



The Industrial Choice.



**Model BSD53
Direct Drive**

**LOW PROFILE UPBLAST
PROPELLER ROOF VENTILATORS**

Models BSD53 / BSB53

Roof Ventilators

Models

BSD53 | BSB53



Model BSD53



Model BSB53

Aerovent's line of Low Profile Upblast Propeller Roof Ventilators provide general exhaust of commercial and light industrial buildings while offering a pleasing low profile design that minimizes extension above the roof line. The upblast design discharges air and contaminants up and away from the building. These ventilators exhaust large volumes of air at low to medium static pressures. Typical applications for upblast propeller roof ventilators include warehouses, shopping centers and manufacturing facilities.

A wide array of adjustable pitch, cast aluminum propellers are available to meet specific performances and application requirements. The cost effective design is available in both belt and direct drive configurations. Application flexibility, cost competitiveness and robust design all combine to make Aerovent's BSD53 and BSB53 Low Profile Upblast Propeller Roof Ventilators an industry leader.

Models

Model BSD53

Upblast direct drive model BSD53 is available for general-purpose exhaust. Direct drive fans are an ideal choice for installations where service and maintenance are made difficult due to limited access. The BSD53 can save on service costs incurred through sheave, belt and bearing maintenance.

Model BSB53

Standard duty upblast belt driven model BSB53 is available for use in clean air applications requiring the adjustable performance of a belt drive fan. Motor and drives are located below the fan, inside the roof curb for access from inside the building.

Sizes

Direct Drive sizes: 14 to 48 inch wheel diameters

Belt driven sizes: 21 to 54 inch wheel diameters

Performance

Airflow to 47,400 CFM

Static pressure to 1 inch w.g.



Models BSD53 and BSB53 are UL/cUL 705 listed, for electrical, File No. E158680.

Construction Features

Propellers

Cast aluminum blades and hubs. Propellers on belt driven units shall be secured to the fan shaft with a taperlock bushing. Propellers on direct drive units shall be mounted directly on the motor shaft with a taperlock bushing.

Butterfly Dampers

Blades constructed of steel as standard, unless the outlet velocity of the fan is below the minimum required to open steel damper blades, then aluminum blades shall be provided. Butterfly dampers provide weather protection when the fan is not in operation. A rain channel provides for run off of precipitation.

Windband

Constructed of heavy gauge galvanized steel with bolted seams. Reinforcing flange provides rigidity, strength and safe handling. The windband is removable with four bolts, allowing access to the fan through the damper blades.

Bearings (BSB53 only)

Cast iron pillow block bearings selected for L-50 average life of 200,000 hours at maximum cataloged operating speeds.

Curb Base

Heavy gauge galvanized or finish painted steel curb bases are provided with prepunched mounting holes. Curb base includes venturi inlet for efficient airflow.

Motor and Drive Frame

Support assemblies are constructed of heavy gauge galvanized or finish painted steel.

Shaft (BSB53 only)

Shaft diameters are sized to have a first critical speed of at least 125% of the fan's maximum operating speed.

Motors

ODP, TEFC and Explosion proof, single and three phase motors are carefully matched to the fan load.

Drives (BSB53 only)

Drive sheaves shall be of cast iron and supplied as variable pitch as standard. Drives and belts shall be rated for 150% of the required motor HP.

Lifting Lugs

The windband brackets also double as lifting points for the unit.

Mechanical Run Test & Final Vibration Check

All fans are assembled for a mechanical run test and final balance prior to shipment. Vibration readings are taken on both fan bearings in the axial, horizontal and vertical directions at the specified speed. Fans are balanced to 0.15 in./sec. peak or less.



Propeller



Butterfly Damper



Pillow Block Bearing



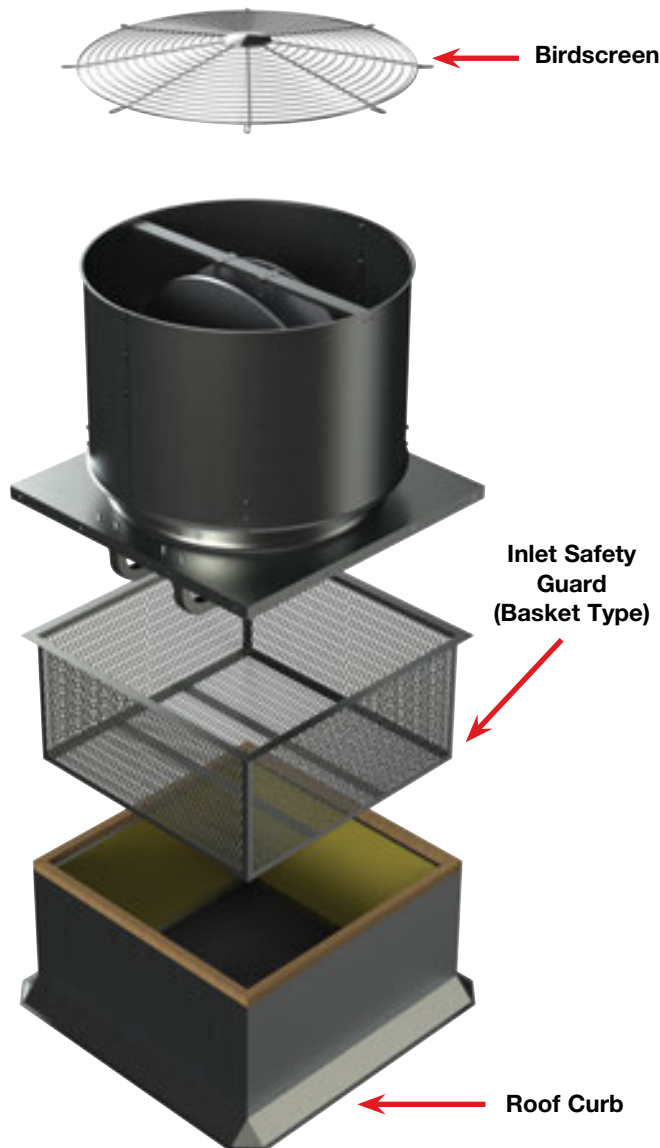
Curb Base



Motor & Drive Frame



Accessories



Inlet Safety Guard

A basket style guard shall be offered to accommodate motors and drives extending down into the roof curb. Aerovent recommends the use of an inlet safety screen on all non-ducted installations.

Screens

A zinc plated steel birdscreen protects the fan discharge from birds and other types of debris.

Fusible Link Assembly

Allows the damper blades to open when the link melts at 165°F. This accessory is optional on models BSD53 and BSB53.

Magnetic Damper Latches

Used to hold butterfly dampers closed when fan is not in operation. Damper blades must be steel with magnetic damper latches.

Hinged Base

Allows access to propeller, motor and drives from the roof. Only available through size 36.

Tie Down Brackets

Quantity of four brackets to allow for unit to be anchored to the roof. Cables by others.

Extended Lube Lines

Allow for easy lubrication of bearings on belt driven units without disassembly by extending polyethylene lines from fan bearings to exterior of base.

Aluminum Construction

Stack cap assembly is constructed out of aluminum in lieu of standard galvanized. Orifice panel is not constructed of aluminum.

Roof Curbs and Extensions

Prefabricated roof curbs are available in heavy duty galvanized steel or aluminum in heights of 8", 12" or 18". Both types, canted and self-flashing, are provided with 1½" of insulation and feature continuously welded seams for added rigidity and moisture protection.

Extensions work to extend the height of the roof curb. Standard curb extension is galvanized steel, 13" high and has an 8" removable panel.

Disconnect Switches

A NEMA 3R, 4 or 7/9 disconnect switch is available for positive electrical shutoff of the fan and the protection of service personnel. NEMA 1 disconnect switches are not available on models BSB53 and BSD53.

Special Coatings

A wide variety of special coatings are available for both decorative or corrosion resistant requirements.



Material Specifications - Direct Drive, BSD53

| FAN SIZE | GAUGE OF MATERIAL | | | | PROPELLERS |
|----------|-------------------|-----------|-------------|----------------------|------------|
| | WIND BAND | FAN PANEL | DRIVE FRAME | | |
| 14 | 20 | 16 | 14 | DIE CAST ALUM. | |
| 16 | 20 | 16 | 14 | | |
| 18 | 20 | 16 | 14 | | |
| 21 | 20 | 16 | 14 | | |
| 24 | 20 | 16 | 12 | | |
| 30 | 20 | 16 | 12 | | |
| 36 | 20 | 16 | 12 | | |
| 42 | 20 | 14 | 10 | | |
| 48 | 20 | 14 | 10 | | |

* All gauges are minimums.

Shipping Weights

| FAN SIZE | BSD53 | BSB53 |
|----------|-------|-------|
| 14 | 85 | --- |
| 16 | 96 | --- |
| 18 | 108 | --- |
| 21 | 133 | 148 |
| 24 | 161 | 175 |
| 30 | 213 | 242 |
| 36 | 290 | 321 |
| 42 | 370 | 438 |
| 48 | 416 | 519 |
| 54 | --- | 594 |

* Weights are only approximate and do not include accessories. Consult Fan Selector Program for actual shipping weights.

Material Specifications - Belt Driven, BSB53

| FAN SIZE | GAUGE OF MATERIAL | | | | SHAFT SIZE (IN.) |
|----------|-------------------|-----------|-------------|----------------------|--------------------------------|
| | WIND BAND | FAN PANEL | DRIVE FRAME | PROPELLERS | |
| 21 | 20 | 16 | 14 | DIE CAST ALUM. | 1 |
| 24 | 20 | 16 | 14 | | 1 |
| 30 | 20 | 16 | 12 | | 1 |
| 36 | 20 | 16 | 12 | | 1 |
| 42 | 20 | 14 | 12 | | 1 ³ / ₁₆ |
| 48 | 20 | 14 | 12 | | 1 ⁷ / ₁₆ |
| 54 | 18 | 14 | 10 | | 1 ⁷ / ₁₆ |

* All gauges are minimums.

CFM Required to Open Damper Blades

| DAMPER MATERIAL | | 14 | 16 | 18 | 21 | 24 | 30 | 36 | 42 | 48 | 54 |
|-----------------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|
| | STEEL | MIN. | 1955 | 2516 | 3179 | 4284 | 5627 | 8704 | 12444 | 16949 | 22032 |
| MAX. | | 2413 | 3519 | 4805 | 6363 | 8259 | 16223 | 24544 | 29853 | 41165 | 52321 |
| ALUM | MIN. | 1380 | 1776 | 2244 | 3024 | 3972 | 6144 | 8784 | 11964 | 15552 | 19980 |
| | MAX. | 2413 | 3519 | 4805 | 6363 | 8259 | 16223 | 24544 | 29853 | 41165 | 52321 |

The terminal velocity of rain is approximately 2000 feet per minute. Selections below this point are not recommended if rain entry into the building is a concern.



Direct Drive

BSD53 | Size 14

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 14B105 | 10 | 1/4 | 1750 | 0.10 | 13.5 | 943 | 859 | 840 | 821 | 781 | 733 | 682 | 614 | 469 | 378 | 296 | |
| | 15 | | 1750 | 0.14 | 15.1 | 1267 | 1189 | 1169 | 1149 | 1108 | 1063 | 1005 | 910 | 785 | | | |
| | 20 | | 1750 | 0.19 | 16.3 | 1561 | 1481 | 1459 | 1438 | 1394 | 1347 | 1290 | 1173 | 1030 | | | |
| | 25 | | 1750 | 0.25 | 17.1 | 1824 | 1735 | 1711 | 1687 | 1636 | 1581 | 1513 | 1381 | 1223 | | | |
| | 30 | 1/3 | 1750 | 0.31 | 17.9 | 2047 | 1941 | 1911 | 1881 | 1816 | 1743 | 1655 | 1525 | 1325 | | | |

BSD53 | Size16

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 16B105 | 10 | 1/4 | 1750 | 0.16 | 16.6 | 1384 | 1283 | 1259 | 1235 | 1188 | 1137 | 1079 | 990 | 848 | 667 | 558 | |
| | 15 | | 1750 | 0.25 | 18.9 | 1862 | 1767 | 1743 | 1719 | 1671 | 1621 | 1567 | 1462 | 1287 | 1132 | | |
| | 20 | 1/3 | 1750 | 0.34 | 21 | 2294 | 2198 | 2173 | 2147 | 2096 | 2043 | 1986 | 1881 | 1663 | 1506 | | |
| | 25 | 1/2 | 1750 | 0.43 | 22 | 2678 | 2571 | 2543 | 2514 | 2456 | 2394 | 2328 | 2205 | 1964 | 1771 | | |
| | 30 | | 1750 | 0.54 | 23 | 3001 | 2876 | 2842 | 2807 | 2734 | 2657 | 2570 | 2417 | 2166 | 1924 | | |

BSD53 | Size 18

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 18B105 | 10 | 1/3 | 1750 | 0.25 | 21 | 1937 | 1816 | 1787 | 1759 | 1703 | 1646 | 1584 | 1480 | 1310 | 1114 | 912 | 663 |
| | 15 | | 1750 | 0.40 | 23 | 2613 | 2501 | 2472 | 2443 | 2386 | 2329 | 2269 | 2169 | 1945 | 1760 | 1564 | |
| | 20 | 1/2 | 1750 | 0.54 | 25 | 3220 | 3106 | 3076 | 3046 | 2985 | 2923 | 2859 | 2755 | 2514 | 2281 | 2083 | |
| | 25 | 3/4 | 1750 | 0.70 | 26 | 3752 | 3628 | 3595 | 3561 | 3493 | 3423 | 3350 | 3229 | 2960 | 2700 | 2465 | |
| | 30 | | 1750 | 0.87 | 27 | 4200 | 4052 | 4013 | 3973 | 3891 | 3806 | 3715 | 3561 | 3262 | 2971 | 2678 | |

BSD53 | Size 21

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 21B105 | 10 | 1/2 | 1750 | 0.44 | 26 | 3003 | 2851 | 2814 | 2776 | 2703 | 2630 | 2556 | 2435 | 2212 | 1995 | 1736 | 1267 |
| | 15 | | 3/4 | 1750 | 0.69 | 29 | 4064 | 3921 | 3885 | 3848 | 3774 | 3701 | 3627 | 3511 | 3277 | 2994 | 2757 |
| | 20 | 1 | 1750 | 0.99 | 31 | 5005 | 4861 | 4823 | 4785 | 4707 | 4629 | 4550 | 4427 | 4192 | 3875 | 3586 | 3046 |
| | 25 | 1 1/2 | 1750 | 1.28 | 33 | 5822 | 5668 | 5627 | 5585 | 5500 | 5414 | 5325 | 5185 | 4917 | 4574 | 4248 | 3627 |
| | 30 | | 2 | 1750 | 1.56 | 35 | 6505 | 6323 | 6275 | 6226 | 6127 | 6024 | 5917 | 5747 | 5424 | 5059 | 4685 |

BSD53 | Size 24

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 24B105 | 10 | 3/4 | 1750 | 0.69 | 36 | 4377 | 4189 | 4142 | 4094 | 4000 | 3907 | 3812 | 3665 | 3395 | 3111 | 2825 | 2120 |
| | 15 | | 1 | 1750 | 1.13 | 35 | 5941 | 5764 | 5718 | 5671 | 5577 | 5484 | 5389 | 5244 | 4979 | 4649 | 4312 |
| | 20 | 1 1/2 | 1750 | 1.57 | 34 | 7317 | 7136 | 7088 | 7040 | 6942 | 6844 | 6745 | 6593 | 6320 | 5987 | 5597 | 4906 |
| | 25 | | 2 | 1750 | 2.06 | 35 | 8496 | 8303 | 8251 | 8199 | 8094 | 7987 | 7879 | 7711 | 7406 | 7043 | 6628 |
| | 30 | 3 | 1750 | 2.60 | 37 | 9476 | 9239 | 9179 | 9120 | 8999 | 8877 | 8752 | 8558 | 8202 | 7801 | 7362 | 6355 |

NOTES:

- Performance certified is for installation type A: Free inlet, free outlet.
- Performance ratings do not include the effects of appurtenances (accessories).
- The sound ratings shown are loudness values in fan sone at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

Direct Drive

BSD53 | Size 30

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 30B105 | 10 | 1/2 | 1160 | 0.41 | 24 | 5465 | 5011 | 4888 | 4761 | 4503 | 4238 | 3954 | 3472 | 2526 | 1519 | | |
| | 15 | 3/4 | 1160 | 0.66 | 25 | 7451 | 6998 | 6879 | 6759 | 6510 | 6242 | 5949 | 5482 | 4637 | 3408 | | |
| | 20 | 1 | 1160 | 0.96 | 25 | 9156 | 8694 | 8574 | 8452 | 8200 | 7931 | 7637 | 7154 | 6264 | 5191 | | |
| | 25 | 1 1/2 | 1160 | 1.31 | 25 | 10599 | 10112 | 9986 | 9857 | 9591 | 9308 | 9006 | 8513 | 7521 | 6170 | | |
| | 30 | 2 | 1160 | 1.73 | 27 | 11760 | 11243 | 11107 | 10968 | 10678 | 10360 | 10015 | 9532 | 8472 | | | |

BSD53 | Size 36

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 36B206 | 10 | 1 | 1160 | 0.96 | 36 | 8851 | 8323 | 8184 | 8043 | 7755 | 7451 | 7121 | 6582 | 5621 | 4498 | 3296 | |
| | 15 | 1 1/2 | 1160 | 1.47 | 39 | 11955 | 11468 | 11335 | 11199 | 10921 | 10631 | 10325 | 9820 | 8847 | 7844 | 6451 | 2800 |
| | 20 | 2 | 1160 | 2.12 | 40 | 14762 | 14268 | 14131 | 13993 | 13709 | 13414 | 13105 | 12610 | 11655 | 10582 | 9324 | 4592 |
| | 25 | 3 | 1160 | 2.96 | 42 | 17258 | 16719 | 16573 | 16426 | 16124 | 15811 | 15485 | 14969 | 14017 | 12873 | 11352 | |
| | 30 | 5 | 1160 | 3.97 | 44 | 19394 | 18783 | 18625 | 18464 | 18135 | 17794 | 17441 | 16856 | 15847 | 14555 | 12511 | |

BSD53 | Size 42

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 42B304 | 10 | 1 | 860 | 0.78 | 24 | 11354 | 10482 | 10256 | 10026 | 9540 | 9001 | 8418 | 7480 | 5641 | 3496 | | |
| | 15 | 1 1/2 | 860 | 1.23 | 26 | 14616 | 13711 | 13462 | 13207 | 12680 | 12131 | 11554 | 10671 | 9130 | 6550 | | |
| | 20 | 2 | 860 | 1.76 | 27 | 17387 | 16428 | 16162 | 15889 | 15330 | 14760 | 14168 | 13255 | 11707 | 9626 | | |
| | 25 | 3 | 860 | 2.40 | 28 | 19688 | 18643 | 18363 | 18077 | 17495 | 16900 | 16284 | 15318 | 13595 | | | |
| | 30 | 3 | 860 | 3.15 | 29 | 21470 | 20374 | 20086 | 19793 | 19182 | 18512 | 17849 | 16831 | 14704 | | | |

BSD53 | Size 48

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 48B304 | 10 | 1 1/2 | 860 | 1.14 | 29 | 16339 | 15137 | 14823 | 14501 | 13814 | 13029 | 12187 | 10913 | 8459 | 5037 | | |
| | 15 | 2 | 860 | 1.83 | 31 | 21073 | 19834 | 19491 | 19138 | 18413 | 17660 | 16869 | 15684 | 13740 | 10909 | | |
| | 20 | 3 | 860 | 2.69 | 32 | 25038 | 23713 | 23352 | 22984 | 22235 | 21473 | 20682 | 19469 | 17476 | 14885 | | |
| | 25 | 5 | 860 | 3.71 | 33 | 28205 | 26810 | 26446 | 26077 | 25318 | 24500 | 23659 | 22429 | 20129 | | | |
| | 30 | 5 | 860 | 4.91 | 35 | 30613 | 29230 | 28860 | 28479 | 27666 | 26755 | 25875 | 24508 | 21303 | | | |

NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Performance ratings do not include the effects of appurtenances (accessories).
3. The sound ratings shown are loudness values in fan sone at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.



Belt Driven

BSB53 | Size 21

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 | |
| 21B105 | 20 | 1/4 | 1142 | 0.27 | 16.6 | 3266 | 3036 | 2976 | 2914 | 2777 | 2595 | 2403 | 2164 | | | | | |
| | 25 | | 1048 | 0.27 | 15.2 | 3487 | 3212 | 3136 | 3054 | 2854 | 2623 | 2418 | 2029 | | | | | |
| | 30 | | 977 | 0.27 | 13.9 | 3632 | 3278 | 3174 | 3057 | 2797 | 2525 | 2245 | | | | | | |
| | 20 | 1/3 | 1252 | 0.36 | 18.9 | 3581 | 3373 | 3318 | 3263 | 3148 | 3017 | 2846 | 2592 | 2218 | | | | |
| | 25 | | 1150 | 0.36 | 17.6 | 3826 | 3579 | 3512 | 3442 | 3288 | 3092 | 2882 | 2602 | | | | | |
| | 30 | | 1072 | 0.36 | 17 | 3985 | 3669 | 3580 | 3484 | 3265 | 3025 | 2776 | | | | | | |
| | 20 | 1/2 | 1438 | 0.54 | 24 | 4113 | 3934 | 3887 | 3840 | 3744 | 3645 | 3537 | 3336 | 2963 | 2642 | | | |
| | 25 | | 1320 | 0.54 | 22 | 4392 | 4180 | 4123 | 4066 | 3945 | 3813 | 3656 | 3378 | 2967 | | | | |
| | 30 | | 1231 | 0.54 | 21 | 4576 | 4307 | 4234 | 4157 | 3994 | 3805 | 3598 | 3279 | | | | | |
| | 20 | 3/4 | 1646 | 0.80 | 29 | 4708 | 4554 | 4513 | 4472 | 4389 | 4306 | 4221 | 4084 | 3794 | 3460 | 3184 | | |
| | 25 | | 1511 | 0.82 | 26 | 5027 | 4845 | 4796 | 4747 | 4647 | 4542 | 4431 | 4239 | 3840 | 3482 | 3119 | | |
| | 30 | | 1409 | 0.82 | 25 | 5237 | 5006 | 4945 | 4881 | 4749 | 4607 | 4450 | 4184 | 3719 | 3232 | | | |

BSB53 | Size 24

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 24B105 | 20 | 1/3 | 1067 | 0.36 | 15.6 | 4461 | 4150 | 4068 | 3984 | 3797 | 3561 | 3311 | 2976 | | | | |
| | 25 | | 977 | 0.36 | 13.7 | 4743 | 4373 | 4271 | 4162 | 3902 | 3605 | 3322 | 2840 | | | | |
| | 30 | | 908 | 0.36 | 12.7 | 4917 | 4445 | 4311 | 4163 | 3833 | 3455 | 3052 | | | | | |
| | 20 | 1/2 | 1226 | 0.54 | 19.3 | 5126 | 4858 | 4788 | 4718 | 4571 | 4412 | 4223 | 3891 | 3400 | | | |
| | 25 | | 1122 | 0.54 | 17.2 | 5447 | 5130 | 5046 | 4958 | 4771 | 4550 | 4293 | 3918 | | | | |
| | 30 | | 1043 | 0.55 | 15.8 | 5648 | 5244 | 5137 | 5023 | 4771 | 4486 | 4174 | 3657 | | | | |
| | 20 | 3/4 | 1403 | 0.83 | 24 | 5866 | 5635 | 5574 | 5513 | 5390 | 5263 | 5128 | 4896 | 4420 | 3994 | 3524 | |
| | 25 | | 1285 | 0.83 | 21 | 6239 | 5966 | 5894 | 5820 | 5669 | 5506 | 5325 | 5001 | 4452 | 3892 | | |
| | 30 | | 1194 | 0.82 | 19.9 | 6466 | 6116 | 6026 | 5933 | 5737 | 5518 | 5277 | 4882 | 4140 | | | |
| | 20 | 1 | 1544 | 1.07 | 28 | 6455 | 6248 | 6193 | 6137 | 6026 | 5914 | 5798 | 5613 | 5236 | 4802 | 4417 | |
| | 25 | | 1414 | 1.10 | 25 | 6865 | 6619 | 6554 | 6489 | 6355 | 6215 | 6067 | 5817 | 5313 | 4822 | 4311 | |
| | 30 | | 1314 | 1.10 | 23 | 7115 | 6798 | 6718 | 6636 | 6466 | 6284 | 6084 | 5754 | 5130 | 4443 | | |

NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

Belt Driven

BSB53 | Size 30

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 30B105 | 20 | 1/2 | 964 | 0.55 | 19 | 7609 | 7045 | 6896 | 6740 | 6399 | 6017 | 5608 | 4928 | | | | |
| | 25 | | 869 | 0.55 | 16.2 | 7940 | 7273 | 7090 | 6896 | 6473 | 5986 | 5393 | | | | | |
| | 30 | | 793 | 0.55 | 14.6 | 8039 | 7242 | 7000 | 6752 | 6238 | | | | | | | |
| | 20 | 3/4 | 1104 | 0.83 | 23 | 8714 | 8227 | 8100 | 7971 | 7700 | 7406 | 7082 | 6558 | 5575 | | | |
| | 25 | | 995 | 0.83 | 20 | 9091 | 8517 | 8365 | 8208 | 7873 | 7506 | 7102 | 6375 | | | | |
| | 30 | | 908 | 0.83 | 17.9 | 9205 | 8526 | 8340 | 8137 | 7704 | 7271 | 6720 | | | | | |
| | 20 | 1 | 1215 | 1.10 | 27 | 9590 | 9150 | 9036 | 8921 | 8684 | 8435 | 8166 | 7723 | 6907 | 5986 | | |
| | 25 | | 1095 | 1.10 | 23 | 10005 | 9487 | 9352 | 9214 | 8925 | 8614 | 8280 | 7724 | 6560 | | | |
| | 30 | | 999 | 1.10 | 21 | 10128 | 9519 | 9354 | 9184 | 8805 | 8418 | 8025 | 7238 | | | | |
| | 20 | 1 1/2 | 1390 | 1.65 | 34 | 10971 | 10590 | 10491 | 10392 | 10191 | 9984 | 9770 | 9427 | 8785 | 8078 | 7299 | |
| | 25 | | 1253 | 1.65 | 29 | 11449 | 11000 | 10884 | 10767 | 10526 | 10274 | 10009 | 9582 | 8775 | 7765 | 6236 | |
| | 30 | | 1143 | 1.65 | 26 | 11588 | 11063 | 10924 | 10782 | 10486 | 10157 | 9808 | 9317 | 8146 | | | |
| | 20 | 2 | 1530 | 2.20 | 40 | 12076 | 11732 | 11643 | 11553 | 11373 | 11189 | 11001 | 10708 | 10174 | 9574 | 8931 | 7480 |
| | 25 | | 1379 | 2.20 | 33 | 12600 | 12194 | 12090 | 11984 | 11770 | 11550 | 11321 | 10957 | 10293 | 9529 | 8602 | |
| | 30 | | 1258 | 2.20 | 30 | 12754 | 12280 | 12156 | 12030 | 11770 | 11498 | 11197 | 10725 | 9920 | | | |
| | 20 | 3 | 1752 | 3.29 | 50 | 13829 | 13531 | 13454 | 13376 | 13219 | 13062 | 12902 | 12658 | 12233 | 11770 | 11263 | 10149 |
| | 25 | | 1579 | 3.30 | 42 | 14427 | 14074 | 13984 | 13894 | 13710 | 13524 | 13333 | 13037 | 12510 | 11934 | 11300 | 9734 |
| | 30 | | 1440 | 3.30 | 38 | 14599 | 14189 | 14083 | 13975 | 13755 | 13529 | 13295 | 12916 | 12232 | 11556 | 10694 | |

BSB53 | Size 36

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 36B206 | 20 | 3/4 | 845 | 0.83 | 23 | 10753 | 10035 | 9834 | 9626 | 9176 | 8662 | 8088 | 7141 | 4152 | | | |
| | 25 | | 758 | 0.82 | 20 | 11278 | 10397 | 10150 | 9891 | 9325 | 8669 | 7821 | 5907 | | | | |
| | 30 | | 688 | 0.83 | 18.6 | 11503 | 10411 | 10094 | 9740 | 9061 | 7707 | | | | | | |
| | 20 | 1 | 930 | 1.09 | 27 | 11835 | 11194 | 11016 | 10834 | 10450 | 10032 | 9561 | 8777 | 7171 | 4043 | | |
| | 25 | | 835 | 1.10 | 24 | 12423 | 11637 | 11421 | 11197 | 10718 | 10192 | 9594 | 8420 | | | | |
| | 30 | | 757 | 1.10 | 21 | 12656 | 11681 | 11412 | 11123 | 10491 | 9837 | 8546 | | | | | |
| | 20 | 1 1/2 | 1064 | 1.64 | 35 | 13540 | 12993 | 12842 | 12689 | 12371 | 12037 | 11682 | 11090 | 9955 | 8632 | 6406 | |
| | 25 | | 955 | 1.65 | 30 | 14208 | 13535 | 13353 | 13166 | 12775 | 12359 | 11913 | 11165 | 9479 | | | |
| | 30 | | 866 | 1.65 | 26 | 14479 | 13641 | 13416 | 13185 | 12684 | 12124 | 11608 | 10212 | | | | |
| | 20 | 2 | 1171 | 2.20 | 41 | 14902 | 14413 | 14278 | 14142 | 13861 | 13569 | 13265 | 12779 | 11844 | 10787 | 9580 | 4931 |
| | 25 | | 1051 | 2.20 | 35 | 15637 | 15033 | 14870 | 14704 | 14362 | 14003 | 13624 | 13012 | 11812 | 10148 | | |
| | 30 | | 953 | 2.20 | 31 | 15933 | 15179 | 14980 | 14776 | 14351 | 13880 | 13369 | 12652 | 10369 | | | |
| | 20 | 3 | 1340 | 3.27 | 54 | 17053 | 16635 | 16521 | 16404 | 16165 | 15920 | 15669 | 15276 | 14570 | 13761 | 12859 | 10779 |
| | 25 | | 1204 | 3.30 | 44 | 17913 | 17396 | 17256 | 17115 | 16827 | 16528 | 16220 | 15733 | 14847 | 13822 | 12506 | |
| | 30 | | 1091 | 3.30 | 40 | 18240 | 17589 | 17419 | 17246 | 16890 | 16521 | 16128 | 15464 | 14399 | 12284 | | |
| | 20 | 5 | 1589 | 5.46 | 76 | 20222 | 19876 | 19785 | 19691 | 19496 | 19296 | 19092 | 18780 | 18238 | 17660 | 17035 | 15588 |
| | 25 | | 1427 | 5.51 | 63 | 21231 | 20805 | 20690 | 20573 | 20337 | 20095 | 19848 | 19467 | 18797 | 18075 | 17287 | 15349 |
| | 30 | | 1294 | 5.51 | 55 | 21634 | 21090 | 20950 | 20808 | 20519 | 20223 | 19919 | 19445 | 18550 | 17659 | 16597 | |

NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.



Belt Driven

BSB53 | Size 42

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 | |
| 42B304 | 20 | 1 | 735 | 1.10 | 21 | 14860 | 13702 | 13379 | 13050 | 12376 | 11671 | 10957 | 9853 | | | | | |
| | 25 | | 664 | 1.10 | 18.3 | 15201 | 13798 | 13420 | 13033 | 12224 | 11370 | 10460 | | | | | | |
| | 30 | | 606 | 1.10 | 16.9 | 15129 | 13504 | 13027 | 12558 | 11556 | 10313 | | | | | | | |
| | 20 | 1 1/2 | 842 | 1.65 | 26 | 17024 | 16040 | 15766 | 15486 | 14914 | 14328 | 13718 | 12784 | 11177 | 8795 | | | |
| | 25 | | 760 | 1.65 | 23 | 17399 | 16197 | 15872 | 15542 | 14869 | 14166 | 13430 | 12268 | | | | | |
| | 30 | | 694 | 1.65 | 21 | 17326 | 15938 | 15562 | 15155 | 14330 | 13472 | 12453 | | | | | | |
| | 20 | 2 | 926 | 2.20 | 29 | 18722 | 17843 | 17600 | 17351 | 16839 | 16317 | 15783 | 14950 | 13535 | 12025 | 9815 | | |
| | 25 | | 836 | 2.20 | 26 | 19139 | 18060 | 17770 | 17474 | 16873 | 16256 | 15615 | 14609 | 12790 | | | | |
| | 30 | | 764 | 2.21 | 25 | 19073 | 17827 | 17495 | 17153 | 16404 | 15666 | 14883 | 13477 | | | | | |
| | 20 | 3 | 1060 | 3.29 | 36 | 21431 | 20682 | 20475 | 20265 | 19832 | 19385 | 18930 | 18238 | 17029 | 15792 | 14532 | 10862 | |
| | 25 | | 957 | 3.30 | 32 | 21909 | 20981 | 20734 | 20482 | 19968 | 19443 | 18910 | 18081 | 16620 | 15051 | | | |
| | 30 | | 874 | 3.30 | 30 | 21819 | 20742 | 20460 | 20172 | 19577 | 18923 | 18264 | 17286 | 15250 | | | | |
| | 20 | 5 | 1257 | 5.47 | 50 | 25414 | 24801 | 24632 | 24461 | 24109 | 23748 | 23377 | 22809 | 21843 | 20839 | 19802 | 17710 | |
| | 25 | | 1135 | 5.51 | 43 | 25984 | 25215 | 25012 | 24807 | 24386 | 23955 | 23517 | 22851 | 21704 | 20497 | 19234 | 16479 | |
| | 30 | | 1037 | 5.52 | 40 | 25889 | 24991 | 24759 | 24524 | 24044 | 23549 | 23031 | 22191 | 20835 | 19245 | 17364 | | |

BSB53 | Size 48

| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 48B304 | 20 | 1 1/2 | 731 | 1.65 | 25 | 21282 | 19682 | 19245 | 18802 | 17894 | 16948 | 16002 | 14583 | 10971 | | | |
| | 25 | | 657 | 1.65 | 21 | 21548 | 19677 | 19171 | 18626 | 17545 | 16408 | 15165 | | | | | |
| | 30 | | 598 | 1.65 | 19.8 | 21286 | 19154 | 18495 | 17872 | 16426 | 14505 | | | | | | |
| | 20 | 2 | 805 | 2.20 | 29 | 23437 | 22007 | 21616 | 21218 | 20413 | 19578 | 18719 | 17434 | 15158 | | | |
| | 25 | | 723 | 2.21 | 25 | 23712 | 22029 | 21583 | 21123 | 20128 | 19156 | 18116 | 16404 | | | | |
| | 30 | | 659 | 2.21 | 23 | 23458 | 21579 | 21024 | 20425 | 19293 | 17870 | 16097 | | | | | |
| | 20 | 3 | 921 | 3.30 | 35 | 26814 | 25590 | 25257 | 24918 | 24225 | 23522 | 22802 | 21683 | 19812 | 17881 | 15132 | |
| | 25 | | 827 | 3.30 | 31 | 27123 | 25668 | 25288 | 24901 | 24099 | 23228 | 22370 | 21050 | 18560 | | | |
| | 30 | | 754 | 3.31 | 29 | 26839 | 25236 | 24797 | 24330 | 23294 | 22310 | 21193 | 18973 | | | | |
| | 20 | 5 | 1092 | 5.50 | 47 | 31792 | 30784 | 30513 | 30236 | 29670 | 29089 | 28500 | 27607 | 26055 | 24462 | 22905 | 19058 |
| | 25 | | 981 | 5.51 | 41 | 32174 | 30959 | 30646 | 30329 | 29683 | 29019 | 28319 | 27211 | 25402 | 23397 | 21147 | |
| | 30 | | 894 | 5.52 | 38 | 31823 | 30498 | 30146 | 29784 | 29025 | 28171 | 27296 | 26052 | 23222 | | | |
| | 20 | 7 1/2 | 1250 | 8.25 | 61 | 36392 | 35527 | 35295 | 35059 | 34577 | 34083 | 33580 | 32810 | 31510 | 30157 | 28769 | 26030 |
| | 25 | | 1123 | 8.26 | 52 | 36831 | 35776 | 35506 | 35234 | 34681 | 34118 | 33543 | 32647 | 31040 | 29476 | 27772 | 23923 |
| | 30 | | 1023 | 8.27 | 47 | 36415 | 35270 | 34971 | 34665 | 34036 | 33377 | 32656 | 31500 | 29671 | 27248 | 24472 | |

NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.

Belt Driven

BSB53 | Size 54

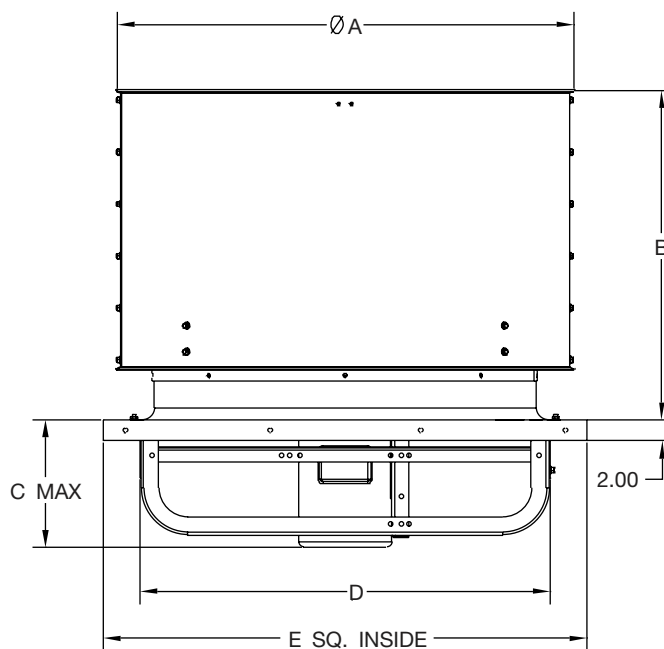
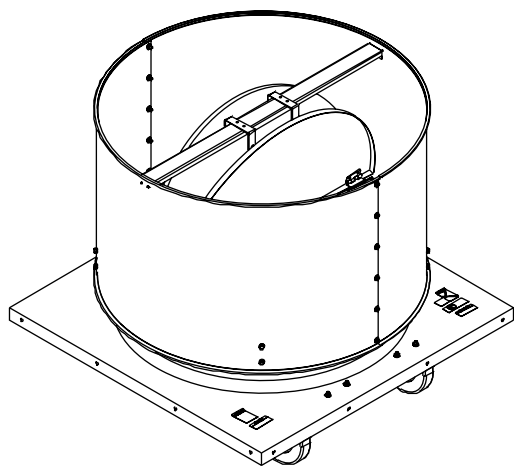
| PROPELLER | BLADE ANGLE | MOTOR HP | FAN RPM | MAX BHP | SONES @ 0" SP | CFM / STATIC PRESSURE (IN. W.G.) | | | | | | | | | | | |
|-----------|-------------|----------|---------|---------|---------------|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | 0.000 | 0.100 | 0.125 | 0.150 | 0.200 | 0.250 | 0.300 | 0.375 | 0.500 | 0.625 | 0.750 | 1.000 |
| 54B406 | 20 | 1 1/2 | 556 | 1.66 | 26 | 24411 | 22429 | 21893 | 21354 | 20281 | 19161 | 17899 | 15676 | | | | |
| | 25 | | 498 | 1.65 | 23 | 25133 | 22806 | 22158 | 21431 | 20000 | 18351 | 16447 | | | | | |
| | 30 | | 452 | 1.65 | 22 | 25193 | 22427 | 21353 | 20442 | | | | | | | | |
| | 20 | 2 | 612 | 2.21 | 30 | 26869 | 25094 | 24613 | 24126 | 23149 | 22172 | 21153 | 19415 | 15666 | | | |
| | 25 | | 549 | 2.21 | 28 | 27707 | 25626 | 25062 | 24474 | 23151 | 21862 | 20354 | 17771 | | | | |
| | 30 | | 498 | 2.21 | 26 | 27757 | 25383 | 24575 | 23588 | 20319 | | | | | | | |
| | 20 | 3 | 700 | 3.30 | 40 | 30733 | 29209 | 28799 | 28381 | 27531 | 26676 | 25825 | 24514 | 21998 | 18889 | | |
| | 25 | | 628 | 3.31 | 35 | 31694 | 29901 | 29426 | 28938 | 27915 | 26754 | 25627 | 23770 | 20017 | | | |
| | 30 | | 570 | 3.31 | 32 | 31770 | 29781 | 29199 | 28556 | 26890 | 25304 | | | | | | |
| | 20 | 5 | 830 | 5.50 | 58 | 36440 | 35184 | 34847 | 34505 | 33806 | 33093 | 32373 | 31293 | 29477 | 27488 | 25173 | 18231 |
| | 25 | | 744 | 5.50 | 49 | 37548 | 36055 | 35666 | 35271 | 34459 | 33615 | 32706 | 31226 | 28756 | 25733 | | |
| | 30 | | 675 | 5.51 | 44 | 37622 | 35999 | 35551 | 35080 | 34057 | 32712 | 31374 | | | | | |
| | 20 | 7 1/2 | 950 | 8.26 | 72 | 41709 | 40630 | 40341 | 40048 | 39451 | 38841 | 38222 | 37280 | 35708 | 34128 | 32461 | 28508 |
| | 25 | | 852 | 8.26 | 64 | 42999 | 41704 | 41371 | 41033 | 40345 | 39638 | 38910 | 37760 | 35622 | 33515 | 31008 | |
| | 30 | | 773 | 8.27 | 56 | 43085 | 41694 | 41320 | 40934 | 40118 | 39233 | 38174 | 36311 | | | | |
| | 20 | 10 | 1046 | 11.02 | 84 | 45924 | 44957 | 44697 | 44434 | 43900 | 43355 | 42801 | 41956 | 40527 | 39102 | 37666 | 34541 |
| | 25 | | 938 | 11.03 | 74 | 47339 | 46168 | 45868 | 45565 | 44950 | 44321 | 43678 | 42684 | 40875 | 38934 | 37025 | 32306 |
| | 30 | | 851 | 11.04 | 68 | 47432 | 46181 | 45850 | 45510 | 44801 | 44049 | 43242 | 41768 | 39125 | | | |

NOTES:

1. Performance certified is for installation type A: Free inlet, free outlet.
2. Power rating (BHP) does not include transmission losses.
3. Performance ratings do not include the effects of appurtenances (accessories).
4. The sound ratings shown are loudness values in fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values are for installation Type A: Free inlet hemispherical sone levels.



Model BSD53

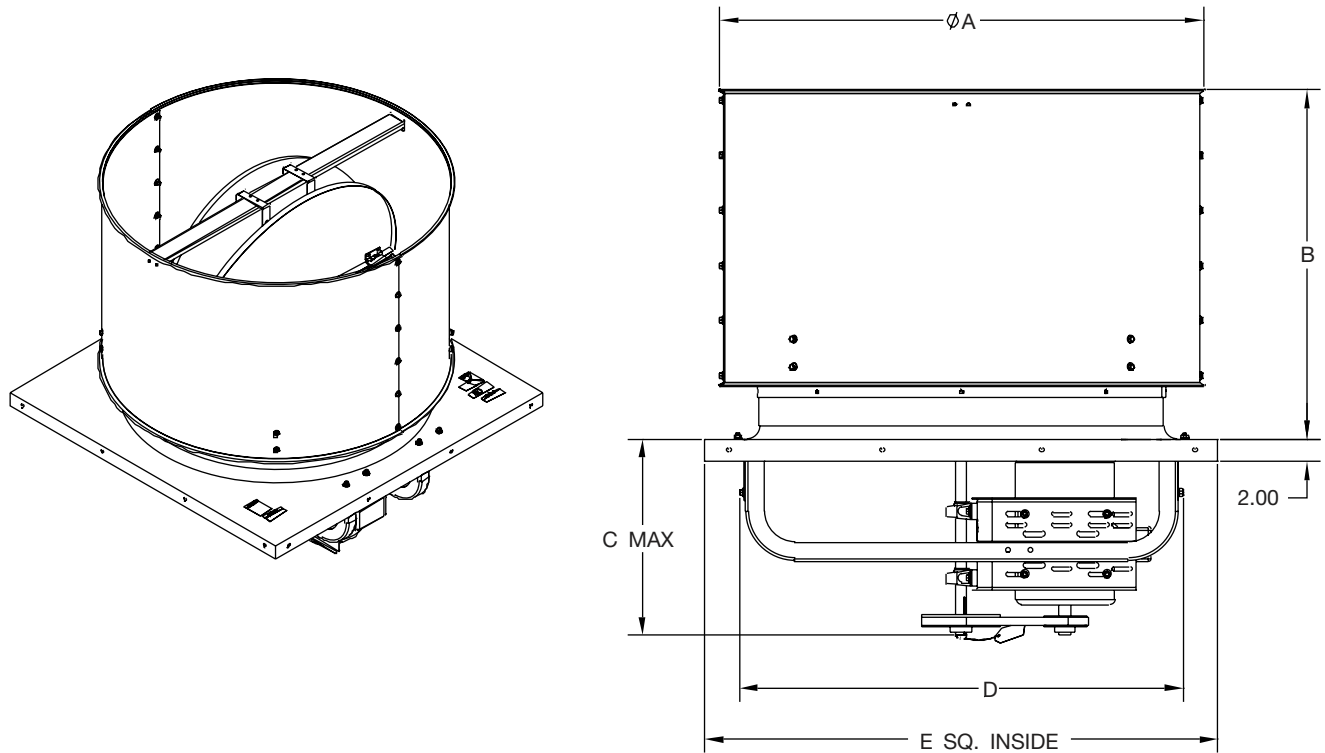


| SIZE | A | B | C MAX | D | E | CANTED CURB DIMENSIONS | SELF-FLASHING CURB DIMENSIONS |
|------|-------|-------|-------|-------|-------|------------------------|-------------------------------|
| 14 | 21.13 | 19.20 | 11.19 | 15.25 | 21.50 | 20 x 20 | 20.50 x 20.50 |
| 16 | 23.13 | 20.20 | 11.19 | 18.25 | 24.50 | 23 x 23 | 23.50 x 23.50 |
| 18 | 25.13 | 21.20 | 11.19 | 20.25 | 26.50 | 25 x 25 | 25.50 x 25.50 |
| 21 | 28.44 | 22.70 | 14.41 | 23.25 | 29.50 | 28 x 28 | 28.50 x 28.50 |
| 24 | 31.88 | 24.44 | 14.55 | 26.25 | 32.50 | 31 x 31 | 31.50 x 31.50 |
| 30 | 37.88 | 27.94 | 14.74 | 34.25 | 40.50 | 39 x 39 | 39.50 x 39.50 |
| 36 | 43.88 | 31.94 | 15.67 | 40.25 | 46.50 | 45 x 45 | 45.50 x 45.50 |
| 42 | 49.88 | 34.92 | 23.59 | 45.00 | 52.50 | 51 x 51 | 51.50 x 51.50 |
| 48 | 55.88 | 37.92 | 23.59 | 51.00 | 58.50 | 57 x 57 | 57.50 x 57.50 |

NOTE:

1. Dimensions are not to be used for construction.

Model BSB53



| SIZE | A | B | C MAX | D | E | CANTED CURB DIMENSIONS | SELF-FLASHING CURB DIMENSIONS |
|------|-------|-------|-------|-------|-------|------------------------|-------------------------------|
| 21 | 28.44 | 22.70 | 17.25 | 23.30 | 29.50 | 28 x 28 | 28.50 x 28.50 |
| 24 | 31.88 | 24.44 | 17.25 | 26.30 | 32.50 | 31 x 31 | 31.50 x 31.50 |
| 30 | 37.88 | 27.94 | 18.31 | 34.30 | 40.50 | 39 x 39 | 39.50 x 39.50 |
| 36 | 43.88 | 31.94 | 18.31 | 40.30 | 46.50 | 45 x 45 | 45.50 x 45.50 |
| 42 | 49.88 | 34.92 | 21.31 | 45.55 | 52.50 | 51 x 51 | 51.50 x 51.50 |
| 48 | 55.88 | 37.92 | 21.31 | 51.55 | 58.50 | 57 x 57 | 57.50 x 57.50 |
| 54 | 61.88 | 40.92 | 26.13 | 56.88 | 64.50 | 63 x 63 | 63.50 x 63.50 |

NOTE:

1. Dimensions are not to be used for construction.



Model BSD53

Low Profile Upblast Propeller Roof Ventilators, shall be Model BSD53 direct drive as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

CONSTRUCTION — Fan curb caps shall be constructed of heavy gauge galvanized or painted steel for durability and appearance. Curb caps shall have a deep formed inlet venturi for efficient airflow and pre-punched holes for easy mounting to the roof curb. Discharge cap with butterfly dampers shall contain a rain channel to protect against rain entry. Butterfly damper blades constructed of steel as standard, unless the outlet velocity of the fan is below the minimum required to open steel damper blades, then aluminum blades shall be provided. Discharge caps and motor mount assemblies shall be constructed of heavy gauge galvanized steel.

PROPELLERS — Propellers shall be constructed of cast aluminum blades and hubs. Propellers shall be secured to the motor shaft with a taperlock bushing.

MOTORS — All motors shall be single phase or three phase induction, permanently lubricated, heavy-duty, ball bearing type, closely matched to the fan load and provided at the voltage, phase, hertz, and enclosure as provided on the fan schedule.

FINISH AND COATING — Fans shall have galvanized steel or finish painted curb caps, motor supports and windbands.

ACCESSORIES — When specified, accessories such as inlet safety guards, fusible link assemblies, magnetic damper latches, hinged bases, roof curbs and disconnect switches shall be provided by Aerovent to maintain one source responsibility.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each propeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its Model BSD53 for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.

Model BSB53

Low Profile Upblast Propeller Roof Ventilators, shall be Model BSB53 belt driven as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA test codes for air moving devices and shall be guaranteed by the manufacturer to deliver rated published performance levels.

CONSTRUCTION — Fan curb caps shall be constructed of heavy gauge galvanized steel or painted steel for durability and appearance. Curb caps shall have a deep formed inlet venturi for efficient airflow and pre-punched holes for easy mounting to the roof curb. Discharge cap with butterfly dampers shall contain a rain channel to protect against rain entry. Butterfly damper blades constructed of steel as standard, unless the outlet velocity of the fan is below the minimum required to open steel damper blades, then aluminum blades shall be provided. Discharge caps and motor mount assemblies shall be constructed of heavy gauge galvanized steel.

PROPELLERS — Propellers shall be constructed of cast aluminum blades and hubs. Propellers on belt driven units shall be secured to the fan shaft with a taperlock bushing.

SHAFTS — Shafts shall be AISI 1045 cold rolled steel, accurately turned, ground, polished, and ring gauged for accuracy. Shafts shall be sized for the first critical speed of at least 1.43 times the maximum speed.

BEARINGS — Bearings are to be pillow block, heavy-duty, anti-friction, self-aligning, grease lubricated, ball type. Each fan's bearings are sized with a minimum average life, per AFBMA, in excess of 200,000 hours when operating at the maximum RPM of the fan size.

DRIVES — Motor sheaves shall be cast iron, and supplied as variable pitch standard. Drives and belts shall be rated for a minimum of 150% of the required motor HP.

MOTORS — All motors shall be single phase or three phase induction, permanently lubricated, heavy-duty, ball bearing type, closely matched to the fan load and provided at the voltage, phase, hertz, and enclosure as provided on the fan schedule.

FINISH AND COATING — Fans shall have galvanized steel or finish painted curb caps, motor supports and windbands.

ACCESSORIES — When specified, accessories such as inlet safety guards, fusible link assemblies, magnetic damper latches, hinged bases, extended lube lines, roof curbs and disconnect switches shall be provided by Aerovent to maintain one source responsibility.

FACTORY RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at operating speed or maximum RPM allowed for the particular construction type. Each propeller shall be statically and dynamically balanced in accordance with ANSI/AMCA 204-96 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical, and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

GUARANTEE — The manufacturer shall guarantee the workmanship and materials for its Model BSB53 for at least one (1) year from startup or eighteen (18) months from shipment, whichever occurs first.



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INDUSTRIAL AIR HANDLERS | AIR MAKE-UP | FIBERGLASS FANS | CUSTOM FANS**



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