

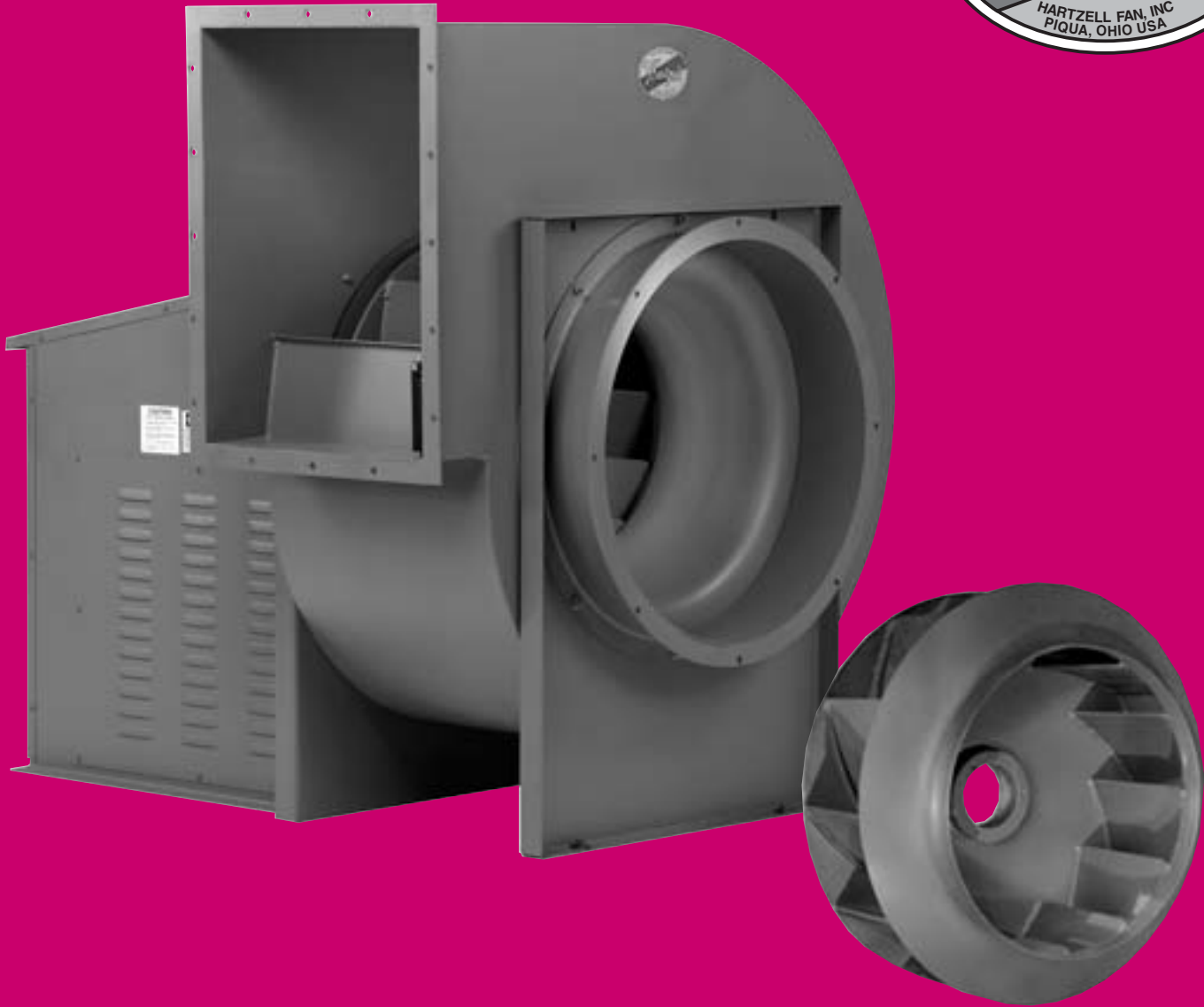
Backward Curved Centrifugal Fans

Series 03
Series 03S

Series 03P
Series 03Q

Series 03U
Series 03F

Series 13
Series 11



Craig Equipment Company

13055 MIDDLETOWN INDUSTRIAL BLVD. LOUISVILLE, KY 40223 • P.O. BOX 43250 LOUISVILLE, KY 40253

TF:800-928-7100 • T:502-245-4840 • F:502-245-1665

craig-equip.com

Index

Hartzell Model Code ExplanationPage 2
 Pictorial Table of ContentsPage 3
 Hartzell Backward Curved Centrifugal FansPage 4
 Temperature & Altitude CorrectionsPage 5
 Centrifugal Fan Classifications
 and Mounting ArrangementsPage 6
 Material SpecificationsPage 7
 Series 03U Backward Curved Utility Set.....Page 8
 Series 03- Backward Curved Centrifugal FanPage 9
 Dimensions – Series 03-Pages 10-11
 Series 03P Packaged Centrifugal FanPage 12

Dimensions – Series 03PPage 13
 Series 03- Direct Drive – Dim. & Rating Table ..Page 14
 Rating Tables Series 03-, Series 03PPages 15-27
 Series 13 – Backward Curved
 Centrifugal Fan, DWDIPage 28
 Dimensions – Series 13, DWDI.....Page 29
 Construction Option – Series 03SPage 30
 Construction Option – Series 03QPage 31
 Construction Options – Series 03F, Series 11 ..Page 32
 SpecificationsPage 33
 Options and AccessoriesPages 34-35



Certified Ratings for Air and Sound Performance

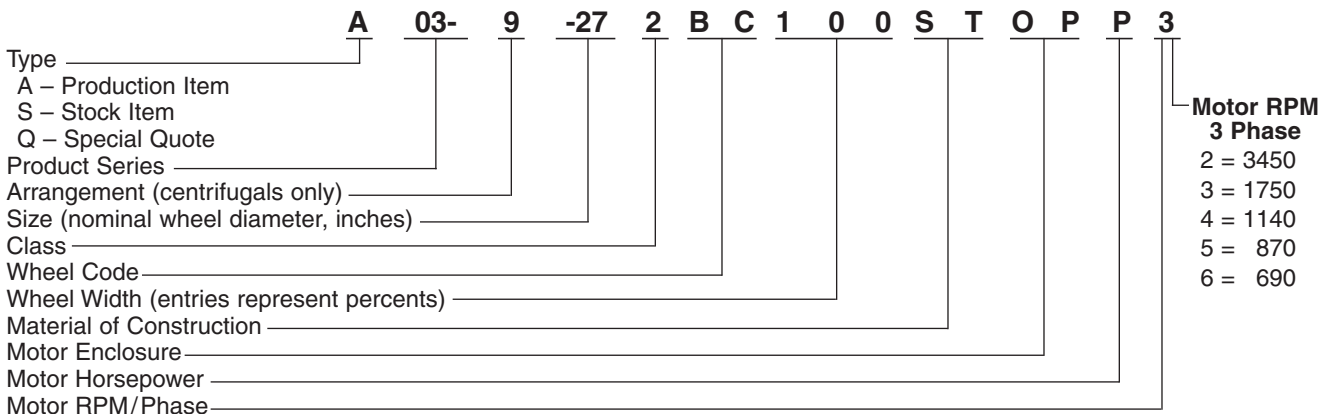
Hartzell Fan, Inc. certifies that the Backward Curved Centrifugal Fans, Series 03, and Series 03P with type BC wheels shown on pages 14 through 27, and Backward Curved Utility Set, Series 03U with type BU wheels shown on page 8, are licensed to bear the AMCA seal for air and sound performance. The ratings 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.

Sound performance data is available upon request. Please contact the factory and ask for Engineering Publication #SD-147 for the Series 03 and 03P and Engineering Publication #SD-03U for Series 03U.



Hartzell Fan, Inc. certifies that the Series 03 Backward Curved Centrifugal Fan, shown on page 16, is authorized to bear CE Marking in accordance with Machinery Safety Directive 98/37/EC of the European Union. Reference Technical File E.S. 13.2.1.

Hartzell Model Code Explanation



Motor Horsepower

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|-----|-----|-----|-----|---|-------|---|---|---|-------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|
| Horsepower | 1/4 | 1/3 | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 3 | 5 | 7 1/2 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 75 | 100 | 125 | 150 | 200 |
| Code Letter | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |

Example:

Assume a required performance of 12,000 CFM at 7" S.P.W.G., at standard conditions is required. Reading Rating Table on page 19, we find Series 03 Backward Curved Centrifugal Fan Arrangement 9, 27 inch wheel diameter with 100% wheel width. Class II construction. 12,000 CFM at 7" S.P., 1,635 RPM,

18.4 BHP, with outlet velocity of 2,712 FPM. Standard construction. Open, protected motor enclosure. Motor horsepower required is 20; therefore, horsepower code is "P." Motor RPM required is 1750; therefore, motor RPM code is "3."

This bulletin lists Hartzell's complete line of Series 03 Backward Curved Centrifugal Fans and accessories. More than 70 Hartzell offices can provide specific performance and installation data to meet your requirements. Call your Hartzell representative for assistance. Visit our website (www.hartzellfan.com) or call toll-free (1-800-336-3267) for the name of your Hartzell representative.

Certificates of Design Assessment are issued by the American Bureau of Shipping. The assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. The certificates, by itself, do not reflect that the products are Type Approved.



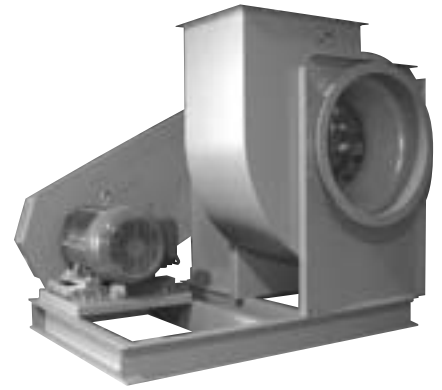
Backward Curved Centrifugal Fans



**Series 03U
Backward Curved
Utility Set
Page 8**



**Series 03 – Type BA & BC
Backward Curved
Centrifugals
Page 9**



**Series 03, Arrg. 1
Backward Curved
Centrifugals
Page 9**



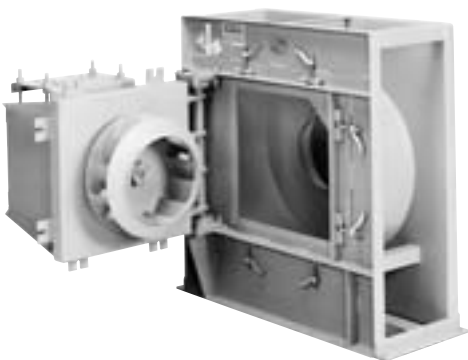
**Series 03P
Packaged Centrifugals
Page 12**



**Series 03
Direct Drive Centrifugals
Page 14**



**Series 13
Double Width Centrifugal Fan
Page 28**



**Series 03S
Swing Out Type
Page 30**



**Series 03Q
Square Type Fans
Page 31**



**Series 03F, Series 11
Flange Mount and Plug Fans
Page 32**



General Construction Features

The Hartzell backward curved centrifugal fans are designed to provide maximum performance and efficiency for clean air applications. These blowers are available in direct drive and belt drive configurations in a variety of arrangements and construction to meet your requirements. Air delivery ranges from 500 CFM to 186,000 CFM (depending on series), with static pressure capabilities to 14" and higher.

The Hartzell Type BC and BA (airfoil) wheels have non-overloading horsepower characteristics. Efficient airflow is provided over a broad range of pressures (maximum total efficiencies exceeding 80%). Designed for quiet operation, the Hartzell backward curved centrifugal blowers provide lower sound levels in the highest efficiency ranges.

Standard Construction – Our standard construction is built for reliable service in standard applications with continuously welded hot rolled steel housings. Bearing base/motor pedestal is constructed of hot rolled steel and structural steel. Standard construction also includes precision balancing and shafts, long life bearings and drives, industrial duty enamel finish, motor out of the airstream, easy installation, maintenance and system access.

Stock – Many sizes of the Series 03P and Series 03U are available from stock.

Your Special Features and Options – Hartzell Fan has a wide range of designs, configurations, performances, sizes, materials, finishes, and motors in-stock and from production to fit your ventilation requirements. Construction is available for high temperature, spark resistance, leak resistant, and special materials. Accessories including guards, companion flanges, dampers, louvers, inlet bells, sub-bases, vibration isolators, lifting lugs, and sound mufflers are available.

Series 03-
Shown with
optional equipment



Series, Sizes, Classes, Arrangements, and Features

Series 03 – Backward Curved Centrifugal Fans (SWSI), incorporate Heavy Industrial Duty Construction and are available in single width, single inlet wheel diameter sizes 12"–60", in Class I, II, or III, Arrangements 1, 3, 4, 8, 9, 9M, or 10. See page 9 for details.

Series 03P – Backward Curved Centrifugal Fans, Packaged, incorporate Industrial Duty Construction and are available in wheel diameter sizes 12"–36", (SWSI), Class II, Arrangement 10 packaged with guards and covers. See page 12 for details.

Series 03U – Backward Curved Utility Set is designed for General Industrial Service with value, application, and performance range taken together and is available in wheel diameter sizes 10"–30" (SWSI), Arrangement 10. Applications are limited by selection point and motor horsepower, see page 8 for details.

Series 13 – Backward Curved Centrifugal Fans (DWDI), incorporate Heavy Industrial Duty Construction and are available in double width, double inlet wheel diameter sizes 10"–60", in Class I, II, or III, Arrangements 1 or 3. See page 28 for details.

Series 03S, Series 03Q, Series 03F, Series 11 – Hartzell fan offers backward curved centrifugal fans in a variety of configurations to meet your requirements. See pages 30–32 for additional details on these series.

Wheel Design



Type BC Wheel

Type BC Wheel

The Hartzell backward curved centrifugal Type BC wheels have single thickness airfoil blades. The heavy-duty steel construction is reinforced depending on size and class of construction. The wheel's inlet rim is a tapered spun orifice. The inlet rim is overlapped by the fan's spun inlet cone with closely held tolerances to ensure maximum performance and efficiency.

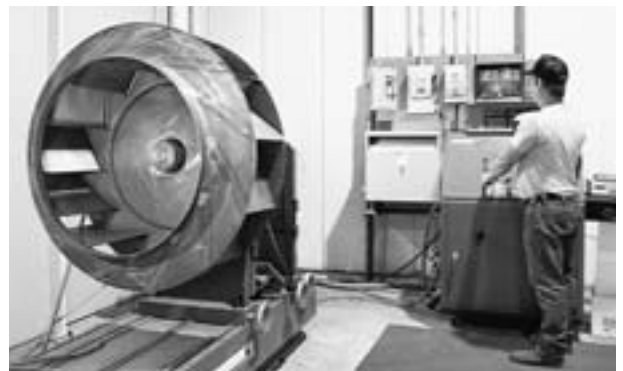


Type BA Wheel

Type BA Wheel (Airfoil)

The Hartzell backward curved centrifugal Type BA wheels have double thickness hollow airfoil blades. These blades are die formed in a true airfoil shape. The backplate and inlets on the Type BA wheels are the same configuration as the Type BC.




The wheels are individually precision balanced prior to assembly. Below illustrates the dynamic balance operation on a Hartzell Series 03 Type BC wheel. Equipment at this Hartzell Quality Assurance Station balances in two places.



Hartzell Centrifugal Fan Classifications

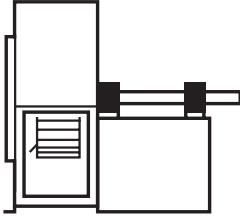
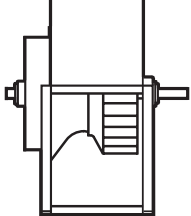
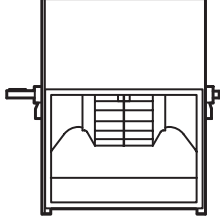
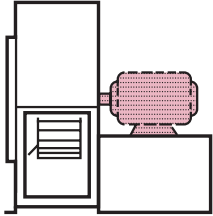
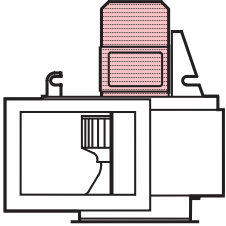
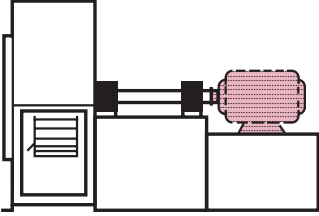
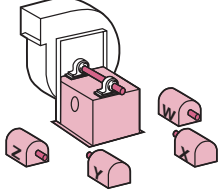
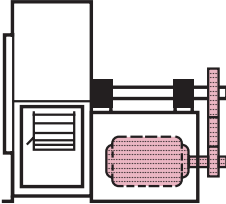
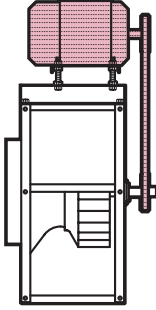
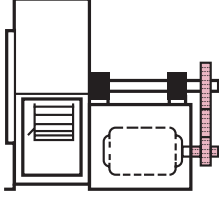
Hartzell Series 03 Backward Curved Centrifugal Fans are designed and classified to perform within the centrifugal fan classification parameters established by AMCA Standard No. 2408; AMCA

Publication 99. Hartzell Series 03 Backward Curved Centrifugal Fans are available in Class I, II and III construction. These parameters are explained in the following table.

| FAN CLASS | PERFORMANCE RANGE* | TABLE SHADING |
|-----------|---|---|
| I | 5" @ 2300 FPM To 2 1/2" @ 3200 FPM |  |
| II | 8 1/2" @ 3000 FPM To 4 1/4" @ 4175 FPM |  |
| III | 13 1/2" @ 3780 FPM To 6 3/4" @ 5260 FPM |  |

* At standard air conditions (70°F., 29.92 in. HG barometric pressure, .075 lbs./ft.3).
Static pressure shown in inches of water; outlet velocity shown in feet per minute.

Centrifugal Fan Arrangements

| | | | |
|---|---|---|--|
|  <p>Arrangement 1 Unit furnished with shaft and bearings, less motor and drive. Designed to be driven by a separately mounted motor. Impeller is overhung – two bearings on base. Temperature limitations: Standard fan to 300°F, heat fan to 800°F.</p> |  <p>Arrangement 3 Series 03 – Unit furnished with shaft and bearings, for belt drive configuration. One bearing on each side and supported by fan housing. Temperature limitations: Standard fan to 150° F.</p> |  <p>Arrangement 3 Series 13 – Double Width, Double Inlet Unit furnished with shaft and bearings, for belt drive configuration. One bearing on each side and supported by fan housing. Temperature limitations: Standard to 200° F.</p> |  <p>Arrangement 4 Direct drive packaged unit, wheel is overhung and attached to the shaft of the electric motor. No bearings on fan. Temperature limitations: Standard fan to 200°F.</p> |
|  <p>Arr. 4 Flange Mount Series 03F – Direct drive unit for mounting on fan inlet flange, wheel is overhung and attached to the shaft of the electric motor. No bearings on fan. Temperature limitations: Standard fan to 200° F.</p> |  <p>Arrangement 8 Direct Coupled configuration with motor mounted to common fan base. Impeller is overhung and supported by two bearings on fan base. Temperature Limitations: 800°F.</p> | <p>Motor Position Designation Motor position designation is necessary when ordering the following for Arrangement 1 fans – 1 – V Belt Drive. 2 – Vibration Bases. 3 – Belt Guards. Note: Location of motor is determined by facing the drive side of the fan and designating the motor position by letters W, X, Y, or Z.</p>  | |
|  <p>Arrangement 9 Series 03 – Belt drive configuration with motor mounted on outside of bearing base support. Packaged unit, wheel is overhung, slide rail motor base permits easy adjustment of belt tension. Available on either left or right hand side of base (when facing drive end of shaft). Temperature limitations: Standard fan to 300°F, heat fan to 800°F.</p> |  <p>Arrangement 9 Series 03Q – Belt drive configuration with motor mounted and fan housing. Bearings are out of airstream, (Arrangement 2), wheel is overhung, motor base permits easy adjustment of belt tension. See page 31 for motor positions. Temperature limitations: Standard fan to 200° F.</p> |  <p>Arrangement 10 Series 03, 03P, 03U – Belt drive configuration with motor mounted inside base. Packaged unit, wheel is overhung. Temperature limitations: Standard fan to 250°F, heat fan to 600°F.</p> | |

Adapted from AMCA Standard 99-2404-03, *Drive Arrangements for Centrifugal Fans*, and AMCA Standard 99-2407-03, *Motor Positions for Belt or Chain Drive Centrifugal Fans*, with written permission from Air Movement and Control Association International, Inc.



Temperature/Altitude Applications

When a fan operates in ambient conditions, generally it is handling standard air at 70°, 29.92" barometric pressure, weighing 0.075 lbs./cu. ft. For an application where the fan operates at other than ambient conditions (temperature, altitude, or both), correction factors must be applied to the selection of the fan. In addition, the standard construction of the fan must be modified. These modifications are explained on page 7 and illustrated as options on page 34-35.

Correction factors for temperatures and altitudes are provided in Table 1. When a fan operates at other than ambient conditions, the correction factors in Table 1 will be required to correct static pressure and horsepower.

Table 1 Altitude/Temperature Correction Factors

| Temp. ① (°F) | -25 | 0 | 25 | 50 | 70 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Factor | 0.82 | 0.87 | 0.91 | 0.96 | 1.00 | 1.06 | 1.15 | 1.25 | 1.34 | 1.43 | 1.53 | 1.62 | 1.72 | 1.81 | 1.91 | 2.00 | 2.09 | 2.19 | 2.29 | 2.38 |

| Alt. ② (Ft.) | 0 | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000 | 11000 | 12000 |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| Factor | 1.00 | 1.04 | 1.08 | 1.12 | 1.16 | 1.20 | 1.25 | 1.30 | 1.35 | 1.40 | 1.46 | 1.51 | 1.57 |

Above table has inverted values. Actual density is the reciprocal of the above values. ① At sea level. ② At 70°F.

For corrections involving both temperature and altitude, correction factors should be multiplied.

Example: 150°F at 7000 ft. Temperature factor 1.15 x altitude factor 1.30 = 1.50 combined correction factor.

Table 2 Maximum Safe Speeds @ 70°F

| Size | Maximum Speed (RPM) | | |
|------|---------------------|----------|-----------|
| | Class I | Class II | Class III |
| 12 | 3430 | 4365 | 5610 |
| 15 | 2730 | 3480 | 4470 |
| 18 | 2270 | 2890 | 3715 |
| 22 | 1855 | 2365 | 3040 |
| 24 | 1705 | 2170 | 2790 |
| 27 | 1520 | 1935 | 2490 |
| 30 | 1400 | 1780 | 2290 |
| 33 | 1275 | 1620 | 2085 |
| 36 | 1165 | 1485 | 1910 |
| 40 | 1045 | 1330 | 1710 |
| 44 | 945 | 1200 | 1545 |
| 49 | 855 | 1090 | 1405 |
| 54 | 775 | 985 | 1265 |
| 60 | 700 | 890 | 1145 |

NOTE: Maximum safe speeds are usually different than AMCA defined limits (see page 3). Tabular performance table shadings reflect AMCA limits. Hartzell Fanselct (Computer Fan Selection Software) reflects maximum RPM's shown in Table 2.

Use of Altitude – Temperature Correction Table

First select size, RPM and BHP of the blower needed.

If temperature or altitude is involved, correct to standard air. Example: Assume the required performance to be 24,000 CFM at 6.7" SP, 150°F and 7000 feet altitude.

1. Temperature factor 1.15 x altitude factor 1.30 = 1.50 combine correction factor.
2. 6.7" SP x 1.50 = 10" SP for 70°F at sea level.
3. A Series 03, Class III, 36" belt drive backward curved centrifugal, selected from the rating tables (page 22) for the new condition shows 24,000 CFM at 10" SP, 1,476 RPM and 48.6 BHP.
4. Correct the horsepower and static pressure in item 3 to nonstandard performance by dividing by factor: 10" SP divided by 1.50 = 6.7" SP; 48.6 BHP divided by 1.50 = 32.4 BHP.

Table 2 shows the maximum safe operating speeds for each size fan wheel, at each class of construction. In addition, this table also shows the maximum safe operating temperature for each fan arrangement.

At high temperatures, these maximum safe operating speeds should be derated. Deration varies according to material of construction. Table 3 provides maximum safe speed correction factors by temperature and material construction.

An example on the use of these tables appears at the bottom of this page.

Table 3 Maximum Safe Speed Correction Factors*

| Material Code | Spark Resistance | Material of Construction | Temperature °F. | | | | | | | | |
|---------------|------------------|---------------------------------------|-----------------|-------|--------|--------|--------|--------|--------|--------|--------|
| | | | 0°F. | 70°F. | 200°F. | 300°F. | 400°F. | 500°F. | 600°F. | 700°F. | 800°F. |
| ST | None | Steel Wheel & Housing | 1.000 | 1.000 | 1.000 | 0.966 | 0.930 | 0.890 | 0.860 | 0.820 | 0.77 |
| AA | AMCA "A" | Aluminum Wheel, Aluminum Housing | 0.966 | 0.948 | 0.837 | 0.733 | - | - | - | - | - |
| AB | AMCA "B" | Aluminum Wheel, Steel Housing | 0.966 | 0.948 | 0.837 | 0.733 | - | - | - | - | - |
| AC | AMCA "C" | Steel Wheel & Housing Aluminum Buffer | 1.000 | 1.000 | 1.000 | 0.966 | 0.930 | 0.890 | 0.860 | 0.820 | 0.77 |
| CT | None | Corten Wheel, Steel Housing | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 0.96 |
| S4 | None | 304SS Wheel & Housing | 1.000 | 1.000 | 1.000 | 0.938 | 0.896 | 0.852 | 0.830 | 0.806 | 0.792 |
| S6 | None | 316SS Wheel & Housing | 1.000 | 1.000 | 1.000 | 0.987 | 0.950 | 0.913 | 0.894 | 0.876 | 0.861 |
| 4L | None | 304LSS Wheel & Housing | 1.000 | 1.000 | 1.000 | 0.938 | 0.896 | 0.852 | 0.830 | 0.806 | 0.792 |
| 6L | None | 316LSS Wheel & Housing | 1.000 | 1.000 | 1.000 | 0.987 | 0.950 | 0.913 | 0.894 | 0.876 | 0.861 |

*NOTES: To correct maximum operating speeds (Table 2) for high temperatures, multiply those speeds by correction factor from Table 3. See also: Arrangement & Accessory Maximum Temperatures and High Temperature modifications shown on page 7.

5. Check the maximum safe speed. Maximum speed at 70°F for fan size 36", Class III is 1740 RPM. Using the maximum safe speed factor table and interpolating at 150°F for aluminum construction yields a safe speed factor of .985. The maximum safe speed is 1740 x .985 = 1714 RPM; thus operation at 1,476 RPM at 150°F is satisfactory.

6. Final performance of the unit at the assumed conditions: 24,000 CFM at 6.7" SP, 1,476 RPM, 32.4 BHP at 150°F and 7000 feet altitude.

7. Size motor for cold startups and use a special high altitude motor if altitude exceeds 3300 feet.



Material Specifications/Weight

Material Specifications – Gauge – All Sizes

| Class | Size | Housing (Thickness) | | | | | Shaft & Bearings | | *Maximum Motor Frame | | BC Wheel | | BA Wheel | | Installation Weights (Lbs.) (Less Motor) | | |
|-------|------|---------------------|--------------|--------------|-------------|-------------|--------------------------------|----------|----------------------|--|-------------|--|-------------|--------|--|------------|------|
| | | Scroll | Side | Side Angle | Flanges | | Size & Type Arr. #1 & #9 & #10 | Arr. #4 | Arr. #9 & #10 | (Lb.- Ft. ²) WR ² | (Lbs.) Wgt. | (Lb.- Ft. ²) WR ² | (Lbs.) Wgt. | Arr.#1 | Arr.#4 | Arr.#9
 | |
| | | | | | ① Inlet | ① Outlet | | | | | | | | | | | TEFC |
| I | 12 | 12GA | 12GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 | P3U-216 | 184T | 182T | 2.8 | 16.0 | | | 183 | 159 | 193 |
| | 15 | 12GA | 12GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 3/16 | P3U-219 | 256T | 184T | 6.0 | 23.9 | | | 256 | 263 | 269 |
| | 18 | 12GA | 12GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3U-219 | 286T | 184T | 12.0 | 37.7 | 12.5 | 39.2 | 377 | 390 | 390 |
| | 22 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3U-223 | 286T | 213T | 28.0 | 61.4 | 29.1 | 63.9 | 562 | 566 | 580 |
| | 24 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3U-223 | 286T | 215T | 50.0 | 89.2 | 52.0 | 92.8 | 699 | 667 | 717 |
| | 27 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3U-227 | 286T | 254T | 81.0 | 112 | 84.2 | 116.5 | 838 | 794 | 856 |
| | 30 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | P3U-231 | 326T | 254T | 112 | 138 | 116.5 | 143.5 | 1053 | 1007 | 1077 |
| | 33 | 12GA | 10GA | — | 2 1/2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | P3U-231 | 365T | 254T | 173 | 196 | 179.9 | 203.8 | 1286 | 1242 | 1310 |
| | 36 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 3/16 | P3U-235 | — | 256T | 277 | 250 | 288.1 | 260.0 | 1787 | — | 1811 |
| | 40 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 3/16 | P3U-235 | — | 284T | 438 | 312 | 455.5 | 324.5 | 2152 | — | 2179 |
| | 44 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 7/16 | P3U-239 | — | 286T | 651 | 377 | 677.0 | 392.1 | 2654 | — | 2681 |
| | 49 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 7/16 | PB-22439 | — | 324T | 1233 | 583 | 1282.3 | 606.3 | 3160 | — | 3187 |
| 54 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 1/2 x 1/4 | 2 7/16 | PB-22439 | — | 364T | 1290 | 720 | 1340 | 760 | 3550 | — | 3580 | |
| 60 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 1/2 x 1/4 | 2 11/16 | PB-22443 | — | 364T | 2300 | 920 | 2390 | 990 | 3940 | — | 3970 | |
| II | 12 | 12GA | 12GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3U-219 | 184T | 184T | 2.8 | 16.0 | | | 189 | 159 | 202 |
| | 15 | 12GA | 12GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3U-223 | 256T | 215T | 6.0 | 23.9 | | | 262 | 261 | 275 |
| | 18 | 12GA | 12GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3U-227 | 286T | 254T | 12.0 | 37.7 | 12.5 | 39.2 | 377 | 387 | 390 |
| | 22 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3U-227 | 286T | 256T | 28.0 | 61.4 | 29.1 | 63.9 | 572 | 566 | 595 |
| | 24 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | P3U-231 | 286T | 284T | 50.0 | 89.2 | 52.0 | 92.8 | 719 | 669 | 742 |
| | 27 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 2 3/16 | P3U-235 | 286T | 286T | 81.0 | 112 | 84.2 | 116.5 | 858 | 765 | 881 |
| | 30 | 12GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | PB-22431 | 326T | 286T | 122 | 148 | 126.9 | 153.9 | 1071 | 1019 | 1095 |
| | 33 | 12GA | 10GA | — | 2 1/2 x 1/4 | 1 1/2 x 7GA | 2 7/16 | PB-22435 | 365T | 324T | 189 | 208 | 196.6 | 216.3 | 1294 | 1241 | 1318 |
| | 36 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 3/16 | PB-22435 | — | 326T | 299 | 268 | 311.0 | 278.7 | 1854 | — | 1880 |
| | 40 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 7/16 | PB-22439 | — | 364T | 472 | 335 | 490.9 | 348.4 | 2219 | — | 2246 |
| | 44 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 7/16 | PB-22439 | — | 365T | 700 | 405 | 728.0 | 421.2 | 2727 | — | 2754 |
| | 49 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 15/16 | PB-22447 | — | 365T | 1310 | 616 | 1362.4 | 640.6 | 3281 | — | 3308 |
| 54 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 1/2 x 1/4 | 2 15/16 | PB-22447 | — | 405T* | 1410 | 800 | 1470 | 850 | 3770 | — | 3800 | |
| 60 | 10GA | 10GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 1/2 x 1/4 | 3 1/16 | PB-22451 | — | 405T* | 2500 | 1050 | 2610 | 1110 | 3940 | — | 3970 | |
| III | 12 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3U-227 | 184T | 184T | 3.0 | 17.2 | | | 200 | 160 | 213 |
| | 15 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3U-227 | 256T | 215T | 6.0 | 26.3 | | | 286 | 277 | 301 |
| | 18 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | P3U-231 | 286T | 256T | 12.0 | 40.1 | 12.5 | 41.7 | 420 | 408 | 435 |
| | 22 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | PB-22431 | 286T | 256T | 30.0 | 67.4 | 31.2 | 70.1 | 613 | 591 | 636 |
| | 24 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | PB-22431 | 286T | 286T | 53.0 | 95.2 | 55.1 | 99.0 | 744 | 694 | 769 |
| | 27 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 2 7/16 | PB-22435 | 286T | 286T | 87.0 | 120 | 90.5 | 124.8 | 904 | 799 | 929 |
| | 30 | 10GA | 10GA | — | 2 x 1/4 | 1 1/2 x 7GA | 2 11/16 | PB-22443 | 326T | 286T | 122 | 148 | 126.9 | 153.9 | 1134 | 1015 | 1160 |
| | 33 | 7GA | 7GA | — | 2 1/2 x 1/4 | 1 1/2 x 7GA | 2 15/16 | PB-22447 | 365T | 326T | 189 | 208 | 196.6 | 216.3 | 1471 | 1409 | 1497 |
| | 36 | 7GA | 7GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 15/16 | PB-22447 | — | 326T | 299 | 268 | 311.0 | 278.7 | 2017 | — | 2043 |
| | 40 | 7GA | 7GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 7/16 | PB-22447 | — | 364T | 472 | 335 | 490.9 | 348.4 | 2421 | — | 2453 |
| | 44 | 7GA | 7GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 15/16 | PB-22447 | — | 365T | 700 | 405 | 728.0 | 421.2 | 2869 | — | 2901 |
| | 49 | 7GA | 7GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 x 7GA | 2 15/16 | PB-22447 | — | 365T | 1310 | 616 | 1362.4 | 640.6 | 3636 | — | 3668 |
| 54 | 7GA | 7GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 1/2 x 1/4 | 3 1/16 | PB-22451 | — | 405T* | 1410 | 800 | 1470 | 850 | 4100 | — | 4140 | |
| 60 | 7GA | 7GA | 3 x 3 x 5/16 | 2 1/2 x 3/8 | 2 1/2 x 1/4 | 3 1/16 | PB-22455 | — | 405T* | 2500 | 1050 | 2610 | 1110 | 4800 | — | 4840 | |

① Inlet and outlet flanges are optional, with or without holes. *Arrangement #10 maximum frame size is 365T. Motor frames exceeding these values must be Arrangement 9M, Arrangement 1, or Arrangement 8. For other Arrangement maximum motor frame size and dimensions please contact factory. Dimensions and specifications are subject to change. Certified prints are available.

Arrangement & Accessory Maximum Temperatures*

| Description | Maximum Temperature |
|--|---------------------|
| Arrangement 1, 8, & 9 | 800° F |
| Arrangement 3 | 150° F |
| Arrangement 4 | 200° F |
| Arrangement 10 | 600° F |
| Aluminum Spark Resistant Construction | 350° F |
| Weather Cover Arrangement 9 | 500° F |
| Weather Cover Arrangement 10, Arrangement 9M | 250° F |

*Use in conjunction with High Temperature Modifications table.

High Temperature Modifications**

| Maximum Design Temperature | High Temperature Modifications Required |
|----------------------------|---|
| 70 - 300° F | Standard Construction, none required. |
| 301 - 600° F | Heat Slinger (must be supplied with heat slinger guard or shaft guard), high temperature shaft seal, high temperature paint, special bearing lubricant, fiberglass gasket material, motor heat shield on arrangement 9 or 10. |
| 601 - 800° F | In addition to above, bearing heat shield. |
| 801 - 1000° F | Contact Factory |

**Use in conjunction with Arrangement & Accessory Maximum Temperatures table.

NOTE: High temperature applications require air density correction and fan accessory items. See pages 6 and 34-35.



Series 03U Backward Curved Utility Set

Stock Models Available in Hartzell's HRS Program



Hartzell Fan, Inc. certifies that the Backward Curved Utility Set, Series 03U with type BU wheels shown here in a licensed to bear the AMCA seal for air and sound performance. 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.

Sound and Air Performance Data is available in Hartzell ESP (Electronic Support Package). Please visit www.hartzellfan.com to request a copy.

The Hartzell Series 03U Backward Curved Utility Set with single thickness airfoil blades has been designed for clean air applications. The wheel's inlet rim is a tapered spun orifice. The inlet rim is overlapped by the fan's spun inlet cone with closely held tolerances to provide maximum performance and efficiency. The Series 03U Utility Set, like all Hartzell products, is test run and balanced prior to shipment. In addition, the wheels are individually precision balanced prior to assembly.

Features

- **Sizes** – 10", 12", 13", 15", 16", 18", 20", 22", 24", 27" and 30" wheel diameters. SWSI only.
- **Arrangement** 10 packaged unit only.
- **Temperature Limitations** – suitable for temperatures up to 200°F.
- **Performance** – 530 CFM to 15,600 CFM; static pressures to 4" W.G.
- **Rotation and Discharge** – Clockwise or counterclockwise rotation in all eight discharge positions. Drawings and dimensions on page 4. Rotatable housing.
- **Wheels** – Type "BU" non-overloading backward curved, aluminum with single thickness airfoil blades.
- **Drive Assembly** – Belts are oil, heat and static resistant type. Shafts are turned, ground and polished, keyed at both ends.
- **Easy installation and maintenance** – Motor, drive and bearings are readily accessible for ease in wiring, installation, adjustment and lubrication.
- **AMCA Type "B" spark resistant construction** – Units are built to meet AMCA Type "B" construction as standard. AMCA Type "A" construction is available as an option.
- **Fan inlets and outlets** – Straight inlet and outlet connections are provided for easy "slip-fit" connection to ducting. Optional drilled or undrilled outlet flanges are available.
- **Neoprene shaft seal** standard on all sizes.
- **Options and Accessories** – See page 34-35.

Application Range – Series 03U

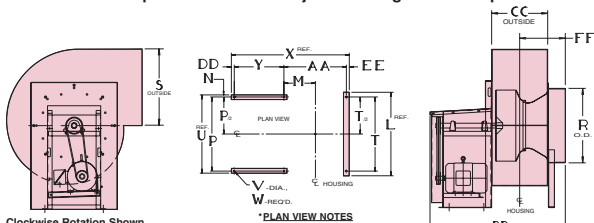
| Size | Model | Max BHP | Max Motor Frame | Fan RPM Range | CFM @ S.P. | | | | | Ship Weight Less Motor and Acc. |
|------|---------------------|---------|-----------------|---------------|------------|------------|------------|------------|------------|---------------------------------|
| | | | | | ½" | 1" | 2" | 3" | 4" | |
| 10 | 03U0-10-BU100BN---- | 1½ | 145T | 1375-3500 | 520-1755 | 515-1690 | 520-1495 | 520-1300 | 585-1105 | 137 |
| 12 | 03U0-12-BU100BN---- | 2 | 145T | 1100-2835 | 700-2440 | 700-2440 | 780-2175 | 960-1910 | 1045-1475 | 147 |
| 13 | 03U0-13-BU100BN---- | 2 | 145T | 985-2570 | 850-3050 | 850-3000 | 950-2650 | 1050-2350 | 1250-1800 | 153 |
| 15 | 03U0-15-BU100BN---- | 3 | 182T | 900-2265 | 1095-3700 | 1095-3700 | 1235-3560 | 1510-3014 | 1780-2465 | 194 |
| 16 | 03U0-16-BU100BN---- | 3 | 182T | 810-2100 | 1250-4600 | 1260-4400 | 1400-4100 | 1750-3500 | 2050-2850 | 218 |
| 18 | 03U0-18-BU100BN---- | 5 | 184T | 800-1885 | 1590-5950 | 1590-5950 | 1785-5550 | 2180-4960 | 2580-3970 | 256 |
| 20 | 03U0-20-BU100BN---- | 5 | 184T | 650-1740 | 1850-6950 | 1850-6950 | 2100-6250 | 2550-5550 | 3000-4400 | 287 |
| 22 | 03U0-22-BU100BN---- | 7½ | 184T | 700-1535 | 2375-8900 | 2375-8900 | 2670-8300 | 3265-7120 | 3855-5930 | 319 |
| 24 | 03U0-24-BU100BN---- | 7½ | 213T | 600-1410 | 2810-10550 | 2810-10550 | 3160-10200 | 3870-9140 | 4570-7380 | 351 |
| 27 | 03U0-27-BU100BN---- | 10 | 215T | 500-1260 | 3540-13270 | 3540-13270 | 3890-12830 | 4870-11500 | 5750-9290 | 497 |
| 30 | 03U0-30-BU100BN---- | 10 | 215T | 415-1150 | 4200-15600 | 4200-15600 | 4700-15150 | 5750-13550 | 6800-10950 | 555 |

Sound and Air Performance Data is available in Hartzell ESP (Electronic Support Package). Please visit www.hartzellfan.com to request a copy. Performance certified is for Installation Type D: Ducted Inlet/Ducted Outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Shaded units are available from stock. To complete model code, add class of construction, motor enclosure code, motor horsepower code and motor speed code. Refer to page 2 for more information.

Principal Dimensions (Inches)

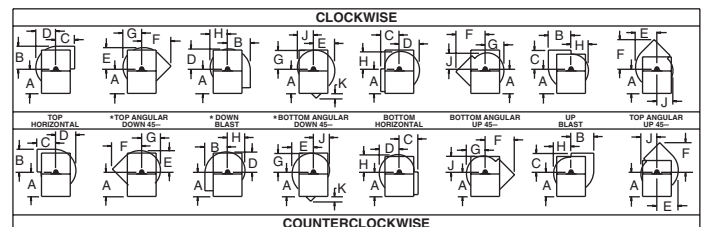
| FAN SIZE | A | B | C | D | R | S | U | X | BB | CC | FF |
|----------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------|------------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 10 | 18 ¹ / ₁₆ | 11 ³ / ₈ | 12 ¹ / ₄ | 10 ¹ / ₁₆ | 11 ¹ / ₁₆ | 11 ³ / ₈ | 21 ¹ / ₄ | 27 ³ / ₁₆ * | 35 ¹ / ₈ | 8 ⁵ / ₁₆ | 10 ¹ / ₄ |
| 12 | 18 ¹ / ₁₆ | 13 ³ / ₄ | 14 ¹ / ₄ | 11 ¹¹ / ₁₆ | 12 ¹³ / ₁₆ | 13 ³ / ₄ | 21 ¹ / ₄ | 28 ⁹ / ₁₆ * | 36 ¹ / ₂ | 9 ¹ / ₁₆ | 10 ¹⁵ / ₁₆ |
| 13 | 18 ¹ / ₁₆ | 14 ⁹ / ₁₆ | 15 ³ / ₄ | 12 ⁷ / ₈ | 14 ¹ / ₈ | 14 ⁵ / ₈ | 21 ¹ / ₄ | 29 ¹ / ₂ * | 37 ⁷ / ₁₆ | 10 ¹¹ / ₁₆ | 11 ⁷ / ₁₆ |
| 15 | 23 | 16 ¹⁹ / ₃₂ | 16 ⁹ / ₁₆ | 14 ¹¹ / ₁₆ | 16 ¹ / ₁₆ | 16 ⁵ / ₈ | 22 ¹ / ₄ | 31 ¹ / ₁₆ * | 38 ¹⁵ / ₁₆ | 12 ¹ / ₈ | 12 ⁹ / ₁₆ |
| 16 | 23 | 17 ¹³ / ₁₆ | 17 ³ / ₄ | 15 ³ / ₄ | 17 ¹ / ₄ | 17 ⁷ / ₈ | 22 ¹ / ₄ | 31 ¹⁵ / ₁₆ * | 39 ¹³ / ₁₆ | 12 ¹⁵ / ₁₆ | 12 ⁹ / ₁₆ |
| 18 | 23 | 20 | 18 ⁷ / ₈ | 17 ¹¹ / ₁₆ | 19 ³ / ₈ | 20 ¹ / ₁₆ | 22 ¹ / ₄ | 33 ¹ / ₂ | 41 ³ / ₈ | 14 ¹ / ₂ | 13 ³ / ₈ |
| 20 | 29 | 21 ⁵ / ₈ | 20 ⁷ / ₁₆ | 19 ¹ / ₈ | 20 ⁷ / ₈ | 21 ¹¹ / ₁₆ | 22 ¹ / ₄ | 34 ³ / ₄ | 42 ⁵ / ₈ | 15 ³ / ₄ | 14 |
| 22 | 29 | 24 ³ / ₈ | 22 | 21 ⁹ / ₁₆ | 23 ⁵ / ₈ | 24 ¹ / ₂ | 22 ¹ / ₄ | 36 ³ / ₄ | 44 ⁵ / ₈ | 17 ¹³ / ₁₆ | 15 |
| 24 | 29 | 26 ⁹ / ₁₆ | 23 ⁷ / ₁₆ | 23 ⁷ / ₁₆ | 25 ¹ / ₁₆ | 26 ¹¹ / ₁₆ | 22 ¹ / ₄ | 38 ⁵ / ₁₆ | 46 ³ / ₁₆ | 19 ³ / ₈ | 15 ¹³ / ₁₆ |
| 27 | 36 | 29 ³ / ₄ | 25 ³ / ₄ | 26 ⁵ / ₁₆ | 28 ⁷ / ₈ | 29 ⁷ / ₈ | 33 ¹ / ₂ | 43 ¹⁵ / ₁₆ | 51 ¹ / ₂ | 21 ¹¹ / ₁₆ | 16 ¹⁵ / ₁₆ |
| 30 | 36 | 32 ⁵ / ₁₆ | 27 ¹ / ₂ | 28 ⁹ / ₁₆ | 31 ⁵ / ₁₆ | 32 ³ / ₈ | 33 ¹ / ₂ | 45 ¹ / ₂ | 53 ³ / ₈ | 23 ⁹ / ₁₆ | 17 ⁷ / ₈ |

Dimensions and specifications are subject to change. Certified prints are available.



Refer to sales drawings for additional dimensions.

Fan Discharges



Series 03 Backward Curved Centrifugal Fan Type BA and Type BC



ABS Certificate of Design Assessment Received



Hartzell Fan, Inc. certifies that the Backward Curved Centrifugal Fan, Series 03 with type BC wheels shown herein is licensed to bear the AMCA seal for air and sound performance. 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.

Sound performance data is available upon request. Please contact the factory and ask for Engineering Publication #SD-147.



Hartzell Fan, Inc. certifies that the Backward Curved Centrifugal Fans, Series 03, shown herein, is authorized to bear CE Marking in accordance with Machinery Safety Directive 98/37/EC of the European Union. Reference Technical File E.S. 13.2.1.



**Type BC –
SWSI Backward Curved Wheel**



**Type BA –
SWSI Backward Curved
Airfoil Wheel**

The Hartzell Series 03 Backward Curved Centrifugal Fans are designed to provide maximum performance and efficiency. These versatile and dependable units are suited for handling clean air and industrial fumes. These blowers are available in direct drive and belt drive configurations.

The Hartzell Type BC and BA (airfoil) wheels have non-overloading horsepower characteristics. Efficient airflow is provided over a broad range of pressures (maximum total efficiencies exceeding 80%). Designed for quiet operation, the Hartzell backward curved centrifugal fans provide lower sound levels in the highest efficiency ranges. Accurate and reliable air performance and sound power rating, in eight octave bands, in accordance with industry standards, tests, and procedures is available. Air delivery ranges from 700 CFM to 104,000 CFM; static pressure capabilities to 14" and higher.

Features

- **Sizes, Classes, and Arrangements** – available in single width, single inlet wheel diameter sizes 12" - 60", in Class I, II, or III, Belt Drive Arrangements #1, #9, #9M, and #10, Direct Drive Arr. #4 and Direct Coupled Arr. #8. Contact Factory for others.
- **Rotation and Discharge Positions** – Available in both clockwise and counterclockwise rotations and in standard discharge positions. Housing discharge position can be changed on fan sizes 12" through 33". Size 36" through 60" are fixed position and are non-rotatable.
- **Standard Construction** – The Hartzell Series 03 Backward Curved Centrifugal Fans, (SWSI), incorporate Heavy Industrial Duty Construction - Designed for Heavyweight Service with ruggedness, use, long life, reliability, and performance taken together. Housings are continuously welded rolled steel and bearing base/motor pedestal bases are built of heavy gauge hot rolled steel and structural steel. See material specification tables for construction details.
- **Fan Inlets and Outlets** – Straight inlet and outlet connections are provided for easy "slip-fit" connection to ducting. Optional continuously welded flanges are available.
- **Wheels** – Type BC wheels have single thickness airfoil blades, and Type BA wheels have double thickness hollow airfoil blades. The heavy-duty steel construction is reinforced depending on size and class of construction. The wheel's inlet rim is a tapered spun orifice. The inlet rim is overlapped by the fan's spun inlet cone with closely held tolerances to ensure maximum performance and efficiency.
- **Balancing** – Fans are electronically statically and dynamically balanced to the requirements of Fan Application Category BV-3 of AMCA/ANSI Std. 204-96 and whenever possible receive an Operational Test and Inspection prior to shipment.
- **Bearings** – Fan Bearings are heavy-duty, self-aligning, shielded and mechanically sealed, ball or roller type, in cast iron or malleable pillow block housings. Bearings are selected for minimum L-50 Life of 250,000 hours at maximum catalog speed, horsepower, and static pressure. Lubrication fittings are extended as standard for easy relubrication.
- **Shafts and Drives** – Shafts are turned, ground, polished, keyed at both ends, and sized to operate well below critical speed. V-Belt Drives are oversized for long life and continuous duty and are fixed pitch as standard option. Variable pitch drives are available upon request. Belts are oil, heat, and static resistant type.
- **Standard Finish** – Standard fans and accessories are pretreated and painted with blue industrial duty air dry enamel. Alternate coatings are available for high temperature and corrosive environments.
- **Motor Out of the Airstream** – Exterior motor mounting for easy electrical connection, adjustment of belts, and lubrication is standard. An adjustable motor slide base in belt drive models is standard. Motors can be furnished as TEFC, ODP, Mill and Chemical Duty, or to specifications upon request. Motor HP and frame size limits are identified in Dimensions and Material Specifications table.
- **High Temperature Fans and Systems** – Standard construction operates to 300°F (except Arrangement 4). Construction is available for operation up to 800°F in most arrangements. (See Pages 6-7).
- **Spark Resistant Construction** – AMCA Type A, B, and C is available, Membrane Type shaft seal is standard with AMCA Spark Resistant Construction. Explosion Proof Motors are also available.
- **Special Materials of Construction** – Alternate materials of construction; stainless steel, aluminum, fiberglass housing, and other materials are available upon request.
- **Your Special Features and Options** – Hartzell Fan has a wide range of designs, configurations, performances, sizes, materials, finishes, and motors in-stock and from production to fit your ventilation requirements. Accessories including guards, companion flanges, dampers, louvers, inlet bells, sub-bases, vibration isolators, lifting lugs, leak resistant construction, and sound mufflers are available.



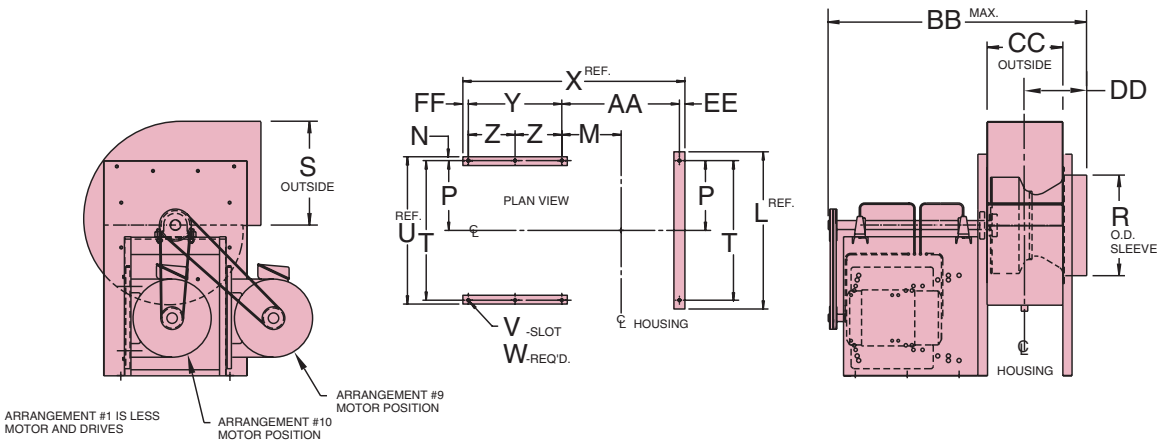
Dimensions – Arrangements 1, 9, or 10

SERIES 03

Sizes 12 BC Through 33 BC, Rotatable Housing

Standard Construction – Classes I, II and III, Maximum Temperature – 800°F.

Clockwise Shown. Counterclockwise Opposite.



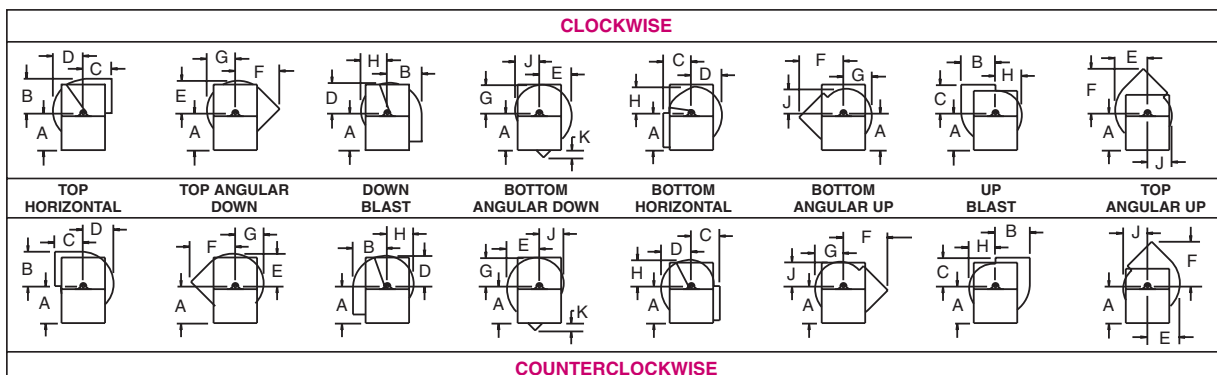
Principal Dimensions (Inches) – Sizes 12" – 33"

| FAN SIZE | A | B | C | D | E | F | G | H | J | K | L | M | N |
|----------|----------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|---------------------------------|
| 12 | 18 ¹ / ₂ | 13 ⁵ / ₁₆ | 14 ¹ / ₄ | 11 ³ / ₄ | 12 ⁹ / ₁₆ | 19 ¹ / ₂ | 11 | 10 ¹ / ₄ | 9 ¹ / ₂ | 1 | *18 ³ / ₄ | 7 ¹ / ₄ | 1 |
| 15 | 21 ¹ / ₂ | 16 ¹¹ / ₁₆ | 16 ⁹ / ₁₆ | 14 ³ / ₄ | 15 ¹ / ₄ | 23 ¹ / ₂ | 13 ¹³ / ₁₆ | 12 ¹³ / ₁₆ | 11 ⁷ / ₈ | 2 | *20 ³ / ₄ | 8 ¹ / ₂ | 1 |
| 18 | 24 ¹ / ₄ | 20 | 18 ⁷ / ₈ | 17 ¹¹ / ₁₆ | 18 ⁷ / ₈ | 27 ¹ / ₂ | 16 ⁹ / ₁₆ | 15 ³ / ₈ | 14 ¹ / ₄ | 3 ¹ / ₄ | 27 ³ / ₄ | 11 ³ / ₁₆ | 1 ¹⁵ / ₁₆ |
| 22 | 30 | 24 ⁷ / ₁₆ | 22 | 21 ⁵ / ₈ | 23 ¹ / ₁₆ | 32 ⁷ / ₈ | 20 ³ / ₁₆ | 18 ³ / ₁₆ | 17 ³ / ₈ | 2 ⁷ / ₈ | 28 ¹ / ₈ | 11 ¹ / ₄ | 1 |
| 24 | 33 ¹⁵ / ₁₆ | 26 ⁵ / ₈ | 23 ⁹ / ₁₆ | 23 ¹ / ₂ | 25 ¹ / ₁₆ | 35 ¹ / ₂ | 22 | 20 ⁷ / ₁₆ | 18 ¹⁵ / ₁₆ | 1 ⁹ / ₁₆ | 30 | 12 | 1 |
| 27 | 32 ⁵ / ₈ | 29 ¹³ / ₁₆ | 25 ³ / ₄ | 26 ³ / ₈ | 28 ¹ / ₈ | 39 ⁵ / ₁₆ | 24 ⁵ / ₈ | 22 ¹⁵ / ₁₆ | 21 ³ / ₁₆ | 6 ¹¹ / ₁₆ | 33 ³ / ₈ | 13 ³ / ₁₆ | 1 |
| 30 | 37 | 32 ³ / ₈ | 27 ¹ / ₂ | 28 ⁹ / ₁₆ | 30 ¹ / ₂ | 42 ⁹ / ₁₆ | 26 ¹¹ / ₁₆ | 24 ¹³ / ₁₆ | 22 ¹⁵ / ₁₆ | 5 ⁵ / ₁₆ | 43 ³ / ₄ | 16 ¹³ / ₁₆ | 2 ¹ / ₈ |
| 33 | 40 | 35 ⁹ / ₁₆ | 30 | 31 ⁷ / ₁₆ | 33 ¹ / ₂ | 46 ³ / ₈ | 29 ⁹ / ₈ | 27 ⁹ / ₁₆ | 25 ¹ / ₄ | 6 ³ / ₈ | 47 ¹ / ₄ | 18 ¹ / ₁₆ | 2 ¹ / ₈ |

| FAN SIZE | P | R | S | T | U | V | W | X | Y | Z | AA | BB | CC | DD | EE | FF |
|----------|----------------------------------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|--|---|-----------------------------------|--------------------------------|--------------------------------|-----------------------------------|----------------------------------|----------------------------------|---------------------------------|-------------------------------|-------------------------------|
| 12 | 8 ¹ / ₈ | 12 ¹⁵ / ₁₆ | 13 ³ / ₈ | 16 ¹ / ₄ | 18 ¹ / ₄ | 1 ¹¹ / ₁₆ X 1 ¹ / ₁₆ | 4 | *28 ⁵ / ₁₆ | 12 ³ / ₄ | – | *13 ⁹ / ₁₆ | 36 ⁵ / ₁₆ | 9 ³ / ₄ | 11 ³ / ₁₆ | *1 | 1 ¹ / ₄ |
| 15 | 9 ¹ / ₈ | 16 ³ / ₁₆ | 16 ³ / ₄ | 18 ¹ / ₄ | 20 ¹ / ₄ | 1 ¹¹ / ₁₆ X 1 ¹ / ₁₆ | 4 | *33 ¹¹ / ₁₆ | 15 ³ / ₄ | – | *15 ¹¹ / ₁₆ | 41 ¹¹ / ₁₆ | 12 ² / ₃₂ | 12 ⁹ / ₁₆ | *1 | 1 ¹ / ₄ |
| 18 | 12 ¹¹ / ₁₆ | 19 ¹ / ₂ | 20 ¹ / ₁₆ | 25 ³ / ₈ | 27 ¹ / ₄ | 1 ¹¹ / ₁₆ X 1 ¹ / ₁₆ | 8 | 40 ³ / ₄ | 18 ³ / ₄ | 9 ³ / ₈ | 19 ³ / ₄ | 49 ¹ / ₄ | 14 ¹⁹ / ₃₂ | 13 ⁵ / ₈ | 1 | 1 ¹ / ₄ |
| 22 | 12 ¹¹ / ₁₆ | 23 ³ / ₄ | 24 ¹ / ₂ | 25 ³ / ₈ | 27 ³ / ₈ | 1 ¹¹ / ₁₆ X 1 ¹ / ₁₆ | 8 | 43 ³ / ₄ | 20 ¹ / ₄ | 10 ¹ / ₈ | 21 ¹ / ₄ | 52 ¹ / ₄ | 17 ⁷ / ₈ | 15 ¹ / ₄ | 1 | 1 ¹ / ₄ |
| 24 | 12 ¹¹ / ₁₆ | 25 ¹³ / ₁₆ | 26 ¹¹ / ₁₆ | 25 ³ / ₈ | 27 ³ / ₈ | 1 ¹¹ / ₁₆ X 1 ¹ / ₁₆ | 8 | 47 ⁵ / ₈ | 22 ¹ / ₂ | 11 ¹ / ₄ | 22 ⁷ / ₈ | 56 ⁵ / ₈ | 19 ⁷ / ₁₆ | 16 | 1 | 1 ¹ / ₄ |
| 27 | 11 | 28 ¹⁵ / ₁₆ | 30 ¹ / ₁₆ | 22 | 24 | 1 ¹¹ / ₁₆ X 1 ¹ / ₁₆ | 8 | 49 ¹⁵ / ₁₆ | 22 ¹ / ₂ | 11 ¹ / ₄ | 25 ³ / ₁₆ | 61 ¹⁵ / ₁₆ | 21 ³ / ₄ | 17 ³ / ₁₆ | 1 | 1 ¹ / ₄ |
| 30 | 16 ⁷ / ₈ | 31 ³ / ₈ | 32 ⁷ / ₁₆ | 33 ³ / ₄ | 38 | 1 ¹³ / ₁₆ X 1 ¹ / ₄ | 9 | 56 ⁵ / ₁₆ | 22 ³ / ₄ | 11 ³ / ₈ | 30 ¹ / ₁₆ | 64 ¹ / ₈ | 23 ⁹ / ₁₆ | 18 ³ / ₃₂ | 1 ¹ / ₂ | 2 |
| 33 | 16 ⁷ / ₈ | 34 ¹ / ₂ | 35 ¹¹ / ₁₆ | 33 ³ / ₄ | 38 | 1 ¹³ / ₁₆ X 1 ¹ / ₄ | 9 | 61 ¹³ / ₁₆ | 25 ³ / ₄ | 12 ⁷ / ₈ | 32 ⁹ / ₁₆ | 70 ¹⁵ / ₁₆ | 26 ¹ / ₃₂ | 19 ⁹ / ₁₆ | 1 ¹ / ₂ | 2 |

PLAN VIEW NOTES: An inlet support and the dimensions indicated by an asterisk () are not standard for sizes 12-15 except when vibration isolators are specified. All dimensions listed for 18 thru 33 are standard with or without vibration isolators. Dimensions and specifications are subject to change. Certified prints are available.

Fan Discharges



NOTE: For bottom angular down, top angular down, and/or down blast, contact factory when discharge flanges are required.



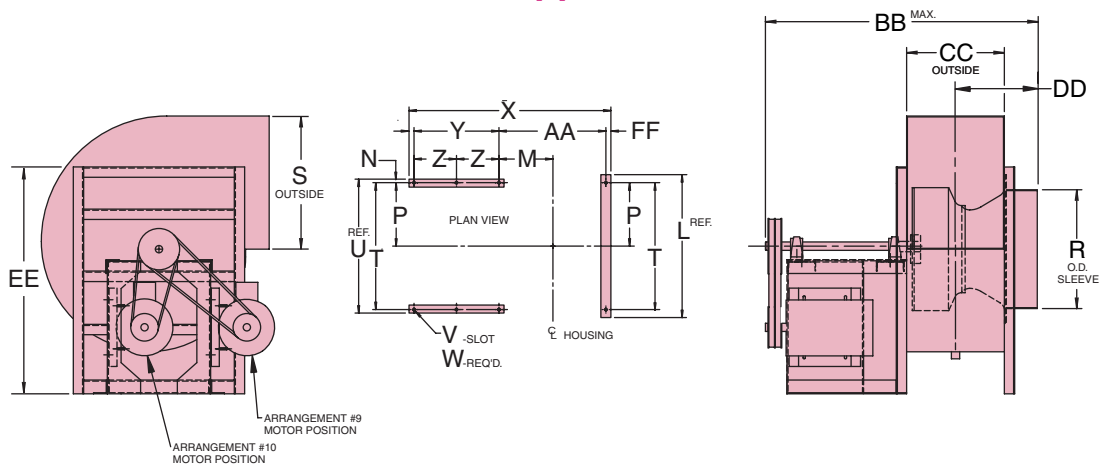
Dimensions – Arrangements 1, 9, or 10

SERIES 03-

Sizes 36 Through 60

Standard Construction – Classes I, II and III, Maximum Temperature – 800°F.

Clockwise Shown. Counterclockwise Opposite.



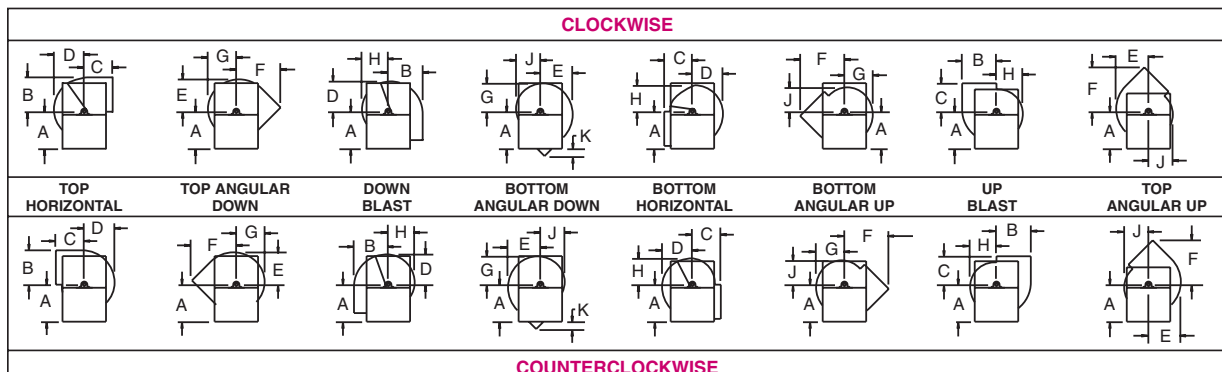
Principal Dimensions (Inches) – Sizes 36" – 60"

| FAN SIZE | A | | | B | C | D | E | F | G | H | J | K | L | M |
|----------|--------------------------------|--------------------------------|--------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------|----------------------------------|
| | TAD/TH | TAU/UB | BAU/BH/DB | | | | | | | | | | | |
| 36 | 42 | 42 | 42 | 38 ³ / ₄ | 38 | 34 ⁵ / ₁₆ | 36 ⁹ / ₁₆ | 54 ⁵ / ₁₆ | 32 ¹ / ₃₂ | 29 ¹³ / ₁₆ | 27 ⁹ / ₁₆ | 12 ⁵ / ₁₆ | 50 ³ / ₄ | 19 ¹ / ₈ |
| 40 | 47 | 47 | 47 | 43 ³ / ₈ | 41 ³ / ₄ | 38 ⁵ / ₁₆ | 40 ⁷ / ₈ | 60 ³ / ₁₆ | 35 ¹³ / ₁₆ | 33 ⁵ / ₁₆ | 30 ¹³ / ₁₆ | 13 ³ / ₁₆ | 55 ¹ / ₄ | 20 ¹³ / ₁₆ |
| 44 | 51 ¹ / ₄ | 51 ¹ / ₄ | 51 ¹ / ₄ | 47 ¹⁵ / ₁₆ | 44 ¹ / ₃₂ | 42 ³ / ₈ | 45 ¹ / ₈ | 65 ¹ / ₁₆ | 39 ⁵ / ₈ | 36 ¹³ / ₁₆ | 34 | 13 ¹³ / ₁₆ | 59 ⁵ / ₈ | 22 ⁷ / ₁₆ |
| 49 | 56 | 56 | 56 | 52 ³ / ₄ | 48 ¹ / ₃₂ | 46 ⁵ / ₈ | 49 ¹¹ / ₁₆ | 71 ¹ / ₄ | 43 ⁹ / ₁₆ | 40 ¹ / ₂ | 37 ⁷ / ₁₆ | 15 ¹ / ₄ | 64 ¹ / ₂ | 24 ³ / ₁₆ |
| 54 | 47 ³ / ₄ | 54 ¹ / ₄ | 61 | 60 ¹⁵ / ₁₆ | 53 ¹ / ₁₆ | 51 ¹¹ / ₁₆ | 55 ⁵ / ₁₆ | 78 ⁷ / ₈ | 48 ⁵ / ₁₆ | 44 ¹⁵ / ₁₆ | 41 ¹ / ₂ | --- | 69 ¹ / ₂ | 27 |
| 60 | 52 ¹ / ₂ | 60 | 67 ¹ / ₂ | 67 ¹ / ₈ | 58 5/8 | 57 ¹ / ₈ | 60 ⁷ / ₈ | 87 ¹ / ₄ | 53 ³ / ₈ | 49 ⁵ / ₈ | 45 ⁷ / ₈ | --- | 75 ¹ / ₂ | 29 ¹ / ₄ |

| FAN SIZE | N | P | R | S | T | U | V | W | X | Y | Z | AA | BB | CC | DD | EE* | FF |
|----------|-------------------------------|--------------------------------|---------------------------------|----------------------------------|--------------------------------|----|--|---|---------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|-------------------------------|
| 36 | 2 ¹ / ₈ | 16 ⁷ / ₈ | 37 ⁵ / ₈ | 38 ¹⁵ / ₁₆ | 33 ³ / ₄ | 38 | 1 ³ / ₁₆ X 1 ¹ / ₄ | 9 | 64 | 25 ³ / ₄ | 12 ⁷ / ₈ | 34 ³ / ₄ | 73 ⁹ / ₁₆ | 28 ¹ / ₄ | 20 ¹ / ₄ | --- | 1 ¹ / ₂ |
| 40 | 2 | 22 | 42 ¹ / ₈ | 43 ¹ / ₂ | 44 | 48 | 1 ³ / ₁₆ X 1 ¹ / ₄ | 9 | 69 ⁹ / ₁₆ | 27 ³ / ₄ | 13 ⁷ / ₈ | 38 ¹ / ₁₆ | 78 ⁵ / ₈ | 31 ⁹ / ₁₆ | 21 ¹⁵ / ₁₆ | --- | 1 ¹ / ₂ |
| 44 | 2 | 22 | 46 ⁵ / ₈ | 48 ¹ / ₁₆ | 44 | 48 | 1 ³ / ₁₆ X 1 ¹ / ₄ | 9 | 72 ⁵ / ₈ | 27 ³ / ₄ | 13 ⁷ / ₈ | 41 ³ / ₈ | 82 ⁷ / ₁₆ | 34 ¹ / ₈ | 23 ⁵ / ₈ | --- | 1 ¹ / ₂ |
| 49 | 2 | 22 | 51 ³ / ₁₆ | 52 ⁷ / ₈ | 44 | 48 | 1 ³ / ₁₆ X 1 ¹ / ₄ | 9 | 76 ¹ / ₈ | 27 ³ / ₄ | 13 ⁷ / ₈ | 44 ⁷ / ₈ | 86 ¹⁵ / ₁₆ | 38 ³ / ₈ | 25 ³ / ₈ | --- | 1 ¹ / ₂ |
| 54 | 2 | 27 | 56 ³ / ₄ | 58 ⁵ / ₈ | 54 | 58 | 1 ³ / ₁₆ | 9 | 85 ⁵ / ₁₆ | 32 | 16 | 49 ⁵ / ₁₆ | 97 ¹ / ₁₆ | 42 ⁹ / ₁₆ | 27 ³ / ₈ | 91 ³ / ₄ | 1 ³ / ₈ |
| 60 | 2 | 27 | 62 ³ / ₄ | 64 ¹³ / ₁₆ | 54 | 58 | 1 ³ / ₁₆ | 9 | 89 ³ / ₄ | 32 | 16 | 54 ³ / ₈ | 101 ¹ / ₂ | 47 | 29 ⁵ / ₈ | 101 ³ / ₈ | 1 ³ / ₈ |

NOTE: *For top angular up discharge only 54" and 60", dimension is for location of removable split scroll to allow for shipping. Assembly required in field. Dimensions and specifications are subject to change. Certified prints are available.

Fan Discharges



NOTE: For bottom angular down, top angular down, and/or down blast, contact factory when discharge flanges are required.



Series 03P Backward Curved Centrifugal Fan, Packaged



Series 03P

Shown with optional equipment



Hartzell Fan, Inc. certifies that the Backward Curved Centrifugal Fan, Packaged, Series 03P, with type BC wheels shown herein is licensed to bear the AMCA seal for air and sound performance. 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.

Sound performance data is available upon request. Please contact the factory and ask for Engineering Publication #SD-147.

ABS Certificate
of Design Assessment
Received



Type BC Wheel

Type BA Wheel also available

Series 03P – Backward Curved Centrifugal Fans, Packaged, is built for reliable service in standard applications and is designed to provide maximum performance and efficiency in a compact, packaged, Class II design. These versatile and dependable units are suited for handling clean air and industrial fumes, and incorporate Industrial Duty Construction.

Developed to perform throughout the entire Class II Performance Range, the Series 03P utilize the Hartzell Type BC And BA (airfoil) wheels and have non-overloading horsepower characteristics. Efficient airflow is provided over a broad range of pressures (maximum total efficiencies exceeding 80%). Designed for quiet operation, the Series 03P provides lower sound levels in the highest efficiency ranges.

Sizes and Performance – wheel diameter sizes **12" – 36"**, (SWSI), Class II, Arrangement 10. Air delivery ranges from **700 CFM to 35,000 CFM**; static pressure capabilities to **10" W.G.**

Features

- **Construction** – Housings are continuously welded rolled steel and bearing base/motor pedestal bases are built of heavy gauge hot rolled steel. Base is sized to accept maximum motor frame size required for Class II operation. See material specification tables construction details.
- **Rotation and Discharge Positions** – Available in both clockwise and counter-clockwise rotations and in all standard discharge positions. Housing discharge position can be changed on all sizes.
- **Stock** – Most sizes of the Series 03P are available from stock.
- **Standard Shaft Seal** – A shaft seal is placed where the shaft leaves the housing to minimize leakage. Seal is not gas tight.
- **Bearings** – Bearings are heavy duty, self-aligning, ball or roller type, in cast iron pillow block housings, selected for long life at maximum class II construction limits, and include extended lubrication fittings as standard.
- **Shafts and Drives** – Shafts are turned, ground, polished, keyed at both ends, and sized to operate well below critical speed. V-Belt Drives are oversized for long life and continuous duty and are fixed pitch as standard option. Variable pitch drives for sizes 24" through 36" are available upon request. Belts are oil, heat, and static resistant type. Weather cover is standard.
- **Balancing** – Fans are electronically statically and dynamically balanced to the requirements of Fan Application Category BV-3 of AMCA ANSI Std. 204-96 and whenever possible receive an Operational Test and Inspection prior to shipment.
- **Fan Inlets and Outlets** – Straight inlet and outlet connections are provided for easy "slip-fit" connection to ducting. Optional continuously welded flanges are available. Flange bolt holes are optional.
- **Motor Out of the Airstream** – Exterior motor mounting for easy electrical connection, adjustment of belts, and lubrication of Drip Proof Protected motor on an adjustable motor pivot base is standard. Motors can be furnished as TEFC, Mill and Chemical Duty, or to specifications upon request. Motor HP and frame size limits are identified in Dimensions and Material Specifications table.
- **Easy Installation and Maintenance** – Motor, drives and bearings are readily accessible for ease in wiring, installation, adjustment, and lubrication.
- **Standard Finish** – Standard fans and accessories are pretreated and painted with blue industrial duty air dry enamel. Alternate coatings are available for high temperature and corrosive environments.
- **High Temperature Fans and Systems** – Standard construction operates to 250°F. Construction is available for operation up to 600°F with high temperature options. (See Pages 6-7).
- **Spark Resistant Construction** – AMCA Type A, B, and C is available, Membrane Type shaft seal is standard with AMCA Spark Resistant Construction. Explosion Proof Motors are also available.
- **Options and Accessories** – Accessories including companion flanges, dampers, louvers, inlet bells, sub-bases, vibration isolators, lifting lugs, leak resistant construction, and sound mufflers are available. See pages 34 and 35.



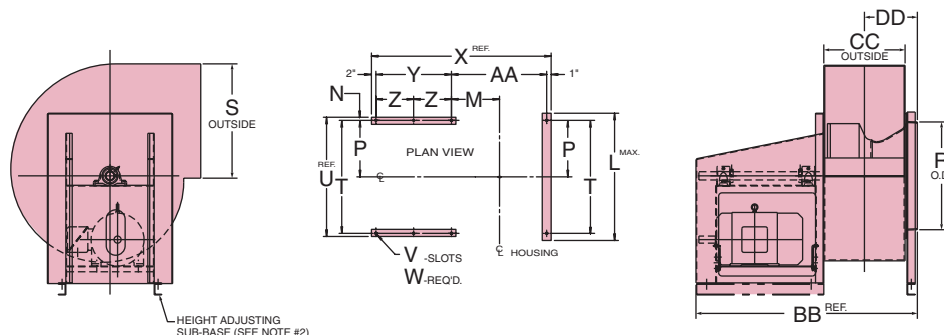
Dimensions – Arrangement 10

SERIES 03P

Sizes 12 Through 36

Standard Construction – Class II, Standard Maximum Temperature – 250°F.

Maximum Temperature – 600°F. Clockwise Shown. Counterclockwise Opposite.



Refer to sales drawings for additional dimensions.

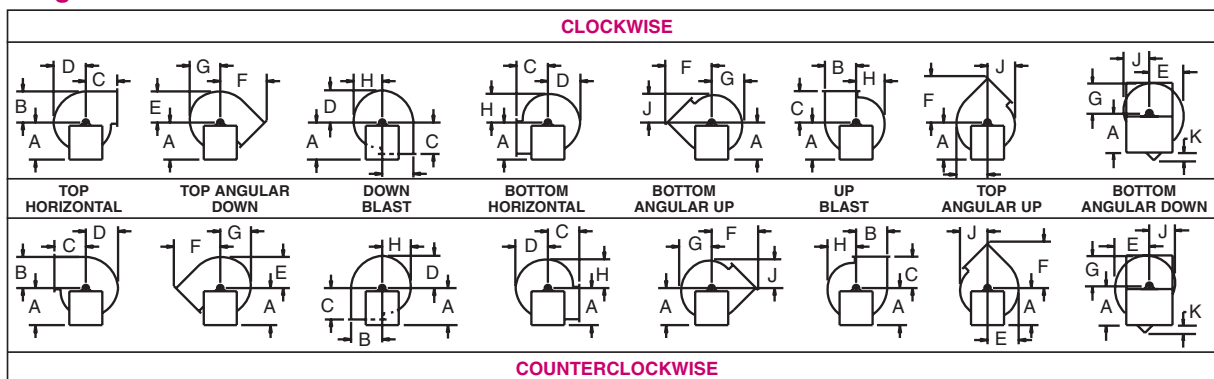
Principal Dimensions (Inches) – Sizes 12" – 33"

| FAN SIZE | A | B | C | D | H | R | S | BB | CC | DD | Max Mtr Frame |
|----------|--------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------|
| 12 | 17 | 13 ⁵ / ₁₆ | 14 ¹ / ₄ | 11 ³ / ₄ | 10 ¹ / ₄ | 12 ¹⁵ / ₁₆ | 13 ⁷ / ₁₆ | 40 ³ / ₄ | 9 ³ / ₄ | 11 ¹ / ₈ | 215T |
| 15 | 17 | 16 ¹¹ / ₁₆ | 16 ⁹ / ₁₆ | 14 ³ / ₄ | 12 ¹³ / ₁₆ | 16 ³ / ₁₆ | 16 ³ / ₄ | 43 ¹ / ₄ | 12 ¹ / ₄ | 12 ³ / ₈ | 215T |
| 18 | 20 | 20 | 18 ⁷ / ₈ | 17 ¹¹ / ₁₆ | 15 ³ / ₈ | 19 ⁷ / ₁₆ | 20 ¹ / ₈ | 50 ¹ / ₄ | 14 ⁵ / ₈ | 13 ⁹ / ₁₆ | 254T |
| 22 | 24 ³ / ₄ | 24 ⁷ / ₁₆ | 22 | 21 ⁵ / ₈ | 18 ¹³ / ₁₆ | 23 ³ / ₄ | 24 ⁹ / ₁₆ | 53 ⁷ / ₁₆ | 17 ¹³ / ₁₆ | 15 ⁵ / ₃₂ | 256T |
| 24 | 27 | 26 ⁵ / ₈ | 23 ⁹ / ₁₆ | 23 ¹ / ₂ | 20 ⁷ / ₁₆ | 25 ¹³ / ₁₆ | 26 ¹¹ / ₁₆ | 55 | 19 ⁹ / ₈ | 16 | 256T |
| 27 | 28 ¹ / ₂ | 29 ¹³ / ₁₆ | 25 ³ / ₄ | 26 ³ / ₈ | 22 ¹⁵ / ₁₆ | 28 ¹⁵ / ₁₆ | 29 ¹⁵ / ₁₆ | 61 ¹³ / ₁₆ | 21 ³ / ₄ | 17 ⁷ / ₁₆ | 286T |
| 30 | 30 ¹ / ₂ | 32 ⁵ / ₈ | 27 ¹ / ₂ | 28 ⁹ / ₁₆ | 24 ¹³ / ₁₆ | 31 ³ / ₈ | 32 ¹ / ₂ | 67 ¹ / ₁₆ | 23 ⁹ / ₁₆ | 18 ¹ / ₈ | 324T |
| 33 | 37 | 35 ⁹ / ₁₆ | 30 | 31 ⁷ / ₁₆ | 27 ⁵ / ₁₆ | 34 ⁷ / ₁₆ | 35 ¹¹ / ₁₆ | 69 ⁷ / ₁₆ | 25 ¹⁵ / ₁₆ | 19 ⁹ / ₁₆ | 324T |
| 36 | 37 | 38 ³ / ₄ | 38 | 34 ⁵ / ₁₆ | 29 ¹³ / ₁₆ | 37 ¹¹ / ₁₆ | 38 ¹⁵ / ₁₆ | 71 ³ / ₄ | 28 ¹ / ₄ | 20 ⁷ / ₁₆ | 326T |

1. Clockwise rotation shown, counter clockwise rotation is opposite as shown.

2. Scrolls are rotatable. BH and BAU rotations require a 3" tall height adjusting sub-base. B.A.D. requires special consideration. Contact factory.

Fan Discharges



NOTE: For bottom angular down, top angular down, and/or down blast, contact factory when discharge flanges are required.

Series 03P – Material Specifications

| FAN SIZE | HOUSING | | FLANGES* | | SHAFTS AND BEARINGS | | | BC WHEEL | | BA WHEEL | | MAX FRAME SIZE | INST WGT |
|----------|---------|------|-------------|-------------|---------------------|------------|------------|--------------|-------------|--------------|-------------|----------------|----------|
| | SCROLL | SIDE | INLET | OUTLET | SIZE | DRIVE SIDE | WHEEL SIDE | (LB.-FT.) WR | (LBS.) WGT. | (LB.-FT.) WR | (LBS.) WGT. | | |
| 12 | 12GA | 12GA | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3-U223 | P3-U223 | 2.8 | 16 | --- | --- | 215T | 249 |
| 15 | 12GA | 12GA | 2 x 1/4 | 1 1/2 x 7GA | 1 7/16 | P3-U223 | P3-U223 | 6 | 23.9 | --- | --- | 215T | 295 |
| 18 | 12GA | 12GA | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3-U227 | P3-U227 | 12 | 37.7 | 12.5 | 39.2 | 254T | 403 |
| 22 | 12GA | 10GA | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3-U227 | P3-U227 | 28 | 61.4 | 29.1 | 63.9 | 256T | 546 |
| 24 | 12GA | 10GA | 2 x 1/4 | 1 1/2 x 7GA | 1 11/16 | P3-U227 | P3-U227 | 50 | 89.2 | 52 | 92.8 | 256T | 631 |
| 27 | 12GA | 10GA | 2 x 1/4 | 1 1/2 x 7GA | 1 15/16 | P3-U231 | P3-U231 | 81 | 112 | 84.2 | 116.5 | 286T | 845 |
| 30 | 12GA | 10GA | 2 x 1/4 | 1 1/2 x 7GA | 2 3/16 | P-B22435 | P3-U235 | 122 | 148 | 126.9 | 153.9 | 324T | 1002 |
| 33 | 12GA | 10GA | 2 1/2 x 1/4 | 1 1/2 x 7GA | 2 3/16 | P3-U235 | P3-U235 | 189 | 208 | 196.6 | 216.3 | 324T | 1173 |
| 36 | 10GA | 10GA | 2 1/2 x 1/4 | 2 x 7GA | 2 3/16 | P3-U235 | P3-U235 | 299 | 268 | 311 | 278.7 | 326T | 1464 |

*Inlet and outlet flanges are optional, with or without holes. Dimensions and specifications are subject to change. Certified prints are available.



Series 03, Direct Drive Centrifugal, Arrg. 4



Series 03
Arrangement 4 Construction



Hartzell Fan, Inc. certifies that the Backward Curved Centrifugal Fan, Series 03 with type BC wheels shown herein is licensed to bear the AMCA seal for air and sound performance. 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.

Sound performance data is available upon request. Please contact the factory and ask for Engineering Publication #SD-147.

Applications – Compact direct drive applications handling clean air and industrial fumes requiring performance from **750 CFM to 24,000 CFM** and pressures to **10"SP** at temperatures not exceeding 200°F, designed for foot mounting in horizontal position. Available in **sizes 12" to 33"**, in clockwise or counterclockwise rotations, and in all standard discharge positions. Housing discharge position can be changed on all sizes.

Housings – Are continuously welded heavy gauge, hot rolled steel with **Internal cone** designed to ensure maximum efficiency with minimal turbulence and finished with blue industrial duty enamel.

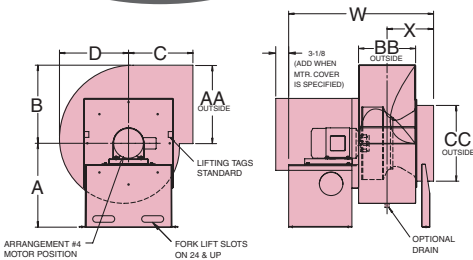
Wheels – Centrifugal wheels are Type BC or Type BA (airfoil) and have non-overloading horsepower characteristics. Efficient airflow is provided over a broad range. Fans are electronically statically and dynamically balanced to BV-3 and receive an Operational Test and Inspection prior to shipment. Type BC performance is shown below.

Motor Out of the Airstream – Exterior motor mounting for easy electrical connection and lubrication of motor is standard. Motors can be furnished as Drip Proof Protected, TEFC, Mill and Chemical Duty, or to specifications upon request. Motors supplied with re-lubricable bearings include extended lubrication tubes when required for access as standard. Fractional HP and small motors are supplied with permanently lubricated bearings for maintenance free installation.

Fan Inlets and Outlets – Straight inlet and outlet connections are standard. Optional continuously welded flanges are available. Flange bolt holes are optional.

Special Features and Options – Accessories including guards, companion flanges, dampers, louvers, inlet bells, sub-bases, vibration isolators, lifting lugs, special coatings, Spark Resistant Construction, leak resistant construction, and sound mufflers are available. See pages 34 and 35.

ABS Certificate
of Design Assessment
Received



Principal Dimensions (Inches) – Sizes 12" – 33"

| FAN SIZE | A | B | C | D | W | X | AA | BB | CC | FRAME SIZE | | WT.# LESS MOTOR |
|----------|--------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|------------|------|-----------------|
| | | | | | | | | | | MIN. | MAX. | |
| 12 | 16 | 13 ¹ / ₄ | 14 ¹ / ₄ | 11 ³ / ₄ | 30 ³ / ₁₆ | 10 ⁷ / ₈ | 13 ³ / ₈ | 9 ³ / ₄ | 12 ¹⁵ / ₁₆ | 56 | 184T | 160 |
| 15 | 18 ³ / ₄ | 16 ⁵ / ₈ | 16 ⁹ / ₁₆ | 14 ³ / ₄ | 39 ⁵ / ₈ | 12 ¹ / ₁₆ | 16 ¹³ / ₁₆ | 12 ³ / ₁₆ | 16 ³ / ₁₆ | 143T | 256T | 277 |
| 18 | 22 | 20 | 18 ⁷ / ₈ | 17 ¹¹ / ₁₆ | 44 ⁹ / ₁₆ | 13 ⁵ / ₁₆ | 20 ¹ / ₈ | 14 ⁹ / ₁₆ | 19 ¹ / ₂ | 143T | 286T | 408 |
| 22 | 26 ³ / ₄ | 24 ⁷ / ₁₆ | 22 | 21 ⁹ / ₁₆ | 47 ⁷ / ₈ | 14 ¹⁵ / ₁₆ | 24 ⁹ / ₁₆ | 17 ⁷ / ₈ | 23 ³ / ₄ | 213T | 286T | 591 |
| 24 | 28 ¹ / ₂ | 26 ⁹ / ₁₆ | 23 ⁹ / ₁₆ | 23 ¹ / ₂ | 49 ⁷ / ₁₆ | 15 ¹¹ / ₁₆ | 26 ³ / ₄ | 19 ⁷ / ₁₆ | 25 ¹³ / ₁₆ | 213T | 286T | 694 |
| 27 | 32 ¹ / ₄ | 29 ¹³ / ₁₆ | 25 ³ / ₄ | 26 ³ / ₈ | 51 ³ / ₄ | 16 ⁷ / ₈ | 29 ¹⁵ / ₁₆ | 21 ³ / ₄ | 28 ¹⁵ / ₁₆ | 213T | 286T | 799 |
| 30 | 34 ³ / ₄ | 32 ³ / ₈ | 27 ¹ / ₂ | 28 ⁵ / ₈ | 56 ¹ / ₄ | 17 ¹³ / ₁₆ | 32 ¹ / ₂ | 23 ⁵ / ₈ | 31 ³ / ₈ | 254T | 326T | 1019 |
| 33 | 38 | 35 ⁵ / ₈ | 30 | 31 ¹ / ₂ | 60 ⁷ / ₈ | 19 | 35 ¹³ / ₁₆ | 25 ¹⁵ / ₁₆ | 34 ¹ / ₂ | 254T | 365T | 1409 |

NOTE: Dimensions and specifications are subject to change. Certified prints are available. Inlet support leg is optional on sizes 12 and 15. Weight is approximate.

Rating Table – Series 03 – Direct Drive Centrifugal, A03-4-__ _BC100ST_ _ _ _

| Size | Model | Fan (Motor) | | Peak Fan BHP | Cubic Feet Per Minute vs. Static Pressure | | | | | | | | | | | | | | |
|------|---------------------|-------------|------|--------------|---|-------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | HP | RPM | | 0" | 1/2" | 1" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 5" | 6" | 7" | 8" | 9" | 10" | |
| 12 | 03-4-121BC100ST__F3 | 1/2 | 1750 | 0.39 | 1700 | 1482 | 1285 | 970 | | | | | | | | | | | |
| | 03-4-121BC100ST__K2 | 3 | 3450 | 2.95 | 3351 | 3217 | 3102 | 3003 | 2912 | 2819 | 2719 | 2508 | 2239 | 1851 | | | | | |
| 15 | 03-4-151BC100ST__I3 | 1 1/2 | 1750 | 1.22 | 3620 | 3366 | 3084 | 2759 | 2391 | 1875 | | | | | | | | | |
| | 03-4-152BC100ST__N2 | 10 | 3450 | 9.35 | 7136 | 7012 | 6885 | 6755 | 6621 | 6484 | 6342 | 6045 | 5725 | 5376 | 4987 | 4634 | 4154 | 3535 | |
| 18 | 03-4-181BC100ST__G4 | 3/4 | 1160 | 0.83 | 4070 | 3681 | 3216 | 2513 | | | | | | | | | | | |
| | 03-4-181BC100ST__K3 | 3 | 1750 | 2.86 | 6139 | 5891 | 5629 | 5337 | 5035 | 4682 | 4224 | 2829 | | | | | | | |
| | 03-4-183BC100ST__P2 | 20 | 3450 | 21.9 | | | | | | | | | 10780 | 10468 | 10162 | 9854 | 9508 | 9108 | |
| 22 | 03-4-221BC100ST__J4 | 2 | 1160 | 2.28 | 7444 | 6980 | 6455 | 5876 | 5072 | 3863 | | | | | | | | | |
| | 03-4-221BC100ST__M3 | 7 1/2 | 1750 | 7.83 | 11230 | 10929 | 10617 | 10294 | 9946 | 9568 | 9203 | 8285 | 7095 | 5131 | | | | | |
| 24 | 03-4-241BC100ST__L4 | 5 | 1160 | 3.83 | 10023 | 9499 | 8923 | 8358 | 7633 | 6669 | 5430 | | | | | | | | |
| | 03-4-242BC100ST__O3 | 15 | 1750 | 13.1 | 15121 | 14768 | 14425 | 14072 | 13673 | 13299 | 12933 | 12095 | 10959 | 9641 | 7809 | | | | |
| 27 | 03-4-271BC100ST__K5 | 3 | 870 | 2.87 | 10613 | 9818 | 8961 | 7852 | 6311 | | | | | | | | | | |
| | 03-4-271BC100ST__M4 | 7 1/2 | 1160 | 6.80 | 14150 | 13560 | 12940 | 12302 | 11643 | 10809 | 9745 | 6796 | | | | | | | |
| | 03-4-272BC100ST__Q3 | 25 | 1750 | 23.3 | 21348 | 20952 | 20562 | 20179 | 19769 | 19319 | 18894 | 18066 | 17112 | 15890 | 14447 | 12869 | 10534 | | |
| 30 | 03-4-301BC100ST__L5 | 5 | 870 | 4.33 | 13592 | 12741 | 11808 | 10795 | 9329 | 7389 | | | | | | | | | |
| | 03-4-301BC100ST__N4 | 10 | 1160 | 10.3 | 18123 | 17479 | 16835 | 16113 | 15440 | 14682 | 13733 | 11328 | 7209 | | | | | | |
| | 03-4-302BC100ST__S3 | 40 | 1750 | 35.3 | 27341 | 26910 | 26484 | 26069 | 25648 | 25182 | 24692 | 23793 | 22866 | 21795 | 20465 | 18913 | 17270 | 15175 | |
| 33 | 03-4-331BC100ST__M5 | 7 1/2 | 870 | 6.87 | 18169 | 17258 | 16256 | 15192 | 13964 | 12332 | 10607 | | | | | | | | |
| | 03-4-331BC100ST__O4 | 15 | 1160 | 16.3 | 24225 | 23554 | 22851 | 22105 | 21323 | 20528 | 19692 | 17619 | 15008 | 10630 | | | | | |
| | 03-4-333BC100ST__U3 | 60 | 1750 | 55.9 | | | | | | | | 34257 | 33765 | 32746 | 31698 | 30634 | 29507 | 28217 | 26745 |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 12 A03-_-12_BC100 _____ or A03PO-122BC100 _____

Wheel Diameter – 12.25 in.
Outlet Area – 0.87 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 600 | 690 | 1033 | 0.08 | 1338 | 0.15 | | | | | | | | | | | | |
| 900 | 1034 | 1231 | 0.13 | 1490 | 0.23 | 1712 | 0.33 | 1912 | 0.45 | 2097 | 0.57 | 2270 | 0.69 | | | | |
| 1200 | 1379 | 1488 | 0.23 | 1682 | 0.32 | 1875 | 0.45 | 2067 | 0.60 | 2230 | 0.74 | 2386 | 0.89 | 2534 | 1.05 | 2676 | 1.20 |
| 1500 | 1724 | 1767 | 0.39 | 1931 | 0.49 | 2084 | 0.62 | 2233 | 0.76 | 2395 | 0.94 | 2549 | 1.13 | 2684 | 1.31 | 2811 | 1.49 |
| 1800 | 2069 | 2056 | 0.62 | 2197 | 0.74 | 2333 | 0.87 | 2461 | 1.02 | 2585 | 1.18 | 2711 | 1.36 | 2847 | 1.58 | 2981 | 1.81 |
| 2100 | 2414 | 2349 | 0.93 | 2479 | 1.08 | 2597 | 1.22 | 2713 | 1.37 | 2824 | 1.54 | 2931 | 1.72 | 3036 | 1.91 | 3144 | 2.12 |
| 2400 | 2759 | 2642 | 1.32 | 2767 | 1.52 | 2873 | 1.67 | 2976 | 1.83 | 3078 | 2.00 | 3177 | 2.19 | 3271 | 2.39 | 3364 | 2.60 |
| 2700 | 3103 | 2938 | 1.80 | 3058 | 2.06 | 3158 | 2.24 | 3250 | 2.41 | 3342 | 2.59 | 3433 | 2.79 | 3522 | 2.99 | 3608 | 3.21 |
| 3000 | 3448 | 3235 | 2.39 | 3351 | 2.70 | 3447 | 2.94 | 3534 | 3.13 | 3617 | 3.32 | 3699 | 3.52 | 3782 | 3.74 | 3862 | 3.96 |
| 3300 | 3793 | 3533 | 3.10 | 3644 | 3.46 | 3739 | 3.76 | 3822 | 3.99 | 3900 | 4.20 | 3975 | 4.41 | 4050 | 4.63 | 4125 | 4.86 |
| 3600 | 4138 | 3833 | 3.94 | 3939 | 4.36 | 4032 | 4.71 | 4112 | 4.99 | 4187 | 5.24 | 4258 | 5.47 | 4326 | 5.70 | 4395 | 5.93 |
| 3900 | 4483 | 4134 | 4.92 | 4235 | 5.39 | 4324 | 5.80 | 4405 | 6.15 | 4476 | 6.43 | 4544 | 6.69 | 4610 | 6.94 | 4673 | 7.19 |
| 4200 | 4828 | 4436 | 6.05 | 4532 | 6.58 | 4618 | 7.04 | 4697 | 7.45 | 4768 | 7.79 | 4834 | 8.09 | 4897 | 8.37 | 4957 | 8.64 |
| 4500 | 5172 | 4738 | 7.35 | 4831 | 7.93 | 4914 | 8.45 | 4990 | 8.91 | 5061 | 9.32 | 5125 | 9.67 | 5186 | 9.98 | 5244 | 10.3 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 1500 | 1724 | 3057 | 1.86 | 3289 | 2.25 | 3508 | 2.64 | 3716 | 3.05 | | | | | | |
| 1750 | 2011 | 3184 | 2.18 | 3399 | 2.60 | 3606 | 3.04 | 3805 | 3.49 | 4178 | 4.42 | 4526 | 5.38 | | | | |
| 2000 | 2299 | 3326 | 2.51 | 3535 | 2.99 | 3727 | 3.47 | 3915 | 3.97 | 4271 | 4.98 | 4605 | 6.03 | 4921 | 7.11 | | |
| 2250 | 2586 | 3456 | 2.82 | 3673 | 3.39 | 3870 | 3.94 | 4048 | 4.48 | 4384 | 5.58 | 4704 | 6.71 | 5007 | 7.88 | 5297 | 9.08 |
| 2500 | 2874 | 3622 | 3.24 | 3806 | 3.77 | 4002 | 4.38 | 4192 | 5.02 | 4517 | 6.22 | 4819 | 7.44 | 5111 | 8.69 | 5391 | 9.97 |
| 2750 | 3161 | 3814 | 3.79 | 3976 | 4.29 | 4141 | 4.85 | 4319 | 5.51 | 4660 | 6.90 | 4954 | 8.21 | 5230 | 9.54 | 5499 | 10.9 |
| 3000 | 3448 | 4019 | 4.43 | 4168 | 4.94 | 4317 | 5.49 | 4466 | 6.08 | 4790 | 7.51 | 5098 | 9.03 | 5368 | 10.5 | 5622 | 11.9 |
| 3250 | 3736 | 4229 | 5.18 | 4372 | 5.70 | 4510 | 6.26 | 4647 | 6.85 | 4927 | 8.17 | 5229 | 9.77 | 5512 | 11.4 | | |
| 3500 | 4023 | 4445 | 6.05 | 4582 | 6.58 | 4714 | 7.15 | 4842 | 7.75 | 5096 | 9.03 | 5362 | 10.5 | 5642 | 12.3 | | |
| 3750 | 4310 | 4666 | 7.04 | 4796 | 7.59 | 4923 | 8.16 | 5046 | 8.77 | 5285 | 10.1 | 5522 | 11.5 | | | | |
| 4000 | 4598 | 4891 | 8.16 | 5015 | 8.73 | 5137 | 9.31 | 5255 | 9.93 | 5483 | 11.2 | | | | | | |
| 4250 | 4885 | 5122 | 9.44 | 5238 | 10.0 | 5355 | 10.6 | 5469 | 11.2 | | | | | | | | |
| 4500 | 5172 | 5357 | 10.9 | 5466 | 11.4 | 5577 | 12.0 | | | | | | | | | | |
| 4750 | 5460 | 5594 | 12.4 | | | | | | | | | | | | | | |

Size 15 A03-_-15_BC100 _____ or A03PO-152BC100 _____

Wheel Diameter – 15.375 in.
Outlet Area – 1.371 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1000 | 729 | 818 | 0.12 | 1065 | 0.23 | | | | | | | | | | | | |
| 1500 | 1094 | 978 | 0.21 | 1178 | 0.37 | 1367 | 0.52 | 1525 | 0.69 | 1669 | 0.86 | 1806 | 1.06 | | | | |
| 2000 | 1459 | 1165 | 0.35 | 1343 | 0.55 | 1492 | 0.75 | 1636 | 0.96 | 1779 | 1.17 | 1904 | 1.39 | 2021 | 1.61 | 2131 | 1.84 |
| 2500 | 1823 | 1370 | 0.55 | 1520 | 0.79 | 1661 | 1.04 | 1787 | 1.30 | 1899 | 1.55 | 2016 | 1.81 | 2132 | 2.07 | 2244 | 2.34 |
| 3000 | 2188 | 1587 | 0.83 | 1716 | 1.10 | 1838 | 1.39 | 1957 | 1.70 | 2068 | 2.01 | 2168 | 2.32 | 2260 | 2.62 | 2356 | 2.92 |
| 3500 | 2553 | 1810 | 1.21 | 1923 | 1.52 | 2032 | 1.84 | 2136 | 2.18 | 2237 | 2.53 | 2337 | 2.90 | 2431 | 3.27 | 2515 | 3.62 |
| 4000 | 2918 | 2038 | 1.70 | 2138 | 2.05 | 2235 | 2.41 | 2329 | 2.78 | 2421 | 3.17 | 2510 | 3.57 | 2599 | 3.98 | 2685 | 4.40 |
| 4500 | 3282 | 2268 | 2.31 | 2358 | 2.70 | 2446 | 3.10 | 2532 | 3.51 | 2615 | 3.94 | 2697 | 4.37 | 2777 | 4.81 | 2856 | 5.26 |
| 5000 | 3647 | 2501 | 3.07 | 2583 | 3.50 | 2663 | 3.94 | 2741 | 4.39 | 2818 | 4.85 | 2893 | 5.32 | 2967 | 5.80 | 3040 | 6.28 |
| 5500 | 4012 | 2735 | 4.00 | 2810 | 4.46 | 2883 | 4.94 | 2955 | 5.43 | 3026 | 5.92 | 3096 | 6.43 | 3165 | 6.94 | 3232 | 7.47 |
| 6000 | 4376 | 2971 | 5.09 | 3040 | 5.60 | 3107 | 6.11 | 3174 | 6.64 | 3240 | 7.17 | 3305 | 7.72 | 3369 | 8.27 | 3432 | 8.83 |
| 6500 | 4741 | 3207 | 6.38 | 3271 | 6.93 | 3334 | 7.48 | 3396 | 8.05 | 3457 | 8.62 | 3518 | 9.20 | 3578 | 9.79 | 3637 | 10.4 |
| 7000 | 5106 | 3445 | 7.88 | 3504 | 8.46 | 3562 | 9.06 | 3620 | 9.66 | 3678 | 10.3 | 3734 | 10.9 | 3791 | 11.5 | 3846 | 12.1 |
| 7500 | 5470 | 3682 | 9.59 | 3738 | 10.2 | 3793 | 10.9 | 3847 | 11.5 | 3901 | 12.1 | 3954 | 12.8 | 4007 | 13.5 | 4060 | 14.1 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 2400 | 1751 | 2417 | 2.76 | 2600 | 3.31 | 2775 | 3.91 | | | | | | | | |
| 2800 | 2042 | 2510 | 3.28 | 2687 | 3.88 | 2851 | 4.50 | 3008 | 5.14 | 3307 | 6.55 | | | | | | |
| 3200 | 2334 | 2595 | 3.85 | 2776 | 4.53 | 2943 | 5.21 | 3095 | 5.90 | 3377 | 7.34 | 3643 | 8.90 | 3897 | 10.6 | | |
| 3600 | 2626 | 2706 | 4.49 | 2866 | 5.23 | 3029 | 5.99 | 3186 | 6.76 | 3465 | 8.31 | 3719 | 9.91 | 3959 | 11.6 | 4191 | 13.4 |
| 4000 | 2918 | 2842 | 5.23 | 2983 | 6.02 | 3125 | 6.84 | 3272 | 7.67 | 3557 | 9.38 | 3809 | 11.1 | 4041 | 12.9 | 4262 | 14.7 |
| 4400 | 3209 | 2978 | 6.01 | 3120 | 6.91 | 3249 | 7.79 | 3375 | 8.67 | 3641 | 10.5 | 3900 | 12.4 | 4132 | 14.3 | 4348 | 16.2 |
| 4800 | 3501 | 3113 | 6.84 | 3255 | 7.85 | 3386 | 8.84 | 3506 | 9.80 | 3740 | 11.7 | 3985 | 13.7 | 4222 | 15.8 | 4440 | 17.8 |
| 5200 | 3793 | 3254 | 7.77 | 3390 | 8.84 | 3521 | 9.93 | 3644 | 11.0 | 3864 | 13.1 | 4082 | 15.2 | 4307 | 17.4 | | |
| 5600 | 4085 | 3403 | 8.81 | 3530 | 9.92 | 3656 | 11.1 | 3778 | 12.3 | 4000 | 14.6 | 4200 | 16.8 | 4404 | 19.1 | | |
| 6000 | 4376 | 3556 | 9.97 | 3677 | 11.1 | 3795 | 12.3 | 3913 | 13.6 | 4137 | 16.1 | 4335 | 18.5 | | | | |
| 6400 | 4668 | 3713 | 11.3 | 3828 | 12.5 | 3941 | 13.7 | 4052 | 15.0 | 4271 | 17.7 | 4474 | 20.4 | | | | |
| 6800 | 4960 | 3874 | 12.7 | 3984 | 14.0 | 4092 | 15.3 | 4198 | 16.6 | 4406 | 19.4 | | | | | | |
| 7200 | 5252 | 4038 | 14.2 | 4143 | 15.6 | 4246 | 17.0 | 4348 | 18.4 | | | | | | | | |
| 7600 | 5543 | 4205 | 15.9 | 4305 | 17.3 | 4404 | 18.8 | 4502 | 20.2 | | | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 18 A03-_-18_BC100_ _ _ _ _ or A03PO-182BC100_ _ _ _ _

Wheel Diameter – 18.5 in.
Outlet Area – 1.984 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1400 | 706 | 663 | 0.15 | 874 | 0.31 | | | | | | | | | | | | |
| 2100 | 1058 | 784 | 0.26 | 954 | 0.46 | 1110 | 0.66 | 1247 | 0.90 | 1371 | 1.17 | 1486 | 1.46 | | | | |
| 2800 | 1411 | 942 | 0.44 | 1076 | 0.66 | 1205 | 0.93 | 1326 | 1.20 | 1443 | 1.48 | 1551 | 1.78 | 1652 | 2.10 | 1747 | 2.45 |
| 3500 | 1764 | 1114 | 0.71 | 1223 | 0.97 | 1331 | 1.26 | 1438 | 1.59 | 1536 | 1.93 | 1633 | 2.27 | 1729 | 2.60 | 1821 | 2.95 |
| 4200 | 2117 | 1295 | 1.06 | 1391 | 1.40 | 1479 | 1.72 | 1568 | 2.06 | 1659 | 2.44 | 1746 | 2.84 | 1827 | 3.25 | 1908 | 3.66 |
| 4900 | 2470 | 1481 | 1.57 | 1563 | 1.95 | 1644 | 2.33 | 1719 | 2.69 | 1795 | 3.08 | 1873 | 3.51 | 1951 | 3.96 | 2025 | 4.43 |
| 5600 | 2823 | 1671 | 2.24 | 1742 | 2.62 | 1814 | 3.09 | 1885 | 3.52 | 1950 | 3.93 | 2016 | 4.36 | 2083 | 4.82 | 2152 | 5.32 |
| 6300 | 3175 | 1862 | 3.10 | 1927 | 3.47 | 1990 | 3.98 | 2054 | 4.50 | 2117 | 4.98 | 2175 | 5.44 | 2233 | 5.91 | 2292 | 6.41 |
| 7000 | 3528 | 2055 | 4.16 | 2114 | 4.55 | 2171 | 5.05 | 2228 | 5.55 | 2286 | 6.20 | 2343 | 6.74 | 2395 | 7.25 | 2447 | 7.76 |
| 7700 | 3881 | 2249 | 5.45 | 2303 | 5.87 | 2355 | 6.33 | 2407 | 6.95 | 2459 | 7.61 | 2512 | 8.23 | 2564 | 8.82 | 2612 | 9.39 |
| 8400 | 4234 | 2445 | 6.98 | 2494 | 7.44 | 2542 | 7.92 | 2590 | 8.50 | 2637 | 9.20 | 2685 | 9.92 | 2733 | 10.6 | 2781 | 11.2 |
| 9100 | 4587 | 2640 | 8.79 | 2686 | 9.29 | 2731 | 9.79 | 2775 | 10.3 | 2819 | 11.0 | 2863 | 11.8 | 2907 | 12.6 | 2952 | 13.3 |
| 9800 | 4940 | 2836 | 10.9 | 2879 | 11.4 | 2921 | 12.0 | 2962 | 12.5 | 3003 | 13.2 | 3044 | 13.9 | 3085 | 14.8 | 3125 | 15.6 |
| 10500 | 5292 | 3034 | 13.3 | 3073 | 13.9 | 3112 | 14.5 | 3151 | 15.0 | 3190 | 15.7 | 3228 | 16.4 | 3266 | 17.2 | 3304 | 18.1 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 1764 | 1990 | 3.72 | 2147 | 4.56 | 2294 | 5.46 | 2433 | 6.41 | | | | | | | |
| 4000 | 2016 | 2045 | 4.22 | 2198 | 5.07 | 2340 | 5.99 | 2475 | 6.97 | 2726 | 9.07 | | | | | | |
| 4500 | 2268 | 2106 | 4.85 | 2254 | 5.72 | 2394 | 6.64 | 2525 | 7.64 | 2770 | 9.78 | 2996 | 12.1 | 3208 | 14.6 | | |
| 5000 | 2520 | 2181 | 5.52 | 2317 | 6.49 | 2451 | 7.45 | 2581 | 8.43 | 2819 | 10.6 | 3041 | 13.0 | 3248 | 15.5 | 3444 | 18.2 |
| 5500 | 2772 | 2268 | 6.22 | 2393 | 7.29 | 2516 | 8.36 | 2639 | 9.42 | 2875 | 11.6 | 3091 | 14.0 | 3294 | 16.6 | 3486 | 19.3 |
| 6000 | 3024 | 2357 | 6.99 | 2480 | 8.14 | 2594 | 9.30 | 2707 | 10.5 | 2932 | 12.8 | 3147 | 15.2 | 3345 | 17.8 | 3533 | 20.6 |
| 6500 | 3276 | 2451 | 7.86 | 2569 | 9.05 | 2682 | 10.3 | 2788 | 11.6 | 2997 | 14.1 | 3203 | 16.6 | 3401 | 19.2 | 3585 | 22.0 |
| 7000 | 3528 | 2553 | 8.86 | 2662 | 10.1 | 2772 | 11.4 | 2876 | 12.7 | 3072 | 15.4 | 3266 | 18.1 | 3457 | 20.8 | 3642 | 23.6 |
| 7500 | 3780 | 2662 | 10.0 | 2761 | 11.2 | 2863 | 12.5 | 2966 | 13.9 | 3157 | 16.8 | 3338 | 19.7 | 3520 | 22.6 | 3698 | 25.5 |
| 8000 | 4032 | 2776 | 11.3 | 2868 | 12.5 | 2962 | 13.9 | 3058 | 15.3 | 3247 | 18.3 | 3421 | 21.4 | 3590 | 24.5 | | |
| 8500 | 4284 | 2895 | 12.8 | 2980 | 14.0 | 3067 | 15.4 | 3155 | 16.8 | 3337 | 19.8 | 3509 | 23.1 | 3671 | 26.4 | | |
| 9000 | 4536 | 3015 | 14.4 | 3097 | 15.7 | 3178 | 17.0 | 3260 | 18.5 | 3429 | 21.5 | 3600 | 24.9 | | | | |
| 9500 | 4788 | 3136 | 16.1 | 3216 | 17.5 | 3293 | 18.9 | 3370 | 20.3 | 3527 | 23.4 | 3690 | 26.8 | | | | |
| 10000 | 5040 | 3257 | 17.9 | 3337 | 19.5 | 3411 | 20.9 | 3484 | 22.4 | 3632 | 25.5 | | | | | | |

Size 18 A03-_-18_BA100_ _ _ _ _ or A03PO-182BA100_ _ _ _ _

Wheel Diameter – 18.5 in.
Outlet Area – 1.984 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|-------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1400 | 706 | 690 | 0.16 | 915 | 0.33 | | | | | | | | | | | | |
| 2100 | 1058 | 807 | 0.27 | 995 | 0.48 | 1154 | 0.69 | 1303 | 0.96 | 1439 | 1.25 | | | | | | |
| 2800 | 1411 | 961 | 0.44 | 1109 | 0.70 | 1256 | 1.00 | 1381 | 1.25 | 1500 | 1.53 | 1615 | 1.86 | 1725 | 2.22 | 1830 | 2.61 |
| 3500 | 1764 | 1128 | 0.69 | 1255 | 0.99 | 1371 | 1.33 | 1491 | 1.70 | 1603 | 2.06 | 1702 | 2.37 | 1797 | 2.69 | 1892 | 3.07 |
| 4200 | 2117 | 1307 | 1.04 | 1415 | 1.40 | 1518 | 1.76 | 1615 | 2.16 | 1713 | 2.60 | 1813 | 3.05 | 1906 | 3.48 | 1991 | 3.85 |
| 4900 | 2470 | 1491 | 1.50 | 1583 | 1.92 | 1676 | 2.33 | 1764 | 2.76 | 1848 | 3.22 | 1930 | 3.71 | 2016 | 4.23 | 2101 | 4.76 |
| 5600 | 2823 | 1678 | 2.10 | 1761 | 2.56 | 1841 | 3.05 | 1922 | 3.52 | 1999 | 4.01 | 2073 | 4.53 | 2145 | 5.06 | 2217 | 5.62 |
| 6300 | 3175 | 1868 | 2.86 | 1943 | 3.36 | 2014 | 3.91 | 2086 | 4.45 | 2158 | 4.98 | 2227 | 5.53 | 2293 | 6.10 | 2358 | 6.69 |
| 7000 | 3528 | 2059 | 3.81 | 2128 | 4.34 | 2193 | 4.93 | 2257 | 5.55 | 2322 | 6.14 | 2387 | 6.73 | 2449 | 7.33 | 2510 | 7.95 |
| 7700 | 3881 | 2251 | 4.95 | 2315 | 5.52 | 2376 | 6.15 | 2434 | 6.81 | 2492 | 7.50 | 2551 | 8.15 | 2610 | 8.79 | 2668 | 9.44 |
| 8400 | 4234 | 2444 | 6.32 | 2503 | 6.92 | 2560 | 7.58 | 2615 | 8.29 | 2668 | 9.02 | 2721 | 9.77 | 2775 | 10.5 | 2829 | 11.2 |
| 9100 | 4587 | 2638 | 7.93 | 2693 | 8.57 | 2746 | 9.26 | 2798 | 10.00 | 2848 | 10.8 | 2897 | 11.6 | 2946 | 12.4 | 2996 | 13.2 |
| 9800 | 4940 | 2833 | 9.80 | 2884 | 10.5 | 2934 | 11.2 | 2983 | 12.0 | 3030 | 12.8 | 3076 | 13.6 | 3122 | 14.5 | 3167 | 15.4 |
| 10500 | 5292 | 3028 | 12.0 | 3076 | 12.7 | 3123 | 13.4 | 3169 | 14.2 | 3214 | 15.1 | 3258 | 16.0 | 3301 | 16.9 | 3343 | 17.81 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 1764 | 2075 | 3.92 | 2246 | 4.85 | 2407 | 5.83 | | | | | | | | | |
| 4000 | 2016 | 2125 | 4.38 | 2288 | 5.31 | 2443 | 6.34 | 2591 | 7.42 | 2862 | 9.62 | | | | | | |
| 4500 | 2268 | 2195 | 5.07 | 2342 | 5.91 | 2489 | 6.92 | 2631 | 8.02 | 2898 | 10.4 | 3145 | 12.9 | | | | |
| 5000 | 2520 | 2275 | 5.90 | 2415 | 6.80 | 2548 | 7.69 | 2682 | 8.76 | 2939 | 11.2 | 3180 | 13.8 | 3407 | 16.6 | | |
| 5500 | 2772 | 2352 | 6.68 | 2496 | 7.80 | 2624 | 8.79 | 2747 | 9.77 | 2988 | 12.1 | 3221 | 14.7 | 3443 | 17.6 | 3653 | 20.6 |
| 6000 | 3024 | 2433 | 7.44 | 2573 | 8.74 | 2705 | 9.98 | 2825 | 11.1 | 3049 | 13.2 | 3270 | 15.8 | 3485 | 18.7 | 3690 | 21.8 |
| 6500 | 3276 | 2525 | 8.29 | 2653 | 9.64 | 2782 | 11.0 | 2906 | 12.4 | 3125 | 14.8 | 3330 | 17.1 | 3535 | 20.0 | 3733 | 23.1 |
| 7000 | 3528 | 2628 | 9.26 | 2743 | 10.6 | 2862 | 12.1 | 2982 | 13.6 | 3206 | 16.4 | 3404 | 18.9 | 3594 | 21.5 | | |
| 7500 | 3780 | 2735 | 10.3 | 2843 | 11.8 | 2951 | 13.2 | 3062 | 14.8 | 3284 | 18.1 | 3484 | 20.9 | 3668 | 23.6 | | |
| 8000 | 4032 | 2845 | 11.5 | 2949 | 13.0 | 3050 | 14.5 | 3151 | 16.1 | 3361 | 19.6 | 3566 | 23.0 | 3747 | 25.9 | | |
| 8500 | 4284 | 2958 | 12.9 | 3058 | 14.4 | 3155 | 16.0 | 3250 | 17.6 | 3443 | 21.1 | 3641 | 24.8 | | | | |
| 9000 | 4536 | 3073 | 14.4 | 3169 | 15.9 | 3263 | 17.5 | 3354 | 19.2 | 3534 | 22.7 | 3720 | 26.6 | | | | |
| 9500 | 4788 | 3189 | 16.0 | 3283 | 17.6 | 3374 | 19.3 | 3462 | 21.0 | 3633 | 24.6 | | | | | | |
| 10000 | 5040 | 3307 | 17.7 | 3398 | 19.4 | 3486 | 21.1 | 3572 | 22.9 | 3737 | 26.6 | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 22 A03-_-22_BC100 _____ or A03PO-222BC100 _____

Wheel Diameter – 22.625 in.
Outlet Area – 2.967 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2000 | 674 | 536 | 0.21 | 710 | 0.44 | | | | | | | | | | | | |
| 3000 | 1011 | 626 | 0.36 | 769 | 0.65 | 899 | 0.95 | 1012 | 1.30 | 1115 | 1.70 | | | | | | |
| 4000 | 1348 | 746 | 0.60 | 861 | 0.93 | 968 | 1.32 | 1071 | 1.70 | 1168 | 2.11 | 1257 | 2.56 | 1341 | 3.04 | 1420 | 3.55 |
| 5000 | 1685 | 879 | 0.96 | 971 | 1.33 | 1064 | 1.76 | 1153 | 2.24 | 1236 | 2.73 | 1319 | 3.21 | 1399 | 3.69 | 1474 | 4.22 |
| 6000 | 2022 | 1018 | 1.43 | 1100 | 1.91 | 1175 | 2.36 | 1252 | 2.86 | 1329 | 3.43 | 1400 | 4.01 | 1469 | 4.59 | 1539 | 5.17 |
| 7000 | 2359 | 1163 | 2.08 | 1233 | 2.64 | 1301 | 3.18 | 1365 | 3.70 | 1431 | 4.27 | 1498 | 4.91 | 1563 | 5.57 | 1624 | 6.25 |
| 8000 | 2696 | 1310 | 2.96 | 1371 | 3.53 | 1433 | 4.19 | 1492 | 4.79 | 1547 | 5.38 | 1604 | 6.02 | 1663 | 6.71 | 1722 | 7.45 |
| 9000 | 3033 | 1459 | 4.08 | 1514 | 4.64 | 1568 | 5.40 | 1624 | 6.11 | 1675 | 6.77 | 1724 | 7.44 | 1775 | 8.14 | 1826 | 8.88 |
| 10000 | 3370 | 1610 | 5.47 | 1659 | 6.03 | 1708 | 6.80 | 1757 | 7.64 | 1807 | 8.42 | 1853 | 9.17 | 1898 | 9.90 | 1943 | 10.7 |
| 11000 | 3707 | 1761 | 7.15 | 1806 | 7.75 | 1851 | 8.48 | 1895 | 9.40 | 1940 | 10.3 | 1985 | 11.2 | 2028 | 12.0 | 2069 | 12.8 |
| 12000 | 4044 | 1913 | 9.16 | 1955 | 9.81 | 1996 | 10.5 | 2037 | 11.4 | 2077 | 12.4 | 2119 | 13.4 | 2160 | 14.4 | 2200 | 15.3 |
| 13000 | 4382 | 2066 | 11.5 | 2105 | 12.2 | 2143 | 13.0 | 2181 | 13.8 | 2218 | 14.9 | 2255 | 16.0 | 2294 | 17.0 | 2332 | 18.1 |
| 14000 | 4719 | 2219 | 14.3 | 2255 | 15.0 | 2291 | 15.8 | 2326 | 16.6 | 2361 | 17.6 | 2396 | 18.8 | 2430 | 20.0 | 2466 | 21.1 |
| 15000 | 5056 | 2372 | 17.4 | 2406 | 18.3 | 2439 | 19.1 | 2473 | 19.9 | 2506 | 20.8 | 2538 | 22.0 | 2570 | 23.3 | 2603 | 24.6 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 4800 | 1618 | 1603 | 5.20 | 1734 | 6.44 | 1857 | 7.76 | | | | | | | | |
| 5600 | 1887 | 1649 | 5.91 | 1775 | 7.17 | 1893 | 8.53 | 2005 | 9.97 | | | | | | | | |
| 6400 | 2157 | 1699 | 6.83 | 1823 | 8.09 | 1937 | 9.48 | 2046 | 11.0 | 2248 | 14.1 | 2436 | 17.6 | | | | |
| 7200 | 2427 | 1759 | 7.88 | 1874 | 9.27 | 1986 | 10.7 | 2093 | 12.1 | 2290 | 15.4 | 2472 | 18.9 | 2643 | 22.7 | 2805 | 26.7 |
| 8000 | 2696 | 1832 | 8.98 | 1936 | 10.5 | 2040 | 12.1 | 2143 | 13.6 | 2337 | 16.9 | 2514 | 20.5 | 2681 | 24.3 | 2839 | 28.4 |
| 8800 | 2966 | 1911 | 10.2 | 2011 | 11.9 | 2105 | 13.6 | 2200 | 15.3 | 2386 | 18.7 | 2562 | 22.3 | 2725 | 26.2 | 2879 | 30.3 |
| 9600 | 3236 | 1991 | 11.5 | 2089 | 13.3 | 2181 | 15.1 | 2268 | 17.0 | 2441 | 20.7 | 2611 | 24.4 | 2773 | 28.3 | 2924 | 32.5 |
| 10400 | 3505 | 2079 | 13.1 | 2169 | 14.9 | 2259 | 16.8 | 2345 | 18.8 | 2506 | 22.9 | 2666 | 26.9 | 2823 | 30.9 | 2973 | 35.1 |
| 11200 | 3775 | 2174 | 14.9 | 2256 | 16.7 | 2340 | 18.7 | 2423 | 20.8 | 2580 | 25.1 | 2728 | 29.5 | 2877 | 33.8 | 3023 | 38.1 |
| 12000 | 4044 | 2274 | 17.0 | 2349 | 18.9 | 2426 | 20.8 | 2504 | 22.9 | 2659 | 27.4 | 2801 | 32.1 | 2939 | 36.7 | | |
| 12800 | 4314 | 2378 | 19.4 | 2448 | 21.3 | 2518 | 23.2 | 2590 | 25.3 | 2737 | 29.9 | 2878 | 34.8 | 3010 | 39.8 | | |
| 13600 | 4584 | 2484 | 22.0 | 2550 | 24.0 | 2616 | 26.0 | 2682 | 28.1 | 2819 | 32.7 | 2957 | 37.7 | | | | |
| 14400 | 4853 | 2589 | 24.7 | 2655 | 26.9 | 2717 | 29.0 | 2779 | 31.2 | 2906 | 35.8 | 3036 | 40.9 | | | | |
| 15200 | 5123 | 2696 | 27.8 | 2761 | 30.1 | 2821 | 32.3 | 2880 | 34.6 | 2998 | 39.2 | | | | | | |

Size 22 A03-_-22_BA100 _____ or A03PO-222BA100 _____

Wheel Diameter – 22.625 in.
Outlet Area – 2.967 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2000 | 674 | 557 | 0.22 | 745 | 0.47 | | | | | | | | | | | | |
| 3000 | 1011 | 645 | 0.38 | 802 | 0.67 | 936 | 1.00 | 1060 | 1.39 | 1170 | 1.80 | | | | | | |
| 4000 | 1348 | 762 | 0.60 | 888 | 0.99 | 1010 | 1.40 | 1114 | 1.76 | 1215 | 2.20 | 1312 | 2.70 | 1403 | 3.23 | 1489 | 3.79 |
| 5000 | 1685 | 891 | 0.94 | 998 | 1.38 | 1098 | 1.87 | 1200 | 2.41 | 1290 | 2.88 | 1372 | 3.32 | 1454 | 3.83 | 1534 | 4.41 |
| 6000 | 2022 | 1029 | 1.40 | 1121 | 1.91 | 1208 | 2.44 | 1290 | 3.03 | 1376 | 3.67 | 1459 | 4.31 | 1533 | 4.86 | 1603 | 5.40 |
| 7000 | 2359 | 1172 | 2.00 | 1251 | 2.61 | 1329 | 3.20 | 1403 | 3.83 | 1474 | 4.50 | 1546 | 5.22 | 1619 | 5.97 | 1691 | 6.72 |
| 8000 | 2696 | 1317 | 2.79 | 1387 | 3.47 | 1456 | 4.15 | 1524 | 4.83 | 1589 | 5.55 | 1652 | 6.30 | 1713 | 7.09 | 1777 | 7.93 |
| 9000 | 3033 | 1465 | 3.79 | 1528 | 4.52 | 1589 | 5.31 | 1651 | 6.07 | 1711 | 6.83 | 1769 | 7.63 | 1825 | 8.46 | 1880 | 9.33 |
| 10000 | 3370 | 1613 | 5.02 | 1672 | 5.80 | 1727 | 6.66 | 1782 | 7.54 | 1838 | 8.37 | 1892 | 9.22 | 1945 | 10.1 | 1996 | 11.0 |
| 11000 | 3707 | 1763 | 6.52 | 1817 | 7.35 | 1869 | 8.26 | 1918 | 9.22 | 1968 | 10.2 | 2019 | 11.1 | 2069 | 12.0 | 2117 | 13.0 |
| 12000 | 4044 | 1913 | 8.31 | 1964 | 9.18 | 2012 | 10.1 | 2058 | 11.2 | 2104 | 12.2 | 2149 | 13.3 | 2196 | 14.3 | 2242 | 15.3 |
| 13000 | 4382 | 2065 | 10.4 | 2111 | 11.3 | 2157 | 12.3 | 2200 | 13.4 | 2243 | 14.5 | 2284 | 15.7 | 2327 | 16.8 | 2370 | 17.9 |
| 14000 | 4719 | 2216 | 12.9 | 2260 | 13.8 | 2303 | 14.9 | 2344 | 16.0 | 2384 | 17.2 | 2423 | 18.4 | 2462 | 19.7 | 2501 | 20.9 |
| 15000 | 5056 | 2369 | 15.7 | 2410 | 16.7 | 2450 | 17.8 | 2489 | 19.0 | 2527 | 20.2 | 2564 | 21.5 | 2600 | 22.8 | 2636 | 24.1 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 4800 | 1618 | 1677 | 5.53 | 1820 | 6.88 | | | | | | | | | | |
| 5600 | 1887 | 1715 | 6.17 | 1852 | 7.58 | 1982 | 9.08 | 2104 | 10.7 | | | | | | | | |
| 6400 | 2157 | 1767 | 7.06 | 1894 | 8.42 | 2017 | 9.94 | 2136 | 11.6 | 2358 | 15.1 | | | | | | |
| 7200 | 2427 | 1835 | 8.35 | 1951 | 9.63 | 2064 | 11.0 | 2176 | 12.7 | 2390 | 16.3 | 2590 | 20.2 | 2774 | 24.2 | | |
| 8000 | 2696 | 1905 | 9.65 | 2020 | 11.2 | 2126 | 12.6 | 2228 | 14.1 | 2430 | 17.6 | 2623 | 21.6 | 2806 | 25.9 | 2979 | 30.4 |
| 8800 | 2966 | 1973 | 10.9 | 2089 | 12.8 | 2197 | 14.5 | 2295 | 16.1 | 2480 | 19.3 | 2664 | 23.2 | 2841 | 27.5 | 3010 | 32.2 |
| 9600 | 3236 | 2052 | 12.2 | 2158 | 14.2 | 2265 | 16.3 | 2366 | 18.2 | 2545 | 21.7 | 2714 | 25.2 | 2883 | 29.5 | 3046 | 34.2 |
| 10400 | 3505 | 2141 | 13.7 | 2235 | 15.8 | 2334 | 18.0 | 2433 | 20.2 | 2615 | 24.4 | 2778 | 28.1 | 2934 | 31.9 | | |
| 11200 | 3775 | 2234 | 15.4 | 2323 | 17.5 | 2411 | 19.8 | 2502 | 22.1 | 2684 | 27.0 | 2847 | 31.2 | 2998 | 35.2 | | |
| 12000 | 4044 | 2330 | 17.4 | 2415 | 19.6 | 2498 | 21.8 | 2580 | 24.2 | 2751 | 29.3 | 2918 | 34.5 | 3067 | 38.9 | | |
| 12800 | 4314 | 2429 | 19.5 | 2511 | 21.8 | 2590 | 24.1 | 2667 | 26.6 | 2824 | 31.8 | 2985 | 37.3 | | | | |
| 13600 | 4584 | 2530 | 21.9 | 2609 | 24.3 | 2685 | 26.7 | 2759 | 29.2 | 2904 | 34.5 | 3054 | 40.2 | | | | |
| 14400 | 4853 | 2632 | 24.6 | 2709 | 27.0 | 2782 | 29.5 | 2853 | 32.1 | 2992 | 37.5 | | | | | | |
| 15200 | 5123 | 2736 | 27.4 | 2810 | 30.0 | 2881 | 32.6 | 2950 | 35.2 | | | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 24 A03-_-24_BC100 _____ or A03PO-242BC100 _____

Wheel Diameter – 24.625 in.
Outlet Area – 3.516 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2400 | 683 | 482 | 0.26 | 639 | 0.49 | | | | | | | | | | | | |
| 3600 | 1024 | 563 | 0.44 | 693 | 0.79 | 809 | 1.09 | 912 | 1.45 | 1004 | 1.86 | | | | | | |
| 4800 | 1365 | 667 | 0.71 | 775 | 1.14 | 874 | 1.60 | 965 | 2.05 | 1052 | 2.43 | 1132 | 2.88 | 1207 | 3.37 | 1279 | 3.90 |
| 6000 | 1706 | 788 | 1.13 | 871 | 1.59 | 958 | 2.16 | 1040 | 2.71 | 1115 | 3.32 | 1188 | 3.88 | 1259 | 4.36 | 1327 | 4.85 |
| 7200 | 2048 | 913 | 1.71 | 984 | 2.25 | 1054 | 2.82 | 1127 | 3.50 | 1197 | 4.18 | 1263 | 4.85 | 1326 | 5.59 | 1386 | 6.31 |
| 8400 | 2389 | 1040 | 2.46 | 1106 | 3.13 | 1164 | 3.75 | 1224 | 4.42 | 1286 | 5.19 | 1349 | 6.02 | 1408 | 6.79 | 1465 | 7.57 |
| 9600 | 2730 | 1171 | 3.47 | 1230 | 4.23 | 1283 | 4.94 | 1335 | 5.66 | 1387 | 6.42 | 1441 | 7.26 | 1496 | 8.19 | 1550 | 9.13 |
| 10800 | 3072 | 1304 | 4.74 | 1356 | 5.54 | 1407 | 6.41 | 1453 | 7.20 | 1498 | 8.01 | 1545 | 8.86 | 1592 | 9.76 | 1641 | 10.8 |
| 12000 | 3413 | 1438 | 6.31 | 1484 | 7.15 | 1532 | 8.13 | 1576 | 9.06 | 1617 | 9.93 | 1658 | 10.8 | 1699 | 11.8 | 1742 | 12.7 |
| 13200 | 3754 | 1573 | 8.20 | 1615 | 9.12 | 1657 | 10.1 | 1701 | 11.2 | 1740 | 12.2 | 1777 | 13.2 | 1814 | 14.1 | 1851 | 15.2 |
| 14400 | 4096 | 1708 | 10.5 | 1747 | 11.5 | 1785 | 12.5 | 1826 | 13.7 | 1865 | 14.8 | 1900 | 15.9 | 1934 | 16.9 | 1968 | 18.0 |
| 15600 | 4437 | 1844 | 13.1 | 1881 | 14.2 | 1916 | 15.3 | 1952 | 16.5 | 1989 | 17.8 | 2024 | 19.0 | 2057 | 20.2 | 2088 | 21.3 |
| 16800 | 4778 | 1980 | 16.2 | 2015 | 17.4 | 2048 | 18.5 | 2080 | 19.7 | 2114 | 21.1 | 2149 | 22.5 | 2181 | 23.8 | 2211 | 25.1 |
| 18000 | 5119 | 2117 | 19.7 | 2150 | 21.0 | 2180 | 22.2 | 2210 | 23.5 | 2241 | 24.8 | 2274 | 26.3 | 2306 | 27.8 | 2336 | 29.3 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 6300 | 1792 | 1466 | 6.30 | 1581 | 7.58 | 1690 | 8.98 | 1792 | 10.5 | | | | | | |
| 7200 | 2048 | 1506 | 7.49 | 1619 | 8.69 | 1724 | 10.1 | 1823 | 11.6 | 2009 | 14.9 | | | | | | |
| 8100 | 2304 | 1553 | 8.89 | 1660 | 10.3 | 1763 | 11.5 | 1860 | 13.0 | 2040 | 16.3 | 2207 | 19.9 | 2364 | 23.8 | | |
| 9000 | 2560 | 1611 | 10.0 | 1709 | 11.9 | 1806 | 13.5 | 1900 | 14.9 | 2077 | 18.0 | 2240 | 21.6 | 2393 | 25.6 | 2537 | 29.8 |
| 9900 | 2816 | 1673 | 11.4 | 1767 | 13.3 | 1857 | 15.3 | 1945 | 17.2 | 2117 | 20.3 | 2277 | 23.8 | 2426 | 27.7 | 2568 | 32.0 |
| 10800 | 3072 | 1738 | 12.9 | 1830 | 14.9 | 1916 | 16.9 | 1999 | 19.1 | 2160 | 23.2 | 2317 | 26.5 | 2464 | 30.3 | 2603 | 34.5 |
| 11700 | 3328 | 1805 | 14.4 | 1895 | 16.6 | 1979 | 18.8 | 2059 | 21.0 | 2211 | 25.8 | 2360 | 30.0 | 2505 | 33.6 | 2641 | 37.6 |
| 12600 | 3584 | 1877 | 16.0 | 1961 | 18.4 | 2044 | 20.9 | 2122 | 23.2 | 2270 | 28.1 | 2409 | 33.2 | 2547 | 37.6 | 2682 | 41.5 |
| 13500 | 3840 | 1955 | 18.0 | 2032 | 20.4 | 2110 | 23.0 | 2187 | 25.6 | 2331 | 30.6 | 2466 | 36.0 | 2595 | 41.4 | 2724 | 46.1 |
| 14400 | 4096 | 2036 | 20.2 | 2107 | 22.6 | 2180 | 25.2 | 2253 | 28.0 | 2395 | 33.5 | 2527 | 38.8 | 2652 | 44.7 | 2773 | 50.5 |
| 15300 | 4352 | 2122 | 22.7 | 2187 | 25.1 | 2254 | 27.7 | 2323 | 30.5 | 2460 | 36.5 | 2589 | 42.1 | 2712 | 47.9 | | |
| 16200 | 4608 | 2210 | 25.5 | 2271 | 28.0 | 2333 | 30.6 | 2396 | 33.3 | 2527 | 39.5 | 2654 | 45.7 | 2774 | 51.6 | | |
| 17100 | 4863 | 2300 | 28.5 | 2357 | 31.1 | 2415 | 33.7 | 2474 | 36.5 | 2596 | 42.6 | 2720 | 49.3 | | | | |
| 18000 | 5119 | 2392 | 31.9 | 2446 | 34.5 | 2500 | 37.2 | 2556 | 40.0 | 2670 | 46.1 | 2787 | 52.9 | | | | |

Size 24 A03-_-24_BA100 _____ or A03PO-242BA100 _____

Wheel Diameter – 24.625 in.
Outlet Area – 3.516 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2400 | 683 | 499 | 0.25 | 679 | 0.53 | | | | | | | | | | | | |
| 3600 | 1024 | 575 | 0.41 | 716 | 0.75 | 846 | 1.14 | 965 | 1.58 | 1068 | 2.02 | | | | | | |
| 4800 | 1365 | 678 | 0.67 | 791 | 1.08 | 898 | 1.52 | 999 | 1.99 | 1097 | 2.52 | 1190 | 3.09 | 1277 | 3.68 | 1358 | 4.27 |
| 6000 | 1706 | 795 | 1.05 | 888 | 1.52 | 978 | 2.04 | 1065 | 2.59 | 1148 | 3.15 | 1229 | 3.73 | 1308 | 4.38 | 1386 | 5.05 |
| 7200 | 2048 | 920 | 1.59 | 997 | 2.12 | 1074 | 2.69 | 1150 | 3.32 | 1224 | 3.98 | 1295 | 4.63 | 1364 | 5.30 | 1432 | 6.00 |
| 8400 | 2389 | 1049 | 2.32 | 1115 | 2.90 | 1182 | 3.54 | 1248 | 4.22 | 1313 | 4.94 | 1377 | 5.69 | 1440 | 6.46 | 1501 | 7.22 |
| 9600 | 2730 | 1181 | 3.25 | 1239 | 3.91 | 1297 | 4.60 | 1356 | 5.35 | 1413 | 6.12 | 1470 | 6.93 | 1527 | 7.77 | 1583 | 8.64 |
| 10800 | 3072 | 1315 | 4.43 | 1367 | 5.19 | 1418 | 5.91 | 1470 | 6.72 | 1522 | 7.56 | 1573 | 8.42 | 1624 | 9.32 | 1675 | 10.3 |
| 12000 | 3413 | 1450 | 5.87 | 1497 | 6.73 | 1543 | 7.54 | 1590 | 8.37 | 1636 | 9.28 | 1683 | 10.2 | 1729 | 11.2 | 1775 | 12.1 |
| 13200 | 3754 | 1585 | 7.61 | 1629 | 8.56 | 1671 | 9.48 | 1713 | 10.4 | 1755 | 11.3 | 1798 | 12.3 | 1840 | 13.3 | 1882 | 14.4 |
| 14400 | 4096 | 1721 | 9.69 | 1762 | 10.7 | 1801 | 11.8 | 1840 | 12.7 | 1878 | 13.7 | 1917 | 14.7 | 1956 | 15.8 | 1995 | 16.9 |
| 15600 | 4437 | 1858 | 12.1 | 1896 | 13.2 | 1933 | 14.4 | 1968 | 15.5 | 2004 | 16.5 | 2039 | 17.5 | 2075 | 18.7 | 2111 | 19.8 |
| 16800 | 4778 | 1995 | 15.0 | 2031 | 16.1 | 2065 | 17.4 | 2099 | 18.6 | 2132 | 19.7 | 2165 | 20.8 | 2197 | 21.9 | 2231 | 23.2 |
| 18000 | 5119 | 2133 | 18.2 | 2166 | 19.5 | 2199 | 20.8 | 2230 | 22.1 | 2261 | 23.4 | 2292 | 24.5 | 2323 | 25.7 | 2353 | 26.9 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 6300 | 1792 | 1538 | 6.73 | 1672 | 8.27 | 1795 | 9.83 | 1907 | 11.4 | | | | | | |
| 7200 | 2048 | 1565 | 7.50 | 1693 | 9.14 | 1814 | 10.9 | 1930 | 12.6 | 2136 | 16.2 | | | | | | |
| 8100 | 2304 | 1603 | 8.44 | 1722 | 10.1 | 1838 | 11.9 | 1949 | 13.8 | 2158 | 17.7 | 2346 | 21.7 | | | | |
| 9000 | 2560 | 1654 | 9.57 | 1763 | 11.3 | 1869 | 13.1 | 1975 | 15.0 | 2178 | 19.2 | 2367 | 23.6 | 2541 | 28.0 | 2699 | 32.5 |
| 9900 | 2816 | 1711 | 10.8 | 1814 | 12.6 | 1914 | 14.5 | 2011 | 16.4 | 2203 | 20.7 | 2387 | 25.3 | 2560 | 30.1 | 2724 | 35.0 |
| 10800 | 3072 | 1774 | 12.2 | 1871 | 14.1 | 1966 | 16.1 | 2058 | 18.2 | 2236 | 22.4 | 2412 | 27.1 | 2581 | 32.1 | 2741 | 37.3 |
| 11700 | 3328 | 1843 | 13.7 | 1934 | 15.8 | 2024 | 17.9 | 2111 | 20.0 | 2280 | 24.5 | 2444 | 29.1 | 2606 | 34.3 | 2763 | 39.6 |
| 12600 | 3584 | 1915 | 15.3 | 2002 | 17.5 | 2086 | 19.8 | 2170 | 22.1 | 2331 | 26.7 | 2487 | 31.5 | 2639 | 36.6 | 2789 | 42.1 |
| 13500 | 3840 | 1992 | 17.1 | 2073 | 19.4 | 2153 | 21.8 | 2233 | 24.2 | 2387 | 29.2 | 2536 | 34.2 | 2680 | 39.4 | | |
| 14400 | 4096 | 2072 | 19.2 | 2148 | 21.6 | 2224 | 24.0 | 2300 | 26.6 | 2447 | 31.8 | 2590 | 37.0 | 2728 | 42.4 | | |
| 15300 | 4352 | 2155 | 21.5 | 2227 | 23.9 | 2299 | 26.4 | 2370 | 29.1 | 2511 | 34.5 | 2648 | 40.1 | 2781 | 45.7 | | |
| 16200 | 4608 | 2240 | 23.9 | 2308 | 26.5 | 2377 | 29.1 | 2445 | 31.8 | 2579 | 37.5 | 2711 | 43.3 | | | | |
| 17100 | 4863 | 2327 | 26.6 | 2392 | 29.3 | 2457 | 32.0 | 2522 | 34.8 | 2650 | 40.6 | 2776 | 46.7 | | | | |
| 18000 | 5119 | 2416 | 29.6 | 2478 | 32.4 | 2540 | 35.2 | 2601 | 38.0 | 2724 | 44.0 | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 27 A03-_-27_BC100 _____ or A03PO-272BC100 _____

Wheel Diameter – 27.625 in.
Outlet Area – 4.425 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3000 | 678 | 429 | 0.32 | 569 | 0.61 | | | | | | | | | | | | |
| 4500 | 1017 | 501 | 0.55 | 617 | 0.98 | 721 | 1.36 | 812 | 1.81 | 895 | 2.33 | | | | | | |
| 6000 | 1356 | 592 | 0.88 | 689 | 1.42 | 777 | 2.00 | 858 | 2.56 | 936 | 3.03 | 1008 | 3.60 | 1075 | 4.22 | 1139 | 4.88 |
| 7500 | 1695 | 699 | 1.40 | 773 | 1.98 | 852 | 2.69 | 925 | 3.38 | 992 | 4.14 | 1057 | 4.84 | 1121 | 5.43 | 1181 | 6.05 |
| 9000 | 2034 | 809 | 2.12 | 873 | 2.79 | 935 | 3.51 | 1001 | 4.36 | 1064 | 5.21 | 1123 | 6.05 | 1179 | 6.98 | 1233 | 7.87 |
| 10500 | 2373 | 922 | 3.05 | 980 | 3.88 | 1033 | 4.66 | 1087 | 5.50 | 1143 | 6.47 | 1199 | 7.50 | 1252 | 8.47 | 1302 | 9.44 |
| 12000 | 2712 | 1038 | 4.29 | 1091 | 5.24 | 1138 | 6.13 | 1184 | 7.03 | 1231 | 7.99 | 1280 | 9.04 | 1329 | 10.2 | 1378 | 11.4 |
| 13500 | 3051 | 1155 | 5.85 | 1202 | 6.86 | 1248 | 7.95 | 1289 | 8.93 | 1329 | 9.94 | 1371 | 11.0 | 1414 | 12.1 | 1458 | 13.4 |
| 15000 | 3390 | 1274 | 7.79 | 1315 | 8.85 | 1358 | 10.1 | 1397 | 11.2 | 1434 | 12.3 | 1471 | 13.4 | 1508 | 14.6 | 1546 | 15.8 |
| 16500 | 3729 | 1393 | 10.1 | 1431 | 11.3 | 1469 | 12.5 | 1508 | 13.9 | 1543 | 15.1 | 1576 | 16.3 | 1609 | 17.6 | 1643 | 18.8 |
| 18000 | 4068 | 1513 | 12.9 | 1548 | 14.2 | 1582 | 15.4 | 1618 | 16.9 | 1653 | 18.4 | 1684 | 19.7 | 1715 | 21.0 | 1745 | 22.4 |
| 19500 | 4407 | 1633 | 16.2 | 1666 | 17.5 | 1697 | 18.9 | 1730 | 20.4 | 1763 | 22.0 | 1795 | 23.6 | 1824 | 25.0 | 1852 | 26.4 |
| 21000 | 4746 | 1754 | 20.0 | 1785 | 21.4 | 1814 | 22.9 | 1843 | 24.4 | 1874 | 26.1 | 1905 | 27.9 | 1934 | 29.5 | 1961 | 31.1 |
| 22500 | 5085 | 1875 | 24.3 | 1904 | 25.9 | 1932 | 27.5 | 1959 | 29.0 | 1987 | 30.7 | 2016 | 32.6 | 2044 | 34.5 | 2071 | 36.3 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 7200 | 1627 | 1286 | 7.23 | 1391 | 8.84 | | | | | | | | | | |
| 8400 | 1898 | 1321 | 8.47 | 1423 | 10.1 | 1518 | 11.8 | 1608 | 13.7 | | | | | | | | |
| 9600 | 2169 | 1361 | 10.3 | 1460 | 11.8 | 1553 | 13.5 | 1640 | 15.4 | 1803 | 19.5 | 1954 | 24.0 | | | | |
| 10800 | 2441 | 1411 | 12.0 | 1502 | 14.1 | 1591 | 15.8 | 1677 | 17.5 | 1836 | 21.6 | 1983 | 26.2 | 2120 | 31.1 | | |
| 12000 | 2712 | 1469 | 13.6 | 1554 | 16.0 | 1635 | 18.4 | 1717 | 20.5 | 1873 | 24.3 | 2016 | 28.8 | 2150 | 33.7 | 2278 | 39.1 |
| 13200 | 2983 | 1529 | 15.5 | 1612 | 18.0 | 1689 | 20.6 | 1764 | 23.3 | 1912 | 27.9 | 2053 | 32.1 | 2184 | 37.0 | 2309 | 42.3 |
| 14400 | 3254 | 1592 | 17.5 | 1672 | 20.3 | 1748 | 22.9 | 1820 | 25.7 | 1957 | 31.6 | 2092 | 36.5 | 2222 | 40.9 | 2344 | 46.2 |
| 15600 | 3525 | 1658 | 19.7 | 1735 | 22.7 | 1808 | 25.7 | 1879 | 28.5 | 2011 | 34.7 | 2137 | 40.9 | 2261 | 46.1 | 2382 | 50.9 |
| 16800 | 3797 | 1730 | 22.2 | 1800 | 25.2 | 1871 | 28.5 | 1940 | 31.7 | 2069 | 37.9 | 2189 | 44.7 | 2306 | 51.4 | 2422 | 57.0 |
| 18000 | 4068 | 1807 | 25.1 | 1871 | 28.1 | 1936 | 31.4 | 2002 | 34.9 | 2128 | 41.7 | 2247 | 48.4 | 2358 | 55.8 | 2467 | 63.0 |
| 19200 | 4339 | 1888 | 28.4 | 1946 | 31.5 | 2006 | 34.7 | 2067 | 38.2 | 2190 | 45.7 | 2305 | 52.8 | 2415 | 60.1 | | |
| 20400 | 4610 | 1971 | 32.1 | 2025 | 35.2 | 2080 | 38.5 | 2137 | 41.9 | 2253 | 49.7 | 2366 | 57.5 | 2473 | 65.0 | | |
| 21600 | 4881 | 2056 | 36.2 | 2107 | 39.4 | 2158 | 42.7 | 2211 | 46.2 | 2319 | 53.9 | 2429 | 62.4 | | | | |
| 22800 | 5153 | 2143 | 40.7 | 2191 | 44.0 | 2239 | 47.4 | 2288 | 51.0 | 2389 | 58.6 | 2493 | 67.2 | | | | |

Size 27 A03-_-27_BA100 _____ or A03PO-272BA100 _____

Wheel Diameter – 27.625 in.
Outlet Area – 4.425 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3000 | 678 | 445 | 0.31 | 605 | 0.67 | | | | | | | | | | | | |
| 4500 | 1017 | 511 | 0.52 | 637 | 0.94 | 754 | 1.43 | 860 | 1.98 | 952 | 2.53 | | | | | | |
| 6000 | 1356 | 601 | 0.83 | 703 | 1.35 | 799 | 1.90 | 889 | 2.49 | 977 | 3.16 | 1060 | 3.87 | 1138 | 4.60 | 1210 | 5.35 |
| 7500 | 1695 | 705 | 1.30 | 788 | 1.89 | 869 | 2.54 | 947 | 3.23 | 1022 | 3.93 | 1094 | 4.67 | 1165 | 5.47 | 1234 | 6.33 |
| 9000 | 2034 | 815 | 1.97 | 885 | 2.63 | 954 | 3.35 | 1022 | 4.14 | 1088 | 4.96 | 1152 | 5.78 | 1214 | 6.62 | 1274 | 7.49 |
| 10500 | 2373 | 930 | 2.87 | 989 | 3.59 | 1049 | 4.40 | 1108 | 5.25 | 1166 | 6.16 | 1224 | 7.10 | 1280 | 8.06 | 1334 | 9.01 |
| 12000 | 2712 | 1047 | 4.02 | 1099 | 4.84 | 1151 | 5.71 | 1203 | 6.65 | 1255 | 7.62 | 1306 | 8.63 | 1357 | 9.69 | 1407 | 10.8 |
| 13500 | 3051 | 1165 | 5.47 | 1212 | 6.42 | 1257 | 7.33 | 1304 | 8.35 | 1350 | 9.40 | 1396 | 10.5 | 1442 | 11.6 | 1488 | 12.8 |
| 15000 | 3390 | 1284 | 7.25 | 1327 | 8.33 | 1368 | 9.33 | 1410 | 10.4 | 1452 | 11.5 | 1493 | 12.7 | 1535 | 13.9 | 1576 | 15.1 |
| 16500 | 3729 | 1404 | 9.40 | 1443 | 10.6 | 1481 | 11.7 | 1519 | 12.8 | 1557 | 14.0 | 1595 | 15.3 | 1633 | 16.5 | 1671 | 17.8 |
| 18000 | 4068 | 1524 | 12.0 | 1561 | 13.3 | 1596 | 14.6 | 1631 | 15.7 | 1665 | 16.9 | 1700 | 18.3 | 1735 | 19.6 | 1770 | 21.0 |
| 19500 | 4407 | 1645 | 15.0 | 1680 | 16.4 | 1712 | 17.8 | 1745 | 19.1 | 1776 | 20.4 | 1808 | 21.7 | 1840 | 23.2 | 1873 | 24.6 |
| 21000 | 4746 | 1767 | 18.5 | 1799 | 20.0 | 1830 | 21.5 | 1860 | 23.0 | 1889 | 24.4 | 1919 | 25.8 | 1948 | 27.2 | 1978 | 28.7 |
| 22500 | 5085 | 1889 | 22.5 | 1919 | 24.1 | 1948 | 25.7 | 1976 | 27.3 | 2004 | 28.9 | 2032 | 30.4 | 2059 | 31.9 | 2087 | 33.4 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 7200 | 1627 | 1360 | 7.88 | 1479 | 9.67 | | | | | | | | | | |
| 8400 | 1898 | 1380 | 8.85 | 1498 | 10.9 | 1608 | 12.9 | 1709 | 15.0 | | | | | | | | |
| 9600 | 2169 | 1409 | 9.95 | 1520 | 12.1 | 1626 | 14.3 | 1728 | 16.6 | 1915 | 21.4 | | | | | | |
| 10800 | 2441 | 1452 | 11.4 | 1553 | 13.5 | 1652 | 15.7 | 1749 | 18.2 | 1933 | 23.3 | 2103 | 28.6 | 2255 | 34.0 | | |
| 12000 | 2712 | 1504 | 13.0 | 1598 | 15.2 | 1689 | 17.5 | 1778 | 19.9 | 1954 | 25.2 | 2120 | 30.9 | 2276 | 36.8 | 2420 | 42.8 |
| 13200 | 2983 | 1562 | 14.7 | 1650 | 17.1 | 1735 | 19.6 | 1819 | 22.1 | 1982 | 27.4 | 2142 | 33.3 | 2294 | 39.5 | 2438 | 45.9 |
| 14400 | 3254 | 1625 | 16.6 | 1708 | 19.2 | 1789 | 21.9 | 1868 | 24.5 | 2021 | 30.0 | 2170 | 35.9 | 2316 | 42.3 | 2457 | 49.0 |
| 15600 | 3525 | 1692 | 18.8 | 1770 | 21.5 | 1847 | 24.4 | 1922 | 27.2 | 2067 | 33.0 | 2207 | 39.0 | 2345 | 45.4 | 2481 | 52.3 |
| 16800 | 3797 | 1764 | 21.2 | 1837 | 24.0 | 1909 | 27.0 | 1981 | 30.1 | 2119 | 36.2 | 2253 | 42.4 | 2383 | 48.9 | 2510 | 55.8 |
| 18000 | 4068 | 1839 | 23.9 | 1908 | 26.8 | 1976 | 29.9 | 2043 | 33.1 | 2176 | 39.7 | 2303 | 46.2 | 2427 | 53.0 | | |
| 19200 | 4339 | 1917 | 26.9 | 1982 | 29.9 | 2046 | 33.1 | 2110 | 36.4 | 2236 | 43.3 | 2358 | 50.3 | 2477 | 57.3 | | |
| 20400 | 4610 | 1997 | 30.2 | 2058 | 33.4 | 2119 | 36.7 | 2180 | 40.1 | 2299 | 47.2 | 2417 | 54.6 | | | | |
| 21600 | 4881 | 2080 | 33.8 | 2138 | 37.1 | 2195 | 40.5 | 2253 | 44.1 | 2367 | 51.4 | 2479 | 59.1 | | | | |
| 22800 | 5153 | 2164 | 37.7 | 2219 | 41.3 | 2274 | 44.8 | 2328 | 48.4 | 2437 | 56.0 | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 30 A03-_-30_BC100_ _ _ _ _ or A03PO-302BC100_ _ _ _ _

Wheel Diameter – 30.0 in.
Outlet Area – 5.218 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4000 | 767 | 410 | 0.44 | 534 | 0.80 | 636 | 1.25 | | | | | | | | | | |
| 6000 | 1150 | 491 | 0.77 | 592 | 1.34 | 681 | 1.90 | 763 | 2.40 | 837 | 3.01 | 906 | 3.68 | | | | |
| 8000 | 1533 | 596 | 1.33 | 673 | 1.99 | 750 | 2.75 | 820 | 3.54 | 886 | 4.29 | 951 | 4.90 | 1011 | 5.62 | 1068 | 6.40 |
| 10000 | 1916 | 710 | 2.18 | 771 | 2.93 | 833 | 3.77 | 897 | 4.74 | 956 | 5.66 | 1011 | 6.66 | 1065 | 7.67 | 1118 | 8.52 |
| 12000 | 2300 | 826 | 3.33 | 881 | 4.27 | 931 | 5.17 | 982 | 6.16 | 1036 | 7.30 | 1088 | 8.45 | 1138 | 9.56 | 1185 | 10.7 |
| 14000 | 2683 | 946 | 4.92 | 996 | 6.03 | 1039 | 7.06 | 1082 | 8.12 | 1126 | 9.25 | 1172 | 10.5 | 1218 | 11.9 | 1262 | 13.2 |
| 16000 | 3066 | 1069 | 7.00 | 1111 | 8.19 | 1154 | 9.48 | 1191 | 10.6 | 1228 | 11.8 | 1267 | 13.1 | 1306 | 14.4 | 1346 | 15.9 |
| 18000 | 3450 | 1192 | 9.64 | 1229 | 10.9 | 1268 | 12.4 | 1305 | 13.8 | 1338 | 15.1 | 1371 | 16.4 | 1405 | 17.8 | 1439 | 19.3 |
| 20000 | 3833 | 1317 | 12.9 | 1350 | 14.3 | 1384 | 15.8 | 1420 | 17.5 | 1451 | 19.0 | 1481 | 20.4 | 1511 | 21.9 | 1541 | 23.4 |
| 22000 | 4216 | 1442 | 16.8 | 1473 | 18.4 | 1503 | 19.9 | 1535 | 21.7 | 1567 | 23.5 | 1595 | 25.2 | 1622 | 26.8 | 1650 | 28.4 |
| 24000 | 4599 | 1567 | 21.5 | 1596 | 23.2 | 1624 | 24.9 | 1652 | 26.6 | 1681 | 28.6 | 1710 | 30.6 | 1737 | 32.4 | 1762 | 34.2 |
| 26000 | 4983 | 1693 | 27.1 | 1720 | 28.9 | 1746 | 30.7 | 1771 | 32.5 | 1798 | 34.5 | 1825 | 36.7 | 1852 | 38.9 | 1876 | 40.8 |
| 28000 | 5366 | 1819 | 33.5 | 1844 | 35.5 | 1869 | 37.4 | 1892 | 39.3 | 1916 | 41.3 | 1941 | 43.6 | 1967 | 45.9 | 1991 | 48.3 |
| 30000 | 5749 | 1945 | 40.9 | 1969 | 43.0 | 1992 | 45.1 | 2015 | 47.1 | 2037 | 49.2 | 2059 | 51.4 | 2083 | 53.9 | 2106 | 56.4 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 9000 | 1725 | 1195 | 9.00 | 1291 | 10.9 | 1381 | 13.0 | | | 1646 | 21.8 | | | | |
| 10500 | 2012 | 1232 | 10.8 | 1324 | 12.6 | 1411 | 14.7 | 1493 | 16.9 | | | | | | | | |
| 12000 | 2300 | 1274 | 13.2 | 1362 | 15.2 | 1447 | 17.0 | 1526 | 19.2 | 1674 | 24.1 | 1811 | 29.5 | | | | |
| 13500 | 2587 | 1328 | 15.1 | 1408 | 17.9 | 1486 | 20.3 | 1563 | 22.5 | 1708 | 27.1 | 1842 | 32.4 | 1967 | 38.3 | 2085 | 44.6 |
| 15000 | 2875 | 1385 | 17.4 | 1462 | 20.2 | 1535 | 23.3 | 1606 | 26.2 | 1746 | 31.1 | 1876 | 36.2 | 1998 | 42.0 | 2114 | 48.3 |
| 16500 | 3162 | 1446 | 19.9 | 1520 | 23.0 | 1591 | 26.0 | 1658 | 29.4 | 1787 | 35.8 | 1914 | 41.1 | 2034 | 46.6 | 2147 | 52.8 |
| 18000 | 3450 | 1509 | 22.4 | 1581 | 26.0 | 1649 | 29.4 | 1714 | 32.7 | 1837 | 39.9 | 1955 | 46.8 | 2072 | 52.6 | 2184 | 58.3 |
| 19500 | 3737 | 1578 | 25.5 | 1644 | 29.0 | 1710 | 32.9 | 1773 | 36.6 | 1893 | 43.8 | 2005 | 51.8 | 2114 | 59.3 | 2222 | 65.6 |
| 21000 | 4025 | 1652 | 29.1 | 1712 | 32.5 | 1773 | 36.4 | 1834 | 40.6 | 1951 | 48.4 | 2060 | 56.4 | 2163 | 65.0 | 2264 | 73.2 |
| 22500 | 4312 | 1730 | 33.1 | 1785 | 36.7 | 1840 | 40.5 | 1898 | 44.7 | 2011 | 53.5 | 2117 | 61.7 | 2218 | 70.4 | 2314 | 79.6 |
| 24000 | 4599 | 1811 | 37.7 | 1861 | 41.4 | 1913 | 45.2 | 1965 | 49.3 | 2072 | 58.4 | 2177 | 67.6 | 2275 | 76.5 | | |
| 25500 | 4887 | 1894 | 42.8 | 1941 | 46.6 | 1989 | 50.5 | 2037 | 54.6 | 2137 | 63.7 | 2238 | 73.7 | | | | |
| 27000 | 5174 | 1979 | 48.4 | 2023 | 52.4 | 2068 | 56.4 | 2113 | 60.6 | 2205 | 69.6 | 2300 | 79.7 | | | | |
| 28500 | 5462 | 2065 | 54.6 | 2107 | 58.7 | 2149 | 62.9 | 2191 | 67.2 | 2277 | 76.3 | | | | | | |

Size 30 A03-_-30_BA100_ _ _ _ _ or A03PO-302BA100_ _ _ _ _

Wheel Diameter – 30.0 in.
Outlet Area – 5.218 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4000 | 767 | 422 | 0.42 | 562 | 0.86 | | | | | | | | | | | | |
| 6000 | 1150 | 501 | 0.74 | 608 | 1.28 | 706 | 1.87 | 800 | 2.55 | 886 | 3.29 | 963 | 4.03 | | | | |
| 8000 | 1533 | 603 | 1.24 | 687 | 1.90 | 768 | 2.62 | 844 | 3.36 | 917 | 4.15 | 990 | 5.02 | 1059 | 5.95 | 1125 | 6.91 |
| 10000 | 1916 | 715 | 2.02 | 783 | 2.77 | 850 | 3.60 | 916 | 4.49 | 979 | 5.40 | 1040 | 6.33 | 1100 | 7.29 | 1158 | 8.30 |
| 12000 | 2300 | 833 | 3.13 | 890 | 3.96 | 946 | 4.90 | 1002 | 5.88 | 1057 | 6.93 | 1112 | 8.02 | 1164 | 9.11 | 1216 | 10.2 |
| 14000 | 2683 | 954 | 4.62 | 1003 | 5.57 | 1051 | 6.59 | 1100 | 7.68 | 1148 | 8.82 | 1196 | 10.0 | 1243 | 11.2 | 1289 | 12.5 |
| 16000 | 3066 | 1077 | 6.54 | 1120 | 7.67 | 1162 | 8.74 | 1205 | 9.94 | 1248 | 11.2 | 1290 | 12.5 | 1332 | 13.8 | 1373 | 15.2 |
| 18000 | 3450 | 1202 | 8.96 | 1240 | 10.3 | 1278 | 11.5 | 1315 | 12.7 | 1353 | 14.1 | 1391 | 15.5 | 1429 | 16.9 | 1466 | 18.3 |
| 20000 | 3833 | 1327 | 12.0 | 1362 | 13.4 | 1396 | 14.8 | 1430 | 16.1 | 1464 | 17.5 | 1498 | 19.0 | 1532 | 20.6 | 1566 | 22.1 |
| 22000 | 4216 | 1452 | 15.6 | 1485 | 17.2 | 1516 | 18.8 | 1547 | 20.2 | 1578 | 21.7 | 1609 | 23.2 | 1640 | 24.9 | 1671 | 26.6 |
| 24000 | 4599 | 1579 | 19.9 | 1609 | 21.6 | 1638 | 23.4 | 1666 | 25.1 | 1695 | 26.7 | 1723 | 28.2 | 1751 | 29.9 | 1779 | 31.7 |
| 26000 | 4983 | 1705 | 25.0 | 1733 | 26.8 | 1761 | 28.7 | 1787 | 30.6 | 1813 | 32.4 | 1839 | 34.1 | 1865 | 35.8 | 1891 | 37.6 |
| 28000 | 5366 | 1832 | 30.9 | 1858 | 32.9 | 1884 | 34.9 | 1909 | 36.9 | 1933 | 38.9 | 1958 | 40.9 | 1982 | 42.7 | 2006 | 44.5 |
| 30000 | 5749 | 1959 | 37.7 | 1984 | 39.8 | 2008 | 42.0 | 2032 | 44.1 | 2055 | 46.3 | 2077 | 48.5 | 2100 | 50.5 | 2122 | 52.4 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 9000 | 1725 | 1258 | 9.70 | 1369 | 11.9 | 1468 | 14.1 | | | | | | | | |
| 10500 | 2012 | 1281 | 11.0 | 1387 | 13.4 | 1487 | 15.9 | 1582 | 18.5 | 1751 | 23.7 | | | | | | |
| 12000 | 2300 | 1316 | 12.5 | 1413 | 15.0 | 1508 | 17.6 | 1600 | 20.4 | 1771 | 26.3 | 1926 | 32.2 | | | | |
| 13500 | 2587 | 1362 | 14.4 | 1451 | 16.9 | 1538 | 19.6 | 1624 | 22.5 | 1790 | 28.7 | 1944 | 35.2 | 2088 | 42.0 | 2218 | 48.6 |
| 15000 | 2875 | 1416 | 16.5 | 1499 | 19.3 | 1580 | 22.1 | 1659 | 25.0 | 1814 | 31.3 | 1963 | 38.1 | 2105 | 45.3 | 2239 | 52.7 |
| 16500 | 3162 | 1476 | 18.8 | 1554 | 21.8 | 1630 | 24.8 | 1704 | 27.9 | 1848 | 34.3 | 1989 | 41.3 | 2125 | 48.7 | 2256 | 56.6 |
| 18000 | 3450 | 1540 | 21.4 | 1613 | 24.6 | 1685 | 27.9 | 1755 | 31.2 | 1891 | 37.9 | 2022 | 44.9 | 2151 | 52.4 | 2278 | 60.5 |
| 19500 | 3737 | 1609 | 24.3 | 1678 | 27.7 | 1745 | 31.1 | 1812 | 34.7 | 1940 | 41.8 | 2065 | 49.1 | 2185 | 56.7 | 2305 | 64.8 |
| 21000 | 4025 | 1682 | 27.6 | 1746 | 31.1 | 1809 | 34.7 | 1872 | 38.4 | 1995 | 46.1 | 2113 | 53.8 | 2228 | 61.7 | | |
| 22500 | 4312 | 1758 | 31.3 | 1818 | 34.9 | 1877 | 38.7 | 1937 | 42.5 | 2053 | 50.6 | 2166 | 58.8 | 2276 | 67.1 | | |
| 24000 | 4599 | 1836 | 35.4 | 1893 | 39.2 | 1949 | 43.0 | 2005 | 47.1 | 2115 | 55.4 | 2223 | 64.2 | | | | |
| 25500 | 4887 | 1916 | 39.9 | 1970 | 43.9 | 2023 | 47.9 | 2076 | 52.0 | 2180 | 60.7 | 2284 | 69.8 | | | | |
| 27000 | 5174 | 1998 | 44.9 | 2049 | 49.0 | 2099 | 53.2 | 2149 | 57.5 | 2249 | 66.4 | | | | | | |
| 28500 | 5462 | 2082 | 50.4 | 2130 | 54.7 | 2178 | 59.1 | 2226 | 63.5 | | | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 33 A03-_-33_BC100 _____ or A03PO-332BC100 _____

Wheel Diameter – 33.0 in.
Outlet Area – 6.314 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6000 | 950 | 403 | 0.68 | 499 | 1.18 | 588 | 1.79 | 669 | 2.46 | | | | | | | | |
| 8000 | 1267 | 472 | 1.08 | 556 | 1.79 | 629 | 2.46 | 696 | 3.14 | 763 | 3.95 | 825 | 4.82 | 885 | 5.73 | 942 | 6.68 |
| 10000 | 1584 | 552 | 1.68 | 620 | 2.47 | 687 | 3.38 | 749 | 4.30 | 803 | 5.04 | 856 | 5.88 | 911 | 6.88 | 963 | 7.92 |
| 12000 | 1901 | 637 | 2.49 | 694 | 3.41 | 750 | 4.39 | 806 | 5.46 | 861 | 6.63 | 910 | 7.64 | 954 | 8.53 | 998 | 9.46 |
| 14000 | 2217 | 724 | 3.57 | 775 | 4.65 | 823 | 5.72 | 871 | 6.87 | 919 | 8.10 | 967 | 9.43 | 1013 | 10.8 | 1055 | 12.0 |
| 16000 | 2534 | 813 | 4.97 | 859 | 6.18 | 903 | 7.41 | 944 | 8.64 | 986 | 9.95 | 1028 | 11.3 | 1070 | 12.8 | 1112 | 14.3 |
| 18000 | 2851 | 904 | 6.74 | 945 | 8.07 | 985 | 9.46 | 1023 | 10.8 | 1060 | 12.2 | 1097 | 13.7 | 1135 | 15.2 | 1172 | 16.8 |
| 20000 | 3168 | 995 | 8.91 | 1033 | 10.4 | 1069 | 11.9 | 1105 | 13.4 | 1139 | 14.9 | 1172 | 16.5 | 1205 | 18.1 | 1239 | 19.8 |
| 22000 | 3484 | 1088 | 11.5 | 1122 | 13.1 | 1155 | 14.7 | 1188 | 16.4 | 1220 | 18.1 | 1251 | 19.8 | 1281 | 21.5 | 1311 | 23.2 |
| 24000 | 3801 | 1181 | 14.7 | 1212 | 16.3 | 1243 | 18.1 | 1274 | 19.9 | 1304 | 21.8 | 1333 | 23.6 | 1361 | 25.5 | 1389 | 27.3 |
| 26000 | 4118 | 1274 | 18.3 | 1303 | 20.1 | 1332 | 22.0 | 1360 | 24.0 | 1388 | 26.0 | 1416 | 28.0 | 1443 | 30.0 | 1469 | 31.9 |
| 28000 | 4435 | 1368 | 22.6 | 1395 | 24.5 | 1421 | 26.5 | 1448 | 28.6 | 1474 | 30.7 | 1500 | 32.9 | 1526 | 35.0 | 1551 | 37.2 |
| 30000 | 4751 | 1462 | 27.5 | 1487 | 29.6 | 1512 | 31.7 | 1537 | 33.8 | 1561 | 36.1 | 1586 | 38.4 | 1610 | 40.7 | 1634 | 43.0 |
| 32000 | 5068 | 1556 | 33.1 | 1580 | 35.3 | 1603 | 37.5 | 1626 | 39.8 | 1650 | 42.1 | 1673 | 44.5 | 1696 | 47.0 | 1718 | 49.5 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 10500 | 1663 | 1067 | 10.5 | 1159 | 12.9 | 1245 | 15.4 | | | | | | | | |
| 12000 | 1901 | 1089 | 11.8 | 1176 | 14.3 | 1258 | 16.9 | 1337 | 19.7 | | | | | | | | |
| 13500 | 2138 | 1118 | 13.3 | 1199 | 15.9 | 1278 | 18.7 | 1353 | 21.5 | 1496 | 27.6 | 1629 | 34.1 | | | | |
| 15000 | 2376 | 1160 | 15.6 | 1230 | 17.9 | 1303 | 20.6 | 1375 | 23.6 | 1511 | 29.9 | 1640 | 36.7 | 1762 | 43.8 | | |
| 16500 | 2613 | 1204 | 18.1 | 1272 | 20.7 | 1337 | 23.1 | 1402 | 25.9 | 1533 | 32.5 | 1657 | 39.5 | 1774 | 46.9 | 1887 | 54.6 |
| 18000 | 2851 | 1246 | 20.2 | 1317 | 23.7 | 1380 | 26.5 | 1439 | 29.1 | 1558 | 35.3 | 1678 | 42.6 | 1792 | 50.2 | 1901 | 58.1 |
| 19500 | 3088 | 1291 | 22.4 | 1359 | 26.2 | 1424 | 29.9 | 1483 | 33.0 | 1592 | 38.9 | 1703 | 45.9 | 1813 | 53.8 | 1919 | 62.0 |
| 21000 | 3326 | 1339 | 25.0 | 1403 | 28.8 | 1466 | 32.9 | 1527 | 36.9 | 1634 | 43.5 | 1735 | 49.8 | 1838 | 57.6 | 1941 | 66.2 |
| 22500 | 3564 | 1390 | 27.9 | 1450 | 31.8 | 1510 | 35.9 | 1569 | 40.2 | 1679 | 48.5 | 1775 | 55.2 | 1869 | 62.1 | 1966 | 70.6 |
| 24000 | 3801 | 1444 | 31.1 | 1500 | 35.1 | 1557 | 39.3 | 1612 | 43.7 | 1722 | 53.0 | 1819 | 61.2 | 1909 | 68.3 | 1997 | 75.7 |
| 25500 | 4039 | 1501 | 34.7 | 1553 | 38.8 | 1606 | 43.1 | 1659 | 47.6 | 1764 | 57.2 | 1864 | 67.1 | 1953 | 75.1 | 2036 | 82.6 |
| 27000 | 4276 | 1559 | 38.6 | 1608 | 42.8 | 1658 | 47.3 | 1708 | 51.9 | 1808 | 61.6 | 1906 | 72.1 | 1998 | 82.1 | 2080 | 90.4 |
| 28500 | 4514 | 1619 | 42.9 | 1666 | 47.3 | 1712 | 51.8 | 1760 | 56.6 | 1855 | 66.5 | 1948 | 77.1 | 2040 | 88.3 | | |
| 30000 | 4751 | 1680 | 47.6 | 1725 | 52.2 | 1769 | 56.8 | 1814 | 61.7 | 1904 | 71.8 | 1993 | 82.6 | 2082 | 94.1 | | |

Size 33 A03-_-33_BA100 _____ or A03PO-332BA100 _____

Wheel Diameter – 33.0 in.
Outlet Area – 6.314 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6000 | 950 | 410 | 0.64 | 510 | 1.18 | 610 | 1.83 | 698 | 2.57 | | | | | | | | |
| 8000 | 1267 | 486 | 1.04 | 563 | 1.66 | 638 | 2.36 | 715 | 3.16 | 789 | 4.03 | 858 | 4.96 | 924 | 5.98 | 983 | 7.01 |
| 10000 | 1584 | 571 | 1.64 | 635 | 2.36 | 696 | 3.14 | 756 | 3.98 | 816 | 4.90 | 878 | 5.91 | 939 | 6.97 | 997 | 8.09 |
| 12000 | 1901 | 660 | 2.46 | 715 | 3.31 | 768 | 4.19 | 819 | 5.12 | 869 | 6.10 | 918 | 7.13 | 969 | 8.24 | 1021 | 9.42 |
| 14000 | 2217 | 752 | 3.53 | 801 | 4.54 | 847 | 5.53 | 892 | 6.56 | 937 | 7.64 | 980 | 8.76 | 1023 | 9.91 | 1064 | 11.1 |
| 16000 | 2534 | 844 | 4.90 | 890 | 6.08 | 931 | 7.22 | 972 | 8.35 | 1011 | 9.52 | 1050 | 10.7 | 1088 | 12.0 | 1126 | 13.3 |
| 18000 | 2851 | 937 | 6.61 | 980 | 7.96 | 1019 | 9.26 | 1055 | 10.5 | 1091 | 11.8 | 1126 | 13.1 | 1161 | 14.5 | 1195 | 15.9 |
| 20000 | 3168 | 1030 | 8.70 | 1072 | 10.2 | 1108 | 11.7 | 1141 | 13.1 | 1174 | 14.5 | 1206 | 16.0 | 1238 | 17.4 | 1270 | 18.9 |
| 22000 | 3484 | 1124 | 11.2 | 1164 | 12.9 | 1199 | 14.6 | 1230 | 16.1 | 1260 | 17.7 | 1290 | 19.3 | 1320 | 20.8 | 1348 | 22.4 |
| 24000 | 3801 | 1218 | 14.2 | 1257 | 16.1 | 1290 | 17.9 | 1320 | 19.6 | 1349 | 21.4 | 1376 | 23.1 | 1404 | 24.8 | 1431 | 26.5 |
| 26000 | 4118 | 1313 | 17.7 | 1350 | 19.7 | 1383 | 21.7 | 1411 | 23.7 | 1439 | 25.5 | 1465 | 27.4 | 1490 | 29.3 | 1515 | 31.1 |
| 28000 | 4435 | 1408 | 21.7 | 1443 | 24.0 | 1475 | 26.1 | 1503 | 28.2 | 1529 | 30.3 | 1554 | 32.3 | 1578 | 34.3 | 1602 | 36.3 |
| 30000 | 4751 | 1503 | 26.3 | 1537 | 28.8 | 1567 | 31.1 | 1596 | 33.4 | 1621 | 35.6 | 1645 | 37.8 | 1668 | 40.0 | 1690 | 42.1 |
| 32000 | 5068 | 1598 | 31.5 | 1631 | 34.2 | 1660 | 36.7 | 1688 | 39.2 | 1713 | 41.6 | 1736 | 44.0 | 1758 | 46.3 | 1780 | 48.6 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 10500 | 1663 | 1109 | 10.8 | 1210 | 13.4 | | | | | | | | | | |
| 12000 | 1901 | 1122 | 11.9 | 1219 | 14.6 | 1310 | 17.5 | 1396 | 20.6 | | | | | | | | |
| 13500 | 2138 | 1143 | 13.2 | 1233 | 16.1 | 1321 | 19.0 | 1405 | 22.1 | 1561 | 28.9 | | | | | | |
| 15000 | 2376 | 1173 | 14.8 | 1255 | 17.6 | 1337 | 20.7 | 1418 | 23.9 | 1570 | 30.8 | 1712 | 38.3 | 1840 | 46.0 | | |
| 16500 | 2613 | 1215 | 16.6 | 1287 | 19.5 | 1361 | 22.6 | 1436 | 26.0 | 1583 | 33.0 | 1720 | 40.5 | 1850 | 48.7 | 1971 | 57.2 |
| 18000 | 2851 | 1263 | 18.7 | 1329 | 21.7 | 1394 | 24.9 | 1463 | 28.2 | 1600 | 35.5 | 1733 | 43.3 | 1860 | 51.5 | 1980 | 60.2 |
| 19500 | 3088 | 1314 | 21.1 | 1376 | 24.2 | 1437 | 27.5 | 1497 | 30.9 | 1623 | 38.2 | 1749 | 46.2 | 1872 | 54.7 | 1990 | 63.5 |
| 21000 | 3326 | 1368 | 23.7 | 1427 | 27.0 | 1484 | 30.4 | 1541 | 33.9 | 1654 | 41.3 | 1772 | 49.4 | 1889 | 58.1 | 2003 | 67.2 |
| 22500 | 3564 | 1425 | 26.7 | 1480 | 30.1 | 1535 | 33.6 | 1589 | 37.3 | 1694 | 44.8 | 1801 | 53.0 | 1911 | 61.8 | 2020 | 71.1 |
| 24000 | 3801 | 1484 | 29.9 | 1536 | 33.5 | 1588 | 37.2 | 1639 | 41.0 | 1739 | 48.8 | 1837 | 57.0 | 1939 | 65.9 | 2042 | 75.4 |
| 25500 | 4039 | 1544 | 33.5 | 1594 | 37.2 | 1643 | 41.0 | 1692 | 45.0 | 1787 | 53.1 | 1880 | 61.6 | 1973 | 70.5 | 2069 | 80.0 |
| 27000 | 4276 | 1607 | 37.5 | 1654 | 41.3 | 1700 | 45.3 | 1747 | 49.3 | 1838 | 57.8 | 1927 | 66.5 | 2015 | 75.6 | 2103 | 85.2 |
| 28500 | 4514 | 1670 | 41.8 | 1715 | 45.8 | 1760 | 49.9 | 1804 | 54.1 | 1891 | 62.8 | 1977 | 71.9 | 2061 | 81.2 | | |
| 30000 | 4751 | 1734 | 46.4 | 1778 | 50.7 | 1820 | 54.9 | 1862 | 59.3 | 1946 | 68.2 | 2028 | 77.6 | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 36 A03-_-36_BC100_ _ _ _ _ or A03PO-362BC100_ _ _ _ _

Wheel Diameter – 36.0 in.
Outlet Area – 7.514 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5000 | 665 | 323 | 0.49 | 433 | 1.03 | | | | | | | | | | | | |
| 7500 | 998 | 378 | 0.87 | 465 | 1.51 | 543 | 2.22 | 615 | 3.03 | 682 | 3.92 | | | | | | |
| 10000 | 1331 | 447 | 1.41 | 520 | 2.27 | 587 | 3.17 | 645 | 3.94 | 705 | 4.92 | 761 | 5.96 | 815 | 7.07 | 866 | 8.22 |
| 12500 | 1664 | 526 | 2.22 | 584 | 3.19 | 643 | 4.28 | 700 | 5.49 | 749 | 6.48 | 795 | 7.42 | 843 | 8.57 | 890 | 9.85 |
| 15000 | 1996 | 608 | 3.32 | 658 | 4.47 | 707 | 5.66 | 756 | 6.96 | 805 | 8.39 | 851 | 9.82 | 891 | 11.0 | 930 | 12.1 |
| 17500 | 2329 | 692 | 4.79 | 738 | 6.14 | 780 | 7.47 | 821 | 8.87 | 864 | 10.4 | 905 | 11.9 | 947 | 13.7 | 986 | 15.3 |
| 20000 | 2662 | 779 | 6.71 | 819 | 8.21 | 858 | 9.75 | 894 | 11.3 | 930 | 12.9 | 967 | 14.6 | 1004 | 16.3 | 1040 | 18.1 |
| 22500 | 2994 | 866 | 9.13 | 903 | 10.8 | 938 | 12.5 | 971 | 14.2 | 1004 | 15.9 | 1036 | 17.7 | 1069 | 19.6 | 1102 | 21.5 |
| 25000 | 3327 | 955 | 12.1 | 988 | 13.9 | 1020 | 15.8 | 1051 | 17.7 | 1081 | 19.6 | 1110 | 21.5 | 1139 | 23.5 | 1169 | 25.5 |
| 27500 | 3660 | 1044 | 15.7 | 1074 | 17.7 | 1103 | 19.7 | 1132 | 21.8 | 1161 | 23.9 | 1188 | 26.0 | 1215 | 28.1 | 1241 | 30.2 |
| 30000 | 3993 | 1134 | 20.0 | 1161 | 22.1 | 1188 | 24.3 | 1215 | 26.5 | 1242 | 28.9 | 1268 | 31.2 | 1293 | 33.5 | 1317 | 35.7 |
| 32500 | 4325 | 1224 | 25.1 | 1249 | 27.3 | 1274 | 29.6 | 1299 | 32.0 | 1324 | 34.5 | 1348 | 37.0 | 1372 | 39.6 | 1395 | 42.0 |
| 35000 | 4658 | 1315 | 30.9 | 1338 | 33.3 | 1361 | 35.8 | 1385 | 38.3 | 1408 | 41.0 | 1430 | 43.6 | 1453 | 46.4 | 1475 | 49.1 |
| 37500 | 4991 | 1405 | 37.7 | 1427 | 40.2 | 1449 | 42.8 | 1471 | 45.5 | 1492 | 48.3 | 1514 | 51.1 | 1535 | 54.0 | 1556 | 56.9 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| 14000 | 1863 | 995 | 13.8 | 1075 | 16.7 | 1151 | 19.8 | 1224 | 23.1 | | | | | | | | |
| 16000 | 2129 | 1024 | 15.8 | 1098 | 18.8 | 1170 | 22.1 | 1240 | 25.5 | 1370 | 32.8 | | | | | | |
| 18000 | 2396 | 1067 | 18.8 | 1131 | 21.5 | 1196 | 24.7 | 1262 | 28.3 | 1387 | 35.9 | 1505 | 43.9 | 1616 | 52.4 | | |
| 20000 | 2662 | 1112 | 22.0 | 1175 | 25.3 | 1233 | 28.3 | 1291 | 31.5 | 1410 | 39.4 | 1522 | 47.7 | 1629 | 56.5 | 1732 | 65.8 |
| 22000 | 2928 | 1155 | 24.8 | 1220 | 29.1 | 1278 | 32.9 | 1332 | 36.1 | 1437 | 43.2 | 1545 | 51.9 | 1648 | 61.1 | 1747 | 70.6 |
| 24000 | 3194 | 1202 | 28.0 | 1263 | 32.5 | 1323 | 37.2 | 1377 | 41.4 | 1476 | 48.6 | 1573 | 56.5 | 1672 | 66.0 | 1767 | 75.9 |
| 26000 | 3460 | 1254 | 31.7 | 1310 | 36.2 | 1366 | 41.1 | 1421 | 46.2 | 1521 | 55.1 | 1611 | 62.8 | 1700 | 71.5 | 1792 | 81.6 |
| 28000 | 3726 | 1308 | 35.8 | 1361 | 40.5 | 1413 | 45.5 | 1465 | 50.6 | 1566 | 61.5 | 1655 | 70.5 | 1738 | 78.8 | 1821 | 88.0 |
| 30000 | 3993 | 1365 | 40.4 | 1414 | 45.3 | 1463 | 50.4 | 1512 | 55.7 | 1609 | 67.1 | 1701 | 78.6 | 1782 | 87.7 | 1859 | 96.6 |
| 32000 | 4259 | 1425 | 45.6 | 1470 | 50.6 | 1516 | 55.9 | 1563 | 61.4 | 1654 | 72.9 | 1744 | 85.4 | 1828 | 97.1 | 1903 | 107 |
| 34000 | 4525 | 1487 | 51.3 | 1529 | 56.6 | 1572 | 62.0 | 1615 | 67.6 | 1702 | 79.4 | 1788 | 92.0 | 1872 | 105 | | |
| 36000 | 4791 | 1549 | 57.6 | 1590 | 63.1 | 1630 | 68.7 | 1671 | 74.4 | 1753 | 86.6 | 1834 | 99.4 | 1915 | 113 | | |
| 38000 | 5057 | 1613 | 64.5 | 1652 | 70.2 | 1690 | 76.0 | 1728 | 82.0 | 1806 | 94.4 | 1883 | 108 | | | | |
| 40000 | 5323 | 1677 | 71.9 | 1715 | 78.0 | 1752 | 84.1 | 1788 | 90.2 | 1861 | 103 | | | | | | |

Size 36 A03-_-36_BA100_ _ _ _ _ or A03PO-362BA100_ _ _ _ _

Wheel Diameter – 36.0 in.
Outlet Area – 7.514 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5000 | 665 | 330 | 0.49 | 452 | 1.08 | | | | | | | | | | | | |
| 7500 | 998 | 385 | 0.82 | 473 | 1.47 | 561 | 2.26 | 641 | 3.15 | 712 | 4.12 | | | | | | |
| 10000 | 1331 | 461 | 1.37 | 529 | 2.12 | 593 | 2.96 | 660 | 3.93 | 727 | 4.99 | 790 | 6.11 | 849 | 7.32 | 904 | 8.61 |
| 12500 | 1664 | 544 | 2.17 | 600 | 3.06 | 654 | 4.02 | 706 | 5.05 | 758 | 6.15 | 812 | 7.36 | 866 | 8.64 | 918 | 10.00 |
| 15000 | 1996 | 630 | 3.27 | 679 | 4.35 | 725 | 5.42 | 771 | 6.57 | 815 | 7.77 | 858 | 9.02 | 901 | 10.3 | 946 | 11.8 |
| 17500 | 2329 | 719 | 4.74 | 763 | 6.00 | 803 | 7.25 | 843 | 8.50 | 882 | 9.83 | 920 | 11.2 | 958 | 12.6 | 995 | 14.1 |
| 20000 | 2662 | 808 | 6.60 | 849 | 8.08 | 885 | 9.51 | 921 | 10.9 | 956 | 12.4 | 990 | 13.9 | 1024 | 15.4 | 1057 | 17.0 |
| 22500 | 2994 | 897 | 8.93 | 937 | 10.6 | 971 | 12.3 | 1003 | 13.9 | 1034 | 15.5 | 1065 | 17.1 | 1096 | 18.7 | 1126 | 20.4 |
| 25000 | 3327 | 987 | 11.8 | 1025 | 13.7 | 1057 | 15.6 | 1087 | 17.4 | 1116 | 19.1 | 1144 | 20.9 | 1172 | 22.7 | 1200 | 24.5 |
| 27500 | 3660 | 1078 | 15.2 | 1114 | 17.4 | 1145 | 19.4 | 1173 | 21.4 | 1200 | 23.4 | 1226 | 25.4 | 1252 | 27.3 | 1278 | 29.3 |
| 30000 | 3993 | 1169 | 19.3 | 1204 | 21.7 | 1234 | 24.0 | 1261 | 26.2 | 1286 | 28.4 | 1310 | 30.5 | 1334 | 32.6 | 1358 | 34.8 |
| 32500 | 4325 | 1260 | 24.1 | 1293 | 26.7 | 1323 | 29.2 | 1349 | 31.6 | 1373 | 34.0 | 1396 | 36.4 | 1419 | 38.7 | 1441 | 41.0 |
| 35000 | 4658 | 1352 | 29.6 | 1383 | 32.5 | 1412 | 35.2 | 1438 | 37.9 | 1461 | 40.5 | 1483 | 43.0 | 1504 | 45.5 | 1525 | 48.0 |
| 37500 | 4991 | 1444 | 35.9 | 1474 | 39.0 | 1501 | 42.0 | 1526 | 44.9 | 1549 | 47.7 | 1571 | 50.5 | 1591 | 53.2 | 1611 | 55.9 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| 14000 | 1863 | 1027 | 14.0 | 1116 | 17.2 | 1200 | 20.6 | 1278 | 24.2 | | | | | | | | |
| 16000 | 2129 | 1047 | 15.7 | 1130 | 19.0 | 1211 | 22.6 | 1287 | 26.2 | 1431 | 34.3 | | | | | | |
| 18000 | 2396 | 1078 | 17.7 | 1153 | 21.2 | 1228 | 24.8 | 1301 | 28.7 | 1440 | 36.8 | 1570 | 45.7 | 1688 | 55.0 | | |
| 20000 | 2662 | 1122 | 20.3 | 1187 | 23.7 | 1253 | 27.5 | 1321 | 31.4 | 1453 | 39.9 | 1579 | 48.9 | 1698 | 58.5 | 1809 | 68.9 |
| 22000 | 2928 | 1172 | 23.2 | 1232 | 26.8 | 1290 | 30.6 | 1350 | 34.6 | 1473 | 43.3 | 1593 | 52.6 | 1708 | 62.5 | 1817 | 72.7 |
| 24000 | 3194 | 1226 | 26.5 | 1282 | 30.3 | 1336 | 34.2 | 1390 | 38.3 | 1500 | 47.1 | 1612 | 56.7 | 1722 | 66.8 | 1829 | 77.5 |
| 26000 | 3460 | 1283 | 30.2 | 1335 | 34.2 | 1387 | 38.3 | 1437 | 42.6 | 1535 | 51.5 | 1638 | 61.2 | 1742 | 71.6 | 1844 | 82.6 |
| 28000 | 3726 | 1343 | 34.3 | 1392 | 38.5 | 1440 | 42.9 | 1488 | 47.3 | 1581 | 56.5 | 1673 | 66.3 | 1768 | 76.9 | 1865 | 88.0 |
| 30000 | 3993 | 1405 | 39.0 | 1451 | 43.4 | 1496 | 47.9 | 1541 | 52.6 | 1630 | 62.2 | 1716 | 72.2 | 1802 | 82.8 | 1891 | 94.1 |
| 32000 | 4259 | 1468 | 44.2 | 1512 | 48.8 | 1555 | 53.5 | 1597 | 58.3 | 1681 | 68.3 | 1764 | 78.7 | 1844 | 89.5 | 1925 | 101 |
| 34000 | 4525 | 1533 | 49.9 | 1575 | 54.8 | 1615 | 59.6 | 1656 | 64.6 | 1736 | 75.0 | 1814 | 85.8 | 1891 | 97.0 | | |
| 36000 | 4791 | 1599 | 56.2 | 1639 | 61.3 | 1678 | 66.4 | 1716 | 71.6 | 1792 | 82.3 | 1867 | 93.5 | | | | |
| 38000 | 5057 | 1667 | 63.0 | 1705 | 68.4 | 1742 | 73.8 | 1779 | 79.2 | 1851 | 90.3 | 1923 | 102 | | | | |
| 40000 | 5323 | 1735 | 70.4 | 1771 | 76.1 | 1807 | 81.8 | 1842 | 87.5 | 1911 | 98.9 | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 40 A03-_-40_BC100

Wheel Diameter – 40.25 in.
Outlet Area – 9.393 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9000 | 958 | 332 | 1.03 | 410 | 1.78 | 483 | 2.68 | 548 | 3.68 | | | | | | | | |
| 12000 | 1278 | 389 | 1.63 | 457 | 2.69 | 517 | 3.71 | 572 | 4.70 | 626 | 5.92 | 677 | 7.21 | 726 | 8.57 | 772 | 9.99 |
| 15000 | 1597 | 456 | 2.54 | 510 | 3.72 | 565 | 5.07 | 616 | 6.47 | 660 | 7.60 | 703 | 8.83 | 748 | 10.3 | 790 | 11.9 |
| 18000 | 1916 | 526 | 3.78 | 572 | 5.16 | 618 | 6.62 | 663 | 8.22 | 708 | 9.97 | 748 | 11.5 | 785 | 12.9 | 821 | 14.2 |
| 21000 | 2236 | 598 | 5.42 | 640 | 7.03 | 679 | 8.64 | 718 | 10.4 | 757 | 12.2 | 795 | 14.2 | 833 | 16.2 | 868 | 18.0 |
| 24000 | 2555 | 672 | 7.55 | 709 | 9.37 | 744 | 11.2 | 778 | 13.1 | 812 | 15.0 | 847 | 17.1 | 881 | 19.2 | 915 | 21.5 |
| 27000 | 2874 | 747 | 10.2 | 780 | 12.2 | 813 | 14.3 | 844 | 16.4 | 874 | 18.5 | 904 | 20.6 | 934 | 22.9 | 965 | 25.3 |
| 30000 | 3194 | 822 | 13.6 | 853 | 15.7 | 883 | 18.0 | 911 | 20.3 | 939 | 22.6 | 966 | 24.9 | 993 | 27.3 | 1021 | 29.8 |
| 33000 | 3513 | 899 | 17.6 | 926 | 19.9 | 954 | 22.4 | 981 | 24.9 | 1007 | 27.5 | 1032 | 30.0 | 1056 | 32.5 | 1081 | 35.1 |
| 36000 | 3833 | 976 | 22.3 | 1001 | 24.8 | 1026 | 27.5 | 1051 | 30.2 | 1076 | 33.0 | 1099 | 35.8 | 1122 | 38.5 | 1145 | 41.3 |
| 39000 | 4152 | 1053 | 27.9 | 1076 | 30.6 | 1100 | 33.4 | 1123 | 36.4 | 1146 | 39.3 | 1168 | 42.4 | 1190 | 45.4 | 1211 | 48.3 |
| 42000 | 4471 | 1130 | 34.4 | 1152 | 37.3 | 1174 | 40.3 | 1196 | 43.4 | 1217 | 46.6 | 1238 | 49.8 | 1259 | 53.1 | 1279 | 56.3 |
| 45000 | 4791 | 1208 | 41.9 | 1229 | 45.0 | 1249 | 48.1 | 1269 | 51.4 | 1289 | 54.7 | 1309 | 58.2 | 1329 | 61.6 | 1348 | 65.1 |
| 48000 | 5110 | 1286 | 50.4 | 1305 | 53.7 | 1324 | 57.0 | 1343 | 60.4 | 1362 | 63.9 | 1381 | 67.6 | 1400 | 71.2 | 1418 | 74.9 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| 17500 | 1863 | 890 | 17.2 | 961 | 20.9 | 1030 | 24.8 | 1095 | 28.9 | | | | | | | | |
| 20000 | 2129 | 916 | 19.7 | 982 | 23.5 | 1047 | 27.7 | 1109 | 31.9 | 1226 | 41.0 | | | | | | |
| 22500 | 2395 | 954 | 23.6 | 1011 | 26.9 | 1070 | 30.9 | 1129 | 35.4 | 1240 | 44.8 | 1346 | 54.9 | 1445 | 65.5 | | |
| 25000 | 2662 | 994 | 27.6 | 1051 | 31.7 | 1103 | 35.4 | 1155 | 39.4 | 1261 | 49.2 | 1361 | 59.6 | 1457 | 70.7 | 1549 | 82.2 |
| 27500 | 2928 | 1033 | 31.0 | 1091 | 36.4 | 1143 | 41.1 | 1191 | 45.2 | 1286 | 54.0 | 1382 | 64.9 | 1474 | 76.3 | 1563 | 88.3 |
| 30000 | 3194 | 1075 | 35.0 | 1130 | 40.6 | 1183 | 46.5 | 1232 | 51.8 | 1320 | 60.8 | 1407 | 70.7 | 1495 | 82.5 | 1581 | 94.9 |
| 32500 | 3460 | 1121 | 39.6 | 1172 | 45.3 | 1222 | 51.3 | 1271 | 57.7 | 1360 | 68.9 | 1440 | 78.5 | 1521 | 89.3 | 1602 | 102 |
| 35000 | 3726 | 1170 | 44.7 | 1217 | 50.6 | 1264 | 56.8 | 1310 | 63.3 | 1401 | 76.9 | 1480 | 88.2 | 1554 | 98.5 | 1629 | 110 |
| 37500 | 3992 | 1221 | 50.5 | 1265 | 56.6 | 1309 | 63.0 | 1353 | 69.6 | 1439 | 83.9 | 1521 | 98.2 | 1594 | 110 | 1663 | 121 |
| 40000 | 4258 | 1275 | 57.0 | 1315 | 63.3 | 1356 | 69.9 | 1398 | 76.7 | 1479 | 91.1 | 1560 | 107 | 1635 | 121 | 1702 | 134 |
| 42500 | 4525 | 1330 | 64.1 | 1368 | 70.7 | 1406 | 77.4 | 1445 | 84.5 | 1522 | 99.3 | 1599 | 115 | 1674 | 132 | | |
| 45000 | 4791 | 1386 | 72.0 | 1422 | 78.9 | 1458 | 85.8 | 1494 | 93.0 | 1568 | 108 | 1640 | 124 | 1713 | 141 | | |
| 47500 | 5057 | 1443 | 80.6 | 1478 | 87.8 | 1512 | 95.1 | 1546 | 102 | 1615 | 118 | 1684 | 134 | | | | |
| 50000 | 5323 | 1500 | 89.8 | 1534 | 97.5 | 1567 | 105 | 1599 | 113 | 1664 | 129 | | | | | | |

Size 40 A03-_-40_BA100

Wheel Diameter – 40.25 in.
Outlet Area – 9.393 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9000 | 958 | 337 | 0.96 | 419 | 1.77 | 500 | 2.74 | 573 | 3.85 | | | | | | | | |
| 12000 | 1278 | 400 | 1.58 | 463 | 2.50 | 524 | 3.54 | 587 | 4.73 | 647 | 6.04 | 704 | 7.42 | 758 | 8.94 | 807 | 10.5 |
| 15000 | 1597 | 471 | 2.48 | 523 | 3.56 | 573 | 4.73 | 621 | 5.98 | 671 | 7.36 | 721 | 8.85 | 770 | 10.4 | 818 | 12.1 |
| 18000 | 1916 | 545 | 3.72 | 590 | 5.01 | 633 | 6.31 | 675 | 7.71 | 715 | 9.18 | 755 | 10.7 | 796 | 12.4 | 838 | 14.1 |
| 21000 | 2236 | 621 | 5.36 | 661 | 6.87 | 699 | 8.37 | 735 | 9.89 | 771 | 11.5 | 807 | 13.2 | 841 | 14.9 | 875 | 16.7 |
| 24000 | 2555 | 697 | 7.45 | 734 | 9.21 | 768 | 10.9 | 801 | 12.6 | 833 | 14.4 | 865 | 16.2 | 896 | 18.1 | 927 | 20.0 |
| 27000 | 2874 | 774 | 10.0 | 809 | 12.1 | 840 | 14.0 | 870 | 15.9 | 899 | 17.9 | 928 | 19.8 | 956 | 21.8 | 984 | 23.9 |
| 30000 | 3194 | 851 | 13.2 | 885 | 15.5 | 915 | 17.7 | 942 | 19.9 | 969 | 22.0 | 995 | 24.1 | 1021 | 26.3 | 1046 | 28.5 |
| 33000 | 3513 | 928 | 17.0 | 962 | 19.6 | 990 | 22.1 | 1015 | 24.5 | 1040 | 26.8 | 1064 | 29.2 | 1088 | 31.5 | 1112 | 33.9 |
| 36000 | 3833 | 1006 | 21.6 | 1038 | 24.4 | 1065 | 27.2 | 1090 | 29.8 | 1113 | 32.4 | 1135 | 34.9 | 1158 | 37.5 | 1180 | 40.1 |
| 39000 | 4152 | 1085 | 26.9 | 1115 | 30.0 | 1142 | 33.0 | 1165 | 35.9 | 1187 | 38.7 | 1209 | 41.5 | 1229 | 44.3 | 1250 | 47.1 |
| 42000 | 4471 | 1163 | 33.0 | 1192 | 36.4 | 1218 | 39.7 | 1241 | 42.9 | 1262 | 45.9 | 1283 | 49.0 | 1302 | 52.0 | 1322 | 55.0 |
| 45000 | 4791 | 1242 | 40.0 | 1270 | 43.7 | 1295 | 47.3 | 1318 | 50.7 | 1338 | 54.1 | 1358 | 57.3 | 1376 | 60.6 | 1395 | 63.8 |
| 48000 | 5110 | 1321 | 48.0 | 1347 | 52.0 | 1371 | 55.9 | 1394 | 59.6 | 1414 | 63.2 | 1433 | 66.7 | 1451 | 70.2 | 1469 | 73.7 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| 17500 | 1863 | 918 | 17.5 | 998 | 21.5 | 1073 | 25.7 | 1143 | 30.3 | | | | | | | | |
| 20000 | 2129 | 936 | 19.6 | 1011 | 23.8 | 1083 | 28.2 | 1152 | 32.8 | 1280 | 42.8 | | | | | | |
| 22500 | 2395 | 964 | 22.2 | 1031 | 26.5 | 1098 | 31.0 | 1164 | 35.9 | 1288 | 46.0 | 1404 | 57.2 | 1509 | 68.8 | | |
| 25000 | 2662 | 1004 | 25.3 | 1061 | 29.6 | 1121 | 34.3 | 1181 | 39.3 | 1300 | 49.9 | 1412 | 61.1 | 1518 | 73.2 | 1618 | 86.1 |
| 27500 | 2928 | 1049 | 29.0 | 1102 | 33.5 | 1154 | 38.2 | 1208 | 43.2 | 1317 | 54.1 | 1425 | 65.8 | 1528 | 78.1 | 1625 | 90.9 |
| 30000 | 3194 | 1097 | 33.1 | 1146 | 37.8 | 1195 | 42.8 | 1243 | 47.9 | 1341 | 58.8 | 1442 | 70.8 | 1541 | 83.6 | 1636 | 96.9 |
| 32500 | 3460 | 1148 | 37.7 | 1194 | 42.7 | 1240 | 47.9 | 1285 | 53.2 | 1373 | 64.3 | 1465 | 76.5 | 1558 | 89.5 | 1650 | 103 |
| 35000 | 3726 | 1201 | 42.9 | 1245 | 48.2 | 1288 | 53.6 | 1330 | 59.1 | 1414 | 70.7 | 1496 | 82.9 | 1582 | 96.1 | 1668 | 110 |
| 37500 | 3992 | 1256 | 48.8 | 1297 | 54.2 | 1338 | 59.9 | 1378 | 65.7 | 1458 | 77.7 | 1535 | 90.2 | 1612 | 103 | 1692 | 118 |
| 40000 | 4258 | 1313 | 55.3 | 1352 | 61.0 | 1391 | 66.8 | 1429 | 72.9 | 1504 | 85.4 | 1577 | 98.4 | 1649 | 112 | 1722 | 126 |
| 42500 | 4525 | 1371 | 62.4 | 1408 | 68.5 | 1445 | 74.6 | 1481 | 80.8 | 1552 | 93.8 | 1623 | 107 | 1691 | 121 | | |
| 45000 | 4791 | 1431 | 70.2 | 1466 | 76.6 | 1501 | 83.0 | 1535 | 89.5 | 1603 | 103 | 1670 | 117 | | | | |
| 47500 | 5057 | 1491 | 78.8 | 1525 | 85.5 | 1558 | 92.2 | 1591 | 99.0 | 1655 | 113 | 1720 | 127 | | | | |
| 50000 | 5323 | 1552 | 88.0 | 1584 | 95.1 | 1616 | 102 | 1648 | 109 | 1709 | 124 | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 44 A03-_-44_BC100

Wheel Diameter – 44.5 in.
Outlet Area – 11.481 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 8000 | 697 | 265 | 0.80 | 352 | 1.62 | | | | | | | | | | | | |
| 12000 | 1045 | 313 | 1.42 | 382 | 2.48 | 443 | 3.54 | 500 | 4.81 | 554 | 6.18 | | | | | | |
| 16000 | 1394 | 373 | 2.35 | 430 | 3.69 | 484 | 5.20 | 529 | 6.40 | 575 | 7.84 | 620 | 9.48 | 662 | 11.2 | 703 | 13.0 |
| 20000 | 1742 | 441 | 3.74 | 486 | 5.28 | 532 | 6.99 | 576 | 8.90 | 617 | 10.6 | 653 | 12.1 | 689 | 13.8 | 726 | 15.7 |
| 24000 | 2090 | 511 | 5.65 | 551 | 7.49 | 588 | 9.36 | 626 | 11.4 | 664 | 13.6 | 700 | 15.9 | 734 | 18.0 | 765 | 19.8 |
| 28000 | 2439 | 583 | 8.21 | 618 | 10.3 | 651 | 12.5 | 683 | 14.7 | 716 | 17.0 | 748 | 19.5 | 780 | 22.1 | 812 | 24.8 |
| 32000 | 2787 | 657 | 11.5 | 688 | 13.9 | 718 | 16.4 | 747 | 18.8 | 775 | 21.3 | 803 | 24.0 | 831 | 26.7 | 860 | 29.5 |
| 36000 | 3136 | 731 | 15.8 | 759 | 18.4 | 787 | 21.1 | 813 | 23.9 | 838 | 26.6 | 863 | 29.4 | 888 | 32.3 | 914 | 35.3 |
| 40000 | 3484 | 807 | 21.0 | 832 | 23.8 | 857 | 26.8 | 881 | 29.9 | 905 | 33.0 | 928 | 36.0 | 950 | 39.1 | 972 | 42.2 |
| 44000 | 3832 | 882 | 27.3 | 905 | 30.4 | 928 | 33.6 | 951 | 36.9 | 973 | 40.3 | 994 | 43.7 | 1015 | 47.1 | 1036 | 50.4 |
| 48000 | 4181 | 959 | 34.8 | 980 | 38.1 | 1001 | 41.6 | 1021 | 45.2 | 1042 | 48.8 | 1062 | 52.6 | 1082 | 56.2 | 1101 | 59.9 |
| 52000 | 4529 | 1035 | 43.6 | 1055 | 47.2 | 1074 | 50.9 | 1093 | 54.7 | 1112 | 58.6 | 1131 | 62.6 | 1150 | 66.7 | 1168 | 70.7 |
| 56000 | 4878 | 1112 | 53.9 | 1130 | 57.7 | 1148 | 61.6 | 1166 | 65.7 | 1184 | 69.8 | 1202 | 74.1 | 1219 | 78.4 | 1237 | 82.7 |
| 60000 | 5226 | 1189 | 65.7 | 1206 | 69.8 | 1223 | 73.9 | 1239 | 78.2 | 1256 | 82.6 | 1273 | 87.1 | 1289 | 91.6 | 1306 | 96.3 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 21000 | 1829 | 802 | 20.7 | 868 | 25.2 | 930 | 29.9 | 989 | 34.8 | | | | | | |
| 24000 | 2090 | 824 | 23.6 | 885 | 28.3 | 944 | 33.3 | 1001 | 38.4 | 1107 | 49.4 | | | | | | |
| 27000 | 2352 | 857 | 28.0 | 910 | 32.0 | 964 | 37.0 | 1018 | 42.5 | 1119 | 54.0 | 1215 | 66.2 | 1306 | 79.1 | | |
| 30000 | 2613 | 893 | 32.9 | 944 | 37.6 | 991 | 42.1 | 1040 | 47.1 | 1137 | 59.1 | 1228 | 71.8 | 1316 | 85.2 | 1399 | 99.2 |
| 33000 | 2874 | 927 | 37.1 | 980 | 43.5 | 1026 | 48.8 | 1070 | 53.7 | 1158 | 64.7 | 1246 | 78.0 | 1330 | 91.8 | 1411 | 106 |
| 36000 | 3136 | 964 | 41.7 | 1014 | 48.5 | 1062 | 55.5 | 1106 | 61.5 | 1186 | 72.2 | 1267 | 84.7 | 1348 | 99.2 | 1426 | 114 |
| 39000 | 3397 | 1004 | 47.0 | 1051 | 53.9 | 1097 | 61.3 | 1141 | 68.9 | 1221 | 81.8 | 1295 | 93.4 | 1370 | 107 | 1445 | 123 |
| 42000 | 3658 | 1047 | 53.0 | 1090 | 60.1 | 1133 | 67.6 | 1176 | 75.6 | 1258 | 91.8 | 1329 | 105 | 1397 | 117 | 1467 | 132 |
| 45000 | 3920 | 1091 | 59.7 | 1132 | 67.1 | 1172 | 74.9 | 1213 | 82.9 | 1292 | 100 | 1366 | 117 | 1431 | 130 | 1495 | 144 |
| 48000 | 4181 | 1139 | 67.3 | 1176 | 74.9 | 1214 | 82.9 | 1252 | 91.2 | 1327 | 109 | 1401 | 127 | 1468 | 144 | 1529 | 159 |
| 51000 | 4442 | 1187 | 75.6 | 1222 | 83.5 | 1258 | 91.7 | 1293 | 100 | 1365 | 118 | 1435 | 137 | 1503 | 157 | | |
| 54000 | 4703 | 1237 | 84.8 | 1270 | 93.0 | 1303 | 101 | 1337 | 110 | 1404 | 129 | 1471 | 148 | 1537 | 169 | | |
| 57000 | 4965 | 1287 | 94.7 | 1319 | 103 | 1351 | 112 | 1382 | 121 | 1446 | 140 | 1510 | 160 | | | | |
| 60000 | 5226 | 1338 | 106 | 1369 | 115 | 1399 | 124 | 1429 | 133 | 1489 | 152 | 1550 | 173 | | | | |

Size 44 A03-_-44_BA100

Wheel Diameter – 44.5 in.
Outlet Area – 11.481 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 8000 | 697 | 270 | 0.78 | 367 | 1.69 | | | | | | | | | | | | |
| 12000 | 1045 | 320 | 1.35 | 387 | 2.36 | 456 | 3.58 | 520 | 4.94 | 578 | 6.47 | | | | | | |
| 16000 | 1394 | 385 | 2.29 | 438 | 3.48 | 488 | 4.80 | 539 | 6.27 | 591 | 7.91 | 641 | 9.67 | 688 | 11.5 | 733 | 13.5 |
| 20000 | 1742 | 456 | 3.67 | 500 | 5.09 | 542 | 6.60 | 583 | 8.21 | 623 | 9.91 | 664 | 11.8 | 705 | 13.8 | 747 | 15.9 |
| 24000 | 2090 | 530 | 5.57 | 568 | 7.30 | 604 | 9.01 | 639 | 10.8 | 674 | 12.7 | 708 | 14.7 | 741 | 16.7 | 774 | 18.9 |
| 28000 | 2439 | 605 | 8.10 | 640 | 10.1 | 672 | 12.1 | 702 | 14.1 | 733 | 16.2 | 762 | 18.4 | 792 | 20.6 | 821 | 22.9 |
| 32000 | 2787 | 681 | 11.3 | 714 | 13.7 | 742 | 16.0 | 770 | 18.3 | 797 | 20.6 | 823 | 22.9 | 850 | 25.3 | 876 | 27.8 |
| 36000 | 3136 | 757 | 15.4 | 788 | 18.2 | 815 | 20.8 | 840 | 23.3 | 864 | 25.9 | 888 | 28.5 | 912 | 31.0 | 936 | 33.7 |
| 40000 | 3484 | 833 | 20.4 | 863 | 23.5 | 889 | 26.5 | 912 | 29.3 | 934 | 32.2 | 957 | 35.0 | 978 | 37.9 | 1000 | 40.7 |
| 44000 | 3832 | 910 | 26.4 | 939 | 29.9 | 964 | 33.2 | 986 | 36.4 | 1007 | 39.6 | 1027 | 42.7 | 1047 | 45.8 | 1067 | 48.9 |
| 48000 | 4181 | 987 | 33.5 | 1015 | 37.4 | 1039 | 41.1 | 1060 | 44.6 | 1080 | 48.1 | 1099 | 51.5 | 1118 | 55.0 | 1136 | 58.4 |
| 52000 | 4529 | 1065 | 41.8 | 1091 | 46.1 | 1114 | 50.1 | 1135 | 54.1 | 1154 | 57.9 | 1172 | 61.6 | 1190 | 65.4 | 1207 | 69.1 |
| 56000 | 4878 | 1143 | 51.5 | 1167 | 56.1 | 1190 | 60.5 | 1210 | 64.8 | 1229 | 69.0 | 1246 | 73.1 | 1263 | 77.1 | 1280 | 81.2 |
| 60000 | 5226 | 1221 | 62.5 | 1244 | 67.5 | 1266 | 72.4 | 1286 | 77.0 | 1304 | 81.6 | 1321 | 86.0 | 1337 | 90.4 | 1353 | 94.7 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 21000 | 1829 | 829 | 21.1 | 901 | 25.9 | 970 | 31.1 | 1033 | 36.6 | | | | | | |
| 24000 | 2090 | 844 | 23.6 | 912 | 28.6 | 978 | 34.0 | 1040 | 39.5 | 1156 | 51.8 | | | | | | |
| 27000 | 2352 | 867 | 26.6 | 929 | 31.8 | 990 | 37.3 | 1050 | 43.2 | 1163 | 55.5 | 1269 | 69.2 | | | | |
| 30000 | 2613 | 901 | 30.2 | 954 | 35.5 | 1010 | 41.2 | 1065 | 47.2 | 1174 | 60.1 | 1276 | 73.7 | 1372 | 88.6 | 1462 | 104 |
| 33000 | 2874 | 940 | 34.5 | 989 | 39.9 | 1037 | 45.7 | 1087 | 51.8 | 1188 | 65.0 | 1286 | 79.2 | 1380 | 94.1 | 1469 | 110 |
| 36000 | 3136 | 982 | 39.3 | 1028 | 45.0 | 1072 | 51.0 | 1116 | 57.2 | 1208 | 70.6 | 1300 | 85.2 | 1391 | 101 | 1478 | 117 |
| 39000 | 3397 | 1027 | 44.7 | 1070 | 50.7 | 1112 | 57.0 | 1153 | 63.4 | 1235 | 76.9 | 1320 | 91.8 | 1405 | 108 | 1489 | 124 |
| 42000 | 3658 | 1074 | 50.8 | 1114 | 57.1 | 1154 | 63.6 | 1193 | 70.4 | 1269 | 84.3 | 1345 | 99.2 | 1425 | 115 | 1504 | 132 |
| 45000 | 3920 | 1123 | 57.6 | 1160 | 64.2 | 1198 | 71.0 | 1235 | 78.0 | 1307 | 92.6 | 1378 | 108 | 1450 | 124 | 1524 | 141 |
| 48000 | 4181 | 1173 | 65.2 | 1208 | 72.1 | 1244 | 79.1 | 1279 | 86.4 | 1348 | 102 | 1415 | 117 | 1481 | 134 | 1549 | 151 |
| 51000 | 4442 | 1224 | 73.5 | 1258 | 80.8 | 1291 | 88.1 | 1325 | 95.7 | 1390 | 111 | 1455 | 128 | 1518 | 145 | | |
| 54000 | 4703 | 1276 | 82.6 | 1309 | 90.3 | 1341 | 98.0 | 1372 | 106 | 1435 | 122 | 1496 | 139 | 1557 | 156 | | |
| 57000 | 4965 | 1329 | 92.6 | 1360 | 101 | 1391 | 109 | 1421 | 117 | 1481 | 134 | 1540 | 151 | | | | |
| 60000 | 5226 | 1383 | 103 | 1413 | 112 | 1442 | 120 | 1471 | 129 | 1528 | 146 | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 49 A03-_-49_BC100_ _ _ _ _

Wheel Diameter – 49.0 in.
Outlet Area – 13.921 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|-------------|------------|-------------|------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 10000 | 718 | 243 | 1.02 | 320 | 2.01 | | | | | | | | | | | | |
| 15000 | 1078 | 289 | 1.81 | 351 | 3.15 | 404 | 4.41 | 456 | 5.97 | 504 | 7.66 | 549 | 9.45 | | | | |
| 20000 | 1437 | 346 | 3.03 | 396 | 4.68 | 445 | 6.59 | 486 | 8.13 | 526 | 9.80 | 566 | 11.8 | 604 | 13.9 | 641 | 16.1 |
| 25000 | 1796 | 410 | 4.84 | 450 | 6.77 | 490 | 8.87 | 530 | 11.2 | 567 | 13.5 | 600 | 15.4 | 631 | 17.3 | 663 | 19.6 |
| 30000 | 2155 | 476 | 7.36 | 511 | 9.66 | 544 | 12.0 | 578 | 14.5 | 611 | 17.2 | 644 | 20.1 | 675 | 22.9 | 702 | 25.2 |
| 35000 | 2514 | 544 | 10.7 | 575 | 13.4 | 604 | 16.1 | 633 | 18.8 | 661 | 21.7 | 690 | 24.7 | 718 | 27.9 | 746 | 31.3 |
| 40000 | 2873 | 613 | 15.2 | 641 | 18.1 | 667 | 21.2 | 693 | 24.2 | 717 | 27.3 | 742 | 30.6 | 767 | 33.9 | 792 | 37.4 |
| 45000 | 3233 | 683 | 20.8 | 708 | 24.0 | 732 | 27.4 | 756 | 30.9 | 778 | 34.3 | 800 | 37.8 | 822 | 41.3 | 844 | 45.0 |
| 50000 | 3592 | 754 | 27.7 | 776 | 31.2 | 798 | 34.9 | 820 | 38.7 | 841 | 42.6 | 861 | 46.4 | 881 | 50.2 | 901 | 54.1 |
| 55000 | 3951 | 825 | 36.0 | 845 | 39.8 | 865 | 43.8 | 885 | 48.0 | 905 | 52.3 | 924 | 56.5 | 942 | 60.7 | 961 | 64.9 |
| 60000 | 4310 | 896 | 46.0 | 915 | 50.1 | 933 | 54.4 | 952 | 58.9 | 970 | 63.4 | 988 | 68.1 | 1006 | 72.7 | 1022 | 77.3 |
| 65000 | 4669 | 968 | 57.7 | 985 | 62.2 | 1002 | 66.7 | 1019 | 71.5 | 1036 | 76.3 | 1053 | 81.3 | 1070 | 86.3 | 1086 | 91.4 |
| 70000 | 5028 | 1040 | 71.3 | 1056 | 76.1 | 1072 | 81.0 | 1088 | 86.0 | 1103 | 91.1 | 1119 | 96.4 | 1135 | 102 | 1150 | 107 |
| 75000 | 5388 | 1112 | 87.0 | 1127 | 92.1 | 1142 | 97.2 | 1157 | 103 | 1171 | 108 | 1186 | 114 | 1201 | 119 | 1215 | 125 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 24000 | 1724 | 722 | 23.8 | 783 | 29.2 | 840 | 34.8 | | | | | | | | |
| 28000 | 2011 | 742 | 27.4 | 799 | 33.1 | 853 | 39.0 | 905 | 45.2 | 1003 | 58.4 | | | | | | |
| 32000 | 2299 | 772 | 32.7 | 821 | 37.8 | 871 | 43.9 | 921 | 50.5 | 1014 | 64.3 | 1102 | 79.0 | | | | |
| 36000 | 2586 | 808 | 39.3 | 854 | 44.8 | 897 | 50.2 | 942 | 56.5 | 1030 | 71.0 | 1114 | 86.3 | 1194 | 103 | 1270 | 119 |
| 40000 | 2873 | 842 | 44.9 | 890 | 52.7 | 932 | 59.1 | 972 | 65.0 | 1051 | 78.4 | 1131 | 94.5 | 1208 | 111 | 1281 | 129 |
| 44000 | 3161 | 879 | 51.1 | 924 | 59.4 | 968 | 68.0 | 1008 | 75.5 | 1080 | 88.6 | 1153 | 104 | 1226 | 121 | 1296 | 139 |
| 48000 | 3448 | 919 | 58.3 | 961 | 66.8 | 1002 | 75.8 | 1043 | 85.2 | 1116 | 102 | 1182 | 116 | 1248 | 132 | 1315 | 151 |
| 52000 | 3735 | 962 | 66.5 | 1001 | 75.3 | 1039 | 84.5 | 1077 | 94.1 | 1152 | 114 | 1217 | 131 | 1278 | 147 | 1339 | 164 |
| 56000 | 4023 | 1008 | 75.9 | 1044 | 85.0 | 1079 | 94.5 | 1115 | 104 | 1186 | 126 | 1253 | 147 | 1313 | 165 | 1370 | 181 |
| 60000 | 4310 | 1056 | 86.4 | 1088 | 95.8 | 1122 | 106 | 1155 | 116 | 1222 | 137 | 1287 | 161 | 1350 | 183 | 1405 | 202 |
| 64000 | 4597 | 1105 | 98.1 | 1136 | 108 | 1166 | 118 | 1198 | 129 | 1260 | 151 | 1322 | 174 | 1384 | 199 | | |
| 68000 | 4885 | 1155 | 111 | 1184 | 121 | 1213 | 132 | 1242 | 143 | 1301 | 165 | 1360 | 189 | | | | |
| 72000 | 5172 | 1205 | 125 | 1234 | 136 | 1261 | 147 | 1289 | 158 | 1344 | 182 | 1400 | 206 | | | | |
| 76000 | 5459 | 1257 | 141 | 1284 | 152 | 1311 | 164 | 1337 | 175 | 1388 | 199 | | | | | | |

Size 49 A03-_-49_BA100_ _ _ _ _

Wheel Diameter – 49.0 in.
Outlet Area – 13.921 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|-------------|------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 10000 | 718 | 247 | 0.98 | 333 | 2.08 | | | | | | | | | | | | |
| 15000 | 1078 | 295 | 1.72 | 355 | 2.96 | 416 | 4.45 | 473 | 6.13 | 526 | 7.99 | | | | | | |
| 20000 | 1437 | 357 | 2.95 | 404 | 4.42 | 449 | 6.05 | 493 | 7.85 | 539 | 9.85 | 584 | 12.0 | 627 | 14.3 | 667 | 16.6 |
| 25000 | 1796 | 425 | 4.76 | 463 | 6.54 | 501 | 8.40 | 537 | 10.4 | 572 | 12.5 | 608 | 14.7 | 644 | 17.2 | 681 | 19.7 |
| 30000 | 2155 | 494 | 7.27 | 528 | 9.43 | 560 | 11.6 | 591 | 13.8 | 621 | 16.1 | 651 | 18.5 | 681 | 21.1 | 710 | 23.7 |
| 35000 | 2514 | 564 | 10.6 | 595 | 13.2 | 624 | 15.7 | 651 | 18.1 | 678 | 20.7 | 704 | 23.4 | 730 | 26.1 | 756 | 29.0 |
| 40000 | 2873 | 635 | 14.9 | 665 | 17.9 | 690 | 20.8 | 715 | 23.6 | 739 | 26.4 | 762 | 29.3 | 785 | 32.3 | 808 | 35.4 |
| 45000 | 3233 | 706 | 20.2 | 735 | 23.7 | 759 | 27.0 | 781 | 30.2 | 803 | 33.4 | 824 | 36.6 | 845 | 39.8 | 866 | 43.1 |
| 50000 | 3592 | 778 | 26.8 | 805 | 30.7 | 828 | 34.5 | 849 | 38.1 | 869 | 41.7 | 888 | 45.2 | 908 | 48.8 | 927 | 52.3 |
| 55000 | 3951 | 850 | 34.7 | 876 | 39.1 | 898 | 43.3 | 918 | 47.3 | 937 | 51.3 | 955 | 55.3 | 973 | 59.2 | 990 | 63.1 |
| 60000 | 4310 | 923 | 44.2 | 947 | 49.0 | 969 | 53.7 | 988 | 58.1 | 1006 | 62.5 | 1023 | 66.8 | 1039 | 71.1 | 1056 | 75.4 |
| 65000 | 4669 | 995 | 55.2 | 1019 | 60.5 | 1039 | 65.7 | 1058 | 70.6 | 1075 | 75.4 | 1092 | 80.1 | 1107 | 84.8 | 1123 | 89.4 |
| 70000 | 5028 | 1068 | 68.0 | 1090 | 73.8 | 1110 | 79.4 | 1129 | 84.8 | 1146 | 90.1 | 1161 | 95.2 | 1176 | 100 | 1191 | 105 |
| 75000 | 5388 | 1141 | 82.7 | 1162 | 89.0 | 1182 | 95.0 | 1199 | 101 | 1216 | 107 | 1231 | 112 | 1246 | 118 | 1260 | 123 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 24000 | 1724 | 749 | 24.4 | 816 | 30.3 | 878 | 36.5 | | | | | | | | |
| 28000 | 2011 | 761 | 27.6 | 825 | 33.7 | 885 | 40.1 | 943 | 46.8 | 1047 | 61.3 | | | | | | |
| 32000 | 2299 | 783 | 31.4 | 840 | 37.7 | 897 | 44.4 | 952 | 51.5 | 1055 | 66.2 | 1151 | 82.7 | | | | |
| 36000 | 2586 | 815 | 36.1 | 864 | 42.5 | 915 | 49.4 | 966 | 56.7 | 1065 | 72.3 | 1158 | 88.7 | 1246 | 107 | 1326 | 125 |
| 40000 | 2873 | 854 | 41.8 | 898 | 48.4 | 941 | 55.3 | 987 | 62.8 | 1079 | 78.8 | 1168 | 96.0 | 1253 | 114 | 1334 | 133 |
| 44000 | 3161 | 896 | 48.2 | 937 | 55.2 | 977 | 62.5 | 1017 | 70.0 | 1099 | 86.3 | 1182 | 104 | 1264 | 123 | 1343 | 142 |
| 48000 | 3448 | 941 | 55.6 | 979 | 63.0 | 1017 | 70.6 | 1054 | 78.5 | 1127 | 94.9 | 1203 | 113 | 1279 | 132 | 1354 | 153 |
| 52000 | 3735 | 988 | 63.9 | 1024 | 71.7 | 1059 | 79.7 | 1094 | 88.0 | 1162 | 105 | 1230 | 123 | 1300 | 143 | 1370 | 163 |
| 56000 | 4023 | 1037 | 73.4 | 1071 | 81.5 | 1104 | 89.9 | 1137 | 98.5 | 1202 | 116 | 1264 | 135 | 1327 | 155 | 1392 | 176 |
| 60000 | 4310 | 1088 | 83.9 | 1120 | 92.5 | 1151 | 101 | 1182 | 110 | 1243 | 129 | 1303 | 148 | 1361 | 168 | | |
| 64000 | 4597 | 1140 | 95.6 | 1170 | 105 | 1199 | 114 | 1228 | 123 | 1286 | 143 | 1343 | 163 | 1399 | 184 | | |
| 68000 | 4885 | 1192 | 108 | 1221 | 118 | 1249 | 128 | 1277 | 137 | 1332 | 158 | 1386 | 179 | | | | |
| 72000 | 5172 | 1246 | 123 | 1273 | 133 | 1300 | 143 | 1327 | 153 | 1379 | 174 | | | | | | |
| 76000 | 5459 | 1301 | 138 | 1326 | 149 | 1352 | 160 | 1378 | 170 | | | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 54 A03- -54_BC100

Wheel Diameter – 54.25 in.
Outlet Area – 17.026 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 12000 | 705 | 218 | 1.37 | 287 | 2.60 | | | | | | | | | | | | |
| 18000 | 1057 | 260 | 2.39 | 315 | 4.19 | 365 | 5.84 | 410 | 7.73 | 451 | 9.85 | 489 | 12.0 | | | | |
| 24000 | 1410 | 312 | 3.97 | 357 | 6.16 | 398 | 8.57 | 437 | 10.9 | 475 | 13.1 | 511 | 15.4 | 543 | 18.0 | 574 | 20.8 |
| 30000 | 1762 | 369 | 6.36 | 406 | 8.90 | 442 | 11.7 | 475 | 14.6 | 507 | 17.7 | 538 | 20.7 | 569 | 23.4 | 599 | 26.1 |
| 36000 | 2114 | 428 | 9.72 | 460 | 12.6 | 491 | 15.8 | 521 | 19.1 | 550 | 22.5 | 577 | 26.2 | 603 | 29.8 | 629 | 33.5 |
| 42000 | 2467 | 490 | 14.3 | 517 | 17.6 | 544 | 21.1 | 570 | 24.7 | 596 | 28.6 | 621 | 32.5 | 646 | 36.6 | 669 | 40.8 |
| 48000 | 2819 | 552 | 20.1 | 577 | 23.9 | 600 | 27.8 | 624 | 31.8 | 647 | 36.0 | 670 | 40.3 | 692 | 44.7 | 714 | 49.3 |
| 54000 | 3172 | 615 | 27.6 | 637 | 31.8 | 659 | 36.0 | 680 | 40.4 | 700 | 45.0 | 721 | 49.6 | 741 | 54.4 | 761 | 59.4 |
| 60000 | 3524 | 679 | 36.8 | 699 | 41.4 | 718 | 46.1 | 738 | 50.9 | 756 | 55.8 | 775 | 60.8 | 793 | 65.9 | 812 | 71.2 |
| 66000 | 3877 | 743 | 47.9 | 761 | 52.9 | 779 | 58.0 | 797 | 63.3 | 814 | 68.6 | 831 | 74.0 | 848 | 79.5 | 865 | 85.1 |
| 72000 | 4229 | 808 | 61.1 | 824 | 66.6 | 841 | 72.2 | 857 | 77.8 | 873 | 83.5 | 889 | 89.3 | 905 | 95.2 | 920 | 101 |
| 78000 | 4581 | 872 | 76.7 | 888 | 82.6 | 903 | 88.6 | 918 | 94.7 | 933 | 101 | 948 | 107 | 962 | 113 | 977 | 120 |
| 84000 | 4934 | 937 | 94.7 | 951 | 101 | 966 | 108 | 980 | 114 | 994 | 121 | 1007 | 127 | 1021 | 134 | 1035 | 141 |
| 90000 | 5286 | 1002 | 116 | 1015 | 122 | 1029 | 129 | 1042 | 136 | 1055 | 143 | 1068 | 150 | 1081 | 157 | 1094 | 164 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 30000 | 1762 | 655 | 32.0 | 706 | 38.8 | 754 | 46.0 | 800 | 53.2 | | | | | | |
| 35000 | 2056 | 676 | 38.6 | 727 | 45.1 | 773 | 52.4 | 816 | 60.3 | 898 | 77.0 | 977 | 93.2 | | | | |
| 40000 | 2349 | 702 | 46.5 | 749 | 53.8 | 794 | 61.1 | 837 | 68.5 | 916 | 85.9 | 989 | 105 | 1059 | 124 | 1128 | 142 |
| 45000 | 2643 | 734 | 54.0 | 776 | 63.2 | 818 | 71.8 | 859 | 80.0 | 937 | 96.4 | 1008 | 116 | 1075 | 136 | 1139 | 158 |
| 50000 | 2937 | 770 | 62.2 | 809 | 72.3 | 847 | 82.5 | 885 | 92.5 | 959 | 111 | 1030 | 129 | 1095 | 150 | 1156 | 172 |
| 55000 | 3230 | 808 | 71.5 | 846 | 82.2 | 881 | 93.3 | 916 | 104 | 984 | 126 | 1052 | 147 | 1116 | 167 | 1177 | 188 |
| 60000 | 3524 | 848 | 82.1 | 884 | 93.4 | 918 | 105 | 951 | 117 | 1014 | 142 | 1077 | 165 | 1139 | 187 | 1198 | 209 |
| 65000 | 3818 | 890 | 94.1 | 923 | 106 | 956 | 118 | 988 | 131 | 1048 | 157 | 1107 | 183 | 1164 | 209 | 1221 | 233 |
| 70000 | 4111 | 933 | 108 | 965 | 120 | 996 | 133 | 1026 | 146 | 1084 | 173 | 1140 | 202 | 1194 | 230 | 1247 | 258 |
| 75000 | 4405 | 978 | 123 | 1008 | 136 | 1037 | 149 | 1066 | 163 | 1122 | 191 | 1175 | 221 | 1227 | 252 | 1277 | 282 |
| 80000 | 4699 | 1024 | 140 | 1052 | 153 | 1079 | 167 | 1107 | 182 | 1161 | 211 | 1213 | 242 | 1262 | 274 | | |
| 85000 | 4993 | 1071 | 158 | 1097 | 173 | 1123 | 187 | 1149 | 202 | 1201 | 233 | 1251 | 265 | | | | |
| 90000 | 5286 | 1119 | 179 | 1144 | 194 | 1169 | 209 | 1193 | 225 | 1242 | 257 | | | | | | |
| 95000 | 5580 | 1167 | 202 | 1191 | 217 | 1215 | 233 | 1238 | 249 | | | | | | | | |

Size 54 A03- -54_BA100

Wheel Diameter – 54.25 in.
Outlet Area – 17.026 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|-------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 12000 | 705 | 237 | 1.41 | 313 | 2.67 | | | | | | | | | | | | |
| 18000 | 1057 | 280 | 2.38 | 341 | 4.28 | 395 | 6.00 | 445 | 7.89 | 492 | 10.2 | 534 | 12.5 | | | | |
| 24000 | 1410 | 338 | 3.98 | 383 | 6.14 | 430 | 8.68 | 474 | 11.2 | 514 | 13.5 | 551 | 15.7 | 589 | 18.4 | 625 | 21.3 |
| 30000 | 1762 | 403 | 6.45 | 437 | 8.87 | 475 | 11.6 | 512 | 14.7 | 549 | 18.0 | 584 | 21.2 | 617 | 24.1 | 648 | 26.8 |
| 36000 | 2114 | 470 | 9.90 | 500 | 12.7 | 529 | 15.7 | 559 | 19.0 | 591 | 22.5 | 622 | 26.3 | 653 | 30.3 | 683 | 34.3 |
| 42000 | 2467 | 538 | 14.5 | 566 | 17.8 | 590 | 21.1 | 614 | 24.6 | 641 | 28.4 | 668 | 32.4 | 694 | 36.6 | 721 | 41.1 |
| 48000 | 2819 | 605 | 20.4 | 632 | 24.3 | 655 | 28.1 | 676 | 31.9 | 697 | 35.8 | 720 | 40.1 | 743 | 44.5 | 767 | 49.2 |
| 54000 | 3172 | 672 | 27.7 | 700 | 32.3 | 721 | 36.6 | 740 | 40.8 | 759 | 45.1 | 778 | 49.5 | 798 | 54.2 | 818 | 59.1 |
| 60000 | 3524 | 740 | 36.7 | 767 | 42.0 | 788 | 46.9 | 806 | 51.6 | 824 | 56.3 | 841 | 61.0 | 857 | 65.8 | 875 | 70.9 |
| 66000 | 3877 | 808 | 47.6 | 834 | 53.5 | 856 | 59.1 | 873 | 64.3 | 890 | 69.5 | 905 | 74.6 | 921 | 79.8 | 936 | 85.1 |
| 72000 | 4229 | 877 | 60.5 | 902 | 67.1 | 923 | 73.3 | 940 | 79.2 | 956 | 84.8 | 971 | 90.5 | 986 | 96.1 | 1000 | 102 |
| 78000 | 4581 | 945 | 75.6 | 969 | 82.9 | 990 | 89.8 | 1008 | 96.4 | 1023 | 103 | 1038 | 109 | 1052 | 115 | 1065 | 121 |
| 84000 | 4934 | 1014 | 93.1 | 1037 | 101 | 1057 | 109 | 1075 | 116 | 1091 | 123 | 1105 | 129 | 1118 | 136 | 1131 | 143 |
| 90000 | 5286 | 1083 | 113 | 1105 | 122 | 1125 | 130 | 1142 | 138 | 1158 | 146 | 1172 | 153 | 1185 | 160 | 1198 | 167 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 30000 | 1762 | 708 | 32.7 | 767 | 39.8 | 823 | 47.4 | 874 | 55.3 | | | | | | |
| 35000 | 2056 | 732 | 39.7 | 785 | 46.3 | 836 | 53.4 | 887 | 61.8 | 982 | 79.6 | | | | | | |
| 40000 | 2349 | 762 | 47.6 | 812 | 55.4 | 859 | 62.8 | 904 | 70.3 | 994 | 87.8 | 1080 | 108 | 1158 | 129 | | |
| 45000 | 2643 | 793 | 54.5 | 842 | 64.5 | 887 | 73.8 | 930 | 82.2 | 1012 | 99.0 | 1092 | 118 | 1170 | 140 | 1244 | 163 |
| 50000 | 2937 | 828 | 62.1 | 873 | 72.9 | 917 | 83.9 | 960 | 94.9 | 1038 | 114 | 1112 | 133 | 1184 | 153 | 1256 | 176 |
| 55000 | 3230 | 868 | 71.3 | 909 | 82.2 | 950 | 93.9 | 991 | 106 | 1068 | 130 | 1139 | 151 | 1206 | 171 | 1271 | 192 |
| 60000 | 3524 | 912 | 81.7 | 949 | 93.1 | 987 | 105 | 1024 | 118 | 1098 | 144 | 1169 | 170 | 1233 | 192 | | |
| 65000 | 3818 | 958 | 93.7 | 992 | 105 | 1027 | 118 | 1061 | 131 | 1131 | 158 | 1198 | 187 | 1263 | 215 | | |
| 70000 | 4111 | 1007 | 107 | 1038 | 120 | 1070 | 132 | 1102 | 146 | 1166 | 173 | 1230 | 204 | | | | |
| 75000 | 4405 | 1059 | 123 | 1086 | 135 | 1116 | 149 | 1145 | 162 | 1205 | 191 | 1265 | 222 | | | | |
| 80000 | 4699 | 1112 | 140 | 1137 | 153 | 1163 | 167 | 1191 | 181 | 1247 | 210 | | | | | | |
| 85000 | 4993 | 1167 | 160 | 1190 | 173 | 1213 | 187 | 1239 | 201 | | | | | | | | |
| 90000 | 5286 | 1221 | 181 | 1244 | 195 | 1266 | 210 | | | | | | | | | | |
| 95000 | 5580 | 1277 | 205 | | | | | | | | | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Performance Data

Size 60 A03-_-60_BC100_ _ _ _ _

Wheel Diameter –60.0 in.
Outlet Area – 20.826 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|--------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 14000 | 672 | 195 | 1.57 | 258 | 3.06 | | | | | | | | | | | | |
| 21000 | 1008 | 230 | 2.71 | 280 | 4.80 | 327 | 6.73 | 368 | 9.08 | 405 | 11.6 | | | | | | |
| 28000 | 1344 | 273 | 4.43 | 315 | 7.03 | 353 | 9.87 | 390 | 12.5 | 425 | 15.1 | 457 | 18.0 | 487 | 21.2 | 516 | 24.5 |
| 35000 | 1681 | 321 | 7.01 | 356 | 10.0 | 390 | 13.3 | 421 | 16.8 | 451 | 20.4 | 480 | 23.7 | 509 | 26.8 | 536 | 30.0 |
| 42000 | 2017 | 372 | 10.6 | 402 | 14.1 | 431 | 17.8 | 459 | 21.7 | 486 | 25.8 | 511 | 30.1 | 536 | 34.4 | 561 | 38.4 |
| 49000 | 2353 | 425 | 15.5 | 451 | 19.4 | 476 | 23.5 | 501 | 27.8 | 525 | 32.4 | 549 | 37.1 | 571 | 42.0 | 593 | 46.9 |
| 56000 | 2689 | 478 | 21.8 | 501 | 26.2 | 524 | 30.7 | 546 | 35.5 | 568 | 40.4 | 589 | 45.5 | 610 | 50.8 | 630 | 56.2 |
| 63000 | 3025 | 533 | 29.7 | 553 | 34.6 | 573 | 39.6 | 593 | 44.8 | 613 | 50.2 | 632 | 55.7 | 651 | 61.4 | 670 | 67.2 |
| 70000 | 3361 | 587 | 39.5 | 606 | 44.9 | 624 | 50.4 | 643 | 56.1 | 660 | 61.8 | 678 | 67.8 | 695 | 73.9 | 713 | 80.1 |
| 77000 | 3697 | 642 | 51.3 | 660 | 57.2 | 676 | 63.2 | 693 | 69.4 | 709 | 75.6 | 726 | 82.0 | 742 | 88.5 | 757 | 95.1 |
| 84000 | 4033 | 698 | 65.4 | 714 | 71.8 | 729 | 78.3 | 745 | 85.0 | 760 | 91.7 | 775 | 98.5 | 789 | 105 | 804 | 113 |
| 91000 | 4370 | 754 | 82.0 | 768 | 88.9 | 783 | 95.9 | 797 | 103 | 811 | 110 | 825 | 118 | 839 | 125 | 852 | 132 |
| 98000 | 4706 | 809 | 101 | 823 | 109 | 836 | 116 | 850 | 124 | 863 | 131 | 876 | 139 | 889 | 147 | 902 | 155 |
| 105000 | 5042 | 865 | 123 | 878 | 131 | 890 | 139 | 903 | 147 | 915 | 156 | 928 | 164 | 940 | 172 | 952 | 181 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 36000 | 1729 | 590 | 38.5 | 636 | 46.8 | 680 | 55.4 | 722 | 63.9 | | | | | | |
| 42000 | 2017 | 609 | 46.1 | 654 | 53.8 | 696 | 62.9 | 736 | 72.6 | 811 | 92.8 | | | | | | |
| 48000 | 2305 | 631 | 55.4 | 674 | 64.2 | 715 | 72.9 | 754 | 81.9 | 826 | 103 | 892 | 126 | 956 | 149 | | |
| 54000 | 2593 | 659 | 64.4 | 697 | 75.4 | 736 | 85.5 | 773 | 95.3 | 844 | 115 | 909 | 139 | 969 | 164 | 1027 | 190 |
| 60000 | 2881 | 690 | 74.0 | 726 | 86.2 | 761 | 98.5 | 795 | 110 | 863 | 132 | 927 | 154 | 986 | 180 | 1042 | 207 |
| 66000 | 3169 | 724 | 84.9 | 758 | 97.9 | 790 | 111 | 822 | 125 | 885 | 151 | 946 | 175 | 1005 | 199 | 1060 | 225 |
| 72000 | 3457 | 759 | 97.4 | 791 | 111 | 822 | 125 | 852 | 140 | 911 | 169 | 968 | 197 | 1025 | 223 | 1079 | 249 |
| 78000 | 3745 | 795 | 111 | 826 | 126 | 856 | 140 | 885 | 156 | 940 | 187 | 993 | 219 | 1047 | 249 | 1099 | 277 |
| 84000 | 4033 | 833 | 127 | 862 | 142 | 890 | 158 | 918 | 174 | 971 | 207 | 1022 | 241 | 1072 | 275 | 1121 | 307 |
| 90000 | 4322 | 873 | 145 | 900 | 160 | 927 | 177 | 953 | 193 | 1005 | 228 | 1053 | 263 | 1101 | 300 | | |
| 96000 | 4610 | 913 | 164 | 939 | 181 | 964 | 198 | 989 | 215 | 1039 | 251 | 1086 | 288 | 1131 | 327 | | |
| 102000 | 4898 | 955 | 186 | 979 | 203 | 1003 | 221 | 1027 | 239 | 1074 | 276 | 1120 | 315 | | | | |
| 108000 | 5186 | 997 | 210 | 1020 | 228 | 1043 | 246 | 1065 | 265 | 1110 | 304 | | | | | | |
| 114000 | 5474 | 1040 | 236 | 1062 | 255 | 1083 | 274 | 1105 | 294 | | | | | | | | |

Size 60 A03-_-60_BA100_ _ _ _ _

Wheel Diameter –60.0 in.
Outlet Area – 20.826 sq. ft.

| CFM | Outlet Velocity FPM | STATIC PRESSURE | | | | | | | | | | | | | | | |
|--------|------------------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | ½" | | 1" | | 1½" | | 2" | | 2½" | | 3" | | 3½" | | 4" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 14000 | 672 | 211 | 1.61 | 282 | 3.15 | | | | | | | | | | | | |
| 21000 | 1008 | 247 | 2.70 | 304 | 4.94 | 353 | 6.90 | 400 | 9.30 | 443 | 12.0 | | | | | | |
| 28000 | 1344 | 295 | 4.43 | 339 | 7.02 | 383 | 10.1 | 423 | 12.9 | 459 | 15.5 | 495 | 18.3 | 530 | 21.7 | 563 | 25.2 |
| 35000 | 1681 | 351 | 7.09 | 383 | 9.97 | 419 | 13.3 | 454 | 17.0 | 489 | 20.8 | 521 | 24.3 | 551 | 27.6 | 579 | 30.8 |
| 42000 | 2017 | 408 | 10.8 | 436 | 14.1 | 464 | 17.7 | 493 | 21.6 | 523 | 25.9 | 552 | 30.5 | 581 | 35.1 | 608 | 39.5 |
| 49000 | 2353 | 466 | 15.7 | 492 | 19.6 | 515 | 23.5 | 539 | 27.7 | 564 | 32.2 | 589 | 37.0 | 615 | 42.1 | 640 | 47.5 |
| 56000 | 2689 | 524 | 22.0 | 549 | 26.6 | 570 | 31.0 | 590 | 35.4 | 611 | 40.2 | 633 | 45.3 | 655 | 50.7 | 677 | 56.2 |
| 63000 | 3025 | 582 | 29.9 | 607 | 35.2 | 627 | 40.2 | 645 | 45.1 | 662 | 50.1 | 681 | 55.5 | 700 | 61.1 | 720 | 66.9 |
| 70000 | 3361 | 641 | 39.6 | 665 | 45.7 | 684 | 51.2 | 701 | 56.7 | 718 | 62.2 | 733 | 67.8 | 750 | 73.6 | 767 | 79.8 |
| 77000 | 3697 | 700 | 51.2 | 723 | 58.0 | 742 | 64.4 | 759 | 70.4 | 774 | 76.4 | 789 | 82.5 | 803 | 88.6 | 817 | 94.9 |
| 84000 | 4033 | 758 | 64.9 | 781 | 72.6 | 801 | 79.8 | 817 | 86.4 | 831 | 93.0 | 845 | 99.6 | 859 | 106 | 872 | 113 |
| 91000 | 4370 | 818 | 81.1 | 840 | 89.5 | 858 | 97.4 | 875 | 105 | 889 | 112 | 902 | 119 | 915 | 126 | 927 | 133 |
| 98000 | 4706 | 877 | 99.7 | 898 | 109 | 916 | 118 | 933 | 126 | 947 | 134 | 960 | 142 | 972 | 149 | 984 | 157 |
| 105000 | 5042 | 936 | 121 | 957 | 131 | 975 | 141 | 991 | 150 | 1005 | 158 | 1018 | 167 | 1030 | 175 | 1041 | 183 |
| CFM | OV FPM | 5" | | 6" | | 7" | | 8" | | 10" | | 12" | | 14" | | 16" | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| | | 36000 | 1729 | 638 | 39.3 | 693 | 48.0 | 743 | 57.3 | 788 | 66.7 | | | | | | |
| 42000 | 2017 | 659 | 47.4 | 707 | 55.2 | 754 | 64.3 | 801 | 74.4 | 886 | 96.2 | | | | | | |
| 48000 | 2305 | 685 | 56.9 | 730 | 66.0 | 773 | 74.9 | 814 | 84.0 | 897 | 106 | 974 | 130 | 1044 | 155 | | |
| 54000 | 2593 | 712 | 65.2 | 756 | 77.1 | 798 | 87.9 | 837 | 98.0 | 911 | 118 | 985 | 142 | 1056 | 169 | 1123 | 197 |
| 60000 | 2881 | 743 | 74.1 | 784 | 87.2 | 824 | 100 | 863 | 113 | 934 | 136 | 1001 | 158 | 1068 | 183 | 1133 | 212 |
| 66000 | 3169 | 777 | 84.7 | 815 | 98.0 | 853 | 112 | 890 | 127 | 960 | 155 | 1024 | 180 | 1086 | 204 | 1146 | 230 |
| 72000 | 3457 | 815 | 96.9 | 850 | 111 | 884 | 125 | 919 | 141 | 986 | 172 | 1050 | 202 | 1109 | 229 | | |
| 78000 | 3745 | 856 | 111 | 887 | 125 | 919 | 140 | 951 | 156 | 1015 | 189 | 1077 | 224 | 1135 | 256 | | |
| 84000 | 4033 | 898 | 127 | 927 | 141 | 957 | 157 | 986 | 173 | 1046 | 207 | 1105 | 244 | | | | |
| 90000 | 4322 | 944 | 145 | 969 | 160 | 997 | 176 | 1024 | 192 | 1079 | 227 | 1135 | 265 | | | | |
| 96000 | 4610 | 991 | 165 | 1014 | 180 | 1039 | 197 | 1064 | 214 | 1116 | 250 | | | | | | |
| 102000 | 4898 | 1039 | 188 | 1061 | 204 | 1082 | 220 | 1106 | 238 | 1154 | 275 | | | | | | |
| 108000 | 5186 | 1087 | 212 | 1108 | 229 | 1129 | 246 | 1149 | 264 | | | | | | | | |
| 114000 | 5474 | 1136 | 240 | 1156 | 257 | | | | | | | | | | | | |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.



Series 13, Backward Curved Centrifugal Fan, DWDI

The Hartzell Series 13 Double Width, Double Inlet (DWDI) centrifugal blowers have been designed to provide maximum performance and efficiency. For clean air applications, these blowers are available in belt drive configuration. Air delivery ranges from 1200 CFM to 186,000 CFM; static pressure capabilities to 14". Efficient air flow is provided over a broad range of pressures (maximum total efficiencies exceeding 80%). Designed for quiet operation, the Hartzell "Double Width, Double Inlet" centrifugal provides lower sound levels in the highest efficiency ranges.

Features

Sizes – 10" to 60" wheel diameters, Double Width, Double Inlet construction (DWDI). For Single Width, Single Inlet see Page 9.

Arrangements – Series 13 blowers are available in Arrangement 3 as standard with or without a sub-base for motor mounting.

Rotation and Discharge – Clockwise and counterclockwise rotations are available in four discharge positions. Dimensional drawings are shown on Page 29.

Motors – Are available to your specifications, mounted and test run at the factory prior to shipment.

Bearings – Heavy-duty, pillow block bearings. Minimum L-10 bearing life of 50,000 hours. For size and type, please contact factory.

Drive Assembly (Belt Drive Fans) – Belts are oil, heat and static resistant type, oversized for continuous duty. Shafts are turned, stepped, polished, and keyed at the drive end.

Easy Installation and Maintenance – Motor, drive and bearings are readily accessible for ease in wiring, installation, adjustment and lubrication.

Fan Inlets and Outlets – Open non-ducted inlet is standard. "Slip-fit" outlet connections are provided for easy connection to ducting. Optional outlet flanges are available.



Series 13
Shown with optional equipment



Hartzell Fan, Inc. certifies that the Series 13, Backward Curved Centrifugal Fans, air and sound performance ratings shown herein are reliable and accurate and in accordance with industry standards. The ratings shown are based on tests and procedures performed in accordance with AMCA Standard 210, Standard 300, and Standard 301.

Sound Performance data is available upon request. Please contact the factory and ask for Engineering Publication SD-149. Sound and Air Performance data is available in ESP.

Housings – Heavy-duty carbon steel housings, supported and braced with plate and structural steel are provided as standard construction. Housing sizes 12" through 27" are rotatable; larger sizes have fixed construction.

Lifting Lugs – For ease of handling and installation, lifting tabs, or lugs, are provided as standard features.

Surface Coatings – Standard finish is an industrial grade enamel. Other special coatings are available upon request.

Accessories – See Page 34.

Type BC
DWDI
Wheel



Type BI
DWDI
Wheel



Type BA
DWDI
Wheel



Rating Table – Series 13, DWDI, Wheel Type BC and Type BI shown Type BA available

| Model | CFM Range at Static Pressure | | | | | | | |
|----------------------|------------------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|
| | 2" S.P. | 3" S.P. | 4" S.P. | 6" S.P. | 8" S.P. | 10" S.P. | 12" S.P. | 14" S.P. |
| 13-3-10_BC100ST ____ | 1,200 - 3,800 | 1,200 - 3,800 | 1,430 - 3,800 | 2,150 - 5,230 | 2,150 - 5,230 | 2,150 - 4,760 | 2,390 - 4,280 | 2,620 - 3,800 |
| 13-3-12_BC100ST ____ | 1,630 - 5,180 | 1,630 - 5,180 | 1,950 - 5,180 | 2,920 - 7,130 | 2,920 - 6,480 | 3,250 - 5,830 | 3,250 - 5,180 | 3,570 - 0,000 |
| 13-3-13_BC100ST ____ | 1,970 - 6,280 | 1,970 - 6,280 | 2,360 - 6,280 | 3,540 - 9,430 | 3,540 - 9,430 | 3,940 - 8,640 | 3,940 - 7,860 | 4,330 - 7,070 |
| 13-3-15_BC100ST ____ | 2,550 - 8,150 | 3,060 - 8,150 | 3,570 - 8,150 | 4,600 - 12,200 | 4,600 - 12,200 | 5,100 - 12,200 | 5,700 - 12,200 | 6,200 - 11,200 |
| 13-3-16_BC100ST ____ | 2,940 - 9,400 | 3,530 - 9,400 | 4,120 - 9,400 | 5,300 - 14,100 | 5,300 - 14,100 | 5,900 - 14,100 | 6,500 - 14,100 | 7,100 - 12,900 |
| 13-3-18_BC100ST ____ | 3,700 - 11,800 | 4,500 - 11,800 | 5,200 - 11,800 | 6,700 - 17,700 | 6,700 - 17,700 | 7,400 - 16,200 | 8,200 - 14,700 | 8,900 - 13,300 |
| 13-3-20_BC100ST ____ | 4,400 - 13,800 | 5,200 - 13,800 | 6,100 - 13,800 | 7,800 - 20,700 | 7,800 - 20,700 | 8,700 - 19,000 | 9,600 - 15,500 | 10,400 - 0,000 |
| 13-3-22_BC100ST ____ | 5,600 - 17,600 | 6,700 - 17,600 | 7,800 - 17,600 | 10,000 - 26,500 | 11,100 - 26,500 | 12,200 - 26,500 | 13,300 - 24,300 | 15,500 - 19,900 |
| 13-3-24_BC100ST ____ | 6,600 - 20,900 | 7,900 - 20,900 | 9,200 - 20,900 | 11,800 - 31,400 | 13,100 - 31,400 | 14,500 - 28,800 | 15,800 - 26,100 | 18,400 - 23,500 |
| 13-3-27_BC100ST ____ | 9,900 - 26,300 | 11,600 - 26,300 | 13,200 - 26,300 | 14,900 - 39,500 | 18,200 - 39,500 | 19,800 - 39,500 | 21,500 - 36,200 | 23,100 - 29,600 |
| 13-3-30_BC100ST ____ | 11,700 - 31,000 | 13,600 - 31,000 | 15,600 - 31,000 | 17,500 - 46,600 | 21,400 - 46,600 | 23,400 - 46,600 | 25,300 - 42,700 | 27,200 - 34,900 |
| 13-3-33_BC100ST ____ | 16,500 - 37,500 | 21,200 - 37,500 | 23,500 - 37,500 | 28,200 - 56,300 | 32,900 - 56,300 | 35,300 - 56,300 | 42,300 - 51,600 | 42,300 - 42,200 |
| 13-3-36_BC100ST ____ | 19,600 - 44,700 | 25,200 - 44,700 | 28,000 - 44,700 | 33,600 - 67,000 | 39,200 - 67,000 | 42,000 - 67,000 | 50,300 - 61,400 | 50,300 - 50,200 |
| 13-3-40_BC100ST ____ | 24,500 - 55,900 | 31,500 - 55,900 | 35,000 - 55,900 | 42,000 - 83,800 | 49,000 - 83,800 | 52,500 - 83,800 | 63,000 - 76,800 | 63,000 - 62,900 |
| 13-3-44_BC100ST ____ | 29,900 - 68,300 | 38,500 - 68,300 | 42,800 - 68,300 | 51,300 - 102,400 | 59,800 - 102,400 | 64,100 - 102,400 | 76,900 - 93,900 | 76,900 - 76,800 |
| 13-3-49_BC100ST ____ | 31,100 - 82,800 | 41,500 - 82,800 | 46,600 - 82,800 | 57,000 - 124,200 | 62,200 - 124,200 | 72,500 - 124,200 | 77,700 - 113,800 | 82,900 - 93,100 |
| 13-3-54_BC100ST ____ | 38,100 - 101,400 | 50,800 - 101,400 | 57,100 - 101,400 | 69,800 - 152,100 | 76,100 - 152,100 | 88,800 - 152,100 | 95,200 - 139,500 | 101,500 - 114,100 |
| 13-3-60_BC100ST ____ | 46,600 - 124,100 | 62,100 - 124,100 | 69,900 - 124,100 | 85,400 - 186,200 | 93,200 - 186,200 | 108,700 - 186,200 | 116,500 - 170,700 | 124,200 - 139,700 |

Performance certified for installation Type D: ducted inlet/ducted outlet. Power ratings (BHP) do not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories) in the airstream. Performance data is based on standard air conditions (0.075 lb/cu. ft.). To complete model code, add motor enclosure code. Refer to page 2 for additional model code information.

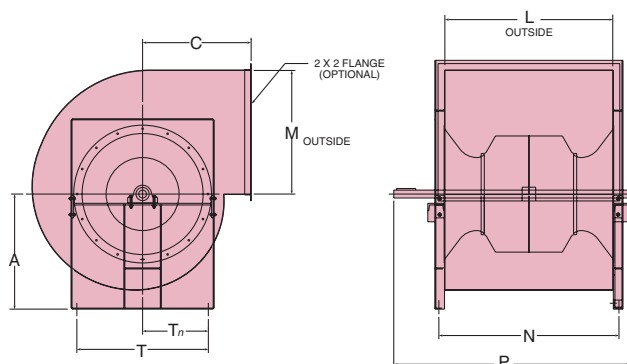


Dimensions – Series 13, DWDI

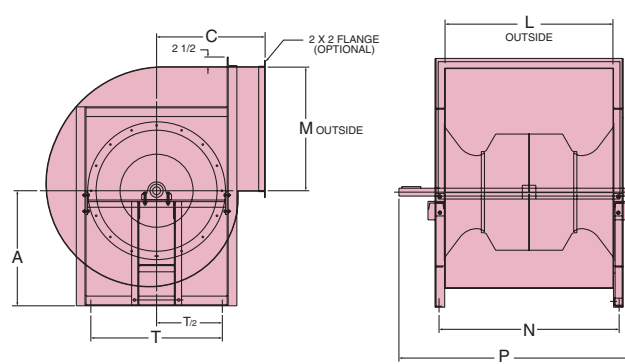
Arrangement 3 –

Standard Construction – Classes I, II, III, Maximum Temperature – 200°F.

Clockwise Rotation Shown. Counterclockwise Opposite.



Sizes 10-27 Rotatable Housing



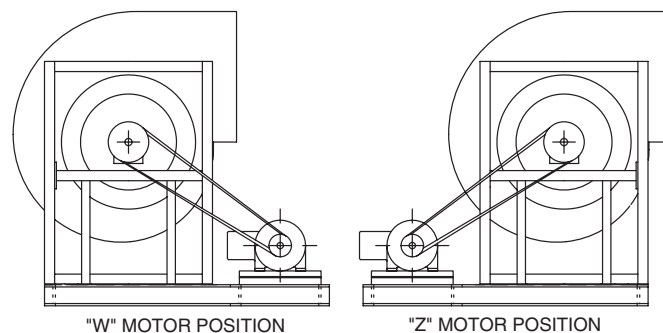
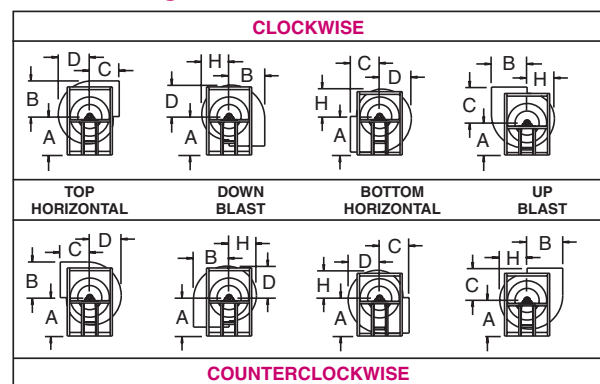
Sizes 30-60 Fixed Housing

Principal Dimensions (Inches)

| Fan Size | A | | | | B | C | D | H | L | M | N | P | T |
|----------|--------------------------------|----------------------------------|--------------------------------|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--------|--------|--------|---------------------------------|--------------------------------|
| | Top Horiz. | Down Blast | Upblast | Bottom Horiz. | | | | | | | | | |
| 10 | 10 ³ / ₈ | 12 ⁷ / ₃₂ | 14 ¹ / ₄ | 14 ¹ / ₄ | 11 ³ / ₈ | 12 ³ / ₁₆ | 10 ¹ / ₁₆ | 8 ³ / ₄ | 15.471 | 11.545 | 18.851 | 23 ³ / ₈ | 19 ³ / ₄ |
| 12 | 12 | 14 ¹ / ₄ | 16 ¹ / ₄ | 16 ¹ / ₄ | 13 ¹ / ₄ | 14 ¹ / ₄ | 11 ¹¹ / ₁₆ | 10 ³ / ₁₆ | 18.022 | 13.424 | 21.372 | 26 ⁷ / ₈ | 16 ¹ / ₄ |
| 13 | 13 ¹ / ₈ | 15 ¹¹ / ₁₆ | 17 ¹ / ₂ | 17 ¹ / ₂ | 14 ⁹ / ₁₆ | 15 ¹¹ / ₁₆ | 12 ⁷ / ₈ | 11 ³ / ₁₆ | 19.793 | 14.766 | 23.173 | 27 ⁷ / ₈ | 19 ³ / ₄ |
| 15 | 13 ¹ / ₂ | 16 ⁹ / ₁₆ | 19 ¹ / ₂ | 19 ¹ / ₂ | 16 ⁹ / ₁₆ | 16 ⁹ / ₁₆ | 14 ⁵ / ₈ | 12 ³ / ₄ | 22.494 | 16.780 | 24.861 | 31 ¹ / ₂ | 18 ¹ / ₄ |
| 16 | 15 ¹ / ₂ | 17 ³ / ₄ | 20 ³ / ₄ | 20 ³ / ₄ | 17 ¹³ / ₁₆ | 17 ³ / ₄ | 15 ³ / ₄ | 13 ¹¹ / ₁₆ | 24.145 | 17.988 | 27.525 | 33 ³ / ₈ | 20 ¹ / ₄ |
| 18 | 17 ¹ / ₄ | 18 ⁷ / ₈ | 13 | 13 | 19 ⁵ / ₁₆ | 18 ⁷ / ₈ | 17 ⁵ / ₈ | 15 ⁵ / ₁₆ | 27.055 | 20.136 | 30.406 | 36 ¹ / ₂ | 25 ³ / ₈ |
| 20 | 18 ¹ / ₂ | 20 ⁷ / ₁₆ | 14 ¹ / ₂ | 14 ¹ / ₂ | 21 ⁵ / ₈ | 20 ³ / ₈ | 19 ¹ / ₈ | 16 ⁵ / ₈ | 29.261 | 21.747 | 31.620 | 38 ³ / ₄ | 20 ¹ / ₄ |
| 22 | 20 ³ / ₄ | 22 | 27 ¹ / ₂ | 27 ¹ / ₂ | 24 ³ / ₈ | 22 | 21 ⁹ / ₁₆ | 18 ³ / ₄ | 33.043 | 24.566 | 36.409 | 42 ³ / ₄ | 25 ³ / ₈ |
| 24 | 22 ³ / ₈ | 23 ⁹ / ₁₆ | 29 ¹ / ₂ | 29 ¹ / ₂ | 26 ⁹ / ₁₆ | 23 ⁹ / ₁₆ | 23 ⁷ / ₁₆ | 20 ³ / ₈ | 35.924 | 26.713 | 38.431 | 46 | 25 ³ / ₈ |
| 27 | 24 ⁷ / ₈ | 25 ³ / ₄ | 32 ³ / ₄ | 32 ³ / ₄ | 29 ³ / ₄ | 25 ³ / ₄ | 26 ⁵ / ₁₆ | 22 ⁷ / ₈ | 40.246 | 29.934 | 43.610 | 50 | 22 |
| 30 | 25 ⁷ / ₈ | 25 ⁷ / ₈ | 31 | 35 | 32 ⁵ / ₁₆ | 25 ⁷ / ₈ | 28 ⁹ / ₁₆ | 24 ¹³ / ₁₆ | 43.667 | 32.486 | 46.608 | 55 ³ / ₄ | 33 ³ / ₄ |
| 33 | 30 | 28 ¹ / ₃₂ | 34 | 38 | 35 ⁵ / ₁₆ | 28 ¹ / ₃₂ | 31 ⁷ / ₁₆ | 27 ⁵ / ₁₆ | 48.079 | 35.798 | 50.989 | 59 ³ / ₄ | 33 ³ / ₄ |
| 36 | 31 ¹ / ₂ | 33 ³ / ₁₆ | 37 | 42 | 38 ³ / ₁₆ | 33 ³ / ₁₆ | 34 ⁷ / ₁₆ | 29 ¹³ / ₁₆ | 52.401 | 39.018 | 55.311 | 64 ⁷ / ₈ | 33 ³ / ₄ |
| 40 | 34 ¹ / ₄ | 36 ¹ / ₂ | 46 | 46 | 43 ³ / ₈ | 36 ¹ / ₂ | 38 ⁷ / ₁₆ | 33 ⁵ / ₁₆ | 58.573 | 43.582 | 61.483 | 74 ¹ / ₈ | 44 |
| 44 | 37 | 39 ¹ / ₁₆ | 45 | 51 | 47 ⁷ / ₈ | 39 ¹ / ₁₆ | 42 ³ / ₈ | 36 ¹³ / ₁₆ | 64.696 | 48.147 | 67.606 | 78 ¹ / ₂ | 44 |
| 49 | 42 ¹ / ₂ | 38 ²⁵ / ₃₂ | 50 | 56 | 52 ³ / ₄ | 38 ²⁵ / ₃₂ | 46 ⁵ / ₈ | 40 ¹ / ₂ | 71.199 | 52.977 | 74.039 | 87 ⁷ / ₈ | 44 |
| 54 | 46 ⁷ / ₈ | 45 | 55 | 61 | 58 ³ / ₈ | 45 | 51 ¹ / ₁₆ | 44 ⁷ / ₈ | 78.742 | 58.613 | 81.902 | 95 | 54 |
| 60 | 51 ¹ / ₂ | 45 ³ / ₄ | 60 | 68 | 64 ³ / ₁₆ | 45 ³ / ₄ | 57 ⁷ / ₈ | 49 ¹ / ₂ | 87.109 | 64.788 | 90.269 | 103 ¹ / ₂ | 54 |

NOTE: Dimensions and specifications are subject to change. Certified prints are available.

Fan Discharges



Consider discharge location and motor height when specifying.

NOTE: For downblast, contact factory.

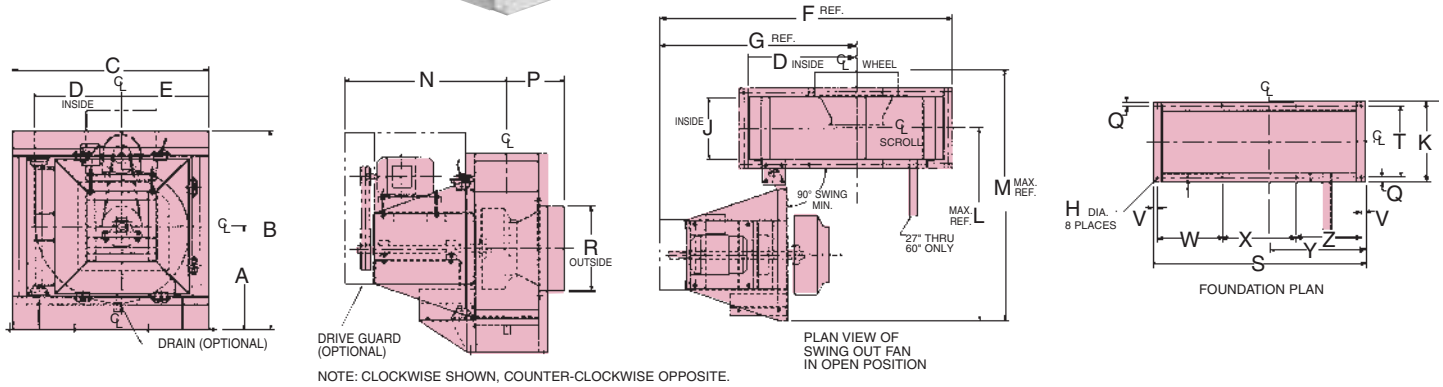
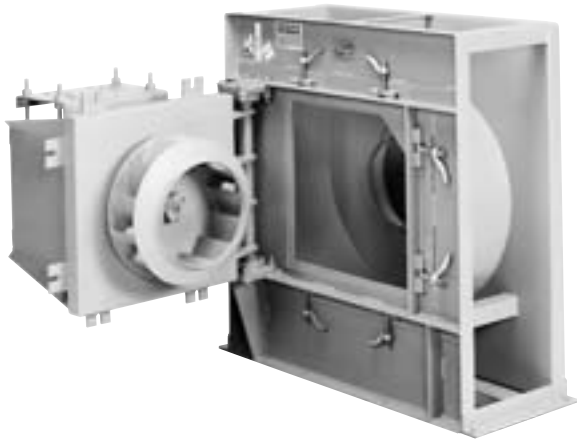


Construction Options – Series 03S

SERIES 03S – Backward Curved Centrifugal Fan, Swingout Type, Single Width Arrangement 9
Maximum Temperature – 300°F.
600°F available with heat slinger and guard

Construction Features

- **Sizes** – 12" - 49" wheel diameters . . . Type BC.
- **Sizes** – 18" - 49" wheel diameters . . . Type BA.
- **Rotation** – Clockwise or counterclockwise in four discharge positions (TH, BH, UB, DB).
- **Construction** – Heavy gauge hot rolled steel. Also available in stainless or aluminum.
- **Finish** – Industrial grade enamel. Other special coatings available.
- **Performance** – Refer to rating tables in this bulletin.
- **Options & Accessories** –
 - Food grade welding
 - Inlet flanges
 - Bolted access door
 - Drive guard
 - Weather guard
 - Inlet guard
 - AMCA non-sparking construction
 - Drain connection



Principal Dimensions

| FAN SIZE | A | | | | B | C | D | E | F | G | H | J | K | L | M | N | P | Q |
|----------|---------------------------------|----------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|-----|----------------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|--------------------------------|---|---|
| | UB, TH | BH, DB | | | | | | | | | | | | | | | | |
| 12 | 18 ⁵ / ₈ | 18 ⁵ / ₈ | 37 ¹ / ₄ | 37 ¹ / ₄ | 13 ¹ / ₈ | 18 ⁵ / ₈ | 55 ¹³ / ₁₆ | 35 ⁷ / ₁₆ | 1/2 | 9 ¹ / ₂ | 13 ³ / ₄ | 32 ¹ / ₄ | 43 ¹ / ₄ | 29 ³ / ₁₆ | 11 | 1/2 | | |
| 15 | 20 ³ / ₄ | 19 ¹ / ₈ | 39 ⁷ / ₈ | 39 ⁷ / ₈ | 16 ¹ / ₂ | 20 ³ / ₄ | 58 | 35 ⁷ / ₁₆ | 1/2 | 11 ¹⁵ / ₁₆ | 16 ³ / ₁₆ | 33 ¹ / ₂ | 45 ³ / ₄ | 30 ⁵ / ₁₆ | 12 ¹ / ₄ | 1 | | |
| 18 | 24 ¹ / ₂ | 24 | 48 ¹ / ₂ | 48 ¹ / ₂ | 19 ⁷ / ₈ | 24 ¹ / ₂ | 72 ¹ / ₁₆ | 45 ¹³ / ₁₆ | 1/2 | 14 ³ / ₈ | 18 ⁵ / ₈ | 44 ³ / ₄ | 58 ¹ / ₄ | 36 ⁷ / ₈ | 13 ⁷ / ₁₆ | 1/2 | | |
| 22 | 28 ⁵ / ₈ | 26 ⁷ / ₈ | 55 ¹ / ₂ | 55 ¹ / ₂ | 24 ¹ / ₄ | 28 ⁵ / ₈ | 76 ³ / ₁₆ | 45 ¹³ / ₁₆ | 5/8 | 17 ⁹ / ₁₆ | 21 ¹³ / ₁₆ | 46 ³ / ₈ | 61 ³ / ₈ | 38 ⁷ / ₁₆ | 15 | 1 | | |
| 24 | 25 ¹ / ₂ | 29 ³ / ₄ | 54 ³ / ₄ | 54 ³ / ₄ | 26 ⁷ / ₁₆ | 25 ¹ / ₂ | 73 ¹ / ₁₆ | 45 ¹³ / ₁₆ | 5/8 | 19 ¹ / ₈ | 23 ³ / ₈ | 47 ³ / ₁₆ | 63 | 39 ¹ / ₄ | 15 ¹³ / ₁₆ | 1/2 | | |
| 27 | 32 ¹ / ₄ | 32 ³ / ₄ | 65 | 65 | 29 ⁵ / ₈ | 32 ¹ / ₄ | 95 ³ / ₁₆ | 60 ¹ / ₄ | 5/8 | 21 ⁷ / ₁₆ | 27 ³ / ₄ | 65 ¹ / ₂ | 82 ¹ / ₂ | 46 ⁹ / ₁₆ | 17 | 1/4 | | |
| 30 | 32 ⁵ / ₈ | 35 ³ / ₈ | 68 | 68 | 32 ¹ / ₄ | 32 ⁵ / ₈ | 95 ¹ / ₂ | 60 ¹ / ₄ | 3/4 | 23 ⁵ / ₁₆ | 29 ⁵ / ₁₆ | 66 ⁷ / ₁₆ | 84 ⁵ / ₁₆ | 47 ¹ / ₂ | 17 ¹⁵ / ₁₆ | 1 ¹ / ₈ | | |
| 33 | 32 ⁵ / ₈ | 38 ⁵ / ₈ | 71 ¹ / ₄ | 71 ¹ / ₄ | 35 ⁷ / ₁₆ | 32 ⁵ / ₈ | 95 ¹ / ₂ | 60 ¹ / ₄ | 3/4 | 25 ¹¹ / ₁₆ | 31 ¹⁵ / ₁₆ | 67 ⁹ / ₁₆ | 86 ³ / ₄ | 48 ³ / ₄ | 19 ¹ / ₈ | 1 ⁵ / ₁₆ | | |
| 36 | 40 ³ / ₁₆ | 41 ¹³ / ₁₆ | 82 | 82 | 38 ⁵ / ₈ | 40 ³ / ₁₆ | 103 ¹ / ₈ | 60 ¹ / ₄ | 3/4 | 28 | 34 ¹ / ₄ | 68 ³ / ₄ | 89 | 49 ¹³ / ₁₆ | 20 ¹ / ₄ | 1 ³ / ₁₆ | | |
| 40 | 45 ⁷ / ₈ | 46 ³ / ₈ | 92 ¹ / ₄ | 92 ¹ / ₄ | 43 ¹ / ₄ | 45 ⁷ / ₈ | 119 | 70 ³ / ₈ | 3/4 | 31 ⁵ / ₁₆ | 37 ¹¹ / ₁₆ | 79 | 100 ⁷ / ₈ | 57 ³ / ₈ | 21 ¹⁵ / ₁₆ | 1 ¹ / ₄ | | |
| 44 | 46 ⁵ / ₁₆ | 50 ¹⁵ / ₁₆ | 97 ¹ / ₄ | 97 ¹ / ₄ | 47 ³ / ₄ | 46 ⁵ / ₁₆ | 119 ⁹ / ₈ | 70 ³ / ₈ | 3/4 | 34 ⁹ / ₁₆ | 40 ¹⁵ / ₁₆ | 80 ⁵ / ₈ | 104 ¹ / ₄ | 59 ¹ / ₁₆ | 23 ⁵ / ₈ | 1 ¹ / ₄ | | |
| 49 | 50 ³ / ₁₆ | 55 ¹³ / ₁₆ | 106 | 106 | 52 ⁵ / ₈ | 50 ³ / ₁₆ | 124 ¹ / ₄ | 71 ³ / ₈ | 3/4 | 38 ¹ / ₈ | 44 ⁷ / ₁₆ | 84 ³ / ₈ | 109 ³ / ₄ | 60 ¹³ / ₁₆ | 25 ³ / ₈ | 1 ¹ / ₄ | | |

Specifications and dimensions are subject to change. Certified prints are available.

Do not attempt to open door unless fan is securely fastened to sufficient foundation and power is locked out.

| FAN SIZE | R | S | T | V | W | X | Y | Z | MAXIMUM MOTOR FRAME SIZE |
|----------|----------------------------------|---------------------------------|----------------------------------|-----|----|--------------------------------|----------------------------------|----|--------------------------|
| 12 | 12 ¹⁵ / ₁₆ | 40 ³ / ₄ | 12 ³ / ₄ | 1/2 | 13 | 13 ³ / ₄ | 20 ³ / ₈ | 13 | 215T |
| 15 | 16 ³ / ₁₆ | 43 ³ / ₈ | 14 ³ / ₁₆ | 1/2 | 14 | 14 ³ / ₈ | 22 ¹ / ₂ | 14 | 215T |
| 18 | 19 ¹ / ₂ | 52 | 17 ⁵ / ₈ | 1/2 | 17 | 17 | 26 ¹ / ₄ | 17 | 256T |
| 22 | 23 ³ / ₄ | 59 | 19 ¹³ / ₁₆ | 1/2 | 19 | 20 | 30 ³ / ₈ | 19 | 256T |
| 24 | 25 ¹³ / ₁₆ | 58 ¹ / ₄ | 22 ³ / ₈ | 1/2 | 20 | 17 ¹ / ₄ | 27 ¹ / ₄ | 20 | 256T |
| 27 | 28 ¹⁵ / ₁₆ | 70 ³ / ₈ | 25 ¹ / ₄ | 1/4 | 18 | 31 ⁷ / ₈ | 34 ¹⁵ / ₁₆ | 18 | 364T - 365T ODP ONLY |
| 30 | 31 ³ / ₈ | 73 ³ / ₈ | 27 ¹ / ₁₆ | 1/4 | 23 | 24 ⁷ / ₈ | 35 ⁵ / ₁₆ | 23 | 364T - 365T ODP ONLY |
| 33 | 34 ¹ / ₂ | 76 ⁵ / ₈ | 29 ⁵ / ₁₆ | 1/4 | 23 | 28 ¹ / ₈ | 35 ⁵ / ₁₆ | 23 | 364T - 365T ODP ONLY |
| 36 | 37 ¹¹ / ₁₆ | 87 ³ / ₈ | 31 ⁷ / ₈ | 1/4 | 26 | 32 ⁷ / ₈ | 42 ⁷ / ₈ | 26 | 364T - 365T ODP ONLY |
| 40 | 42 ¹ / ₈ | 97 ⁵ / ₈ | 35 ³ / ₁₆ | 1/4 | 28 | 39 ⁵ / ₈ | 48 ⁹ / ₁₆ | 28 | 364T - 365T ODP ONLY |
| 44 | 46 ¹⁷ / ₃₂ | 102 ⁵ / ₈ | 38 ⁷ / ₁₆ | 1/4 | 32 | 36 ¹ / ₈ | 49 | 32 | 364T - 365T ODP ONLY |
| 49 | 51 ³ / ₁₆ | 111 ³ / ₈ | 42 | 1/4 | 32 | 44 ⁷ / ₈ | 52 ⁷ / ₈ | 32 | 364T - 365T ODP ONLY |



Construction Options – Series 03Q

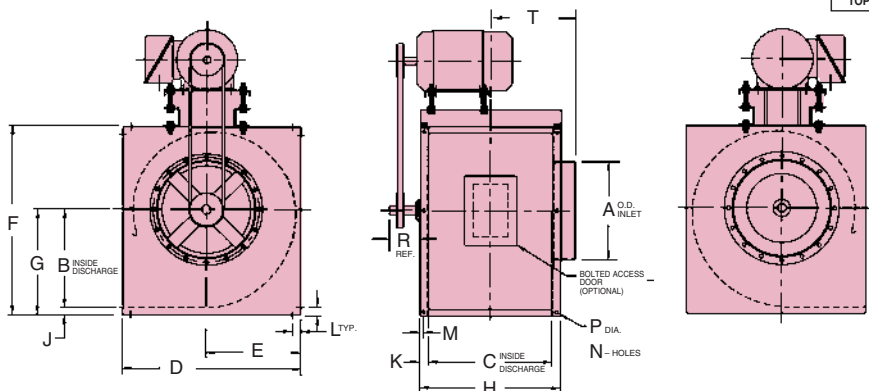
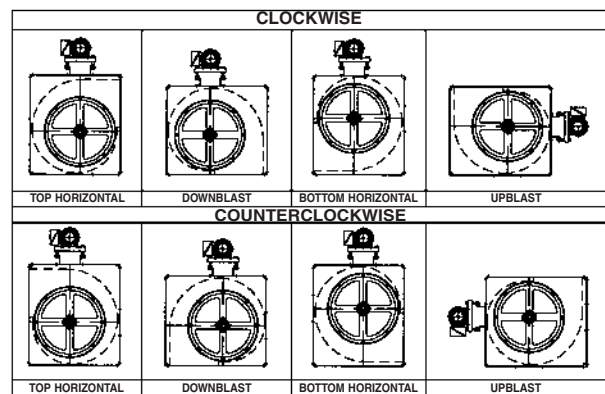
SERIES 03Q – Backward Curved Centrifugal Fan, Square Type, Single Width Arrangement 2, Belt Drive (Shown) Maximum Temperature – 200°F. Contact factory for high temperature applications.



ABS Certificate of Design Assessment Received

Construction Features

- **Sizes** – 12" - 49" wheel diameters . . . Type BC.
- **Sizes** – 18" - 49" wheel diameters . . . Type BA.
- **Rotation** – Clockwise or counterclockwise in four discharge positions.
- **Construction** – Heavy gauge hot rolled steel. Also available in stainless or aluminum.
- **Finish** – Industrial grade enamel. Other special coatings available.
- **Performance** – Refer to rating tables in this bulletin. – Add 3% to RPM/6% to BHP.
- **Options & Accessories** –
 - Food grade welding
 - Inlet flanges
 - Inlet adapters
 - Bolted access door
 - Drive guard
 - Weather cover
 - Inlet guard
 - AMCA non-sparking construction



Principal Dimensions

| FAN SIZE | A | B | C | D | E | F | G | H | J | K | L | M | N | P | R | T | MAXIMUM FRAME |
|----------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------------------------------|---|-------------------------------|-------------------------------|----|---------------------------------|-------------------------------|----------------------------------|---------------|
| 10 | 11 ¹ / ₁₆ | 11 ¹ / ₄ | 10 ⁹ / ₁₆ | 23 ¹³ / ₁₆ | 11 ¹⁹ / ₃₂ | 23 ¹ / ₄ | 12 ¹⁵ / ₁₆ | 14 ⁹ / ₁₆ | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 11 ¹ / ₂ | 184T |
| 12 | 12 ¹⁵ / ₁₆ | 13 ³ / ₁₆ | 11 ¹⁵ / ₁₆ | 27 ¹ / ₂ | 13 ¹ / ₄ | 26 ⁹ / ₁₆ | 14 ¹³ / ₁₆ | 15 ¹⁵ / ₁₆ | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 12 ⁹ / ₃₂ | 184T |
| 13 | 14 ¹ / ₈ | 14 ¹ / ₂ | 13 ³ / ₁₆ | 30 ³ / ₁₆ | 14 ⁷ / ₁₆ | 28 ⁷ / ₈ | 16 ¹ / ₈ | 17 ³ / ₁₆ | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 12 ¹³ / ₁₆ | 184T |
| 15 | 16 ³ / ₁₆ | 16 ¹ / ₂ | 14 ⁷ / ₈ | 32 ¹³ / ₁₆ | 16 ¹ / ₄ | 32 ⁷ / ₁₆ | 18 ¹ / ₈ | 18 ⁷ / ₈ | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 13 ³ / ₄ | 215T |
| 16 | 17 ¹ / ₄ | 17 ³ / ₄ | 15 ¹⁵ / ₁₆ | 35 ¹ / ₁₆ | 17 ⁵ / ₁₆ | 34 ⁹ / ₁₆ | 19 ³ / ₈ | 19 ¹⁵ / ₁₆ | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 14 ³ / ₁₆ | 184T |
| 18 | 19 ¹ / ₂ | 19 ⁷ / ₈ | 17 ⁵ / ₈ | 38 ¹ / ₁₆ | 19 ⁹ / ₁₆ | 38 ³ / ₈ | 21 ¹ / ₂ | 21 ⁵ / ₈ | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 15 ¹ / ₈ | 256T |
| 20 | 20 ⁷ / ₈ | 21 ¹ / ₂ | 20 | 41 ¹ / ₁₆ | 20 ⁵ / ₈ | 41 ¹ / ₄ | 23 ¹ / ₈ | 24 | 1 ⁵ / ₈ | 2 | 1 ¹ / ₂ | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 16 ¹ / ₄ | 256T |
| 22 | 23 ³ / ₄ | 24 ⁵ / ₁₆ | 22 | 45 ¹ / ₈ | 23 ¹ / ₈ | 46 ¹ / ₄ | 25 ¹⁵ / ₁₆ | 26 | 1 ⁵ / ₈ | 2 | 2 | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 | 17 ⁵ / ₁₆ | 256T |
| 24 | 25 ¹³ / ₁₆ | 26 ¹ / ₂ | 23 ⁷ / ₈ | 48 ⁹ / ₁₆ | 25 | 50 ¹ / ₁₆ | 28 ¹ / ₈ | 27 ⁷ / ₈ | 1 ⁵ / ₈ | 2 | 2 | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 ⁵ / ₈ | 18 ¹ / ₄ | 286T |
| 27 | 28 ¹⁵ / ₁₆ | 29 ¹¹ / ₁₆ | 27 | 53 ⁵ / ₈ | 27 ⁷ / ₈ | 55 ³ / ₄ | 31 ⁵ / ₁₆ | 31 | 1 ⁵ / ₈ | 2 | 2 | 3 ³ / ₄ | 16 | 9 ⁹ / ₁₆ | 4 ⁵ / ₈ | 19 ¹³ / ₁₆ | 286T |
| 30 | 31 ³ / ₈ | 32 ³ / ₁₆ | 29 ³ / ₈ | 57 ⁹ / ₁₆ | 30 ¹ / ₁₆ | 60 ³ / ₈ | 33 ¹³ / ₁₆ | 33 ³ / ₈ | 1 ⁵ / ₈ | 2 | 3 | 3 ³ / ₄ | 16 | 11 ¹ / ₁₆ | 4 ⁵ / ₈ | 21 ¹ / ₁₆ | 286T |
| 33 | 34 ¹ / ₂ | 35 ⁷ / ₁₆ | 32 ¹ / ₄ | 62 ¹⁵ / ₁₆ | 32 ¹⁵ / ₁₆ | 65 ⁷ / ₈ | 37 ¹ / ₁₆ | 36 ¹ / ₄ | 1 ⁵ / ₈ | 2 | 3 | 3 ³ / ₄ | 16 | 11 ¹ / ₁₆ | 5 ¹ / ₄ | 22 ¹ / ₂ | 326T |
| 36 | 37 ⁵ / ₈ | 38 ¹¹ / ₁₆ | 35 | 73 ¹³ / ₁₆ | 35 ¹¹ / ₁₆ | 71 ⁵ / ₈ | 40 ⁵ / ₁₆ | 39 | 1 ⁵ / ₈ | 2 | 4 | 3 ³ / ₄ | 32 | 13 ¹ / ₁₆ | 5 ⁵ / ₈ | 23 ⁷ / ₈ | 326T |
| 40 | 42 ¹ / ₈ | 43 ³ / ₄ | 39 ¹ / ₄ | 81 ⁹ / ₁₆ | 39 ¹¹ / ₁₆ | 79 ¹¹ / ₁₆ | 44 ⁷ / ₈ | 43 ¹ / ₄ | 1 ⁵ / ₈ | 2 | 4 | 3 ³ / ₄ | 32 | 13 ¹ / ₁₆ | 5 ⁵ / ₈ | 26 | 364T |
| 44 | 46 ³ / ₈ | 47 ¹³ / ₁₆ | 43 ⁵ / ₈ | 87 ⁷ / ₈ | 43 ⁷ / ₈ | 87 ³ / ₄ | 49 ⁷ / ₁₆ | 47 ⁵ / ₈ | 1 ⁵ / ₈ | 2 | 5 | 3 ³ / ₄ | 32 | 13 ¹ / ₁₆ | 5 ⁵ / ₈ | 28 ³ / ₁₆ | 365T |
| 49 | 51 ³ / ₁₆ | 52 ⁵ / ₈ | 48 | 96 ¹ / ₈ | 48 ¹ / ₈ | 96 ¹ / ₄ | 54 ¹ / ₄ | 52 | 1 ⁵ / ₈ | 2 | 5 | 3 ³ / ₄ | 32 | 13 ¹ / ₁₆ | 5 ⁵ / ₈ | 30 ³ / ₈ | 365T |

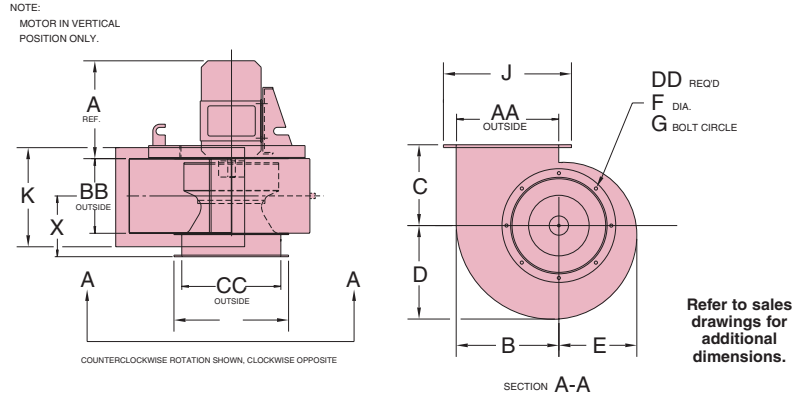
Note: Typical dimensions for Class I fan shown. Dimensions are subject to change. Certified prints are available.



Construction Options

SERIES 03F – Backward Curved Centrifugal Fan, Flange Mounted Type, Single Width Arrangement 4 Maximum Temperature – 200°F.

ABS Certificate
of Design Assessment
Received



Construction Features

Self-contained, Arrangement 4 (direct drive) fan/motor package. Specifically designed to be used as the primary air moving device in other apparatus in a flange mounted configuration. Typical applications include dust, fume and material collection equipment, and electric motor, switchgear or component cooling.

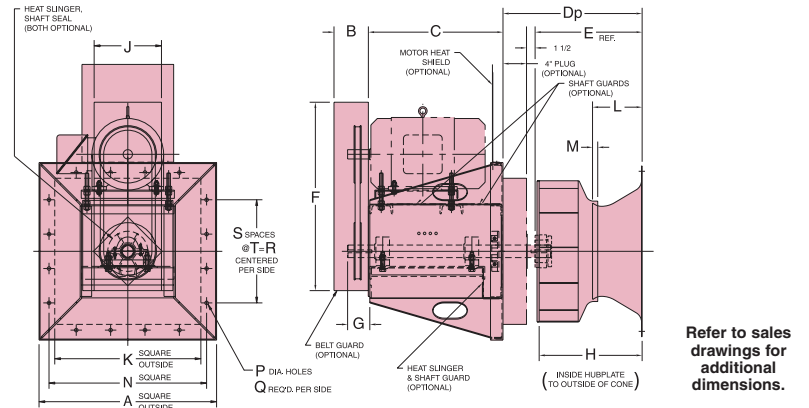
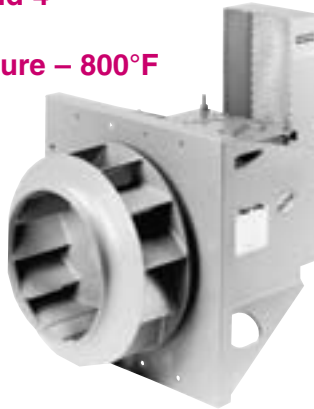
- **Sizes** – Available in 12", 15", 18", 22", 24", 27", 30" and 33" wheel diameters.
- **Rotation** – Clockwise and counterclockwise.
- **Construction** – Continuously welded hot-rolled steel scroll and continuously welded steel inlet and outlet flanges. Motor base constructed of heavy gauge hot rolled steel. Supplied with inlet mounting adapter as standard.

Principal Dimensions

| FAN SIZE | A | B | C | D | E | H | X | BB | CC |
|----------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 12 | 13 ¹ / ₁₆ | 13 ¹ / ₄ | 14 ¹ / ₄ | 11 ³ / ₄ | 10 ¹ / ₄ | 16 ¹⁵ / ₁₆ | 11 | 9 ¹³ / ₁₆ | 12 ¹⁵ / ₁₆ |
| 15 | 20 ³ / ₄ | 16 ⁵ / ₈ | 16 ⁹ / ₁₆ | 14 ³ / ₄ | 12 ³ / ₄ | 19 ⁹ / ₁₆ | 12 ¹ / ₄ | 12 ¹ / ₄ | 16 ¹³ / ₁₆ |
| 18 | 23 ¹ / ₁₆ | 20 | 18 ⁷ / ₈ | 17 ¹¹ / ₁₆ | 15 ⁵ / ₈ | 23 ¹ / ₂ | 13 ¹ / ₂ | 14 ¹¹ / ₁₆ | 19 ¹ / ₂ |
| 22 | 23 ¹ / ₁₆ | 24 ⁷ / ₁₆ | 22 | 21 ⁹ / ₁₆ | 18 ³ / ₄ | 27 ⁵ / ₁₆ | 15 | 17 ⁷ / ₈ | 23 ³ / ₄ |
| 24 | 23 ¹ / ₁₆ | 26 ⁵ / ₁₆ | 23 ³ / ₁₆ | 23 ¹ / ₂ | 20 ⁷ / ₁₆ | 29 ⁷ / ₈ | 15 ¹³ / ₁₆ | 19 ⁷ / ₁₆ | 25 ¹³ / ₁₆ |
| 27 | 23 ¹ / ₁₆ | 29 ³ / ₁₆ | 25 ³ / ₄ | 26 ³ / ₈ | 22 ⁷ / ₈ | 32 | 17 | 21 ³ / ₄ | 28 ¹⁵ / ₁₆ |
| 30 | 25 ⁷ / ₁₆ | 32 ³ / ₈ | 27 ¹ / ₂ | 28 ⁵ / ₈ | 24 ¹³ / ₁₆ | 35 ⁷ / ₁₆ | 17 ¹⁵ / ₁₆ | 23 ⁵ / ₈ | 31 ³ / ₈ |
| 33 | 28 ¹ / ₄ | 35 ⁵ / ₈ | 30 | 31 ¹ / ₂ | 27 ³ / ₈ | 39 ⁹ / ₁₆ | 19 ¹ / ₈ | 26 | 34 ¹ / ₂ |

NOTE: Counterclockwise rotation shown. Clockwise rotation opposite. For vertical installation only. For horizontal installation contact factory. Dimensions and specifications are subject to change. Certified prints are available.

SERIES 11 – PLUG FANS Arrangements 9 and 4 Class I, II and III Maximum Temperature – 800°F



Principal Dimensions

| FAN SIZE | A | B | C | D | Dp | H | J | K | Max Motor | Weight |
|----------|--------------------------------|----|----------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|-----------|--------|
| 12 | 21 | 5 | 19 ³ / ₁₆ | 10 ³ / ₄ | 14 ³ / ₄ | 8 ¹⁵ / ₁₆ | 9 ⁵ / ₈ | 16 | 215T | 205 |
| 15 | " | " | " | 13 ¹ / ₃₂ | 17 ¹ / ₃₂ | 11 ⁷ / ₃₂ | " | " | 215T | 205 |
| 18 | 31 | 6 | 23 ¹ / ₂ | 15 ²³ / ₃₂ | 19 ²³ / ₃₂ | 13 ¹ / ₂ | 11 ³ / ₄ | 25 ¹ / ₂ | 256T | 422 |
| 22 | " | " | " | 18 ²³ / ₃₂ | 22 ²³ / ₃₂ | 16 ¹ / ₂ | " | " | 256T | 453 |
| 24 | " | " | " | 20 ³ / ₁₆ | 24 ³ / ₁₆ | 17 ³¹ / ₃₂ | " | " | 256T | 485 |
| 27 | 48 | 8 | 27 ¹¹ / ₁₆ | 22 ³ / ₈ | 26 ³ / ₈ | 20 ³ / ₁₆ | 19 ¹ / ₂ | 37 ¹ / ₂ | 364T | 940 |
| 30 | " | " | " | 24 | 28 | 21 ²⁵ / ₃₂ | " | " | 364T | 933 |
| 33 | " | " | " | 26 ¹¹ / ₁₆ | 30 ¹ / ₁₆ | 23 ³¹ / ₃₂ | " | " | 364T | 1004 |
| 36 | " | " | " | 29 | 33 | 26 ⁹ / ₃₂ | " | " | 364T | 1110 |
| 40 | 56 ¹ / ₂ | 12 | 29 ⁹ / ₁₆ | 32 ¹ / ₈ | 36 ¹ / ₈ | 29 ¹³ / ₃₂ | 19 ¹ / ₂ | 50 ¹ / ₂ | 364T | 1363 |
| 44 | " | " | " | 35 ¹ / ₄ | 39 ¹ / ₄ | 32 ¹ / ₂ | " | " | 364T | 1443 |
| 49 | " | " | " | 38 ¹⁵ / ₃₂ | 42 ¹⁵ / ₃₂ | 35 ²³ / ₃₂ | " | " | 364T | 1685 |
| 54 | 72 | 12 | 37 ¹⁵ / ₁₆ | 42 ¹ / ₁₆ | 46 ¹ / ₁₆ | 39 ⁹ / ₁₆ | 31 ¹ / ₂ | 61 ¹ / ₂ | 364T | 2805 |
| 60 | " | " | " | 46 ¹¹ / ₃₂ | 50 ¹ / ₃₂ | 43 ¹⁹ / ₃₂ | " | " | 364T | 3091 |

NOTE: Weight is less motor and options. Dimension "D" applies without insulating plug. Dimensions are subject to change. Certified prints are available.

Construction Features

Plug fans are typically applied in a plenum as the fan enclosure, to be used as primary air circulators in ovens, paint booths, evaporators, kilns, or other types of industrial dryers. The plug fan's self-contained mounting panel, with or without insulated plug, accommodates ease of installation to a properly supported plenum wall. Plug fans afford efficient air circulation with remote drive in an easy to install and maintain configuration.

- **Sizes** – 12" - 60" wheel diameters.
- **Rotation** – Clockwise or counterclockwise.
- **Construction** – Heavy-duty steel, continuously welded and finished with an industrial grade coating.

Specifications

Backward Curved Centrifugal Fan, SWSI (Belt Drive)

The belt drive Backward Curved Centrifugal Fan, Single Width shall be manufactured by Hartzell Fan, Inc.[®], Series 03, ARRG. 1, 9, 9M, or 10, Class I, II, or III.

Wheels available are the backward curved (BC, 12" – 60") or the airfoil (BA, 18" – 60"). Rotation as determined by the drive side of the fan, shall be clockwise or counterclockwise.

Fan housing, for sizes 12" through 33", shall be field rotatable and the discharge shall be any of the eight AMCA standard positions. Sizes 36" through 60" shall be a fixed construction for the rotation and discharge specified. The fan shall be packaged, completely assembled and ready to install, except for ARRG.1, which is less motor and drive.

The fan housing and base shall be a heavy gauge commercial quality carbon steel suitable for temperatures up to 300°F and with modifications up to 800°F (ARRG. 10 limited 250°F to 600°F). The housing and wheels shall be continuously welded in compliance with AWS D1.1 standard.

The wheels shall be commercial quality carbon steel with single thickness airfoil blades or double thickness hollow airfoil blades and have non-overloading horsepower characteristics. The wheel shall be mounted to the fan shaft with a split taper bushing.

The shafts shall be ground and polished. The fan bearings shall be heavy duty, self-aligning ball or roller type (depending on fan size, motor HP, and performance) relubricatable for continuous service. They shall have a minimum L10 life of 50,000 hours. The belts shall be an oil, heat, and static-resistant type, oversized for continuous duty.

Lifting lugs are a standard feature, for ease of handling and installation.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. Fans shall be balanced in accordance with AMCA Standard 204-96, fan application category BV-3 (comparable to Grade G6.3).

Fans shall be manufactured in accordance with Hartzell's standard quality assurance procedures.

The fan performance shall be based on tests conducted in Hartzell's AMCA accredited laboratory in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound and published in accordance with AMCA Publication 211 (Air) and AMCA Publication 311 (Sound). Fans shall be licensed to bear the AMCA Certified Sound and Air Performance Rating Seal for the BC wheel only.

Backward Curved Centrifugal Fan, SWSI (Direct Drive)

The Direct Drive Backward Curved Centrifugal fan shall be manufactured by Hartzell Fan, Inc., Piqua, Ohio. Series 03 ____ (Arrangement 4) ____ (Size), ____ (Class I, II, or III), SWSI.

The fan shall have a capacity of _____ CFM at _____ inch(es) static pressure, standard air. The fan shall be supplied with a _____ horsepower, _____ RPM, industrial continuous duty (or alternate electrical specification) _____ (ODP, TEFC explosion proof) motor to operate on _____ volts, _____ cycles, _____ phase.

Rotation as determined by the drive side of the fan shall be _____ (clockwise or counterclockwise). Discharge shall be _____ (any of the eight AMCA standard positions). The fan shall be packaged, completely assembled, inspected for adherence to specifications and test run at the factory, and ready to install.

The fan housing and base shall be a heavy gauge commercial quality carbon steel suitable for temperatures of up to 200°F. The housing and wheel shall be continuously welded in compliance with AWS D1.1 and D1.2 standards.

The wheels shall be commercial quality, carbon steel, with _____ (single thickness, Type BC or airfoil, Type BA backward curved blades), having non-overloading horsepower characteristics.

Lifting lugs shall be supplied as a standard design feature for ease of handling and installation.

The fan assembly shall be dynamically balanced at the Hartzell factory prior to shipping. All fans shall meet the balance requirements of the Acoustical Society of America Standard ASASTD2-1975 (ANSI S2 19-1975), Grade G6.3.

Fans shall be manufactured in accordance with Hartzell standard, published quality assurance procedures and shipped complete with installation, operation, and maintenance instructions.

The fan performance shall be based on tests conducted in Hartzell's AMCA accredited laboratory in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound and published in accordance with AMCA Publication 211 (Air) and AMCA Publication 311 (Sound). Fans shall be licensed to bear the AMCA Certified Sound and Air Performance Rating Seal for the BC wheel only.



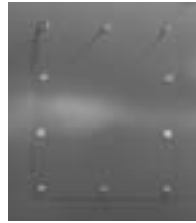
Options and Accessories

Drain Pipe Coupling

A standard pipe coupling welded to housing at its lowest point; female pipe has threaded plug.

Access Door

For maintenance and clean-out of internal fan housing. Bolted and gasketed. A hinged, quick release type also available for Class I only.



Vibration Isolator

Rubber-in-shear or spring-type isolators are available.

Combination Drive Guard and Weather Cover

Covers motor and shaft sheaves as well as belts. Combines guarding of the drive as well as protection from the weather.



Arrangement 4



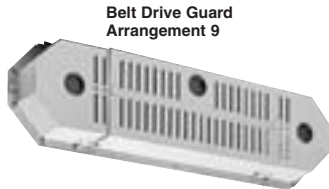
Arrangement 9

Drive Guards

Encloses the drive assembly while permitting circulation of ambient air. Standard features include: tach opening, belt tension openings and adjustable length.



Shaft Guard
Arrangement 9 or 1



Belt Drive Guard
Arrangement 9

Inlet and Outlet Guards

Spiral ring guard offers protection on inlet side and a wire mesh guard can be furnished for the outlet side.



Inlet Guard



Outlet Guard

Flanged Inlet and Outlet

Welded flanges. Drilled flanges can be furnished, if specified.

Neoprene Shaft Seal and Slinger

Shaft seal limits contaminants from the airstream passing through shaft hole in the housing. Seals are not gas tight. A neoprene shaft seal and slinger are required when stainless steel shaft and hardware are specified. For temperatures to 300°F.

Discharge Backdraft Damper

Automatic gravity operated backdraft damper eliminates backflow of air when fan is not operating. Class I only.

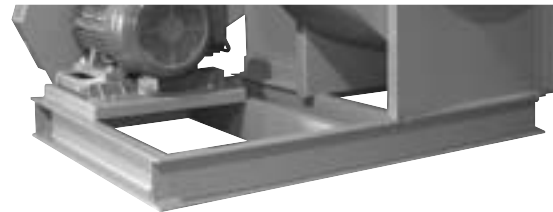


Arrangements

Arrangement 8 and other arrangements not shown are available, (see page 6). Contact factory.

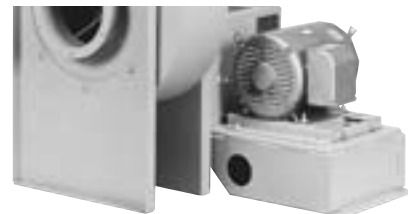
Arrangement 1 Sub-Base

Common structural support for Arrangement 1 fan and motor. Specify motor mounting position (See page 3).



Arrangement 9M Motor Base

Accommodates a larger frame size motor than the standard Arrangement 9 base.



Heat Fan Accessories – Series 03 Heat Slinger

Draws cool air over inboard bearing and reduces heat conduction from wheel through shaft. Heat slinger guard included.



Motor Heat Shield (Arr. 9 Fans)

Aluminum plate attached to base between fan scroll and motor assists in heat deflection and dissipation. Aluminum shaft plate is standard on all Series 03 blowers.

High Temperature Shaft Seal

Shaft seal encased between housing drive side and metal retaining plate. Required for temperatures from 300°F to 800°F.

CAUTION: The drive assembly or the periphery of the wheel of a fan less than seven (7) feet above the floor or working level must be guarded to be in accordance with OSHA regulations.



Corrosive Applications

Protective Coatings

An epoxy coating is available for mildly corrosive atmospheres. The finish is chemical, moisture and abrasion resistant, providing a very tough and durable coating. Surfaces are phosphatized prior to coating. Finish air dries to 6 mils. Temperatures range up to 250°F.

Inorganic zinc coating is also available. This finish is a very hard coating with exceptional abrasion resistance. Offers excellent weathering characteristics and resistance to alcohols, solvents, and petroleum products. Also, resistant to temperatures up to 600°F. Surfaces are sandblasted prior to application. Finish air dries to 2 1/2 mil thickness.

Fiberglass Units

Where extreme corrosive fumes are encountered, Hartzell Fiberglass Backward Curved Blowers, Series 41, give unsurpassed resistance to a wide variety of corrosive elements at a cost substantially below that of corrosive resistant metals. Size range of 12" to 60" wheel diameter. For complete details on Hartzell Fiberglass Centrifugal Fans, See Bulletin A-160.



Series 41
Arrangement 9

Spark Resistant Construction

For safely handling fumes and vapors, Hartzell offers three types of spark resistant construction. Types A, B, and C as outlined in AMCA Standard 99-0401-86.

Type A – All aluminum fan housing, inlet cone and wheel with a ground and polished steel shaft covered with an aluminum sleeve. Temperature limitation of 350°F, with high temperature construction. Material Code AA.

Type B – Aluminum wheel and aluminum wear plate where the shaft passes through the housing. Temperature limitation of 350°F, with high temperature construction. Material Code AB.

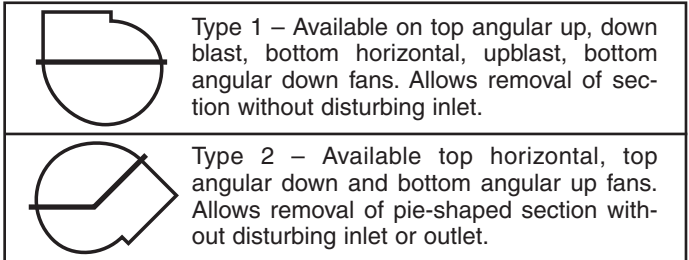
Type C – Aluminum inlet cone and aluminum wear plate where the shaft passes through the housing. Temperature limitation of 350°F, with high temperature construction. Material Code AC.

NOTES: No bearings, drive components, or electrical devices shall be placed in the air or gas stream.

The user shall electrostatically ground all fan parts.

The use of the above standard in no way implies a guarantee of safety for any level of spark resistance. Spark resistant construction also does not protect against any airstream material that may be present in a system which might cause ignition of explosive gases.

Split Housing



Heavy-Duty Control Dampers

Inlet Control Damper

Increases the efficiency of the blower and permits control of air volume.

Outlet Dampers

Dampers are mounted directly on the blower outlet to control the volume of air delivered to the system. Opposed and parallel blades are available constructed of standard gauge steel and available with a variety of finishes.

Parallel Blade Type

Best suited for applications requiring accurate air volume in a range from wide open to 75% of wide open. Usually used for balancing the system or for modulated control when pressure drop is variable.

Opposed Blade Type

Best suited for control over a broad range of air volume with more precise control.

Both types of outlet control dampers are available in three classifications:

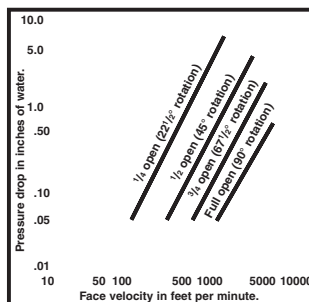
Classification:

Class I – Maximum static pressure: 5" SP
Maximum velocity: 3900 FPM

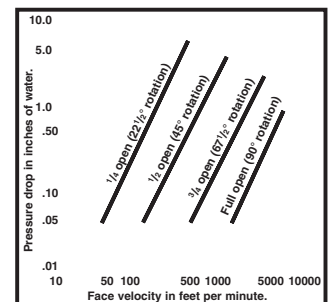
Class II – Maximum static pressure: 8-1/2" SP
Maximum velocity: 5100 FPM

Class III – Maximum static pressure: 20" SP
Maximum velocity: 6000 FPM

NOTE: Class III dampers must be used on installation with temperatures above 250°F.



Typical performance curve for parallel blade dampers.



Typical performance curve for opposed blade dampers.

SAFETY ACCESSORIES, APPLICATION AND USE WARNING

The safe application and use of equipment supplied by Hartzell Fan, Inc. is the responsibility of the installer, the user, the owner, and the employer. Since the application and use of its equipment can vary greatly, Hartzell Fan, Inc. offers various product types, optional safety accessories, and sound performance data per laboratory tests. Hartzell Fan, Inc. sells its equipment with and without safety accessories, and accordingly, it can supply such safety accessories only upon receipt of an order. The need for safety accessories will frequently depend upon the type of system, fan location and operating procedures being employed. The proper protective safety accessories to meet company standards, local codes, and the requirements of the Occupation Safety and Health Act must be determined by the user since safety requirements vary depending on the location and use of the equipment. If applicable local conditions, standards, codes or OSHA rules require the addition of the safety accessories, the user should specify and obtain the required safety accessories from Hartzell Fan, Inc. and should not allow the operation of the equipment without them.

Owners, employers, users and installers should read "RECOMMENDED SAFETY PRACTICES FOR USERS AND INSTALLERS OF INDUSTRIAL AND COMMERCIAL FANS" published by the Air Movement and Control Association International, Inc., 30 West University Drive, Arlington Heights, Illinois 60004. A copy of this publication is enclosed with each fan shipped from Hartzell Fan, Inc., and is available upon request at Hartzell's office in Piqua, Ohio 45356.

Please contact Hartzell Fan, Inc. or your local Hartzell representative for more information on product types, safety accessories, and sound performance estimates.

Remember, the selection of safety accessories and the safe application and use of equipment supplied by Hartzell Fan, Inc. is **your** responsibility.



Hartzell Warranty

LIMITED WARRANTIES

Hartzell represents to Buyer that any goods to be delivered hereunder will be produced in compliance with the requirements of the Fair Labor Standards Act of 1938 as amended.

Hartzell also warrants to Buyer its goods to be free from defects in workmanship and material under normal use and service for one (1) year after tender of delivery by Hartzell, plus six months allowance for shipment to approved stocking dealers and distributors. No warranty extends to future performance of goods and any claims for breach of warranty or otherwise accrues upon tender of delivery. The foregoing constitute Hartzell's sole and exclusive warranties and are in lieu of all other warranties, whether written, oral, express, implied or statutory.

LIMITATION OF LIABILITY FOR BREACH OF WARRANTY

Hartzell's obligation for any breach of warranty is limited to repairing or replacing, at its option, without cost to Buyer at its factory any goods which shall, within such a warranty period, be returned to it with transportation charges prepaid, and which its examination shall disclose to its satisfaction to have been defective. Any request for repair or replacement should be directed to Hartzell Fan, Inc., P.O. Box 919, Piqua, Ohio 45356. Hartzell will not pay for any repairs made outside its factory without its prior written consent. This does not apply to any such Hartzell goods which have failed as a result of faulty installation or abuse, or incorrect electrical connections or alterations, made by others, or use under abnormal operating conditions or misapplication of the goods.

LIMITATION OF LIABILITY

To the extent the above limitation of liability for breach of warranty is not applicable, the liability of Hartzell on any claim of any kind, including negligence, for any loss or damage arising out of or connected with, or resulting from the sale and purchase of the goods or services covered by these Terms and Conditions of Sale or from the performance or breach of any contract pertaining to such sale or purchase or from the design manufacture, sale, delivery, resale, installation, technical direction installation, inspection repair, operation or use of any goods or services covered by these Terms and Conditions shall, in no case exceed the price allocable to the goods or services which gave rise to the claim and shall terminate one year after tender of delivery of said goods or services, plus six months allowance for shipment to approved stocking dealers and distributors. In no event will Hartzell be responsible or liable for any labor or other incidental costs associated with the removal or replacement of defective products or materials.

In no event whether as a result of breach of contract, or warranty or alleged negligence, defects, incorrect advice or other causes, shall Hartzell be liable for special or consequential damages, including, but not limited to, loss of profits or revenue, loss of use of the equipment or any associated equipment, cost of substitute equipment, facilities or services, down time costs, or claims of customers of the Buyer for such damages. Hartzell neither assumes nor authorizes any person to assume for it any other liability in connection with the sale of its goods or services.

NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS

HARTZELL DOES NOT WARRANT THAT SAID GOODS ARE OF MERCHANTABILITY QUALITY OR THAT THEY ARE FIT FOR ANY PARTICULAR PURPOSE. THERE IS NO IMPLIED WARRANTY OF MERCHANTABILITY AND THERE IS NO IMPLIED WARRANTY OF FITNESS.



Propeller Fans



Cooling Tower &
Heat Exchanger Fans



Duct Fans



Duct Axial Fans



Vaneaxial Blowers



Cool Blast & Utility Fans



Steel Centrifugal Blowers



Roof Ventilators –
Steel & Fiberglass



Heating Equipment –
Gas & Steam



Fiberglass
Axial Flow Fans



Fiberglass Centrifugal
Blowers



Marine –
Mine Duty Blowers

Hartzell Fan, Inc., Piqua, Ohio 45356 • Plants in Piqua, Ohio and Portland, Indiana.