | 184T | 184T | 184T | 184T | 215T |
| 7 1/2 | - | - | - | - | - | 213T | 213T | 213T | - | 215T |
| 10 | - | - | - | - | - | 215T | 215T | 215T | - | 256T |
| 15 | - | - | - | - | - | 254T | 254T | 254T | - | 284T |

*On horsepowers less than 1 1/2, motor frame sizes may change due to variations in voltage, special features and motor manufacturer. Motors shown are ball bearing, continuous duty and 1750 RPM or 1750/1140 RPM for two speed - two winding motors.*

# MOTOR AVAILABILITY

## Direct Drive Motor Availability

The following chart lists the various motor options available for each of the direct drive fan models. Once a fan model is selected, this chart can be used to determine if a suitable motor is available. (If not, another selection may have to be made from the fan performance charts). Look under the nominal RPM heading to determine which fans have 2-speed and 3-speed motors.

| Model | Nominal RPM | | | | 1 Phase | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 115 Volts | | | 200 - 240 Volts | | | | | 460 Volts |
| | 1050 V | 1300 S | 1550 R | 1725 Q | Open Drip Proof | Totally Enclosed | Explosion Proof | Open Drip Proof | Totally Enclosed | 50 hz | 50 C Ambient | Explosion Proof (4) | Totally Enclosed |
| DX06R | - | - | x | - | yes | - | - | Use TE Motors | - | - | - | - | - |
| DX08V | x | - | - | - | - | yes(7) | - | | yes(7) | yes(7) | - | - | yes(7) |
| DX08S/R | - | x | x | - | yes | yes (1) | - | | yes (1) | yes (1) | yes (1) | - | - |
| DX08Q | - | - | - | x | - | yes(7) | - | | yes(7) | yes(7) | - | - | yes(7) |
| DX10V | x | - | - | - | - | yes(7) | - | | yes(7) | yes(7) | - | - | yes(7) |
| DX10S/R | - | x | x | - | yes | yes (1) | - | | yes (1) | yes (1) | yes (1) | - | - |
| DX10Q | - | - | - | x | - | yes(7) | - | | yes(7) | yes(7) | - | - | yes(7) |
| DX11V/S/R | x | x | x | - | yes | yes (1) | - | | yes (1) | yes (1) | yes (1) | - | - |
| DX11Q | - | - | - | x | yes | yes | yes | | yes | yes | - | yes (5) | yes (5) |
| DX13V/S/R | x | x | x | - | yes | yes (1) | - | | yes (1) | yes (1) | - | - | - |
| DX13Q | - | - | - | x | yes | yes | yes | | yes | yes | yes | yes (5) | yes (5) |
| DX16V/S/R | x | x | x | - | yes | yes (1) | - | | yes (1) | yes (1) | yes (1) | - | - |
| DX16Q1 | - | - | - | x (3) | yes | - | - | | - | - | - | - | - |
| DX16Q2 | - | - | - | x | yes | yes | yes | | yes | yes | yes | yes (5) | yes (5) |
| DX18V | x | - | - | - | yes | - | - | | - | - | - | - | - |

| Model | Nominal RPM | | | | 3 Phase |
|---|---|---|---|---|---|
| | 1050 V | 1300 S | 1550 R | 1725 Q | 200 - 460 Volts (2) |
| | | | | | Explosion Proof (4) |
| DX06R | - | - | x | - | - |
| DX08V | - | - | - | - | - |
| DX08S/R | - | x | x | - | - |
| DX08Q | - | - | - | - | - |
| DX10V | - | - | - | - | - |
| DX10S/R | - | x | x | - | - |
| DX10Q | - | - | - | - | - |
| DX11V/S/R | x | x | x | - | - |
| DX11Q | - | - | - | x | yes (6) |
| DX13V/S/R | x | x | x | - | - |
| DX13Q | - | - | - | x | yes (6) |
| DX16V/S/R | x | x | x | - | - |
| DX16Q1 | - | - | - | x (3) | - |
| DX16Q2 | - | - | - | x | yes (6) |
| DX18V | x | - | - | - | - |

*(1) High speed only.*
*(2) 200V - 240V, 380V, 415V, 460V.*
*(3) Nominal 1650 RPM.*
*(4) Cls.I, Grp.D, Div. I / Cls. II, Grp.F & G, Div.I., Not available with 50 Hz.*
*(5) 208V-230V only. Not available in 200V.*
*(6) 230V and 460V only.*
*(7) Available on EC Motor only.*

# DX06, DX08, DX10, & DX11 | DIRECT DRIVE

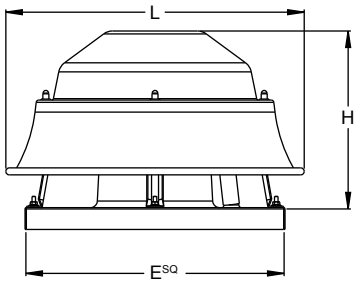
## Performance Data Overview

Domex direct drive models are available with single and multi-speed motors. Multi-speed motors are designated V (1050 RPM), S (1300 RPM), and R (1550 RPM). DX06R and DX18V are exceptions being single speed motors. Q, Q1, Q2 (1725/1760 RPM) are single speed motors. A single Domex fan may be suitable for several requirements by a simple wiring change. This feature provides flexibility for a variety of reasons, including energy savings, off-hours requirements, future expansion, or unexpected field variations. Domex direct drive models are available in seven sizes (6, 8, 10, 11, 13, 16 and 18). Capacities range from below 150 CFM to above 4500 CFM, with static pressures beyond 1 1/4".

By using Lek-Trol™ variable speed controllers, the high speed flow rate of most models can be reduced by as much as 50%. Do not use Lek-Trol™ on medium or low speed for multispeed models, unless a specific Lek-trol™ is shown to be available (see Lek-Trol™ Speed Controller Availability). When compared to belt drive models, Domex direct drive fans require less maintenance, have a simpler construction, cost less, and are lighter in weight. Performances in 50 Hz applications will be less than shown below; consult with local PennBarry representative.

| Model | Material Gages | | | Dimensions | | | | Est. Ship Wt. |
|---|---|---|---|---|---|---|---|---|
| | Alum. Base | Galv. Base | Hood/ Apron | L (Dia.) | H | E* | Ro | |
| DX06R | 0.064" | 16 ga. | 0.050" | 18 ⅞ | 12 ⅝ | 18 ½ x 18 ½ | 9 x 9 | 22 lbs |
| DX08V/S/R/Q | 0.064" | 16 ga. | 0.064" | 20 ⅞ | 13 ⅜ | 18 ½ x 18 ½ | 9 x 9 | 26 lbs |
| DX10V/S/R/Q | 0.064" | 16 ga. | 0.064" | 20 ⅞ | 13 ⅜ | 18 ½ x 18 ½ | 11 ½ x 11 ½ | 29 lbs |
| DX11V/S/R | 0.064" | 16 ga. | 0.064" | 20 ⅞ | 13 ⅜ | 18 ½ x 18 ½ | 11 ½ x 11 ½ | 38 lbs |
| DX11Q | 0.064" | 16 ga. | 0.064" | 20 ⅞ | 13 ⅜ | 18 ½ x 18 ½ | 11 ½ x 11 ½ | 40 lbs |

*All dimensions are in inches. *Outside dimension of curb should be 1 ½" less than "E" dimension.*




| Model | Nominal | | | Tip Speed FPM | 0.000" SP | | 0.125" SP | | 0.250" SP | | 0.375" SP | | 0.500" SP | | 0.625" SP | | 0.750" SP | | 0.875" SP | | 1.000" SP | | 1.250" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HP | Max Watts | RPM | | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones |
| DX06R | 1/100 | 52 | 1550 | 2841 | 146 | 4.3 | 100 | 3.6 | 69 | 3.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DX08V | 1/100(4) | -(4) | 1050 | 1649 | 191 | 0.3 | 111 | 0.8 | 54 | 0.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DX8S | 1/50 | 44 | 1300 | 3361 | 237 | 1.5 | 161 | 2.2 | 114 | 3.0 | 69 | 3.8 | - | - | - | - | - | - | - | - | - | - | - | - |
| DX8R | 1/30 | 55 | 1550 | 4007 | 285 | 2.4 | 199 | 2.8 | 142 | 3.5 | 95 | 4.1 | 58 | 4.9 | - | - | - | - | - | - | - | - | - | - |
| DX8Q | 1/20(4) | -(4) | 1725 | 4460 | 317 | 3.3 | 237 | 3.4 | 180 | 4.0 | 134 | 4.0 | 95 | 4.0 | 63 | 4.0 | 26 | 4.0 | - | - | - | - | - | - |
| DX10V | 1/30(4) | -(4) | 1050 | 2715 | 311 | 2.0 | 230 | 2.3 | 166 | 2.9 | 118 | 2.9 | 61 | 2.9 | - | - | - | - | - | - | - | - | - | - |
| DX10S | 1/25 | 82 | 1300 | 3361 | 385 | 3.9 | 316 | 3.5 | 257 | 4.8 | 207 | 5.1 | 168 | 5.2 | 129 | 5.6 | 82 | 6.1 | - | - | - | - | - | - |
| DX10R | 1/12(1) | 121 | 1550 | 4007 | 559 | 6.1 | 501 | 5.9 | 446 | 6.1 | 394 | 6.5 | 338 | 6.8 | 267 | 7.0 | 187 | 7.2 | 100 | 7.4 | - | - | - | - |
| DX10Q | 1/6(4) | -(4) | 1725 | 4460 | 622 | 7.5 | 569 | 7.4 | 521 | 7.6 | 472 | 7.8 | 425 | 8.3 | 373 | 8.5 | 312 | 8.5 | 239 | 8.5 | 166 | 8.5 | - | - |
| DX11V | 1/25 | 111 | 1050 | 2715 | 388 | 1.8 | - | 2.2 | 148 | 3.1 | 112 | 3.7 | 80 | 4.5 | 49 | 5.3 | - | - | - | - | - | - | - | - |
| DX11S | 1/11 | 142 | 1300 | 3786 | 503 | 3.4 | 397 | 3.6 | 320 | 4.3 | 262 | 5.0 | 201 | 5.5 | 149 | 6.0 | 104 | 6.5 | - | - | - | - | - | - |
| DX11R | 1/6(2) | 201 | 1550 | 4514 | 736 | 6.7 | 659 | 6.4 | 577 | 6.6 | 502 | 6.9 | 432 | 7.6 | 356 | 7.9 | 274 | 7.9 | 188 | 7.9 | 100 | 7.9 | - | - |
| DX11Q | 1/5(3) | 268 | 1725 | 5024 | 997 | 9.7 | 921 | 9.7 | 850 | 9.5 | 768 | 9.5 | 685 | 9.4 | 598 | 9.2 | 511 | 9.0 | 409 | 8.7 | 294 | 8.9 | 100 | 8.0 |

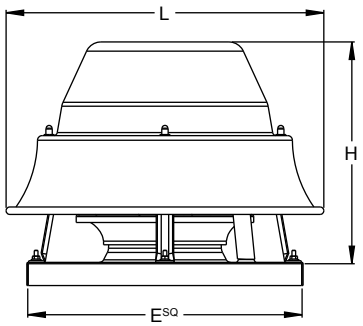
*(1) TE motor is 1/6 Hp.*
*(2) TE motor is 1/7 Hp.*
*(3) EXP motor is 1/4 Hp.*
*(4) Available on EC Motor only.*

*Performance certified for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances (accessories). Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.*

## DX13 | DIRECT DRIVE

| Model | Material Gages | | | Dimensions | | | | Est. Ship Wt. |
|---|---|---|---|---|---|---|---|---|
| | Alum. Base | Galv. Base | Hood/ Apron | L (Dia.) | H | E* | Ro | |
| DX13V/S/R | 0.064" | 16 ga. | 0.064" | 21 7/16 | 14 ¾ | 18 ½ x 18 ½ | 11 ½ x11 ½ | 36 lbs |
| DX13Q | 0.064" | 16 ga. | 0.064" | 21 7/16 | 14 ¾ | 18 ½ x 18 ½ | 11 ½ x11 ½ | 43 lbs |

*All dimensions are in inches. *Outside dimension of curb should be 1 ½" less than "E" dimension.*




| Model | Nominal | | | Tip Speed FPM | 0.000" SP | | 0.125" SP | | 0.250" SP | | 0.375" SP | | 0.500" SP | | 0.625" SP | | 0.750" SP | | 0.875" SP | | 1.000" SP | | 1.250" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HP | Max Watts | RPM | | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones |
| DX13V | 1/20 | 92 | 1050 | 3221 | 661 | 4.4 | 479 | 3.1 | 341 | 2.8 | 262 | 3.6 | 207 | 4.3 | 161 | 5.1 | 115 | 5.9 | 79 | 6.6 | 44 | 7.4 | - | - |
| DX13S | 1/12 | 120 | 1300 | 3988 | 869 | 8 | 749 | 6.4 | 632 | 5.3 | 510 | 5.4 | 418 | 6 | 349 | 6.4 | 290 | 6.7 | 226 | 7 | 158 | 7.4 | - | - |
| DX13R | 1/6 | 201 | 1550 | 4755 | 1054 | 10.5 | 988 | 9.9 | 917 | 9.2 | 839 | 8.9 | 736 | 8.5 | 651 | 8.2 | 579 | 7.9 | 510 | 7.9 | 428 | 8 | 191 | 8.5 |
| DX13Q | 1/4 | 314 | 1725 | 5292 | 1280 | 16 | 1226 | 15.3 | 1170 | 14.6 | 1112 | 14 | 1053 | 13.4 | 995 | 13 | 936 | 12.5 | 868 | 12 | 796 | 11.5 | 630 | 11 |

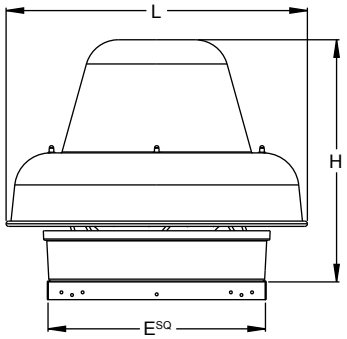
*Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the air stream.*

*Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.*

## DX16 & DX18 | DIRECT DRIVE

| Model | Material Gages | | | Dimensions | | | | Est. Ship Wt. |
|---|---|---|---|---|---|---|---|---|
| | Alum. Base | Galv. Base | Hood/ Apron | L (Dia.) | H | E* | Ro | |
| DX16V/S/R, Q1 & Q2 | 0.064" | 16 ga. | 0.064" | 28 ½ | 22 ½ | 20 ½ x 20 ½ | 16 x 16 | 56 lbs |
| DX18V | 0.080" | 14 ga. | 0.064" | 39 | 31 | 28 ½ | 20 | 78 lbs |

*All dimensions are in inches. *Outside dimension of curb should be 1 ½" less than "E" dimension.*




| Model | Nominal | | | Tip Speed FPM | 0.000" SP | | 0.125" SP | | 0.250" SP | | 0.375" SP | | 0.500" SP | | 0.625" SP | | 0.750" SP | | 0.875" SP | | 1.000" SP | | 1.250" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HP | Max Watts | RPM | | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones | CFM | Sones |
| DX16V | 1/6 | 453 | 1050 | 3788 | 1738 | 9.9 | 1489 | 8 | 1256 | 6.6 | 1032 | 6.1 | 884 | 6.6 | 772 | 7.1 | 682 | 7.9 | 598 | 9.9 | 529 | 10.1 | 392 | 10.2 |
| DX16S | 1/3 | 510 | 1300 | 4690 | 2021 | 12 | 1822 | 10.6 | 1637 | 9.5 | 1428 | 8.7 | 1256 | 8.4 | 1094 | 8.5 | 943 | 9.3 | 850 | 10.2 | 775 | 11 | 606 | 12.3 |
| DX16R | 1/3(1) | 574 | 1550 | 5592 | 2346 | 13.8 | 2176 | 12.8 | 2014 | 12 | 1853 | 11.3 | 1685 | 10.7 | 1532 | 10.4 | 1384 | 10.1 | 1247 | 10 | 1115 | 10.4 | 881 | 12.4 |
| DX16Q1 | 1/2 | 688 | 1650 | 5953 | 2701 | 16.9 | 2576 | 16.4 | 2465 | 15.9 | 2352 | 15.5 | 2228 | 15 | 2096 | 14.4 | 1966 | 14 | 1839 | 13.6 | 1700 | 13.5 | 1401 | 13.5 |
| DX16Q2 | 3/4 | 866 | 1725 | 6223 | 3016 | 17.7 | 2921 | 17.1 | 2829 | 16.7 | 2747 | 16.3 | 2665 | 15.9 | 2575 | 15.5 | 2484 | 15 | 2371 | 14.6 | 2256 | 14.2 | 2005 | 13.3 |
| DX18V | 3/4 | 964 | 1075 | 6029 | 4561 | 21 | 4395 | 19.8 | 4230 | 19.1 | 4053 | 18.5 | 3865 | 17.9 | 3671 | 16.9 | 3454 | 16.4 | 3237 | 16.4 | 2995 | 16.4 | 2405 | 16.4 |

*(1) TE motor is 1/2 Hp.*

*Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the air stream.*

*Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.*

# DIRECT DRIVE PERFORMANCE DATA

## Domex Fan Curves

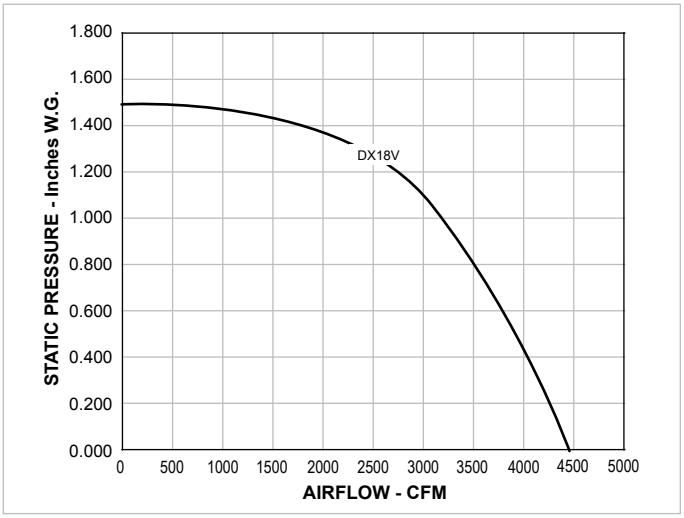
The fan curves illustrated here show the range of capacities available for direct drive units. Each graph shows the performance of several models at one particular nominal speed. Fan curves provide a quick method for selecting a fan unit based on design point requirements.

The direct drive performance chart on the previous page provides the tabular data (CFM and static pressure) used to plot the fan curves. In addition, the horsepower, tip speed and sones are tabulated. Since sound is normally an important factor in the selection of a fan, an engineer will usually want to select the “slowest” unit which meets CFM and SP requirements.

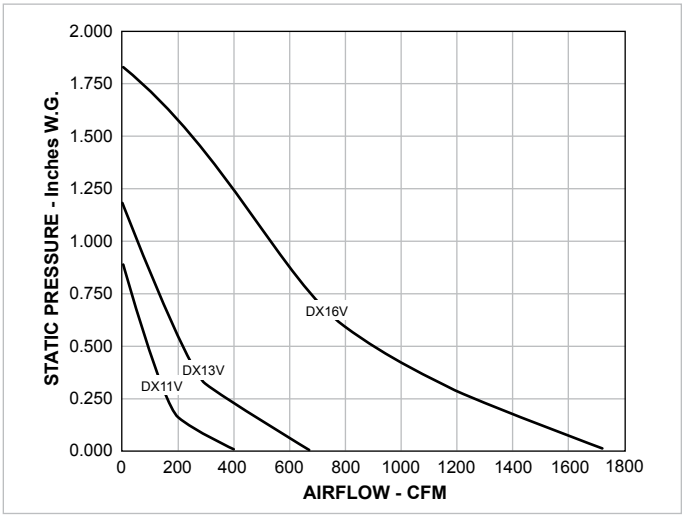
Please refer to the Motor Selection section to make sure the motor you select meets your electrical requirements.

*Domex fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.*

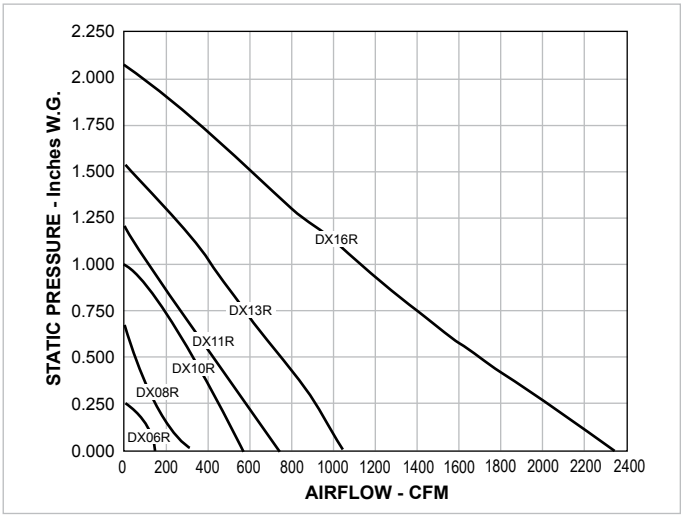
## Nominal 1075 RPM



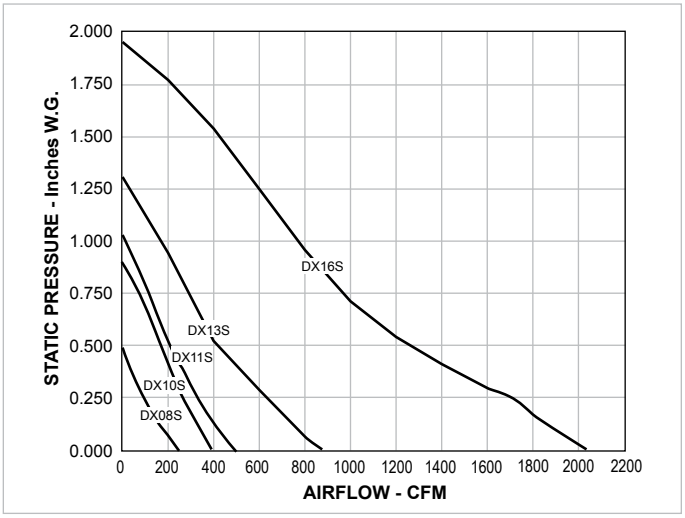

## Nominal 1050 RPM



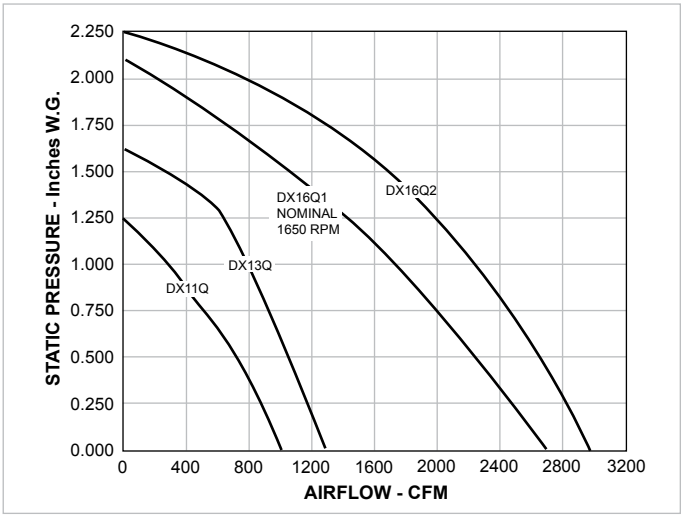

## Nominal 1550 RPM




## Nominal 1300 RPM




## Nominal 1725 RPM



# BELT DRIVE PERFORMANCE DATA

## Performance Data

The belt drive models shown on the following pages have sizes and capacities ranging from below 300 CFM to above 39,000 CFM, with static pressures from 0" to above 1 ½". All models are available with a wide range of horsepower sizes and RPM's. Two-speed motors are commonly used to enhance this flexibility.

The data provided for each belt drive model includes:

- Elevation Drawing Showing Overall Dimensions
- Fan Curve Graph
- Performance Chart

Each curve graphically displays the range of capacities available for each model, in most cases beyond the specifics shown in the tabular data. The maximum performance afforded by each horsepower is indicated by dashed lines and the RPM is indicated by solid lines.

Some models have graphs that show both shaded and unshaded areas. Selection should be made from the unshaded area only. Shaded areas reflect unstable performance ("surge"), a characteristic typical of backward inclined wheels, and should be avoided. These unstable regions are not shown in the tabular data.

The highest RPM shown for a specific horsepower in the tabular data is the maximum speed that for any point along the performance curve, the BHP will not exceed the available horsepower.

It is important to note that while it is common industry-wide practice to exceed a "nominal" horsepower by using a motor's service factor, PennBarry uses a conservative portion of the service factor, allowing half to remain a true "safety" factor.

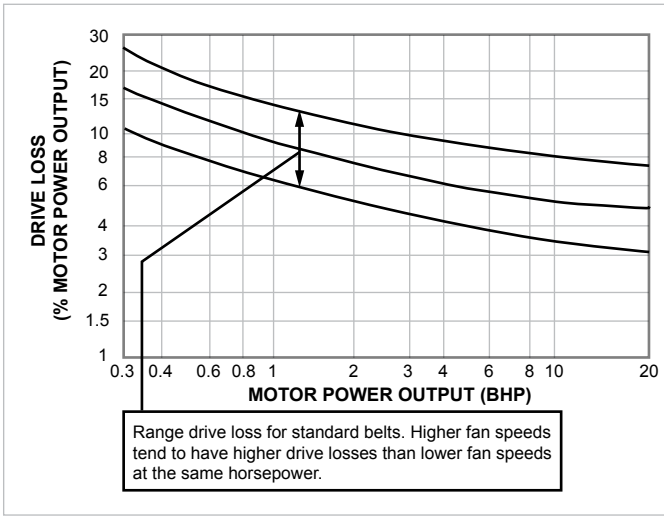
Use the Motor Availability chart (see Motor Selection) to select motor enclosures and voltages which can be installed in the fans.

*Note: Domex fans are only one component of a total system. As such, performance is directly affected by the system. It is critical that system designers determine actual system losses to ensure that the actual flow is specified in the system range.*

## Belt Drive Losses

The AMCA Review Committee has developed the chart shown below for the purpose of estimating belt drive losses. To calculate total BHP (including drive losses): Find the BHP of your operating point on the x-axis on the graph below. Follow the vertical line to the curves indicating the range of drive losses. Look at the y-axis on the left and find the drive loss percentage. Calculate the total BHP by adding the drive loss to the operating point BHP. For BHP's below 0.3, use 30%.

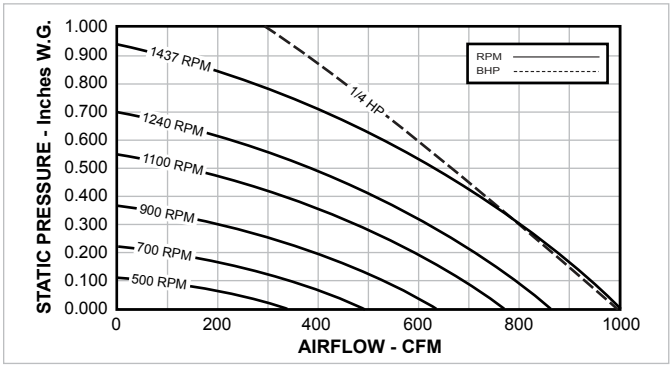
## Drive Loss Reference Chart



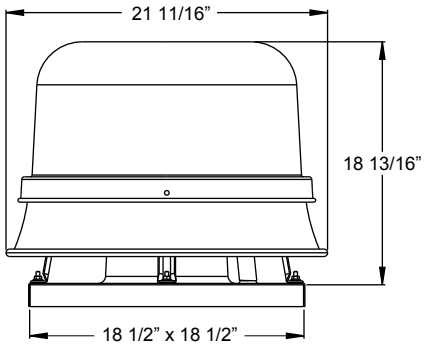

***For totally enclosed, explosion proof, multi-speed and all 1.0 Service Factor motors, fan BHP plus drive losses should not exceed motor rated HP.***

*Graph reprinted from AMCA publication 203, with the express written permission from the Air Movement and Control Association, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.*

# DX06B | BELT DRIVE



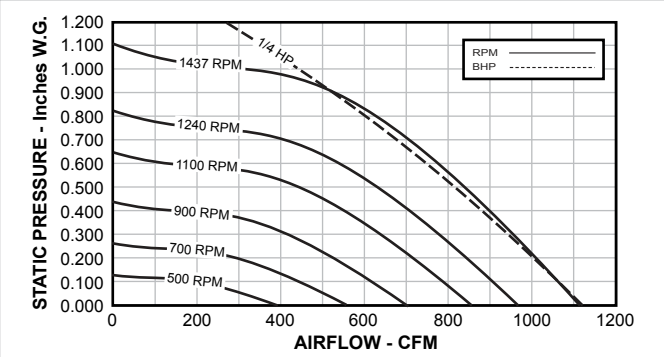

| |
|---|
| Galv. Steel Base = 16 Gage |
| Aluminum Base = 0.064" |
| Discharge Apron = 0.05" |
| Hood = 0.064" |
| Roof Opening = 11 ½" SQ. |
| Damper Size = 11 ¼" SQ. |
| Max. Motor Frame Size = 42 |
| Peak BHP = $(RPM/2232)^3$ |
| Max. RPM = 1437 (1/4 HP) |
| Est. Ship Weight = 35 lbs. |



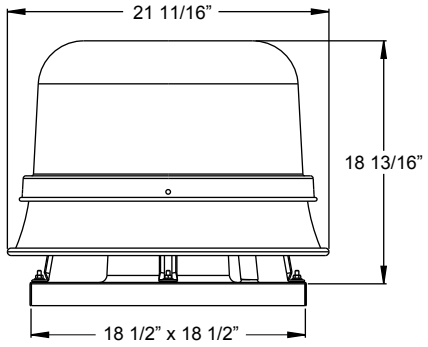

| HP | RPM | Tip Speed FPM | 0.000" SP | | 0.125" SP | | 0.250" SP | | 0.375" SP | | 0.500" SP | | 0.625" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 375 | 1092 | 264 | | - | | - | | - | | - | | - | |
| | | | 1.6 | 0.01 | - | | - | | - | | - | | - | |
| | 430 | 1252 | 302 | | - | | - | | - | | - | | - | |
| | | | 1.8 | 0.01 | - | | - | | - | | - | | - | |
| | 475 | 1383 | 334 | | - | | - | | - | | - | | - | |
| | | | 2.1 | 0.01 | - | | - | | - | | - | | - | |
| | 520 | 1515 | 366 | | - | | - | | - | | - | | - | |
| | | | 2.2 | 0.01 | - | | - | | - | | - | | - | |
| | 565 | 1646 | 397 | | - | | - | | - | | - | | - | |
| | | | 2.4 | 0.02 | - | | - | | - | | - | | - | |
| | 610 | 1777 | 429 | | 179 | | - | | - | | - | | - | |
| | | | 2.9 | 0.02 | 2.5 | 0.02 | - | | - | | - | | - | |
| | 655 | 1908 | 461 | | 244 | | - | | - | | - | | - | |
| | | | 3.1 | 0.02 | 2.6 | 0.02 | - | | - | | - | | - | |
| | 700 | 2039 | 492 | | 298 | | - | | - | | - | | - | |
| | | | 3.4 | 0.03 | 2.9 | 0.03 | - | | - | | - | | - | |
| | 745 | 2170 | 524 | | 347 | | - | | - | | - | | - | |
| | | | 3.7 | 0.04 | 3.2 | 0.03 | - | | - | | - | | - | |
| | 790 | 2301 | 556 | | 394 | | 114 | | - | | - | | - | |
| | | | 4.0 | 0.04 | 3.5 | 0.04 | 3.1 | 0.04 | - | | - | | - | |
| | 835 | 2432 | 587 | | 438 | | 209 | | - | | - | | - | |
| | | | 4.4 | 0.05 | 3.8 | 0.05 | 3.5 | 0.04 | - | | - | | - | |
| | 880 | 2563 | 619 | | 480 | | 279 | | - | | - | | - | |
| | | | 4.8 | 0.06 | 4.3 | 0.06 | 3.7 | 0.05 | - | | - | | - | |
| | 925 | 2694 | 651 | | 519 | | 344 | | - | | - | | - | |
| | | | 5.2 | 0.07 | 4.7 | 0.07 | 4.1 | 0.06 | - | | - | | - | |
| | 970 | 2825 | 683 | | 558 | | 398 | | 146 | | - | | - | |
| | | | 5.9 | 0.08 | 5.3 | 0.08 | 4.6 | 0.07 | 4.4 | 0.05 | - | | - | |
| | 1015 | 2956 | 714 | | 597 | | 450 | | 243 | | - | | - | |
| | | | 6.4 | 0.09 | 5.8 | 0.09 | 5.2 | 0.08 | 4.8 | 0.07 | - | | - | |
| | 1060 | 3087 | 746 | | 635 | | 498 | | 315 | | - | | - | |
| | | | 6.5 | 0.11 | 6.0 | 0.10 | 5.3 | 0.10 | 4.9 | 0.08 | - | | - | |
| | 1105 | 3218 | 778 | | 674 | | 544 | | 382 | | 131 | | - | |
| | | | 6.8 | 0.12 | 6.3 | 0.12 | 5.7 | 0.11 | 5.1 | 0.10 | 4.9 | 0.07 | - | |
| | 1150 | 3349 | 809 | | 712 | | 590 | | 442 | | 241 | | - | |
| | | | 7.2 | 0.13 | 6.7 | 0.13 | 6.1 | 0.13 | 5.5 | 0.12 | 5.1 | 0.10 | - | |
| | 1195 | 3480 | 841 | | 749 | | 634 | | 496 | | 318 | | - | |
| | | | 7.7 | 0.15 | 7.2 | 0.15 | 6.5 | 0.14 | 5.9 | 0.13 | 5.4 | 0.12 | - | |
| | 1240 | 3612 | 873 | | 783 | | 675 | | 547 | | 389 | | 158 | |
| | | | 8.2 | 0.17 | 7.6 | 0.17 | 6.9 | 0.16 | 6.4 | 0.15 | 5.8 | 0.14 | 5.3 | 0.11 |
| | 1280 | 3728 | 901 | | 814 | | 710 | | 590 | | 447 | | 256 | |
| | | | 8.4 | 0.19 | 7.9 | 0.18 | 7.3 | 0.18 | 6.7 | 0.17 | 6.3 | 0.16 | 5.9 | 0.13 |
| | 1320 | 3845 | 929 | | 845 | | 745 | | 633 | | 501 | | 330 | |
| | | | 8.8 | 0.20 | 8.2 | 0.20 | 7.6 | 0.20 | 7.1 | 0.19 | 6.7 | 0.18 | 6.4 | 0.15 |
| | 1350 | 3932 | 950 | | 868 | | 771 | | 664 | | 537 | | 378 | |
| | | | 9.1 | 0.22 | 8.5 | 0.22 | 8.0 | 0.21 | 7.4 | 0.20 | 7.0 | 0.19 | 6.8 | 0.17 |
| | 1390 | 4048 | 978 | | 898 | | 805 | | 704 | | 585 | | 440 | |
| | | | 9.5 | 0.24 | 9.1 | 0.24 | 8.4 | 0.23 | 7.9 | 0.22 | 7.5 | 0.21 | 7.3 | 0.19 |
| | 1420 | 4136 | 999 | | 921 | | 830 | | 734 | | 619 | | 484 | |
| | | | 9.9 | 0.25 | 9.4 | 0.25 | 8.8 | 0.25 | 8.3 | 0.24 | 7.8 | 0.23 | 7.8 | 0.21 |
| | 1437 | 4185 | 1011 | | 933 | | 845 | | 750 | | 638 | | 509 | |
| | | | 10.1 | 0.26 | 9.5 | 0.26 | 9.1 | 0.25 | 8.5 | 0.25 | 8.0 | 0.24 | 7.9 | 0.22 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX08B | BELT DRIVE



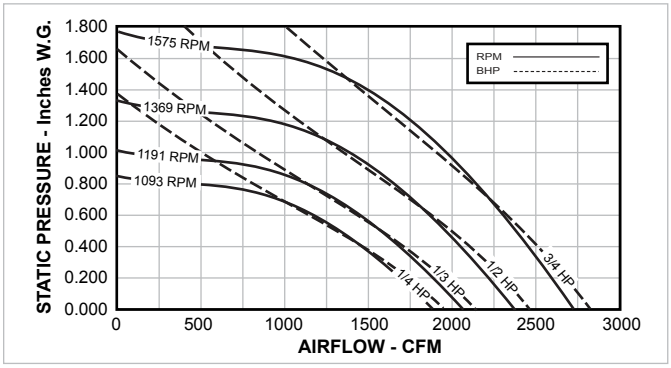

| |
|---|
| Galv. Steel Base = 16 Gage |
| Aluminum Base = 0.064" |
| Discharge Apron = 0.064" |
| Hood = 0.064" |
| Roof Opening = 11 ½" SQ. |
| Damper Size = 11 ¼" SQ. |
| Max. Motor Frame Size = 42 |
| Peak BHP = $(RPM/2232)^3$ |
| Max. RPM = 1437 (1/4 HP) |
| Est. Ship Weight = 35 lbs. |



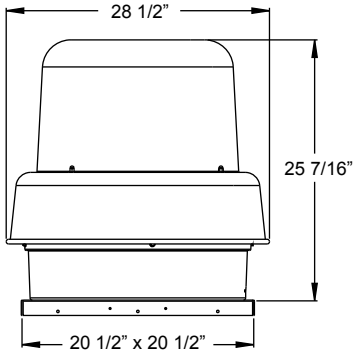

| HP | RPM | Tip Speed FPM | 0.000" SP | | 0.125" SP | | 0.250" SP | | 0.375" SP | | 0.500" SP | | 0.625" SP | | 0.750" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 375 | 1150 | 289 | | - | | - | | - | | - | | - | | - | |
| | | | 1.4 | 0.01 | - | | - | | - | | - | | - | | - | |
| | 430 | 1319 | 331 | | - | | - | | - | | - | | - | | - | |
| | | | 1.7 | 0.01 | - | | - | | - | | - | | - | | - | |
| | 475 | 1457 | 366 | | - | | - | | - | | - | | - | | - | |
| | | | 2.0 | 0.01 | - | | - | | - | | - | | - | | - | |
| | 520 | 1595 | 401 | | 155 | | - | | - | | - | | - | | - | |
| | | | 2.2 | 0.01 | 1.7 | 0.01 | - | | - | | - | | - | | - | |
| | 565 | 1733 | 435 | | 242 | | - | | - | | - | | - | | - | |
| | | | 2.5 | 0.02 | 1.9 | 0.02 | - | | - | | - | | - | | - | |
| | 610 | 1871 | 470 | | 301 | | - | | - | | - | | - | | - | |
| | | | 3.1 | 0.02 | 2.4 | 0.02 | - | | - | | - | | - | | - | |
| | 655 | 2009 | 505 | | 351 | | - | | - | | - | | - | | - | |
| | | | 3.4 | 0.02 | 2.7 | 0.02 | - | | - | | - | | - | | - | |
| | 700 | 2147 | 540 | | 399 | | - | | - | | - | | - | | - | |
| | | | 3.8 | 0.03 | 3.1 | 0.03 | - | | - | | - | | - | | - | |
| | 745 | 2285 | 574 | | 444 | | 247 | | - | | - | | - | | - | |
| | | | 4.3 | 0.03 | 3.5 | 0.04 | 3.0 | 0.03 | - | | - | | - | | - | |
| | 790 | 2424 | 609 | | 487 | | 330 | | - | | - | | - | | - | |
| | | | 4.6 | 0.04 | 3.9 | 0.04 | 3.3 | 0.04 | - | | - | | - | | - | |
| | 835 | 2562 | 644 | | 530 | | 393 | | - | | - | | - | | - | |
| | | | 5.0 | 0.05 | 4.2 | 0.05 | 3.6 | 0.05 | - | | - | | - | | - | |
| | 880 | 2700 | 678 | | 571 | | 446 | | 207 | | - | | - | | - | |
| | | | 5.5 | 0.06 | 4.7 | 0.06 | 4.0 | 0.06 | 3.6 | 0.05 | - | | - | | - | |
| | 925 | 2838 | 713 | | 611 | | 496 | | 329 | | - | | - | | - | |
| | | | 6.0 | 0.07 | 5.2 | 0.07 | 4.5 | 0.07 | 4.0 | 0.07 | - | | - | | - | |
| | 970 | 2976 | 748 | | 651 | | 543 | | 408 | | - | | - | | - | |
| | | | 6.7 | 0.08 | 5.9 | 0.08 | 5.2 | 0.08 | 4.5 | 0.08 | - | | - | | - | |
| | 1015 | 3114 | 783 | | 691 | | 590 | | 471 | | 236 | | - | | - | |
| | | | 7.2 | 0.09 | 6.5 | 0.09 | 5.8 | 0.09 | 5.1 | 0.09 | 4.8 | 0.08 | - | | - | |
| | 1060 | 3252 | 817 | | 730 | | 635 | | 526 | | 364 | | - | | - | |
| | | | 7.5 | 0.10 | 6.8 | 0.10 | 6.2 | 0.11 | 5.6 | 0.11 | 5.2 | 0.10 | - | | - | |
| | 1105 | 3390 | 852 | | 769 | | 678 | | 577 | | 449 | | - | | - | |
| | | | 8.0 | 0.11 | 7.2 | 0.12 | 6.6 | 0.12 | 6.0 | 0.12 | 5.5 | 0.12 | - | | - | |
| | 1150 | 3258 | 887 | | 808 | | 720 | | 626 | | 514 | | 309 | | - | |
| | | | 8.8 | 0.13 | 7.9 | 0.13 | 7.3 | 0.13 | 6.7 | 0.13 | 6.2 | 0.13 | 5.8 | 0.12 | - | |
| | 1195 | 3666 | 921 | | 846 | | 762 | | 673 | | 575 | | 426 | | - | |
| | | | 9.8 | 0.14 | 8.8 | 0.15 | 8.1 | 0.15 | 7.6 | 0.15 | 7.1 | 0.15 | 6.7 | 0.14 | - | |
| | 1240 | 3804 | 956 | | 885 | | 803 | | 719 | | 626 | | 509 | | 279 | |
| | | | 10.4 | 0.16 | 9.4 | 0.16 | 8.6 | 0.17 | 8.1 | 0.17 | 7.7 | 0.17 | 7.4 | 0.16 | 6.8 | 0.14 |
| | 1280 | 3927 | 687 | | 918 | | 840 | | 760 | | 670 | | 566 | | 398 | |
| | | | 10.5 | 0.17 | 9.6 | 0.18 | 8.9 | 0.18 | 8.3 | 0.19 | 7.9 | 0.19 | 7.6 | 0.18 | 7.3 | 0.17 |
| | 1320 | 4049 | 1018 | | 952 | | 875 | | 798 | | 714 | | 622 | | 488 | |
| | | | 10.8 | 0.19 | 10.0 | 0.20 | 9.3 | 0.20 | 8.7 | 0.20 | 8.3 | 0.20 | 8.0 | 0.20 | 7.9 | 0.19 |
| | 1350 | 4141 | 1041 | | 977 | | 902 | | 827 | | 746 | | 658 | | 544 | |
| | | | 11.1 | 0.21 | 10.4 | 0.21 | 9.7 | 0.21 | 9.0 | 0.22 | 8.7 | 0.22 | 8.5 | 0.22 | 8.3 | 0.21 |
| | 1390 | 4264 | 1072 | | 1010 | | 937 | | 865 | | 787 | | 704 | | 603 | |
| | | | 11.7 | 0.22 | 11.1 | 0.23 | 10.3 | 0.23 | 9.7 | 0.23 | 9.1 | 0.24 | 9.1 | 0.24 | 9.0 | 0.23 |
| | 1420 | 4356 | 1095 | | 1035 | | 964 | | 893 | | 818 | | 737 | | 645 | |
| | | | 12.3 | 0.24 | 11.6 | 0.24 | 10.9 | 0.25 | 10.3 | 0.25 | 9.6 | 0.25 | 9.6 | 0.25 | 9.6 | 0.25 |
| | 1437 | 4408 | 1108 | | 1049 | | 979 | | 909 | | 836 | | 756 | | 669 | |
| | | | 12.5 | 0.25 | 11.8 | 0.25 | 11.1 | 0.26 | 10.5 | 0.26 | 9.9 | 0.26 | 9.8 | 0.26 | 9.8 | 0.26 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX11B | BELT DRIVE



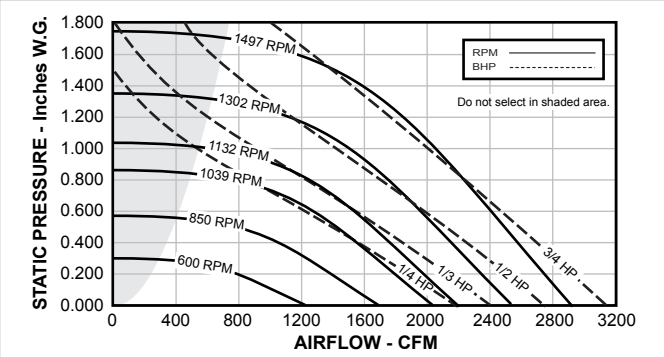

| |
|---|
| Galv. Steel Base = 16 Gage |
| Aluminum Base = 0.064” |
| Hood / Apron = 0.08” |
| Roof Opening = 16” SQ. |
| Damper Size = 15 ¾” SQ. |
| Max. Motor Frame Size = 56 |
| Peak BHP = (RPM/1700)$^3$ |
| Max. RPM = 1575 (3/4 HP) |
| Est. Ship Weight = 55 lbs. |



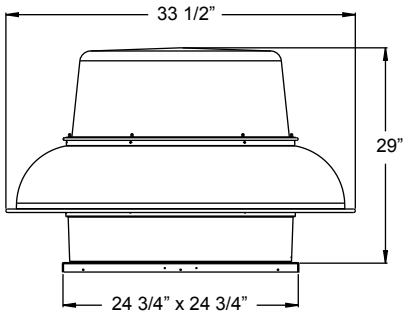

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 0.875” SP | | 1.000” SP | | 1.125” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 650 | 2345 | 1120 | | 905 | | 535 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 4.7 | 0.05 | 4.1 | 0.05 | 3.4 | 0.05 | - | | - | | - | | - | | - | | - | | - | |
| | 675 | 2435 | 1164 | | 959 | | 638 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 4.9 | 0.05 | 4.3 | 0.06 | 3.6 | 0.06 | - | | - | | - | | - | | - | | - | | - | |
| | 700 | 2526 | 1207 | | 1011 | | 737 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 5.1 | 0.06 | 4.6 | 0.07 | 3.9 | 0.07 | - | | - | | - | | - | | - | | - | | - | |
| | 725 | 2616 | 1250 | | 1062 | | 813 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 5.5 | 0.07 | 4.9 | 0.07 | 4.3 | 0.08 | - | | - | | - | | - | | - | | - | | - | |
| | 750 | 2706 | 1293 | | 1113 | | 880 | | 252 | | - | | - | | - | | - | | - | | - | |
| | | | 5.8 | 0.07 | 5.3 | 0.08 | 4.7 | 0.09 | 4.1 | 0.05 | - | | - | | - | | - | | - | | - | |
| | 800 | 2886 | 1379 | | 1213 | | 1007 | | 672 | | - | | - | | - | | - | | - | | - | |
| | | | 6.6 | 0.09 | 6.1 | 0.10 | 5.5 | 0.10 | 5.0 | 0.10 | - | | - | | - | | - | | - | | - | |
| | 825 | 2976 | 1422 | | 1263 | | 1067 | | 775 | | - | | - | | - | | - | | - | | - | |
| | | | 6.8 | 0.10 | 6.3 | 0.10 | 5.7 | 0.11 | 5.2 | 0.11 | - | | - | | - | | - | | - | | - | |
| | 850 | 3067 | 1465 | | 1312 | | 1126 | | 874 | | - | | - | | - | | - | | - | | - | |
| | | | 7.0 | 0.11 | 6.5 | 0.11 | 5.9 | 0.12 | 5.4 | 0.12 | - | | - | | - | | - | | - | | - | |
| | 900 | 3247 | 1552 | | 1407 | | 1238 | | 1028 | | 665 | | - | | - | | - | | - | | - | |
| | | | 7.8 | 0.13 | 7.2 | 0.13 | 6.5 | 0.14 | 6.0 | 0.15 | 5.7 | 0.13 | - | | - | | - | | - | | - | |
| | 950 | 3427 | 1638 | | 1502 | | 1347 | | 1159 | | 884 | | - | | - | | - | | - | | - | |
| | | | 8.5 | 0.15 | 7.9 | 0.16 | 7.3 | 0.16 | 6.7 | 0.17 | 6.3 | 0.17 | - | | - | | - | | - | | - | |
| | 1000 | 3608 | 1724 | | 1596 | | 1451 | | 1282 | | 1080 | | 706 | | - | | - | | - | | - | |
| | | | 9.2 | 0.17 | 8.7 | 0.18 | 8.0 | 0.19 | 7.3 | 0.20 | 7.0 | 0.20 | 6.8 | 0.18 | - | | - | | - | | - | |
| | 1050 | 3788 | 1810 | | 1689 | | 1553 | | 1400 | | 1217 | | 939 | | - | | - | | - | | - | |
| | | | 9.7 | 0.20 | 9.2 | 0.21 | 8.5 | 0.22 | 7.8 | 0.23 | 7.4 | 0.23 | 7.1 | 0.22 | - | | - | | - | | - | |
| | 1075 | 3878 | 1853 | | 1735 | | 1603 | | 1456 | | 1284 | | 1040 | | 647 | | - | | - | | - | |
| | | | 10.0 | 0.21 | 9.4 | 0.23 | 8.8 | 0.23 | 8.1 | 0.24 | 7.7 | 0.25 | 7.4 | 0.25 | 7.5 | 0.21 | - | | - | | - | |
| | 1093 | 3943 | 1884 | | 1768 | | 1639 | | 1496 | | 1329 | | 1111 | | 758 | | - | | - | | - | |
| | | | 10.2 | 0.23 | 9.6 | 0.24 | 9.1 | 0.24 | 8.3 | 0.26 | 7.9 | 0.26 | 7.7 | 0.26 | 7.7 | 0.23 | - | | - | | - | |
| 1/3 | 1125 | 4059 | 1940 | | 1827 | | 1703 | | 1566 | | 1408 | | 1227 | | 924 | | - | | - | | - | |
| | | | 10.6 | 0.25 | 10.0 | 0.26 | 9.5 | 0.27 | 8.8 | 0.27 | 8.2 | 0.29 | 8.0 | 0.29 | 8.1 | 0.27 | - | | - | | - | |
| | 1150 | 4149 | 1983 | | 1873 | | 1753 | | 1621 | | 1469 | | 1296 | | 1028 | | 489 | | - | | - | |
| | | | 11.0 | 0.26 | 10.4 | 0.27 | 9.8 | 0.28 | 9.1 | 0.29 | 8.5 | 0.31 | 8.3 | 0.31 | 8.3 | 0.29 | 8.4 | 0.21 | - | | - | |
| | 1191 | 4297 | 2053 | | 1948 | | 1834 | | 1708 | | 1568 | | 1406 | | 1193 | | 883 | | - | | - | |
| | | | 11.5 | 0.29 | 11.0 | 0.30 | 10.5 | 0.31 | 9.8 | 0.32 | 9.0 | 0.34 | 8.8 | 0.34 | 8.6 | 0.34 | 8.6 | 0.31 | - | | - | |
| 1/2 | 1220 | 4402 | 2103 | | 2001 | | 1889 | | 1767 | | 1634 | | 1481 | | 1306 | | 1019 | | - | | - | |
| | | | 11.9 | 0.31 | 11.4 | 0.33 | 10.9 | 0.34 | 10.2 | 0.34 | 9.6 | 0.36 | 9.2 | 0.37 | 9.0 | 0.37 | 8.9 | 0.34 | - | | - | |
| | 1250 | 4510 | 2155 | | 2056 | | 1947 | | 1829 | | 1700 | | 1555 | | 1393 | | 1142 | | 801 | | - | |
| | | | 12.4 | 0.34 | 11.9 | 0.35 | 11.4 | 0.36 | 10.8 | 0.37 | 10.0 | 0.38 | 9.6 | 0.39 | 9.4 | 0.39 | 9.3 | 0.38 | 9.3 | 0.33 | - | |
| | 1300 | 4690 | 2241 | | 2147 | | 2042 | | 1930 | | 1811 | | 1677 | | 1528 | | 1342 | | 1071 | | - | |
| | | | 13.0 | 0.38 | 12.6 | 0.39 | 12.2 | 0.40 | 11.6 | 0.41 | 10.9 | 0.42 | 10.2 | 0.44 | 10.1 | 0.44 | 9.9 | 0.44 | 9.9 | 0.42 | - | |
| | 1369 | 4939 | 2360 | | 2271 | | 2172 | | 2069 | | 1959 | | 1838 | | 1703 | | 1556 | | 1352 | | 1095 | |
| | | | 14.0 | 0.44 | 13.6 | 0.46 | 13.2 | 0.47 | 12.8 | 0.48 | 12.1 | 0.49 | 11.4 | 0.51 | 11.0 | 0.52 | 10.8 | 0.52 | 10.9 | 0.51 | 10.9 | 0.48 |
| 3/4 | 1380 | 4979 | 2379 | | 2290 | | 2193 | | 2091 | | 1982 | | 1862 | | 1730 | | 1585 | | 1396 | | 1141 | |
| | | | 14.1 | 0.45 | 13.8 | 0.47 | 13.4 | 0.48 | 13.0 | 0.49 | 12.3 | 0.50 | 11.6 | 0.52 | 11.1 | 0.53 | 10.9 | 0.53 | 11.0 | 0.52 | 11.1 | 0.50 |
| | 1410 | 5087 | 2431 | | 2344 | | 2249 | | 2150 | | 2044 | | 1929 | | 1803 | | 1666 | | 1513 | | 1265 | |
| | | | 14.6 | 0.48 | 14.2 | 0.50 | 13.8 | 0.51 | 13.5 | 0.52 | 12.8 | 0.53 | 12.1 | 0.55 | 11.5 | 0.56 | 11.4 | 0.56 | 11.4 | 0.57 | 11.5 | 0.54 |
| | 1470 | 5304 | 2535 | | 2451 | | 2361 | | 2268 | | 2166 | | 2061 | | 1946 | | 1818 | | 1681 | | 1505 | |
| | | | 15.6 | 0.55 | 15.2 | 0.56 | 14.8 | 0.58 | 14.5 | 0.58 | 13.9 | 0.60 | 13.2 | 0.61 | 12.6 | 0.64 | 12.3 | 0.64 | 12.2 | 0.64 | 12.3 | 0.63 |
| | 1500 | 5412 | 2586 | | 2504 | | 2416 | | 2325 | | 2227 | | 2126 | | 2014 | | 1892 | | 1761 | | 1620 | |
| | | | 16.1 | 0.58 | 15.8 | 0.60 | 15.4 | 0.61 | 15.1 | 0.62 | 14.5 | 0.63 | 13.9 | 0.64 | 13.2 | 0.67 | 12.8 | 0.68 | 12.7 | 0.68 | 12.8 | 0.68 |
| | 1575 | 5682 | 2716 | | 2638 | | 2555 | | 2468 | | 2377 | | 2282 | | 2180 | | 2073 | | 1952 | | 1825 | |
| | | | 17.4 | 0.67 | 17.2 | 0.69 | 16.9 | 0.71 | 16.6 | 0.72 | 16.3 | 0.73 | 15.6 | 0.74 | 15.0 | 0.76 | 14.4 | 0.78 | 14.3 | 0.79 | 14.3 | 0.79 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX12B | BELT DRIVE



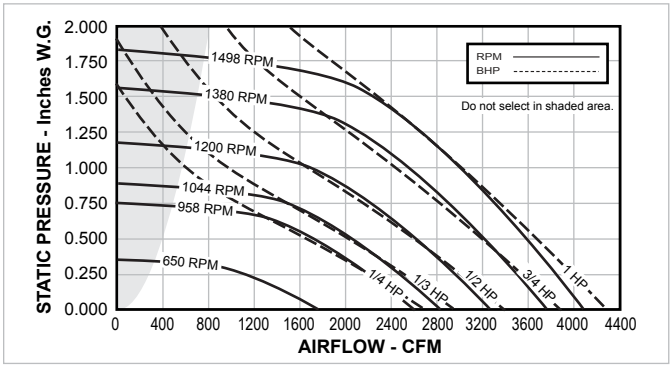

| |
|---|
| Galv. Steel Base = 16 Gage |
| Aluminum Base = 0.064” |
| Hood / Apron = 0.09” |
| Roof Opening = 16” SQ. |
| Damper Size = 15 ¾” SQ. |
| Max. Motor Frame Size = 56 |
| Peak BHP = (RPM/1617)³ |
| Max. RPM = 2000 (1 ½ HP) |
| Est. Ship Weight = 98 lbs. |



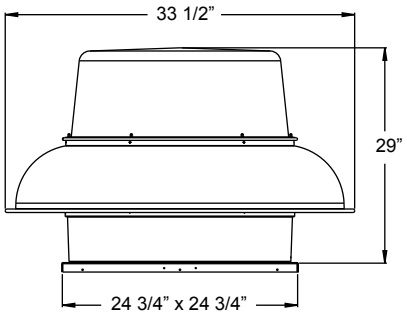

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 0.875” SP | | 1.000” SP | | 1.250” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 400 | 1662 | 780 | | - | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 2.9 | 0.01 | - | | - | | - | | - | | - | | - | | - | | - | | - | |
| | 500 | 2078 | 975 | | 654 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 4.9 | 0.02 | 4.2 | 0.03 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 600 | 2494 | 1170 | | 922 | | 538 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 7.1 | 0.04 | 6.6 | 0.05 | 6.1 | 0.05 | - | | - | | - | | - | | - | | - | | - | |
| | 700 | 2909 | 1365 | | 1151 | | 903 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 9.4 | 0.06 | 8.7 | 0.07 | 8.5 | 0.08 | - | | - | | - | | - | | - | | - | | - | |
| | 800 | 3325 | 1561 | | 1375 | | 1182 | | 929 | | - | | - | | - | | - | | - | | - | |
| | | | 11.0 | 0.09 | 10.2 | 0.11 | 10.0 | 0.12 | 9.6 | 0.12 | - | | - | | - | | - | | - | | - | |
| | 850 | 3533 | 1658 | | 1485 | | 1308 | | 1084 | | 769 | | - | | - | | - | | - | | - | |
| | | | 11.5 | 0.11 | 10.8 | 0.13 | 10.4 | 0.14 | 10.2 | 0.14 | 9.6 | 0.12 | - | | - | | - | | - | | - | |
| | 900 | 3740 | 1756 | | 1595 | | 1425 | | 1232 | | 985 | | - | | - | | - | | - | | - | |
| | | | 12.2 | 0.13 | 11.5 | 0.15 | 11.0 | 0.16 | 10.8 | 0.17 | 10.3 | 0.17 | - | | - | | - | | - | | - | |
| | 950 | 3948 | 1853 | | 1703 | | 1538 | | 1371 | | 1155 | | 858 | | - | | - | | - | | - | |
| | | | 12.9 | 0.16 | 12.3 | 0.17 | 11.6 | 0.18 | 11.4 | 0.19 | 11.0 | 0.20 | 10.4 | 0.19 | - | | - | | - | | - | |
| | 1000 | 4156 | 1951 | | 1811 | | 1650 | | 1499 | | 1308 | | 1076 | | 553 | | - | | - | | - | |
| | | | 13.3 | 0.18 | 12.8 | 0.20 | 12.1 | 0.21 | 11.7 | 0.22 | 11.4 | 0.23 | 11.1 | 0.23 | 10.1 | 0.19 | - | | - | | - | |
| | 1039 | 4318 | 2027 | | 1894 | | 1737 | | 1597 | | 1422 | | 1219 | | 930 | | - | | - | | - | |
| | | | 13.7 | 0.21 | 13.2 | 0.22 | 12.6 | 0.24 | 12.2 | 0.25 | 11.7 | 0.26 | 11.6 | 0.26 | 11.2 | 0.25 | - | | - | | - | |
| 1/3 | 1055 | 4385 | 2058 | | 1928 | | 1774 | | 1636 | | 1468 | | 1269 | | 1011 | | - | | - | | - | |
| | | | 13.8 | 0.21 | 13.4 | 0.23 | 12.8 | 0.25 | 12.4 | 0.26 | 11.9 | 0.27 | 11.7 | 0.28 | 11.5 | 0.27 | - | | - | | - | |
| | 1075 | 4468 | 2097 | | 1970 | | 1819 | | 1683 | | 1525 | | 1331 | | 1094 | | 524 | | - | | - | |
| | | | 14.1 | 0.23 | 13.6 | 0.24 | 13.1 | 0.26 | 12.6 | 0.27 | 12.2 | 0.28 | 12.0 | 0.29 | 11.8 | 0.29 | 10.8 | 0.23 | - | | - | |
| | 1100 | 4572 | 2146 | | 2023 | | 1875 | | 1740 | | 1591 | | 1408 | | 1197 | | 855 | | - | | - | |
| | | | 14.5 | 0.24 | 13.9 | 0.26 | 13.4 | 0.28 | 12.9 | 0.29 | 12.5 | 0.30 | 12.3 | 0.31 | 12.2 | 0.31 | 11.7 | 0.29 | - | | - | |
| | 1132 | 4705 | 2208 | | 2091 | | 1946 | | 1813 | | 1673 | | 1503 | | 1316 | | 1058 | | - | | - | |
| | | | 15.0 | 0.27 | 14.4 | 0.28 | 13.9 | 0.30 | 13.4 | 0.31 | 13.0 | 0.33 | 12.7 | 0.34 | 12.6 | 0.34 | 12.5 | 0.33 | - | | - | |
| 1/2 | 1150 | 4779 | 2244 | | 2128 | | 1986 | | 1854 | | 1719 | | 1556 | | 1373 | | 1136 | | 572 | | - | |
| | | | 15.3 | 0.28 | 14.7 | 0.29 | 14.2 | 0.31 | 13.7 | 0.33 | 13.3 | 0.34 | 12.9 | 0.35 | 12.9 | 0.36 | 12.9 | 0.35 | 12.0 | 0.28 | - | |
| | 1175 | 4883 | 2292 | | 2180 | | 2041 | | 1910 | | 1782 | | 1629 | | 1451 | | 1239 | | 906 | | - | |
| | | | 15.7 | 0.30 | 15.2 | 0.31 | 14.6 | 0.33 | 14.2 | 0.35 | 13.7 | 0.36 | 13.3 | 0.37 | 13.2 | 0.38 | 13.3 | 0.38 | 12.9 | 0.35 | - | |
| | 1200 | 4987 | 2341 | | 2231 | | 2096 | | 1966 | | 1844 | | 1700 | | 1527 | | 1341 | | 1076 | | - | |
| | | | 16.3 | 0.32 | 15.8 | 0.33 | 15.2 | 0.35 | 14.7 | 0.37 | 14.3 | 0.38 | 13.8 | 0.39 | 13.7 | 0.40 | 13.7 | 0.41 | 13.6 | 0.39 | - | |
| | 1250 | 5195 | 2439 | | 2333 | | 2206 | | 2077 | | 1963 | | 1831 | | 1676 | | 1507 | | 1300 | | - | |
| | | | 17.2 | 0.36 | 16.8 | 0.37 | 16.2 | 0.40 | 15.7 | 0.42 | 15.1 | 0.43 | 14.7 | 0.44 | 14.4 | 0.45 | 14.4 | 0.46 | 14.5 | 0.45 | - | |
| | 1275 | 5299 | 2488 | | 2384 | | 2260 | | 2134 | | 2021 | | 1895 | | 1749 | | 1585 | | 1402 | | - | |
| | | | 17.7 | 0.38 | 17.2 | 0.39 | 16.7 | 0.42 | 16.1 | 0.44 | 15.5 | 0.45 | 14.9 | 0.47 | 14.5 | 0.48 | 14.6 | 0.48 | 14.7 | 0.48 | - | |
| | 1302 | 5411 | 2540 | | 2439 | | 2319 | | 2195 | | 2082 | | 1963 | | 1827 | | 1668 | | 1503 | | 869 | |
| | | | 18.1 | 0.40 | 17.6 | 0.42 | 17.1 | 0.44 | 16.6 | 0.46 | 16.0 | 0.48 | 15.4 | 0.49 | 14.7 | 0.51 | 14.7 | 0.52 | 14.9 | 0.52 | 14.5 | 0.45 |
| 3/4 | 1325 | 5507 | 2585 | | 2486 | | 2369 | | 2247 | | 2134 | | 2021 | | 1891 | | 1736 | | 1576 | | 1106 | |
| | | | 18.5 | 0.43 | 18.0 | 0.44 | 17.5 | 0.46 | 17.0 | 0.49 | 16.4 | 0.50 | 15.8 | 0.52 | 15.2 | 0.53 | 14.8 | 0.54 | 15.0 | 0.55 | 15.1 | 0.51 |
| | 1350 | 5611 | 2634 | | 2536 | | 2423 | | 2303 | | 2190 | | 2083 | | 1956 | | 1810 | | 1654 | | 1248 | |
| | | | 18.9 | 0.45 | 18.4 | 0.47 | 17.9 | 0.49 | 17.4 | 0.51 | 16.8 | 0.53 | 16.3 | 0.54 | 15.7 | 0.56 | 15.2 | 0.57 | 15.1 | 0.58 | 15.6 | 0.56 |
| | 1400 | 5818 | 2731 | | 2637 | | 2530 | | 2414 | | 2302 | | 2201 | | 2084 | | 1955 | | 1807 | | 1463 | |
| | | | 19.9 | 0.50 | 19.4 | 0.52 | 18.8 | 0.54 | 18.3 | 0.57 | 17.7 | 0.59 | 17.2 | 0.60 | 16.7 | 0.62 | 16.1 | 0.63 | 15.9 | 0.64 | 16.2 | 0.64 |
| | 1425 | 5922 | 2780 | | 2688 | | 2584 | | 2469 | | 2357 | | 2258 | | 2147 | | 2026 | | 1882 | | 1566 | |
| | | | 20.0 | 0.53 | 19.9 | 0.55 | 19.3 | 0.57 | 18.7 | 0.60 | 18.2 | 0.62 | 17.7 | 0.63 | 17.2 | 0.65 | 16.6 | 0.66 | 16.2 | 0.67 | 16.3 | 0.68 |
| | 1450 | 6026 | 2829 | | 2738 | | 2637 | | 2524 | | 2413 | | 2315 | | 2210 | | 2092 | | 1955 | | 1663 | |
| | | | 21.0 | 0.56 | 20.0 | 0.58 | 19.9 | 0.60 | 19.3 | 0.62 | 18.7 | 0.65 | 18.2 | 0.66 | 17.6 | 0.68 | 17.1 | 0.69 | 16.6 | 0.70 | 16.6 | 0.72 |
| | 1497 | 6222 | 2921 | | 2833 | | 2737 | | 2627 | | 2520 | | 2421 | | 2327 | | 2212 | | 2091 | | 1811 | |
| | | | 22.0 | 0.61 | 21.0 | 0.63 | 21.0 | 0.65 | 20.0 | 0.68 | 19.7 | 0.71 | 19.2 | 0.72 | 18.7 | 0.74 | 18.1 | 0.75 | 17.5 | 0.77 | 17.3 | 0.79 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX14B | BELT DRIVE



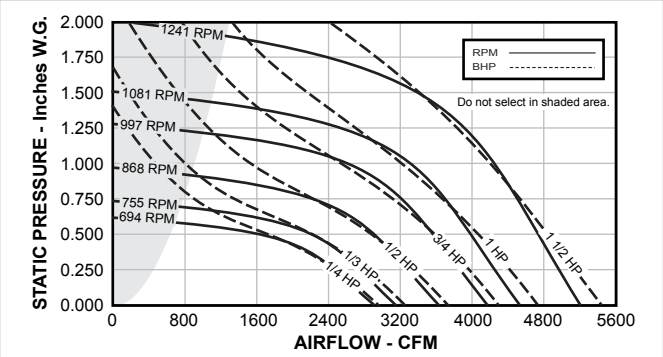

| |
|---|
| Galv. Steel Base = 16 Gage |
| Aluminum Base = 0.064” |
| Hood / Apron = 0.09” |
| Roof Opening = 16” SQ. |
| Damper Size = 15 ¾” SQ. |
| Max. Motor Frame Size = 56 |
| Peak BHP = (RPM/1493)$^3$ |
| Max. RPM = 1793 (1 ½ HP) |
| Est. Ship Weight = 98 lbs. |



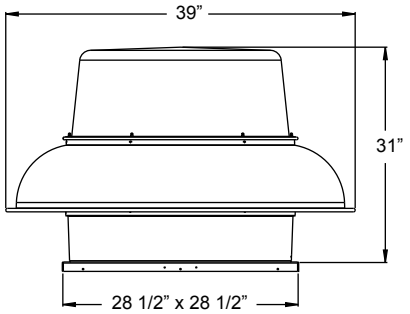

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 350 | 1455 | 952 | | - | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 1.6 | 0.01 | - | | - | | - | | - | | - | | - | | - | | - | | - | |
| | 400 | 1662 | 1088 | | 221 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 2.5 | 0.02 | 3.0 | 0.01 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 515 | 2140 | 1401 | | 994 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 4.8 | 0.04 | 4.5 | 0.04 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 680 | 2826 | 1849 | | 1582 | | 1212 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 7.3 | 0.08 | 6.7 | 0.09 | 6.0 | 0.09 | - | | - | | - | | - | | - | | - | | - | |
| | 842 | 3499 | 2290 | | 2077 | | 1835 | | 1522 | | 1104 | | - | | - | | - | | - | | - | |
| | | | 9.7 | 0.15 | 9.0 | 0.17 | 8.3 | 0.18 | 7.4 | 0.18 | 6.3 | 0.17 | - | | - | | - | | - | | - | |
| | 910 | 3782 | 2475 | | 2276 | | 2070 | | 1793 | | 1495 | | 831 | | - | | - | | - | | - | |
| | | | 10.7 | 0.19 | 10.1 | 0.21 | 9.5 | 0.22 | 8.8 | 0.23 | 7.6 | 0.22 | 6.9 | 0.18 | - | | - | | - | | - | |
| | 958 | 3982 | 2606 | | 2415 | | 2226 | | 1977 | | 1699 | | 1355 | | - | | - | | - | | - | |
| | | | 11.8 | 0.23 | 11.2 | 0.24 | 10.6 | 0.26 | 10.0 | 0.26 | 8.8 | 0.26 | 7.6 | 0.25 | - | | - | | - | | - | |
| 1/3 | 1000 | 4156 | 2720 | | 2536 | | 2360 | | 2135 | | 1870 | | 1588 | | 1033 | | - | | - | | - | |
| | | | 12.6 | 0.26 | 12.0 | 0.27 | 11.4 | 0.29 | 10.8 | 0.30 | 9.8 | 0.30 | 8.5 | 0.29 | 7.9 | 0.25 | - | | - | | - | |
| | 1020 | 4239 | 2774 | | 2593 | | 2424 | | 2208 | | 1949 | | 1684 | | 1250 | | - | | - | | - | |
| | | | 12.9 | 0.27 | 12.3 | 0.29 | 11.8 | 0.30 | 11.1 | 0.32 | 10.2 | 0.32 | 8.9 | 0.31 | 8.1 | 0.29 | - | | - | | - | |
| | 1044 | 4339 | 2840 | | 2662 | | 2499 | | 2292 | | 2044 | | 1788 | | 1445 | | - | | - | | - | |
| | | | 13.1 | 0.29 | 12.6 | 0.31 | 12.1 | 0.33 | 11.4 | 0.34 | 10.7 | 0.34 | 9.4 | 0.34 | 8.4 | 0.32 | - | | - | | - | |
| 1/2 | 1060 | 4405 | 2883 | | 2708 | | 2549 | | 2348 | | 2106 | | 1854 | | 1561 | | - | | - | | - | |
| | | | 13.4 | 0.31 | 12.8 | 0.32 | 12.4 | 0.34 | 11.7 | 0.35 | 11.0 | 0.36 | 9.8 | 0.35 | 8.7 | 0.34 | - | | - | | - | |
| | 1095 | 4551 | 2978 | | 2809 | | 2654 | | 2469 | | 2240 | | 1998 | | 1738 | | - | | - | | - | |
| | | | 14.2 | 0.34 | 13.7 | 0.35 | 13.2 | 0.37 | 12.6 | 0.39 | 11.9 | 0.39 | 10.7 | 0.39 | 9.5 | 0.38 | - | | - | | - | |
| | 1130 | 4696 | 3074 | | 2909 | | 2758 | | 2586 | | 2373 | | 2138 | | 1901 | | 610 | | - | | - | |
| | | | 15.2 | 0.37 | 14.6 | 0.39 | 14.1 | 0.41 | 13.6 | 0.42 | 12.8 | 0.43 | 11.9 | 0.43 | 10.5 | 0.43 | 9.3 | 0.25 | - | | - | |
| | 1160 | 4821 | 3155 | | 2995 | | 2847 | | 2683 | | 2484 | | 2257 | | 2027 | | 1251 | | - | | - | |
| | | | 16.0 | 0.40 | 15.5 | 0.42 | 15.1 | 0.44 | 14.5 | 0.46 | 13.8 | 0.47 | 12.9 | 0.47 | 11.5 | 0.46 | 9.8 | 0.40 | - | | - | |
| | 1190 | 4946 | 3237 | | 3081 | | 2936 | | 2780 | | 2592 | | 2373 | | 2150 | | 1556 | | - | | - | |
| | | | 17.0 | 0.44 | 16.4 | 0.45 | 16.0 | 0.47 | 15.5 | 0.49 | 14.8 | 0.50 | 14.0 | 0.51 | 12.6 | 0.50 | 10.4 | 0.47 | - | | - | |
| | 1200 | 4987 | 3264 | | 3109 | | 2965 | | 2812 | | 2627 | | 2412 | | 2191 | | 1629 | | - | | - | |
| | | | 17.3 | 0.45 | 16.8 | 0.46 | 16.3 | 0.48 | 15.8 | 0.50 | 15.1 | 0.52 | 14.4 | 0.52 | 12.9 | 0.52 | 10.6 | 0.49 | - | | - | |
| 3/4 | 1218 | 5062 | 3313 | | 3160 | | 3018 | | 2869 | | 2690 | | 2481 | | 2263 | | 1759 | | - | | - | |
| | | | 17.7 | 0.47 | 17.2 | 0.48 | 16.7 | 0.50 | 16.2 | 0.52 | 15.6 | 0.54 | 14.8 | 0.54 | 13.5 | 0.54 | 11.0 | 0.52 | - | | - | |
| | 1285 | 5341 | 3495 | | 3351 | | 3213 | | 3081 | | 2921 | | 2733 | | 2528 | | 2105 | | 1072 | | - | |
| | | | 18.5 | 0.55 | 18.0 | 0.56 | 17.5 | 0.58 | 17.1 | 0.61 | 16.5 | 0.63 | 15.8 | 0.64 | 15.1 | 0.40 | 12.6 | 0.62 | 11.8 | 0.47 | - | |
| | 1315 | 5465 | 3577 | | 3435 | | 3300 | | 3173 | | 3019 | | 2844 | | 2644 | | 2238 | | 1594 | | - | |
| | | | 18.7 | 0.59 | 18.2 | 0.60 | 17.7 | 0.62 | 17.3 | 0.65 | 16.8 | 0.67 | 16.2 | 0.68 | 15.5 | 0.68 | 13.3 | 0.67 | 12.2 | 0.62 | - | |
| | 1345 | 5590 | 3659 | | 3520 | | 3387 | | 3262 | | 3116 | | 2949 | | 2759 | | 2363 | | 1845 | | - | |
| | | | 19.0 | 0.63 | 18.5 | 0.65 | 18.1 | 0.67 | 17.7 | 0.69 | 17.2 | 0.71 | 16.6 | 0.73 | 16.0 | 0.73 | 14.0 | 0.72 | 12.5 | 0.69 | - | |
| | 1380 | 5735 | 3754 | | 3619 | | 3488 | | 3367 | | 3229 | | 3071 | | 2891 | | 2507 | | 2080 | | 699 | |
| | | | 19.5 | 0.68 | 19.1 | 0.70 | 18.6 | 0.72 | 18.2 | 0.74 | 17.8 | 0.76 | 17.2 | 0.78 | 16.6 | 0.79 | 14.9 | 0.79 | 13.1 | 0.76 | 12.9 | 0.45 |
| 1 | 1400 | 5818 | 3808 | | 3675 | | 3546 | | 3426 | | 3293 | | 3140 | | 2966 | | 2587 | | 2178 | | 939 | |
| | | | 19.9 | 0.71 | 19.4 | 0.73 | 19.0 | 0.75 | 18.6 | 0.77 | 18.2 | 0.79 | 17.6 | 0.81 | 17.0 | 0.82 | 15.5 | 0.82 | 13.6 | 0.80 | 13.2 | 0.53 |
| | 1425 | 5922 | 3876 | | 3746 | | 3617 | | 3500 | | 3372 | | 3226 | | 3059 | | 2687 | | 2298 | | 1579 | |
| | | | 20.0 | 0.75 | 20.0 | 0.77 | 19.5 | 0.79 | 19.2 | 0.81 | 18.8 | 0.83 | 18.2 | 0.86 | 17.6 | 0.87 | 16.2 | 0.87 | 14.3 | 0.85 | 13.6 | 0.76 |
| | 1450 | 6026 | 3944 | | 3816 | | 3689 | | 3574 | | 3451 | | 3309 | | 3149 | | 3786 | | 2417 | | 1848 | |
| | | | 21.0 | 0.79 | 21.0 | 0.81 | 20.0 | 0.83 | 19.7 | 0.85 | 19.3 | 0.87 | 18.8 | 0.90 | 18.2 | 0.91 | 16.8 | 0.91 | 15.0 | 0.90 | 14.0 | 0.85 |
| | 1475 | 6130 | 4012 | | 3886 | | 3761 | | 3647 | | 3530 | | 3391 | | 3236 | | 2885 | | 2523 | | 2033 | |
| | | | 22.0 | 0.83 | 21.0 | 0.85 | 21.0 | 0.87 | 20.0 | 0.89 | 19.8 | 0.92 | 19.3 | 0.94 | 18.8 | 0.96 | 17.5 | 0.96 | 15.7 | 0.95 | 14.2 | 0.91 |
| | 1498 | 6226 | 4075 | | 3951 | | 3826 | | 3714 | | 3602 | | 3465 | | 3317 | | 2974 | | 2618 | | 2200 | |
| | | | 22.0 | 0.87 | 22.0 | 0.89 | 21.0 | 0.91 | 21.0 | 0.93 | 20.0 | 0.96 | 19.8 | 0.98 | 19.3 | 1.00 | 18.1 | 1.01 | 16.3 | 1.00 | 14.6 | 0.97 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX16B | BELT DRIVE



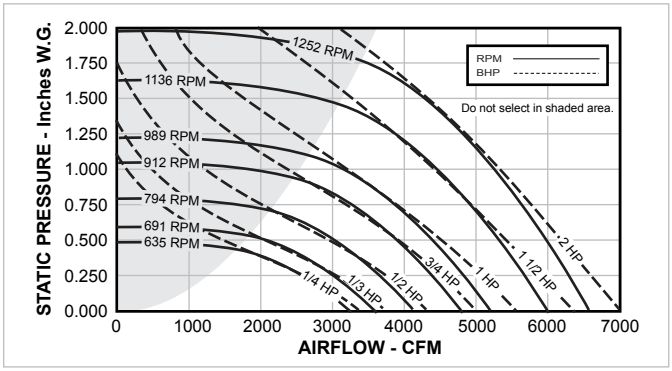

| |
|---|
| Galv. Steel Base = 14 Gage |
| Aluminum Base = 0.08” |
| Discharge Apron = 0.064” |
| Hood = 0.08” |
| Roof Opening = 20” SQ. |
| Damper Size = 19 ¾” SQ. |
| Max. Motor Frame Size = 145T |
| Peak BHP = (RPM/1078)$^3$ |
| Max. RPM = 1631 (3 HP) |
| Est. Ship Weight = 131 lbs. |



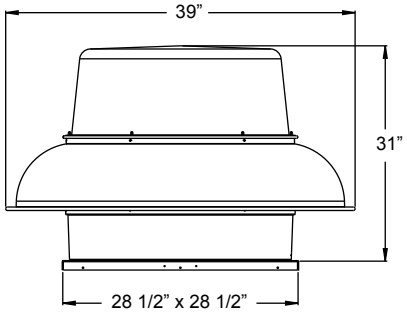

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 300 | 1468 | 1248 | | - | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 3.1 | 0.02 | - | | - | | - | | - | | - | | - | | - | | - | | - | |
| | 450 | 2202 | 1873 | | 1531 | | 511 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 5.2 | 0.06 | 4.5 | 0.07 | 4.4 | 0.05 | - | | - | | - | | - | | - | | - | | - | |
| | 600 | 2936 | 2497 | | 2250 | | 1980 | | 1465 | | - | | - | | - | | - | | - | | - | |
| | | | 8.8 | 0.15 | 8.3 | 0.16 | 7.9 | 0.17 | 7.4 | 0.16 | - | | - | | - | | - | | - | | - | |
| | 650 | 3180 | 2705 | | 2478 | | 2233 | | 1935 | | 1029 | | - | | - | | - | | - | | - | |
| | | | 9.7 | 0.19 | 9.1 | 0.20 | 8.8 | 0.21 | 8.5 | 0.22 | 7.8 | 0.17 | - | | - | | - | | - | | - | |
| | 694 | 3395 | 2889 | | 2677 | | 2450 | | 2212 | | 1707 | | - | | - | | - | | - | | - | |
| | | | 10.4 | 0.23 | 10.0 | 0.24 | 9.7 | 0.26 | 9.3 | 0.27 | 8.8 | 0.25 | - | | - | | - | | - | | - | |
| 1/3 | 715 | 3498 | 2976 | | 2772 | | 2552 | | 2323 | | 1948 | | 907 | | - | | - | | - | | - | |
| | | | 10.9 | 0.25 | 10.5 | 0.27 | 10.1 | 0.28 | 9.8 | 0.29 | 9.2 | 0.29 | 8.9 | 0.20 | - | | - | | - | | - | |
| | 735 | 3596 | 3059 | | 2861 | | 2648 | | 2426 | | 2120 | | 1302 | | - | | - | | - | | - | |
| | | | 11.5 | 0.27 | 11.0 | 0.29 | 10.6 | 0.30 | 10.2 | 0.31 | 9.7 | 0.32 | 9.2 | 0.26 | - | | - | | - | | - | |
| | 755 | 3694 | 3142 | | 2950 | | 2744 | | 2528 | | 2266 | | 1620 | | - | | - | | - | | - | |
| | | | 11.9 | 0.30 | 11.6 | 0.31 | 11.1 | 0.33 | 10.7 | 0.34 | 10.3 | 0.34 | 9.7 | 0.31 | - | | - | | - | | - | |
| 1/2 | 775 | 3792 | 3226 | | 3039 | | 2839 | | 2629 | | 2397 | | 1897 | | 766 | | - | | - | | - | |
| | | | 12.3 | 0.32 | 11.9 | 0.34 | 11.6 | 0.35 | 11.2 | 0.36 | 10.7 | 0.37 | 10.1 | 0.35 | 9.9 | 0.22 | - | | - | | - | |
| | 800 | 3914 | 3330 | | 3150 | | 2957 | | 2755 | | 2546 | | 2183 | | 1334 | | - | | - | | - | |
| | | | 12.8 | 0.35 | 12.4 | 0.37 | 12.0 | 0.38 | 11.7 | 0.40 | 11.3 | 0.41 | 10.6 | 0.40 | 10.3 | 0.40 | - | | - | | - | |
| | 825 | 4036 | 3434 | | 3259 | | 3073 | | 2878 | | 2679 | | 2396 | | 1744 | | - | | - | | - | |
| | | | 13.3 | 0.39 | 12.9 | 0.40 | 12.5 | 0.42 | 12.2 | 0.43 | 11.8 | 0.45 | 11.2 | 0.45 | 10.7 | 0.40 | - | | - | | - | |
| | 850 | 4159 | 3538 | | 3368 | | 3188 | | 3001 | | 2808 | | 2575 | | 2091 | | - | | - | | - | |
| | | | 13.8 | 0.42 | 13.5 | 0.44 | 13.1 | 0.46 | 12.7 | 0.47 | 12.3 | 0.49 | 11.9 | 0.49 | 11.2 | 0.46 | - | | - | | - | |
| | 868 | 4247 | 3613 | | 3447 | | 3271 | | 3088 | | 2900 | | 2690 | | 2314 | | - | | - | | - | |
| | | | 14.3 | 0.45 | 13.9 | 0.47 | 13.5 | 0.49 | 13.2 | 0.50 | 12.8 | 0.51 | 12.3 | 0.52 | 11.6 | 0.51 | - | | - | | - | |
| 3/4 | 895 | 4379 | 3725 | | 3564 | | 3395 | | 3218 | | 3037 | | 2850 | | 2556 | | 887 | | - | | - | |
| | | | 15.0 | 0.49 | 14.6 | 0.51 | 14.2 | 0.53 | 13.9 | 0.55 | 13.5 | 0.56 | 13.0 | 0.57 | 12.4 | 0.57 | 11.9 | 0.35 | - | | - | |
| | 925 | 4526 | 3850 | | 3694 | | 3531 | | 3362 | | 3187 | | 3009 | | 2778 | | 1563 | | - | | - | |
| | | | 15.8 | 0.54 | 15.4 | 0.56 | 15.0 | 0.58 | 14.7 | 0.60 | 14.3 | 0.62 | 13.9 | 0.63 | 13.3 | 0.63 | 12.5 | 0.50 | - | | - | |
| | 950 | 4648 | 3954 | | 3803 | | 3644 | | 3481 | | 3311 | | 3138 | | 2941 | | 1974 | | - | | - | |
| | | | 16.5 | 0.59 | 16.1 | 0.61 | 15.8 | 0.63 | 15.4 | 0.65 | 15.0 | 0.66 | 15.0 | 0.68 | 14.2 | 0.69 | 13.1 | 0.60 | - | | - | |
| | 975 | 4770 | 4058 | | 3911 | | 3757 | | 3599 | | 3433 | | 3266 | | 3090 | | 2331 | | - | | - | |
| | | | 17.1 | 0.64 | 16.7 | 0.66 | 16.4 | 0.68 | 16.0 | 0.70 | 15.7 | 0.71 | 15.3 | 0.73 | 14.8 | 0.74 | 13.6 | 0.69 | - | | - | |
| | 997 | 4878 | 4150 | | 4005 | | 3856 | | 3701 | | 3540 | | 3377 | | 3212 | | 2608 | | - | | - | |
| | | | 17.4 | 0.68 | 17.1 | 0.70 | 16.7 | 0.72 | 16.4 | 0.74 | 16.0 | 0.76 | 15.7 | 0.78 | 15.2 | 0.79 | 13.9 | 0.77 | - | | - | |
| 1 | 1025 | 5015 | 4266 | | 4126 | | 3982 | | 3831 | | 3676 | | 3518 | | 3357 | | 2880 | | 1573 | | - | |
| | | | 17.9 | 0.74 | 17.6 | 0.76 | 17.2 | 0.78 | 16.9 | 0.80 | 16.5 | 0.82 | 16.2 | 0.84 | 15.8 | 0.85 | 14.6 | 0.86 | 14.1 | 0.65 | - | |
| | 1055 | 5162 | 4391 | | 4255 | | 4116 | | 3969 | | 3820 | | 3667 | | 3511 | | 3115 | | 2100 | | - | |
| | | | 18.5 | 0.81 | 18.1 | 0.83 | 17.8 | 0.85 | 17.4 | 0.87 | 17.1 | 0.89 | 16.7 | 0.91 | 16.3 | 0.93 | 15.4 | 0.94 | 14.4 | 0.81 | - | |
| | 1081 | 5289 | 4500 | | 4366 | | 4231 | | 4088 | | 3943 | | 3794 | | 3643 | | 3299 | | 2484 | | - | |
| | | | 18.9 | 0.87 | 18.6 | 0.89 | 18.3 | 0.92 | 17.9 | 0.94 | 17.6 | 0.96 | 17.2 | 0.97 | 16.8 | 0.99 | 15.9 | 1.01 | 14.7 | 0.93 | - | |
| 1 1/2 | 1115 | 5455 | 4641 | | 4512 | | 4382 | | 4244 | | 4104 | | 3960 | | 3814 | | 3504 | | 2920 | | 1562 | |
| | | | 19.8 | 0.95 | 19.4 | 0.98 | 19.1 | 1.00 | 18.7 | 1.02 | 18.4 | 1.04 | 18.1 | 1.06 | 17.6 | 1.08 | 16.7 | 1.11 | 15.3 | 1.08 | 15.1 | 0.80 |
| | 1150 | 5626 | 4787 | | 4662 | | 4536 | | 4403 | | 4268 | | 4129 | | 3989 | | 3703 | | 3256 | | 2209 | |
| | | | 21.0 | 1.04 | 20.0 | 1.07 | 20.0 | 1.10 | 19.7 | 1.12 | 19.3 | 1.14 | 19.0 | 1.16 | 18.6 | 1.18 | 17.7 | 1.21 | 16.5 | 1.21 | 15.6 | 1.03 |
| | 1180 | 5773 | 4912 | | 4790 | | 4668 | | 4538 | | 4407 | | 4273 | | 4136 | | 3858 | | 3486 | | 2664 | |
| | | | 22.0 | 1.13 | 21.0 | 1.16 | 21.0 | 1.18 | 21.0 | 1.21 | 20.0 | 1.23 | 19.8 | 1.25 | 19.4 | 1.27 | 18.6 | 1.30 | 17.5 | 1.32 | 16.2 | 1.19 |
| | 1210 | 5920 | 5037 | | 4918 | | 4798 | | 4673 | | 4546 | | 4416 | | 4282 | | 4012 | | 3698 | | 3056 | |
| | | | 22.0 | 1.22 | 22.0 | 1.24 | 22.0 | 1.27 | 21.0 | 1.30 | 21.0 | 1.32 | 21.0 | 1.34 | 20.0 | 1.36 | 19.3 | 1.40 | 18.4 | 1.42 | 16.8 | 1.36 |
| | 1241 | 6072 | 5166 | | 5050 | | 4933 | | 4812 | | 4688 | | 4563 | | 4432 | | 4170 | | 3884 | | 3398 | |
| | | | 23.0 | 1.31 | 23.0 | 1.34 | 22.0 | 1.37 | 22.0 | 1.39 | 22.0 | 1.42 | 21.0 | 1.44 | 21.0 | 1.46 | 20.0 | 1.50 | 19.1 | 1.53 | 17.8 | 1.51 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX18B | BELT DRIVE



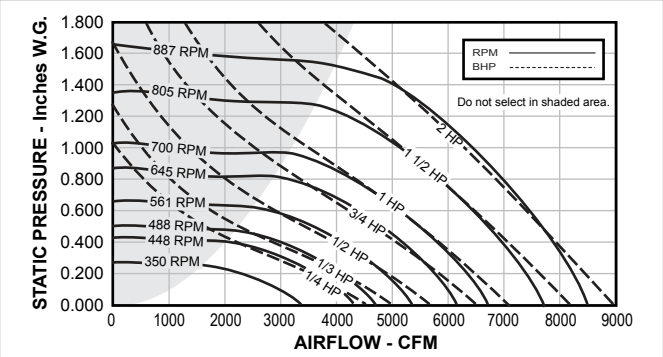

| |
|---|
| Galv. Steel Base = 14 Gage |
| Aluminum Base = 0.08” |
| Discharge Apron = 0.064” |
| Hood = 0.08” |
| Roof Opening = 20” SQ. |
| Damper Size = 19 ¾” SQ. |
| Max. Motor Frame Size = 145T |
| Peak BHP = (RPM/986)$^3$ |
| Max. RPM = 1326 (2 HP) |
| Est. Ship Weight = 132 lbs. |



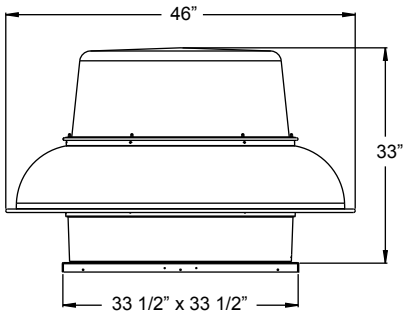

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 375 | 1988 | 1975 | | 1402 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 3.9 | 0.04 | 3.6 | 0.05 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 549 | 2910 | 2892 | | 2531 | | 2138 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 8.0 | 0.14 | 7.7 | 0.16 | 7.1 | 0.17 | - | | - | | - | | - | | - | | - | | - | |
| | 590 | 3128 | 3108 | | 2774 | | 2417 | | 1746 | | - | | - | | - | | - | | - | | - | |
| | | | 8.9 | 0.18 | 8.5 | 0.20 | 7.9 | 0.21 | 7.4 | 0.20 | - | | - | | - | | - | | - | | - | |
| | 635 | 3366 | 3345 | | 3037 | | 2711 | | 2291 | | - | | - | | - | | - | | - | | - | |
| | | | 10.1 | 0.22 | 9.7 | 0.24 | 9.1 | 0.26 | 8.3 | 0.26 | - | | - | | - | | - | | - | | - | |
| 1/3 | 655 | 3472 | 3450 | | 3153 | | 2838 | | 2478 | | 1493 | | - | | - | | - | | - | | - | |
| | | | 10.4 | 0.24 | 10.0 | 0.26 | 9.4 | 0.28 | 8.7 | 0.29 | 8.2 | 0.24 | - | | - | | - | | - | | - | |
| | 675 | 3578 | 3555 | | 3268 | | 2963 | | 2638 | | 1913 | | - | | - | | - | | - | | - | |
| | | | 10.7 | 0.26 | 10.3 | 0.29 | 9.8 | 0.31 | 9.1 | 0.32 | 8.4 | 0.30 | - | | - | | - | | - | | - | |
| | 691 | 3663 | 3640 | | 3360 | | 3062 | | 2751 | | 2162 | | - | | - | | - | | - | | - | |
| | | | 10.9 | 0.28 | 10.5 | 0.31 | 10.1 | 0.33 | 9.3 | 0.34 | 8.5 | 0.34 | - | | - | | - | | - | | - | |
| 1/2 | 715 | 3791 | 3766 | | 3497 | | 3209 | | 2911 | | 2456 | | - | | - | | - | | - | | - | |
| | | | 11.4 | 0.31 | 11.0 | 0.34 | 10.5 | 0.36 | 9.8 | 0.38 | 9.0 | 0.37 | - | | - | | - | | - | | - | |
| | 740 | 3923 | 3898 | | 3639 | | 3361 | | 3075 | | 2712 | | 1852 | | - | | - | | - | | - | |
| | | | 12.1 | 0.35 | 11.7 | 0.37 | 11.2 | 0.39 | 10.4 | 0.41 | 9.7 | 0.42 | 9.1 | 0.37 | - | | - | | - | | - | |
| | 770 | 4082 | 4056 | | 3808 | | 3542 | | 3271 | | 2974 | | 2383 | | - | | - | | - | | - | |
| | | | 13.1 | 0.39 | 12.7 | 0.42 | 12.2 | 0.44 | 11.5 | 0.46 | 10.6 | 0.48 | 9.7 | 0.46 | - | | - | | - | | - | |
| | 794 | 4209 | 4182 | | 3943 | | 3685 | | 3424 | | 3150 | | 2684 | | 1604 | | - | | - | | - | |
| | | | 14.2 | 0.43 | 13.7 | 0.46 | 13.2 | 0.48 | 12.5 | 0.50 | 11.6 | 0.52 | 10.6 | 0.51 | 10.3 | 0.41 | - | | - | | - | |
| 3/4 | 825 | 4374 | 4345 | | 4115 | | 3868 | | 3618 | | 3357 | | 3010 | | 2313 | | - | | - | | - | |
| | | | 15.2 | 0.48 | 14.8 | 0.51 | 14.2 | 0.53 | 13.7 | 0.56 | 12.6 | 0.58 | 11.6 | 0.58 | 10.8 | 0.54 | - | | - | | - | |
| | 855 | 4533 | 4503 | | 4281 | | 4045 | | 3804 | | 3555 | | 3278 | | 2763 | | - | | - | | - | |
| | | | 15.5 | 0.53 | 15.1 | 0.57 | 14.6 | 0.59 | 14.1 | 0.62 | 13.2 | 0.64 | 12.2 | 0.65 | 11.2 | 0.64 | - | | - | | - | |
| | 885 | 4692 | 4662 | | 4447 | | 4220 | | 3987 | | 3750 | | 3504 | | 3107 | | - | | - | | - | |
| | | | 16.3 | 0.59 | 15.9 | 0.63 | 15.4 | 0.65 | 14.9 | 0.68 | 14.1 | 0.70 | 13.3 | 0.72 | 12.3 | 0.71 | - | | - | | - | |
| | 912 | 4835 | 4804 | | 4595 | | 4376 | | 4151 | | 3923 | | 3684 | | 3376 | | 1675 | | - | | - | |
| | | | 17.1 | 0.65 | 16.8 | 0.68 | 16.3 | 0.71 | 15.8 | 0.74 | 15.1 | 0.76 | 14.3 | 0.78 | 13.4 | 0.78 | 12.3 | 0.59 | - | | - | |
| 1 | 930 | 4930 | 4899 | | 4694 | | 4480 | | 4259 | | 4036 | | 3803 | | 3536 | | 2206 | | - | | - | |
| | | | 17.8 | 0.69 | 17.4 | 0.72 | 17.0 | 0.75 | 16.5 | 0.78 | 15.9 | 0.81 | 15.0 | 0.83 | 14.1 | 0.84 | 12.8 | 0.72 | - | | - | |
| | 965 | 5116 | 5083 | | 4886 | | 4682 | | 4469 | | 4255 | | 4034 | | 3806 | | 2875 | | - | | - | |
| | | | 18.9 | 0.77 | 18.7 | 0.81 | 18.3 | 0.84 | 17.8 | 0.86 | 17.3 | 0.89 | 16.5 | 0.92 | 15.7 | 0.94 | 13.8 | 0.90 | - | | - | |
| | 989 | 5243 | 5209 | | 5017 | | 4819 | | 4612 | | 4403 | | 4190 | | 3969 | | 3213 | | - | | - | |
| | | | 19.9 | 0.82 | 19.6 | 0.87 | 19.2 | 0.90 | 18.7 | 0.92 | 18.2 | 0.95 | 17.5 | 0.98 | 16.7 | 1.00 | 14.9 | 0.99 | - | | - | |
| 1 1/2 | 1030 | 5460 | 5425 | | 5241 | | 5053 | | 4853 | | 4653 | | 4451 | | 4240 | | 3671 | | 2215 | | - | |
| | | | 21.0 | 0.93 | 21.0 | 0.97 | 20.0 | 1.01 | 19.9 | 1.04 | 19.5 | 1.07 | 18.9 | 1.10 | 18.0 | 1.12 | 16.5 | 1.12 | 15.5 | 0.92 | - | |
| | 1065 | 5646 | 5610 | | 5431 | | 5251 | | 5058 | | 4865 | | 4671 | | 4470 | | 4006 | | 2984 | | - | |
| | | | 22.0 | 1.03 | 21.0 | 1.07 | 21.0 | 1.12 | 21.0 | 1.14 | 20.0 | 1.17 | 19.5 | 1.20 | 18.7 | 1.23 | 17.3 | 1.25 | 15.9 | 1.17 | - | |
| | 1100 | 5832 | 5794 | | 5621 | | 5448 | | 5262 | | 5075 | | 4887 | | 4697 | | 4291 | | 3517 | | - | |
| | | | 22.0 | 1.13 | 22.0 | 1.18 | 22.0 | 1.23 | 21.0 | 1.25 | 21.0 | 1.28 | 20.0 | 1.31 | 19.5 | 1.34 | 18.1 | 1.39 | 16.5 | 1.36 | - | |
| | 1136 | 6022 | 5984 | | 5816 | | 5649 | | 5470 | | 5289 | | 5108 | | 4925 | | 4543 | | 3945 | | 2625 | |
| | | | 23.0 | 1.25 | 23.0 | 1.30 | 22.0 | 1.34 | 22.0 | 1.34 | 22.0 | 1.37 | 21.0 | 1.44 | 21.0 | 1.47 | 19.2 | 1.52 | 17.7 | 1.49 | 16.8 | 1.29 |
| 2 | 1175 | 6229 | 6189 | | 6027 | | 5865 | | 5694 | | 5520 | | 5345 | | 5169 | | 4802 | | 4336 | | 3414 | |
| | | | 24.0 | 1.38 | 24.0 | 1.43 | 24.0 | 1.48 | 23.0 | 1.51 | 23.0 | 1.54 | 22.0 | 1.57 | 22.0 | 1.61 | 20.0 | 1.67 | 19.1 | 1.67 | 17.6 | 1.60 |
| | 1200 | 6362 | 6321 | | 6162 | | 6004 | | 5838 | | 5667 | | 5495 | | 5323 | | 4967 | | 4560 | | 3786 | |
| | | | 25.0 | 1.47 | 25.0 | 1.52 | 24.0 | 1.57 | 24.0 | 1.61 | 23.0 | 1.64 | 23.0 | 1.67 | 23.0 | 1.71 | 21.0 | 1.77 | 20.0 | 1.80 | 18.3 | 1.77 |
| | 1225 | 6494 | 6453 | | 6297 | | 6142 | | 5980 | | 5813 | | 5645 | | 5477 | | 5153 | | 4763 | | 4100 | |
| | | | 25.0 | 1.57 | 25.0 | 1.62 | 25.0 | 1.67 | 25.0 | 1.71 | 24.0 | 1.74 | 24.0 | 1.77 | 23.0 | 1.81 | 22.0 | 1.87 | 21.0 | 1.93 | 19.6 | 1.88 |
| | 1252 | 6637 | 6595 | | 6443 | | 6291 | | 6134 | | 5970 | | 5806 | | 5641 | | 5307 | | 4958 | | 4399 | |
| | | | 26.0 | 1.67 | 26.0 | 1.73 | 26.0 | 1.78 | 26.0 | 1.82 | 25.0 | 1.85 | 25.0 | 1.88 | 24.0 | 1.92 | 23.0 | 1.99 | 22.0 | 2.05 | 21.0 | 2.00 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX24B | BELT DRIVE



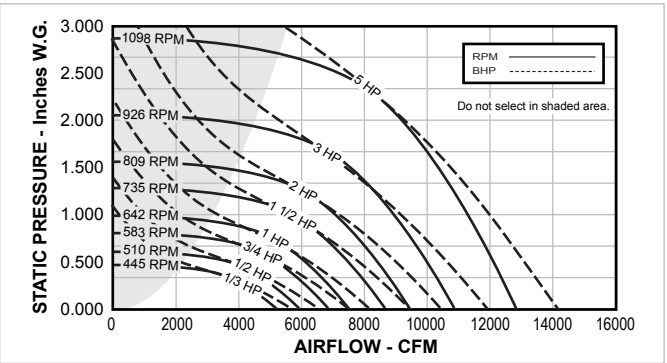

| |
|---|
| Galv. Steel Base = 14 Gage |
| Aluminum Base = 0.08” |
| Discharge Apron = 0.064” |
| Hood = 0.08” |
| Roof Opening = 25” SQ. |
| Damper Size = 24 ¾” SQ. |
| Max. Motor Frame Size = 184T |
| Peak BHP = (RPM/700)³ |
| Max. RPM = 1275 (5 HP) |
| Est. Ship Weight = 183 lbs. |



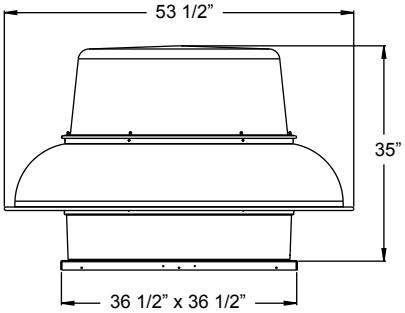

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/4 | 265 | 1719 | 2547 | | 1450 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 3.1 | 0.05 | 1.4 | 0.05 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 399 | 2589 | 3835 | | 3315 | | 2531 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 7.6 | 0.15 | 7.0 | 0.18 | 5.5 | 0.18 | - | | - | | - | | - | | - | | - | | - | |
| | 430 | 2790 | 4133 | | 3675 | | 2998 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 8.2 | 0.19 | 7.6 | 0.22 | 6.9 | 0.23 | - | | - | | - | | - | | - | | - | | - | |
| | 448 | 2906 | 4306 | | 3873 | | 3251 | | 2278 | | - | | - | | - | | - | | - | | - | |
| | | | 8.6 | 0.22 | 7.9 | 0.25 | 7.3 | 0.26 | 4.7 | 0.24 | - | | - | | - | | - | | - | | - | |
| 1/3 | 460 | 2984 | 4421 | | 4003 | | 3407 | | 2534 | | - | | - | | - | | - | | - | | - | |
| | | | 8.9 | 0.24 | 8.2 | 0.27 | 7.6 | 0.28 | 5.2 | 0.27 | - | | - | | - | | - | | - | | - | |
| | 475 | 3082 | 4565 | | 4164 | | 3600 | | 2837 | | - | | - | | - | | - | | - | | - | |
| | | | 9.3 | 0.26 | 8.7 | 0.29 | 8.0 | 0.31 | 6.1 | 0.30 | - | | - | | - | | - | | - | | - | |
| | 488 | 3166 | 4690 | | 4303 | | 3766 | | 3087 | | - | | - | | - | | - | | - | | - | |
| | | | 9.7 | 0.28 | 9.1 | 0.32 | 8.4 | 0.34 | 6.9 | 0.33 | - | | - | | - | | - | | - | | - | |
| 1/2 | 520 | 3374 | 4998 | | 4643 | | 4163 | | 3575 | | 2688 | | - | | - | | - | | - | | - | |
| | | | 10.6 | 0.34 | 10.0 | 0.38 | 9.3 | 0.40 | 8.4 | 0.41 | 5.9 | 0.38 | - | | - | | - | | - | | - | |
| | 530 | 3438 | 5094 | | 4749 | | 4283 | | 3721 | | 2901 | | - | | - | | - | | - | | - | |
| | | | 10.8 | 0.36 | 10.2 | 0.40 | 9.5 | 0.42 | 8.8 | 0.43 | 6.5 | 0.41 | - | | - | | - | | - | | - | |
| | 540 | 3503 | 5190 | | 4854 | | 4402 | | 3865 | | 3107 | | - | | - | | - | | - | | - | |
| | | | 11.0 | 0.38 | 10.5 | 0.42 | 9.7 | 0.45 | 9.0 | 0.46 | 7.0 | 0.43 | - | | - | | - | | - | | - | |
| | 561 | 3640 | 5392 | | 5075 | | 4650 | | 4142 | | 3517 | | - | | - | | - | | - | | - | |
| | | | 11.6 | 0.43 | 11.0 | 0.47 | 10.4 | 0.49 | 9.6 | 0.51 | 8.2 | 0.50 | - | | - | | - | | - | | - | |
| 3/4 | 600 | 3893 | 5767 | | 5473 | | 5104 | | 4642 | | 4122 | | 3399 | | - | | - | | - | | - | |
| | | | 13.1 | 0.52 | 12.6 | 0.57 | 11.9 | 0.59 | 11.2 | 0.62 | 10.3 | 0.62 | 8.2 | 0.59 | - | | - | | - | | - | |
| | 625 | 4055 | 6007 | | 5726 | | 5384 | | 4955 | | 4484 | | 3890 | | 2988 | | - | | - | | - | |
| | | | 14.3 | 0.59 | 13.7 | 0.64 | 13.0 | 0.67 | 12.3 | 0.70 | 11.6 | 0.71 | 9.9 | 0.69 | 8.2 | 0.64 | - | | - | | - | |
| | 645 | 4185 | 6200 | | 5926 | | 5601 | | 5196 | | 4747 | | 4226 | | 3466 | | - | | - | | - | |
| | | | 14.5 | 0.65 | 14.0 | 0.71 | 13.4 | 0.73 | 12.6 | 0.76 | 11.9 | 0.78 | 10.8 | 0.76 | 8.8 | 0.73 | - | | - | | - | |
| 1 | 663 | 4301 | 6373 | | 6107 | | 5795 | | 5411 | | 4980 | | 4493 | | 3838 | | - | | - | | - | |
| | | | 14.7 | 0.71 | 14.2 | 0.76 | 13.7 | 0.79 | 13.0 | 0.82 | 12.3 | 0.85 | 11.4 | 0.84 | 9.7 | 0.80 | - | | - | | - | |
| | 675 | 4379 | 6488 | | 6227 | | 5924 | | 5553 | | 5134 | | 4669 | | 4075 | | - | | - | | - | |
| | | | 15.0 | 0.75 | 14.5 | 0.80 | 13.9 | 0.84 | 13.1 | 0.86 | 12.6 | 0.89 | 11.8 | 0.89 | 10.3 | 0.86 | - | | - | | - | |
| | 685 | 4444 | 6584 | | 6327 | | 6031 | | 5671 | | 5261 | | 4815 | | 4268 | | - | | - | | - | |
| | | | 15.2 | 0.78 | 14.7 | 0.84 | 14.1 | 0.87 | 13.5 | 0.90 | 12.8 | 0.93 | 12.1 | 0.93 | 10.8 | 0.90 | - | | - | | - | |
| | 700 | 4541 | 6728 | | 6477 | | 6191 | | 5847 | | 5450 | | 5031 | | 4531 | | - | | - | | - | |
| | | | 15.5 | 0.83 | 15.0 | 0.89 | 14.5 | 0.93 | 13.9 | 0.96 | 13.3 | 0.99 | 12.6 | 1.00 | 11.5 | 0.97 | - | | - | | - | |
| 1 1/2 | 750 | 4866 | 7209 | | 6974 | | 6721 | | 6425 | | 6063 | | 5680 | | 5269 | | 4113 | | - | | - | |
| | | | 17.0 | 1.02 | 16.6 | 1.09 | 16.1 | 1.14 | 15.5 | 1.16 | 14.9 | 1.20 | 14.3 | 1.22 | 13.7 | 1.22 | 11.1 | 1.15 | - | | - | |
| | 775 | 5028 | 7449 | | 7222 | | 6984 | | 6697 | | 6360 | | 5998 | | 5619 | | 4619 | | - | | - | |
| | | | 17.9 | 1.13 | 17.5 | 1.19 | 17.1 | 1.25 | 16.5 | 1.27 | 16.0 | 1.31 | 15.4 | 1.34 | 14.8 | 1.36 | 12.4 | 1.30 | - | | - | |
| | 790 | 5125 | 7593 | | 7370 | | 7141 | | 6860 | | 6537 | | 6186 | | 5815 | | 4910 | | - | | - | |
| | | | 18.6 | 1.20 | 18.2 | 1.26 | 17.7 | 1.32 | 17.2 | 1.34 | 16.6 | 1.38 | 16.0 | 1.42 | 15.5 | 1.43 | 13.4 | 1.39 | - | | - | |
| | 805 | 5223 | 7738 | | 7519 | | 7298 | | 7022 | | 6713 | | 6374 | | 6009 | | 5182 | | 3788 | | - | |
| | | | 19.1 | 1.27 | 18.6 | 1.33 | 18.1 | 1.40 | 17.6 | 1.42 | 17.0 | 1.45 | 16.5 | 1.50 | 15.9 | 1.51 | 14.1 | 1.48 | 12.0 | 1.35 | - | |
| 2 | 820 | 5320 | 7882 | | 7667 | | 7452 | | 7183 | | 6888 | | 6556 | | 6202 | | 5407 | | 4203 | | - | |
| | | | 19.2 | 1.34 | 18.8 | 1.41 | 18.3 | 1.48 | 17.8 | 1.50 | 17.3 | 1.53 | 16.7 | 1.58 | 16.1 | 1.60 | 14.6 | 1.57 | 12.3 | 1.48 | - | |
| | 850 | 5515 | 8170 | | 7963 | | 7756 | | 7505 | | 7235 | | 6915 | | 6583 | | 5851 | | 4836 | | - | |
| | | | 19.6 | 1.49 | 19.2 | 1.56 | 18.8 | 1.63 | 18.3 | 1.66 | 17.8 | 1.69 | 17.2 | 1.74 | 16.7 | 1.77 | 15.5 | 1.77 | 13.5 | 1.69 | - | |
| | 870 | 5644 | 8362 | | 8160 | | 7957 | | 7718 | | 7462 | | 7152 | | 6834 | | 6142 | | 5234 | | - | |
| | | | 20.0 | 1.60 | 20.0 | 1.67 | 19.5 | 1.74 | 19.0 | 1.78 | 18.5 | 1.80 | 17.9 | 1.85 | 17.4 | 1.89 | 16.3 | 1.91 | 14.3 | 1.84 | - | |
| | 887 | 5755 | 8526 | | 8327 | | 8129 | | 7898 | | 7648 | | 7352 | | 7046 | | 6384 | | 5561 | | 4317 | |
| | | | 21.0 | 1.69 | 21.0 | 1.77 | 20.0 | 1.84 | 19.7 | 1.89 | 19.2 | 1.91 | 18.6 | 1.95 | 18.1 | 2.00 | 17.0 | 2.04 | 15.3 | 1.97 | 13.9 | 1.83 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX27B | BELT DRIVE

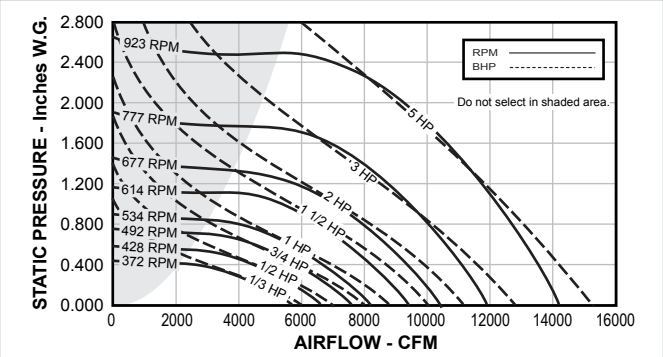



| |
|---|
| Galv. Steel Base = 14 Gage |
| Aluminum Base = 0.102” |
| Discharge Apron = 0.08” |
| Hood = 0.08” |
| Roof Opening = 28” SQ. |
| Damper Size = 27 ¾” SQ. |
| Max. Motor Frame Size = 184T |
| Peak BHP = (RPM/642)$^3$ |
| Max. RPM = 1210 (5 HP) |
| Est. Ship Weight = 210 lbs. |

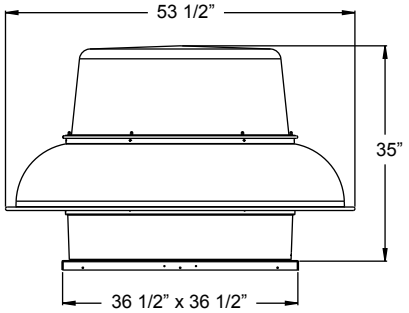



| HP | RPM | Tip Speed FPM | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | | 2.000” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/3 | 445 | 3234 | 4748 | | 4165 | | 3314 | | - | | - | | - | | - | | - | | - | |
| | | | 8.1 | 0.29 | 7.3 | 0.32 | 6.8 | 0.33 | - | | - | | - | | - | | - | | - | |
| 1/2 | 475 | 3451 | 5124 | | 4604 | | 3947 | | - | | - | | - | | - | | - | | - | |
| | | | 9.2 | 0.34 | 8.4 | 0.38 | 7.7 | 0.40 | - | | - | | - | | - | | - | | - | |
| | 510 | 3703 | 5557 | | 5102 | | 4545 | | 3731 | | - | | - | | - | | - | | - | |
| | | | 10.3 | 0.42 | 9.5 | 0.46 | 8.8 | 0.46 | 8.4 | 0.50 | - | | - | | - | | - | | - | |
| 3/4 | 530 | 3850 | 5808 | | 5386 | | 4866 | | 4180 | | - | | - | | - | | - | | - | |
| | | | 10.9 | 0.47 | 10.2 | 0.51 | 9.5 | 0.54 | 9.0 | 0.56 | - | | - | | - | | - | | - | |
| | 560 | 4068 | 6178 | | 5801 | | 5321 | | 4773 | | - | | - | | - | | - | | - | |
| | | | 12.1 | 0.55 | 11.4 | 0.59 | 10.6 | 0.63 | 10.0 | 0.66 | - | | - | | - | | - | | - | |
| | 583 | 4239 | 6466 | | 6121 | | 5664 | | 5166 | | - | | - | | - | | - | | - | |
| | | | 13.3 | 0.62 | 12.5 | 0.66 | 11.6 | 0.70 | 10.9 | 0.73 | - | | - | | - | | - | | - | |
| 1 | 600 | 4359 | 6670 | | 6345 | | 5915 | | 5430 | | 3890 | | - | | - | | - | | - | |
| | | | 13.8 | 0.67 | 13.1 | 0.71 | 12.2 | 0.76 | 11.4 | 0.79 | 10.8 | 0.79 | - | | - | | - | | - | |
| | 620 | 4504 | 6912 | | 6593 | | 6188 | | 5744 | | 4473 | | - | | - | | - | | - | |
| | | | 14.4 | 0.73 | 13.9 | 0.78 | 13.0 | 0.83 | 12.1 | 0.87 | 11.3 | 0.90 | - | | - | | - | | - | |
| | 642 | 4666 | 7182 | | 6875 | | 6501 | | 6079 | | 4967 | | - | | - | | - | | - | |
| | | | 15.0 | 0.81 | 14.5 | 0.86 | 13.8 | 0.91 | 12.9 | 0.95 | 11.9 | 1.00 | - | | - | | - | | - | |
| 1 1/2 | 660 | 4795 | 7398 | | 7099 | | 6748 | | 6340 | | 5356 | | - | | - | | - | | - | |
| | | | 15.4 | 0.87 | 15.0 | 0.93 | 14.3 | 0.98 | 13.5 | 1.02 | 12.4 | 1.09 | - | | - | | - | | - | |
| | 685 | 4976 | 7701 | | 7412 | | 7093 | | 6702 | | 5830 | | 4186 | | - | | - | | - | |
| | | | 16.2 | 0.97 | 15.9 | 1.03 | 15.3 | 1.08 | 14.5 | 1.13 | 13.1 | 1.20 | 13.1 | 1.15 | - | | - | | - | |
| | 710 | 5158 | 8003 | | 7724 | | 7434 | | 7061 | | 6253 | | 5029 | | - | | - | | - | |
| | | | 17.2 | 1.08 | 16.9 | 1.14 | 16.4 | 1.19 | 15.7 | 1.24 | 14.2 | 1.33 | 13.7 | 1.21 | - | | - | | - | |
| | 735 | 5341 | 8306 | | 8036 | | 7775 | | 7417 | | 6654 | | 5594 | | - | | - | | - | |
| | | | 18.3 | 1.19 | 18.1 | 1.25 | 17.7 | 1.31 | 17.0 | 1.37 | 15.6 | 1.46 | 14.7 | 1.50 | - | | - | | - | |
| 2 | 750 | 5449 | 8484 | | 8220 | | 7975 | | 7624 | | 6888 | | 5921 | | - | | - | | - | |
| | | | 18.9 | 1.26 | 18.7 | 1.33 | 18.4 | 1.38 | 17.7 | 1.44 | 16.3 | 1.54 | 15.2 | 1.64 | - | | - | | - | |
| | 770 | 5594 | 8724 | | 8467 | | 8210 | | 7901 | | 7201 | | 6339 | | 4824 | | - | | - | |
| | | | 19.7 | 1.36 | 19.5 | 1.43 | 19.0 | 1.49 | 18.5 | 1.55 | 17.2 | 1.65 | 15.9 | 1.72 | 15.8 | 1.65 | - | | - | |
| | 790 | 5739 | 8964 | | 8713 | | 8463 | | 8177 | | 7497 | | 6714 | | 5514 | | - | | - | |
| | | | 20.0 | 1.47 | 20.0 | 1.54 | 19.9 | 1.60 | 19.4 | 1.66 | 18.0 | 1.77 | 16.7 | 1.85 | 16.3 | 1.99 | - | | - | |
| | 809 | 5877 | 9192 | | 8947 | | 8702 | | 8437 | | 7775 | | 7046 | | 5967 | | - | | - | |
| | | | 21.0 | 1.57 | 21.0 | 1.64 | 20.0 | 1.71 | 20.0 | 1.77 | 18.7 | 1.88 | 17.4 | 1.97 | 16.9 | 1.99 | - | | - | |
| 3 | 840 | 6102 | 9562 | | 9326 | | 9091 | | 8856 | | 8224 | | 7543 | | 6652 | | 5163 | | - | |
| | | | 22.0 | 1.75 | 22.0 | 1.83 | 22.0 | 1.90 | 21.0 | 1.96 | 20.0 | 2.08 | 18.9 | 2.18 | 17.9 | 2.24 | 18.1 | 2.13 | - | |
| | 870 | 6320 | 9920 | | 9692 | | 9465 | | 9238 | | 8654 | | 8016 | | 7259 | | 6171 | | - | |
| | | | 24.0 | 1.94 | 23.0 | 2.02 | 23.0 | 2.09 | 23.0 | 2.16 | 22.0 | 2.29 | 21.0 | 2.40 | 19.0 | 2.47 | 19.0 | 2.49 | - | |
| | 900 | 6538 | 10278 | | 10057 | | 9838 | | 9618 | | 9078 | | 8476 | | 7805 | | 6843 | | - | |
| | | | 25.0 | 2.15 | 25.0 | 2.23 | 25.0 | 2.30 | 24.0 | 2.37 | 24.0 | 2.51 | 22.0 | 2.63 | 21.0 | 2.72 | 20.0 | 2.75 | - | |
| | 926 | 6727 | 10587 | | 10373 | | 10159 | | 9946 | | 9441 | | 8858 | | 8224 | | 7414 | | - | |
| | | | 27.0 | 2.33 | 27.0 | 2.42 | 26.0 | 2.49 | 26.0 | 2.56 | 25.0 | 2.71 | 24.0 | 2.84 | 23.0 | 2.93 | 21.0 | 2.99 | - | |
| 5 | 960 | 6974 | 10992 | | 10785 | | 10579 | | 10373 | | 9910 | | 9353 | | 8763 | | 8082 | | 5611 | |
| | | | 29.0 | 2.59 | 29.0 | 2.68 | 28.0 | 2.76 | 28.0 | 2.84 | 27.0 | 2.98 | 26 .0 | 3.12 | 25.0 | 3.24 | 23.0 | 3.27 | 23.0 | 3.14 |
| | 1000 | 7265 | 11467 | | 11268 | | 11078 | | 10872 | | 10458 | | 9927 | | 9385 | | 8778 | | 7000 | |
| | | | 31.0 | 2.92 | 30.0 | 3.02 | 30.0 | 3.10 | 30.0 | 3.18 | 29.0 | 3.33 | 28.0 | 3.48 | 27.0 | 3.62 | 25.0 | 3.71 | 24.0 | 3.75 |
| | 1040 | 7555 | 11941 | | 11750 | | 11559 | | 11369 | | 10889 | | 10493 | | 9973 | | 9416 | | 7919 | |
| | | | 32.0 | 3.28 | 31.0 | 3.38 | 31.0 | 3.47 | 31.0 | 3.55 | 30.0 | 3.71 | 29.0 | 3.87 | 28.0 | 4.01 | 27.0 | 4.13 | 25.0 | 4.24 |
| | 1098 | 7977 | 12627 | | 12447 | | 12266 | | 12086 | | 11726 | | 11299 | | 10812 | | 10318 | | 9135 | |
| | | | 34.0 | 3.84 | 34.0 | 3.95 | 34.0 | 4.05 | 33.0 | 4.14 | 33.0 | 4.61 | 32 .0 | 4.48 | 31.0 | 4.63 | 30.0 | 4.78 | 27.0 | 4.98 |

# DX30B | BELT DRIVE



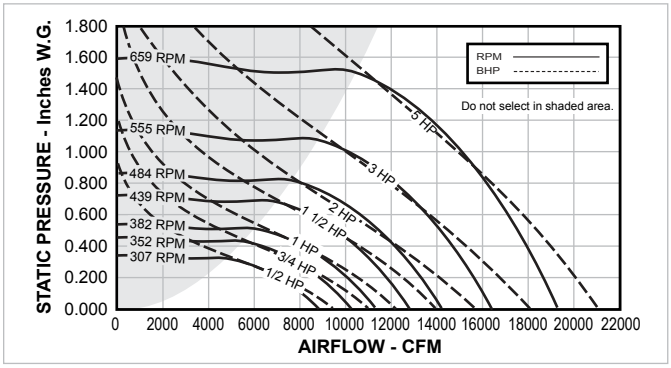

| |
|---|
| Galv. Steel Base = 14 Gage |
| Aluminum Base = 0.102” |
| Discharge Apron = 0.08” |
| Hood = 0.08” |
| Roof Opening = 28” SQ. |
| Damper Size = 27 ¾” SQ. |
| Max. Motor Frame Size = 184T |
| Peak BHP = (RPM/534)$^3$ |
| Max. RPM = 999 (5 HP) |
| Est. Ship Weight = 210 lbs. |



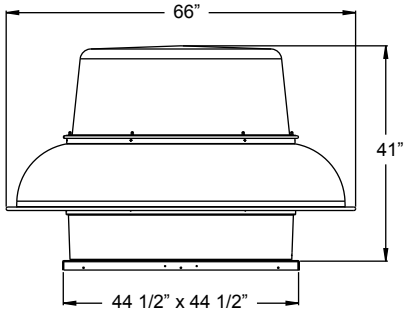

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/3 | 225 | 1804 | 3480 | 2.9 0.06 | 2165 | 2.0 0.07 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 300 | 2405 | 4640 | 5.8 0.14 | 3849 | 5.1 0.17 | 2423 | 4.3 0.17 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | 372 | 2983 | 5753 | 8.7 0.27 | 5164 | 8.0 0.30 | 4386 | 7.4 0.33 | 3184 | 6.6 0.32 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1/2 | 405 | 3247 | 6264 | 9.7 0.35 | 5732 | 8.9 0.38 | 5073 | 8.2 0.42 | 4186 | 7.5 0.43 | - | - | - | - | - | - | - | - | - | - | - | - |
| | 428 | 3432 | 6619 | 10.4 0.41 | 6120 | 9.7 0.45 | 5514 | 9.0 0.49 | 4747 | 8.3 0.51 | 3627 | 7.4 0.49 | - | - | - | - | - | - | - | - | - | - |
| 3/4 | 460 | 3688 | 7114 | 11.7 0.51 | 6653 | 10.8 0.55 | 6114 | 10.0 0.59 | 5468 | 9.3 0.63 | 4618 | 8.5 0.63 | - | - | - | - | - | - | - | - | - | - |
| | 480 | 3848 | 7424 | 12.6 0.57 | 6985 | 11.5 0.62 | 6478 | 10.5 0.66 | 5897 | 9.9 0.71 | 5147 | 9.0 0.72 | 4103 | 8.4 0.70 | - | - | - | - | - | - | - | - |
| | 492 | 3945 | 7609 | 13.1 0.62 | 7183 | 12.1 0.67 | 6695 | 11.0 0.71 | 6136 | 10.3 0.76 | 5430 | 9.4 0.78 | 4490 | 8.7 0.76 | - | - | - | - | - | - | - | - |
| 1 | 520 | 4169 | 8042 | 14.1 0.73 | 7642 | 13.3 0.79 | 7195 | 12.4 0.83 | 6674 | 11.6 0.87 | 6071 | 10.8 0.91 | 5324 | 9.9 0.92 | 4225 | 8.9 0.87 | - | - | - | - | - | - |
| | 534 | 4281 | 8259 | 14.7 0.79 | 7871 | 13.9 0.85 | 7443 | 13.2 0.89 | 6939 | 12.4 0.94 | 6375 | 11.6 0.98 | 5691 | 10.6 1.00 | 4760 | 9.5 0.97 | - | - | - | - | - | - |
| 1 1/2 | 560 | 4490 | 8661 | 15.4 0.91 | 8295 | 14.8 0.98 | 7890 | 14.2 1.02 | 7427 | 13.4 1.06 | 6927 | 12.7 1.12 | 6303 | 11.8 1.14 | 5559 | 10.7 1.14 | - | - | - | - | - | - |
| | 580 | 4650 | 8971 | 16.1 1.01 | 8617 | 15.5 1.08 | 8229 | 14.9 1.13 | 7792 | 14.2 1.17 | 7315 | 13.5 1.23 | 6757 | 12.7 1.26 | 6115 | 11.7 1.28 | - | - | - | - | - | - |
| | 600 | 4811 | 9280 | 16.8 1.12 | 8938 | 16.2 1.19 | 8566 | 15.6 1.24 | 8153 | 15.0 1.29 | 7698 | 14.3 1.34 | 7192 | 13.5 1.39 | 6590 | 12.5 1.41 | 4847 | 10.4 1.33 | - | - | - | - |
| | 614 | 4923 | 9496 | 17.4 1.20 | 9162 | 16.9 1.27 | 8801 | 16.2 1.32 | 8405 | 15.6 1.37 | 7964 | 14.9 1.43 | 7493 | 14.2 1.49 | 6917 | 13.2 1.50 | 5412 | 10.9 1.47 | - | - | - | - |
| 2 | 640 | 5131 | 9899 | 18.4 1.36 | 9578 | 17.9 1.44 | 9234 | 17.3 1.49 | 8868 | 16.8 1.54 | 8452 | 16.1 1.59 | 8015 | 15.3 1.66 | 7504 | 14.5 1.69 | 6230 | 12.3 1.69 | - | - | - | - |
| | 660 | 5292 | 10208 | 19.1 1.49 | 9897 | 18.6 1.57 | 9567 | 18.1 1.63 | 9222 | 17.6 1.68 | 8820 | 17.0 1.73 | 8400 | 16.2 1.80 | 7937 | 15.4 1.85 | 6798 | 13.4 1.88 | 4544 | 11.5 1.62 | - | - |
| | 677 | 5428 | 10471 | 19.5 1.61 | 10168 | 19.0 1.69 | 9848 | 18.6 1.75 | 9513 | 18.2 1.80 | 9129 | 17.7 1.86 | 8724 | 16.9 1.92 | 8302 | 16.1 1.99 | 7235 | 14.2 2.03 | 5744 | 12.5 1.96 | - | - |
| 3 | 710 | 5693 | 10981 | 20.0 1.86 | 10692 | 19.9 1.94 | 10392 | 19.5 2.01 | 10073 | 19.1 2.06 | 9723 | 18.7 2.12 | 9346 | 18.1 2.18 | 8952 | 17.3 2.26 | 8011 | 15.6 2.32 | 6801 | 14.0 2.30 | - | - |
| | 735 | 5893 | 11368 | 21.0 2.06 | 11089 | 21.0 2.15 | 10802 | 20.0 2.22 | 10494 | 20.0 2.28 | 10169 | 19.6 2.33 | 9808 | 19.1 2.39 | 9431 | 18.3 2.47 | 8577 | 16.8 2.56 | 7519 | 15.0 2.59 | 5947 | 13.8 2.45 |
| | 760 | 6093 | 11755 | 22.0 2.28 | 11485 | 22.0 2.37 | 11210 | 21.0 2.45 | 10912 | 21.0 2.51 | 10611 | 21.0 2.56 | 10263 | 20.0 2.63 | 9905 | 19.4 2.70 | 9120 | 17.9 2.83 | 8163 | 16.3 2.87 | 6886 | 14.8 2.79 |
| | 777 | 6230 | 12018 | 23.0 2.44 | 11754 | 22.0 2.53 | 11488 | 22.0 2.61 | 11196 | 22.0 2.67 | 10905 | 21.0 2.73 | 10569 | 21.0 2.79 | 10224 | 20.0 2.86 | 9485 | 18.7 3.01 | 8564 | 17.1 3.06 | 7426 | 15.5 3.01 |
| 5 | 815 | 6534 | 12605 | 24.0 2.81 | 12354 | 24.0 2.91 | 12102 | 23.0 3.00 | 11827 | 23.0 3.06 | 11549 | 23.0 3.12 | 11249 | 23.0 3.19 | 10924 | 22.0 3.25 | 10244 | 21.0 3.42 | 9441 | 18.8 3.50 | 8513 | 17.2 3.55 |
| | 845 | 6775 | 13069 | 25.0 3.14 | 12827 | 25.0 3.23 | 12584 | 25.0 3.33 | 12323 | 25.0 3.40 | 12055 | 25.0 3.46 | 11781 | 24.0 3.53 | 11467 | 24.0 3.60 | 10819 | 23.0 3.76 | 10095 | 21.0 3.89 | 9237 | 18.5 3.94 |
| | 875 | 7015 | 13533 | 26.0 3.48 | 13299 | 26.0 3.58 | 13065 | 26.0 3.68 | 12817 | 26.0 3.76 | 12558 | 26.0 3.83 | 12299 | 26.0 3.89 | 12006 | 26.0 3.96 | 11389 | 24.0 4.12 | 10739 | 23.0 4.30 | 9937 | 20.0 4.34 |
| | 905 | 7256 | 13997 | 28.0 3.85 | 13771 | 28.0 3.96 | 13544 | 28.0 4.06 | 13308 | 27.0 4.15 | 13058 | 27.0 4.22 | 12808 | 27.0 4.28 | 12540 | 27.0 4.35 | 11952 | 26.0 4.50 | 11333 | 24.0 4.70 | 10610 | 22.0 4.79 |
| | 923 | 7400 | 14276 | 29.0 4.09 | 14054 | 29.0 4.19 | 13831 | 29.0 4.30 | 13603 | 28.0 4.39 | 13357 | 28.0 4.46 | 13112 | 28.0 4.53 | 12859 | 28.0 4.60 | 12284 | 27.0 4.75 | 11680 | 25.0 4.95 | 11001 | 23.0 5.07 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# DX36B | BELT DRIVE



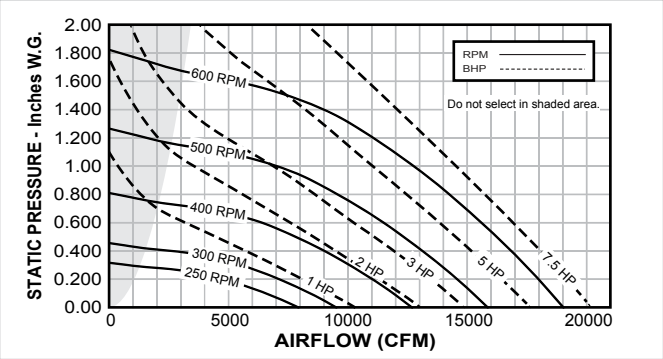

| |
|---|
| Galv. Steel Base = 12 Gage |
| Aluminum Base = 0.102” |
| Discharge Apron = 0.08” |
| Hood = 0.08” |
| Roof Opening = 36” SQ. |
| Damper Size = 35 ½” SQ. |
| Max. Motor Frame Size = 213T |
| Peak BHP = (RPM/381)$^3$ |
| Max. RPM = 810 (7 ½ HP) |
| Est. Ship Weight = 420 lbs. |



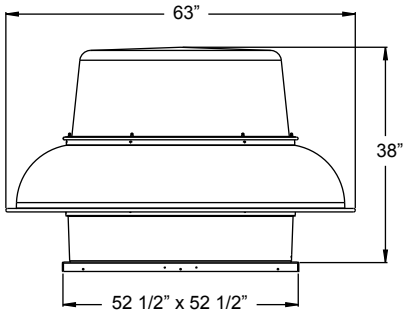

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1/2 | 215 | 2093 | 6343 | | 4855 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 3.9 | 0.13 | 3.7 | 0.18 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 261 | 2541 | 7700 | | 6555 | | 4707 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 5.9 | 0.24 | 5.6 | 0.30 | 5.6 | 0.31 | - | | - | | - | | - | | - | | - | | - | |
| | 307 | 2989 | 9057 | | 8105 | | 6994 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 8.0 | 0.39 | 7.7 | 0.46 | 7.6 | 0.51 | - | | - | | - | | - | | - | | - | | - | |
| 3/4 | 325 | 3164 | 9588 | | 8714 | | 7701 | | 6101 | | - | | - | | - | | - | | - | | - | |
| | | | 9.0 | 0.46 | 8.6 | 0.53 | 8.3 | 0.60 | 7.9 | 0.61 | - | | - | | - | | - | | - | | - | |
| | 340 | 3310 | 10031 | | 9216 | | 8248 | | 6922 | | - | | - | | - | | - | | - | | - | |
| | | | 9.9 | 0.53 | 9.4 | 0.59 | 8.9 | 0.68 | 8.5 | 0.71 | - | | - | | - | | - | | - | | - | |
| | 352 | 3427 | 10385 | | 9613 | | 8675 | | 7497 | | - | | - | | - | | - | | - | | - | |
| | | | 10.6 | 0.58 | 10.2 | 0.65 | 9.5 | 0.74 | 9.1 | 0.79 | - | | - | | - | | - | | - | | - | |
| 1 | 365 | 3553 | 10768 | | 10037 | | 9130 | | 8086 | | 6338 | | - | | - | | - | | - | | - | |
| | | | 11.4 | 0.65 | 11.1 | 0.72 | 10.2 | 0.82 | 9.7 | 0.87 | 9.3 | 0.85 | - | | - | | - | | - | | - | |
| | 375 | 3651 | 11063 | | 10362 | | 9469 | | 8523 | | 7027 | | - | | - | | - | | - | | - | |
| | | | 12.0 | 0.71 | 11.6 | 0.78 | 10.8 | 0.88 | 10.1 | 0.94 | 9.6 | 0.93 | - | | - | | - | | - | | - | |
| | 382 | 3719 | 11270 | | 10589 | | 9705 | | 8809 | | 7438 | | - | | - | | - | | - | | - | |
| | | | 12.4 | 0.75 | 12.1 | 0.82 | 11.3 | 0.92 | 10.6 | 0.99 | 9.9 | 1.00 | - | | - | | - | | - | | - | |
| 1 1/2 | 400 | 3894 | 11801 | | 11169 | | 10314 | | 9503 | | 8351 | | - | | - | | - | | - | | - | |
| | | | 13.5 | 0.86 | 13.3 | 0.93 | 12.5 | 1.04 | 11.7 | 1.11 | 10.9 | 1.16 | - | | - | | - | | - | | - | |
| | 415 | 4040 | 12243 | | 11643 | | 10821 | | 10050 | | 9052 | | 7592 | | - | | - | | - | | - | |
| | | | 14.6 | 0.96 | 14.4 | 1.04 | 13.6 | 1.14 | 12.8 | 1.23 | 12.0 | 1.29 | 11.2 | 1.26 | - | | - | | - | | - | |
| | 430 | 4186 | 12686 | | 12115 | | 11324 | | 10586 | | 9711 | | 8478 | | - | | - | | - | | - | |
| | | | 15.5 | 1.06 | 15.4 | 1.15 | 14.8 | 1.26 | 14.0 | 1.35 | 13.2 | 1.42 | 12.3 | 1.42 | - | | - | | - | | - | |
| | 439 | 4274 | 12951 | | 12397 | | 11627 | | 10904 | | 10089 | | 8939 | | - | | - | | - | | - | |
| | | | 16.1 | 1.13 | 16.1 | 1.23 | 15.4 | 1.33 | 14.7 | 1.43 | 14.0 | 1.50 | 13.1 | 1.53 | - | | - | | - | | - | |
| 2 | 455 | 4430 | 13423 | | 12896 | | 12168 | | 11453 | | 10719 | | 9706 | | 8341 | | - | | - | | - | |
| | | | 17.0 | 1.26 | 17.0 | 1.36 | 16.5 | 1.46 | 15.7 | 1.57 | 15.0 | 1.65 | 14.3 | 1.71 | 13.2 | 1.66 | - | | - | | - | |
| | 470 | 4576 | 13866 | | 13364 | | 12671 | | 11959 | | 11271 | | 10386 | | 9229 | | - | | - | | - | |
| | | | 17.9 | 1.39 | 17.9 | 1.50 | 17.5 | 1.58 | 16.8 | 1.71 | 16.0 | 1.80 | 15.4 | 1.87 | 14.5 | 1.86 | - | | - | | - | |
| | 484 | 4712 | 14279 | | 13798 | | 13139 | | 12432 | | 11778 | | 10998 | | 9945 | | - | | - | | - | |
| | | | 18.8 | 1.52 | 18.8 | 1.63 | 18.6 | 1.71 | 18.0 | 1.85 | 17.2 | 1.95 | 16.5 | 2.02 | 15.8 | 2.06 | - | | - | | - | |
| 3 | 505 | 4916 | 14899 | | 14449 | | 13830 | | 13143 | | 12523 | | 11839 | | 10942 | | - | | - | | - | |
| | | | 21.0 | 1.72 | 21.0 | 1.85 | 21.0 | 1.92 | 20.0 | 2.07 | 19.4 | 2.18 | 18.6 | 2.26 | 17.9 | 2.34 | - | | - | | - | |
| | 525 | 5111 | 15489 | | 15061 | | 14481 | | 13814 | | 13212 | | 12584 | | 11822 | | 9607 | | - | | - | |
| | | | 22.0 | 1.94 | 22.0 | 2.07 | 22.0 | 2.14 | 21.0 | 2.29 | 20.0 | 2.42 | 19.6 | 2.51 | 19.0 | 2.58 | 17.1 | 2.55 | - | | - | |
| | 540 | 5257 | 15931 | | 15515 | | 14968 | | 14319 | | 13718 | | 13128 | | 12449 | | 10507 | | - | | - | |
| | | | 22.0 | 2.11 | 22.0 | 2.24 | 22.0 | 2.32 | 22.0 | 2.46 | 21.0 | 2.60 | 20.0 | 2.71 | 19.6 | 2.78 | 18.0 | 2.81 | - | | - | |
| | 555 | 5403 | 16374 | | 15969 | | 15452 | | 14826 | | 14223 | | 13662 | | 13039 | | 11292 | | - | | - | |
| | | | 23.0 | 2.29 | 23.0 | 2.43 | 23.0 | 2.50 | 22.0 | 2.65 | 22.0 | 2.80 | 21.0 | 2.91 | 20.0 | 3.00 | 18.9 | 3.09 | - | | - | |
| 5 | 575 | 5598 | 16964 | | 16573 | | 16091 | | 15498 | | 14902 | | 14364 | | 13781 | | 12252 | | 9844 | | - | |
| | | | 24.0 | 2.55 | 24.0 | 2.69 | 24.0 | 2.77 | 23.0 | 2.90 | 23.0 | 3.07 | 22.0 | 3.20 | 21.0 | 3.30 | 20.0 | 3.45 | 18.5 | 3.30 | - | |
| | 595 | 5793 | 17554 | | 17177 | | 16721 | | 16166 | | 15575 | | 15043 | | 14505 | | 13160 | | 11240 | | - | |
| | | | 25.0 | 2.82 | 25.0 | 2.97 | 25.0 | 3.06 | 25.0 | 3.17 | 24.0 | 3.36 | 24.0 | 3.36 | 24.0 | 3.62 | 22.0 | 3.79 | 19.8 | 3.74 | - | |
| | 615 | 5987 | 18144 | | 17779 | | 17349 | | 16824 | | 16245 | | 15715 | | 15214 | | 14033 | | 12346 | | - | |
| | | | 27.0 | 3.12 | 27.0 | 3.27 | 27.0 | 3.37 | 26.0 | 3.48 | 26.0 | 3.66 | 25.0 | 3.82 | 25.0 | 3.95 | 23.0 | 4.13 | 22.0 | 4.19 | - | |
| | 630 | 6133 | 18586 | | 18230 | | 17818 | | 17314 | | 16753 | | 16225 | | 15740 | | 14630 | | 13087 | | 10793 | |
| | | | 28.0 | 3.35 | 28.0 | 3.51 | 28.0 | 3.62 | 28.0 | 3.72 | 27.0 | 3.90 | 27.0 | 4.07 | 26.0 | 4.21 | 24.0 | 4.41 | 23.0 | 4.53 | 21.0 | 4.34 |
| | 645 | 6279 | 19029 | | 18681 | | 18286 | | 17801 | | 17260 | | 16733 | | 16249 | | 15218 | | 13799 | | 11892 | |
| | | | 29.0 | 3.59 | 29.0 | 3.75 | 29.0 | 3.87 | 28.0 | 3.97 | 28.0 | 4.14 | 27.0 | 4.32 | 27.0 | 4.48 | 25.0 | 4.69 | 24.0 | 4.87 | 22.0 | 4.74 |
| | 659 | 6416 | 19442 | | 19101 | | 18722 | | 18255 | | 17730 | | 17205 | | 16722 | | 15732 | | 14438 | | 12737 | |
| | | | 29.0 | 3.83 | 29.0 | 4.00 | 29.0 | 4.13 | 29.0 | 4.22 | 28.0 | 4.38 | 28.0 | 4.57 | 27.0 | 4.74 | 26.0 | 4.97 | 24.0 | 5.17 | 23.0 | 5.10 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# KB420 | BELT DRIVE



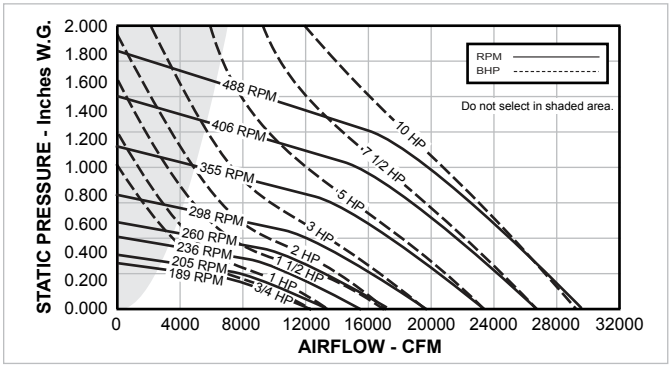

| |
|---|
| Galv. Steel Base = N/A |
| Aluminum Base = 0.125” |
| Discharge Apron = 0.09” |
| Hood = 0.08” |
| Roof Opening = 44” SQ. |
| Damper Size = 43 ½” SQ. |
| Max. Motor Frame Size = 213T |
| Peak BHP = (RPM/315)³ |
| Max. RPM = 600 (7 ½ HP) |
| Est. Ship Weight = 600 lbs. |



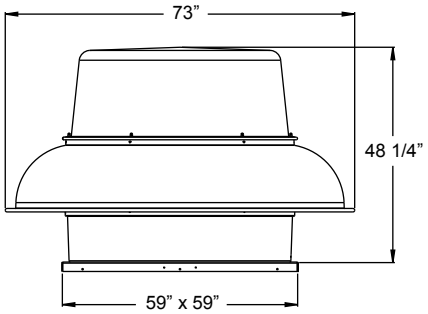

| HP | RPM | Tip Speed FPM | 0.000” | | 0.125” | | 0.250” | | 0.375” | | 0.500” | | 0.625” | | 0.750” | | 1.000” | | 1.250” | | 1.500” | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 3/4 | 240 | 2748 | 7613 | | 5746 | | 2471 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.4 | 0.40 | 6.3 | 0.40 | 6.0 | 0.30 | - | | - | | - | | - | | - | | - | | - | |
| | 260 | 2977 | 8248 | | 6568 | | 4237 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 7.2 | 0.51 | 7.1 | 0.52 | 6.9 | 0.46 | - | | - | | - | | - | | - | | - | | - | |
| | 283 | 3240 | 8977 | | 7467 | | 5526 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 8.2 | 0.66 | 8.0 | 0.67 | 7.8 | 0.63 | - | | - | | - | | - | | - | | - | | - | |
| | 295 | 3377 | 9358 | | 7926 | | 6131 | | 3166 | | - | | - | | - | | - | | - | | - | |
| | | | 8.6 | 0.75 | 8.5 | 0.75 | 8.2 | 0.72 | 7.8 | 0.56 | - | | - | | - | | - | | - | | - | |
| 1 | 300 | 3435 | 9517 | | 8116 | | 6371 | | 3713 | | - | | - | | - | | - | | - | | - | |
| | | | 8.8 | 0.78 | 8.6 | 0.79 | 8.3 | 0.77 | 8.0 | 0.63 | - | | - | | - | | - | | - | | - | |
| | 308 | 3526 | 9770 | | 8414 | | 6748 | | 4432 | | - | | - | | - | | - | | - | | - | |
| | | | 9.1 | 0.85 | 8.9 | 0.86 | 8.6 | 0.83 | 8.3 | 0.72 | - | | - | | - | | - | | - | | - | |
| | 330 | 3778 | 10468 | | 9213 | | 7728 | | 5878 | | 2008 | | - | | - | | - | | - | | - | |
| | | | 9.8 | 1.04 | 9.6 | 1.05 | 9.2 | 1.04 | 8.8 | 0.97 | 8.6 | 0.64 | - | | - | | - | | - | | - | |
| 1 1/2 | 345 | 3950 | 10944 | | 9752 | | 8361 | | 6685 | | 4146 | | - | | - | | - | | - | | - | |
| | | | 10.2 | 1.19 | 10.0 | 1.20 | 9.6 | 1.20 | 8.9 | 1.14 | 8.8 | 0.94 | - | | - | | - | | - | | - | |
| | 354 | 4053 | 11230 | | 10072 | | 8735 | | 7151 | | 4987 | | - | | - | | - | | - | | - | |
| | | | 10.4 | 1.29 | 10.2 | 1.30 | 9.7 | 1.30 | 9.0 | 1.24 | 8.8 | 1.09 | - | | - | | - | | - | | - | |
| | 365 | 4179 | 11579 | | 10462 | | 9181 | | 7687 | | 5830 | | - | | - | | - | | - | | - | |
| | | | 10.8 | 1.41 | 10.4 | 1.42 | 10.0 | 1.43 | 9.2 | 1.38 | 8.9 | 1.26 | - | | - | | - | | - | | - | |
| 2 | 380 | 4350 | 12054 | | 10989 | | 9773 | | 8395 | | 6725 | | 3977 | | - | | - | | - | | - | |
| | | | 11.4 | 1.59 | 11.1 | 1.60 | 10.7 | 1.61 | 10.0 | 1.57 | 9.4 | 1.48 | 9.4 | 1.19 | - | | - | | - | | - | |
| | 390 | 4465 | 12372 | | 11339 | | 10164 | | 8857 | | 7279 | | 5063 | | - | | - | | - | | - | |
| | | | 11.9 | 1.72 | 11.5 | 1.73 | 11.1 | 1.74 | 10.5 | 1.71 | 9.7 | 1.62 | 9.7 | 1.40 | - | | - | | - | | - | |
| 3 | 420 | 4808 | 13323 | | 12379 | | 11316 | | 10134 | | 8806 | | 7232 | | 4822 | | - | | - | | - | |
| | | | 13.2 | 2.15 | 12.9 | 2.16 | 12.4 | 2.18 | 11.9 | 2.16 | 11.2 | 2.09 | 10.8 | 1.97 | 10.8 | 1.67 | - | | - | | - | |
| | 430 | 4923 | 13640 | | 12718 | | 11694 | | 10551 | | 9281 | | 7818 | | 5821 | | - | | - | | - | |
| | | | 13.7 | 2.31 | 13.3 | 2.32 | 12.8 | 2.33 | 12.3 | 2.33 | 11.7 | 2.26 | 11.2 | 2.16 | 11.2 | 1.91 | - | | - | | - | |
| | 440 | 5037 | 13958 | | 13056 | | 12061 | | 10964 | | 9751 | | 8347 | | 6613 | | - | | - | | - | |
| | | | 14.1 | 2.47 | 13.7 | 2.49 | 13.3 | 2.50 | 12.8 | 2.50 | 12.2 | 2.44 | 11.5 | 2.34 | 11.5 | 2.14 | - | | - | | - | |
| | 447 | 5117 | 14180 | | 13292 | | 12316 | | 11243 | | 10076 | | 8714 | | 7138 | | - | | - | | - | |
| | | | 14.4 | 2.59 | 14.0 | 2.61 | 13.5 | 2.62 | 13.0 | 2.62 | 12.6 | 2.57 | 11.8 | 2.48 | 11.8 | 2.31 | - | | - | | - | |
| | 460 | 5266 | 14592 | | 13730 | | 12788 | | 11757 | | 10643 | | 9384 | | 7917 | | - | | - | | - | |
| | | | 15.0 | 2.82 | 14.6 | 2.84 | 14.1 | 2.85 | 13.5 | 2.86 | 13.1 | 2.81 | 12.5 | 2.73 | 12.2 | 2.59 | - | | - | | - | |
| 5 | 480 | 5495 | 15227 | | 14400 | | 13508 | | 12539 | | 11493 | | 10341 | | 9039 | | 4943 | | - | | - | |
| | | | 15.7 | 3.21 | 15.3 | 3.23 | 14.7 | 3.24 | 14.1 | 3.25 | 13.8 | 3.22 | 13.3 | 3.15 | 12.8 | 3.03 | 12.8 | 2.39 | - | | - | |
| | 500 | 5724 | 15861 | | 15068 | | 14222 | | 13310 | | 12327 | | 11276 | | 10080 | | 7004 | | - | | - | |
| | | | 16.5 | 3.63 | 16.0 | 3.64 | 15.4 | 3.66 | 14.8 | 3.67 | 14.3 | 3.66 | 14.0 | 3.59 | 13.5 | 3.50 | 13.3 | 3.05 | - | | - | |
| | 520 | 5953 | 16495 | | 15733 | | 14929 | | 14072 | | 13135 | | 12144 | | 11052 | | 8475 | | 2897 | | - | |
| | | | 17.3 | 4.08 | 16.7 | 4.10 | 16.1 | 4.11 | 15.3 | 4.13 | 14.7 | 4.13 | 14.5 | 4.07 | 14.2 | 3.99 | 13.8 | 3.66 | 13.8 | 2.44 | - | |
| | 532 | 6091 | 16876 | | 16130 | | 15352 | | 14519 | | 13609 | | 12653 | | 11620 | | 9192 | | 4913 | | - | |
| | | | 17.7 | 4.37 | 17.1 | 4.39 | 16.4 | 4.40 | 15.7 | 4.42 | 14.9 | 4.42 | 14.7 | 4.38 | 14.4 | 4.30 | 14.1 | 4.01 | 14.1 | 3.12 | - | |
| | 555 | 6354 | 17606 | | 16891 | | 16156 | | 15358 | | 14508 | | 13616 | | 12675 | | 10477 | | 7502 | | - | |
| | | | 18.5 | 4.96 | 17.8 | 4.98 | 17.1 | 5.00 | 16.2 | 5.01 | 15.2 | 5.02 | 14.9 | 5.00 | 14.8 | 4.93 | 14.5 | 4.69 | 14.5 | 4.11 | - | |
| 7 1/2 | 570 | 6526 | 18082 | | 17386 | | 16678 | | 15901 | | 15087 | | 14233 | | 13318 | | 11260 | | 8691 | | 3231 | |
| | | | 18.9 | 5.37 | 18.2 | 5.39 | 17.4 | 5.41 | 16.5 | 5.43 | 15.4 | 5.44 | 14.9 | 5.43 | 14.8 | 5.36 | 14.7 | 5.15 | 14.7 | 4.69 | 14.7 | 3.23 |
| | 585 | 6697 | 18557 | | 17879 | | 17198 | | 16441 | | 15662 | | 14829 | | 13954 | | 12022 | | 9693 | | 5676 | |
| | | | 19.6 | 5.81 | 18.9 | 5.83 | 18.1 | 5.85 | 17.1 | 5.87 | 16.1 | 5.88 | 15.2 | 5.87 | 15.2 | 5.82 | 15.2 | 5.63 | 15.2 | 5.25 | 15.2 | 4.23 |
| | 599 | 6858 | 19001 | | 18339 | | 17677 | | 16942 | | 16194 | | 15381 | | 14542 | | 12693 | | 10526 | | 7325 | |
| | | | 20.3 | 6.23 | 19.6 | 6.26 | 18.8 | 6.28 | 17.9 | 6.29 | 16.9 | 6.31 | 15.9 | 6.31 | 15.9 | 6.27 | 15.9 | 6.09 | 15.9 | 5.76 | 15.9 | 4.96 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# JB48 | BELT DRIVE



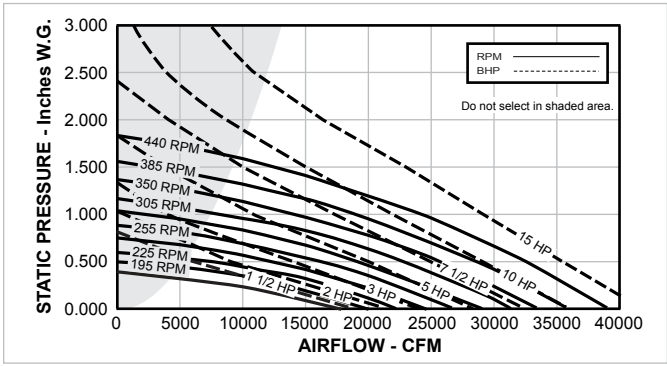

| |
|---|
| Galv. Steel Base = N/A |
| Aluminum Base = 0.125” |
| Discharge Apron = 0.102” |
| Hood = 0.08” |
| Roof Opening = 50” SQ. |
| Damper Size = 49 ½” SQ. |
| Max. Motor Frame Size = 215T |
| Peak BHP = (RPM/206)$^3$ |
| Max. RPM = 449 (10 HP) |
| Est. Ship Weight = 775 lbs. |



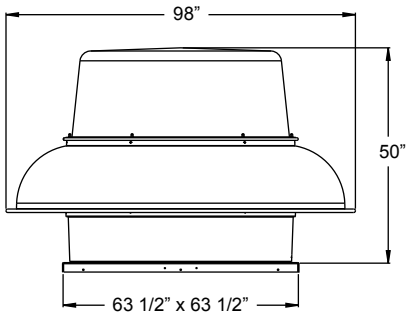

| HP | RPM | Tip Speed FPM | 0.000” SP | | 0.125” SP | | 0.250” SP | | 0.375” SP | | 0.500” SP | | 0.625” SP | | 0.750” SP | | 1.000” SP | | 1.250” SP | | 1.500” SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 3/4 | 160 | 2105 | 11842 | | 7937 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 4.6 | 0.47 | 4.4 | 0.42 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 175 | 2302 | 12953 | | 9473 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 5.4 | 0.62 | 5.2 | 0.57 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 189 | 2486 | 13989 | | 10828 | | 5936 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.0 | 0.78 | 5.7 | 0.73 | 5.7 | 0.55 | - | | - | | - | | - | | - | | - | | - | |
| 1 | 195 | 2565 | 14433 | | 11397 | | 7183 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.3 | 0.85 | 6.0 | 0.81 | 5.9 | 0.66 | - | | - | | - | | - | | - | | - | | - | |
| | 200 | 2631 | 14803 | | 11865 | | 8089 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.5 | 0.92 | 6.2 | 0.88 | 6.0 | 0.75 | - | | - | | - | | - | | - | | - | | - | |
| | 205 | 2697 | 15173 | | 12308 | | 8799 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.8 | 0.99 | 6.4 | 0.95 | 6.2 | 0.83 | - | | - | | - | | - | | - | | - | | - | |
| 1 1/2 | 215 | 2828 | 15913 | | 13183 | | 9999 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 7.2 | 1.14 | 6.8 | 1.10 | 6.6 | 0.99 | - | | - | | - | | - | | - | | - | | - | |
| | 225 | 2960 | 16654 | | 14046 | | 11088 | | 5724 | | - | | - | | - | | - | | - | | - | |
| | | | 7.6 | 1.31 | 7.2 | 1.26 | 6.9 | 1.16 | 6.8 | 0.80 | - | | - | | - | | - | | - | | - | |
| | 236 | 3105 | 17468 | | 14983 | | 12267 | | 8231 | | - | | - | | - | | - | | - | | - | |
| | | | 8.1 | 1.51 | 7.7 | 1.47 | 7.3 | 1.37 | 7.1 | 1.14 | - | | - | | - | | - | | - | | - | |
| 2 | 245 | 3223 | 18134 | | 15742 | | 13155 | | 9914 | | - | | - | | - | | - | | - | | - | |
| | | | 8.5 | 1.69 | 8.0 | 1.65 | 7.7 | 1.56 | 7.3 | 1.38 | - | | - | | - | | - | | - | | - | |
| | 255 | 3355 | 18874 | | 16577 | | 14131 | | 11319 | | 5416 | | - | | - | | - | | - | | - | |
| | | | 8.9 | 1.90 | 8.4 | 1.86 | 8.0 | 1.78 | 7.6 | 1.63 | 7.6 | 1.01 | - | | - | | - | | - | | - | |
| | 260 | 3420 | 19244 | | 16992 | | 14615 | | 11878 | | 6656 | | - | | - | | - | | - | | - | |
| | | | 9.1 | 2.02 | 8.6 | 1.98 | 8.2 | 1.89 | 7.8 | 1.74 | 7.7 | 1.24 | - | | - | | - | | - | | - | |
| 3 | 270 | 3552 | 19984 | | 17817 | | 15572 | | 12978 | | 8983 | | - | | - | | - | | - | | - | |
| | | | 9.5 | 2.26 | 9.0 | 2.22 | 8.6 | 2.14 | 8.1 | 1.99 | 7.9 | 1.66 | - | | - | | - | | - | | - | |
| | 280 | 3684 | 20725 | | 18637 | | 16515 | | 14055 | | 11032 | | 4757 | | - | | - | | - | | - | |
| | | | 9.9 | 2.52 | 9.5 | 2.48 | 9.0 | 2.40 | 8.5 | 2.26 | 8.1 | 2.04 | 8.1 | 1.10 | - | | - | | - | | - | |
| | 290 | 3815 | 21465 | | 19457 | | 17414 | | 15124 | | 12455 | | 7271 | | - | | - | | - | | - | |
| | | | 10.5 | 2.80 | 10.0 | 2.77 | 9.6 | 2.68 | 9.2 | 2.55 | 8.6 | 2.36 | 8.6 | 1.70 | - | | - | | - | | - | |
| | 298 | 3920 | 22057 | | 20091 | | 18116 | | 15911 | | 13468 | | 9191 | | - | | - | | - | | - | |
| | | | 11.0 | 3.04 | 10.4 | 3.00 | 9.9 | 2.92 | 9.5 | 2.79 | 9.0 | 2.61 | 8.9 | 2.13 | - | | - | | - | | - | |
| 5 | 315 | 4144 | 23315 | | 21458 | | 19589 | | 17568 | | 15336 | | 12614 | | 7315 | | - | | - | | - | |
| | | | 11.8 | 3.59 | 11.3 | 3.55 | 10.8 | 3.47 | 10.2 | 3.36 | 9.8 | 3.18 | 9.5 | 2.93 | 9.5 | 2.06 | - | | - | | - | |
| | 330 | 4341 | 24425 | | 22655 | | 20871 | | 19007 | | 16935 | | 14702 | | 10848 | | - | | - | | - | |
| | | | 12.6 | 4.13 | 12.0 | 4.09 | 11.4 | 4.00 | 10.9 | 3.90 | 10.5 | 3.73 | 10.1 | 3.53 | 10.0 | 3.00 | - | | - | | - | |
| | 345 | 4539 | 25536 | | 23842 | | 22138 | | 20420 | | 18461 | | 16365 | | 13809 | | - | | - | | - | |
| | | | 13.4 | 4.72 | 12.7 | 4.68 | 12.1 | 4.59 | 11.6 | 4.49 | 11.1 | 4.33 | 10.8 | 4.13 | 10.6 | 3.84 | - | | - | | - | |
| | 355 | 4670 | 26276 | | 24629 | | 22975 | | 21312 | | 19437 | | 17450 | | 15230 | | 6228 | | - | | - | |
| | | | 13.9 | 5.14 | 13.3 | 5.10 | 12.6 | 5.01 | 12.0 | 4.91 | 11.4 | 4.78 | 11.2 | 4.57 | 11.0 | 4.32 | 11.0 | 2.31 | - | | - | |
| 7 1/2 | 370 | 4868 | 27386 | | 25805 | | 24222 | | 22626 | | 20891 | | 19045 | | 17054 | | 9969 | | - | | - | |
| | | | 14.7 | 5.82 | 14.0 | 5.77 | 13.3 | 5.70 | 12.7 | 5.59 | 12.0 | 5.46 | 11.7 | 5.26 | 11.6 | 5.04 | 11.5 | 3.71 | - | | - | |
| | 385 | 5065 | 28496 | | 26976 | | 25458 | | 23923 | | 22322 | | 20569 | | 18696 | | 13361 | | - | | - | |
| | | | 15.3 | 6.56 | 14.7 | 6.51 | 14.0 | 6.44 | 13.4 | 6.33 | 12.7 | 6.20 | 12.2 | 6.01 | 12.1 | 5.80 | 11.9 | 4.94 | - | | - | |
| | 395 | 5196 | 29237 | | 27756 | | 26276 | | 24781 | | 23263 | | 21544 | | 19772 | | 15418 | | 6502 | | - | |
| | | | 15.8 | 7.08 | 15.1 | 7.03 | 14.5 | 6.96 | 13.8 | 6.85 | 13.1 | 6.73 | 12.5 | 6.57 | 12.4 | 6.34 | 12.3 | 5.70 | 12.3 | 3.00 | - | |
| | 406 | 5341 | 30051 | | 28611 | | 27181 | | 25718 | | 24263 | | 22617 | | 20941 | | 17033 | | 9283 | | - | |
| | | | 16.3 | 7.69 | 15.6 | 7.64 | 14.9 | 7.59 | 14.3 | 7.46 | 13.6 | 7.34 | 12.9 | 7.18 | 12.8 | 6.95 | 12.6 | 6.39 | 12.6 | 4.36 | - | |
| 10 | 425 | 5591 | 31457 | | 30084 | | 28700 | | 27320 | | 25931 | | 24440 | | 22849 | | 19444 | | 13785 | | - | |
| | | | 17.3 | 8.82 | 16.5 | 8.76 | 15.8 | 8.71 | 15.1 | 8.59 | 14.4 | 8.47 | 13.8 | 8.32 | 13.3 | 8.12 | 13.2 | 7.61 | 13.2 | 6.37 | - | |
| | 448 | 5894 | 33160 | | 31860 | | 30548 | | 29239 | | 27920 | | 26602 | | 25090 | | 21961 | | 18201 | | 10947 | |
| | | | 18.5 | 10.33 | 17.8 | 10.27 | 17.2 | 10.22 | 16.7 | 10.10 | 16.1 | 9.98 | 15.6 | 9.85 | 15.1 | 9.67 | 14.9 | 9.17 | 14.9 | 8.47 | 14.9 | 6.18 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5’0’ (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

# MB542 | BELT DRIVE




| |
|---|
| Galv. Steel Base = N/A |
| Aluminum Base = 0.125 |
| Discharge Apron = 0.150" |
| Hood = 0.125" |
| Roof Opening = 55" SQ. |
| Damper Size = 54 ½" SQ. |
| Max. Motor Frame Size = 254T |
| Peak BHP = (RPM/182)$^3$ |
| Max. RPM = 440 (15 HP) |
| Est. Ship Weight = 1500 lbs. |




| HP | RPM | Tip Speed FPM | 0.000" SP | | 0.125" SP | | 0.250" SP | | 0.375" SP | | 0.500" SP | | 0.625" SP | | 0.750" SP | | 1.000" SP | | 1.250" SP | | 1.500" SP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP | Sones | BHP |
| 1 1/2 | 165 | 2505 | 14688 | | 9955 | | - | | - | | - | | - | | - | | - | | - | | - | |
| | | | 5.9 | 0.70 | 5.7 | 0.63 | - | | - | | - | | - | | - | | - | | - | | - | |
| | 175 | 2657 | 15578 | | 11226 | | 4004 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.4 | 0.83 | 6.1 | 0.77 | 5.8 | 0.52 | - | | - | | - | | - | | - | | - | | - | |
| | 185 | 2809 | 16468 | | 12456 | | 6493 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 6.9 | 0.99 | 6.6 | 0.92 | 6.3 | 0.72 | - | | - | | - | | - | | - | | - | | - | |
| | 195 | 2961 | 17359 | | 13657 | | 8499 | | - | | - | | - | | - | | - | | - | | - | |
| | | | 7.3 | 1.15 | 7.0 | 1.09 | 6.8 | 0.92 | - | | - | | - | | - | | - | | - | | - | |
| 2 | 215 | 3265 | 19139 | | 15861 | | 11532 | | 5074 | | - | | - | | - | | - | | - | | - | |
| | | | 8.2 | 1.55 | 7.9 | 1.49 | 7.5 | 1.32 | 7.4 | 0.97 | - | | - | | - | | - | | - | | - | |
| | 220 | 3341 | 19584 | | 16401 | | 12238 | | 6336 | | - | | - | | - | | - | | - | | - | |
| | | | 8.4 | 1.66 | 8.1 | 1.60 | 7.7 | 1.44 | 7.6 | 1.12 | - | | - | | - | | - | | - | | - | |
| | 225 | 3416 | 20029 | | 16937 | | 12935 | | 7580 | | - | | - | | - | | - | | - | | - | |
| | | | 8.7 | 1.77 | 8.3 | 1.72 | 7.9 | 1.56 | 7.8 | 1.27 | - | | - | | - | | - | | - | | - | |
| 3 | 235 | 3568 | 20919 | | 18000 | | 14299 | | 9753 | | - | | - | | - | | - | | - | | - | |
| | | | 9.1 | 2.02 | 8.8 | 1.97 | 8.3 | 1.82 | 8.1 | 1.58 | - | | - | | - | | - | | - | | - | |
| | 240 | 3644 | 21365 | | 18526 | | 14935 | | 10594 | | 3733 | | - | | - | | - | | - | | - | |
| | | | 9.3 | 2.15 | 9.0 | 2.10 | 8.5 | 1.96 | 8.2 | 1.72 | 8.2 | 1.20 | - | | - | | - | | - | | - | |
| | 245 | 3720 | 21810 | | 19050 | | 15565 | | 11373 | | 5028 | | - | | - | | - | | - | | - | |
| | | | 9.5 | 2.29 | 9.2 | 2.24 | 8.7 | 2.10 | 8.4 | 1.86 | 8.4 | 1.38 | - | | - | | - | | - | | - | |
| | 255 | 3872 | 22700 | | 20089 | | 16806 | | 12900 | | 7559 | | - | | - | | - | | - | | - | |
| | | | 9.9 | 2.58 | 9.6 | 2.53 | 9.2 | 2.39 | 8.7 | 2.16 | 8.7 | 1.76 | - | | - | | - | | - | | - | |
| 5 | 265 | 4024 | 23590 | | 21118 | | 18025 | | 14362 | | 9911 | | - | | - | | - | | - | | - | |
| | | | 10.5 | 2.90 | 10.1 | 2.85 | 9.7 | 2.72 | 9.3 | 2.49 | 9.2 | 2.16 | - | | - | | - | | - | | - | |
| | 275 | 4176 | 24480 | | 22119 | | 19223 | | 15764 | | 11898 | | 5898 | | - | | - | | - | | - | |
| | | | 11.0 | 3.24 | 10.6 | 3.19 | 10.2 | 3.07 | 9.8 | 2.85 | 9.6 | 2.57 | 9.6 | 1.97 | - | | - | | - | | - | |
| | 295 | 4479 | 26261 | | 24059 | | 21444 | | 18426 | | 14978 | | 10805 | | 4849 | | - | | - | | - | |
| | | | 11.8 | 3.99 | 11.4 | 3.95 | 11.1 | 3.83 | 10.8 | 3.64 | 10.4 | 3.35 | 10.4 | 2.96 | 10.4 | 2.26 | - | | - | | - | |
| | 305 | 4631 | 27151 | | 25022 | | 22533 | | 19680 | | 16443 | | 12913 | | 7415 | | - | | - | | - | |
| | | | 12.3 | 4.41 | 11.8 | 4.37 | 11.5 | 4.25 | 11.3 | 4.06 | 10.9 | 3.79 | 10.9 | 3.48 | 10.9 | 2.80 | - | | - | | - | |
| 7 1/2 | 320 | 4859 | 28486 | | 26457 | | 24146 | | 21523 | | 18542 | | 15254 | | 11153 | | - | | - | | - | |
| | | | 13.0 | 5.10 | 12.4 | 5.05 | 12.2 | 4.94 | 11.9 | 4.76 | 11.7 | 4.51 | 11.5 | 4.18 | 11.5 | 3.70 | - | | - | | - | |
| | 330 | 5011 | 29376 | | 27408 | | 25208 | | 22731 | | 19910 | | 16773 | | 13299 | | - | | - | | - | |
| | | | 13.4 | 5.59 | 12.9 | 5.54 | 12.6 | 5.44 | 12.4 | 5.27 | 12.1 | 5.03 | 11.9 | 4.69 | 11.9 | 4.31 | - | | - | | - | |
| | 340 | 5163 | 30267 | | 28357 | | 26262 | | 23907 | | 21196 | | 18242 | | 15075 | | 5433 | | - | | - | |
| | | | 13.9 | 6.12 | 13.3 | 6.06 | 13.0 | 5.97 | 12.8 | 5.80 | 12.6 | 5.56 | 12.4 | 5.24 | 12.4 | 4.89 | 12.4 | 3.44 | - | | - | |
| | 350 | 5315 | 31157 | | 29301 | | 27307 | | 25020 | | 22452 | | 19652 | | 16627 | | 8009 | | - | | - | |
| | | | 14.3 | 6.67 | 13.7 | 6.62 | 13.4 | 6.53 | 13.2 | 6.36 | 13.1 | 6.13 | 12.9 | 5.82 | 12.8 | 5.46 | 12.8 | 4.15 | - | | - | |
| 10 | 365 | 5542 | 32492 | | 30713 | | 28862 | | 26668 | | 24304 | | 21723 | | 18899 | | 11779 | | - | | - | |
| | | | 14.9 | 7.57 | 14.2 | 7.51 | 13.9 | 7.43 | 13.8 | 7.26 | 13.7 | 7.04 | 13.5 | 6.77 | 13.4 | 6.39 | 13.4 | 5.32 | - | | - | |
| | 375 | 5694 | 33382 | | 31651 | | 29890 | | 27755 | | 25519 | | 23047 | | 20345 | | 14066 | | - | | - | |
| | | | 15.2 | 8.21 | 14.6 | 8.15 | 14.2 | 8.08 | 14.1 | 7.90 | 14.0 | 7.70 | 13.9 | 7.43 | 13.8 | 7.06 | 13.8 | 6.13 | - | | - | |
| | 385 | 5846 | 34273 | | 32586 | | 30899 | | 28832 | | 26720 | | 24312 | | 21750 | | 16190 | | 7338 | | - | |
| | | | 15.6 | 8.88 | 14.9 | 8.82 | 14.5 | 8.76 | 14.4 | 8.58 | 14.3 | 8.39 | 14.3 | 8.11 | 14.2 | 7.77 | 14.1 | 6.98 | 14.1 | 5.23 | - | |
| 15 | 410 | 6226 | 36498 | | 34914 | | 33330 | | 31490 | | 29537 | | 27407 | | 25146 | | 20095 | | 13644 | | - | |
| | | | 16.4 | 10.72 | 15.7 | 10.66 | 15.2 | 10.60 | 15.1 | 10.44 | 15.1 | 10.25 | 15.1 | 10.00 | 15.1 | 9.70 | 15.0 | 8.88 | 15.0 | 7.63 | - | |
| | 420 | 6377 | 37388 | | 35842 | | 34296 | | 32540 | | 30634 | | 28620 | | 26413 | | 21604 | | 15884 | | 7586 | |
| | | | 16.8 | 11.53 | 16.0 | 11.46 | 15.4 | 11.40 | 15.4 | 11.26 | 15.4 | 11.06 | 15.4 | 10.82 | 15.4 | 10.52 | 15.4 | 9.72 | 15.4 | 8.65 | 15.4 | 6.69 |
| | 430 | 6529 | 38279 | | 36768 | | 35258 | | 33584 | | 31722 | | 29821 | | 27665 | | 23064 | | 18008 | | 10149 | |
| | | | 17.4 | 12.37 | 16.6 | 12.30 | 16.0 | 12.24 | 15.9 | 12.11 | 15.9 | 11.90 | 15.9 | 11.68 | 15.9 | 11.38 | 15.9 | 10.60 | 15.9 | 9.70 | 15.9 | 7.77 |
| | 440 | 6681 | 39169 | | 37693 | | 36217 | | 34622 | | 32803 | | 30983 | | 28903 | | 24477 | | 19628 | | 12673 | |
| | | | 18.0 | 13.25 | 17.3 | 13.19 | 16.6 | 13.12 | 16.5 | 13.00 | 16.5 | 12.79 | 16.5 | 12.58 | 16.5 | 12.28 | 16.5 | 11.52 | 16.5 | 10.63 | 16.5 | 8.92 |

*Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.*

## ENGINEERING SPECIFICATIONS

**Model**
DX / KB / JB / MB = Domex

**Unit Size**
06, 08, 10, 11, 12, 14, 16, 18, 24, 27, 30, 36, 420, 48, 542

**Drive Type**
D = Direct Drive
B = Belt Drive

**Motor Tap**
Q = 1725 RPM
R = 1550 RPM
S = 1300 RPM
V = 1050 RPM
Q1 = 1650 RPM
Q2 = 1725 RPM

**ECM**
0 = None
G = ECM

**Motor Speed**
1 = Single Speed
2 = 2S2W Single & Three Phase
3 = 2S1W Three Phase

**Horse Power**
See selection software.

**Enclosure**
O = Open Drip Proof
T = Totally Enclosed
E = Explosion Proof
X = Special

**Voltage**
See selection software.

**Phase**
1 = Single
3 = Three

**Cycle**
5 = 50 Hz
6 = 60 Hz

**Efficiency**
S = Standard
P = Premium

**Paint / Coating**
0 = None
F = Epoxy Powder Coat*
G = Epoxy Powder Coat with UV*
H = Hi-Temp Powder Coat*
J = Non-stick Powder Coat*
K = Phenolic Powder Coat*
L = Phenolic Powder Coat with UV*
N = Polyester Powder Coat
X = Special
** Not available with choice of color.*

**Color**
0 = None
50 = Chrome Green
55 = Pale Green
56 = Dove Gray
61 = White
63 = Oxford Beige
65 = Dover White
66 = Desert Tan
70 = Black
73 = Smoke Gray
77 = Brick Red
79 = Peppercorn
81 = Pale Brown
83 = Chocolate Brown
85 = Timeless Bronze
94 = Charcoal
X = Special

**AMCA Spark Rating**
0 = None
C = Standard
B = Optional

**Damper**
0 = None
BDD = Gravity Backdraft Damper
MD1 = Gravity Backdraft Damper 115V
MD2 = Gravity Backdraft Damper 230V
MD4 = Gravity Backdraft Damper 460V
ED1 = Explosion Proof Motor Operated Damper 115V

**Screen**
0 = None
B = Bird Screen (Standard)
S = Insect/Bird Screen

**Roof Curb**
See selection software.

**Slope**
0 = None
S = Single
D = Double

**Metal Liner**
0 = None
L = Metal Liner

**Damper Holding Plate**
0 = None
P = Damper Holding Plate

**Neoprene Gasket**
0 = None
G = Gasket

**Wooden Nailer**
0 = None
W = Wooden Nailer

**Curb Paint/Coating**
0 = None
B = Air Dried Epoxy
Q = Enamel

**Hinged Sub-base**
0 = None
H = Hinged Sub-base

**Mounting Pedestal**
0 = None
P = Mounting Pedestal

**Aluminum Base**
0 = None
A = Aluminum Base

**Thermal Overload Protection**
0 = None
P = Thermal Overload Protection

**Disconnect Switch**
0 = None
1 = NEMA 1 Disconnect Switch
3R = NEMA 3R Disconnect Switch
4 = NEMA 4 Disconnect Switch
7 = NEMA 7 Disconnect Switch
9 = NEMA 9 Disconnect Switch

**Internal Wiring**
0 = None
1 = NEMA 1 Internal Wiring
3R = NEMA 3R Internal Wiring

**Transformer**
0 = None
T = Transformer

**Speed Controller**
0 = None
L = Loose
M = Mounted

**Firestat Switch**
0 = None
F = Firestat Switch

**High Wind Construction**
0 = None
M = Miami Dade Approved

# ENGINEERING SPECIFICATIONS

## Domex - Belt Drive Units

Belt driven centrifugal roof exhaust fan shall be Domex DX, KB, JB, MB, manufactured by PennBarry.

The housing shall be weatherproof, utilize heavy gauge spun aluminum construction with a large rolled bead for strength, with galvanized (aluminum optional) base, and with rigid galvanized steel internal support structures. Housing shall not provide any of the internal structural support. Units shall be equipped with an oversized electrical conduit chase through the curb cap and into the motor compartment for ease of wiring (except Explosion Proof). Units shall be pre-wired to a junction box mounted in the motor compartment & equipped with an electrical disconnect device (except Explosion Proof).

Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, ball bearing design, permanently lubricated, mounted out of the main airstream, and furnished at the specified voltage, phase, and enclosure.

Shafts shall be turned, ground, polished, and rust protected. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached, and sized for 150% of the horsepower at its rated maximum speed.

Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance (DX) or for Air performance (KB, JB, MB) and shall be UL listed.

## Domex - Direct Drive Units

Direct drive centrifugal roof exhaust fan shall be Domex DX, manufactured by PennBarry.

The housing shall be weatherproof, utilize heavy-gauge spun aluminum construction with a large rolled bead for strength, with galvanized (aluminum optional) base, and with rigid galvanized steel internal support structures. Housing shall not provide any of the internal structural support. Units shall be equipped with an oversized electrical conduit chase through the curb cap and into the motor compartment for ease of wiring (except Explosion Proof). Units shall be pre-wired to a junction box mounted in the motor compartment and equipped with an electrical disconnect device (except Explosion Proof).

Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, permanently lubricated, multi-speed (for applicable models), have thermal overload protection, mounted out of the main airstream, be easily accessible for service, and furnished at the specified voltage, phase.

Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance and shall be cULus listed.

## PennBarry Product Solutions

### COMMERCIAL

Roof & Wall Exhaust Centrifugal Fans

Ceiling, Wall, & Inline Centrifugal Fans

Roof Supply Centrifugal Fans

Square & Round Centrifugal Fans

Wall Mounted Axial Fans

Hooded Roof Axial Fans

Upblast Roof Axial Fans

Gravity Ventilators

Roof Curbs

### INDUSTRIAL

Utility Vent Sets

Freestanding Centrifugal Fans

Industrial & Material Handling Fans

Tubular Centrifugal Inline Fans

Mixed Flow Centrifugal Fans

Plug & Plenum Fans

Wall Mounted Propeller Fans

Tube Axial Fans

Vane Axial Fans

Bifurcator Fans

Fume Exhaust

### ENERGY RECOVERY

Outdoor Units

Indoor Units

### KITCHEN VENTILATION

Kitchen Hoods

Make-Up Air Units

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