

Single-Width Centrifugal Fan *Performance Supplement*

- Engineering Information
- Air Performance
- Sound Performance
- Dimensional Data

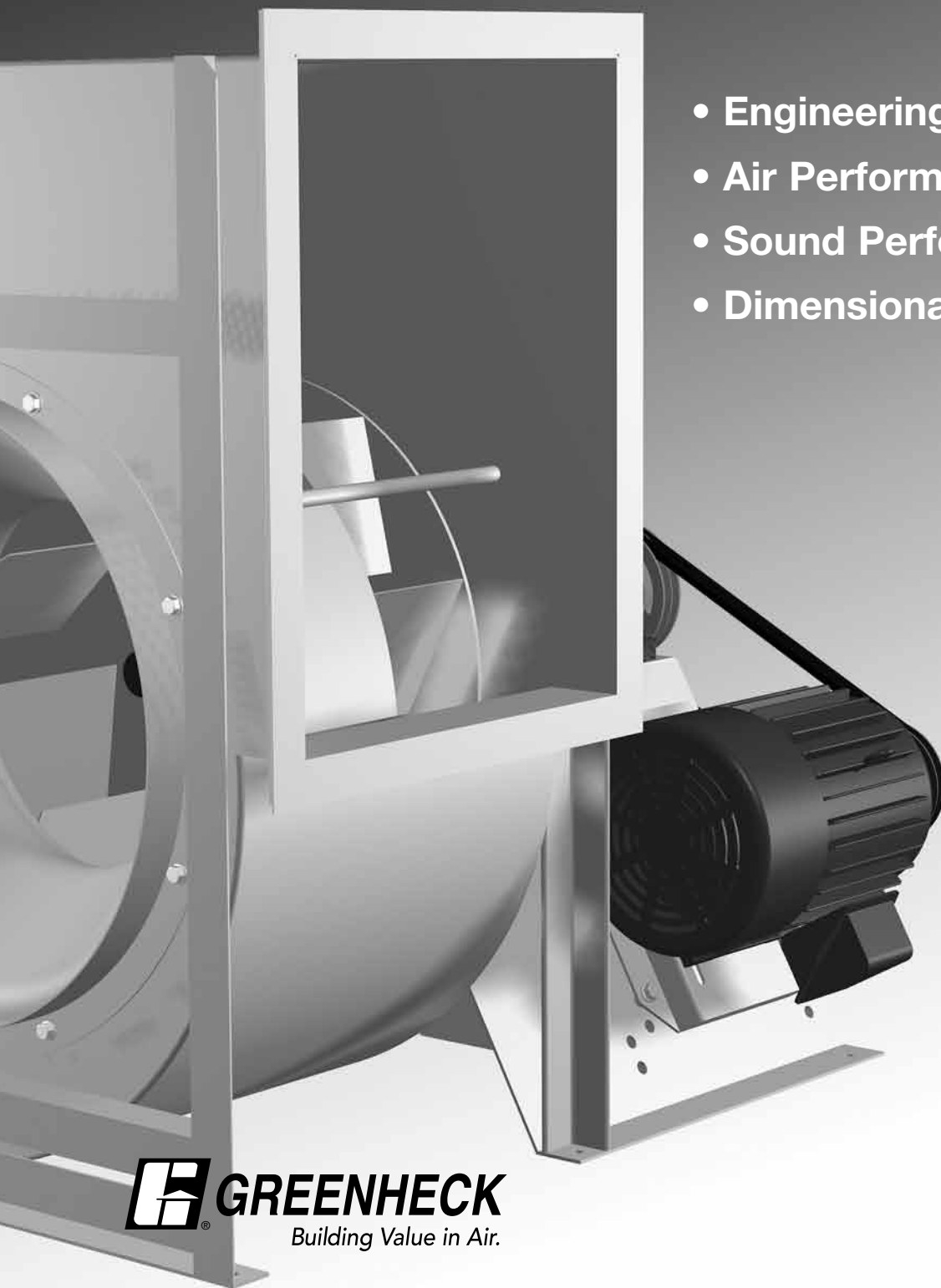


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To-Scale Drawings and Fan Specifications

To-scale CAD drawings along with detailed centrifugal specifications can be found online at greenheck.com or within our Computer Aided Product Selection program (CAPS).



Greenheck Fan Corporation certifies that the backward inclined and airfoil centrifugal fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Motor Selection

Greenheck centrifugal fans can be supplied with any motor that is commercially available, and appropriate for the fan size and performance required. The tables show motor frame sizes corresponding to those motors readily available. See the maximum motor frame size charts below if motor is for arrangement 9 or 10 fans.

- Notes: 1. Fractional horsepower motor frame sizes shown may change due to variations in voltage, special features and manufacturer.
2. Motors shown are ball bearing, continuous duty. Two speed motors are two winding, 1/3 reduction in RPM.
3. Single-phase motors are capacitor start.

| 1750 RPM Motors (NEMA T-Frame) | | | | | | | | | | | |
|--------------------------------|--------------|-------------|------|---------------------|------|---------------------|---------------------|-----------------------------|---------------------------|-------------|------|
| HP | Single Speed | | | | | | | | 2 Speed 2 Winding | | |
| | Open | | | | TE | | Explosion-Resistant | | High Efficiency | | Open |
| | | | | | | | | | | | |
| | 115V 1PH | 230V 1PH | 3PH | 115V 230V 1PH | 3PH | 115V 230V 1PH | 3PH | Open 230V 460V 3PH | TE 230V 460V 3PH | 115V 1PH | 3PH |
| 1/4 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 | |
| 1/2 | 48 | 48 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | |
| 3/4 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | |
| 1 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | 56 | |
| 1 1/2 | 145T | 145T | 145T | 145T | 145T | 145T | 145T | 145T | 145T | | 56 |
| 2 | 182T | 182T | 145T | 182T | 145T | 145T | 145T | 145T | 145T | | 182T |
| 3 | | | 182T | | 182T | | 182T | 182T | 182T | | 184T |
| 5 | | | 184T | | 184T | | 184T | 184T | 184T | | 215T |
| 7 1/2 | | | 213T | | 213T | | 213T | 213T | 213T | | 254T |
| 10 | | | 215T | | 215T | | 215T | 215T | 215T | | 256T |
| 15 | | | 254T | | 254T | | 254T | 254T | 254T | | 256T |
| 20 | | | 256T | | 256T | | 256T | 256T | 256T | | 284T |
| 25 | | | 284T | | 284T | | 284T | 284T | 284T | | 286T |
| 30 | | | 286T | | 286T | | 286T | 286T | 286T | | 324T |
| 40 | | | 324T | | 324T | | 324T | 324T | 324T | | 326T |
| 50 | | | 326T | | 326T | | 326T | 326T | 326T | | 365T |
| 60 | | | 364T | | 364T | | 364T | 364T | 364T | | |
| 75 | | | 365T | | 365T | | 365T | 365T | 365T | | |
| 100 | | | 405T | | 405T | | 405T | 405T | 405T | | |
| 125 | | | 405T | | 444T | | 444T | 405T | 444T | | |
| 150 | | | 444T | | 445T | | 445T | 444T | 445T | | |

| 3600 RPM Motors (NEMA T-Frame) | | | | | | | | | |
|--------------------------------|--------------|-------------|-------|---------------------|-------|---------------------|---------------------|-----------------------------|---------------------------|
| HP | Single Speed | | | | | | | | |
| | Open | | | | TE | | Explosion-Resistant | | High Efficiency |
| | | | | | | | | | |
| | 115V 1PH | 230V 1PH | 3PH | 115V 230V 1PH | 3PH | 115V 230V 1PH | 3PH | Open 230V 460V 3PH | TE 230V 460V 3PH |
| 1/4 | 48 | 48 | | | 56 | | 48 | 48 | 48 |
| 1/2 | 48 | 48 | 56 | 56 | 56 | | 56 | 56 | 56 |
| 3/4 | 56 | 56 | 56 | 56 | 56 | | 56 | 56 | 56 |
| 1 | 56 | 56 | 56 | 56 | 56 | | 56 | 56 | 56 |
| 1 1/2 | 143T | 143T | 143T | 143T | 143T | | 143T | 143T | 143T |
| 2 | 145T | 145T | 145T | 145T | 145T | | 145T | 145T | 145T |
| 3 | 182T | 182T | 145T | 182T | 182T | | 182T | 145T | 182T |
| 5 | | 184T | 182T | 182T | 184T | | 184T | 182T | 184T |
| 7 1/2 | | 213T | 184T | 184T | 213T | | 213T | 184T | 213T |
| 10 | | 215T | 213T | 213T | 215T | | 215T | 213T | 215T |
| 15 | | | 215T | | 254T | | 254T | 215T | 254T |
| 20 | | | 254T | | 256T | | 256T | 254T | 256T |
| 25 | | | 256T | | 284TS | | 284TS | 256T | 284TS |
| 30 | | | 284TS | | 286TS | | 286TS | 284TS | 286TS |
| 40 | | | 286TS | | 324TS | | 324TS | 286TS | 324TS |
| 50 | | | 324TS | | 326TS | | 326TS | 324TS | 326TS |

Maximum Motor Frame Sizes

Arrangement 9 and 10 fans have specific motor size limitations based on enclosure type (examples: Open, Totally Enclosed Fan Cooled) and voltage. The charts below should be used to verify the motor selected will physically fit on the fan.

| Arrangement 9 | | | | | |
|----------------|------|----------------|------|------|------------|
| Class I and II | | | | | Class III |
| Fan Size | Open | High Eff. Open | TEFC | EXP | All Motors |
| 10 | 184T | 184T | 184T | 184T | NA |
| 12 | 184T | 184T | 184T | 184T | 145T |
| 13 | 184T | 184T | 184T | 184T | 145T |
| 15 | 213T | 213T | 213T | 213T | 184T |
| 16 | 215T | 215T | 215T | 215T | 184T |
| 18 | 254T | 254T | 254T | 254T | 215T |
| 20 | 254T | 254T | 254T | 254T | 215T |
| 22 | 256T | 256T | 256T | 256T | 256T |
| 24 | 284T | 284T | 284T | 284T | 286T |
| 27 | 284T | 284T | 284T | 284T | 286T |
| 30 | 324T | 324T | 324T | 324T | 326T |
| 33 | 324T | 286T | 284T | 284T | 365T |
| 36 | 326T | 324T | 286T | 286T | 365T |
| 40 | 326T | 326T | 324T | 324T | 405T |
| 44 | 364T | 364T | 364T | 326T | 444T |
| 49 | 364T | 364T | 364T | 364T | 444T |
| 54 | 404T | 404T | 404T | 404T | 444T |
| 60 | 404T | 404T | 404T | 404T | 444T |
| 66 | 405T | 405T | 405T | 404T | 444T |
| 73 | 405T | 405T | 405T | 405T | 444T |

| Arrangement 10 | | | | | | | | |
|----------------|------|------|----------------|------|------|------|------|------|
| Class I and II | | | | | | | | |
| Fan Size | Open | | High Eff. Open | | TEFC | | EXP | |
| | I | II | I | II | I | II | I | II |
| 7-10 | 145T | 184T | 145T | 184T | 145T | 184T | 145T | 184T |
| 12 | 182T | 213T | 182T | 213T | 182T | 213T | 182T | 213T |
| 13 | 184T | 213T | 184T | 213T | 184T | 213T | 184T | 213T |
| 15 | 184T | 215T | 184T | 215T | 184T | 215T | 184T | 215T |
| 16 | 184T | 254T | 184T | 254T | 184T | 254T | 184T | 254T |
| 18 | 213T | 254T | 213T | 254T | 213T | 254T | 213T | 254T |
| 20 | 213T | 254T | 213T | 254T | 213T | 254T | 213T | 254T |
| 22 | 215T | 256T | 215T | 256T | 215T | 256T | 215T | 256T |
| 24 | 215T | 284T | 215T | 284T | 215T | 284T | 215T | 284T |
| 27 | 254T | 284T | 254T | 284T | 254T | 284T | 254T | 284T |
| 30 | 254T | 324T | 254T | 324T | 254T | 324T | 254T | 324T |
| 33 | 256T | 256T | 256T | 256T | 215T | 215T | 215T | 215T |
| 36 | 286T | 286T | 286T | 286T | 256T | 256T | 256T | 256T |
| 40 | 324T | 324T | 324T | 324T | 286T | 286T | 256T | 256T |
| 44 | 326T | 326T | 326T | 326T | 286T | 286T | 256T | 256T |
| 49 | 326T | 326T | 326T | 326T | 326T | 326T | 286T | 286T |
| 54 | 365T | 365T | 365T | 365T | 326T | 326T | 326T | 326T |
| 60 | 365T | 365T | 365T | 365T | 365T | 365T | 326T | 326T |
| 66 | 404T | 404T | 404T | 404T | 404T | 404T | 365T | 365T |
| 73 | 404T | 404T | 404T | 404T | 404T | 404T | 404T | 404T |

Engineering Data

Motor Starting Torque

When selecting a motor for a centrifugal fan, the motor must be capable of driving the fan at operating speed and also capable of accelerating the fan wheel, shaft and drive to the operating speed.

The fan performance tables and curves in this catalog show the brake horsepower required to operate the fan once it is brought to operating speed. For applications requiring a large air volume at a low static pressure, the BHP required at the fan's operating RPM may not be sufficient to initially start the fan. If the time required to bring the fan to speed is excessive, the motor winding insulation can be damaged due to excessive temperature rise and the life of the motor seriously affected.

For a belt drive fan, the required motor starting torque capability can be expressed by the following formula:

$$WR_M^2 = WR_F^2 \times \left(\frac{FRPM}{MRPM} \right)^2 \times (1.1)$$

WR_M^2 = The moment of inertia that the motor must be capable of turning at the motor shaft, lb-ft²

WR_F^2 = The moment of inertia of the fan wheel, lb-ft²

FRPM = Fan RPM

MRPM = Motor RPM

V-Belt Drives

Constant Speed Drives

Advantages of constant speed drives include low vibration levels, ease of assembly and low cost. Fan speed changes can be accomplished in most cases simply by changing the motor pulley.

Constant speed drives are recommended over variable speed drives for applications that require motors 15 HP and larger, and all applications requiring 3600 RPM motors.

Variable Speed Drives

Variable speed drives allow the fan speed to be changed by adjusting the pitch diameter of the motor pulley. The power to the fan must be off and locked out, and the belts must be removed before manually adjusting the variable pitch pulley.

High Temperature Operating Limits

| Temperature | Material | Arrangement | Options Included |
|---------------|---|------------------------|--|
| -20 to 180°F | Steel Aluminum Stainless Steel | 3 | None |
| -20 to 200°F | Steel Aluminum Stainless Steel | 1, 9 & 10 | None |
| 201 to 500°F | Steel Stainless Steel Aluminum – limited to 250°F | 1, 9 & 10 | <ul style="list-style-type: none"> Heat Slinger Shaft Seal 1, 9 & 10 Motor Heat Shield on Arrangements 9 & 10 Airfoil Blade Weep Holes High Temperature Paint |
| 501 to 750°F | Steel Stainless Steel | 1, 9 & 10 BISW only | <ul style="list-style-type: none"> Heat Slinger Shaft Seal High Temperature Grease Motor Heat Shield on Arrangements 9 & 10 High Temperature Paint |
| 751 to 1000°F | 316 Stainless Steel | 1, 9 & 10 BISW only | All options shown above except paint Mill Finish |

Moments of Inertia (lb-ft²)

Moments of inertia are shown for steel wheels. Aluminum wheels are one-third of the value shown.

| Fan Size | Steel Backward Inclined Centrifugal Wheels | | | | Steel Airfoil Centrifugal Wheels | | |
|----------|--|----------|-----------|----------|----------------------------------|----------|-----------|
| | Class I | Class II | Class III | Class IV | Class I | Class II | Class III |
| 7-10 | 1.0 | 1.0 | — | — | — | — | — |
| 12 | 1.5 | 1.8 | 2.3 | — | — | — | — |
| 13 | 2.1 | 2.5 | 3.4 | — | — | — | — |
| 15 | 3.5 | 3.7 | 5.4 | — | — | — | — |
| 16 | 5.3 | 6.3 | 7.1 | — | — | — | — |
| 18 | 8.9 | 10.2 | 13.0 | 17.0 | 9.8 | 11.1 | 14.6 |
| 20 | 12.4 | 14.2 | 20.4 | 24 | 13.3 | 20.1 | 21.6 |
| 22 | 22.4 | 22.4 | 31.7 | 40 | 24.0 | 24.0 | 31.6 |
| 24 | 31.8 | 34.4 | 45.5 | 66 | 33.3 | 33.3 | 44.1 |
| 27 | 46.0 | 49.8 | 62.6 | 94 | 49.7 | 49.7 | 72.9 |
| 30 | 71.8 | 87.3 | 96.4 | 143 | 78.4 | 88.8 | 113 |
| 33 | 103 | 125 | 139 | 210 | 113 | 144 | 165 |
| 36 | 179 | 200 | 259 | 377 | 183 | 230 | 273 |
| 40 | 300 | 333 | 407 | 581 | 303 | 372 | 426 |
| 44 | 434 | 541 | 596 | 869 | 432 | 530 | 612 |
| 49 | 663 | 821 | 901 | 1350 | 741 | 816 | 935 |
| 54 | 1120 | 1350 | 1420 | 2025 | 1130 | 1340 | 1570 |
| 60 | 1920 | 2250 | 2400 | 3893 | 2100 | 2100 | 2390 |
| 66 | 3000 | 3200 | 3430 | 5511 | 2970 | 2970 | 3400 |
| 73 | 4480 | 4780 | 5120 | 7942 | 4430 | 4430 | 5070 |

Fan RPM Limitations

The maximum allowable wheel RPM shown on the fan performance pages are for fans of standard steel operating at 70°F. Since the strength of the fan wheel, shaft and bearings decreases with an increase in temperature, maximum allowable speeds must be reduced by the correction factors shown below.

| Maximum RPM Correction Factors For High Temperatures | | | |
|--|----------------|-------|--------|
| Temperature (°F) | Wheel Material | | |
| | Aluminum | Steel | 316 SS |
| 70 | 1.00 | 1.00 | 1.00 |
| 200 | 1.00 | .97 | .92 |
| 250 | .95 | .96 | .89 |
| 300 | | .95 | .87 |
| 400 | | .93 | .83 |
| 500 | | .90 | .80 |
| 600 | | .85 | .77 |
| 700 | | .80 | .75 |
| 800 | | .72 | .72 |
| 900 | | | .71 |
| 1000 | | | .69 |

Effect of Air Density — High Suction at Fan Inlet

The density used for fan selection is that which is measured at the fan inlet. When the inlet total pressure exceeds 10 inches in suction, the density at the fan inlet should be corrected by the following values. These values should be multiplied to the fan static pressure and the result used for the proper fan selection. With suction pressures less than 10 inches, this correction is typically ignored.

| Inlet P _t | Inlet Density Correction Factor |
|----------------------|---------------------------------|
| -10 in. | 1.03 |
| -14 in. | 1.04 |
| -18 in. | 1.05 |
| -22 in. | 1.06 |

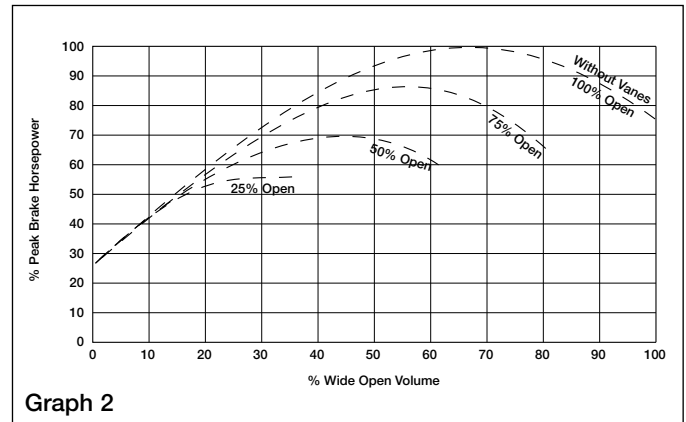
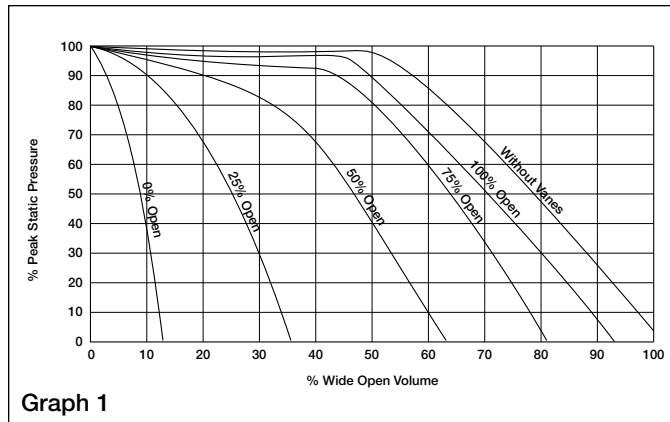
Example:

10 in. Ps x 1.03 = 10.3 in. Corrected Ps

Use 10.3 in. Ps to select fan in performance pages.

Inlet Vane Performance

As inlet vanes are closed, they impart a spin to the airflow in the direction of wheel rotation and reduce airflow, static pressure and brake horsepower as shown in the graphs below. The graphs show how CFM, static pressure and brake horsepower are affected as inlet vanes are modulated from 100% open to 0% open in a typical variable air volume system. Graph 3 provides RPM and BHP correction factors for fans equipped with inlet vanes.



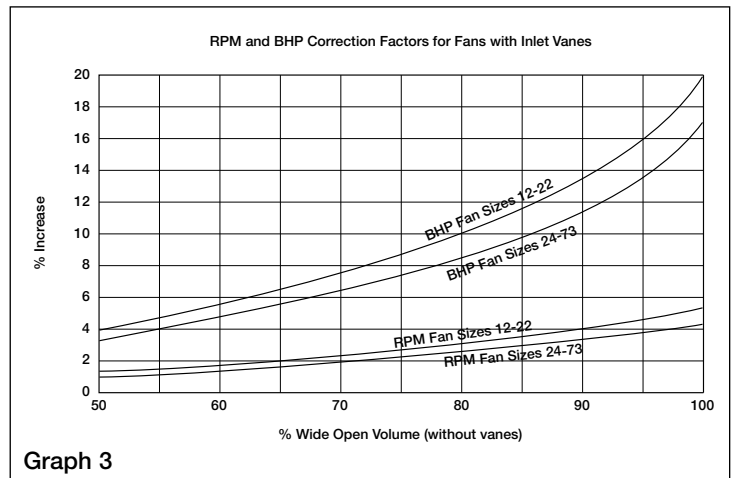
RPM & BHP Corrections

To compensate for pressure drop through inlet vanes, a percentage increase in fan RPM and BHP at full-load design conditions must be applied.

Enter graph 3 with “% wide open volume” (see page 9 for calculation of % WOV) and the appropriate fan size.

Move horizontally left to the “% increase” scale. Record the % increase.

Increase the selected fan RPM by the % increase shown. Also increase the BHP by the % increase shown.



Minimum Recommended Actuator Torque For Inlet Vanes (inch-lbs.) for Single-Width Fans

Use the table below to determine minimum torque required for an inlet vane actuator.

| Class | Fan Size | | | | | | | | | | | | | | | | | | |
|-------|----------|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
| | 12 | 13 | 15 | 16 | 18 | 20 | 22 | 24 | 27 | 30 | 33 | 36 | 40 | 44 | 49 | 54 | 60 | 66 | 73 |
| I | 26 | 30 | 33 | 38 | 47 | 57 | 68 | 110 | 130 | 140 | 160 | 180 | 270 | 320 | 370 | 430 | 500 | 600 | 700 |
| II | 38 | 43 | 49 | 58 | 73 | 88 | 110 | 160 | 180 | 200 | 230 | 260 | 420 | 490 | 580 | 680 | 800 | 960 | 1100 |
| III | 54 | 63 | 72 | 86 | 110 | 130 | 160 | 220 | 260 | 280 | 330 | 380 | 620 | 740 | 880 | 1000 | 1200 | 1500 | 1700 |

Engineering Data

Effect of Air Density – Temperature and Elevation

Ratings in the fan performance tables and curves of this catalog are based on standard air (clean, dry air with a density of 0.075 pounds per cubic foot, barometric pressure at sea level of 406.75 inches wg, temperature of 70°F). Selecting a fan to operate at conditions other than standard air requires an adjustment to both static pressure and brake horsepower.

One cubic foot of air has a constant volume regardless of temperature or elevation. However, air density changes with non-standard temperature or elevation. Therefore, when selecting a fan to operate at a non-standard air density using standard air density tables and curves, corrections must be made to parameters affected by air density. These parameters are static pressure and brake horsepower.

For example, a size 30 BISW centrifugal fan is to deliver 16,500 CFM at 8.1 inches wg static pressure. Elevation is 2000 feet, temperature is 150°F.

The 8.1 inches wg static pressure refers to the static pressure at the operating air density, in this case at 2000 feet, 150°F. Intuitively, we realize that at higher than standard elevations and temperatures, air density will be lower than standard. Therefore, we must determine what static pressure at standard air density will equate to 8.1 inches wg static pressure at our operating density. Since standard air density is greater than operating air density in this case, we would expect the corrected static pressure to be greater than the operating static pressure.

The accompanying table gives air density correction factors for non-standard temperatures and elevations.

The example below shows the relationship of fan performance at sea level and at 2000 ft. elevation and 150°F.

| Dry Air Density Correction Factor (I-P) | | | | | | | | | | | | | |
|---|--------|--------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Multiply Standard Air Density, 0.075 lb _m /ft ³ by the Factor to obtain Density at Condition p _b | | | | | | | | | | | | | |
| Altitude, (Z) | ft. | -1000 | Sea Level | 1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000 |
| Barometric Pressure (p _b) | in. Hg | 31.02 | 29.92 | 28.85 | 27.82 | 26.82 | 25.84 | 24.89 | 23.98 | 23.09 | 22.22 | 21.39 | 20.58 |
| | in. wg | 421.71 | 406.75 | 392.21 | 378.20 | 364.61 | 351.29 | 338.37 | 326.00 | 313.90 | 302.07 | 290.79 | 279.78 |
| Temperature °F, (t) | -40 | 1.309 | 1.262 | 1.217 | 1.174 | 1.131 | 1.090 | 1.050 | 1.012 | 0.974 | 0.937 | 0.902 | 0.868 |
| | 0 | 1.195 | 1.152 | 1.111 | 1.071 | 1.033 | 0.995 | 0.959 | 0.924 | 0.889 | 0.856 | 0.824 | 0.793 |
| | 40 | 1.099 | 1.060 | 1.022 | 0.986 | 0.950 | 0.915 | 0.882 | 0.850 | 0.818 | 0.787 | 0.758 | 0.729 |
| | 70 | 1.037 | 1.000 | 0.964 | 0.930 | 0.896 | 0.864 | 0.832 | 0.801 | 0.772 | 0.743 | 0.715 | 0.688 |
| | 100 | 0.981 | 0.946 | 0.913 | 0.880 | 0.848 | 0.817 | 0.787 | 0.759 | 0.730 | 0.703 | 0.677 | 0.651 |
| | 150 | 0.901 | 0.869 | 0.838 | 0.808 | 0.779 | 0.750 | 0.723 | 0.696 | 0.670 | 0.645 | 0.621 | 0.598 |
| | 200 | 0.832 | 0.803 | 0.774 | 0.747 | 0.720 | 0.693 | 0.668 | 0.644 | 0.620 | 0.596 | 0.574 | 0.552 |
| | 250 | 0.774 | 0.746 | 0.720 | 0.694 | 0.669 | 0.645 | 0.621 | 0.598 | 0.576 | 0.554 | 0.534 | 0.513 |
| | 300 | 0.723 | 0.697 | 0.672 | 0.648 | 0.625 | 0.602 | 0.580 | 0.559 | 0.538 | 0.518 | 0.498 | 0.480 |
| | 350 | 0.678 | 0.654 | 0.631 | 0.608 | 0.586 | 0.565 | 0.544 | 0.524 | 0.505 | 0.486 | 0.468 | 0.450 |
| | 400 | 0.639 | 0.616 | 0.594 | 0.573 | 0.552 | 0.532 | 0.513 | 0.494 | 0.475 | 0.458 | 0.440 | 0.424 |
| | 450 | 0.604 | 0.582 | 0.561 | 0.541 | 0.522 | 0.503 | 0.484 | 0.467 | 0.449 | 0.432 | 0.416 | 0.401 |
| | 500 | 0.572 | 0.552 | 0.532 | 0.513 | 0.495 | 0.477 | 0.459 | 0.442 | 0.426 | 0.410 | 0.395 | 0.380 |
| | 550 | 0.544 | 0.525 | 0.506 | 0.488 | 0.470 | 0.453 | 0.436 | 0.420 | 0.405 | 0.390 | 0.375 | 0.361 |
| | 600 | 0.518 | 0.500 | 0.482 | 0.465 | 0.448 | 0.432 | 0.416 | 0.401 | 0.386 | 0.371 | 0.357 | 0.344 |
| | 700 | 0.474 | 0.457 | 0.440 | 0.425 | 0.409 | 0.394 | 0.380 | 0.366 | 0.352 | 0.339 | 0.327 | 0.314 |
| | 800 | 0.436 | 0.420 | 0.405 | 0.391 | 0.377 | 0.363 | 0.350 | 0.337 | 0.324 | 0.312 | 0.301 | 0.289 |
| | 900 | 0.404 | 0.390 | 0.376 | 0.362 | 0.349 | 0.336 | 0.324 | 0.312 | 0.301 | 0.289 | 0.278 | 0.268 |
| | 1000 | 0.376 | 0.363 | 0.350 | 0.337 | 0.325 | 0.313 | 0.302 | 0.291 | 0.280 | 0.269 | 0.259 | 0.250 |

Adapted from AMCA Standard 99-09, section 0200, Charts and Tables, with written permission from Air Movement and Control Association International, Inc.

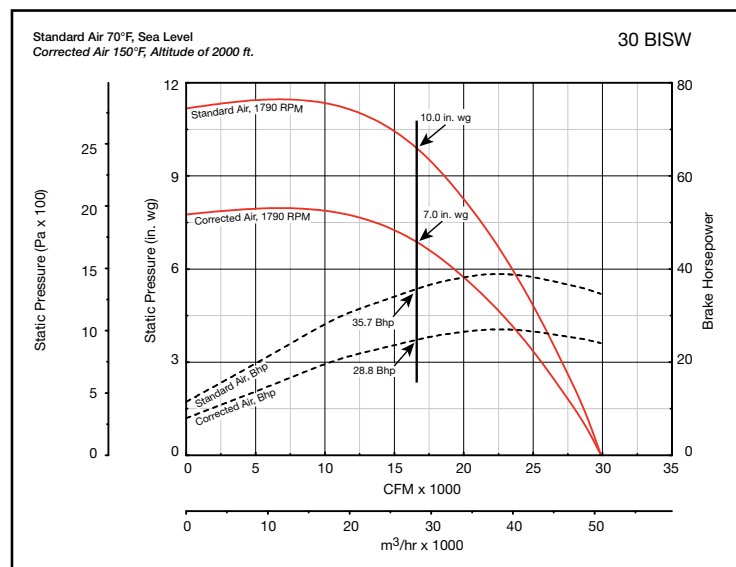
Example:

The following example shows how to properly select the fan described above:

1. Since the air volume delivered by the fan is not affected by density, airflow remains 16,500 CFM.
2. Determine correction factor from chart for an elevation of 2000 feet and air temperature of 150°F. The correction factor is 0.808.
3. Divide the specified operating static pressure by the correction factor to determine the standard air density equivalent static pressure.
Corrected static pressure = 8.1 inches wg ÷ 0.808 = 10.0 inches wg static pressure.
4. Refer to the fan performance table for a 30 BISW. At 16,500 CFM and 10.0 inches wg static pressure:
Fan RPM = 1790, BHP = 35.7
5. 1790 Fan RPM is required to produce the desired performance.
6. Since the horsepower selected refers to standard air density, this must be corrected to reflect actual BHP at the lighter operating air.
Operating BHP = Standard BHP x 0.808, or 35.7 x 0.808 = 28.8 BHP.

If a fan is selected to operate at high temperatures, the motor must be of sufficient horsepower to handle the increased load at any lower operating temperature where the air is more dense. Assume the air entering the 30 BISW fan at start-up is 0°F. For 0°F and 2000 feet elevation, the air density correction factor is 1.071

BHP at 0°F = 35.7 x 1.071 = 38.2, therefore, a 40 HP motor is required.



Effect of Installation on Performance

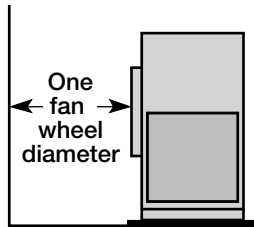
Ratings presented in the performance tables and curves of this catalog were derived from tests made in accordance with AMCA Standard 210 — “Laboratory Methods of Testing Fans for Ratings.” The AMCA test procedure utilizes an open inlet and a straight outlet duct to assure maximum static regain.

Any installation with inlet or discharge configurations that deviate from this standard may result in reduced fan performance. Restricted or unstable flow at the fan inlet can cause pre-rotation of incoming air or uneven loading of the fan wheel yielding large system losses and increased sound levels. Free discharge or turbulent flow in the discharge ductwork will also result in system effect losses.

Static pressure losses due to inlet and discharge conditions can be expressed in terms of system effect factors. The static pressure for selection of the fans equals the system static pressure plus the system effect factor.

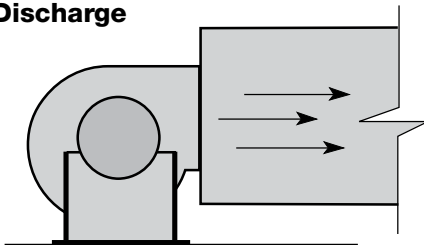
Some common inlet and discharge conditions which affect fan performance are:

Non-Ducted Inlet Clearance



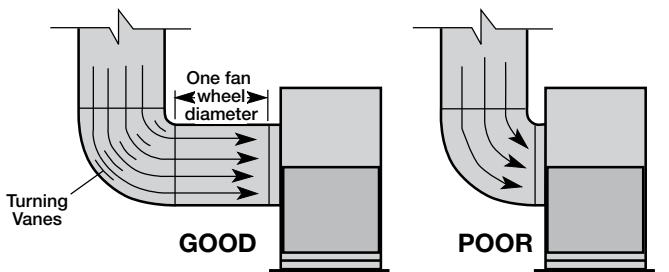
Installation of a fan with an open inlet too close to a wall or bulkhead will cause reduced fan performance. It is desirable to have one fan wheel diameter between the fan inlet and the wall. **System effect Curve #3** depicts the pressure loss for one-half wheel diameter clearance.

Free Discharge



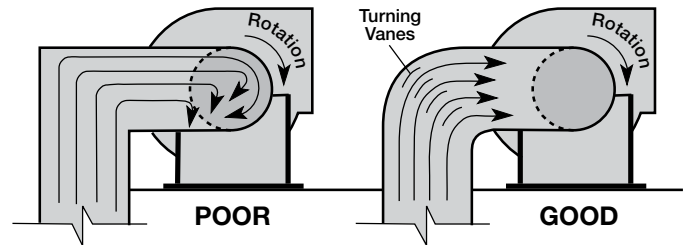
Free or abrupt discharge into a plenum results in a reduction in fan performance. The effect of static regain in discharge is not realized. **System effect Curve #2** depicts the pressure loss for free or abrupt discharge.

Inlet Duct Turns



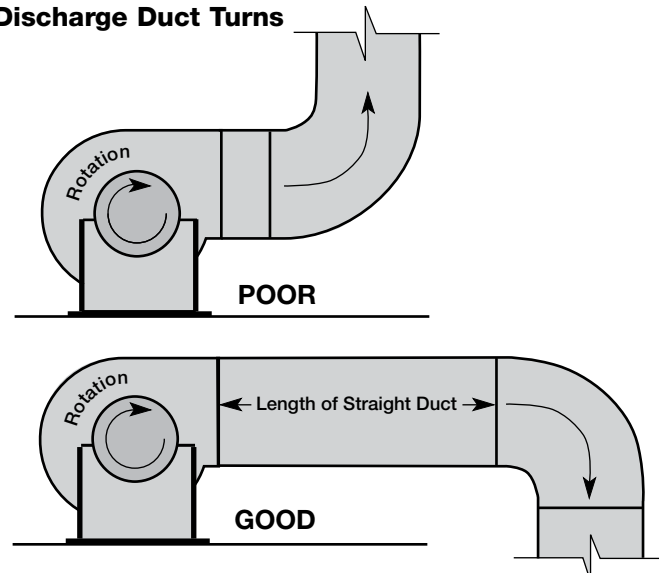
Installation of a duct turn or elbow too close to the fan inlet reduces fan performance because the air is loaded unevenly into the fan wheel. To achieve full fan performance there should be at least one fan wheel diameter between the turn or elbow and the fan inlet. **Curve #1** shows the system effect factor when less than one diameter is provided. Note: Use of an inlet box in lieu of a turn or elbow significantly reduces system effect.

Inlet Spin



Inlet spin is a frequent cause of reduced fan performance. The change in fan performance is a function of the intensity of spin and not easily defined. The best solution is proper duct design and airflow patterns.

Discharge Duct Turns

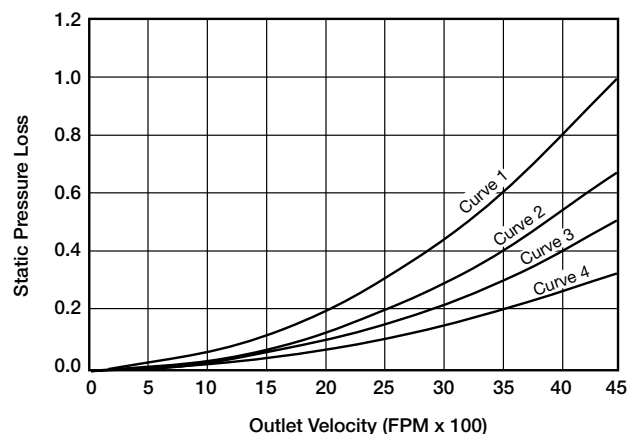


Duct turns located near the fan discharge should always be in the direction of the fan rotation.

Fan performance is reduced when duct turns are made immediately off the fan discharge. To achieve cataloged fan performance there should be at least three equivalent duct diameters of straight ductwork between the fan discharge and any duct turns. **Curve #4** shows the system effect factor for two diameters of straight ductwork and **Curve #2** for one diameter.

System Effect Factor Curves

Additional information on system effect factors can be found in AMCA Publication 201 — “Fans and Systems” and ASHRAE Handbooks.



Sound Performance Testing

AMCA Licensed Ratings

Sound tests of Model BISW and AFSW were conducted in Greenheck Fan Corporation's AMCA Accredited sound laboratory in accordance with AMCA Standard 300. Inlet and outlet sound ratings comply with AMCA Publication 311, qualifying these models to bear the AMCA Seal for Sound and Air Performance. The sound power levels published here can be compared directly with those of other similarly rated fans, or used as a baseline to determine sound levels in occupied spaces.

The sound data in this brochure is the result of extensive testing, which included both inlet and outlet sound tests on single-width centrifugal fans. Typically, fan manufacturers publish only inlet sound for single-width fans. The assumption they make is that outlet sound is identical to inlet sound. Sound data based on this assumption is simply not accurate enough for today's sound sensitive installations. This assumption also ignores duct end corrections for outlet sound.

Test Methods

AMCA Standard 300 clearly defines methods used to test fans in a reverberant sound test room. The reverberant room is specifically designed to allow sound waves to be dispersed evenly throughout the room. The walls have a hard surface that reflects sound and are positioned to prevent resonances which could result in quiet areas within the room.

Sound power cannot be directly measured. The test method is based on a Reference Sound Source (RSS) substitution for determining fan sound power. The RSS is a laboratory calibrated device which has a known sound power output level. The test fan is installed as shown below. The RSS is energized and the sound pressure levels in the reverberant room are recorded. The fan is then operated without the RSS and the fan sound pressure levels are recorded for various points of operation. Since the sound power levels of the RSS are known, the substitution method is used to determine the sound power levels of the fan. This method is illustrated in the following example.

Calculating Fan Sound Power

| Octave Band | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------------------------------|-----|-----|-----|-----|------|------|------|------|
| Center Frequency (Hz) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Calibrated RSS Sound Power (Lwr) | 82 | 81 | 81 | 81 | 81 | 81 | 79 | 78 |
| Measured RSS Sound Pressure (Lpq) | 70 | 74 | 75 | 76 | 75 | 74 | 69 | 61 |
| Difference (Lwr-Lpq) | 12 | 7 | 6 | 5 | 6 | 7 | 10 | 17 |
| Measured Fan Sound Pressure (Lpm) | 68 | 72 | 69 | 69 | 68 | 62 | 57 | 46 |
| Substitution (Lwr-Lpq, from above) | +12 | +7 | +6 | +5 | +6 | +7 | +10 | +17 |
| Fan Sound Power (Lw) | 80 | 79 | 75 | 74 | 74 | 69 | 67 | 63 |

Note: Sound level shown in dB

Test Setups

The illustrations show where the sound levels were measured with respect to the fan. Inlet sound was tested as in Figure 2 of AMCA Standard 300 and outlet sound was tested as in Figure 3. Inlet and outlet sound were determined in the same inlet and outlet configurations as the air tests. (Installation Type B - Free Inlet, Ducted Outlet).

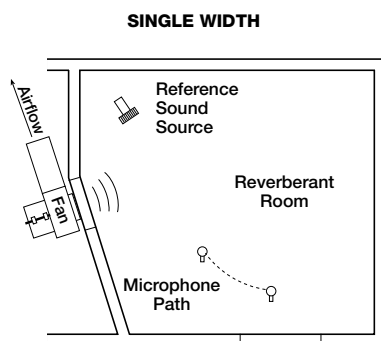


Figure 2:
AMCA Standard 300 - Fan Inlet Sound Testing
Installation Type B: Free Inlet, Ducted Outlet

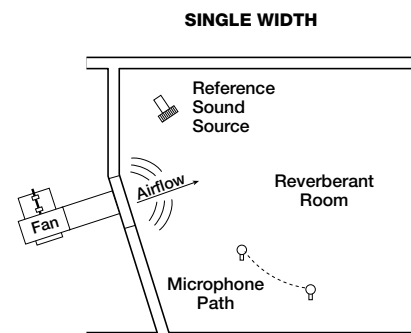


Figure 3:
AMCA Standard 300 - Fan Outlet Sound Testing
Installation Type B: Free Inlet, Ducted Outlet
(Ratings include the effects of duct end correction)

Interpreting Sound Data

Sound power levels in this catalog are presented as dB (re 10^{-12} watts) in each of the eight full octave bands with center frequencies from 63Hz to 8000 Hz. They are also presented as a single A-weighted sound power level, L_{WA} . Charts are provided covering the full range of fan speeds and percent wide open volume (% WOV) for each fan size. Outlet sound power data is based on a ducted outlet and therefore includes duct end reflection corrections.

Sound Performance Testing

Outlet Sound – Duct End Corrections

This correction accounts for sound that is reflected back into the duct where there is an abrupt termination of the duct.

AMCA Standard 300 requires that outlet sound power for fans with ducted outlets include Duct End Corrections. These corrections account for any sound power that may be present in the duct but is not measured in the reverberant room, because it is reflected back into the duct at the discharge.

Duct end corrections are included in all outlet sound power ratings.

| Duct End Corrections (dB) | | | |
|---------------------------|-------------------|--------|--------|
| Size | Single-Width Fans | | |
| | 63 Hz | 125 Hz | 250 Hz |
| 18 | 9 | 5 | 2 |
| 20 | 9 | 4 | 1 |
| 22 | 8 | 4 | 1 |
| 24 | 7 | 3 | |
| 27 | 6 | 3 | |
| 30 | 6 | 2 | |
| 33 | 5 | 2 | |
| 36 | 5 | 2 | |
| 40 | 4 | 1 | |
| 44 | 4 | 1 | |
| 49 | 3 | | |
| 54 | 3 | | |
| 60 | 2 | | |
| 66 | 2 | | |
| 73 | 2 | | |

Tolerance and Application

The certification process in AMCA Standard 311 calls for a precertification test to verify original test results. Check tests are also required every three (3) years for each model licensed. Test data must agree with the published sound power within the following tolerance levels:

| Octave Band | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------|----|-----|-----|-----|------|------|------|------|
| Center Frequency (Hz) | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| Tolerance | +6 | +3 | +3 | +3 | +3 | +3 | +3 | +3 |

These tolerance levels are a good indication of the variance that could occur from one fan or test setup to another. Once installed however, there are many other factors that can affect the sound power generated by a fan.

The lower frequencies (below 125 Hz) are greatly affected by vibration. Fan wheel balance, motor balance, drive alignment, etc., all affect the vibration level of the fan and can increase sound power in the 1st and 2nd octaves. When ducts are not properly isolated from the fan, these vibrations can be transmitted into the ducts, which can generate additional low frequency sound.

Sound power generated by a fan can also be influenced by system effects. System effects are pressure losses caused by inlet or outlet restrictions, or other conditions causing non-uniform airflow at the inlet or discharge of a fan (see AMCA Publication 201). Examples include inlet or outlet elbows too close to a fan, restricted inlets and fan accessories. While system effects can prevent fans from reaching their designed air performance, they can also result in increased sound power levels. Typically, system effects cause pressure fluctuations which influence the lower frequencies. Poor inlet conditions can also greatly increase sound levels at the blade pass frequency (BPF). The blade pass frequency refers to how often a blade or wheel fin passes a stationary location of the housing and can be calculated using the following equation:

Per AMCA: Blade Pass Frequency

$$\text{BPF (Hz)} = \left(\frac{\text{Fan RPM} \times \text{Number of Blades}}{60} \right)^2$$

NOTE: All BISW and AFSW wheels have nine blades.

Sound is becoming increasingly critical for most fan installations. Greenheck employs extensive research and testing to provide sound data that is as thorough and accurate as possible. However, sound pressure levels in occupied spaces are affected by the acoustical qualities of the space, distance from source to receiver, etc. Therefore, published sound power data can be used only as a baseline for determining the resulting sound pressure levels an occupant hears. While Greenheck provides products which meet published sound power levels, no manufacturer can be responsible for poor installations or system designs beyond their control. For further information on installation practices, see AMCA Publication 201, "Fans and Systems".

Sound Power

Sound power data is charted for the full range of RPM and percent wide open volume (% WOV) for each unit size.

The % WOV is a convenient way to indicate the operating point (pressure and CFM) for a given fan RPM. To calculate the % WOV for a given fan size, use the equation given on the performance page.

$$\% \text{ WOV} = \frac{\text{CFM} \times 100}{\text{RPM} \times K}$$

Use the following procedure to calculate sound data for a specific Fan RPM and % WOV:

1. Determine the eight sound power levels for the specified % WOV using the higher Fan RPM shown.
2. Determine the eight sound power levels for the specified % WOV using the lower Fan RPM shown.
3. Interpolate between the higher and lower sound power levels using the specified RPM.

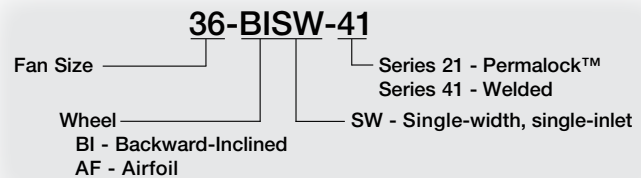
Sample Fan Selection

The purpose of these two pages is to demonstrate the manual centrifugal fan selection process. These pages also contain helpful tips to check your fan selection, as well as a step-by-step set of instructions on how to use this manual to properly select a centrifugal fan.

An important point to remember when manually selecting a centrifugal fan is that more than one fan is available to meet the desired performance (CFM and Ps). Selection criteria such as unit size, efficiency, speed, outlet velocity, horsepower, or construction material may also dictate which fan is chosen.

Sound and Air performance are identical for Greenheck Series 21 and 41 centrifugal fans.

The following example explains the model number code for both series of centrifugal fans.



A The Outlet Area is used for the Outlet Velocity (OV) calculation.

$$OV = \frac{CFM}{OA}$$

B The Maximum BHP can be calculated for a given fan RPM along the fan curve.

C The minimum starting HP is determined by the inertia (WR²) of the fan and motor. See page 4 for a complete motor starting torque formula.

D The maximum fan RPM for each fan class is listed.

E The maximum open motor frame size is listed for each fan class by arrangement. A complete HP and frame size chart is listed on page 3.

F Constant HP curves are plotted for each motor HP size.

G The % WOV is used to identify the fan operating point. The lines in the fan curve or the equation can be used.

36 BISW

Wheel Diameter = 36 1/2 in.

A Outlet Area = 7.66 ft.²

Tip Speed = 9.56 x RPM

B Maximum BHP = (RPM/381)³

C Minimum Starting HP = 1

Maximum RPM Class I = 1051

D Maximum RPM Class II = 1371

Maximum RPM Class III = 1727

Maximum RPM Class IV = 2082

E Maximum Open Motor Frame Size

| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 326T | 326T | 365T | NA |
| Arr. 10 | 286T | 286T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6100 | 796 | 339 | 0.67 | 449 | 1.36 | | | | | | | | | | | | | | | | |
| 7100 | 926 | 358 | 0.81 | 458 | 1.55 | 546 | 2.41 | | | | | | | | | | | | | | |
| 8100 | 1057 | 380 | 0.98 | 472 | 1.77 | 554 | 2.65 | 630 | 3.67 | | | | | | | | | | | | |
| 9100 | 1187 | 402 | 1.17 | 489 | 2.03 | 567 | 2.97 | 638 | 4.00 | 705 | 5.15 | | | | | | | | | | |
| 10100 | 1318 | 426 | 1.40 | 508 | 2.32 | 581 | 3.32 | 649 | 4.40 | 713 | 5.56 | 773 | 6.84 | 829 | 8.16 | | | | | | |
| 11100 | 1449 | 452 | 1.65 | 529 | 2.65 | 598 | 3.70 | 663 | 4.84 | 723 | 6.04 | 781 | 7.33 | 837 | 8.72 | 889 | 10.2 | | | | |
| 12100 | 1579 | 479 | 1.95 | 551 | 3.02 | 617 | 4.14 | 677 | 5.32 | 737 | 6.59 | 791 | 7.91 | 844 | 9.30 | 896 | 10.8 | 945 | 12.4 | 991 | 14.0 |
| 13100 | 1710 | 506 | 2.28 | 574 | 3.42 | 637 | 4.61 | 696 | 5.86 | 751 | 7.17 | 805 | 8.56 | 855 | 9.99 | 904 | 11.5 | 953 | 13.1 | 999 | 14.8 |
| 14100 | 1840 | 535 | 2.67 | 599 | 3.86 | 659 | 5.14 | 715 | 6.45 | 768 | 7.81 | 819 | 9.25 | 869 | 10.8 | 916 | 12.3 | 960 | 13.9 | 1006 | 15.6 |
| 15100 | 1971 | 564 | 3.10 | 624 | 4.36 | 681 | 5.70 | 736 | 7.09 | 787 | 8.52 | 834 | 9.99 | 883 | 11.6 | 930 | 13.2 | 973 | 14.8 | 1015 | 16.5 |
| 16100 | 2101 | 593 | 3.59 | 650 | 4.90 | 705 | 6.32 | 757 | 7.78 | 806 | 9.27 | 854 | 10.8 | 897 | 12.4 | 943 | 14.1 | 987 | 15.8 | 1029 | 17.5 |
| 17100 | 2232 | 623 | 4.13 | 677 | 5.50 | 729 | 6.98 | 779 | 8.52 | 827 | 10.1 | 873 | 11.7 | 917 | | 961 | 15.0 | 1001 | 16.8 | 1042 | 18.6 |
| 18100 | 2362 | 653 | 4.74 | 704 | 6.16 | 754 | 7.70 | 802 | 9.31 | 848 | 11.0 | 892 | 12.6 | 936 | | 980 | 16.1 | 1015 | 17.9 | 1056 | 19.8 |
| 19100 | 2493 | 683 | 5.41 | 732 | 6.86 | 780 | 8.43 | 828 | 10.0 | 874 | 11.8 | 918 | 13.5 | 962 | | 1005 | 17.2 | 1034 | 19.1 | 1070 | 21.0 |
| 20100 | 2624 | 714 | 6.15 | 761 | 7.68 | 806 | 9.34 | 850 | 11.1 | 893 | 12.9 | 935 | 14.7 | 976 | 16.6 | 1014 | 18.4 | 1053 | 20.4 | 1089 | 22.3 |
| 21100 | 2754 | 745 | 6.95 | 790 | 8.55 | 833 | 10.3 | 875 | 12.1 | 917 | 13.9 | 957 | 15.8 | 997 | 17.8 | 1035 | 19.7 | 1072 | 21.7 | 1108 | 23.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 13800 | 1801 | 1004 | 15.3 | 1048 | 17.1 | 1090 | 18.9 | 1130 | 20.7 | | | | | | | | | | | | |
| 14900 | 1945 | 1012 | 16.3 | 1056 | 18.1 | 1098 | 19.9 | 1138 | 21.8 | 1177 | 23.8 | 1214 | 25.7 | | | | | | | | |
| 16000 | 2088 | 1027 | 17.4 | 1067 | 19.2 | 1107 | 21.0 | 1147 | 23.0 | 1186 | 25.0 | 1223 | 27.1 | 1259 | 29.1 | 1294 | 31.2 | 1328 | 33.4 | | |
| 17100 | 2232 | 1042 | 18.6 | 1082 | 20.5 | 1119 | 22.4 | 1159 | 24.3 | 1194 | 26.3 | 1231 | 28.4 | 1267 | 30.6 | 1302 | 32.7 | 1336 | 34.9 | 1397 | 39.3 |
| 18200 | 2375 | 1058 | 19.9 | 1097 | 21.8 | 1135 | 23.8 | 1171 | 25.8 | 1206 | 27.8 | 1239 | 29.8 | 1276 | 32.0 | 1311 | 34.3 | 1345 | 36.6 | 1405 | 41.0 |
| 19300 | 2519 | 1074 | 21.2 | 1112 | 23.2 | 1150 | 25.3 | 1186 | 27.3 | 1221 | 29.4 | 1254 | 31.5 | 1287 | 33.7 | 1319 | 35.8 | 1353 | 38.2 | 1413 | 42.8 |
| 20400 | 2663 | 1095 | 22.7 | 1129 | 24.7 | 1165 | 26.8 | 1201 | 29.0 | 1236 | 31.1 | 1269 | 33.3 | 1302 | 35.5 | 1333 | 37.8 | 1364 | 40.0 | 1422 | 44.6 |
| 21500 | 2806 | 1116 | 24.3 | 1150 | 26.4 | 1184 | 28.5 | 1217 | 30.7 | 1251 | 32.9 | 1285 | 35.2 | 1317 | 37.5 | 1348 | 39.8 | 1379 | 42.1 | 1432 | 46.6 |
| 22600 | 2950 | 1136 | 26.0 | 1171 | 28.1 | 1204 | 30.3 | 1236 | 32.5 | 1267 | 34.7 | 1300 | 37.1 | 1332 | 39.5 | 1364 | 41.9 | 1394 | 44.3 | 1447 | 48.9 |
| 23700 | 3093 | 1159 | 27.7 | 1192 | 30.0 | 1225 | 32.2 | 1257 | 34.5 | 1287 | 36.8 | 1316 | 39.1 | 1348 | 41.6 | 1379 | 44.0 | 1409 | 46.5 | 1462 | 51.3 |
| 24800 | 3237 | 1183 | 29.6 | 1215 | 31.9 | 1246 | 34.2 | 1277 | 36.6 | 1308 | 39.0 | 1338 | 41.4 | 1366 | 43.8 | 1395 | 46.3 | 1425 | 48.9 | 1477 | 53.7 |
| 25900 | 3381 | 1206 | 31.5 | 1238 | 33.9 | 1269 | 36.3 | 1298 | 38.8 | 1329 | 41.2 | 1358 | 43.7 | 1387 | 46.2 | 1415 | 48.7 | 1441 | 51.3 | 1492 | 56.3 |
| 27000 | 3524 | 1230 | 33.6 | 1262 | 36.1 | 1292 | 38.5 | 1321 | 41.0 | 1350 | 43.6 | 1379 | 46.1 | 1407 | 48.7 | 1435 | 51.3 | 1462 | 54.0 | 1507 | 58.9 |
| 28100 | 3668 | 1255 | 35.8 | 1286 | 38.3 | 1316 | 40.9 | 1345 | 43.5 | 1373 | 46.1 | 1400 | 48.7 | 1428 | 51.4 | 1456 | 54.0 | 1483 | 56.7 | 1526 | 61.7 |
| 29200 | 3812 | 1282 | 38.0 | 1310 | 40.7 | 1340 | 43.3 | 1368 | 46.0 | 1396 | 48.7 | 1423 | 51.4 | 1450 | 54.1 | 1477 | 56.9 | 1503 | 59.6 | 1548 | 64.7 |
| 30300 | 3955 | 1308 | 40.4 | 1336 | 43.1 | 1364 | 45.9 | 1392 | 48.6 | 1420 | 51.4 | 1447 | 54.2 | 1473 | 57.0 | 1499 | 59.8 | 1524 | 62.6 | 1568 | 67.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 24500 | 3198 | 1473 | 53.0 | 1527 | 58.2 | 1580 | 63.5 | 1630 | 68.9 | 1682 | 74.5 | 1734 | 80.4 | 1784 | 86.4 | 1832 | 92.5 | 1879 | 98.7 | 1970 | 111 |
| 25700 | 3355 | 1489 | 55.8 | 1544 | 61.1 | 1596 | 66.6 | 1646 | 72.1 | 1695 | 77.7 | 1741 | 83.3 | 1793 | 89.6 | 1841 | 95.8 | 1888 | 102 | 1978 | 115 |
| 26900 | 3511 | 1506 | 58.6 | 1561 | 64.2 | 1613 | 69.8 | 1663 | 75.5 | 1711 | 81.2 | 1757 | 87.0 | 1802 | 92.9 | 1850 | 99.2 | 1897 | 106 | 1987 | 119 |
| 28100 | 3668 | 1526 | 61.7 | 1577 | 67.3 | 1629 | 73.1 | 1679 | 78.9 | 1727 | 84.8 | 1774 | 90.8 | 1818 | 96.8 | 1862 | 103 | 1906 | 109 | 1996 | 123 |
| 29300 | 3825 | 1549 | 65.0 | 1597 | 70.6 | 1646 | 76.4 | 1696 | 82.5 | 1744 | 88.5 | 1790 | 94.7 | 1835 | 101 | 1878 | 107 | 1920 | 114 | 2005 | 127 |
| 30500 | 3981 | 1572 | 68.4 | 1620 | 74.2 | 1665 | 80.1 | 1712 | 86.1 | 1760 | 92.4 | 1806 | 98.7 | 1851 | 105 | 1894 | 112 | 1936 | 118 | 2017 | 131 |
| 31700 | 4138 | 1594 | 72.0 | 1642 | 78.0 | 1688 | 84.0 | 1731 | 90.0 | 1777 | 96.3 | 1823 | 103 | 1867 | 109 | 1910 | 116 | 1952 | 123 | 2033 | 136 |
| 32900 | 4295 | 1618 | 75.7 | 1665 | 81.9 | 1710 | 88.0 | 1753 | 94.3 | 1796 | 101 | 1839 | 107 | 1884 | 114 | 1927 | 121 | 1969 | 127 | 2049 | 141 |
| 34100 | 4451 | 1643 | 79.6 | 1687 | 85.9 | 1733 | 92.2 | 1776 | 98.6 | 1818 | 105 | 1859 | 112 | 1900 | 118 | 1943 | 125 | 1985 | 132 | | |
| 35300 | 4608 | 1668 | 83.7 | 1712 | 90.1 | 1755 | 96.6 | 1799 | 103 | 1841 | 110 | 1881 | 116 | 1920 | 123 | 1960 | 130 | 2002 | 137 | | |
| 36500 | 4765 | 1694 | 87.9 | 1738 | 94.5 | 1780 | 101 | 1821 | 108 | 1863 | 115 | 1904 | 122 | 1941 | 128 | 1980 | 135 | 2018 | 142 | | |
| 37700 | 4921 | 1720 | 92.3 | 1763 | 99.1 | 1805 | 106 | 1845 | 113 | 1886 | 120 | 1926 | 127 | 1965 | 134 | 2002 | 141 | 2039 | 148 | | |
| 38900 | 5078 | 1746 | 96.9 | 1789 | 104 | 1830 | 111 | 1870 | 118 | 1909 | 125 | 1948 | 132 | 1987 | 139 | 2025 | 147 | 2061 | 154 | | |
| 40100 | 5234 | 1773 | 102 | 1815 | 109 | 1856 | 116 | 1896 | 123 | 1934 | 130 | 1971 | 138 | 2010 | 145 | 2047 | 152 | | | | |
| 41300 | 5391 | 1802 | 106 | 1840 | 114 | 1882 | 121 | 1921 | 128 | 1959 | 136 | 1996 | 143 | 2032 | 151 | | | | | | |
| 42500 | 5548 | 1831 | 112 | 1869 | 119 | 1907 | 127 | 1947 | 134 | 1985 | 142 | 2022 | 149 | 2052 | 157 | | | | | | |

Fan Selection Procedure

STEP 1

Enter the performance table with the desired CFM and Ps. Obtain the fan RPM, BHP and Class.

EXAMPLE

For this example, we will use 19,100 CFM at 4.0 Ps. This gives us a fan RPM of 995, requiring 17.2 BHP, with Class I construction.

NOTE: If your specific fan selection requires inlet vanes or if the fan operating point is not at standard air (70°F), refer to the inlet vane and air density correction factor tables found on pages 5 and 6.

STEP 2

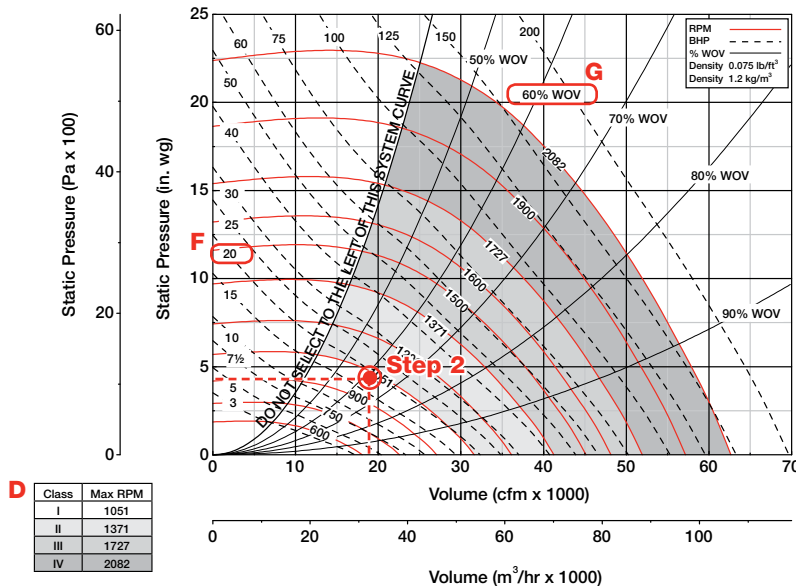
Enter the Fan Curve with the desired CFM and Ps. Obtain the fan operating point, % WOV, Motor HP and verify fan class by curve shading.

EXAMPLE

For this example, the fan operating point is at 60% WOV using a 20 HP motor.

NOTE: This motor size can be compared to the Maximum Open Frame Size chart (E) found above the performance table.

36 BISW



STEP 3

Enter the Fan Sound Table with the Fan RPM from the performance table and the % WOV from the fan curve. Obtain the eight octave ratings for inlet (L_{wi}) and Outlet (L_{wo}) Sound Power.

EXAMPLE

For this example, the eight octave ratings can be calculated by interpolating between the data circled in the table.

NOTE: The exact % WOV for your desired performance can be found using the equation above the Sound Power tables if it is not published. The eight octave ratings can then be found using the interpolation instructions found in the Sound Performance section on pages 8 and 9.

$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 30.1)$$

Sound Power [dB Ref 10⁻¹² watts]

| | | Inlet Sound Power, L_{wi} | | | | | | | | |
|------|------|-----------------------------|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wiA} |
| 300 | 100 | 80 | 73 | 68 | 62 | 57 | 49 | 41 | 36 | 65 |
| | 80 | 79 | 72 | 65 | 58 | 55 | 46 | 39 | 35 | 63 |
| | 60 | 79 | 71 | 64 | 58 | 57 | 46 | 39 | 34 | 63 |
| | 50 | 79 | 70 | 65 | 59 | 58 | 48 | 41 | 36 | 63 |
| | 40 | 78 | 70 | 65 | 60 | 59 | 49 | 42 | 37 | 64 |
| 600 | 100 | 99 | 93 | 85 | 78 | 79 | 73 | 64 | 59 | 84 |
| | 80 | 96 | 90 | 81 | 74 | 74 | 68 | 62 | 58 | 80 |
| | 60 | 93 | 87 | 78 | 72 | 74 | 68 | 65 | 61 | 79 |
| | 50 | 90 | 85 | 76 | 72 | 73 | 68 | 65 | 61 | 78 |
| | 40 | 95 | 87 | 79 | 73 | 74 | 69 | 66 | 62 | 79 |
| 800 | 100 | 95 | 100 | 92 | 86 | 86 | 83 | 73 | 68 | 91 |
| | 80 | 91 | 101 | 88 | 82 | 80 | 77 | 70 | 66 | 88 |
| | 60 | 89 | 95 | 84 | 79 | 79 | 76 | 73 | 69 | 85 |
| | 50 | 89 | 95 | 83 | 78 | 78 | 75 | 73 | 69 | 84 |
| | 40 | 98 | 93 | 86 | 80 | 79 | 76 | 74 | 72 | 86 |
| 1200 | 100 | 102 | 108 | 104 | 97 | 95 | 94 | 87 | 81 | 102 |
| | 80 | 97 | 106 | 100 | 93 | 91 | 88 | 83 | 78 | 98 |
| | 60 | 95 | 103 | 97 | 89 | 88 | 86 | 83 | 81 | 95 |
| | 50 | 97 | 103 | 97 | 88 | 87 | 85 | 84 | 81 | 95 |
| | 40 | 106 | 107 | 101 | 92 | 89 | 86 | 85 | 82 | 97 |
| 1727 | 100 | 109 | 115 | 119 | 108 | 103 | 102 | 99 | 92 | 113 |
| | 80 | 103 | 111 | 117 | 104 | 99 | 98 | 94 | 88 | 110 |
| | 60 | 101 | 108 | 113 | 101 | 96 | 95 | 93 | 90 | 107 |
| | 50 | 103 | 109 | 114 | 100 | 95 | 94 | 92 | 91 | 107 |
| | 40 | 112 | 116 | 117 | 104 | 98 | 95 | 93 | 91 | 110 |
| 2082 | 100 | 112 | 118 | 122 | 116 | 109 | 107 | 104 | 98 | 118 |
| | 80 | 107 | 114 | 119 | 112 | 105 | 102 | 99 | 94 | 114 |
| | 60 | 104 | 111 | 116 | 108 | 101 | 99 | 97 | 95 | 111 |
| | 50 | 106 | 113 | 117 | 108 | 101 | 98 | 97 | 95 | 111 |
| | 40 | 115 | 120 | 121 | 112 | 103 | 100 | 98 | 96 | 115 |

| | | Outlet Sound Power, L_{wo} | | | | | | | | |
|------|------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{woA} |
| 300 | 100 | 84 | 80 | 71 | 67 | 62 | 54 | 47 | 43 | 70 |
| | 80 | 81 | 79 | 70 | 64 | 61 | 52 | 46 | 42 | 68 |
| | 60 | 79 | 78 | 69 | 64 | 61 | 52 | 46 | 43 | 68 |
| | 50 | 79 | 78 | 69 | 64 | 61 | 52 | 46 | 43 | 68 |
| | 40 | 79 | 78 | 69 | 64 | 61 | 52 | 47 | 44 | 68 |
| 600 | 100 | 100 | 95 | 87 | 83 | 81 | 76 | 68 | 65 | 87 |
| | 80 | 96 | 91 | 83 | 79 | 76 | 71 | 64 | 60 | 83 |
| | 60 | 95 | 89 | 80 | 76 | 74 | 69 | 64 | 61 | 80 |
| | 50 | 95 | 90 | 80 | 76 | 74 | 69 | 65 | 64 | 80 |
| | 40 | 94 | 89 | 79 | 75 | 73 | 68 | 64 | 64 | 80 |
| 800 | 100 | 104 | 106 | 94 | 91 | 88 | 86 | 78 | 74 | 95 |
| | 80 | 98 | 102 | 89 | 87 | 83 | 80 | 73 | 69 | 91 |
| | 60 | 96 | 101 | 87 | 84 | 80 | 77 | 72 | 69 | 89 |
| | 50 | 96 | 99 | 86 | 83 | 79 | 76 | 72 | 70 | 87 |
| | 40 | 97 | 97 | 86 | 83 | 78 | 75 | 72 | 70 | 86 |
| 1200 | 100 | 111 | 112 | 107 | 102 | 99 | 97 | 92 | 85 | 106 |
| | 80 | 108 | 109 | 103 | 98 | 94 | 91 | 86 | 80 | 101 |
| | 60 | 102 | 107 | 101 | 95 | 91 | 88 | 84 | 80 | 99 |
| | 50 | 103 | 106 | 100 | 94 | 90 | 87 | 84 | 80 | 98 |
| | 40 | 104 | 105 | 99 | 93 | 89 | 85 | 83 | 80 | 97 |
| 1727 | 100 | 117 | 120 | 121 | 112 | 108 | 106 | 103 | 97 | 116 |
| | 80 | 114 | 116 | 118 | 108 | 104 | 101 | 97 | 91 | 113 |
| | 60 | 109 | 112 | 117 | 105 | 101 | 97 | 94 | 90 | 110 |
| | 50 | 110 | 113 | 115 | 104 | 100 | 96 | 93 | 90 | 109 |
| | 40 | 111 | 113 | 114 | 103 | 99 | 95 | 92 | 90 | 108 |
| 2082 | 100 | 120 | 123 | 125 | 119 | 113 | 110 | 108 | 102 | 121 |
| | 80 | 117 | 120 | 122 | 115 | 109 | 106 | 102 | 97 | 117 |
| | 60 | 112 | 115 | 120 | 112 | 106 | 102 | 99 | 95 | 115 |
| | 50 | 113 | 116 | 119 | 111 | 105 | 101 | 98 | 95 | 114 |
| | 40 | 114 | 116 | 118 | 111 | 104 | 100 | 97 | 95 | 113 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

7 BISW

Wheel Diameter = 10½ in.

Outlet Area = 0.64 ft²

Tip Speed = 2.75 x RPM

Maximum BHP = (RPM/3659)³

Minimum Starting HP = ¼

Maximum RPM Class I = 4050

Maximum RPM Class II = 4500

Maximum Open Motor Frame Size

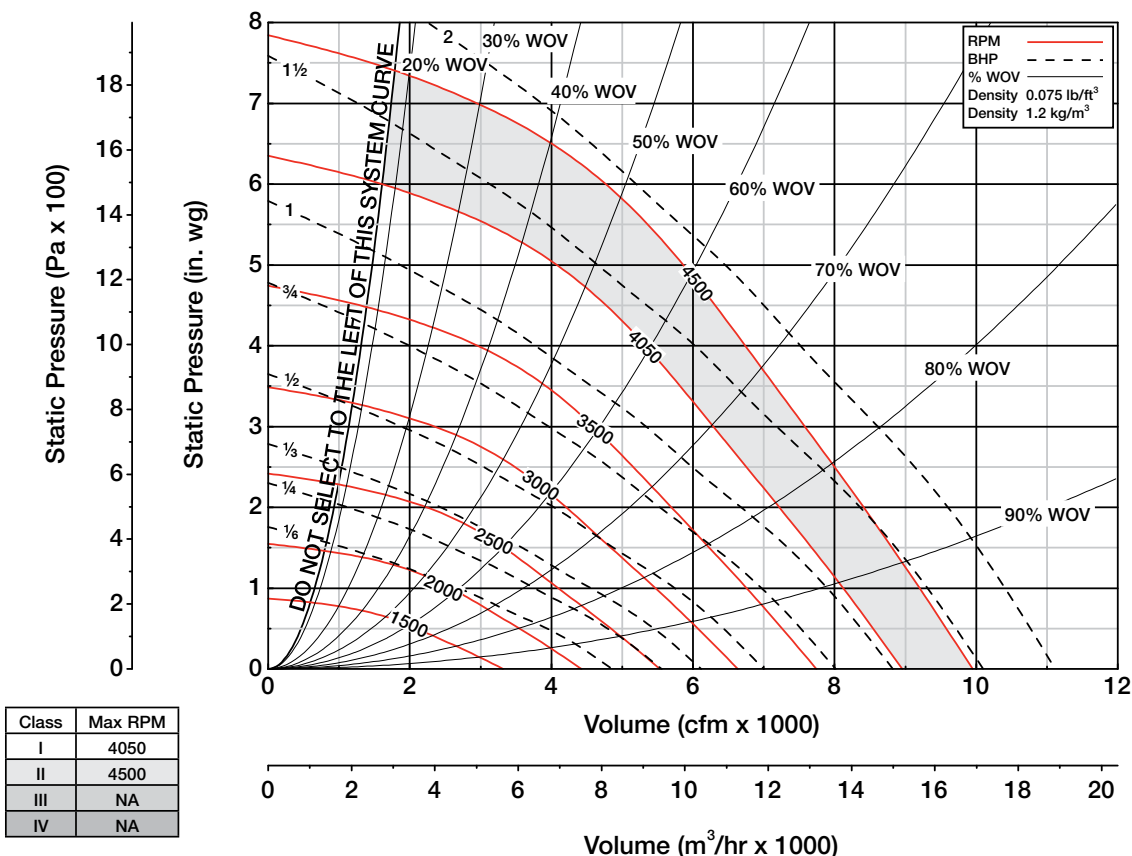
| Class | I | II |
|---------|------|------|
| Arr. 9 | 184T | 184T |
| Arr. 10 | 145T | 184T |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|-----|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 50 | 77 | 844 | 0.01 | 1172 | 0.03 | | | | | | | | | | | | | | | | |
| 75 | 116 | 878 | 0.01 | 1198 | 0.03 | 1450 | 0.06 | 1662 | 0.09 | 1850 | 0.12 | | | | | | | | | | |
| 100 | 155 | 928 | 0.02 | 1233 | 0.04 | 1478 | 0.06 | 1688 | 0.09 | 1875 | 0.13 | 2044 | 0.16 | 2200 | 0.20 | 2345 | 0.24 | 2481 | 0.29 | | |
| 125 | 193 | 989 | 0.02 | 1276 | 0.04 | 1513 | 0.07 | 1720 | 0.10 | 1903 | 0.14 | 2070 | 0.17 | 2226 | 0.21 | 2370 | 0.26 | 2507 | 0.30 | 2635 | 0.35 |
| 150 | 232 | 1064 | 0.02 | 1333 | 0.05 | 1556 | 0.08 | 1756 | 0.11 | 1938 | 0.15 | 2103 | 0.18 | 2254 | 0.23 | 2396 | 0.27 | 2532 | 0.32 | 2661 | 0.37 |
| 175 | 271 | 1147 | 0.03 | 1393 | 0.05 | 1612 | 0.09 | 1801 | 0.12 | 1974 | 0.16 | 2138 | 0.20 | 2290 | 0.24 | 2431 | 0.29 | 2563 | 0.33 | 2689 | 0.38 |
| 200 | 310 | 1232 | 0.03 | 1468 | 0.06 | 1670 | 0.09 | 1857 | 0.13 | 2024 | 0.17 | 2175 | 0.21 | 2325 | 0.25 | 2466 | 0.30 | 2598 | 0.35 | 2724 | 0.40 |
| 225 | 348 | 1321 | 0.04 | 1547 | 0.07 | 1738 | 0.10 | 1915 | 0.14 | 2080 | 0.18 | 2230 | 0.23 | 2369 | 0.27 | 2502 | 0.32 | 2634 | 0.37 | 2759 | 0.42 |
| 250 | 387 | 1412 | 0.05 | 1630 | 0.08 | 1813 | 0.12 | 1978 | 0.16 | 2137 | 0.20 | 2286 | 0.24 | 2424 | 0.29 | 2553 | 0.34 | 2675 | 0.39 | 2795 | 0.44 |
| 275 | 426 | 1505 | 0.06 | 1716 | 0.09 | 1893 | 0.13 | 2052 | 0.17 | 2198 | 0.21 | 2344 | 0.26 | 2481 | 0.31 | 2609 | 0.36 | 2730 | 0.41 | 2845 | 0.47 |
| 300 | 465 | 1601 | 0.07 | 1803 | 0.11 | 1976 | 0.15 | 2129 | 0.19 | 2272 | 0.23 | 2404 | 0.28 | 2538 | 0.33 | 2666 | 0.39 | 2786 | 0.44 | 2900 | 0.50 |
| 325 | 503 | 1699 | 0.08 | 1893 | 0.12 | 2061 | 0.16 | 2211 | 0.21 | 2348 | 0.25 | 2478 | 0.30 | 2599 | 0.36 | 2724 | 0.41 | 2843 | 0.47 | 2957 | 0.53 |
| 350 | 542 | 1798 | 0.10 | 1984 | 0.14 | 2147 | 0.18 | 2294 | 0.23 | 2428 | 0.27 | 2554 | 0.33 | 2674 | 0.38 | 2786 | 0.44 | 2901 | 0.50 | 3014 | 0.56 |
| 375 | 581 | 1899 | 0.11 | 2077 | 0.15 | 2236 | 0.20 | 2379 | 0.25 | 2510 | 0.30 | 2632 | 0.35 | 2749 | 0.41 | 2861 | 0.47 | 2967 | 0.53 | 3073 | 0.59 |
| 400 | 620 | 2000 | 0.13 | 2171 | 0.17 | 2325 | 0.22 | 2465 | 0.27 | 2594 | 0.33 | 2714 | 0.38 | 2827 | 0.44 | 2936 | 0.50 | 3041 | 0.56 | 3141 | 0.62 |
| 425 | 568 | 2103 | 1.15 | 2268 | 0.19 | 2416 | 0.24 | 2553 | 0.30 | 2679 | 0.36 | 2797 | 0.41 | 2908 | 0.47 | 3013 | 0.53 | 3117 | 0.59 | 3216 | 0.66 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|-----|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.75 | | 3.00 | | 3.25 | | 3.50 | | 3.75 | | 4.00 | | 4.25 | | 4.50 | | 4.75 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 125 | 193 | 2758 | 0.40 | 2875 | 0.45 | 2987 | 0.50 | 3095 | 0.56 | | | | | | | | | | | | |
| 150 | 232 | 2783 | 0.42 | 2900 | 0.47 | 3012 | 0.52 | 3120 | 0.58 | 3225 | 0.64 | 3325 | 0.70 | 3423 | 0.76 | 3518 | 0.82 | 3610 | 0.89 | 3700 | 0.95 |
| 175 | 271 | 2809 | 0.44 | 2926 | 0.49 | 3038 | 0.55 | 3146 | 0.60 | 3250 | 0.66 | 3351 | 0.72 | 3448 | 0.79 | 3543 | 0.85 | 3636 | 0.92 | 3725 | 0.99 |
| 200 | 310 | 2843 | 0.46 | 2957 | 0.51 | 3066 | 0.57 | 3172 | 0.63 | 3276 | 0.69 | 3376 | 0.75 | 3474 | 0.82 | 3569 | 0.88 | 3661 | 0.95 | 3751 | 1.02 |
| 225 | 348 | 2878 | 0.48 | 2992 | 0.54 | 3101 | 0.59 | 3206 | 0.65 | 3308 | 0.72 | 3406 | 0.78 | 3501 | 0.85 | 3594 | 0.91 | 3686 | 0.98 | 3776 | 1.05 |
| 250 | 387 | 2914 | 0.50 | 3027 | 0.56 | 3137 | 0.62 | 3242 | 0.68 | 3343 | 0.75 | 3441 | 0.81 | 3536 | 0.88 | 3629 | 0.95 | 3719 | 1.02 | 3806 | 1.09 |
| 275 | 426 | 2954 | 0.53 | 3063 | 0.59 | 3172 | 0.65 | 3277 | 0.71 | 3378 | 0.78 | 3476 | 0.84 | 3571 | 0.91 | 3664 | 0.98 | 3754 | 1.05 | 3841 | 1.13 |
| 300 | 465 | 3009 | 0.56 | 3113 | 0.62 | 3213 | 0.68 | 3313 | 0.74 | 3414 | 0.81 | 3512 | 0.88 | 3607 | 0.95 | 3699 | 1.02 | 3789 | 1.09 | 3876 | 1.17 |
| 325 | 503 | 3065 | 0.59 | 3169 | 0.65 | 3269 | 0.71 | 3365 | 0.78 | 3458 | 0.84 | 3548 | 0.91 | 3643 | 0.98 | 3735 | 1.06 | 3824 | 1.13 | 3912 | 1.21 |
| 350 | 542 | 3122 | 0.62 | 3225 | 0.68 | 3325 | 0.75 | 3421 | 0.82 | 3513 | 0.88 | 3603 | 0.95 | 3690 | 1.03 | 3775 | 1.10 | 3860 | 1.17 | 3948 | 1.25 |
| 375 | 581 | 3180 | 0.65 | 3283 | 0.72 | 3382 | 0.79 | 3477 | 0.86 | 3569 | 0.93 | 3659 | 1.00 | 3746 | 1.07 | 3830 | 1.15 | 3912 | 1.22 | 3992 | 1.30 |
| 400 | 620 | 3238 | 0.69 | 3341 | 0.76 | 3439 | 0.83 | 3534 | 0.90 | 3626 | 0.97 | 3715 | 1.04 | 3802 | 1.12 | 3886 | 1.20 | 3968 | 1.27 | 4048 | 1.35 |
| 425 | 658 | 3311 | 0.73 | 3402 | 0.80 | 3497 | 0.87 | 3592 | 0.94 | 3683 | 1.02 | 3772 | 1.09 | 3858 | 1.17 | 3942 | 1.25 | 4024 | 1.33 | 4104 | 1.41 |
| 450 | 697 | 3385 | 0.77 | 3476 | 0.84 | 3563 | 0.91 | 3650 | 0.99 | 3741 | 1.06 | 3830 | 1.14 | 3916 | 1.22 | 3999 | 1.30 | 4081 | 1.38 | 4160 | 1.47 |
| 475 | 736 | 3461 | 0.81 | 3551 | 0.88 | 3638 | 0.96 | 3722 | 1.04 | 3803 | 1.11 | 3888 | 1.19 | 3974 | 1.27 | 4057 | 1.36 | 4138 | 1.44 | 4217 | 1.53 |
| 500 | 775 | 3539 | 0.86 | 3627 | 0.93 | 3713 | 1.01 | 3796 | 1.09 | 3877 | 1.17 | 3956 | 1.25 | 4032 | 1.33 | 4115 | 1.41 | 4196 | 1.50 | 4275 | 1.59 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|-----|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|
| | | 5.25 | | 5.50 | | 5.75 | | 6.00 | | 6.25 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 175 | 271 | 3813 | 1.06 | 3899 | 1.13 | 3982 | 1.20 | 4064 | 1.27 | 4144 | 1.35 | 4223 | 1.42 | 4376 | 1.58 | | | | | | |
| 200 | 310 | 3838 | 1.09 | 3924 | 1.16 | 4008 | 1.23 | 4089 | 1.31 | 4170 | 1.39 | 4248 | 1.46 | 4401 | 1.62 | | | | | | |
| 225 | 348 | 3864 | 1.12 | 3949 | 1.20 | 4033 | 1.27 | 4115 | 1.35 | 4195 | 1.43 | 4273 | 1.50 | 4426 | 1.67 | | | | | | |
| 250 | 387 | 3892 | 1.16 | 3975 | 1.23 | 4059 | 1.31 | 4140 | 1.39 | 4220 | 1.47 | 4299 | 1.55 | 4452 | 1.71 | | | | | | |
| 275 | 426 | 3926 | 1.20 | 4010 | 1.28 | 4091 | 1.35 | 4171 | 1.43 | 4249 | 1.51 | 4326 | 1.59 | 4477 | 1.76 | | | | | | |
| 300 | 465 | 3962 | 1.24 | 4045 | 1.32 | 4126 | 1.40 | 4206 | 1.48 | 4284 | 1.56 | 4361 | 1.64 | | | | | | | | |
| 325 | 503 | 3997 | 1.29 | 4080 | 1.37 | 4162 | 1.45 | 4241 | 1.53 | 4319 | 1.61 | 4396 | 1.69 | | | | | | | | |
| 350 | 542 | 4033 | 1.33 | 4116 | 1.41 | 4197 | 1.49 | 4277 | 1.58 | 4355 | 1.66 | 4431 | 1.75 | | | | | | | | |
| 375 | 581 | 4071 | 1.38 | 4152 | 1.46 | 4233 | 1.54 | 4312 | 1.63 | 4390 | 1.71 | 4467 | 1.80 | | | | | | | | |
| 400 | 620 | 4126 | 1.43 | 4202 | 1.51 | 4277 | 1.60 | 4350 | 1.68 | 4426 | 1.77 | | | | | | | | | | |
| 425 | 658 | 4181 | 1.49 | 4257 | 1.57 | 4332 | 1.66 | 4405 | 1.74 | 4476 | 1.83 | | | | | | | | | | |
| 450 | 697 | 4238 | 1.55 | 4313 | 1.63 | 4388 | 1.72 | 4460 | 1.81 | | | | | | | | | | | | |
| 475 | 736 | 4294 | 1.61 | 4370 | 1.70 | 4444 | 1.79 | | | | | | | | | | | | | | |
| 500 | 775 | 4352 | 1.68 | 4427 | 1.76 | | | | | | | | | | | | | | | | |
| 525 | 813 | 4410 | 1.74 | 4485 | 1.83 | | | | | | | | | | | | | | | | |
| 550 | 852 | 4468 | 1.81 | | | | | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.221)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|----|----|----|----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 900 | 100 | 69 | 60 | 53 | 51 | 49 | 47 | 39 | 31 | 55 |
| | 80 | 69 | 60 | 53 | 51 | 48 | 47 | 39 | 31 | 54 |
| | 60 | 68 | 61 | 53 | 51 | 47 | 47 | 39 | 30 | 54 |
| | 40 | 69 | 60 | 53 | 50 | 47 | 47 | 40 | 31 | 54 |
| | 20 | 70 | 61 | 54 | 51 | 48 | 48 | 41 | 32 | 55 |
| 1300 | 100 | 75 | 67 | 65 | 60 | 58 | 56 | 50 | 42 | 64 |
| | 80 | 76 | 67 | 64 | 60 | 57 | 55 | 50 | 41 | 63 |
| | 60 | 76 | 69 | 65 | 60 | 56 | 55 | 50 | 40 | 63 |
| | 40 | 76 | 69 | 65 | 60 | 56 | 56 | 50 | 40 | 63 |
| | 20 | 77 | 70 | 66 | 61 | 57 | 57 | 51 | 41 | 64 |
| 1800 | 100 | 84 | 74 | 71 | 69 | 65 | 63 | 57 | 51 | 72 |
| | 80 | 82 | 73 | 73 | 69 | 64 | 62 | 56 | 49 | 71 |
| | 60 | 82 | 74 | 73 | 70 | 64 | 61 | 56 | 49 | 71 |
| | 40 | 82 | 75 | 72 | 70 | 64 | 63 | 57 | 49 | 71 |
| | 20 | 83 | 76 | 73 | 71 | 65 | 64 | 58 | 50 | 72 |
| 2500 | 100 | 81 | 78 | 76 | 79 | 74 | 71 | 65 | 60 | 79 |
| | 80 | 82 | 78 | 77 | 79 | 73 | 70 | 64 | 59 | 79 |
| | 60 | 83 | 79 | 80 | 79 | 73 | 70 | 63 | 58 | 79 |
| | 40 | 87 | 80 | 82 | 80 | 74 | 71 | 64 | 58 | 81 |
| | 20 | 87 | 81 | 83 | 81 | 75 | 72 | 65 | 59 | 82 |
| 3600 | 100 | 94 | 87 | 83 | 87 | 83 | 80 | 75 | 70 | 88 |
| | 80 | 92 | 85 | 84 | 88 | 83 | 79 | 74 | 69 | 89 |
| | 60 | 91 | 86 | 87 | 90 | 83 | 80 | 74 | 68 | 90 |
| | 40 | 92 | 87 | 88 | 88 | 83 | 81 | 75 | 69 | 89 |
| | 20 | 93 | 88 | 89 | 89 | 84 | 82 | 76 | 70 | 90 |
| 4500 | 100 | 98 | 96 | 90 | 91 | 89 | 85 | 81 | 76 | 94 |
| | 80 | 95 | 93 | 90 | 92 | 90 | 85 | 80 | 75 | 94 |
| | 60 | 94 | 93 | 92 | 94 | 90 | 85 | 80 | 75 | 95 |
| | 40 | 95 | 95 | 94 | 94 | 90 | 86 | 81 | 75 | 95 |
| | 20 | 96 | 96 | 95 | 95 | 91 | 87 | 82 | 76 | 96 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 900 | 100 | 81 | 74 | 62 | 56 | 51 | 49 | 43 | 35 | 62 |
| | 80 | 80 | 74 | 61 | 55 | 49 | 49 | 42 | 35 | 62 |
| | 60 | 80 | 75 | 61 | 55 | 48 | 49 | 43 | 35 | 62 |
| | 40 | 81 | 75 | 62 | 55 | 48 | 49 | 43 | 34 | 63 |
| | 20 | 82 | 76 | 63 | 56 | 49 | 50 | 44 | 35 | 64 |
| 1300 | 100 | 86 | 80 | 78 | 68 | 59 | 59 | 52 | 45 | 72 |
| | 80 | 84 | 81 | 74 | 65 | 57 | 57 | 52 | 43 | 70 |
| | 60 | 85 | 82 | 75 | 64 | 56 | 56 | 52 | 43 | 71 |
| | 40 | 85 | 83 | 75 | 65 | 57 | 57 | 52 | 43 | 71 |
| | 20 | 86 | 84 | 76 | 66 | 58 | 58 | 53 | 44 | 72 |
| 1800 | 100 | 88 | 85 | 82 | 75 | 67 | 66 | 60 | 53 | 78 |
| | 80 | 87 | 85 | 82 | 73 | 65 | 64 | 58 | 52 | 77 |
| | 60 | 90 | 86 | 83 | 71 | 65 | 64 | 59 | 52 | 77 |
| | 40 | 90 | 88 | 82 | 71 | 66 | 66 | 60 | 53 | 78 |
| | 20 | 91 | 89 | 83 | 72 | 67 | 67 | 61 | 54 | 79 |
| 2500 | 100 | 93 | 89 | 86 | 87 | 78 | 75 | 68 | 62 | 86 |
| | 80 | 93 | 89 | 88 | 85 | 75 | 73 | 67 | 61 | 85 |
| | 60 | 93 | 90 | 89 | 84 | 75 | 73 | 67 | 61 | 85 |
| | 40 | 95 | 92 | 91 | 85 | 75 | 75 | 68 | 62 | 87 |
| | 20 | 96 | 93 | 92 | 86 | 76 | 76 | 69 | 63 | 88 |
| 3600 | 100 | 98 | 95 | 92 | 94 | 87 | 85 | 79 | 73 | 94 |
| | 80 | 99 | 95 | 93 | 95 | 86 | 83 | 78 | 72 | 94 |
| | 60 | 99 | 96 | 95 | 96 | 86 | 84 | 78 | 72 | 95 |
| | 40 | 100 | 97 | 96 | 94 | 85 | 84 | 79 | 73 | 94 |
| | 20 | 102 | 98 | 97 | 95 | 86 | 85 | 80 | 74 | 95 |
| 4500 | 100 | 102 | 100 | 97 | 98 | 94 | 90 | 85 | 80 | 99 |
| | 80 | 102 | 101 | 98 | 99 | 93 | 89 | 84 | 78 | 99 |
| | 60 | 103 | 101 | 100 | 100 | 94 | 89 | 85 | 79 | 100 |
| | 40 | 104 | 103 | 101 | 99 | 93 | 89 | 85 | 79 | 100 |
| | 20 | 106 | 104 | 102 | 100 | 94 | 90 | 86 | 80 | 101 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

8 BISW

Wheel Diameter = 10½ in.

Outlet Area = 0.64 ft²

Tip Speed = 2.75 x RPM

Maximum BHP = (RPM/3471)³

Minimum Starting HP = ¼

Maximum RPM Class I = 4050

Maximum RPM Class II = 4500

Maximum Open Motor Frame Size

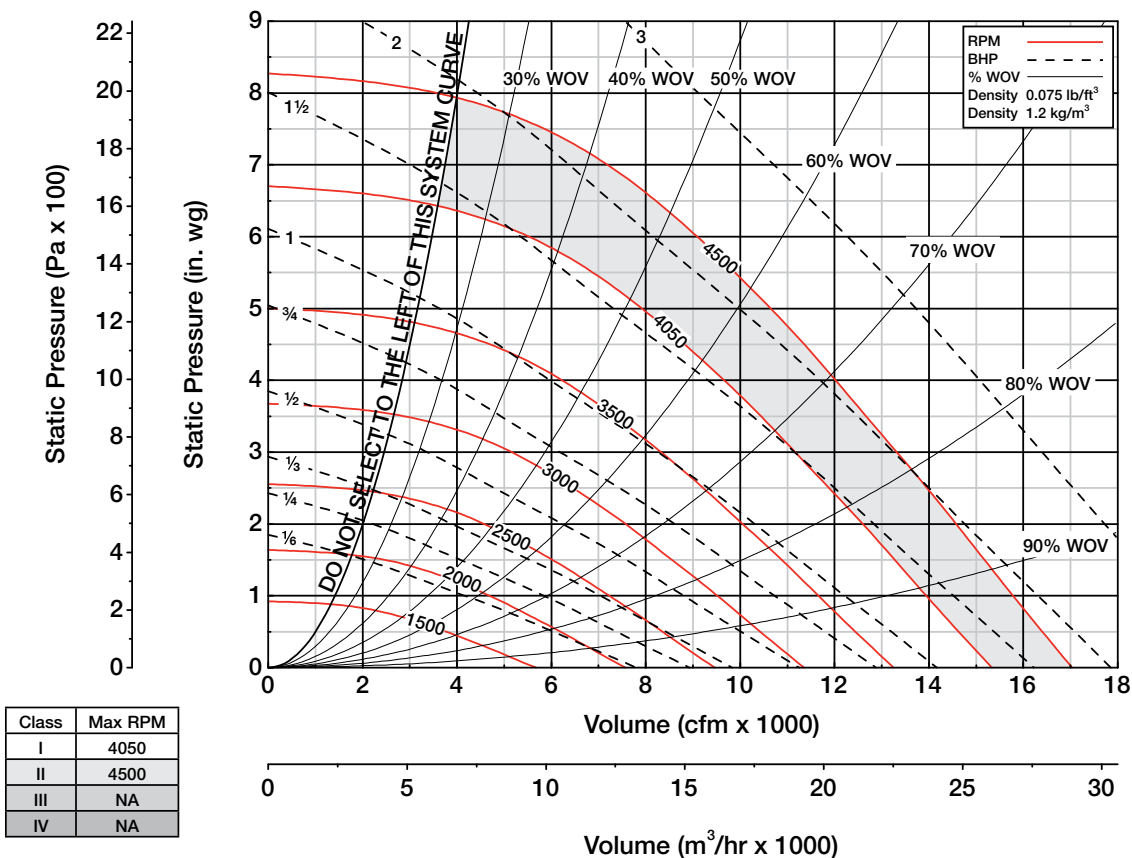
| Class | I | II |
|---------|------|------|
| Arr. 9 | 184T | 184T |
| Arr. 10 | 145T | 184T |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|-----|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 125 | 193 | 840 | 0.01 | 1144 | 0.03 | 1384 | 0.06 | | | | | | | | | | | | | | |
| 150 | 232 | 868 | 0.02 | 1162 | 0.04 | 1399 | 0.06 | 1602 | 0.09 | | | | | | | | | | | | |
| 175 | 271 | 905 | 0.02 | 1187 | 0.04 | 1415 | 0.06 | 1617 | 0.09 | 1795 | 0.12 | 1957 | 0.16 | | | | | | | | |
| 200 | 310 | 942 | 0.02 | 1212 | 0.04 | 1440 | 0.07 | 1632 | 0.10 | 1810 | 0.13 | 1971 | 0.17 | 2120 | 0.20 | | | | | | |
| 225 | 348 | 984 | 0.02 | 1247 | 0.05 | 1465 | 0.07 | 1657 | 0.10 | 1826 | 0.14 | 1986 | 0.17 | 2135 | 0.21 | 2273 | 0.25 | 2403 | 0.29 | 2526 | 0.34 |
| 250 | 387 | 1028 | 0.03 | 1283 | 0.05 | 1490 | 0.08 | 1681 | 0.11 | 1851 | 0.14 | 2004 | 0.18 | 2150 | 0.22 | 2288 | 0.26 | 2418 | 0.31 | 2540 | 0.35 |
| 275 | 426 | 1074 | 0.03 | 1321 | 0.06 | 1526 | 0.09 | 1706 | 0.12 | 1875 | 0.15 | 2029 | 0.19 | 2170 | 0.23 | 2303 | 0.27 | 2433 | 0.32 | 2555 | 0.36 |
| 300 | 465 | 1124 | 0.03 | 1359 | 0.06 | 1563 | 0.09 | 1737 | 0.13 | 1900 | 0.16 | 2053 | 0.20 | 2194 | 0.24 | 2325 | 0.28 | 2449 | 0.33 | 2570 | 0.38 |
| 325 | 503 | 1174 | 0.04 | 1403 | 0.07 | 1600 | 0.10 | 1773 | 0.13 | 1927 | 0.17 | 2078 | 0.21 | 2219 | 0.25 | 2350 | 0.30 | 2473 | 0.34 | 2590 | 0.39 |
| 350 | 542 | 1226 | 0.04 | 1448 | 0.07 | 1638 | 0.10 | 1810 | 0.14 | 1963 | 0.18 | 2103 | 0.22 | 2244 | 0.27 | 2374 | 0.31 | 2498 | 0.36 | 2614 | 0.41 |
| 375 | 581 | 1279 | 0.05 | 1494 | 0.08 | 1678 | 0.11 | 1847 | 0.15 | 2000 | 0.19 | 2138 | 0.23 | 2269 | 0.28 | 2399 | 0.33 | 2522 | 0.37 | 2639 | 0.42 |
| 400 | 620 | 1332 | 0.05 | 1541 | 0.08 | 1722 | 0.12 | 1885 | 0.16 | 2037 | 0.20 | 2175 | 0.25 | 2302 | 0.29 | 2425 | 0.34 | 2547 | 0.39 | 2663 | 0.44 |
| 425 | 658 | 1386 | 0.06 | 1591 | 0.09 | 1767 | 0.13 | 1924 | 0.17 | 2074 | 0.21 | 2211 | 0.26 | 2339 | 0.31 | 2458 | 0.36 | 2572 | 0.41 | 2688 | 0.46 |
| 450 | 697 | 1441 | 0.07 | 1641 | 0.10 | 1812 | 0.14 | 1968 | 0.18 | 2112 | 0.23 | 2249 | 0.27 | 2375 | 0.32 | 2494 | 0.37 | 2606 | 0.42 | 2714 | 0.48 |
| 475 | 736 | 1498 | 0.07 | 1692 | 0.11 | 1858 | 0.15 | 2012 | 0.19 | 2151 | 0.24 | 2286 | 0.29 | 2412 | 0.34 | 2530 | 0.39 | 2642 | 0.44 | 2748 | 0.50 |
| 500 | 775 | 1555 | 0.08 | 1744 | 0.12 | 1908 | 0.16 | 2057 | 0.20 | 2195 | 0.25 | 2324 | 0.30 | 2450 | 0.35 | 2567 | 0.40 | 2678 | 0.46 | 2784 | 0.52 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|-----|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.75 | | 3.00 | | 3.25 | | 3.50 | | 3.75 | | 4.00 | | 4.25 | | 4.50 | | 4.75 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 250 | 387 | 2657 | 0.40 | 2769 | 0.45 | | | | | | | | | | | | | | | | |
| 275 | 426 | 2672 | 0.41 | 2784 | 0.46 | 2891 | 0.51 | 2994 | 0.57 | 3093 | 0.62 | | | | | | | | | | |
| 300 | 465 | 2687 | 0.43 | 2799 | 0.48 | 2906 | 0.53 | 3008 | 0.59 | 3108 | 0.64 | 3204 | 0.70 | 3297 | 0.76 | | | | | | |
| 325 | 503 | 2702 | 0.44 | 2813 | 0.49 | 2920 | 0.55 | 3023 | 0.60 | 3123 | 0.66 | 3219 | 0.72 | 3312 | 0.78 | 3402 | 0.84 | 3490 | 0.90 | 3576 | 0.97 |
| 350 | 542 | 2725 | 0.46 | 2831 | 0.51 | 2935 | 0.56 | 3038 | 0.62 | 3138 | 0.68 | 3234 | 0.74 | 3327 | 0.80 | 3417 | 0.86 | 3505 | 0.93 | 3591 | 0.99 |
| 375 | 581 | 2749 | 0.48 | 2855 | 0.53 | 2957 | 0.58 | 3055 | 0.64 | 3153 | 0.70 | 3249 | 0.76 | 3342 | 0.82 | 3432 | 0.88 | 3520 | 0.95 | 3606 | 1.02 |
| 400 | 620 | 2774 | 0.49 | 2880 | 0.55 | 2981 | 0.60 | 3079 | 0.66 | 3174 | 0.72 | 3265 | 0.78 | 3357 | 0.84 | 3447 | 0.91 | 3535 | 0.97 | 3621 | 1.04 |
| 425 | 658 | 2799 | 0.51 | 2905 | 0.57 | 3006 | 0.63 | 3104 | 0.68 | 3198 | 0.74 | 3289 | 0.81 | 3378 | 0.87 | 3464 | 0.93 | 3550 | 1.00 | 3636 | 1.07 |
| 450 | 697 | 2824 | 0.53 | 2930 | 0.59 | 3031 | 0.65 | 3128 | 0.71 | 3223 | 0.77 | 3314 | 0.83 | 3402 | 0.90 | 3488 | 0.96 | 3572 | 1.03 | 3653 | 1.09 |
| 475 | 736 | 2849 | 0.55 | 2955 | 0.61 | 3056 | 0.67 | 3153 | 0.73 | 3247 | 0.80 | 3338 | 0.86 | 3427 | 0.92 | 3513 | 0.99 | 3596 | 1.06 | 3677 | 1.13 |
| 500 | 775 | 2884 | 0.57 | 2981 | 0.63 | 3081 | 0.69 | 3178 | 0.76 | 3272 | 0.82 | 3363 | 0.89 | 3451 | 0.95 | 3537 | 1.02 | 3621 | 1.09 | 3702 | 1.16 |
| 525 | 813 | 2920 | 0.60 | 3017 | 0.66 | 3109 | 0.72 | 3203 | 0.78 | 3297 | 0.85 | 3388 | 0.91 | 3476 | 0.98 | 3562 | 1.05 | 3645 | 1.12 | 3727 | 1.19 |
| 550 | 852 | 2957 | 0.62 | 3053 | 0.68 | 3145 | 0.74 | 3234 | 0.81 | 3323 | 0.88 | 3413 | 0.94 | 3501 | 1.01 | 3587 | 1.08 | 3670 | 1.15 | 3751 | 1.23 |
| 575 | 891 | 2994 | 0.64 | 3089 | 0.70 | 3181 | 0.77 | 3270 | 0.84 | 3355 | 0.90 | 3439 | 0.97 | 3527 | 1.04 | 3612 | 1.11 | 3695 | 1.19 | 3776 | 1.26 |
| 600 | 930 | 3031 | 0.67 | 3126 | 0.73 | 3218 | 0.80 | 3306 | 0.86 | 3391 | 0.93 | 3474 | 1.00 | 3555 | 1.07 | 3637 | 1.15 | 3720 | 1.22 | 3801 | 1.30 |
| 625 | 968 | 3068 | 0.69 | 3163 | 0.76 | 3254 | 0.82 | 3343 | 0.89 | 3428 | 0.96 | 3510 | 1.03 | 3591 | 1.11 | 3669 | 1.18 | 3746 | 1.26 | 3826 | 1.33 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|------|-----|
| | | 5.25 | | 5.50 | | 5.75 | | 6.00 | | 6.25 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 325 | 503 | 3660 | 1.03 | | | | | | | | | | | | | | | | | | |
| 350 | 542 | 3674 | 1.06 | 3756 | 1.12 | 3914 | 1.26 | | | | | | | | | | | | | | |
| 375 | 581 | 3689 | 1.08 | 3771 | 1.15 | 3929 | 1.29 | 4080 | 1.44 | 4226 | 1.59 | | | | | | | | | | |
| 400 | 620 | 3704 | 1.11 | 3786 | 1.18 | 3943 | 1.32 | 4095 | 1.47 | 4240 | 1.62 | 4381 | 1.78 | | | | | | | | |
| 425 | 658 | 3719 | 1.14 | 3801 | 1.21 | 3958 | 1.35 | 4110 | 1.50 | 4255 | 1.66 | 4396 | 1.81 | | | | | | | | |
| 450 | 697 | 3734 | 1.16 | 3816 | 1.24 | 3973 | 1.38 | 4125 | 1.53 | 4270 | 1.69 | 4411 | 1.85 | | | | | | | | |
| 475 | 736 | 3757 | 1.20 | 3834 | 1.27 | 3988 | 1.41 | 4139 | 1.57 | 4285 | 1.73 | 4426 | 1.89 | | | | | | | | |
| 500 | 775 | 3781 | 1.23 | 3859 | 1.30 | 4009 | 1.45 | 4154 | 1.60 | 4300 | 1.76 | 4440 | 1.93 | | | | | | | | |
| 525 | 813 | 3806 | 1.26 | 3883 | 1.34 | 4033 | 1.49 | 4177 | 1.64 | 4315 | 1.80 | 4455 | 1.97 | | | | | | | | |
| 550 | 852 | 3830 | 1.30 | 3908 | 1.37 | 4058 | 1.53 | 4201 | 1.68 | 4340 | 1.84 | 4473 | 2.01 | | | | | | | | |
| 575 | 891 | 3855 | 1.34 | 3933 | 1.41 | 4082 | 1.57 | 4226 | 1.73 | 4364 | 1.89 | 4497 | 2.06 | | | | | | | | |
| 600 | 930 | 3880 | 1.37 | 3957 | 1.45 | 4107 | 1.61 | 4250 | 1.77 | 4389 | 1.94 | | | | | | | | | | |
| 625 | 968 | 3905 | 1.41 | 3982 | 1.49 | 4132 | 1.65 | 4275 | 1.81 | 4413 | 1.98 | | | | | | | | | | |
| 650 | 1007 | 3931 | 1.45 | 4008 | 1.53 | 4157 | 1.69 | 4300 | 1.86 | 4438 | 2.03 | | | | | | | | | | |
| 675 | 1046 | 3963 | 1.49 | 4033 | 1.57 | 4182 | 1.74 | 4325 | 1.91 | 4463 | 2.08 | | | | | | | | | | |
| 700 | 1085 | 3999 | 1.53 | 4069 | 1.61 | 4207 | 1.78 | 4350 | 1.95 | 4488 | 2.13 | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.378)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|----|----|----|----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wiA} |
| 900 | 100 | 71 | 63 | 56 | 55 | 51 | 46 | 40 | 32 | 57 |
| | 80 | 71 | 63 | 56 | 54 | 49 | 45 | 40 | 31 | 56 |
| | 60 | 72 | 63 | 56 | 53 | 47 | 45 | 40 | 31 | 56 |
| | 40 | 72 | 62 | 56 | 52 | 46 | 45 | 40 | 31 | 55 |
| | 20 | 73 | 63 | 57 | 53 | 47 | 46 | 41 | 32 | 56 |
| 1300 | 100 | 77 | 70 | 69 | 64 | 60 | 56 | 50 | 42 | 66 |
| | 80 | 76 | 68 | 67 | 63 | 59 | 54 | 50 | 42 | 65 |
| | 60 | 76 | 69 | 65 | 62 | 57 | 53 | 50 | 41 | 64 |
| | 40 | 76 | 69 | 64 | 61 | 56 | 53 | 50 | 41 | 63 |
| | 20 | 77 | 70 | 65 | 62 | 57 | 54 | 51 | 42 | 64 |
| 1800 | 100 | 84 | 74 | 72 | 73 | 69 | 64 | 59 | 52 | 74 |
| | 80 | 85 | 73 | 71 | 73 | 68 | 62 | 57 | 50 | 73 |
| | 60 | 84 | 74 | 72 | 72 | 67 | 60 | 56 | 48 | 72 |
| | 40 | 85 | 75 | 71 | 71 | 65 | 60 | 56 | 48 | 72 |
| | 20 | 85 | 75 | 72 | 72 | 66 | 61 | 57 | 49 | 73 |
| 2500 | 100 | 86 | 78 | 78 | 85 | 80 | 72 | 68 | 61 | 85 |
| | 80 | 87 | 77 | 80 | 85 | 77 | 71 | 65 | 60 | 84 |
| | 60 | 84 | 78 | 81 | 83 | 77 | 70 | 63 | 58 | 83 |
| | 40 | 84 | 80 | 80 | 82 | 76 | 69 | 63 | 57 | 81 |
| | 20 | 85 | 81 | 81 | 83 | 77 | 70 | 64 | 58 | 82 |
| 3600 | 100 | 95 | 88 | 84 | 92 | 87 | 82 | 78 | 73 | 92 |
| | 80 | 95 | 86 | 84 | 91 | 86 | 81 | 76 | 70 | 91 |
| | 60 | 93 | 86 | 87 | 90 | 86 | 80 | 74 | 69 | 90 |
| | 40 | 94 | 87 | 87 | 88 | 84 | 78 | 74 | 68 | 89 |
| | 20 | 95 | 88 | 88 | 89 | 85 | 79 | 75 | 69 | 90 |
| 4500 | 100 | 99 | 97 | 91 | 95 | 94 | 88 | 84 | 79 | 97 |
| | 80 | 99 | 96 | 91 | 94 | 93 | 87 | 82 | 76 | 97 |
| | 60 | 97 | 95 | 92 | 94 | 92 | 86 | 80 | 75 | 96 |
| | 40 | 97 | 95 | 93 | 93 | 90 | 85 | 80 | 74 | 95 |
| | 20 | 98 | 96 | 94 | 94 | 91 | 86 | 81 | 75 | 96 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{woA} |
| 900 | 100 | 80 | 76 | 65 | 58 | 52 | 50 | 42 | 36 | 64 |
| | 80 | 81 | 76 | 64 | 56 | 50 | 49 | 42 | 34 | 63 |
| | 60 | 80 | 75 | 63 | 56 | 49 | 48 | 42 | 35 | 63 |
| | 40 | 80 | 75 | 62 | 55 | 48 | 48 | 42 | 34 | 62 |
| | 20 | 81 | 76 | 63 | 56 | 49 | 49 | 43 | 35 | 63 |
| 1300 | 100 | 85 | 82 | 80 | 68 | 61 | 61 | 53 | 45 | 74 |
| | 80 | 84 | 82 | 77 | 66 | 58 | 58 | 52 | 44 | 72 |
| | 60 | 84 | 83 | 76 | 66 | 57 | 57 | 52 | 43 | 72 |
| | 40 | 84 | 82 | 76 | 64 | 56 | 56 | 52 | 43 | 71 |
| | 20 | 85 | 83 | 77 | 65 | 57 | 57 | 53 | 44 | 72 |
| 1800 | 100 | 90 | 85 | 83 | 76 | 69 | 68 | 61 | 54 | 79 |
| | 80 | 90 | 86 | 84 | 74 | 67 | 66 | 59 | 52 | 79 |
| | 60 | 90 | 86 | 83 | 72 | 66 | 64 | 58 | 52 | 78 |
| | 40 | 91 | 88 | 83 | 71 | 65 | 64 | 58 | 52 | 78 |
| | 20 | 92 | 89 | 84 | 72 | 66 | 65 | 59 | 53 | 79 |
| 2500 | 100 | 91 | 90 | 88 | 90 | 80 | 78 | 71 | 64 | 89 |
| | 80 | 89 | 89 | 89 | 88 | 77 | 75 | 68 | 62 | 87 |
| | 60 | 94 | 90 | 90 | 87 | 76 | 74 | 66 | 61 | 87 |
| | 40 | 92 | 91 | 90 | 86 | 74 | 73 | 66 | 60 | 86 |
| | 20 | 95 | 92 | 91 | 87 | 75 | 74 | 67 | 61 | 87 |
| 3600 | 100 | 98 | 97 | 93 | 96 | 89 | 87 | 81 | 76 | 96 |
| | 80 | 99 | 97 | 93 | 96 | 87 | 86 | 79 | 73 | 95 |
| | 60 | 99 | 96 | 95 | 94 | 86 | 84 | 77 | 71 | 94 |
| | 40 | 100 | 97 | 95 | 92 | 85 | 84 | 78 | 72 | 93 |
| | 20 | 104 | 98 | 96 | 93 | 86 | 85 | 79 | 73 | 95 |
| 4500 | 100 | 102 | 102 | 99 | 100 | 96 | 92 | 88 | 82 | 101 |
| | 80 | 103 | 102 | 99 | 99 | 95 | 91 | 85 | 79 | 101 |
| | 60 | 103 | 102 | 100 | 99 | 93 | 89 | 84 | 78 | 100 |
| | 40 | 104 | 103 | 100 | 98 | 92 | 89 | 85 | 78 | 99 |
| | 20 | 107 | 105 | 101 | 99 | 93 | 90 | 86 | 79 | 100 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

9 BISW

Wheel Diameter = 10½ in.

Outlet Area = 0.64 ft.²

Tip Speed = 2.75 x RPM

Maximum BHP = (RPM/3304)³

Minimum Starting HP = ¼

Maximum RPM Class I = 4050

Maximum RPM Class II = 4500

Maximum Open Motor Frame Size

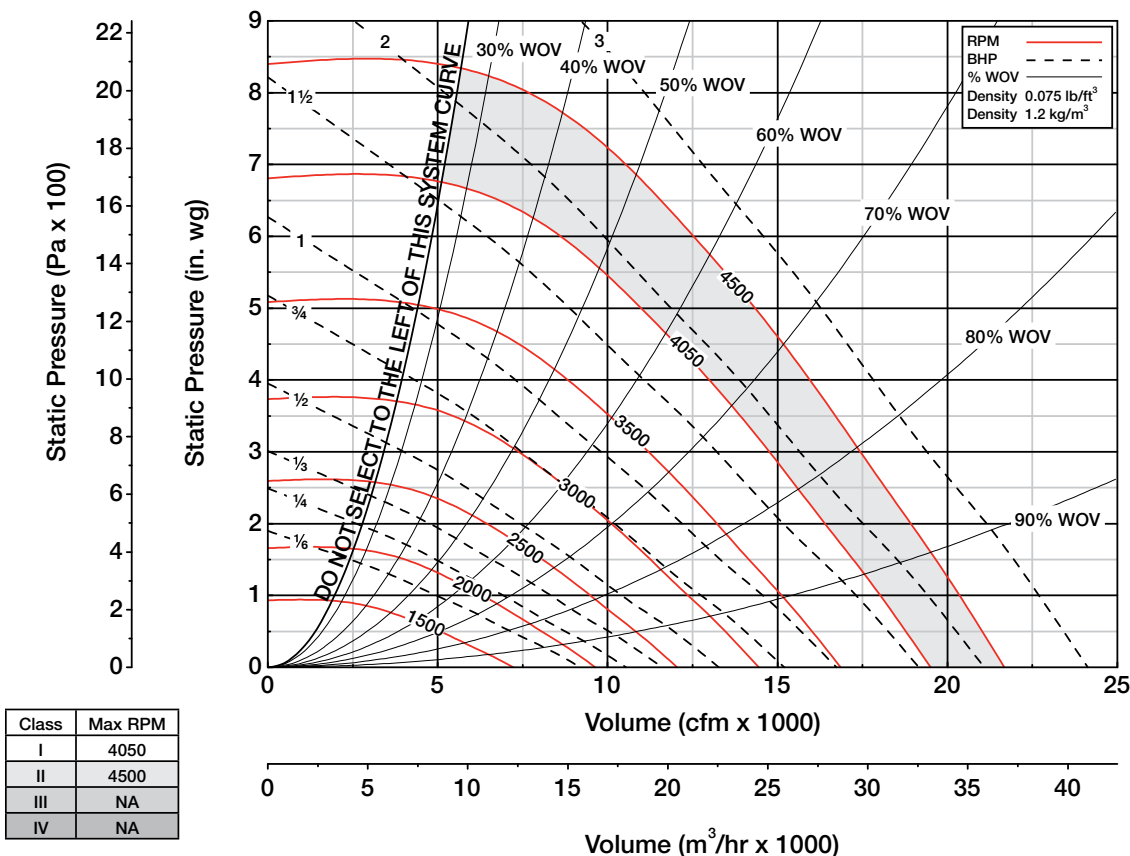
| Class | I | II |
|---------|------|------|
| Arr. 9 | 184T | 184T |
| Arr. 10 | 145T | 184T |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-----|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 150 | 232 | 806 | 0.01 | 1106 | 0.03 | | | | | | | | | | | | | | | | |
| 200 | 310 | 853 | 0.02 | 1131 | 0.04 | 1362 | 0.06 | 1559 | 0.09 | | | | | | | | | | | | |
| 250 | 387 | 911 | 0.02 | 1170 | 0.04 | 1389 | 0.07 | 1581 | 0.10 | 1755 | 0.13 | 1912 | 0.17 | | | | | | | | |
| 300 | 465 | 978 | 0.03 | 1226 | 0.05 | 1429 | 0.08 | 1613 | 0.11 | 1777 | 0.14 | 1934 | 0.18 | 2078 | 0.22 | 2213 | 0.26 | 2339 | 0.31 | | |
| 350 | 542 | 1050 | 0.03 | 1285 | 0.06 | 1482 | 0.09 | 1653 | 0.12 | 1815 | 0.16 | 1961 | 0.20 | 2100 | 0.24 | 2235 | 0.28 | 2361 | 0.33 | 2480 | 0.37 |
| 400 | 620 | 1127 | 0.04 | 1350 | 0.07 | 1540 | 0.10 | 1706 | 0.14 | 1855 | 0.17 | 2001 | 0.21 | 2136 | 0.26 | 2262 | 0.30 | 2383 | 0.35 | 2502 | 0.40 |
| 450 | 697 | 1208 | 0.05 | 1419 | 0.08 | 1600 | 0.11 | 1764 | 0.15 | 1911 | 0.19 | 2045 | 0.23 | 2176 | 0.28 | 2301 | 0.32 | 2419 | 0.37 | 2531 | 0.42 |
| 500 | 775 | 1293 | 0.06 | 1492 | 0.09 | 1667 | 0.13 | 1823 | 0.17 | 1969 | 0.21 | 2101 | 0.25 | 2224 | 0.30 | 2341 | 0.35 | 2459 | 0.40 | 2570 | 0.45 |
| 550 | 852 | 1379 | 0.07 | 1570 | 0.11 | 1736 | 0.14 | 1888 | 0.19 | 2028 | 0.23 | 2159 | 0.28 | 2281 | 0.32 | 2395 | 0.37 | 2503 | 0.42 | 2610 | 0.48 |
| 600 | 930 | 1467 | 0.08 | 1649 | 0.12 | 1809 | 0.16 | 1956 | 0.21 | 2091 | 0.25 | 2218 | 0.30 | 2339 | 0.35 | 2453 | 0.40 | 2560 | 0.46 | 2661 | 0.51 |
| 650 | 1007 | 1556 | 0.09 | 1731 | 0.14 | 1886 | 0.18 | 2026 | 0.23 | 2159 | 0.28 | 2281 | 0.33 | 2398 | 0.38 | 2511 | 0.44 | 2617 | 0.49 | 2718 | 0.55 |
| 700 | 1085 | 1647 | 0.11 | 1816 | 0.16 | 1964 | 0.21 | 2100 | 0.25 | 2228 | 0.30 | 2348 | 0.36 | 2461 | 0.41 | 2570 | 0.47 | 2676 | 0.53 | 2776 | 0.59 |
| 750 | 1162 | 1739 | 0.13 | 1902 | 0.18 | 2044 | 0.23 | 2177 | 0.28 | 2298 | 0.33 | 2417 | 0.39 | 2528 | 0.45 | 2633 | 0.51 | 2735 | 0.57 | 2835 | 0.63 |
| 800 | 1240 | 1832 | 0.16 | 1990 | 0.21 | 2127 | 0.26 | 2255 | 0.31 | 2374 | 0.37 | 2487 | 0.42 | 2597 | 0.48 | 2700 | 0.54 | 2799 | 0.61 | 2894 | 0.67 |
| 850 | 1317 | 1927 | 0.18 | 2078 | 0.23 | 2212 | 0.29 | 2335 | 0.35 | 2452 | 0.40 | 2560 | 0.46 | 2666 | 0.52 | 2769 | 0.59 | 2866 | 0.65 | 2959 | 0.72 |
| 900 | 1395 | 2023 | 0.21 | 2167 | 0.26 | 2298 | 0.32 | 2416 | 0.38 | 2530 | 0.44 | 2637 | 0.50 | 2738 | 0.56 | 2838 | 0.63 | 2934 | 0.70 | 3027 | 0.77 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.75 | | 3.00 | | 3.25 | | 3.50 | | 3.75 | | 4.00 | | 4.25 | | 4.50 | | 4.75 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 350 | 542 | 2594 | 0.42 | 2702 | 0.47 | | | | | | | | | | | | | | | | |
| 400 | 620 | 2616 | 0.45 | 2724 | 0.50 | 2828 | 0.56 | 2928 | 0.61 | 3025 | 0.67 | 3119 | 0.73 | | | | | | | | |
| 450 | 697 | 2638 | 0.47 | 2746 | 0.53 | 2850 | 0.58 | 2950 | 0.64 | 3047 | 0.70 | 3141 | 0.76 | 3231 | 0.82 | 3319 | 0.89 | 3405 | 0.95 | 3488 | 1.02 |
| 500 | 775 | 2676 | 0.50 | 2778 | 0.56 | 2875 | 0.61 | 2973 | 0.67 | 3069 | 0.74 | 3163 | 0.80 | 3253 | 0.86 | 3341 | 0.93 | 3427 | 0.99 | 3510 | 1.06 |
| 550 | 852 | 2716 | 0.53 | 2818 | 0.59 | 2915 | 0.65 | 3008 | 0.71 | 3099 | 0.77 | 3186 | 0.83 | 3275 | 0.90 | 3363 | 0.97 | 3449 | 1.04 | 3532 | 1.11 |
| 600 | 930 | 2758 | 0.57 | 2858 | 0.63 | 2955 | 0.69 | 3048 | 0.75 | 3138 | 0.80 | 3226 | 0.88 | 3310 | 0.94 | 3393 | 1.01 | 3473 | 1.08 | 3554 | 1.15 |
| 650 | 1007 | 2815 | 0.61 | 2907 | 0.67 | 2996 | 0.73 | 3088 | 0.79 | 3178 | 0.86 | 3265 | 0.92 | 3350 | 0.99 | 3432 | 1.06 | 3512 | 1.13 | 3590 | 1.20 |
| 700 | 1085 | 2872 | 0.65 | 2964 | 0.71 | 3052 | 0.77 | 3138 | 0.84 | 3220 | 0.90 | 3306 | 0.97 | 3390 | 1.04 | 3472 | 1.11 | 3552 | 1.19 | 3630 | 1.26 |
| 750 | 1162 | 2930 | 0.69 | 3021 | 0.75 | 3110 | 0.82 | 3194 | 0.89 | 3277 | 0.95 | 3356 | 1.02 | 3434 | 1.09 | 3512 | 1.17 | 3592 | 1.24 | 3670 | 1.32 |
| 800 | 1240 | 2989 | 0.74 | 3080 | 0.80 | 3167 | 0.87 | 3252 | 0.94 | 3334 | 1.01 | 3413 | 1.08 | 3490 | 1.15 | 3565 | 1.23 | 3638 | 1.30 | 3710 | 1.38 |
| 850 | 1317 | 3048 | 0.79 | 3139 | 0.85 | 3226 | 0.92 | 3310 | 1.00 | 3391 | 1.07 | 3470 | 1.14 | 3547 | 1.22 | 3622 | 1.29 | 3695 | 1.37 | 3766 | 1.45 |
| 900 | 1395 | 3115 | 0.84 | 3200 | 0.91 | 3285 | 0.98 | 3369 | 1.05 | 3450 | 1.13 | 3528 | 1.21 | 3605 | 1.28 | 3679 | 1.36 | 3752 | 1.44 | 3822 | 1.52 |
| 950 | 1472 | 3183 | 0.89 | 3267 | 0.96 | 3348 | 1.04 | 3428 | 1.12 | 3509 | 1.19 | 3587 | 1.27 | 3663 | 1.35 | 3737 | 1.43 | 3809 | 1.51 | 3880 | 1.60 |
| 1000 | 1550 | 3251 | 0.95 | 3335 | 1.02 | 3415 | 1.10 | 3494 | 1.18 | 3569 | 1.26 | 3647 | 1.34 | 3722 | 1.42 | 3796 | 1.51 | 3868 | 1.59 | 3938 | 1.67 |
| 1050 | 1627 | 3321 | 1.01 | 3403 | 1.09 | 3483 | 1.17 | 3561 | 1.25 | 3636 | 1.33 | 3709 | 1.41 | 3782 | 1.50 | 3855 | 1.58 | 3927 | 1.67 | 3996 | 1.76 |
| 1100 | 1705 | 3391 | 1.07 | 3473 | 1.15 | 3552 | 1.24 | 3629 | 1.32 | 3704 | 1.40 | 3776 | 1.49 | 3847 | 1.58 | 3916 | 1.66 | 3986 | 1.75 | 4056 | 1.84 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|
| | | 5.25 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 9.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 500 | 775 | 3591 | 1.13 | 3671 | 1.20 | 3824 | 1.35 | | | | | | | | | | | | | | |
| 550 | 852 | 3613 | 1.18 | 3692 | 1.25 | 3846 | 1.40 | 3993 | 1.55 | 4135 | 1.71 | 4272 | 1.87 | | | | | | | | |
| 600 | 930 | 3635 | 1.23 | 3715 | 1.30 | 3868 | 1.45 | 4015 | 1.61 | 4157 | 1.77 | 4293 | 1.94 | 4426 | 2.11 | | | | | | |
| 650 | 1007 | 3666 | 1.28 | 3740 | 1.35 | 3890 | 1.51 | 4037 | 1.67 | 4179 | 1.83 | 4315 | 2.00 | 4448 | 2.18 | | | | | | |
| 700 | 1085 | 3705 | 1.34 | 3780 | 1.41 | 3923 | 1.57 | 4061 | 1.73 | 4201 | 1.90 | 4337 | 2.07 | 4470 | 2.25 | | | | | | |
| 750 | 1162 | 3745 | 1.40 | 3819 | 1.47 | 3963 | 1.63 | 4100 | 1.80 | 4233 | 1.97 | 4361 | 2.14 | 4492 | 2.32 | | | | | | |
| 800 | 1240 | 3786 | 1.46 | 3859 | 1.54 | 4003 | 1.70 | 4140 | 1.87 | 4272 | 2.04 | 4400 | 2.22 | | | | | | | | |
| 850 | 1317 | 3835 | 1.53 | 3903 | 1.61 | 4043 | 1.77 | 4180 | 1.95 | 4312 | 2.12 | 4440 | 2.30 | | | | | | | | |
| 900 | 1395 | 3891 | 1.60 | 3959 | 1.68 | 4090 | 1.85 | 4220 | 2.02 | 4352 | 2.20 | 4480 | 2.39 | | | | | | | | |
| 950 | 1472 | 3949 | 1.68 | 4016 | 1.76 | 4146 | 1.93 | 4272 | 2.11 | 4393 | 2.29 | | | | | | | | | | |
| 1000 | 1550 | 4006 | 1.76 | 4073 | 1.85 | 4203 | 2.02 | 4328 | 2.20 | 4449 | 2.39 | | | | | | | | | | |
| 1050 | 1627 | 4065 | 1.85 | 4131 | 1.93 | 4261 | 2.12 | 4385 | 2.30 | | | | | | | | | | | | |
| 1100 | 1705 | 4123 | 1.93 | 4190 | 2.02 | 4319 | 2.21 | 4443 | 2.40 | | | | | | | | | | | | |
| 1150 | 1782 | 4183 | 2.03 | 4249 | 2.12 | 4378 | 2.31 | | | | | | | | | | | | | | |
| 1200 | 1860 | 4246 | 2.12 | 4309 | 2.22 | 4437 | 2.41 | | | | | | | | | | | | | | |
| 1250 | 1937 | 4313 | 2.22 | 4375 | 2.32 | 4496 | 2.52 | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.481)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|----|----|----|----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 900 | 100 | 74 | 66 | 59 | 58 | 52 | 46 | 42 | 35 | 59 |
| | 80 | 74 | 64 | 58 | 56 | 49 | 45 | 41 | 32 | 58 |
| | 60 | 74 | 63 | 58 | 54 | 48 | 45 | 40 | 31 | 57 |
| | 40 | 73 | 64 | 58 | 53 | 47 | 45 | 41 | 31 | 56 |
| | 30 | 74 | 65 | 59 | 54 | 48 | 46 | 42 | 32 | 57 |
| 1300 | 100 | 79 | 71 | 68 | 68 | 62 | 56 | 52 | 44 | 68 |
| | 80 | 77 | 70 | 67 | 66 | 60 | 54 | 51 | 42 | 67 |
| | 60 | 78 | 69 | 64 | 64 | 58 | 52 | 51 | 41 | 65 |
| | 40 | 77 | 68 | 66 | 63 | 57 | 52 | 50 | 41 | 64 |
| | 30 | 78 | 69 | 67 | 64 | 58 | 53 | 51 | 42 | 65 |
| 1800 | 100 | 82 | 76 | 74 | 76 | 72 | 64 | 62 | 54 | 76 |
| | 80 | 80 | 75 | 72 | 75 | 70 | 62 | 59 | 51 | 75 |
| | 60 | 80 | 73 | 71 | 73 | 68 | 60 | 58 | 50 | 73 |
| | 40 | 81 | 73 | 71 | 73 | 66 | 59 | 57 | 50 | 72 |
| | 30 | 82 | 74 | 72 | 74 | 67 | 60 | 58 | 51 | 73 |
| 2500 | 100 | 90 | 82 | 79 | 84 | 82 | 73 | 71 | 64 | 85 |
| | 80 | 89 | 80 | 80 | 82 | 80 | 71 | 68 | 61 | 84 |
| | 60 | 89 | 80 | 80 | 83 | 78 | 69 | 66 | 60 | 83 |
| | 40 | 88 | 79 | 79 | 82 | 76 | 68 | 65 | 59 | 81 |
| | 30 | 89 | 80 | 80 | 83 | 77 | 69 | 66 | 60 | 82 |
| 3600 | 100 | 95 | 90 | 86 | 91 | 89 | 83 | 80 | 75 | 93 |
| | 80 | 95 | 88 | 84 | 89 | 87 | 81 | 78 | 72 | 91 |
| | 60 | 95 | 87 | 84 | 89 | 86 | 79 | 76 | 70 | 90 |
| | 40 | 93 | 87 | 85 | 89 | 85 | 79 | 76 | 70 | 90 |
| | 30 | 94 | 88 | 86 | 90 | 86 | 80 | 77 | 71 | 91 |
| 4500 | 100 | 99 | 98 | 93 | 95 | 95 | 89 | 86 | 81 | 98 |
| | 80 | 98 | 96 | 91 | 93 | 93 | 87 | 83 | 78 | 96 |
| | 60 | 98 | 96 | 91 | 93 | 92 | 86 | 81 | 77 | 96 |
| | 40 | 97 | 95 | 91 | 93 | 92 | 85 | 82 | 77 | 96 |
| | 30 | 99 | 97 | 93 | 95 | 94 | 87 | 84 | 79 | 98 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 900 | 100 | 80 | 76 | 66 | 59 | 53 | 51 | 43 | 36 | 64 |
| | 80 | 78 | 75 | 65 | 57 | 50 | 49 | 42 | 35 | 63 |
| | 60 | 79 | 75 | 64 | 56 | 49 | 49 | 42 | 36 | 63 |
| | 40 | 78 | 75 | 63 | 55 | 48 | 48 | 42 | 36 | 62 |
| | 30 | 79 | 76 | 64 | 56 | 49 | 49 | 43 | 37 | 63 |
| 1300 | 100 | 85 | 83 | 80 | 71 | 63 | 61 | 54 | 46 | 75 |
| | 80 | 83 | 81 | 77 | 68 | 59 | 58 | 52 | 44 | 72 |
| | 60 | 84 | 81 | 75 | 67 | 57 | 56 | 52 | 43 | 71 |
| | 40 | 83 | 80 | 74 | 66 | 57 | 56 | 52 | 43 | 70 |
| | 30 | 84 | 81 | 75 | 67 | 58 | 57 | 53 | 44 | 71 |
| 1800 | 100 | 89 | 88 | 85 | 78 | 73 | 70 | 63 | 56 | 81 |
| | 80 | 89 | 86 | 83 | 76 | 69 | 67 | 60 | 53 | 79 |
| | 60 | 88 | 86 | 81 | 74 | 67 | 64 | 58 | 52 | 77 |
| | 40 | 88 | 86 | 80 | 73 | 66 | 64 | 59 | 52 | 77 |
| | 30 | 90 | 87 | 81 | 74 | 67 | 65 | 60 | 53 | 78 |
| 2500 | 100 | 95 | 92 | 89 | 89 | 82 | 79 | 72 | 65 | 89 |
| | 80 | 91 | 91 | 89 | 88 | 79 | 76 | 68 | 62 | 88 |
| | 60 | 95 | 90 | 89 | 87 | 78 | 74 | 66 | 61 | 87 |
| | 40 | 94 | 91 | 89 | 86 | 75 | 73 | 67 | 61 | 86 |
| | 30 | 96 | 92 | 90 | 87 | 76 | 74 | 68 | 62 | 87 |
| 3600 | 100 | 100 | 98 | 94 | 95 | 91 | 90 | 83 | 77 | 97 |
| | 80 | 98 | 97 | 93 | 95 | 89 | 87 | 80 | 74 | 96 |
| | 60 | 98 | 95 | 92 | 93 | 87 | 85 | 77 | 71 | 93 |
| | 40 | 98 | 96 | 93 | 92 | 85 | 84 | 78 | 72 | 93 |
| | 30 | 101 | 97 | 94 | 93 | 86 | 85 | 79 | 73 | 94 |
| 4500 | 100 | 104 | 103 | 100 | 99 | 97 | 94 | 89 | 83 | 102 |
| | 80 | 102 | 102 | 99 | 99 | 96 | 92 | 87 | 80 | 101 |
| | 60 | 101 | 101 | 97 | 97 | 93 | 90 | 84 | 78 | 99 |
| | 40 | 102 | 101 | 98 | 96 | 92 | 89 | 84 | 78 | 98 |
| | 30 | 107 | 104 | 100 | 98 | 94 | 91 | 86 | 80 | 100 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

10 BISW

Wheel Diameter = 10½ in.

Outlet Area = 0.64 ft.²

Tip Speed = 2.75 x RPM

Maximum BHP = (RPM/3127)³

Minimum Starting HP = ¼

Maximum RPM Class I = 4050

Maximum RPM Class II = 4500

Maximum Open Motor Frame Size

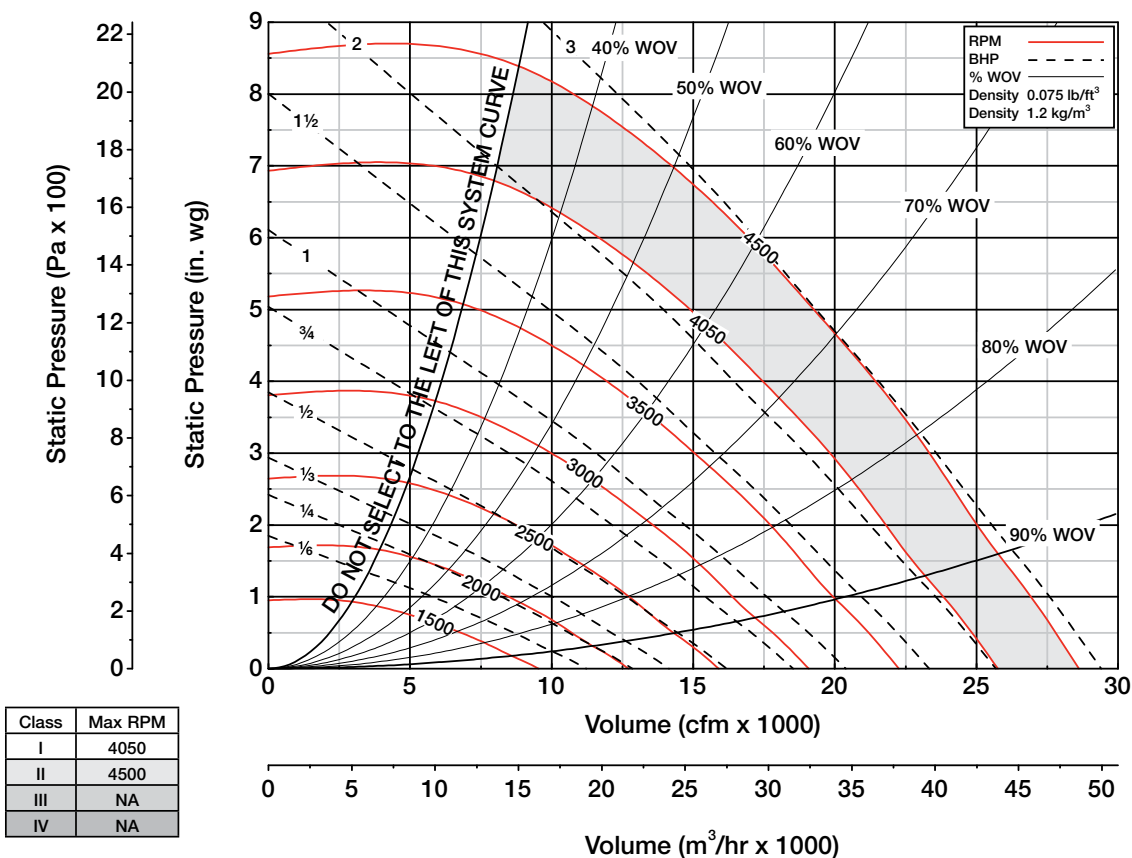
| Class | I | II |
|---------|------|------|
| Arr. 9 | 184T | 184T |
| Arr. 10 | 145T | 184T |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 300 | 465 | 877 | 0.02 | 1148 | 0.05 | 1366 | 0.08 | | | | | | | | | | | | | | |
| 400 | 620 | 974 | 0.03 | 1220 | 0.06 | 1426 | 0.09 | 1609 | 0.13 | 1771 | 0.16 | 1918 | 0.21 | | | | | | | | |
| 500 | 775 | 1083 | 0.04 | 1309 | 0.07 | 1503 | 0.11 | 1671 | 0.15 | 1831 | 0.19 | 1977 | 0.23 | 2112 | 0.28 | 2237 | 0.33 | 2355 | 0.38 | 2466 | 0.44 |
| 600 | 930 | 1204 | 0.06 | 1413 | 0.09 | 1591 | 0.13 | 1755 | 0.17 | 1902 | 0.22 | 2038 | 0.27 | 2172 | 0.32 | 2297 | 0.37 | 2414 | 0.42 | 2525 | 0.48 |
| 700 | 1085 | 1334 | 0.08 | 1524 | 0.12 | 1694 | 0.16 | 1845 | 0.20 | 1987 | 0.25 | 2120 | 0.30 | 2242 | 0.36 | 2358 | 0.41 | 2475 | 0.47 | 2586 | 0.53 |
| 800 | 1240 | 1471 | 0.10 | 1642 | 0.14 | 1802 | 0.19 | 1948 | 0.24 | 2080 | 0.29 | 2206 | 0.35 | 2327 | 0.40 | 2441 | 0.46 | 2548 | 0.52 | 2650 | 0.59 |
| 900 | 1395 | 1612 | 0.13 | 1769 | 0.18 | 1916 | 0.23 | 2055 | 0.28 | 2183 | 0.34 | 2303 | 0.40 | 2414 | 0.46 | 2527 | 0.52 | 2633 | 0.58 | 2734 | 0.65 |
| 1000 | 1550 | 1752 | 0.17 | 1900 | 0.22 | 2037 | 0.27 | 2167 | 0.33 | 2291 | 0.39 | 2407 | 0.45 | 2516 | 0.52 | 2619 | 0.58 | 2720 | 0.65 | 2820 | 0.72 |
| 1100 | 1705 | 1893 | 0.21 | 2037 | 0.27 | 2164 | 0.33 | 2284 | 0.39 | 2403 | 0.45 | 2514 | 0.52 | 2620 | 0.59 | 2722 | 0.66 | 2818 | 0.73 | 2910 | 0.80 |
| 1200 | 1860 | 2037 | 0.26 | 2177 | 0.33 | 2294 | 0.39 | 2409 | 0.45 | 2518 | 0.52 | 2627 | 0.59 | 2729 | 0.66 | 2827 | 0.74 | 2922 | 0.81 | 3012 | 0.89 |
| 1300 | 2015 | 2182 | 0.32 | 2318 | 0.39 | 2430 | 0.46 | 2538 | 0.53 | 2641 | 0.60 | 2741 | 0.67 | 2841 | 0.75 | 2937 | 0.83 | 3027 | 0.91 | 3117 | 0.99 |
| 1400 | 2170 | 2330 | 0.39 | 2458 | 0.46 | 2569 | 0.54 | 2668 | 0.61 | 2768 | 0.69 | 2863 | 0.76 | 2956 | 0.84 | 3049 | 0.93 | 3138 | 1.01 | 3224 | 1.10 |
| 1500 | 2325 | 2480 | 0.47 | 2599 | 0.55 | 2709 | 0.63 | 2805 | 0.70 | 2898 | 0.78 | 2990 | 0.87 | 3077 | 0.95 | 3164 | 1.03 | 3251 | 1.12 | 3335 | 1.21 |
| 1600 | 2480 | 2630 | 0.56 | 2741 | 0.64 | 2851 | 0.73 | 2943 | 0.80 | 3030 | 0.89 | 3118 | 0.98 | 3203 | 1.07 | 3285 | 1.15 | 3366 | 1.24 | 3449 | 1.34 |
| 1700 | 2635 | 2781 | 0.66 | 2885 | 0.74 | 2990 | 0.84 | 3083 | 0.92 | 3167 | 1.01 | 3249 | 1.10 | 3332 | 1.19 | 3411 | 1.29 | 3488 | 1.38 | 3564 | 1.48 |
| 1800 | 2790 | 2933 | 0.77 | 3029 | 0.86 | 3131 | 0.96 | 3224 | 1.05 | 3306 | 1.15 | 3384 | 1.24 | 3462 | 1.34 | 3539 | 1.43 | 3614 | 1.53 | 3687 | 1.63 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.75 | | 3.00 | | 3.25 | | 3.50 | | 3.75 | | 4.00 | | 4.25 | | 4.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 600 | 930 | 2631 | 0.54 | 2732 | 0.60 | 2829 | 0.66 | 2923 | 0.73 | 3013 | 0.79 | | | | | | |
| 700 | 1085 | 2691 | 0.59 | 2792 | 0.66 | 2889 | 0.72 | 2982 | 0.79 | 3072 | 0.86 | 3159 | 0.93 | 3244 | 1.00 | 3326 | 1.07 |
| 800 | 1240 | 2752 | 0.65 | 2853 | 0.72 | 2949 | 0.79 | 3042 | 0.86 | 3132 | 0.93 | 3219 | 1.01 | 3303 | 1.08 | 3385 | 1.16 |
| 900 | 1395 | 2830 | 0.72 | 2922 | 0.79 | 3011 | 0.86 | 3103 | 0.93 | 3193 | 1.01 | 3280 | 1.09 | 3364 | 1.17 | 3445 | 1.25 |
| 1000 | 1550 | 2915 | 0.79 | 3007 | 0.87 | 3095 | 0.94 | 3180 | 1.02 | 3262 | 1.09 | 3342 | 1.17 | 3425 | 1.26 | 3506 | 1.34 |
| 1100 | 1705 | 3002 | 0.87 | 3093 | 0.95 | 3180 | 1.03 | 3265 | 1.11 | 3346 | 1.19 | 3426 | 1.27 | 3503 | 1.36 | 3577 | 1.44 |
| 1200 | 1860 | 3099 | 0.97 | 3183 | 1.04 | 3267 | 1.13 | 3351 | 1.21 | 3432 | 1.30 | 3511 | 1.38 | 3587 | 1.47 | 3662 | 1.56 |
| 1300 | 2015 | 3202 | 1.07 | 3285 | 1.15 | 3365 | 1.24 | 3442 | 1.32 | 3519 | 1.41 | 3597 | 1.50 | 3673 | 1.59 | 3747 | 1.68 |
| 1400 | 2170 | 3307 | 1.18 | 3389 | 1.27 | 3468 | 1.36 | 3544 | 1.45 | 3618 | 1.54 | 3690 | 1.63 | 3761 | 1.72 | 3834 | 1.82 |
| 1500 | 2325 | 3416 | 1.30 | 3495 | 1.40 | 3572 | 1.49 | 3648 | 1.58 | 3721 | 1.68 | 3792 | 1.77 | 3862 | 1.87 | 3929 | 1.96 |
| 1600 | 2480 | 3528 | 1.44 | 3605 | 1.53 | 3680 | 1.63 | 3753 | 1.73 | 3825 | 1.83 | 3896 | 1.93 | 3964 | 2.03 | 4031 | 2.13 |
| 1700 | 2635 | 3642 | 1.58 | 3718 | 1.68 | 3791 | 1.78 | 3863 | 1.88 | 3932 | 1.99 | 4001 | 2.09 | 4069 | 2.20 | 4135 | 2.30 |
| 1800 | 2790 | 3758 | 1.73 | 3832 | 1.84 | 3905 | 1.94 | 3975 | 2.05 | 4044 | 2.16 | 4110 | 2.27 | 4176 | 2.38 | 4240 | 2.49 |
| 1900 | 2945 | 3882 | 1.90 | 3949 | 2.01 | 4019 | 2.12 | 4089 | 2.23 | 4156 | 2.34 | 4222 | 2.46 | 4287 | 2.57 | 4349 | 2.69 |
| 2000 | 3100 | 4009 | 2.09 | 4074 | 2.20 | 4138 | 2.31 | 4204 | 2.42 | 4270 | 2.54 | 4335 | 2.66 | 4399 | 2.78 | 4461 | 2.90 |
| 2100 | 3255 | 4137 | 2.29 | 4201 | 2.40 | 4264 | 2.52 | 4325 | 2.63 | 4386 | 2.75 | 4450 | 2.88 | 4513 | 3.00 | 4574 | 3.13 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 5.25 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 700 | 1085 | 3560 | 1.30 | | | | | | | | | | | | | | |
| 800 | 1240 | 3618 | 1.40 | 3692 | 1.48 | 3836 | 1.64 | 3973 | 1.82 | | | | | | | | |
| 900 | 1395 | 3678 | 1.50 | 3752 | 1.58 | 3895 | 1.76 | 4032 | 1.94 | 4164 | 2.12 | 4292 | 2.31 | 4415 | 2.50 | 4535 | 2.69 |
| 1000 | 1550 | 3738 | 1.60 | 3812 | 1.69 | 3955 | 1.87 | 4092 | 2.06 | 4224 | 2.25 | 4351 | 2.45 | 4474 | 2.64 | 4594 | 2.85 |
| 1100 | 1705 | 3800 | 1.71 | 3873 | 1.80 | 4015 | 1.99 | 4152 | 2.19 | 4284 | 2.39 | 4411 | 2.59 | 4534 | 2.80 | 4653 | 3.01 |
| 1200 | 1860 | 3874 | 1.84 | 3942 | 1.93 | 4077 | 2.12 | 4213 | 2.32 | 4344 | 2.53 | 4471 | 2.74 | 4594 | 2.96 | 4713 | 3.17 |
| 1300 | 2015 | 3958 | 1.97 | 4026 | 2.07 | 4156 | 2.27 | 4281 | 2.47 | 4406 | 2.68 | 4532 | 2.90 | 4655 | 3.12 | 4774 | 3.35 |
| 1400 | 2170 | 4044 | 2.12 | 4111 | 2.22 | 4240 | 2.43 | 4365 | 2.64 | 4485 | 2.85 | 4602 | 3.07 | 4717 | 3.29 | 4835 | 3.53 |
| 1500 | 2325 | 4131 | 2.27 | 4197 | 2.38 | 4326 | 2.59 | 4450 | 2.81 | 4570 | 3.03 | 4686 | 3.26 | 4798 | 3.49 | 4907 | 3.72 |
| 1600 | 2480 | 4224 | 2.44 | 4285 | 2.54 | 4413 | 2.77 | 4536 | 2.99 | 4655 | 3.23 | 4770 | 3.46 | 4882 | 3.70 | 4991 | 3.94 |
| 1700 | 2635 | 4326 | 2.63 | 4386 | 2.74 | 4505 | 2.96 | 4623 | 3.19 | 4742 | 3.43 | 4856 | 3.67 | 4968 | 3.92 | | |
| 1800 | 2790 | 4429 | 2.83 | 4489 | 2.94 | 4606 | 3.17 | 4720 | 3.40 | 4829 | 3.64 | 4943 | 3.89 | | | | |
| 1900 | 2945 | 4534 | 3.04 | 4593 | 3.16 | 4709 | 3.40 | 4822 | 3.64 | 4930 | 3.88 | | | | | | |
| 2000 | 3100 | 4640 | 3.27 | 4699 | 3.39 | 4814 | 3.64 | 4925 | 3.89 | | | | | | | | |
| 2100 | 3255 | 4751 | 3.51 | 4808 | 3.63 | 4919 | 3.89 | | | | | | | | | | |
| 2200 | 3410 | 4863 | 3.76 | 4920 | 3.89 | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 0.635)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|----|----|----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 900 | 100 | 73 | 64 | 57 | 59 | 54 | 49 | 43 | 35 | 60 |
| | 80 | 73 | 62 | 56 | 56 | 50 | 46 | 42 | 34 | 57 |
| | 60 | 72 | 62 | 54 | 53 | 48 | 45 | 41 | 32 | 55 |
| | 40 | 72 | 62 | 53 | 53 | 49 | 46 | 42 | 32 | 56 |
| | 30 | 73 | 63 | 54 | 54 | 50 | 47 | 43 | 33 | 57 |
| 1300 | 100 | 78 | 71 | 67 | 67 | 63 | 58 | 54 | 45 | 68 |
| | 80 | 77 | 69 | 65 | 65 | 61 | 55 | 52 | 42 | 66 |
| | 60 | 78 | 69 | 65 | 63 | 60 | 53 | 51 | 42 | 65 |
| | 40 | 78 | 68 | 63 | 62 | 61 | 54 | 52 | 43 | 65 |
| | 30 | 79 | 69 | 64 | 63 | 62 | 55 | 53 | 44 | 66 |
| 1800 | 100 | 84 | 77 | 72 | 73 | 70 | 65 | 64 | 55 | 75 |
| | 80 | 85 | 76 | 70 | 70 | 67 | 62 | 60 | 52 | 72 |
| | 60 | 86 | 75 | 69 | 69 | 67 | 60 | 59 | 52 | 72 |
| | 40 | 86 | 74 | 70 | 69 | 68 | 62 | 61 | 55 | 72 |
| | 30 | 87 | 75 | 71 | 70 | 69 | 63 | 62 | 56 | 73 |
| 2500 | 100 | 90 | 82 | 80 | 83 | 79 | 72 | 72 | 65 | 84 |
| | 80 | 92 | 81 | 78 | 80 | 76 | 69 | 68 | 61 | 81 |
| | 60 | 87 | 79 | 78 | 77 | 75 | 68 | 67 | 63 | 79 |
| | 40 | 85 | 80 | 78 | 76 | 75 | 70 | 69 | 66 | 80 |
| | 30 | 86 | 81 | 79 | 77 | 76 | 71 | 70 | 67 | 81 |
| 3600 | 100 | 96 | 89 | 84 | 91 | 86 | 81 | 81 | 77 | 91 |
| | 80 | 97 | 87 | 83 | 89 | 83 | 78 | 77 | 72 | 89 |
| | 60 | 97 | 85 | 80 | 87 | 82 | 78 | 77 | 78 | 88 |
| | 40 | 98 | 85 | 80 | 86 | 82 | 78 | 78 | 78 | 88 |
| | 30 | 99 | 86 | 81 | 87 | 83 | 79 | 79 | 79 | 89 |
| 4500 | 100 | 100 | 97 | 92 | 94 | 92 | 87 | 85 | 83 | 97 |
| | 80 | 100 | 96 | 90 | 92 | 90 | 84 | 82 | 78 | 94 |
| | 60 | 100 | 95 | 88 | 90 | 89 | 84 | 82 | 82 | 93 |
| | 40 | 102 | 95 | 87 | 89 | 88 | 84 | 83 | 82 | 93 |
| | 30 | 104 | 97 | 89 | 91 | 90 | 86 | 85 | 84 | 95 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|----|----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 900 | 100 | 82 | 76 | 64 | 58 | 55 | 53 | 44 | 37 | 64 |
| | 80 | 80 | 75 | 62 | 56 | 51 | 50 | 42 | 36 | 63 |
| | 60 | 81 | 75 | 62 | 55 | 50 | 48 | 42 | 36 | 62 |
| | 40 | 82 | 74 | 61 | 55 | 51 | 48 | 43 | 37 | 62 |
| | 30 | 83 | 75 | 62 | 56 | 52 | 49 | 44 | 38 | 63 |
| 1300 | 100 | 85 | 83 | 81 | 68 | 62 | 63 | 55 | 46 | 75 |
| | 80 | 84 | 80 | 78 | 66 | 60 | 59 | 53 | 44 | 72 |
| | 60 | 83 | 79 | 74 | 65 | 60 | 57 | 52 | 44 | 70 |
| | 40 | 83 | 80 | 74 | 64 | 59 | 56 | 52 | 45 | 70 |
| | 30 | 84 | 81 | 75 | 65 | 60 | 57 | 53 | 46 | 71 |
| 1800 | 100 | 90 | 87 | 82 | 75 | 70 | 69 | 65 | 57 | 79 |
| | 80 | 88 | 86 | 79 | 73 | 66 | 65 | 60 | 53 | 76 |
| | 60 | 89 | 85 | 77 | 71 | 64 | 62 | 58 | 53 | 75 |
| | 40 | 87 | 85 | 77 | 71 | 64 | 61 | 59 | 55 | 74 |
| | 30 | 89 | 86 | 78 | 72 | 65 | 62 | 60 | 56 | 76 |
| 2500 | 100 | 95 | 92 | 88 | 91 | 79 | 77 | 74 | 68 | 90 |
| | 80 | 96 | 92 | 88 | 87 | 75 | 73 | 69 | 62 | 86 |
| | 60 | 101 | 93 | 87 | 84 | 74 | 71 | 66 | 62 | 85 |
| | 40 | 98 | 92 | 86 | 84 | 73 | 69 | 66 | 64 | 84 |
| | 30 | 100 | 93 | 87 | 85 | 74 | 70 | 67 | 65 | 86 |
| 3600 | 100 | 102 | 98 | 92 | 93 | 88 | 86 | 83 | 80 | 95 |
| | 80 | 99 | 97 | 91 | 91 | 84 | 83 | 79 | 74 | 92 |
| | 60 | 97 | 98 | 90 | 89 | 81 | 81 | 76 | 72 | 90 |
| | 40 | 98 | 97 | 89 | 88 | 81 | 80 | 76 | 73 | 90 |
| | 30 | 100 | 98 | 90 | 89 | 82 | 81 | 77 | 74 | 91 |
| 4500 | 100 | 105 | 104 | 99 | 97 | 94 | 91 | 88 | 85 | 100 |
| | 80 | 102 | 102 | 97 | 95 | 91 | 88 | 85 | 80 | 98 |
| | 60 | 101 | 103 | 97 | 94 | 88 | 85 | 82 | 78 | 96 |
| | 40 | 102 | 102 | 96 | 93 | 88 | 85 | 82 | 78 | 95 |
| | 30 | 106 | 105 | 98 | 95 | 90 | 87 | 84 | 80 | 98 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

12 BISW

Wheel Diameter = 12¼ in.

Outlet Area = 0.86 ft.²

Tip Speed = 3.21 x RPM

Maximum BHP = (RPM/2347)³

Minimum Starting HP = ¼

Maximum RPM Class I = 3274

Maximum RPM Class II = 4270

Maximum RPM Class III = 4300

Maximum Open Motor Frame Size

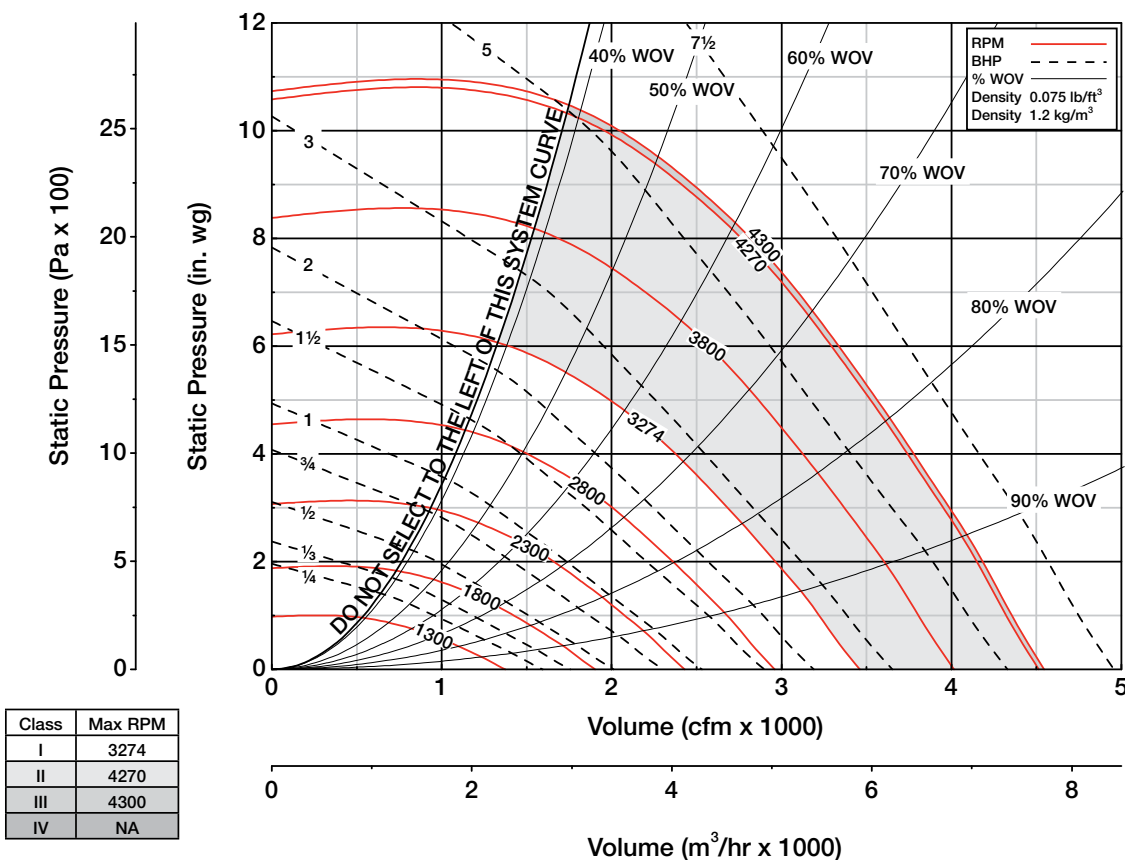
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 184T | 184T | 145T |
| Arr. 10 | 182T | 213T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 600 | 697 | 823 | 0.04 | 1021 | 0.08 | 1194 | 0.12 | 1346 | 0.16 | | | | | | | | | | | | |
| 760 | 883 | 934 | 0.06 | 1107 | 0.10 | 1264 | 0.15 | 1406 | 0.20 | 1535 | 0.25 | 1655 | 0.30 | 1773 | 0.36 | | | | | | |
| 920 | 1069 | 1055 | 0.09 | 1212 | 0.14 | 1350 | 0.19 | 1482 | 0.24 | 1601 | 0.30 | 1717 | 0.35 | 1825 | 0.42 | 1925 | 0.48 | 2024 | 0.55 | 2122 | 0.62 |
| 1080 | 1255 | 1183 | 0.13 | 1325 | 0.18 | 1453 | 0.24 | 1569 | 0.29 | 1685 | 0.36 | 1790 | 0.42 | 1891 | 0.48 | 1990 | 0.55 | 2084 | 0.63 | 2173 | 0.70 |
| 1240 | 1441 | 1315 | 0.17 | 1445 | 0.23 | 1563 | 0.30 | 1673 | 0.36 | 1774 | 0.43 | 1876 | 0.50 | 1973 | 0.57 | 2064 | 0.64 | 2150 | 0.72 | 2239 | 0.80 |
| 1400 | 1627 | 1451 | 0.23 | 1571 | 0.30 | 1680 | 0.37 | 1782 | 0.44 | 1880 | 0.51 | 1970 | 0.58 | 2060 | 0.66 | 2149 | 0.74 | 2234 | 0.82 | 2315 | 0.91 |
| 1560 | 1813 | 1592 | 0.30 | 1700 | 0.38 | 1802 | 0.45 | 1898 | 0.53 | 1989 | 0.61 | 2077 | 0.69 | 2160 | 0.77 | 2238 | 0.85 | 2321 | 0.94 | 2400 | 1.03 |
| 1720 | 2000 | 1735 | 0.39 | 1832 | 0.47 | 1928 | 0.55 | 2018 | 0.64 | 2105 | 0.72 | 2187 | 0.81 | 2267 | 0.90 | 2344 | 0.99 | 2417 | 1.08 | 2488 | 1.17 |
| 1880 | 2186 | 1879 | 0.49 | 1967 | 0.58 | 2057 | 0.67 | 2143 | 0.76 | 2224 | 0.85 | 2302 | 0.94 | 2377 | 1.04 | 2452 | 1.14 | 2523 | 1.23 | 2592 | 1.33 |
| 2040 | 2372 | 2024 | 0.62 | 2105 | 0.70 | 2189 | 0.80 | 2270 | 0.90 | 2347 | 1.00 | 2422 | 1.10 | 2494 | 1.20 | 2563 | 1.30 | 2632 | 1.41 | 2699 | 1.51 |
| 2200 | 2558 | 2170 | 0.76 | 2246 | 0.85 | 2322 | 0.95 | 2399 | 1.06 | 2473 | 1.16 | 2544 | 1.27 | 2613 | 1.38 | 2680 | 1.49 | 2745 | 1.60 | 2809 | 1.71 |
| 2360 | 2744 | 2316 | 0.92 | 2389 | 1.02 | 2457 | 1.12 | 2531 | 1.24 | 2601 | 1.35 | 2670 | 1.46 | 2735 | 1.58 | 2800 | 1.70 | 2863 | 1.82 | 2923 | 1.93 |
| 2520 | 2930 | 2463 | 1.11 | 2532 | 1.21 | 2597 | 1.32 | 2664 | 1.44 | 2732 | 1.56 | 2797 | 1.68 | 2861 | 1.80 | 2922 | 1.93 | 2982 | 2.05 | 3041 | 2.18 |
| 2680 | 3116 | 2610 | 1.31 | 2676 | 1.43 | 2738 | 1.54 | 2799 | 1.66 | 2864 | 1.79 | 2926 | 1.92 | 2988 | 2.05 | 3047 | 2.18 | 3104 | 2.31 | 3161 | 2.44 |
| 2840 | 3302 | 2757 | 1.55 | 2821 | 1.67 | 2880 | 1.79 | 2937 | 1.91 | 2998 | 2.05 | 3058 | 2.18 | 3116 | 2.32 | 3174 | 2.46 | 3230 | 2.60 | 3284 | 2.74 |
| 3000 | 3488 | 2905 | 1.81 | 2967 | 1.94 | 3024 | 2.07 | 3078 | 2.20 | 3133 | 2.33 | 3191 | 2.47 | 3247 | 2.62 | 3302 | 2.76 | 3357 | 2.91 | 3410 | 3.05 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1200 | 1395 | 2222 | 0.77 | 2388 | 0.93 | 2540 | 1.09 | 2693 | 1.28 | 2839 | 1.48 | | | | | | |
| 1360 | 1581 | 2294 | 0.88 | 2453 | 1.05 | 2605 | 1.22 | 2747 | 1.41 | 2880 | 1.59 | 3015 | 1.80 | 3147 | 2.02 | 3272 | 2.25 |
| 1520 | 1767 | 2379 | 1.00 | 2528 | 1.18 | 2671 | 1.36 | 2812 | 1.56 | 2945 | 1.76 | 3071 | 1.97 | 3191 | 2.18 | 3310 | 2.40 |
| 1680 | 1953 | 2466 | 1.14 | 2614 | 1.33 | 2751 | 1.53 | 2880 | 1.73 | 3011 | 1.94 | 3136 | 2.16 | 3256 | 2.38 | 3370 | 2.61 |
| 1840 | 2139 | 2565 | 1.29 | 2701 | 1.49 | 2837 | 1.70 | 2965 | 1.92 | 3085 | 2.14 | 3202 | 2.36 | 3321 | 2.60 | 3435 | 2.83 |
| 2000 | 2325 | 2672 | 1.47 | 2800 | 1.68 | 2924 | 1.90 | 3051 | 2.12 | 3170 | 2.36 | 3284 | 2.59 | 3393 | 2.83 | 3502 | 3.08 |
| 2160 | 2511 | 2781 | 1.66 | 2906 | 1.89 | 3024 | 2.11 | 3138 | 2.35 | 3257 | 2.59 | 3370 | 2.84 | 3478 | 3.10 | 3581 | 3.35 |
| 2320 | 2697 | 2894 | 1.88 | 3015 | 2.11 | 3131 | 2.36 | 3240 | 2.60 | 3345 | 2.85 | 3457 | 3.11 | 3564 | 3.38 | 3667 | 3.65 |
| 2480 | 2883 | 3012 | 2.11 | 3126 | 2.36 | 3239 | 2.62 | 3347 | 2.88 | 3449 | 3.14 | 3548 | 3.40 | 3651 | 3.68 | 3753 | 3.96 |
| 2640 | 3069 | 3131 | 2.38 | 3243 | 2.64 | 3349 | 2.91 | 3455 | 3.18 | 3556 | 3.45 | 3653 | 3.73 | 3746 | 4.01 | 3841 | 4.30 |
| 2800 | 3255 | 3253 | 2.66 | 3361 | 2.94 | 3465 | 3.22 | 3565 | 3.50 | 3665 | 3.79 | 3760 | 4.08 | 3852 | 4.38 | 3941 | 4.68 |
| 2960 | 3441 | 3378 | 2.97 | 3481 | 3.26 | 3583 | 3.56 | 3680 | 3.85 | 3775 | 4.16 | 3869 | 4.46 | 3959 | 4.77 | 4047 | 5.08 |
| 3120 | 3627 | 3505 | 3.31 | 3605 | 3.62 | 3702 | 3.93 | 3797 | 4.24 | 3889 | 4.55 | 3979 | 4.87 | 4068 | 5.19 | 4155 | 5.51 |
| 3280 | 3813 | 3633 | 3.68 | 3730 | 4.00 | 3824 | 4.32 | 3916 | 4.65 | 4006 | 4.97 | 4093 | 5.30 | 4178 | 5.64 | 4264 | 5.97 |
| 3440 | 4000 | 3762 | 4.08 | 3857 | 4.41 | 3948 | 4.75 | 4037 | 5.09 | 4125 | 5.43 | 4210 | 5.77 | 4292 | 6.12 | | |
| 3600 | 4186 | 3893 | 4.51 | 3985 | 4.86 | 4074 | 5.21 | 4160 | 5.56 | 4245 | 5.92 | | | | | | |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1500 | 1744 | 3542 | 2.87 | 3654 | 3.12 | | | | | | | | | | |
| 1660 | 1930 | 3580 | 3.04 | 3692 | 3.31 | 3800 | 3.57 | 3905 | 3.85 | 4007 | 4.12 | | | | |
| 1820 | 2116 | 3642 | 3.29 | 3744 | 3.54 | 3843 | 3.79 | 3943 | 4.06 | 4045 | 4.35 | 4240 | 4.94 | | |
| 1980 | 2302 | 3708 | 3.56 | 3809 | 3.82 | 3908 | 4.09 | 4003 | 4.35 | 4096 | 4.63 | 4278 | 5.19 | | |
| 2140 | 2488 | 3774 | 3.84 | 3875 | 4.12 | 3973 | 4.39 | 4068 | 4.68 | 4161 | 4.96 | | | | |
| 2300 | 2674 | 3851 | 4.15 | 3944 | 4.43 | 4039 | 4.72 | 4134 | 5.01 | 4227 | 5.31 | | | | |
| 2460 | 2860 | 3936 | 4.50 | 4028 | 4.79 | 4118 | 5.08 | 4205 | 5.38 | 4293 | 5.68 | | | | |
| 2620 | 3046 | 4022 | 4.86 | 4114 | 5.16 | 4202 | 5.47 | 4289 | 5.78 | | | | | | |
| 2780 | 3232 | 4109 | 5.24 | 4200 | 5.56 | 4288 | 5.88 | | | | | | | | |
| 2940 | 3418 | 4201 | 5.65 | 4288 | 5.98 | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 1.06)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|----|----|-----|----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 900 | 100 | 70 | 73 | 64 | 63 | 61 | 54 | 46 | 39 | 65 |
| | 80 | 68 | 67 | 61 | 59 | 55 | 47 | 40 | 35 | 60 |
| | 60 | 67 | 67 | 60 | 57 | 53 | 45 | 38 | 33 | 59 |
| | 50 | 67 | 67 | 60 | 57 | 54 | 45 | 39 | 34 | 59 |
| | 40 | 68 | 67 | 60 | 57 | 54 | 46 | 40 | 34 | 59 |
| 1300 | 100 | 75 | 78 | 77 | 71 | 67 | 66 | 58 | 50 | 74 |
| | 80 | 74 | 76 | 75 | 67 | 63 | 59 | 52 | 45 | 71 |
| | 60 | 74 | 73 | 69 | 66 | 65 | 58 | 54 | 47 | 69 |
| | 50 | 74 | 73 | 70 | 66 | 66 | 59 | 55 | 50 | 70 |
| | 40 | 78 | 80 | 75 | 69 | 68 | 60 | 57 | 51 | 73 |
| 1900 | 100 | 80 | 82 | 80 | 79 | 76 | 73 | 70 | 63 | 81 |
| | 80 | 78 | 79 | 77 | 75 | 73 | 70 | 65 | 59 | 78 |
| | 60 | 79 | 79 | 75 | 74 | 74 | 69 | 65 | 61 | 78 |
| | 50 | 80 | 79 | 75 | 74 | 74 | 69 | 67 | 63 | 78 |
| | 40 | 81 | 81 | 77 | 75 | 75 | 70 | 68 | 64 | 79 |
| 2600 | 100 | 89 | 88 | 85 | 90 | 84 | 79 | 78 | 74 | 90 |
| | 80 | 84 | 85 | 81 | 87 | 81 | 76 | 74 | 69 | 87 |
| | 60 | 83 | 84 | 79 | 83 | 80 | 76 | 74 | 70 | 85 |
| | 50 | 84 | 84 | 80 | 83 | 81 | 77 | 76 | 72 | 85 |
| | 40 | 87 | 87 | 82 | 85 | 81 | 78 | 77 | 73 | 86 |
| 3800 | 100 | 99 | 96 | 91 | 98 | 93 | 89 | 87 | 85 | 99 |
| | 80 | 100 | 93 | 87 | 95 | 90 | 85 | 83 | 81 | 95 |
| | 60 | 99 | 95 | 87 | 91 | 88 | 85 | 84 | 81 | 94 |
| | 50 | 99 | 94 | 88 | 93 | 88 | 86 | 85 | 82 | 95 |
| | 40 | 99 | 95 | 91 | 96 | 90 | 87 | 87 | 84 | 96 |
| 4300 | 100 | 101 | 99 | 95 | 100 | 97 | 92 | 89 | 88 | 101 |
| | 80 | 102 | 97 | 91 | 96 | 93 | 89 | 86 | 84 | 98 |
| | 60 | 101 | 99 | 91 | 93 | 91 | 88 | 87 | 84 | 96 |
| | 50 | 100 | 98 | 92 | 95 | 92 | 89 | 88 | 85 | 97 |
| | 40 | 101 | 99 | 95 | 98 | 94 | 90 | 89 | 87 | 99 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 900 | 100 | 82 | 79 | 72 | 67 | 62 | 58 | 50 | 43 | 70 |
| | 80 | 81 | 77 | 67 | 62 | 59 | 53 | 47 | 40 | 66 |
| | 60 | 81 | 75 | 65 | 61 | 58 | 52 | 47 | 40 | 65 |
| | 50 | 81 | 74 | 65 | 60 | 58 | 52 | 48 | 41 | 65 |
| | 40 | 81 | 74 | 64 | 60 | 59 | 52 | 48 | 42 | 65 |
| 1300 | 100 | 86 | 83 | 81 | 76 | 69 | 67 | 61 | 53 | 78 |
| | 80 | 83 | 81 | 78 | 74 | 66 | 62 | 56 | 49 | 75 |
| | 60 | 83 | 79 | 75 | 69 | 64 | 59 | 56 | 49 | 72 |
| | 50 | 84 | 79 | 74 | 68 | 63 | 59 | 56 | 50 | 71 |
| | 40 | 90 | 81 | 75 | 68 | 63 | 59 | 56 | 50 | 72 |
| 1900 | 100 | 96 | 91 | 91 | 85 | 80 | 78 | 73 | 65 | 87 |
| | 80 | 92 | 88 | 88 | 82 | 76 | 74 | 68 | 61 | 84 |
| | 60 | 90 | 86 | 84 | 79 | 73 | 70 | 66 | 61 | 81 |
| | 50 | 90 | 86 | 83 | 78 | 73 | 69 | 66 | 62 | 80 |
| | 40 | 91 | 88 | 83 | 78 | 72 | 69 | 66 | 62 | 81 |
| 2600 | 100 | 102 | 96 | 94 | 101 | 89 | 86 | 82 | 76 | 99 |
| | 80 | 99 | 93 | 90 | 95 | 85 | 82 | 77 | 71 | 94 |
| | 60 | 97 | 92 | 88 | 92 | 82 | 79 | 74 | 70 | 91 |
| | 50 | 97 | 92 | 88 | 90 | 82 | 78 | 74 | 70 | 90 |
| | 40 | 98 | 97 | 89 | 90 | 81 | 78 | 74 | 71 | 90 |
| 3800 | 100 | 113 | 105 | 99 | 106 | 96 | 94 | 90 | 87 | 105 |
| | 80 | 116 | 102 | 96 | 102 | 92 | 90 | 86 | 82 | 101 |
| | 60 | 116 | 100 | 94 | 95 | 89 | 87 | 84 | 80 | 97 |
| | 50 | 115 | 100 | 93 | 93 | 88 | 86 | 84 | 81 | 96 |
| | 40 | 114 | 100 | 93 | 93 | 88 | 86 | 84 | 81 | 96 |
| 4300 | 100 | 115 | 109 | 102 | 107 | 100 | 97 | 93 | 90 | 107 |
| | 80 | 118 | 107 | 99 | 103 | 96 | 93 | 89 | 85 | 104 |
| | 60 | 118 | 105 | 97 | 97 | 93 | 90 | 87 | 83 | 100 |
| | 50 | 117 | 105 | 96 | 96 | 92 | 89 | 87 | 84 | 99 |
| | 40 | 116 | 105 | 96 | 95 | 91 | 88 | 87 | 84 | 99 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

13 BISW

Wheel Diameter = 13½ in.

Outlet Area = 1.05 ft.²

Tip Speed = 3.53 x RPM

Maximum BHP = (RPM/1997)³

Minimum Starting HP = ¼

Maximum RPM Class I = 2971

Maximum RPM Class II = 3875

Maximum RPM Class III = 4150

Maximum Open Motor Frame Size

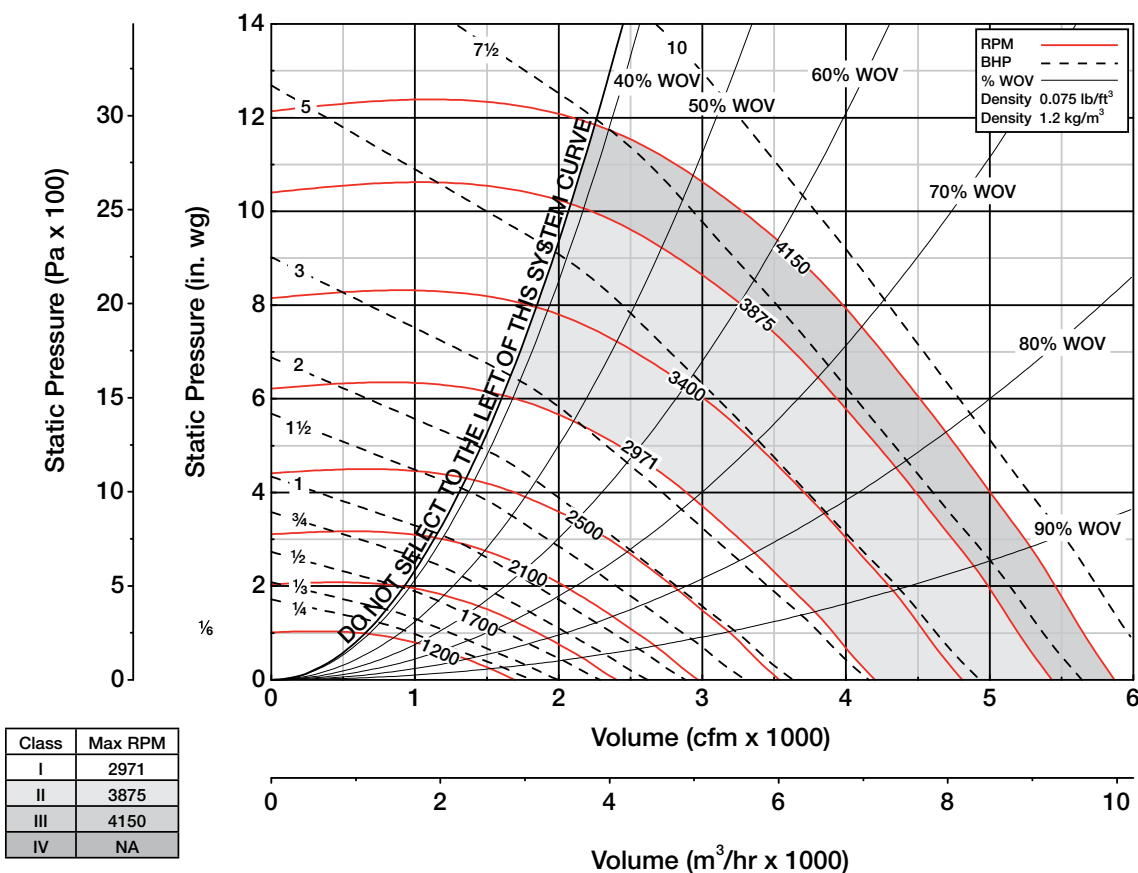
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 184T | 184T | 145T |
| Arr. 10 | 184T | 213T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 800 | 761 | 783 | 0.06 | 955 | 0.10 | 1105 | 0.15 | 1238 | 0.21 | 1363 | 0.27 | | | | | | | | | | |
| 980 | 933 | 879 | 0.09 | 1031 | 0.14 | 1170 | 0.19 | 1293 | 0.25 | 1410 | 0.32 | 1517 | 0.38 | 1619 | 0.45 | 1719 | 0.53 | | | | |
| 1160 | 1104 | 983 | 0.12 | 1122 | 0.18 | 1243 | 0.24 | 1362 | 0.30 | 1469 | 0.37 | 1572 | 0.45 | 1669 | 0.52 | 1760 | 0.60 | 1846 | 0.68 | 1933 | 0.77 |
| 1340 | 1276 | 1091 | 0.16 | 1218 | 0.23 | 1333 | 0.30 | 1436 | 0.37 | 1540 | 0.44 | 1636 | 0.52 | 1725 | 0.60 | 1815 | 0.69 | 1900 | 0.77 | 1981 | 0.86 |
| 1520 | 1447 | 1202 | 0.21 | 1319 | 0.29 | 1426 | 0.36 | 1525 | 0.44 | 1616 | 0.52 | 1708 | 0.61 | 1796 | 0.70 | 1878 | 0.79 | 1956 | 0.88 | 2036 | 0.97 |
| 1700 | 1619 | 1316 | 0.28 | 1425 | 0.36 | 1525 | 0.45 | 1617 | 0.53 | 1705 | 0.62 | 1787 | 0.71 | 1869 | 0.80 | 1950 | 0.90 | 2027 | 1.00 | 2100 | 1.10 |
| 1880 | 1790 | 1435 | 0.36 | 1534 | 0.45 | 1627 | 0.54 | 1714 | 0.63 | 1797 | 0.73 | 1877 | 0.83 | 1952 | 0.92 | 2024 | 1.03 | 2100 | 1.13 | 2172 | 1.24 |
| 2060 | 1961 | 1555 | 0.46 | 1644 | 0.55 | 1733 | 0.65 | 1815 | 0.75 | 1894 | 0.85 | 1969 | 0.96 | 2043 | 1.06 | 2112 | 1.17 | 2178 | 1.28 | 2245 | 1.40 |
| 2240 | 2133 | 1676 | 0.57 | 1757 | 0.67 | 1840 | 0.78 | 1919 | 0.89 | 1994 | 1.00 | 2065 | 1.11 | 2135 | 1.22 | 2203 | 1.34 | 2268 | 1.45 | 2330 | 1.57 |
| 2420 | 2304 | 1798 | 0.70 | 1872 | 0.81 | 1950 | 0.92 | 2025 | 1.04 | 2096 | 1.16 | 2165 | 1.28 | 2231 | 1.40 | 2295 | 1.52 | 2359 | 1.64 | 2420 | 1.77 |
| 2600 | 2476 | 1920 | 0.86 | 1990 | 0.97 | 2062 | 1.08 | 2133 | 1.21 | 2202 | 1.34 | 2267 | 1.46 | 2331 | 1.59 | 2392 | 1.72 | 2452 | 1.85 | 2512 | 1.99 |
| 2780 | 2647 | 2043 | 1.03 | 2110 | 1.15 | 2175 | 1.27 | 2243 | 1.40 | 2309 | 1.54 | 2372 | 1.67 | 2432 | 1.81 | 2492 | 1.95 | 2550 | 2.08 | 2606 | 2.22 |
| 2960 | 2819 | 2167 | 1.23 | 2230 | 1.35 | 2290 | 1.48 | 2355 | 1.62 | 2417 | 1.76 | 2478 | 1.90 | 2537 | 2.05 | 2593 | 2.19 | 2650 | 2.34 | 2704 | 2.49 |
| 3140 | 2990 | 2290 | 1.44 | 2351 | 1.58 | 2409 | 1.71 | 2467 | 1.85 | 2528 | 2.00 | 2586 | 2.16 | 2643 | 2.31 | 2698 | 2.46 | 2751 | 2.62 | 2804 | 2.77 |
| 3320 | 3161 | 2414 | 1.69 | 2473 | 1.83 | 2528 | 1.97 | 2581 | 2.12 | 2639 | 2.28 | 2696 | 2.44 | 2750 | 2.60 | 2804 | 2.76 | 2855 | 2.92 | 2905 | 3.08 |
| 3500 | 3333 | 2538 | 1.96 | 2595 | 2.11 | 2648 | 2.26 | 2698 | 2.41 | 2752 | 2.57 | 2806 | 2.74 | 2859 | 2.91 | 2911 | 3.08 | 2961 | 3.25 | 3010 | 3.42 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1500 | 1428 | 2030 | 0.96 | 2180 | 1.16 | 2318 | 1.36 | 2451 | 1.58 | 2584 | 1.82 | 2709 | 2.07 | | | | |
| 1680 | 1600 | 2092 | 1.08 | 2235 | 1.29 | 2373 | 1.51 | 2501 | 1.73 | 2622 | 1.97 | 2741 | 2.21 | 2861 | 2.48 | 2975 | 2.76 |
| 1860 | 1771 | 2164 | 1.22 | 2300 | 1.44 | 2428 | 1.67 | 2556 | 1.91 | 2677 | 2.15 | 2791 | 2.40 | 2900 | 2.66 | 3006 | 2.93 |
| 2040 | 1942 | 2237 | 1.38 | 2372 | 1.61 | 2497 | 1.85 | 2614 | 2.10 | 2732 | 2.35 | 2846 | 2.62 | 2954 | 2.89 | 3058 | 3.16 |
| 2220 | 2114 | 2320 | 1.55 | 2445 | 1.79 | 2568 | 2.05 | 2684 | 2.31 | 2794 | 2.57 | 2902 | 2.85 | 3010 | 3.13 | 3113 | 3.42 |
| 2400 | 2285 | 2410 | 1.75 | 2526 | 2.00 | 2642 | 2.26 | 2757 | 2.54 | 2865 | 2.82 | 2969 | 3.10 | 3068 | 3.39 | 3169 | 3.69 |
| 2580 | 2457 | 2502 | 1.96 | 2615 | 2.23 | 2722 | 2.50 | 2830 | 2.79 | 2938 | 3.08 | 3040 | 3.38 | 3139 | 3.68 | 3233 | 3.99 |
| 2760 | 2628 | 2595 | 2.20 | 2706 | 2.48 | 2812 | 2.77 | 2911 | 3.06 | 3011 | 3.36 | 3113 | 3.68 | 3211 | 4.00 | 3304 | 4.32 |
| 2940 | 2800 | 2693 | 2.46 | 2799 | 2.75 | 2902 | 3.06 | 3001 | 3.36 | 3094 | 3.67 | 3187 | 3.99 | 3283 | 4.33 | 3376 | 4.67 |
| 3120 | 2971 | 2793 | 2.74 | 2895 | 3.05 | 2995 | 3.37 | 3091 | 3.69 | 3183 | 4.02 | 3272 | 4.35 | 3357 | 4.68 | 3450 | 5.03 |
| 3300 | 3142 | 2894 | 3.05 | 2994 | 3.37 | 3089 | 3.71 | 3183 | 4.04 | 3274 | 4.38 | 3361 | 4.73 | 3445 | 5.08 | 3526 | 5.43 |
| 3480 | 3314 | 2998 | 3.38 | 3094 | 3.72 | 3187 | 4.07 | 3276 | 4.42 | 3366 | 4.78 | 3452 | 5.14 | 3535 | 5.50 | 3615 | 5.87 |
| 3660 | 3485 | 3104 | 3.74 | 3196 | 4.10 | 3287 | 4.46 | 3374 | 4.83 | 3459 | 5.20 | 3544 | 5.58 | 3626 | 5.95 | 3705 | 6.34 |
| 3840 | 3657 | 3211 | 4.14 | 3301 | 4.51 | 3388 | 4.89 | 3474 | 5.27 | 3556 | 5.65 | 3637 | 6.04 | 3717 | 6.44 | 3796 | 6.83 |
| 4020 | 3828 | 3319 | 4.56 | 3406 | 4.95 | 3491 | 5.34 | 3574 | 5.74 | 3655 | 6.14 | 3733 | 6.54 | 3810 | 6.95 | 3887 | 7.36 |
| 4200 | 4000 | 3428 | 5.01 | 3513 | 5.42 | 3596 | 5.83 | 3675 | 6.24 | 3755 | 6.66 | 3832 | 7.07 | 3907 | 7.50 | 3980 | 7.92 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2400 | 2285 | 3363 | 4.31 | 3455 | 4.63 | 3545 | 4.95 | 3632 | 5.28 | 3716 | 5.61 | 3881 | 6.29 | 4050 | 7.06 | | |
| 2580 | 2457 | 3419 | 4.63 | 3511 | 4.96 | 3600 | 5.30 | 3686 | 5.64 | 3770 | 5.98 | 3932 | 6.68 | 4086 | 7.40 | | |
| 2760 | 2628 | 3482 | 4.98 | 3567 | 5.31 | 3655 | 5.66 | 3742 | 6.02 | 3825 | 6.37 | 3987 | 7.10 | 4140 | 7.84 | | |
| 2940 | 2800 | 3553 | 5.35 | 3637 | 5.70 | 3718 | 6.05 | 3798 | 6.41 | 3881 | 6.78 | 4042 | 7.54 | | | | |
| 3120 | 2971 | 3625 | 5.75 | 3708 | 6.12 | 3789 | 6.48 | 3868 | 6.85 | 3944 | 7.23 | 4098 | 8.00 | | | | |
| 3300 | 3142 | 3697 | 6.17 | 3780 | 6.55 | 3861 | 6.94 | 3939 | 7.32 | 4015 | 7.71 | 4162 | 8.50 | | | | |
| 3480 | 3314 | 3771 | 6.62 | 3853 | 7.01 | 3933 | 7.41 | 4011 | 7.81 | 4087 | 8.22 | 4233 | 9.03 | | | | |
| 3660 | 3485 | 3856 | 7.11 | 3928 | 7.50 | 4007 | 7.91 | 4084 | 8.33 | | | | | | | | |
| 3840 | 3657 | 3945 | 7.64 | 4017 | 8.04 | 4086 | 8.45 | | | | | | | | | | |
| 4020 | 3828 | 4035 | 8.19 | 4106 | 8.62 | | | | | | | | | | | | |
| 4200 | 4000 | 4126 | 8.79 | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 1.41)$$

Sound Power [dB Ref 10⁻¹² watts]

| | | Inlet Sound Power, L_{Wi} | | | | | | | | | |
|------|------|-----------------------------|-----|----|-----|----|----|----|----|-----------|--|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} | |
| 850 | 100 | 73 | 75 | 65 | 64 | 63 | 55 | 47 | 40 | 67 | |
| | 80 | 71 | 69 | 62 | 60 | 57 | 48 | 41 | 36 | 62 | |
| | 60 | 70 | 68 | 61 | 59 | 55 | 46 | 39 | 35 | 61 | |
| | 50 | 70 | 68 | 61 | 58 | 55 | 46 | 40 | 35 | 61 | |
| | 40 | 71 | 69 | 62 | 58 | 56 | 46 | 41 | 35 | 61 | |
| 1200 | 100 | 78 | 80 | 77 | 71 | 68 | 67 | 59 | 51 | 75 | |
| | 80 | 77 | 77 | 75 | 67 | 64 | 60 | 53 | 45 | 71 | |
| | 60 | 76 | 74 | 69 | 67 | 66 | 58 | 54 | 48 | 70 | |
| | 50 | 77 | 75 | 69 | 67 | 67 | 59 | 56 | 50 | 71 | |
| | 40 | 81 | 81 | 74 | 70 | 69 | 60 | 58 | 51 | 73 | |
| 1700 | 100 | 83 | 83 | 80 | 79 | 76 | 73 | 71 | 62 | 81 | |
| | 80 | 80 | 80 | 77 | 75 | 73 | 70 | 65 | 58 | 78 | |
| | 60 | 81 | 79 | 75 | 74 | 74 | 68 | 66 | 61 | 78 | |
| | 50 | 82 | 80 | 75 | 74 | 75 | 69 | 67 | 63 | 78 | |
| | 40 | 83 | 81 | 77 | 75 | 75 | 69 | 68 | 64 | 79 | |
| 2400 | 100 | 91 | 90 | 86 | 91 | 85 | 80 | 79 | 75 | 91 | |
| | 80 | 86 | 86 | 82 | 88 | 82 | 76 | 75 | 70 | 88 | |
| | 60 | 85 | 85 | 81 | 84 | 81 | 77 | 75 | 71 | 86 | |
| | 50 | 86 | 86 | 81 | 84 | 81 | 78 | 77 | 73 | 87 | |
| | 40 | 89 | 88 | 83 | 86 | 82 | 79 | 77 | 74 | 88 | |
| 3500 | 100 | 101 | 97 | 93 | 100 | 94 | 90 | 88 | 86 | 100 | |
| | 80 | 102 | 94 | 89 | 97 | 90 | 86 | 84 | 82 | 97 | |
| | 60 | 101 | 95 | 88 | 93 | 89 | 86 | 85 | 82 | 95 | |
| | 50 | 100 | 95 | 89 | 95 | 89 | 87 | 86 | 83 | 96 | |
| | 40 | 100 | 96 | 93 | 97 | 90 | 88 | 88 | 85 | 98 | |
| 4150 | 100 | 104 | 102 | 98 | 102 | 99 | 94 | 92 | 90 | 104 | |
| | 80 | 105 | 100 | 94 | 99 | 96 | 91 | 88 | 86 | 100 | |
| | 60 | 104 | 101 | 94 | 96 | 93 | 90 | 89 | 86 | 99 | |
| | 50 | 103 | 101 | 95 | 97 | 94 | 91 | 90 | 87 | 100 | |
| | 40 | 103 | 101 | 98 | 100 | 96 | 92 | 91 | 89 | 102 | |

| | | Outlet Sound Power, L_{Wo} | | | | | | | | | |
|------|------|------------------------------|-----|-----|-----|-----|----|----|----|-----------|--|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} | |
| 850 | 100 | 84 | 80 | 73 | 68 | 64 | 59 | 51 | 44 | 71 | |
| | 80 | 83 | 78 | 68 | 64 | 60 | 54 | 49 | 41 | 68 | |
| | 60 | 83 | 76 | 66 | 62 | 60 | 53 | 49 | 41 | 66 | |
| | 50 | 83 | 75 | 66 | 62 | 60 | 53 | 49 | 42 | 66 | |
| | 40 | 83 | 74 | 65 | 61 | 60 | 53 | 50 | 43 | 66 | |
| 1200 | 100 | 88 | 84 | 82 | 77 | 70 | 68 | 61 | 54 | 79 | |
| | 80 | 85 | 82 | 79 | 74 | 66 | 63 | 57 | 49 | 76 | |
| | 60 | 84 | 79 | 75 | 70 | 64 | 60 | 57 | 50 | 72 | |
| | 50 | 86 | 79 | 74 | 69 | 64 | 59 | 57 | 50 | 72 | |
| | 40 | 92 | 81 | 74 | 69 | 64 | 59 | 57 | 51 | 73 | |
| 1700 | 100 | 97 | 91 | 91 | 84 | 80 | 78 | 73 | 65 | 87 | |
| | 80 | 93 | 88 | 88 | 81 | 76 | 74 | 68 | 60 | 84 | |
| | 60 | 91 | 86 | 84 | 78 | 73 | 70 | 66 | 61 | 81 | |
| | 50 | 91 | 86 | 83 | 78 | 72 | 69 | 66 | 62 | 80 | |
| | 40 | 92 | 88 | 83 | 77 | 72 | 69 | 67 | 62 | 80 | |
| 2400 | 100 | 103 | 97 | 96 | 101 | 89 | 87 | 82 | 77 | 100 | |
| | 80 | 100 | 94 | 92 | 96 | 86 | 83 | 78 | 71 | 95 | |
| | 60 | 98 | 93 | 89 | 92 | 83 | 80 | 75 | 71 | 91 | |
| | 50 | 98 | 93 | 89 | 91 | 82 | 79 | 74 | 71 | 90 | |
| | 40 | 99 | 97 | 90 | 90 | 82 | 79 | 75 | 72 | 91 | |
| 3500 | 100 | 114 | 105 | 100 | 108 | 96 | 95 | 91 | 88 | 106 | |
| | 80 | 116 | 102 | 97 | 103 | 93 | 91 | 86 | 82 | 102 | |
| | 60 | 116 | 100 | 95 | 96 | 90 | 88 | 85 | 81 | 98 | |
| | 50 | 115 | 100 | 94 | 95 | 89 | 87 | 85 | 81 | 97 | |
| | 40 | 115 | 100 | 94 | 94 | 89 | 87 | 85 | 82 | 97 | |
| 4150 | 100 | 117 | 110 | 104 | 109 | 102 | 98 | 95 | 91 | 109 | |
| | 80 | 119 | 109 | 101 | 105 | 98 | 95 | 91 | 87 | 106 | |
| | 60 | 119 | 107 | 99 | 100 | 95 | 92 | 89 | 85 | 102 | |
| | 50 | 118 | 107 | 98 | 98 | 94 | 91 | 89 | 86 | 101 | |
| | 40 | 118 | 107 | 99 | 98 | 93 | 90 | 89 | 86 | 101 | |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

15 BISW

Wheel Diameter = 15 in.

Outlet Area = 1.29 ft.²

Tip Speed = 3.93 x RPM

Maximum BHP = (RPM/1675)³

Minimum Starting HP = ¼

Maximum RPM Class I = 2674

Maximum RPM Class II = 3488

Maximum RPM Class III = 3950

Maximum Open Motor Frame Size

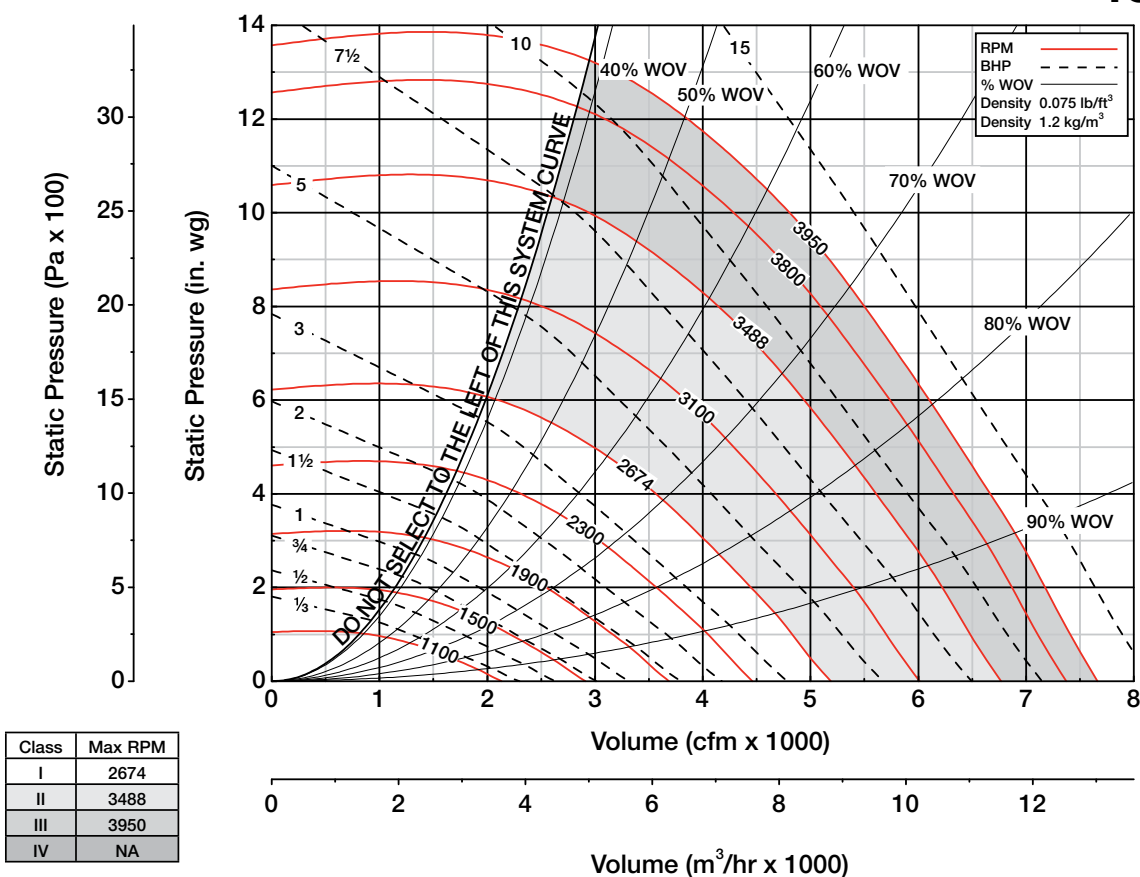
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 213T | 213T | 184T |
| Arr. 10 | 184T | 215T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1000 | 775 | 709 | 0.08 | 863 | 0.13 | 997 | 0.19 | 1117 | 0.26 | 1228 | 0.33 | 1333 | 0.42 | | | | | | | | |
| 1240 | 961 | 803 | 0.11 | 939 | 0.17 | 1061 | 0.24 | 1171 | 0.32 | 1276 | 0.40 | 1372 | 0.48 | 1461 | 0.57 | 1551 | 0.67 | 1635 | 0.77 | | |
| 1480 | 1147 | 905 | 0.16 | 1027 | 0.23 | 1136 | 0.31 | 1240 | 0.39 | 1335 | 0.48 | 1425 | 0.57 | 1513 | 0.67 | 1594 | 0.76 | 1671 | 0.86 | 1746 | 0.97 |
| 1720 | 1333 | 1011 | 0.22 | 1123 | 0.30 | 1224 | 0.39 | 1316 | 0.48 | 1405 | 0.57 | 1491 | 0.67 | 1571 | 0.78 | 1648 | 0.88 | 1725 | 0.99 | 1797 | 1.11 |
| 1960 | 1519 | 1120 | 0.29 | 1223 | 0.39 | 1316 | 0.49 | 1403 | 0.59 | 1484 | 0.69 | 1562 | 0.80 | 1641 | 0.91 | 1714 | 1.02 | 1784 | 1.14 | 1851 | 1.26 |
| 2200 | 1705 | 1233 | 0.39 | 1326 | 0.49 | 1413 | 0.60 | 1495 | 0.71 | 1572 | 0.82 | 1645 | 0.94 | 1714 | 1.06 | 1785 | 1.18 | 1854 | 1.31 | 1919 | 1.44 |
| 2440 | 1891 | 1349 | 0.51 | 1433 | 0.62 | 1515 | 0.74 | 1591 | 0.86 | 1663 | 0.98 | 1734 | 1.11 | 1800 | 1.23 | 1864 | 1.36 | 1925 | 1.49 | 1990 | 1.63 |
| 2680 | 2077 | 1466 | 0.65 | 1542 | 0.77 | 1618 | 0.90 | 1690 | 1.03 | 1759 | 1.16 | 1825 | 1.30 | 1889 | 1.43 | 1951 | 1.57 | 2010 | 1.71 | 2067 | 1.85 |
| 2920 | 2263 | 1584 | 0.82 | 1653 | 0.94 | 1725 | 1.08 | 1793 | 1.22 | 1858 | 1.37 | 1921 | 1.51 | 1981 | 1.66 | 2040 | 1.81 | 2098 | 1.96 | 2153 | 2.11 |
| 3160 | 2449 | 1703 | 1.01 | 1767 | 1.14 | 1833 | 1.29 | 1897 | 1.44 | 1960 | 1.60 | 2019 | 1.75 | 2077 | 1.91 | 2133 | 2.07 | 2188 | 2.23 | 2242 | 2.39 |
| 3400 | 2635 | 1822 | 1.24 | 1883 | 1.38 | 1943 | 1.53 | 2004 | 1.69 | 2063 | 1.86 | 2121 | 2.03 | 2176 | 2.19 | 2230 | 2.36 | 2282 | 2.53 | 2332 | 2.70 |
| 3640 | 2821 | 1943 | 1.49 | 2000 | 1.65 | 2054 | 1.80 | 2112 | 1.98 | 2169 | 2.15 | 2224 | 2.33 | 2277 | 2.51 | 2328 | 2.69 | 2379 | 2.87 | 2428 | 3.05 |
| 3880 | 3007 | 2062 | 1.78 | 2117 | 1.95 | 2169 | 2.12 | 2222 | 2.29 | 2276 | 2.48 | 2328 | 2.67 | 2380 | 2.85 | 2429 | 3.05 | 2477 | 3.24 | 2525 | 3.43 |
| 4120 | 3193 | 2183 | 2.11 | 2236 | 2.29 | 2285 | 2.47 | 2333 | 2.64 | 2385 | 2.84 | 2435 | 3.04 | 2484 | 3.24 | 2532 | 3.44 | 2578 | 3.64 | 2624 | 3.85 |
| 4360 | 3379 | 2303 | 2.48 | 2354 | 2.67 | 2402 | 2.86 | 2447 | 3.04 | 2495 | 3.24 | 2543 | 3.45 | 2590 | 3.66 | 2636 | 3.87 | 2681 | 4.09 | 2725 | 4.30 |
| 4600 | 3565 | 2424 | 2.89 | 2474 | 3.09 | 2519 | 3.29 | 2563 | 3.48 | 2605 | 3.68 | 2652 | 3.90 | 2697 | 4.12 | 2741 | 4.34 | 2785 | 4.57 | 2828 | 4.79 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1800 | 1395 | 1815 | 1.16 | 1950 | 1.39 | 2075 | 1.64 | 2199 | 1.92 | 2319 | 2.21 | | | | | | | | | | |
| 2040 | 1581 | 1873 | 1.31 | 2004 | 1.57 | 2128 | 1.84 | 2243 | 2.11 | 2352 | 2.39 | 2463 | 2.70 | 2570 | 3.03 | 2672 | 3.37 | | | | |
| 2280 | 1767 | 1943 | 1.50 | 2065 | 1.77 | 2181 | 2.05 | 2297 | 2.34 | 2405 | 2.64 | 2508 | 2.95 | 2606 | 3.26 | 2704 | 3.60 | 2802 | 3.96 | 2897 | 4.33 |
| 2520 | 1953 | 2014 | 1.70 | 2135 | 1.99 | 2247 | 2.29 | 2352 | 2.59 | 2459 | 2.91 | 2561 | 3.24 | 2659 | 3.57 | 2752 | 3.91 | 2842 | 4.25 | 2929 | 4.60 |
| 2760 | 2139 | 2095 | 1.94 | 2206 | 2.24 | 2317 | 2.55 | 2421 | 2.88 | 2520 | 3.21 | 2615 | 3.54 | 2712 | 3.89 | 2806 | 4.25 | 2895 | 4.62 | 2981 | 4.99 |
| 3000 | 2325 | 2183 | 2.20 | 2287 | 2.52 | 2389 | 2.84 | 2492 | 3.19 | 2589 | 3.54 | 2682 | 3.89 | 2771 | 4.25 | 2860 | 4.62 | 2949 | 5.00 | 3035 | 5.39 |
| 3240 | 2511 | 2272 | 2.49 | 2374 | 2.83 | 2470 | 3.17 | 2563 | 3.52 | 2660 | 3.89 | 2752 | 4.27 | 2840 | 4.64 | 2925 | 5.03 | 3007 | 5.42 | 3089 | 5.82 |
| 3480 | 2697 | 2364 | 2.82 | 2463 | 3.17 | 2557 | 3.53 | 2646 | 3.90 | 2732 | 4.27 | 2823 | 4.67 | 2911 | 5.07 | 2995 | 5.47 | 3076 | 5.88 | 3154 | 6.30 |
| 3720 | 2883 | 2460 | 3.17 | 2553 | 3.55 | 2646 | 3.93 | 2734 | 4.32 | 2817 | 4.71 | 2898 | 5.11 | 2982 | 5.52 | 3065 | 5.95 | 3146 | 6.38 | 3223 | 6.81 |
| 3960 | 3069 | 2558 | 3.57 | 2649 | 3.96 | 2736 | 4.36 | 2822 | 4.77 | 2905 | 5.18 | 2984 | 5.60 | 3060 | 6.02 | 3137 | 6.45 | 3217 | 6.90 | 3294 | 7.36 |
| 4200 | 3255 | 2657 | 3.99 | 2746 | 4.41 | 2830 | 4.83 | 2912 | 5.25 | 2993 | 5.69 | 3071 | 6.12 | 3146 | 6.57 | 3219 | 7.01 | 3289 | 7.46 | 3365 | 7.94 |
| 4440 | 3441 | 2759 | 4.46 | 2844 | 4.90 | 2926 | 5.34 | 3006 | 5.78 | 3083 | 6.24 | 3160 | 6.69 | 3234 | 7.15 | 3306 | 7.62 | 3375 | 8.09 | 3442 | 8.57 |
| 4680 | 3627 | 2863 | 4.97 | 2944 | 5.43 | 3024 | 5.89 | 3102 | 6.36 | 3176 | 6.83 | 3250 | 7.30 | 3323 | 7.78 | 3394 | 8.27 | 3462 | 8.76 | 3529 | 9.25 |
| 4920 | 3813 | 2967 | 5.52 | 3047 | 6.00 | 3123 | 6.49 | 3199 | 6.97 | 3272 | 7.46 | 3343 | 7.96 | 3413 | 8.46 | 3483 | 8.96 | 3550 | 9.47 | 3616 | 10.0 |
| 5160 | 4000 | 3072 | 6.12 | 3150 | 6.62 | 3225 | 7.13 | 3297 | 7.64 | 3369 | 8.15 | 3439 | 8.66 | 3506 | 9.18 | 3573 | 9.70 | 3639 | 10.2 | 3704 | 10.8 |
| 5400 | 4186 | 3180 | 6.76 | 3255 | 7.28 | 3328 | 7.81 | 3398 | 8.35 | 3467 | 8.88 | 3536 | 9.42 | 3602 | 10.0 | 3666 | 10.5 | 3730 | 11.0 | 3794 | 11.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3000 | 2325 | 3035 | 5.39 | 3118 | 5.79 | 3198 | 6.19 | 3276 | 6.59 | 3352 | 7.00 | 3498 | 7.84 | 3649 | 8.78 | 3794 | 9.75 | 3934 | 10.8 | | |
| 3220 | 2496 | 3084 | 5.78 | 3167 | 6.20 | 3247 | 6.61 | 3325 | 7.04 | 3401 | 7.46 | 3546 | 8.33 | 3685 | 9.22 | 3823 | 10.2 | | | | |
| 3440 | 2666 | 3142 | 6.21 | 3218 | 6.63 | 3297 | 7.06 | 3374 | 7.50 | 3450 | 7.95 | 3595 | 8.85 | 3733 | 9.77 | 3865 | 10.7 | | | | |
| 3660 | 2837 | 3206 | 6.68 | 3281 | 7.11 | 3354 | 7.55 | 3425 | 7.99 | 3499 | 8.45 | 3644 | 9.39 | 3782 | 10.4 | 3914 | 11.3 | | | | |
| 3880 | 3007 | 3270 | 7.17 | 3345 | 7.62 | 3418 | 8.08 | 3488 | 8.54 | 3557 | 9.00 | 3693 | 10.0 | 3831 | 11.0 | | | | | | |
| 4100 | 3178 | 3335 | 7.69 | 3410 | 8.16 | 3482 | 8.64 | 3552 | 9.11 | 3621 | 9.60 | 3753 | 10.6 | 3881 | 11.6 | | | | | | |
| 4320 | 3348 | 3401 | 8.24 | 3475 | 8.73 | 3547 | 9.22 | 3617 | 9.72 | 3685 | 10.2 | 3816 | 11.2 | 3942 | 12.3 | | | | | | |
| 4540 | 3519 | 3478 | 8.85 | 3543 | 9.33 | 3613 | 9.84 | 3682 | 10.4 | 3750 | 10.9 | 3880 | 11.9 | | | | | | | | |
| 4760 | 3689 | 3558 | 9.49 | 3622 | 10.0 | 3685 | 10.5 | 3748 | 11.0 | 3815 | 11.6 | 3945 | 12.7 | | | | | | | | |
| 4980 | 3860 | 3638 | 10.2 | 3702 | 10.7 | 3764 | 11.2 | 3825 | 11.8 | 3884 | 12.3 | | | | | | | | | | |
| 5200 | 4031 | 3719 | 10.9 | 3782 | 11.4 | 3844 | 12.0 | 3904 | 12.5 | | | | | | | | | | | | |
| 5420 | 4201 | 3801 | 11.7 | 3864 | 12.2 | | | | | | | | | | | | | | | | |
| 5640 | 4372 | 3884 | 12.5 | 3946 | 13.1 | | | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 1.94)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 800 | 100 | 75 | 77 | 66 | 66 | 64 | 56 | 48 | 42 | 69 |
| | 80 | 74 | 71 | 63 | 62 | 58 | 49 | 43 | 37 | 64 |
| | 60 | 73 | 71 | 63 | 60 | 56 | 47 | 41 | 36 | 62 |
| | 50 | 73 | 71 | 63 | 60 | 57 | 47 | 42 | 36 | 62 |
| | 40 | 74 | 72 | 63 | 60 | 57 | 48 | 43 | 37 | 63 |
| 1100 | 100 | 80 | 82 | 78 | 72 | 69 | 67 | 59 | 51 | 76 |
| | 80 | 78 | 80 | 75 | 68 | 65 | 61 | 53 | 45 | 72 |
| | 60 | 77 | 76 | 70 | 68 | 67 | 59 | 55 | 48 | 71 |
| | 50 | 78 | 77 | 70 | 69 | 68 | 60 | 57 | 51 | 72 |
| | 40 | 82 | 84 | 75 | 71 | 69 | 61 | 58 | 52 | 74 |
| 1600 | 100 | 85 | 85 | 82 | 81 | 78 | 75 | 72 | 63 | 83 |
| | 80 | 82 | 82 | 79 | 77 | 75 | 71 | 67 | 60 | 80 |
| | 60 | 83 | 81 | 77 | 76 | 75 | 70 | 67 | 62 | 79 |
| | 50 | 84 | 81 | 77 | 76 | 76 | 70 | 68 | 64 | 80 |
| | 40 | 85 | 83 | 79 | 77 | 77 | 71 | 69 | 65 | 81 |
| 2200 | 100 | 92 | 91 | 88 | 91 | 86 | 82 | 80 | 76 | 92 |
| | 80 | 88 | 87 | 85 | 89 | 83 | 78 | 76 | 70 | 89 |
| | 60 | 87 | 86 | 82 | 85 | 82 | 78 | 76 | 72 | 87 |
| | 50 | 87 | 86 | 83 | 85 | 82 | 79 | 77 | 73 | 88 |
| | 40 | 90 | 89 | 85 | 87 | 83 | 80 | 78 | 74 | 88 |
| 3100 | 100 | 100 | 96 | 95 | 100 | 94 | 90 | 88 | 86 | 100 |
| | 80 | 100 | 93 | 91 | 97 | 90 | 86 | 84 | 82 | 97 |
| | 60 | 100 | 94 | 90 | 93 | 89 | 87 | 85 | 82 | 95 |
| | 50 | 100 | 94 | 91 | 95 | 89 | 87 | 86 | 83 | 96 |
| | 40 | 100 | 96 | 94 | 97 | 91 | 89 | 88 | 85 | 98 |
| 3950 | 100 | 106 | 104 | 100 | 104 | 101 | 96 | 94 | 92 | 106 |
| | 80 | 107 | 102 | 97 | 101 | 97 | 93 | 90 | 87 | 102 |
| | 60 | 106 | 103 | 96 | 98 | 95 | 92 | 91 | 88 | 101 |
| | 50 | 106 | 103 | 97 | 99 | 96 | 93 | 92 | 89 | 102 |
| | 40 | 106 | 103 | 100 | 102 | 97 | 94 | 93 | 91 | 104 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 800 | 100 | 86 | 82 | 74 | 69 | 65 | 60 | 52 | 45 | 73 |
| | 80 | 85 | 80 | 69 | 65 | 62 | 56 | 50 | 42 | 69 |
| | 60 | 85 | 78 | 67 | 64 | 62 | 55 | 50 | 43 | 68 |
| | 50 | 85 | 76 | 67 | 63 | 62 | 54 | 51 | 43 | 68 |
| | 40 | 85 | 76 | 66 | 63 | 62 | 55 | 51 | 45 | 68 |
| 1100 | 100 | 89 | 86 | 82 | 77 | 71 | 69 | 61 | 54 | 79 |
| | 80 | 86 | 83 | 79 | 75 | 67 | 64 | 57 | 49 | 76 |
| | 60 | 85 | 81 | 76 | 71 | 65 | 61 | 57 | 50 | 73 |
| | 50 | 86 | 81 | 75 | 70 | 64 | 60 | 57 | 51 | 72 |
| | 40 | 92 | 82 | 75 | 69 | 64 | 60 | 57 | 51 | 73 |
| 1600 | 100 | 98 | 93 | 93 | 86 | 81 | 79 | 74 | 66 | 89 |
| | 80 | 94 | 90 | 90 | 83 | 78 | 75 | 69 | 61 | 86 |
| | 60 | 92 | 88 | 86 | 80 | 75 | 71 | 67 | 62 | 82 |
| | 50 | 92 | 88 | 85 | 79 | 74 | 71 | 68 | 63 | 82 |
| | 40 | 93 | 89 | 85 | 79 | 74 | 71 | 68 | 64 | 82 |
| 2200 | 100 | 103 | 98 | 98 | 101 | 90 | 88 | 83 | 78 | 100 |
| | 80 | 101 | 95 | 94 | 96 | 87 | 83 | 78 | 72 | 95 |
| | 60 | 99 | 94 | 91 | 92 | 84 | 80 | 75 | 71 | 92 |
| | 50 | 99 | 93 | 90 | 91 | 83 | 79 | 75 | 72 | 91 |
| | 40 | 100 | 98 | 91 | 91 | 83 | 80 | 76 | 73 | 91 |
| 3100 | 100 | 113 | 105 | 102 | 107 | 96 | 95 | 91 | 88 | 106 |
| | 80 | 114 | 102 | 99 | 103 | 93 | 91 | 86 | 82 | 102 |
| | 60 | 113 | 100 | 96 | 96 | 90 | 88 | 85 | 81 | 98 |
| | 50 | 113 | 99 | 95 | 95 | 89 | 87 | 85 | 81 | 97 |
| | 40 | 113 | 100 | 95 | 95 | 89 | 87 | 85 | 82 | 96 |
| 3950 | 100 | 119 | 112 | 107 | 111 | 104 | 100 | 97 | 94 | 111 |
| | 80 | 121 | 110 | 104 | 107 | 100 | 97 | 92 | 88 | 108 |
| | 60 | 121 | 108 | 101 | 101 | 97 | 94 | 91 | 87 | 104 |
| | 50 | 120 | 108 | 101 | 100 | 96 | 93 | 91 | 88 | 103 |
| | 40 | 120 | 108 | 101 | 100 | 95 | 92 | 91 | 88 | 103 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

16 BISW

Wheel Diameter = 16½ in.

Outlet Area = 1.57 ft.²

Tip Speed = 4.32 x RPM

Maximum BHP = (RPM/1429)³

Minimum Starting HP = ⅓

Maximum RPM Class I = 2431

Maximum RPM Class II = 3171

Maximum RPM Class III = 3800

Maximum Open Motor Frame Size

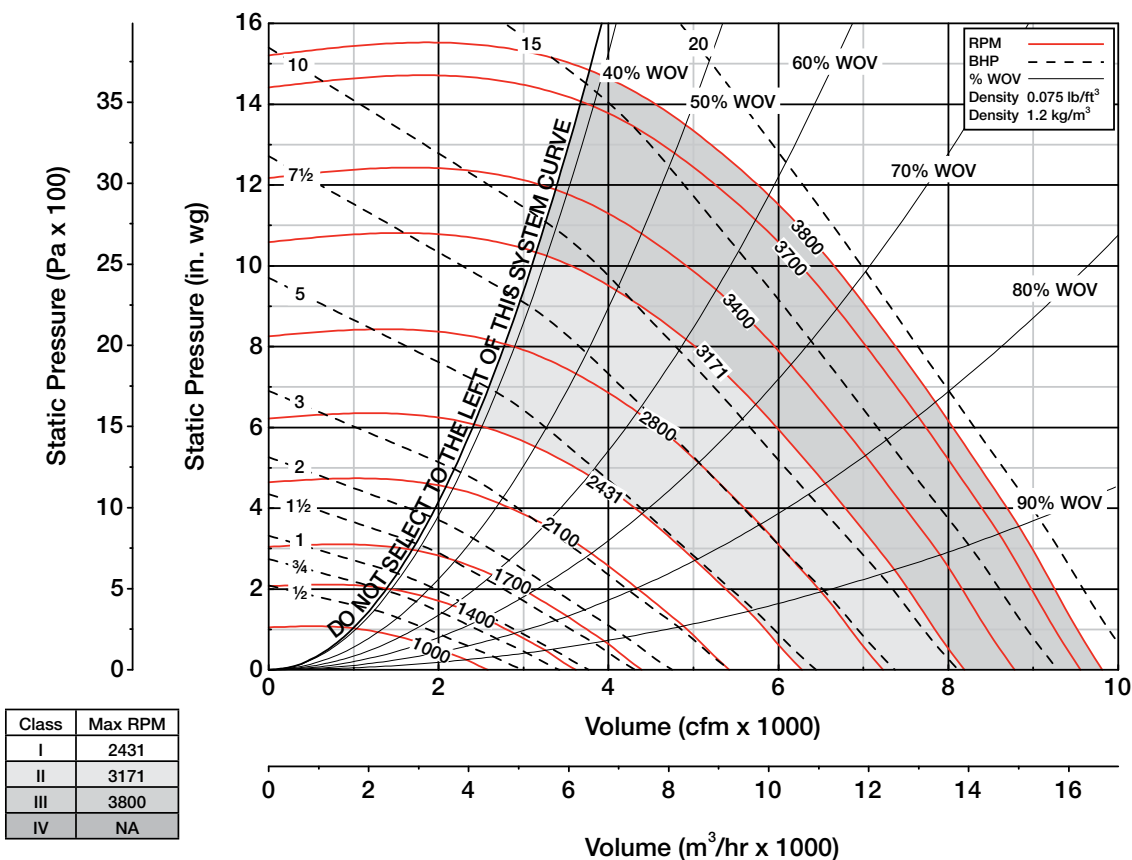
| Class | I | II | III |
|---------|------|------|-----|
| Arr. 9 | 215T | 215T | NA |
| Arr. 10 | 184T | 254T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1200 | 764 | 642 | 0.09 | 782 | 0.16 | 905 | 0.23 | 1014 | 0.31 | 1116 | 0.40 | 1211 | 0.50 | | | | | | | | |
| 1480 | 942 | 724 | 0.13 | 848 | 0.21 | 960 | 0.29 | 1061 | 0.38 | 1156 | 0.48 | 1243 | 0.58 | 1326 | 0.68 | 1408 | 0.80 | 1484 | 0.93 | | |
| 1760 | 1121 | 813 | 0.18 | 925 | 0.27 | 1024 | 0.36 | 1120 | 0.46 | 1207 | 0.57 | 1290 | 0.68 | 1370 | 0.79 | 1444 | 0.91 | 1514 | 1.03 | 1584 | 1.16 |
| 2040 | 1299 | 905 | 0.25 | 1008 | 0.35 | 1101 | 0.46 | 1185 | 0.56 | 1269 | 0.68 | 1347 | 0.80 | 1419 | 0.92 | 1491 | 1.05 | 1561 | 1.18 | 1627 | 1.31 |
| 2320 | 1477 | 1001 | 0.34 | 1095 | 0.45 | 1181 | 0.57 | 1261 | 0.68 | 1336 | 0.81 | 1409 | 0.94 | 1480 | 1.07 | 1547 | 1.20 | 1611 | 1.34 | 1674 | 1.49 |
| 2600 | 1656 | 1099 | 0.44 | 1186 | 0.57 | 1266 | 0.70 | 1340 | 0.83 | 1412 | 0.96 | 1479 | 1.10 | 1543 | 1.24 | 1609 | 1.39 | 1672 | 1.54 | 1731 | 1.69 |
| 2880 | 1834 | 1200 | 0.58 | 1279 | 0.71 | 1354 | 0.85 | 1424 | 0.99 | 1491 | 1.14 | 1556 | 1.29 | 1617 | 1.44 | 1675 | 1.59 | 1734 | 1.75 | 1793 | 1.91 |
| 3160 | 2012 | 1302 | 0.73 | 1374 | 0.87 | 1444 | 0.93 | 1511 | 1.18 | 1574 | 1.34 | 1635 | 1.50 | 1694 | 1.66 | 1751 | 1.83 | 1805 | 1.99 | 1856 | 2.16 |
| 3440 | 2191 | 1406 | 0.92 | 1470 | 1.07 | 1537 | 1.23 | 1600 | 1.40 | 1660 | 1.57 | 1718 | 1.74 | 1773 | 1.91 | 1829 | 2.09 | 1881 | 2.27 | 1932 | 2.45 |
| 3720 | 2369 | 1510 | 1.14 | 1570 | 1.29 | 1631 | 1.47 | 1691 | 1.65 | 1748 | 1.83 | 1804 | 2.01 | 1857 | 2.20 | 1908 | 2.39 | 1960 | 2.58 | 2009 | 2.77 |
| 4000 | 2547 | 1614 | 1.38 | 1671 | 1.55 | 1727 | 1.73 | 1784 | 1.93 | 1839 | 2.12 | 1891 | 2.32 | 1943 | 2.52 | 1993 | 2.71 | 2040 | 2.91 | 2088 | 3.12 |
| 4280 | 2726 | 1719 | 1.67 | 1773 | 1.85 | 1824 | 2.04 | 1878 | 2.24 | 1931 | 2.45 | 1981 | 2.66 | 2030 | 2.87 | 2078 | 3.08 | 2125 | 3.29 | 2170 | 3.51 |
| 4560 | 2904 | 1825 | 1.99 | 1876 | 2.19 | 1924 | 2.38 | 1974 | 2.59 | 2024 | 2.81 | 2073 | 3.03 | 2120 | 3.25 | 2165 | 3.48 | 2210 | 3.71 | 2254 | 3.93 |
| 4840 | 3082 | 1930 | 2.35 | 1979 | 2.56 | 2025 | 2.77 | 2071 | 2.98 | 2119 | 3.21 | 2165 | 3.45 | 2211 | 3.68 | 2255 | 3.92 | 2298 | 4.16 | 2340 | 4.40 |
| 5120 | 3261 | 2035 | 2.76 | 2083 | 2.98 | 2127 | 3.20 | 2169 | 3.42 | 2215 | 3.66 | 2259 | 3.90 | 2303 | 4.15 | 2346 | 4.40 | 2387 | 4.65 | 2428 | 4.90 |
| 5400 | 3439 | 2141 | 3.20 | 2187 | 3.45 | 2229 | 3.68 | 2270 | 3.91 | 2311 | 4.15 | 2355 | 4.40 | 2396 | 4.66 | 2438 | 4.92 | 2478 | 5.19 | 2518 | 5.45 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2000 | 1273 | 1620 | 1.29 | 1743 | 1.57 | 1867 | 1.88 | 1982 | 2.21 | | | | | | | | | | | | |
| 2280 | 1452 | 1667 | 1.46 | 1790 | 1.76 | 1903 | 2.07 | 2009 | 2.39 | 2118 | 2.75 | 2220 | 3.12 | | | | | | | | |
| 2560 | 1630 | 1723 | 1.66 | 1837 | 1.97 | 1949 | 2.30 | 2055 | 2.64 | 2154 | 2.99 | 2248 | 3.35 | 2345 | 3.75 | 2438 | 4.16 | 2528 | 4.59 | | |
| 2840 | 1808 | 1784 | 1.88 | 1895 | 2.21 | 1998 | 2.55 | 2102 | 2.91 | 2200 | 3.28 | 2293 | 3.66 | 2382 | 4.05 | 2468 | 4.44 | 2555 | 4.88 | 2641 | 5.33 |
| 3120 | 1987 | 1847 | 2.12 | 1956 | 2.48 | 2058 | 2.84 | 2154 | 3.22 | 2247 | 3.60 | 2340 | 4.00 | 2429 | 4.41 | 2514 | 4.83 | 2595 | 5.25 | 2674 | 5.68 |
| 3400 | 2165 | 1921 | 2.41 | 2019 | 2.77 | 2120 | 3.16 | 2215 | 3.56 | 2304 | 3.96 | 2389 | 4.37 | 2476 | 4.80 | 2561 | 5.23 | 2642 | 5.68 | 2720 | 6.13 |
| 3680 | 2343 | 1998 | 2.72 | 2092 | 3.11 | 2183 | 3.51 | 2276 | 3.92 | 2365 | 4.35 | 2449 | 4.78 | 2530 | 5.22 | 2608 | 5.67 | 2689 | 6.13 | 2767 | 6.61 |
| 3960 | 2522 | 2077 | 3.07 | 2169 | 3.48 | 2256 | 3.89 | 2339 | 4.32 | 2427 | 4.77 | 2511 | 5.22 | 2591 | 5.69 | 2668 | 6.15 | 2742 | 6.63 | 2815 | 7.11 |
| 4240 | 2700 | 2158 | 3.45 | 2247 | 3.88 | 2333 | 4.32 | 2414 | 4.77 | 2491 | 5.22 | 2573 | 5.70 | 2653 | 6.19 | 2729 | 6.68 | 2803 | 7.17 | 2874 | 7.68 |
| 4520 | 2878 | 2242 | 3.87 | 2327 | 4.32 | 2411 | 4.79 | 2490 | 5.26 | 2566 | 5.73 | 2639 | 6.22 | 2715 | 6.72 | 2791 | 7.23 | 2864 | 7.75 | 2935 | 8.28 |
| 4800 | 3057 | 2328 | 4.33 | 2411 | 4.81 | 2490 | 5.29 | 2568 | 5.78 | 2643 | 6.28 | 2715 | 6.79 | 2784 | 7.30 | 2854 | 7.83 | 2926 | 8.37 | 2996 | 8.92 |
| 5080 | 3235 | 2415 | 4.83 | 2495 | 5.33 | 2572 | 5.84 | 2647 | 6.35 | 2721 | 6.88 | 2792 | 7.41 | 2860 | 7.94 | 2926 | 8.48 | 2990 | 9.03 | 3059 | 9.60 |
| 5360 | 3414 | 2505 | 5.37 | 2582 | 5.90 | 2657 | 6.43 | 2729 | 6.97 | 2799 | 7.52 | 2869 | 8.07 | 2937 | 8.63 | 3002 | 9.19 | 3065 | 9.76 | 3126 | 10.3 |
| 5640 | 3592 | 2595 | 5.96 | 2670 | 6.52 | 2742 | 7.08 | 2813 | 7.64 | 2881 | 8.20 | 2948 | 8.78 | 3015 | 9.36 | 3079 | 9.94 | 3141 | 10.5 | 3202 | 11.1 |
| 5920 | 3770 | 2687 | 6.60 | 2759 | 7.18 | 2829 | 7.77 | 2898 | 8.35 | 2965 | 8.94 | 3029 | 9.54 | 3093 | 10.1 | 3157 | 10.8 | 3218 | 11.4 | 3278 | 12.0 |
| 6200 | 3949 | 2779 | 7.29 | 2850 | 7.89 | 2918 | 8.50 | 2984 | 9.12 | 3050 | 9.73 | 3113 | 10.4 | 3174 | 11.0 | 3236 | 11.6 | 3296 | 12.2 | 3356 | 12.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3400 | 2165 | 2720 | 6.13 | 2796 | 6.59 | 2869 | 7.06 | 2940 | 7.53 | 3012 | 8.03 | 3157 | 9.11 | 3295 | 10.2 | 3427 | 11.4 | | | | |
| 3680 | 2343 | 2767 | 6.61 | 2843 | 7.09 | 2916 | 7.58 | 2987 | 8.07 | 3056 | 8.57 | 3188 | 9.59 | 3322 | 10.7 | 3454 | 11.9 | 3581 | 13.1 | 3703 | 14.4 |
| 3960 | 2522 | 2815 | 7.11 | 2890 | 7.62 | 2963 | 8.13 | 3033 | 8.64 | 3102 | 9.17 | 3234 | 10.2 | 3360 | 11.3 | 3482 | 12.4 | 3608 | 13.7 | 3730 | 15.0 |
| 4240 | 2700 | 2874 | 7.68 | 2942 | 8.19 | 3010 | 8.70 | 3081 | 9.24 | 3149 | 9.79 | 3281 | 10.9 | 3407 | 12.0 | 3527 | 13.2 | 3642 | 14.3 | 3757 | 15.6 |
| 4520 | 2878 | 2935 | 8.28 | 3003 | 8.81 | 3069 | 9.35 | 3134 | 9.89 | 3197 | 10.4 | 3328 | 11.6 | 3453 | 12.8 | 3573 | 14.0 | 3689 | 15.2 | 3800 | 16.4 |
| 4800 | 3057 | 2996 | 8.92 | 3064 | 9.48 | 3130 | 10.0 | 3194 | 10.6 | 3257 | 11.2 | 3377 | 12.3 | 3501 | 13.5 | 3620 | 14.8 | 3735 | 16.0 | | |
| 5080 | 3235 | 3059 | 9.60 | 3126 | 10.2 | 3192 | 10.8 | 3256 | 11.4 | 3318 | 11.9 | 3437 | 13.1 | 3552 | 14.4 | 3668 | 15.6 | 3782 | 16.9 | | |
| 5360 | 3414 | 3126 | 10.3 | 3189 | 10.9 | 3254 | 11.5 | 3318 | 12.1 | 3379 | 12.8 | 3498 | 14.0 | 3612 | 15.3 | 3721 | 16.6 | | | | |
| 5640 | 3592 | 3202 | 11.0 | 3261 | 11.7 | 3318 | 12.3 | 3380 | 13.0 | 3442 | 13.6 | 3560 | 14.9 | 3673 | 16.2 | 3782 | 17.6 | | | | |
| 5920 | 3770 | 3278 | 12.0 | 3336 | 12.6 | 3393 | 13.2 | 3449 | 13.9 | 3505 | 14.5 | 3622 | 15.9 | 3735 | 17.2 | | | | | | |
| 6200 | 3949 | 3356 | 12.9 | 3413 | 13.5 | 3469 | 14.2 | 3524 | 14.8 | 3578 | 15.5 | 3685 | 16.9 | 3797 | 18.3 | | | | | | |
| 6480 | 4127 | 3434 | 13.8 | 3491 | 14.5 | 3546 | 15.2 | 3600 | 15.9 | 3653 | 16.6 | 3756 | 17.9 | | | | | | | | |
| 6760 | 4305 | 3513 | 14.9 | 3569 | 15.6 | 3624 | 16.3 | 3678 | 17.0 | 3730 | 17.7 | | | | | | | | | | |
| 7040 | 4484 | 3595 | 15.9 | 3648 | 16.6 | 3703 | 17.4 | 3756 | 18.1 | | | | | | | | | | | | |
| 7320 | 4662 | 3679 | 17.1 | 3731 | 17.8 | 3782 | 18.6 | | | | | | | | | | | | | | |
| 7600 | 4840 | 3763 | 18.3 | | | | | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 2.58)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 700 | 100 | 75 | 75 | 66 | 66 | 63 | 55 | 47 | 40 | 68 |
| | 80 | 73 | 70 | 63 | 61 | 57 | 48 | 41 | 36 | 63 |
| | 60 | 72 | 69 | 62 | 59 | 54 | 46 | 40 | 35 | 61 |
| | 50 | 72 | 69 | 62 | 59 | 55 | 46 | 41 | 35 | 61 |
| | 40 | 73 | 70 | 62 | 59 | 55 | 47 | 41 | 36 | 61 |
| 1000 | 100 | 81 | 84 | 78 | 73 | 70 | 67 | 59 | 51 | 76 |
| | 80 | 79 | 81 | 75 | 69 | 65 | 60 | 53 | 45 | 72 |
| | 60 | 78 | 78 | 70 | 69 | 66 | 59 | 55 | 48 | 71 |
| | 50 | 78 | 79 | 71 | 70 | 67 | 60 | 57 | 51 | 72 |
| | 40 | 83 | 85 | 75 | 72 | 69 | 62 | 58 | 52 | 75 |
| 1400 | 100 | 84 | 84 | 82 | 80 | 77 | 74 | 70 | 61 | 82 |
| | 80 | 82 | 81 | 78 | 77 | 74 | 70 | 65 | 58 | 79 |
| | 60 | 82 | 80 | 77 | 76 | 74 | 69 | 66 | 61 | 79 |
| | 50 | 83 | 80 | 77 | 76 | 75 | 70 | 68 | 64 | 79 |
| | 40 | 84 | 82 | 79 | 77 | 76 | 71 | 69 | 64 | 80 |
| 2000 | 100 | 93 | 91 | 90 | 92 | 86 | 82 | 80 | 76 | 92 |
| | 80 | 88 | 87 | 87 | 89 | 83 | 78 | 76 | 70 | 89 |
| | 60 | 87 | 86 | 84 | 86 | 82 | 79 | 76 | 72 | 87 |
| | 50 | 88 | 86 | 84 | 86 | 83 | 80 | 78 | 74 | 88 |
| | 40 | 90 | 89 | 86 | 87 | 83 | 80 | 79 | 75 | 89 |
| 2800 | 100 | 100 | 96 | 96 | 100 | 94 | 91 | 88 | 87 | 100 |
| | 80 | 100 | 93 | 93 | 96 | 90 | 87 | 85 | 82 | 97 |
| | 60 | 100 | 94 | 91 | 93 | 89 | 87 | 85 | 82 | 95 |
| | 50 | 99 | 94 | 92 | 95 | 90 | 88 | 87 | 83 | 96 |
| | 40 | 100 | 96 | 96 | 97 | 91 | 89 | 88 | 85 | 98 |
| 3800 | 100 | 110 | 106 | 102 | 107 | 102 | 98 | 96 | 94 | 108 |
| | 80 | 110 | 104 | 98 | 104 | 99 | 94 | 92 | 90 | 104 |
| | 60 | 109 | 105 | 98 | 100 | 97 | 94 | 93 | 90 | 103 |
| | 50 | 109 | 105 | 99 | 102 | 97 | 95 | 94 | 91 | 104 |
| | 40 | 109 | 105 | 102 | 105 | 99 | 96 | 95 | 93 | 106 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 700 | 100 | 85 | 81 | 73 | 69 | 64 | 59 | 51 | 44 | 72 |
| | 80 | 84 | 78 | 68 | 65 | 61 | 55 | 48 | 41 | 68 |
| | 60 | 84 | 76 | 67 | 64 | 60 | 54 | 49 | 41 | 67 |
| | 50 | 83 | 75 | 66 | 63 | 60 | 54 | 49 | 42 | 66 |
| | 40 | 83 | 74 | 66 | 63 | 61 | 54 | 50 | 44 | 66 |
| 1000 | 100 | 89 | 87 | 83 | 77 | 71 | 69 | 61 | 54 | 80 |
| | 80 | 86 | 84 | 80 | 74 | 67 | 64 | 57 | 49 | 76 |
| | 60 | 85 | 82 | 76 | 71 | 65 | 61 | 57 | 50 | 73 |
| | 50 | 86 | 82 | 75 | 70 | 65 | 61 | 57 | 51 | 73 |
| | 40 | 91 | 84 | 75 | 70 | 65 | 61 | 57 | 51 | 74 |
| 1400 | 100 | 97 | 93 | 91 | 85 | 81 | 78 | 72 | 64 | 88 |
| | 80 | 93 | 90 | 88 | 82 | 77 | 74 | 67 | 60 | 85 |
| | 60 | 91 | 87 | 84 | 79 | 74 | 71 | 66 | 61 | 81 |
| | 50 | 91 | 87 | 84 | 78 | 73 | 70 | 67 | 62 | 81 |
| | 40 | 93 | 89 | 84 | 78 | 73 | 70 | 67 | 63 | 81 |
| 2000 | 100 | 103 | 99 | 100 | 100 | 91 | 88 | 83 | 78 | 100 |
| | 80 | 101 | 95 | 96 | 95 | 87 | 84 | 78 | 72 | 95 |
| | 60 | 99 | 94 | 93 | 92 | 84 | 81 | 76 | 72 | 92 |
| | 50 | 99 | 94 | 92 | 91 | 83 | 80 | 76 | 73 | 91 |
| | 40 | 101 | 98 | 92 | 90 | 83 | 80 | 76 | 74 | 91 |
| 2800 | 100 | 112 | 104 | 104 | 106 | 97 | 95 | 91 | 88 | 105 |
| | 80 | 113 | 101 | 100 | 102 | 93 | 91 | 86 | 82 | 101 |
| | 60 | 112 | 100 | 97 | 96 | 91 | 88 | 85 | 81 | 98 |
| | 50 | 111 | 99 | 95 | 95 | 90 | 88 | 85 | 81 | 97 |
| | 40 | 111 | 99 | 95 | 94 | 89 | 87 | 85 | 82 | 96 |
| 3800 | 100 | 121 | 114 | 108 | 114 | 105 | 103 | 99 | 96 | 113 |
| | 80 | 124 | 111 | 105 | 110 | 102 | 99 | 94 | 90 | 110 |
| | 60 | 123 | 109 | 103 | 104 | 98 | 96 | 93 | 89 | 106 |
| | 50 | 123 | 109 | 102 | 102 | 98 | 95 | 93 | 89 | 105 |
| | 40 | 122 | 109 | 102 | 103 | 97 | 94 | 93 | 90 | 105t |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

18 BISW

Wheel Diameter = 18¼ in.

Outlet Area = 1.92 ft.²

Tip Speed = 4.78 x RPM

Maximum BHP = (RPM/1206)³

Minimum Starting HP = ⅓

Maximum RPM Class I = 2099

Maximum RPM Class II = 2738

Maximum RPM Class III = 3450

Maximum RPM Class IV = 3800

Maximum Open Motor Frame Size

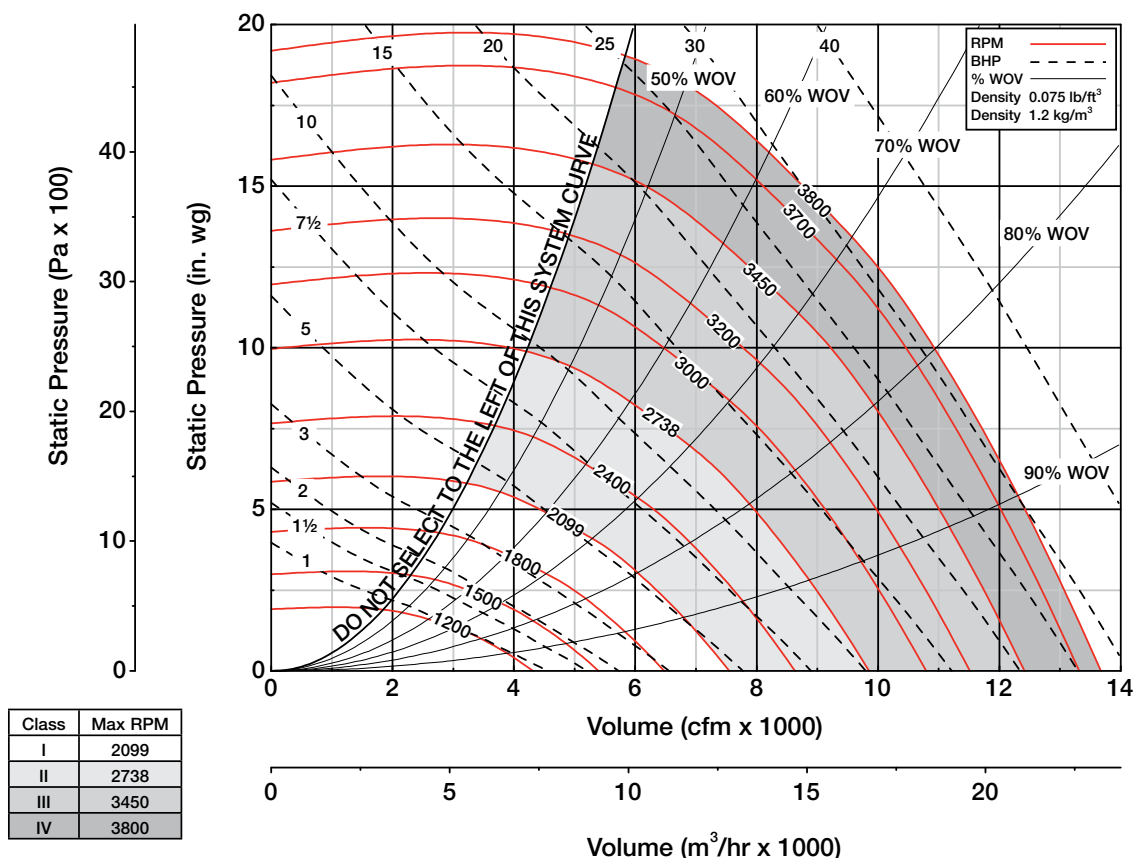
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 254T | 254T | 215T | NA |
| Arr. 10 | 213T | 254T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1500 | 781 | 679 | 0.17 | 884 | 0.33 | | | | | | | | | | | | | | | | |
| 1750 | 911 | 718 | 0.21 | 908 | 0.38 | 1076 | 0.59 | | | | | | | | | | | | | | |
| 2000 | 1041 | 761 | 0.25 | 942 | 0.44 | 1096 | 0.66 | 1241 | 0.90 | | | | | | | | | | | | |
| 2250 | 1171 | 810 | 0.30 | 980 | 0.51 | 1127 | 0.74 | 1261 | 0.99 | 1388 | 1.27 | | | | | | | | | | |
| 2500 | 1302 | 862 | 0.36 | 1020 | 0.59 | 1161 | 0.84 | 1288 | 1.10 | 1408 | 1.38 | 1523 | 1.68 | | | | | | | | |
| 2750 | 1432 | 918 | 0.44 | 1062 | 0.68 | 1199 | 0.94 | 1322 | 1.22 | 1435 | 1.51 | 1543 | 1.82 | 1649 | 2.15 | 1748 | 2.50 | | | | |
| 3000 | 1562 | 976 | 0.52 | 1108 | 0.78 | 1238 | 1.05 | 1358 | 1.35 | 1467 | 1.65 | 1570 | 1.97 | 1669 | 2.31 | 1768 | 2.67 | 1861 | 3.05 | 1949 | 3.43 |
| 3250 | 1692 | 1035 | 0.62 | 1159 | 0.89 | 1281 | 1.18 | 1396 | 1.49 | 1502 | 1.81 | 1602 | 2.15 | 1697 | 2.49 | 1788 | 2.85 | 1881 | 3.24 | 1969 | 3.64 |
| 3500 | 1822 | 1096 | 0.73 | 1211 | 1.01 | 1324 | 1.32 | 1436 | 1.65 | 1540 | 1.99 | 1636 | 2.34 | 1730 | 2.70 | 1818 | 3.07 | 1901 | 3.45 | 1988 | 3.86 |
| 3750 | 1953 | 1157 | 0.85 | 1267 | 1.15 | 1373 | 1.47 | 1478 | 1.82 | 1579 | 2.17 | 1674 | 2.54 | 1763 | 2.92 | 1850 | 3.31 | 1933 | 3.70 | 2012 | 4.10 |
| 4000 | 2083 | 1220 | 0.99 | 1324 | 1.31 | 1424 | 1.64 | 1522 | 2.00 | 1620 | 2.37 | 1713 | 2.76 | 1801 | 3.15 | 1884 | 3.55 | 1965 | 3.97 | 2044 | 4.39 |
| 4250 | 2213 | 1284 | 1.14 | 1381 | 1.48 | 1476 | 1.83 | 1569 | 2.20 | 1663 | 2.59 | 1752 | 2.99 | 1839 | 3.40 | 1921 | 3.82 | 1999 | 4.25 | 2076 | 4.69 |
| 4500 | 2343 | 1348 | 1.31 | 1441 | 1.67 | 1531 | 2.03 | 1620 | 2.42 | 1706 | 2.82 | 1795 | 3.24 | 1878 | 3.66 | 1959 | 4.10 | 2036 | 4.55 | 2110 | 5.00 |
| 4750 | 2473 | 1412 | 1.50 | 1501 | 1.87 | 1587 | 2.26 | 1671 | 2.65 | 1754 | 3.07 | 1838 | 3.51 | 1920 | 3.95 | 1998 | 4.40 | 2074 | 4.87 | 2147 | 5.34 |
| 5000 | 2604 | 1477 | 1.70 | 1562 | 2.10 | 1644 | 2.50 | 1724 | 2.91 | 1805 | 3.34 | 1881 | 3.79 | 1962 | 4.25 | 2039 | 4.72 | 2113 | 5.20 | 2186 | 5.69 |
| 5250 | 2734 | 1543 | 1.93 | 1623 | 2.35 | 1702 | 2.76 | 1780 | 3.19 | 1856 | 3.63 | 1931 | 4.10 | 2006 | 4.57 | 2082 | 5.06 | 2154 | 5.56 | 2224 | 6.06 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3500 | 1822 | 1988 | 3.86 | 2072 | 4.29 | 2152 | 4.73 | 2228 | 5.17 | | | | | | | | | | | | |
| 3770 | 1963 | 2014 | 4.13 | 2093 | 4.55 | 2173 | 5.01 | 2250 | 5.47 | 2323 | 5.94 | 2394 | 6.43 | | | | | | | | |
| 4040 | 2104 | 2049 | 4.44 | 2124 | 4.87 | 2195 | 5.31 | 2271 | 5.78 | 2345 | 6.27 | 2416 | 6.77 | 2484 | 7.28 | 2551 | 7.79 | 2616 | 8.31 | | |
| 4310 | 2244 | 2084 | 4.76 | 2158 | 5.21 | 2230 | 5.67 | 2298 | 6.13 | 2366 | 6.61 | 2437 | 7.12 | 2506 | 7.65 | 2572 | 8.18 | 2637 | 8.72 | 2753 | 9.78 |
| 4580 | 2385 | 2122 | 5.11 | 2194 | 5.58 | 2265 | 6.05 | 2333 | 6.54 | 2399 | 7.02 | 2463 | 7.52 | 2527 | 8.03 | 2594 | 8.58 | 2659 | 9.14 | 2774 | 10.2 |
| 4850 | 2526 | 2163 | 5.48 | 2232 | 5.96 | 2301 | 6.45 | 2368 | 6.96 | 2434 | 7.46 | 2497 | 7.98 | 2559 | 8.50 | 2619 | 9.02 | 2680 | 9.57 | 2795 | 10.7 |
| 5120 | 2666 | 2204 | 5.87 | 2273 | 6.37 | 2340 | 6.88 | 2404 | 7.40 | 2470 | 7.93 | 2532 | 8.46 | 2593 | 9.00 | 2653 | 9.54 | 2711 | 10.1 | 2817 | 11.2 |
| 5390 | 2807 | 2246 | 6.28 | 2315 | 6.80 | 2381 | 7.33 | 2445 | 7.87 | 2506 | 8.41 | 2568 | 8.96 | 2628 | 9.52 | 2688 | 10.1 | 2745 | 10.7 | 2847 | 11.7 |
| 5660 | 2947 | 2292 | 6.72 | 2357 | 7.25 | 2422 | 7.80 | 2486 | 8.36 | 2547 | 8.92 | 2606 | 9.49 | 2664 | 10.1 | 2724 | 10.6 | 2780 | 11.2 | 2881 | 12.4 |
| 5930 | 3088 | 2338 | 7.18 | 2402 | 7.74 | 2465 | 8.30 | 2527 | 8.87 | 2588 | 9.45 | 2647 | 10.0 | 2704 | 10.6 | 2760 | 11.2 | 2817 | 11.8 | 2915 | 13.0 |
| 6200 | 3229 | 2384 | 7.67 | 2448 | 8.25 | 2510 | 8.83 | 2570 | 9.42 | 2630 | 10.0 | 2689 | 10.6 | 2746 | 11.2 | 2801 | 11.9 | 2855 | 12.5 | 2950 | 13.7 |
| 6470 | 3369 | 2431 | 8.19 | 2495 | 8.78 | 2556 | 9.38 | 2616 | 9.99 | 2673 | 10.6 | 2730 | 11.2 | 2787 | 11.9 | 2842 | 12.5 | 2896 | 13.1 | 2988 | 14.3 |
| 6740 | 3510 | 2485 | 8.74 | 2542 | 9.35 | 2603 | 9.97 | 2662 | 10.6 | 2719 | 11.2 | 2774 | 11.9 | 2829 | 12.5 | 2884 | 13.2 | 2937 | 13.8 | 3028 | 15.1 |
| 7010 | 3651 | 2539 | 9.32 | 2594 | 9.95 | 2650 | 10.6 | 2708 | 11.2 | 2765 | 11.9 | 2820 | 12.5 | 2873 | 13.2 | 2926 | 13.9 | 2979 | 14.5 | 3069 | 15.8 |
| 7280 | 3791 | 2595 | 9.94 | 2649 | 10.6 | 2701 | 11.2 | 2755 | 11.9 | 2811 | 12.6 | 2866 | 13.2 | 2919 | 13.9 | 2971 | 14.6 | 3022 | 15.3 | 3110 | 16.6 |
| 7550 | 3932 | 2651 | 10.6 | 2704 | 11.2 | 2756 | 11.9 | 2806 | 12.6 | 2858 | 13.3 | 2913 | 14.0 | 2965 | 14.7 | 3017 | 15.4 | 3067 | 16.1 | 3151 | 17.4 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6100 | 3177 | 2937 | 13.4 | 3041 | 14.7 | 3140 | 15.9 | 3235 | 17.2 | 3330 | 18.5 | 3428 | 20.0 | 3524 | 21.5 | 3616 | 22.9 | 3706 | 24.4 | | |
| 6400 | 3333 | 2977 | 14.2 | 3079 | 15.4 | 3178 | 16.8 | 3273 | 18.1 | 3364 | 19.4 | 3453 | 20.8 | 3547 | 22.3 | 3639 | 23.8 | 3729 | 25.3 | | |
| 6700 | 3489 | 3022 | 14.9 | 3118 | 16.3 | 3216 | 17.6 | 3311 | 19.0 | 3402 | 20.4 | 3490 | 21.8 | 3576 | 23.2 | 3663 | 24.7 | 3752 | 26.3 | | |
| 7000 | 3645 | 3067 | 15.8 | 3164 | 17.1 | 3255 | 18.5 | 3349 | 20.0 | 3440 | 21.4 | 3528 | 22.8 | 3613 | 24.3 | 3695 | 25.8 | 3775 | 27.2 | | |
| 7300 | 3802 | 3113 | 16.6 | 3209 | 18.1 | 3301 | 19.5 | 3388 | 20.9 | 3479 | 22.4 | 3566 | 23.9 | 3651 | 25.4 | 3733 | 26.9 | | | | |
| 7600 | 3958 | 3159 | 17.5 | 3254 | 19.0 | 3346 | 20.5 | 3434 | 22.0 | 3518 | 23.5 | 3605 | 25.0 | 3689 | 26.5 | 3771 | 28.1 | | | | |
| 7900 | 4114 | 3209 | 18.5 | 3300 | 20.0 | 3391 | 21.5 | 3479 | 23.0 | 3564 | 24.6 | 3645 | 26.1 | 3727 | 27.7 | | | | | | |
| 8200 | 4270 | 3259 | 19.5 | 3349 | 21.0 | 3437 | 22.6 | 3524 | 24.1 | 3609 | 25.7 | 3690 | 27.3 | 3768 | 28.9 | | | | | | |
| 8500 | 4427 | 3310 | 20.5 | 3399 | 22.1 | 3485 | 23.7 | 3570 | 25.3 | 3654 | 26.9 | 3735 | 28.5 | | | | | | | | |
| 8800 | 4583 | 3361 | 21.6 | 3450 | 23.2 | 3535 | 24.9 | 3617 | 26.5 | 3700 | 28.1 | 3780 | 29.8 | | | | | | | | |
| 9100 | 4739 | 3413 | 22.8 | 3501 | 24.4 | 3585 | 26.1 | 3667 | 27.7 | 3746 | 29.4 | | | | | | | | | | |
| 9400 | 4895 | 3469 | 24.0 | 3552 | 25.6 | 3636 | 27.3 | 3718 | 29.0 | 3796 | 30.8 | | | | | | | | | | |
| 9700 | 5052 | 3529 | 25.2 | 3604 | 26.9 | 3688 | 28.6 | 3768 | 30.4 | | | | | | | | | | | | |
| 10000 | 5208 | 3590 | 26.5 | 3664 | 28.2 | 3739 | 30.0 | | | | | | | | | | | | | | |
| 10300 | 5364 | 3651 | 27.9 | 3724 | 29.6 | 3796 | 31.4 | | | | | | | | | | | | | | |
| 10600 | 5520 | 3712 | 29.3 | 3785 | 31.1 | | | | | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 3.60)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 600 | 100 | 78 | 77 | 70 | 65 | 58 | 52 | 43 | 40 | 67 |
| | 80 | 77 | 75 | 66 | 60 | 53 | 48 | 39 | 37 | 64 |
| | 60 | 76 | 75 | 63 | 58 | 54 | 48 | 38 | 35 | 63 |
| | 50 | 75 | 74 | 62 | 57 | 56 | 48 | 40 | 36 | 62 |
| | 40 | 75 | 74 | 61 | 58 | 56 | 49 | 41 | 36 | 63 |
| 1200 | 100 | 89 | 86 | 88 | 84 | 79 | 76 | 67 | 61 | 86 |
| | 80 | 88 | 85 | 85 | 80 | 73 | 69 | 62 | 56 | 81 |
| | 60 | 87 | 84 | 81 | 77 | 72 | 68 | 63 | 58 | 79 |
| | 50 | 87 | 83 | 79 | 75 | 72 | 68 | 64 | 60 | 78 |
| | 40 | 86 | 83 | 77 | 74 | 73 | 68 | 65 | 61 | 78 |
| 1700 | 100 | 91 | 89 | 94 | 91 | 87 | 86 | 79 | 71 | 93 |
| | 80 | 90 | 87 | 92 | 89 | 85 | 82 | 76 | 70 | 91 |
| | 60 | 91 | 88 | 91 | 86 | 82 | 79 | 75 | 71 | 89 |
| | 50 | 92 | 88 | 89 | 84 | 81 | 78 | 75 | 72 | 87 |
| | 40 | 97 | 92 | 91 | 85 | 81 | 79 | 76 | 74 | 88 |
| 2500 | 100 | 96 | 95 | 97 | 102 | 96 | 96 | 93 | 83 | 103 |
| | 80 | 95 | 94 | 95 | 101 | 93 | 91 | 87 | 80 | 100 |
| | 60 | 94 | 92 | 93 | 98 | 91 | 89 | 85 | 81 | 98 |
| | 50 | 96 | 93 | 95 | 98 | 91 | 89 | 86 | 83 | 98 |
| | 40 | 99 | 96 | 96 | 96 | 90 | 89 | 86 | 83 | 97 |
| 3450 | 100 | 102 | 105 | 105 | 108 | 106 | 103 | 101 | 94 | 111 |
| | 80 | 101 | 103 | 103 | 107 | 104 | 99 | 96 | 90 | 108 |
| | 60 | 100 | 102 | 101 | 104 | 101 | 97 | 94 | 90 | 106 |
| | 50 | 102 | 103 | 102 | 104 | 101 | 97 | 95 | 91 | 106 |
| | 40 | 105 | 106 | 105 | 103 | 100 | 96 | 94 | 92 | 105 |
| 3800 | 100 | 104 | 107 | 107 | 109 | 108 | 105 | 103 | 97 | 113 |
| | 80 | 102 | 106 | 105 | 109 | 106 | 101 | 98 | 93 | 110 |
| | 60 | 102 | 105 | 104 | 106 | 104 | 100 | 97 | 93 | 108 |
| | 50 | 103 | 106 | 105 | 106 | 104 | 100 | 97 | 94 | 108 |
| | 40 | 107 | 109 | 107 | 105 | 103 | 99 | 97 | 94 | 108 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 600 | 100 | 92 | 79 | 71 | 66 | 63 | 54 | 45 | 38 | 71 |
| | 80 | 92 | 78 | 68 | 62 | 58 | 51 | 42 | 34 | 69 |
| | 60 | 89 | 74 | 65 | 58 | 56 | 49 | 42 | 35 | 66 |
| | 50 | 87 | 72 | 63 | 58 | 57 | 50 | 43 | 36 | 65 |
| | 40 | 87 | 72 | 62 | 59 | 58 | 50 | 44 | 38 | 65 |
| 1200 | 100 | 98 | 89 | 89 | 83 | 83 | 79 | 69 | 62 | 87 |
| | 80 | 98 | 89 | 88 | 80 | 78 | 72 | 63 | 57 | 84 |
| | 60 | 98 | 88 | 86 | 78 | 75 | 68 | 62 | 58 | 82 |
| | 50 | 98 | 86 | 83 | 75 | 73 | 67 | 62 | 58 | 80 |
| | 40 | 97 | 87 | 82 | 74 | 72 | 67 | 63 | 59 | 79 |
| 1700 | 100 | 102 | 95 | 97 | 91 | 90 | 88 | 83 | 73 | 95 |
| | 80 | 100 | 92 | 95 | 88 | 87 | 84 | 77 | 70 | 92 |
| | 60 | 100 | 91 | 94 | 86 | 85 | 81 | 74 | 69 | 91 |
| | 50 | 101 | 91 | 93 | 84 | 83 | 79 | 73 | 69 | 89 |
| | 40 | 103 | 93 | 92 | 83 | 82 | 78 | 73 | 70 | 88 |
| 2500 | 100 | 107 | 103 | 101 | 106 | 99 | 99 | 96 | 87 | 106 |
| | 80 | 106 | 99 | 97 | 102 | 97 | 94 | 90 | 82 | 103 |
| | 60 | 104 | 95 | 96 | 98 | 94 | 91 | 86 | 81 | 99 |
| | 50 | 104 | 96 | 96 | 96 | 93 | 89 | 85 | 80 | 98 |
| | 40 | 108 | 98 | 96 | 96 | 92 | 88 | 85 | 80 | 98 |
| 3450 | 100 | 113 | 112 | 109 | 111 | 109 | 106 | 105 | 98 | 114 |
| | 80 | 112 | 109 | 105 | 108 | 106 | 102 | 99 | 93 | 110 |
| | 60 | 110 | 106 | 102 | 104 | 103 | 99 | 95 | 90 | 107 |
| | 50 | 110 | 107 | 103 | 102 | 101 | 98 | 94 | 90 | 106 |
| | 40 | 114 | 110 | 104 | 102 | 101 | 97 | 93 | 89 | 106 |
| 3800 | 100 | 114 | 114 | 111 | 113 | 111 | 108 | 107 | 101 | 116 |
| | 80 | 114 | 112 | 107 | 109 | 108 | 105 | 102 | 96 | 113 |
| | 60 | 112 | 109 | 105 | 106 | 105 | 102 | 98 | 93 | 110 |
| | 50 | 112 | 109 | 105 | 104 | 103 | 100 | 97 | 92 | 108 |
| | 40 | 116 | 112 | 107 | 105 | 103 | 99 | 96 | 92 | 108 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

20 BISW

Wheel Diameter = 20 in.

Outlet Area = 2.30 ft.²

Tip Speed = 5.24 x RPM

Maximum BHP = (RPM/1035)³

Minimum Starting HP = ½

Maximum RPM Class I = 1915

Maximum RPM Class II = 2498

Maximum RPM Class III = 3147

Maximum RPM Class IV = 3600

Maximum Open Motor Frame Size

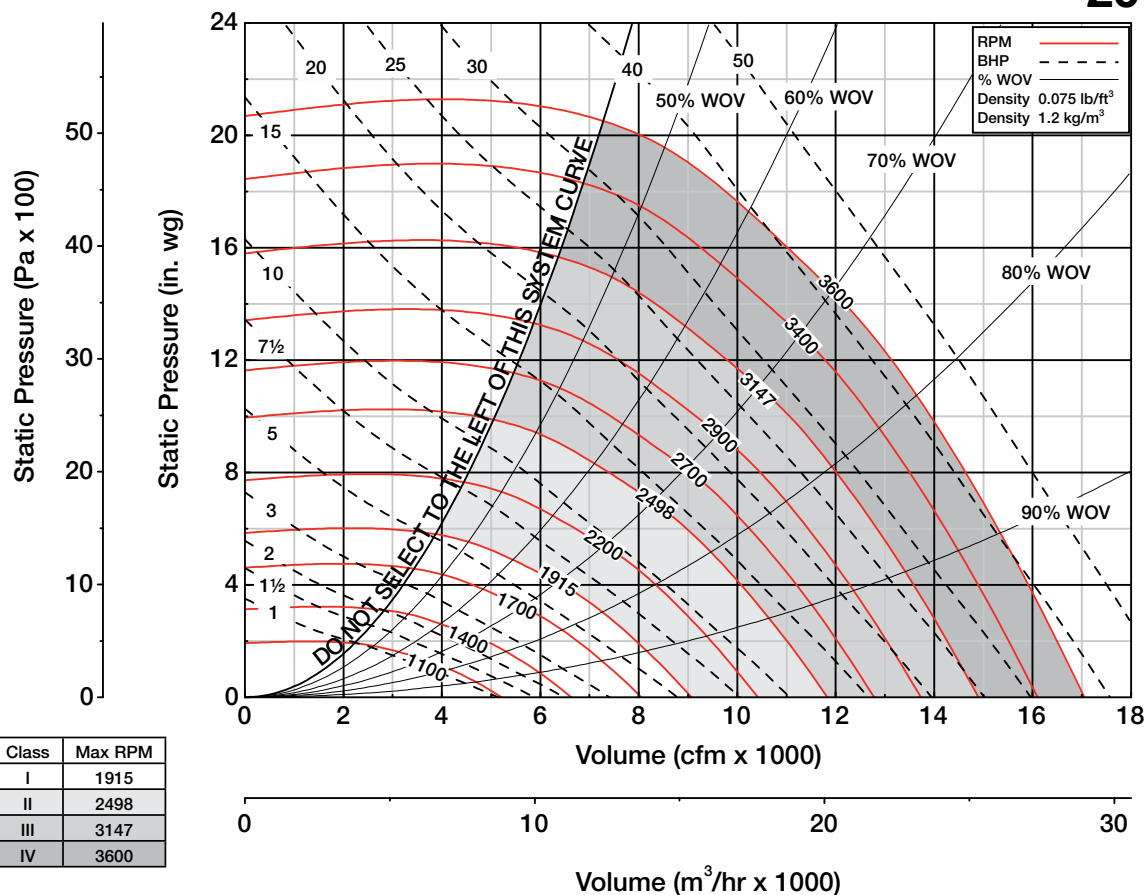
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 254T | 254T | 215T | NA |
| Arr. 10 | 213T | 254T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1800 | 782 | 619 | 0.20 | 807 | 0.40 | | | | | | | | | | | | | | | | |
| 2090 | 908 | 654 | 0.25 | 828 | 0.46 | 981 | 0.71 | | | | | | | | | | | | | | |
| 2380 | 1034 | 691 | 0.30 | 857 | 0.53 | 999 | 0.78 | 1131 | 1.08 | | | | | | | | | | | | |
| 2670 | 1160 | 734 | 0.36 | 890 | 0.61 | 1025 | 0.88 | 1148 | 1.18 | 1265 | 1.51 | | | | | | | | | | |
| 2960 | 1286 | 780 | 0.43 | 925 | 0.70 | 1054 | 0.99 | 1171 | 1.30 | 1282 | 1.63 | 1388 | 2.00 | | | | | | | | |
| 3250 | 1413 | 829 | 0.51 | 962 | 0.79 | 1088 | 1.11 | 1200 | 1.44 | 1304 | 1.78 | 1405 | 2.15 | 1502 | 2.55 | 1592 | 2.97 | | | | |
| 3540 | 1539 | 879 | 0.60 | 1002 | 0.91 | 1122 | 1.24 | 1231 | 1.58 | 1332 | 1.95 | 1427 | 2.33 | 1519 | 2.73 | 1610 | 3.16 | 1694 | 3.61 | | |
| 3830 | 1665 | 931 | 0.71 | 1046 | 1.03 | 1159 | 1.38 | 1265 | 1.75 | 1362 | 2.13 | 1455 | 2.53 | 1542 | 2.94 | 1627 | 3.37 | 1712 | 3.83 | 1792 | 4.31 |
| 4120 | 1791 | 985 | 0.83 | 1092 | 1.17 | 1197 | 1.54 | 1300 | 1.92 | 1396 | 2.33 | 1485 | 2.74 | 1570 | 3.17 | 1651 | 3.61 | 1729 | 4.07 | 1809 | 4.56 |
| 4410 | 1917 | 1038 | 0.97 | 1140 | 1.33 | 1238 | 1.71 | 1337 | 2.12 | 1429 | 2.54 | 1517 | 2.97 | 1600 | 3.42 | 1679 | 3.88 | 1755 | 4.35 | 1827 | 4.83 |
| 4700 | 2043 | 1093 | 1.13 | 1190 | 1.50 | 1283 | 1.90 | 1375 | 2.32 | 1465 | 2.76 | 1550 | 3.22 | 1631 | 3.68 | 1709 | 4.16 | 1783 | 4.65 | 1855 | 5.15 |
| 4990 | 2169 | 1149 | 1.30 | 1240 | 1.69 | 1328 | 2.11 | 1414 | 2.55 | 1502 | 3.01 | 1585 | 3.48 | 1665 | 3.97 | 1740 | 4.46 | 1813 | 4.97 | 1883 | 5.49 |
| 5280 | 2295 | 1206 | 1.49 | 1292 | 1.90 | 1376 | 2.33 | 1459 | 2.79 | 1540 | 3.27 | 1622 | 3.76 | 1699 | 4.27 | 1773 | 4.79 | 1844 | 5.31 | 1913 | 5.85 |
| 5570 | 2421 | 1262 | 1.69 | 1345 | 2.14 | 1425 | 2.59 | 1504 | 3.06 | 1580 | 3.55 | 1659 | 4.06 | 1735 | 4.59 | 1807 | 5.12 | 1877 | 5.67 | 1944 | 6.23 |
| 5860 | 2547 | 1319 | 1.92 | 1399 | 2.39 | 1475 | 2.86 | 1550 | 3.34 | 1624 | 3.85 | 1697 | 4.38 | 1772 | 4.93 | 1842 | 5.48 | 1911 | 6.05 | 1977 | 6.63 |
| 6150 | 2673 | 1377 | 2.17 | 1452 | 2.66 | 1526 | 3.15 | 1598 | 3.65 | 1669 | 4.18 | 1738 | 4.73 | 1810 | 5.29 | 1879 | 5.87 | 1946 | 6.45 | 2011 | 7.05 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4100 | 1782 | 1808 | 4.55 | 1884 | 5.05 | 1957 | 5.57 | 2027 | 6.10 | | | | | | | | | | | | |
| 4430 | 1926 | 1829 | 4.85 | 1904 | 5.37 | 1977 | 5.91 | 2047 | 6.46 | 2114 | 7.02 | 2179 | 7.59 | | | | | | | | |
| 4760 | 2069 | 1861 | 5.22 | 1929 | 5.73 | 1997 | 6.26 | 2067 | 6.84 | 2134 | 7.42 | 2199 | 8.01 | 2261 | 8.61 | 2322 | 9.23 | | | | |
| 5090 | 2213 | 1893 | 5.61 | 1961 | 6.15 | 2026 | 6.69 | 2089 | 7.24 | 2154 | 7.83 | 2219 | 8.44 | 2281 | 9.07 | 2342 | 9.70 | 2401 | 10.3 | 2508 | 11.6 |
| 5420 | 2356 | 1927 | 6.03 | 1993 | 6.59 | 2058 | 7.15 | 2121 | 7.73 | 2181 | 8.31 | 2239 | 8.90 | 2301 | 9.53 | 2362 | 10.2 | 2421 | 10.9 | 2527 | 12.2 |
| 5750 | 2500 | 1965 | 6.47 | 2028 | 7.05 | 2092 | 7.64 | 2153 | 8.24 | 2213 | 8.84 | 2271 | 9.45 | 2327 | 10.1 | 2382 | 10.7 | 2441 | 11.4 | 2547 | 12.7 |
| 6080 | 2643 | 2003 | 6.94 | 2066 | 7.54 | 2127 | 8.15 | 2187 | 8.77 | 2246 | 9.40 | 2303 | 10.0 | 2359 | 10.7 | 2414 | 11.3 | 2467 | 12.0 | 2567 | 13.3 |
| 6410 | 2786 | 2042 | 7.44 | 2105 | 8.06 | 2165 | 8.69 | 2223 | 9.33 | 2280 | 9.98 | 2337 | 10.6 | 2392 | 11.3 | 2446 | 12.0 | 2499 | 12.7 | 2592 | 14.0 |
| 6740 | 2930 | 2084 | 7.97 | 2144 | 8.61 | 2204 | 9.27 | 2261 | 9.93 | 2317 | 10.6 | 2372 | 11.3 | 2426 | 12.0 | 2479 | 12.7 | 2531 | 13.4 | 2624 | 14.7 |
| 7070 | 3073 | 2126 | 8.53 | 2186 | 9.20 | 2243 | 9.87 | 2300 | 10.6 | 2356 | 11.3 | 2410 | 12.0 | 2462 | 12.7 | 2513 | 13.4 | 2565 | 14.1 | 2656 | 15.5 |
| 7400 | 3217 | 2169 | 9.12 | 2228 | 9.81 | 2285 | 10.5 | 2339 | 11.2 | 2394 | 11.9 | 2448 | 12.7 | 2500 | 13.4 | 2551 | 14.1 | 2600 | 14.9 | 2688 | 16.3 |
| 7730 | 3360 | 2213 | 9.75 | 2271 | 10.5 | 2327 | 11.2 | 2382 | 11.9 | 2434 | 12.6 | 2487 | 13.4 | 2538 | 14.1 | 2589 | 14.9 | 2638 | 15.7 | 2722 | 17.1 |
| 8060 | 3504 | 2262 | 10.4 | 2315 | 11.1 | 2370 | 11.9 | 2424 | 12.6 | 2476 | 13.4 | 2527 | 14.2 | 2577 | 14.9 | 2627 | 15.7 | 2676 | 16.5 | 2760 | 18.0 |
| 8390 | 3647 | 2313 | 11.1 | 2362 | 11.9 | 2414 | 12.6 | 2467 | 13.4 | 2519 | 14.2 | 2569 | 15.0 | 2618 | 15.8 | 2666 | 16.6 | 2715 | 17.4 | 2797 | 18.9 |
| 8720 | 3791 | 2364 | 11.9 | 2413 | 12.6 | 2461 | 13.4 | 2511 | 14.2 | 2562 | 15.0 | 2612 | 15.8 | 2661 | 16.7 | 2708 | 17.5 | 2754 | 18.3 | 2836 | 19.9 |
| 9050 | 3934 | 2416 | 12.7 | 2464 | 13.5 | 2512 | 14.3 | 2557 | 15.1 | 2606 | 15.9 | 2655 | 16.7 | 2704 | 17.6 | 2751 | 18.4 | 2797 | 19.3 | 2874 | 20.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 7400 | 3217 | 2688 | 16.3 | 2782 | 17.8 | 2873 | 19.3 | 2960 | 20.9 | 3044 | 22.5 | 3134 | 24.2 | 3221 | 26.0 | 3305 | 27.8 | 3386 | 29.6 | 3543 | 33.3 |
| 7750 | 3369 | 2724 | 17.2 | 2816 | 18.7 | 2907 | 20.3 | 2993 | 21.9 | 3077 | 23.6 | 3157 | 25.2 | 3241 | 27.0 | 3325 | 28.8 | 3407 | 30.6 | 3564 | 34.4 |
| 8100 | 3521 | 2764 | 18.1 | 2853 | 19.7 | 2941 | 21.3 | 3027 | 23.0 | 3110 | 24.7 | 3191 | 26.4 | 3269 | 28.1 | 3344 | 29.8 | 3428 | 31.7 | 3584 | 35.6 |
| 8450 | 3673 | 2804 | 19.1 | 2892 | 20.7 | 2976 | 22.4 | 3061 | 24.1 | 3144 | 25.8 | 3224 | 27.6 | 3302 | 29.3 | 3377 | 31.1 | 3450 | 32.9 | | |
| 8800 | 3826 | 2845 | 20.1 | 2933 | 21.8 | 3016 | 23.5 | 3096 | 25.3 | 3178 | 27.0 | 3258 | 28.8 | 3335 | 30.6 | 3410 | 32.5 | 3483 | 34.3 | | |
| 9150 | 3978 | 2886 | 21.2 | 2973 | 22.9 | 3056 | 24.7 | 3137 | 26.5 | 3213 | 28.3 | 3292 | 30.1 | 3369 | 32.0 | 3444 | 33.8 | 3517 | 35.7 | | |
| 9500 | 4130 | 2930 | 22.3 | 3014 | 24.1 | 3097 | 25.9 | 3177 | 27.7 | 3254 | 29.6 | 3328 | 31.4 | 3403 | 33.3 | 3478 | 35.3 | 3550 | 37.2 | | |
| 9850 | 4282 | 2975 | 23.4 | 3057 | 25.3 | 3137 | 27.1 | 3217 | 29.0 | 3294 | 30.9 | 3368 | 32.8 | 3439 | 34.8 | 3512 | 36.7 | 3584 | 38.7 | | |
| 10200 | 4434 | 3020 | 24.7 | 3101 | 26.5 | 3180 | 28.4 | 3258 | 30.3 | 3334 | 32.3 | 3408 | 34.3 | 3480 | 36.2 | 3549 | 38.2 | | | | |
| 10550 | 4586 | 3065 | 25.9 | 3146 | 27.8 | 3224 | 29.8 | 3299 | 31.7 | 3375 | 33.7 | 3448 | 35.7 | 3520 | 37.8 | 3589 | 39.8 | | | | |
| 10900 | 4739 | 3111 | 27.2 | 3191 | 29.2 | 3269 | 31.2 | 3344 | 33.2 | 3416 | 35.2 | 3489 | 37.3 | 3560 | 39.4 | | | | | | |
| 11250 | 4891 | 3160 | 28.6 | 3237 | 30.6 | 3314 | 32.7 | 3388 | 34.7 | 3460 | 36.8 | 3530 | 38.9 | 3600 | 41.0 | | | | | | |
| 11600 | 5043 | 3213 | 30.1 | 3282 | 32.1 | 3359 | 34.2 | 3433 | 36.3 | 3504 | 38.4 | 3574 | 40.5 | | | | | | | | |
| 11950 | 5195 | 3267 | 31.6 | 3335 | 33.6 | 3405 | 35.8 | 3478 | 37.9 | 3549 | 40.1 | | | | | | | | | | |
| 12300 | 5347 | 3321 | 33.1 | 3388 | 35.3 | 3454 | 37.4 | 3524 | 39.6 | 3594 | 41.8 | | | | | | | | | | |
| 12650 | 5500 | 3375 | 34.8 | 3442 | 37.0 | 3507 | 39.1 | 3569 | 41.3 | | | | | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 4.74)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 550 | 100 | 80 | 76 | 70 | 65 | 58 | 52 | 43 | 40 | 67 |
| | 80 | 79 | 75 | 65 | 60 | 53 | 49 | 38 | 38 | 64 |
| | 60 | 78 | 74 | 63 | 58 | 55 | 48 | 37 | 35 | 63 |
| | 50 | 77 | 74 | 61 | 58 | 56 | 48 | 39 | 36 | 63 |
| | 40 | 77 | 74 | 60 | 58 | 57 | 49 | 41 | 36 | 63 |
| 1100 | 100 | 90 | 87 | 89 | 84 | 80 | 76 | 67 | 61 | 86 |
| | 80 | 89 | 87 | 85 | 80 | 74 | 69 | 62 | 56 | 82 |
| | 60 | 88 | 86 | 81 | 77 | 73 | 68 | 63 | 59 | 79 |
| | 50 | 87 | 85 | 79 | 76 | 73 | 68 | 65 | 60 | 78 |
| | 40 | 87 | 84 | 78 | 75 | 73 | 68 | 65 | 61 | 78 |
| 1600 | 100 | 93 | 92 | 95 | 92 | 89 | 87 | 80 | 72 | 95 |
| | 80 | 91 | 89 | 94 | 90 | 86 | 83 | 77 | 71 | 92 |
| | 60 | 93 | 90 | 93 | 88 | 83 | 80 | 76 | 72 | 90 |
| | 50 | 93 | 90 | 91 | 85 | 82 | 80 | 76 | 73 | 89 |
| | 40 | 98 | 94 | 92 | 86 | 82 | 80 | 78 | 75 | 89 |
| 2200 | 100 | 96 | 95 | 98 | 101 | 96 | 95 | 91 | 81 | 102 |
| | 80 | 95 | 94 | 96 | 99 | 92 | 90 | 85 | 78 | 99 |
| | 60 | 94 | 92 | 94 | 97 | 91 | 88 | 85 | 81 | 97 |
| | 50 | 95 | 93 | 95 | 97 | 91 | 89 | 85 | 82 | 97 |
| | 40 | 98 | 96 | 96 | 95 | 90 | 88 | 86 | 83 | 97 |
| 3147 | 100 | 104 | 105 | 105 | 109 | 106 | 104 | 102 | 94 | 111 |
| | 80 | 103 | 104 | 104 | 108 | 103 | 99 | 96 | 90 | 109 |
| | 60 | 102 | 103 | 102 | 105 | 101 | 98 | 94 | 90 | 106 |
| | 50 | 104 | 103 | 103 | 105 | 101 | 98 | 95 | 91 | 107 |
| | 40 | 107 | 107 | 105 | 104 | 100 | 97 | 95 | 92 | 106 |
| 3600 | 100 | 106 | 109 | 109 | 111 | 109 | 107 | 105 | 98 | 114 |
| | 80 | 105 | 107 | 107 | 110 | 107 | 103 | 99 | 94 | 112 |
| | 60 | 104 | 106 | 105 | 108 | 105 | 101 | 98 | 94 | 110 |
| | 50 | 106 | 107 | 107 | 108 | 105 | 101 | 98 | 95 | 110 |
| | 40 | 109 | 110 | 109 | 107 | 103 | 100 | 98 | 95 | 109 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 550 | 100 | 93 | 77 | 72 | 66 | 63 | 54 | 45 | 38 | 71 |
| | 80 | 93 | 75 | 68 | 62 | 59 | 51 | 42 | 34 | 70 |
| | 60 | 90 | 71 | 65 | 58 | 56 | 49 | 42 | 35 | 67 |
| | 50 | 89 | 69 | 63 | 59 | 58 | 50 | 43 | 36 | 66 |
| | 40 | 88 | 69 | 63 | 59 | 59 | 50 | 44 | 38 | 66 |
| 1100 | 100 | 98 | 91 | 89 | 84 | 83 | 79 | 69 | 62 | 88 |
| | 80 | 98 | 90 | 88 | 81 | 78 | 72 | 64 | 57 | 85 |
| | 60 | 97 | 89 | 86 | 78 | 75 | 69 | 63 | 58 | 82 |
| | 50 | 98 | 88 | 83 | 76 | 73 | 67 | 62 | 59 | 80 |
| | 40 | 97 | 89 | 82 | 75 | 72 | 67 | 63 | 60 | 80 |
| 1600 | 100 | 103 | 97 | 98 | 92 | 91 | 89 | 83 | 73 | 97 |
| | 80 | 101 | 94 | 96 | 89 | 88 | 85 | 78 | 70 | 93 |
| | 60 | 101 | 92 | 95 | 87 | 86 | 82 | 75 | 70 | 92 |
| | 50 | 101 | 93 | 94 | 86 | 84 | 80 | 74 | 71 | 90 |
| | 40 | 104 | 94 | 93 | 85 | 83 | 79 | 74 | 71 | 90 |
| 2200 | 100 | 106 | 103 | 102 | 105 | 99 | 98 | 95 | 85 | 106 |
| | 80 | 105 | 99 | 99 | 101 | 96 | 93 | 89 | 80 | 102 |
| | 60 | 103 | 95 | 96 | 98 | 94 | 90 | 85 | 80 | 99 |
| | 50 | 103 | 96 | 95 | 95 | 92 | 89 | 84 | 79 | 97 |
| | 40 | 106 | 98 | 96 | 95 | 91 | 87 | 84 | 80 | 97 |
| 3147 | 100 | 114 | 112 | 109 | 113 | 109 | 107 | 105 | 98 | 115 |
| | 80 | 114 | 109 | 105 | 109 | 106 | 103 | 99 | 92 | 111 |
| | 60 | 112 | 106 | 103 | 105 | 103 | 100 | 96 | 90 | 108 |
| | 50 | 112 | 106 | 103 | 103 | 101 | 98 | 94 | 90 | 106 |
| | 40 | 116 | 109 | 105 | 103 | 101 | 97 | 94 | 90 | 106 |
| 3600 | 100 | 116 | 115 | 113 | 115 | 113 | 110 | 108 | 102 | 118 |
| | 80 | 116 | 113 | 109 | 111 | 110 | 106 | 103 | 97 | 114 |
| | 60 | 114 | 110 | 107 | 108 | 107 | 103 | 99 | 94 | 111 |
| | 50 | 114 | 110 | 107 | 106 | 105 | 102 | 98 | 93 | 109 |
| | 40 | 118 | 113 | 108 | 106 | 104 | 101 | 97 | 93 | 110 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

22 BISW

Wheel Diameter = 22¼ in.

Outlet Area = 2.85 ft.²

Tip Speed = 5.83 x RPM

Maximum BHP = (RPM/867)³

Minimum Starting HP = ½

Maximum RPM Class I = 1722

Maximum RPM Class II = 2246

Maximum RPM Class III = 2830

Maximum RPM Class IV = 3413

Maximum Open Motor Frame Size

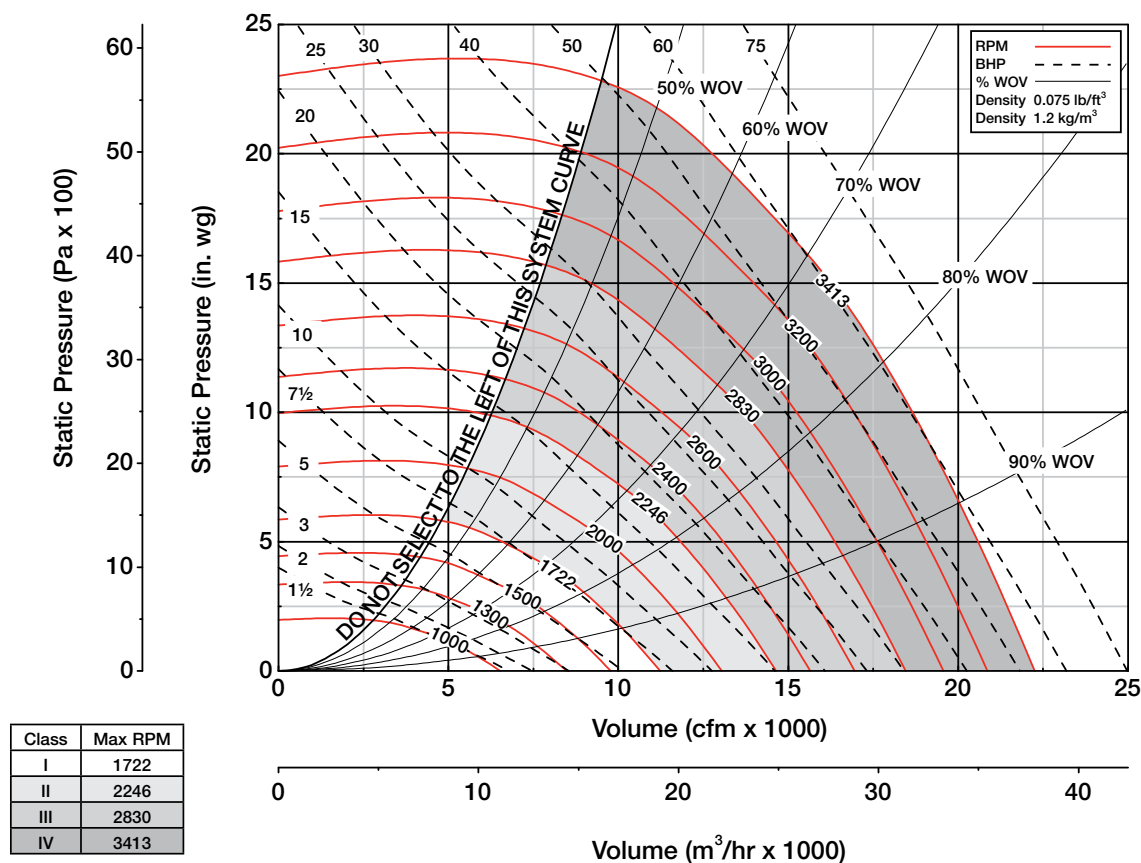
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 256T | 256T | 256T | NA |
| Arr. 10 | 215T | 256T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2300 | 807 | 563 | 0.26 | 728 | 0.51 | | | | | | | | | | | | | | | | |
| 2660 | 933 | 594 | 0.32 | 749 | 0.58 | 885 | 0.89 | | | | | | | | | | | | | | |
| 3020 | 1059 | 629 | 0.38 | 776 | 0.67 | 901 | 0.99 | 1020 | 1.36 | | | | | | | | | | | | |
| 3380 | 1185 | 668 | 0.46 | 806 | 0.77 | 926 | 1.12 | 1035 | 1.48 | 1140 | 1.90 | | | | | | | | | | |
| 3740 | 1312 | 710 | 0.55 | 838 | 0.89 | 954 | 1.25 | 1058 | 1.64 | 1156 | 2.06 | 1251 | 2.52 | 1338 | 2.99 | | | | | | |
| 4100 | 1438 | 755 | 0.65 | 872 | 1.01 | 984 | 1.40 | 1085 | 1.82 | 1178 | 2.25 | 1266 | 2.70 | 1353 | 3.21 | 1435 | 3.73 | | | | |
| 4460 | 1564 | 800 | 0.77 | 909 | 1.15 | 1016 | 1.57 | 1114 | 2.00 | 1203 | 2.46 | 1288 | 2.93 | 1369 | 3.43 | 1450 | 3.97 | 1526 | 4.53 | 1598 | 5.10 |
| 4820 | 1691 | 848 | 0.91 | 950 | 1.31 | 1049 | 1.75 | 1144 | 2.21 | 1231 | 2.69 | 1313 | 3.19 | 1391 | 3.70 | 1466 | 4.22 | 1542 | 4.81 | 1614 | 5.41 |
| 5180 | 1817 | 896 | 1.07 | 991 | 1.49 | 1084 | 1.95 | 1176 | 2.43 | 1261 | 2.94 | 1340 | 3.46 | 1417 | 3.99 | 1489 | 4.54 | 1558 | 5.10 | 1630 | 5.72 |
| 5540 | 1943 | 944 | 1.24 | 1035 | 1.69 | 1122 | 2.17 | 1209 | 2.68 | 1292 | 3.20 | 1370 | 3.75 | 1444 | 4.31 | 1515 | 4.88 | 1583 | 5.47 | 1648 | 6.06 |
| 5900 | 2070 | 994 | 1.44 | 1080 | 1.91 | 1163 | 2.41 | 1244 | 2.94 | 1324 | 3.49 | 1401 | 4.06 | 1473 | 4.64 | 1542 | 5.24 | 1609 | 5.85 | 1673 | 6.47 |
| 6260 | 2196 | 1045 | 1.66 | 1125 | 2.16 | 1204 | 2.67 | 1280 | 3.22 | 1358 | 3.80 | 1432 | 4.39 | 1503 | 5.00 | 1571 | 5.62 | 1636 | 6.25 | 1699 | 6.90 |
| 6620 | 2322 | 1096 | 1.90 | 1173 | 2.42 | 1247 | 2.96 | 1321 | 3.53 | 1393 | 4.13 | 1466 | 4.74 | 1534 | 5.37 | 1601 | 6.02 | 1664 | 6.68 | 1726 | 7.35 |
| 6980 | 2449 | 1147 | 2.16 | 1221 | 2.72 | 1292 | 3.28 | 1362 | 3.87 | 1429 | 4.48 | 1500 | 5.12 | 1567 | 5.78 | 1632 | 6.44 | 1695 | 7.13 | 1755 | 7.82 |
| 7340 | 2575 | 1198 | 2.45 | 1269 | 3.04 | 1337 | 3.62 | 1403 | 4.22 | 1470 | 4.87 | 1534 | 5.53 | 1601 | 6.21 | 1664 | 6.90 | 1725 | 7.60 | 1785 | 8.33 |
| 7700 | 2701 | 1250 | 2.77 | 1317 | 3.38 | 1383 | 3.99 | 1447 | 4.62 | 1510 | 5.28 | 1572 | 5.96 | 1635 | 6.66 | 1698 | 7.38 | 1757 | 8.11 | 1815 | 8.85 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5100 | 1789 | 1626 | 5.65 | 1695 | 6.28 | 1760 | 6.92 | 1823 | 7.58 | | | | | | | | | | | | |
| 5500 | 1929 | 1645 | 6.02 | 1712 | 6.66 | 1778 | 7.33 | 1841 | 8.02 | 1901 | 8.71 | 1959 | 9.42 | | | | | | | | |
| 5900 | 2070 | 1673 | 6.47 | 1734 | 7.10 | 1795 | 7.76 | 1858 | 8.47 | 1919 | 9.19 | 1977 | 9.93 | 2033 | 10.7 | 2088 | 11.4 | | | | |
| 6300 | 2210 | 1701 | 6.95 | 1763 | 7.61 | 1821 | 8.28 | 1878 | 8.96 | 1936 | 9.69 | 1994 | 10.5 | 2051 | 11.2 | 2105 | 12.0 | 2158 | 12.8 | 2255 | 14.4 |
| 6700 | 2350 | 1731 | 7.45 | 1791 | 8.14 | 1850 | 8.84 | 1906 | 9.55 | 1960 | 10.3 | 2012 | 11.0 | 2068 | 11.8 | 2123 | 12.6 | 2176 | 13.4 | 2272 | 15.0 |
| 7100 | 2491 | 1765 | 7.99 | 1822 | 8.70 | 1879 | 9.43 | 1934 | 10.2 | 1988 | 10.9 | 2040 | 11.7 | 2091 | 12.4 | 2140 | 13.2 | 2193 | 14.1 | 2289 | 15.7 |
| 7500 | 2631 | 1798 | 8.56 | 1855 | 9.30 | 1910 | 10.1 | 1964 | 10.8 | 2017 | 11.6 | 2069 | 12.4 | 2119 | 13.2 | 2168 | 14.0 | 2216 | 14.8 | 2307 | 16.4 |
| 7900 | 2771 | 1832 | 9.15 | 1889 | 9.93 | 1943 | 10.7 | 1996 | 11.5 | 2047 | 12.3 | 2098 | 13.1 | 2148 | 13.9 | 2196 | 14.8 | 2244 | 15.6 | 2328 | 17.2 |
| 8300 | 2912 | 1869 | 9.79 | 1923 | 10.6 | 1977 | 11.4 | 2029 | 12.2 | 2080 | 13.0 | 2128 | 13.9 | 2177 | 14.7 | 2225 | 15.6 | 2272 | 16.5 | 2356 | 18.1 |
| 8700 | 3052 | 1907 | 10.5 | 1960 | 11.3 | 2011 | 12.1 | 2063 | 13.0 | 2113 | 13.8 | 2162 | 14.7 | 2209 | 15.6 | 2255 | 16.4 | 2302 | 17.3 | 2384 | 19.1 |
| 9100 | 3192 | 1944 | 11.2 | 1997 | 12.0 | 2048 | 12.9 | 2097 | 13.8 | 2147 | 14.6 | 2195 | 15.5 | 2242 | 16.4 | 2288 | 17.3 | 2332 | 18.3 | 2413 | 20.0 |
| 9500 | 3333 | 1983 | 11.9 | 2035 | 12.8 | 2086 | 13.7 | 2134 | 14.6 | 2182 | 15.5 | 2229 | 16.4 | 2276 | 17.3 | 2321 | 18.3 | 2365 | 19.2 | 2442 | 21.0 |
| 9900 | 3473 | 2025 | 12.7 | 2073 | 13.6 | 2123 | 14.6 | 2172 | 15.5 | 2219 | 16.4 | 2264 | 17.3 | 2310 | 18.3 | 2355 | 19.3 | 2399 | 20.2 | 2475 | 22.1 |
| 10300 | 3614 | 2069 | 13.6 | 2114 | 14.5 | 2162 | 15.4 | 2210 | 16.4 | 2256 | 17.4 | 2302 | 18.3 | 2346 | 19.3 | 2389 | 20.3 | 2433 | 21.3 | 2508 | 23.2 |
| 10700 | 3754 | 2114 | 14.5 | 2159 | 15.4 | 2202 | 16.4 | 2248 | 17.4 | 2294 | 18.4 | 2339 | 19.4 | 2383 | 20.4 | 2426 | 21.4 | 2467 | 22.4 | 2542 | 24.3 |
| 11100 | 3894 | 2160 | 15.4 | 2204 | 16.4 | 2246 | 17.4 | 2288 | 18.4 | 2333 | 19.4 | 2377 | 20.4 | 2421 | 21.5 | 2463 | 22.5 | 2504 | 23.5 | 2576 | 25.5 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9100 | 3192 | 2413 | 20.0 | 2498 | 21.9 | 2579 | 23.8 | 2657 | 25.7 | 2733 | 27.7 | 2815 | 29.8 | 2893 | 32.0 | 2969 | 34.2 | 3043 | 36.4 | 3184 | 41.0 |
| 9540 | 3347 | 2446 | 21.1 | 2529 | 23.1 | 2610 | 25.0 | 2688 | 27.0 | 2763 | 29.0 | 2836 | 31.0 | 2912 | 33.2 | 2988 | 35.5 | 3061 | 37.8 | 3202 | 42.5 |
| 9980 | 3501 | 2482 | 22.3 | 2562 | 24.3 | 2641 | 26.3 | 2719 | 28.4 | 2794 | 30.4 | 2866 | 32.5 | 2936 | 34.6 | 3007 | 36.8 | 3080 | 39.2 | 3221 | 43.9 |
| 10420 | 3656 | 2519 | 23.5 | 2598 | 25.6 | 2673 | 27.6 | 2750 | 29.7 | 2825 | 31.9 | 2897 | 34.0 | 2966 | 36.2 | 3034 | 38.4 | 3100 | 40.6 | 3240 | 45.5 |
| 10860 | 3810 | 2555 | 24.8 | 2634 | 26.9 | 2710 | 29.0 | 2782 | 31.2 | 2856 | 33.4 | 2927 | 35.6 | 2997 | 37.8 | 3064 | 40.1 | 3130 | 42.3 | 3259 | 47.0 |
| 11300 | 3964 | 2593 | 26.1 | 2671 | 28.3 | 2746 | 30.5 | 2819 | 32.7 | 2888 | 34.9 | 2959 | 37.2 | 3028 | 39.5 | 3095 | 41.8 | 3160 | 44.1 | 3286 | 48.9 |
| 11740 | 4119 | 2633 | 27.5 | 2708 | 29.7 | 2783 | 32.0 | 2855 | 34.3 | 2925 | 36.5 | 2991 | 38.9 | 3059 | 41.2 | 3126 | 43.6 | 3191 | 46.0 | 3316 | 50.8 |
| 12180 | 4273 | 2674 | 29.0 | 2748 | 31.2 | 2820 | 33.5 | 2892 | 35.9 | 2961 | 38.2 | 3028 | 40.6 | 3092 | 43.0 | 3157 | 45.4 | 3222 | 47.9 | 3347 | 52.9 |
| 12620 | 4428 | 2715 | 30.5 | 2788 | 32.8 | 2859 | 35.2 | 2929 | 37.6 | 2998 | 40.0 | 3064 | 42.4 | 3129 | 44.9 | 3191 | 47.3 | 3253 | 49.9 | 3378 | 54.9 |
| 13060 | 4582 | 2756 | 32.1 | 2829 | 34.5 | 2899 | 36.9 | 2967 | 39.3 | 3034 | 41.8 | 3101 | 44.3 | 3165 | 46.8 | 3228 | 49.3 | 3287 | 51.9 | | |
| 13500 | 4736 | 2798 | 33.8 | 2870 | 36.2 | 2940 | 38.7 | 3007 | 41.2 | 3072 | 43.7 | 3138 | 46.2 | 3202 | 48.8 | 3264 | 51.4 | 3325 | 54.0 | | |
| 13940 | 4891 | 2843 | 35.5 | 2912 | 38.0 | 2981 | 40.5 | 3048 | 43.1 | 3113 | 45.6 | 3175 | 48.2 | 3239 | 50.8 | 3300 | 53.5 | 3361 | 56.2 | | |
| 14380 | 5045 | 2892 | 37.3 | 2954 | 39.9 | 3023 | 42.4 | 3089 | 45.1 | 3153 | 47.7 | 3215 | 50.3 | 3276 | 53.0 | 3337 | 55.7 | | | | |
| 14820 | 5200 | 2941 | 39.2 | 3002 | 41.8 | 3064 | 44.4 | 3130 | 47.1 | 3194 | 49.8 | 3256 | 52.5 | 3316 | 55.2 | 3374 | 57.9 | | | | |
| 15260 | 5354 | 2990 | 41.2 | 3051 | 43.9 | 3110 | 46.5 | 3172 | 49.2 | 3235 | 52.0 | 3297 | 54.7 | 3356 | 57.5 | | | | | | |
| 15700 | 5508 | 3040 | 43.3 | 3100 | 46.0 | 3158 | 48.7 | 3214 | 51.4 | 3277 | 54.2 | 3338 | 57.1 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 6.52)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 500 | 100 | 82 | 76 | 70 | 65 | 59 | 52 | 44 | 41 | 68 |
| | 80 | 81 | 75 | 66 | 60 | 54 | 48 | 39 | 39 | 64 |
| | 60 | 80 | 74 | 63 | 59 | 55 | 48 | 38 | 36 | 63 |
| | 50 | 79 | 73 | 62 | 59 | 56 | 48 | 40 | 37 | 63 |
| | 40 | 79 | 73 | 61 | 59 | 57 | 49 | 41 | 36 | 63 |
| 1000 | 100 | 90 | 90 | 89 | 85 | 80 | 76 | 68 | 61 | 87 |
| | 80 | 90 | 89 | 86 | 81 | 74 | 69 | 62 | 57 | 82 |
| | 60 | 89 | 88 | 82 | 78 | 73 | 69 | 64 | 59 | 80 |
| | 50 | 88 | 87 | 80 | 76 | 73 | 69 | 65 | 61 | 79 |
| | 40 | 88 | 86 | 79 | 76 | 74 | 69 | 66 | 61 | 79 |
| 1400 | 100 | 93 | 93 | 95 | 92 | 89 | 86 | 79 | 70 | 94 |
| | 80 | 91 | 90 | 93 | 90 | 86 | 82 | 76 | 70 | 92 |
| | 60 | 92 | 91 | 92 | 87 | 83 | 80 | 75 | 72 | 90 |
| | 50 | 93 | 91 | 90 | 85 | 82 | 79 | 76 | 73 | 88 |
| | 40 | 98 | 94 | 91 | 85 | 82 | 80 | 77 | 75 | 89 |
| 2000 | 100 | 97 | 97 | 100 | 101 | 97 | 96 | 91 | 81 | 103 |
| | 80 | 96 | 95 | 99 | 100 | 93 | 91 | 85 | 78 | 100 |
| | 60 | 95 | 94 | 96 | 97 | 92 | 89 | 85 | 81 | 98 |
| | 50 | 96 | 95 | 97 | 97 | 92 | 89 | 86 | 83 | 98 |
| | 40 | 99 | 97 | 97 | 96 | 91 | 89 | 86 | 83 | 97 |
| 2830 | 100 | 106 | 106 | 106 | 110 | 106 | 105 | 102 | 93 | 112 |
| | 80 | 105 | 105 | 104 | 110 | 103 | 100 | 96 | 90 | 109 |
| | 60 | 104 | 103 | 103 | 107 | 101 | 98 | 95 | 91 | 107 |
| | 50 | 106 | 104 | 104 | 107 | 101 | 98 | 95 | 92 | 107 |
| | 40 | 109 | 107 | 106 | 105 | 100 | 98 | 95 | 92 | 107 |
| 3413 | 100 | 109 | 111 | 111 | 114 | 111 | 109 | 107 | 100 | 116 |
| | 80 | 108 | 110 | 109 | 113 | 109 | 105 | 101 | 95 | 114 |
| | 60 | 108 | 109 | 108 | 110 | 107 | 103 | 100 | 96 | 112 |
| | 50 | 109 | 110 | 109 | 110 | 106 | 103 | 100 | 97 | 112 |
| | 40 | 112 | 113 | 111 | 109 | 105 | 102 | 100 | 97 | 111 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 500 | 100 | 95 | 77 | 72 | 67 | 63 | 54 | 45 | 38 | 72 |
| | 80 | 95 | 75 | 69 | 62 | 59 | 51 | 42 | 34 | 71 |
| | 60 | 92 | 71 | 65 | 59 | 56 | 50 | 42 | 35 | 68 |
| | 50 | 90 | 69 | 64 | 60 | 58 | 50 | 43 | 37 | 67 |
| | 40 | 90 | 69 | 63 | 60 | 59 | 50 | 44 | 38 | 67 |
| 1000 | 100 | 98 | 92 | 89 | 85 | 84 | 78 | 70 | 62 | 88 |
| | 80 | 98 | 92 | 88 | 82 | 79 | 72 | 64 | 57 | 85 |
| | 60 | 97 | 91 | 86 | 79 | 75 | 69 | 63 | 59 | 83 |
| | 50 | 97 | 89 | 83 | 77 | 73 | 68 | 63 | 60 | 81 |
| | 40 | 96 | 90 | 82 | 76 | 73 | 68 | 64 | 60 | 80 |
| 1400 | 100 | 102 | 98 | 97 | 92 | 91 | 89 | 82 | 72 | 96 |
| | 80 | 100 | 95 | 95 | 89 | 88 | 84 | 77 | 69 | 93 |
| | 60 | 99 | 94 | 94 | 88 | 86 | 81 | 75 | 70 | 91 |
| | 50 | 100 | 93 | 92 | 86 | 84 | 79 | 74 | 70 | 90 |
| | 40 | 102 | 95 | 92 | 85 | 82 | 78 | 74 | 71 | 89 |
| 2000 | 100 | 107 | 104 | 104 | 105 | 100 | 99 | 95 | 85 | 106 |
| | 80 | 105 | 99 | 101 | 102 | 97 | 94 | 89 | 80 | 103 |
| | 60 | 102 | 97 | 98 | 98 | 94 | 91 | 86 | 80 | 99 |
| | 50 | 103 | 97 | 96 | 96 | 93 | 89 | 85 | 80 | 98 |
| | 40 | 106 | 99 | 97 | 96 | 92 | 88 | 84 | 80 | 98 |
| 2830 | 100 | 115 | 112 | 110 | 114 | 109 | 107 | 106 | 97 | 115 |
| | 80 | 115 | 109 | 106 | 111 | 106 | 103 | 100 | 92 | 112 |
| | 60 | 113 | 105 | 104 | 107 | 104 | 100 | 96 | 90 | 108 |
| | 50 | 113 | 106 | 104 | 104 | 102 | 99 | 95 | 90 | 107 |
| | 40 | 117 | 109 | 105 | 105 | 101 | 98 | 94 | 90 | 107 |
| 3413 | 100 | 119 | 117 | 115 | 117 | 114 | 112 | 110 | 104 | 120 |
| | 80 | 118 | 114 | 111 | 114 | 112 | 108 | 105 | 98 | 116 |
| | 60 | 116 | 111 | 109 | 110 | 108 | 105 | 101 | 96 | 113 |
| | 50 | 116 | 112 | 109 | 108 | 107 | 104 | 100 | 95 | 111 |
| | 40 | 120 | 115 | 110 | 108 | 106 | 103 | 99 | 95 | 111 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

24 BISW

Wheel Diameter = 24½ in.

Outlet Area = 3.45 ft.²

Tip Speed = 6.41 x RPM

Maximum BHP = (RPM/750)³

Minimum Starting HP = ½

Maximum RPM Class I = 1570

Maximum RPM Class II = 2048

Maximum RPM Class III = 2580

Maximum RPM Class IV = 3110

Maximum Open Motor Frame Size

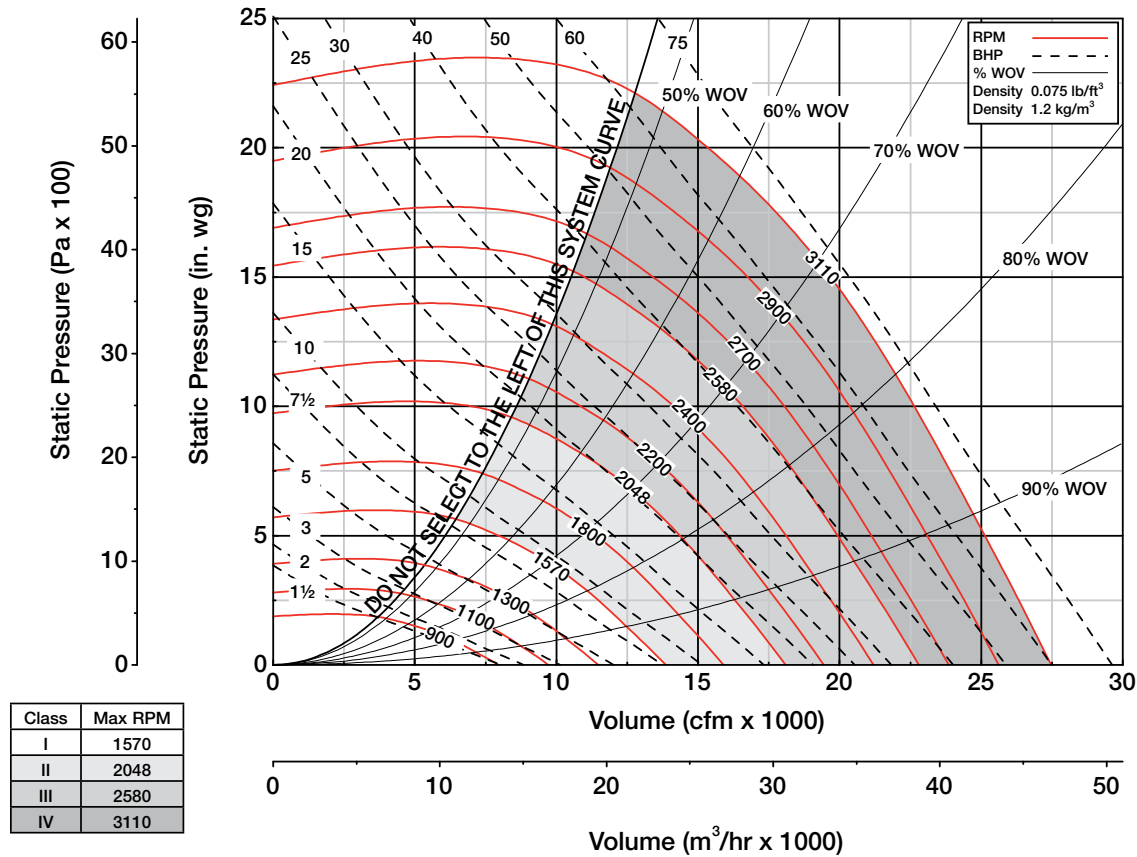
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 284T | 284T | 286T | NA |
| Arr. 10 | 215T | 284T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2800 | 811 | 513 | 0.31 | 665 | 0.62 | | | | | | | | | | | | | | | | |
| 3230 | 936 | 541 | 0.37 | 686 | 0.71 | | | | | | | | | | | | | | | | |
| 3660 | 1060 | 574 | 0.45 | 707 | 0.81 | 826 | 1.20 | | | | | | | | | | | | | | |
| 4090 | 1185 | 608 | 0.53 | 734 | 0.92 | 846 | 1.35 | 947 | 1.80 | | | | | | | | | | | | |
| 4520 | 1310 | 646 | 0.63 | 762 | 1.04 | 868 | 1.50 | 967 | 1.98 | 1056 | 2.48 | | | | | | | | | | |
| 4950 | 1434 | 685 | 0.75 | 794 | 1.18 | 895 | 1.66 | 988 | 2.18 | 1076 | 2.71 | 1157 | 3.27 | | | | | | | | |
| 5380 | 1559 | 726 | 0.89 | 828 | 1.34 | 923 | 1.85 | 1012 | 2.38 | 1097 | 2.95 | 1177 | 3.54 | 1251 | 4.14 | | | | | | |
| 5810 | 1684 | 767 | 1.04 | 862 | 1.52 | 953 | 2.05 | 1040 | 2.61 | 1120 | 3.21 | 1198 | 3.83 | 1271 | 4.46 | 1340 | 5.11 | 1405 | 5.77 | | |
| 6240 | 1808 | 810 | 1.21 | 900 | 1.72 | 986 | 2.27 | 1068 | 2.86 | 1146 | 3.47 | 1220 | 4.12 | 1292 | 4.79 | 1361 | 5.47 | 1425 | 6.17 | 1487 | 6.87 |
| 6670 | 1933 | 853 | 1.40 | 939 | 1.94 | 1020 | 2.51 | 1097 | 3.13 | 1174 | 3.77 | 1244 | 4.44 | 1314 | 5.14 | 1381 | 5.86 | 1446 | 6.58 | 1507 | 7.32 |
| 7100 | 2057 | 896 | 1.61 | 978 | 2.18 | 1055 | 2.78 | 1130 | 3.42 | 1202 | 4.09 | 1272 | 4.78 | 1338 | 5.50 | 1403 | 6.25 | 1466 | 7.01 | 1527 | 7.78 |
| 7530 | 2182 | 940 | 1.84 | 1019 | 2.45 | 1093 | 3.07 | 1164 | 3.73 | 1232 | 4.43 | 1301 | 5.15 | 1365 | 5.89 | 1427 | 6.66 | 1488 | 7.46 | 1548 | 8.27 |
| 7960 | 2307 | 985 | 2.10 | 1060 | 2.75 | 1131 | 3.40 | 1198 | 4.07 | 1266 | 4.80 | 1329 | 5.54 | 1393 | 6.31 | 1453 | 7.10 | 1512 | 7.92 | 1570 | 8.76 |
| 8390 | 2431 | 1030 | 2.38 | 1102 | 3.07 | 1169 | 3.75 | 1235 | 4.45 | 1299 | 5.19 | 1361 | 5.96 | 1422 | 6.76 | 1482 | 7.58 | 1538 | 8.41 | 1594 | 9.28 |
| 8820 | 2556 | 1075 | 2.69 | 1145 | 3.41 | 1210 | 4.13 | 1273 | 4.85 | 1333 | 5.61 | 1394 | 6.41 | 1451 | 7.23 | 1510 | 8.08 | 1566 | 8.94 | 1620 | 9.82 |
| 9250 | 2681 | 1120 | 3.02 | 1188 | 3.78 | 1250 | 4.54 | 1311 | 5.29 | 1369 | 6.07 | 1428 | 6.89 | 1484 | 7.74 | 1539 | 8.61 | 1595 | 9.50 | 1648 | 10.4 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6200 | 1797 | 1485 | 6.83 | | | | | | | | | | | | | | | | | | |
| 6690 | 1939 | 1508 | 7.34 | 1566 | 8.09 | 1622 | 8.86 | | | | | | | | | | | | | | |
| 7180 | 2081 | 1531 | 7.87 | 1589 | 8.66 | 1645 | 9.46 | 1698 | 10.3 | | | | | | | | | | | | |
| 7670 | 2223 | 1554 | 8.43 | 1612 | 9.25 | 1668 | 10.1 | 1721 | 10.9 | 1772 | 11.8 | 1822 | 12.7 | | | | | | | | |
| 8160 | 2365 | 1581 | 9.0 | 1636 | 9.87 | 1691 | 10.7 | 1744 | 11.6 | 1795 | 12.5 | 1845 | 13.4 | 1893 | 14.4 | 1940 | 15.3 | 1985 | 16.2 | | |
| 8650 | 2507 | 1610 | 9.6 | 1664 | 10.5 | 1716 | 11.4 | 1768 | 12.4 | 1819 | 13.3 | 1868 | 14.2 | 1916 | 15.2 | 1962 | 16.1 | 2008 | 17.1 | 2087 | 19.0 |
| 9140 | 2649 | 1641 | 10.3 | 1692 | 11.2 | 1744 | 12.1 | 1794 | 13.1 | 1842 | 14.1 | 1891 | 15.0 | 1939 | 16.0 | 1985 | 17.0 | 2031 | 18.0 | 2109 | 20.0 |
| 9630 | 2791 | 1673 | 10.9 | 1724 | 11.9 | 1772 | 12.9 | 1821 | 13.9 | 1870 | 14.9 | 1916 | 15.9 | 1963 | 16.9 | 2009 | 18.0 | 2054 | 19.0 | 2132 | 21.0 |
| 10120 | 2933 | 1706 | 11.7 | 1756 | 12.7 | 1804 | 13.7 | 1851 | 14.7 | 1897 | 15.7 | 1944 | 16.8 | 1989 | 17.8 | 2033 | 18.9 | 2077 | 20.0 | 2155 | 22.0 |
| 10610 | 3075 | 1740 | 12.5 | 1789 | 13.5 | 1837 | 14.5 | 1883 | 15.5 | 1928 | 16.6 | 1973 | 17.7 | 2017 | 18.8 | 2060 | 19.9 | 2103 | 21.0 | 2178 | 23.1 |
| 11100 | 3217 | 1778 | 13.3 | 1823 | 14.3 | 1870 | 15.4 | 1916 | 16.5 | 1960 | 17.5 | 2003 | 18.6 | 2046 | 19.7 | 2088 | 20.9 | 2130 | 22.1 | 2203 | 24.3 |
| 11590 | 3359 | 1816 | 14.2 | 1860 | 15.2 | 1903 | 16.3 | 1948 | 17.4 | 1993 | 18.5 | 2036 | 19.7 | 2077 | 20.8 | 2118 | 22.0 | 2159 | 23.1 | 2230 | 25.4 |
| 12080 | 3501 | 1854 | 15.1 | 1898 | 16.2 | 1941 | 17.3 | 1982 | 18.4 | 2025 | 19.6 | 2068 | 20.8 | 2110 | 21.9 | 2150 | 23.1 | 2189 | 24.3 | 2257 | 26.6 |
| 12570 | 3643 | 1893 | 16.1 | 1937 | 17.2 | 1979 | 18.4 | 2020 | 19.5 | 2060 | 20.7 | 2101 | 21.9 | 2142 | 23.1 | 2182 | 24.3 | 2221 | 25.5 | 2286 | 27.8 |
| 13060 | 3785 | 1935 | 17.1 | 1976 | 18.3 | 2018 | 19.4 | 2058 | 20.6 | 2098 | 21.8 | 2136 | 23.1 | 2175 | 24.3 | 2215 | 25.6 | 2254 | 26.8 | 2318 | 29.1 |
| 13550 | 3927 | 1977 | 18.2 | 2016 | 19.4 | 2057 | 20.6 | 2097 | 21.8 | 2136 | 23.1 | 2174 | 24.3 | 2211 | 25.6 | 2248 | 26.8 | 2287 | 28.1 | 2350 | 30.5 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 11000 | 3188 | 2197 | 24.0 | 2277 | 26.4 | 2354 | 28.7 | 2428 | 31.1 | 2500 | 33.5 | 2568 | 36.0 | 2635 | 38.4 | | | | | | |
| 11530 | 3342 | 2227 | 25.3 | 2303 | 27.7 | 2379 | 30.1 | 2453 | 32.6 | 2524 | 35.1 | 2593 | 37.6 | 2659 | 40.1 | 2724 | 42.7 | 2786 | 45.3 | | |
| 12060 | 3495 | 2256 | 26.5 | 2332 | 29.0 | 2405 | 31.6 | 2478 | 34.1 | 2549 | 36.7 | 2617 | 39.3 | 2684 | 41.9 | 2748 | 44.5 | 2810 | 47.2 | | |
| 12590 | 3649 | 2287 | 27.9 | 2362 | 30.4 | 2434 | 33.0 | 2504 | 35.7 | 2574 | 38.3 | 2642 | 41.0 | 2708 | 43.7 | 2772 | 46.4 | 2834 | 49.1 | 2954 | 54.7 |
| 13120 | 3802 | 2322 | 29.3 | 2392 | 31.9 | 2464 | 34.5 | 2533 | 37.3 | 2600 | 40.0 | 2667 | 42.8 | 2733 | 45.5 | 2797 | 48.3 | 2859 | 51.1 | 2978 | 56.8 |
| 13650 | 3956 | 2357 | 30.8 | 2427 | 33.5 | 2493 | 36.1 | 2563 | 38.9 | 2629 | 41.7 | 2694 | 44.6 | 2756 | 47.4 | 2821 | 50.3 | 2883 | 53.2 | 3002 | 59.0 |
| 14180 | 4110 | 2392 | 32.4 | 2462 | 35.1 | 2529 | 37.8 | 2593 | 40.6 | 2659 | 43.5 | 2723 | 46.4 | 2785 | 49.3 | 2846 | 52.3 | 2908 | 55.3 | 3027 | 61.3 |
| 14710 | 4263 | 2427 | 34.0 | 2496 | 36.8 | 2563 | 39.6 | 2627 | 42.4 | 2689 | 45.3 | 2753 | 48.3 | 2815 | 51.3 | 2875 | 54.4 | 2933 | 57.4 | 3051 | 63.6 |
| 15240 | 4417 | 2466 | 35.7 | 2532 | 38.6 | 2598 | 41.4 | 2662 | 44.4 | 2722 | 47.3 | 2782 | 50.3 | 2844 | 53.4 | 2904 | 56.5 | 2962 | 59.6 | 3074 | 66.0 |
| 15770 | 4571 | 2506 | 37.5 | 2568 | 40.4 | 2633 | 43.4 | 2696 | 46.3 | 2757 | 49.3 | 2816 | 52.4 | 2873 | 55.4 | 2933 | 58.6 | 2992 | 61.9 | | |
| 16300 | 4724 | 2547 | 39.4 | 2608 | 42.3 | 2668 | 45.3 | 2731 | 48.4 | 2792 | 51.5 | 2851 | 54.6 | 2907 | 57.7 | 2963 | 60.9 | 3021 | 64.2 | | |
| 16830 | 4878 | 2588 | 41.3 | 2649 | 44.4 | 2708 | 47.4 | 2766 | 50.5 | 2827 | 53.7 | 2886 | 56.8 | 2942 | 60.0 | 2997 | 63.3 | 3051 | 66.5 | | |
| 17360 | 5031 | 2630 | 43.4 | 2690 | 46.5 | 2748 | 49.6 | 2805 | 52.7 | 2862 | 55.9 | 2920 | 59.2 | 2977 | 62.4 | 3032 | 65.7 | | | | |
| 17890 | 5185 | 2671 | 45.5 | 2731 | 48.6 | 2789 | 51.8 | 2845 | 55.0 | 2899 | 58.3 | 2955 | 61.6 | 3012 | 64.9 | 3067 | 68.3 | | | | |
| 18420 | 5339 | 2715 | 47.7 | 2773 | 50.9 | 2830 | 54.1 | 2886 | 57.4 | 2939 | 60.8 | 2992 | 64.1 | 3047 | 67.5 | | | | | | |
| 18950 | 5492 | 2761 | 50.1 | 2814 | 53.2 | 2872 | 56.6 | 2927 | 59.9 | 2980 | 63.3 | 3032 | 66.7 | 3082 | 70.2 | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 8.84)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 450 | 100 | 81 | 76 | 71 | 64 | 58 | 51 | 44 | 38 | 67 |
| | 80 | 74 | 68 | 64 | 57 | 51 | 45 | 38 | 32 | 60 |
| | 60 | 73 | 65 | 60 | 54 | 51 | 44 | 36 | 31 | 57 |
| | 50 | 71 | 64 | 59 | 54 | 53 | 45 | 38 | 32 | 58 |
| | 40 | 71 | 63 | 58 | 54 | 53 | 45 | 38 | 32 | 57 |
| 900 | 100 | 88 | 89 | 86 | 81 | 78 | 74 | 64 | 58 | 84 |
| | 80 | 84 | 86 | 83 | 78 | 74 | 69 | 62 | 57 | 80 |
| | 60 | 83 | 87 | 82 | 76 | 74 | 68 | 64 | 60 | 80 |
| | 50 | 84 | 84 | 80 | 75 | 73 | 68 | 65 | 61 | 78 |
| | 40 | 85 | 83 | 79 | 75 | 73 | 68 | 66 | 62 | 78 |
| 1300 | 100 | 91 | 91 | 98 | 90 | 85 | 86 | 77 | 70 | 94 |
| | 80 | 88 | 88 | 96 | 87 | 81 | 80 | 74 | 68 | 91 |
| | 60 | 88 | 86 | 93 | 84 | 80 | 78 | 74 | 71 | 88 |
| | 50 | 88 | 85 | 91 | 82 | 79 | 76 | 75 | 72 | 87 |
| | 40 | 88 | 85 | 93 | 82 | 80 | 77 | 75 | 72 | 88 |
| 1800 | 100 | 98 | 95 | 104 | 97 | 94 | 96 | 92 | 82 | 102 |
| | 80 | 94 | 91 | 102 | 93 | 89 | 89 | 85 | 78 | 97 |
| | 60 | 94 | 87 | 97 | 89 | 87 | 86 | 84 | 80 | 94 |
| | 50 | 95 | 88 | 98 | 87 | 86 | 85 | 84 | 82 | 94 |
| | 40 | 98 | 93 | 100 | 89 | 86 | 86 | 85 | 82 | 95 |
| 2580 | 100 | 105 | 106 | 109 | 110 | 103 | 103 | 102 | 95 | 111 |
| | 80 | 101 | 102 | 106 | 106 | 99 | 97 | 95 | 90 | 107 |
| | 60 | 101 | 100 | 101 | 102 | 96 | 94 | 93 | 90 | 103 |
| | 50 | 102 | 101 | 102 | 102 | 94 | 93 | 93 | 91 | 103 |
| | 40 | 105 | 105 | 106 | 104 | 96 | 94 | 93 | 91 | 104 |
| 3110 | 100 | 108 | 111 | 113 | 113 | 109 | 107 | 106 | 101 | 115 |
| | 80 | 104 | 107 | 109 | 110 | 105 | 102 | 99 | 95 | 111 |
| | 60 | 104 | 105 | 105 | 105 | 101 | 99 | 97 | 95 | 107 |
| | 50 | 105 | 106 | 107 | 105 | 100 | 98 | 97 | 95 | 107 |
| | 40 | 108 | 110 | 110 | 107 | 102 | 98 | 97 | 96 | 109 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 450 | 100 | 84 | 78 | 71 | 67 | 62 | 54 | 47 | 40 | 69 |
| | 80 | 84 | 77 | 69 | 62 | 58 | 50 | 43 | 37 | 67 |
| | 60 | 83 | 74 | 66 | 59 | 57 | 49 | 44 | 38 | 64 |
| | 50 | 81 | 73 | 64 | 58 | 56 | 48 | 45 | 39 | 63 |
| | 40 | 80 | 72 | 64 | 58 | 56 | 48 | 45 | 39 | 63 |
| 900 | 100 | 95 | 94 | 86 | 82 | 82 | 77 | 68 | 61 | 86 |
| | 80 | 94 | 91 | 82 | 78 | 77 | 71 | 64 | 59 | 82 |
| | 60 | 90 | 89 | 80 | 75 | 74 | 67 | 63 | 60 | 79 |
| | 50 | 91 | 88 | 79 | 74 | 73 | 67 | 64 | 64 | 79 |
| | 40 | 91 | 88 | 78 | 74 | 72 | 67 | 64 | 64 | 78 |
| 1300 | 100 | 102 | 99 | 98 | 92 | 90 | 89 | 82 | 73 | 96 |
| | 80 | 99 | 97 | 98 | 89 | 87 | 84 | 77 | 71 | 94 |
| | 60 | 96 | 94 | 97 | 86 | 84 | 79 | 74 | 71 | 91 |
| | 50 | 95 | 94 | 96 | 85 | 82 | 77 | 73 | 72 | 90 |
| | 40 | 95 | 94 | 95 | 84 | 81 | 77 | 74 | 72 | 89 |
| 1800 | 100 | 108 | 105 | 107 | 100 | 99 | 99 | 95 | 86 | 105 |
| | 80 | 103 | 102 | 104 | 97 | 96 | 94 | 90 | 82 | 101 |
| | 60 | 101 | 99 | 101 | 94 | 93 | 89 | 85 | 81 | 99 |
| | 50 | 101 | 99 | 99 | 93 | 91 | 87 | 84 | 81 | 97 |
| | 40 | 101 | 99 | 98 | 92 | 90 | 86 | 84 | 82 | 96 |
| 2580 | 100 | 114 | 114 | 114 | 112 | 107 | 107 | 105 | 99 | 114 |
| | 80 | 109 | 110 | 110 | 109 | 104 | 103 | 100 | 94 | 111 |
| | 60 | 107 | 108 | 108 | 106 | 102 | 99 | 95 | 91 | 108 |
| | 50 | 108 | 108 | 106 | 104 | 100 | 97 | 94 | 91 | 106 |
| | 40 | 108 | 108 | 106 | 103 | 99 | 96 | 93 | 91 | 105 |
| 3110 | 100 | 118 | 118 | 118 | 115 | 112 | 111 | 109 | 104 | 118 |
| | 80 | 113 | 114 | 114 | 112 | 109 | 107 | 105 | 100 | 115 |
| | 60 | 111 | 112 | 112 | 109 | 107 | 104 | 100 | 96 | 112 |
| | 50 | 111 | 112 | 111 | 107 | 105 | 102 | 99 | 96 | 110 |
| | 40 | 111 | 112 | 111 | 107 | 104 | 101 | 98 | 95 | 110 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

27 BISW

Wheel Diameter = 27 in.

Outlet Area = 4.19 ft.²

Tip Speed = 7.09 x RPM

Maximum BHP = (RPM/638)³

Minimum Starting HP = $\frac{3}{4}$

Maximum RPM Class I = 1425

Maximum RPM Class II = 1859

Maximum RPM Class III = 2342

Maximum RPM Class IV = 2823

Maximum Open Motor Frame Size

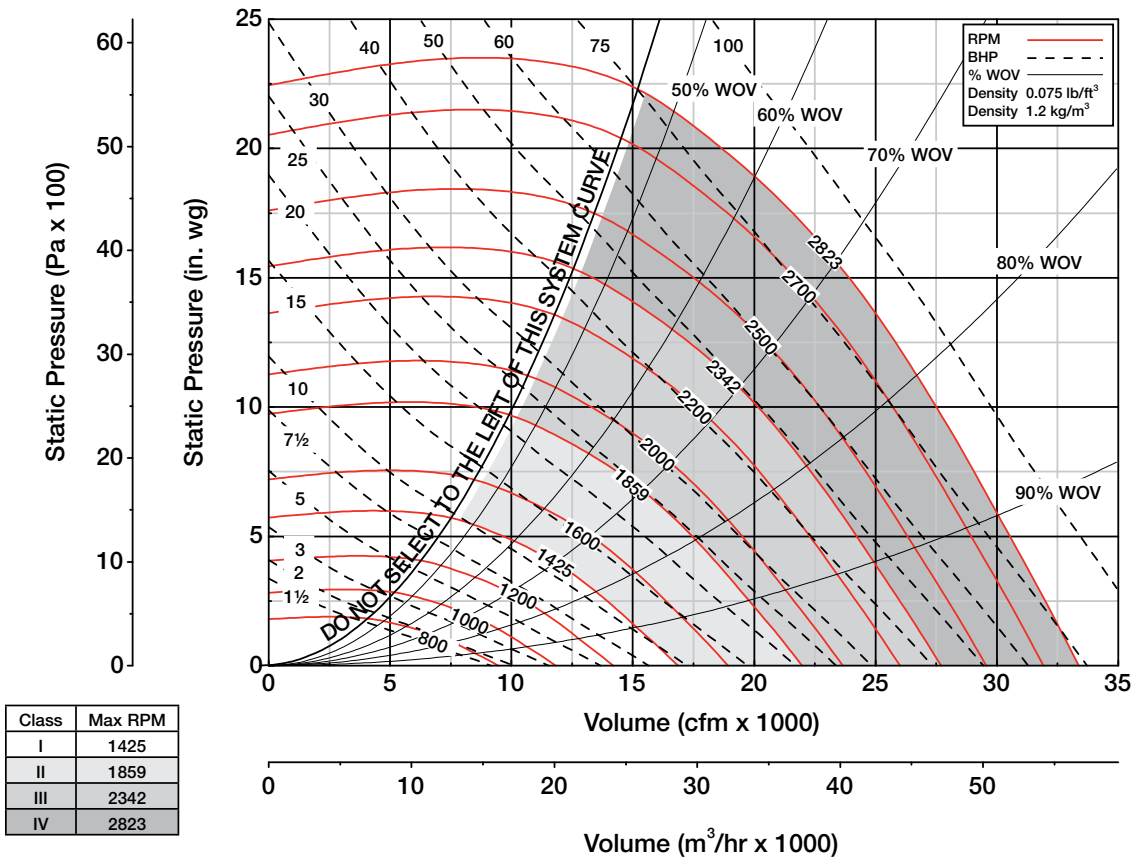
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 284T | 284T | 286T | NA |
| Arr. 10 | 254T | 284T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3400 | 811 | 465 | 0.38 | 604 | 0.75 | | | | | | | | | | | | | | | | |
| 3930 | 937 | 492 | 0.46 | 622 | 0.86 | | | | | | | | | | | | | | | | |
| 4460 | 1064 | 522 | 0.55 | 642 | 0.98 | 750 | 1.47 | | | | | | | | | | | | | | |
| 4990 | 1190 | 553 | 0.65 | 667 | 1.12 | 769 | 1.64 | 860 | 2.19 | | | | | | | | | | | | |
| 5520 | 1317 | 588 | 0.78 | 693 | 1.28 | 789 | 1.83 | 879 | 2.42 | 960 | 3.03 | | | | | | | | | | |
| 6050 | 1443 | 624 | 0.92 | 723 | 1.45 | 814 | 2.03 | 898 | 2.66 | 978 | 3.32 | 1051 | 3.99 | | | | | | | | |
| 6580 | 1570 | 662 | 1.09 | 754 | 1.65 | 840 | 2.26 | 920 | 2.92 | 996 | 3.62 | 1070 | 4.33 | 1137 | 5.06 | | | | | | |
| 7110 | 1696 | 700 | 1.28 | 786 | 1.87 | 868 | 2.51 | 946 | 3.20 | 1019 | 3.93 | 1089 | 4.68 | 1156 | 5.46 | 1218 | 6.25 | 1277 | 7.05 | | |
| 7640 | 1823 | 739 | 1.49 | 821 | 2.12 | 898 | 2.79 | 972 | 3.51 | 1043 | 4.26 | 1110 | 5.05 | 1175 | 5.87 | 1237 | 6.70 | 1296 | 7.55 | 1351 | 8.41 |
| 8170 | 1949 | 779 | 1.73 | 856 | 2.39 | 930 | 3.09 | 1000 | 3.84 | 1069 | 4.63 | 1133 | 5.44 | 1195 | 6.30 | 1256 | 7.18 | 1314 | 8.06 | 1370 | 8.96 |
| 8700 | 2076 | 819 | 1.99 | 893 | 2.70 | 962 | 3.42 | 1030 | 4.21 | 1095 | 5.03 | 1158 | 5.87 | 1218 | 6.75 | 1276 | 7.67 | 1333 | 8.60 | 1388 | 9.54 |
| 9230 | 2202 | 860 | 2.28 | 931 | 3.04 | 997 | 3.79 | 1061 | 4.60 | 1123 | 5.45 | 1185 | 6.33 | 1243 | 7.24 | 1299 | 8.18 | 1354 | 9.15 | 1407 | 10.1 |
| 9760 | 2329 | 901 | 2.61 | 968 | 3.41 | 1032 | 4.20 | 1093 | 5.02 | 1154 | 5.91 | 1211 | 6.82 | 1269 | 7.76 | 1323 | 8.72 | 1376 | 9.72 | 1428 | 10.8 |
| 10290 | 2455 | 942 | 2.96 | 1007 | 3.80 | 1068 | 4.64 | 1127 | 5.49 | 1185 | 6.40 | 1241 | 7.35 | 1295 | 8.32 | 1350 | 9.32 | 1401 | 10.3 | 1451 | 11.4 |
| 10820 | 2582 | 984 | 3.34 | 1047 | 4.23 | 1105 | 5.11 | 1162 | 6.00 | 1216 | 6.92 | 1271 | 7.91 | 1323 | 8.91 | 1376 | 9.95 | 1427 | 11.0 | 1475 | 12.1 |
| 11350 | 2708 | 1026 | 3.77 | 1087 | 4.70 | 1143 | 5.63 | 1197 | 6.55 | 1250 | 7.50 | 1303 | 8.50 | 1354 | 9.54 | 1403 | 10.6 | 1453 | 11.7 | 1501 | 12.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 7500 | 1789 | 1346 | 8.27 | | | | | | | | | | | | | | | | | | |
| 8090 | 1930 | 1367 | 8.88 | 1420 | 9.79 | 1470 | 10.7 | | | | | | | | | | | | | | |
| 8680 | 2071 | 1388 | 9.52 | 1441 | 10.5 | 1491 | 11.4 | 1540 | 12.4 | | | | | | | | | | | | |
| 9270 | 2212 | 1408 | 10.2 | 1461 | 11.2 | 1512 | 12.2 | 1560 | 13.2 | 1607 | 14.3 | 1652 | 15.3 | | | | | | | | |
| 9860 | 2353 | 1433 | 10.9 | 1482 | 11.9 | 1533 | 13.0 | 1581 | 14.1 | 1628 | 15.1 | 1672 | 16.2 | 1716 | 17.3 | 1758 | 18.5 | | | | |
| 10450 | 2494 | 1458 | 11.6 | 1507 | 12.7 | 1555 | 13.8 | 1602 | 14.9 | 1648 | 16.0 | 1693 | 17.2 | 1737 | 18.3 | 1779 | 19.5 | 1820 | 20.7 | 1892 | 22.9 |
| 11040 | 2634 | 1486 | 12.4 | 1533 | 13.5 | 1580 | 14.6 | 1625 | 15.8 | 1669 | 17.0 | 1714 | 18.2 | 1758 | 19.4 | 1800 | 20.6 | 1840 | 21.8 | 1913 | 24.1 |
| 11630 | 2775 | 1515 | 13.2 | 1561 | 14.3 | 1606 | 15.5 | 1650 | 16.7 | 1694 | 17.9 | 1736 | 19.2 | 1779 | 20.4 | 1821 | 21.7 | 1861 | 22.9 | 1933 | 25.4 |
| 12220 | 2916 | 1544 | 14.1 | 1590 | 15.3 | 1634 | 16.5 | 1676 | 17.7 | 1719 | 18.9 | 1761 | 20.2 | 1802 | 21.5 | 1842 | 22.8 | 1882 | 24.1 | 1954 | 26.6 |
| 12810 | 3057 | 1574 | 15.0 | 1620 | 16.2 | 1663 | 17.5 | 1705 | 18.7 | 1746 | 20.0 | 1786 | 21.3 | 1827 | 22.7 | 1866 | 24.0 | 1905 | 25.4 | 1974 | 27.9 |
| 13400 | 3198 | 1608 | 16.0 | 1649 | 17.3 | 1693 | 18.5 | 1734 | 19.8 | 1775 | 21.1 | 1814 | 22.5 | 1853 | 23.8 | 1891 | 25.2 | 1930 | 26.6 | 1996 | 29.3 |
| 13990 | 3338 | 1643 | 17.1 | 1683 | 18.3 | 1722 | 19.7 | 1764 | 21.0 | 1804 | 22.3 | 1843 | 23.7 | 1881 | 25.1 | 1918 | 26.5 | 1955 | 27.9 | 2020 | 30.7 |
| 14580 | 3479 | 1677 | 18.2 | 1717 | 19.5 | 1756 | 20.8 | 1794 | 22.2 | 1833 | 23.6 | 1872 | 25.0 | 1910 | 26.4 | 1947 | 27.9 | 1982 | 29.3 | 2045 | 32.1 |
| 15170 | 3620 | 1712 | 19.3 | 1752 | 20.7 | 1790 | 22.1 | 1828 | 23.5 | 1864 | 24.9 | 1902 | 26.3 | 1939 | 27.8 | 1976 | 29.3 | 2011 | 30.8 | 2070 | 33.5 |
| 15760 | 3761 | 1749 | 20.6 | 1787 | 22.0 | 1825 | 23.4 | 1862 | 24.8 | 1898 | 26.3 | 1932 | 27.8 | 1969 | 29.3 | 2005 | 30.8 | 2040 | 32.3 | 2099 | 35.1 |
| 16350 | 3902 | 1787 | 21.9 | 1823 | 23.3 | 1860 | 24.8 | 1896 | 26.2 | 1932 | 27.7 | 1966 | 29.2 | 2000 | 30.8 | 2035 | 32.3 | 2070 | 33.9 | 2128 | 36.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 13400 | 3198 | 1996 | 29.3 | 2068 | 32.1 | 2138 | 35.0 | 2206 | 37.9 | 2270 | 40.8 | 2333 | 43.8 | 2393 | 46.8 | | | | | | |
| 14040 | 3350 | 2022 | 30.8 | 2092 | 33.7 | 2161 | 36.7 | 2228 | 39.7 | 2292 | 42.7 | 2355 | 45.8 | 2415 | 48.9 | 2473 | 52.0 | 2530 | 55.2 | | |
| 14680 | 3503 | 2049 | 32.3 | 2118 | 35.4 | 2184 | 38.4 | 2250 | 41.5 | 2315 | 44.7 | 2377 | 47.8 | 2437 | 51.0 | 2495 | 54.2 | 2552 | 57.5 | | |
| 15320 | 3656 | 2077 | 33.9 | 2145 | 37.0 | 2211 | 40.2 | 2274 | 43.4 | 2337 | 46.7 | 2399 | 49.9 | 2459 | 53.2 | 2517 | 56.5 | 2574 | 59.8 | 2682 | 66.6 |
| 15960 | 3809 | 2109 | 35.7 | 2172 | 38.8 | 2237 | 42.1 | 2300 | 45.4 | 2361 | 48.7 | 2422 | 52.0 | 2481 | 55.4 | 2539 | 58.8 | 2596 | 62.2 | 2704 | 69.2 |
| 16600 | 3961 | 2140 | 37.5 | 2204 | 40.7 | 2264 | 44.0 | 2327 | 47.3 | 2388 | 50.8 | 2446 | 54.2 | 2503 | 57.7 | 2562 | 61.2 | 2618 | 64.7 | 2726 | 71.8 |
| 17240 | 4114 | 2172 | 39.4 | 2235 | 42.7 | 2296 | 46.0 | 2354 | 49.4 | 2414 | 52.9 | 2472 | 56.5 | 2529 | 60.0 | 2584 | 63.7 | 2640 | 67.3 | 2748 | 74.5 |
| 17880 | 4267 | 2204 | 41.4 | 2267 | 44.8 | 2327 | 48.2 | 2385 | 51.6 | 2441 | 55.1 | 2499 | 58.8 | 2555 | 62.4 | 2610 | 66.1 | 2663 | 69.9 | 2770 | 77.3 |
| 18520 | 4420 | 2239 | 43.4 | 2298 | 46.9 | 2358 | 50.4 | 2416 | 53.9 | 2471 | 57.5 | 2526 | 61.1 | 2582 | 64.9 | 2636 | 68.7 | 2689 | 72.5 | 2791 | 80.2 |
| 19160 | 4572 | 2275 | 45.6 | 2331 | 49.1 | 2390 | 52.7 | 2448 | 56.3 | 2503 | 60.0 | 2556 | 63.7 | 2608 | 67.4 | 2663 | 71.3 | 2716 | 75.2 | | |
| 19800 | 4725 | 2312 | 47.9 | 2368 | 51.5 | 2422 | 55.1 | 2479 | 58.8 | 2534 | 62.5 | 2588 | 66.3 | 2639 | 70.1 | 2689 | 74.0 | 2742 | 78.0 | | |
| 20440 | 4878 | 2349 | 50.2 | 2405 | 53.9 | 2458 | 57.6 | 2511 | 61.4 | 2566 | 65.2 | 2619 | 69.1 | 2671 | 73.0 | 2720 | 76.9 | 2769 | 80.8 | | |
| 21080 | 5031 | 2387 | 52.7 | 2441 | 56.4 | 2494 | 60.2 | 2545 | 64.0 | 2598 | 67.9 | 2651 | 71.9 | 2702 | 75.9 | 2752 | 79.9 | | | | |
| 21720 | 5183 | 2424 | 55.2 | 2479 | 59.0 | 2531 | 62.9 | 2582 | 66.8 | 2631 | 70.8 | 2682 | 74.8 | 2733 | 78.9 | 2783 | 83.0 | | | | |
| 22360 | 5336 | 2464 | 57.9 | 2516 | 61.8 | 2568 | 65.7 | 2619 | 69.7 | 2667 | 73.8 | 2715 | 77.8 | 2765 | 82.0 | | | | | | |
| 23000 | 5489 | 2505 | 60.8 | 2554 | 64.6 | 2606 | 68.7 | 2656 | 72.7 | 2704 | 76.8 | 2751 | 81.0 | 2797 | 85.2 | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 11.8)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 400 | 100 | 83 | 75 | 71 | 63 | 58 | 51 | 43 | 37 | 67 |
| | 80 | 76 | 67 | 63 | 56 | 51 | 44 | 37 | 32 | 60 |
| | 60 | 75 | 63 | 59 | 53 | 51 | 43 | 36 | 30 | 57 |
| | 50 | 73 | 63 | 58 | 54 | 53 | 44 | 37 | 32 | 57 |
| | 40 | 72 | 61 | 58 | 54 | 53 | 44 | 38 | 31 | 57 |
| 800 | 100 | 89 | 89 | 86 | 81 | 78 | 73 | 63 | 58 | 83 |
| | 80 | 86 | 87 | 82 | 78 | 74 | 68 | 61 | 56 | 80 |
| | 60 | 85 | 88 | 81 | 76 | 73 | 68 | 64 | 60 | 80 |
| | 50 | 84 | 84 | 79 | 75 | 73 | 68 | 65 | 61 | 78 |
| | 40 | 86 | 84 | 78 | 75 | 73 | 68 | 66 | 62 | 78 |
| 1200 | 100 | 93 | 94 | 99 | 91 | 86 | 86 | 78 | 71 | 94 |
| | 80 | 90 | 90 | 97 | 87 | 82 | 81 | 74 | 69 | 91 |
| | 60 | 89 | 88 | 93 | 84 | 80 | 78 | 75 | 71 | 88 |
| | 50 | 90 | 87 | 92 | 83 | 80 | 77 | 76 | 73 | 87 |
| | 40 | 89 | 88 | 93 | 83 | 81 | 78 | 76 | 73 | 88 |
| 1700 | 100 | 100 | 98 | 106 | 99 | 96 | 97 | 92 | 83 | 103 |
| | 80 | 96 | 94 | 104 | 94 | 91 | 90 | 86 | 79 | 99 |
| | 60 | 95 | 90 | 99 | 90 | 88 | 87 | 85 | 82 | 96 |
| | 50 | 96 | 91 | 100 | 89 | 87 | 87 | 86 | 83 | 96 |
| | 40 | 99 | 96 | 102 | 91 | 88 | 87 | 86 | 84 | 97 |
| 2342 | 100 | 107 | 106 | 111 | 109 | 104 | 104 | 102 | 94 | 111 |
| | 80 | 103 | 102 | 108 | 106 | 99 | 98 | 95 | 89 | 107 |
| | 60 | 103 | 100 | 103 | 101 | 96 | 95 | 93 | 90 | 103 |
| | 50 | 104 | 101 | 104 | 101 | 95 | 94 | 93 | 91 | 103 |
| | 40 | 107 | 105 | 107 | 103 | 96 | 95 | 94 | 92 | 105 |
| 2823 | 100 | 110 | 112 | 114 | 115 | 109 | 108 | 107 | 100 | 116 |
| | 80 | 106 | 108 | 111 | 112 | 105 | 102 | 100 | 95 | 112 |
| | 60 | 107 | 106 | 107 | 108 | 101 | 99 | 98 | 95 | 109 |
| | 50 | 107 | 107 | 108 | 108 | 100 | 98 | 98 | 96 | 108 |
| | 40 | 110 | 111 | 111 | 110 | 102 | 99 | 98 | 96 | 111 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 400 | 100 | 85 | 77 | 70 | 66 | 62 | 53 | 46 | 40 | 69 |
| | 80 | 85 | 76 | 68 | 61 | 58 | 49 | 42 | 36 | 66 |
| | 60 | 84 | 73 | 65 | 58 | 57 | 47 | 44 | 38 | 64 |
| | 50 | 82 | 71 | 63 | 58 | 57 | 47 | 44 | 39 | 63 |
| | 40 | 81 | 71 | 63 | 58 | 57 | 47 | 45 | 39 | 63 |
| 800 | 100 | 95 | 94 | 85 | 82 | 81 | 76 | 67 | 60 | 86 |
| | 80 | 94 | 91 | 82 | 78 | 77 | 71 | 64 | 58 | 82 |
| | 60 | 91 | 89 | 79 | 75 | 73 | 67 | 63 | 60 | 79 |
| | 50 | 91 | 87 | 78 | 74 | 72 | 67 | 64 | 64 | 78 |
| | 40 | 91 | 88 | 77 | 74 | 72 | 67 | 64 | 64 | 78 |
| 1200 | 100 | 103 | 100 | 98 | 92 | 91 | 89 | 82 | 73 | 97 |
| | 80 | 100 | 98 | 98 | 90 | 88 | 84 | 77 | 71 | 94 |
| | 60 | 97 | 96 | 97 | 87 | 84 | 79 | 75 | 72 | 92 |
| | 50 | 96 | 95 | 96 | 85 | 82 | 78 | 74 | 73 | 90 |
| | 40 | 97 | 95 | 95 | 84 | 82 | 78 | 75 | 73 | 90 |
| 1700 | 100 | 109 | 107 | 109 | 101 | 100 | 100 | 96 | 87 | 107 |
| | 80 | 104 | 104 | 105 | 98 | 97 | 95 | 91 | 83 | 103 |
| | 60 | 102 | 101 | 103 | 96 | 95 | 91 | 86 | 83 | 100 |
| | 50 | 103 | 100 | 101 | 94 | 92 | 89 | 86 | 83 | 98 |
| | 40 | 103 | 100 | 100 | 93 | 91 | 88 | 86 | 83 | 97 |
| 2342 | 100 | 116 | 114 | 115 | 111 | 108 | 107 | 105 | 98 | 115 |
| | 80 | 111 | 111 | 111 | 108 | 105 | 103 | 100 | 94 | 111 |
| | 60 | 109 | 108 | 109 | 106 | 102 | 99 | 95 | 91 | 108 |
| | 50 | 109 | 108 | 107 | 104 | 100 | 97 | 94 | 91 | 106 |
| | 40 | 109 | 108 | 107 | 103 | 99 | 96 | 94 | 91 | 106 |
| 2823 | 100 | 119 | 119 | 119 | 118 | 113 | 112 | 110 | 104 | 120 |
| | 80 | 114 | 115 | 115 | 115 | 110 | 108 | 105 | 100 | 116 |
| | 60 | 112 | 112 | 113 | 112 | 107 | 104 | 100 | 96 | 114 |
| | 50 | 113 | 113 | 112 | 111 | 105 | 102 | 99 | 96 | 112 |
| | 40 | 112 | 113 | 111 | 110 | 104 | 101 | 98 | 96 | 111 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

| |
|--------------------------------------|
| 30 BISW |
| Wheel Diameter = 30 in. |
| Outlet Area = 5.17 ft. ² |
| Tip Speed = 7.85 x RPM |
| Maximum BHP = (RPM/528) ³ |

| |
|-------------------------------------|
| Minimum Starting HP = $\frac{3}{4}$ |
| Maximum RPM Class I = 1279 |
| Maximum RPM Class II = 1668 |
| Maximum RPM Class III = 2102 |
| Maximum RPM Class IV = 2532 |

Maximum Open Motor Frame Size

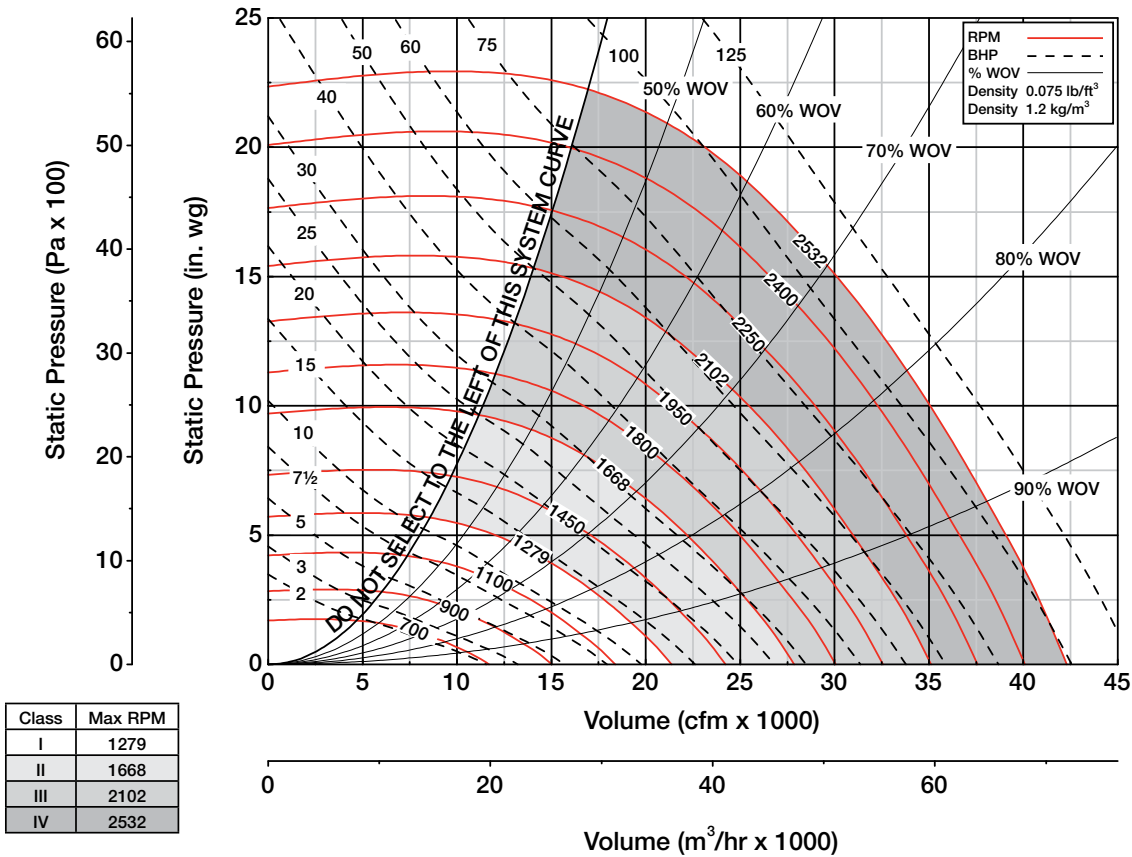
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 324T | 324T | 326T | NA |
| Arr. 10 | 254T | 324T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4100 | 793 | 412 | 0.45 | 545 | 0.91 | | | | | | | | | | | | | | | | |
| 4800 | 928 | 436 | 0.55 | 558 | 1.05 | 665 | 1.63 | | | | | | | | | | | | | | |
| 5500 | 1063 | 463 | 0.67 | 575 | 1.20 | 674 | 1.80 | 767 | 2.49 | | | | | | | | | | | | |
| 6200 | 1199 | 491 | 0.80 | 597 | 1.38 | 691 | 2.03 | 777 | 2.72 | 858 | 3.50 | | | | | | | | | | |
| 6900 | 1334 | 522 | 0.96 | 621 | 1.59 | 709 | 2.27 | 792 | 3.00 | 868 | 3.79 | 942 | 4.65 | 1010 | 5.56 | | | | | | |
| 7600 | 1470 | 555 | 1.15 | 648 | 1.83 | 731 | 2.54 | 809 | 3.32 | 882 | 4.14 | 952 | 5.00 | 1019 | 5.95 | 1082 | 6.93 | | | | |
| 8300 | 1605 | 589 | 1.36 | 675 | 2.09 | 755 | 2.85 | 828 | 3.66 | 900 | 4.52 | 966 | 5.42 | 1029 | 6.36 | 1092 | 7.38 | 1151 | 8.44 | 1208 | 9.53 |
| 9000 | 1740 | 624 | 1.60 | 705 | 2.37 | 781 | 3.19 | 852 | 4.05 | 918 | 4.94 | 984 | 5.88 | 1045 | 6.86 | 1101 | 7.86 | 1161 | 8.96 | 1217 | 10.09 |
| 9700 | 1876 | 660 | 1.88 | 736 | 2.69 | 809 | 3.57 | 876 | 4.47 | 941 | 5.40 | 1001 | 6.37 | 1062 | 7.40 | 1119 | 8.45 | 1172 | 9.52 | 1227 | 10.67 |
| 10400 | 2011 | 696 | 2.19 | 768 | 3.05 | 837 | 3.97 | 903 | 4.92 | 964 | 5.90 | 1023 | 6.91 | 1080 | 7.97 | 1136 | 9.07 | 1189 | 10.2 | 1240 | 11.33 |
| 11100 | 2147 | 733 | 2.54 | 802 | 3.44 | 867 | 4.41 | 930 | 5.42 | 989 | 6.44 | 1046 | 7.50 | 1100 | 8.58 | 1154 | 9.72 | 1207 | 10.9 | 1257 | 12.08 |
| 11800 | 2282 | 771 | 2.94 | 836 | 3.88 | 898 | 4.89 | 957 | 5.95 | 1016 | 7.03 | 1070 | 8.13 | 1124 | 9.26 | 1173 | 10.4 | 1225 | 11.6 | 1275 | 12.87 |
| 12500 | 2417 | 809 | 3.38 | 870 | 4.35 | 930 | 5.41 | 987 | 6.52 | 1043 | 7.65 | 1096 | 8.80 | 1148 | 9.98 | 1198 | 11.2 | 1244 | 12.4 | 1292 | 13.69 |
| 13200 | 2553 | 848 | 3.87 | 906 | 4.88 | 963 | 5.98 | 1018 | 7.13 | 1070 | 8.32 | 1123 | 9.52 | 1173 | 10.8 | 1221 | 12.0 | 1268 | 13.3 | 1313 | 14.56 |
| 13900 | 2688 | 886 | 4.40 | 943 | 5.46 | 997 | 6.60 | 1049 | 7.79 | 1100 | 9.03 | 1151 | 10.3 | 1199 | 11.6 | 1246 | 12.9 | 1292 | 14.2 | 1336 | 15.52 |
| 14600 | 2823 | 925 | 4.99 | 979 | 6.09 | 1031 | 7.27 | 1081 | 8.51 | 1131 | 9.79 | 1178 | 11.1 | 1227 | 12.4 | 1272 | 13.8 | 1316 | 15.1 | 1360 | 16.53 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9300 | 1798 | 1221 | 10.3 | 1275 | 11.5 | 1326 | 12.7 | 1375 | 14.0 | | | | | | | | | | | | |
| 10000 | 1934 | 1231 | 10.9 | 1284 | 12.1 | 1335 | 13.4 | 1384 | 14.7 | 1431 | 16.0 | 1477 | 17.3 | | | | | | | | |
| 10700 | 2069 | 1247 | 11.7 | 1295 | 12.8 | 1345 | 14.1 | 1394 | 15.4 | 1441 | 16.8 | 1486 | 18.1 | 1530 | 19.5 | 1573 | 21.0 | | | | |
| 11400 | 2205 | 1265 | 12.4 | 1313 | 13.7 | 1358 | 14.9 | 1404 | 16.2 | 1451 | 17.6 | 1496 | 19.0 | 1540 | 20.4 | 1582 | 21.9 | 1624 | 23.4 | 1697 | 26.3 |
| 12100 | 2340 | 1282 | 13.2 | 1330 | 14.5 | 1376 | 15.8 | 1420 | 17.1 | 1462 | 18.5 | 1506 | 19.9 | 1550 | 21.4 | 1592 | 22.9 | 1633 | 24.4 | 1706 | 27.4 |
| 12800 | 2475 | 1300 | 14.0 | 1348 | 15.4 | 1393 | 16.7 | 1437 | 18.1 | 1479 | 19.5 | 1520 | 20.9 | 1560 | 22.3 | 1602 | 23.9 | 1643 | 25.4 | 1716 | 28.5 |
| 13500 | 2611 | 1323 | 15.0 | 1366 | 16.3 | 1411 | 17.7 | 1455 | 19.1 | 1497 | 20.6 | 1538 | 22.0 | 1577 | 23.5 | 1615 | 25.0 | 1653 | 26.5 | 1726 | 29.6 |
| 14200 | 2746 | 1346 | 15.9 | 1389 | 17.3 | 1429 | 18.7 | 1472 | 20.2 | 1514 | 21.7 | 1555 | 23.2 | 1594 | 24.7 | 1633 | 26.3 | 1670 | 27.8 | 1734 | 30.8 |
| 14900 | 2882 | 1370 | 17.0 | 1412 | 18.4 | 1453 | 19.9 | 1491 | 21.3 | 1532 | 22.9 | 1573 | 24.4 | 1612 | 26.0 | 1650 | 27.6 | 1687 | 29.2 | 1751 | 32.2 |
| 15600 | 3017 | 1395 | 18.1 | 1436 | 19.5 | 1476 | 21.0 | 1515 | 22.6 | 1552 | 24.1 | 1591 | 25.7 | 1630 | 27.3 | 1668 | 28.9 | 1705 | 30.6 | 1768 | 33.7 |
| 16300 | 3152 | 1422 | 19.2 | 1461 | 20.7 | 1500 | 22.3 | 1539 | 23.8 | 1576 | 25.4 | 1612 | 27.0 | 1648 | 28.6 | 1686 | 30.3 | 1722 | 32.0 | 1785 | 35.3 |
| 17000 | 3288 | 1449 | 20.4 | 1487 | 22.0 | 1525 | 23.6 | 1563 | 25.2 | 1600 | 26.8 | 1636 | 28.5 | 1671 | 30.1 | 1704 | 31.8 | 1740 | 33.5 | 1803 | 36.8 |
| 17700 | 3423 | 1476 | 21.7 | 1514 | 23.3 | 1551 | 24.9 | 1587 | 26.6 | 1624 | 28.3 | 1660 | 30.0 | 1694 | 31.7 | 1728 | 33.4 | 1760 | 35.1 | 1820 | 38.5 |
| 18400 | 3558 | 1503 | 23.0 | 1541 | 24.7 | 1578 | 26.4 | 1614 | 28.1 | 1648 | 29.8 | 1683 | 31.5 | 1718 | 33.3 | 1752 | 35.1 | 1784 | 36.9 | 1838 | 40.1 |
| 19100 | 3694 | 1532 | 24.4 | 1569 | 26.1 | 1605 | 27.9 | 1641 | 29.6 | 1675 | 31.4 | 1708 | 33.2 | 1742 | 35.0 | 1775 | 36.8 | 1808 | 38.6 | 1861 | 42.0 |
| 19800 | 3829 | 1563 | 25.8 | 1597 | 27.6 | 1633 | 29.4 | 1668 | 31.2 | 1702 | 33.0 | 1735 | 34.9 | 1767 | 36.7 | 1799 | 38.6 | 1832 | 40.5 | 1885 | 43.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-------|-------|------|-------|------|-------|------|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 16500 | 3191 | 1790 | 35.7 | 1857 | 39.2 | 1921 | 42.8 | 1982 | 46.3 | 2045 | 50.2 | 2108 | 54.2 | 2169 | 58.2 | 2228 | 62.3 | 2285 | 66.5 | 2395 | 75.0 |
| 17300 | 3346 | 1810 | 37.5 | 1877 | 41.1 | 1940 | 44.8 | 2001 | 48.5 | 2060 | 52.3 | 2119 | 56.1 | 2180 | 60.3 | 2239 | 64.5 | 2296 | 68.8 | 2406 | 77.5 |
| 18100 | 3500 | 1830 | 39.4 | 1897 | 43.1 | 1960 | 46.9 | 2021 | 50.7 | 2079 | 54.6 | 2136 | 58.5 | 2191 | 62.5 | 2250 | 66.7 | 2307 | 71.1 | 2416 | 80.0 |
| 18900 | 3655 | 1854 | 41.5 | 1917 | 45.2 | 1980 | 49.1 | 2040 | 53.0 | 2099 | 57.0 | 2155 | 61.0 | 2210 | 65.1 | 2263 | 69.2 | 2318 | 73.5 | 2427 | 82.6 |
| 19700 | 3810 | 1882 | 43.6 | 1940 | 47.4 | 2000 | 51.4 | 2060 | 55.4 | 2119 | 59.5 | 2175 | 63.6 | 2229 | 67.8 | 2282 | 72.0 | 2333 | 76.3 | 2438 | 85.2 |
| 20500 | 3965 | 1908 | 45.9 | 1967 | 49.8 | 2022 | 53.7 | 2080 | 57.8 | 2139 | 62.0 | 2195 | 66.3 | 2249 | 70.6 | 2302 | 74.9 | 2353 | 79.3 | 2451 | 88.1 |
| 21300 | 4119 | 1935 | 48.3 | 1994 | 52.3 | 2049 | 56.3 | 2102 | 60.4 | 2159 | 64.7 | 2214 | 69.0 | 2269 | 73.4 | 2321 | 77.9 | 2372 | 82.3 | 2470 | 91.4 |
| 22100 | 4274 | 1963 | 50.8 | 2021 | 54.9 | 2076 | 59.0 | 2129 | 63.2 | 2180 | 67.4 | 2235 | 71.9 | 2288 | 76.4 | 2341 | 80.9 | 2392 | 85.5 | 2490 | 94.8 |
| 22900 | 4429 | 1993 | 53.3 | 2048 | 57.5 | 2103 | 61.8 | 2156 | 66.1 | 2207 | 70.4 | 2257 | 74.8 | 2309 | 79.4 | 2361 | 84.0 | 2411 | 88.7 | | |
| 23700 | 4584 | 2024 | 56.0 | 2077 | 60.3 | 2130 | 64.7 | 2183 | 69.1 | 2234 | 73.6 | 2283 | 78.0 | 2331 | 82.6 | 2381 | 87.2 | 2431 | 92.0 | | |
| 24500 | 4738 | 2054 | 58.8 | 2108 | 63.2 | 2159 | 67.7 | 2210 | 72.2 | 2261 | 76.8 | 2310 | 81.4 | 2357 | 86.0 | 2404 | 90.7 | 2451 | 95.5 | | |
| 25300 | 4893 | 2085 | 61.7 | 2138 | 66.2 | 2189 | 70.8 | 2238 | 75.4 | 2288 | 80.1 | 2337 | 84.8 | 2385 | 89.5 | 2430 | 94.3 | 2475 | 99.1 | | |
| 26100 | 5048 | 2116 | 64.7 | 2169 | 69.4 | 2219 | 74.0 | 2268 | 78.8 | 2316 | 83.5 | 2364 | 88.3 | 2411 | 93.2 | 2457 | 98.0 | 2501 | 103 | | |
| 26900 | 5203 | 2149 | 67.8 | 2200 | 72.6 | 2250 | 77.4 | 2299 | 82.2 | 2346 | 87.1 | 2391 | 92.0 | 2438 | 96.9 | 2484 | 102 | | | | |
| 27700 | 5357 | 2183 | 71.1 | 2231 | 76.0 | 2281 | 80.9 | 2329 | 85.8 | 2376 | 90.8 | 2421 | 95.8 | 2465 | 100.8 | | | | | | |
| 28500 | 5512 | 2218 | 74.4 | 2264 | 79.4 | 2312 | 84.5 | 2360 | 89.5 | 2406 | 94.6 | 2451 | 99.7 | 2495 | 104.9 | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 16.7)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 400 | 100 | 86 | 79 | 74 | 66 | 61 | 54 | 47 | 40 | 70 |
| | 80 | 80 | 71 | 67 | 59 | 54 | 48 | 40 | 35 | 63 |
| | 60 | 78 | 67 | 62 | 56 | 54 | 46 | 39 | 33 | 60 |
| | 50 | 77 | 66 | 62 | 57 | 56 | 47 | 41 | 35 | 61 |
| | 40 | 76 | 65 | 61 | 57 | 56 | 47 | 41 | 35 | 60 |
| 800 | 100 | 92 | 93 | 89 | 84 | 81 | 76 | 66 | 61 | 87 |
| | 80 | 89 | 91 | 86 | 81 | 77 | 71 | 65 | 59 | 84 |
| | 60 | 88 | 92 | 85 | 79 | 77 | 71 | 67 | 63 | 83 |
| | 50 | 88 | 88 | 83 | 78 | 76 | 71 | 68 | 64 | 82 |
| | 40 | 89 | 87 | 82 | 78 | 76 | 71 | 69 | 65 | 82 |
| 1100 | 100 | 94 | 96 | 99 | 91 | 88 | 86 | 78 | 71 | 95 |
| | 80 | 91 | 93 | 97 | 88 | 83 | 81 | 75 | 70 | 92 |
| | 60 | 90 | 91 | 93 | 85 | 82 | 79 | 76 | 72 | 89 |
| | 50 | 91 | 89 | 92 | 84 | 81 | 79 | 77 | 73 | 88 |
| | 40 | 90 | 90 | 93 | 84 | 81 | 79 | 77 | 74 | 89 |
| 1500 | 100 | 99 | 100 | 105 | 98 | 97 | 97 | 91 | 81 | 103 |
| | 80 | 95 | 97 | 103 | 94 | 91 | 90 | 85 | 79 | 99 |
| | 60 | 94 | 93 | 98 | 90 | 89 | 87 | 85 | 82 | 95 |
| | 50 | 95 | 94 | 99 | 89 | 88 | 87 | 86 | 83 | 95 |
| | 40 | 99 | 98 | 101 | 91 | 88 | 88 | 86 | 84 | 97 |
| 2102 | 100 | 109 | 107 | 113 | 108 | 104 | 105 | 102 | 94 | 112 |
| | 80 | 105 | 102 | 110 | 105 | 99 | 99 | 95 | 89 | 107 |
| | 60 | 105 | 99 | 106 | 100 | 97 | 96 | 94 | 91 | 104 |
| | 50 | 106 | 100 | 107 | 99 | 95 | 95 | 94 | 92 | 104 |
| | 40 | 109 | 105 | 109 | 101 | 96 | 95 | 95 | 92 | 105 |
| 2532 | 100 | 112 | 112 | 115 | 115 | 109 | 109 | 107 | 100 | 117 |
| | 80 | 108 | 108 | 113 | 112 | 105 | 103 | 100 | 95 | 112 |
| | 60 | 108 | 106 | 108 | 107 | 102 | 100 | 98 | 95 | 109 |
| | 50 | 109 | 107 | 109 | 107 | 100 | 99 | 98 | 96 | 108 |
| | 40 | 112 | 111 | 112 | 109 | 102 | 100 | 99 | 97 | 110 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 400 | 100 | 89 | 80 | 74 | 69 | 65 | 56 | 49 | 43 | 72 |
| | 80 | 88 | 79 | 71 | 64 | 61 | 52 | 46 | 40 | 70 |
| | 60 | 87 | 76 | 68 | 62 | 60 | 51 | 47 | 41 | 67 |
| | 50 | 85 | 74 | 66 | 61 | 60 | 51 | 48 | 42 | 66 |
| | 40 | 85 | 74 | 66 | 61 | 60 | 51 | 48 | 42 | 66 |
| 800 | 100 | 98 | 97 | 89 | 85 | 85 | 79 | 70 | 64 | 89 |
| | 80 | 97 | 94 | 85 | 82 | 80 | 74 | 67 | 61 | 85 |
| | 60 | 94 | 92 | 82 | 79 | 77 | 70 | 66 | 63 | 82 |
| | 50 | 94 | 91 | 81 | 77 | 75 | 70 | 67 | 67 | 82 |
| | 40 | 94 | 91 | 81 | 77 | 75 | 70 | 68 | 67 | 81 |
| 1100 | 100 | 104 | 101 | 99 | 94 | 92 | 90 | 82 | 74 | 98 |
| | 80 | 101 | 99 | 99 | 91 | 89 | 85 | 78 | 72 | 95 |
| | 60 | 98 | 97 | 97 | 88 | 85 | 80 | 76 | 73 | 92 |
| | 50 | 98 | 97 | 96 | 86 | 83 | 79 | 76 | 74 | 91 |
| | 40 | 98 | 96 | 95 | 85 | 82 | 79 | 76 | 74 | 90 |
| 1500 | 100 | 109 | 108 | 108 | 102 | 101 | 100 | 95 | 86 | 107 |
| | 80 | 105 | 104 | 105 | 99 | 97 | 95 | 90 | 82 | 103 |
| | 60 | 102 | 102 | 103 | 96 | 94 | 90 | 86 | 82 | 100 |
| | 50 | 103 | 101 | 100 | 94 | 92 | 89 | 86 | 83 | 98 |
| | 40 | 103 | 101 | 100 | 93 | 91 | 88 | 86 | 83 | 97 |
| 2102 | 100 | 117 | 115 | 116 | 111 | 108 | 108 | 106 | 97 | 115 |
| | 80 | 112 | 111 | 113 | 108 | 106 | 104 | 100 | 94 | 111 |
| | 60 | 110 | 109 | 110 | 105 | 103 | 100 | 95 | 92 | 109 |
| | 50 | 111 | 109 | 108 | 104 | 101 | 98 | 95 | 92 | 107 |
| | 40 | 111 | 109 | 108 | 102 | 100 | 96 | 94 | 92 | 106 |
| 2532 | 100 | 120 | 119 | 120 | 117 | 113 | 112 | 111 | 104 | 120 |
| | 80 | 115 | 115 | 116 | 114 | 110 | 108 | 105 | 99 | 116 |
| | 60 | 113 | 113 | 114 | 112 | 108 | 105 | 101 | 97 | 114 |
| | 50 | 114 | 113 | 112 | 110 | 106 | 103 | 99 | 96 | 112 |
| | 40 | 114 | 113 | 112 | 109 | 105 | 101 | 99 | 96 | 111 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

33 BISW

Wheel Diameter = 33 in.

Outlet Area = 6.26 ft.²

Tip Speed = 8.64 x RPM

Maximum BHP = (RPM/451)³

Minimum Starting HP = 1

Maximum RPM Class I = 1163

Maximum RPM Class II = 1517

Maximum RPM Class III = 1911

Maximum RPM Class IV = 2302

Maximum Open Motor Frame Size

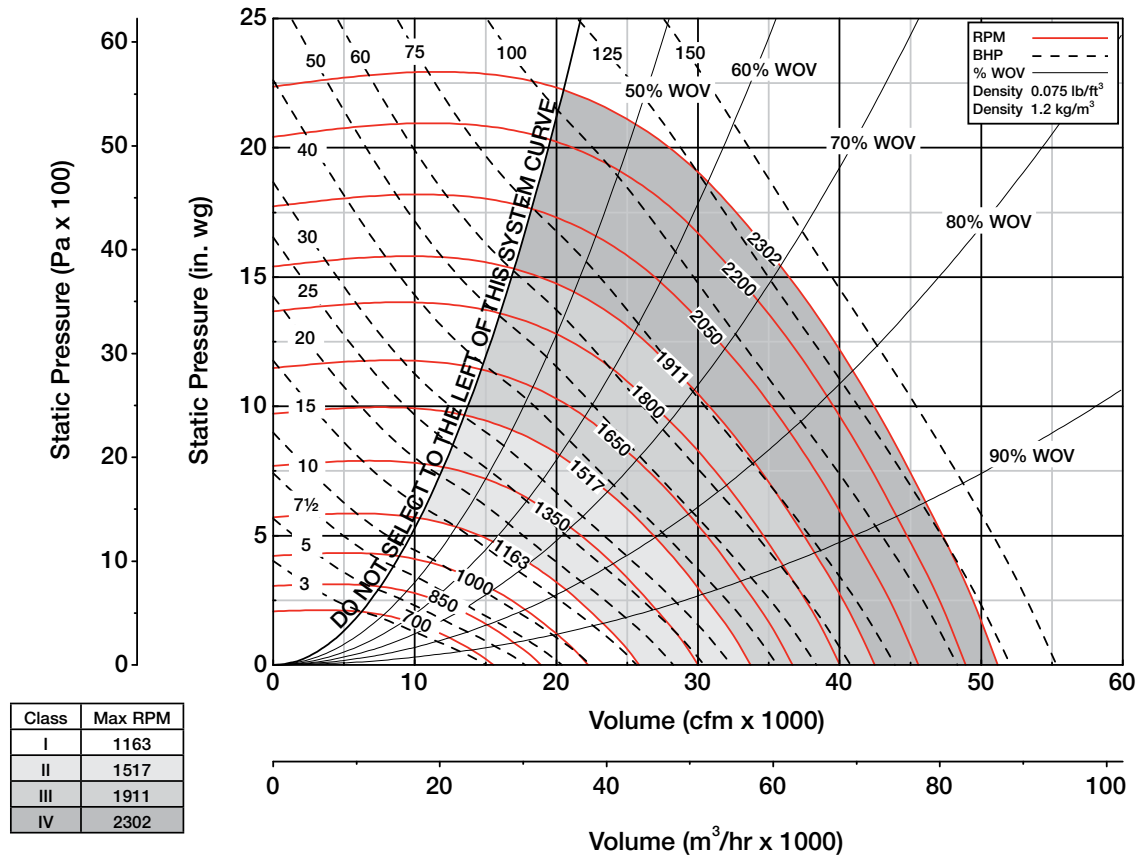
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 324T | 324T | 365T | NA |
| Arr. 10 | 256T | 256T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5000 | 798 | 375 | 0.55 | 496 | 1.11 | | | | | | | | | | | | | | | | |
| 5800 | 926 | 396 | 0.66 | 507 | 1.26 | 604 | 1.97 | | | | | | | | | | | | | | |
| 6600 | 1054 | 419 | 0.80 | 522 | 1.44 | 613 | 2.16 | 697 | 3.00 | | | | | | | | | | | | |
| 7400 | 1182 | 443 | 0.95 | 540 | 1.65 | 626 | 2.42 | 705 | 3.26 | 779 | 4.20 | | | | | | | | | | |
| 8200 | 1309 | 470 | 1.13 | 561 | 1.88 | 641 | 2.69 | 717 | 3.57 | 788 | 4.52 | 855 | 5.56 | 916 | 6.64 | | | | | | |
| 9000 | 1437 | 497 | 1.33 | 583 | 2.14 | 660 | 3.00 | 732 | 3.92 | 799 | 4.90 | 863 | 5.95 | 925 | 7.09 | 982 | 8.26 | | | | |
| 9800 | 1565 | 526 | 1.56 | 607 | 2.43 | 680 | 3.34 | 747 | 4.30 | 813 | 5.34 | 874 | 6.41 | 933 | 7.55 | 990 | 8.78 | 1044 | 10.0 | 1095 | 11.3 |
| 10600 | 1693 | 556 | 1.83 | 632 | 2.75 | 702 | 3.72 | 767 | 4.73 | 829 | 5.80 | 889 | 6.92 | 944 | 8.08 | 999 | 9.31 | 1053 | 10.6 | 1104 | 12.0 |
| 11400 | 1821 | 587 | 2.13 | 658 | 3.10 | 725 | 4.13 | 788 | 5.20 | 847 | 6.30 | 904 | 7.47 | 959 | 8.69 | 1011 | 9.93 | 1061 | 11.2 | 1112 | 12.6 |
| 12200 | 1948 | 618 | 2.47 | 685 | 3.49 | 749 | 4.58 | 810 | 5.70 | 867 | 6.86 | 919 | 8.05 | 974 | 9.32 | 1026 | 10.6 | 1074 | 12.0 | 1120 | 13.3 |
| 13000 | 2076 | 650 | 2.85 | 713 | 3.92 | 774 | 5.06 | 833 | 6.24 | 887 | 7.46 | 940 | 8.70 | 989 | 9.99 | 1041 | 11.4 | 1089 | 12.7 | 1135 | 14.2 |
| 13800 | 2204 | 682 | 3.28 | 742 | 4.39 | 800 | 5.58 | 856 | 6.83 | 910 | 8.10 | 961 | 9.40 | 1009 | 10.7 | 1056 | 12.1 | 1104 | 13.6 | 1150 | 15.0 |
| 14600 | 2332 | 714 | 3.75 | 772 | 4.90 | 827 | 6.15 | 880 | 7.45 | 933 | 8.78 | 982 | 10.1 | 1030 | 11.5 | 1075 | 12.9 | 1119 | 14.4 | 1165 | 15.9 |
| 15400 | 2460 | 747 | 4.27 | 802 | 5.47 | 855 | 6.77 | 907 | 8.12 | 956 | 9.51 | 1005 | 10.9 | 1050 | 12.4 | 1096 | 13.9 | 1138 | 15.3 | 1180 | 16.9 |
| 16200 | 2587 | 780 | 4.85 | 833 | 6.09 | 884 | 7.43 | 933 | 8.84 | 980 | 10.3 | 1028 | 11.8 | 1073 | 13.3 | 1116 | 14.8 | 1159 | 16.4 | 1199 | 17.9 |
| 17000 | 2715 | 813 | 5.48 | 864 | 6.77 | 913 | 8.15 | 960 | 9.61 | 1006 | 11.1 | 1051 | 12.7 | 1096 | 14.2 | 1138 | 15.8 | 1179 | 17.4 | 1219 | 19.0 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 11300 | 1805 | 1111 | 12.5 | 1159 | 14.0 | 1206 | 15.4 | 1250 | 16.9 | | | | | | | | | | | | |
| 12200 | 1948 | 1120 | 13.3 | 1169 | 14.8 | 1215 | 16.3 | 1259 | 17.9 | 1302 | 19.5 | 1343 | 21.1 | | | | | | | | |
| 13100 | 2092 | 1137 | 14.3 | 1180 | 15.7 | 1225 | 17.2 | 1269 | 18.8 | 1312 | 20.5 | 1353 | 22.1 | 1393 | 23.8 | 1431 | 25.6 | 1469 | 27.3 | | |
| 14000 | 2236 | 1153 | 15.3 | 1197 | 16.8 | 1239 | 18.3 | 1279 | 19.9 | 1321 | 21.5 | 1362 | 23.2 | 1402 | 25.0 | 1441 | 26.8 | 1478 | 28.6 | 1545 | 32.1 |
| 14900 | 2380 | 1170 | 16.3 | 1214 | 17.9 | 1255 | 19.5 | 1295 | 21.1 | 1334 | 22.7 | 1371 | 24.4 | 1412 | 26.2 | 1450 | 28.0 | 1488 | 29.9 | 1554 | 33.5 |
| 15800 | 2523 | 1188 | 17.4 | 1231 | 19.0 | 1272 | 20.7 | 1312 | 22.4 | 1351 | 24.1 | 1388 | 25.8 | 1424 | 27.6 | 1460 | 29.3 | 1497 | 31.3 | 1563 | 35.0 |
| 16700 | 2667 | 1212 | 18.6 | 1249 | 20.2 | 1289 | 22.0 | 1329 | 23.7 | 1368 | 25.5 | 1405 | 27.3 | 1440 | 29.1 | 1475 | 30.9 | 1509 | 32.8 | 1573 | 36.5 |
| 17600 | 2811 | 1235 | 19.9 | 1273 | 21.6 | 1310 | 23.3 | 1346 | 25.1 | 1385 | 26.9 | 1421 | 28.8 | 1457 | 30.7 | 1492 | 32.6 | 1526 | 34.5 | 1584 | 38.1 |
| 18500 | 2955 | 1258 | 21.3 | 1296 | 23.0 | 1333 | 24.8 | 1368 | 26.6 | 1402 | 28.5 | 1439 | 30.4 | 1474 | 32.3 | 1509 | 34.3 | 1543 | 36.3 | 1601 | 40.0 |
| 19400 | 3099 | 1283 | 22.7 | 1319 | 24.5 | 1356 | 26.4 | 1391 | 28.2 | 1425 | 30.1 | 1457 | 32.0 | 1491 | 34.0 | 1526 | 36.1 | 1560 | 38.1 | 1617 | 41.9 |
| 20300 | 3242 | 1309 | 24.2 | 1344 | 26.1 | 1379 | 28.0 | 1414 | 30.0 | 1448 | 31.9 | 1480 | 33.9 | 1512 | 35.9 | 1543 | 37.9 | 1577 | 40.0 | 1634 | 44.0 |
| 21200 | 3386 | 1335 | 25.8 | 1370 | 27.8 | 1404 | 29.8 | 1437 | 31.8 | 1471 | 33.8 | 1503 | 35.8 | 1535 | 37.8 | 1565 | 39.9 | 1594 | 42.0 | 1651 | 46.0 |
| 22100 | 3530 | 1362 | 27.5 | 1396 | 29.5 | 1430 | 31.6 | 1462 | 33.6 | 1494 | 35.7 | 1526 | 37.8 | 1558 | 39.9 | 1588 | 42.0 | 1618 | 44.2 | 1668 | 48.2 |
| 23000 | 3674 | 1389 | 29.3 | 1423 | 31.4 | 1456 | 33.5 | 1488 | 35.6 | 1520 | 37.7 | 1550 | 39.9 | 1581 | 42.1 | 1611 | 44.3 | 1641 | 46.5 | 1689 | 50.5 |
| 23900 | 3817 | 1419 | 31.1 | 1450 | 33.3 | 1483 | 35.5 | 1514 | 37.7 | 1545 | 39.9 | 1576 | 42.1 | 1605 | 44.3 | 1634 | 46.6 | 1664 | 48.8 | 1712 | 53.0 |
| 24800 | 3961 | 1448 | 33.1 | 1479 | 35.3 | 1509 | 37.6 | 1541 | 39.8 | 1572 | 42.1 | 1601 | 44.4 | 1631 | 46.7 | 1659 | 49.0 | 1687 | 51.3 | 1735 | 55.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 20000 | 3194 | 1628 | 43.3 | 1689 | 47.5 | 1747 | 51.8 | 1803 | 56.2 | 1860 | 60.8 | 1917 | 65.6 | 1973 | 70.6 | 2026 | 75.5 | 2078 | 80.6 | 2178 | 90.9 |
| 21000 | 3354 | 1647 | 45.6 | 1707 | 50.0 | 1765 | 54.4 | 1821 | 58.9 | 1874 | 63.4 | 1926 | 68.1 | 1983 | 73.2 | 2036 | 78.3 | 2088 | 83.5 | 2188 | 94.0 |
| 22000 | 3514 | 1666 | 47.9 | 1726 | 52.5 | 1784 | 57.0 | 1839 | 61.7 | 1892 | 66.4 | 1944 | 71.1 | 1993 | 75.9 | 2047 | 81.1 | 2098 | 86.4 | 2198 | 97.2 |
| 23000 | 3674 | 1689 | 50.5 | 1746 | 55.1 | 1802 | 59.8 | 1858 | 64.6 | 1911 | 69.4 | 1962 | 74.3 | 2012 | 79.2 | 2060 | 84.2 | 2109 | 89.3 | 2208 | 100 |
| 24000 | 3833 | 1715 | 53.3 | 1767 | 57.9 | 1821 | 62.6 | 1876 | 67.5 | 1929 | 72.5 | 1980 | 77.5 | 2030 | 82.6 | 2078 | 87.7 | 2125 | 92.9 | 2218 | 104 |
| 25000 | 3993 | 1740 | 56.2 | 1793 | 60.9 | 1843 | 65.7 | 1895 | 70.6 | 1948 | 75.7 | 1999 | 80.9 | 2048 | 86.1 | 2096 | 91.4 | 2143 | 96.7 | 2232 | 107 |
| 26000 | 4153 | 1766 | 59.1 | 1818 | 64.0 | 1869 | 68.9 | 1917 | 73.9 | 1967 | 79.0 | 2017 | 84.3 | 2067 | 89.7 | 2114 | 95.1 | 2161 | 101 | 2250 | 112 |
| 27000 | 4313 | 1792 | 62.3 | 1844 | 67.3 | 1894 | 72.3 | 1943 | 77.4 | 1989 | 82.6 | 2036 | 87.9 | 2085 | 93.4 | 2133 | 98.9 | 2179 | 105 | 2268 | 116 |
| 28000 | 4472 | 1821 | 65.5 | 1870 | 70.7 | 1919 | 75.8 | 1968 | 81.1 | 2013 | 86.4 | 2059 | 91.7 | 2104 | 97.2 | 2152 | 103 | 2198 | 109 | | |
| 29000 | 4632 | 1849 | 68.9 | 1898 | 74.2 | 1945 | 79.5 | 1993 | 84.9 | 2039 | 90.3 | 2083 | 95.8 | 2127 | 101 | 2169 | 107 | 2216 | 113 | | |
| 30000 | 4792 | 1878 | 72.4 | 1927 | 77.8 | 1973 | 83.3 | 2019 | 88.8 | 2065 | 94.4 | 2109 | 100 | 2152 | 106 | 2194 | 111 | 2235 | 117 | | |
| 31000 | 4952 | 1907 | 76.1 | 1955 | 81.7 | 2001 | 87.3 | 2046 | 92.9 | 2090 | 98.6 | 2135 | 104 | 2178 | 110 | 2219 | 116 | 2259 | 122 | | |
| 32000 | 5111 | 1937 | 80.0 | 1984 | 85.6 | 2030 | 91.4 | 2074 | 97.1 | 2117 | 103 | 2160 | 109 | 2203 | 115 | 2245 | 121 | | | | |
| 33000 | 5271 | 1968 | 83.9 | 2013 | 89.7 | 2059 | 95.6 | 2103 | 102 | 2145 | 108 | 2187 | 114 | 2228 | 120 | 2270 | 126 | | | | |
| 34000 | 5431 | 2000 | 88.0 | 2043 | 94.0 | 2088 | 100 | 2132 | 106 | 2174 | 112 | 2215 | 118 | 2255 | 125 | | | | | | |
| 35000 | 5591 | 2033 | 92.3 | 2075 | 98.4 | 2117 | 105 | 2161 | 111 | 2203 | 117 | 2243 | 123 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 22.2)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 350 | 100 | 85 | 78 | 73 | 65 | 60 | 52 | 45 | 39 | 69 |
| | 80 | 78 | 70 | 65 | 58 | 53 | 46 | 39 | 34 | 62 |
| | 60 | 76 | 66 | 61 | 56 | 52 | 44 | 38 | 32 | 59 |
| | 50 | 74 | 65 | 61 | 57 | 54 | 46 | 40 | 34 | 60 |
| | 40 | 74 | 64 | 60 | 57 | 54 | 46 | 40 | 33 | 59 |
| 700 | 100 | 92 | 92 | 88 | 83 | 80 | 74 | 65 | 60 | 86 |
| | 80 | 89 | 90 | 85 | 80 | 76 | 70 | 64 | 58 | 83 |
| | 60 | 89 | 90 | 83 | 79 | 75 | 70 | 66 | 62 | 82 |
| | 50 | 88 | 87 | 82 | 78 | 75 | 71 | 67 | 63 | 81 |
| | 40 | 89 | 86 | 81 | 78 | 75 | 71 | 68 | 64 | 81 |
| 1000 | 100 | 95 | 98 | 99 | 92 | 89 | 86 | 78 | 71 | 95 |
| | 80 | 92 | 95 | 96 | 88 | 84 | 81 | 75 | 70 | 92 |
| | 60 | 91 | 92 | 93 | 86 | 82 | 80 | 76 | 73 | 89 |
| | 50 | 91 | 91 | 91 | 84 | 82 | 79 | 77 | 74 | 88 |
| | 40 | 91 | 93 | 93 | 85 | 82 | 80 | 77 | 74 | 89 |
| 1400 | 100 | 100 | 103 | 106 | 100 | 98 | 98 | 92 | 82 | 104 |
| | 80 | 96 | 99 | 103 | 95 | 93 | 91 | 86 | 79 | 99 |
| | 60 | 95 | 95 | 99 | 92 | 90 | 89 | 86 | 83 | 96 |
| | 50 | 96 | 96 | 99 | 90 | 89 | 88 | 87 | 84 | 96 |
| | 40 | 100 | 100 | 101 | 92 | 90 | 89 | 87 | 85 | 97 |
| 1911 | 100 | 110 | 107 | 115 | 108 | 104 | 106 | 103 | 93 | 112 |
| | 80 | 107 | 102 | 112 | 104 | 100 | 99 | 96 | 89 | 108 |
| | 60 | 107 | 98 | 108 | 99 | 97 | 96 | 94 | 91 | 104 |
| | 50 | 108 | 100 | 109 | 98 | 96 | 95 | 95 | 92 | 104 |
| | 40 | 110 | 105 | 110 | 100 | 97 | 96 | 95 | 93 | 106 |
| 2302 | 100 | 114 | 113 | 117 | 115 | 109 | 110 | 108 | 100 | 117 |
| | 80 | 110 | 109 | 114 | 111 | 105 | 103 | 101 | 95 | 112 |
| | 60 | 110 | 106 | 110 | 107 | 102 | 101 | 99 | 96 | 109 |
| | 50 | 111 | 107 | 111 | 106 | 101 | 100 | 99 | 97 | 109 |
| | 40 | 113 | 111 | 113 | 108 | 102 | 100 | 100 | 98 | 110 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 350 | 100 | 87 | 79 | 73 | 69 | 64 | 55 | 48 | 41 | 71 |
| | 80 | 86 | 78 | 70 | 64 | 60 | 51 | 44 | 38 | 68 |
| | 60 | 85 | 74 | 67 | 61 | 58 | 50 | 46 | 40 | 66 |
| | 50 | 83 | 73 | 65 | 61 | 58 | 50 | 46 | 41 | 65 |
| | 40 | 82 | 73 | 65 | 61 | 58 | 50 | 47 | 41 | 65 |
| 700 | 100 | 98 | 95 | 88 | 85 | 84 | 77 | 69 | 62 | 88 |
| | 80 | 97 | 92 | 84 | 81 | 79 | 72 | 66 | 60 | 84 |
| | 60 | 94 | 90 | 82 | 78 | 75 | 69 | 65 | 63 | 81 |
| | 50 | 93 | 89 | 80 | 77 | 74 | 69 | 67 | 67 | 81 |
| | 40 | 93 | 89 | 80 | 77 | 74 | 69 | 68 | 67 | 80 |
| 1000 | 100 | 104 | 101 | 99 | 94 | 93 | 90 | 82 | 73 | 98 |
| | 80 | 101 | 100 | 98 | 92 | 89 | 84 | 78 | 72 | 95 |
| | 60 | 99 | 98 | 96 | 89 | 85 | 80 | 76 | 73 | 92 |
| | 50 | 98 | 98 | 95 | 87 | 83 | 79 | 76 | 74 | 91 |
| | 40 | 98 | 97 | 94 | 86 | 83 | 79 | 77 | 75 | 90 |
| 1400 | 100 | 110 | 109 | 109 | 103 | 102 | 101 | 95 | 86 | 108 |
| | 80 | 106 | 106 | 105 | 100 | 99 | 96 | 91 | 83 | 104 |
| | 60 | 104 | 104 | 103 | 98 | 95 | 91 | 87 | 83 | 101 |
| | 50 | 104 | 102 | 101 | 96 | 93 | 90 | 87 | 84 | 99 |
| | 40 | 104 | 102 | 100 | 95 | 92 | 89 | 87 | 84 | 98 |
| 1911 | 100 | 118 | 115 | 117 | 110 | 109 | 109 | 106 | 97 | 116 |
| | 80 | 113 | 112 | 114 | 107 | 106 | 104 | 101 | 93 | 112 |
| | 60 | 111 | 109 | 111 | 105 | 104 | 100 | 96 | 92 | 109 |
| | 50 | 112 | 109 | 109 | 103 | 102 | 98 | 95 | 92 | 107 |
| | 40 | 112 | 109 | 109 | 102 | 101 | 97 | 95 | 92 | 106 |
| 2302 | 100 | 121 | 120 | 121 | 117 | 113 | 113 | 111 | 104 | 120 |
| | 80 | 116 | 116 | 117 | 114 | 111 | 109 | 106 | 99 | 117 |
| | 60 | 114 | 114 | 115 | 111 | 108 | 105 | 101 | 97 | 114 |
| | 50 | 115 | 114 | 113 | 110 | 106 | 103 | 100 | 97 | 112 |
| | 40 | 115 | 114 | 113 | 109 | 105 | 102 | 99 | 97 | 111 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

36 BISW

Wheel Diameter = 36½ in.

Outlet Area = 7.66 ft.²

Tip Speed = 9.56 x RPM

Maximum BHP = (RPM/381)³

Minimum Starting HP = 1

Maximum RPM Class I = 1051

Maximum RPM Class II = 1371

Maximum RPM Class III = 1727

Maximum RPM Class IV = 2082

Maximum Open Motor Frame Size

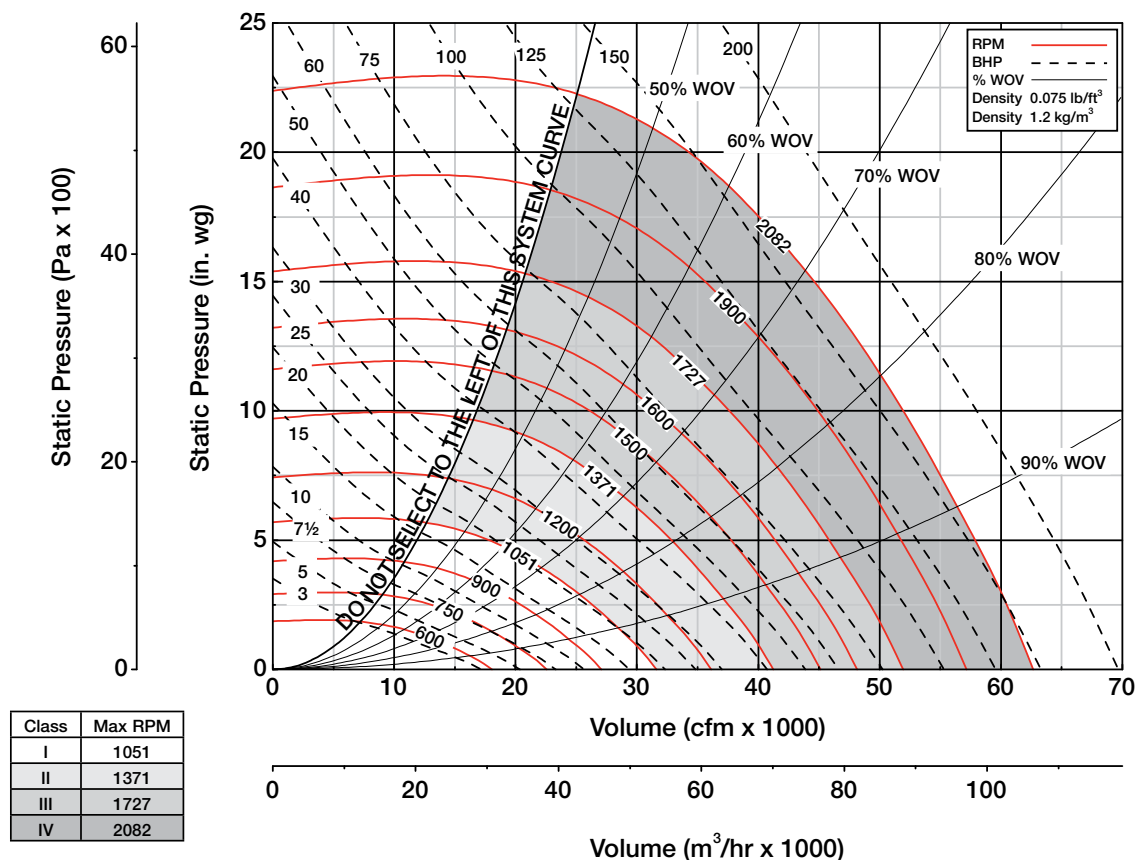
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 326T | 326T | 365T | NA |
| Arr. 10 | 286T | 286T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6100 | 796 | 339 | 0.67 | 449 | 1.36 | | | | | | | | | | | | | | | | |
| 7100 | 926 | 358 | 0.81 | 458 | 1.55 | 546 | 2.41 | | | | | | | | | | | | | | |
| 8100 | 1057 | 380 | 0.98 | 472 | 1.77 | 554 | 2.65 | 630 | 3.67 | | | | | | | | | | | | |
| 9100 | 1187 | 402 | 1.17 | 489 | 2.03 | 567 | 2.97 | 638 | 4.00 | 705 | 5.15 | | | | | | | | | | |
| 10100 | 1318 | 426 | 1.40 | 508 | 2.32 | 581 | 3.32 | 649 | 4.40 | 713 | 5.56 | 773 | 6.84 | 829 | 8.16 | | | | | | |
| 11100 | 1449 | 452 | 1.65 | 529 | 2.65 | 598 | 3.70 | 663 | 4.84 | 723 | 6.04 | 781 | 7.33 | 837 | 8.72 | 889 | 10.2 | | | | |
| 12100 | 1579 | 479 | 1.95 | 551 | 3.02 | 617 | 4.14 | 677 | 5.32 | 737 | 6.59 | 791 | 7.91 | 844 | 9.30 | 896 | 10.8 | 945 | 12.4 | 991 | 14.0 |
| 13100 | 1710 | 506 | 2.28 | 574 | 3.42 | 637 | 4.61 | 696 | 5.86 | 751 | 7.17 | 805 | 8.56 | 855 | 9.99 | 904 | 11.5 | 953 | 13.1 | 999 | 14.8 |
| 14100 | 1840 | 535 | 2.67 | 599 | 3.86 | 659 | 5.14 | 715 | 6.45 | 768 | 7.81 | 819 | 9.25 | 869 | 10.8 | 916 | 12.3 | 960 | 13.9 | 1006 | 15.6 |
| 15100 | 1971 | 564 | 3.10 | 624 | 4.36 | 681 | 5.70 | 736 | 7.09 | 787 | 8.52 | 834 | 9.99 | 883 | 11.6 | 930 | 13.2 | 973 | 14.8 | 1015 | 16.5 |
| 16100 | 2101 | 593 | 3.59 | 650 | 4.90 | 705 | 6.32 | 757 | 7.78 | 806 | 9.27 | 854 | 10.8 | 897 | 12.4 | 943 | 14.1 | 987 | 15.8 | 1029 | 17.5 |
| 17100 | 2232 | 623 | 4.13 | 677 | 5.50 | 729 | 6.98 | 779 | 8.52 | 827 | 10.1 | 873 | 11.7 | 917 | 13.3 | 958 | 15.0 | 1001 | 16.8 | 1042 | 18.6 |
| 18100 | 2362 | 653 | 4.74 | 704 | 6.16 | 754 | 7.70 | 802 | 9.31 | 848 | 11.0 | 892 | 12.6 | 935 | 14.4 | 977 | 16.1 | 1015 | 17.9 | 1056 | 19.8 |
| 19100 | 2493 | 683 | 5.41 | 732 | 6.89 | 780 | 8.49 | 826 | 10.2 | 870 | 11.9 | 914 | 13.6 | 955 | 15.4 | 995 | 17.2 | 1034 | 19.1 | 1070 | 21.0 |
| 20100 | 2624 | 714 | 6.15 | 761 | 7.68 | 806 | 9.34 | 850 | 11.1 | 893 | 12.9 | 935 | 14.7 | 976 | 16.6 | 1014 | 18.4 | 1053 | 20.4 | 1089 | 22.3 |
| 21100 | 2754 | 745 | 6.95 | 790 | 8.55 | 833 | 10.3 | 875 | 12.1 | 917 | 13.9 | 957 | 15.8 | 997 | 17.8 | 1035 | 19.7 | 1072 | 21.7 | 1108 | 23.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 13800 | 1801 | 1004 | 15.3 | 1048 | 17.1 | 1090 | 18.9 | 1130 | 20.7 | | | | | | | | | | | | |
| 14900 | 1945 | 1012 | 16.3 | 1056 | 18.1 | 1098 | 19.9 | 1138 | 21.8 | 1177 | 23.8 | 1214 | 25.7 | | | | | | | | |
| 16000 | 2088 | 1027 | 17.4 | 1067 | 19.2 | 1107 | 21.0 | 1147 | 23.0 | 1186 | 25.0 | 1223 | 27.1 | 1259 | 29.1 | 1294 | 31.2 | 1328 | 33.4 | | |
| 17100 | 2232 | 1042 | 18.6 | 1082 | 20.5 | 1119 | 22.4 | 1156 | 24.3 | 1194 | 26.3 | 1231 | 28.4 | 1267 | 30.6 | 1302 | 32.7 | 1336 | 34.9 | 1397 | 39.3 |
| 18200 | 2375 | 1058 | 19.9 | 1097 | 21.8 | 1135 | 23.8 | 1171 | 25.8 | 1206 | 27.8 | 1239 | 29.8 | 1276 | 32.0 | 1311 | 34.3 | 1345 | 36.6 | 1405 | 41.0 |
| 19300 | 2519 | 1074 | 21.2 | 1112 | 23.2 | 1150 | 25.3 | 1186 | 27.3 | 1221 | 29.4 | 1254 | 31.5 | 1287 | 33.7 | 1319 | 35.8 | 1353 | 38.2 | 1413 | 42.8 |
| 20400 | 2663 | 1095 | 22.7 | 1129 | 24.7 | 1165 | 26.8 | 1201 | 29.0 | 1236 | 31.1 | 1269 | 33.3 | 1302 | 35.5 | 1333 | 37.8 | 1364 | 40.0 | 1422 | 44.6 |
| 21500 | 2806 | 1116 | 24.3 | 1150 | 26.4 | 1184 | 28.5 | 1217 | 30.7 | 1251 | 32.9 | 1285 | 35.2 | 1317 | 37.5 | 1348 | 39.8 | 1379 | 42.1 | 1432 | 46.6 |
| 22600 | 2950 | 1136 | 26.0 | 1171 | 28.1 | 1204 | 30.3 | 1236 | 32.5 | 1267 | 34.7 | 1300 | 37.1 | 1332 | 39.5 | 1364 | 41.9 | 1394 | 44.3 | 1447 | 48.9 |
| 23700 | 3093 | 1159 | 27.7 | 1192 | 30.0 | 1225 | 32.2 | 1257 | 34.5 | 1287 | 36.8 | 1316 | 39.1 | 1348 | 41.6 | 1379 | 44.0 | 1409 | 46.5 | 1462 | 51.3 |
| 24800 | 3237 | 1183 | 29.6 | 1215 | 31.9 | 1246 | 34.2 | 1277 | 36.6 | 1308 | 39.0 | 1338 | 41.4 | 1366 | 43.8 | 1395 | 46.3 | 1425 | 48.9 | 1477 | 53.7 |
| 25900 | 3381 | 1206 | 31.5 | 1238 | 33.9 | 1269 | 36.3 | 1298 | 38.8 | 1329 | 41.2 | 1358 | 43.7 | 1387 | 46.2 | 1415 | 48.7 | 1441 | 51.3 | 1492 | 56.3 |
| 27000 | 3524 | 1230 | 33.6 | 1262 | 36.1 | 1292 | 38.5 | 1321 | 41.0 | 1350 | 43.6 | 1379 | 46.1 | 1407 | 48.7 | 1435 | 51.3 | 1462 | 54.0 | 1507 | 58.9 |
| 28100 | 3668 | 1255 | 35.8 | 1286 | 38.3 | 1316 | 40.9 | 1345 | 43.5 | 1373 | 46.1 | 1400 | 48.7 | 1428 | 51.4 | 1456 | 54.0 | 1483 | 56.7 | 1526 | 61.7 |
| 29200 | 3812 | 1282 | 38.0 | 1310 | 40.7 | 1340 | 43.3 | 1368 | 46.0 | 1396 | 48.7 | 1423 | 51.4 | 1450 | 54.1 | 1477 | 56.9 | 1503 | 59.6 | 1548 | 64.7 |
| 30300 | 3955 | 1308 | 40.4 | 1336 | 43.1 | 1364 | 45.9 | 1392 | 48.6 | 1420 | 51.4 | 1447 | 54.2 | 1473 | 57.0 | 1499 | 59.8 | 1524 | 62.6 | 1568 | 67.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 24500 | 3198 | 1473 | 53.0 | 1527 | 58.2 | 1580 | 63.5 | 1630 | 68.9 | 1682 | 74.5 | 1734 | 80.4 | 1784 | 86.4 | 1832 | 92.5 | 1879 | 98.7 | 1970 | 111 |
| 25700 | 3355 | 1489 | 55.8 | 1544 | 61.1 | 1596 | 66.6 | 1646 | 72.1 | 1695 | 77.7 | 1741 | 83.3 | 1793 | 89.6 | 1841 | 95.8 | 1888 | 102 | 1978 | 115 |
| 26900 | 3511 | 1506 | 58.6 | 1561 | 64.2 | 1613 | 69.8 | 1663 | 75.5 | 1711 | 81.2 | 1757 | 87.0 | 1802 | 92.9 | 1850 | 99.2 | 1897 | 106 | 1987 | 119 |
| 28100 | 3668 | 1526 | 61.7 | 1577 | 67.3 | 1629 | 73.1 | 1679 | 78.9 | 1727 | 84.8 | 1774 | 90.8 | 1818 | 96.8 | 1862 | 103 | 1906 | 109 | 1996 | 123 |
| 29300 | 3825 | 1549 | 65.0 | 1597 | 70.6 | 1646 | 76.4 | 1696 | 82.5 | 1744 | 88.5 | 1790 | 94.7 | 1835 | 101 | 1878 | 107 | 1920 | 114 | 2005 | 127 |
| 30500 | 3981 | 1572 | 68.4 | 1620 | 74.2 | 1665 | 80.1 | 1712 | 86.1 | 1760 | 92.4 | 1806 | 98.7 | 1851 | 105 | 1894 | 112 | 1936 | 118 | 2017 | 131 |
| 31700 | 4138 | 1594 | 72.0 | 1642 | 78.0 | 1688 | 84.0 | 1731 | 90.0 | 1777 | 96.3 | 1823 | 103 | 1867 | 109 | 1910 | 116 | 1952 | 123 | 2033 | 136 |
| 32900 | 4295 | 1618 | 75.7 | 1665 | 81.9 | 1710 | 88.0 | 1753 | 94.3 | 1796 | 101 | 1839 | 107 | 1884 | 114 | 1927 | 121 | 1969 | 127 | 2049 | 141 |
| 34100 | 4451 | 1643 | 79.6 | 1687 | 85.9 | 1733 | 92.2 | 1776 | 98.6 | 1818 | 105 | 1859 | 112 | 1900 | 118 | 1943 | 125 | 1985 | 132 | | |
| 35300 | 4608 | 1668 | 83.7 | 1712 | 90.1 | 1755 | 96.6 | 1799 | 103 | 1841 | 110 | 1881 | 116 | 1920 | 123 | 1960 | 130 | 2002 | 137 | | |
| 36500 | 4765 | 1694 | 87.9 | 1738 | 94.5 | 1780 | 101 | 1821 | 108 | 1863 | 115 | 1904 | 122 | 1941 | 128 | 1980 | 135 | 2018 | 142 | | |
| 37700 | 4921 | 1720 | 92.3 | 1763 | 99.1 | 1805 | 106 | 1845 | 113 | 1886 | 120 | 1926 | 127 | 1965 | 134 | 2002 | 141 | 2039 | 148 | | |
| 38900 | 5078 | 1746 | 96.9 | 1789 | 104 | 1830 | 111 | 1870 | 118 | 1909 | 125 | 1948 | 132 | 1987 | 139 | 2025 | 147 | 2061 | 154 | | |
| 40100 | 5234 | 1773 | 102 | 1815 | 109 | 1856 | 116 | 1896 | 123 | 1934 | 130 | 1971 | 138 | 2010 | 145 | 2047 | 152 | | | | |
| 41300 | 5391 | 1802 | 106 | 1840 | 114 | 1882 | 121 | 1921 | 128 | 1959 | 136 | 1996 | 143 | 2032 | 151 | | | | | | |
| 42500 | 5548 | 1831 | 112 | 1869 | 119 | 1907 | 127 | 1947 | 134 | 1985 | 142 | 2022 | 149 | 2057 | 157 | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 30.1)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 300 | 100 | 80 | 73 | 68 | 62 | 57 | 49 | 41 | 36 | 65 |
| | 80 | 79 | 72 | 65 | 58 | 55 | 46 | 39 | 35 | 63 |
| | 60 | 79 | 71 | 64 | 58 | 57 | 46 | 39 | 34 | 63 |
| | 50 | 79 | 70 | 65 | 59 | 58 | 48 | 41 | 36 | 63 |
| | 40 | 78 | 70 | 65 | 60 | 59 | 49 | 42 | 37 | 64 |
| 600 | 100 | 99 | 93 | 85 | 78 | 79 | 73 | 64 | 59 | 84 |
| | 80 | 96 | 90 | 81 | 74 | 74 | 68 | 62 | 58 | 80 |
| | 60 | 93 | 87 | 78 | 72 | 74 | 68 | 65 | 61 | 79 |
| | 50 | 90 | 85 | 76 | 72 | 73 | 68 | 65 | 61 | 78 |
| | 40 | 95 | 87 | 79 | 73 | 74 | 69 | 66 | 62 | 79 |
| 800 | 100 | 95 | 100 | 92 | 86 | 86 | 83 | 73 | 68 | 91 |
| | 80 | 91 | 101 | 88 | 82 | 80 | 77 | 70 | 66 | 88 |
| | 60 | 89 | 95 | 84 | 79 | 79 | 76 | 73 | 69 | 85 |
| | 50 | 89 | 95 | 83 | 78 | 78 | 75 | 73 | 69 | 84 |
| | 40 | 98 | 93 | 86 | 80 | 79 | 76 | 74 | 72 | 86 |
| 1200 | 100 | 102 | 108 | 104 | 97 | 95 | 94 | 87 | 81 | 102 |
| | 80 | 97 | 106 | 100 | 93 | 91 | 88 | 83 | 78 | 98 |
| | 60 | 95 | 103 | 97 | 89 | 88 | 86 | 83 | 81 | 95 |
| | 50 | 97 | 103 | 97 | 88 | 87 | 85 | 84 | 81 | 95 |
| | 40 | 106 | 107 | 101 | 92 | 89 | 86 | 85 | 82 | 97 |
| 1727 | 100 | 109 | 115 | 119 | 108 | 103 | 102 | 99 | 92 | 113 |
| | 80 | 103 | 111 | 117 | 104 | 99 | 98 | 94 | 88 | 110 |
| | 60 | 101 | 108 | 113 | 101 | 96 | 95 | 93 | 90 | 107 |
| | 50 | 103 | 109 | 114 | 100 | 95 | 94 | 92 | 91 | 107 |
| | 40 | 112 | 116 | 117 | 104 | 98 | 95 | 93 | 91 | 110 |
| 2082 | 100 | 112 | 118 | 122 | 116 | 109 | 107 | 104 | 98 | 118 |
| | 80 | 107 | 114 | 119 | 112 | 105 | 102 | 99 | 94 | 114 |
| | 60 | 104 | 111 | 116 | 108 | 101 | 99 | 97 | 95 | 111 |
| | 50 | 106 | 113 | 117 | 108 | 101 | 98 | 97 | 95 | 111 |
| | 40 | 115 | 120 | 121 | 112 | 103 | 100 | 98 | 96 | 115 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 300 | 100 | 84 | 80 | 71 | 67 | 62 | 54 | 47 | 43 | 70 |
| | 80 | 81 | 79 | 70 | 64 | 61 | 52 | 46 | 42 | 68 |
| | 60 | 79 | 78 | 69 | 64 | 61 | 52 | 46 | 43 | 68 |
| | 50 | 79 | 78 | 69 | 64 | 61 | 52 | 46 | 43 | 68 |
| | 40 | 79 | 78 | 69 | 64 | 61 | 52 | 47 | 44 | 68 |
| 600 | 100 | 100 | 95 | 87 | 83 | 81 | 76 | 68 | 65 | 87 |
| | 80 | 96 | 91 | 83 | 79 | 76 | 71 | 64 | 60 | 83 |
| | 60 | 95 | 89 | 80 | 76 | 74 | 69 | 64 | 61 | 80 |
| | 50 | 95 | 90 | 80 | 76 | 74 | 69 | 65 | 64 | 80 |
| | 40 | 94 | 89 | 79 | 75 | 73 | 68 | 64 | 64 | 80 |
| 800 | 100 | 104 | 106 | 94 | 91 | 88 | 86 | 78 | 74 | 95 |
| | 80 | 98 | 102 | 89 | 87 | 83 | 80 | 73 | 69 | 91 |
| | 60 | 96 | 101 | 87 | 84 | 80 | 77 | 72 | 69 | 89 |
| | 50 | 96 | 99 | 86 | 83 | 79 | 76 | 72 | 70 | 87 |
| | 40 | 97 | 97 | 86 | 83 | 78 | 75 | 72 | 70 | 86 |
| 1200 | 100 | 111 | 112 | 107 | 102 | 99 | 97 | 92 | 85 | 106 |
| | 80 | 108 | 109 | 103 | 98 | 94 | 91 | 86 | 80 | 101 |
| | 60 | 102 | 107 | 101 | 95 | 91 | 88 | 84 | 80 | 99 |
| | 50 | 103 | 106 | 100 | 94 | 90 | 87 | 84 | 80 | 98 |
| | 40 | 104 | 105 | 99 | 93 | 89 | 85 | 83 | 80 | 97 |
| 1727 | 100 | 117 | 120 | 121 | 112 | 108 | 106 | 103 | 97 | 116 |
| | 80 | 114 | 116 | 118 | 108 | 104 | 101 | 97 | 91 | 113 |
| | 60 | 109 | 112 | 117 | 105 | 101 | 97 | 94 | 90 | 110 |
| | 50 | 110 | 113 | 115 | 104 | 100 | 96 | 93 | 90 | 109 |
| | 40 | 111 | 113 | 114 | 103 | 99 | 95 | 92 | 90 | 108 |
| 2082 | 100 | 120 | 123 | 125 | 119 | 113 | 110 | 108 | 102 | 121 |
| | 80 | 117 | 120 | 122 | 115 | 109 | 106 | 102 | 97 | 117 |
| | 60 | 112 | 115 | 120 | 112 | 106 | 102 | 99 | 95 | 115 |
| | 50 | 113 | 116 | 119 | 111 | 105 | 101 | 98 | 95 | 114 |
| | 40 | 114 | 116 | 118 | 111 | 104 | 100 | 97 | 95 | 113 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

40 BISW

Wheel Diameter = 40¼ in.

Outlet Area = 9.31 ft.²

Tip Speed = 10.54 x RPM

Maximum BHP = (RPM/326)³

Minimum Starting HP = 2

Maximum RPM Class I = 936

Maximum RPM Class II = 1221

Maximum RPM Class III = 1538

Maximum RPM Class IV = 1852

Maximum Open Motor Frame Size

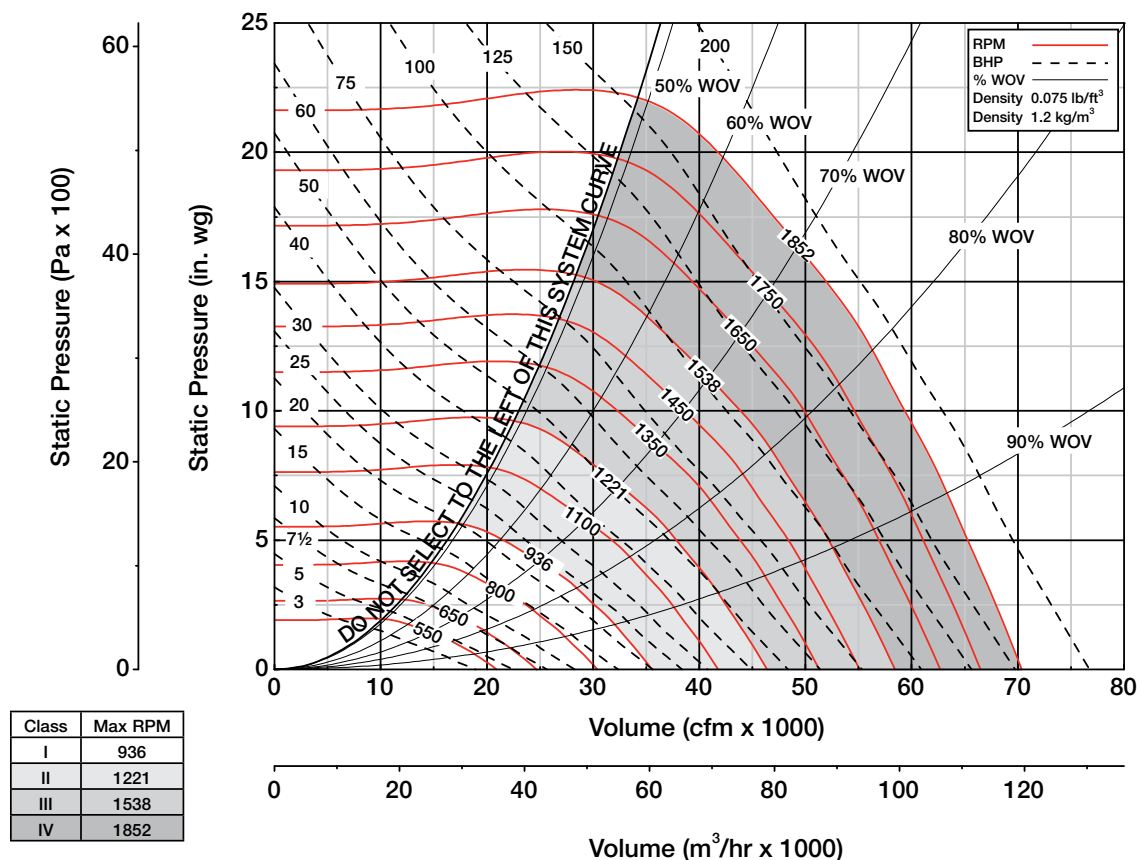
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 326T | 326T | 405T | NA |
| Arr. 10 | 324T | 324T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 7400 | 794 | 305 | 0.78 | 396 | 1.52 | | | | | | | | | | | | | | | | |
| 8600 | 923 | 323 | 0.96 | 405 | 1.74 | | | | | | | | | | | | | | | | |
| 9800 | 1052 | 344 | 1.17 | 421 | 2.03 | 489 | 2.97 | | | | | | | | | | | | | | |
| 11000 | 1181 | 366 | 1.40 | 439 | 2.36 | 503 | 3.35 | 563 | 4.47 | | | | | | | | | | | | |
| 12200 | 1310 | 391 | 1.70 | 458 | 2.73 | 519 | 3.80 | 573 | 4.93 | 629 | 6.20 | | | | | | | | | | |
| 13400 | 1439 | 417 | 2.03 | 478 | 3.14 | 537 | 4.30 | 590 | 5.50 | 638 | 6.75 | 689 | 8.17 | | | | | | | | |
| 14600 | 1568 | 443 | 2.42 | 500 | 3.58 | 556 | 4.85 | 606 | 6.12 | 654 | 7.46 | 698 | 8.83 | 745 | 10.4 | 791 | 12.0 | | | | |
| 15800 | 1697 | 470 | 2.86 | 523 | 4.08 | 575 | 5.44 | 625 | 6.81 | 670 | 8.21 | 714 | 9.66 | 754 | 11.1 | 798 | 12.8 | 840 | 14.6 | | |
| 17000 | 1825 | 498 | 3.38 | 548 | 4.67 | 596 | 6.08 | 644 | 7.56 | 688 | 9.03 | 730 | 10.6 | 771 | 12.1 | 807 | 13.7 | 847 | 15.4 | 888 | 17.3 |
| 18200 | 1954 | 527 | 3.97 | 573 | 5.32 | 618 | 6.77 | 663 | 8.35 | 707 | 9.92 | 747 | 11.5 | 787 | 13.2 | 824 | 14.8 | 859 | 16.5 | 895 | 18.3 |
| 19400 | 2083 | 556 | 4.64 | 599 | 6.03 | 641 | 7.54 | 684 | 9.20 | 726 | 10.9 | 766 | 12.6 | 803 | 14.3 | 840 | 16.0 | 876 | 17.8 | 908 | 19.6 |
| 20600 | 2212 | 585 | 5.37 | 626 | 6.81 | 666 | 8.41 | 706 | 10.1 | 746 | 11.9 | 785 | 13.7 | 822 | 15.5 | 856 | 17.3 | 892 | 19.1 | 925 | 21.0 |
| 21800 | 2341 | 614 | 6.18 | 652 | 7.66 | 692 | 9.36 | 728 | 11.1 | 767 | 13.0 | 804 | 14.8 | 841 | 16.7 | 875 | 18.6 | 908 | 20.6 | 941 | 22.5 |
| 23000 | 2470 | 643 | 7.07 | 680 | 8.63 | 718 | 10.4 | 753 | 12.2 | 788 | 14.1 | 824 | 16.1 | 860 | 18.1 | 894 | 20.1 | 926 | 22.1 | 957 | 24.1 |
| 24200 | 2599 | 673 | 8.05 | 708 | 9.71 | 744 | 11.5 | 778 | 13.4 | 811 | 15.3 | 846 | 17.4 | 880 | 19.5 | 913 | 21.6 | 945 | 23.7 | 976 | 25.8 |
| 25400 | 2728 | 703 | 9.12 | 737 | 10.9 | 770 | 12.7 | 804 | 14.7 | 835 | 16.6 | 867 | 18.8 | 900 | 21.0 | 933 | 23.2 | 964 | 25.4 | 994 | 27.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 16800 | 1804 | 887 | 17.2 | | | | | | | | | | | | | | | | | | |
| 18100 | 1944 | 894 | 18.2 | 933 | 20.2 | 970 | 22.3 | | | | | | | | | | | | | | |
| 19400 | 2083 | 908 | 19.6 | 940 | 21.5 | 977 | 23.5 | 1012 | 25.7 | 1046 | 27.9 | | | | | | | | | | |
| 20700 | 2223 | 926 | 21.2 | 957 | 23.1 | 988 | 25.0 | 1020 | 27.1 | 1054 | 29.4 | 1087 | 31.7 | 1119 | 34.1 | | | | | | |
| 22000 | 2363 | 944 | 22.8 | 975 | 24.8 | 1006 | 26.8 | 1034 | 28.9 | 1062 | 31.0 | 1094 | 33.3 | 1126 | 35.7 | 1157 | 38.2 | 1187 | 40.7 | | |
| 23300 | 2502 | 962 | 24.5 | 993 | 26.6 | 1023 | 28.7 | 1052 | 30.9 | 1079 | 33.1 | 1106 | 35.2 | 1133 | 37.5 | 1164 | 40.0 | 1194 | 42.6 | 1246 | 47.5 |
| 24600 | 2642 | 982 | 26.4 | 1011 | 28.5 | 1040 | 30.7 | 1069 | 33.0 | 1097 | 35.2 | 1124 | 37.5 | 1150 | 39.8 | 1175 | 42.1 | 1201 | 44.5 | 1254 | 49.6 |
| 25900 | 2781 | 1002 | 28.3 | 1031 | 30.6 | 1059 | 32.8 | 1087 | 35.1 | 1115 | 37.5 | 1142 | 39.9 | 1168 | 42.3 | 1192 | 44.7 | 1217 | 47.1 | 1261 | 51.7 |
| 27200 | 2921 | 1023 | 30.4 | 1052 | 32.7 | 1079 | 35.1 | 1106 | 37.5 | 1132 | 39.9 | 1159 | 42.3 | 1185 | 44.8 | 1210 | 47.3 | 1235 | 49.8 | 1275 | 54.5 |
| 28500 | 3061 | 1044 | 32.5 | 1073 | 35.0 | 1100 | 37.5 | 1126 | 39.9 | 1152 | 42.4 | 1177 | 44.9 | 1203 | 47.5 | 1228 | 50.1 | 1252 | 52.7 | 1292 | 57.5 |
| 29800 | 3200 | 1066 | 34.8 | 1094 | 37.4 | 1121 | 40.0 | 1147 | 42.5 | 1173 | 45.1 | 1197 | 47.7 | 1221 | 50.3 | 1245 | 53.0 | 1270 | 55.7 | 1310 | 60.6 |
| 31100 | 3340 | 1089 | 37.1 | 1116 | 39.8 | 1142 | 42.5 | 1168 | 45.2 | 1193 | 47.9 | 1218 | 50.6 | 1242 | 53.3 | 1265 | 56.0 | 1288 | 58.8 | 1327 | 63.8 |
| 32400 | 3480 | 1113 | 39.6 | 1138 | 42.4 | 1164 | 45.2 | 1189 | 48.0 | 1214 | 50.8 | 1238 | 53.6 | 1262 | 56.4 | 1285 | 59.2 | 1308 | 62.1 | 1345 | 67.2 |
| 33700 | 3619 | 1137 | 42.2 | 1162 | 45.1 | 1186 | 48.0 | 1211 | 50.9 | 1235 | 53.8 | 1259 | 56.8 | 1283 | 59.7 | 1306 | 62.6 | 1328 | 65.5 | 1364 | 70.7 |
| 35000 | 3759 | 1162 | 44.9 | 1186 | 47.9 | 1210 | 50.9 | 1233 | 54.0 | 1257 | 57.0 | 1281 | 60.0 | 1304 | 63.1 | 1326 | 66.1 | 1349 | 69.1 | 1384 | 74.5 |
| 36300 | 3899 | 1189 | 47.9 | 1210 | 50.8 | 1234 | 53.9 | 1257 | 57.1 | 1279 | 60.3 | 1302 | 63.4 | 1325 | 66.5 | 1348 | 69.7 | 1369 | 72.8 | 1404 | 78.3 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 29800 | 3200 | 1310 | 60.6 | 1353 | 66.0 | 1396 | 71.5 | 1436 | 77.1 | 1484 | 83.5 | 1530 | 90.0 | 1574 | 96.6 | | | | | | |
| 31200 | 3351 | 1329 | 64.1 | 1373 | 69.7 | 1414 | 75.4 | 1454 | 81.1 | 1493 | 86.9 | 1538 | 93.4 | 1582 | 100 | 1624 | 107 | 1666 | 114 | | |
| 32600 | 3501 | 1348 | 67.7 | 1391 | 73.5 | 1432 | 79.4 | 1472 | 85.3 | 1511 | 91.3 | 1549 | 97.3 | 1589 | 104 | 1632 | 111 | 1673 | 118 | 1753 | 132 |
| 34000 | 3651 | 1369 | 71.6 | 1410 | 77.5 | 1452 | 83.5 | 1491 | 89.7 | 1529 | 95.8 | 1567 | 102 | 1603 | 108 | 1638 | 115 | 1681 | 122 | 1760 | 137 |
| 35400 | 3802 | 1390 | 75.6 | 1431 | 81.7 | 1470 | 87.9 | 1510 | 94.1 | 1548 | 101 | 1585 | 107 | 1621 | 113 | 1656 | 120 | 1690 | 126 | 1768 | 141 |
| 36800 | 3952 | 1412 | 79.9 | 1452 | 86.1 | 1491 | 92.4 | 1529 | 98.8 | 1567 | 105 | 1603 | 112 | 1639 | 119 | 1674 | 125 | 1708 | 132 | 1773 | 146 |
| 38200 | 4103 | 1434 | 84.3 | 1474 | 90.7 | 1512 | 97.2 | 1549 | 104 | 1586 | 110 | 1623 | 117 | 1657 | 124 | 1692 | 131 | 1726 | 138 | 1791 | 152 |
| 39600 | 4253 | 1457 | 88.8 | 1496 | 95.5 | 1534 | 102 | 1570 | 109 | 1606 | 116 | 1641 | 123 | 1677 | 130 | 1710 | 137 | 1744 | 144 | 1809 | 158 |
| 41000 | 4403 | 1480 | 93.5 | 1519 | 100 | 1556 | 107 | 1592 | 114 | 1627 | 121 | 1661 | 128 | 1695 | 135 | 1730 | 143 | 1762 | 150 | 1827 | 164 |
| 42400 | 4554 | 1503 | 98.3 | 1541 | 106 | 1578 | 113 | 1614 | 120 | 1649 | 127 | 1683 | 134 | 1716 | 141 | 1749 | 149 | 1782 | 156 | | |
| 43800 | 4704 | 1527 | 103 | 1564 | 111 | 1601 | 118 | 1636 | 126 | 1671 | 133 | 1705 | 140 | 1737 | 148 | 1769 | 155 | 1801 | 163 | | |
| 45200 | 4854 | 1553 | 108 | 1588 | 116 | 1624 | 124 | 1659 | 131 | 1693 | 139 | 1726 | 147 | 1759 | 154 | 1790 | 162 | 1821 | 169 | | |
| 46600 | 5005 | 1578 | 114 | 1613 | 122 | 1647 | 130 | 1682 | 137 | 1716 | 145 | 1748 | 153 | 1781 | 161 | 1812 | 169 | | | | |
| 48000 | 5155 | 1604 | 119 | 1638 | 127 | 1671 | 136 | 1705 | 144 | 1738 | 152 | 1771 | 160 | 1802 | 168 | 1834 | 176 | | | | |
| 49400 | 5306 | 1630 | 125 | 1664 | 133 | 1696 | 142 | 1728 | 150 | 1761 | 158 | 1793 | 167 | 1825 | 175 | | | | | | |
| 50800 | 5456 | 1659 | 132 | 1689 | 140 | 1722 | 148 | 1753 | 157 | 1784 | 165 | 1817 | 174 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 38.0)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 300 | 100 | 84 | 77 | 71 | 65 | 60 | 52 | 44 | 39 | 68 |
| | 80 | 83 | 75 | 68 | 61 | 58 | 49 | 42 | 38 | 66 |
| | 60 | 83 | 74 | 67 | 61 | 60 | 49 | 42 | 37 | 66 |
| | 50 | 82 | 73 | 68 | 62 | 61 | 51 | 44 | 39 | 66 |
| | 40 | 82 | 74 | 68 | 63 | 62 | 52 | 45 | 40 | 67 |
| 600 | 100 | 102 | 96 | 88 | 81 | 82 | 76 | 67 | 62 | 87 |
| | 80 | 99 | 93 | 84 | 77 | 77 | 71 | 65 | 60 | 83 |
| | 60 | 97 | 90 | 81 | 75 | 77 | 71 | 68 | 64 | 82 |
| | 50 | 94 | 88 | 79 | 75 | 76 | 71 | 68 | 64 | 81 |
| | 40 | 98 | 91 | 82 | 76 | 77 | 72 | 69 | 65 | 82 |
| 800 | 100 | 98 | 104 | 95 | 89 | 89 | 86 | 76 | 71 | 94 |
| | 80 | 94 | 104 | 91 | 85 | 83 | 80 | 73 | 69 | 91 |
| | 60 | 92 | 99 | 87 | 82 | 82 | 79 | 75 | 72 | 88 |
| | 50 | 92 | 98 | 86 | 81 | 81 | 78 | 76 | 72 | 88 |
| | 40 | 101 | 97 | 90 | 83 | 82 | 79 | 77 | 75 | 89 |
| 1100 | 100 | 104 | 110 | 104 | 97 | 96 | 95 | 88 | 81 | 102 |
| | 80 | 99 | 108 | 99 | 93 | 92 | 89 | 83 | 79 | 98 |
| | 60 | 97 | 105 | 96 | 90 | 89 | 87 | 84 | 81 | 96 |
| | 50 | 99 | 105 | 96 | 89 | 88 | 86 | 85 | 82 | 95 |
| | 40 | 108 | 108 | 100 | 92 | 89 | 87 | 85 | 83 | 98 |
| 1538 | 100 | 110 | 116 | 118 | 108 | 104 | 102 | 98 | 92 | 113 |
| | 80 | 105 | 112 | 115 | 103 | 100 | 98 | 93 | 88 | 109 |
| | 60 | 102 | 109 | 112 | 100 | 96 | 95 | 93 | 90 | 106 |
| | 50 | 104 | 111 | 112 | 100 | 95 | 94 | 93 | 91 | 106 |
| | 40 | 113 | 117 | 115 | 103 | 98 | 95 | 93 | 91 | 109 |
| 1852 | 100 | 113 | 119 | 121 | 115 | 109 | 107 | 103 | 97 | 117 |
| | 80 | 108 | 115 | 119 | 111 | 105 | 102 | 98 | 94 | 114 |
| | 60 | 106 | 112 | 115 | 107 | 101 | 99 | 97 | 95 | 111 |
| | 50 | 108 | 114 | 116 | 107 | 101 | 99 | 97 | 95 | 111 |
| | 40 | 117 | 121 | 120 | 111 | 103 | 100 | 98 | 96 | 114 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 300 | 100 | 87 | 83 | 74 | 70 | 65 | 57 | 50 | 46 | 73 |
| | 80 | 84 | 82 | 73 | 67 | 64 | 55 | 48 | 45 | 71 |
| | 60 | 82 | 81 | 72 | 67 | 64 | 55 | 49 | 46 | 71 |
| | 50 | 82 | 81 | 72 | 67 | 64 | 55 | 49 | 46 | 71 |
| | 40 | 82 | 81 | 72 | 67 | 64 | 55 | 50 | 47 | 71 |
| 600 | 100 | 103 | 98 | 90 | 86 | 84 | 79 | 71 | 67 | 90 |
| | 80 | 99 | 94 | 86 | 82 | 79 | 74 | 67 | 63 | 86 |
| | 60 | 98 | 92 | 83 | 79 | 77 | 72 | 67 | 64 | 83 |
| | 50 | 98 | 92 | 83 | 79 | 77 | 72 | 68 | 67 | 83 |
| | 40 | 97 | 92 | 82 | 78 | 76 | 71 | 67 | 67 | 83 |
| 800 | 100 | 107 | 109 | 97 | 94 | 91 | 89 | 81 | 77 | 98 |
| | 80 | 101 | 105 | 92 | 90 | 86 | 83 | 76 | 72 | 94 |
| | 60 | 99 | 104 | 90 | 87 | 83 | 80 | 75 | 72 | 92 |
| | 50 | 99 | 102 | 89 | 86 | 82 | 79 | 75 | 73 | 90 |
| | 40 | 100 | 100 | 89 | 86 | 81 | 78 | 75 | 73 | 89 |
| 1100 | 100 | 112 | 114 | 106 | 103 | 99 | 98 | 93 | 85 | 106 |
| | 80 | 109 | 110 | 102 | 99 | 95 | 92 | 86 | 81 | 102 |
| | 60 | 104 | 109 | 100 | 96 | 92 | 89 | 85 | 81 | 99 |
| | 50 | 105 | 108 | 99 | 95 | 90 | 87 | 85 | 81 | 98 |
| | 40 | 106 | 107 | 98 | 94 | 89 | 86 | 84 | 81 | 97 |
| 1538 | 100 | 118 | 120 | 120 | 112 | 108 | 106 | 102 | 96 | 116 |
| | 80 | 115 | 117 | 117 | 108 | 104 | 101 | 96 | 91 | 112 |
| | 60 | 110 | 114 | 115 | 105 | 101 | 97 | 94 | 90 | 110 |
| | 50 | 111 | 114 | 114 | 104 | 100 | 96 | 93 | 90 | 109 |
| | 40 | 112 | 114 | 113 | 103 | 99 | 95 | 92 | 90 | 108 |
| 1852 | 100 | 121 | 124 | 124 | 118 | 113 | 111 | 107 | 102 | 121 |
| | 80 | 118 | 121 | 121 | 114 | 109 | 106 | 102 | 96 | 117 |
| | 60 | 113 | 117 | 119 | 112 | 106 | 102 | 99 | 95 | 114 |
| | 50 | 114 | 117 | 118 | 111 | 105 | 101 | 98 | 95 | 113 |
| | 40 | 115 | 117 | 117 | 110 | 104 | 100 | 97 | 95 | 112 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

44 BISW

Wheel Diameter = 44½ in.

Outlet Area = 11.39 ft.²

Tip Speed = 11.65 x RPM

Maximum BHP = (RPM/276)³

Minimum Starting HP = 3

Maximum RPM Class I = 847

Maximum RPM Class II = 1105

Maximum RPM Class III = 1392

Maximum RPM Class IV = 1675

Maximum Open Motor Frame Size

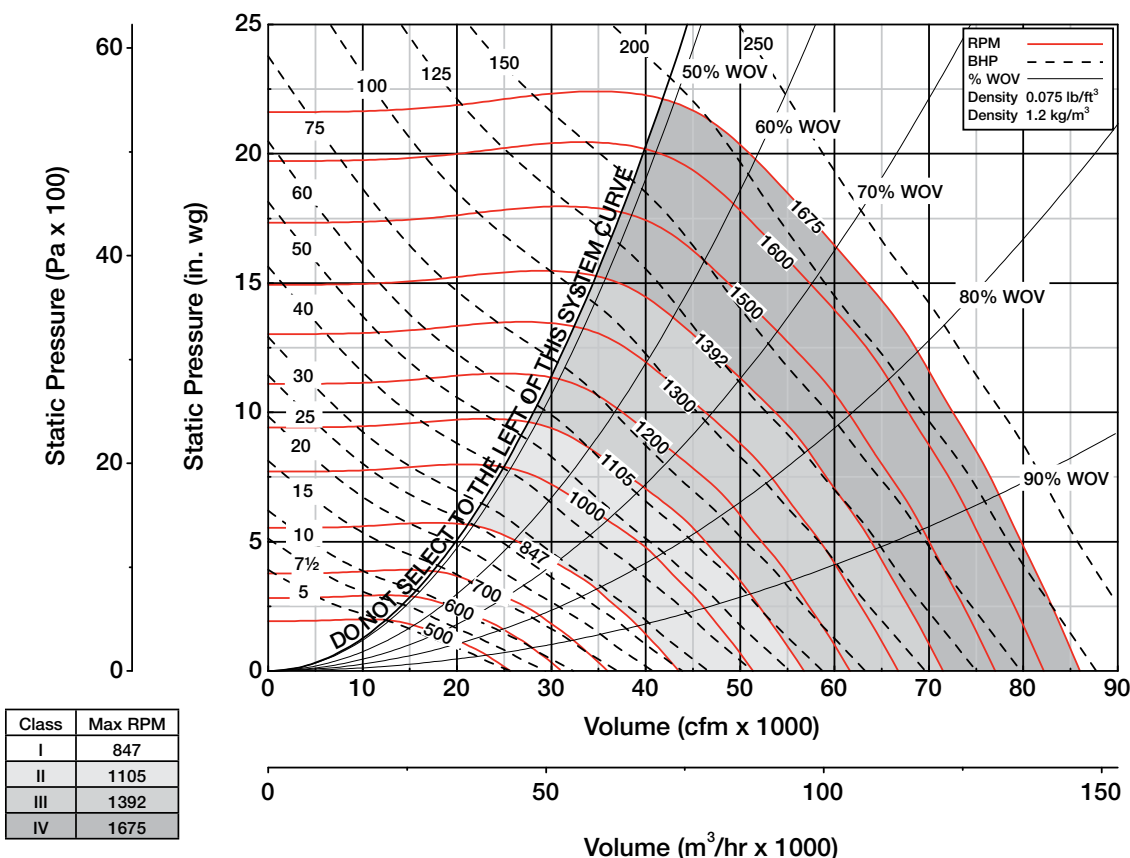
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 364T | 364T | 444T | NA |
| Arr. 10 | 326T | 326T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9100 | 798 | 276 | 0.96 | 358 | 1.87 | | | | | | | | | | | | | | | | |
| 10500 | 921 | 292 | 1.17 | 366 | 2.12 | | | | | | | | | | | | | | | | |
| 11900 | 1044 | 310 | 1.41 | 380 | 2.46 | 442 | 3.61 | | | | | | | | | | | | | | |
| 13300 | 1167 | 329 | 1.69 | 395 | 2.84 | 452 | 4.05 | 509 | 5.41 | | | | | | | | | | | | |
| 14700 | 1290 | 350 | 2.02 | 412 | 3.27 | 467 | 4.56 | 516 | 5.93 | 568 | 7.50 | | | | | | | | | | |
| 16100 | 1413 | 373 | 2.40 | 429 | 3.74 | 482 | 5.13 | 531 | 6.59 | 574 | 8.10 | 622 | 9.85 | | | | | | | | |
| 17500 | 1536 | 395 | 2.84 | 447 | 4.25 | 498 | 5.76 | 545 | 7.30 | 589 | 8.91 | 627 | 10.6 | 672 | 12.5 | | | | | | |
| 18900 | 1659 | 418 | 3.33 | 466 | 4.81 | 515 | 6.44 | 560 | 8.08 | 602 | 9.77 | 642 | 11.5 | 678 | 13.3 | 720 | 15.4 | 758 | 17.5 | | |
| 20300 | 1782 | 442 | 3.91 | 488 | 5.46 | 533 | 7.18 | 577 | 8.93 | 617 | 10.7 | 656 | 12.5 | 691 | 14.4 | 726 | 16.3 | 764 | 18.5 | 801 | 20.8 |
| 21700 | 1905 | 467 | 4.57 | 510 | 6.20 | 551 | 7.95 | 593 | 9.84 | 633 | 11.7 | 670 | 13.6 | 706 | 15.6 | 739 | 17.6 | 771 | 19.7 | 807 | 21.9 |
| 23100 | 2028 | 492 | 5.32 | 532 | 6.99 | 571 | 8.80 | 611 | 10.8 | 649 | 12.8 | 686 | 14.8 | 720 | 16.9 | 754 | 19.0 | 786 | 21.1 | 815 | 23.3 |
| 24500 | 2151 | 517 | 6.14 | 555 | 7.87 | 592 | 9.77 | 629 | 11.8 | 666 | 14.0 | 702 | 16.1 | 735 | 18.2 | 768 | 20.4 | 800 | 22.6 | 830 | 24.9 |
| 25900 | 2273 | 542 | 7.04 | 578 | 8.82 | 614 | 10.8 | 648 | 12.9 | 684 | 15.2 | 719 | 17.4 | 752 | 19.6 | 783 | 21.9 | 814 | 24.2 | 844 | 26.6 |
| 27300 | 2396 | 567 | 8.02 | 601 | 9.86 | 636 | 12.0 | 668 | 14.1 | 702 | 16.4 | 736 | 18.8 | 768 | 21.2 | 799 | 23.5 | 828 | 25.9 | 858 | 28.4 |
| 28700 | 2519 | 593 | 9.10 | 625 | 11.1 | 658 | 13.2 | 690 | 15.5 | 721 | 17.8 | 753 | 20.3 | 785 | 22.8 | 815 | 25.3 | 844 | 27.7 | 872 | 30.3 |
| 30100 | 2642 | 618 | 10.3 | 650 | 12.4 | 681 | 14.5 | 712 | 16.9 | 741 | 19.2 | 772 | 21.8 | 802 | 24.4 | 832 | 27.1 | 861 | 29.7 | 888 | 32.3 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 20500 | 1799 | 802 | 21.0 | | | | | | | | | | | | | | | | | | |
| 22100 | 1940 | 809 | 22.3 | 844 | 24.7 | 877 | 27.2 | | | | | | | | | | | | | | |
| 23700 | 2080 | 821 | 24.0 | 850 | 26.2 | 884 | 28.8 | 916 | 31.4 | 947 | 34.1 | | | | | | | | | | |
| 25300 | 2221 | 838 | 25.9 | 865 | 28.2 | 893 | 30.6 | 922 | 33.1 | 953 | 35.9 | 983 | 38.8 | 1012 | 41.6 | | | | | | |
| 26900 | 2361 | 854 | 27.9 | 882 | 30.3 | 910 | 32.8 | 935 | 35.3 | 961 | 37.9 | 990 | 40.7 | 1018 | 43.7 | 1046 | 46.7 | 1073 | 49.8 | | |
| 28500 | 2502 | 870 | 30.0 | 898 | 32.5 | 925 | 35.1 | 952 | 37.8 | 976 | 40.4 | 1001 | 43.1 | 1025 | 45.8 | 1053 | 48.9 | 1080 | 52.1 | 1128 | 58.2 |
| 30100 | 2642 | 888 | 32.3 | 915 | 34.9 | 941 | 37.6 | 968 | 40.3 | 993 | 43.1 | 1017 | 45.9 | 1040 | 48.7 | 1063 | 51.6 | 1087 | 54.4 | 1134 | 60.7 |
| 31700 | 2783 | 907 | 34.7 | 933 | 37.4 | 958 | 40.2 | 983 | 43.0 | 1009 | 45.9 | 1033 | 48.8 | 1057 | 51.7 | 1079 | 54.7 | 1101 | 57.7 | 1141 | 63.3 |
| 33300 | 2923 | 926 | 37.2 | 952 | 40.1 | 977 | 43.0 | 1001 | 45.9 | 1025 | 48.8 | 1049 | 51.9 | 1072 | 54.9 | 1095 | 58.0 | 1118 | 61.0 | 1154 | 66.7 |
| 34900 | 3064 | 946 | 39.9 | 971 | 42.9 | 996 | 45.9 | 1020 | 48.9 | 1043 | 52.0 | 1065 | 55.1 | 1088 | 58.2 | 1111 | 61.4 | 1133 | 64.6 | 1169 | 70.4 |
| 36500 | 3204 | 965 | 42.7 | 990 | 45.8 | 1015 | 49.0 | 1038 | 52.1 | 1061 | 55.3 | 1084 | 58.5 | 1106 | 61.7 | 1127 | 64.9 | 1149 | 68.2 | 1186 | 74.3 |
| 38100 | 3345 | 986 | 45.6 | 1010 | 48.9 | 1034 | 52.2 | 1057 | 55.5 | 1080 | 58.8 | 1102 | 62.0 | 1124 | 65.4 | 1145 | 68.7 | 1166 | 72.1 | 1202 | 78.3 |
| 39700 | 3485 | 1008 | 48.6 | 1031 | 52.0 | 1054 | 55.5 | 1077 | 58.9 | 1099 | 62.4 | 1121 | 65.8 | 1143 | 69.2 | 1164 | 72.7 | 1184 | 76.1 | 1218 | 82.4 |
| 41300 | 3625 | 1030 | 51.7 | 1052 | 55.3 | 1074 | 58.9 | 1097 | 62.5 | 1119 | 66.1 | 1140 | 69.7 | 1162 | 73.2 | 1182 | 76.8 | 1203 | 80.4 | 1235 | 86.8 |
| 42900 | 3766 | 1053 | 55.2 | 1074 | 58.8 | 1096 | 62.5 | 1117 | 66.2 | 1139 | 70.0 | 1160 | 73.7 | 1181 | 77.4 | 1201 | 81.1 | 1221 | 84.8 | 1253 | 91.4 |
| 44500 | 3906 | 1077 | 58.9 | 1096 | 62.4 | 1118 | 66.2 | 1139 | 70.1 | 1159 | 74.0 | 1180 | 77.8 | 1200 | 81.7 | 1221 | 85.5 | 1240 | 89.4 | 1272 | 96.2 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|------|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 36400 | 3195 | 1185 | 74.0 | 1224 | 80.7 | 1262 | 87.4 | 1299 | 94.2 | 1343 | 102 | 1384 | 110 | 1424 | 118 | | | | | | |
| 38100 | 3345 | 1202 | 78.3 | 1241 | 85.1 | 1278 | 92.1 | 1315 | 99.1 | 1350 | 106 | 1391 | 114 | 1431 | 122 | 1469 | 131 | 1507 | 139 | | |
| 39800 | 3494 | 1219 | 82.7 | 1258 | 89.8 | 1295 | 96.9 | 1331 | 104 | 1366 | 111 | 1400 | 119 | 1438 | 127 | 1476 | 135 | 1514 | 144 | 1585 | 162 |
| 41500 | 3643 | 1237 | 87.4 | 1275 | 94.6 | 1313 | 102 | 1348 | 109 | 1383 | 117 | 1417 | 125 | 1449 | 132 | 1481 | 140 | 1520 | 149 | 1592 | 167 |
| 43200 | 3792 | 1257 | 92.3 | 1293 | 99.7 | 1329 | 107 | 1365 | 115 | 1399 | 123 | 1433 | 130 | 1465 | 138 | 1497 | 146 | 1528 | 154 | 1599 | 172 |
| 44900 | 3942 | 1277 | 97.4 | 1313 | 105 | 1348 | 113 | 1382 | 121 | 1417 | 129 | 1449 | 137 | 1482 | 145 | 1513 | 153 | 1544 | 161 | 1606 | 178 |
| 46600 | 4091 | 1296 | 103 | 1332 | 111 | 1367 | 119 | 1400 | 126 | 1434 | 135 | 1467 | 143 | 1498 | 151 | 1530 | 160 | 1560 | 168 | 1619 | 185 |
| 48300 | 4240 | 1317 | 108 | 1352 | 116 | 1386 | 125 | 1420 | 133 | 1452 | 141 | 1484 | 149 | 1516 | 158 | 1546 | 167 | 1577 | 175 | 1635 | 193 |
| 50000 | 4389 | 1337 | 114 | 1372 | 122 | 1406 | 131 | 1439 | 139 | 1471 | 148 | 1502 | 156 | 1533 | 165 | 1564 | 174 | 1593 | 183 | 1651 | 200 |
| 51700 | 4539 | 1358 | 120 | 1393 | 128 | 1426 | 137 | 1459 | 146 | 1490 | 155 | 1521 | 163 | 1551 | 172 | 1581 | 181 | 1611 | 190 | | |
| 53400 | 4688 | 1380 | 126 | 1414 | 135 | 1447 | 144 | 1479 | 153 | 1510 | 162 | 1540 | 171 | 1570 | 180 | 1599 | 189 | 1627 | 198 | | |
| 55100 | 4837 | 1402 | 132 | 1434 | 141 | 1467 | 151 | 1499 | 160 | 1530 | 169 | 1560 | 178 | 1589 | 188 | 1618 | 197 | 1646 | 206 | | |
| 56800 | 4986 | 1425 | 138 | 1457 | 148 | 1488 | 158 | 1519 | 167 | 1550 | 177 | 1580 | 186 | 1609 | 196 | 1637 | 205 | | | | |
| 58500 | 5136 | 1448 | 145 | 1479 | 155 | 1509 | 165 | 1540 | 175 | 1570 | 185 | 1600 | 195 | 1629 | 204 | 1657 | 214 | | | | |
| 60200 | 5285 | 1472 | 152 | 1502 | 162 | 1532 | 172 | 1561 | 183 | 1591 | 193 | 1620 | 203 | 1649 | 213 | | | | | | |
| 61900 | 5434 | 1498 | 160 | 1525 | 170 | 1555 | 180 | 1584 | 191 | 1612 | 201 | 1641 | 211 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 51.4)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 250 | 100 | 82 | 73 | 68 | 63 | 58 | 49 | 42 | 37 | 66 |
| | 80 | 81 | 72 | 66 | 59 | 56 | 46 | 39 | 36 | 63 |
| | 60 | 81 | 71 | 65 | 59 | 57 | 46 | 40 | 35 | 63 |
| | 50 | 81 | 70 | 66 | 61 | 59 | 47 | 42 | 37 | 64 |
| | 40 | 81 | 70 | 66 | 61 | 59 | 48 | 43 | 38 | 64 |
| 500 | 100 | 103 | 93 | 85 | 80 | 79 | 73 | 65 | 60 | 85 |
| | 80 | 100 | 89 | 81 | 76 | 75 | 69 | 63 | 58 | 81 |
| | 60 | 97 | 86 | 78 | 74 | 75 | 69 | 66 | 62 | 80 |
| | 50 | 94 | 84 | 77 | 74 | 74 | 69 | 67 | 62 | 79 |
| | 40 | 99 | 87 | 80 | 75 | 75 | 70 | 67 | 63 | 81 |
| 700 | 100 | 100 | 102 | 94 | 90 | 88 | 84 | 75 | 70 | 94 |
| | 80 | 96 | 102 | 90 | 85 | 83 | 79 | 72 | 68 | 90 |
| | 60 | 94 | 97 | 86 | 82 | 81 | 78 | 75 | 71 | 87 |
| | 50 | 94 | 96 | 85 | 81 | 81 | 77 | 75 | 72 | 87 |
| | 40 | 101 | 95 | 88 | 83 | 81 | 78 | 77 | 75 | 88 |
| 1000 | 100 | 106 | 111 | 104 | 98 | 96 | 95 | 88 | 82 | 103 |
| | 80 | 101 | 109 | 99 | 94 | 92 | 89 | 83 | 79 | 99 |
| | 60 | 99 | 106 | 96 | 90 | 90 | 87 | 85 | 82 | 96 |
| | 50 | 101 | 107 | 96 | 89 | 89 | 87 | 85 | 83 | 96 |
| | 40 | 109 | 109 | 100 | 92 | 90 | 88 | 86 | 83 | 99 |
| 1392 | 100 | 112 | 117 | 117 | 108 | 104 | 103 | 98 | 92 | 112 |
| | 80 | 107 | 114 | 114 | 103 | 100 | 98 | 93 | 88 | 109 |
| | 60 | 104 | 111 | 110 | 100 | 97 | 96 | 93 | 90 | 106 |
| | 50 | 106 | 112 | 111 | 99 | 96 | 95 | 93 | 91 | 106 |
| | 40 | 115 | 117 | 114 | 103 | 98 | 96 | 94 | 92 | 109 |
| 1675 | 100 | 115 | 121 | 120 | 114 | 109 | 107 | 104 | 97 | 117 |
| | 80 | 110 | 117 | 117 | 110 | 105 | 103 | 99 | 94 | 113 |
| | 60 | 107 | 114 | 114 | 107 | 102 | 100 | 98 | 95 | 110 |
| | 50 | 110 | 116 | 114 | 106 | 101 | 99 | 98 | 96 | 110 |
| | 40 | 118 | 121 | 117 | 110 | 103 | 101 | 99 | 96 | 113 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 250 | 100 | 86 | 80 | 71 | 68 | 62 | 54 | 48 | 44 | 71 |
| | 80 | 84 | 79 | 70 | 65 | 61 | 52 | 46 | 44 | 69 |
| | 60 | 81 | 79 | 69 | 65 | 62 | 52 | 47 | 44 | 68 |
| | 50 | 82 | 79 | 69 | 65 | 62 | 52 | 47 | 44 | 68 |
| | 40 | 81 | 78 | 69 | 65 | 62 | 52 | 48 | 45 | 68 |
| 500 | 100 | 103 | 94 | 88 | 85 | 82 | 76 | 69 | 66 | 88 |
| | 80 | 99 | 91 | 84 | 81 | 77 | 71 | 65 | 61 | 83 |
| | 60 | 97 | 89 | 81 | 78 | 75 | 70 | 65 | 63 | 81 |
| | 50 | 98 | 89 | 81 | 77 | 75 | 70 | 66 | 66 | 81 |
| | 40 | 97 | 88 | 80 | 77 | 74 | 69 | 66 | 66 | 81 |
| 700 | 100 | 108 | 106 | 97 | 94 | 91 | 88 | 81 | 76 | 97 |
| | 80 | 102 | 103 | 92 | 89 | 86 | 82 | 75 | 71 | 93 |
| | 60 | 100 | 101 | 90 | 86 | 82 | 79 | 75 | 72 | 90 |
| | 50 | 100 | 99 | 89 | 85 | 81 | 78 | 75 | 73 | 89 |
| | 40 | 100 | 98 | 88 | 85 | 81 | 77 | 74 | 73 | 88 |
| 1000 | 100 | 113 | 115 | 107 | 103 | 100 | 98 | 92 | 85 | 107 |
| | 80 | 110 | 112 | 102 | 99 | 96 | 92 | 87 | 81 | 102 |
| | 60 | 105 | 110 | 100 | 96 | 92 | 89 | 85 | 81 | 100 |
| | 50 | 106 | 109 | 99 | 95 | 91 | 88 | 85 | 82 | 99 |
| | 40 | 107 | 108 | 98 | 94 | 90 | 87 | 85 | 82 | 98 |
| 1392 | 100 | 119 | 121 | 119 | 112 | 109 | 107 | 102 | 96 | 116 |
| | 80 | 116 | 118 | 115 | 108 | 104 | 101 | 96 | 91 | 112 |
| | 60 | 111 | 115 | 114 | 105 | 101 | 98 | 94 | 90 | 109 |
| | 50 | 112 | 115 | 113 | 104 | 100 | 96 | 94 | 90 | 108 |
| | 40 | 113 | 115 | 112 | 103 | 99 | 95 | 93 | 90 | 107 |
| 1675 | 100 | 123 | 125 | 123 | 118 | 114 | 111 | 108 | 102 | 121 |
| | 80 | 119 | 122 | 119 | 114 | 109 | 106 | 102 | 96 | 116 |
| | 60 | 114 | 118 | 117 | 111 | 106 | 103 | 99 | 95 | 114 |
| | 50 | 115 | 118 | 116 | 111 | 105 | 101 | 98 | 95 | 113 |
| | 40 | 116 | 118 | 115 | 110 | 104 | 100 | 98 | 95 | 112 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

49 BISW

Wheel Diameter = 49 in.

Outlet Area = 13.80 ft.²

Tip Speed = 12.83 x RPM

Maximum BHP = (RPM/235)³

Minimum Starting HP = 7½

Maximum RPM Class I = 769

Maximum RPM Class II = 1003

Maximum RPM Class III = 1264

Maximum RPM Class IV = 1521

Maximum Open Motor Frame Size

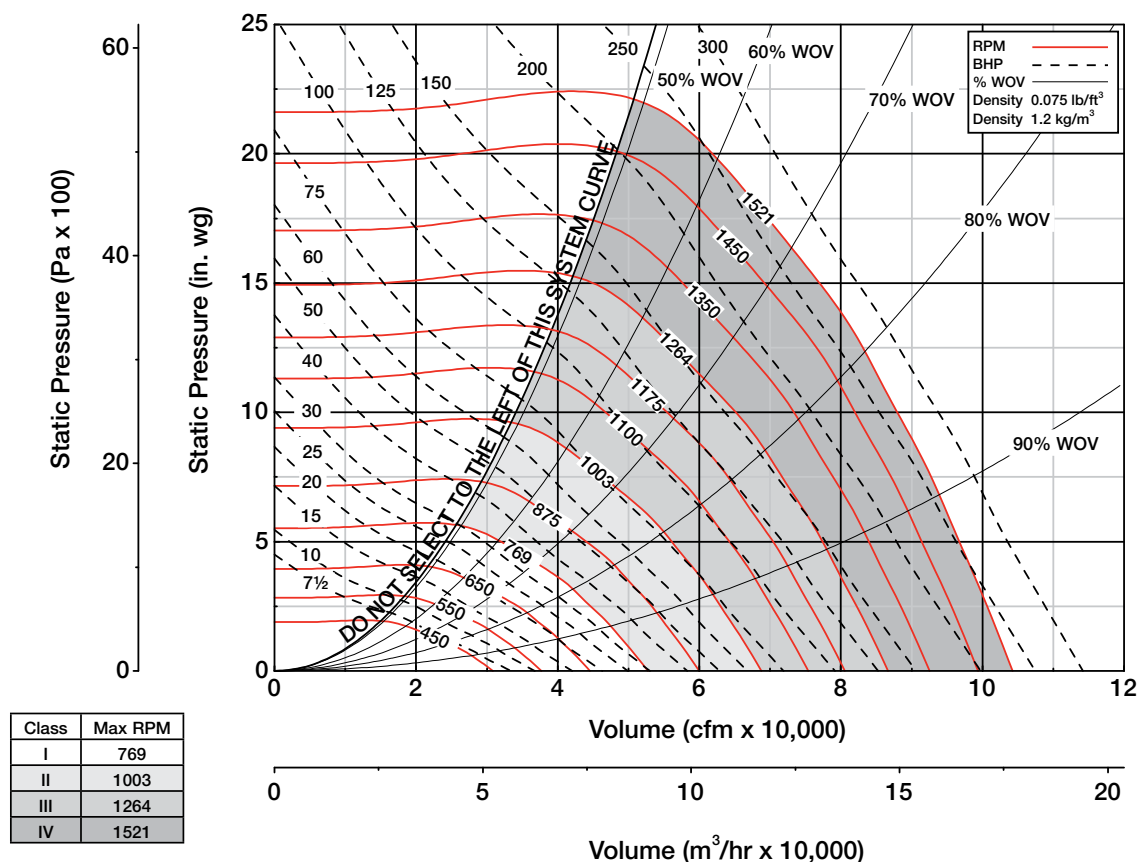
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 364T | 364T | 145T | NA |
| Arr. 10 | 326T | 326T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 11000 | 797 | 250 | 1.16 | 325 | 2.26 | | | | | | | | | | | | | | | | |
| 12800 | 927 | 266 | 1.43 | 333 | 2.59 | | | | | | | | | | | | | | | | |
| 14600 | 1057 | 283 | 1.74 | 347 | 3.02 | 402 | 4.42 | | | | | | | | | | | | | | |
| 16400 | 1188 | 302 | 2.10 | 362 | 3.52 | 414 | 5.01 | 463 | 6.65 | | | | | | | | | | | | |
| 18200 | 1318 | 323 | 2.55 | 377 | 4.08 | 427 | 5.68 | 471 | 7.36 | 517 | 9.24 | | | | | | | | | | |
| 20000 | 1449 | 344 | 3.06 | 394 | 4.70 | 442 | 6.43 | 486 | 8.23 | 525 | 10.1 | 566 | 12.2 | | | | | | | | |
| 21800 | 1579 | 366 | 3.64 | 412 | 5.37 | 458 | 7.27 | 499 | 9.17 | 539 | 11.2 | 574 | 13.2 | 612 | 15.5 | 650 | 17.9 | | | | |
| 23600 | 1710 | 388 | 4.31 | 431 | 6.14 | 474 | 8.16 | 515 | 10.2 | 552 | 12.3 | 588 | 14.5 | 620 | 16.7 | 656 | 19.1 | 691 | 21.7 | | |
| 25400 | 1840 | 412 | 5.11 | 452 | 7.03 | 491 | 9.13 | 531 | 11.3 | 567 | 13.5 | 601 | 15.8 | 635 | 18.1 | 665 | 20.5 | 697 | 23.0 | 730 | 25.9 |
| 27200 | 1971 | 436 | 6.01 | 474 | 8.01 | 510 | 10.2 | 547 | 12.5 | 583 | 14.9 | 616 | 17.3 | 648 | 19.7 | 679 | 22.2 | 707 | 24.7 | 736 | 27.3 |
| 29000 | 2101 | 460 | 7.02 | 495 | 9.09 | 529 | 11.4 | 564 | 13.8 | 599 | 16.3 | 631 | 18.8 | 662 | 21.4 | 692 | 24.0 | 721 | 26.7 | 748 | 29.4 |
| 30800 | 2231 | 484 | 8.14 | 517 | 10.3 | 550 | 12.7 | 582 | 15.2 | 615 | 17.9 | 647 | 20.5 | 677 | 23.2 | 706 | 25.9 | 734 | 28.7 | 762 | 31.5 |
| 32600 | 2362 | 508 | 9.36 | 539 | 11.6 | 572 | 14.1 | 601 | 16.7 | 633 | 19.5 | 664 | 22.3 | 693 | 25.1 | 721 | 27.9 | 748 | 30.8 | 775 | 33.8 |
| 34400 | 2492 | 533 | 10.7 | 563 | 13.1 | 593 | 15.7 | 622 | 18.3 | 651 | 21.2 | 680 | 24.2 | 709 | 27.1 | 737 | 30.1 | 763 | 33.1 | 789 | 36.1 |
| 36200 | 2623 | 558 | 12.2 | 586 | 14.7 | 615 | 17.3 | 643 | 20.2 | 669 | 23.0 | 698 | 26.1 | 726 | 29.3 | 753 | 32.4 | 779 | 35.5 | 804 | 38.7 |
| 38000 | 2753 | 582 | 13.8 | 610 | 16.5 | 637 | 19.2 | 664 | 22.1 | 690 | 25.1 | 716 | 28.2 | 743 | 31.5 | 769 | 34.8 | 795 | 38.1 | 820 | 41.4 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 24800 | 1797 | 728 | 25.4 | | | | | | | | | | | | | | | | | | |
| 26700 | 1934 | 734 | 26.9 | 766 | 29.9 | 796 | 32.9 | | | | | | | | | | | | | | |
| 28600 | 2072 | 745 | 28.9 | 771 | 31.6 | 802 | 34.7 | 831 | 38.0 | 859 | 41.2 | | | | | | | | | | |
| 30500 | 2210 | 760 | 31.1 | 785 | 34.0 | 810 | 36.9 | 837 | 40.0 | 865 | 43.3 | 892 | 46.8 | | | | | | | | |
| 32400 | 2347 | 774 | 33.5 | 800 | 36.5 | 825 | 39.5 | 848 | 42.5 | 871 | 45.6 | 898 | 49.1 | 924 | 52.7 | 949 | 56.3 | 974 | 60.0 | | |
| 34300 | 2485 | 788 | 36.0 | 814 | 39.1 | 839 | 42.2 | 862 | 45.4 | 885 | 48.6 | 907 | 51.8 | 930 | 55.2 | 955 | 59.0 | 980 | 62.8 | 1023 | 70.1 |
| 36200 | 2623 | 804 | 38.7 | 828 | 41.9 | 853 | 45.1 | 876 | 48.4 | 899 | 51.8 | 922 | 55.1 | 942 | 58.5 | 963 | 62.0 | 986 | 65.6 | 1029 | 73.1 |
| 38100 | 2760 | 821 | 41.5 | 845 | 44.8 | 868 | 48.2 | 891 | 51.6 | 914 | 55.1 | 936 | 58.6 | 957 | 62.1 | 977 | 65.6 | 997 | 69.2 | 1035 | 76.2 |
| 40000 | 2898 | 838 | 44.5 | 861 | 48.0 | 884 | 51.5 | 906 | 55.0 | 928 | 58.5 | 950 | 62.2 | 971 | 65.8 | 992 | 69.5 | 1012 | 73.2 | 1045 | 80.1 |
| 41900 | 3036 | 855 | 47.6 | 878 | 51.3 | 901 | 54.9 | 922 | 58.5 | 944 | 62.2 | 964 | 65.9 | 985 | 69.7 | 1006 | 73.5 | 1026 | 77.4 | 1059 | 84.4 |
| 43800 | 3173 | 872 | 50.9 | 895 | 54.7 | 917 | 58.5 | 939 | 62.3 | 960 | 66.1 | 980 | 69.9 | 1000 | 73.8 | 1020 | 77.7 | 1040 | 81.7 | 1074 | 89.0 |
| 45700 | 3311 | 890 | 54.3 | 913 | 58.3 | 935 | 62.2 | 956 | 66.2 | 977 | 70.2 | 997 | 74.1 | 1017 | 78.1 | 1036 | 82.1 | 1055 | 86.2 | 1088 | 93.7 |
| 47600 | 3449 | 910 | 57.9 | 931 | 62.0 | 952 | 66.1 | 973 | 70.3 | 994 | 74.4 | 1014 | 78.5 | 1033 | 82.6 | 1052 | 86.8 | 1071 | 90.9 | 1102 | 98.6 |
| 49500 | 3586 | 929 | 61.6 | 950 | 65.9 | 970 | 70.2 | 991 | 74.5 | 1011 | 78.8 | 1030 | 83.1 | 1050 | 87.3 | 1069 | 91.6 | 1087 | 95.9 | 1117 | 104 |
| 51400 | 3724 | 949 | 65.5 | 969 | 69.9 | 989 | 74.4 | 1008 | 78.9 | 1028 | 83.3 | 1048 | 87.7 | 1067 | 92.2 | 1085 | 96.7 | 1104 | 101 | 1133 | 109 |
| 53300 | 3862 | 971 | 69.9 | 989 | 74.2 | 1008 | 78.7 | 1027 | 83.4 | 1046 | 88.0 | 1065 | 92.6 | 1084 | 97.2 | 1103 | 102 | 1121 | 107 | 1150 | 115 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 44200 | 3202 | 1077 | 89.9 | 1112 | 98.0 | 1147 | 106 | 1180 | 114 | 1220 | 124 | 1257 | 134 | 1293 | 143 | | | | | | |
| 46300 | 3355 | 1092 | 95.2 | 1128 | 104 | 1162 | 112 | 1195 | 120 | 1227 | 129 | 1264 | 139 | 1300 | 149 | 1335 | 159 | 1369 | 169 | | |
| 48400 | 3507 | 1108 | 101 | 1144 | 109 | 1178 | 118 | 1210 | 127 | 1242 | 136 | 1273 | 145 | 1306 | 154 | 1341 | 165 | 1375 | 175 | 1440 | 197 |
| 50500 | 3659 | 1125 | 106 | 1159 | 115 | 1194 | 124 | 1226 | 133 | 1257 | 142 | 1288 | 152 | 1318 | 161 | 1346 | 170 | 1382 | 181 | 1447 | 203 |
| 52600 | 3811 | 1144 | 113 | 1177 | 122 | 1209 | 131 | 1242 | 140 | 1273 | 149 | 1303 | 159 | 1333 | 169 | 1361 | 178 | 1389 | 188 | 1453 | 210 |
| 54700 | 3963 | 1162 | 119 | 1195 | 128 | 1226 | 138 | 1257 | 147 | 1289 | 157 | 1318 | 167 | 1348 | 176 | 1376 | 186 | 1404 | 196 | 1458 | 216 |
| 56800 | 4115 | 1180 | 126 | 1213 | 135 | 1244 | 145 | 1274 | 155 | 1304 | 164 | 1335 | 174 | 1364 | 185 | 1392 | 195 | 1419 | 205 | 1473 | 226 |
| 58900 | 4268 | 1199 | 132 | 1231 | 142 | 1262 | 152 | 1292 | 162 | 1321 | 172 | 1350 | 183 | 1379 | 193 | 1408 | 203 | 1434 | 214 | 1487 | 235 |
| 61000 | 4420 | 1218 | 139 | 1250 | 150 | 1281 | 160 | 1310 | 170 | 1339 | 181 | 1367 | 191 | 1395 | 202 | 1423 | 212 | 1451 | 223 | 1503 | 245 |
| 63100 | 4572 | 1237 | 147 | 1269 | 157 | 1299 | 168 | 1329 | 179 | 1357 | 189 | 1385 | 200 | 1412 | 211 | 1439 | 222 | 1466 | 233 | | |
| 65200 | 4724 | 1258 | 154 | 1288 | 165 | 1318 | 176 | 1347 | 187 | 1375 | 198 | 1403 | 209 | 1430 | 220 | 1456 | 231 | 1481 | 242 | | |
| 67300 | 4876 | 1279 | 162 | 1307 | 173 | 1337 | 185 | 1366 | 196 | 1394 | 208 | 1421 | 219 | 1448 | 230 | 1474 | 241 | 1499 | 253 | | |
| 69400 | 5028 | 1300 | 170 | 1328 | 182 | 1356 | 194 | 1385 | 205 | 1413 | 217 | 1440 | 229 | 1466 | 240 | 1492 | 252 | | | | |
| 71500 | 5181 | 1321 | 178 | 1349 | 190 | 1377 | 203 | 1404 | 215 | 1431 | 227 | 1458 | 239 | 1484 | 251 | | | | | | |
| 73600 | 5333 | 1344 | 187 | 1371 | 199 | 1398 | 212 | 1424 | 224 | 1451 | 237 | 1477 | 249 | 1503 | 261 | | | | | | |
| 75700 | 5485 | 1368 | 197 | 1392 | 209 | 1419 | 221 | 1445 | 234 | 1470 | 247 | 1496 | 260 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 68.6)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 250 | 100 | 86 | 76 | 71 | 66 | 61 | 52 | 45 | 40 | 69 |
| | 80 | 85 | 75 | 69 | 62 | 59 | 49 | 42 | 39 | 66 |
| | 60 | 85 | 74 | 68 | 62 | 60 | 49 | 43 | 38 | 66 |
| | 50 | 84 | 73 | 69 | 63 | 62 | 50 | 45 | 40 | 67 |
| | 40 | 84 | 73 | 69 | 64 | 62 | 51 | 46 | 41 | 67 |
| 500 | 100 | 106 | 96 | 88 | 83 | 82 | 75 | 68 | 63 | 88 |
| | 80 | 103 | 92 | 84 | 79 | 78 | 72 | 66 | 61 | 84 |
| | 60 | 101 | 89 | 81 | 77 | 78 | 72 | 69 | 65 | 83 |
| | 50 | 98 | 87 | 80 | 77 | 77 | 72 | 69 | 65 | 82 |
| | 40 | 102 | 90 | 83 | 78 | 78 | 73 | 70 | 66 | 84 |
| 700 | 100 | 103 | 105 | 97 | 92 | 91 | 87 | 78 | 73 | 97 |
| | 80 | 100 | 105 | 93 | 88 | 86 | 82 | 75 | 71 | 93 |
| | 60 | 97 | 100 | 89 | 85 | 84 | 81 | 78 | 74 | 90 |
| | 50 | 97 | 99 | 88 | 84 | 84 | 80 | 78 | 75 | 90 |
| | 40 | 104 | 98 | 91 | 86 | 84 | 81 | 80 | 78 | 91 |
| 900 | 100 | 108 | 113 | 103 | 98 | 97 | 94 | 87 | 81 | 103 |
| | 80 | 104 | 111 | 99 | 94 | 93 | 89 | 83 | 79 | 100 |
| | 60 | 101 | 107 | 96 | 91 | 90 | 88 | 85 | 82 | 97 |
| | 50 | 102 | 108 | 95 | 90 | 89 | 87 | 85 | 83 | 97 |
| | 40 | 110 | 111 | 99 | 93 | 90 | 88 | 86 | 83 | 99 |
| 1264 | 100 | 114 | 119 | 116 | 108 | 105 | 104 | 98 | 92 | 112 |
| | 80 | 109 | 116 | 112 | 103 | 101 | 99 | 93 | 89 | 108 |
| | 60 | 106 | 113 | 109 | 100 | 98 | 96 | 94 | 91 | 106 |
| | 50 | 108 | 114 | 109 | 99 | 97 | 95 | 94 | 91 | 105 |
| | 40 | 117 | 118 | 112 | 102 | 99 | 96 | 95 | 92 | 108 |
| 1521 | 100 | 117 | 122 | 119 | 114 | 110 | 108 | 104 | 97 | 117 |
| | 80 | 112 | 119 | 115 | 110 | 106 | 103 | 99 | 94 | 113 |
| | 60 | 109 | 116 | 112 | 106 | 102 | 101 | 98 | 96 | 110 |
| | 50 | 111 | 117 | 112 | 106 | 102 | 100 | 98 | 96 | 110 |
| | 40 | 120 | 122 | 116 | 109 | 104 | 101 | 99 | 97 | 113 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 250 | 100 | 89 | 83 | 74 | 71 | 65 | 57 | 51 | 47 | 73 |
| | 80 | 86 | 82 | 73 | 68 | 64 | 55 | 49 | 47 | 72 |
| | 60 | 84 | 82 | 72 | 68 | 65 | 55 | 50 | 47 | 71 |
| | 50 | 85 | 82 | 72 | 68 | 65 | 55 | 50 | 47 | 71 |
| | 40 | 84 | 81 | 72 | 68 | 65 | 55 | 51 | 48 | 71 |
| 500 | 100 | 106 | 97 | 91 | 88 | 85 | 79 | 72 | 69 | 91 |
| | 80 | 101 | 94 | 87 | 84 | 80 | 74 | 68 | 64 | 86 |
| | 60 | 100 | 92 | 84 | 81 | 78 | 73 | 68 | 66 | 84 |
| | 50 | 101 | 92 | 84 | 80 | 78 | 73 | 69 | 68 | 84 |
| | 40 | 100 | 91 | 83 | 80 | 77 | 72 | 69 | 69 | 83 |
| 700 | 100 | 110 | 109 | 99 | 97 | 94 | 91 | 84 | 79 | 100 |
| | 80 | 105 | 105 | 95 | 92 | 89 | 85 | 78 | 74 | 96 |
| | 60 | 103 | 104 | 93 | 89 | 85 | 82 | 78 | 75 | 93 |
| | 50 | 103 | 102 | 92 | 88 | 84 | 81 | 78 | 75 | 92 |
| | 40 | 103 | 101 | 91 | 88 | 84 | 80 | 77 | 76 | 91 |
| 900 | 100 | 114 | 116 | 107 | 104 | 100 | 98 | 92 | 85 | 107 |
| | 80 | 111 | 113 | 103 | 99 | 96 | 92 | 86 | 81 | 103 |
| | 60 | 107 | 111 | 100 | 96 | 92 | 89 | 85 | 81 | 100 |
| | 50 | 107 | 110 | 99 | 95 | 91 | 88 | 85 | 82 | 99 |
| | 40 | 108 | 109 | 98 | 94 | 90 | 87 | 85 | 82 | 98 |
| 1264 | 100 | 121 | 122 | 118 | 113 | 109 | 107 | 103 | 96 | 116 |
| | 80 | 118 | 119 | 114 | 108 | 105 | 102 | 96 | 91 | 112 |
| | 60 | 112 | 117 | 112 | 105 | 101 | 98 | 94 | 91 | 109 |
| | 50 | 113 | 116 | 111 | 104 | 100 | 97 | 94 | 91 | 108 |
| | 40 | 114 | 115 | 110 | 104 | 99 | 96 | 94 | 91 | 107 |
| 1521 | 100 | 124 | 126 | 121 | 118 | 114 | 112 | 108 | 102 | 121 |
| | 80 | 121 | 123 | 117 | 114 | 110 | 107 | 102 | 96 | 116 |
| | 60 | 115 | 120 | 115 | 111 | 106 | 103 | 99 | 96 | 113 |
| | 50 | 116 | 119 | 114 | 110 | 105 | 102 | 99 | 96 | 113 |
| | 40 | 117 | 119 | 113 | 109 | 104 | 101 | 98 | 96 | 112 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

54 BISW

Wheel Diameter = 54¼ in.

Outlet Area = 16.92 ft.²

Tip Speed = 14.20 x RPM

Maximum BHP = (RPM/198)³

Minimum Starting HP = 15

Maximum RPM Class I = 695

Maximum RPM Class II = 905

Maximum RPM Class III = 1142

Maximum RPM Class IV = 1375

Maximum Open Motor Frame Size

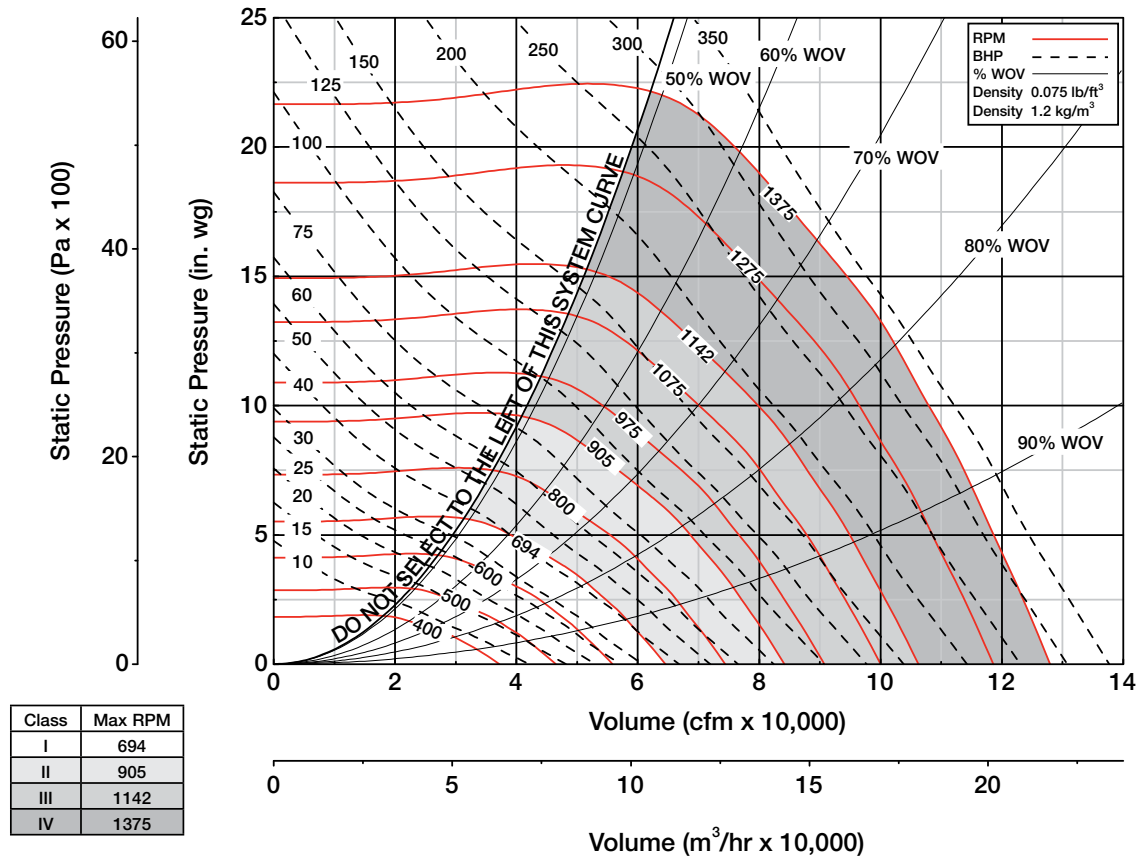
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 404T | 404T | 444T | NA |
| Arr. 10 | 365T | 365T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 13500 | 797 | 226 | 1.42 | 294 | 2.77 | | | | | | | | | | | | | | | | |
| 15600 | 921 | 240 | 1.74 | 300 | 3.15 | | | | | | | | | | | | | | | | |
| 17700 | 1046 | 254 | 2.10 | 312 | 3.66 | 363 | 5.37 | | | | | | | | | | | | | | |
| 19800 | 1170 | 270 | 2.51 | 325 | 4.23 | 372 | 6.03 | 417 | 8.06 | | | | | | | | | | | | |
| 21900 | 1294 | 288 | 3.01 | 338 | 4.88 | 384 | 6.80 | 424 | 8.84 | 466 | 11.2 | | | | | | | | | | |
| 24000 | 1418 | 306 | 3.59 | 352 | 5.58 | 396 | 7.66 | 436 | 9.83 | 471 | 12.1 | 510 | 14.7 | | | | | | | | |
| 26100 | 1542 | 325 | 4.25 | 368 | 6.35 | 409 | 8.61 | 447 | 10.9 | 483 | 13.3 | 515 | 15.8 | 552 | 18.6 | | | | | | |
| 28200 | 1666 | 344 | 4.99 | 384 | 7.19 | 423 | 9.63 | 460 | 12.1 | 495 | 14.6 | 527 | 17.2 | 556 | 19.9 | 591 | 22.9 | 622 | 26.1 | | |
| 30300 | 1790 | 364 | 5.87 | 401 | 8.19 | 438 | 10.7 | 474 | 13.4 | 507 | 16.0 | 539 | 18.7 | 569 | 21.5 | 596 | 24.4 | 627 | 27.6 | 657 | 31.0 |
| 32400 | 1914 | 384 | 6.88 | 420 | 9.29 | 453 | 11.9 | 488 | 14.7 | 520 | 17.5 | 550 | 20.4 | 580 | 23.3 | 608 | 26.3 | 633 | 29.4 | 662 | 32.7 |
| 34500 | 2039 | 405 | 8.00 | 438 | 10.5 | 469 | 13.2 | 502 | 16.2 | 534 | 19.2 | 564 | 22.2 | 592 | 25.2 | 619 | 28.4 | 646 | 31.6 | 670 | 34.8 |
| 36600 | 2163 | 426 | 9.25 | 457 | 11.8 | 487 | 14.7 | 518 | 17.7 | 548 | 20.9 | 577 | 24.1 | 604 | 27.2 | 631 | 30.5 | 657 | 33.8 | 682 | 37.2 |
| 38700 | 2287 | 447 | 10.6 | 476 | 13.3 | 505 | 16.3 | 533 | 19.4 | 562 | 22.7 | 591 | 26.1 | 618 | 29.4 | 643 | 32.8 | 669 | 36.3 | 693 | 39.8 |
| 40800 | 2411 | 468 | 12.1 | 495 | 14.8 | 524 | 18.0 | 550 | 21.2 | 578 | 24.6 | 605 | 28.2 | 632 | 31.7 | 657 | 35.2 | 681 | 38.8 | 705 | 42.5 |
| 42900 | 2535 | 489 | 13.7 | 515 | 16.7 | 542 | 19.9 | 568 | 23.2 | 593 | 26.7 | 620 | 30.4 | 646 | 34.1 | 670 | 37.8 | 694 | 41.6 | 717 | 45.3 |
| 45000 | 2659 | 510 | 15.5 | 536 | 18.6 | 561 | 21.9 | 586 | 25.4 | 610 | 28.9 | 635 | 32.7 | 660 | 36.7 | 684 | 40.6 | 708 | 44.4 | 730 | 48.3 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 30500 | 1802 | 658 | 31.2 | | | | | | | | | | | | | | | | | | |
| 32900 | 1944 | 663 | 33.1 | 692 | 36.8 | 720 | 40.5 | | | | | | | | | | | | | | |
| 35300 | 2086 | 674 | 35.7 | 698 | 39.0 | 725 | 42.8 | 751 | 46.8 | 777 | 50.8 | | | | | | | | | | |
| 37700 | 2228 | 688 | 38.5 | 710 | 42.1 | 733 | 45.6 | 757 | 49.3 | 782 | 53.5 | 807 | 57.7 | 830 | 62.0 | | | | | | |
| 40100 | 2369 | 701 | 41.6 | 724 | 45.2 | 747 | 48.9 | 768 | 52.7 | 789 | 56.5 | 812 | 60.6 | 836 | 65.1 | 859 | 69.6 | 881 | 74.2 | | |
| 42500 | 2511 | 715 | 44.8 | 737 | 48.6 | 760 | 52.5 | 782 | 56.4 | 801 | 60.3 | 822 | 64.3 | 841 | 68.4 | 864 | 72.9 | 886 | 77.6 | 926 | 86.7 |
| 44900 | 2653 | 730 | 48.2 | 751 | 52.1 | 773 | 56.2 | 795 | 60.2 | 815 | 64.4 | 835 | 68.5 | 854 | 72.7 | 873 | 77.0 | 891 | 81.2 | 931 | 90.5 |
| 47300 | 2795 | 745 | 51.8 | 767 | 55.9 | 787 | 60.1 | 808 | 64.3 | 828 | 68.6 | 848 | 72.9 | 868 | 77.3 | 887 | 81.7 | 904 | 86.1 | 935 | 94.4 |
| 49700 | 2937 | 761 | 55.7 | 782 | 60.0 | 803 | 64.3 | 823 | 68.6 | 842 | 73.0 | 862 | 77.5 | 881 | 82.0 | 900 | 86.6 | 918 | 91.2 | 948 | 99.7 |
| 52100 | 3079 | 777 | 59.7 | 798 | 64.2 | 818 | 68.7 | 838 | 73.2 | 857 | 77.7 | 875 | 82.3 | 894 | 87.0 | 913 | 91.7 | 931 | 96.5 | 961 | 105 |
| 54500 | 3221 | 794 | 63.9 | 814 | 68.6 | 834 | 73.3 | 853 | 78.0 | 872 | 82.7 | 891 | 87.5 | 909 | 92.2 | 926 | 97.1 | 944 | 102 | 975 | 111 |
| 56900 | 3362 | 811 | 68.2 | 831 | 73.2 | 850 | 78.1 | 869 | 83.0 | 888 | 87.9 | 906 | 92.9 | 924 | 97.8 | 941 | 103 | 958 | 108 | 988 | 117 |
| 59300 | 3504 | 829 | 72.8 | 848 | 77.9 | 867 | 83.1 | 885 | 88.2 | 904 | 93.4 | 922 | 98.5 | 939 | 104 | 956 | 109 | 973 | 114 | 1001 | 123 |
| 61700 | 3646 | 847 | 77.6 | 866 | 82.9 | 884 | 88.3 | 902 | 93.7 | 920 | 99.0 | 938 | 104 | 955 | 110 | 972 | 115 | 989 | 120 | 1015 | 130 |
| 64100 | 3788 | 866 | 82.8 | 884 | 88.1 | 902 | 93.7 | 919 | 99.3 | 936 | 105 | 954 | 110 | 971 | 116 | 988 | 122 | 1004 | 127 | 1031 | 137 |
| 66500 | 3930 | 887 | 88.4 | 903 | 93.7 | 920 | 99.3 | 937 | 105 | 954 | 111 | 970 | 117 | 987 | 122 | 1004 | 128 | 1020 | 134 | 1046 | 144 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 54100 | 3197 | 972 | 110 | 1004 | 120 | 1036 | 130 | 1066 | 140 | 1102 | 152 | 1136 | 164 | 1168 | 176 | | | | | | |
| 56700 | 3351 | 986 | 117 | 1019 | 127 | 1049 | 137 | 1079 | 148 | 1108 | 158 | 1141 | 170 | 1174 | 182 | 1206 | 195 | 1237 | 207 | | |
| 59300 | 3504 | 1001 | 123 | 1033 | 134 | 1064 | 145 | 1093 | 155 | 1122 | 166 | 1150 | 177 | 1180 | 189 | 1212 | 202 | 1242 | 215 | 1301 | 241 |
| 61900 | 3658 | 1017 | 131 | 1047 | 141 | 1078 | 152 | 1108 | 163 | 1136 | 175 | 1163 | 186 | 1190 | 197 | 1216 | 209 | 1248 | 222 | 1307 | 249 |
| 64500 | 3812 | 1033 | 138 | 1063 | 149 | 1092 | 160 | 1122 | 172 | 1151 | 183 | 1177 | 195 | 1204 | 207 | 1230 | 219 | 1256 | 230 | 1313 | 257 |
| 67100 | 3965 | 1050 | 146 | 1080 | 157 | 1108 | 169 | 1136 | 181 | 1165 | 192 | 1192 | 204 | 1218 | 216 | 1244 | 229 | 1269 | 241 | 1317 | 266 |
| 69700 | 4119 | 1067 | 154 | 1096 | 166 | 1124 | 178 | 1152 | 190 | 1179 | 202 | 1206 | 214 | 1233 | 227 | 1257 | 239 | 1282 | 252 | 1331 | 277 |
| 72300 | 4273 | 1084 | 163 | 1113 | 175 | 1141 | 187 | 1168 | 199 | 1194 | 212 | 1220 | 224 | 1247 | 237 | 1272 | 250 | 1296 | 263 | 1344 | 289 |
| 74900 | 4426 | 1101 | 171 | 1130 | 184 | 1158 | 197 | 1185 | 209 | 1211 | 222 | 1236 | 235 | 1261 | 248 | 1286 | 261 | 1311 | 274 | 1358 | 301 |
| 77500 | 4580 | 1119 | 180 | 1147 | 194 | 1175 | 207 | 1201 | 220 | 1227 | 233 | 1252 | 246 | 1277 | 259 | 1300 | 272 | 1325 | 286 | | |
| 80100 | 4734 | 1138 | 190 | 1165 | 203 | 1192 | 217 | 1218 | 230 | 1244 | 244 | 1269 | 257 | 1293 | 271 | 1316 | 284 | 1339 | 298 | | |
| 82700 | 4887 | 1157 | 199 | 1183 | 214 | 1209 | 227 | 1235 | 241 | 1260 | 255 | 1285 | 269 | 1309 | 283 | 1333 | 297 | 1355 | 311 | | |
| 85300 | 5041 | 1176 | 209 | 1202 | 224 | 1227 | 238 | 1253 | 253 | 1278 | 267 | 1302 | 282 | 1326 | 296 | 1349 | 310 | | | | |
| 87900 | 5195 | 1196 | 220 | 1221 | 235 | 1246 | 250 | 1270 | 264 | 1295 | 279 | 1319 | 294 | 1343 | 309 | | | | | | |
| 90500 | 5348 | 1216 | 231 | 1240 | 246 | 1265 | 261 | 1288 | 277 | 1313 | 292 | 1336 | 307 | 1360 | 322 | | | | | | |
| 93100 | 5502 | 1238 | 243 | 1260 | 257 | 1284 | 273 | 1308 | 289 | 1330 | 305 | 1354 | 320 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 93.0)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 200 | 100 | 81 | 73 | 68 | 62 | 56 | 48 | 41 | 36 | 65 |
| | 80 | 79 | 71 | 65 | 59 | 54 | 45 | 39 | 36 | 62 |
| | 60 | 79 | 70 | 64 | 60 | 55 | 45 | 40 | 34 | 62 |
| | 50 | 79 | 70 | 65 | 62 | 56 | 47 | 41 | 37 | 63 |
| | 40 | 78 | 70 | 65 | 62 | 57 | 48 | 42 | 38 | 64 |
| 400 | 100 | 104 | 92 | 84 | 81 | 78 | 71 | 64 | 60 | 85 |
| | 80 | 101 | 88 | 80 | 77 | 74 | 68 | 63 | 58 | 81 |
| | 60 | 99 | 85 | 78 | 76 | 74 | 70 | 66 | 62 | 80 |
| | 50 | 96 | 83 | 77 | 76 | 74 | 70 | 66 | 62 | 79 |
| | 40 | 100 | 86 | 79 | 77 | 74 | 70 | 67 | 63 | 81 |
| 600 | 100 | 104 | 103 | 95 | 92 | 91 | 84 | 77 | 72 | 95 |
| | 80 | 102 | 101 | 91 | 87 | 85 | 80 | 74 | 70 | 91 |
| | 60 | 99 | 97 | 88 | 85 | 83 | 80 | 77 | 73 | 89 |
| | 50 | 99 | 96 | 87 | 84 | 82 | 80 | 77 | 74 | 88 |
| | 40 | 103 | 97 | 90 | 86 | 83 | 81 | 79 | 77 | 90 |
| 800 | 100 | 109 | 113 | 103 | 99 | 97 | 94 | 87 | 81 | 103 |
| | 80 | 106 | 111 | 99 | 95 | 93 | 89 | 83 | 79 | 100 |
| | 60 | 103 | 107 | 95 | 91 | 90 | 88 | 85 | 82 | 97 |
| | 50 | 104 | 108 | 95 | 90 | 89 | 88 | 86 | 83 | 97 |
| | 40 | 110 | 111 | 98 | 93 | 90 | 88 | 86 | 83 | 99 |
| 1140 | 100 | 116 | 120 | 114 | 107 | 106 | 105 | 98 | 92 | 112 |
| | 80 | 111 | 118 | 110 | 103 | 102 | 99 | 93 | 89 | 109 |
| | 60 | 108 | 115 | 107 | 100 | 99 | 97 | 94 | 91 | 106 |
| | 50 | 110 | 115 | 107 | 99 | 98 | 96 | 95 | 92 | 106 |
| | 40 | 119 | 119 | 111 | 102 | 99 | 97 | 95 | 93 | 108 |
| 1375 | 100 | 119 | 124 | 122 | 113 | 110 | 109 | 104 | 97 | 118 |
| | 80 | 114 | 121 | 119 | 109 | 106 | 104 | 99 | 94 | 114 |
| | 60 | 111 | 118 | 116 | 106 | 103 | 101 | 99 | 96 | 111 |
| | 50 | 114 | 119 | 116 | 105 | 102 | 101 | 99 | 97 | 111 |
| | 40 | 122 | 123 | 120 | 109 | 104 | 102 | 100 | 97 | 115 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 200 | 100 | 85 | 79 | 72 | 68 | 61 | 53 | 48 | 44 | 70 |
| | 80 | 84 | 77 | 70 | 65 | 59 | 51 | 47 | 44 | 68 |
| | 60 | 82 | 77 | 69 | 66 | 60 | 51 | 47 | 44 | 68 |
| | 50 | 82 | 77 | 69 | 65 | 60 | 52 | 48 | 45 | 68 |
| | 40 | 82 | 76 | 69 | 66 | 60 | 52 | 48 | 45 | 68 |
| 400 | 100 | 104 | 93 | 88 | 85 | 81 | 75 | 69 | 66 | 87 |
| | 80 | 100 | 90 | 84 | 81 | 76 | 70 | 65 | 61 | 83 |
| | 60 | 98 | 87 | 81 | 78 | 74 | 69 | 66 | 63 | 81 |
| | 50 | 99 | 87 | 81 | 78 | 74 | 70 | 67 | 66 | 81 |
| | 40 | 98 | 87 | 80 | 77 | 73 | 69 | 67 | 67 | 80 |
| 600 | 100 | 111 | 106 | 99 | 96 | 93 | 89 | 82 | 78 | 99 |
| | 80 | 106 | 102 | 94 | 91 | 88 | 83 | 77 | 73 | 94 |
| | 60 | 104 | 101 | 92 | 88 | 84 | 81 | 77 | 74 | 92 |
| | 50 | 103 | 99 | 91 | 87 | 83 | 80 | 77 | 75 | 91 |
| | 40 | 103 | 98 | 90 | 87 | 83 | 79 | 77 | 75 | 90 |
| 800 | 100 | 115 | 116 | 107 | 103 | 101 | 98 | 91 | 84 | 107 |
| | 80 | 112 | 113 | 103 | 99 | 96 | 92 | 86 | 80 | 103 |
| | 60 | 108 | 111 | 100 | 96 | 92 | 89 | 85 | 81 | 100 |
| | 50 | 108 | 110 | 99 | 95 | 91 | 88 | 85 | 82 | 99 |
| | 40 | 108 | 109 | 98 | 94 | 90 | 87 | 85 | 82 | 98 |
| 1140 | 100 | 122 | 123 | 117 | 113 | 109 | 108 | 103 | 95 | 116 |
| | 80 | 119 | 120 | 113 | 109 | 105 | 102 | 96 | 91 | 112 |
| | 60 | 113 | 119 | 110 | 106 | 102 | 99 | 95 | 91 | 109 |
| | 50 | 114 | 117 | 109 | 105 | 100 | 97 | 95 | 91 | 108 |
| | 40 | 116 | 116 | 109 | 104 | 99 | 96 | 94 | 91 | 107 |
| 1375 | 100 | 125 | 127 | 125 | 118 | 114 | 112 | 108 | 101 | 122 |
| | 80 | 122 | 124 | 121 | 114 | 110 | 107 | 102 | 96 | 117 |
| | 60 | 117 | 121 | 119 | 111 | 107 | 103 | 100 | 96 | 115 |
| | 50 | 118 | 121 | 118 | 110 | 105 | 102 | 99 | 96 | 114 |
| | 40 | 119 | 120 | 117 | 109 | 105 | 101 | 99 | 96 | 113 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

| |
|--------------------------------------|
| 60 BISW |
| Wheel Diameter = 60 in. |
| Outlet Area = 20.70 ft. ² |
| Tip Speed = 15.71 x RPM |
| Maximum BHP = (RPM/168) ³ |

| |
|------------------------------|
| Minimum Starting HP = 20 |
| Maximum RPM Class I = 628 |
| Maximum RPM Class II = 819 |
| Maximum RPM Class III = 1032 |
| Maximum RPM Class IV = 1243 |

Maximum Open Motor Frame Size

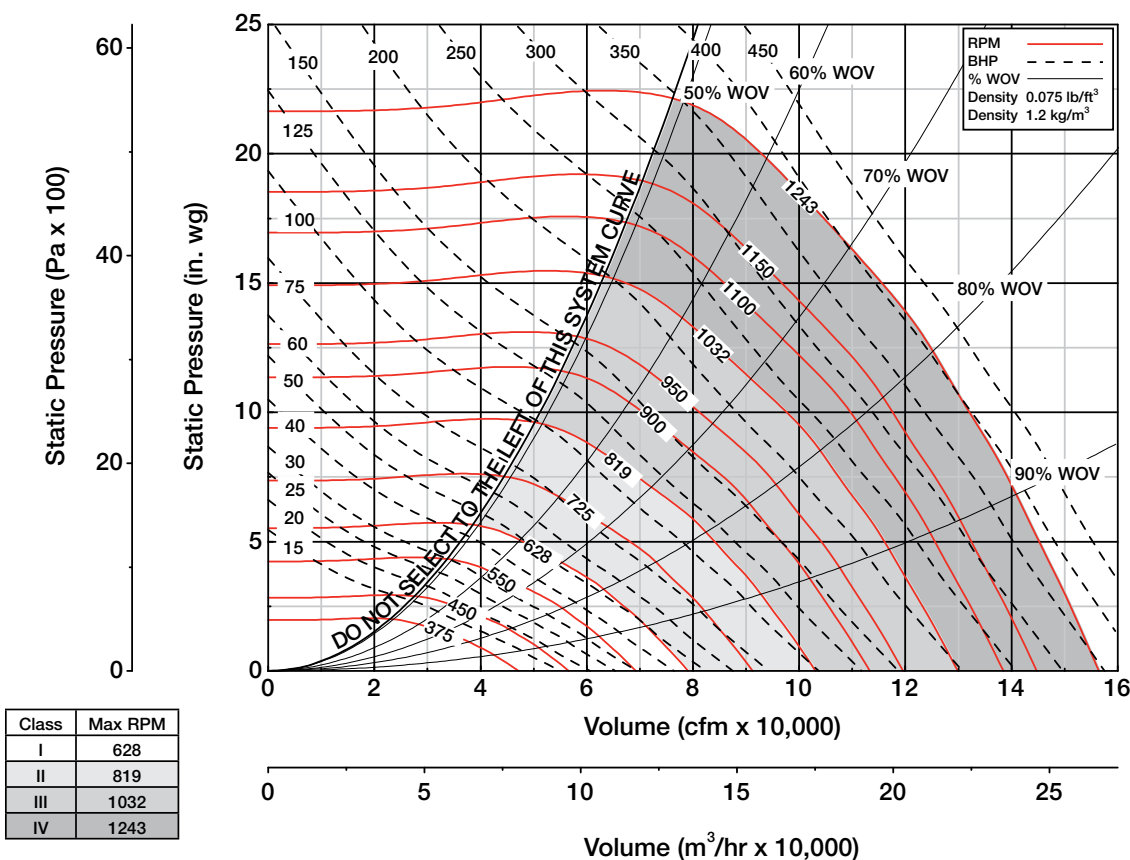
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 404T | 404T | 444T | NA |
| Arr. 10 | 365T | 365T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 16600 | 801 | 205 | 1.75 | 266 | 3.40 | | | | | | | | | | | | | | | | |
| 19200 | 927 | 217 | 2.15 | 271 | 3.88 | | | | | | | | | | | | | | | | |
| 21800 | 1053 | 231 | 2.60 | 283 | 4.51 | 328 | 6.60 | | | | | | | | | | | | | | |
| 24400 | 1178 | 245 | 3.11 | 294 | 5.22 | 337 | 7.44 | 378 | 9.91 | | | | | | | | | | | | |
| 27000 | 1304 | 262 | 3.74 | 307 | 6.03 | 348 | 8.40 | 384 | 10.9 | 422 | 13.7 | | | | | | | | | | |
| 29600 | 1429 | 279 | 4.47 | 320 | 6.91 | 359 | 9.47 | 395 | 12.1 | 427 | 14.9 | 462 | 18.1 | | | | | | | | |
| 32200 | 1555 | 296 | 5.29 | 334 | 7.87 | 372 | 10.7 | 406 | 13.5 | 438 | 16.4 | 467 | 19.5 | 499 | 22.9 | | | | | | |
| 34800 | 1681 | 313 | 6.23 | 349 | 8.93 | 384 | 11.9 | 418 | 15.0 | 449 | 18.1 | 478 | 21.3 | 504 | 24.5 | 534 | 28.2 | 563 | 32.2 | | |
| 37400 | 1806 | 331 | 7.34 | 365 | 10.2 | 398 | 13.3 | 430 | 16.6 | 460 | 19.8 | 488 | 23.2 | 515 | 26.6 | 540 | 30.1 | 568 | 34.0 | 595 | 38.2 |
| 40000 | 1932 | 350 | 8.60 | 382 | 11.6 | 412 | 14.8 | 443 | 18.3 | 472 | 21.7 | 499 | 25.2 | 526 | 28.8 | 551 | 32.5 | 574 | 36.3 | 599 | 40.3 |
| 42600 | 2057 | 369 | 10.0 | 399 | 13.1 | 427 | 16.4 | 456 | 20.1 | 485 | 23.8 | 511 | 27.4 | 537 | 31.2 | 562 | 35.1 | 585 | 39.0 | 607 | 43.0 |
| 45200 | 2183 | 388 | 11.6 | 416 | 14.7 | 443 | 18.3 | 470 | 22.0 | 498 | 25.9 | 524 | 29.8 | 548 | 33.8 | 572 | 37.8 | 596 | 41.9 | 618 | 46.0 |
| 47800 | 2309 | 407 | 13.3 | 433 | 16.6 | 460 | 20.3 | 485 | 24.1 | 511 | 28.2 | 536 | 32.3 | 561 | 36.5 | 584 | 40.6 | 606 | 44.9 | 629 | 49.2 |
| 50400 | 2434 | 426 | 15.2 | 451 | 18.6 | 477 | 22.5 | 500 | 26.4 | 525 | 30.6 | 549 | 35.0 | 573 | 39.4 | 596 | 43.7 | 618 | 48.1 | 639 | 52.6 |
| 53000 | 2560 | 446 | 17.2 | 469 | 20.9 | 494 | 24.8 | 517 | 28.9 | 539 | 33.2 | 563 | 37.8 | 586 | 42.4 | 609 | 47.0 | 630 | 51.5 | 651 | 56.2 |
| 55600 | 2685 | 465 | 19.5 | 488 | 23.3 | 511 | 27.3 | 534 | 31.7 | 555 | 36.0 | 577 | 40.7 | 599 | 45.5 | 621 | 50.3 | 643 | 55.1 | 663 | 60.0 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-----|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 37300 | 1801 | 595 | 38.1 | | | | | | | | | | | | | | | | | | |
| 40200 | 1942 | 600 | 40.5 | 626 | 45.0 | 650 | 49.5 | | | | | | | | | | | | | | |
| 43100 | 2082 | 609 | 43.6 | 630 | 47.7 | 655 | 52.3 | 679 | 57.1 | 702 | 62.0 | | | | | | | | | | |
| 46000 | 2222 | 621 | 47.0 | 642 | 51.3 | 662 | 55.6 | 684 | 60.2 | 707 | 65.3 | 729 | 70.5 | 750 | 75.7 | | | | | | |
| 48900 | 2362 | 633 | 50.6 | 654 | 55.1 | 675 | 59.6 | 693 | 64.2 | 712 | 68.9 | 734 | 74.0 | 755 | 79.4 | 776 | 84.9 | 796 | 90.5 | | |
| 51800 | 2502 | 645 | 54.5 | 666 | 59.1 | 686 | 63.9 | 706 | 68.7 | 724 | 73.5 | 742 | 78.4 | 760 | 83.3 | 781 | 88.9 | 801 | 94.7 | 837 | 106 |
| 54700 | 2642 | 659 | 58.6 | 678 | 63.4 | 698 | 68.3 | 717 | 73.3 | 736 | 78.3 | 754 | 83.4 | 771 | 88.5 | 788 | 93.7 | 806 | 98.9 | 841 | 110 |
| 57600 | 2782 | 673 | 63.0 | 692 | 68.0 | 711 | 73.1 | 729 | 78.2 | 748 | 83.4 | 766 | 88.7 | 784 | 94.0 | 800 | 99.4 | 816 | 105 | 846 | 115 |
| 60500 | 2922 | 687 | 67.6 | 706 | 72.8 | 724 | 78.1 | 742 | 83.4 | 760 | 88.7 | 778 | 94.2 | 795 | 99.7 | 812 | 105 | 829 | 111 | 856 | 121 |
| 63400 | 3062 | 701 | 72.4 | 720 | 77.9 | 738 | 83.4 | 756 | 88.9 | 773 | 94.4 | 790 | 100 | 807 | 106 | 824 | 112 | 840 | 117 | 867 | 128 |
| 66300 | 3202 | 716 | 77.5 | 734 | 83.2 | 752 | 89.0 | 770 | 94.7 | 787 | 100 | 804 | 106 | 820 | 112 | 836 | 118 | 852 | 124 | 880 | 135 |
| 69200 | 3342 | 731 | 82.7 | 749 | 88.7 | 767 | 94.7 | 784 | 101 | 801 | 107 | 817 | 113 | 833 | 119 | 849 | 125 | 864 | 131 | 891 | 142 |
| 72100 | 3483 | 747 | 88.1 | 764 | 94.4 | 781 | 101 | 798 | 107 | 815 | 113 | 831 | 119 | 847 | 126 | 863 | 132 | 878 | 138 | 903 | 150 |
| 75000 | 3623 | 763 | 93.9 | 780 | 100 | 796 | 107 | 813 | 113 | 829 | 120 | 845 | 126 | 861 | 133 | 876 | 139 | 891 | 146 | 916 | 158 |
| 77900 | 3763 | 780 | 100 | 796 | 107 | 812 | 113 | 828 | 120 | 844 | 127 | 860 | 134 | 875 | 140 | 890 | 147 | 905 | 154 | 930 | 166 |
| 80800 | 3903 | 798 | 107 | 812 | 113 | 828 | 120 | 844 | 127 | 859 | 134 | 874 | 141 | 890 | 148 | 905 | 155 | 919 | 162 | 943 | 175 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 66200 | 3198 | 879 | 135 | 908 | 147 | 936 | 159 | 964 | 171 | 996 | 186 | 1027 | 200 | 1056 | 215 | | | | | | |
| 69400 | 3352 | 892 | 143 | 922 | 155 | 949 | 168 | 976 | 181 | 1002 | 193 | 1032 | 208 | 1062 | 223 | 1090 | 238 | 1118 | 254 | | |
| 72600 | 3507 | 905 | 151 | 934 | 164 | 963 | 177 | 989 | 190 | 1015 | 203 | 1040 | 217 | 1067 | 231 | 1096 | 247 | 1123 | 263 | 1177 | 295 |
| 75800 | 3661 | 920 | 160 | 947 | 173 | 975 | 187 | 1002 | 200 | 1027 | 214 | 1052 | 228 | 1077 | 242 | 1100 | 256 | 1129 | 272 | 1182 | 305 |
| 79000 | 3816 | 935 | 169 | 962 | 183 | 988 | 197 | 1015 | 211 | 1041 | 225 | 1065 | 239 | 1089 | 253 | 1112 | 268 | 1135 | 282 | 1187 | 315 |
| 82200 | 3971 | 950 | 179 | 977 | 193 | 1003 | 207 | 1028 | 221 | 1054 | 236 | 1078 | 251 | 1102 | 265 | 1125 | 280 | 1148 | 295 | 1191 | 325 |
| 85400 | 4125 | 965 | 189 | 992 | 203 | 1017 | 218 | 1042 | 233 | 1066 | 247 | 1091 | 263 | 1115 | 278 | 1137 | 293 | 1160 | 308 | 1204 | 339 |
| 88600 | 4280 | 981 | 199 | 1007 | 215 | 1032 | 229 | 1057 | 244 | 1081 | 260 | 1104 | 275 | 1128 | 291 | 1151 | 306 | 1173 | 322 | 1216 | 354 |
| 91800 | 4434 | 997 | 210 | 1023 | 226 | 1048 | 241 | 1072 | 257 | 1096 | 272 | 1118 | 288 | 1141 | 304 | 1164 | 320 | 1186 | 336 | 1229 | 369 |
| 95000 | 4589 | 1013 | 221 | 1038 | 237 | 1063 | 254 | 1087 | 270 | 1111 | 286 | 1133 | 302 | 1155 | 318 | 1177 | 334 | 1199 | 351 | | |
| 98200 | 4743 | 1030 | 233 | 1054 | 250 | 1079 | 266 | 1102 | 283 | 1126 | 299 | 1148 | 316 | 1170 | 332 | 1191 | 349 | 1212 | 366 | | |
| 101400 | 4898 | 1047 | 245 | 1071 | 262 | 1095 | 279 | 1118 | 296 | 1141 | 314 | 1163 | 330 | 1185 | 347 | 1206 | 365 | 1227 | 382 | | |
| 104600 | 5053 | 1065 | 257 | 1088 | 275 | 1111 | 293 | 1134 | 310 | 1157 | 328 | 1178 | 346 | 1200 | 363 | 1221 | 381 | | | | |
| 107800 | 5207 | 1083 | 270 | 1106 | 288 | 1128 | 306 | 1150 | 325 | 1172 | 343 | 1194 | 361 | 1215 | 379 | | | | | | |
| 111000 | 5362 | 1102 | 284 | 1123 | 302 | 1145 | 321 | 1167 | 340 | 1188 | 358 | 1210 | 377 | 1231 | 396 | | | | | | |
| 114200 | 5516 | 1122 | 299 | 1141 | 316 | 1163 | 335 | 1184 | 355 | 1205 | 374 | 1226 | 393 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 126)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 200 | 100 | 84 | 76 | 71 | 66 | 59 | 51 | 44 | 39 | 68 |
| | 80 | 83 | 74 | 68 | 63 | 57 | 48 | 42 | 39 | 65 |
| | 60 | 82 | 73 | 67 | 63 | 58 | 48 | 43 | 38 | 65 |
| | 50 | 82 | 73 | 68 | 65 | 59 | 50 | 45 | 40 | 66 |
| | 40 | 82 | 73 | 69 | 65 | 60 | 51 | 45 | 41 | 67 |
| 400 | 100 | 108 | 95 | 87 | 84 | 82 | 74 | 67 | 63 | 88 |
| | 80 | 105 | 91 | 83 | 80 | 77 | 71 | 66 | 61 | 84 |
| | 60 | 102 | 88 | 81 | 79 | 77 | 73 | 69 | 65 | 83 |
| | 50 | 99 | 86 | 80 | 79 | 77 | 73 | 69 | 65 | 82 |
| | 40 | 104 | 89 | 82 | 80 | 77 | 74 | 70 | 66 | 84 |
| 550 | 100 | 106 | 103 | 96 | 93 | 91 | 84 | 77 | 72 | 96 |
| | 80 | 105 | 101 | 92 | 88 | 86 | 80 | 75 | 71 | 92 |
| | 60 | 101 | 96 | 88 | 86 | 84 | 81 | 78 | 74 | 90 |
| | 50 | 100 | 96 | 87 | 85 | 83 | 81 | 78 | 74 | 89 |
| | 40 | 103 | 97 | 90 | 87 | 84 | 82 | 80 | 78 | 91 |
| 750 | 100 | 112 | 113 | 104 | 100 | 99 | 95 | 88 | 82 | 104 |
| | 80 | 108 | 111 | 100 | 96 | 94 | 90 | 85 | 80 | 100 |
| | 60 | 105 | 108 | 96 | 93 | 91 | 89 | 86 | 83 | 98 |
| | 50 | 107 | 108 | 96 | 92 | 91 | 89 | 87 | 84 | 98 |
| | 40 | 112 | 111 | 99 | 94 | 92 | 90 | 88 | 85 | 100 |
| 1032 | 100 | 117 | 122 | 114 | 108 | 106 | 105 | 98 | 92 | 113 |
| | 80 | 113 | 120 | 110 | 104 | 102 | 99 | 93 | 89 | 109 |
| | 60 | 110 | 116 | 106 | 100 | 99 | 97 | 95 | 92 | 106 |
| | 50 | 112 | 117 | 106 | 99 | 99 | 97 | 95 | 92 | 106 |
| | 40 | 120 | 120 | 110 | 102 | 100 | 98 | 96 | 93 | 109 |
| 1243 | 100 | 121 | 125 | 122 | 114 | 111 | 109 | 104 | 97 | 118 |
| | 80 | 116 | 122 | 118 | 109 | 107 | 104 | 99 | 94 | 114 |
| | 60 | 113 | 119 | 115 | 106 | 104 | 102 | 99 | 97 | 111 |
| | 50 | 115 | 120 | 115 | 105 | 103 | 101 | 100 | 97 | 111 |
| | 40 | 123 | 124 | 118 | 108 | 105 | 102 | 100 | 98 | 114 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 200 | 100 | 88 | 82 | 75 | 71 | 64 | 56 | 51 | 47 | 73 |
| | 80 | 87 | 80 | 73 | 68 | 62 | 54 | 50 | 47 | 71 |
| | 60 | 85 | 80 | 72 | 69 | 63 | 54 | 50 | 47 | 71 |
| | 50 | 85 | 80 | 72 | 68 | 63 | 55 | 51 | 48 | 71 |
| | 40 | 85 | 79 | 72 | 69 | 63 | 55 | 51 | 48 | 71 |
| 400 | 100 | 107 | 96 | 91 | 88 | 84 | 78 | 72 | 69 | 91 |
| | 80 | 103 | 93 | 87 | 84 | 80 | 73 | 68 | 64 | 86 |
| | 60 | 101 | 90 | 84 | 81 | 77 | 72 | 69 | 66 | 84 |
| | 50 | 102 | 90 | 84 | 81 | 77 | 73 | 70 | 70 | 84 |
| | 40 | 101 | 90 | 83 | 80 | 76 | 72 | 70 | 70 | 84 |
| 550 | 100 | 112 | 106 | 99 | 97 | 94 | 89 | 83 | 79 | 99 |
| | 80 | 108 | 102 | 95 | 92 | 89 | 83 | 78 | 73 | 95 |
| | 60 | 106 | 100 | 92 | 89 | 85 | 81 | 78 | 75 | 92 |
| | 50 | 105 | 99 | 91 | 88 | 84 | 81 | 78 | 76 | 91 |
| | 40 | 105 | 98 | 91 | 87 | 83 | 80 | 78 | 76 | 91 |
| 750 | 100 | 117 | 117 | 108 | 105 | 102 | 99 | 92 | 85 | 108 |
| | 80 | 114 | 113 | 104 | 101 | 97 | 93 | 87 | 81 | 104 |
| | 60 | 110 | 111 | 101 | 97 | 94 | 90 | 86 | 83 | 101 |
| | 50 | 110 | 110 | 100 | 96 | 92 | 90 | 86 | 83 | 100 |
| | 40 | 110 | 109 | 99 | 95 | 91 | 89 | 86 | 83 | 99 |
| 1032 | 100 | 123 | 125 | 117 | 113 | 110 | 108 | 103 | 95 | 117 |
| | 80 | 120 | 121 | 112 | 109 | 105 | 102 | 97 | 91 | 112 |
| | 60 | 115 | 120 | 110 | 106 | 102 | 99 | 95 | 91 | 110 |
| | 50 | 116 | 119 | 109 | 105 | 101 | 98 | 95 | 92 | 109 |
| | 40 | 117 | 118 | 108 | 104 | 100 | 97 | 95 | 92 | 108 |
| 1243 | 100 | 126 | 128 | 124 | 118 | 115 | 113 | 108 | 101 | 122 |
| | 80 | 123 | 125 | 120 | 114 | 110 | 107 | 102 | 96 | 118 |
| | 60 | 118 | 123 | 118 | 111 | 107 | 104 | 100 | 96 | 115 |
| | 50 | 119 | 122 | 117 | 110 | 106 | 103 | 100 | 97 | 114 |
| | 40 | 120 | 121 | 116 | 109 | 105 | 101 | 99 | 96 | 113 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

66 BISW

Wheel Diameter = 66 in.

Outlet Area = 25.05 ft.²

Tip Speed = 17.28 x RPM

Maximum BHP = (RPM/143)³

Minimum Starting HP = 25

Maximum RPM Class I = 571

Maximum RPM Class II = 745

Maximum RPM Class III = 939

Maximum RPM Class IV = 1130

Maximum Open Motor Frame Size

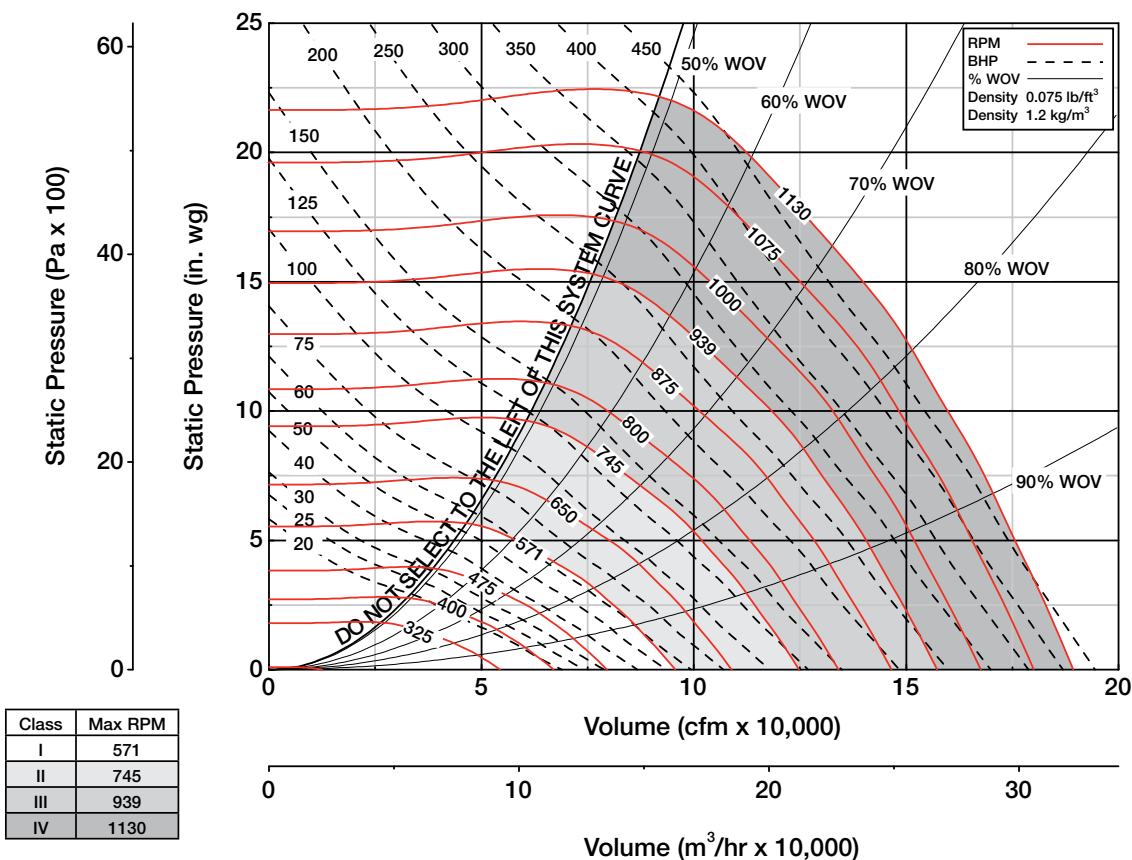
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 405T | 405T | 444T | NA |
| Arr. 10 | 404T | 404T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 20000 | 798 | 186 | 2.11 | 242 | 4.10 | | | | | | | | | | | | | | | | |
| 23200 | 926 | 198 | 2.60 | 247 | 4.69 | | | | | | | | | | | | | | | | |
| 26400 | 1053 | 210 | 3.15 | 257 | 5.47 | 298 | 7.99 | | | | | | | | | | | | | | |
| 29600 | 1181 | 223 | 3.78 | 268 | 6.35 | 307 | 9.03 | 343 | 12.0 | | | | | | | | | | | | |
| 32800 | 1309 | 239 | 4.56 | 279 | 7.34 | 316 | 10.2 | 349 | 13.3 | 383 | 16.7 | | | | | | | | | | |
| 36000 | 1437 | 254 | 5.46 | 291 | 8.43 | 327 | 11.6 | 360 | 14.8 | 388 | 18.1 | 420 | 22.0 | | | | | | | | |
| 39200 | 1564 | 270 | 6.48 | 304 | 9.61 | 339 | 13.0 | 369 | 16.4 | 399 | 20.0 | 425 | 23.7 | 454 | 27.9 | 482 | 32.3 | | | | |
| 42400 | 1692 | 286 | 7.65 | 318 | 11.0 | 350 | 14.6 | 381 | 18.3 | 409 | 22.0 | 435 | 25.9 | 459 | 29.9 | 486 | 34.3 | 512 | 39.1 | | |
| 45600 | 1820 | 303 | 9.04 | 334 | 12.5 | 363 | 16.3 | 392 | 20.3 | 419 | 24.2 | 445 | 28.3 | 470 | 32.5 | 492 | 36.8 | 517 | 41.4 | 541 | 46.5 |
| 48800 | 1948 | 320 | 10.6 | 349 | 14.2 | 376 | 18.1 | 404 | 22.4 | 431 | 26.6 | 455 | 30.8 | 479 | 35.3 | 502 | 39.8 | 523 | 44.3 | 545 | 49.1 |
| 52000 | 2075 | 338 | 12.4 | 365 | 16.1 | 390 | 20.2 | 416 | 24.6 | 442 | 29.1 | 467 | 33.6 | 489 | 38.2 | 512 | 42.9 | 533 | 47.7 | 553 | 52.6 |
| 55200 | 2203 | 355 | 14.3 | 381 | 18.2 | 405 | 22.5 | 430 | 27.0 | 454 | 31.8 | 478 | 36.6 | 500 | 41.4 | 522 | 46.2 | 543 | 51.2 | 563 | 56.3 |
| 58400 | 2331 | 373 | 16.5 | 397 | 20.4 | 421 | 25.0 | 443 | 29.6 | 467 | 34.6 | 490 | 39.7 | 512 | 44.7 | 533 | 49.8 | 553 | 55.0 | 573 | 60.3 |
| 61600 | 2459 | 391 | 18.8 | 413 | 23.0 | 436 | 27.7 | 458 | 32.5 | 480 | 37.6 | 502 | 43.0 | 524 | 48.3 | 544 | 53.6 | 564 | 59.0 | 583 | 64.5 |
| 64800 | 2586 | 409 | 21.4 | 430 | 25.8 | 452 | 30.6 | 473 | 35.7 | 493 | 40.8 | 514 | 46.4 | 535 | 52.0 | 556 | 57.7 | 575 | 63.3 | 594 | 68.9 |
| 68000 | 2714 | 427 | 24.2 | 448 | 29.0 | 468 | 33.8 | 489 | 39.1 | 508 | 44.4 | 528 | 50.1 | 548 | 56.0 | 568 | 61.9 | 587 | 67.8 | 605 | 73.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|-------|-----|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 45100 | 1800 | 541 | 46.1 | | | | | | | | | | | | | | | | | | |
| 48600 | 1940 | 545 | 49.0 | 569 | 54.4 | 591 | 59.9 | | | | | | | | | | | | | | |
| 52100 | 2079 | 553 | 52.7 | 573 | 57.6 | 596 | 63.3 | 617 | 69.1 | 638 | 75.0 | | | | | | | | | | |
| 55600 | 2219 | 565 | 56.8 | 583 | 62.0 | 602 | 67.2 | 622 | 72.8 | 643 | 78.9 | 663 | 85.2 | 682 | 91.5 | | | | | | |
| 59100 | 2359 | 575 | 61.2 | 595 | 66.6 | 613 | 72.1 | 630 | 77.6 | 647 | 83.2 | 667 | 89.5 | 687 | 96.0 | 705 | 103 | 724 | 109 | | |
| 62600 | 2499 | 586 | 65.8 | 605 | 71.5 | 624 | 77.2 | 641 | 83.0 | 658 | 88.8 | 674 | 94.7 | 690 | 101 | 710 | 108 | 728 | 114 | 761 | 128 |
| 66100 | 2638 | 599 | 70.8 | 616 | 76.6 | 634 | 82.5 | 652 | 88.6 | 669 | 94.6 | 686 | 101 | 701 | 107 | 716 | 113 | 733 | 120 | 765 | 134 |
| 69600 | 2778 | 611 | 76.1 | 629 | 82.1 | 646 | 88.2 | 663 | 94.5 | 680 | 101 | 696 | 107 | 712 | 114 | 727 | 120 | 742 | 127 | 769 | 139 |
| 73100 | 2918 | 624 | 81.7 | 641 | 88.0 | 658 | 94.3 | 674 | 101 | 690 | 107 | 707 | 114 | 723 | 121 | 738 | 127 | 753 | 134 | 778 | 147 |
| 76600 | 3057 | 637 | 87.4 | 654 | 94.1 | 671 | 101 | 687 | 107 | 703 | 114 | 718 | 121 | 733 | 128 | 749 | 135 | 764 | 142 | 788 | 155 |
| 80100 | 3197 | 650 | 93.5 | 667 | 100 | 683 | 107 | 699 | 114 | 715 | 121 | 730 | 128 | 745 | 135 | 759 | 142 | 774 | 150 | 800 | 163 |
| 83600 | 3337 | 664 | 99.8 | 680 | 107 | 696 | 114 | 712 | 122 | 728 | 129 | 743 | 136 | 757 | 143 | 771 | 151 | 785 | 158 | 810 | 172 |
| 87100 | 3477 | 678 | 106 | 694 | 114 | 710 | 122 | 725 | 129 | 740 | 137 | 755 | 144 | 770 | 152 | 784 | 159 | 797 | 167 | 821 | 181 |
| 90600 | 3616 | 693 | 113 | 708 | 121 | 723 | 129 | 738 | 137 | 753 | 145 | 768 | 153 | 782 | 160 | 796 | 168 | 810 | 176 | 833 | 190 |
| 94100 | 3756 | 708 | 121 | 723 | 129 | 738 | 137 | 752 | 145 | 767 | 153 | 781 | 161 | 795 | 170 | 809 | 178 | 822 | 186 | 845 | 201 |
| 97600 | 3896 | 725 | 129 | 738 | 137 | 752 | 145 | 766 | 153 | 780 | 162 | 794 | 170 | 808 | 179 | 822 | 187 | 835 | 196 | 857 | 211 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 80200 | 3201 | 800 | 163 | 826 | 178 | 852 | 193 | 876 | 208 | 906 | 225 | 934 | 243 | 961 | 260 | | | | | | |
| 84000 | 3353 | 811 | 173 | 838 | 188 | 863 | 203 | 888 | 219 | 911 | 234 | 939 | 252 | 965 | 270 | 992 | 288 | 1017 | 307 | | |
| 87800 | 3504 | 823 | 183 | 850 | 198 | 875 | 214 | 899 | 230 | 922 | 246 | 945 | 262 | 970 | 280 | 996 | 299 | 1021 | 318 | 1070 | 357 |
| 91600 | 3656 | 836 | 193 | 861 | 209 | 887 | 226 | 911 | 242 | 934 | 259 | 956 | 275 | 979 | 292 | 1000 | 309 | 1026 | 329 | 1075 | 369 |
| 95400 | 3808 | 849 | 204 | 874 | 221 | 898 | 237 | 922 | 254 | 946 | 271 | 968 | 289 | 990 | 306 | 1011 | 323 | 1032 | 341 | 1079 | 381 |
| 99200 | 3960 | 863 | 216 | 887 | 233 | 911 | 250 | 934 | 267 | 957 | 285 | 980 | 302 | 1001 | 320 | 1022 | 338 | 1043 | 356 | 1083 | 393 |
| 103000 | 4111 | 876 | 228 | 901 | 245 | 924 | 263 | 946 | 280 | 969 | 298 | 991 | 317 | 1013 | 335 | 1033 | 353 | 1054 | 372 | 1094 | 409 |
| 106800 | 4263 | 890 | 240 | 914 | 258 | 937 | 276 | 960 | 294 | 981 | 313 | 1003 | 331 | 1025 | 350 | 1046 | 369 | 1065 | 388 | 1105 | 427 |
| 110600 | 4415 | 904 | 253 | 928 | 272 | 951 | 290 | 973 | 309 | 995 | 328 | 1015 | 347 | 1036 | 366 | 1057 | 385 | 1077 | 405 | 1116 | 444 |
| 114400 | 4566 | 919 | 266 | 942 | 285 | 965 | 305 | 987 | 324 | 1008 | 343 | 1029 | 363 | 1049 | 382 | 1068 | 402 | 1089 | 422 | | |
| 118200 | 4718 | 934 | 280 | 956 | 300 | 979 | 320 | 1000 | 340 | 1021 | 360 | 1042 | 379 | 1062 | 399 | 1081 | 420 | 1100 | 440 | | |
| 122000 | 4870 | 949 | 294 | 971 | 315 | 993 | 335 | 1014 | 356 | 1035 | 376 | 1055 | 397 | 1075 | 417 | 1094 | 438 | 1113 | 459 | | |
| 125800 | 5021 | 965 | 308 | 986 | 330 | 1007 | 351 | 1028 | 372 | 1049 | 393 | 1069 | 415 | 1089 | 436 | 1108 | 457 | | | | |
| 129600 | 5173 | 981 | 323 | 1002 | 345 | 1022 | 367 | 1042 | 389 | 1063 | 411 | 1083 | 433 | 1102 | 455 | | | | | | |
| 133400 | 5325 | 997 | 340 | 1018 | 362 | 1038 | 384 | 1057 | 407 | 1077 | 429 | 1097 | 452 | 1116 | 474 | | | | | | |
| 137200 | 5477 | 1015 | 357 | 1033 | 378 | 1053 | 401 | 1073 | 425 | 1091 | 448 | 1111 | 471 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 168)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wiA} |
| 180 | 100 | 83 | 76 | 70 | 65 | 58 | 50 | 44 | 39 | 68 |
| | 80 | 82 | 74 | 67 | 63 | 56 | 47 | 42 | 39 | 65 |
| | 60 | 81 | 73 | 67 | 64 | 56 | 48 | 42 | 37 | 65 |
| | 50 | 81 | 73 | 68 | 65 | 58 | 50 | 44 | 39 | 66 |
| | 40 | 81 | 73 | 68 | 66 | 59 | 50 | 45 | 41 | 67 |
| 350 | 100 | 104 | 93 | 86 | 85 | 80 | 72 | 66 | 62 | 87 |
| | 80 | 101 | 90 | 82 | 80 | 76 | 70 | 65 | 60 | 83 |
| | 60 | 98 | 86 | 80 | 80 | 76 | 72 | 68 | 64 | 82 |
| | 50 | 95 | 84 | 79 | 79 | 75 | 72 | 69 | 64 | 81 |
| | 40 | 99 | 87 | 81 | 80 | 76 | 73 | 69 | 65 | 83 |
| 500 | 100 | 108 | 102 | 96 | 94 | 92 | 84 | 78 | 72 | 96 |
| | 80 | 107 | 100 | 91 | 89 | 86 | 80 | 75 | 71 | 92 |
| | 60 | 103 | 96 | 88 | 87 | 84 | 81 | 78 | 74 | 90 |
| | 50 | 102 | 95 | 87 | 86 | 83 | 81 | 78 | 75 | 90 |
| | 40 | 103 | 97 | 90 | 87 | 84 | 82 | 80 | 78 | 91 |
| 700 | 100 | 114 | 114 | 105 | 101 | 100 | 95 | 89 | 83 | 105 |
| | 80 | 111 | 111 | 100 | 97 | 95 | 90 | 86 | 81 | 101 |
| | 60 | 107 | 107 | 97 | 94 | 93 | 90 | 87 | 85 | 99 |
| | 50 | 109 | 108 | 96 | 93 | 92 | 90 | 88 | 85 | 99 |
| | 40 | 113 | 111 | 100 | 95 | 93 | 91 | 89 | 86 | 101 |
| 939 | 100 | 119 | 123 | 114 | 108 | 107 | 105 | 98 | 92 | 113 |
| | 80 | 115 | 121 | 110 | 104 | 103 | 99 | 94 | 89 | 110 |
| | 60 | 112 | 118 | 106 | 101 | 100 | 98 | 95 | 92 | 107 |
| | 50 | 114 | 118 | 106 | 100 | 99 | 97 | 96 | 93 | 107 |
| | 40 | 121 | 121 | 110 | 103 | 100 | 98 | 96 | 93 | 109 |
| 1130 | 100 | 122 | 126 | 121 | 114 | 111 | 109 | 104 | 97 | 118 |
| | 80 | 118 | 124 | 118 | 110 | 107 | 104 | 99 | 95 | 115 |
| | 60 | 115 | 121 | 114 | 106 | 104 | 102 | 100 | 97 | 112 |
| | 50 | 117 | 121 | 114 | 106 | 103 | 102 | 100 | 98 | 112 |
| | 40 | 124 | 125 | 118 | 109 | 105 | 103 | 101 | 98 | 115 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{woA} |
| 180 | 100 | 88 | 81 | 75 | 70 | 63 | 56 | 51 | 47 | 72 |
| | 80 | 87 | 80 | 73 | 69 | 61 | 54 | 50 | 47 | 71 |
| | 60 | 85 | 79 | 72 | 69 | 62 | 54 | 51 | 48 | 70 |
| | 50 | 85 | 79 | 72 | 69 | 62 | 55 | 51 | 48 | 70 |
| | 40 | 85 | 78 | 72 | 69 | 62 | 55 | 51 | 48 | 70 |
| 350 | 100 | 104 | 95 | 90 | 88 | 83 | 76 | 72 | 68 | 90 |
| | 80 | 100 | 91 | 86 | 83 | 78 | 72 | 68 | 64 | 85 |
| | 60 | 99 | 88 | 83 | 81 | 76 | 72 | 68 | 65 | 83 |
| | 50 | 99 | 88 | 83 | 81 | 76 | 72 | 70 | 69 | 83 |
| | 40 | 98 | 88 | 82 | 80 | 75 | 71 | 70 | 70 | 83 |
| 500 | 100 | 113 | 105 | 100 | 97 | 95 | 88 | 83 | 79 | 100 |
| | 80 | 109 | 101 | 96 | 92 | 89 | 83 | 78 | 73 | 95 |
| | 60 | 108 | 99 | 93 | 89 | 86 | 81 | 78 | 75 | 92 |
| | 50 | 106 | 98 | 92 | 88 | 85 | 81 | 78 | 76 | 91 |
| | 40 | 106 | 97 | 92 | 87 | 84 | 81 | 78 | 76 | 91 |
| 700 | 100 | 118 | 117 | 109 | 106 | 104 | 100 | 93 | 86 | 109 |
| | 80 | 115 | 113 | 105 | 102 | 98 | 94 | 88 | 82 | 105 |
| | 60 | 112 | 111 | 102 | 98 | 95 | 91 | 87 | 84 | 102 |
| | 50 | 112 | 110 | 101 | 97 | 93 | 91 | 88 | 84 | 101 |
| | 40 | 112 | 109 | 100 | 96 | 92 | 90 | 87 | 84 | 100 |
| 939 | 100 | 124 | 126 | 117 | 114 | 111 | 108 | 102 | 95 | 117 |
| | 80 | 121 | 123 | 113 | 110 | 106 | 102 | 97 | 91 | 113 |
| | 60 | 117 | 121 | 110 | 106 | 102 | 99 | 95 | 92 | 110 |
| | 50 | 117 | 120 | 109 | 105 | 101 | 98 | 95 | 92 | 109 |
| | 40 | 118 | 119 | 109 | 104 | 100 | 97 | 95 | 92 | 108 |
| 1130 | 100 | 127 | 130 | 124 | 119 | 115 | 113 | 108 | 101 | 122 |
| | 80 | 124 | 126 | 120 | 114 | 111 | 107 | 102 | 96 | 118 |
| | 60 | 120 | 124 | 118 | 111 | 107 | 104 | 100 | 97 | 115 |
| | 50 | 120 | 123 | 117 | 110 | 106 | 103 | 100 | 97 | 114 |
| | 40 | 121 | 123 | 116 | 109 | 105 | 102 | 100 | 97 | 113 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

73 BISW

Wheel Diameter = 73 in.

Outlet Area = 30.64 ft.²

Tip Speed = 19.11 x RPM

Maximum BHP = (RPM/121)³

Minimum Starting HP = 40

Maximum RPM Class I = 516

Maximum RPM Class II = 673

Maximum RPM Class III = 848

Maximum RPM Class IV = 1022

Maximum Open Motor Frame Size

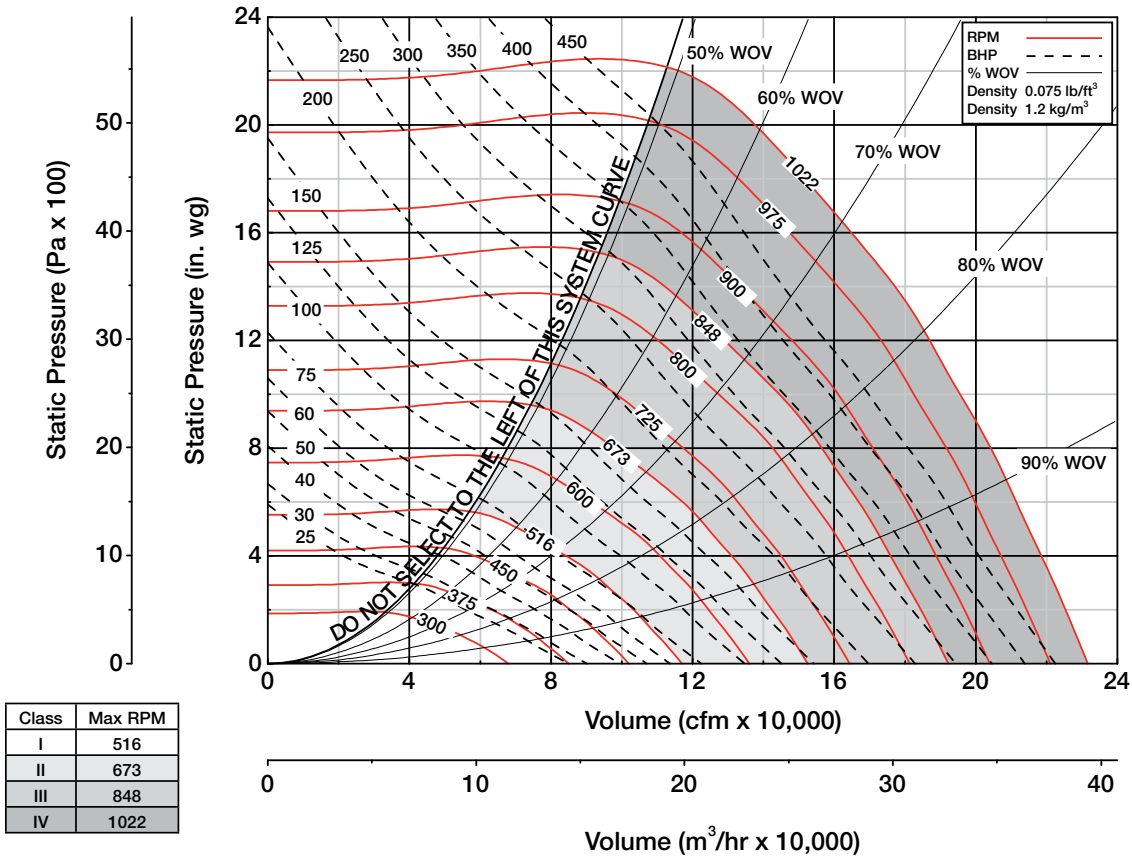
| Class | I | II | III | IV |
|---------|------|------|------|----|
| Arr. 9 | 405T | 405T | 444T | NA |
| Arr. 10 | 404T | 404T | NA | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.50 | | 1.00 | | 1.50 | | 2.00 | | 2.50 | | 3.00 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 24500 | 799 | 168 | 2.59 | 218 | 5.02 | | | | | | | | | | | | | | | | |
| 28400 | 926 | 179 | 3.18 | 223 | 5.74 | | | | | | | | | | | | | | | | |
| 32300 | 1054 | 190 | 3.85 | 233 | 6.69 | 270 | 9.78 | | | | | | | | | | | | | | |
| 36200 | 1181 | 202 | 4.62 | 242 | 7.76 | 277 | 11.0 | 310 | 14.7 | | | | | | | | | | | | |
| 40100 | 1308 | 216 | 5.57 | 252 | 8.97 | 286 | 12.5 | 315 | 16.2 | 347 | 20.4 | | | | | | | | | | |
| 44000 | 1436 | 230 | 6.67 | 263 | 10.3 | 296 | 14.1 | 325 | 18.1 | 351 | 22.2 | 380 | 26.8 | | | | | | | | |
| 47900 | 1563 | 244 | 7.91 | 275 | 11.7 | 306 | 15.9 | 334 | 20.1 | 361 | 24.5 | 384 | 29.0 | 411 | 34.0 | | | | | | |
| 51800 | 1690 | 258 | 9.33 | 288 | 13.4 | 317 | 17.8 | 344 | 22.3 | 369 | 26.9 | 393 | 31.7 | 415 | 36.5 | 440 | 42.0 | 463 | 47.8 | | |
| 55700 | 1817 | 274 | 11.0 | 301 | 15.2 | 328 | 19.9 | 354 | 24.7 | 379 | 29.6 | 402 | 34.6 | 424 | 39.7 | 444 | 44.9 | 467 | 50.6 | 489 | 56.9 |
| 59600 | 1945 | 289 | 12.9 | 315 | 17.3 | 340 | 22.1 | 365 | 27.3 | 389 | 32.4 | 411 | 37.6 | 433 | 43.0 | 454 | 48.5 | 472 | 54.1 | 493 | 60.0 |
| 63500 | 2072 | 305 | 15.1 | 329 | 19.6 | 352 | 24.6 | 376 | 30.0 | 399 | 35.5 | 421 | 41.0 | 442 | 46.6 | 463 | 52.4 | 482 | 58.2 | 500 | 64.2 |
| 67400 | 2199 | 321 | 17.4 | 344 | 22.1 | 366 | 27.4 | 388 | 32.9 | 410 | 38.8 | 432 | 44.6 | 452 | 50.5 | 471 | 56.4 | 491 | 62.5 | 509 | 68.8 |
| 71300 | 2327 | 337 | 20.0 | 358 | 24.9 | 380 | 30.4 | 400 | 36.1 | 421 | 42.3 | 442 | 48.4 | 462 | 54.6 | 481 | 60.8 | 500 | 67.1 | 518 | 73.6 |
| 75200 | 2454 | 353 | 22.9 | 373 | 28.0 | 394 | 33.7 | 413 | 39.6 | 433 | 45.9 | 453 | 52.4 | 473 | 58.9 | 492 | 65.4 | 509 | 72.0 | 527 | 78.6 |
| 79100 | 2581 | 369 | 26.0 | 388 | 31.5 | 408 | 37.3 | 427 | 43.5 | 445 | 49.8 | 465 | 56.6 | 484 | 63.5 | 502 | 70.3 | 520 | 77.2 | 537 | 84.1 |
| 83000 | 2708 | 385 | 29.5 | 404 | 35.2 | 422 | 41.1 | 441 | 47.6 | 458 | 54.1 | 477 | 61.0 | 495 | 68.3 | 513 | 75.4 | 530 | 82.6 | 547 | 89.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|-----|------|-----|-------|-----|
| | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 55200 | 1801 | 489 | 56.5 | | | | | | | | | | | | | | | | | | |
| 59500 | 1941 | 493 | 60.0 | 514 | 66.6 | 535 | 73.3 | | | | | | | | | | | | | | |
| 63800 | 2082 | 500 | 64.5 | 518 | 70.6 | 539 | 77.5 | 558 | 84.6 | 577 | 91.8 | | | | | | | | | | |
| 68100 | 2222 | 511 | 69.6 | 527 | 75.9 | 544 | 82.4 | 562 | 89.2 | 581 | 96.7 | 599 | 104 | 617 | 112 | | | | | | |
| 72400 | 2362 | 520 | 75.0 | 538 | 81.6 | 555 | 88.3 | 570 | 95.1 | 585 | 102 | 603 | 110 | 621 | 118 | 638 | 126 | 654 | 134 | | |
| 76700 | 2503 | 530 | 80.7 | 547 | 87.6 | 564 | 94.6 | 580 | 102 | 595 | 109 | 610 | 116 | 624 | 123 | 642 | 132 | 658 | 140 | 688 | 157 |
| 81000 | 2643 | 542 | 86.8 | 558 | 93.9 | 574 | 101 | 590 | 109 | 605 | 116 | 620 | 124 | 634 | 131 | 648 | 139 | 663 | 147 | 692 | 164 |
| 85300 | 2783 | 553 | 93.3 | 569 | 101 | 584 | 108 | 599 | 116 | 615 | 124 | 630 | 131 | 644 | 139 | 657 | 147 | 671 | 155 | 696 | 171 |
| 89600 | 2924 | 564 | 100 | 580 | 108 | 595 | 116 | 610 | 123 | 625 | 131 | 639 | 140 | 654 | 148 | 668 | 156 | 681 | 164 | 704 | 180 |
| 93900 | 3064 | 576 | 107 | 592 | 115 | 607 | 124 | 621 | 132 | 636 | 140 | 649 | 148 | 663 | 157 | 677 | 165 | 691 | 174 | 713 | 190 |
| 98200 | 3204 | 588 | 115 | 604 | 123 | 618 | 132 | 633 | 140 | 647 | 149 | 661 | 157 | 674 | 166 | 687 | 175 | 700 | 184 | 724 | 200 |
| 102500 | 3345 | 601 | 123 | 616 | 131 | 630 | 140 | 644 | 149 | 658 | 158 | 672 | 167 | 685 | 176 | 698 | 185 | 710 | 194 | 733 | 211 |
| 106800 | 3485 | 614 | 131 | 628 | 140 | 642 | 149 | 656 | 158 | 670 | 168 | 683 | 177 | 696 | 186 | 709 | 195 | 722 | 205 | 743 | 222 |
| 111100 | 3625 | 628 | 139 | 641 | 149 | 655 | 158 | 668 | 168 | 682 | 178 | 695 | 187 | 708 | 197 | 721 | 207 | 733 | 216 | 754 | 234 |
| 115400 | 3766 | 641 | 148 | 655 | 158 | 668 | 168 | 681 | 178 | 694 | 188 | 707 | 198 | 720 | 208 | 732 | 218 | 744 | 228 | 765 | 246 |
| 119700 | 3906 | 657 | 158 | 668 | 168 | 681 | 178 | 694 | 188 | 706 | 199 | 719 | 209 | 732 | 220 | 744 | 230 | 756 | 240 | 776 | 259 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | 15.00 | | 16.00 | | 17.00 | | 18.00 | | 20.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 98000 | 3198 | 723 | 200 | 747 | 218 | 770 | 236 | 792 | 254 | 819 | 275 | 844 | 297 | 869 | 318 | | | | | | |
| 102700 | 3351 | 734 | 211 | 758 | 230 | 780 | 249 | 802 | 268 | 824 | 287 | 849 | 308 | 873 | 330 | 897 | 353 | 919 | 376 | | |
| 107400 | 3505 | 744 | 224 | 768 | 243 | 791 | 262 | 813 | 282 | 834 | 301 | 855 | 321 | 877 | 342 | 901 | 366 | 924 | 389 | 968 | 437 |
| 112100 | 3658 | 756 | 237 | 779 | 256 | 802 | 276 | 824 | 296 | 844 | 317 | 865 | 337 | 885 | 358 | 904 | 379 | 928 | 403 | 972 | 452 |
| 116800 | 3812 | 768 | 250 | 791 | 270 | 812 | 291 | 834 | 311 | 856 | 332 | 875 | 354 | 895 | 375 | 914 | 396 | 933 | 418 | 976 | 467 |
| 121500 | 3965 | 781 | 265 | 803 | 285 | 824 | 306 | 845 | 327 | 866 | 349 | 887 | 371 | 905 | 392 | 925 | 414 | 943 | 437 | 979 | 481 |
| 126200 | 4118 | 793 | 280 | 815 | 301 | 836 | 322 | 856 | 344 | 876 | 366 | 897 | 388 | 917 | 411 | 935 | 433 | 953 | 456 | 989 | 502 |
| 130900 | 4272 | 806 | 295 | 827 | 317 | 848 | 339 | 869 | 361 | 888 | 384 | 907 | 406 | 927 | 429 | 946 | 453 | 964 | 476 | 999 | 523 |
| 135600 | 4425 | 819 | 310 | 840 | 334 | 861 | 356 | 881 | 379 | 900 | 402 | 919 | 425 | 937 | 449 | 957 | 473 | 975 | 497 | 1010 | 545 |
| 140300 | 4578 | 832 | 327 | 853 | 351 | 873 | 374 | 893 | 398 | 912 | 422 | 931 | 445 | 949 | 469 | 967 | 493 | 985 | 518 | | |
| 145000 | 4732 | 846 | 344 | 866 | 368 | 886 | 393 | 906 | 418 | 925 | 442 | 943 | 466 | 961 | 491 | 979 | 515 | 996 | 540 | | |
| 149700 | 4885 | 860 | 361 | 879 | 387 | 899 | 412 | 918 | 437 | 937 | 463 | 956 | 488 | 973 | 513 | 991 | 538 | 1008 | 563 | | |
| 154400 | 5039 | 874 | 379 | 893 | 405 | 912 | 432 | 931 | 458 | 950 | 484 | 968 | 510 | 986 | 536 | 1003 | 562 | | | | |
| 159100 | 5192 | 889 | 398 | 908 | 425 | 926 | 452 | 944 | 479 | 963 | 506 | 981 | 533 | 998 | 559 | | | | | | |
| 163800 | 5345 | 904 | 418 | 922 | 445 | 940 | 473 | 958 | 501 | 976 | 528 | 993 | 556 | 1011 | 583 | | | | | | |
| 168500 | 5499 | 920 | 440 | 937 | 466 | 955 | 494 | 972 | 523 | 989 | 552 | 1006 | 580 | | | | | | | | |

Performance certified is for model BISW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 227)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 150 | 100 | 79 | 74 | 68 | 63 | 55 | 47 | 42 | 37 | 65 |
| | 80 | 78 | 71 | 64 | 61 | 52 | 45 | 41 | 37 | 63 |
| | 60 | 77 | 70 | 64 | 63 | 52 | 45 | 40 | 35 | 63 |
| | 50 | 76 | 71 | 65 | 64 | 54 | 47 | 42 | 37 | 64 |
| | 40 | 76 | 71 | 66 | 65 | 55 | 48 | 43 | 39 | 65 |
| 300 | 100 | 99 | 91 | 84 | 85 | 79 | 70 | 65 | 60 | 85 |
| | 80 | 96 | 87 | 80 | 80 | 74 | 68 | 64 | 59 | 81 |
| | 60 | 93 | 84 | 78 | 80 | 74 | 71 | 67 | 63 | 81 |
| | 50 | 90 | 82 | 78 | 79 | 74 | 71 | 67 | 63 | 80 |
| | 40 | 93 | 85 | 79 | 80 | 75 | 72 | 68 | 64 | 81 |
| 400 | 100 | 106 | 98 | 92 | 92 | 89 | 79 | 74 | 69 | 93 |
| | 80 | 106 | 94 | 88 | 86 | 83 | 76 | 72 | 68 | 89 |
| | 60 | 101 | 90 | 85 | 85 | 82 | 79 | 75 | 72 | 87 |
| | 50 | 101 | 89 | 84 | 84 | 81 | 79 | 75 | 72 | 87 |
| | 40 | 99 | 93 | 86 | 85 | 82 | 80 | 78 | 76 | 88 |
| 600 | 100 | 114 | 110 | 103 | 101 | 100 | 93 | 87 | 81 | 104 |
| | 80 | 112 | 106 | 99 | 97 | 94 | 89 | 84 | 80 | 100 |
| | 60 | 109 | 103 | 95 | 94 | 92 | 89 | 87 | 84 | 98 |
| | 50 | 109 | 103 | 94 | 93 | 91 | 90 | 87 | 84 | 97 |
| | 40 | 113 | 107 | 98 | 95 | 92 | 91 | 88 | 85 | 99 |
| 848 | 100 | 120 | 124 | 114 | 109 | 108 | 104 | 98 | 92 | 114 |
| | 80 | 117 | 122 | 110 | 105 | 103 | 99 | 94 | 90 | 111 |
| | 60 | 114 | 119 | 106 | 102 | 100 | 98 | 95 | 93 | 108 |
| | 50 | 115 | 120 | 106 | 101 | 100 | 98 | 96 | 93 | 108 |
| | 40 | 122 | 122 | 109 | 103 | 101 | 99 | 97 | 94 | 110 |
| 1022 | 100 | 124 | 128 | 121 | 114 | 112 | 109 | 104 | 97 | 119 |
| | 80 | 120 | 125 | 117 | 110 | 108 | 104 | 99 | 95 | 115 |
| | 60 | 117 | 122 | 114 | 107 | 105 | 103 | 100 | 97 | 112 |
| | 50 | 118 | 123 | 114 | 106 | 104 | 103 | 101 | 98 | 112 |
| | 40 | 125 | 127 | 117 | 109 | 106 | 103 | 101 | 99 | 115 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 150 | 100 | 86 | 77 | 73 | 68 | 60 | 53 | 49 | 45 | 70 |
| | 80 | 85 | 76 | 70 | 67 | 58 | 52 | 48 | 46 | 68 |
| | 60 | 84 | 75 | 70 | 67 | 58 | 52 | 49 | 46 | 68 |
| | 50 | 84 | 75 | 70 | 67 | 58 | 52 | 49 | 46 | 68 |
| | 40 | 84 | 75 | 70 | 68 | 58 | 53 | 50 | 47 | 68 |
| 300 | 100 | 100 | 93 | 89 | 87 | 82 | 74 | 71 | 67 | 88 |
| | 80 | 97 | 89 | 85 | 83 | 77 | 70 | 66 | 62 | 84 |
| | 60 | 95 | 86 | 82 | 80 | 75 | 70 | 67 | 65 | 82 |
| | 50 | 95 | 86 | 82 | 80 | 75 | 71 | 70 | 69 | 82 |
| | 40 | 95 | 86 | 81 | 79 | 74 | 70 | 70 | 70 | 81 |
| 400 | 100 | 111 | 100 | 97 | 94 | 92 | 84 | 80 | 76 | 97 |
| | 80 | 108 | 96 | 93 | 89 | 86 | 79 | 75 | 70 | 92 |
| | 60 | 107 | 93 | 90 | 86 | 83 | 78 | 75 | 73 | 89 |
| | 50 | 105 | 92 | 89 | 85 | 82 | 78 | 76 | 74 | 88 |
| | 40 | 103 | 92 | 89 | 84 | 81 | 78 | 76 | 74 | 88 |
| 600 | 100 | 118 | 113 | 108 | 105 | 103 | 98 | 91 | 84 | 108 |
| | 80 | 115 | 109 | 104 | 101 | 97 | 92 | 86 | 81 | 103 |
| | 60 | 113 | 107 | 101 | 97 | 94 | 90 | 86 | 82 | 100 |
| | 50 | 112 | 106 | 100 | 96 | 93 | 90 | 86 | 83 | 99 |
| | 40 | 111 | 105 | 99 | 95 | 91 | 89 | 86 | 83 | 98 |
| 848 | 100 | 125 | 127 | 117 | 114 | 111 | 108 | 102 | 95 | 118 |
| | 80 | 122 | 124 | 113 | 110 | 106 | 102 | 97 | 91 | 113 |
| | 60 | 118 | 123 | 111 | 107 | 103 | 100 | 96 | 92 | 111 |
| | 50 | 118 | 121 | 110 | 105 | 101 | 99 | 96 | 92 | 110 |
| | 40 | 119 | 120 | 109 | 104 | 100 | 98 | 96 | 92 | 109 |
| 1022 | 100 | 128 | 131 | 124 | 119 | 116 | 113 | 108 | 101 | 123 |
| | 80 | 125 | 128 | 120 | 115 | 111 | 107 | 102 | 97 | 118 |
| | 60 | 121 | 125 | 118 | 112 | 108 | 105 | 101 | 97 | 116 |
| | 50 | 121 | 125 | 117 | 111 | 107 | 104 | 101 | 97 | 115 |
| | 40 | 122 | 124 | 116 | 110 | 105 | 103 | 100 | 97 | 114 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

18 AFSW

Wheel Diameter = 18¼ in.

Outlet Area = 1.92 ft.²

Tip Speed = 4.78 x RPM

Maximum BHP = (RPM/1348)³

Minimum Starting HP = ⅓

Maximum RPM Class I = 2301

Maximum RPM Class II = 3001

Maximum RPM Class III = 3781

Maximum Open Motor Frame Size

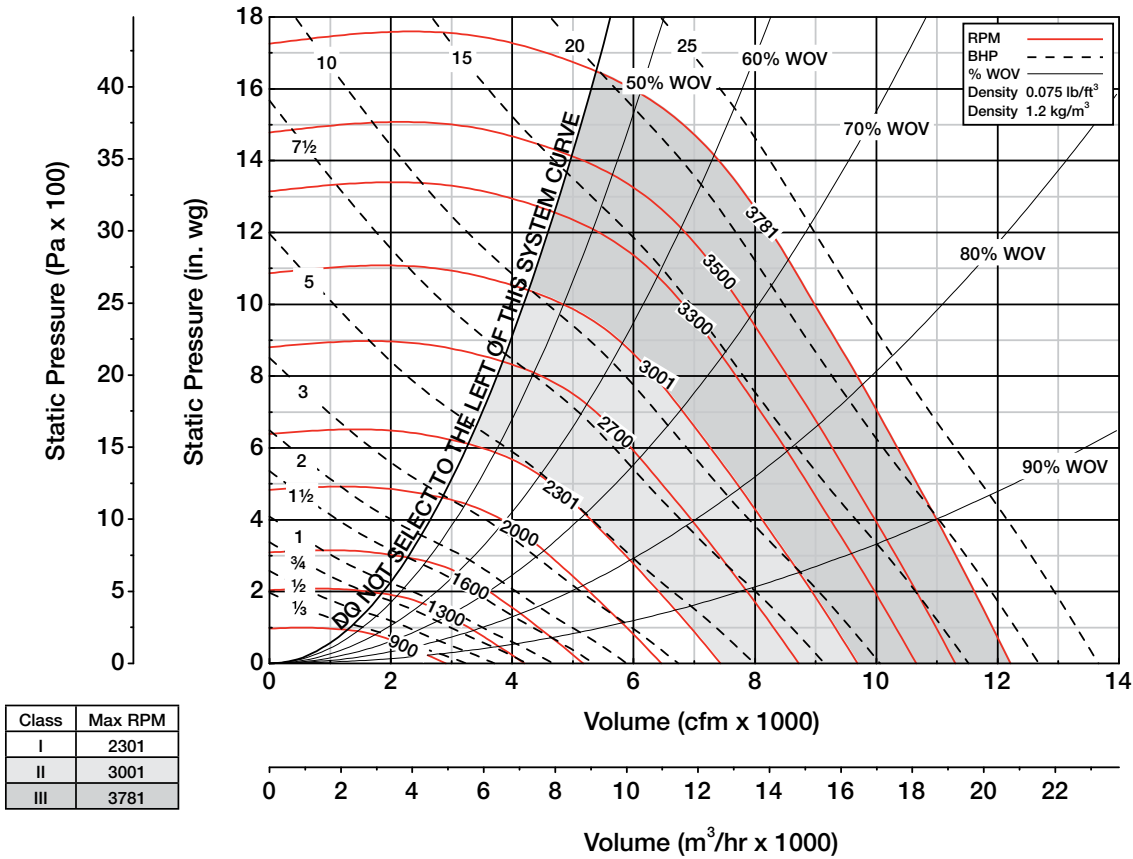
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 254T | 254T | 215T |
| Arr. 10 | 213T | 254T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1400 | 729 | 593 | 0.08 | 715 | 0.15 | 829 | 0.22 | 939 | 0.31 | | | | | | | | | | | | |
| 1720 | 895 | 670 | 0.12 | 780 | 0.19 | 877 | 0.27 | 972 | 0.36 | 1063 | 0.46 | 1151 | 0.57 | | | | | | | | |
| 2040 | 1062 | 752 | 0.17 | 852 | 0.25 | 942 | 0.34 | 1023 | 0.43 | 1103 | 0.54 | 1181 | 0.65 | 1259 | 0.77 | 1333 | 0.89 | 1404 | 1.02 | | |
| 2360 | 1229 | 838 | 0.22 | 930 | 0.32 | 1011 | 0.42 | 1088 | 0.53 | 1160 | 0.63 | 1226 | 0.75 | 1298 | 0.87 | 1364 | 1.00 | 1431 | 1.14 | 1498 | 1.28 |
| 2680 | 1395 | 926 | 0.29 | 1011 | 0.41 | 1087 | 0.52 | 1157 | 0.63 | 1225 | 0.75 | 1290 | 0.87 | 1350 | 1.00 | 1410 | 1.13 | 1472 | 1.27 | 1531 | 1.42 |
| 3000 | 1562 | 1015 | 0.38 | 1095 | 0.51 | 1166 | 0.63 | 1233 | 0.76 | 1295 | 0.89 | 1356 | 1.02 | 1415 | 1.15 | 1470 | 1.29 | 1523 | 1.43 | 1576 | 1.58 |
| 3320 | 1729 | 1107 | 0.48 | 1180 | 0.62 | 1248 | 0.76 | 1311 | 0.90 | 1370 | 1.04 | 1426 | 1.18 | 1481 | 1.33 | 1536 | 1.47 | 1588 | 1.63 | 1637 | 1.78 |
| 3640 | 1895 | 1200 | 0.61 | 1268 | 0.76 | 1332 | 0.91 | 1391 | 1.07 | 1448 | 1.22 | 1502 | 1.37 | 1553 | 1.53 | 1602 | 1.68 | 1653 | 1.84 | 1702 | 2.01 |
| 3960 | 2062 | 1294 | 0.76 | 1357 | 0.91 | 1417 | 1.08 | 1474 | 1.25 | 1527 | 1.42 | 1579 | 1.58 | 1629 | 1.75 | 1677 | 1.92 | 1722 | 2.09 | 1768 | 2.26 |
| 4280 | 2229 | 1388 | 0.93 | 1447 | 1.09 | 1504 | 1.28 | 1558 | 1.46 | 1609 | 1.64 | 1658 | 1.82 | 1707 | 2.00 | 1753 | 2.18 | 1797 | 2.36 | 1840 | 2.54 |
| 4600 | 2395 | 1483 | 1.13 | 1538 | 1.30 | 1592 | 1.49 | 1644 | 1.69 | 1693 | 1.89 | 1740 | 2.08 | 1785 | 2.27 | 1830 | 2.46 | 1874 | 2.66 | 1916 | 2.85 |
| 4920 | 2562 | 1579 | 1.35 | 1631 | 1.54 | 1681 | 1.74 | 1731 | 1.94 | 1778 | 2.16 | 1823 | 2.37 | 1867 | 2.57 | 1909 | 2.78 | 1952 | 2.98 | 1992 | 3.19 |
| 5240 | 2729 | 1674 | 1.61 | 1724 | 1.80 | 1771 | 2.01 | 1819 | 2.23 | 1864 | 2.45 | 1908 | 2.68 | 1950 | 2.90 | 1991 | 3.12 | 2031 | 3.34 | 2070 | 3.56 |
| 5560 | 2895 | 1771 | 1.89 | 1818 | 2.10 | 1863 | 2.32 | 1908 | 2.54 | 1952 | 2.78 | 1994 | 3.02 | 2034 | 3.26 | 2074 | 3.49 | 2112 | 3.73 | 2149 | 3.96 |
| 5880 | 3062 | 1867 | 2.21 | 1912 | 2.43 | 1955 | 2.66 | 1997 | 2.89 | 2040 | 3.14 | 2080 | 3.39 | 2120 | 3.65 | 2158 | 3.90 | 2195 | 4.14 | 2231 | 4.39 |
| 6200 | 3229 | 1964 | 2.57 | 2007 | 2.80 | 2048 | 3.04 | 2088 | 3.27 | 2129 | 3.53 | 2168 | 3.80 | 2206 | 4.06 | 2243 | 4.33 | 2279 | 4.60 | 2314 | 4.86 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3000 | 1562 | 1576 | 1.58 | 1686 | 1.90 | 1790 | 2.24 | 1896 | 2.60 | 1995 | 2.97 | 2089 | 3.35 | | | | | | | | |
| 3320 | 1729 | 1637 | 1.78 | 1732 | 2.10 | 1833 | 2.45 | 1927 | 2.82 | 2023 | 3.20 | 2117 | 3.60 | 2206 | 4.01 | 2291 | 4.43 | | | | |
| 3640 | 1895 | 1702 | 2.01 | 1794 | 2.34 | 1880 | 2.69 | 1972 | 3.07 | 2061 | 3.47 | 2145 | 3.87 | 2234 | 4.30 | 2319 | 4.74 | 2401 | 5.19 | 2480 | 5.65 |
| 3960 | 2062 | 1768 | 2.26 | 1859 | 2.61 | 1944 | 2.98 | 2023 | 3.35 | 2106 | 3.76 | 2190 | 4.18 | 2269 | 4.61 | 2347 | 5.06 | 2428 | 5.53 | 2507 | 6.01 |
| 4280 | 2229 | 1840 | 2.54 | 1925 | 2.91 | 2008 | 3.30 | 2087 | 3.69 | 2162 | 4.09 | 2235 | 4.51 | 2314 | 4.96 | 2390 | 5.43 | 2464 | 5.90 | 2535 | 6.38 |
| 4600 | 2395 | 1916 | 2.85 | 1995 | 3.24 | 2075 | 3.64 | 2152 | 4.06 | 2226 | 4.48 | 2296 | 4.91 | 2364 | 5.35 | 2436 | 5.82 | 2509 | 6.31 | 2579 | 6.81 |
| 4920 | 2562 | 1992 | 3.19 | 2070 | 3.61 | 2144 | 4.02 | 2218 | 4.45 | 2291 | 4.90 | 2361 | 5.35 | 2428 | 5.80 | 2492 | 6.27 | 2554 | 6.74 | 2624 | 7.26 |
| 5240 | 2729 | 2070 | 3.56 | 2147 | 4.00 | 2219 | 4.44 | 2288 | 4.89 | 2357 | 5.35 | 2426 | 5.82 | 2492 | 6.29 | 2556 | 6.78 | 2617 | 7.27 | 2677 | 7.77 |
| 5560 | 2895 | 2149 | 3.96 | 2224 | 4.42 | 2295 | 4.89 | 2362 | 5.36 | 2427 | 5.83 | 2493 | 6.32 | 2558 | 6.82 | 2621 | 7.32 | 2682 | 7.83 | 2741 | 8.35 |
| 5880 | 3062 | 2231 | 4.39 | 2302 | 4.88 | 2372 | 5.37 | 2438 | 5.87 | 2501 | 6.37 | 2563 | 6.87 | 2625 | 7.38 | 2687 | 7.90 | 2747 | 8.44 | 2805 | 8.97 |
| 6200 | 3229 | 2314 | 4.86 | 2382 | 5.38 | 2450 | 5.90 | 2515 | 6.41 | 2577 | 6.94 | 2637 | 7.46 | 2695 | 7.99 | 2753 | 8.52 | 2813 | 9.08 | 2871 | 9.63 |
| 6520 | 3395 | 2398 | 5.36 | 2465 | 5.91 | 2529 | 6.46 | 2592 | 7.00 | 2654 | 7.54 | 2713 | 8.09 | 2770 | 8.64 | 2825 | 9.20 | 2880 | 9.76 | 2937 | 10.3 |
| 6840 | 3562 | 2483 | 5.90 | 2548 | 6.47 | 2610 | 7.05 | 2671 | 7.62 | 2731 | 8.19 | 2789 | 8.76 | 2846 | 9.34 | 2900 | 9.92 | 2953 | 10.5 | 3005 | 11.1 |
| 7160 | 3729 | 2569 | 6.47 | 2632 | 7.08 | 2693 | 7.68 | 2751 | 8.29 | 2810 | 8.88 | 2867 | 9.47 | 2922 | 10.1 | 2976 | 10.7 | 3028 | 11.3 | 3079 | 11.9 |
| 7480 | 3895 | 2656 | 7.08 | 2717 | 7.73 | 2776 | 8.35 | 2834 | 8.98 | 2889 | 9.62 | 2945 | 10.2 | 3000 | 10.9 | 3053 | 11.5 | 3104 | 12.1 | 3154 | 12.8 |
| 7800 | 4062 | 2743 | 7.73 | 2803 | 8.40 | 2860 | 9.07 | 2917 | 9.72 | 2971 | 10.4 | 3024 | 11.0 | 3078 | 11.7 | 3130 | 12.3 | 3181 | 13.0 | 3230 | 13.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4600 | 2395 | 2579 | 6.81 | 2647 | 7.31 | 2712 | 7.83 | 2783 | 8.37 | 2852 | 8.92 | 2985 | 10.0 | 3112 | 11.2 | 3232 | 12.4 | | | | |
| 4920 | 2562 | 2624 | 7.26 | 2692 | 7.78 | 2757 | 8.32 | 2821 | 8.86 | 2883 | 9.41 | 3013 | 10.6 | 3139 | 11.8 | 3260 | 13.0 | 3376 | 14.2 | | |
| 5240 | 2729 | 2677 | 7.77 | 2737 | 8.28 | 2802 | 8.83 | 2866 | 9.40 | 2928 | 10.0 | 3046 | 11.1 | 3167 | 12.3 | 3288 | 13.6 | 3403 | 14.9 | 3515 | 16.2 |
| 5560 | 2895 | 2741 | 8.35 | 2798 | 8.87 | 2854 | 9.40 | 2911 | 10.0 | 2973 | 10.6 | 3091 | 11.7 | 3204 | 13.0 | 3315 | 14.2 | 3431 | 15.6 | 3542 | 16.9 |
| 5880 | 3062 | 2805 | 8.97 | 2862 | 9.52 | 2917 | 10.1 | 2971 | 10.6 | 3023 | 11.2 | 3136 | 12.4 | 3249 | 13.7 | 3357 | 14.9 | 3460 | 16.3 | 3570 | 17.6 |
| 6200 | 3229 | 2871 | 9.63 | 2927 | 10.2 | 2982 | 10.8 | 3035 | 11.3 | 3087 | 11.9 | 3187 | 13.1 | 3294 | 14.4 | 3402 | 15.7 | 3505 | 17.1 | 3604 | 18.4 |
| 6520 | 3395 | 2937 | 10.3 | 2993 | 10.9 | 3047 | 11.5 | 3100 | 12.1 | 3151 | 12.7 | 3251 | 13.9 | 3346 | 15.2 | 3447 | 16.5 | 3550 | 17.9 | 3649 | 19.3 |
| 6840 | 3562 | 3005 | 11.1 | 3059 | 11.7 | 3113 | 12.3 | 3165 | 12.9 | 3216 | 13.5 | 3315 | 14.8 | 3410 | 16.1 | 3501 | 17.4 | 3595 | 18.7 | 3694 | 20.2 |
| 7160 | 3729 | 3079 | 11.9 | 3129 | 12.5 | 3180 | 13.1 | 3232 | 13.8 | 3282 | 14.4 | 3380 | 15.7 | 3474 | 17.0 | 3565 | 18.4 | 3652 | 19.7 | 3740 | 21.1 |
| 7480 | 3895 | 3154 | 12.8 | 3203 | 13.4 | 3251 | 14.0 | 3299 | 14.7 | 3349 | 15.3 | 3446 | 16.7 | 3539 | 18.0 | 3629 | 19.4 | 3716 | 20.8 | | |
| 7800 | 4062 | 3230 | 13.6 | 3279 | 14.3 | 3326 | 15.0 | 3372 | 15.6 | 3418 | 16.3 | 3512 | 17.7 | 3605 | 19.1 | 3694 | 20.5 | 3780 | 21.9 | | |
| 8120 | 4229 | 3307 | 14.6 | 3355 | 15.3 | 3401 | 16.0 | 3447 | 16.7 | 3492 | 17.3 | 3579 | 18.7 | 3671 | 20.2 | 3759 | 21.6 | | | | |
| 8440 | 4395 | 3385 | 15.6 | 3432 | 16.3 | 3478 | 17.0 | 3523 | 17.7 | 3567 | 18.4 | 3653 | 19.9 | 3738 | 21.3 | | | | | | |
| 8760 | 4562 | 3463 | 16.6 | 3509 | 17.4 | 3555 | 18.1 | 3599 | 18.8 | 3643 | 19.6 | 3728 | 21.1 | | | | | | | | |
| 9080 | 4729 | 3542 | 17.8 | 3587 | 18.5 | 3632 | 19.3 | 3676 | 20.0 | 3719 | 20.8 | | | | | | | | | | |
| 9400 | 4895 | 3622 | 18.9 | 3666 | 19.7 | 3710 | 20.5 | 3754 | 21.3 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 3.23)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 600 | 100 | 77 | 76 | 67 | 60 | 56 | 49 | 40 | 33 | 65 |
| | 80 | 76 | 76 | 64 | 58 | 52 | 48 | 39 | 32 | 63 |
| | 60 | 73 | 75 | 61 | 56 | 54 | 48 | 40 | 33 | 62 |
| | 50 | 73 | 74 | 60 | 56 | 56 | 49 | 42 | 33 | 62 |
| | 40 | 77 | 75 | 60 | 56 | 56 | 49 | 42 | 34 | 63 |
| 900 | 100 | 81 | 81 | 77 | 71 | 67 | 60 | 52 | 44 | 74 |
| | 80 | 81 | 77 | 73 | 68 | 64 | 57 | 49 | 42 | 70 |
| | 60 | 82 | 75 | 70 | 66 | 64 | 56 | 50 | 42 | 69 |
| | 50 | 80 | 75 | 68 | 65 | 65 | 57 | 52 | 45 | 69 |
| | 40 | 82 | 76 | 68 | 65 | 65 | 57 | 52 | 45 | 69 |
| 1300 | 100 | 85 | 84 | 86 | 82 | 76 | 72 | 64 | 58 | 83 |
| | 80 | 83 | 81 | 83 | 78 | 73 | 67 | 61 | 56 | 79 |
| | 60 | 82 | 79 | 79 | 75 | 72 | 67 | 63 | 59 | 78 |
| | 50 | 83 | 78 | 77 | 74 | 73 | 68 | 65 | 61 | 77 |
| | 40 | 88 | 84 | 79 | 74 | 73 | 68 | 65 | 62 | 78 |
| 1900 | 100 | 92 | 90 | 91 | 88 | 86 | 83 | 75 | 69 | 91 |
| | 80 | 89 | 87 | 91 | 87 | 83 | 79 | 73 | 68 | 89 |
| | 60 | 88 | 85 | 89 | 85 | 81 | 77 | 75 | 71 | 87 |
| | 50 | 88 | 85 | 87 | 83 | 81 | 78 | 76 | 73 | 86 |
| | 40 | 93 | 90 | 90 | 84 | 82 | 78 | 76 | 73 | 88 |
| 2700 | 100 | 99 | 96 | 94 | 100 | 93 | 95 | 88 | 81 | 101 |
| | 80 | 96 | 93 | 93 | 99 | 90 | 89 | 83 | 78 | 98 |
| | 60 | 94 | 90 | 92 | 97 | 89 | 87 | 84 | 81 | 97 |
| | 50 | 98 | 94 | 92 | 97 | 89 | 87 | 85 | 83 | 97 |
| | 40 | 103 | 100 | 97 | 98 | 89 | 87 | 86 | 83 | 98 |
| 3781 | 100 | 105 | 108 | 104 | 105 | 104 | 101 | 99 | 92 | 109 |
| | 80 | 101 | 104 | 102 | 104 | 102 | 97 | 93 | 88 | 106 |
| | 60 | 100 | 102 | 100 | 103 | 101 | 95 | 93 | 90 | 105 |
| | 50 | 103 | 106 | 102 | 102 | 100 | 95 | 93 | 91 | 105 |
| | 40 | 109 | 112 | 107 | 105 | 101 | 95 | 93 | 92 | 107 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 600 | 100 | 88 | 80 | 69 | 61 | 59 | 51 | 40 | 32 | 69 |
| | 80 | 88 | 80 | 66 | 58 | 56 | 48 | 38 | 31 | 68 |
| | 60 | 85 | 79 | 64 | 57 | 56 | 48 | 40 | 33 | 66 |
| | 50 | 83 | 78 | 63 | 57 | 56 | 48 | 41 | 34 | 65 |
| | 40 | 84 | 78 | 63 | 56 | 57 | 48 | 42 | 35 | 66 |
| 900 | 100 | 94 | 84 | 79 | 73 | 71 | 64 | 54 | 46 | 77 |
| | 80 | 94 | 83 | 76 | 68 | 66 | 59 | 50 | 42 | 74 |
| | 60 | 91 | 81 | 73 | 66 | 64 | 58 | 52 | 47 | 72 |
| | 50 | 97 | 84 | 74 | 66 | 64 | 58 | 53 | 49 | 75 |
| | 40 | 100 | 85 | 75 | 67 | 66 | 60 | 54 | 50 | 77 |
| 1300 | 100 | 98 | 89 | 88 | 83 | 81 | 76 | 67 | 60 | 86 |
| | 80 | 98 | 86 | 85 | 79 | 76 | 70 | 63 | 57 | 82 |
| | 60 | 97 | 85 | 82 | 76 | 72 | 67 | 63 | 59 | 80 |
| | 50 | 98 | 86 | 82 | 74 | 71 | 66 | 63 | 60 | 79 |
| | 40 | 103 | 92 | 86 | 76 | 72 | 67 | 63 | 61 | 83 |
| 1900 | 100 | 104 | 97 | 94 | 89 | 88 | 87 | 79 | 72 | 94 |
| | 80 | 101 | 93 | 92 | 85 | 84 | 81 | 74 | 68 | 90 |
| | 60 | 100 | 90 | 90 | 84 | 82 | 78 | 72 | 69 | 88 |
| | 50 | 102 | 91 | 90 | 83 | 80 | 77 | 73 | 71 | 87 |
| | 40 | 105 | 94 | 91 | 83 | 80 | 76 | 73 | 71 | 88 |
| 2700 | 100 | 109 | 103 | 98 | 103 | 97 | 96 | 91 | 84 | 104 |
| | 80 | 107 | 99 | 96 | 99 | 94 | 92 | 85 | 79 | 100 |
| | 60 | 107 | 95 | 93 | 95 | 91 | 87 | 83 | 79 | 96 |
| | 50 | 110 | 95 | 93 | 95 | 89 | 86 | 83 | 80 | 96 |
| | 40 | 113 | 99 | 96 | 95 | 89 | 85 | 83 | 80 | 96 |
| 3781 | 100 | 114 | 114 | 108 | 108 | 107 | 104 | 101 | 95 | 112 |
| | 80 | 113 | 111 | 104 | 105 | 104 | 100 | 96 | 89 | 108 |
| | 60 | 113 | 109 | 101 | 102 | 100 | 96 | 92 | 88 | 105 |
| | 50 | 116 | 111 | 101 | 101 | 100 | 95 | 92 | 89 | 105 |
| | 40 | 119 | 114 | 104 | 102 | 100 | 94 | 91 | 89 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

20 AFSW

Wheel Diameter = 20 in.

Outlet Area = 2.30 ft.²

Tip Speed = 5.24 x RPM

Maximum BHP = (RPM/1157)³

Minimum Starting HP = ½

Maximum RPM Class I = 2096

Maximum RPM Class II = 2734

Maximum RPM Class III = 3445

Maximum Open Motor Frame Size

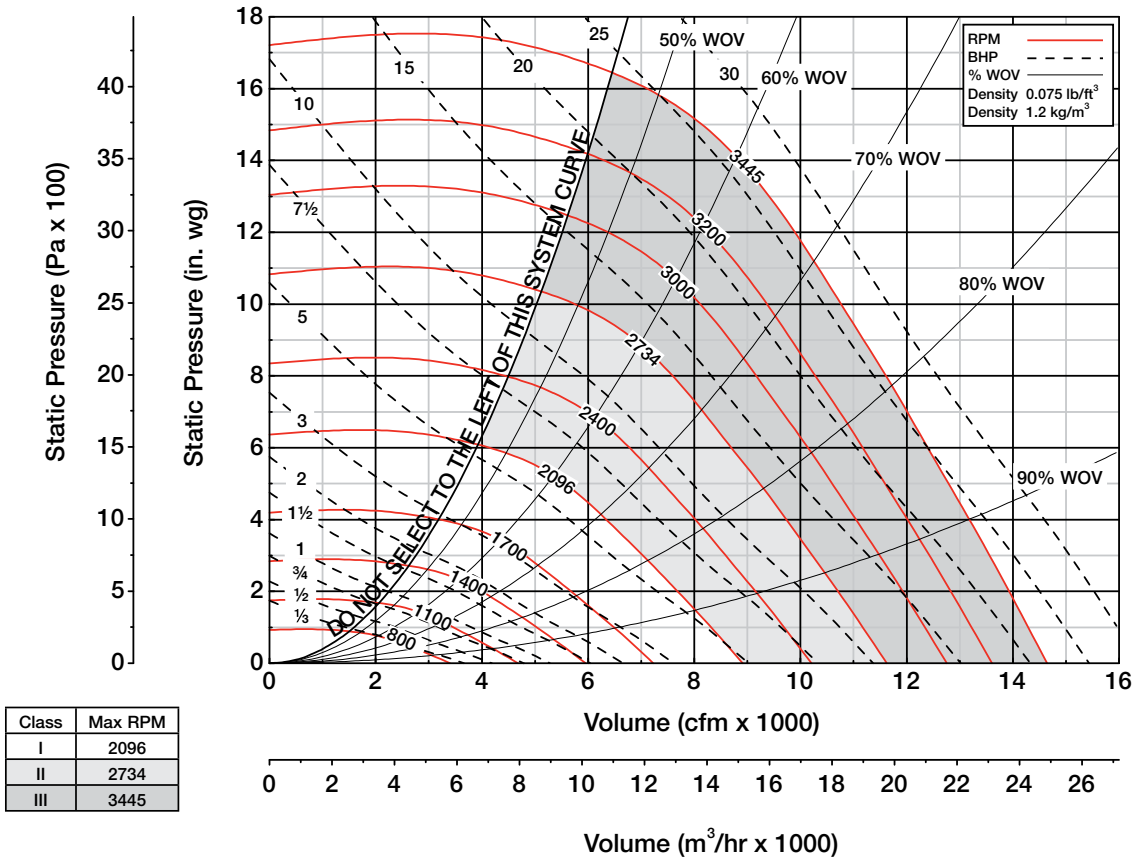
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 254T | 254T | 215T |
| Arr. 10 | 213T | 254T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 1800 | 782 | 562 | 0.11 | 670 | 0.19 | 769 | 0.29 | 865 | 0.39 | 953 | 0.50 | | | | | | | | | | |
| 2200 | 956 | 637 | 0.16 | 733 | 0.25 | 820 | 0.35 | 901 | 0.46 | 980 | 0.58 | 1059 | 0.72 | 1132 | 0.85 | | | | | | |
| 2600 | 1130 | 717 | 0.22 | 805 | 0.33 | 883 | 0.44 | 957 | 0.56 | 1023 | 0.69 | 1094 | 0.82 | 1159 | 0.97 | 1226 | 1.12 | 1290 | 1.28 | 1351 | 1.44 |
| 3000 | 1304 | 799 | 0.30 | 879 | 0.43 | 953 | 0.55 | 1019 | 0.68 | 1084 | 0.82 | 1144 | 0.96 | 1202 | 1.11 | 1263 | 1.27 | 1320 | 1.43 | 1377 | 1.61 |
| 3400 | 1478 | 883 | 0.40 | 958 | 0.54 | 1026 | 0.69 | 1088 | 0.83 | 1147 | 0.97 | 1205 | 1.13 | 1260 | 1.28 | 1311 | 1.44 | 1363 | 1.61 | 1417 | 1.79 |
| 3800 | 1652 | 969 | 0.52 | 1039 | 0.68 | 1102 | 0.84 | 1161 | 1.00 | 1217 | 1.16 | 1269 | 1.32 | 1322 | 1.49 | 1372 | 1.66 | 1420 | 1.84 | 1465 | 2.02 |
| 4200 | 1826 | 1057 | 0.66 | 1121 | 0.83 | 1181 | 1.01 | 1236 | 1.19 | 1289 | 1.37 | 1340 | 1.54 | 1387 | 1.72 | 1435 | 1.90 | 1482 | 2.09 | 1526 | 2.29 |
| 4600 | 2000 | 1146 | 0.83 | 1205 | 1.02 | 1261 | 1.22 | 1314 | 1.41 | 1364 | 1.60 | 1412 | 1.80 | 1458 | 1.99 | 1502 | 2.18 | 1545 | 2.38 | 1589 | 2.59 |
| 5000 | 2173 | 1235 | 1.04 | 1290 | 1.23 | 1343 | 1.44 | 1393 | 1.66 | 1441 | 1.87 | 1487 | 2.08 | 1531 | 2.29 | 1574 | 2.50 | 1615 | 2.71 | 1654 | 2.92 |
| 5400 | 2347 | 1325 | 1.27 | 1376 | 1.48 | 1427 | 1.70 | 1475 | 1.94 | 1520 | 2.17 | 1563 | 2.39 | 1606 | 2.62 | 1647 | 2.84 | 1687 | 3.07 | 1726 | 3.30 |
| 5800 | 2521 | 1416 | 1.54 | 1464 | 1.76 | 1511 | 2.00 | 1557 | 2.24 | 1600 | 2.50 | 1642 | 2.74 | 1682 | 2.99 | 1722 | 3.23 | 1761 | 3.47 | 1798 | 3.71 |
| 6200 | 2695 | 1507 | 1.85 | 1552 | 2.09 | 1596 | 2.33 | 1640 | 2.59 | 1682 | 2.86 | 1722 | 3.12 | 1761 | 3.38 | 1798 | 3.65 | 1835 | 3.91 | 1872 | 4.16 |
| 6600 | 2869 | 1598 | 2.20 | 1641 | 2.45 | 1683 | 2.70 | 1724 | 2.98 | 1765 | 3.26 | 1803 | 3.54 | 1841 | 3.82 | 1877 | 4.10 | 1912 | 4.38 | 1947 | 4.66 |
| 7000 | 3043 | 1689 | 2.59 | 1731 | 2.86 | 1770 | 3.12 | 1809 | 3.40 | 1848 | 3.70 | 1886 | 4.00 | 1922 | 4.30 | 1957 | 4.60 | 1991 | 4.89 | 2024 | 5.19 |
| 7400 | 3217 | 1781 | 3.03 | 1821 | 3.31 | 1859 | 3.59 | 1895 | 3.88 | 1933 | 4.19 | 1969 | 4.50 | 2003 | 4.82 | 2037 | 5.14 | 2070 | 5.45 | 2103 | 5.76 |
| 7800 | 3391 | 1873 | 3.52 | 1911 | 3.81 | 1947 | 4.11 | 1982 | 4.40 | 2018 | 4.72 | 2052 | 5.05 | 2086 | 5.38 | 2119 | 5.72 | 2151 | 6.06 | 2182 | 6.39 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3200 | 1391 | 1395 | 1.70 | 1503 | 2.07 | 1607 | 2.46 | 1703 | 2.86 | | | | | | | | |
| 3600 | 1565 | 1438 | 1.90 | 1539 | 2.28 | 1633 | 2.69 | 1730 | 3.12 | 1820 | 3.56 | 1906 | 4.02 | | | | |
| 4000 | 1739 | 1496 | 2.15 | 1582 | 2.53 | 1674 | 2.96 | 1760 | 3.40 | 1847 | 3.86 | 1932 | 4.34 | 2014 | 4.83 | 2092 | 5.34 |
| 4400 | 1913 | 1557 | 2.43 | 1641 | 2.84 | 1720 | 3.25 | 1803 | 3.71 | 1884 | 4.19 | 1960 | 4.68 | 2040 | 5.19 | 2118 | 5.72 |
| 4800 | 2086 | 1621 | 2.75 | 1703 | 3.18 | 1780 | 3.62 | 1853 | 4.07 | 1927 | 4.55 | 2003 | 5.07 | 2076 | 5.59 | 2145 | 6.13 |
| 5200 | 2260 | 1690 | 3.11 | 1766 | 3.55 | 1842 | 4.02 | 1914 | 4.50 | 1982 | 4.99 | 2047 | 5.48 | 2118 | 6.03 | 2188 | 6.59 |
| 5600 | 2434 | 1762 | 3.50 | 1834 | 3.97 | 1905 | 4.46 | 1976 | 4.96 | 2043 | 5.48 | 2107 | 6.00 | 2168 | 6.53 | 2231 | 7.08 |
| 6000 | 2608 | 1835 | 3.93 | 1906 | 4.44 | 1972 | 4.95 | 2039 | 5.47 | 2105 | 6.00 | 2168 | 6.55 | 2229 | 7.11 | 2288 | 7.67 |
| 6400 | 2782 | 1909 | 4.41 | 1978 | 4.94 | 2044 | 5.48 | 2106 | 6.02 | 2168 | 6.58 | 2231 | 7.15 | 2291 | 7.73 | 2349 | 8.32 |
| 6800 | 2956 | 1985 | 4.92 | 2052 | 5.48 | 2116 | 6.05 | 2177 | 6.63 | 2236 | 7.20 | 2294 | 7.79 | 2353 | 8.40 | 2411 | 9.01 |
| 7200 | 3130 | 2063 | 5.47 | 2127 | 6.08 | 2190 | 6.67 | 2250 | 7.28 | 2307 | 7.89 | 2363 | 8.50 | 2417 | 9.11 | 2473 | 9.75 |
| 7600 | 3304 | 2142 | 6.07 | 2204 | 6.71 | 2264 | 7.35 | 2323 | 7.98 | 2380 | 8.62 | 2434 | 9.26 | 2487 | 9.90 | 2538 | 10.6 |
| 8000 | 3478 | 2223 | 6.72 | 2282 | 7.39 | 2340 | 8.07 | 2397 | 8.73 | 2453 | 9.39 | 2506 | 10.1 | 2558 | 10.8 | 2608 | 11.4 |
| 8400 | 3652 | 2304 | 7.40 | 2362 | 8.12 | 2418 | 8.82 | 2472 | 9.54 | 2527 | 10.2 | 2579 | 10.9 | 2630 | 11.6 | 2680 | 12.4 |
| 8800 | 3826 | 2385 | 8.14 | 2442 | 8.90 | 2497 | 9.64 | 2550 | 10.4 | 2602 | 11.1 | 2653 | 11.9 | 2703 | 12.6 | 2752 | 13.3 |
| 9200 | 4000 | 2468 | 8.93 | 2523 | 9.73 | 2577 | 10.5 | 2628 | 11.3 | 2678 | 12.1 | 2728 | 12.8 | 2777 | 13.6 | 2825 | 14.4 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5000 | 2173 | 2304 | 7.50 | 2373 | 8.10 | 2440 | 8.70 | 2505 | 9.32 | 2568 | 10.0 | | | | | | |
| 5400 | 2347 | 2340 | 8.01 | 2402 | 8.61 | 2467 | 9.23 | 2532 | 9.88 | 2595 | 10.5 | 2716 | 11.9 | 2831 | 13.2 | | |
| 5800 | 2521 | 2383 | 8.56 | 2445 | 9.19 | 2504 | 9.82 | 2563 | 10.5 | 2621 | 11.1 | 2742 | 12.5 | 2857 | 13.9 | 2967 | 15.4 |
| 6200 | 2695 | 2429 | 9.16 | 2488 | 9.80 | 2547 | 10.5 | 2605 | 11.1 | 2662 | 11.8 | 2770 | 13.2 | 2884 | 14.6 | 2994 | 16.1 |
| 6600 | 2869 | 2489 | 9.89 | 2541 | 10.5 | 2592 | 11.1 | 2648 | 11.8 | 2704 | 12.5 | 2812 | 14.0 | 2916 | 15.4 | 3020 | 16.9 |
| 7000 | 3043 | 2550 | 10.7 | 2602 | 11.3 | 2652 | 12.0 | 2702 | 12.6 | 2750 | 13.3 | 2855 | 14.8 | 2958 | 16.3 | 3056 | 17.8 |
| 7400 | 3217 | 2612 | 11.5 | 2664 | 12.1 | 2714 | 12.8 | 2762 | 13.5 | 2810 | 14.2 | 2901 | 15.6 | 3001 | 17.2 | 3099 | 18.7 |
| 7800 | 3391 | 2675 | 12.3 | 2726 | 13.0 | 2775 | 13.8 | 2824 | 14.5 | 2871 | 15.2 | 2962 | 16.6 | 3049 | 18.1 | 3142 | 19.7 |
| 8200 | 3565 | 2739 | 13.3 | 2789 | 14.0 | 2838 | 14.7 | 2886 | 15.5 | 2932 | 16.2 | 3023 | 17.7 | 3109 | 19.3 | 3192 | 20.8 |
| 8600 | 3739 | 2810 | 14.3 | 2855 | 15.0 | 2901 | 15.8 | 2949 | 16.5 | 2995 | 17.3 | 3084 | 18.9 | 3170 | 20.4 | 3253 | 22.1 |
| 9000 | 3913 | 2881 | 15.4 | 2926 | 16.1 | 2970 | 16.9 | 3012 | 17.7 | 3058 | 18.4 | 3147 | 20.1 | 3232 | 21.7 | 3314 | 23.4 |
| 9400 | 4086 | 2954 | 16.5 | 2998 | 17.3 | 3041 | 18.1 | 3083 | 18.9 | 3124 | 19.7 | 3210 | 21.3 | 3294 | 23.0 | 3376 | 24.7 |
| 9800 | 4260 | 3027 | 17.7 | 3070 | 18.5 | 3112 | 19.3 | 3154 | 20.2 | 3195 | 21.0 | 3274 | 22.7 | 3357 | 24.4 | 3438 | 26.2 |
| 10200 | 4434 | 3100 | 18.9 | 3143 | 19.8 | 3185 | 20.6 | 3226 | 21.5 | 3266 | 22.4 | 3345 | 24.1 | 342 | 25.8 | | |
| 10600 | 4608 | 3175 | 20.3 | 3217 | 21.1 | 3258 | 22.0 | 3299 | 22.9 | 3338 | 23.8 | 3416 | 25.6 | | | | |
| 11000 | 4782 | 3250 | 21.7 | 3291 | 22.6 | 3332 | 23.5 | 3372 | 24.4 | 3411 | 25.3 | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



% WOV = (CFM X 100) / (RPM X 4.25)

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 600 | 100 | 81 | 79 | 70 | 63 | 59 | 52 | 43 | 36 | 68 |
| | 80 | 79 | 79 | 67 | 60 | 55 | 50 | 42 | 35 | 66 |
| | 60 | 76 | 78 | 64 | 59 | 57 | 51 | 43 | 35 | 65 |
| | 50 | 76 | 78 | 63 | 59 | 59 | 51 | 44 | 36 | 65 |
| | 40 | 80 | 79 | 63 | 59 | 59 | 52 | 45 | 37 | 66 |
| 900 | 100 | 85 | 85 | 80 | 74 | 70 | 63 | 55 | 47 | 77 |
| | 80 | 85 | 80 | 76 | 71 | 67 | 60 | 52 | 44 | 73 |
| | 60 | 85 | 78 | 73 | 68 | 66 | 59 | 53 | 45 | 72 |
| | 50 | 83 | 78 | 71 | 68 | 67 | 60 | 54 | 48 | 72 |
| | 40 | 86 | 79 | 71 | 68 | 68 | 60 | 55 | 48 | 72 |
| 1200 | 100 | 87 | 84 | 86 | 82 | 77 | 72 | 64 | 59 | 83 |
| | 80 | 85 | 82 | 83 | 78 | 73 | 68 | 61 | 57 | 80 |
| | 60 | 84 | 80 | 79 | 76 | 73 | 67 | 64 | 60 | 78 |
| | 50 | 85 | 78 | 77 | 74 | 74 | 68 | 66 | 62 | 78 |
| | 40 | 90 | 84 | 78 | 74 | 74 | 68 | 66 | 62 | 79 |
| 1700 | 100 | 93 | 90 | 92 | 88 | 86 | 83 | 74 | 69 | 91 |
| | 80 | 90 | 87 | 92 | 87 | 83 | 79 | 72 | 68 | 89 |
| | 60 | 89 | 84 | 90 | 84 | 81 | 77 | 74 | 71 | 87 |
| | 50 | 89 | 84 | 88 | 82 | 81 | 77 | 76 | 73 | 86 |
| | 40 | 94 | 89 | 91 | 83 | 82 | 77 | 76 | 73 | 88 |
| 2400 | 100 | 100 | 96 | 95 | 99 | 93 | 95 | 87 | 80 | 101 |
| | 80 | 96 | 93 | 94 | 98 | 90 | 89 | 82 | 78 | 98 |
| | 60 | 95 | 90 | 93 | 97 | 89 | 87 | 84 | 81 | 96 |
| | 50 | 98 | 93 | 93 | 96 | 88 | 87 | 85 | 83 | 96 |
| | 40 | 104 | 99 | 97 | 98 | 88 | 87 | 86 | 83 | 98 |
| 3445 | 100 | 107 | 108 | 104 | 107 | 104 | 102 | 99 | 91 | 109 |
| | 80 | 103 | 104 | 103 | 106 | 102 | 97 | 93 | 88 | 107 |
| | 60 | 102 | 102 | 101 | 104 | 100 | 96 | 93 | 90 | 105 |
| | 50 | 105 | 105 | 102 | 104 | 100 | 95 | 94 | 92 | 105 |
| | 40 | 111 | 112 | 108 | 106 | 101 | 95 | 94 | 92 | 107 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 600 | 100 | 91 | 83 | 72 | 64 | 62 | 53 | 42 | 35 | 72 |
| | 80 | 91 | 83 | 69 | 61 | 59 | 51 | 40 | 34 | 71 |
| | 60 | 88 | 81 | 67 | 60 | 59 | 51 | 43 | 36 | 69 |
| | 50 | 86 | 81 | 66 | 59 | 59 | 51 | 44 | 37 | 68 |
| | 40 | 87 | 81 | 66 | 59 | 59 | 51 | 45 | 38 | 68 |
| 900 | 100 | 97 | 87 | 82 | 75 | 74 | 66 | 57 | 49 | 80 |
| | 80 | 97 | 86 | 79 | 71 | 68 | 61 | 53 | 45 | 77 |
| | 60 | 94 | 83 | 76 | 69 | 67 | 61 | 55 | 50 | 75 |
| | 50 | 100 | 87 | 77 | 68 | 67 | 61 | 56 | 52 | 78 |
| | 40 | 102 | 88 | 78 | 70 | 68 | 62 | 57 | 52 | 80 |
| 1200 | 100 | 99 | 89 | 88 | 83 | 82 | 76 | 67 | 60 | 86 |
| | 80 | 99 | 86 | 85 | 79 | 77 | 71 | 63 | 58 | 83 |
| | 60 | 98 | 85 | 83 | 76 | 73 | 68 | 63 | 60 | 80 |
| | 50 | 99 | 86 | 82 | 74 | 71 | 67 | 64 | 61 | 80 |
| | 40 | 104 | 91 | 85 | 76 | 73 | 67 | 64 | 62 | 83 |
| 1700 | 100 | 104 | 97 | 95 | 88 | 89 | 87 | 78 | 71 | 94 |
| | 80 | 101 | 93 | 93 | 84 | 84 | 81 | 73 | 68 | 90 |
| | 60 | 101 | 89 | 91 | 83 | 82 | 77 | 72 | 69 | 88 |
| | 50 | 102 | 90 | 91 | 82 | 80 | 77 | 73 | 71 | 87 |
| | 40 | 105 | 93 | 91 | 82 | 80 | 76 | 73 | 71 | 88 |
| 2400 | 100 | 108 | 103 | 99 | 103 | 96 | 96 | 90 | 83 | 103 |
| | 80 | 106 | 98 | 96 | 99 | 93 | 91 | 84 | 78 | 100 |
| | 60 | 106 | 94 | 94 | 95 | 90 | 87 | 82 | 79 | 96 |
| | 50 | 109 | 94 | 93 | 95 | 89 | 86 | 83 | 80 | 96 |
| | 40 | 112 | 98 | 96 | 95 | 88 | 85 | 83 | 80 | 96 |
| 3445 | 100 | 116 | 114 | 108 | 110 | 107 | 104 | 101 | 94 | 112 |
| | 80 | 114 | 110 | 105 | 106 | 104 | 100 | 96 | 89 | 109 |
| | 60 | 114 | 108 | 102 | 102 | 100 | 96 | 92 | 89 | 105 |
| | 50 | 117 | 109 | 101 | 102 | 100 | 95 | 92 | 89 | 105 |
| | 40 | 120 | 113 | 105 | 102 | 99 | 94 | 92 | 90 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

22 AFSW

Wheel Diameter = 22¼ in.

Outlet Area = 2.85 ft.²

Tip Speed = 5.83 x RPM

Maximum BHP = (RPM/969)³

Minimum Starting HP = ½

Maximum RPM Class I = 1885

Maximum RPM Class II = 2459

Maximum RPM Class III = 3098

Maximum Open Motor Frame Size

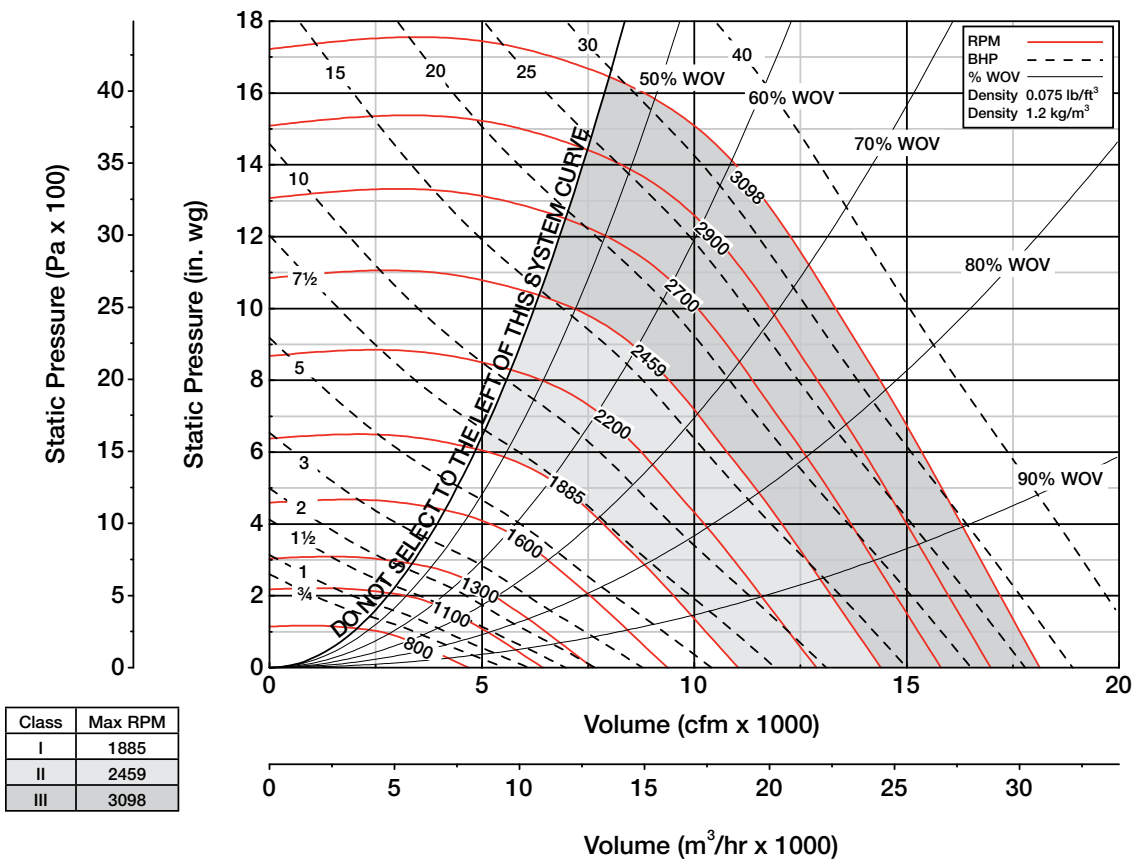
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 256T | 256T | 256T |
| Arr. 10 | 215T | 256T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 2000 | 701 | 475 | 0.12 | 578 | 0.21 | 676 | 0.32 | 766 | 0.45 | | | | | | | | | | | | |
| 2500 | 877 | 542 | 0.17 | 633 | 0.28 | 713 | 0.40 | 793 | 0.53 | 869 | 0.68 | 941 | 0.83 | | | | | | | | |
| 3000 | 1052 | 612 | 0.24 | 695 | 0.37 | 768 | 0.50 | 836 | 0.64 | 902 | 0.79 | 966 | 0.96 | 1031 | 1.13 | 1092 | 1.32 | 1150 | 1.51 | | |
| 3500 | 1228 | 687 | 0.33 | 761 | 0.48 | 828 | 0.62 | 892 | 0.78 | 950 | 0.94 | 1005 | 1.11 | 1064 | 1.29 | 1118 | 1.48 | 1173 | 1.69 | 1228 | 1.90 |
| 4000 | 1403 | 763 | 0.44 | 831 | 0.61 | 894 | 0.78 | 951 | 0.95 | 1007 | 1.12 | 1060 | 1.30 | 1109 | 1.49 | 1157 | 1.69 | 1208 | 1.90 | 1257 | 2.12 |
| 4500 | 1578 | 841 | 0.58 | 904 | 0.77 | 962 | 0.96 | 1017 | 1.14 | 1067 | 1.34 | 1116 | 1.53 | 1165 | 1.73 | 1210 | 1.94 | 1254 | 2.15 | 1296 | 2.37 |
| 5000 | 1754 | 920 | 0.75 | 979 | 0.95 | 1033 | 1.16 | 1084 | 1.37 | 1133 | 1.58 | 1178 | 1.79 | 1222 | 2.01 | 1267 | 2.23 | 1309 | 2.46 | 1350 | 2.69 |
| 5500 | 1929 | 1000 | 0.95 | 1055 | 1.17 | 1105 | 1.41 | 1153 | 1.64 | 1200 | 1.87 | 1244 | 2.10 | 1286 | 2.33 | 1325 | 2.56 | 1366 | 2.80 | 1406 | 3.05 |
| 6000 | 2105 | 1081 | 1.19 | 1133 | 1.43 | 1180 | 1.68 | 1225 | 1.93 | 1268 | 2.19 | 1311 | 2.44 | 1351 | 2.69 | 1390 | 2.94 | 1427 | 3.19 | 1463 | 3.45 |
| 6500 | 2280 | 1163 | 1.47 | 1211 | 1.73 | 1256 | 1.99 | 1298 | 2.27 | 1340 | 2.54 | 1379 | 2.82 | 1418 | 3.08 | 1456 | 3.36 | 1492 | 3.63 | 1527 | 3.91 |
| 7000 | 2456 | 1245 | 1.79 | 1290 | 2.07 | 1333 | 2.35 | 1374 | 2.64 | 1412 | 2.94 | 1450 | 3.23 | 1487 | 3.53 | 1523 | 3.82 | 1559 | 4.11 | 1593 | 4.40 |
| 7500 | 2631 | 1327 | 2.16 | 1370 | 2.46 | 1411 | 2.76 | 1450 | 3.07 | 1487 | 3.38 | 1523 | 3.69 | 1558 | 4.01 | 1592 | 4.33 | 1626 | 4.64 | 1659 | 4.95 |
| 8000 | 2807 | 1410 | 2.58 | 1451 | 2.89 | 1490 | 3.21 | 1527 | 3.54 | 1562 | 3.87 | 1596 | 4.21 | 1630 | 4.54 | 1663 | 4.88 | 1695 | 5.22 | 1727 | 5.55 |
| 8500 | 2982 | 1493 | 3.05 | 1532 | 3.38 | 1569 | 3.72 | 1604 | 4.06 | 1638 | 4.41 | 1671 | 4.77 | 1703 | 5.13 | 1735 | 5.48 | 1766 | 5.84 | 1796 | 6.20 |
| 9000 | 3157 | 1576 | 3.58 | 1613 | 3.93 | 1649 | 4.29 | 1683 | 4.65 | 1716 | 5.02 | 1747 | 5.39 | 1778 | 5.76 | 1808 | 6.14 | 1838 | 6.52 | 1867 | 6.90 |
| 9500 | 3333 | 1659 | 4.17 | 1695 | 4.54 | 1729 | 4.91 | 1762 | 5.29 | 1793 | 5.68 | 1824 | 6.07 | 1854 | 6.46 | 1882 | 6.86 | 1911 | 7.26 | 1939 | 7.66 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4000 | 1403 | 1257 | 2.12 | 1353 | 2.58 | 1446 | 3.06 | 1533 | 3.57 | | | | | | | | | | | | |
| 4500 | 1578 | 1296 | 2.37 | 1386 | 2.85 | 1470 | 3.35 | 1557 | 3.89 | 1638 | 4.44 | 1715 | 5.01 | | | | | | | | |
| 5000 | 1754 | 1350 | 2.69 | 1426 | 3.16 | 1508 | 3.69 | 1586 | 4.24 | 1662 | 4.81 | 1739 | 5.41 | 1812 | 6.02 | 1882 | 6.65 | | | | |
| 5500 | 1929 | 1406 | 3.05 | 1481 | 3.55 | 1551 | 4.07 | 1624 | 4.64 | 1697 | 5.23 | 1766 | 5.84 | 1836 | 6.47 | 1906 | 7.13 | 1973 | 7.80 | 2038 | 8.49 |
| 6000 | 2105 | 1463 | 3.45 | 1537 | 3.99 | 1607 | 4.54 | 1672 | 5.10 | 1736 | 5.69 | 1805 | 6.33 | 1870 | 6.98 | 1933 | 7.64 | 1997 | 8.34 | 2062 | 9.06 |
| 6500 | 2280 | 1527 | 3.91 | 1595 | 4.46 | 1663 | 5.04 | 1727 | 5.64 | 1788 | 6.25 | 1846 | 6.86 | 1909 | 7.53 | 1971 | 8.23 | 2031 | 8.94 | 2089 | 9.66 |
| 7000 | 2456 | 1593 | 4.40 | 1657 | 5.00 | 1720 | 5.60 | 1784 | 6.23 | 1844 | 6.86 | 1901 | 7.51 | 1957 | 8.17 | 2010 | 8.85 | 2070 | 9.59 | 2128 | 10.3 |
| 7500 | 2631 | 1659 | 4.95 | 1723 | 5.58 | 1782 | 6.22 | 1841 | 6.86 | 1900 | 7.53 | 1957 | 8.21 | 2012 | 8.90 | 2064 | 9.61 | 2115 | 10.3 | 2167 | 11.1 |
| 8000 | 2807 | 1727 | 5.55 | 1789 | 6.22 | 1847 | 6.89 | 1903 | 7.57 | 1958 | 8.25 | 2014 | 8.97 | 2068 | 9.69 | 2120 | 10.4 | 2170 | 11.2 | 2219 | 11.9 |
| 8500 | 2982 | 1796 | 6.20 | 1856 | 6.91 | 1913 | 7.65 | 1968 | 8.34 | 2021 | 9.06 | 2072 | 9.78 | 2125 | 10.5 | 2176 | 11.3 | 2226 | 12.1 | 2274 | 12.9 |
| 9000 | 3157 | 1867 | 6.90 | 1924 | 7.66 | 1980 | 8.41 | 2034 | 9.16 | 2085 | 9.92 | 2135 | 10.7 | 2183 | 11.5 | 2233 | 12.2 | 2282 | 13.1 | 2330 | 13.9 |
| 9500 | 3333 | 1939 | 7.66 | 1994 | 8.46 | 2048 | 9.26 | 2101 | 10.0 | 2151 | 10.8 | 2200 | 11.7 | 2247 | 12.5 | 2293 | 13.3 | 2340 | 14.1 | 2387 | 14.9 |
| 10000 | 3508 | 2012 | 8.48 | 2066 | 9.32 | 2117 | 10.2 | 2168 | 11.0 | 2218 | 11.8 | 2266 | 12.7 | 2312 | 13.5 | 2357 | 14.4 | 2401 | 15.2 | 2445 | 16.1 |
| 10500 | 3684 | 2087 | 9.36 | 2138 | 10.2 | 2188 | 11.1 | 2237 | 12.0 | 2285 | 12.9 | 2332 | 13.8 | 2378 | 14.6 | 2422 | 15.5 | 2465 | 16.4 | 2507 | 17.3 |
| 11000 | 3859 | 2162 | 10.3 | 2211 | 11.2 | 2260 | 12.2 | 2307 | 13.1 | 2353 | 14.0 | 2400 | 14.9 | 2445 | 15.8 | 2488 | 16.8 | 2531 | 17.7 | 2572 | 18.6 |
| 11500 | 4035 | 2238 | 11.3 | 2285 | 12.3 | 2332 | 13.3 | 2379 | 14.2 | 2424 | 15.2 | 2468 | 16.2 | 2512 | 17.1 | 2555 | 18.1 | 2596 | 19.0 | 2637 | 20.0 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6500 | 2280 | 2089 | 9.66 | 2148 | 10.4 | 2208 | 11.2 | 2267 | 12.0 | 2323 | 12.8 | 2432 | 14.4 | | | | | | | | |
| 7000 | 2456 | 2128 | 10.3 | 2183 | 11.1 | 2237 | 11.9 | 2291 | 12.7 | 2347 | 13.5 | 2456 | 15.2 | 2560 | 16.9 | 2659 | 18.7 | | | | |
| 7500 | 2631 | 2167 | 11.1 | 2222 | 11.9 | 2276 | 12.7 | 2328 | 13.5 | 2379 | 14.3 | 2480 | 16.0 | 2584 | 17.8 | 2683 | 19.6 | 2777 | 21.5 | 2869 | 23.4 |
| 8000 | 2807 | 2219 | 11.9 | 2266 | 12.7 | 2315 | 13.5 | 2367 | 14.3 | 2417 | 15.2 | 2515 | 16.9 | 2608 | 18.7 | 2706 | 20.6 | 2801 | 22.5 | 2893 | 24.5 |
| 8500 | 2982 | 2274 | 12.9 | 2321 | 13.7 | 2366 | 14.5 | 2410 | 15.3 | 2457 | 16.1 | 2553 | 17.9 | 2646 | 19.8 | 2734 | 21.7 | 2825 | 23.6 | 2917 | 25.6 |
| 9000 | 3157 | 2330 | 13.9 | 2376 | 14.7 | 2421 | 15.5 | 2465 | 16.4 | 2508 | 17.2 | 2593 | 19.0 | 2685 | 20.9 | 2773 | 22.8 | 2858 | 24.8 | 2941 | 26.8 |
| 9500 | 3333 | 2387 | 14.9 | 2433 | 15.8 | 2477 | 16.7 | 2521 | 17.5 | 2563 | 18.4 | 2645 | 20.2 | 2724 | 22.0 | 2812 | 24.0 | 2897 | 26.1 | 2978 | 28.1 |
| 10000 | 3508 | 2445 | 16.1 | 2490 | 17.0 | 2534 | 17.9 | 2577 | 18.8 | 2619 | 19.7 | 2700 | 21.5 | 2778 | 23.4 | 2853 | 25.3 | 2936 | 27.4 | 3017 | 29.5 |
| 10500 | 3684 | 2507 | 17.3 | 2548 | 18.2 | 2591 | 19.1 | 2634 | 20.1 | 2676 | 21.0 | 2756 | 22.9 | 2833 | 24.9 | 2908 | 26.8 | 2980 | 28.8 | 3056 | 31.0 |
| 11000 | 3859 | 2572 | 18.6 | 2612 | 19.6 | 2651 | 20.5 | 2692 | 21.4 | 2733 | 22.4 | 2813 | 24.4 | 2889 | 26.4 | 2963 | 28.4 | 3034 | 30.5 | | |
| 11500 | 4035 | 2637 | 20.0 | 2677 | 21.0 | 2716 | 22.0 | 2754 | 22.9 | 2791 | 23.9 | 2870 | 26.0 | 2946 | 28.0 | 3019 | 30.1 | 3090 | 32.2 | | |
| 12000 | 4210 | 2703 | 21.5 | 2742 | 22.5 | 2781 | 23.5 | 2818 | 24.5 | 2855 | 25.5 | 2927 | 27.6 | 3003 | 29.7 | 3075 | 31.9 | | | | |
| 12500 | 4385 | 2770 | 23.0 | 2809 | 24.0 | 2846 | 25.1 | 2883 | 26.2 | 2920 | 27.3 | 2990 | 29.4 | 3060 | 31.5 | | | | | | |
| 13000 | 4561 | 2837 | 24.7 | 2875 | 25.8 | 2913 | 26.8 | 2949 | 27.9 | 2985 | 29.0 | 3055 | 31.2 | | | | | | | | |
| 13500 | 4736 | 2905 | 26.4 | 2943 | 27.5 | 2980 | 28.6 | 3016 | 29.8 | 3051 | 30.9 | | | | | | | | | | |
| 14000 | 4912 | 2974 | 28.2 | 3011 | 29.4 | 3047 | 30.5 | 3083 | 31.7 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 5.85)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 500 | 100 | 82 | 76 | 67 | 61 | 56 | 49 | 40 | 34 | 65 |
| | 80 | 80 | 75 | 64 | 58 | 53 | 48 | 39 | 32 | 63 |
| | 60 | 77 | 74 | 61 | 57 | 55 | 48 | 40 | 33 | 62 |
| | 50 | 77 | 74 | 60 | 58 | 57 | 49 | 42 | 33 | 63 |
| | 40 | 81 | 74 | 60 | 58 | 57 | 49 | 42 | 34 | 63 |
| 700 | 100 | 83 | 81 | 75 | 70 | 65 | 58 | 49 | 42 | 72 |
| | 80 | 82 | 76 | 72 | 67 | 62 | 55 | 47 | 39 | 69 |
| | 60 | 82 | 73 | 69 | 65 | 62 | 54 | 48 | 40 | 68 |
| | 50 | 80 | 74 | 67 | 65 | 63 | 55 | 50 | 43 | 68 |
| | 40 | 82 | 74 | 66 | 65 | 64 | 56 | 51 | 43 | 68 |
| 1000 | 100 | 85 | 85 | 84 | 80 | 75 | 69 | 62 | 57 | 82 |
| | 80 | 83 | 83 | 81 | 76 | 71 | 65 | 59 | 55 | 78 |
| | 60 | 82 | 80 | 77 | 74 | 71 | 66 | 62 | 58 | 76 |
| | 50 | 82 | 79 | 75 | 73 | 71 | 67 | 64 | 60 | 76 |
| | 40 | 87 | 85 | 76 | 74 | 72 | 67 | 64 | 60 | 77 |
| 1500 | 100 | 93 | 91 | 92 | 88 | 86 | 82 | 74 | 68 | 91 |
| | 80 | 90 | 88 | 91 | 87 | 83 | 78 | 72 | 68 | 89 |
| | 60 | 89 | 86 | 90 | 84 | 81 | 77 | 74 | 71 | 87 |
| | 50 | 89 | 86 | 88 | 83 | 81 | 78 | 76 | 73 | 86 |
| | 40 | 94 | 90 | 90 | 84 | 82 | 78 | 76 | 73 | 88 |
| 2200 | 100 | 101 | 97 | 97 | 100 | 94 | 95 | 87 | 80 | 101 |
| | 80 | 97 | 95 | 96 | 99 | 91 | 89 | 83 | 78 | 98 |
| | 60 | 95 | 92 | 95 | 97 | 90 | 88 | 85 | 82 | 97 |
| | 50 | 99 | 95 | 95 | 97 | 89 | 88 | 86 | 84 | 97 |
| | 40 | 105 | 101 | 99 | 98 | 89 | 88 | 87 | 84 | 98 |
| 3098 | 100 | 109 | 108 | 105 | 108 | 103 | 104 | 99 | 91 | 110 |
| | 80 | 105 | 105 | 103 | 107 | 101 | 98 | 93 | 88 | 107 |
| | 60 | 104 | 102 | 102 | 106 | 100 | 96 | 94 | 91 | 106 |
| | 50 | 107 | 106 | 103 | 105 | 99 | 96 | 95 | 92 | 106 |
| | 40 | 113 | 112 | 108 | 107 | 100 | 96 | 95 | 93 | 108 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 500 | 100 | 91 | 78 | 69 | 62 | 60 | 50 | 39 | 32 | 69 |
| | 80 | 91 | 77 | 66 | 59 | 57 | 48 | 37 | 31 | 68 |
| | 60 | 88 | 77 | 64 | 58 | 57 | 48 | 40 | 34 | 66 |
| | 50 | 86 | 76 | 63 | 58 | 57 | 48 | 42 | 35 | 66 |
| | 40 | 87 | 77 | 63 | 58 | 57 | 48 | 42 | 35 | 66 |
| 700 | 100 | 92 | 83 | 78 | 72 | 70 | 61 | 52 | 44 | 76 |
| | 80 | 93 | 81 | 74 | 67 | 64 | 56 | 48 | 40 | 73 |
| | 60 | 90 | 79 | 71 | 65 | 64 | 56 | 51 | 45 | 70 |
| | 50 | 95 | 81 | 72 | 65 | 63 | 56 | 52 | 48 | 73 |
| | 40 | 97 | 82 | 73 | 66 | 65 | 58 | 53 | 48 | 74 |
| 1000 | 100 | 96 | 89 | 86 | 82 | 79 | 73 | 64 | 58 | 85 |
| | 80 | 95 | 86 | 83 | 78 | 75 | 68 | 61 | 55 | 81 |
| | 60 | 94 | 85 | 80 | 75 | 71 | 66 | 62 | 58 | 78 |
| | 50 | 95 | 86 | 79 | 73 | 70 | 65 | 62 | 60 | 78 |
| | 40 | 100 | 91 | 82 | 74 | 70 | 66 | 63 | 60 | 81 |
| 1500 | 100 | 103 | 97 | 94 | 89 | 89 | 86 | 77 | 70 | 94 |
| | 80 | 100 | 93 | 92 | 85 | 84 | 80 | 72 | 68 | 89 |
| | 60 | 99 | 90 | 91 | 84 | 82 | 77 | 72 | 69 | 88 |
| | 50 | 100 | 90 | 90 | 82 | 80 | 76 | 73 | 71 | 87 |
| | 40 | 103 | 93 | 90 | 82 | 79 | 76 | 73 | 71 | 87 |
| 2200 | 100 | 109 | 103 | 101 | 103 | 98 | 97 | 90 | 83 | 104 |
| | 80 | 107 | 99 | 98 | 100 | 95 | 92 | 85 | 79 | 100 |
| | 60 | 106 | 95 | 95 | 96 | 91 | 87 | 83 | 80 | 97 |
| | 50 | 108 | 95 | 95 | 96 | 90 | 87 | 84 | 81 | 96 |
| | 40 | 111 | 99 | 97 | 95 | 89 | 86 | 84 | 81 | 97 |
| 3098 | 100 | 117 | 114 | 108 | 112 | 107 | 105 | 101 | 94 | 113 |
| | 80 | 115 | 110 | 105 | 108 | 104 | 101 | 96 | 89 | 109 |
| | 60 | 116 | 106 | 102 | 104 | 101 | 97 | 93 | 89 | 106 |
| | 50 | 118 | 108 | 102 | 104 | 100 | 95 | 93 | 90 | 105 |
| | 40 | 121 | 111 | 105 | 104 | 99 | 95 | 93 | 90 | 106 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

24 AFSW

Wheel Diameter = 24½ in.

Outlet Area = 3.45 ft.²

Tip Speed = 6.41 x RPM

Maximum BHP = (RPM/824)³

Minimum Starting HP = ½

Maximum RPM Class I = 1694

Maximum RPM Class II = 2208

Maximum RPM Class III = 2782

Maximum Open Motor Frame Size

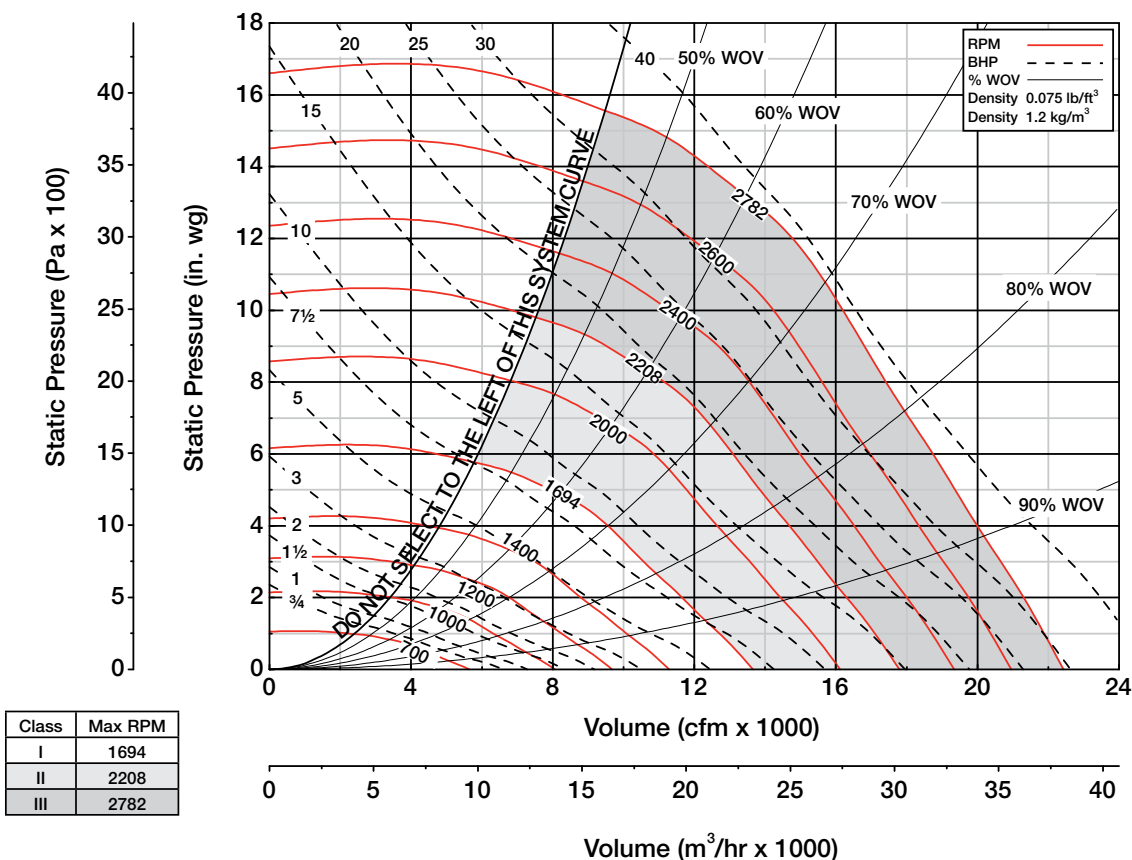
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 284T | 284T | 286T |
| Arr. 10 | 215T | 284T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3000 | 869 | 483 | 0.20 | 567 | 0.33 | 651 | 0.48 | 727 | 0.64 | 799 | 0.82 | 865 | 1.01 | | | | | | | | |
| 3600 | 1043 | 544 | 0.27 | 620 | 0.43 | 689 | 0.58 | 760 | 0.77 | 826 | 0.96 | 886 | 1.15 | 947 | 1.37 | 1004 | 1.60 | | | | |
| 4200 | 1217 | 607 | 0.37 | 679 | 0.55 | 740 | 0.73 | 799 | 0.91 | 861 | 1.12 | 919 | 1.34 | 974 | 1.56 | 1026 | 1.79 | 1078 | 2.04 | 1128 | 2.30 |
| 4800 | 1391 | 673 | 0.49 | 740 | 0.70 | 797 | 0.90 | 850 | 1.10 | 900 | 1.30 | 956 | 1.54 | 1008 | 1.79 | 1058 | 2.04 | 1107 | 2.29 | 1152 | 2.55 |
| 5400 | 1565 | 739 | 0.63 | 802 | 0.87 | 858 | 1.10 | 907 | 1.33 | 953 | 1.55 | 998 | 1.78 | 1046 | 2.04 | 1094 | 2.31 | 1140 | 2.59 | 1185 | 2.87 |
| 6000 | 1739 | 807 | 0.79 | 866 | 1.07 | 919 | 1.33 | 967 | 1.58 | 1010 | 1.83 | 1052 | 2.09 | 1093 | 2.34 | 1134 | 2.60 | 1178 | 2.90 | 1221 | 3.20 |
| 6600 | 1913 | 875 | 0.99 | 931 | 1.30 | 980 | 1.59 | 1028 | 1.87 | 1070 | 2.15 | 1109 | 2.43 | 1147 | 2.70 | 1185 | 2.98 | 1221 | 3.26 | 1260 | 3.57 |
| 7200 | 2086 | 944 | 1.23 | 997 | 1.57 | 1044 | 1.88 | 1089 | 2.19 | 1131 | 2.51 | 1169 | 2.81 | 1205 | 3.11 | 1240 | 3.41 | 1275 | 3.71 | 1309 | 4.02 |
| 7800 | 2260 | 1015 | 1.51 | 1064 | 1.86 | 1109 | 2.22 | 1151 | 2.56 | 1192 | 2.89 | 1230 | 3.24 | 1265 | 3.56 | 1298 | 3.88 | 1331 | 4.21 | 1363 | 4.54 |
| 8400 | 2434 | 1086 | 1.83 | 1131 | 2.19 | 1175 | 2.59 | 1215 | 2.96 | 1253 | 3.32 | 1291 | 3.69 | 1326 | 4.06 | 1359 | 4.40 | 1390 | 4.75 | 1420 | 5.10 |
| 9000 | 2608 | 1158 | 2.21 | 1199 | 2.57 | 1242 | 3.01 | 1280 | 3.41 | 1316 | 3.80 | 1352 | 4.19 | 1387 | 4.58 | 1420 | 4.98 | 1450 | 5.35 | 1480 | 5.72 |
| 9600 | 2782 | 1230 | 2.63 | 1268 | 3.00 | 1309 | 3.45 | 1346 | 3.91 | 1381 | 4.32 | 1415 | 4.74 | 1448 | 5.15 | 1480 | 5.57 | 1511 | 5.99 | 1540 | 6.39 |
| 10200 | 2956 | 1302 | 3.11 | 1338 | 3.48 | 1376 | 3.95 | 1413 | 4.45 | 1447 | 4.90 | 1479 | 5.34 | 1510 | 5.79 | 1542 | 6.23 | 1572 | 6.67 | 1601 | 7.12 |
| 10800 | 3130 | 1375 | 3.64 | 1408 | 4.04 | 1444 | 4.51 | 1479 | 5.03 | 1513 | 5.53 | 1544 | 6.00 | 1574 | 6.47 | 1604 | 6.94 | 1633 | 7.40 | 1662 | 7.87 |
| 11400 | 3304 | 1447 | 4.24 | 1479 | 4.65 | 1512 | 5.12 | 1546 | 5.66 | 1579 | 6.21 | 1610 | 6.72 | 1639 | 7.21 | 1667 | 7.71 | 1695 | 8.20 | 1723 | 8.69 |
| 12000 | 3478 | 1520 | 4.90 | 1551 | 5.33 | 1581 | 5.78 | 1614 | 6.35 | 1646 | 6.93 | 1676 | 7.50 | 1704 | 8.02 | 1732 | 8.54 | 1758 | 9.07 | 1785 | 9.58 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5000 | 1449 | 1163 | 2.65 | 1250 | 3.21 | 1336 | 3.83 | 1416 | 4.47 | | | | | | | | | | | | |
| 5600 | 1623 | 1196 | 2.98 | 1281 | 3.57 | 1359 | 4.17 | 1437 | 4.83 | 1513 | 5.53 | 1584 | 6.25 | | | | | | | | |
| 6200 | 1797 | 1234 | 3.32 | 1314 | 3.96 | 1392 | 4.61 | 1465 | 5.27 | 1533 | 5.95 | 1605 | 6.71 | 1673 | 7.48 | 1738 | 8.28 | 1800 | 9.09 | | |
| 6800 | 1971 | 1274 | 3.70 | 1352 | 4.37 | 1426 | 5.07 | 1497 | 5.78 | 1566 | 6.50 | 1631 | 7.23 | 1693 | 7.99 | 1758 | 8.82 | 1820 | 9.67 | 1880 | 10.5 |
| 7400 | 2144 | 1327 | 4.18 | 1392 | 4.82 | 1464 | 5.56 | 1533 | 6.31 | 1599 | 7.08 | 1663 | 7.85 | 1725 | 8.64 | 1784 | 9.45 | 1841 | 10.3 | 1901 | 11.2 |
| 8000 | 2318 | 1381 | 4.72 | 1444 | 5.39 | 1504 | 6.08 | 1571 | 6.88 | 1635 | 7.69 | 1696 | 8.51 | 1757 | 9.34 | 1816 | 10.2 | 1873 | 11.0 | 1927 | 11.9 |
| 8600 | 2492 | 1440 | 5.30 | 1498 | 6.02 | 1556 | 6.74 | 1611 | 7.48 | 1674 | 8.33 | 1735 | 9.20 | 1792 | 10.0 | 1849 | 11.0 | 1905 | 11.9 | 1959 | 12.8 |
| 9200 | 2666 | 1500 | 5.94 | 1555 | 6.71 | 1610 | 7.48 | 1664 | 8.25 | 1715 | 9.03 | 1774 | 9.93 | 1831 | 10.9 | 1886 | 11.8 | 1939 | 12.7 | 1992 | 13.7 |
| 9800 | 2840 | 1561 | 6.63 | 1615 | 7.44 | 1667 | 8.27 | 1718 | 9.08 | 1769 | 9.91 | 1817 | 10.7 | 1870 | 11.7 | 1925 | 12.6 | 1977 | 13.6 | 2028 | 14.6 |
| 10400 | 3014 | 1621 | 7.36 | 1676 | 8.24 | 1726 | 9.10 | 1774 | 10.0 | 1823 | 10.9 | 1871 | 11.7 | 1916 | 12.6 | 1964 | 13.5 | 2017 | 14.6 | 2067 | 15.6 |
| 11000 | 3188 | 1682 | 8.14 | 1737 | 9.11 | 1786 | 10.0 | 1833 | 10.9 | 1879 | 11.9 | 1925 | 12.8 | 1970 | 13.7 | 2014 | 14.6 | 2056 | 15.6 | 2106 | 16.7 |
| 11600 | 3362 | 1744 | 8.98 | 1797 | 10.0 | 1847 | 11.0 | 1894 | 12.0 | 1938 | 12.9 | 1981 | 13.9 | 2025 | 14.9 | 2068 | 15.8 | 2110 | 16.8 | 2150 | 17.8 |
| 12200 | 3536 | 1806 | 9.90 | 1858 | 11.0 | 1908 | 12.0 | 1954 | 13.1 | 1998 | 14.1 | 2040 | 15.1 | 2081 | 16.1 | 2123 | 17.1 | 2164 | 18.1 | 2204 | 19.2 |
| 12800 | 3710 | 1870 | 10.9 | 1920 | 12.0 | 1969 | 13.1 | 2015 | 14.2 | 2059 | 15.3 | 2100 | 16.3 | 2140 | 17.4 | 2179 | 18.5 | 2219 | 19.6 | 2258 | 20.6 |
| 13400 | 3884 | 1934 | 11.9 | 1982 | 13.1 | 2030 | 14.2 | 2076 | 15.4 | 2120 | 16.6 | 2161 | 17.7 | 2200 | 18.8 | 2238 | 19.9 | 2276 | 21.0 | 2313 | 22.2 |
| 14000 | 4057 | 2000 | 13.0 | 2046 | 14.2 | 2092 | 15.5 | 2137 | 16.7 | 2180 | 17.9 | 2222 | 19.1 | 2261 | 20.3 | 2298 | 21.4 | 2335 | 22.6 | 2371 | 23.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 8000 | 2318 | 1927 | 11.9 | 1980 | 12.8 | 2035 | 13.8 | 2090 | 14.8 | 2142 | 15.8 | 2243 | 17.8 | 2339 | 19.9 | | | | | | |
| 8600 | 2492 | 1959 | 12.8 | 2012 | 13.7 | 2063 | 14.6 | 2112 | 15.6 | 2163 | 16.6 | 2264 | 18.7 | 2360 | 20.9 | 2452 | 23.0 | | | | |
| 9200 | 2666 | 1992 | 13.7 | 2045 | 14.6 | 2095 | 15.6 | 2144 | 16.6 | 2192 | 17.6 | 2285 | 19.6 | 2381 | 21.9 | 2472 | 24.2 | 2560 | 26.5 | 2645 | 28.9 |
| 9800 | 2840 | 2028 | 14.6 | 2078 | 15.6 | 2128 | 16.7 | 2177 | 17.7 | 2225 | 18.7 | 2316 | 20.8 | 2403 | 23.0 | 2493 | 25.3 | 2581 | 27.7 | 2666 | 30.2 |
| 10400 | 3014 | 2067 | 15.6 | 2116 | 16.7 | 2163 | 17.7 | 2210 | 18.8 | 2257 | 19.9 | 2349 | 22.1 | 2436 | 24.3 | 2519 | 26.6 | 2602 | 28.9 | 2686 | 31.5 |
| 11000 | 3188 | 2106 | 16.6 | 2155 | 17.7 | 2202 | 18.8 | 2248 | 20.0 | 2293 | 21.1 | 2382 | 23.4 | 2468 | 25.7 | 2552 | 28.0 | 2631 | 30.4 | 2708 | 32.8 |
| 11600 | 3362 | 2150 | 17.8 | 2194 | 18.9 | 2241 | 20.0 | 2287 | 21.2 | 2331 | 22.3 | 2417 | 24.7 | 2501 | 27.1 | 2584 | 29.5 | 2664 | 32.0 | 2741 | 34.5 |
| 12200 | 3536 | 2204 | 19.2 | 2243 | 20.2 | 2281 | 21.2 | 2326 | 22.4 | 2370 | 23.7 | 2456 | 26.1 | 2537 | 28.6 | 2617 | 31.1 | 2697 | 33.7 | 2773 | 36.2 |
| 12800 | 3710 | 2258 | 20.6 | 2297 | 21.7 | 2334 | 22.8 | 2371 | 23.9 | 2410 | 25.0 | 2495 | 27.6 | 2576 | 30.1 | 2654 | 32.8 | 2730 | 35.4 | | |
| 13400 | 3884 | 2313 | 22.2 | 2351 | 23.3 | 2388 | 24.4 | 2425 | 25.5 | 2460 | 26.7 | 2534 | 29.1 | 2615 | 31.7 | 2693 | 34.4 | 2767 | 37.2 | | |
| 14000 | 4057 | 2371 | 23.8 | 2406 | 24.9 | 2443 | 26.0 | 2479 | 27.3 | 2514 | 28.4 | 2582 | 30.8 | 2654 | 33.4 | 2732 | 36.2 | | | | |
| 14600 | 4231 | 2430 | 25.4 | 2465 | 26.7 | 2499 | 27.9 | 2534 | 29.1 | 2569 | 30.3 | 2636 | 32.8 | 2701 | 35.3 | 2771 | 38.0 | | | | |
| 15200 | 4405 | 2490 | 27.2 | 2524 | 28.5 | 2558 | 29.8 | 2590 | 31.0 | 2624 | 32.3 | 2690 | 34.9 | 2755 | 37.4 | | | | | | |
| 15800 | 4579 | 2551 | 29.1 | 2585 | 30.4 | 2617 | 31.7 | 2650 | 33.0 | 2681 | 34.4 | 2745 | 37.0 | | | | | | | | |
| 16400 | 4753 | 2612 | 31.1 | 2645 | 32.4 | 2678 | 33.8 | 2709 | 35.1 | 2741 | 36.5 | | | | | | | | | | |
| 17000 | 4927 | 2673 | 33.1 | 2706 | 34.6 | 2738 | 36.0 | 2770 | 37.4 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 8.06)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 500 | 100 | 81 | 77 | 71 | 64 | 59 | 52 | 44 | 37 | 68 |
| | 80 | 81 | 75 | 68 | 59 | 53 | 47 | 42 | 36 | 64 |
| | 60 | 79 | 74 | 65 | 57 | 53 | 47 | 42 | 36 | 63 |
| | 50 | 78 | 74 | 65 | 57 | 55 | 51 | 45 | 37 | 63 |
| | 40 | 77 | 73 | 64 | 57 | 55 | 51 | 45 | 38 | 62 |
| 700 | 100 | 82 | 83 | 77 | 71 | 70 | 62 | 54 | 48 | 75 |
| | 80 | 81 | 83 | 76 | 68 | 63 | 58 | 51 | 45 | 72 |
| | 60 | 80 | 81 | 73 | 66 | 64 | 58 | 53 | 47 | 71 |
| | 50 | 78 | 80 | 72 | 66 | 64 | 59 | 54 | 47 | 71 |
| | 40 | 78 | 80 | 72 | 66 | 65 | 59 | 54 | 48 | 70 |
| 1000 | 100 | 87 | 88 | 84 | 78 | 76 | 73 | 65 | 59 | 82 |
| | 80 | 84 | 83 | 80 | 75 | 72 | 67 | 61 | 57 | 78 |
| | 60 | 84 | 84 | 81 | 75 | 73 | 68 | 65 | 60 | 78 |
| | 50 | 86 | 88 | 81 | 74 | 73 | 68 | 66 | 62 | 79 |
| | 40 | 88 | 89 | 82 | 76 | 74 | 69 | 66 | 62 | 80 |
| 1400 | 100 | 91 | 90 | 96 | 88 | 84 | 82 | 76 | 69 | 91 |
| | 80 | 89 | 87 | 95 | 86 | 79 | 77 | 71 | 67 | 89 |
| | 60 | 87 | 84 | 90 | 84 | 79 | 76 | 74 | 71 | 86 |
| | 50 | 98 | 95 | 92 | 84 | 80 | 77 | 76 | 75 | 89 |
| | 40 | 100 | 96 | 95 | 86 | 81 | 78 | 76 | 75 | 90 |
| 2000 | 100 | 98 | 94 | 104 | 97 | 93 | 94 | 89 | 81 | 101 |
| | 80 | 94 | 90 | 100 | 93 | 87 | 87 | 83 | 78 | 96 |
| | 60 | 91 | 90 | 98 | 90 | 86 | 86 | 84 | 81 | 94 |
| | 50 | 94 | 92 | 96 | 89 | 86 | 86 | 85 | 82 | 94 |
| | 40 | 96 | 93 | 98 | 91 | 87 | 86 | 85 | 82 | 95 |
| 2782 | 100 | 104 | 106 | 107 | 110 | 102 | 101 | 99 | 92 | 110 |
| | 80 | 100 | 101 | 102 | 106 | 97 | 94 | 92 | 88 | 105 |
| | 60 | 97 | 100 | 102 | 103 | 95 | 93 | 92 | 90 | 103 |
| | 50 | 100 | 103 | 102 | 102 | 95 | 93 | 92 | 91 | 103 |
| | 40 | 101 | 104 | 104 | 104 | 96 | 94 | 93 | 91 | 104 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 500 | 100 | 89 | 84 | 74 | 66 | 63 | 54 | 46 | 39 | 72 |
| | 80 | 87 | 82 | 71 | 63 | 58 | 51 | 44 | 39 | 69 |
| | 60 | 86 | 81 | 69 | 60 | 57 | 50 | 45 | 40 | 68 |
| | 50 | 86 | 80 | 68 | 59 | 57 | 50 | 45 | 40 | 68 |
| | 40 | 86 | 80 | 67 | 59 | 57 | 50 | 46 | 41 | 67 |
| 700 | 100 | 92 | 89 | 79 | 74 | 72 | 65 | 56 | 49 | 78 |
| | 80 | 89 | 87 | 77 | 71 | 67 | 60 | 53 | 47 | 76 |
| | 60 | 88 | 86 | 75 | 67 | 65 | 58 | 54 | 49 | 74 |
| | 50 | 88 | 85 | 74 | 67 | 64 | 58 | 54 | 50 | 73 |
| | 40 | 88 | 85 | 73 | 66 | 64 | 58 | 55 | 51 | 73 |
| 1000 | 100 | 98 | 97 | 87 | 81 | 80 | 75 | 68 | 62 | 86 |
| | 80 | 95 | 92 | 83 | 78 | 76 | 70 | 64 | 59 | 82 |
| | 60 | 93 | 90 | 81 | 75 | 72 | 67 | 64 | 61 | 79 |
| | 50 | 94 | 90 | 80 | 74 | 71 | 67 | 64 | 62 | 79 |
| | 40 | 97 | 91 | 81 | 74 | 71 | 67 | 64 | 62 | 80 |
| 1400 | 100 | 107 | 100 | 99 | 91 | 88 | 86 | 80 | 72 | 95 |
| | 80 | 105 | 98 | 96 | 88 | 84 | 81 | 74 | 69 | 92 |
| | 60 | 106 | 97 | 94 | 85 | 81 | 77 | 73 | 70 | 90 |
| | 50 | 103 | 95 | 92 | 84 | 79 | 76 | 73 | 71 | 88 |
| | 40 | 107 | 98 | 92 | 83 | 79 | 76 | 73 | 72 | 89 |
| 2000 | 100 | 115 | 108 | 107 | 99 | 97 | 97 | 92 | 85 | 105 |
| | 80 | 112 | 104 | 103 | 96 | 94 | 92 | 87 | 80 | 101 |
| | 60 | 107 | 99 | 101 | 93 | 91 | 87 | 84 | 81 | 97 |
| | 50 | 108 | 98 | 100 | 92 | 89 | 85 | 84 | 82 | 96 |
| | 40 | 107 | 99 | 100 | 92 | 89 | 85 | 84 | 82 | 96 |
| 2782 | 100 | 120 | 119 | 114 | 112 | 105 | 104 | 102 | 96 | 114 |
| | 80 | 118 | 116 | 111 | 109 | 102 | 100 | 97 | 91 | 110 |
| | 60 | 113 | 111 | 107 | 106 | 99 | 96 | 93 | 89 | 107 |
| | 50 | 113 | 111 | 106 | 105 | 97 | 94 | 92 | 90 | 105 |
| | 40 | 113 | 110 | 106 | 105 | 97 | 94 | 92 | 90 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

27 AFSW

Wheel Diameter = 27 in.

Outlet Area = 4.19 ft.²

Tip Speed = 7.07 x RPM

Maximum BHP = (RPM/701)³

Minimum Starting HP = $\frac{3}{4}$

Maximum RPM Class I = 1537

Maximum RPM Class II = 2004

Maximum RPM Class III = 2525

Maximum Open Motor Frame Size

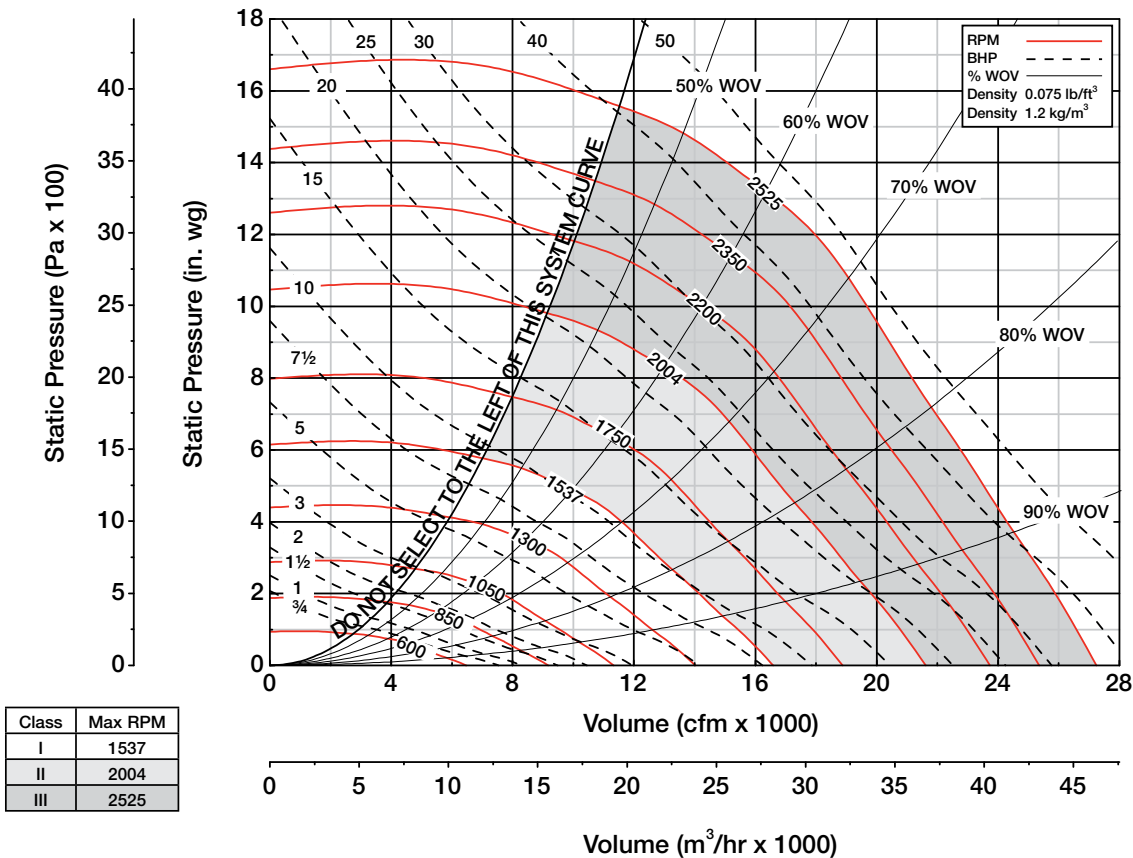
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 284T | 284T | 286T |
| Arr. 10 | 254T | 284T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 3000 | 715 | 391 | 0.17 | 483 | 0.32 | 566 | 0.48 | 641 | 0.67 | | | | | | | | | | | | |
| 3800 | 906 | 450 | 0.26 | 523 | 0.42 | 598 | 0.61 | 666 | 0.81 | 729 | 1.03 | 789 | 1.26 | | | | | | | | |
| 4600 | 1097 | 511 | 0.37 | 579 | 0.56 | 638 | 0.76 | 700 | 0.98 | 759 | 1.22 | 813 | 1.47 | 865 | 1.73 | 917 | 2.01 | 965 | 2.31 | | |
| 5400 | 1288 | 575 | 0.50 | 639 | 0.74 | 692 | 0.96 | 742 | 1.19 | 795 | 1.45 | 847 | 1.73 | 896 | 2.01 | 943 | 2.29 | 987 | 2.59 | 1032 | 2.91 |
| 6200 | 1479 | 641 | 0.68 | 700 | 0.95 | 751 | 1.21 | 796 | 1.47 | 841 | 1.73 | 885 | 2.01 | 932 | 2.32 | 976 | 2.64 | 1019 | 2.96 | 1061 | 3.29 |
| 7000 | 1670 | 708 | 0.88 | 762 | 1.20 | 812 | 1.50 | 856 | 1.79 | 895 | 2.09 | 935 | 2.38 | 972 | 2.68 | 1015 | 3.02 | 1055 | 3.37 | 1094 | 3.72 |
| 7800 | 1861 | 776 | 1.13 | 827 | 1.49 | 873 | 1.83 | 916 | 2.17 | 955 | 2.49 | 991 | 2.82 | 1026 | 3.15 | 1061 | 3.48 | 1095 | 3.82 | 1133 | 4.20 |
| 8600 | 2052 | 844 | 1.43 | 893 | 1.84 | 936 | 2.21 | 977 | 2.58 | 1015 | 2.96 | 1050 | 3.31 | 1083 | 3.67 | 1115 | 4.04 | 1147 | 4.40 | 1178 | 4.76 |
| 9400 | 2243 | 915 | 1.79 | 960 | 2.22 | 1001 | 2.65 | 1039 | 3.06 | 1076 | 3.46 | 1111 | 3.88 | 1143 | 4.26 | 1173 | 4.65 | 1202 | 5.05 | 1232 | 5.44 |
| 10200 | 2434 | 986 | 2.23 | 1027 | 2.66 | 1067 | 3.15 | 1102 | 3.59 | 1137 | 4.03 | 1171 | 4.48 | 1203 | 4.92 | 1233 | 5.34 | 1261 | 5.77 | 1288 | 6.20 |
| 11000 | 2625 | 1057 | 2.73 | 1094 | 3.17 | 1133 | 3.70 | 1168 | 4.19 | 1200 | 4.67 | 1232 | 5.15 | 1264 | 5.62 | 1294 | 6.11 | 1321 | 6.57 | 1348 | 7.02 |
| 11800 | 2816 | 1129 | 3.30 | 1163 | 3.75 | 1199 | 4.31 | 1233 | 4.87 | 1265 | 5.38 | 1295 | 5.90 | 1325 | 6.40 | 1354 | 6.91 | 1382 | 7.43 | 1409 | 7.93 |
| 12600 | 3007 | 1201 | 3.96 | 1232 | 4.42 | 1266 | 4.99 | 1300 | 5.60 | 1330 | 6.17 | 1359 | 6.71 | 1387 | 7.26 | 1415 | 7.80 | 1443 | 8.35 | 1469 | 8.90 |
| 13400 | 3198 | 1273 | 4.70 | 1303 | 5.18 | 1334 | 5.75 | 1366 | 6.40 | 1396 | 7.04 | 1424 | 7.62 | 1451 | 8.20 | 1477 | 8.79 | 1504 | 9.36 | 1530 | 9.94 |
| 14200 | 3389 | 1345 | 5.53 | 1374 | 6.04 | 1403 | 6.60 | 1433 | 7.27 | 1462 | 7.96 | 1490 | 8.61 | 1516 | 9.23 | 1541 | 9.84 | 1566 | 10.5 | 1591 | 11.1 |
| 15000 | 3579 | 1418 | 6.45 | 1445 | 6.99 | 1472 | 7.54 | 1501 | 8.24 | 1529 | 8.96 | 1556 | 9.70 | 1582 | 10.4 | 1606 | 11.0 | 1630 | 11.7 | 1653 | 12.3 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6000 | 1431 | 1053 | 3.19 | 1132 | 3.86 | 1211 | 4.61 | 1283 | 5.38 | | | | | | | | | | | | |
| 6800 | 1622 | 1085 | 3.62 | 1162 | 4.33 | 1234 | 5.07 | 1304 | 5.87 | 1373 | 6.72 | 1437 | 7.59 | | | | | | | | |
| 7600 | 1813 | 1123 | 4.08 | 1196 | 4.85 | 1266 | 5.65 | 1332 | 6.46 | 1394 | 7.29 | 1458 | 8.20 | 1520 | 9.15 | 1579 | 10.1 | 1635 | 11.1 | | |
| 8400 | 2004 | 1165 | 4.60 | 1234 | 5.41 | 1301 | 6.27 | 1365 | 7.14 | 1427 | 8.02 | 1485 | 8.93 | 1542 | 9.85 | 1599 | 10.9 | 1656 | 11.9 | 1710 | 13.0 |
| 9200 | 2195 | 1218 | 5.27 | 1276 | 6.04 | 1339 | 6.93 | 1401 | 7.86 | 1460 | 8.81 | 1518 | 9.77 | 1574 | 10.7 | 1627 | 11.7 | 1679 | 12.7 | 1731 | 13.8 |
| 10000 | 2386 | 1274 | 6.00 | 1329 | 6.84 | 1382 | 7.69 | 1440 | 8.63 | 1498 | 9.64 | 1553 | 10.7 | 1607 | 11.7 | 1660 | 12.7 | 1711 | 13.8 | 1760 | 14.9 |
| 10800 | 2577 | 1333 | 6.81 | 1384 | 7.72 | 1436 | 8.62 | 1485 | 9.53 | 1537 | 10.5 | 1591 | 11.6 | 1643 | 12.7 | 1694 | 13.8 | 1744 | 14.9 | 1793 | 16.1 |
| 11600 | 2768 | 1393 | 7.69 | 1443 | 8.66 | 1490 | 9.64 | 1539 | 10.6 | 1585 | 11.6 | 1631 | 12.6 | 1682 | 13.8 | 1732 | 14.9 | 1780 | 16.1 | 1826 | 17.3 |
| 12400 | 2959 | 1454 | 8.66 | 1503 | 9.69 | 1549 | 10.7 | 1593 | 11.8 | 1639 | 12.8 | 1682 | 13.9 | 1724 | 14.9 | 1771 | 16.1 | 1819 | 17.3 | 1865 | 18.6 |
| 13200 | 3150 | 1514 | 9.67 | 1564 | 10.8 | 1609 | 11.9 | 1652 | 13.0 | 1693 | 14.1 | 1736 | 15.2 | 1777 | 16.3 | 1817 | 17.5 | 1858 | 18.6 | 1904 | 19.9 |
| 14000 | 3341 | 1576 | 10.8 | 1624 | 12.0 | 1670 | 13.2 | 1712 | 14.4 | 1752 | 15.5 | 1791 | 16.7 | 1831 | 17.9 | 1871 | 19.1 | 1909 | 20.2 | 1945 | 21.4 |
| 14800 | 3532 | 1638 | 12.0 | 1685 | 13.3 | 1730 | 14.6 | 1772 | 15.8 | 1812 | 17.0 | 1850 | 18.3 | 1887 | 19.5 | 1925 | 20.8 | 1962 | 22.0 | 1999 | 23.2 |
| 15600 | 3723 | 1701 | 13.3 | 1746 | 14.6 | 1791 | 16.0 | 1833 | 17.4 | 1872 | 18.7 | 1910 | 19.9 | 1946 | 21.3 | 1982 | 22.6 | 2017 | 23.9 | 2053 | 25.2 |
| 16400 | 3914 | 1765 | 14.7 | 1808 | 16.1 | 1852 | 17.5 | 1893 | 19.0 | 1933 | 20.4 | 1970 | 21.8 | 2006 | 23.1 | 2041 | 24.5 | 2074 | 25.9 | 2108 | 27.3 |
| 17200 | 4105 | 1831 | 16.2 | 1872 | 17.7 | 1913 | 19.2 | 1954 | 20.7 | 1993 | 22.2 | 2031 | 23.7 | 2066 | 25.1 | 2100 | 26.5 | 2134 | 28.0 | 2166 | 29.4 |
| 18000 | 4295 | 1896 | 17.8 | 1937 | 19.4 | 1976 | 21.0 | 2016 | 22.5 | 2054 | 24.1 | 2091 | 25.6 | 2128 | 27.2 | 2161 | 28.7 | 2194 | 30.2 | 2226 | 31.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9000 | 2147 | 1726 | 13.6 | 1778 | 14.7 | 1829 | 15.8 | 1878 | 17.0 | 1925 | 18.2 | | | | | | | | | | |
| 9800 | 2338 | 1752 | 14.6 | 1800 | 15.7 | 1849 | 16.8 | 1898 | 18.0 | 1946 | 19.3 | 2038 | 21.8 | 2125 | 24.3 | | | | | | |
| 10600 | 2529 | 1785 | 51.8 | 1832 | 16.9 | 1878 | 18.0 | 1923 | 19.2 | 1967 | 20.4 | 2058 | 23.0 | 2145 | 25.6 | 2229 | 28.4 | 2309 | 31.1 | | |
| 11400 | 2720 | 1817 | 17.0 | 1865 | 18.2 | 1911 | 19.4 | 1955 | 20.6 | 1998 | 21.8 | 2082 | 24.3 | 2166 | 27.0 | 2249 | 29.8 | 2329 | 32.7 | 2406 | 35.6 |
| 12200 | 2911 | 1855 | 18.2 | 1899 | 19.5 | 1943 | 20.8 | 1988 | 22.0 | 2031 | 23.3 | 2114 | 25.9 | 2193 | 28.6 | 2270 | 31.3 | 2350 | 34.3 | 2427 | 37.3 |
| 13000 | 3102 | 1894 | 19.6 | 1938 | 20.9 | 1981 | 22.2 | 2023 | 23.5 | 2064 | 24.9 | 2147 | 27.6 | 2225 | 30.4 | 2301 | 33.2 | 2374 | 36.0 | 2448 | 39.0 |
| 13800 | 3293 | 1933 | 21.0 | 1977 | 22.4 | 2020 | 23.7 | 2061 | 25.1 | 2102 | 26.5 | 2180 | 29.4 | 2258 | 32.2 | 2333 | 35.2 | 2406 | 38.1 | 2476 | 41.1 |
| 14600 | 3484 | 1985 | 22.8 | 2021 | 24.0 | 2059 | 25.4 | 2100 | 26.8 | 2140 | 28.2 | 2218 | 31.2 | 2292 | 34.2 | 2366 | 37.2 | 2438 | 40.3 | 2508 | 43.4 |
| 15400 | 3675 | 2039 | 24.7 | 2074 | 26.0 | 2109 | 27.3 | 2142 | 28.6 | 2180 | 30.1 | 2257 | 33.1 | 2331 | 36.2 | 2401 | 39.4 | 2471 | 42.6 | | |
| 16200 | 3866 | 2094 | 26.7 | 2129 | 28.1 | 2162 | 29.4 | 2195 | 30.8 | 2228 | 32.2 | 2296 | 35.1 | 2369 | 38.3 | 2440 | 41.6 | 2508 | 44.9 | | |
| 17000 | 4057 | 2151 | 28.9 | 2183 | 30.3 | 2217 | 31.7 | 2249 | 33.1 | 2281 | 34.5 | 2343 | 37.4 | 2409 | 40.5 | 2479 | 43.9 | | | | |
| 17800 | 4248 | 2211 | 31.1 | 2242 | 32.6 | 2272 | 34.1 | 2304 | 35.6 | 2335 | 37.0 | 2397 | 40.1 | 2455 | 43.1 | 2518 | 46.3 | | | | |
| 18600 | 4439 | 2270 | 33.5 | 2301 | 35.0 | 2331 | 36.6 | 2361 | 38.2 | 2390 | 39.7 | 2451 | 42.8 | 2509 | 46.0 | | | | | | |
| 19400 | 4630 | 2331 | 36.0 | 2361 | 37.6 | 2391 | 39.2 | 2420 | 40.9 | 2449 | 42.5 | 2505 | 45.8 | | | | | | | | |
| 20200 | 4821 | 2392 | 38.7 | 2422 | 40.4 | 2451 | 42.0 | 2480 | 43.7 | 2508 | 45.4 | | | | | | | | | | |
| 21000 | 5011 | 2452 | 41.4 | 2483 | 43.3 | 2512 | 45.0 | | | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 10.8)$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 450 | 100 | 83 | 77 | 71 | 63 | 60 | 51 | 44 | 37 | 68 |
| | 80 | 83 | 74 | 67 | 58 | 53 | 47 | 42 | 36 | 64 |
| | 60 | 81 | 73 | 65 | 56 | 54 | 47 | 42 | 36 | 63 |
| | 50 | 80 | 73 | 64 | 57 | 55 | 51 | 45 | 37 | 63 |
| | 40 | 79 | 72 | 63 | 56 | 56 | 51 | 45 | 37 | 62 |
| 600 | 100 | 83 | 79 | 76 | 69 | 70 | 60 | 52 | 46 | 74 |
| | 80 | 82 | 79 | 74 | 65 | 63 | 56 | 49 | 43 | 70 |
| | 60 | 81 | 77 | 71 | 64 | 63 | 56 | 51 | 45 | 69 |
| | 50 | 80 | 77 | 70 | 64 | 64 | 57 | 52 | 45 | 69 |
| | 40 | 79 | 76 | 70 | 64 | 64 | 57 | 53 | 45 | 69 |
| 900 | 100 | 89 | 88 | 83 | 78 | 76 | 73 | 64 | 59 | 82 |
| | 80 | 86 | 84 | 81 | 74 | 72 | 67 | 61 | 57 | 78 |
| | 60 | 86 | 85 | 81 | 74 | 73 | 68 | 65 | 60 | 79 |
| | 50 | 88 | 88 | 80 | 74 | 74 | 68 | 66 | 62 | 79 |
| | 40 | 90 | 90 | 82 | 75 | 74 | 69 | 67 | 62 | 80 |
| 1300 | 100 | 94 | 91 | 98 | 89 | 85 | 84 | 76 | 70 | 93 |
| | 80 | 92 | 89 | 97 | 86 | 80 | 78 | 72 | 68 | 91 |
| | 60 | 90 | 85 | 92 | 84 | 80 | 77 | 75 | 72 | 88 |
| | 50 | 101 | 96 | 94 | 85 | 81 | 78 | 77 | 76 | 90 |
| | 40 | 103 | 97 | 96 | 87 | 82 | 78 | 77 | 76 | 91 |
| 1800 | 100 | 99 | 95 | 105 | 97 | 94 | 95 | 88 | 81 | 102 |
| | 80 | 95 | 91 | 101 | 92 | 88 | 88 | 83 | 77 | 96 |
| | 60 | 93 | 92 | 99 | 89 | 87 | 86 | 84 | 81 | 95 |
| | 50 | 95 | 93 | 98 | 89 | 87 | 86 | 85 | 83 | 95 |
| | 40 | 97 | 94 | 99 | 90 | 87 | 87 | 86 | 83 | 95 |
| 2525 | 100 | 106 | 106 | 109 | 109 | 102 | 102 | 99 | 92 | 110 |
| | 80 | 102 | 101 | 105 | 105 | 97 | 95 | 93 | 88 | 105 |
| | 60 | 99 | 101 | 104 | 102 | 95 | 94 | 93 | 90 | 103 |
| | 50 | 102 | 103 | 104 | 101 | 95 | 94 | 93 | 91 | 103 |
| | 40 | 104 | 104 | 105 | 103 | 96 | 94 | 93 | 91 | 104 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 450 | 100 | 91 | 83 | 73 | 65 | 63 | 53 | 45 | 39 | 72 |
| | 80 | 88 | 81 | 70 | 62 | 58 | 50 | 44 | 38 | 69 |
| | 60 | 87 | 80 | 67 | 59 | 58 | 49 | 45 | 40 | 68 |
| | 50 | 87 | 79 | 67 | 59 | 58 | 49 | 45 | 40 | 67 |
| | 40 | 87 | 79 | 66 | 59 | 57 | 49 | 46 | 41 | 67 |
| 600 | 100 | 93 | 84 | 77 | 72 | 71 | 62 | 54 | 47 | 76 |
| | 80 | 89 | 83 | 75 | 69 | 67 | 58 | 51 | 46 | 73 |
| | 60 | 88 | 81 | 73 | 65 | 64 | 56 | 53 | 48 | 71 |
| | 50 | 88 | 80 | 72 | 65 | 64 | 56 | 53 | 49 | 70 |
| | 40 | 88 | 80 | 71 | 64 | 64 | 56 | 54 | 50 | 70 |
| 900 | 100 | 99 | 97 | 85 | 81 | 80 | 75 | 68 | 61 | 86 |
| | 80 | 96 | 92 | 82 | 78 | 76 | 70 | 63 | 59 | 82 |
| | 60 | 94 | 90 | 80 | 75 | 72 | 67 | 64 | 61 | 79 |
| | 50 | 95 | 90 | 79 | 74 | 71 | 67 | 65 | 63 | 79 |
| | 40 | 98 | 91 | 80 | 74 | 71 | 67 | 65 | 63 | 80 |
| 1300 | 100 | 109 | 101 | 100 | 91 | 89 | 88 | 80 | 73 | 96 |
| | 80 | 106 | 98 | 97 | 89 | 85 | 82 | 74 | 70 | 93 |
| | 60 | 108 | 97 | 96 | 85 | 82 | 78 | 73 | 72 | 91 |
| | 50 | 104 | 96 | 94 | 84 | 80 | 77 | 74 | 73 | 89 |
| | 40 | 109 | 98 | 94 | 84 | 80 | 77 | 74 | 73 | 90 |
| 1800 | 100 | 115 | 108 | 108 | 99 | 98 | 98 | 92 | 85 | 105 |
| | 80 | 112 | 104 | 104 | 96 | 94 | 92 | 87 | 79 | 101 |
| | 60 | 108 | 99 | 102 | 93 | 91 | 87 | 84 | 81 | 98 |
| | 50 | 108 | 98 | 101 | 92 | 89 | 86 | 85 | 82 | 97 |
| | 40 | 107 | 99 | 101 | 91 | 89 | 85 | 85 | 82 | 97 |
| 2525 | 100 | 122 | 119 | 115 | 111 | 105 | 105 | 102 | 96 | 114 |
| | 80 | 119 | 115 | 111 | 108 | 103 | 100 | 97 | 90 | 110 |
| | 60 | 114 | 110 | 108 | 105 | 99 | 96 | 93 | 90 | 107 |
| | 50 | 115 | 110 | 107 | 104 | 98 | 95 | 93 | 91 | 105 |
| | 40 | 114 | 110 | 107 | 104 | 97 | 94 | 92 | 91 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

30 AFSW

Wheel Diameter = 30 in.

Outlet Area = 5.17 ft.²

Tip Speed = 7.85 x RPM

Maximum BHP = (RPM/571)³

Minimum Starting HP = $\frac{3}{4}$

Maximum RPM Class I = 1329

Maximum RPM Class II = 1732

Maximum RPM Class III = 2182

Maximum Open Motor Frame Size

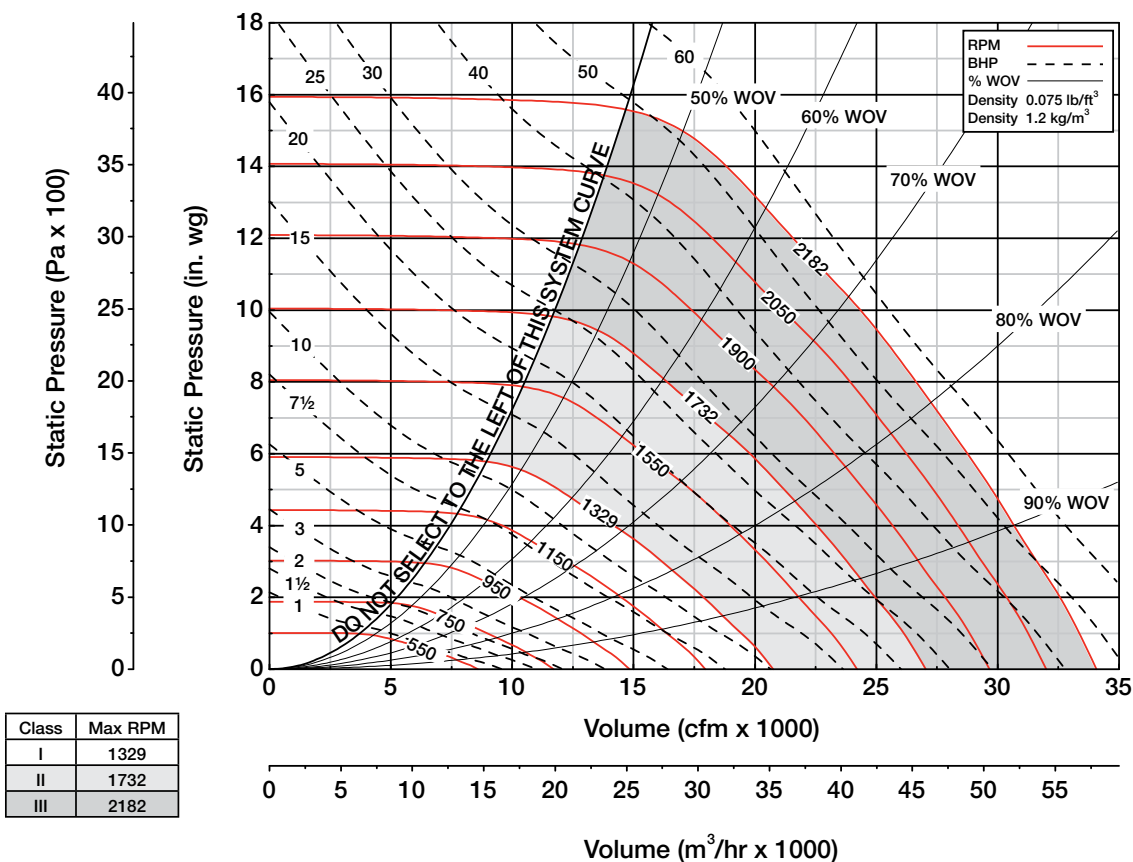
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 324T | 324T | 326T |
| Arr. 10 | 254T | 324T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 4000 | 773 | 351 | 0.23 | 429 | 0.41 | 493 | 0.60 | 557 | 0.83 | | | | | | | | | | | | |
| 4800 | 928 | 390 | 0.32 | 461 | 0.52 | 521 | 0.73 | 576 | 0.96 | 629 | 1.22 | 681 | 1.50 | | | | | | | | |
| 5600 | 1083 | 431 | 0.42 | 494 | 0.65 | 553 | 0.89 | 604 | 1.14 | 651 | 1.40 | 696 | 1.68 | 742 | 2.00 | 787 | 2.33 | 829 | 2.68 | | |
| 6400 | 1237 | 474 | 0.54 | 532 | 0.81 | 586 | 1.08 | 636 | 1.35 | 681 | 1.63 | 723 | 1.92 | 763 | 2.24 | 802 | 2.56 | 843 | 2.93 | 882 | 3.30 |
| 7200 | 1392 | 518 | 0.70 | 572 | 0.99 | 622 | 1.29 | 669 | 1.59 | 713 | 1.90 | 754 | 2.22 | 792 | 2.54 | 828 | 2.88 | 864 | 3.24 | 898 | 3.60 |
| 8000 | 1547 | 564 | 0.88 | 613 | 1.20 | 660 | 1.54 | 703 | 1.87 | 746 | 2.21 | 786 | 2.55 | 823 | 2.90 | 858 | 3.26 | 891 | 3.62 | 924 | 4.00 |
| 8800 | 1702 | 610 | 1.10 | 656 | 1.45 | 700 | 1.81 | 741 | 2.18 | 780 | 2.55 | 819 | 2.92 | 856 | 3.30 | 890 | 3.68 | 923 | 4.07 | 954 | 4.46 |
| 9600 | 1856 | 657 | 1.36 | 700 | 1.74 | 741 | 2.12 | 780 | 2.52 | 817 | 2.92 | 852 | 3.33 | 888 | 3.73 | 922 | 4.14 | 955 | 4.56 | 986 | 4.98 |
| 10400 | 2011 | 705 | 1.65 | 745 | 2.07 | 784 | 2.48 | 821 | 2.90 | 856 | 3.34 | 890 | 3.78 | 922 | 4.21 | 955 | 4.65 | 987 | 5.10 | 1018 | 5.54 |
| 11200 | 2166 | 752 | 1.98 | 791 | 2.44 | 827 | 2.88 | 862 | 3.33 | 896 | 3.80 | 928 | 4.27 | 959 | 4.74 | 989 | 5.21 | 1021 | 5.68 | 1051 | 6.15 |
| 12000 | 2321 | 800 | 2.37 | 838 | 2.87 | 871 | 3.34 | 904 | 3.81 | 937 | 4.29 | 968 | 4.80 | 998 | 5.31 | 1027 | 5.81 | 1055 | 6.31 | 1084 | 6.82 |
| 12800 | 2475 | 849 | 2.81 | 884 | 3.33 | 917 | 3.84 | 948 | 4.35 | 978 | 4.85 | 1008 | 5.38 | 1037 | 5.92 | 1065 | 6.46 | 1093 | 6.99 | 1119 | 7.53 |
| 13600 | 2630 | 899 | 3.31 | 931 | 3.85 | 962 | 4.40 | 992 | 4.94 | 1021 | 5.47 | 1049 | 6.01 | 1078 | 6.58 | 1105 | 7.16 | 1131 | 7.73 | 1157 | 8.30 |
| 14400 | 2785 | 949 | 3.87 | 978 | 4.43 | 1009 | 5.02 | 1037 | 5.59 | 1064 | 6.15 | 1092 | 6.72 | 1119 | 7.30 | 1145 | 7.91 | 1170 | 8.52 | 1195 | 9.12 |
| 15200 | 2940 | 999 | 4.49 | 1026 | 5.06 | 1055 | 5.70 | 1082 | 6.30 | 1108 | 6.90 | 1135 | 7.49 | 1160 | 8.09 | 1186 | 8.71 | 1211 | 9.36 | 1235 | 10.0 |
| 16000 | 3094 | 1049 | 5.18 | 1074 | 5.76 | 1102 | 6.43 | 1128 | 7.07 | 1154 | 7.70 | 1178 | 8.33 | 1203 | 8.96 | 1227 | 9.59 | 1252 | 10.3 | 1275 | 10.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 8000 | 1547 | 924 | 4.00 | 987 | 4.80 | 1052 | 5.69 | 1115 | 6.64 | 1174 | 7.62 | | | | | | |
| 8800 | 1702 | 954 | 4.46 | 1013 | 5.28 | 1071 | 6.15 | 1128 | 7.09 | 1188 | 8.12 | 1244 | 9.17 | 1297 | 10.3 | | |
| 9600 | 1856 | 986 | 4.98 | 1043 | 5.84 | 1098 | 6.72 | 1152 | 7.67 | 1203 | 8.65 | 1258 | 9.73 | 1311 | 10.9 | 1362 | 12.0 |
| 10400 | 2011 | 1018 | 5.54 | 1075 | 6.45 | 1128 | 7.38 | 1178 | 8.33 | 1229 | 9.35 | 1277 | 10.4 | 1325 | 11.5 | 1376 | 12.7 |
| 11200 | 2166 | 1051 | 6.15 | 1107 | 7.12 | 1160 | 8.10 | 1209 | 9.10 | 1256 | 10.1 | 1303 | 11.2 | 1349 | 12.3 | 1392 | 13.4 |
| 12000 | 2321 | 1084 | 6.82 | 1140 | 7.84 | 1192 | 8.88 | 1241 | 9.93 | 1288 | 11.0 | 1332 | 12.1 | 1375 | 13.2 | 1419 | 14.4 |
| 12800 | 2475 | 1119 | 7.53 | 1173 | 8.61 | 1225 | 9.70 | 1273 | 108.0 | 1319 | 11.9 | 1363 | 13.0 | 1405 | 14.2 | 1446 | 15.4 |
| 13600 | 2630 | 1157 | 8.30 | 1207 | 9.44 | 1258 | 10.6 | 1306 | 11.8 | 1351 | 12.9 | 1395 | 14.1 | 1437 | 15.3 | 1477 | 16.5 |
| 14400 | 2785 | 1195 | 9.12 | 1244 | 10.3 | 1291 | 11.5 | 1339 | 12.8 | 1384 | 14.0 | 1427 | 15.2 | 1469 | 16.5 | 1508 | 17.8 |
| 15200 | 2940 | 1235 | 10.0 | 1282 | 11.3 | 1327 | 12.5 | 1372 | 13.8 | 1417 | 15.1 | 1460 | 16.4 | 1501 | 17.7 | 1540 | 19.1 |
| 16000 | 3094 | 1275 | 10.9 | 1320 | 12.3 | 1365 | 13.6 | 1407 | 15.0 | 1450 | 16.3 | 1493 | 17.7 | 1533 | 19.0 | 1573 | 20.4 |
| 16800 | 3249 | 1316 | 11.9 | 1360 | 13.4 | 1403 | 14.8 | 1444 | 16.2 | 1484 | 17.6 | 1526 | 19.0 | 1566 | 20.4 | 1605 | 21.9 |
| 17600 | 3404 | 1357 | 13.0 | 1401 | 14.5 | 1442 | 16.0 | 1483 | 17.4 | 1522 | 18.9 | 1560 | 20.4 | 1600 | 21.9 | 1638 | 23.4 |
| 18400 | 3558 | 1399 | 14.2 | 1441 | 15.7 | 1482 | 17.2 | 1521 | 18.8 | 1560 | 20.3 | 1597 | 21.9 | 1633 | 23.4 | 1671 | 25.0 |
| 19200 | 3713 | 1442 | 15.4 | 1483 | 16.9 | 1522 | 18.6 | 1561 | 20.2 | 1598 | 21.8 | 1635 | 23.4 | 1670 | 25.0 | 1705 | 26.6 |
| 20000 | 3868 | 1486 | 16.8 | 1525 | 18.3 | 1563 | 20.0 | 1601 | 21.7 | 1637 | 23.4 | 1673 | 25.0 | 1708 | 26.7 | 1742 | 28.4 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 12000 | 2321 | 1501 | 16.8 | 1545 | 18.1 | 1588 | 19.5 | 1631 | 21.0 | 1672 | 22.4 | 1751 | 25.3 | | | | |
| 12900 | 2495 | 1530 | 18.0 | 1569 | 19.3 | 1607 | 20.6 | 1646 | 22.0 | 1688 | 23.5 | 1767 | 26.6 | 1842 | 29.7 | 1914 | 32.9 |
| 13800 | 2669 | 1561 | 19.4 | 1599 | 20.7 | 1636 | 22.1 | 1673 | 23.4 | 1708 | 24.8 | 1783 | 27.9 | 1858 | 31.1 | 1930 | 34.4 |
| 14700 | 2843 | 1596 | 20.9 | 1631 | 22.2 | 1666 | 23.5 | 1702 | 25.0 | 1738 | 26.4 | 1806 | 29.4 | 1874 | 32.5 | 1945 | 35.9 |
| 15600 | 3017 | 1631 | 22.5 | 1667 | 23.9 | 1701 | 25.3 | 1735 | 26.7 | 1768 | 28.1 | 1835 | 31.2 | 1900 | 34.3 | 1962 | 37.5 |
| 16500 | 3191 | 1667 | 24.2 | 1702 | 25.6 | 1737 | 27.1 | 1770 | 28.6 | 1803 | 30.0 | 1865 | 33.1 | 1929 | 36.3 | 1991 | 39.6 |
| 17400 | 3365 | 1703 | 26.0 | 1739 | 27.5 | 1773 | 29.0 | 1806 | 30.5 | 1838 | 32.1 | 1900 | 35.2 | 1960 | 38.4 | 2020 | 41.7 |
| 18300 | 3539 | 1740 | 27.9 | 1775 | 29.4 | 1809 | 31.0 | 1842 | 32.6 | 1874 | 34.2 | 1936 | 37.5 | 1995 | 40.8 | 2052 | 44.1 |
| 19200 | 3713 | 1777 | 29.9 | 1812 | 31.5 | 1845 | 33.2 | 1878 | 34.8 | 1910 | 36.5 | 1972 | 39.8 | 2031 | 43.2 | 2087 | 46.7 |
| 20100 | 3887 | 1815 | 32.0 | 1849 | 33.7 | 1882 | 35.4 | 1915 | 37.1 | 1947 | 38.9 | 2008 | 42.3 | 2066 | 45.9 | 2123 | 49.4 |
| 21000 | 406 | 1853 | 34.2 | 1887 | 36.0 | 1920 | 37.8 | 1952 | 39.5 | 1983 | 41.3 | 2044 | 44.9 | 2103 | 48.6 | 2159 | 52.3 |
| 21900 | 4235 | 1896 | 36.5 | 1926 | 38.4 | 1958 | 40.2 | 1989 | 42.1 | 2021 | 43.9 | 2081 | 47.7 | 2139 | 51.4 | | |
| 22800 | 4410 | 1938 | 39.0 | 1968 | 40.9 | 1998 | 42.8 | 2027 | 44.7 | 2058 | 46.7 | 2118 | 50.5 | 2176 | 54.4 | | |
| 23700 | 4584 | 1981 | 41.6 | 2011 | 43.5 | 2040 | 45.5 | 2068 | 47.5 | 2096 | 49.5 | 2156 | 53.5 | | | | |
| 24600 | 4758 | 2025 | 44.3 | 2054 | 46.3 | 2083 | 48.4 | 2111 | 50.4 | 2139 | 52.5 | | | | | | |
| 25500 | 4932 | 2070 | 47.1 | 2098 | 49.2 | 2126 | 51.3 | 2154 | 53.5 | 2181 | 55.6 | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 15.6)$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 400 | 100 | 84 | 76 | 71 | 62 | 60 | 49 | 43 | 37 | 67 |
| | 80 | 85 | 72 | 67 | 57 | 53 | 47 | 41 | 36 | 64 |
| | 60 | 83 | 72 | 64 | 55 | 54 | 46 | 42 | 36 | 62 |
| | 50 | 82 | 72 | 63 | 56 | 56 | 50 | 45 | 36 | 63 |
| | 40 | 81 | 71 | 62 | 56 | 57 | 51 | 45 | 36 | 62 |
| 600 | 100 | 86 | 83 | 79 | 72 | 73 | 63 | 55 | 50 | 77 |
| | 80 | 86 | 83 | 78 | 68 | 66 | 59 | 52 | 46 | 74 |
| | 60 | 85 | 80 | 74 | 67 | 67 | 59 | 54 | 48 | 72 |
| | 50 | 83 | 80 | 74 | 67 | 67 | 60 | 55 | 48 | 72 |
| | 40 | 83 | 80 | 73 | 67 | 68 | 60 | 56 | 49 | 72 |
| 800 | 100 | 90 | 89 | 83 | 78 | 76 | 72 | 64 | 59 | 82 |
| | 80 | 86 | 84 | 80 | 74 | 72 | 66 | 61 | 57 | 78 |
| | 60 | 87 | 86 | 80 | 74 | 73 | 68 | 65 | 60 | 79 |
| | 50 | 89 | 89 | 79 | 74 | 74 | 68 | 66 | 62 | 79 |
| | 40 | 91 | 90 | 81 | 76 | 74 | 69 | 67 | 62 | 80 |
| 1100 | 100 | 93 | 92 | 95 | 87 | 84 | 81 | 74 | 68 | 91 |
| | 80 | 90 | 91 | 94 | 84 | 79 | 76 | 70 | 67 | 88 |
| | 60 | 88 | 86 | 90 | 83 | 79 | 76 | 74 | 71 | 86 |
| | 50 | 99 | 94 | 92 | 83 | 80 | 77 | 76 | 75 | 88 |
| | 40 | 101 | 96 | 94 | 85 | 81 | 78 | 77 | 75 | 90 |
| 1600 | 100 | 99 | 98 | 106 | 97 | 95 | 94 | 88 | 80 | 102 |
| | 80 | 95 | 93 | 102 | 92 | 88 | 87 | 83 | 77 | 97 |
| | 60 | 93 | 94 | 99 | 89 | 87 | 86 | 84 | 81 | 95 |
| | 50 | 95 | 94 | 98 | 89 | 87 | 87 | 85 | 83 | 95 |
| | 40 | 97 | 96 | 100 | 91 | 88 | 87 | 86 | 83 | 96 |
| 2182 | 100 | 107 | 104 | 111 | 107 | 102 | 102 | 98 | 90 | 109 |
| | 80 | 103 | 100 | 107 | 102 | 96 | 95 | 92 | 86 | 104 |
| | 60 | 100 | 100 | 105 | 99 | 95 | 94 | 92 | 89 | 103 |
| | 50 | 103 | 102 | 104 | 99 | 95 | 94 | 93 | 91 | 102 |
| | 40 | 105 | 103 | 106 | 101 | 95 | 94 | 93 | 91 | 103 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 400 | 100 | 92 | 82 | 72 | 65 | 64 | 52 | 45 | 39 | 72 |
| | 80 | 89 | 80 | 68 | 62 | 59 | 49 | 44 | 38 | 69 |
| | 60 | 88 | 79 | 66 | 58 | 58 | 48 | 45 | 39 | 68 |
| | 50 | 88 | 78 | 65 | 58 | 58 | 48 | 46 | 40 | 67 |
| | 40 | 88 | 78 | 64 | 58 | 58 | 48 | 46 | 40 | 67 |
| 600 | 100 | 96 | 87 | 80 | 76 | 74 | 66 | 57 | 51 | 80 |
| | 80 | 93 | 86 | 79 | 72 | 70 | 61 | 55 | 49 | 77 |
| | 60 | 92 | 84 | 76 | 69 | 67 | 59 | 56 | 51 | 74 |
| | 50 | 91 | 83 | 75 | 68 | 67 | 59 | 57 | 52 | 74 |
| | 40 | 91 | 83 | 74 | 67 | 67 | 59 | 57 | 53 | 73 |
| 800 | 100 | 100 | 97 | 85 | 82 | 80 | 75 | 67 | 61 | 86 |
| | 80 | 96 | 92 | 82 | 78 | 76 | 69 | 63 | 59 | 82 |
| | 60 | 94 | 89 | 79 | 75 | 72 | 67 | 64 | 62 | 79 |
| | 50 | 95 | 90 | 78 | 74 | 71 | 67 | 65 | 63 | 79 |
| | 40 | 98 | 91 | 79 | 74 | 71 | 67 | 65 | 63 | 80 |
| 1100 | 100 | 107 | 100 | 98 | 90 | 88 | 85 | 78 | 71 | 95 |
| | 80 | 104 | 97 | 95 | 87 | 84 | 80 | 73 | 69 | 91 |
| | 60 | 105 | 95 | 93 | 84 | 80 | 76 | 73 | 71 | 89 |
| | 50 | 102 | 94 | 91 | 82 | 79 | 76 | 73 | 72 | 88 |
| | 40 | 106 | 96 | 91 | 82 | 79 | 76 | 74 | 72 | 88 |
| 1600 | 100 | 114 | 109 | 108 | 99 | 98 | 97 | 91 | 84 | 105 |
| | 80 | 111 | 105 | 105 | 97 | 95 | 92 | 86 | 79 | 101 |
| | 60 | 107 | 100 | 103 | 93 | 91 | 87 | 84 | 81 | 98 |
| | 50 | 107 | 99 | 101 | 92 | 89 | 86 | 85 | 82 | 97 |
| | 40 | 106 | 100 | 101 | 91 | 89 | 86 | 85 | 83 | 97 |
| 2182 | 100 | 122 | 117 | 115 | 109 | 105 | 105 | 101 | 94 | 113 |
| | 80 | 120 | 113 | 112 | 106 | 102 | 100 | 96 | 89 | 109 |
| | 60 | 115 | 108 | 109 | 103 | 99 | 96 | 92 | 89 | 106 |
| | 50 | 115 | 108 | 107 | 102 | 97 | 94 | 92 | 90 | 105 |
| | 40 | 115 | 108 | 108 | 101 | 97 | 94 | 92 | 90 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

33 AFSW

Wheel Diameter = 33 in.

Outlet Area = 6.26 ft.²

Tip Speed = 8.64 x RPM

Maximum BHP = (RPM/487)³

Minimum Starting HP = 1

Maximum RPM Class I = 1208

Maximum RPM Class II = 1575

Maximum RPM Class III = 1985

Maximum Open Motor Frame Size

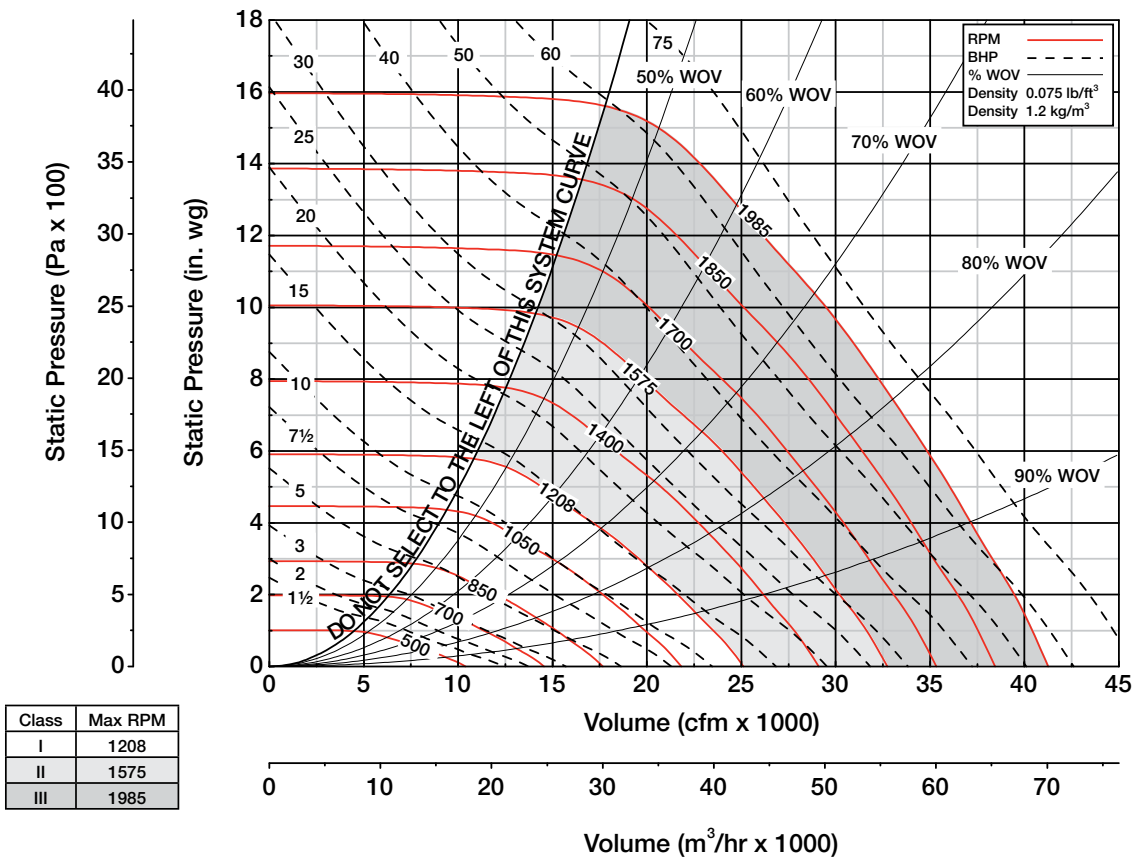
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 324T | 324T | 365T |
| Arr. 10 | 256T | 256T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 5000 | 798 | 325 | 0.30 | 395 | 0.51 | 452 | 0.75 | 508 | 1.03 | | | | | | | | | | | | |
| 6000 | 958 | 362 | 0.40 | 425 | 0.66 | 480 | 0.92 | 528 | 1.20 | 574 | 1.51 | 621 | 1.86 | 665 | 2.23 | | | | | | |
| 7000 | 1118 | 400 | 0.54 | 457 | 0.83 | 510 | 1.13 | 556 | 1.43 | 598 | 1.75 | 638 | 2.10 | 678 | 2.47 | 718 | 2.88 | 756 | 3.31 | | |
| 8000 | 1277 | 441 | 0.70 | 493 | 1.03 | 541 | 1.37 | 586 | 1.71 | 627 | 2.06 | 664 | 2.42 | 700 | 2.80 | 735 | 3.20 | 769 | 3.62 | 805 | 4.09 |
| 9000 | 1437 | 483 | 0.91 | 531 | 1.27 | 575 | 1.65 | 617 | 2.02 | 657 | 2.41 | 694 | 2.80 | 728 | 3.20 | 760 | 3.61 | 792 | 4.05 | 823 | 4.50 |
| 10000 | 1597 | 527 | 1.15 | 570 | 1.55 | 612 | 1.96 | 650 | 2.38 | 688 | 2.80 | 724 | 3.23 | 758 | 3.67 | 790 | 4.11 | 820 | 4.55 | 848 | 5.01 |
| 11000 | 1757 | 570 | 1.44 | 611 | 1.88 | 650 | 2.32 | 686 | 2.78 | 721 | 3.24 | 755 | 3.71 | 788 | 4.18 | 820 | 4.65 | 849 | 5.13 | 878 | 5.62 |
| 12000 | 1916 | 615 | 1.78 | 653 | 2.26 | 689 | 2.73 | 724 | 3.23 | 757 | 3.73 | 788 | 4.24 | 820 | 4.74 | 850 | 5.25 | 880 | 5.77 | 908 | 6.29 |
| 13000 | 2076 | 659 | 2.16 | 695 | 2.69 | 729 | 3.20 | 762 | 3.73 | 793 | 4.28 | 824 | 4.82 | 852 | 5.36 | 882 | 5.91 | 910 | 6.46 | 938 | 7.02 |
| 14000 | 2236 | 704 | 2.61 | 739 | 3.19 | 770 | 3.74 | 801 | 4.28 | 831 | 4.86 | 860 | 5.46 | 888 | 6.04 | 915 | 6.63 | 942 | 7.22 | 969 | 7.81 |
| 15000 | 2396 | 749 | 3.12 | 782 | 3.74 | 812 | 4.33 | 842 | 4.92 | 870 | 5.52 | 898 | 6.15 | 924 | 6.79 | 951 | 7.41 | 976 | 8.04 | 1000 | 8.67 |
| 16000 | 2555 | 796 | 3.71 | 826 | 4.36 | 855 | 5.00 | 883 | 5.63 | 910 | 6.25 | 936 | 6.91 | 962 | 7.58 | 987 | 8.26 | 1012 | 8.92 | 1035 | 9.59 |
| 17000 | 2715 | 843 | 4.38 | 871 | 5.04 | 898 | 5.74 | 924 | 6.41 | 950 | 7.07 | 975 | 7.74 | 1000 | 8.44 | 1025 | 9.16 | 1048 | 9.89 | 1071 | 10.6 |
| 18000 | 2875 | 889 | 5.12 | 915 | 5.80 | 942 | 6.56 | 967 | 7.26 | 991 | 7.97 | 1016 | 8.67 | 1039 | 9.39 | 1063 | 10.1 | 1086 | 10.9 | 1108 | 11.7 |
| 19000 | 3035 | 936 | 5.95 | 960 | 6.64 | 986 | 7.44 | 1010 | 8.20 | 1033 | 8.95 | 1057 | 9.69 | 1079 | 10.4 | 1102 | 11.2 | 1124 | 12.0 | 1145 | 12.8 |
| 20000 | 3194 | 983 | 6.87 | 1005 | 7.57 | 1030 | 8.40 | 1054 | 9.23 | 1076 | 10.0 | 1098 | 10.8 | 1120 | 11.6 | 1141 | 12.4 | 1163 | 13.2 | 1184 | 14.0 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 10000 | 1597 | 848 | 5.01 | 905 | 5.99 | 960 | 7.04 | 1017 | 8.21 | 1071 | 9.41 | | | | | | | | | | |
| 11000 | 1757 | 878 | 5.62 | 931 | 6.62 | 983 | 7.69 | 1032 | 8.80 | 1084 | 10.1 | 1135 | 11.3 | 1184 | 12.7 | | | | | | |
| 12000 | 1916 | 908 | 6.29 | 960 | 7.35 | 1009 | 8.44 | 1056 | 9.59 | 1103 | 10.8 | 1148 | 12.1 | 1197 | 13.5 | 1243 | 14.9 | 1287 | 16.3 | 1330 | 17.8 |
| 13000 | 2076 | 938 | 7.02 | 990 | 8.15 | 1038 | 9.30 | 1083 | 10.5 | 1127 | 11.7 | 1171 | 13.0 | 1213 | 14.3 | 1256 | 15.7 | 1300 | 17.2 | 1343 | 18.8 |
| 14000 | 2236 | 969 | 7.81 | 1020 | 9.01 | 1068 | 10.2 | 1113 | 11.5 | 1155 | 12.7 | 1196 | 14.0 | 1237 | 15.4 | 1277 | 16.8 | 1315 | 18.2 | 1356 | 19.8 |
| 15000 | 2396 | 1000 | 8.67 | 1051 | 9.94 | 1098 | 11.2 | 1143 | 12.5 | 1185 | 13.9 | 1225 | 15.2 | 1263 | 16.6 | 1301 | 18.0 | 1339 | 19.5 | 1376 | 21.0 |
| 16000 | 2555 | 1035 | 9.59 | 1082 | 10.9 | 1129 | 12.3 | 1173 | 13.7 | 1215 | 15.1 | 1254 | 16.5 | 1293 | 17.9 | 1329 | 19.4 | 1364 | 20.8 | 1401 | 22.4 |
| 17000 | 2715 | 1071 | 10.6 | 1116 | 12.0 | 1160 | 13.4 | 1204 | 14.9 | 1245 | 16.4 | 1285 | 17.8 | 1322 | 19.3 | 1359 | 20.8 | 1394 | 22.4 | 1427 | 23.9 |
| 18000 | 2875 | 1108 | 11.7 | 1151 | 13.2 | 1192 | 14.7 | 1235 | 16.2 | 1276 | 17.7 | 1315 | 19.3 | 1352 | 20.8 | 1388 | 22.4 | 1423 | 24.0 | 1457 | 25.6 |
| 19000 | 3035 | 1145 | 12.8 | 1187 | 14.4 | 1228 | 16.0 | 1266 | 17.6 | 1307 | 19.2 | 1346 | 20.8 | 1383 | 22.4 | 1419 | 24.1 | 1453 | 25.7 | 1486 | 27.4 |
| 20000 | 3194 | 1184 | 14.0 | 1224 | 15.7 | 1264 | 17.4 | 1301 | 19.0 | 1338 | 20.7 | 1377 | 22.4 | 1414 | 24.1 | 1449 | 25.8 | 1483 | 27.6 | 1517 | 29.3 |
| 21000 | 3354 | 1222 | 15.3 | 1262 | 17.1 | 1300 | 18.9 | 1337 | 20.6 | 1373 | 22.4 | 1408 | 24.1 | 1445 | 25.9 | 1480 | 27.7 | 1514 | 29.5 | 1547 | 31.3 |
| 22000 | 3514 | 1262 | 16.7 | 1300 | 18.6 | 1337 | 20.4 | 1373 | 22.3 | 1408 | 24.1 | 1442 | 25.9 | 1476 | 27.8 | 1511 | 29.7 | 1545 | 31.5 | 1577 | 33.4 |
| 23000 | 3674 | 1302 | 18.3 | 1339 | 20.1 | 1375 | 22.1 | 1410 | 24.0 | 1444 | 25.9 | 1478 | 27.8 | 1510 | 29.8 | 1543 | 31.7 | 1576 | 33.7 | 1608 | 35.6 |
| 24000 | 3833 | 1342 | 19.9 | 1378 | 21.8 | 1413 | 23.8 | 1448 | 25.8 | 1481 | 27.9 | 1514 | 29.9 | 1546 | 31.9 | 1576 | 33.9 | 1608 | 35.9 | 1640 | 37.9 |
| 25000 | 3993 | 1383 | 21.7 | 1418 | 23.7 | 1452 | 25.7 | 1486 | 27.8 | 1518 | 29.9 | 1550 | 32.0 | 1581 | 34.1 | 1612 | 36.1 | 1641 | 38.3 | 1671 | 40.4 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|------|------|------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | | | | | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | | | | |
| 14000 | 2236 | 1356 | 19.8 | 1397 | 21.4 | 1437 | 23.1 | 1476 | 24.7 | 1513 | 26.5 | 1601 | 31.6 | 1670 | 35.3 | | | 1813 | 45.2 | | | | | | |
| 15200 | 2428 | 1381 | 21.3 | 1417 | 22.8 | 1453 | 24.4 | 1491 | 26.2 | 1529 | 28.0 | | | | | | | | | | | | | | |
| 16400 | 2619 | 1411 | 23.0 | 1446 | 24.6 | 1480 | 26.2 | 1513 | 27.9 | 1546 | 29.5 | | | | | | | | | | | 1617 | 33.3 | 1685 | 37.1 |
| 17600 | 2811 | 1445 | 24.9 | 1478 | 26.5 | 1510 | 28.2 | 1543 | 29.9 | 1575 | 31.6 | | | | | | | | | | | 1637 | 35.2 | 1701 | 39.0 |
| 18800 | 3003 | 1481 | 27.1 | 1513 | 28.7 | 1544 | 30.4 | 1575 | 32.1 | 1605 | 33.9 | 1666 | 37.6 | 1725 | 41.3 | 1782 | 45.2 | 1845 | 49.5 | 1905 | 53.9 | | | | |
| 20000 | 3194 | 1517 | 29.3 | 1549 | 31.1 | 1580 | 32.8 | 1610 | 34.6 | 1640 | 36.4 | 1697 | 40.1 | 1755 | 44.0 | 1811 | 47.9 | 1865 | 52.0 | 1921 | 56.3 | | | | |
| 21200 | 3386 | 1553 | 31.7 | 1585 | 33.6 | 1616 | 35.4 | 1646 | 37.3 | 1675 | 39.2 | 1732 | 43.0 | 1786 | 46.8 | 1840 | 50.8 | 1894 | 55.1 | 1946 | 59.3 | | | | |
| 22400 | 3578 | 1590 | 34.3 | 1621 | 36.2 | 1652 | 38.2 | 1682 | 40.1 | 1711 | 42.1 | 1768 | 46.0 | 1821 | 50.0 | 1873 | 54.1 | 1924 | 58.2 | 1975 | 64.6 | | | | |
| 23600 | 3769 | 1627 | 37.0 | 1658 | 39.0 | 1689 | 41.0 | 1719 | 43.1 | 1748 | 45.1 | 1804 | 49.2 | 1857 | 53.4 | 1908 | 57.6 | 1958 | 61.9 | | | | | | |
| 24800 | 3961 | 1665 | 39.9 | 1696 | 42.0 | 1726 | 44.1 | 1756 | 46.2 | 1784 | 48.3 | 1840 | 52.6 | 1893 | 56.9 | 1944 | 61.3 | | | | | | | | |
| 26000 | 4153 | 1705 | 42.9 | 1734 | 45.1 | 1764 | 47.3 | 1793 | 49.5 | 1821 | 51.7 | 1876 | 56.2 | 1929 | 60.7 | 1980 | 65.2 | | | | | | | | |
| 27200 | 4345 | 1748 | 46.1 | 1775 | 48.4 | 1802 | 50.7 | 1831 | 53.0 | 1859 | 55.3 | 1913 | 59.9 | 1966 | 64.6 | | | | | | | | | | |
| 28400 | 4536 | 1791 | 49.5 | 1818 | 51.8 | 1845 | 54.2 | 1871 | 56.6 | 1897 | 59.0 | 1951 | 63.8 | | | | | | | | | | | | |
| 29600 | 4728 | 1835 | 53.1 | 1861 | 55.5 | 1888 | 58.0 | 1913 | 60.4 | 1938 | 62.9 | | | | | | | | | | | | | | |
| 30800 | 4920 | 1879 | 56.8 | 1905 | 59.4 | 1931 | 61.9 | 1956 | 64.5 | 1981 | 67.0 | | | | | | | | | | | | | | |
| 32000 | 5111 | 1925 | 60.6 | 1950 | 63.4 | 1975 | 66.1 | | | | | | | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



% WOV = (CFM X 100) / (RPM X 20.8)

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 400 | 100 | 88 | 79 | 74 | 65 | 63 | 52 | 46 | 40 | 70 |
| | 80 | 88 | 76 | 70 | 60 | 56 | 49 | 44 | 38 | 67 |
| | 60 | 86 | 75 | 67 | 58 | 57 | 49 | 45 | 38 | 65 |
| | 50 | 85 | 75 | 66 | 59 | 59 | 53 | 47 | 39 | 66 |
| | 40 | 84 | 74 | 65 | 59 | 59 | 53 | 48 | 39 | 65 |
| 600 | 100 | 90 | 86 | 82 | 75 | 76 | 66 | 58 | 53 | 80 |
| | 80 | 89 | 86 | 81 | 71 | 69 | 62 | 55 | 49 | 77 |
| | 60 | 88 | 84 | 77 | 70 | 70 | 62 | 57 | 51 | 75 |
| | 50 | 87 | 83 | 77 | 70 | 70 | 63 | 58 | 51 | 75 |
| | 40 | 86 | 83 | 76 | 70 | 70 | 63 | 59 | 52 | 75 |
| 800 | 100 | 93 | 92 | 86 | 81 | 79 | 75 | 67 | 61 | 85 |
| | 80 | 90 | 87 | 83 | 77 | 75 | 69 | 64 | 60 | 81 |
| | 60 | 90 | 89 | 83 | 77 | 76 | 71 | 68 | 63 | 82 |
| | 50 | 92 | 92 | 82 | 77 | 77 | 71 | 69 | 65 | 82 |
| | 40 | 94 | 93 | 84 | 79 | 77 | 72 | 69 | 65 | 83 |
| 1100 | 100 | 96 | 95 | 98 | 90 | 87 | 84 | 77 | 71 | 94 |
| | 80 | 93 | 94 | 97 | 87 | 82 | 79 | 73 | 70 | 91 |
| | 60 | 91 | 89 | 93 | 86 | 82 | 79 | 77 | 74 | 89 |
| | 50 | 102 | 97 | 95 | 86 | 83 | 80 | 79 | 78 | 91 |
| | 40 | 104 | 99 | 97 | 88 | 84 | 81 | 79 | 78 | 93 |
| 1500 | 100 | 100 | 100 | 106 | 98 | 96 | 95 | 88 | 81 | 103 |
| | 80 | 96 | 96 | 102 | 93 | 90 | 89 | 84 | 78 | 98 |
| | 60 | 94 | 96 | 100 | 91 | 89 | 88 | 86 | 83 | 96 |
| | 50 | 97 | 97 | 99 | 91 | 89 | 88 | 87 | 84 | 96 |
| | 40 | 98 | 98 | 100 | 92 | 89 | 88 | 87 | 84 | 97 |
| 1985 | 100 | 109 | 104 | 113 | 106 | 102 | 103 | 98 | 90 | 110 |
| | 80 | 105 | 100 | 109 | 101 | 96 | 96 | 92 | 86 | 105 |
| | 60 | 102 | 101 | 107 | 98 | 95 | 95 | 93 | 90 | 103 |
| | 50 | 105 | 102 | 106 | 98 | 95 | 95 | 94 | 91 | 103 |
| | 40 | 106 | 103 | 107 | 100 | 96 | 95 | 94 | 91 | 104 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 400 | 100 | 95 | 85 | 74 | 68 | 67 | 55 | 48 | 41 | 75 |
| | 80 | 92 | 83 | 71 | 65 | 61 | 52 | 46 | 41 | 72 |
| | 60 | 91 | 82 | 69 | 61 | 61 | 51 | 48 | 42 | 71 |
| | 50 | 91 | 81 | 68 | 61 | 61 | 51 | 49 | 43 | 70 |
| | 40 | 91 | 81 | 67 | 61 | 61 | 51 | 49 | 43 | 70 |
| 600 | 100 | 99 | 90 | 83 | 78 | 77 | 69 | 60 | 54 | 82 |
| | 80 | 95 | 89 | 82 | 75 | 73 | 64 | 57 | 52 | 79 |
| | 60 | 94 | 87 | 79 | 72 | 70 | 62 | 59 | 54 | 77 |
| | 50 | 94 | 86 | 78 | 71 | 70 | 62 | 59 | 55 | 77 |
| | 40 | 94 | 86 | 77 | 70 | 70 | 62 | 60 | 56 | 76 |
| 800 | 100 | 103 | 100 | 88 | 85 | 83 | 78 | 70 | 64 | 89 |
| | 80 | 99 | 95 | 85 | 81 | 79 | 72 | 66 | 62 | 85 |
| | 60 | 97 | 92 | 82 | 78 | 75 | 70 | 67 | 64 | 82 |
| | 50 | 98 | 92 | 81 | 77 | 74 | 70 | 68 | 66 | 82 |
| | 40 | 101 | 93 | 82 | 77 | 74 | 70 | 68 | 66 | 83 |
| 1100 | 100 | 110 | 103 | 101 | 93 | 91 | 88 | 81 | 74 | 98 |
| | 80 | 107 | 100 | 98 | 90 | 87 | 83 | 76 | 71 | 94 |
| | 60 | 108 | 98 | 96 | 87 | 83 | 79 | 75 | 74 | 92 |
| | 50 | 105 | 97 | 94 | 85 | 82 | 79 | 76 | 75 | 90 |
| | 40 | 109 | 98 | 94 | 85 | 81 | 79 | 76 | 75 | 91 |
| 1500 | 100 | 115 | 110 | 109 | 101 | 100 | 98 | 92 | 85 | 106 |
| | 80 | 112 | 106 | 105 | 98 | 96 | 93 | 87 | 80 | 102 |
| | 60 | 107 | 102 | 103 | 95 | 92 | 89 | 85 | 82 | 99 |
| | 50 | 107 | 101 | 101 | 93 | 90 | 88 | 86 | 83 | 98 |
| | 40 | 107 | 102 | 102 | 93 | 90 | 87 | 86 | 84 | 98 |
| 1985 | 100 | 124 | 117 | 116 | 108 | 106 | 106 | 101 | 94 | 113 |
| | 80 | 121 | 113 | 112 | 105 | 103 | 100 | 96 | 89 | 109 |
| | 60 | 116 | 108 | 110 | 102 | 100 | 96 | 93 | 90 | 106 |
| | 50 | 117 | 107 | 108 | 101 | 98 | 94 | 93 | 90 | 105 |
| | 40 | 116 | 108 | 109 | 100 | 97 | 94 | 93 | 91 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

36 AFSW

Wheel Diameter = 36½ in.

Outlet Area = 7.66 ft.²

Tip Speed = 9.56 x RPM

Maximum BHP = (RPM/412)³

Minimum Starting HP = 1

Maximum RPM Class I = 1092

Maximum RPM Class II = 1424

Maximum RPM Class III = 1794

Maximum Open Motor Frame Size

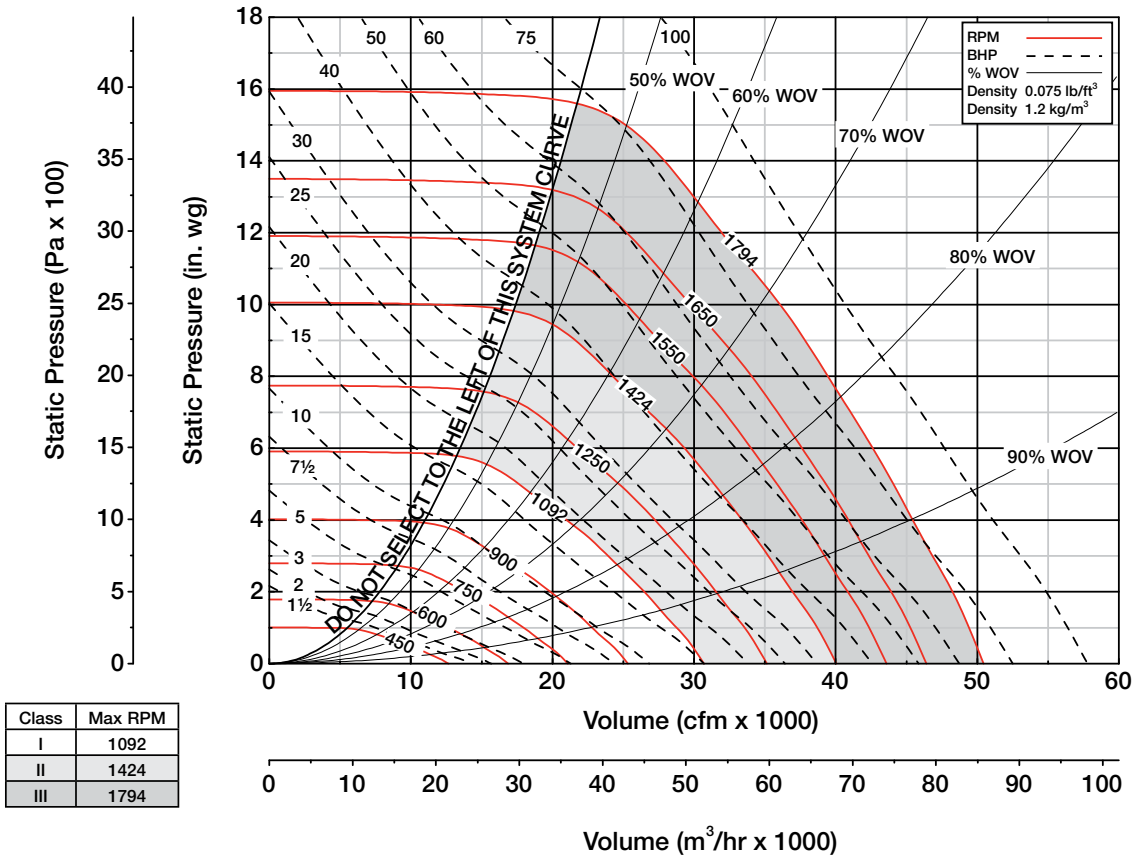
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 326T | 326T | 365T |
| Arr. 10 | 286T | 286T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 6000 | 783 | 291 | 0.35 | 354 | 0.61 | 407 | 0.90 | 459 | 1.24 | | | | | | | | | | | | |
| 7200 | 939 | 323 | 0.48 | 381 | 0.78 | 431 | 1.10 | 475 | 1.44 | 517 | 1.82 | 560 | 2.25 | | | | | | | | |
| 8400 | 1096 | 357 | 0.63 | 409 | 0.98 | 457 | 1.34 | 499 | 1.71 | 537 | 2.10 | 574 | 2.52 | 611 | 2.98 | 648 | 3.48 | 682 | 4.00 | | |
| 9600 | 1253 | 393 | 0.83 | 441 | 1.22 | 485 | 1.62 | 526 | 2.04 | 563 | 2.46 | 596 | 2.89 | 629 | 3.36 | 661 | 3.84 | 694 | 4.37 | 726 | 4.94 |
| 10800 | 1409 | 430 | 1.06 | 474 | 1.50 | 515 | 1.95 | 553 | 2.41 | 589 | 2.87 | 623 | 3.34 | 654 | 3.83 | 683 | 4.32 | 712 | 4.85 | 740 | 5.40 |
| 12000 | 1566 | 468 | 1.35 | 509 | 1.82 | 547 | 2.33 | 582 | 2.83 | 617 | 3.33 | 649 | 3.85 | 680 | 4.37 | 709 | 4.90 | 736 | 5.44 | 762 | 6.00 |
| 13200 | 1723 | 507 | 1.69 | 545 | 2.20 | 580 | 2.74 | 614 | 3.30 | 645 | 3.85 | 677 | 4.41 | 707 | 4.97 | 735 | 5.55 | 762 | 6.13 | 788 | 6.71 |
| 14400 | 1879 | 546 | 2.07 | 581 | 2.65 | 614 | 3.21 | 646 | 3.82 | 677 | 4.42 | 705 | 5.03 | 734 | 5.64 | 762 | 6.25 | 789 | 6.87 | 814 | 7.50 |
| 15600 | 2036 | 586 | 2.52 | 619 | 3.15 | 650 | 3.76 | 680 | 4.40 | 709 | 5.06 | 736 | 5.71 | 763 | 6.37 | 790 | 7.02 | 816 | 7.69 | 841 | 8.36 |
| 16800 | 2193 | 626 | 3.04 | 657 | 3.73 | 686 | 4.39 | 715 | 5.05 | 742 | 5.75 | 769 | 6.46 | 794 | 7.16 | 819 | 7.87 | 844 | 8.58 | 868 | 9.29 |
| 18000 | 2349 | 666 | 3.63 | 696 | 4.38 | 723 | 5.09 | 750 | 5.79 | 776 | 6.51 | 802 | 7.27 | 826 | 8.03 | 850 | 8.78 | 873 | 9.54 | 896 | 10.3 |
| 19200 | 2506 | 707 | 4.31 | 735 | 5.09 | 761 | 5.86 | 786 | 6.61 | 811 | 7.36 | 836 | 8.15 | 859 | 8.97 | 882 | 9.78 | 905 | 10.6 | 926 | 11.4 |
| 20400 | 2663 | 748 | 5.08 | 774 | 5.89 | 799 | 6.72 | 823 | 7.52 | 847 | 8.32 | 870 | 9.12 | 893 | 9.98 | 915 | 10.8 | 937 | 11.7 | 958 | 12.6 |
| 21600 | 2819 | 789 | 5.94 | 813 | 6.77 | 838 | 7.67 | 861 | 8.51 | 883 | 9.36 | 906 | 10.2 | 927 | 11.1 | 949 | 12.0 | 970 | 12.9 | 990 | 13.8 |
| 22800 | 2976 | 831 | 6.90 | 853 | 7.74 | 877 | 8.70 | 899 | 9.60 | 920 | 10.5 | 942 | 11.4 | 962 | 12.3 | 983 | 13.2 | 1003 | 14.2 | 1023 | 15.1 |
| 24000 | 3133 | 873 | 7.96 | 893 | 8.82 | 916 | 9.82 | 937 | 10.8 | 958 | 11.7 | 978 | 12.7 | 998 | 13.6 | 1018 | 14.6 | 1037 | 15.6 | 1057 | 16.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 12000 | 1566 | 762 | 6.00 | 814 | 7.20 | 866 | 8.50 | 918 | 9.91 | 966 | 11.4 | | | | | | | | | | |
| 13200 | 1723 | 788 | 6.71 | 836 | 7.92 | 884 | 9.23 | 929 | 10.6 | 978 | 12.1 | 1024 | 13.7 | 1068 | 15.3 | | | | | | |
| 14400 | 1879 | 814 | 7.50 | 862 | 8.78 | 906 | 10.1 | 950 | 11.5 | 992 | 13.0 | 1035 | 14.6 | 1079 | 16.2 | 1121 | 18.0 | 1161 | 19.7 | | |
| 15600 | 2036 | 841 | 8.36 | 888 | 9.72 | 932 | 11.1 | 973 | 12.5 | 1013 | 14.0 | 1053 | 15.6 | 1091 | 17.2 | 1133 | 19.0 | 1173 | 20.8 | 1211 | 22.7 |
| 16800 | 2193 | 868 | 9.29 | 915 | 10.7 | 958 | 12.2 | 999 | 13.7 | 1037 | 15.2 | 1075 | 16.8 | 1112 | 18.5 | 1148 | 20.2 | 1184 | 21.9 | 1223 | 23.9 |
| 18000 | 2349 | 896 | 10.3 | 942 | 10.8 | 985 | 13.4 | 1025 | 14.9 | 1063 | 16.5 | 1100 | 18.2 | 1134 | 19.8 | 1170 | 21.6 | 1205 | 23.4 | 1238 | 25.2 |
| 19200 | 2506 | 926 | 11.4 | 970 | 13.0 | 1012 | 14.6 | 1052 | 16.3 | 1090 | 18.0 | 1126 | 19.7 | 1160 | 21.4 | 1193 | 23.1 | 1226 | 24.9 | 1259 | 26.8 |
| 20400 | 2663 | 958 | 12.5 | 998 | 14.3 | 1040 | 16.0 | 1079 | 17.7 | 1117 | 19.5 | 1152 | 21.3 | 1187 | 23.1 | 1219 | 24.9 | 1251 | 26.7 | 1282 | 28.6 |
| 21600 | 2819 | 990 | 13.8 | 1030 | 15.6 | 1068 | 17.4 | 1107 | 19.3 | 1144 | 21.1 | 1179 | 23.0 | 1213 | 24.8 | 1246 | 26.7 | 1277 | 28.7 | 1308 | 30.6 |
| 22800 | 2976 | 1023 | 15.1 | 1061 | 17.0 | 1098 | 19.0 | 1135 | 20.9 | 1171 | 22.8 | 1206 | 24.8 | 1240 | 26.7 | 1273 | 28.7 | 1304 | 30.7 | 1334 | 32.7 |
| 24000 | 3133 | 1057 | 16.6 | 1094 | 18.6 | 1130 | 20.6 | 1164 | 22.6 | 1199 | 24.6 | 1234 | 26.7 | 1267 | 28.7 | 1299 | 30.8 | 1331 | 32.9 | 1361 | 35.0 |
| 25200 | 3289 | 1091 | 18.1 | 1127 | 20.2 | 1162 | 22.3 | 1196 | 22.4 | 1228 | 26.6 | 1262 | 28.7 | 1295 | 30.8 | 1327 | 33.0 | 1358 | 35.1 | 1387 | 37.3 |
| 26400 | 3446 | 1125 | 19.7 | 1161 | 21.9 | 1194 | 24.2 | 1228 | 26.4 | 1260 | 28.6 | 1290 | 30.8 | 1323 | 33.0 | 1354 | 35.3 | 1385 | 37.5 | 1414 | 39.8 |
| 27600 | 3603 | 1161 | 21.5 | 1195 | 23.8 | 1228 | 26.1 | 1260 | 28.4 | 1291 | 30.7 | 1322 | 33.0 | 1351 | 35.4 | 1382 | 37.7 | 1412 | 40.0 | 1442 | 42.4 |
| 28800 | 3759 | 1197 | 23.4 | 1229 | 25.7 | 1262 | 28.1 | 1293 | 30.6 | 1324 | 33.0 | 1354 | 35.4 | 1382 | 37.8 | 1411 | 40.2 | 1440 | 42.7 | 1469 | 45.1 |
| 30000 | 3916 | 1233 | 25.5 | 1265 | 27.8 | 1296 | 30.3 | 1327 | 32.8 | 1356 | 35.4 | 1386 | 37.9 | 1414 | 40.4 | 1442 | 42.9 | 1469 | 45.4 | 1497 | 47.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 17000 | 2219 | 1225 | 24.1 | 1262 | 26.0 | 1298 | 28.1 | 1333 | 30.1 | 1367 | 32.2 | | | | | | | | | | |
| 18400 | 2402 | 1245 | 25.7 | 1277 | 27.6 | 1312 | 29.7 | 1346 | 31.8 | 1380 | 34.0 | 1446 | 38.4 | 1508 | 42.9 | | | | | | |
| 19800 | 2584 | 1270 | 27.7 | 1302 | 29.7 | 1333 | 31.6 | 1363 | 33.7 | 1394 | 35.8 | 1459 | 40.3 | 1521 | 45.0 | 1580 | 49.9 | | | | |
| 21200 | 2767 | 1299 | 29.9 | 1329 | 31.9 | 1359 | 33.9 | 1389 | 36.0 | 1418 | 38.1 | 1474 | 42.4 | 1534 | 47.2 | 1594 | 52.2 | 1650 | 57.3 | 1705 | 62.5 |
| 22600 | 2950 | 1330 | 32.4 | 1359 | 34.4 | 1387 | 36.4 | 1415 | 38.5 | 1443 | 40.7 | 1499 | 45.1 | 1552 | 49.7 | 1607 | 54.6 | 1664 | 59.8 | 1718 | 65.2 |
| 24000 | 3133 | 1361 | 35.0 | 1390 | 37.1 | 1418 | 39.2 | 1445 | 41.4 | 1472 | 43.5 | 1525 | 48.0 | 1578 | 52.7 | 1629 | 57.6 | 1678 | 62.5 | 1732 | 68.0 |
| 25400 | 3315 | 1392 | 37.7 | 1421 | 39.9 | 1449 | 42.2 | 1476 | 44.4 | 1503 | 46.7 | 1554 | 51.2 | 1603 | 55.9 | 1654 | 60.9 | 1703 | 66.0 | 1750 | 71.1 |
| 26800 | 3498 | 1423 | 40.6 | 1452 | 42.9 | 1480 | 45.3 | 1507 | 47.6 | 1534 | 50.0 | 1585 | 54.7 | 1633 | 59.5 | 1680 | 64.4 | 1728 | 69.6 | 1775 | 74.9 |
| 28200 | 3681 | 1456 | 43.7 | 1484 | 46.1 | 1512 | 48.5 | 1539 | 51.0 | 1565 | 53.5 | 1615 | 58.4 | 1664 | 63.4 | 1711 | 68.5 | 1756 | 73.6 | | |
| 29600 | 3864 | 1488 | 47.0 | 1516 | 49.0 | 1543 | 52.0 | 1570 | 54.5 | 1596 | 57.1 | 1647 | 62.3 | 1695 | 67.4 | 1741 | 72.7 | 1786 | 78.0 | | |
| 31000 | 4046 | 1521 | 50.4 | 1549 | 53.0 | 1576 | 55.7 | 1602 | 58.3 | 1628 | 60.9 | 1678 | 66.3 | 1726 | 71.7 | 1772 | 77.1 | | | | |
| 32400 | 4229 | 1557 | 54.0 | 1582 | 56.8 | 1608 | 59.5 | 1635 | 62.2 | 1660 | 65.0 | 1710 | 70.5 | 1758 | 76.0 | | | | | | |
| 33800 | 4412 | 1594 | 57.8 | 1619 | 60.7 | 1643 | 63.5 | 1667 | 66.4 | 1693 | 69.2 | 1742 | 74.9 | 1789 | 80.7 | | | | | | |
| 35200 | 4595 | 1632 | 61.9 | 1656 | 64.8 | 1680 | 67.7 | 1703 | 70.7 | 1726 | 73.7 | 1774 | 79.6 | | | | | | | | |
| 36600 | 4778 | 1669 | 66.1 | 1693 | 69.1 | 1717 | 72.2 | 1740 | 75.2 | 1762 | 78.3 | | | | | | | | | | |
| 38000 | 4960 | 1708 | 70.5 | 1731 | 73.7 | 1754 | 76.8 | 1777 | 80.0 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
Performance ratings do not include the effects of appurtenances (accessories).
Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 28.1)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 350 | 100 | 79 | 75 | 70 | 68 | 63 | 54 | 47 | 43 | 69 |
| | 80 | 78 | 74 | 69 | 66 | 62 | 54 | 47 | 43 | 68 |
| | 60 | 75 | 71 | 67 | 66 | 62 | 54 | 47 | 43 | 67 |
| | 50 | 76 | 71 | 66 | 65 | 62 | 55 | 48 | 44 | 67 |
| | 40 | 76 | 71 | 67 | 66 | 62 | 55 | 48 | 44 | 67 |
| 500 | 100 | 91 | 85 | 79 | 75 | 72 | 64 | 56 | 52 | 78 |
| | 80 | 89 | 83 | 76 | 72 | 68 | 62 | 54 | 49 | 75 |
| | 60 | 88 | 80 | 73 | 71 | 69 | 63 | 57 | 51 | 74 |
| | 50 | 87 | 79 | 72 | 71 | 69 | 63 | 57 | 52 | 73 |
| | 40 | 86 | 79 | 72 | 70 | 69 | 63 | 57 | 52 | 73 |
| 700 | 100 | 97 | 96 | 85 | 82 | 81 | 75 | 66 | 61 | 86 |
| | 80 | 98 | 96 | 83 | 77 | 76 | 70 | 64 | 59 | 84 |
| | 60 | 97 | 95 | 80 | 75 | 75 | 71 | 67 | 62 | 83 |
| | 50 | 94 | 92 | 79 | 75 | 75 | 71 | 68 | 64 | 81 |
| | 40 | 96 | 95 | 83 | 76 | 75 | 71 | 67 | 64 | 83 |
| 900 | 100 | 94 | 100 | 91 | 87 | 88 | 85 | 74 | 69 | 93 |
| | 80 | 92 | 100 | 89 | 82 | 82 | 79 | 71 | 67 | 88 |
| | 60 | 89 | 98 | 85 | 79 | 80 | 77 | 74 | 71 | 87 |
| | 50 | 89 | 96 | 84 | 79 | 80 | 77 | 75 | 72 | 86 |
| | 40 | 92 | 94 | 84 | 78 | 80 | 76 | 75 | 72 | 85 |
| 1300 | 100 | 101 | 108 | 105 | 95 | 95 | 95 | 88 | 81 | 102 |
| | 80 | 98 | 108 | 104 | 92 | 90 | 89 | 83 | 77 | 99 |
| | 60 | 96 | 106 | 101 | 89 | 87 | 86 | 84 | 81 | 96 |
| | 50 | 96 | 104 | 99 | 87 | 86 | 86 | 84 | 82 | 95 |
| | 40 | 97 | 104 | 99 | 87 | 86 | 86 | 85 | 82 | 96 |
| 1794 | 100 | 106 | 113 | 119 | 105 | 101 | 102 | 99 | 91 | 112 |
| | 80 | 103 | 111 | 119 | 103 | 97 | 97 | 93 | 86 | 111 |
| | 60 | 102 | 109 | 116 | 100 | 94 | 94 | 92 | 89 | 109 |
| | 50 | 102 | 109 | 115 | 98 | 93 | 93 | 92 | 90 | 107 |
| | 40 | 102 | 109 | 115 | 98 | 93 | 93 | 92 | 91 | 107 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 350 | 100 | 82 | 83 | 77 | 70 | 64 | 56 | 48 | 44 | 73 |
| | 80 | 80 | 83 | 76 | 68 | 63 | 56 | 47 | 44 | 72 |
| | 60 | 79 | 82 | 76 | 68 | 64 | 57 | 49 | 45 | 72 |
| | 50 | 79 | 81 | 75 | 68 | 65 | 58 | 50 | 46 | 72 |
| | 40 | 79 | 81 | 75 | 69 | 65 | 57 | 50 | 46 | 72 |
| 500 | 100 | 94 | 87 | 79 | 76 | 73 | 64 | 57 | 51 | 79 |
| | 80 | 91 | 86 | 77 | 73 | 69 | 62 | 56 | 49 | 76 |
| | 60 | 88 | 83 | 75 | 71 | 68 | 62 | 57 | 52 | 74 |
| | 50 | 89 | 83 | 75 | 70 | 68 | 62 | 57 | 53 | 74 |
| | 40 | 86 | 83 | 74 | 70 | 67 | 61 | 57 | 53 | 74 |
| 700 | 100 | 102 | 99 | 88 | 84 | 83 | 77 | 69 | 64 | 89 |
| | 80 | 100 | 97 | 86 | 80 | 79 | 73 | 66 | 61 | 86 |
| | 60 | 99 | 96 | 84 | 78 | 76 | 71 | 66 | 63 | 84 |
| | 50 | 97 | 95 | 83 | 77 | 75 | 70 | 66 | 63 | 83 |
| | 40 | 97 | 94 | 82 | 77 | 75 | 70 | 66 | 63 | 83 |
| 900 | 100 | 103 | 104 | 93 | 91 | 91 | 87 | 77 | 72 | 95 |
| | 80 | 98 | 102 | 90 | 87 | 84 | 82 | 73 | 69 | 91 |
| | 60 | 96 | 100 | 88 | 84 | 81 | 78 | 73 | 70 | 88 |
| | 50 | 96 | 100 | 87 | 83 | 81 | 77 | 73 | 70 | 88 |
| | 40 | 95 | 99 | 87 | 83 | 80 | 77 | 73 | 71 | 88 |
| 1300 | 100 | 109 | 109 | 105 | 99 | 98 | 97 | 91 | 84 | 104 |
| | 80 | 105 | 109 | 104 | 97 | 93 | 92 | 86 | 80 | 101 |
| | 60 | 102 | 105 | 101 | 94 | 90 | 88 | 84 | 81 | 98 |
| | 50 | 101 | 103 | 99 | 93 | 89 | 86 | 84 | 81 | 96 |
| | 40 | 101 | 103 | 99 | 92 | 88 | 85 | 84 | 81 | 96 |
| 1794 | 100 | 115 | 117 | 117 | 108 | 105 | 104 | 101 | 94 | 113 |
| | 80 | 111 | 114 | 117 | 106 | 102 | 99 | 96 | 90 | 111 |
| | 60 | 108 | 111 | 114 | 103 | 99 | 95 | 93 | 89 | 108 |
| | 50 | 107 | 110 | 111 | 102 | 97 | 94 | 92 | 89 | 106 |
| | 40 | 106 | 109 | 111 | 101 | 96 | 93 | 91 | 89 | 106 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

40 AFSW

Wheel Diameter = 40¼ in.

Outlet Area = 9.31 ft.²

Tip Speed = 10.54 x RPM

Maximum BHP = (RPM/351)³

Minimum Starting HP = 2

Maximum RPM Class I = 984

Maximum RPM Class II = 1283

Maximum RPM Class III = 1617

Maximum Open Motor Frame Size

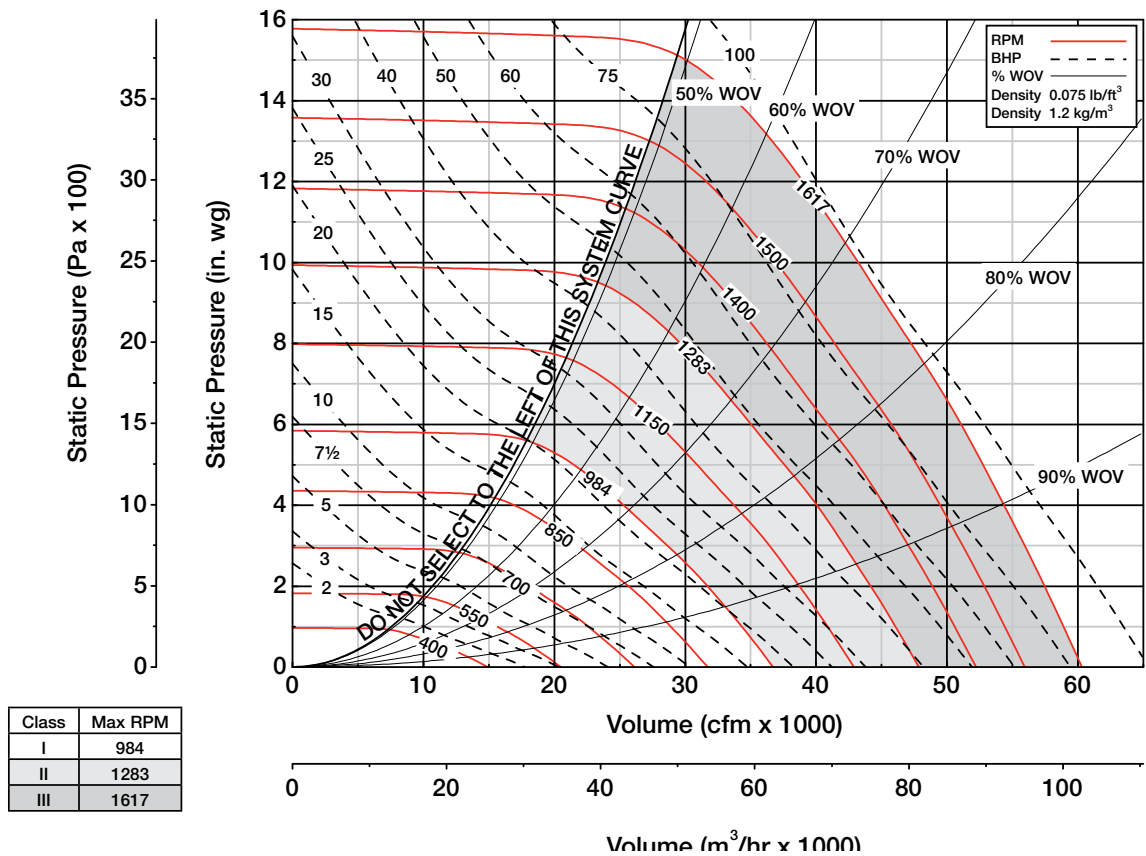
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 326T | 326T | 404T |
| Arr. 10 | 324T | 324T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 8000 | 859 | 278 | 0.50 | 331 | 0.83 | 377 | 1.18 | 420 | 1.58 | | | | | | | | | | | | |
| 9600 | 1031 | 312 | 0.68 | 360 | 1.08 | 402 | 1.47 | 440 | 1.89 | 478 | 2.36 | 512 | 2.84 | | | | | | | | |
| 11200 | 1203 | 347 | 0.92 | 391 | 1.38 | 430 | 1.84 | 466 | 2.30 | 499 | 2.78 | 532 | 3.30 | 564 | 3.85 | 593 | 4.42 | | | | |
| 12800 | 1374 | 385 | 1.22 | 424 | 1.73 | 461 | 2.26 | 494 | 2.79 | 526 | 3.32 | 556 | 3.85 | 583 | 4.41 | 613 | 5.02 | 640 | 5.65 | 667 | 6.30 |
| 14400 | 1546 | 424 | 1.59 | 459 | 2.14 | 493 | 2.75 | 525 | 3.34 | 554 | 3.94 | 583 | 4.53 | 610 | 5.13 | 635 | 5.73 | 660 | 6.37 | 686 | 7.06 |
| 16000 | 1718 | 463 | 2.04 | 495 | 2.65 | 527 | 3.29 | 557 | 3.97 | 585 | 4.62 | 612 | 5.29 | 638 | 5.94 | 662 | 6.60 | 686 | 7.27 | 708 | 7.95 |
| 17600 | 1890 | 503 | 2.57 | 533 | 3.25 | 561 | 3.92 | 590 | 4.65 | 617 | 5.40 | 643 | 6.12 | 667 | 6.85 | 691 | 7.58 | 714 | 8.29 | 736 | 9.02 |
| 19200 | 2062 | 543 | 3.20 | 571 | 3.94 | 597 | 4.67 | 624 | 5.43 | 650 | 6.24 | 674 | 7.05 | 698 | 7.83 | 720 | 8.63 | 742 | 9.43 | 764 | 10.2 |
| 20800 | 2234 | 584 | 3.94 | 610 | 4.73 | 635 | 5.53 | 659 | 6.32 | 683 | 7.17 | 707 | 8.04 | 730 | 8.93 | 752 | 9.77 | 772 | 10.6 | 793 | 11.5 |
| 22400 | 2406 | 625 | 4.80 | 649 | 5.63 | 672 | 6.51 | 695 | 7.35 | 717 | 8.21 | 740 | 9.14 | 762 | 10.1 | 783 | 11.0 | 804 | 12.0 | 824 | 12.9 |
| 24000 | 2577 | 666 | 5.77 | 689 | 6.65 | 711 | 7.58 | 732 | 8.50 | 753 | 9.42 | 774 | 10.4 | 796 | 11.4 | 816 | 12.4 | 836 | 13.4 | 855 | 14.4 |
| 25600 | 2749 | 708 | 6.88 | 729 | 7.80 | 750 | 8.79 | 770 | 9.79 | 790 | 10.8 | 810 | 11.7 | 829 | 12.8 | 849 | 13.8 | 869 | 14.9 | 887 | 16.0 |
| 27200 | 2921 | 750 | 8.13 | 769 | 9.09 | 789 | 10.1 | 809 | 11.2 | 828 | 12.2 | 846 | 13.3 | 864 | 14.3 | 883 | 15.4 | 902 | 16.5 | 920 | 17.7 |
| 28800 | 3093 | 791 | 9.53 | 810 | 10.6 | 829 | 11.6 | 848 | 12.7 | 865 | 13.9 | 883 | 15.0 | 901 | 16.1 | 918 | 17.2 | 936 | 18.3 | 953 | 19.5 |
| 30400 | 3265 | 833 | 11.1 | 851 | 12.2 | 869 | 13.3 | 887 | 14.4 | 904 | 15.6 | 921 | 16.8 | 938 | 18.0 | 954 | 19.1 | 970 | 20.3 | 987 | 21.5 |
| 32000 | 3437 | 875 | 12.8 | 892 | 13.9 | 909 | 15.1 | 926 | 16.3 | 943 | 17.6 | 959 | 18.8 | 975 | 20.0 | 991 | 21.2 | 1006 | 22.5 | 1022 | 23.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 15500 | 1664 | 700 | 7.64 | 748 | 9.12 | 793 | 10.7 | 835 | 12.3 | | | | | | | | | | | | |
| 17000 | 1825 | 725 | 8.61 | 767 | 10.1 | 811 | 11.7 | 853 | 13.4 | 892 | 15.1 | 931 | 16.9 | | | | | | | | |
| 18500 | 1987 | 751 | 9.68 | 793 | 11.2 | 831 | 12.8 | 871 | 14.5 | 910 | 16.3 | 948 | 18.2 | 983 | 20.1 | | | | | | |
| 20000 | 2148 | 778 | 10.8 | 818 | 12.5 | 856 | 14.2 | 892 | 15.9 | 929 | 17.7 | 966 | 19.6 | 1001 | 21.6 | 1035 | 23.6 | 1067 | 25.7 | 1101 | 27.8 |
| 21500 | 2309 | 806 | 12.1 | 845 | 13.9 | 882 | 15.6 | 918 | 17.4 | 951 | 19.2 | 984 | 21.1 | 1019 | 23.2 | 1053 | 25.3 | 1085 | 27.4 | 1117 | 29.6 |
| 23000 | 2470 | 835 | 13.4 | 872 | 15.3 | 909 | 17.2 | 944 | 19.1 | 977 | 21.0 | 1008 | 23.0 | 1039 | 24.9 | 1072 | 27.1 | 1104 | 29.3 | 1135 | 31.6 |
| 24500 | 2631 | 865 | 14.9 | 901 | 16.9 | 936 | 18.9 | 970 | 20.9 | 1003 | 22.9 | 1034 | 25.0 | 1064 | 27.0 | 1093 | 29.1 | 1122 | 31.3 | 1153 | 33.7 |
| 26000 | 2792 | 895 | 16.4 | 931 | 18.6 | 965 | 20.7 | 997 | 22.9 | 1029 | 25.0 | 1060 | 27.1 | 1090 | 29.3 | 1118 | 31.5 | 1146 | 33.7 | 1173 | 35.9 |
| 27500 | 2953 | 926 | 18.0 | 961 | 20.4 | 994 | 22.6 | 1026 | 24.9 | 1056 | 27.2 | 1086 | 29.4 | 1116 | 31.7 | 1144 | 33.9 | 1172 | 36.2 | 1198 | 38.6 |
| 29000 | 3114 | 958 | 12.8 | 992 | 22.2 | 1024 | 24.7 | 1055 | 27.0 | 1085 | 29.4 | 1113 | 31.9 | 1142 | 34.2 | 1170 | 36.6 | 1197 | 39.0 | 1224 | 41.4 |
| 30500 | 3276 | 989 | 21.7 | 1023 | 24.2 | 1054 | 26.8 | 1085 | 29.3 | 1114 | 31.8 | 1142 | 34.3 | 1169 | 36.9 | 1197 | 39.4 | 1224 | 41.9 | 1250 | 44.4 |
| 32000 | 3437 | 1022 | 23.7 | 1054 | 26.3 | 1085 | 29.0 | 1115 | 31.8 | 1143 | 34.4 | 1171 | 37.0 | 1198 | 39.6 | 1224 | 42.3 | 1250 | 45.0 | 1276 | 47.6 |
| 33500 | 3598 | 1056 | 25.9 | 1086 | 28.6 | 1116 | 31.4 | 1145 | 34.2 | 1173 | 37.1 | 1201 | 39.8 | 1227 | 42.6 | 1253 | 45.3 | 1277 | 48.1 | 1302 | 50.9 |
| 35000 | 3759 | 1090 | 28.4 | 1118 | 31.0 | 1148 | 33.9 | 1176 | 36.9 | 1204 | 39.8 | 1231 | 42.8 | 1257 | 45.6 | 1282 | 48.5 | 1306 | 51.4 | 1330 | 54.3 |
| 36500 | 3920 | 1125 | 30.9 | 1152 | 33.7 | 1179 | 36.6 | 1208 | 39.7 | 1235 | 42.7 | 1261 | 45.8 | 1287 | 48.9 | 1311 | 51.9 | 1336 | 54.9 | 1359 | 57.9 |
| 38000 | 4081 | 1160 | 33.7 | 1186 | 36.6 | 1212 | 39.5 | 1239 | 42.6 | 1266 | 45.8 | 1292 | 49.0 | 1317 | 52.3 | 1341 | 55.4 | 1365 | 58.5 | 1389 | 61.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 22000 | 2363 | 1123 | 30.3 | 1153 | 32.5 | 1182 | 34.8 | | | | | | | | | | | | | | |
| 23600 | 2534 | 1142 | 32.4 | 1172 | 34.7 | 1201 | 37.1 | 1229 | 39.5 | 1257 | 41.9 | | | | | | | | | | |
| 25200 | 2706 | 1162 | 34.7 | 1192 | 37.1 | 1221 | 39.5 | 1249 | 42.0 | 1276 | 44.5 | 1329 | 49.7 | 1381 | 55.0 | | | | | | |
| 26800 | 2878 | 1186 | 37.3 | 1212 | 39.6 | 1240 | 42.1 | 1268 | 44.7 | 1296 | 47.3 | 1348 | 52.6 | 1398 | 58.0 | 1446 | 63.5 | | | | |
| 28400 | 3050 | 1213 | 40.2 | 1239 | 42.6 | 1264 | 45.1 | 1288 | 47.5 | 1315 | 50.2 | 1368 | 55.7 | 1417 | 61.3 | 1465 | 67.0 | 1511 | 72.8 | 1558 | 78.9 |
| 30000 | 3222 | 1241 | 43.4 | 1266 | 45.9 | 1291 | 48.4 | 1315 | 50.9 | 1339 | 53.5 | 1387 | 58.9 | 1437 | 64.7 | 1485 | 70.6 | 1530 | 76.6 | 1575 | 82.7 |
| 31600 | 3394 | 1269 | 46.7 | 1294 | 49.3 | 1319 | 51.9 | 1342 | 54.6 | 1366 | 57.2 | 1411 | 62.6 | 1457 | 68.3 | 1504 | 74.4 | 1550 | 80.6 | 1594 | 86.9 |
| 33200 | 3566 | 1297 | 50.2 | 1322 | 52.9 | 1346 | 55.6 | 1370 | 58.4 | 1393 | 61.1 | 1438 | 66.7 | 1480 | 72.4 | 1524 | 78.3 | 1569 | 84.7 | 1613 | 91.2 |
| 34800 | 3737 | 1326 | 53.9 | 1350 | 56.8 | 1374 | 59.6 | 1398 | 62.4 | 1421 | 65.3 | 1465 | 71.1 | 1508 | 76.9 | 1548 | 82.8 | 1589 | 89.0 | | |
| 36400 | 3909 | 1357 | 57.6 | 1380 | 60.7 | 1403 | 63.7 | 1426 | 66.7 | 1449 | 69.3 | 1493 | 75.6 | 1535 | 81.7 | 1575 | 87.8 | 1615 | 94.0 | | |
| 38000 | 4081 | 1389 | 61.6 | 1411 | 64.8 | 1433 | 67.9 | 1455 | 71.1 | 1477 | 74.3 | 1521 | 80.4 | 1563 | 86.7 | 1603 | 93.0 | | | | |
| 39600 | 4253 | 1420 | 65.8 | 1442 | 69.1 | 1464 | 72.4 | 1486 | 75.7 | 1507 | 79.0 | 1549 | 85.5 | 1591 | 91.9 | | | | | | |
| 41200 | 4425 | 1452 | 70.3 | 1474 | 73.6 | 1496 | 77.0 | 1517 | 80.4 | 1538 | 83.8 | 1578 | 90.7 | | | | | | | | |
| 42800 | 4597 | 1484 | 74.8 | 1506 | 78.4 | 1527 | 81.9 | 1548 | 85.4 | 1569 | 88.9 | 1609 | 96.0 | | | | | | | | |
| 44400 | 4769 | 1517 | 79.5 | 1538 | 83.3 | 1559 | 87.0 | 1580 | 90.6 | 1600 | 94.2 | | | | | | | | | | |
| 46000 | 4940 | 1550 | 84.4 | 1571 | 88.3 | 1592 | 92.2 | 1612 | 96.1 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



% WOV = (CFM X 100) / (RPM X 37.3)

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 300 | 100 | 79 | 72 | 70 | 66 | 61 | 51 | 46 | 42 | 67 |
| | 80 | 79 | 70 | 68 | 65 | 60 | 52 | 46 | 43 | 66 |
| | 60 | 76 | 68 | 67 | 65 | 61 | 52 | 46 | 42 | 66 |
| | 50 | 77 | 68 | 66 | 64 | 61 | 52 | 46 | 43 | 66 |
| | 40 | 76 | 67 | 66 | 65 | 61 | 52 | 46 | 42 | 66 |
| 400 | 100 | 91 | 78 | 76 | 72 | 69 | 59 | 52 | 49 | 74 |
| | 80 | 89 | 76 | 73 | 69 | 65 | 57 | 50 | 46 | 71 |
| | 60 | 88 | 73 | 71 | 68 | 66 | 58 | 53 | 48 | 71 |
| | 50 | 86 | 71 | 70 | 68 | 66 | 59 | 54 | 49 | 71 |
| | 40 | 86 | 71 | 69 | 68 | 66 | 59 | 54 | 49 | 70 |
| 600 | 100 | 98 | 91 | 84 | 80 | 81 | 72 | 64 | 60 | 84 |
| | 80 | 99 | 90 | 80 | 75 | 76 | 68 | 62 | 58 | 81 |
| | 60 | 98 | 88 | 78 | 74 | 75 | 69 | 65 | 61 | 80 |
| | 50 | 95 | 86 | 76 | 74 | 75 | 69 | 67 | 63 | 79 |
| | 40 | 97 | 88 | 81 | 74 | 75 | 69 | 67 | 63 | 80 |
| 800 | 100 | 96 | 101 | 90 | 87 | 88 | 84 | 73 | 69 | 92 |
| | 80 | 93 | 100 | 87 | 82 | 82 | 78 | 70 | 67 | 88 |
| | 60 | 91 | 98 | 84 | 79 | 80 | 76 | 74 | 71 | 87 |
| | 50 | 90 | 96 | 83 | 79 | 80 | 76 | 75 | 72 | 86 |
| | 40 | 93 | 94 | 83 | 78 | 80 | 76 | 75 | 72 | 85 |
| 1200 | 100 | 103 | 111 | 104 | 96 | 96 | 96 | 88 | 82 | 103 |
| | 80 | 100 | 110 | 102 | 93 | 91 | 90 | 83 | 78 | 100 |
| | 60 | 98 | 108 | 99 | 89 | 88 | 87 | 84 | 81 | 97 |
| | 50 | 98 | 107 | 98 | 88 | 88 | 87 | 85 | 82 | 96 |
| | 40 | 99 | 107 | 98 | 88 | 88 | 87 | 86 | 83 | 96 |
| 1617 | 100 | 108 | 115 | 119 | 105 | 102 | 103 | 98 | 90 | 113 |
| | 80 | 105 | 113 | 119 | 103 | 98 | 97 | 93 | 86 | 111 |
| | 60 | 104 | 111 | 116 | 99 | 95 | 94 | 92 | 89 | 109 |
| | 50 | 103 | 111 | 115 | 98 | 94 | 94 | 92 | 90 | 108 |
| | 40 | 104 | 111 | 115 | 98 | 93 | 94 | 93 | 91 | 108 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 300 | 100 | 83 | 83 | 74 | 68 | 62 | 53 | 46 | 43 | 72 |
| | 80 | 81 | 83 | 73 | 67 | 62 | 53 | 45 | 43 | 71 |
| | 60 | 80 | 83 | 73 | 67 | 63 | 54 | 47 | 44 | 71 |
| | 50 | 79 | 80 | 73 | 67 | 64 | 55 | 48 | 45 | 71 |
| | 40 | 80 | 80 | 73 | 67 | 64 | 55 | 48 | 45 | 71 |
| 400 | 100 | 93 | 82 | 75 | 74 | 70 | 59 | 54 | 47 | 75 |
| | 80 | 90 | 81 | 73 | 70 | 66 | 57 | 52 | 45 | 73 |
| | 60 | 87 | 78 | 71 | 68 | 65 | 57 | 54 | 48 | 71 |
| | 50 | 88 | 78 | 71 | 68 | 65 | 57 | 54 | 49 | 71 |
| | 40 | 86 | 79 | 70 | 67 | 65 | 57 | 54 | 50 | 70 |
| 600 | 100 | 102 | 94 | 86 | 84 | 83 | 75 | 67 | 63 | 87 |
| | 80 | 100 | 93 | 83 | 79 | 78 | 70 | 64 | 59 | 84 |
| | 60 | 99 | 92 | 81 | 77 | 76 | 69 | 65 | 62 | 82 |
| | 50 | 98 | 90 | 80 | 76 | 75 | 68 | 65 | 62 | 81 |
| | 40 | 97 | 90 | 79 | 76 | 74 | 68 | 65 | 62 | 80 |
| 800 | 100 | 104 | 104 | 92 | 91 | 91 | 86 | 76 | 71 | 95 |
| | 80 | 99 | 102 | 89 | 87 | 84 | 81 | 72 | 68 | 91 |
| | 60 | 97 | 100 | 86 | 84 | 81 | 78 | 73 | 70 | 88 |
| | 50 | 97 | 100 | 86 | 83 | 81 | 77 | 73 | 70 | 88 |
| | 40 | 96 | 99 | 85 | 83 | 80 | 76 | 73 | 71 | 88 |
| 1200 | 100 | 111 | 110 | 105 | 100 | 99 | 98 | 91 | 84 | 105 |
| | 80 | 107 | 110 | 103 | 98 | 94 | 93 | 86 | 81 | 102 |
| | 60 | 104 | 107 | 100 | 95 | 91 | 89 | 84 | 82 | 98 |
| | 50 | 103 | 105 | 99 | 93 | 90 | 87 | 85 | 82 | 97 |
| | 40 | 102 | 104 | 98 | 92 | 88 | 86 | 85 | 82 | 96 |
| 1617 | 100 | 116 | 117 | 117 | 108 | 106 | 105 | 101 | 94 | 113 |
| | 80 | 112 | 115 | 118 | 106 | 102 | 100 | 96 | 90 | 111 |
| | 60 | 109 | 112 | 114 | 103 | 99 | 96 | 93 | 89 | 108 |
| | 50 | 108 | 110 | 112 | 102 | 98 | 95 | 92 | 90 | 106 |
| | 40 | 107 | 110 | 112 | 101 | 96 | 94 | 92 | 90 | 106 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

44 AFSW

Wheel Diameter = 44½ in.

Outlet Area = 11.39 ft.²

Tip Speed = 11.65 x RPM

Maximum BHP = (RPM/297)³

Minimum Starting HP = 3

Maximum RPM Class I = 891

Maximum RPM Class II = 1161

Maximum RPM Class III = 1463

Maximum Open Motor Frame Size

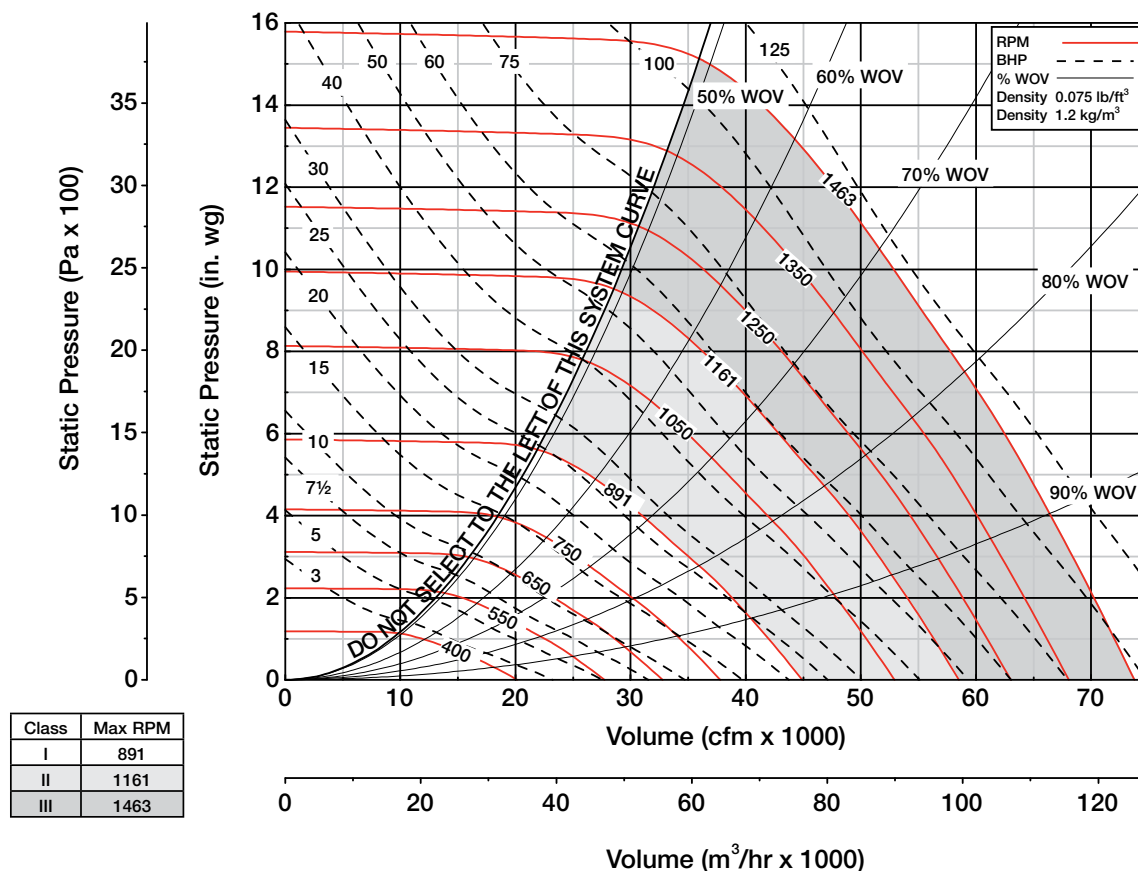
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 364T | 364T | 444T |
| Arr. 10 | 326T | 326T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 9000 | 790 | 240 | 0.53 | 289 | 0.90 | 334 | 1.33 | | | | | | | | | | | | | | |
| 11000 | 965 | 270 | 0.74 | 315 | 1.20 | 354 | 1.65 | 391 | 2.16 | 426 | 2.71 | | | | | | | | | | |
| 13000 | 1141 | 302 | 1.01 | 344 | 1.55 | 380 | 2.08 | 413 | 2.62 | 444 | 3.19 | 475 | 3.83 | 503 | 4.48 | | | | | | |
| 15000 | 1316 | 337 | 1.36 | 374 | 1.96 | 408 | 2.59 | 439 | 3.21 | 468 | 3.83 | 494 | 4.46 | 522 | 5.15 | 548 | 5.89 | 573 | 6.64 | 597 | 7.41 |
| 17000 | 1492 | 372 | 1.80 | 405 | 2.45 | 437 | 3.17 | 466 | 3.87 | 494 | 4.57 | 520 | 5.27 | 544 | 5.98 | 567 | 6.71 | 591 | 7.51 | 615 | 8.34 |
| 19000 | 1668 | 408 | 2.33 | 438 | 3.06 | 468 | 3.82 | 496 | 4.62 | 521 | 5.40 | 546 | 6.19 | 570 | 6.97 | 592 | 7.76 | 613 | 8.56 | 634 | 9.37 |
| 21000 | 1843 | 445 | 2.96 | 473 | 3.77 | 499 | 4.58 | 526 | 5.46 | 551 | 6.34 | 574 | 7.20 | 596 | 8.08 | 618 | 8.94 | 639 | 9.80 | 659 | 10.7 |
| 23000 | 2019 | 482 | 3.72 | 508 | 4.61 | 532 | 5.48 | 557 | 6.40 | 581 | 7.37 | 603 | 8.33 | 624 | 9.27 | 645 | 10.2 | 665 | 11.2 | 685 | 12.1 |
| 25000 | 2194 | 520 | 4.61 | 544 | 5.56 | 567 | 6.52 | 589 | 7.48 | 611 | 8.51 | 633 | 9.56 | 654 | 10.6 | 674 | 11.6 | 693 | 12.7 | 711 | 13.7 |
| 27000 | 2370 | 558 | 5.65 | 580 | 6.65 | 601 | 7.71 | 622 | 8.73 | 643 | 9.78 | 664 | 10.9 | 684 | 12.1 | 703 | 13.2 | 721 | 14.3 | 739 | 15.4 |
| 29000 | 2546 | 596 | 6.84 | 617 | 7.90 | 637 | 9.03 | 657 | 10.1 | 676 | 11.3 | 695 | 12.4 | 714 | 13.6 | 733 | 14.8 | 751 | 16.1 | 768 | 17.3 |
| 31000 | 2721 | 635 | 8.20 | 654 | 9.31 | 673 | 10.5 | 691 | 11.7 | 710 | 12.9 | 727 | 14.1 | 746 | 15.3 | 764 | 16.6 | 781 | 17.9 | 798 | 19.3 |
| 33000 | 2897 | 673 | 9.74 | 691 | 10.9 | 709 | 12.2 | 727 | 13.5 | 744 | 14.7 | 761 | 16.0 | 778 | 17.2 | 795 | 18.6 | 812 | 20.0 | 828 | 21.4 |
| 35000 | 3072 | 712 | 11.5 | 729 | 12.7 | 746 | 14.0 | 763 | 15.4 | 779 | 16.7 | 795 | 18.1 | 811 | 19.4 | 827 | 20.7 | 843 | 22.2 | 859 | 23.6 |
| 37000 | 3248 | 751 | 13.4 | 767 | 14.7 | 783 | 16.0 | 799 | 17.5 | 815 | 18.9 | 830 | 20.3 | 845 | 21.7 | 860 | 23.2 | 875 | 24.6 | 890 | 26.1 |
| 39000 | 3424 | 789 | 15.5 | 805 | 16.9 | 820 | 18.3 | 836 | 19.8 | 851 | 21.3 | 865 | 22.8 | 880 | 24.3 | 894 | 25.8 | 908 | 27.3 | 922 | 28.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 19000 | 1668 | 634 | 9.4 | 677 | 11.2 | 718 | 13.1 | 756 | 15.0 | | | | | | | | | | | | |
| 20800 | 1826 | 656 | 10.5 | 694 | 12.3 | 734 | 14.3 | 772 | 16.3 | 807 | 18.4 | 842 | 20.6 | | | | | | | | |
| 22600 | 1984 | 679 | 11.8 | 717 | 13.7 | 752 | 15.6 | 788 | 17.7 | 823 | 20.0 | 857 | 22.2 | 889 | 24.5 | | | | | | |
| 24400 | 2142 | 703 | 13.2 | 740 | 15.2 | 774 | 17.3 | 806 | 19.3 | 840 | 21.6 | 873 | 23.9 | 905 | 26.3 | 936 | 28.8 | 965 | 31.3 | | |
| 26200 | 2300 | 728 | 14.7 | 763 | 16.9 | 797 | 19.0 | 829 | 21.2 | 859 | 23.4 | 890 | 25.8 | 921 | 28.3 | 952 | 30.8 | 981 | 33.5 | 1009 | 36.1 |
| 28000 | 2458 | 754 | 16.3 | 787 | 18.6 | 820 | 20.9 | 852 | 23.2 | 882 | 25.6 | 911 | 27.9 | 938 | 30.3 | 968 | 33.0 | 997 | 35.7 | 1025 | 38.5 |
| 29800 | 2616 | 780 | 18.0 | 813 | 20.5 | 844 | 23.0 | 875 | 25.4 | 905 | 27.9 | 933 | 30.3 | 961 | 32.8 | 987 | 35.4 | 1014 | 38.1 | 1042 | 41.0 |
| 31600 | 2774 | 807 | 19.9 | 839 | 22.5 | 870 | 25.1 | 899 | 27.7 | 928 | 30.3 | 956 | 32.9 | 983 | 35.5 | 1009 | 38.2 | 1034 | 40.9 | 1059 | 43.6 |
| 33400 | 2932 | 835 | 21.8 | 866 | 24.6 | 896 | 27.4 | 924 | 30.1 | 952 | 32.9 | 980 | 35.6 | 1006 | 38.4 | 1032 | 41.1 | 1057 | 43.9 | 1081 | 46.8 |
| 35200 | 3090 | 862 | 23.9 | 893 | 26.9 | 922 | 29.8 | 950 | 32.7 | 977 | 35.6 | 1003 | 38.5 | 1030 | 41.4 | 1055 | 44.3 | 1080 | 47.2 | 1104 | 50.1 |
| 37000 | 3248 | 890 | 26.1 | 921 | 29.2 | 949 | 32.4 | 977 | 35.4 | 1003 | 38.4 | 1029 | 41.5 | 1053 | 44.6 | 1079 | 47.6 | 1103 | 50.6 | 1127 | 53.7 |
| 38800 | 3406 | 919 | 28.5 | 948 | 31.7 | 977 | 35.0 | 1003 | 38.3 | 1030 | 41.5 | 1055 | 44.7 | 1079 | 47.9 | 1102 | 51.1 | 1126 | 54.3 | 1150 | 57.5 |
| 40600 | 3564 | 949 | 31.2 | 976 | 34.4 | 1004 | 37.8 | 1031 | 41.3 | 1056 | 44.7 | 1081 | 48.0 | 1105 | 51.3 | 1128 | 54.7 | 1150 | 58.1 | 1173 | 61.4 |
| 42400 | 3722 | 979 | 34.0 | 1005 | 37.3 | 1032 | 40.8 | 1058 | 44.4 | 1083 | 48.0 | 1107 | 51.5 | 1131 | 55.0 | 1154 | 58.5 | 1176 | 62.0 | 1198 | 65.6 |
| 44200 | 3880 | 1010 | 37.1 | 1035 | 40.5 | 1060 | 44.0 | 1086 | 47.7 | 1110 | 51.4 | 1134 | 55.2 | 1158 | 58.9 | 1180 | 62.5 | 1202 | 66.1 | 1223 | 69.8 |
| 46000 | 4038 | 1041 | 40.4 | 1065 | 43.9 | 1089 | 47.4 | 1114 | 51.2 | 1138 | 55.1 | 1162 | 59.0 | 1184 | 62.9 | 1207 | 66.7 | 1228 | 70.4 | 1249 | 74.2 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 26000 | 2282 | 1007 | 35.8 | 1035 | 38.5 | | | | | | | | | | | | | | | | |
| 28000 | 2458 | 1025 | 38.5 | 1053 | 41.3 | 1079 | 44.1 | 1104 | 47.0 | 1130 | 49.9 | | | | | | | | | | |
| 30000 | 2633 | 1044 | 41.2 | 1071 | 44.2 | 1097 | 47.1 | 1122 | 50.1 | 1147 | 53.1 | 1195 | 59.3 | | | | | | | | |
| 32000 | 2809 | 1064 | 44.3 | 1089 | 47.2 | 1115 | 50.3 | 1140 | 53.4 | 1165 | 56.5 | 1213 | 62.9 | 1258 | 69.4 | | | | | | |
| 34000 | 2985 | 1088 | 47.9 | 1112 | 50.8 | 1134 | 53.7 | 1159 | 56.8 | 1183 | 60.1 | 1231 | 66.7 | 1276 | 73.5 | 1319 | 80.3 | 1360 | 87.3 | | |
| 36000 | 3160 | 1114 | 51.7 | 1137 | 54.7 | 1159 | 57.7 | 1181 | 60.8 | 1202 | 63.9 | 1249 | 70.7 | 1294 | 77.7 | 1337 | 84.8 | 1378 | 92.1 | 1418 | 99.4 |
| 38000 | 3336 | 1140 | 55.8 | 1162 | 58.9 | 1185 | 62.1 | 1206 | 65.3 | 1227 | 68.5 | 1268 | 75.0 | 1312 | 82.1 | 1355 | 89.5 | 1396 | 97.0 | 1436 | 105 |
| 40000 | 3511 | 1166 | 60.1 | 1188 | 63.3 | 1210 | 66.6 | 1232 | 70.0 | 1253 | 73.3 | 1293 | 80.1 | 1332 | 86.9 | 1373 | 94.3 | 1414 | 102 | 1454 | 110 |
| 42000 | 3687 | 1192 | 64.6 | 1214 | 68.1 | 1236 | 71.5 | 1257 | 74.9 | 1278 | 78.4 | 1318 | 85.4 | 1357 | 92.5 | 1394 | 99.7 | 1433 | 107 | | |
| 44000 | 3863 | 1220 | 69.3 | 1241 | 73.0 | 1262 | 76.6 | 1283 | 80.2 | 1304 | 83.8 | 1344 | 91.0 | 1382 | 98.4 | 1419 | 106 | 1454 | 113 | | |
| 46000 | 4038 | 1249 | 74.2 | 1270 | 78.0 | 1290 | 81.9 | 1310 | 85.7 | 1330 | 89.4 | 1370 | 97.0 | 1408 | 105 | 1444 | 112 | | | | |
| 48000 | 4214 | 1278 | 79.4 | 1299 | 83.3 | 1319 | 87.3 | 1338 | 91.3 | 1357 | 95.3 | 1396 | 103 | 1433 | 111 | | | | | | |
| 50000 | 4389 | 1308 | 84.9 | 1328 | 89.0 | 1348 | 93.1 | 1367 | 97.2 | 1386 | 101 | 1422 | 110 | 1459 | 118 | | | | | | |
| 52000 | 4565 | 1338 | 90.6 | 1357 | 94.9 | 1377 | 99.1 | 1396 | 103 | 1414 | 108 | 1450 | 116 | | | | | | | | |
| 54000 | 4741 | 1368 | 96.4 | 1387 | 101 | 1406 | 106 | 1425 | 110 | 1443 | 114 | | | | | | | | | | |
| 56000 | 4916 | 1398 | 102 | 1418 | 107 | 1436 | 112 | 1455 | 117 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 50.4)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 300 | 100 | 83 | 76 | 73 | 69 | 64 | 55 | 49 | 45 | 71 |
| | 80 | 82 | 74 | 71 | 68 | 64 | 55 | 49 | 46 | 70 |
| | 60 | 80 | 71 | 70 | 68 | 64 | 55 | 49 | 45 | 69 |
| | 50 | 81 | 71 | 69 | 68 | 64 | 55 | 49 | 46 | 69 |
| | 40 | 80 | 71 | 69 | 68 | 64 | 55 | 49 | 45 | 69 |
| 400 | 100 | 94 | 82 | 79 | 75 | 72 | 62 | 55 | 52 | 77 |
| | 80 | 93 | 79 | 76 | 72 | 68 | 60 | 53 | 49 | 75 |
| | 60 | 91 | 76 | 74 | 71 | 69 | 61 | 56 | 51 | 74 |
| | 50 | 90 | 74 | 73 | 71 | 70 | 62 | 57 | 52 | 74 |
| | 40 | 90 | 75 | 72 | 71 | 69 | 62 | 57 | 52 | 74 |
| 600 | 100 | 101 | 94 | 87 | 84 | 84 | 75 | 67 | 63 | 88 |
| | 80 | 102 | 93 | 84 | 78 | 79 | 71 | 65 | 61 | 84 |
| | 60 | 101 | 91 | 81 | 77 | 78 | 72 | 69 | 64 | 83 |
| | 50 | 99 | 89 | 80 | 77 | 78 | 72 | 70 | 66 | 82 |
| | 40 | 100 | 92 | 84 | 77 | 78 | 72 | 70 | 66 | 84 |
| 800 | 100 | 99 | 104 | 93 | 90 | 92 | 87 | 76 | 72 | 96 |
| | 80 | 97 | 103 | 91 | 85 | 85 | 81 | 73 | 70 | 92 |
| | 60 | 94 | 102 | 87 | 82 | 83 | 79 | 77 | 74 | 90 |
| | 50 | 94 | 99 | 86 | 82 | 83 | 79 | 78 | 75 | 89 |
| | 40 | 97 | 98 | 86 | 81 | 83 | 79 | 78 | 75 | 89 |
| 1100 | 100 | 105 | 113 | 103 | 96 | 97 | 97 | 88 | 82 | 103 |
| | 80 | 102 | 113 | 101 | 93 | 92 | 91 | 83 | 79 | 100 |
| | 60 | 101 | 110 | 97 | 89 | 89 | 88 | 85 | 82 | 98 |
| | 50 | 100 | 109 | 96 | 88 | 89 | 88 | 86 | 83 | 97 |
| | 40 | 101 | 109 | 96 | 88 | 89 | 88 | 87 | 84 | 97 |
| 1463 | 100 | 110 | 117 | 117 | 105 | 103 | 103 | 98 | 91 | 112 |
| | 80 | 107 | 115 | 116 | 102 | 99 | 98 | 93 | 87 | 110 |
| | 60 | 106 | 114 | 114 | 99 | 95 | 95 | 93 | 90 | 107 |
| | 50 | 105 | 112 | 112 | 97 | 95 | 95 | 93 | 91 | 106 |
| | 40 | 106 | 113 | 112 | 97 | 95 | 94 | 93 | 91 | 106 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 300 | 100 | 86 | 86 | 77 | 72 | 65 | 56 | 49 | 46 | 75 |
| | 80 | 84 | 86 | 76 | 70 | 65 | 56 | 49 | 46 | 74 |
| | 60 | 83 | 86 | 76 | 70 | 66 | 57 | 50 | 47 | 74 |
| | 50 | 82 | 83 | 76 | 70 | 67 | 58 | 51 | 48 | 74 |
| | 40 | 83 | 83 | 76 | 70 | 67 | 58 | 51 | 48 | 74 |
| 400 | 100 | 96 | 85 | 78 | 77 | 73 | 62 | 57 | 50 | 79 |
| | 80 | 93 | 84 | 76 | 73 | 69 | 60 | 55 | 48 | 76 |
| | 60 | 91 | 81 | 74 | 71 | 68 | 60 | 57 | 51 | 74 |
| | 50 | 91 | 82 | 74 | 71 | 68 | 60 | 57 | 52 | 74 |
| | 40 | 89 | 82 | 73 | 70 | 68 | 60 | 57 | 53 | 73 |
| 600 | 100 | 105 | 97 | 89 | 87 | 86 | 78 | 70 | 66 | 90 |
| | 80 | 103 | 96 | 86 | 82 | 81 | 74 | 67 | 62 | 87 |
| | 60 | 102 | 95 | 84 | 80 | 79 | 72 | 68 | 65 | 85 |
| | 50 | 101 | 93 | 83 | 79 | 78 | 71 | 68 | 65 | 84 |
| | 40 | 100 | 93 | 82 | 79 | 77 | 71 | 68 | 65 | 83 |
| 800 | 100 | 107 | 107 | 95 | 94 | 94 | 89 | 79 | 75 | 98 |
| | 80 | 102 | 105 | 92 | 90 | 87 | 84 | 75 | 71 | 94 |
| | 60 | 100 | 103 | 89 | 87 | 84 | 81 | 76 | 73 | 91 |
| | 50 | 100 | 103 | 89 | 86 | 84 | 80 | 76 | 74 | 91 |
| | 40 | 99 | 102 | 88 | 86 | 83 | 79 | 76 | 74 | 91 |
| 1100 | 100 | 112 | 111 | 105 | 101 | 100 | 99 | 91 | 85 | 105 |
| | 80 | 108 | 112 | 102 | 98 | 95 | 94 | 87 | 82 | 102 |
| | 60 | 105 | 108 | 100 | 95 | 91 | 90 | 85 | 82 | 99 |
| | 50 | 105 | 106 | 98 | 94 | 90 | 88 | 85 | 83 | 98 |
| | 40 | 104 | 106 | 98 | 93 | 89 | 87 | 86 | 83 | 97 |
| 1463 | 100 | 117 | 118 | 116 | 109 | 106 | 105 | 100 | 93 | 113 |
| | 80 | 113 | 117 | 116 | 106 | 102 | 101 | 96 | 90 | 111 |
| | 60 | 110 | 113 | 112 | 103 | 99 | 96 | 93 | 90 | 108 |
| | 50 | 110 | 112 | 110 | 102 | 98 | 95 | 93 | 90 | 106 |
| | 40 | 109 | 111 | 110 | 101 | 97 | 94 | 92 | 90 | 106 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

49 AFSW

Wheel Diameter = 49 in.

Outlet Area = 13.8 ft.²

Tip Speed = 12.83 x RPM

Maximum BHP = (RPM/253)³

Minimum Starting HP = 7½

Maximum RPM Class I = 809

Maximum RPM Class II = 1054

Maximum RPM Class III = 1328

Maximum Open Motor Frame Size

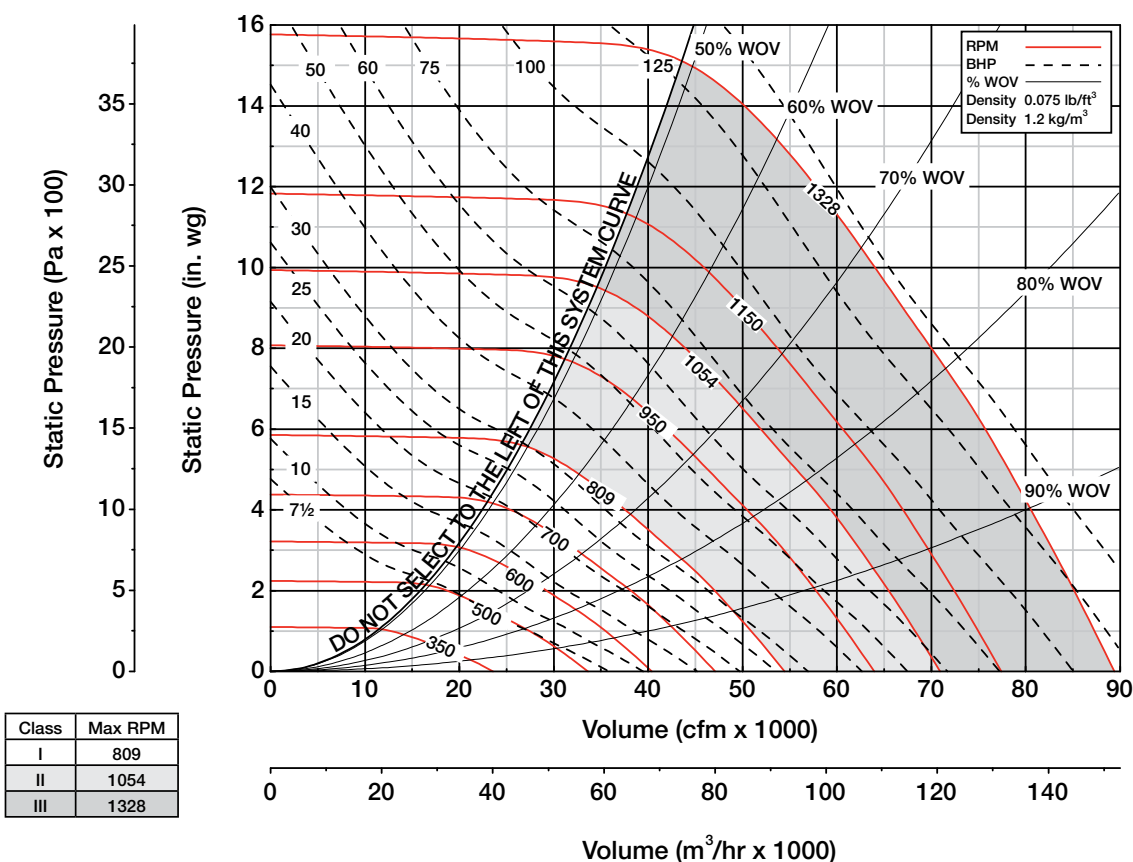
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 364T | 364T | 444T |
| Arr. 10 | 326T | 326T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 11000 | 797 | 219 | 0.65 | 264 | 1.11 | 304 | 1.62 | | | | | | | | | | | | | | |
| 13500 | 978 | 247 | 0.92 | 288 | 1.48 | 323 | 2.04 | 356 | 2.65 | 388 | 3.32 | | | | | | | | | | |
| 16000 | 1159 | 278 | 1.26 | 315 | 1.92 | 347 | 2.58 | 377 | 3.25 | 404 | 3.93 | 433 | 4.71 | 459 | 5.51 | 484 | 6.34 | | | | |
| 18500 | 1340 | 310 | 1.72 | 343 | 2.45 | 374 | 3.22 | 401 | 3.99 | 428 | 4.75 | 452 | 5.53 | 476 | 6.36 | 500 | 7.26 | 523 | 8.18 | 544 | 9.12 |
| 21000 | 1521 | 343 | 2.27 | 372 | 3.08 | 401 | 3.96 | 428 | 4.83 | 452 | 5.70 | 476 | 6.56 | 498 | 7.43 | 518 | 8.33 | 540 | 9.28 | 561 | 10.3 |
| 23500 | 1702 | 377 | 2.96 | 404 | 3.86 | 430 | 4.80 | 455 | 5.80 | 478 | 6.76 | 500 | 7.74 | 522 | 8.69 | 542 | 9.66 | 561 | 10.7 | 580 | 11.7 |
| 26000 | 1884 | 412 | 3.78 | 436 | 4.79 | 460 | 5.78 | 484 | 6.86 | 506 | 7.96 | 527 | 9.02 | 547 | 10.1 | 566 | 11.2 | 585 | 12.2 | 603 | 13.3 |
| 28500 | 2065 | 447 | 4.76 | 469 | 5.86 | 491 | 6.95 | 513 | 8.07 | 534 | 9.27 | 554 | 10.5 | 574 | 11.6 | 592 | 12.8 | 610 | 14.0 | 628 | 15.2 |
| 31000 | 2246 | 482 | 5.93 | 503 | 7.10 | 523 | 8.30 | 543 | 9.48 | 563 | 10.7 | 583 | 12.0 | 601 | 13.4 | 619 | 14.6 | 636 | 15.9 | 653 | 17.2 |
| 33500 | 2427 | 518 | 7.28 | 537 | 8.52 | 556 | 9.83 | 575 | 11.1 | 593 | 12.4 | 612 | 13.8 | 630 | 15.2 | 647 | 16.6 | 664 | 18.0 | 680 | 19.4 |
| 36000 | 2608 | 553 | 8.84 | 572 | 10.2 | 590 | 11.5 | 607 | 12.9 | 624 | 14.3 | 641 | 15.7 | 658 | 17.2 | 675 | 18.7 | 691 | 20.3 | 707 | 21.7 |
| 38500 | 2789 | 589 | 10.6 | 606 | 12.0 | 624 | 13.5 | 640 | 15.0 | 656 | 16.4 | 672 | 17.9 | 688 | 19.4 | 704 | 21.0 | 720 | 22.6 | 735 | 24.3 |
| 41000 | 2971 | 626 | 12.6 | 642 | 14.1 | 658 | 15.6 | 673 | 17.2 | 689 | 18.8 | 704 | 20.4 | 719 | 21.9 | 733 | 23.6 | 749 | 25.3 | 764 | 27.0 |
| 43500 | 3152 | 662 | 14.9 | 677 | 16.4 | 692 | 18.0 | 707 | 19.7 | 722 | 21.4 | 736 | 23.1 | 750 | 24.7 | 764 | 26.4 | 778 | 28.1 | 793 | 29.9 |
| 46000 | 3333 | 698 | 17.4 | 713 | 19.0 | 727 | 20.7 | 741 | 22.5 | 755 | 24.3 | 769 | 26.1 | 782 | 27.8 | 796 | 29.5 | 809 | 31.3 | 822 | 33.1 |
| 48500 | 3514 | 734 | 20.2 | 748 | 21.9 | 762 | 23.7 | 775 | 25.5 | 789 | 27.4 | 802 | 29.3 | 815 | 31.1 | 828 | 33.0 | 840 | 34.8 | 853 | 36.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 25000 | 1811 | 594 | 12.6 | 628 | 14.8 | 665 | 17.2 | 699 | 19.6 | 732 | 22.2 | | | | | | | | | | |
| 27200 | 1971 | 615 | 14.2 | 649 | 16.4 | 680 | 18.8 | 714 | 21.4 | 746 | 24.0 | 777 | 26.7 | 806 | 29.5 | | | | | | |
| 29400 | 2130 | 636 | 15.9 | 670 | 18.3 | 701 | 20.7 | 731 | 23.2 | 761 | 26.0 | 792 | 28.8 | 821 | 31.8 | 849 | 34.7 | 875 | 37.7 | | |
| 31600 | 2289 | 659 | 17.7 | 691 | 20.3 | 722 | 22.9 | 751 | 25.5 | 779 | 28.2 | 807 | 31.1 | 836 | 34.1 | 863 | 37.2 | 890 | 40.4 | 915 | 43.6 |
| 33800 | 2449 | 683 | 19.6 | 713 | 22.4 | 743 | 25.2 | 772 | 28.0 | 799 | 30.8 | 825 | 33.7 | 851 | 36.6 | 878 | 39.8 | 905 | 43.1 | 930 | 46.4 |
| 36000 | 2608 | 707 | 21.7 | 737 | 24.7 | 765 | 27.7 | 794 | 30.6 | 820 | 33.6 | 846 | 36.6 | 871 | 39.6 | 895 | 42.7 | 920 | 46.0 | 945 | 49.5 |
| 38200 | 2768 | 732 | 24.0 | 761 | 27.1 | 789 | 30.3 | 815 | 33.5 | 842 | 36.6 | 867 | 39.7 | 892 | 42.9 | 915 | 46.1 | 938 | 49.3 | 960 | 52.6 |
| 40400 | 2927 | 757 | 26.3 | 785 | 29.7 | 813 | 33.0 | 838 | 36.4 | 863 | 39.8 | 889 | 43.0 | 913 | 46.4 | 936 | 49.7 | 959 | 53.1 | 981 | 56.5 |
| 42600 | 3086 | 782 | 28.8 | 810 | 32.4 | 837 | 36.0 | 862 | 39.5 | 887 | 43.0 | 910 | 46.6 | 934 | 50.0 | 957 | 53.5 | 980 | 57.1 | 1001 | 60.6 |
| 44800 | 3246 | 808 | 31.6 | 835 | 35.3 | 861 | 39.1 | 886 | 42.8 | 910 | 46.5 | 934 | 50.2 | 956 | 54.0 | 979 | 57.6 | 1001 | 61.3 | 1022 | 65.0 |
| 47000 | 3405 | 834 | 34.5 | 861 | 38.4 | 886 | 42.4 | 911 | 46.4 | 934 | 50.2 | 957 | 54.1 | 979 | 58.0 | 1001 | 61.9 | 1023 | 65.7 | 1044 | 69.6 |
| 49200 | 3565 | 861 | 37.8 | 886 | 41.7 | 911 | 45.8 | 936 | 50.0 | 959 | 54.1 | 981 | 58.1 | 1003 | 62.2 | 1024 | 66.3 | 1044 | 70.4 | 1065 | 74.4 |
| 51400 | 3724 | 889 | 41.2 | 912 | 45.2 | 937 | 49.5 | 961 | 53.8 | 983 | 58.2 | 1006 | 62.4 | 1027 | 66.6 | 1048 | 70.9 | 1068 | 75.1 | 1088 | 79.5 |
| 53600 | 3884 | 917 | 45.0 | 940 | 49.1 | 963 | 53.4 | 986 | 57.8 | 1008 | 62.4 | 1030 | 66.9 | 1051 | 71.4 | 1072 | 75.7 | 1092 | 80.1 | 1111 | 84.6 |
| 55800 | 4043 | 946 | 49.0 | 968 | 53.2 | 989 | 57.5 | 1012 | 62.1 | 1034 | 66.8 | 1055 | 71.5 | 1076 | 76.3 | 1096 | 80.9 | 1116 | 85.4 | 1135 | 90.0 |
| 58000 | 4202 | 974 | 53.2 | 996 | 57.6 | 1017 | 62.1 | 1038 | 66.7 | 1059 | 71.5 | 1080 | 76.4 | 1101 | 81.3 | 1120 | 86.3 | 1140 | 91.0 | 1159 | 95.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|-----|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 31000 | 2246 | 912 | 42.8 | 937 | 46.0 | | | | | | | | | | | | | | | | |
| 33400 | 2420 | 927 | 45.9 | 952 | 49.3 | 976 | 52.7 | 999 | 56.1 | | | | | | | | | | | | |
| 35800 | 2594 | 944 | 49.2 | 968 | 52.7 | 992 | 56.2 | 1015 | 59.8 | 1038 | 63.4 | 1082 | 70.9 | | | | | | | | |
| 38200 | 2768 | 960 | 52.6 | 985 | 56.3 | 1008 | 60.0 | 1031 | 63.7 | 1054 | 67.5 | 1097 | 75.2 | 1138 | 83.0 | | | | | | |
| 40600 | 2942 | 983 | 56.9 | 1004 | 60.3 | 1025 | 63.9 | 1048 | 67.8 | 1070 | 71.7 | 1113 | 79.7 | 1154 | 87.8 | 1194 | 96.1 | 1233 | 105 | | |
| 43000 | 3115 | 1005 | 61.4 | 1026 | 65.0 | 1047 | 68.6 | 1066 | 72.3 | 1087 | 76.1 | 1129 | 84.4 | 1170 | 92.8 | 1210 | 101 | 1247 | 110 | 1284 | 119 |
| 45400 | 3289 | 1028 | 66.2 | 1049 | 70.0 | 1069 | 73.7 | 1089 | 77.6 | 1108 | 81.4 | 1146 | 89.3 | 1187 | 98.0 | 1226 | 107 | 1263 | 116 | 1300 | 125 |
| 47800 | 3463 | 1052 | 71.3 | 1072 | 75.2 | 1092 | 79.2 | 1112 | 83.1 | 1131 | 87.1 | 1168 | 95.2 | 1203 | 104 | 1242 | 113 | 1280 | 122 | 1316 | 131 |
| 50200 | 3637 | 1075 | 76.7 | 1096 | 80.8 | 1115 | 84.9 | 1135 | 89.0 | 1154 | 93.2 | 1190 | 102 | 1225 | 110 | 1259 | 119 | 1296 | 128 | | |
| 52600 | 3811 | 1100 | 82.2 | 1119 | 86.7 | 1139 | 90.9 | 1158 | 95.2 | 1177 | 99.5 | 1213 | 108 | 1248 | 117 | 1281 | 126 | 1314 | 135 | | |
| 55000 | 3985 | 1126 | 88.0 | 1145 | 92.6 | 1163 | 97.2 | 1182 | 102 | 1200 | 106 | 1236 | 115 | 1271 | 124 | 1304 | 134 | | | | |
| 57400 | 4159 | 1152 | 94.1 | 1171 | 98.9 | 1189 | 104 | 1207 | 108 | 1224 | 113 | 1260 | 123 | 1294 | 132 | 1327 | 142 | | | | |
| 59800 | 4333 | 1179 | 101 | 1197 | 105 | 1215 | 110 | 1232 | 115 | 1249 | 120 | 1283 | 130 | 1317 | 140 | | | | | | |
| 62200 | 4507 | 1205 | 107 | 1223 | 112 | 1241 | 118 | 1258 | 123 | 1275 | 128 | 1308 | 138 | | | | | | | | |
| 64600 | 4681 | 1232 | 114 | 1250 | 120 | 1267 | 125 | 1285 | 130 | 1301 | 136 | | | | | | | | | | |
| 67000 | 4855 | 1260 | 121 | 1277 | 127 | 1294 | 133 | 1311 | 138 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 67.3)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wiA} |
| 250 | 100 | 82 | 72 | 71 | 67 | 61 | 51 | 46 | 43 | 68 |
| | 80 | 81 | 71 | 70 | 66 | 61 | 52 | 47 | 44 | 67 |
| | 60 | 78 | 68 | 69 | 66 | 61 | 52 | 47 | 44 | 67 |
| | 50 | 79 | 68 | 68 | 66 | 62 | 52 | 47 | 44 | 67 |
| | 40 | 78 | 68 | 68 | 66 | 62 | 52 | 47 | 44 | 67 |
| 350 | 100 | 92 | 81 | 78 | 74 | 70 | 61 | 55 | 51 | 76 |
| | 80 | 90 | 78 | 75 | 71 | 67 | 59 | 53 | 48 | 73 |
| | 60 | 89 | 75 | 73 | 71 | 68 | 60 | 55 | 50 | 73 |
| | 50 | 87 | 74 | 73 | 71 | 68 | 61 | 56 | 51 | 73 |
| | 40 | 87 | 74 | 72 | 71 | 68 | 61 | 56 | 51 | 73 |
| 500 | 100 | 102 | 90 | 85 | 82 | 81 | 72 | 65 | 61 | 85 |
| | 80 | 103 | 89 | 81 | 77 | 76 | 68 | 63 | 59 | 82 |
| | 60 | 102 | 87 | 79 | 76 | 76 | 70 | 66 | 62 | 81 |
| | 50 | 99 | 84 | 77 | 76 | 76 | 71 | 68 | 64 | 81 |
| | 40 | 101 | 88 | 81 | 76 | 75 | 70 | 68 | 64 | 82 |
| 700 | 100 | 101 | 102 | 93 | 91 | 91 | 85 | 75 | 71 | 95 |
| | 80 | 99 | 101 | 89 | 85 | 84 | 80 | 73 | 69 | 90 |
| | 60 | 96 | 99 | 86 | 83 | 82 | 79 | 76 | 73 | 88 |
| | 50 | 95 | 97 | 85 | 82 | 82 | 79 | 77 | 74 | 88 |
| | 40 | 97 | 95 | 85 | 82 | 82 | 79 | 78 | 75 | 88 |
| 1000 | 100 | 107 | 114 | 103 | 97 | 98 | 97 | 88 | 82 | 104 |
| | 80 | 104 | 114 | 100 | 94 | 93 | 91 | 83 | 79 | 101 |
| | 60 | 103 | 112 | 97 | 90 | 90 | 88 | 86 | 83 | 99 |
| | 50 | 102 | 110 | 96 | 89 | 90 | 88 | 87 | 84 | 98 |
| | 40 | 103 | 110 | 96 | 89 | 90 | 88 | 87 | 85 | 98 |
| 1328 | 100 | 112 | 118 | 115 | 105 | 104 | 104 | 97 | 91 | 112 |
| | 80 | 109 | 118 | 114 | 102 | 99 | 99 | 92 | 87 | 109 |
| | 60 | 107 | 116 | 111 | 98 | 96 | 95 | 93 | 90 | 106 |
| | 50 | 107 | 114 | 110 | 97 | 96 | 95 | 94 | 91 | 105 |
| | 40 | 108 | 115 | 110 | 97 | 96 | 95 | 94 | 92 | 105 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{woA} |
| 250 | 100 | 85 | 84 | 74 | 69 | 62 | 53 | 47 | 45 | 72 |
| | 80 | 83 | 84 | 73 | 68 | 62 | 53 | 46 | 44 | 72 |
| | 60 | 82 | 84 | 73 | 68 | 64 | 54 | 48 | 45 | 72 |
| | 50 | 82 | 82 | 73 | 68 | 64 | 55 | 48 | 46 | 71 |
| | 40 | 82 | 81 | 73 | 68 | 65 | 54 | 49 | 47 | 71 |
| 350 | 100 | 94 | 84 | 77 | 76 | 71 | 61 | 56 | 49 | 77 |
| | 80 | 91 | 82 | 75 | 72 | 68 | 59 | 54 | 47 | 75 |
| | 60 | 89 | 80 | 73 | 70 | 67 | 60 | 56 | 50 | 73 |
| | 50 | 89 | 80 | 73 | 70 | 66 | 60 | 56 | 51 | 73 |
| | 40 | 87 | 80 | 72 | 70 | 66 | 59 | 57 | 52 | 72 |
| 500 | 100 | 105 | 94 | 87 | 85 | 83 | 75 | 68 | 64 | 88 |
| | 80 | 103 | 92 | 84 | 81 | 79 | 71 | 65 | 60 | 85 |
| | 60 | 102 | 90 | 82 | 79 | 76 | 70 | 66 | 63 | 83 |
| | 50 | 100 | 89 | 81 | 78 | 75 | 69 | 66 | 63 | 82 |
| | 40 | 100 | 89 | 80 | 77 | 75 | 69 | 66 | 63 | 81 |
| 700 | 100 | 107 | 105 | 95 | 94 | 93 | 87 | 78 | 74 | 97 |
| | 80 | 103 | 102 | 91 | 89 | 87 | 82 | 75 | 71 | 93 |
| | 60 | 100 | 100 | 89 | 86 | 83 | 80 | 75 | 72 | 90 |
| | 50 | 101 | 100 | 89 | 86 | 83 | 79 | 76 | 73 | 90 |
| | 40 | 100 | 100 | 88 | 85 | 82 | 79 | 76 | 74 | 89 |
| 1000 | 100 | 113 | 113 | 105 | 102 | 101 | 98 | 91 | 85 | 106 |
| | 80 | 110 | 113 | 102 | 99 | 96 | 94 | 87 | 82 | 103 |
| | 60 | 107 | 110 | 100 | 96 | 92 | 90 | 86 | 83 | 100 |
| | 50 | 106 | 107 | 99 | 94 | 91 | 89 | 86 | 83 | 98 |
| | 40 | 105 | 107 | 98 | 93 | 90 | 88 | 86 | 83 | 98 |
| 1328 | 100 | 118 | 119 | 115 | 109 | 107 | 106 | 100 | 93 | 113 |
| | 80 | 115 | 118 | 114 | 106 | 103 | 101 | 96 | 90 | 111 |
| | 60 | 112 | 115 | 111 | 103 | 99 | 97 | 93 | 90 | 107 |
| | 50 | 111 | 113 | 109 | 102 | 98 | 96 | 93 | 91 | 106 |
| | 40 | 110 | 112 | 109 | 101 | 97 | 95 | 93 | 91 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

54 AFSW

Wheel Diameter = 54¼ in.

Outlet Area = 16.92 ft.²

Tip Speed = 14.20 x RPM

Maximum BHP = (RPM/214)³

Minimum Starting HP = 15

Maximum RPM Class I = 731

Maximum RPM Class II = 952

Maximum RPM Class III = 1200

Maximum Open Motor Frame Size

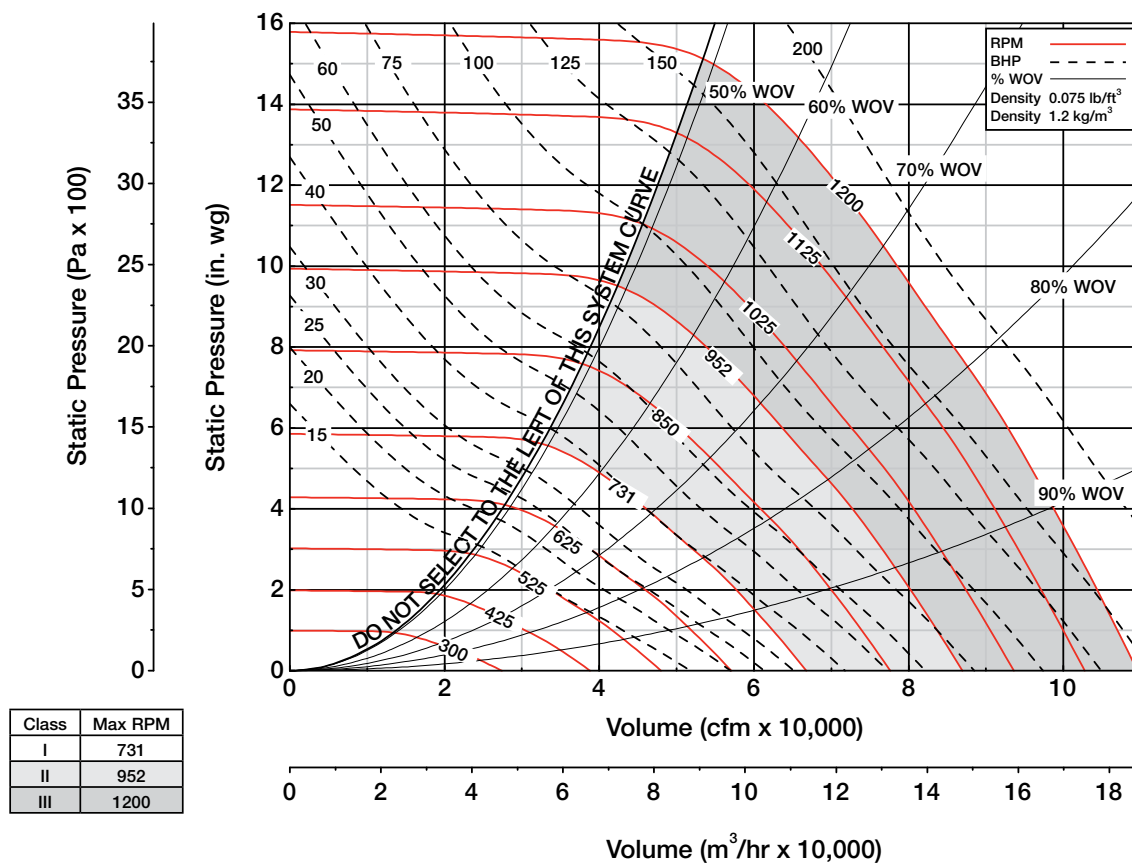
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 404T | 404T | 444T |
| Arr. 10 | 365T | 365T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 15000 | 886 | 210 | 0.95 | 249 | 1.57 | 282 | 2.21 | 314 | 2.95 | | | | | | | | | | | | |
| 18000 | 1063 | 236 | 1.31 | 271 | 2.06 | 302 | 2.80 | 330 | 3.56 | 357 | 4.41 | 383 | 5.32 | | | | | | | | |
| 21000 | 1241 | 264 | 1.78 | 296 | 2.64 | 324 | 3.51 | 350 | 4.37 | 375 | 5.25 | 398 | 6.19 | 421 | 7.21 | 443 | 8.26 | 464 | 9.34 | | |
| 24000 | 1418 | 293 | 2.38 | 321 | 3.32 | 348 | 4.33 | 372 | 5.32 | 396 | 6.30 | 417 | 7.30 | 437 | 8.32 | 458 | 9.43 | 479 | 10.6 | 498 | 11.8 |
| 27000 | 1595 | 323 | 3.11 | 348 | 4.15 | 373 | 5.26 | 396 | 6.38 | 418 | 7.50 | 439 | 8.61 | 458 | 9.72 | 477 | 10.9 | 495 | 12.0 | 513 | 13.3 |
| 30000 | 1773 | 353 | 4.00 | 376 | 5.15 | 399 | 6.33 | 421 | 7.59 | 442 | 8.83 | 461 | 10.1 | 480 | 11.3 | 498 | 12.5 | 515 | 13.8 | 532 | 15.1 |
| 33000 | 1950 | 383 | 5.05 | 405 | 6.34 | 426 | 7.59 | 446 | 8.93 | 466 | 10.3 | 485 | 11.7 | 503 | 13.1 | 520 | 14.4 | 537 | 15.8 | 553 | 17.1 |
| 36000 | 2127 | 414 | 6.31 | 435 | 7.69 | 454 | 9.07 | 472 | 10.5 | 491 | 12.0 | 510 | 13.5 | 527 | 15.0 | 543 | 16.5 | 559 | 18.0 | 575 | 19.4 |
| 39000 | 2304 | 446 | 7.78 | 464 | 9.25 | 482 | 10.8 | 500 | 12.2 | 517 | 13.8 | 535 | 15.4 | 551 | 17.1 | 567 | 18.7 | 583 | 20.3 | 597 | 21.9 |
| 42000 | 2482 | 477 | 9.49 | 495 | 11.0 | 512 | 12.7 | 528 | 14.3 | 544 | 15.9 | 560 | 17.6 | 577 | 19.3 | 592 | 21.1 | 607 | 22.9 | 621 | 24.6 |
| 45000 | 2659 | 509 | 11.4 | 525 | 13.1 | 541 | 14.8 | 557 | 16.5 | 572 | 18.2 | 587 | 20.0 | 602 | 21.8 | 617 | 23.7 | 632 | 25.6 | 646 | 27.5 |
| 48000 | 2836 | 541 | 13.6 | 556 | 15.3 | 571 | 17.2 | 586 | 19.1 | 600 | 20.9 | 615 | 22.7 | 628 | 24.6 | 643 | 26.6 | 657 | 28.6 | 671 | 30.6 |
| 51000 | 3014 | 573 | 16.1 | 587 | 17.9 | 602 | 19.9 | 616 | 21.8 | 629 | 23.8 | 643 | 25.7 | 656 | 27.7 | 669 | 29.7 | 683 | 31.8 | 696 | 33.9 |
| 54000 | 3191 | 605 | 18.9 | 619 | 20.8 | 632 | 22.8 | 646 | 24.9 | 658 | 27.0 | 671 | 29.1 | 684 | 31.1 | 696 | 33.2 | 709 | 35.3 | 722 | 37.5 |
| 57000 | 3368 | 637 | 22.0 | 650 | 24.0 | 663 | 26.1 | 676 | 28.3 | 688 | 30.5 | 700 | 32.7 | 712 | 34.9 | 724 | 37.0 | 736 | 39.2 | 748 | 41.4 |
| 60000 | 3546 | 669 | 25.5 | 682 | 27.6 | 694 | 29.7 | 706 | 32.0 | 718 | 34.3 | 730 | 36.6 | 741 | 39.0 | 753 | 41.2 | 764 | 43.5 | 775 | 45.8 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 29500 | 1743 | 529 | 14.7 | 562 | 17.4 | 595 | 20.3 | 626 | 23.2 | 655 | 26.3 | | | | | | | | | | |
| 32200 | 1903 | 547 | 16.6 | 578 | 19.3 | 608 | 22.1 | 639 | 25.3 | 668 | 28.5 | 696 | 31.7 | | | | | | | | |
| 34900 | 2062 | 567 | 18.6 | 597 | 21.4 | 625 | 24.4 | 653 | 27.5 | 682 | 30.8 | 709 | 34.3 | 736 | 37.8 | 761 | 41.3 | | | | |
| 37600 | 2222 | 586 | 20.7 | 616 | 23.8 | 644 | 26.9 | 671 | 30.1 | 696 | 33.3 | 723 | 36.9 | 749 | 40.6 | 774 | 44.3 | 798 | 48.1 | 821 | 52.0 |
| 40300 | 2381 | 608 | 23.0 | 636 | 26.4 | 663 | 29.7 | 689 | 33.0 | 714 | 36.4 | 738 | 39.8 | 763 | 43.6 | 787 | 47.4 | 811 | 51.4 | 835 | 55.4 |
| 43000 | 2541 | 629 | 25.5 | 657 | 29.1 | 683 | 32.7 | 709 | 36.2 | 733 | 39.7 | 756 | 43.3 | 779 | 47.0 | 801 | 50.8 | 825 | 54.9 | 848 | 59.1 |
| 45700 | 2700 | 652 | 28.3 | 678 | 32.0 | 703 | 35.8 | 728 | 39.5 | 752 | 43.3 | 775 | 47.0 | 798 | 50.9 | 819 | 54.7 | 840 | 58.7 | 862 | 62.9 |
| 48400 | 2860 | 674 | 31.0 | 700 | 35.1 | 725 | 39.1 | 748 | 43.1 | 772 | 47.1 | 795 | 51.0 | 817 | 55.0 | 838 | 59.1 | 858 | 63.1 | 878 | 67.3 |
| 51100 | 3020 | 697 | 34.0 | 722 | 38.4 | 747 | 42.6 | 770 | 46.8 | 792 | 51.1 | 814 | 55.3 | 836 | 59.4 | 857 | 63.6 | 877 | 67.9 | 897 | 72.2 |
| 53800 | 3179 | 720 | 37.3 | 745 | 41.8 | 769 | 46.4 | 792 | 50.8 | 813 | 55.2 | 834 | 59.7 | 855 | 64.1 | 876 | 68.5 | 896 | 72.9 | 916 | 77.4 |
| 56500 | 3339 | 743 | 40.8 | 768 | 45.5 | 791 | 50.3 | 814 | 55.0 | 835 | 59.6 | 856 | 64.3 | 876 | 69.0 | 896 | 73.7 | 916 | 78.3 | 935 | 82.9 |
| 59200 | 3498 | 768 | 44.6 | 791 | 49.4 | 814 | 54.4 | 836 | 59.4 | 857 | 64.3 | 877 | 69.2 | 897 | 74.1 | 916 | 79.0 | 935 | 83.9 | 954 | 88.7 |
| 61900 | 3658 | 793 | 48.8 | 814 | 53.6 | 837 | 58.8 | 858 | 64.0 | 879 | 69.3 | 899 | 74.3 | 919 | 79.4 | 938 | 84.5 | 956 | 89.7 | 974 | 94.9 |
| 64600 | 3817 | 818 | 53.2 | 839 | 58.2 | 860 | 63.4 | 881 | 68.8 | 902 | 74.3 | 921 | 79.8 | 941 | 85.1 | 959 | 90.4 | 977 | 95.7 | 995 | 101 |
| 67300 | 3977 | 844 | 58.0 | 864 | 63.1 | 884 | 68.4 | 904 | 74.0 | 924 | 79.6 | 944 | 85.4 | 963 | 91.1 | 981 | 96.5 | 999 | 102 | 1016 | 108 |
| 70000 | 4137 | 870 | 63.1 | 889 | 68.4 | 908 | 73.8 | 928 | 79.4 | 947 | 85.3 | 967 | 91.2 | 985 | 97.1 | 1003 | 103 | 1021 | 109 | 1038 | 115 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 38000 | 2245 | 823 | 52.5 | 846 | 56.4 | | | | | | | | | | | | | | | | |
| 41000 | 2423 | 838 | 56.4 | 860 | 60.5 | 882 | 64.6 | 903 | 68.9 | | | | | | | | | | | | |
| 44000 | 2600 | 853 | 60.4 | 875 | 64.7 | 897 | 69.1 | 918 | 73.5 | 938 | 78.0 | 977 | 87.1 | | | | | | | | |
| 47000 | 2777 | 868 | 64.8 | 890 | 69.3 | 912 | 73.8 | 933 | 78.4 | 953 | 83.0 | 992 | 92.5 | 1029 | 102 | | | | | | |
| 50000 | 2955 | 889 | 70.1 | 908 | 74.4 | 927 | 78.7 | 948 | 83.5 | 968 | 88.3 | 1007 | 98.1 | 1044 | 108 | 1079 | 118 | 1114 | 129 | | |
| 53000 | 3132 | 910 | 75.8 | 929 | 80.3 | 947 | 84.8 | 965 | 89.3 | 983 | 93.9 | 1022 | 104 | 1059 | 114 | 1094 | 125 | 1128 | 136 | 1161 | 147 |
| 56000 | 3309 | 931 | 81.9 | 950 | 86.5 | 968 | 91.2 | 986 | 95.9 | 1003 | 101 | 1037 | 110 | 1074 | 121 | 1109 | 132 | 1143 | 143 | 1176 | 154 |
| 59000 | 3486 | 953 | 88.3 | 971 | 93.1 | 989 | 98.0 | 1007 | 103 | 1024 | 108 | 1058 | 118 | 1089 | 128 | 1124 | 139 | 1158 | 151 | 1190 | 162 |
| 62000 | 3664 | 975 | 95.1 | 993 | 100 | 1011 | 105 | 1028 | 110 | 1045 | 115 | 1078 | 126 | 1110 | 136 | 1140 | 147 | 1173 | 158 | | |
| 65000 | 3841 | 998 | 102 | 1015 | 107 | 1032 | 113 | 1050 | 118 | 1067 | 123 | 1099 | 134 | 1131 | 145 | 1161 | 156 | 1190 | 167 | | |
| 68000 | 4018 | 1022 | 109 | 1039 | 115 | 1055 | 121 | 1072 | 126 | 1088 | 132 | 1121 | 143 | 1152 | 154 | 1182 | 166 | | | | |
| 71000 | 4196 | 1046 | 117 | 1063 | 123 | 1079 | 129 | 1095 | 135 | 1110 | 141 | 1142 | 152 | 1173 | 164 | | | | | | |
| 74000 | 4373 | 1070 | 125 | 1087 | 131 | 1103 | 137 | 1119 | 143 | 1134 | 150 | 1164 | 162 | 1195 | 174 | | | | | | |
| 77000 | 4550 | 1095 | 134 | 1111 | 140 | 1127 | 146 | 1143 | 153 | 1158 | 159 | 1187 | 172 | | | | | | | | |
| 80000 | 4728 | 1120 | 142 | 1136 | 149 | 1152 | 156 | 1167 | 162 | 1182 | 169 | | | | | | | | | | |
| 83000 | 4905 | 1145 | 152 | 1161 | 159 | 1176 | 166 | 1191 | 173 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 91.3)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 250 | 100 | 85 | 76 | 74 | 70 | 64 | 54 | 49 | 46 | 71 |
| | 80 | 85 | 74 | 73 | 69 | 64 | 55 | 50 | 47 | 70 |
| | 60 | 82 | 71 | 72 | 69 | 64 | 55 | 50 | 47 | 70 |
| | 50 | 83 | 71 | 71 | 69 | 65 | 55 | 50 | 47 | 70 |
| | 40 | 82 | 71 | 71 | 69 | 65 | 55 | 50 | 47 | 70 |
| 350 | 100 | 96 | 84 | 82 | 78 | 73 | 64 | 58 | 54 | 80 |
| | 80 | 94 | 81 | 78 | 74 | 70 | 62 | 56 | 52 | 77 |
| | 60 | 93 | 79 | 77 | 74 | 71 | 63 | 58 | 53 | 76 |
| | 50 | 91 | 77 | 76 | 74 | 71 | 64 | 59 | 54 | 76 |
| | 40 | 91 | 77 | 75 | 74 | 71 | 64 | 59 | 54 | 76 |
| 450 | 100 | 104 | 90 | 85 | 83 | 80 | 72 | 65 | 62 | 86 |
| | 80 | 105 | 88 | 81 | 78 | 75 | 68 | 63 | 59 | 83 |
| | 60 | 104 | 86 | 79 | 77 | 75 | 70 | 67 | 62 | 82 |
| | 50 | 101 | 84 | 78 | 77 | 76 | 71 | 68 | 64 | 81 |
| | 40 | 103 | 88 | 81 | 77 | 75 | 71 | 68 | 64 | 82 |
| 650 | 100 | 103 | 102 | 94 | 92 | 92 | 85 | 76 | 72 | 96 |
| | 80 | 101 | 101 | 90 | 86 | 85 | 80 | 74 | 70 | 91 |
| | 60 | 99 | 99 | 87 | 84 | 83 | 80 | 77 | 74 | 89 |
| | 50 | 98 | 97 | 86 | 84 | 84 | 81 | 78 | 75 | 89 |
| | 40 | 99 | 96 | 86 | 84 | 83 | 81 | 79 | 76 | 89 |
| 900 | 100 | 109 | 116 | 103 | 98 | 99 | 96 | 88 | 82 | 105 |
| | 80 | 107 | 116 | 100 | 94 | 94 | 91 | 84 | 79 | 102 |
| | 60 | 106 | 113 | 97 | 91 | 91 | 89 | 86 | 83 | 100 |
| | 50 | 105 | 112 | 95 | 90 | 90 | 89 | 87 | 84 | 99 |
| | 40 | 105 | 112 | 95 | 90 | 90 | 89 | 88 | 85 | 99 |
| 1200 | 100 | 114 | 120 | 113 | 105 | 105 | 105 | 97 | 91 | 112 |
| | 80 | 111 | 120 | 112 | 102 | 100 | 99 | 92 | 87 | 109 |
| | 60 | 109 | 118 | 109 | 98 | 97 | 96 | 94 | 90 | 106 |
| | 50 | 109 | 116 | 107 | 97 | 97 | 96 | 94 | 92 | 105 |
| | 40 | 110 | 116 | 107 | 97 | 97 | 96 | 95 | 92 | 106 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 250 | 100 | 88 | 87 | 77 | 72 | 66 | 56 | 50 | 48 | 75 |
| | 80 | 86 | 87 | 76 | 71 | 65 | 56 | 49 | 47 | 75 |
| | 60 | 85 | 87 | 76 | 71 | 67 | 57 | 51 | 49 | 75 |
| | 50 | 85 | 85 | 76 | 71 | 68 | 58 | 51 | 49 | 74 |
| | 40 | 85 | 84 | 76 | 71 | 68 | 58 | 52 | 50 | 74 |
| 350 | 100 | 97 | 87 | 80 | 79 | 74 | 64 | 59 | 52 | 80 |
| | 80 | 94 | 85 | 78 | 75 | 71 | 62 | 57 | 50 | 78 |
| | 60 | 92 | 83 | 76 | 74 | 70 | 63 | 59 | 53 | 76 |
| | 50 | 92 | 83 | 76 | 73 | 70 | 63 | 60 | 54 | 76 |
| | 40 | 91 | 83 | 75 | 73 | 69 | 63 | 60 | 55 | 76 |
| 450 | 100 | 106 | 93 | 88 | 86 | 83 | 75 | 68 | 64 | 88 |
| | 80 | 105 | 91 | 84 | 81 | 78 | 71 | 65 | 60 | 85 |
| | 60 | 103 | 90 | 82 | 79 | 76 | 70 | 67 | 64 | 83 |
| | 50 | 102 | 89 | 81 | 78 | 75 | 70 | 67 | 63 | 82 |
| | 40 | 101 | 88 | 80 | 78 | 74 | 70 | 67 | 64 | 82 |
| 650 | 100 | 109 | 105 | 96 | 95 | 94 | 88 | 79 | 75 | 98 |
| | 80 | 105 | 102 | 93 | 91 | 88 | 83 | 76 | 72 | 94 |
| | 60 | 102 | 100 | 90 | 88 | 84 | 81 | 76 | 74 | 91 |
| | 50 | 102 | 100 | 90 | 87 | 84 | 80 | 77 | 74 | 91 |
| | 40 | 102 | 99 | 89 | 87 | 83 | 80 | 77 | 75 | 90 |
| 900 | 100 | 114 | 114 | 105 | 102 | 101 | 98 | 91 | 84 | 106 |
| | 80 | 111 | 115 | 103 | 99 | 96 | 93 | 87 | 82 | 104 |
| | 60 | 108 | 111 | 100 | 96 | 92 | 90 | 86 | 83 | 100 |
| | 50 | 107 | 108 | 99 | 95 | 91 | 89 | 86 | 84 | 99 |
| | 40 | 106 | 108 | 98 | 93 | 90 | 88 | 87 | 84 | 98 |
| 1200 | 100 | 120 | 119 | 114 | 109 | 108 | 107 | 100 | 93 | 114 |
| | 80 | 116 | 119 | 112 | 107 | 103 | 102 | 95 | 90 | 111 |
| | 60 | 113 | 116 | 110 | 104 | 100 | 98 | 94 | 91 | 107 |
| | 50 | 112 | 114 | 108 | 102 | 99 | 96 | 94 | 91 | 106 |
| | 40 | 111 | 114 | 107 | 101 | 97 | 95 | 94 | 91 | 105 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

60 AFSW

Wheel Diameter = 60 in.

Outlet Area = 20.7 ft.²

Tip Speed = 15.71 x RPM

Maximum BHP = (RPM/181)³

Minimum Starting HP = 20

Maximum RPM Class I = 661

Maximum RPM Class II = 861

Maximum RPM Class III = 1085

Maximum Open Motor Frame Size

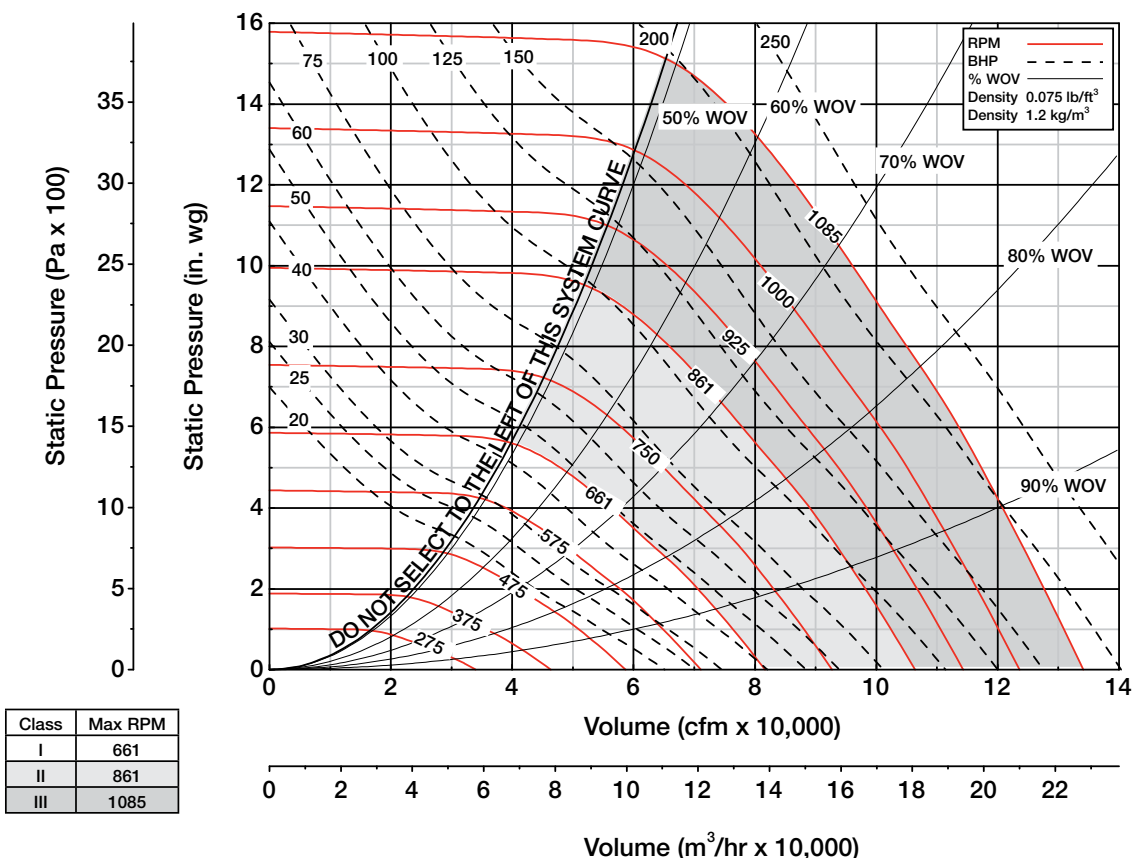
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 404T | 404T | 444T |
| Arr. 10 | 365T | 365T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 19500 | 942 | 197 | 1.29 | 231 | 2.10 | 260 | 2.91 | 288 | 3.83 | 314 | 4.81 | | | | | | | | | | |
| 23000 | 1111 | 220 | 1.74 | 251 | 2.69 | 278 | 3.64 | 303 | 4.60 | 327 | 5.64 | 350 | 6.77 | 371 | 7.94 | | | | | | |
| 26500 | 1280 | 244 | 2.33 | 272 | 3.40 | 298 | 4.50 | 321 | 5.59 | 343 | 6.69 | 363 | 7.82 | 384 | 9.10 | 404 | 10.4 | 422 | 11.8 | | |
| 30000 | 1449 | 269 | 3.06 | 294 | 4.22 | 319 | 5.49 | 340 | 6.72 | 361 | 7.95 | 381 | 9.20 | 399 | 10.5 | 417 | 11.8 | 435 | 13.2 | 453 | 14.7 |
| 33500 | 1618 | 295 | 3.93 | 318 | 5.22 | 340 | 6.59 | 361 | 7.99 | 380 | 9.38 | 399 | 10.8 | 417 | 12.1 | 434 | 13.5 | 449 | 15.0 | 466 | 16.5 |
| 37000 | 1787 | 321 | 4.99 | 342 | 6.41 | 362 | 7.86 | 382 | 9.41 | 401 | 11.0 | 419 | 12.5 | 435 | 14.0 | 452 | 15.5 | 467 | 17.1 | 482 | 18.6 |
| 40500 | 1956 | 348 | 6.23 | 367 | 7.81 | 386 | 9.35 | 404 | 11.0 | 422 | 12.7 | 439 | 14.4 | 455 | 16.1 | 471 | 17.7 | 486 | 19.4 | 501 | 21.1 |
| 44000 | 2125 | 374 | 7.70 | 393 | 9.39 | 410 | 11.1 | 427 | 12.8 | 444 | 14.6 | 460 | 16.5 | 476 | 18.3 | 491 | 20.1 | 505 | 21.9 | 519 | 23.7 |
| 47500 | 2294 | 401 | 9.41 | 418 | 11.2 | 435 | 13.0 | 450 | 14.9 | 466 | 16.7 | 482 | 18.7 | 497 | 20.8 | 512 | 22.7 | 526 | 24.7 | 539 | 26.6 |
| 51000 | 2463 | 429 | 11.4 | 444 | 13.3 | 460 | 15.2 | 475 | 17.2 | 489 | 19.1 | 504 | 21.2 | 519 | 23.4 | 533 | 25.5 | 546 | 27.6 | 560 | 29.7 |
| 54500 | 2632 | 456 | 13.6 | 471 | 15.6 | 485 | 17.7 | 499 | 19.8 | 513 | 21.9 | 527 | 24.0 | 541 | 26.2 | 555 | 28.5 | 568 | 30.8 | 580 | 33.1 |
| 58000 | 2801 | 483 | 16.1 | 497 | 18.2 | 511 | 20.4 | 524 | 22.7 | 538 | 24.9 | 551 | 27.0 | 563 | 29.4 | 577 | 31.8 | 589 | 34.2 | 602 | 36.7 |
| 61500 | 2971 | 511 | 19.0 | 524 | 21.1 | 537 | 23.5 | 550 | 25.9 | 562 | 28.2 | 575 | 30.6 | 587 | 32.9 | 599 | 35.4 | 612 | 37.9 | 624 | 40.5 |
| 65000 | 3140 | 539 | 22.1 | 551 | 24.4 | 563 | 26.8 | 576 | 29.3 | 588 | 31.9 | 599 | 34.4 | 611 | 36.8 | 622 | 39.3 | 634 | 41.9 | 646 | 44.6 |
| 68500 | 3309 | 566 | 25.6 | 578 | 28.0 | 590 | 30.5 | 602 | 33.2 | 613 | 35.8 | 624 | 38.5 | 636 | 41.1 | 646 | 43.7 | 657 | 46.3 | 668 | 49.1 |
| 72000 | 3478 | 594 | 29.5 | 605 | 32.0 | 616 | 34.6 | 628 | 37.3 | 639 | 40.1 | 649 | 43.0 | 660 | 45.7 | 671 | 48.4 | 681 | 51.2 | 691 | 53.9 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 36000 | 1739 | 477 | 18.0 | 507 | 21.2 | 538 | 24.7 | 566 | 28.3 | 592 | 32.1 | | | | | | | | | | |
| 39300 | 1898 | 494 | 20.2 | 522 | 23.5 | 550 | 27.0 | 578 | 30.8 | 604 | 34.7 | 629 | 38.7 | | | | | | | | |
| 42600 | 2057 | 512 | 22.6 | 539 | 26.2 | 565 | 29.7 | 590 | 33.5 | 616 | 37.6 | 641 | 41.8 | 665 | 46.1 | 687 | 50.4 | | | | |
| 45900 | 2217 | 530 | 25.3 | 557 | 29.0 | 582 | 32.8 | 606 | 36.7 | 628 | 40.7 | 653 | 45.0 | 677 | 49.5 | 699 | 54.1 | 721 | 58.7 | 742 | 63.4 |
| 49200 | 2376 | 549 | 28.1 | 574 | 32.2 | 599 | 36.2 | 623 | 40.3 | 645 | 44.4 | 667 | 48.6 | 689 | 53.2 | 712 | 57.9 | 733 | 62.7 | 754 | 67.7 |
| 52500 | 2536 | 568 | 31.1 | 593 | 35.5 | 617 | 39.8 | 640 | 44.1 | 662 | 48.5 | 683 | 52.9 | 704 | 57.3 | 724 | 62.0 | 745 | 67.0 | 766 | 72.1 |
| 55800 | 2695 | 588 | 34.4 | 613 | 39.0 | 635 | 43.6 | 658 | 48.2 | 680 | 52.8 | 701 | 57.4 | 721 | 62.1 | 740 | 66.8 | 759 | 71.6 | 778 | 76.8 |
| 59100 | 2855 | 609 | 37.9 | 632 | 42.8 | 655 | 47.6 | 676 | 52.6 | 697 | 57.4 | 718 | 62.3 | 738 | 67.1 | 757 | 72.1 | 775 | 77.1 | 793 | 82.1 |
| 62400 | 3014 | 629 | 41.5 | 652 | 46.8 | 674 | 52.0 | 695 | 57.1 | 715 | 62.3 | 735 | 67.4 | 755 | 72.5 | 774 | 77.7 | 792 | 82.9 | 810 | 88.1 |
| 65700 | 3173 | 650 | 45.5 | 673 | 51.0 | 694 | 56.6 | 715 | 61.9 | 735 | 67.3 | 754 | 72.8 | 773 | 78.3 | 791 | 83.6 | 810 | 89.0 | 827 | 94.5 |
| 69000 | 3333 | 671 | 49.7 | 693 | 55.5 | 715 | 61.3 | 735 | 67.1 | 754 | 72.7 | 773 | 78.4 | 791 | 84.2 | 809 | 89.9 | 827 | 95.5 | 845 | 101 |
| 72300 | 3492 | 693 | 54.4 | 714 | 60.3 | 735 | 66.3 | 755 | 72.5 | 774 | 78.5 | 793 | 84.4 | 810 | 90.4 | 828 | 96.4 | 845 | 102 | 862 | 108 |
| 75600 | 3652 | 716 | 59.5 | 736 | 65.4 | 756 | 71.7 | 775 | 87.1 | 794 | 84.5 | 812 | 90.7 | 830 | 96.9 | 847 | 103 | 863 | 110 | 880 | 116 |
| 78900 | 3811 | 739 | 64.9 | 757 | 71.0 | 777 | 77.4 | 796 | 84.0 | 814 | 90.7 | 832 | 97.4 | 850 | 104 | 866 | 110 | 883 | 117 | 899 | 123 |
| 82200 | 3971 | 762 | 70.7 | 780 | 77.0 | 798 | 83.4 | 817 | 90.2 | 835 | 97.1 | 852 | 104 | 870 | 111 | 886 | 118 | 902 | 125 | 918 | 131 |
| 85500 | 4130 | 785 | 77.0 | 803 | 83.4 | 820 | 90.0 | 838 | 96.9 | 856 | 104 | 873 | 111 | 890 | 119 | 906 | 126 | 922 | 133 | 938 | 140 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|------|------|------|------|------|------|------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 47000 | 2270 | 746 | 64.8 | 766 | 69.6 | | | | | | | | | | | | | | | | |
| 50600 | 2444 | 759 | 69.5 | 779 | 74.6 | 799 | 79.7 | 818 | 84.9 | 838 | 90.4 | | | | | | | | | | |
| 54200 | 2618 | 773 | 74.5 | 793 | 79.7 | 812 | 85.1 | 831 | 90.5 | 849 | 96.0 | 885 | 107 | | | | | | | | |
| 57800 | 2792 | 787 | 79.8 | 806 | 85.2 | 825 | 90.8 | 844 | 96.4 | 863 | 102 | 898 | 114 | 931 | 125 | | | | | | |
| 61400 | 2966 | 805 | 86.2 | 822 | 91.5 | 839 | 96.7 | 858 | 103 | 876 | 109 | 911 | 121 | 944 | 133 | 977 | 145 | 1007 | 158 | | |
| 65000 | 3140 | 824 | 93.1 | 841 | 98.5 | 857 | 104 | 874 | 110 | 889 | 115 | 924 | 128 | 958 | 140 | 990 | 153 | 1020 | 166 | 1050 | 80 |
| 68600 | 3314 | 842 | 100 | 859 | 106 | 876 | 112 | 892 | 118 | 908 | 123 | 938 | 135 | 971 | 148 | 1003 | 161 | 1034 | 175 | 1063 | 189 |
| 72200 | 3487 | 862 | 108 | 878 | 114 | 895 | 120 | 911 | 126 | 926 | 132 | 956 | 144 | 985 | 157 | 1016 | 170 | 1047 | 184 | 1076 | 198 |
| 75800 | 3661 | 881 | 116 | 897 | 122 | 914 | 129 | 929 | 135 | 945 | 141 | 975 | 154 | 1003 | 167 | 1031 | 180 | 1060 | 194 | | |
| 79400 | 3835 | 902 | 125 | 917 | 131 | 933 | 138 | 949 | 144 | 964 | 151 | 993 | 164 | 1022 | 177 | 1049 | 190 | 1075 | 204 | | |
| 83000 | 4009 | 923 | 133 | 938 | 140 | 953 | 147 | 968 | 154 | 983 | 161 | 1012 | 174 | 1040 | 188 | 1068 | 202 | | | | |
| 86600 | 4183 | 944 | 143 | 959 | 150 | 974 | 157 | 988 | 164 | 1002 | 171 | 1031 | 185 | 1059 | 200 | | | | | | |
| 90200 | 4357 | 966 | 152 | 981 | 160 | 995 | 167 | 1009 | 175 | 1023 | 182 | 1051 | 197 | 1078 | 212 | | | | | | |
| 93800 | 4531 | 987 | 163 | 1002 | 170 | 1017 | 178 | 1031 | 186 | 1045 | 193 | 1071 | 209 | | | | | | | | |
| 97400 | 4705 | 1010 | 173 | 1024 | 181 | 1038 | 189 | 1052 | 197 | 1066 | 205 | | | | | | | | | | |
| 101000 | 4879 | 1032 | 184 | 1046 | 192 | 1060 | 201 | 1074 | 209 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 124)$$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{Wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WiA} |
| 200 | 100 | 80 | 73 | 71 | 67 | 59 | 51 | 47 | 43 | 68 |
| | 80 | 79 | 72 | 70 | 66 | 59 | 51 | 47 | 44 | 67 |
| | 60 | 76 | 70 | 69 | 66 | 59 | 51 | 47 | 44 | 66 |
| | 50 | 76 | 69 | 69 | 66 | 60 | 52 | 47 | 44 | 67 |
| | 40 | 76 | 69 | 69 | 66 | 60 | 52 | 47 | 44 | 67 |
| 300 | 100 | 92 | 83 | 80 | 77 | 71 | 62 | 57 | 53 | 78 |
| | 80 | 90 | 81 | 77 | 73 | 68 | 60 | 54 | 50 | 75 |
| | 60 | 88 | 78 | 76 | 73 | 69 | 62 | 57 | 52 | 75 |
| | 50 | 87 | 77 | 75 | 73 | 69 | 63 | 58 | 52 | 75 |
| | 40 | 87 | 76 | 74 | 73 | 69 | 63 | 58 | 53 | 74 |
| 400 | 100 | 103 | 90 | 85 | 84 | 79 | 71 | 65 | 62 | 86 |
| | 80 | 104 | 87 | 81 | 79 | 75 | 68 | 63 | 59 | 82 |
| | 60 | 103 | 85 | 79 | 78 | 75 | 70 | 66 | 62 | 82 |
| | 50 | 100 | 83 | 78 | 78 | 75 | 71 | 68 | 64 | 81 |
| | 40 | 102 | 87 | 80 | 77 | 75 | 71 | 68 | 64 | 82 |
| 550 | 100 | 103 | 99 | 92 | 92 | 90 | 82 | 75 | 71 | 94 |
| | 80 | 102 | 97 | 88 | 86 | 84 | 78 | 72 | 69 | 89 |
| | 60 | 100 | 94 | 85 | 84 | 82 | 79 | 76 | 73 | 88 |
| | 50 | 99 | 93 | 85 | 84 | 82 | 80 | 77 | 74 | 88 |
| | 40 | 99 | 92 | 84 | 83 | 82 | 80 | 78 | 75 | 88 |
| 800 | 100 | 111 | 115 | 102 | 99 | 99 | 95 | 87 | 82 | 105 |
| | 80 | 109 | 115 | 99 | 95 | 94 | 90 | 83 | 79 | 102 |
| | 60 | 108 | 113 | 96 | 91 | 91 | 89 | 86 | 83 | 100 |
| | 50 | 107 | 111 | 94 | 91 | 91 | 89 | 87 | 84 | 99 |
| | 40 | 107 | 111 | 94 | 90 | 90 | 89 | 88 | 85 | 99 |
| 1085 | 100 | 116 | 122 | 112 | 105 | 106 | 106 | 96 | 91 | 112 |
| | 80 | 112 | 122 | 109 | 102 | 101 | 100 | 92 | 87 | 110 |
| | 60 | 111 | 120 | 106 | 98 | 98 | 97 | 94 | 91 | 107 |
| | 50 | 111 | 118 | 104 | 97 | 98 | 97 | 95 | 92 | 106 |
| | 40 | 111 | 118 | 104 | 96 | 98 | 96 | 96 | 93 | 106 |

| Outlet Sound Power, L_{Wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{WoA} |
| 200 | 100 | 86 | 82 | 74 | 68 | 61 | 52 | 48 | 45 | 71 |
| | 80 | 85 | 82 | 72 | 67 | 60 | 52 | 47 | 45 | 71 |
| | 60 | 85 | 82 | 72 | 68 | 62 | 53 | 48 | 46 | 71 |
| | 50 | 83 | 80 | 73 | 68 | 62 | 54 | 49 | 47 | 71 |
| | 40 | 84 | 80 | 73 | 68 | 62 | 54 | 49 | 47 | 71 |
| 300 | 100 | 94 | 85 | 80 | 78 | 71 | 63 | 57 | 51 | 79 |
| | 80 | 92 | 83 | 77 | 74 | 68 | 61 | 55 | 49 | 76 |
| | 60 | 90 | 81 | 75 | 73 | 68 | 62 | 57 | 52 | 75 |
| | 50 | 90 | 81 | 75 | 72 | 68 | 62 | 58 | 53 | 75 |
| | 40 | 89 | 81 | 75 | 72 | 67 | 62 | 58 | 54 | 74 |
| 400 | 100 | 106 | 92 | 88 | 87 | 82 | 74 | 68 | 64 | 88 |
| | 80 | 104 | 90 | 84 | 82 | 77 | 70 | 65 | 60 | 84 |
| | 60 | 102 | 89 | 82 | 79 | 75 | 70 | 67 | 64 | 83 |
| | 50 | 101 | 88 | 81 | 79 | 74 | 70 | 67 | 63 | 82 |
| | 40 | 100 | 87 | 80 | 78 | 74 | 70 | 67 | 64 | 81 |
| 550 | 100 | 108 | 101 | 95 | 95 | 93 | 85 | 78 | 73 | 97 |
| | 80 | 105 | 98 | 92 | 90 | 87 | 80 | 74 | 70 | 92 |
| | 60 | 103 | 96 | 89 | 86 | 83 | 79 | 75 | 72 | 89 |
| | 50 | 103 | 96 | 89 | 86 | 83 | 79 | 76 | 73 | 89 |
| | 40 | 102 | 95 | 88 | 85 | 82 | 79 | 76 | 74 | 88 |
| 800 | 100 | 114 | 114 | 105 | 103 | 101 | 97 | 90 | 84 | 106 |
| | 80 | 112 | 114 | 102 | 99 | 97 | 93 | 86 | 81 | 103 |
| | 60 | 109 | 111 | 100 | 96 | 93 | 90 | 86 | 83 | 100 |
| | 50 | 107 | 108 | 98 | 95 | 92 | 89 | 86 | 84 | 99 |
| | 40 | 107 | 108 | 98 | 93 | 90 | 89 | 87 | 84 | 98 |
| 1085 | 100 | 121 | 120 | 113 | 110 | 109 | 107 | 100 | 93 | 114 |
| | 80 | 117 | 121 | 111 | 107 | 104 | 103 | 95 | 90 | 111 |
| | 60 | 114 | 117 | 108 | 104 | 100 | 98 | 94 | 91 | 108 |
| | 50 | 113 | 115 | 107 | 103 | 99 | 97 | 94 | 92 | 106 |
| | 40 | 113 | 115 | 106 | 102 | 98 | 96 | 94 | 92 | 106 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} , L_{WiA} and outlet L_{Wo} , L_{WoA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

66 AFSW

Wheel Diameter = 66 in.

Outlet Area = 25.05 ft.²

Tip Speed = 17.28 x RPM

Maximum BHP = (RPM/154)³

Minimum Starting HP = 25

Maximum RPM Class I = 601

Maximum RPM Class II = 783

Maximum RPM Class III = 987

Maximum Open Motor Frame Size

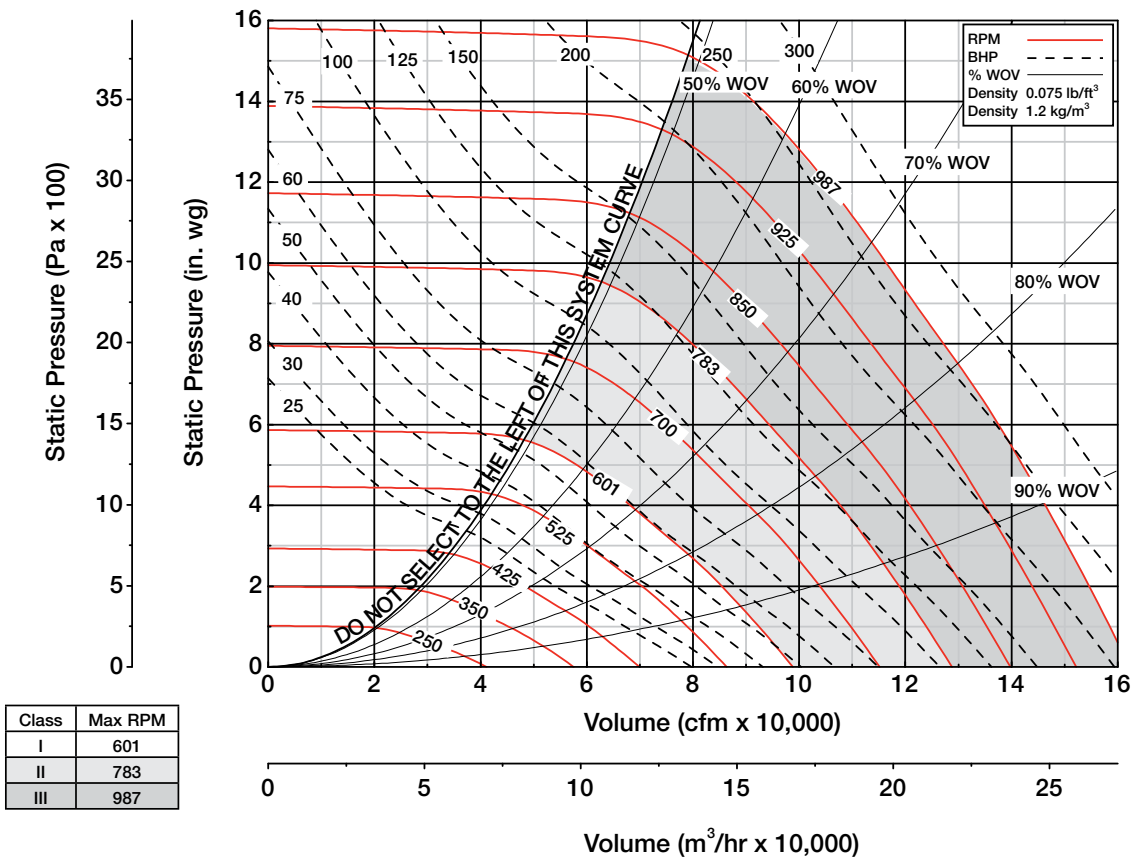
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 405T | 405T | 444T |
| Arr. 10 | 404T | 404T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|-------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 22000 | 878 | 172 | 1.38 | 204 | 2.29 | 231 | 3.24 | 257 | 4.33 | | | | | | | | | | | | |
| 26400 | 1053 | 193 | 1.90 | 222 | 3.00 | 247 | 4.09 | 270 | 5.21 | 293 | 6.47 | 314 | 7.80 | | | | | | | | |
| 30800 | 1229 | 215 | 2.59 | 242 | 3.85 | 265 | 5.12 | 287 | 6.39 | 307 | 7.68 | 326 | 9.07 | 345 | 10.6 | 363 | 12.1 | 381 | 13.7 | | |
| 35200 | 1405 | 239 | 3.46 | 262 | 4.83 | 285 | 6.31 | 305 | 7.77 | 324 | 9.21 | 342 | 10.7 | 358 | 12.2 | 376 | 13.8 | 392 | 15.5 | 408 | 17.3 |
| 39600 | 1580 | 263 | 4.51 | 284 | 6.03 | 305 | 7.67 | 324 | 9.31 | 342 | 11.0 | 359 | 12.6 | 375 | 14.2 | 390 | 15.9 | 405 | 17.6 | 421 | 19.4 |
| 44000 | 1756 | 288 | 5.79 | 307 | 7.48 | 326 | 9.21 | 344 | 11.1 | 361 | 12.9 | 377 | 14.7 | 393 | 16.5 | 408 | 18.3 | 422 | 20.2 | 436 | 22.0 |
| 48400 | 1932 | 312 | 7.31 | 330 | 9.19 | 347 | 11.0 | 365 | 13.0 | 381 | 15.1 | 397 | 17.1 | 411 | 19.1 | 425 | 21.1 | 439 | 23.0 | 453 | 25.0 |
| 52800 | 2107 | 338 | 9.12 | 354 | 11.2 | 370 | 13.2 | 386 | 15.2 | 402 | 17.4 | 416 | 19.7 | 431 | 21.8 | 444 | 24.0 | 457 | 26.2 | 470 | 28.4 |
| 57200 | 2283 | 363 | 11.2 | 379 | 13.4 | 394 | 15.6 | 408 | 17.8 | 422 | 20.1 | 437 | 22.5 | 451 | 24.9 | 464 | 27.3 | 476 | 29.6 | 489 | 32.0 |
| 61600 | 2459 | 389 | 13.7 | 403 | 16.0 | 417 | 18.4 | 431 | 20.7 | 444 | 23.1 | 458 | 25.6 | 471 | 28.2 | 484 | 30.8 | 496 | 33.3 | 508 | 35.9 |
| 66000 | 2634 | 415 | 16.5 | 428 | 18.9 | 441 | 21.4 | 454 | 24.0 | 467 | 26.5 | 479 | 29.0 | 492 | 31.8 | 504 | 34.6 | 516 | 37.4 | 528 | 40.1 |
| 70400 | 2810 | 441 | 19.7 | 453 | 22.2 | 466 | 24.9 | 478 | 27.7 | 490 | 30.3 | 502 | 33.0 | 513 | 35.8 | 525 | 38.7 | 537 | 41.6 | 548 | 44.6 |
| 74800 | 2986 | 467 | 23.3 | 479 | 25.9 | 491 | 28.7 | 502 | 31.6 | 513 | 34.5 | 525 | 37.4 | 535 | 40.2 | 546 | 43.2 | 558 | 46.3 | 569 | 49.4 |
| 79200 | 3161 | 493 | 27.3 | 504 | 30.1 | 515 | 33.0 | 526 | 36.1 | 537 | 39.2 | 548 | 42.2 | 558 | 45.2 | 568 | 48.2 | 579 | 51.4 | 590 | 54.7 |
| 83600 | 3337 | 519 | 31.8 | 530 | 34.7 | 540 | 37.7 | 551 | 40.9 | 561 | 44.2 | 571 | 47.5 | 581 | 50.6 | 591 | 53.8 | 601 | 57.0 | 611 | 60.3 |
| 88000 | 3512 | 545 | 36.7 | 555 | 39.8 | 565 | 42.9 | 576 | 46.3 | 586 | 49.7 | 595 | 53.1 | 605 | 56.5 | 614 | 59.8 | 624 | 63.2 | 633 | 66.6 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 44000 | 1756 | 436 | 22.0 | 463 | 25.9 | 490 | 30.2 | 515 | 34.6 | 539 | 39.1 | | | | | | | | | | |
| 48000 | 1916 | 451 | 24.7 | 476 | 28.8 | 501 | 33.0 | 526 | 37.7 | 550 | 42.4 | 573 | 47.3 | 595 | 52.3 | | | | | | |
| 52000 | 2075 | 467 | 27.7 | 492 | 32.0 | 515 | 36.4 | 537 | 40.9 | 561 | 45.9 | 584 | 51.0 | 605 | 56.2 | 626 | 61.5 | 647 | 67.1 | | |
| 56000 | 2235 | 483 | 31.0 | 508 | 35.6 | 531 | 40.2 | 552 | 44.9 | 573 | 49.7 | 595 | 55.0 | 616 | 60.4 | 637 | 66.0 | 657 | 71.6 | 676 | 77.3 |
| 60000 | 2395 | 501 | 34.4 | 524 | 39.4 | 547 | 44.3 | 568 | 49.3 | 588 | 54.3 | 608 | 59.4 | 628 | 64.8 | 648 | 70.6 | 668 | 76.5 | 687 | 82.5 |
| 64000 | 2554 | 519 | 38.1 | 541 | 43.4 | 563 | 48.7 | 584 | 54.0 | 604 | 59.2 | 623 | 64.6 | 641 | 70.0 | 659 | 75.6 | 679 | 81.7 | 698 | 87.9 |
| 68000 | 2714 | 537 | 42.2 | 559 | 47.7 | 580 | 53.4 | 600 | 59.0 | 620 | 64.5 | 639 | 70.1 | 657 | 75.8 | 674 | 81.6 | 691 | 87.4 | 709 | 93.6 |
| 72000 | 2874 | 556 | 46.3 | 577 | 52.4 | 597 | 58.3 | 617 | 64.3 | 636 | 70.2 | 654 | 76.1 | 673 | 82.0 | 690 | 88.0 | 707 | 94.1 | 723 | 100 |
| 76000 | 3033 | 574 | 50.8 | 595 | 57.3 | 615 | 63.5 | 634 | 69.8 | 653 | 76.1 | 670 | 82.4 | 688 | 88.6 | 706 | 94.8 | 722 | 101 | 738 | 108 |
| 80000 | 3193 | 593 | 55.6 | 614 | 62.4 | 633 | 69.2 | 652 | 75.7 | 670 | 82.3 | 687 | 89.0 | 704 | 95.6 | 721 | 102 | 738 | 109 | 754 | 115 |
| 84000 | 3353 | 613 | 60.9 | 633 | 67.8 | 652 | 75.0 | 670 | 82.0 | 688 | 88.9 | 705 | 95.8 | 721 | 103 | 738 | 110 | 754 | 117 | 770 | 124 |
| 88000 | 3512 | 633 | 66.6 | 652 | 73.7 | 671 | 81.1 | 689 | 88.6 | 706 | 95.9 | 723 | 103 | 739 | 110 | 755 | 118 | 770 | 125 | 786 | 132 |
| 92000 | 3672 | 654 | 72.8 | 671 | 80.0 | 690 | 87.6 | 707 | 95.4 | 724 | 103 | 741 | 111 | 757 | 118 | 772 | 126 | 787 | 134 | 802 | 141 |
| 96000 | 3832 | 674 | 79.4 | 691 | 86.8 | 709 | 94.6 | 726 | 103 | 743 | 111 | 759 | 119 | 775 | 127 | 790 | 135 | 805 | 143 | 819 | 151 |
| 100000 | 3992 | 695 | 86.6 | 712 | 94.2 | 728 | 102 | 745 | 110 | 762 | 119 | 777 | 127 | 793 | 136 | 808 | 144 | 823 | 152 | 837 | 160 |
| 104000 | 4151 | 717 | 94.2 | 733 | 102 | 748 | 110 | 764 | 118 | 780 | 127 | 796 | 136 | 811 | 145 | 826 | 154 | 841 | 162 | 855 | 170 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|------|------|------|------|------|-----|------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 58000 | 2315 | 681 | 79.9 | 700 | 85.8 | 718 | 91.9 | | | | | | | | | | | | | | |
| 62300 | 2487 | 693 | 85.6 | 711 | 91.7 | 729 | 98.0 | 746 | 104 | 763 | 111 | | | | | | | | | | |
| 66600 | 2658 | 705 | 91.5 | 723 | 98.0 | 741 | 105 | 758 | 111 | 775 | 118 | 807 | 131 | | | | | | | | |
| 70900 | 2830 | 719 | 98.2 | 735 | 105 | 753 | 111 | 770 | 118 | 787 | 125 | 819 | 139 | 849 | 154 | 879 | 169 | | | | |
| 75200 | 3001 | 735 | 106 | 751 | 112 | 766 | 119 | 782 | 126 | 799 | 133 | 831 | 148 | 861 | 162 | 890 | 178 | 918 | 193 | | |
| 79500 | 3173 | 752 | 114 | 767 | 121 | 783 | 128 | 797 | 134 | 812 | 141 | 843 | 156 | 873 | 172 | 902 | 187 | 930 | 203 | 957 | 219 |
| 83800 | 3345 | 769 | 123 | 784 | 130 | 799 | 137 | 814 | 144 | 828 | 151 | 856 | 165 | 885 | 181 | 914 | 197 | 942 | 214 | 969 | 231 |
| 88100 | 3516 | 786 | 132 | 801 | 140 | 816 | 147 | 831 | 154 | 845 | 161 | 872 | 176 | 898 | 191 | 926 | 208 | 954 | 225 | 980 | 242 |
| 92400 | 3688 | 804 | 142 | 819 | 150 | 833 | 157 | 848 | 165 | 862 | 172 | 889 | 188 | 915 | 203 | 940 | 219 | 966 | 236 | | |
| 96700 | 3860 | 822 | 152 | 836 | 160 | 851 | 168 | 865 | 176 | 879 | 184 | 905 | 200 | 931 | 216 | 956 | 232 | 980 | 249 | | |
| 101000 | 4031 | 841 | 163 | 855 | 171 | 869 | 180 | 882 | 188 | 896 | 196 | 922 | 213 | 948 | 229 | 973 | 246 | | | | |
| 105300 | 4203 | 861 | 174 | 874 | 183 | 888 | 191 | 901 | 200 | 914 | 209 | 940 | 226 | 965 | 243 | | | | | | |
| 109600 | 4375 | 880 | 186 | 893 | 195 | 907 | 204 | 920 | 213 | 932 | 222 | 957 | 240 | 982 | 258 | | | | | | |
| 113900 | 4546 | 900 | 198 | 913 | 207 | 926 | 216 | 939 | 226 | 951 | 235 | 976 | 254 | | | | | | | | |
| 118200 | 4718 | 919 | 210 | 932 | 220 | 945 | 230 | 958 | 240 | 970 | 249 | | | | | | | | | | |
| 122500 | 4890 | 939 | 223 | 952 | 234 | 965 | 244 | 978 | 254 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 164)$

Sound Power [dB Ref 10⁻¹² watts]

| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 200 | 100 | 83 | 76 | 74 | 70 | 62 | 54 | 49 | 46 | 71 |
| | 80 | 82 | 75 | 73 | 69 | 62 | 54 | 50 | 47 | 70 |
| | 60 | 79 | 73 | 72 | 69 | 62 | 54 | 50 | 47 | 69 |
| | 50 | 79 | 72 | 72 | 69 | 63 | 55 | 50 | 47 | 70 |
| | 40 | 79 | 72 | 72 | 69 | 63 | 54 | 50 | 47 | 70 |
| 300 | 100 | 96 | 86 | 83 | 79 | 73 | 65 | 60 | 56 | 81 |
| | 80 | 94 | 84 | 80 | 76 | 71 | 63 | 57 | 53 | 78 |
| | 60 | 92 | 81 | 79 | 76 | 72 | 65 | 60 | 54 | 78 |
| | 50 | 90 | 80 | 78 | 76 | 72 | 66 | 60 | 55 | 78 |
| | 40 | 90 | 79 | 77 | 76 | 72 | 65 | 61 | 56 | 77 |
| 400 | 100 | 106 | 93 | 88 | 87 | 82 | 74 | 68 | 65 | 88 |
| | 80 | 107 | 90 | 84 | 82 | 77 | 71 | 66 | 61 | 85 |
| | 60 | 106 | 88 | 82 | 81 | 78 | 73 | 69 | 65 | 85 |
| | 50 | 103 | 86 | 81 | 81 | 78 | 74 | 71 | 67 | 84 |
| | 40 | 105 | 90 | 83 | 80 | 78 | 74 | 71 | 67 | 85 |
| 500 | 100 | 105 | 98 | 93 | 93 | 91 | 81 | 75 | 71 | 95 |
| | 80 | 104 | 96 | 88 | 87 | 84 | 77 | 73 | 69 | 89 |
| | 60 | 102 | 93 | 85 | 85 | 82 | 79 | 76 | 73 | 88 |
| | 50 | 100 | 92 | 85 | 85 | 82 | 80 | 77 | 74 | 88 |
| | 40 | 100 | 91 | 84 | 85 | 82 | 81 | 78 | 75 | 88 |
| 700 | 100 | 112 | 112 | 101 | 99 | 99 | 93 | 86 | 80 | 103 |
| | 80 | 111 | 111 | 98 | 95 | 94 | 88 | 82 | 78 | 100 |
| | 60 | 109 | 108 | 94 | 92 | 91 | 88 | 85 | 82 | 97 |
| | 50 | 108 | 106 | 93 | 91 | 90 | 89 | 86 | 83 | 97 |
| | 40 | 108 | 106 | 93 | 91 | 90 | 89 | 87 | 84 | 97 |
| 987 | 100 | 117 | 123 | 111 | 106 | 107 | 105 | 96 | 91 | 113 |
| | 80 | 115 | 123 | 109 | 102 | 102 | 100 | 92 | 88 | 110 |
| | 60 | 113 | 121 | 106 | 99 | 99 | 97 | 94 | 91 | 108 |
| | 50 | 113 | 119 | 104 | 98 | 98 | 97 | 95 | 92 | 107 |
| | 40 | 113 | 119 | 104 | 98 | 98 | 97 | 96 | 93 | 107 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wA} |
| 200 | 100 | 89 | 85 | 77 | 71 | 63 | 55 | 51 | 48 | 74 |
| | 80 | 88 | 84 | 75 | 70 | 63 | 55 | 50 | 48 | 73 |
| | 60 | 88 | 84 | 75 | 71 | 65 | 56 | 51 | 49 | 74 |
| | 50 | 86 | 83 | 75 | 71 | 65 | 57 | 52 | 50 | 73 |
| | 40 | 86 | 83 | 75 | 71 | 65 | 57 | 52 | 50 | 73 |
| 300 | 100 | 97 | 88 | 83 | 81 | 74 | 65 | 60 | 53 | 82 |
| | 80 | 95 | 86 | 80 | 77 | 71 | 64 | 58 | 51 | 79 |
| | 60 | 93 | 84 | 78 | 76 | 71 | 65 | 60 | 55 | 77 |
| | 50 | 93 | 84 | 78 | 75 | 71 | 65 | 61 | 56 | 77 |
| | 40 | 92 | 84 | 77 | 75 | 70 | 65 | 61 | 57 | 77 |
| 400 | 100 | 109 | 95 | 91 | 89 | 85 | 77 | 71 | 67 | 91 |
| | 80 | 107 | 93 | 87 | 85 | 80 | 73 | 67 | 63 | 87 |
| | 60 | 105 | 92 | 85 | 82 | 78 | 73 | 69 | 67 | 86 |
| | 50 | 104 | 90 | 84 | 82 | 77 | 73 | 70 | 66 | 85 |
| | 40 | 103 | 90 | 83 | 81 | 77 | 73 | 70 | 67 | 84 |
| 500 | 100 | 109 | 100 | 96 | 96 | 93 | 84 | 78 | 73 | 97 |
| | 80 | 106 | 97 | 92 | 90 | 87 | 80 | 74 | 70 | 92 |
| | 60 | 104 | 95 | 90 | 87 | 83 | 79 | 76 | 73 | 90 |
| | 50 | 104 | 95 | 89 | 86 | 83 | 79 | 76 | 74 | 89 |
| | 40 | 104 | 94 | 88 | 86 | 82 | 79 | 76 | 74 | 89 |
| 700 | 100 | 114 | 111 | 104 | 102 | 101 | 96 | 89 | 82 | 106 |
| | 80 | 113 | 111 | 102 | 98 | 96 | 91 | 85 | 80 | 102 |
| | 60 | 109 | 108 | 99 | 95 | 92 | 89 | 85 | 83 | 99 |
| | 50 | 108 | 106 | 98 | 94 | 91 | 89 | 86 | 83 | 98 |
| | 40 | 107 | 105 | 97 | 93 | 90 | 88 | 86 | 83 | 97 |
| 987 | 100 | 122 | 122 | 114 | 110 | 109 | 107 | 100 | 93 | 115 |
| | 80 | 119 | 122 | 111 | 107 | 104 | 102 | 95 | 90 | 112 |
| | 60 | 116 | 118 | 109 | 104 | 101 | 99 | 94 | 92 | 108 |
| | 50 | 114 | 116 | 107 | 103 | 100 | 97 | 95 | 92 | 107 |
| | 40 | 114 | 116 | 106 | 102 | 98 | 97 | 95 | 92 | 106 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wA} and outlet L_{wo} , L_{wA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

73 AFSW

Wheel Diameter = 73 in.

Outlet Area = 30.64 ft.²

Tip Speed = 19.11 x RPM

Maximum BHP = (RPM/130)³

Minimum Starting HP = 40

Maximum RPM Class I = 543

Maximum RPM Class II = 708

Maximum RPM Class III = 892

Maximum Open Motor Frame Size

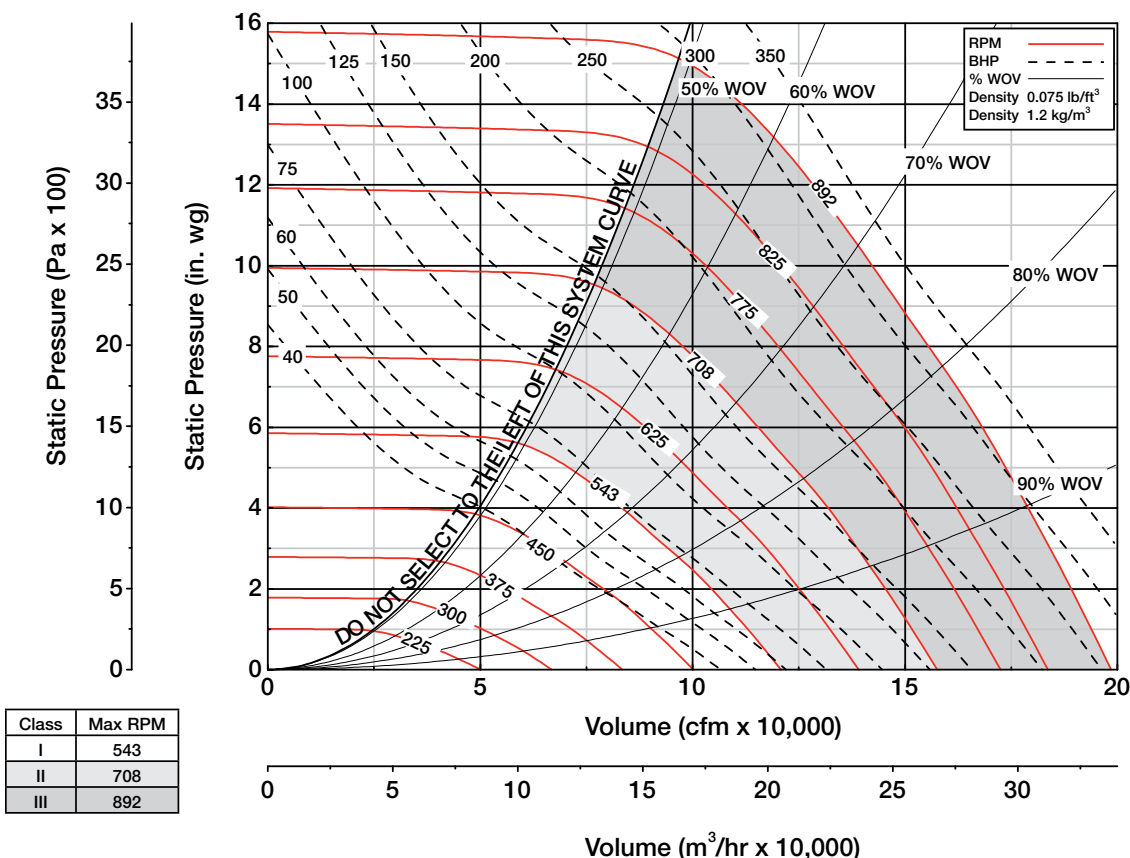
| Class | I | II | III |
|---------|------|------|------|
| Arr. 9 | 405T | 405T | 444T |
| Arr. 10 | 404T | 404T | NA |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 0.25 | | 0.50 | | 0.75 | | 1.00 | | 1.25 | | 1.50 | | 1.75 | | 2.00 | | 2.25 | | 2.50 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 27000 | 881 | 156 | 1.70 | 184 | 2.82 | 209 | 3.98 | 233 | 5.31 | | | | | | | | | | | | |
| 32300 | 1054 | 174 | 2.33 | 201 | 3.67 | 224 | 5.00 | 244 | 6.37 | 265 | 7.92 | 284 | 9.54 | | | | | | | | |
| 37600 | 1227 | 194 | 3.15 | 218 | 4.69 | 239 | 6.25 | 259 | 7.79 | 277 | 9.37 | 295 | 11.1 | 312 | 12.9 | 328 | 14.8 | 344 | 16.8 | | |
| 42900 | 1400 | 215 | 4.19 | 237 | 5.87 | 257 | 7.67 | 275 | 9.45 | 292 | 11.2 | 308 | 13.0 | 323 | 14.8 | 339 | 16.8 | 354 | 18.9 | 369 | 21.1 |
| 48200 | 1573 | 237 | 5.45 | 256 | 7.30 | 275 | 9.30 | 292 | 11.3 | 308 | 13.3 | 324 | 15.3 | 338 | 17.3 | 352 | 19.3 | 365 | 21.4 | 380 | 23.7 |
| 53500 | 1746 | 259 | 6.97 | 276 | 9.03 | 293 | 11.2 | 310 | 13.4 | 325 | 15.6 | 340 | 17.8 | 354 | 20.0 | 368 | 22.2 | 380 | 24.5 | 393 | 26.7 |
| 58800 | 1919 | 281 | 8.79 | 297 | 11.1 | 312 | 13.3 | 328 | 15.7 | 343 | 18.2 | 357 | 20.6 | 370 | 23.1 | 383 | 25.5 | 396 | 27.9 | 408 | 30.3 |
| 64100 | 2092 | 303 | 10.9 | 318 | 13.4 | 333 | 15.9 | 347 | 18.4 | 361 | 21.0 | 375 | 23.8 | 388 | 26.4 | 400 | 29.0 | 412 | 31.7 | 424 | 34.3 |
| 69400 | 2265 | 326 | 13.5 | 340 | 16.1 | 354 | 18.8 | 367 | 21.4 | 380 | 24.2 | 393 | 27.1 | 405 | 30.1 | 417 | 32.9 | 429 | 35.8 | 440 | 38.7 |
| 74700 | 2437 | 349 | 16.4 | 362 | 19.1 | 375 | 22.0 | 387 | 24.9 | 399 | 27.7 | 412 | 30.8 | 424 | 34.0 | 435 | 37.2 | 446 | 40.2 | 457 | 43.3 |
| 80000 | 2610 | 372 | 19.7 | 384 | 22.6 | 396 | 25.7 | 408 | 28.8 | 419 | 31.8 | 430 | 34.9 | 442 | 38.2 | 453 | 41.6 | 464 | 45.0 | 475 | 48.3 |
| 85300 | 2783 | 395 | 23.5 | 406 | 26.5 | 418 | 29.8 | 429 | 33.1 | 440 | 36.3 | 450 | 39.6 | 461 | 43.0 | 472 | 46.5 | 482 | 50.1 | 493 | 53.7 |
| 90600 | 2956 | 418 | 27.7 | 429 | 30.9 | 440 | 34.3 | 450 | 37.9 | 460 | 41.4 | 471 | 44.8 | 481 | 48.3 | 491 | 51.9 | 501 | 55.6 | 511 | 59.4 |
| 95900 | 3129 | 441 | 32.4 | 451 | 35.8 | 462 | 39.4 | 472 | 43.1 | 482 | 46.9 | 491 | 50.5 | 501 | 54.1 | 510 | 57.8 | 520 | 61.7 | 530 | 65.6 |
| 101200 | 3302 | 464 | 37.7 | 474 | 41.3 | 484 | 44.9 | 494 | 48.8 | 503 | 52.8 | 512 | 56.7 | 521 | 60.5 | 530 | 64.4 | 539 | 68.3 | 548 | 72.4 |
| 106500 | 3475 | 488 | 43.6 | 497 | 47.3 | 506 | 51.1 | 516 | 55.2 | 525 | 59.3 | 533 | 63.5 | 542 | 67.5 | 551 | 71.6 | 559 | 75.6 | 568 | 79.7 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 2.50 | | 3.0 | | 3.50 | | 4.00 | | 4.50 | | 5.00 | | 5.50 | | 6.00 | | 6.50 | | 7.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 53000 | 1729 | 391 | 26.4 | 416 | 31.2 | 441 | 36.4 | 464 | 41.7 | 487 | 47.3 | | | | | | | | | | |
| 57900 | 1889 | 405 | 29.7 | 428 | 34.6 | 451 | 39.8 | 474 | 45.4 | 496 | 51.2 | 516 | 57.1 | | | | | | | | |
| 62800 | 2049 | 420 | 33.3 | 442 | 38.5 | 463 | 43.8 | 484 | 49.4 | 506 | 55.4 | 526 | 61.6 | 546 | 68.0 | 564 | 74.4 | | | | |
| 67700 | 2209 | 434 | 37.3 | 457 | 42.8 | 477 | 48.4 | 497 | 54.1 | 516 | 59.9 | 536 | 66.4 | 556 | 73.0 | 574 | 79.8 | 592 | 86.6 | 609 | 93.6 |
| 72600 | 2369 | 450 | 41.4 | 471 | 47.4 | 492 | 53.4 | 511 | 59.4 | 530 | 65.5 | 547 | 71.7 | 566 | 78.4 | 584 | 85.5 | 602 | 92.6 | 619 | 99.8 |
| 77500 | 2529 | 466 | 45.9 | 487 | 52.3 | 506 | 58.7 | 525 | 65.0 | 544 | 71.5 | 561 | 78.0 | 578 | 84.6 | 594 | 91.4 | 612 | 98.9 | 629 | 106 |
| 82400 | 2689 | 483 | 50.8 | 503 | 57.5 | 522 | 64.4 | 540 | 71.2 | 558 | 77.9 | 575 | 84.7 | 592 | 91.6 | 607 | 98.6 | 623 | 106 | 639 | 113 |
| 87300 | 2849 | 500 | 55.8 | 519 | 63.1 | 537 | 70.3 | 555 | 77.6 | 572 | 84.8 | 589 | 91.9 | 606 | 99.1 | 621 | 106 | 637 | 114 | 651 | 121 |
| 92200 | 3009 | 517 | 61.3 | 536 | 69.1 | 554 | 76.7 | 571 | 84.3 | 587 | 92.0 | 604 | 99.6 | 620 | 107 | 636 | 115 | 651 | 122 | 665 | 130 |
| 97100 | 3169 | 534 | 67.1 | 552 | 75.3 | 570 | 83.6 | 587 | 91.5 | 603 | 99.5 | 619 | 108 | 635 | 116 | 650 | 124 | 665 | 132 | 679 | 140 |
| 102000 | 3328 | 551 | 73.4 | 569 | 81.9 | 587 | 90.6 | 603 | 99.1 | 619 | 108 | 635 | 116 | 650 | 124 | 665 | 133 | 679 | 141 | 694 | 150 |
| 106900 | 3488 | 569 | 80.3 | 587 | 89.0 | 604 | 98.0 | 620 | 107 | 636 | 116 | 651 | 125 | 666 | 134 | 680 | 143 | 694 | 151 | 708 | 160 |
| 111800 | 3648 | 588 | 87.8 | 604 | 96.6 | 621 | 106 | 637 | 115 | 652 | 125 | 667 | 134 | 682 | 143 | 696 | 153 | 709 | 162 | 723 | 171 |
| 116700 | 3808 | 607 | 95.9 | 622 | 105 | 638 | 114 | 654 | 124 | 669 | 134 | 684 | 144 | 698 | 154 | 712 | 163 | 725 | 173 | 738 | 182 |
| 121600 | 3968 | 626 | 105 | 641 | 114 | 655 | 123 | 671 | 133 | 686 | 144 | 700 | 154 | 714 | 164 | 728 | 174 | 741 | 184 | 754 | 194 |
| 126500 | 4128 | 645 | 114 | 660 | 123 | 674 | 133 | 688 | 143 | 703 | 154 | 717 | 165 | 731 | 175 | 744 | 186 | 758 | 196 | 770 | 207 |

| CFM | OV | STATIC PRESSURE (in. wg) | | | | | | | | | | | | | | | | | | | |
|--------|------|--------------------------|------|------|-----|------|-----|------|-----|------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|
| | | 7.00 | | 7.50 | | 8.00 | | 8.50 | | 9.00 | | 10.00 | | 11.00 | | 12.00 | | 13.00 | | 14.00 | |
| | | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP | RPM | BHP |
| 70500 | 2300 | 615 | 97.1 | 632 | 104 | 649 | 112 | | | | | | | | | | | | | | |
| 75800 | 2473 | 626 | 104 | 642 | 112 | 658 | 119 | 674 | 127 | 689 | 135 | | | | | | | | | | |
| 81100 | 2646 | 637 | 111 | 653 | 119 | 669 | 127 | 685 | 135 | 700 | 144 | 729 | 160 | | | | | | | | |
| 86400 | 2819 | 649 | 120 | 664 | 127 | 680 | 136 | 695 | 144 | 711 | 153 | 739 | 170 | 767 | 187 | 795 | 206 | | | | |
| 91700 | 2992 | 664 | 129 | 678 | 137 | 692 | 145 | 706 | 153 | 721 | 162 | 750 | 180 | 778 | 198 | 804 | 217 | 830 | 236 | | |
| 97000 | 3165 | 679 | 139 | 693 | 147 | 707 | 156 | 720 | 164 | 733 | 172 | 761 | 190 | 789 | 209 | 815 | 228 | 840 | 248 | 865 | 268 |
| 102300 | 3338 | 695 | 150 | 708 | 159 | 722 | 167 | 735 | 176 | 748 | 184 | 773 | 202 | 800 | 221 | 826 | 241 | 851 | 261 | 875 | 281 |
| 107600 | 3511 | 710 | 162 | 724 | 170 | 737 | 179 | 750 | 188 | 763 | 197 | 788 | 215 | 811 | 234 | 837 | 254 | 862 | 274 | 886 | 296 |
| 112900 | 3684 | 726 | 174 | 740 | 183 | 753 | 192 | 766 | 201 | 779 | 211 | 803 | 229 | 826 | 248 | 849 | 268 | 873 | 288 | | |
| 118200 | 3857 | 743 | 186 | 756 | 196 | 769 | 206 | 782 | 215 | 794 | 225 | 818 | 244 | 842 | 264 | 864 | 284 | 886 | 304 | | |
| 123500 | 4030 | 760 | 199 | 773 | 209 | 785 | 220 | 797 | 230 | 810 | 240 | 834 | 260 | 857 | 280 | 879 | 301 | | | | |
| 128800 | 4203 | 778 | 213 | 790 | 223 | 802 | 234 | 814 | 245 | 826 | 256 | 850 | 277 | 872 | 298 | | | | | | |
| 134100 | 4376 | 796 | 227 | 808 | 238 | 820 | 249 | 832 | 260 | 843 | 271 | 865 | 294 | 888 | 316 | | | | | | |
| 139400 | 4549 | 813 | 242 | 825 | 254 | 837 | 265 | 849 | 276 | 860 | 288 | 882 | 311 | | | | | | | | |
| 144700 | 4722 | 832 | 257 | 843 | 270 | 855 | 282 | 866 | 294 | 878 | 305 | | | | | | | | | | |
| 150000 | 4895 | 850 | 273 | 861 | 286 | 873 | 299 | 884 | 312 | | | | | | | | | | | | |

Performance certified is for model AFSW Arrangement 1, Installation Type B: free inlet, ducted outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (Bhp) does not include transmission losses.



$$\% \text{ WOV} = (\text{CFM} \times 100) / (\text{RPM} \times 223)$$

Sound Power [dB Ref 10⁻¹² watts]

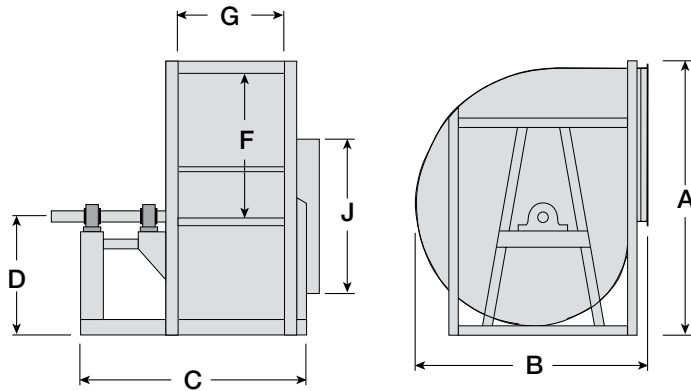
| Inlet Sound Power, L_{wi} | | | | | | | | | | |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{wiA} |
| 180 | 100 | 82 | 77 | 74 | 70 | 61 | 54 | 50 | 46 | 71 |
| | 80 | 81 | 75 | 73 | 69 | 61 | 54 | 50 | 48 | 70 |
| | 60 | 78 | 74 | 72 | 69 | 61 | 54 | 50 | 47 | 69 |
| | 50 | 78 | 73 | 72 | 69 | 62 | 55 | 50 | 47 | 70 |
| | 40 | 78 | 73 | 72 | 69 | 62 | 54 | 50 | 47 | 70 |
| 250 | 100 | 91 | 85 | 81 | 78 | 70 | 62 | 58 | 54 | 79 |
| | 80 | 88 | 82 | 78 | 74 | 68 | 60 | 55 | 51 | 76 |
| | 60 | 86 | 80 | 77 | 75 | 69 | 63 | 57 | 52 | 76 |
| | 50 | 85 | 78 | 77 | 75 | 69 | 63 | 58 | 53 | 76 |
| | 40 | 85 | 78 | 76 | 75 | 69 | 63 | 58 | 53 | 75 |
| 350 | 100 | 102 | 92 | 88 | 87 | 81 | 72 | 67 | 64 | 87 |
| | 80 | 102 | 89 | 83 | 82 | 76 | 70 | 65 | 61 | 84 |
| | 60 | 101 | 86 | 81 | 81 | 77 | 73 | 68 | 64 | 83 |
| | 50 | 98 | 85 | 81 | 81 | 77 | 74 | 70 | 66 | 83 |
| | 40 | 100 | 89 | 82 | 81 | 77 | 73 | 70 | 67 | 84 |
| 500 | 100 | 108 | 101 | 96 | 96 | 94 | 84 | 78 | 74 | 98 |
| | 80 | 107 | 99 | 91 | 90 | 87 | 80 | 76 | 73 | 93 |
| | 60 | 105 | 96 | 88 | 88 | 85 | 82 | 80 | 76 | 91 |
| | 50 | 104 | 95 | 88 | 88 | 85 | 83 | 81 | 77 | 91 |
| | 40 | 103 | 95 | 87 | 88 | 85 | 84 | 81 | 78 | 91 |
| 650 | 100 | 114 | 111 | 101 | 101 | 101 | 94 | 87 | 81 | 104 |
| | 80 | 114 | 110 | 98 | 96 | 95 | 89 | 83 | 79 | 100 |
| | 60 | 112 | 107 | 95 | 93 | 92 | 90 | 87 | 83 | 98 |
| | 50 | 110 | 105 | 93 | 93 | 92 | 90 | 88 | 85 | 98 |
| | 40 | 111 | 105 | 93 | 92 | 91 | 91 | 88 | 85 | 98 |
| 892 | 100 | 119 | 125 | 111 | 107 | 108 | 105 | 96 | 91 | 114 |
| | 80 | 117 | 125 | 109 | 103 | 102 | 99 | 92 | 88 | 111 |
| | 60 | 115 | 122 | 106 | 100 | 99 | 98 | 95 | 92 | 109 |
| | 50 | 115 | 121 | 104 | 99 | 99 | 98 | 96 | 93 | 108 |
| | 40 | 115 | 121 | 104 | 99 | 99 | 98 | 97 | 94 | 108 |

| Outlet Sound Power, L_{wo} | | | | | | | | | | |
|------------------------------|------|-----|-----|-----|-----|-----|-----|-----|----|-----------|
| RPM | %WOV | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | L_{woA} |
| 180 | 100 | 90 | 84 | 77 | 71 | 63 | 55 | 51 | 49 | 74 |
| | 80 | 89 | 83 | 75 | 70 | 63 | 54 | 50 | 48 | 73 |
| | 60 | 89 | 83 | 75 | 71 | 64 | 56 | 52 | 49 | 74 |
| | 50 | 87 | 82 | 75 | 72 | 65 | 56 | 52 | 50 | 73 |
| | 40 | 87 | 82 | 75 | 72 | 64 | 57 | 53 | 50 | 73 |
| 250 | 100 | 93 | 85 | 82 | 79 | 70 | 63 | 57 | 51 | 79 |
| | 80 | 91 | 83 | 79 | 75 | 68 | 62 | 55 | 49 | 77 |
| | 60 | 89 | 81 | 77 | 74 | 68 | 63 | 58 | 52 | 75 |
| | 50 | 89 | 81 | 76 | 74 | 68 | 63 | 59 | 53 | 75 |
| | 40 | 89 | 81 | 76 | 74 | 67 | 63 | 59 | 55 | 75 |
| 350 | 100 | 105 | 94 | 90 | 90 | 83 | 75 | 70 | 66 | 90 |
| | 80 | 103 | 92 | 86 | 85 | 79 | 72 | 67 | 62 | 86 |
| | 60 | 102 | 90 | 84 | 82 | 77 | 72 | 69 | 66 | 84 |
| | 50 | 101 | 89 | 83 | 81 | 76 | 72 | 69 | 66 | 84 |
| | 40 | 100 | 88 | 83 | 81 | 76 | 72 | 69 | 66 | 83 |
| 500 | 100 | 112 | 103 | 99 | 99 | 96 | 87 | 81 | 76 | 100 |
| | 80 | 109 | 100 | 95 | 93 | 90 | 83 | 78 | 74 | 95 |
| | 60 | 107 | 98 | 93 | 90 | 87 | 82 | 79 | 76 | 93 |
| | 50 | 107 | 98 | 92 | 89 | 86 | 82 | 79 | 77 | 92 |
| | 40 | 107 | 97 | 91 | 89 | 85 | 82 | 79 | 77 | 92 |
| 650 | 100 | 115 | 112 | 105 | 104 | 102 | 97 | 90 | 83 | 107 |
| | 80 | 115 | 110 | 103 | 99 | 98 | 92 | 86 | 81 | 103 |
| | 60 | 111 | 107 | 100 | 96 | 94 | 90 | 87 | 84 | 100 |
| | 50 | 109 | 106 | 99 | 95 | 92 | 90 | 87 | 84 | 99 |
| | 40 | 109 | 105 | 98 | 94 | 91 | 90 | 87 | 84 | 98 |
| 892 | 100 | 122 | 123 | 114 | 111 | 110 | 107 | 100 | 93 | 115 |
| | 80 | 120 | 123 | 111 | 108 | 105 | 102 | 96 | 91 | 112 |
| | 60 | 117 | 120 | 109 | 105 | 101 | 99 | 95 | 92 | 109 |
| | 50 | 115 | 117 | 108 | 103 | 100 | 98 | 95 | 92 | 108 |
| | 40 | 115 | 117 | 107 | 102 | 99 | 97 | 95 | 93 | 107 |

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} , L_{wiA} and outlet L_{wo} , L_{woA} sound power levels for Installation Type B: free inlet, ducted outlet. Outlet ratings include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

Dimensional Data

Sizes 7-30 Single-Width Arrangement 10 Rotatable Housing Class I & II



Clockwise Top Horizontal (TH) discharge shown above

Dimensional data provided on pages 88-91 are for general information only and should not be used for exact installation dimensions.

Columns A, B and C have been rounded up to the nearest one inch. All other columns are rounded to the nearest 1/8 inch.

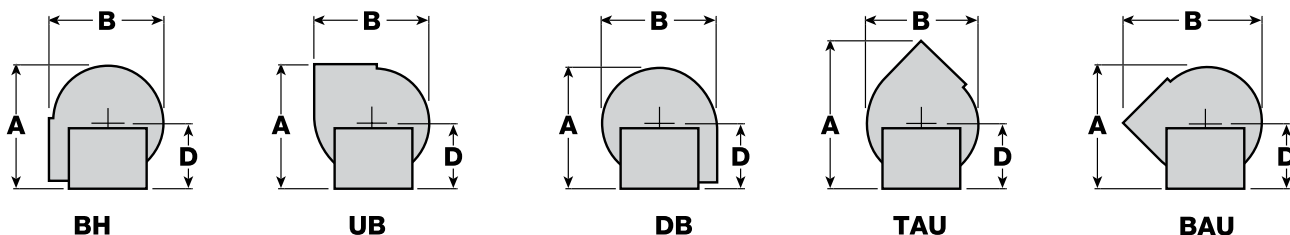
For detailed dimensional data refer to the appropriate CAPS submittal drawing.

All dimensional drawings represent clockwise rotation. Counterclockwise would be a mirror image and would not affect dimensions. Rotation is determined from the drive side of the unit.

| Size | Class | A | | | | | | B | | | | C | D | F | G | J |
|------|-------|----|----|----|----|-----|-----|----|----|-----|-----|----|-----|-----|-----|-----|
| | | TH | BH | UB | DB | TAU | BAU | TH | UB | TAU | BAU | | | | | |
| | | | | | | | | BH | DB | | | | | | | |
| 7-12 | I | 28 | 25 | 27 | 27 | 32 | 25 | 22 | 21 | 20 | 26 | 29 | 16 | 11¼ | 8⅜ | 11⅞ |
| | II | 31 | 28 | 30 | 29 | 35 | 27 | 22 | 21 | 20 | 26 | 31 | 18½ | 11¼ | 8⅜ | 11⅞ |
| 12 | I | 32 | 29 | 31 | 31 | 36 | 28 | 24 | 24 | 22 | 29 | 33 | 18½ | 13⅞ | 9¾ | 13 |
| | II | 35 | 31 | 33 | 33 | 39 | 31 | 24 | 24 | 22 | 29 | 36 | 21 | 13⅞ | 9¾ | 13 |
| 13 | I | 34 | 30 | 31 | 32 | 38 | 29 | 26 | 26 | 24 | 31 | 34 | 18½ | 14⅜ | 10¾ | 14 |
| | II | 36 | 32 | 34 | 34 | 40 | 31 | 26 | 26 | 24 | 31 | 37 | 21 | 14⅜ | 10¾ | 14 |
| 15 | I | 35 | 31 | 33 | 33 | 40 | 30 | 28 | 29 | 27 | 34 | 35 | 18½ | 16 | 12 | 15⅞ |
| | II | 38 | 34 | 35 | 36 | 42 | 33 | 28 | 29 | 27 | 34 | 38 | 21 | 16 | 12 | 15⅞ |
| 16 | I | 39 | 35 | 36 | 37 | 44 | 34 | 31 | 32 | 29 | 37 | 39 | 21 | 17⅞ | 13⅞ | 17½ |
| | II | 43 | 38 | 39 | 41 | 47 | 37 | 31 | 32 | 29 | 37 | 43 | 24½ | 17⅞ | 13⅞ | 17½ |
| 18 | I, II | 45 | 40 | 41 | 42 | 50 | 38 | 33 | 35 | 32 | 41 | 44 | 24½ | 19⅞ | 14⅜ | 19¼ |
| 20 | I, II | 46 | 41 | 42 | 44 | 52 | 40 | 36 | 38 | 35 | 45 | 46 | 24½ | 21¼ | 16 | 21⅞ |
| 22 | I, II | 54 | 48 | 48 | 51 | 59 | 46 | 39 | 42 | 39 | 49 | 52 | 29½ | 23⅞ | 17¾ | 23 |
| 24 | I, II | 56 | 50 | 50 | 53 | 62 | 48 | 43 | 46 | 43 | 54 | 54 | 29½ | 26 | 19½ | 25⅞ |
| 27 | I, II | 65 | 58 | 58 | 61 | 71 | 56 | 47 | 51 | 47 | 59 | 59 | 36 | 28⅞ | 21½ | 28½ |
| 30 | I, II | 68 | 60 | 60 | 64 | 75 | 58 | 51 | 56 | 52 | 64 | 62 | 36 | 31⅞ | 23⅞ | 31¾ |

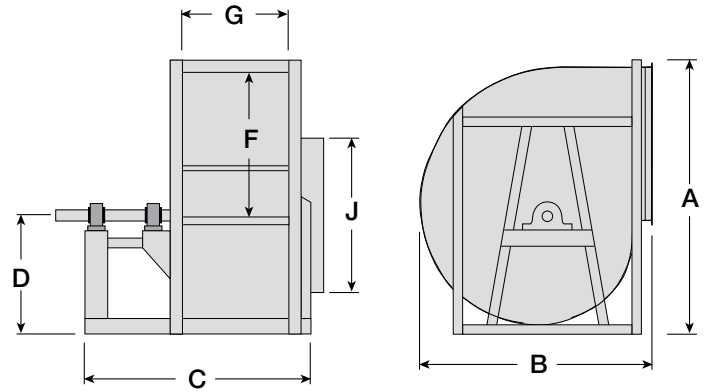
For complete dimensional information, refer to the applicable CAPS submittal drawing.

Angular Discharge Dimensions



Dimensional Data

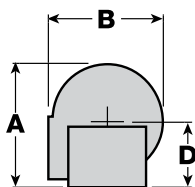
Sizes 7-30 Single-Width Arrangement 1 & 9 Class I, II, III & IV



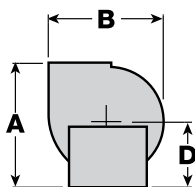
Clockwise Top Horizontal (TH) discharge shown above

| Size | Class | A | | | | | | B | | | | C | D | | | | F | G | J |
|------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|
| | | TH | BH | UB | DB | TAU | BAU | TH | UB | TAU | BAU | | TH | BH | UB | DB | | | |
| | | | | | | | | | | | | | | BAU | TAU | | | | |
| | | | | | | | | | | | | | | | | | | | |
| 7-10 | I, II III | 31 NA | 28 NA | 30 NA | 29 NA | 35 NA | 27 NA | 22 NA | 21 NA | 20 NA | 26 NA | 31 NA | 18½ NA | 18½ NA | 18½ NA | 18½ NA | 11¼ NA | 8⅝ NA | 11⅝ NA |
| 12 | I, II III | 32 | 29 | 31 | 31 | 36 | 28 | 24 | 24 | 22 | 29 | 33 | 18½ | 18½ | 18½ | 18½ | 13⅞ | 9¾ | 13 |
| | | 25 | 25 | 25 | 24 | 31 | 26 | 24 | 25 | 23 | 30 | 29 | 10¼ | 15¼ | 12¾ | 12 | 13⅞ | 9¾ | 13 |
| 13 | I, II III | 34 | 30 | 31 | 32 | 38 | 29 | 26 | 26 | 24 | 31 | 34 | 18½ | 18½ | 18½ | 18½ | 14⅞ | 10¾ | 14 |
| | | 28 | 28 | 27 | 26 | 34 | 28 | 26 | 27 | 25 | 32 | 31 | 11⅜ | 16⅝ | 13⅞ | 12⅞ | 14⅞ | 10¾ | 14 |
| 15 | I, II III | 35 | 31 | 33 | 33 | 40 | 30 | 28 | 29 | 27 | 34 | 35 | 18½ | 18½ | 18½ | 18½ | 16 | 12 | 15⅞ |
| | | 30 | 30 | 29 | 28 | 37 | 30 | 28 | 30 | 27 | 35 | 33 | 12¼ | 18 | 15¼ | 13¾ | 16 | 12 | 15⅞ |
| 16 | I, II III | 39 | 35 | 36 | 37 | 44 | 34 | 31 | 32 | 29 | 37 | 39 | 21 | 21 | 21 | 21 | 17⅝ | 13⅞ | 17½ |
| | | 33 | 33 | 32 | 30 | 41 | 33 | 30 | 32 | 30 | 38 | 36 | 13⅝ | 19⅝ | 16⅞ | 14¾ | 17⅞ | 13⅞ | 17½ |
| 18 | I, II III IV | 45 | 40 | 41 | 42 | 50 | 38 | 33 | 35 | 32 | 41 | 44 | 24½ | 24½ | 24½ | 24½ | 19⅞ | 14⅝ | 19¼ |
| | | 37 | 36 | 34 | 33 | 45 | 35 | 33 | 36 | 32 | 42 | 40 | 14⅞ | 21⅜ | 18⅞ | 15⅞ | 19⅞ | 14⅝ | 19¼ |
| | | 37 | 39 | 34 | 33 | 43 | 37 | 33 | 36 | 32 | 42 | 42 | 15½ | 24 | 18 | 15⅞ | 19⅞ | 14⅝ | 19¼ |
| 20 | I, II III | 46 | 41 | 42 | 44 | 52 | 40 | 36 | 38 | 35 | 45 | 46 | 24½ | 24½ | 24½ | 24½ | 21¼ | 16 | 21⅞ |
| | | 40 | 40 | 37 | 36 | 48 | 39 | 36 | 39 | 35 | 46 | 43 | 16½ | 23½ | 19¾ | 17 | 21¼ | 16 | 21⅞ |
| 22 | I, II III IV | 54 | 48 | 48 | 51 | 59 | 46 | 39 | 42 | 39 | 49 | 52 | 29½ | 29½ | 29½ | 29½ | 23⅞ | 17¾ | 23 |
| | | 44 | 44 | 41 | 39 | 53 | 42 | 39 | 43 | 39 | 50 | 48 | 18¼ | 25⅞ | 21¼ | 18⅞ | 23⅞ | 17¾ | 23 |
| | | 44 | 46 | 40 | 39 | 52 | 44 | 39 | 43 | 38 | 50 | 50 | 18½ | 28 | 21½ | 18⅞ | 23⅞ | 17¾ | 23 |
| 24 | I, II III IV | 56 | 50 | 50 | 53 | 62 | 48 | 43 | 46 | 43 | 54 | 54 | 29½ | 29½ | 29½ | 29½ | 26 | 19½ | 25⅞ |
| | | 49 | 48 | 44 | 43 | 58 | 47 | 43 | 47 | 43 | 55 | 53 | 20¼ | 28½ | 23⅞ | 19⅞ | 26 | 19½ | 25⅞ |
| | | 48 | 50 | 44 | 43 | 57 | 48 | 43 | 47 | 42 | 55 | 53 | 20 | 30 | 24 | 19⅞ | 26 | 19½ | 25⅞ |
| 27 | I, II III IV | 65 | 58 | 58 | 61 | 71 | 56 | 47 | 51 | 47 | 59 | 59 | 36 | 36 | 36 | 36 | 28⅞ | 21½ | 28½ |
| | | 53 | 53 | 48 | 47 | 63 | 51 | 47 | 52 | 47 | 60 | 56 | 22¼ | 31⅞ | 26 | 21⅜ | 28⅞ | 21½ | 28½ |
| | | 53 | 54 | 48 | 47 | 62 | 53 | 47 | 52 | 46 | 60 | 57 | 22 | 33 | 26 | 21⅜ | 28⅞ | 21½ | 28½ |
| 30 | I, II III IV | 68 | 60 | 60 | 64 | 75 | 58 | 51 | 56 | 52 | 64 | 61 | 36 | 36 | 36 | 36 | 31⅞ | 23⅞ | 31¼ |
| | | 59 | 58 | 53 | 51 | 69 | 57 | 51 | 57 | 52 | 66 | 61 | 24⅞ | 34½ | 28⅞ | 23⅞ | 31⅞ | 23⅞ | 31¼ |
| | | 58 | 60 | 53 | 51 | 68 | 58 | 51 | 57 | 51 | 66 | 63 | 24½ | 36 | 29 | 23⅞ | 31⅞ | 23⅞ | 31¼ |

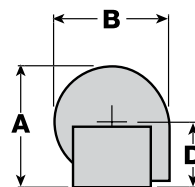
For complete dimensional information, refer to the applicable CAPS submittal drawing.



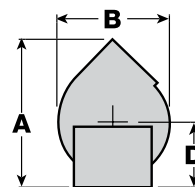
BH



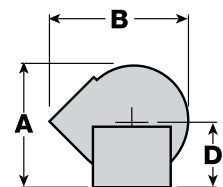
UB



DB



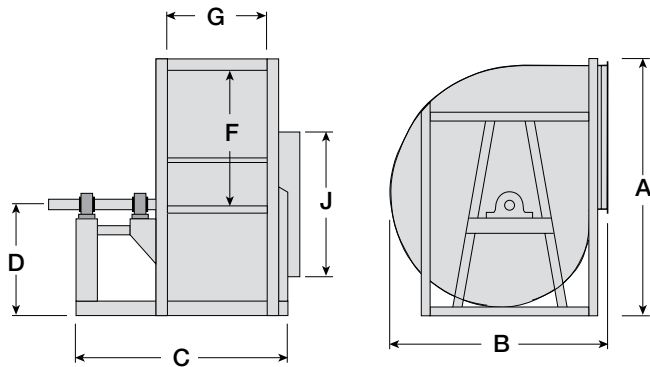
TAU



BAU

Dimensional Data

Sizes 33-73 Single-Width Arrangement 1, 9 & 10 Class I, II, III & IV



Clockwise Top Horizontal (TH) discharge shown above

Dimensional data provided on pages 88-91 are for general information only and should not be used for exact installation dimensions.

Columns A, B and C have been rounded up to the nearest one inch. All other columns are rounded to the nearest 1/8 inch.

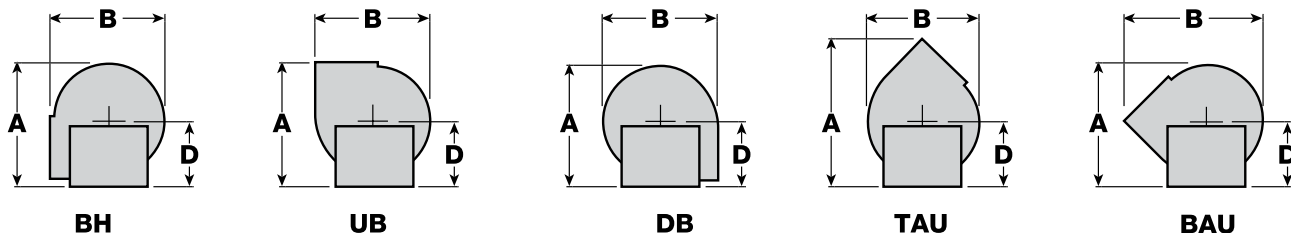
For detailed dimensional data refer to the appropriate CAPS submittal drawing.

All dimensional drawings represent clockwise rotation. Counterclockwise would be a mirror image and would not affect dimensions. Rotation is determined from the drive side of the unit.

| Size | Class | A | | | | | | B | | | | C | D | | | | F | G | J |
|------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | | TH | BH | UB | DB | TAU | BAU | TH | UB | TAU | BAU | | TH | BH | UB | DB | | | |
| | | | | | | | | BH | DB | | | | | BAU | TAU | | | | |
| 33 | I, II | 66 | 64 | 59 | 56 | 77 | 62 | 56 | 63 | 57 | 72 | 59 | 28 ⁵ / ₈ | 37 ⁵ / ₈ | 33 ³ / ₈ | 25 | 35 | 26 ¹ / ₄ | 34 ⁷ / ₈ |
| | III* | 66 | 64 | 59 | 56 | 77 | 62 | 56 | 63 | 57 | 72 | 65 | 28 ⁵ / ₈ | 37 ⁵ / ₈ | 33 ³ / ₈ | 25 ¹ / ₄ | 35 | 26 ¹ / ₄ | 34 ⁷ / ₈ |
| | IV** | 65 | 66 | 58 | 56 | 75 | 64 | 56 | 63 | 56 | 72 | 70 | 27 ¹ / ₂ | 40 | 32 | 25 ¹ / ₄ | 35 | 26 ¹ / ₄ | 34 ⁷ / ₈ |
| 36 | I, II | 72 | 71 | 64 | 61 | 85 | 68 | 61 | 70 | 63 | 79 | 63 | 31 ³ / ₈ | 41 ¹ / ₄ | 36 ³ / ₈ | 27 ¹ / ₄ | 38 ³ / ₄ | 29 | 38 ¹ / ₂ |
| | III* | 72 | 70 | 64 | 61 | 85 | 68 | 61 | 69 | 63 | 79 | 69 | 31 ³ / ₈ | 41 ¹ / ₄ | 36 ³ / ₈ | 27 ¹ / ₂ | 38 ³ / ₄ | 29 | 38 ¹ / ₂ |
| | IV** | 71 | 73 | 63 | 61 | 82 | 70 | 61 | 69 | 62 | 79 | 75 | 30 ¹ / ₂ | 44 | 35 ¹ / ₂ | 27 ¹ / ₂ | 38 ³ / ₄ | 29 | 38 ¹ / ₂ |
| 40 | I, II | 79 | 77 | 70 | 67 | 92 | 75 | 67 | 76 | 69 | 87 | 69 | 34 ¹ / ₄ | 45 ¹ / ₄ | 39 ³ / ₄ | 29 ⁵ / ₈ | 42 ⁵ / ₈ | 31 ⁷ / ₈ | 42 |
| | III* | 79 | 77 | 70 | 67 | 92 | 75 | 67 | 76 | 69 | 87 | 76 | 34 ¹ / ₄ | 45 ¹ / ₄ | 39 ³ / ₄ | 29 ⁵ / ₈ | 42 ⁵ / ₈ | 31 ⁷ / ₈ | 42 |
| | IV** | 78 | 80 | 69 | 67 | 90 | 77 | 67 | 76 | 69 | 87 | 80 | 33 ¹ / ₂ | 48 | 39 | 29 ⁷ / ₈ | 42 ⁵ / ₈ | 31 ⁷ / ₈ | 42 |
| 44 | I, II | 87 | 85 | 76 | 74 | 101 | 82 | 74 | 84 | 76 | 96 | 76 | 37 ¹ / ₂ | 49 ⁵ / ₈ | 43 ³ / ₈ | 32 ⁵ / ₈ | 47 ¹ / ₈ | 35 ¹ / ₄ | 46 ¹ / ₂ |
| | III* | 87 | 85 | 77 | 74 | 102 | 82 | 74 | 84 | 76 | 96 | 83 | 37 ¹ / ₂ | 49 ⁵ / ₈ | 43 ³ / ₈ | 32 ⁵ / ₈ | 47 ¹ / ₈ | 35 ¹ / ₄ | 46 ¹ / ₂ |
| | IV** | 86 | 89 | 76 | 74 | 99 | 86 | 74 | 84 | 76 | 96 | 88 | 36 ¹ / ₂ | 53 ¹ / ₂ | 42 ¹ / ₂ | 32 ⁵ / ₈ | 47 ¹ / ₈ | 35 ¹ / ₄ | 46 ¹ / ₂ |
| 49 | I, II | 95 | 93 | 83 | 81 | 111 | 90 | 81 | 92 | 84 | 105 | 81 | 41 | 54 ³ / ₈ | 47 ⁵ / ₈ | 35 ¹ / ₄ | 51 ³ / ₄ | 38 ³ / ₄ | 51 |
| | III* | 95 | 93 | 83 | 81 | 111 | 90 | 81 | 92 | 84 | 105 | 89 | 41 | 54 ³ / ₈ | 47 ⁵ / ₈ | 35 ³ / ₈ | 51 ³ / ₄ | 38 ³ / ₄ | 51 |
| | IV** | 94 | 97 | 83 | 81 | 109 | 93 | 81 | 92 | 83 | 105 | 95 | 40 | 58 | 47 | 35 ³ / ₈ | 51 ³ / ₄ | 38 ³ / ₄ | 51 |
| 54 | I, II | 105 | 102 | 91 | 88 | 122 | 99 | 88 | 102 | 92 | 115 | 88 | 45 | 59 ⁷ / ₈ | 52 ¹ / ₂ | 38 ³ / ₄ | 57 ⁷ / ₈ | 42 ⁷ / ₈ | 56 ¹ / ₂ |
| | III* | 105 | 102 | 92 | 89 | 122 | 99 | 89 | 102 | 92 | 115 | 96 | 45 | 59 ⁷ / ₈ | 52 ¹ / ₂ | 38 ³ / ₄ | 57 ⁷ / ₈ | 42 ⁷ / ₈ | 56 ¹ / ₂ |
| | IV** | 104 | 106 | 91 | 89 | 120 | 102 | 89 | 102 | 92 | 116 | 101 | 44 | 63 ¹ / ₂ | 52 | 38 ³ / ₄ | 57 ⁷ / ₈ | 42 ⁷ / ₈ | 56 ¹ / ₂ |
| 60 | I, II | 115 | 113 | 100 | 97 | 134 | 109 | 97 | 112 | 102 | 127 | 95 | 49 ¹ / ₂ | 65 ⁷ / ₈ | 57 ⁵ / ₈ | 42 ¹ / ₄ | 63 ¹ / ₂ | 47 ¹ / ₂ | 62 ¹ / ₂ |
| | III* | 115 | 113 | 100 | 98 | 134 | 109 | 98 | 113 | 102 | 127 | 102 | 49 ¹ / ₂ | 65 ⁷ / ₈ | 57 ⁵ / ₈ | 42 ³ / ₈ | 63 ¹ / ₂ | 47 ¹ / ₂ | 62 ¹ / ₂ |
| | IV** | 114 | 119 | 100 | 98 | 132 | 115 | 98 | 112 | 102 | 127 | 111 | 48 ¹ / ₂ | 72 | 57 | 42 ³ / ₈ | 63 ¹ / ₂ | 47 ¹ / ₂ | 62 ¹ / ₂ |
| 66 | I, II | 127 | 124 | 110 | 107 | 147 | 119 | 107 | 124 | 112 | 140 | 105 | 54 ¹ / ₈ | 72 ¹ / ₈ | 63 ³ / ₈ | 46 | 69 ³ / ₄ | 52 ¹ / ₈ | 69 |
| | III* | 127 | 124 | 110 | 107 | 147 | 119 | 107 | 124 | 112 | 140 | 110 | 54 ¹ / ₈ | 72 ¹ / ₈ | 63 ³ / ₈ | 46 ¹ / ₄ | 69 ³ / ₄ | 52 ¹ / ₈ | 69 |
| | IV** | 126 | 130 | 109 | 107 | 144 | 125 | 107 | 124 | 112 | 140 | 117 | 53 | 78 | 62 | 46 ¹ / ₄ | 69 ³ / ₄ | 52 ¹ / ₈ | 69 |
| 73 | I, II | 139 | 136 | 120 | 117 | 162 | 131 | 117 | 136 | 123 | 154 | 114 | 59 ⁵ / ₈ | 79 ¹ / ₂ | 69 ¹ / ₂ | 50 ¹ / ₂ | 77 ¹ / ₄ | 57 ⁵ / ₈ | 76 |
| | III* | 140 | 137 | 121 | 118 | 162 | 131 | 118 | 137 | 123 | 154 | 117 | 59 ⁵ / ₈ | 79 ¹ / ₂ | 69 ¹ / ₂ | 50 ³ / ₄ | 77 ¹ / ₄ | 57 ⁵ / ₈ | 76 |
| | IV** | 139 | 143 | 120 | 118 | 159 | 138 | 118 | 137 | 124 | 154 | 123 | 59 | 85 ¹ / ₂ | 69 | 50 ³ / ₄ | 77 ¹ / ₄ | 57 ⁵ / ₈ | 76 |

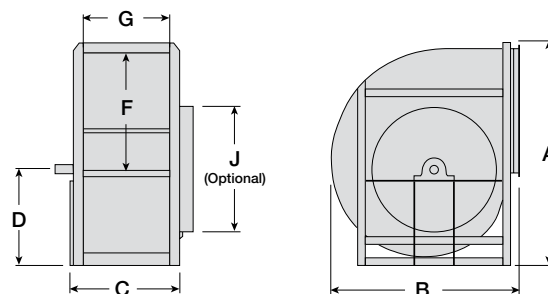
* Class III available in arrangement 1 and 9 ONLY. ** Class IV available in arrangement 1 ONLY.
For complete dimensional information, refer to the applicable CAPS submittal drawing.

Angular Discharge Dimensions



Dimensional Data

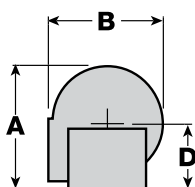
Sizes 12-73 Single-Width Arrangement 3 Class I, II & III



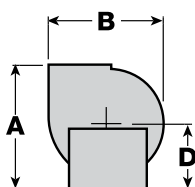
Clockwise Top Horizontal (TH) discharge shown above

| Size | Class | A | | | | | | B | | | | C | D | | | | F | G | J |
|------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| | | TH | BH | UB | DB | TAU | BAU | TH | UB | TAU | BAU | | TH | BH | UB | DB | | | |
| | | | | | | | | | | | | | | BAU | TAU | | | | |
| 12 | I, II III | 25 | 26 | 25 | 24 | 30 | 26 | 24 | 25 | 23 | 29 | 18 | 10 ¹ / ₄ | 15 ¹ / ₄ | 12 ³ / ₄ | 11 ³ / ₄ | 12 ⁷ / ₈ | 9 ³ / ₄ | 13 |
| | | 25 | 25 | 25 | 24 | 31 | 26 | 24 | 25 | 23 | 29 | 22 | 10 ¹ / ₄ | 15 ¹ / ₄ | 12 ³ / ₄ | 12 | 13 | 9 ³ / ₄ | 13 |
| 13 | I, II III | 27 | 28 | 27 | 26 | 33 | 28 | 26 | 27 | 25 | 31 | 19 | 11 ³ / ₈ | 16 ⁵ / ₈ | 13 ³ / ₈ | 12 ¹ / ₂ | 14 ¹ / ₄ | 10 ³ / ₄ | 14 |
| | | 28 | 28 | 27 | 26 | 34 | 28 | 26 | 27 | 25 | 31 | 23 | 11 ³ / ₈ | 16 ⁵ / ₈ | 13 ³ / ₈ | 12 ⁷ / ₈ | 14 ¹ / ₄ | 10 ³ / ₄ | 14 |
| 15 | I, II III | 30 | 31 | 29 | 28 | 36 | 30 | 28 | 30 | 27 | 34 | 21 | 12 ¹ / ₄ | 18 | 15 ¹ / ₄ | 13 ⁵ / ₈ | 15 ⁵ / ₄ | 12 | 15 ⁵ / ₈ |
| | | 30 | 30 | 29 | 28 | 37 | 30 | 28 | 30 | 27 | 34 | 24 | 12 ¹ / ₄ | 18 | 15 ¹ / ₄ | 13 ³ / ₄ | 15 ⁵ / ₈ | 12 | 15 ⁵ / ₈ |
| 16 | I, II III | 33 | 33 | 32 | 30 | 40 | 33 | 30 | 33 | 30 | 37 | 22 | 13 ⁵ / ₈ | 19 ⁵ / ₈ | 16 ⁵ / ₈ | 14 ¹ / ₂ | 17 ³ / ₈ | 13 ¹ / ₈ | 17 ¹ / ₂ |
| | | 33 | 33 | 32 | 30 | 41 | 33 | 30 | 32 | 30 | 37 | 25 | 13 ⁵ / ₈ | 19 ⁵ / ₈ | 16 ⁵ / ₈ | 14 ³ / ₄ | 17 ³ / ₈ | 13 ¹ / ₈ | 17 ¹ / ₂ |
| 18 | I, II III | 36 | 37 | 34 | 33 | 43 | 35 | 33 | 36 | 32 | 41 | 25 | 14 ⁷ / ₈ | 21 ³ / ₈ | 18 ⁷ / ₈ | 15 ⁵ / ₈ | 19 ¹ / ₄ | 14 ⁵ / ₈ | 19 ¹ / ₄ |
| | | 37 | 36 | 34 | 33 | 45 | 35 | 33 | 36 | 32 | 41 | 28 | 14 ⁷ / ₈ | 21 ³ / ₈ | 18 ⁷ / ₈ | 15 ⁷ / ₈ | 19 ¹ / ₄ | 14 ⁵ / ₈ | 19 ¹ / ₄ |
| 20 | I, II III | 39 | 40 | 37 | 36 | 47 | 39 | 36 | 39 | 35 | 45 | 27 | 16 ¹ / ₂ | 23 ¹ / ₂ | 19 ³ / ₄ | 16 ³ / ₄ | 21 ¹ / ₈ | 16 | 21 ¹ / ₈ |
| | | 40 | 40 | 37 | 36 | 48 | 39 | 36 | 39 | 35 | 45 | 29 | 16 ¹ / ₂ | 23 ¹ / ₂ | 19 ³ / ₄ | 17 | 21 ¹ / ₈ | 16 | 21 ¹ / ₈ |
| 22 | I, II III | 43 | 44 | 40 | 39 | 52 | 42 | 39 | 43 | 39 | 49 | 29 | 18 ¹ / ₄ | 25 ⁷ / ₈ | 21 ³ / ₄ | 18 ⁷ / ₈ | 23 ³ / ₈ | 17 ³ / ₄ | 23 |
| | | 44 | 44 | 41 | 39 | 53 | 42 | 39 | 43 | 39 | 49 | 32 | 18 ¹ / ₄ | 25 ⁷ / ₈ | 21 ³ / ₄ | 18 ³ / ₈ | 23 ³ / ₂ | 17 ³ / ₄ | 23 |
| 24 | I, II III | 48 | 49 | 44 | 43 | 56 | 47 | 43 | 47 | 43 | 54 | 32 | 20 ¹ / ₄ | 28 ¹ / ₂ | 23 ⁷ / ₈ | 19 ³ / ₄ | 25 ³ / ₄ | 19 ¹ / ₂ | 25 ⁷ / ₈ |
| | | 49 | 48 | 44 | 43 | 58 | 47 | 43 | 47 | 43 | 54 | 34 | 20 ¹ / ₄ | 28 ¹ / ₂ | 23 ⁷ / ₈ | 19 ⁷ / ₈ | 25 ⁷ / ₈ | 19 ¹ / ₂ | 25 ⁷ / ₈ |
| 27 | I, II III | 52 | 53 | 48 | 47 | 61 | 51 | 47 | 52 | 47 | 59 | 34 | 22 ¹ / ₄ | 31 ¹ / ₈ | 26 | 21 ¹ / ₄ | 28 ¹ / ₄ | 21 ¹ / ₂ | 28 ¹ / ₂ |
| | | 53 | 53 | 48 | 47 | 63 | 51 | 47 | 52 | 47 | 59 | 36 | 22 ¹ / ₄ | 31 ¹ / ₈ | 26 | 21 ³ / ₈ | 28 ¹ / ₂ | 21 ¹ / ₂ | 28 ¹ / ₂ |
| 30 | I, II III | 58 | 59 | 52 | 51 | 68 | 57 | 51 | 57 | 52 | 64 | 37 | 24 ⁷ / ₈ | 34 ¹ / ₂ | 28 ⁷ / ₈ | 23 ¹ / ₈ | 31 ¹ / ₄ | 23 ³ / ₈ | 31 ³ / ₄ |
| | | 59 | 58 | 53 | 51 | 69 | 57 | 51 | 57 | 52 | 64 | 41 | 24 ⁷ / ₈ | 34 ¹ / ₂ | 28 ⁷ / ₈ | 23 ³ / ₈ | 31 ⁵ / ₈ | 23 ³ / ₈ | 31 ³ / ₄ |
| 33 | I, II III | 66 | 64 | 59 | 56 | 77 | 62 | 56 | 63 | 57 | 72 | 40 | 28 ⁵ / ₈ | 37 ⁵ / ₈ | 33 ¹ / ₈ | 25 | 34 ⁵ / ₈ | 26 ¹ / ₄ | 34 ⁷ / ₈ |
| | | 66 | 64 | 59 | 56 | 77 | 62 | 56 | 63 | 57 | 72 | 44 | 28 ⁵ / ₈ | 37 ⁵ / ₈ | 33 ¹ / ₈ | 25 ¹ / ₄ | 34 ³ / ₄ | 26 ¹ / ₄ | 34 ⁷ / ₈ |
| 36 | I, II III | 72 | 71 | 64 | 61 | 85 | 68 | 61 | 70 | 63 | 79 | 43 | 31 ³ / ₈ | 41 ¹ / ₄ | 36 ³ / ₈ | 27 ¹ / ₄ | 38 ¹ / ₄ | 29 | 38 ¹ / ₂ |
| | | 72 | 70 | 64 | 61 | 85 | 68 | 61 | 69 | 63 | 79 | 46 | 31 ³ / ₈ | 41 ¹ / ₄ | 36 ³ / ₈ | 27 ¹ / ₂ | 38 ³ / ₈ | 29 | 38 ¹ / ₂ |
| 40 | I, II III | 79 | 77 | 70 | 67 | 92 | 75 | 67 | 76 | 69 | 87 | 46 | 34 ¹ / ₄ | 45 ¹ / ₄ | 39 ³ / ₄ | 29 ⁵ / ₈ | 42 ¹ / ₄ | 31 ¹ / ₈ | 42 |
| | | 79 | 77 | 70 | 67 | 92 | 75 | 67 | 76 | 69 | 87 | 50 | 34 ¹ / ₄ | 45 ¹ / ₄ | 39 ³ / ₄ | 29 ⁷ / ₈ | 42 ³ / ₈ | 31 ¹ / ₈ | 42 |
| 44 | I, II III | 87 | 85 | 76 | 74 | 101 | 82 | 74 | 84 | 76 | 95 | 51 | 37 ¹ / ₂ | 49 ⁵ / ₈ | 43 ⁵ / ₈ | 32 ³ / ₈ | 46 ⁵ / ₈ | 35 ¹ / ₄ | 46 ¹ / ₂ |
| | | 87 | 85 | 77 | 74 | 102 | 82 | 74 | 84 | 76 | 95 | 55 | 37 ¹ / ₂ | 49 ⁵ / ₈ | 43 ⁵ / ₈ | 32 ⁵ / ₈ | 46 ³ / ₄ | 35 ¹ / ₄ | 46 ¹ / ₂ |
| 49 | I, II III | 95 | 93 | 83 | 81 | 111 | 90 | 81 | 92 | 84 | 105 | 54 | 41 | 54 ³ / ₈ | 47 ⁵ / ₈ | 35 ¹ / ₄ | 51 ³ / ₈ | 38 ³ / ₄ | 51 |
| | | 95 | 93 | 83 | 81 | 111 | 90 | 81 | 92 | 84 | 105 | 58 | 41 | 54 ³ / ₈ | 47 ⁵ / ₈ | 35 ³ / ₈ | 51 ¹ / ₂ | 38 ³ / ₄ | 51 |
| 54 | I, II III | 105 | 102 | 91 | 88 | 122 | 99 | 88 | 102 | 92 | 115 | 59 | 45 | 59 ⁷ / ₈ | 52 ¹ / ₂ | 38 ¹ / ₂ | 56 ⁷ / ₈ | 42 ⁷ / ₈ | 56 ¹ / ₂ |
| | | 105 | 102 | 92 | 89 | 122 | 99 | 89 | 102 | 92 | 115 | 65 | 45 | 59 ⁷ / ₈ | 52 ¹ / ₂ | 38 ³ / ₄ | 56 ⁷ / ₈ | 42 ⁷ / ₈ | 56 ¹ / ₂ |
| 60 | I, II III | 115 | 113 | 100 | 97 | 134 | 109 | 97 | 112 | 102 | 127 | 65 | 49 ¹ / ₂ | 65 ⁷ / ₈ | 57 ⁵ / ₈ | 42 ¹ / ₄ | 62 ⁷ / ₈ | 47 ¹ / ₂ | 62 ¹ / ₂ |
| | | 115 | 113 | 100 | 98 | 134 | 109 | 98 | 112 | 102 | 127 | 71 | 49 ¹ / ₂ | 65 ⁷ / ₈ | 57 ⁵ / ₈ | 42 ³ / ₈ | 63 | 47 ¹ / ₂ | 62 ¹ / ₂ |
| 66 | I, II III | 127 | 124 | 110 | 107 | 147 | 119 | 107 | 124 | 112 | 139 | 72 | 54 ¹ / ₈ | 72 ¹ / ₈ | 63 ³ / ₈ | 46 | 69 ⁷ / ₈ | 52 ¹ / ₈ | 69 |
| | | 127 | 124 | 110 | 107 | 147 | 119 | 107 | 124 | 112 | 139 | 76 | 54 ¹ / ₈ | 72 ¹ / ₈ | 63 ³ / ₈ | 46 ¹ / ₄ | 69 ¹ / ₄ | 52 ¹ / ₈ | 69 |
| 73 | I, II III | 139 | 136 | 120 | 117 | 162 | 131 | 117 | 136 | 123 | 153 | 78 | 59 ⁵ / ₈ | 79 ¹ / ₂ | 69 ¹ / ₂ | 50 ¹ / ₂ | 76 ¹ / ₂ | 57 ⁵ / ₈ | 76 |
| | | 140 | 137 | 120 | 118 | 162 | 131 | 118 | 137 | 123 | 153 | 85 | 59 ⁵ / ₈ | 79 ¹ / ₂ | 69 ¹ / ₂ | 50 ³ / ₄ | 76 ¹ / ₂ | 57 ⁵ / ₈ | 76 |

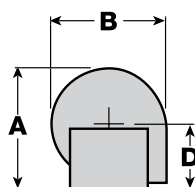
For complete dimensional information, refer to the applicable CAPS submittal drawing.



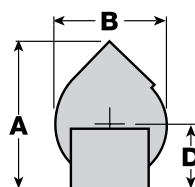
BH



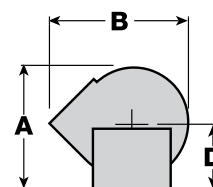
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DB

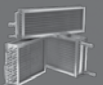
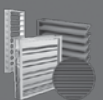
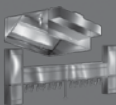
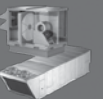
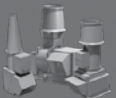
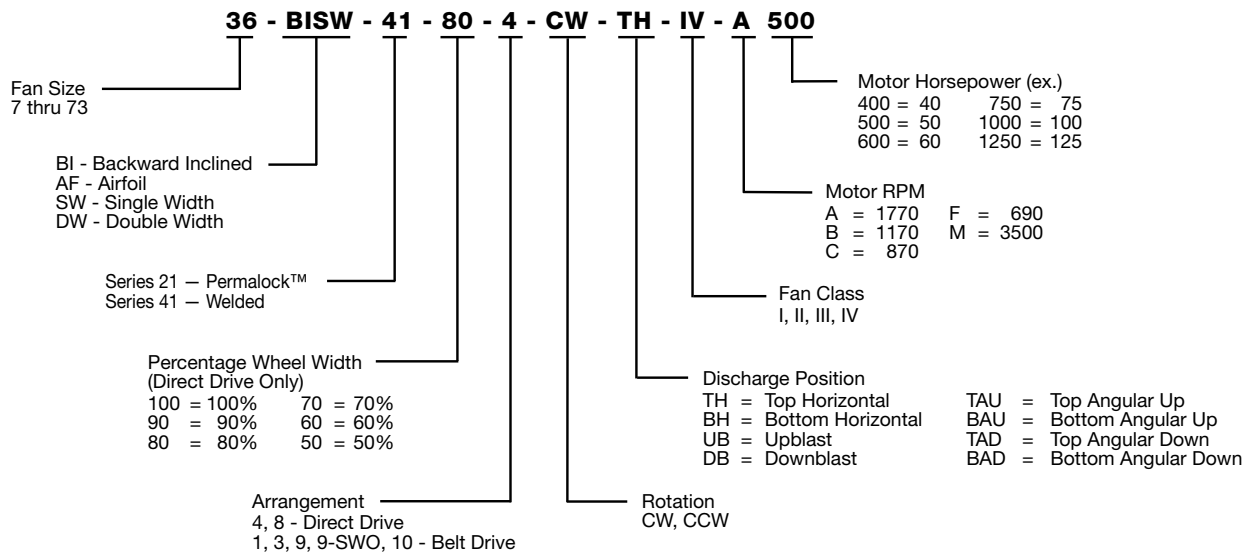


TAU



BAU

Model Number Code



Our Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the shipment date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.

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