

Backwardly Inclined Blowers

Bulletin AS0953

November 2003

SINGLE WIDTH
SINGLE INLET
12¹/₄" THROUGH
66" DIAMETER



A Fläkt Woods Company

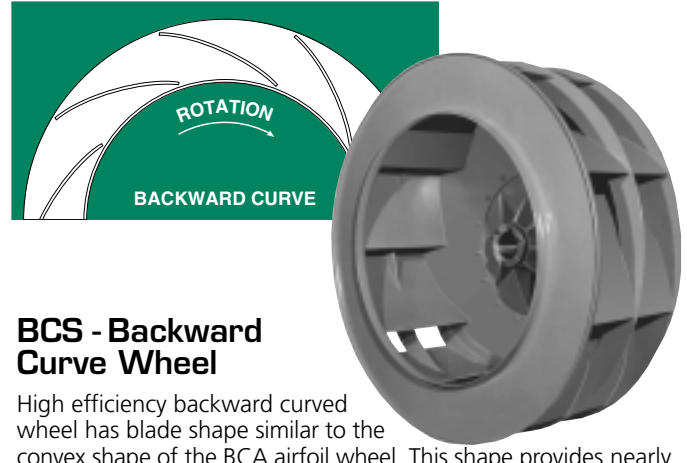
**American
Fan Company**

WHEELS



BCA - Airfoil Wheel

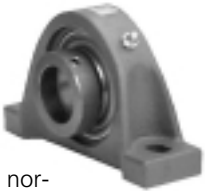
High efficiency backwardly inclined airfoil bladed wheel designed for clean, dry air applications. BCA wheels exhibit non-overloading horsepower characteristics and stable performance over the entire pressure curve. Noise levels are lowest in the peak efficiency range of the performance curve. Class 3 wheels utilize internal blade stiffeners for higher tip speed capability.



BCS - Backward Curve Wheel

High efficiency backward curved wheel has blade shape similar to the convex shape of the BCA airfoil wheel. This shape provides nearly identical performance characteristics at a given speed at a slightly lower efficiency. BCS wheels also exhibit the same non-overloading horsepower characteristics and stable performance over the entire pressure curve. BCS wheels should be specified in moist or lightly contaminated air systems. Noise levels are lowest in the peak efficiency range of the performance curve. Class 3 wheels utilize a circumferential blade stiffener for higher tip speed capability.

BEARINGS



200 Series normal duty ball bearings used on class 1 and 2 on sizes 122 through 445. Eccentric cam locking collars hold the bearings securely to the shaft and further tightens with bearing rotation. Bearings are grease relubricable with steel-clad lip seals. Sizes 2-7/16" diameter and larger feature spring locking collars.



300 Series heavy duty ball bearings used on class 3 on sizes 122 through 330. The spring locking collar design provides a secure grip of the wide inner ring bearing to the shaft. Bearings are grease relubricable with felt contact seals.



22400 Series heavy duty double row spherical roller bearings used on class 1 and 2 on sizes 490 through 660 and on class 3 on sizes 365 through 660. The spring locking collar design provides a secure grip of the wide inner ring bearing to the shaft. Bearings are grease relubricable with floating labyrinth seals which feature multiple self-centering rings held securely in a steel carrier.

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RATINGS



American Fan Company certifies that the models BCA, BCS, QBCA, and QBCS shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

FEATURES



Sizes 122 thru 200



Sizes 222 thru 330



Sizes 365 thru 660

- Choice of two wheel types: Backward Curve (BCS) 12 1/4" diameter through 66" diameter, or Airfoil (BCA) 18 1/4" diameter through 66" diameter.
- Drilled outlet flange and slip collar inlet-standard.
- Pressures to 17" SP wg, Volumes to 100,000 CFM.
- Arrangement 1 bases prepunched for motor slide bases.
- Fork lift slots and lifting eyes in base for ease of handling and installation up through size 330.
- Available in standard or "Q" design
- Heavy gage continuously welded housings, reversible and rotatable through size 330, fixed on sizes 365 and up.
- Heavy duty anti-friction, self-aligning ball or roller bearings with positive shaft locking.
- Close tolerance 1141 turned, ground, and polished shafting.
- Two-plane dynamically balanced wheels.

ACCESSORIES

DRIVE GUARD

Standard guard is a totally enclosed design, as required by OSHA, for industrial applications.



OUTLET DAMPER

Heavy-duty damper bolts onto blower outlet flange for controlled air flow. Parallel or opposed blade designs are furnished. Either manual or motorized operator is available.



ARRT. 1 UNITARY

American Fan Co. offers unitary bases constructed of heavy channel iron for high horse power or high temperature applications where ARRT. 9 is impractical. The unitary base design is a complete packaged unit simplifying handling and installation while providing a more uniform weight distribution necessary when vibration isolators are used. Unitary bases also allow excellent access for routine maintenance.

ACCESS DOOR

Heavy-duty bolt-on type provided as the standard design. Quick release and other types including extended access for high temperature insulated housing applications are available.

ADDITIONAL AVAILABLE ACCESSORIES

- | | | | |
|--|---|---------------------------------|-----------------------|
| ■ Housing drain | ■ Stuffing box | ■ Radial inlet vane damper | ■ Flexible connectors |
| ■ Inlet screen | ■ Mechanical shaft seal | ■ Flexible coupling for arr't 8 | ■ Companion flanges |
| ■ Outlet screen | ■ Spark resistant construction | ■ Special coatings | ■ Weather cover |
| ■ High-temperature construction up to 1000° F. | ■ Stainless steel, aluminum, or other alloy airstream | ■ Flanged inlet | ■ Vibration isolators |
| | | ■ Slip connection discharge | ■ Shaft seal |

TYPICAL APPLICATIONS

- Air pollution control systems
- Dryers and ovens
- HVAC
- Forced draft
- Boiler windbox
- Make-up air
- Fume control
- Air curtains
- Electronics cooling

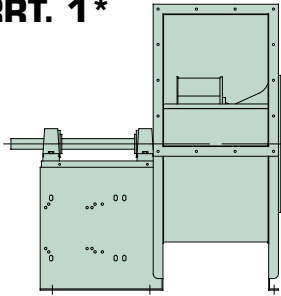
MAJOR INDUSTRIES

- Energy
- Pulp and Paper
- Commercial building
- Automotive
- Textile
- Petrochemical
- Steel

ARRANGEMENTS

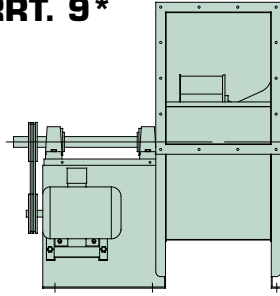
*Also available in "Q" design. See pages 82-91.

ARRT. 1*



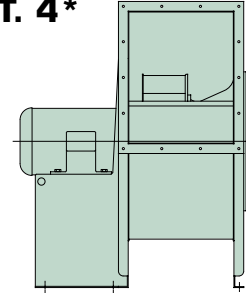
The fan wheel is overhung with both bearings mounted on a common pedestal. ARRT. 1 is suitable for high temperature and/or corrosive environment. Fan can be belt driven or directly coupled to drive motor mounted on a separate base.

ARRT. 9*



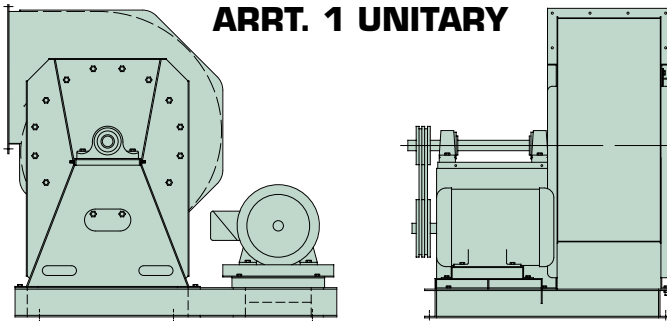
The fan wheel is overhung with both bearings mounted on a common pedestal. Fan is belt driven with drive motor mounted on bearing pedestal for a more compact unit suitable for high temperature and/or corrosive environment.

ARRT. 4*



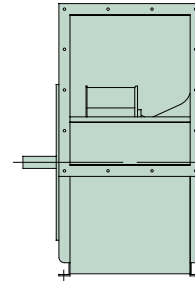
Direct drive fan with wheel mounted directly on motor shaft. Unit is designed for standard temperature applications only. With no belt loss, the direct drive fan operates at a higher efficiency.

ARRT. 1 UNITARY



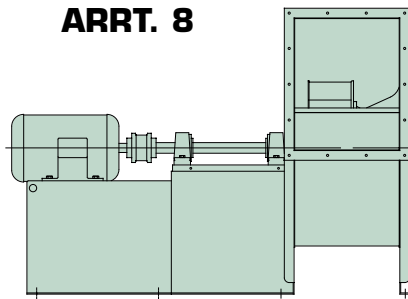
Arrangement 1 fan is mounted on a common channel iron base with motor and slide base. Commonly used when motor frame size exceeds arrangement 9 limitations and for high temperature applications. Also ideal for use with vibration isolators.

ARRT. 3*



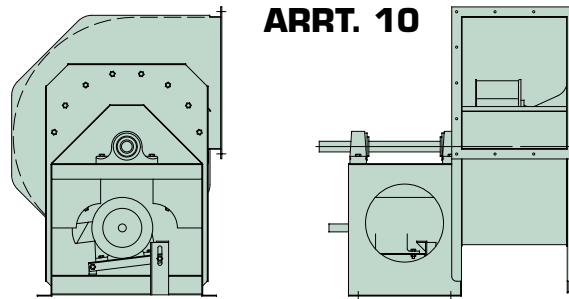
Belt drive or direct drive through coupling. Wheel is center hung with one bearing on each side supported by fan housing. Performance is slightly derated due to bearing in airstream. Designed for clean, dry, normal temperature applications only.

ARRT. 8



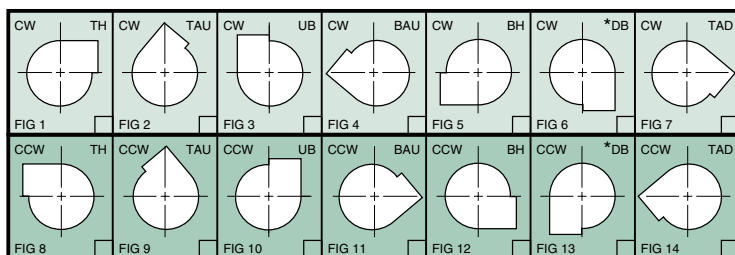
Direct drive fan through shaft and bearings. Efficiency of ARRT. 4 is maintained. However, ARRT. 8 may be used for high temperature and/or corrosive applications which require the motor shaft to be outside of airstream.

ARRT. 10



The fan wheel is overhung with both bearings mounted on a common pedestal. Fan is belt driven with drive motor mounted inside the bearing pedestal. Unit is compact and is commonly provided with an optional weather cover which encloses the shaft, bearings, drives and motor.

DISCHARGE POSITIONS



*Downblast discharge on sizes 122 through 330 can either be supplied without outlet flange or with flange and discharge extended to 2" below mounting surface of base. There is an additional charge for extending discharge. Sizes 365 through 660 are supplied with integral flush outlet flange.

NOTE: ROTATION VIEWED FROM DRIVEN SIDE

CONSTRUCTION MATERIALS

FAN SIZE	CHANNEL SIDE	CHANNEL TOP	MBFP/ INL. PLT	INLET VENTURI	WHEEL SPINNING	CLASS 1 & 2						CLASS 3									
						HSG. SIDE	HSG. SCROLL	BCS BLADE	BCA BLADE	WHL. BKPLT.	SHAFT DIA.	BEARINGS	HSG. SIDE	HSG. SCROLL	BCS BLADE	BCS BLADE REIN.	BCA BLADE	BCA BLADE REIN.	WHL. BKPLT.	SHAFT DIA.	BEARINGS
122	12	12	12	14	14	12	14	14	—	12	1 1/16	P3-Y219N	10	12	12	14	—	—	10	1 1/16	P-323
135	12	12	12	14	14	12	14	14	—	12	1 1/16	P3-Y219N	10	12	12	14	—	—	10	1 1/16	P-323
150	12	12	12	14	14	12	14	14	—	12	1 1/16	P3-Y219N	10	12	12	14	—	—	10	1 1/16	P-323
165	10	10	10	14	12	12	12	14	—	12	1 1/16	P3-Y223N	10	10	12	12	—	—	10	1 1/16	P-327
182	10	10	10	12	12	12	12	12	18	12	1 1/16	P3-Y223N	10	10	10	12	18	16	10	1 1/16	P-327
200	10	10	10	12	12	12	12	12	18	12	1 1/16	P3-Y223N	10	10	10	12	18	16	10	1 1/16	P-331
222	7	7	10	12	12	10	12	12	18	10	1 1/16	P3-Y227N	10	10	10	12	18	16	7	1 1/16	P-331
245	7	7	10	12	10	10	12	10	16	10	1 1/16	P3-Y227N	10	10	7	10	16	14	7	2 3/16	P-335
270	1/4	1/4	7	12	10	10	12	10	16	10	1 1/16	P3-Y227N	10	10	7	10	16	14	7	2 3/16	P-335
300	1/4	1/4	7	12	10	10	12	10	16	7	1 1/16	P3-Y231N	10	10	7	10	16	14	1/4	2 1/16	P-339
330	1/4	1/4	7	12	7	10	12	10	16	7	2 3/16	P3-Y235N	7	7	7	7	16	12	1/4	2 1/16	P-343
365	3/8	3/8	—	12	7	10	10	10	16	7	2 1/16	P3-Y239N	7	7	7	7	16	12	1/4	2 1/16	P-B22443H
402	3/8	3/8	—	12	7	10	10	10	16	7	2 1/16	P-243	7	7	7	7	16	12	1/4	2 1/16	P-B22447H
445	3/8	3/8	—	12	7	10	10	10	16	7	2 1/16	P-243	7	7	7	7	16	12	1/4	2 1/16	P-B22447H
490	3/8	3/8	—	10	1/4	10	10	7	14	1/4	2 3/16	P-B22447H	7	7	1/4	1/4	14	12	5/16	3/16	P-B22455H
542	3/8	3/8	—	10	1/4	10	10	7	14	1/4	3 3/16	P-B22451H	7	7	1/4	1/4	14	12	5/16	3 1/16	P-B22459H
600	3/8	1/2	—	10	1/4	10	10	7	14	1/4	3 3/16	P-B22455H	7	7	1/4	1/4	14	10	5/16	4 1/16	P-B22571H
660	3/8	1/2	—	10	1/4	10	10	7	14	1/4	3 3/16	P-B22463H	7	7	1/4	1/4	14	10	5/16	4 1/16	P-B22571H

NOTE: Bearings are Link-Belt or equivalent.

WHEEL WEIGHTS AND WR²

BCA AIRFOIL WHEELS

SIZE	DIA. (INCHES)	CL. 1 & 2		CL. 3	
		WEIGHT (LBS)	WR ² (LBS-FT ²)	WEIGHT (LBS)	WR ² (LBS-FT ²)
182	18 1/4	32	9.6	34	10.2
200	20	36	13.0	39	14.0
222	22 1/4	51	22.7	57	25.4
245	24 1/2	64	34.6	71	38.4
270	27	74	48.6	83	54.5
300	30	110	89.1	124	100
330	33	135	132	154	151
365	36 1/2	159	191	183	219
402	40 1/4	223	325	251	366
445	44 1/2	258	460	294	524
490	49	407	882	445	962
542	54 1/4	419	1110	532	1409
600	60	615	1993	681	2206
660	66	715	2803	797	3125

BCS BACKWARD CURVE WHEELS

SIZE	DIA. (INCHES)	CL. 1 & 2		CL. 3	
		WEIGHT (LBS)	WR ² (LBS-FT ²)	WEIGHT (LBS)	WR ² (LBS-FT ²)
122	12 1/4	13	1.8	16	2.2
135	13 1/2	15	2.5	19	3.1
150	15	17	3.4	22	4.5
165	16 1/2	27	6.6	33	8.1
182	18 1/4	34	10.2	41	12.3
200	20	38	13.7	46	16.6
222	22 1/4	54	24.1	67	29.9
245	24 1/2	68	36.7	87	47.0
270	27	80	52.5	102	66.9
300	30	116	94.0	147	119
330	33	143	140	183	179
365	36 1/2	168	201	218	261
402	40 1/4	233	340	291	424
445	44 1/2	271	483	342	610
490	49	434	938	539	1165
542	54 1/4	514	1361	644	1706
600	60	647	2096	807	2615
660	66	754	2956	949	3720

$$\left(\text{Equivalent } WR^2 \text{ At Motor Shaft} \right) = WR^2 \left(\frac{\text{Fan RPM}}{\text{Motor RPM}} \right)^2 \times 1.05$$

SPECIAL CONSTRUCTION / MATERIALS

SPARK RESISTANT CONSTRUCTION

TYPE A

All parts of the fan in contact with the air or gas being handled shall be made of non-ferrous material.*

TYPE B

Fan shall have entirely non-ferrous wheel and a non-ferrous ring about the opening through which the shaft passes.

TYPE C

Fan shall be so constructed that a shift of the wheel or shaft will not permit two ferrous parts of the fan to rub or strike.

CORROSION RESISTANT AND SPECIAL ALLOYS

For applications involving handling of corrosive fumes, a wide variety of protective coatings and special alloy metals are available. Consult your American Fan representative or factory for full details.

* American Fan Co. offers a Type "A" alternate Type "AA" spark-resistant construction which has a non-ferrous airstream except shaft, which is 316 S. S.

TEMPERATURE AND ALTITUDE CORRECTIONS

USING DENSITY CORRECTION FACTORS

The Capacity Tables in this bulletin are based on fans handling standard air at a density of .075 pounds per cubic foot equivalent to air at 70°F and 29.92" Hg barometric pressure. Therefore, when a fan handles air or other gases at other than standard density due to temperature, altitude or the type of gas, the published tables should be used in the following manner.

EXAMPLE: Determine RPM and BHP for a BCS-122, 2058 CFM, 7" SP, 300° F, 3000 feet elevation.

- 1) Determine the equivalent static pressure in the following manner: SP = required SP x density factor for conditions from the table below, ie equivalent SP = 7 x 1.61 = 11.27"

- 2) Using the required CFM and the equivalent SP, obtain the RPM and BHP from the capacity table, interpolating when necessary. From capacity table for size BCS-122, RPM = 4804, Equivalent BHP = 5.74
- 3) The RPM obtained is the correct value.
- 4) The BHP obtained must be corrected for the actual density as follows:

$$\text{BHP at conditions} = \frac{\text{Equivalent BHP}}{\text{Density Factor}} = \frac{5.74}{1.61}$$

Therefore, BHP at conditions = 3.57

DERATING FACTORS FOR HI-TEMPERATURE

Tem. °F	Derating Factor		
	std. steel	304 stainless	316 stainless
70°	1.0	.91	.91
200°	.98	.84	.88
300°	.96	.79	.81
400°	.95	.75	.79
500°	.90	.72	.78
600°	.86	.70	.76
700°	.82	.68	.74
800°	N/A	.67	.72
900°	N/A	N/A	Contact
1000°	N/A	N/A	Factory

When elevated temperatures are encountered maximum RPMs shown on performance tables must be derated according to the above table. Standard steel construction is not suitable for use in temperatures over 700°F. Aluminum wheels are suitable for use up to 250°F only.

DENSITY CORRECTION FACTORS

AIR TEMP DEG. F	ALTITUDE IN FEET ABOVE SEA LEVEL																			
	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	10000
-60°	.76	.77	.78	.80	.81	.83	.84	.86	.87	.89	.91	.92	.94	.96	.98	1.00	1.02	1.04	1.06	1.10
-40°	.79	.81	.82	.84	.85	.87	.88	.90	.92	.93	.95	.97	.99	1.01	1.03	1.05	1.07	1.09	1.11	1.15
-20°	.83	.85	.86	.88	.89	.91	.93	.94	.96	.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.21
0°	.87	.89	.91	.92	.94	.96	.98	.99	1.01	1.03	1.05	1.06	1.09	1.10	1.13	1.15	1.17	1.19	1.22	1.26
40°	.94	.96	.98	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.19	1.21	1.23	1.26	1.28	1.30	1.32	1.36
70°	1.00	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.18	1.20	1.22	1.25	1.27	1.30	1.32	1.35	1.37	1.40	1.45
80°	1.02	1.04	1.06	1.08	1.10	1.12	1.14	1.16	1.19	1.21	1.23	1.26	1.28	1.30	1.33	1.36	1.38	1.41	1.43	1.48
100°	1.06	1.08	1.10	1.12	1.14	1.16	1.19	1.21	1.23	1.25	1.28	1.30	1.33	1.35	1.38	1.41	1.43	1.46	1.48	1.54
120°	1.09	1.12	1.14	1.16	1.18	1.20	1.23	1.25	1.28	1.30	1.32	1.35	1.38	1.40	1.43	1.46	1.48	1.51	1.53	1.58
140°	1.13	1.15	1.18	1.20	1.22	1.25	1.27	1.29	1.32	1.34	1.37	1.40	1.42	1.45	1.48	1.51	1.54	1.57	1.58	1.65
160°	1.17	1.19	1.22	1.24	1.26	1.29	1.31	1.34	1.36	1.39	1.42	1.44	1.47	1.50	1.53	1.56	1.59	1.62	1.64	1.70
180°	1.21	1.23	1.26	1.28	1.30	1.33	1.36	1.38	1.41	1.43	1.46	1.49	1.52	1.55	1.58	1.61	1.64	1.67	1.70	1.75
200°	1.25	1.27	1.29	1.32	1.34	1.37	1.40	1.42	1.45	1.48	1.51	1.54	1.57	1.60	1.63	1.66	1.69	1.72	1.75	1.81
250°	1.34	1.36	1.39	1.42	1.45	1.47	1.50	1.53	1.56	1.59	1.62	1.65	1.68	1.71	1.74	1.78	1.82	1.85	1.88	1.94
300°	1.43	1.46	1.49	1.52	1.55	1.58	1.61	1.64	1.67	1.70	1.74	1.77	1.80	1.84	1.87	1.91	1.94	1.98	2.00	2.08
350°	1.53	1.56	1.59	1.62	1.65	1.68	1.72	1.75	1.78	1.81	1.85	1.88	1.92	1.96	2.00	2.04	2.07	2.11	2.14	2.22
400°	1.62	1.65	1.69	1.72	1.75	1.79	1.82	1.85	1.89	1.93	1.96	2.00	2.04	2.08	2.12	2.16	2.20	2.25	2.27	2.35
450°	1.72	1.75	1.79	1.82	1.86	1.89	1.93	1.96	2.00	2.04	2.08	2.12	2.16	2.20	2.24	2.29	2.33	2.38	2.41	2.50
500°	1.81	1.85	1.88	1.92	1.96	1.99	2.03	2.07	2.11	2.15	2.19	2.23	2.28	2.32	2.36	2.41	2.46	2.51	2.54	2.62
550°	1.91	1.94	1.98	2.02	2.06	2.10	2.14	2.18	2.22	2.26	2.30	2.35	2.40	2.44	2.49	2.54	2.58	2.63	2.68	2.77
600°	2.00	2.04	2.08	2.12	2.16	2.20	2.24	2.29	2.33	2.38	2.42	2.47	2.50	2.56	2.61	2.66	2.71	2.77	2.80	2.90
650°	2.10	2.14	2.18	2.22	2.26	2.31	2.35	2.40	2.44	2.49	2.54	2.58	2.63	2.68	2.74	2.79	2.84	2.90	2.94	3.04
700°	2.19	2.23	2.27	2.32	2.36	2.41	2.46	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.86	2.91	2.97	3.03	3.06	3.18
750°	2.28	2.33	2.37	2.42	2.47	2.51	2.56	2.61	2.66	2.71	2.76	2.81	2.87	2.92	2.98	3.04	3.10	3.16	3.19	3.31
800°	2.38	2.43	2.48	2.52	2.57	2.62	2.66	2.72	2.76	2.81	2.86	2.90	2.98	3.02	3.10	3.14	3.21	3.26	3.33	3.45
850°	2.47	2.52	2.57	2.62	2.67	2.72	2.76	2.82	2.87	2.92	2.97	3.02	3.09	3.14	3.21	3.26	3.33	3.38	3.46	3.58
900°	2.57	2.62	2.67	2.72	2.76	2.83	2.88	2.93	2.98	3.03	3.08	3.14	3.21	3.26	3.34	3.39	3.47	3.52	3.60	3.73
950°	2.66	2.72	2.77	2.82	2.87	2.92	2.98	3.03	3.08	3.14	3.19	3.24	3.32	3.38	3.46	3.51	3.58	3.64	3.72	3.86
1000°	2.76	2.82	2.87	2.92	2.98	3.04	3.09	3.14	3.20	3.26	3.31	3.37	3.45	3.50	3.59	3.64	3.72	3.78	3.86	4.00

HIGH TEMPERATURE CONSTRUCTION

- 250°F - 400°F — Heat Slinger, high-temperature paint.
- 401°F - 700°F — Heat Slinger, high-temperature shaft seal, high-temperature paint, Arr't 1 or 8 only.
- 701°F - 900°F — Heat Slinger, high-temperature shaft seal, heat shield, special wheel construction including fins, Arr't 1 or 8 only, fixed and floating bearings, high-temperature paint.
- 901°F - 1000° — Heat Slinger, high-temperature shaft seal, heat shield, 316 S.S. wheel with fins, 316 S.S. shaft, fixed and floating oil lubricated bearings, Arr't 1 or 8 only, high-temperature paint on non S.S. parts.

CONVERSION FACTORS

- Volume — cubic meters/sec. x 2119 = cubic feet/min. (CFM)
- Pressure — Pascals (N/m²) x 0.004 = inches water
- Power — kilowatts (Kw) x 1.341 = horsepower
- Length — centimeters (cm) x 0.3937 = inches
- Temperature — (°C x 1.8) + 32 = °F

SELECTING FANS

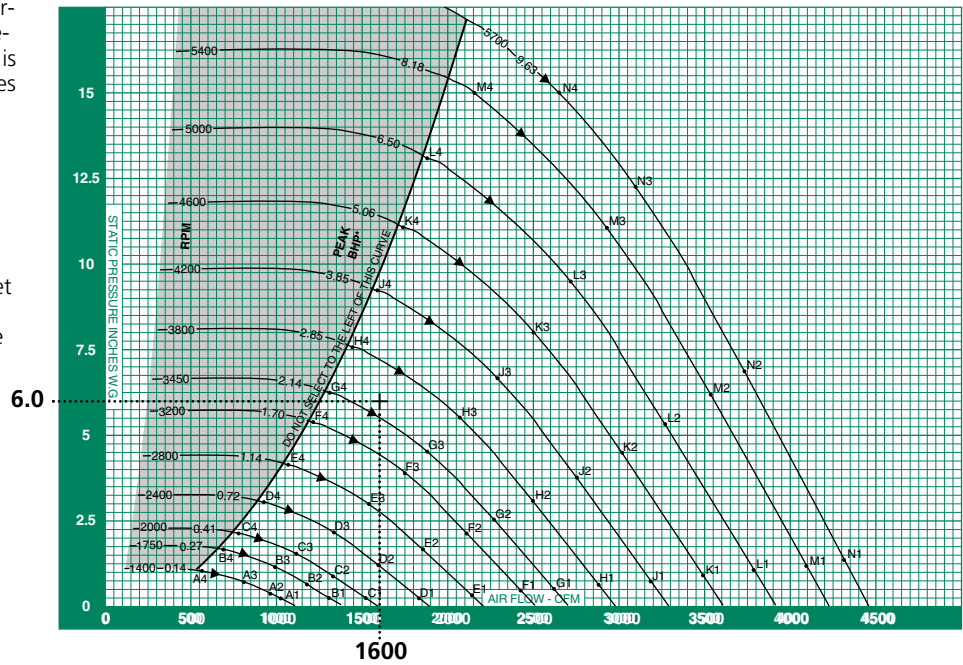
BCS-122 SINGLE WIDTH

The following 56 pages contain air and sound performance data on backward curve (BCS) blowers, 12 1/4" through 66" diameter, and air-foil (BCA) blowers, 18 1/4" through 66" diameter. An IBM compatible PC computer program is also available from your local American Fan sales representative or the factory to aid in selecting any American Fan Company product.

Performance shown is for BCS and BCA blowers with outlet duct and with or without inlet duct.

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

CONSTANT SPEED PERFORMANCE CURVES



CFM	OV	6.00" SP RPM	BHP
1564	1900	3546	2.31
1646	2000	<u>3599</u>	<u>2.43</u>
1729	2100	3653	2.55
1811	2200	3710	2.68
1894	2300	3776	2.81

EXAMPLE:

- 1) A fan is required to deliver 1600 CFM at 6.0" SP at .075 lbs./cu. ft. density.
- 2) Referring to the BCS capacity tables on pages 8 and 10, we see that a BCS-122 selection is closer to the underlined peak efficiency rating and is therefore more efficient than a BCS-135.
- 3) Interpolating on the BCS-122 table the required speed is 3569 RPM, the brakehorsepower is 2.36, and the Class is 1.
- 4) To determine the outlet velocity, divide the CFM by the outlet area. $\frac{1600 \text{ CFM}}{.824 \text{ sq. ft.}} = 1942 \text{ ft./min. outlet velocity}$
- 5) Referring to the constant speed curves on page 9, interpolate between the 3450 and 3800 RPM curve for 3569 RPM. We can see we are near peak efficiency at the selection point. Knowing our BHP is 2.36 we can compare the maximum (or peak) BHP using the formula as shown at the top of page 8.

$$\text{BCS-122 Max BHP} = .052 \times \left(\frac{3569 \text{ RPM}}{1000} \right)^3 = 2.36 \text{ Max. BHP}$$

In this example, the selection BHP and the peak BHP are the same, 2.36, so a 3 HP motor is selected.

- 6) The fan static efficiency (%) can now be calculated using the formula on page 9.

$$\% \text{ Static Efficiency} = \frac{1600 \text{ CFM} \times 6.0" \text{ SP} \times .0157}{2.36 \text{ BHP}} = 63.9\%$$

- 7) To determine sound levels, locate selection point on constant speed performance curves and determine which sound point the selection point is nearest. It may be necessary to interpolate if selection point is approximately equidistant between sound points. In the example, we must average the sound levels of sound points G3, G4, H3 and H4.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY (HZ)							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
3450	4.50	G3	89	91	90	88	82	78	77	72
	6.50	G4	89	97	93	92	85	80	78	74
3800	5.46	H3	90	93	92	91	85	80	79	75
	7.89	H4	91	99	96	95	88	83	81	77

Average of sound points- 90 95 93 92 85 80 79 75

- 8) Results: BCS-122, arrangement 9, Class 1

1600 CFM
1942 ft. / min. OV
6" SP
3569 RPM
2.36 BHP
63.9% Static Efficiency

FAN RPM	FAN SP	Sound Power Levels Band / Frequency (HZ)							
		1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
3569	6.0	90	95	93	92	85	80	79	75

AERODYNAMIC LOSSES OF ARR'T 3 SWSI FANS

Performances shown in this catalog are based on ARR'T 1 test fans with unobstructed inlets. ARR'T 3 SWSI fans have a bearing and supports in the inlet which cause a slight reduction in fan performance. In order to compensate for this reduction, the following formula must be applied. The resultant static pressure loss should be added to your system static pressure when making a fan selection.

SL = CF x SF x (OV/4005)² where:

- SL = Static Pressure Loss
- CF = Class Factor
- OV = Outlet Velocity (from capacity tables)
- SF = Size Factor

CLASS	FACTOR
1 & 2	0.68
3	0.90

FAN SIZE	SIZE FACTOR
122	1.00
135	0.97
150	0.93
165	0.91
182	0.88
200	0.85
222	0.82
245	0.79
270	0.77

FAN SIZE	SIZE FACTOR
300	0.74
330	0.72
365	0.69
402	0.67
445	0.65
490	0.63
542	0.61
600	0.59
660	0.57

- EXAMPLE: Select a BCS-200 ARR'T 3 SWSI fan for 6370 CFM at 6" SP.

From capacity table, BCS-200 OV at 6370 CFM is 2900 ft./min. Fan is class 2. Using static pressure loss formula:

$$\text{SL} = 0.68 \times 0.85 \times (2900/4005)^2 = 0.30"$$

$$6" \text{ SP} + 0.3" \text{ SL} = 6.3" \text{ SP}$$

Therefore, fan should be selected for 6370 CFM at 6.3" SP.

Note: The AMCA Certified Ratings Seal does not apply when factors are used.

BCS-122

SINGLE WIDTH

WHEEL DIAMETER: 12.25"

WHEEL CIRCUMFERENCE: 3.21'

OUTLET AREA: 0.824 SQ. FT.

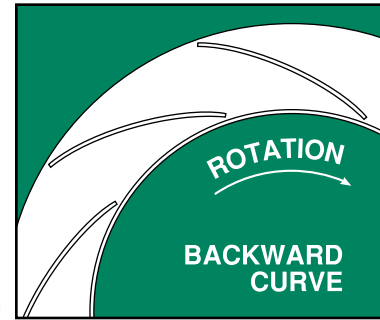
OUTLET SIZE: 9³/₄" x 12³/₁₆"

INLET DIAMETER: 13³/₈" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	3952	5155	5700
251°F TO 400°F*	3754	4897	5415
401°F TO 700°F*	3241	4227	4674
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
TIP SPEED (FPM) = 3.21 x RPM MAX BHP = 0.052 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
576	700	946 0.04	1114 0.07	1269 0.11	1409 0.14					
658	800	1033 0.05	1182 0.08	1326 0.12	1461 0.16	1704 0.25				
741	900	1123 0.06	1262 0.10	1393 0.14	1516 0.18	1747 0.28	1959 0.38			
823	1000	1215 0.08	1346 0.12	1462 0.16	1582 0.21	1800 0.30	1996 0.41	2188 0.53		
905	1100	1309 0.10	1432 0.14	1544 0.18	1650 0.23	1855 0.33	2049 0.45	2225 0.57	2398 0.69	
988	1200	1405 0.12	1522 0.16	1628 0.21	1725 0.26	1921 0.37	2102 0.49	2275 0.61	2436 0.74	2595 0.88
1070	1300	1501 0.14	1613 0.19	1713 0.24	1808 0.29	1988 0.41	2162 0.53	2328 0.66	2484 0.79	2632 0.94
1152	1400	1599 0.17	1705 0.22	1801 0.27	1892 0.33	2057 0.45	2228 0.57	2382 0.71	2537 0.85	2681 1.00
1235	1500	1697 0.20	1799 0.25	1891 0.31	1977 0.37	2138 0.49	2295 0.62	2447 0.76	2591 0.91	2734 1.06
1317	1600	1796 0.23	1894 0.29	1983 0.35	2065 0.41	2220 0.54	2364 0.68	2514 0.82	2653 0.98	2788 1.13
1399	1700	1896 0.27	1989 0.33	2075 0.40	2155 0.46	2304 0.59	2442 0.74	2582 0.89	2719 1.04	2847 1.21
1482	1800	1996 0.32	2086 0.38	2168 0.45	2246 0.51	2390 0.65	2524 0.80	2651 0.95	2786 1.12	2913 1.29
1564	1900	2097 0.36	2183 0.43	2263 0.50	2338 0.57	2476 0.72	2608 0.87	2730 1.03	2854 1.20	2979 1.37
1646	2000	2198 0.42	2281 0.49	2358 0.56	2430 0.63	2565 0.79	2692 0.94	2812 1.11	2924 1.28	3047 1.46
1729	2100	2300 0.48	2379 0.55	2453 0.62	2524 0.70	2655 0.86	2778 1.02	2895 1.19	3006 1.37	3116 1.55

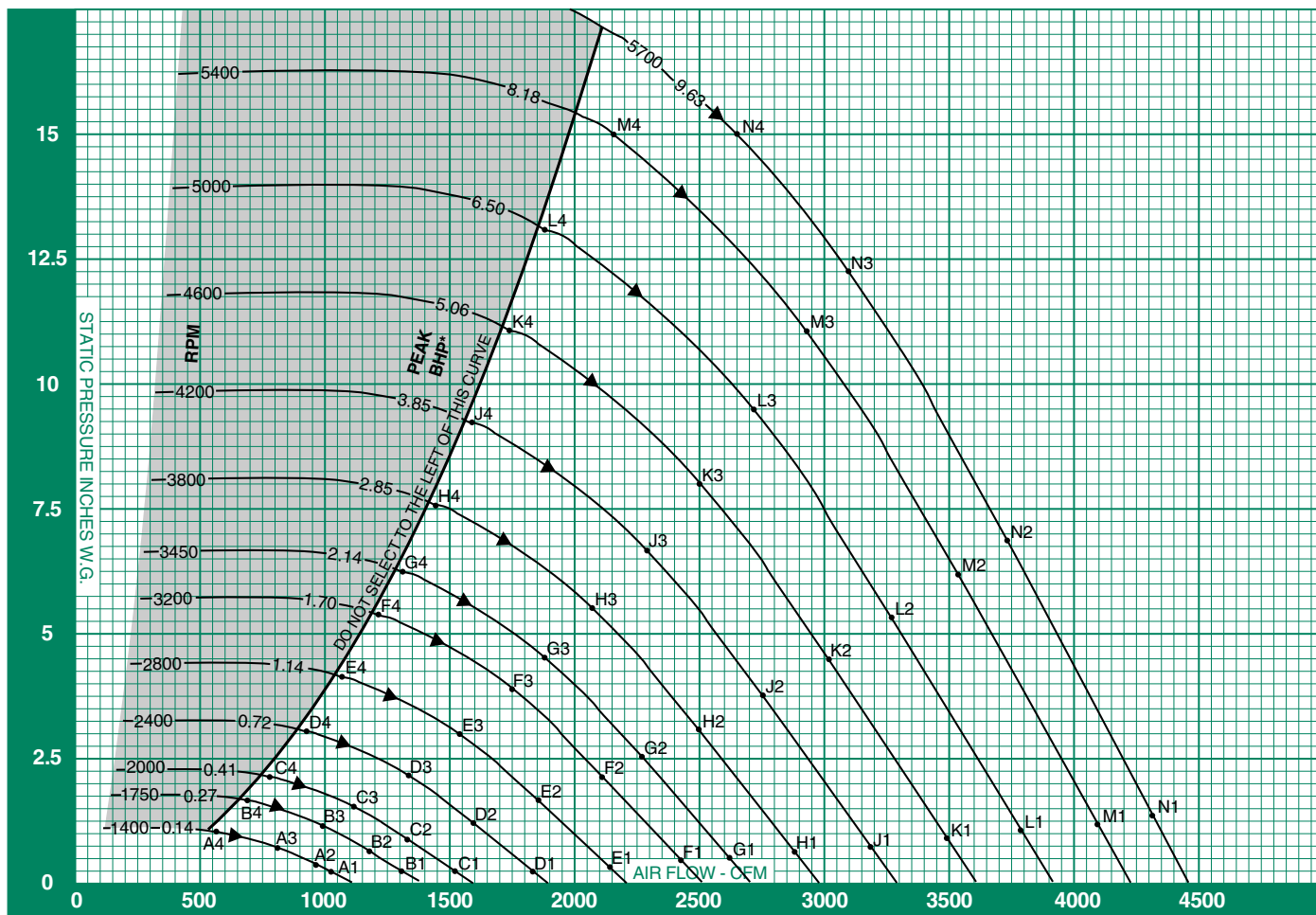
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
1152	1400	2818 1.15	2957 1.31	3089 1.48						
1235	1500	2868 1.22	2995 1.38	3126 1.56	3251 1.73					
1317	1600	2921 1.30	3047 1.46	3166 1.64	3289 1.82	3408 2.01	3523 2.20			
1399	1700	<u>2975</u> 1.38	<u>3100</u> 1.55	3219 1.73	3332 1.91	3446 2.10	3560 2.30	3671 2.50	3777 2.70	
1482	1800	3032 1.46	3154 1.64	<u>3272</u> 1.82	<u>3385</u> 2.01	3493 2.20	3598 2.40	3708 2.60	3815 2.81	3918 3.03
1564	1900	3098 1.55	3210 1.73	3326 1.92	3438 2.12	3546 2.31	3650 2.51	3750 2.72	3852 2.93	3955 3.15
1646	2000	3164 1.64	3275 1.83	3381 2.03	3492 2.23	<u>3599</u> 2.43	3703 2.64	3803 2.85	3899 3.06	3993 3.28
1729	2100	3232 1.74	3342 1.94	3447 2.14	3548 2.34	3653 2.55	<u>3756</u> 2.76	<u>3856</u> 2.98	3952 3.20	4045 3.42
1811	2200	3300 1.85	3409 2.05	3513 2.25	3614 2.46	3710 2.68	3810 2.90	3909 3.12	<u>4005</u> 3.34	4098 3.57
1894	2300	3369 1.96	3477 2.16	3581 2.38	3680 2.59	3776 2.81	3868 3.03	3963 3.26	4058 3.49	<u>4151</u> 3.72
1976	2400	3450 2.08	3546 2.29	3649 2.50	3747 2.72	3842 2.95	3934 3.18	4023 3.41	4113 3.65	4205 3.89
2058	2500	3532 2.20	3622 2.42	3717 2.64	3815 2.86	3909 3.09	4000 3.33	4089 3.57	4174 3.81	4259 4.05
2141	2600	3615 2.34	3704 2.56	3790 2.78	3883 3.01	3977 3.24	4067 3.48	4155 3.73	4240 3.98	4323 4.23
2223	2700	3699 2.48	3787 2.70	3871 2.93	3953 3.16	4045 3.40	4135 3.65	4222 3.90	4307 4.15	4389 4.41
2305	2800	3783 2.68	3870 2.86	3953 3.09	4034 3.33	4114 3.57	4204 3.82	4290 4.07	4374 4.33	4456 4.59
2388	2900	3868 2.78	3954 3.02	4036 3.26	4116 3.50	4194 3.74	4272 4.00	4358 4.26	4442 4.52	4523 4.79
2470	3000	3954 2.94	4038 3.18	4120 3.43	4199 3.68	4275 3.93	4350 4.19	4427 4.45	4510 4.72	4591 4.99
2552	3100	4041 3.12	4124 3.36	4204 3.61	4282 3.87	4358 4.12	4431 4.39	4503 4.65	4579 4.92	4659 5.20
2635	3200	4130 3.30	4210 3.55	4289 3.80	4366 4.06	4441 4.33	4514 4.59	4585 4.86	4654 5.14	4728 5.42
2717	3300	4220 3.48	4297 3.74	4374 4.00	4450 4.27	4524 4.54	4597 4.81	4667 5.09	4736 5.37	4803 5.63

CFM	OV	8.50" SP RPM BHP	9.00" SP RPM BHP	9.50" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP
1564	1900	4055 3.38	4152 3.60							
1646	2000	4092 3.51	4189 3.74	4284 3.98	4375 4.22					
1729	2100	4136 3.65	4227 3.88	4321 4.12	4413 4.37	4590 4.87				
1811	2200	4188 3.80	4276 4.04	4362 4.27	4450 4.52	4627 5.03	4796 5.56			
1894	2300	<u>4241</u> 3.96	4329 4.20	4414 4.45	4497 4.69	4665 5.20	4834 5.74	4996 6.29		
1976	2400	4294 4.13	<u>4382</u> 4.37	4467 4.62	4550 4.88	4710 5.39	4871 5.92	5033 6.48	5190 7.05	5340 7.64
2058	2500	4348 4.30	4435 4.55	<u>4520</u> 4.81	4603 5.07	4763 5.59	4916 6.13	5071 6.68	5227 7.27	5378 7.86
2141	2600	4404 4.48	4489 4.74	4574 5.00	<u>4656</u> 5.26	4816 5.80	4969 6.34	5116 6.90	5265 7.48	5415 8.09
2223	2700	4469 4.67	4548 4.93	4628 5.20	4710 5.46	4869 6.01	5022 6.57	5168 7.14	5310 7.72	5453 8.32
2305	2800	4535 4.86	4613 5.13	4689 5.40	4764 5.67	4923 6.23	<u>5075</u> 6.80	5221 7.38	5363 7.97	5499 8.57
2388	2900	4602 5.06	4679 5.33	4755 5.61	4829 5.89	4977 6.46	5129 7.04	<u>5275</u> 7.63	5415 8.24	5552 8.85
2470	3000	4669 5.27	4746 5.55	4821 5.83	4895 6.12	5037 6.70	5183 7.29	5328 7.89	<u>5469</u> 8.51	5605 9.13
2552	3100	4737 5.48	4814 5.77	4888 6.06	4961 6.35	5103 6.94	5239 7.54	5382 8.16	5522 8.78	<u>5658</u> 9.42
2635	3200	4806 5.71	4881 6.00	4956 6.29	5028 6.59	5169 7.19	5305 7.81	5436 8.43	5576 9.07	
2717	3300	4874 5.94	4950 6.23	5024 6.53	5096 6.84	5236 7.45	5371 8.08	5502 8.71	5630 9.36	
2799	3400	4949 6.18	5019 6.48	5092 6.79	5164 7.09	5303 7.72	5438 8.36	5567 9.00	5693 9.66	
2882	3500	5031 6.44	5094 6.74	5161 7.05	5232 7.36	5371 8.00	5505 8.65	5634 9.30		
2964	3600	5113 6.71	5175 7.01	5237 7.32	5301 7.63	5439 8.28	5572 8.94			

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-122 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS $\times 10^{-12}$ WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
1400	0.25	A1	65	67	69	62	61	61	57	52
	0.41	A2	65	66	67	61	59	58	53	47
	0.74	A3	65	65	65	60	58	56	51	47
	1.07	A4	70	69	68	63	60	57	53	48
1750	0.25	B1	71	71	77	69	65	68	64	60
	0.64	B2	71	71	75	67	64	65	59	54
	1.16	B3	71	71	71	66	63	62	58	53
	1.67	B4	77	75	75	70	65	64	59	55
2000	0.25	C1	75	75	80	74	69	70	70	65
	0.84	C2	75	75	78	72	67	67	63	58
	1.51	C3	74	75	75	71	67	65	61	57
	2.18	C4	80	79	79	74	69	67	63	59
2400	0.25	D1	81	80	83	81	74	74	74	71
	1.21	D2	80	80	82	79	72	71	69	63
	2.18	D3	79	80	80	77	72	70	67	62
	3.15	D4	83	85	84	81	74	71	68	64
2800	0.33	E1	86	85	86	88	78	77	78	75
	1.65	E2	84	85	85	85	77	74	73	68
	2.96	E3	83	85	84	82	76	73	71	66
	4.28	E4	86	90	88	86	79	75	73	68
3200	0.43	F1	90	88	88	93	82	79	82	78
	2.15	F2	88	89	88	90	80	77	77	72
	3.87	F3	87	89	87	86	80	76	75	70
	5.59	F4	88	95	91	90	83	78	76	72
3450	0.50	G1	92	91	89	95	84	80	84	80
	2.50	G2	90	91	90	92	82	79	80	74
3450	4.50	G3	89	91	90	88	82	78	77	72
	6.50	G4	89	97	93	92	85	80	78	74
3800	0.61	H1	94	94	92	97	88	83	85	83
	3.03	H2	92	94	93	94	86	81	81	77
	5.46	H3	90	93	92	91	85	80	79	75
	7.89	H4	91	99	96	95	88	83	81	77
4200	0.74	J1	96	97	95	99	92	85	87	86
	3.71	J2	93	96	95	96	90	84	83	80
	6.67	J3	92	96	95	94	88	83	81	78
	9.63	J4	93	100	100	98	92	86	83	79
4600	0.89	K1	97	100	98	100	95	88	89	88
	4.44	K2	95	99	98	98	93	86	85	82
	8.00	K3	94	98	98	96	91	86	84	80
	11.56	K4	94	102	103	100	95	88	85	82
5000	1.05	L1	99	102	100	101	99	90	90	90
	5.25	L2	96	101	100	100	96	89	87	85
	9.45	L3	95	100	100	98	94	88	85	83
	13.65	L4	96	104	105	102	98	91	87	84
5400	1.22	M1	100	105	102	103	102	92	91	92
	6.12	M2	98	103	103	102	99	91	89	87
	11.02	M3	96	102	102	100	96	90	87	85
	15.00	M4	97	104	106	103	99	92	88	86
5700	1.36	N1	101	106	104	104	104	94	92	94
	6.82	N2	99	105	104	103	101	92	90	89
	12.28	N3	97	104	104	102	98	92	88	87
	15.00	N4	98	105	107	104	100	93	89	88

BCS-135

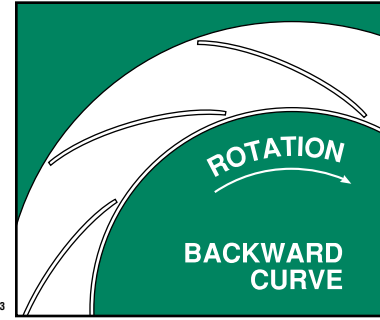
SINGLE WIDTH

WHEEL DIAMETER: 13.50"
 WHEEL CIRCUMFERENCE: 3.53'
 OUTLET AREA: 0.996 SQ. FT.
 OUTLET SIZE: 10¹/₁₆" x 13⁷/₁₆"
 INLET DIAMETER: 14³/₈" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	3586	4678	5172
251°F TO 400°F*	3407	4444	4913
401°F TO 700°F*	2941	3836	4241
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 3.53 x RPM MAX BHP = 0.085 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
700	700	858 0.05	1011 0.09	1151 0.13	1278 0.17					
800	800	937 0.06	1073 0.10	1203 0.15	<u>1325 0.20</u>	1546 0.30				
900	900	1019 0.08	1145 0.12	1264 0.17	1375 0.22	<u>1585 0.33</u>	1777 0.46			
1000	1000	1103 0.10	1221 0.14	1327 0.19	1436 0.25	1633 0.37	1812 0.50	1985 0.64		
1100	1100	1188 0.12	1300 0.17	1401 0.22	1497 0.28	1683 0.41	<u>1859 0.54</u>	2019 0.69	2176 0.84	
1200	1200	1274 0.14	1381 0.20	1477 0.25	1565 0.32	1743 0.45	1908 0.59	2064 0.74	2210 0.90	2355 1.07
1300	1300	1362 0.17	1464 0.23	1554 0.29	1640 0.35	1804 0.49	1961 0.64	<u>2113 0.80</u>	2254 0.96	2389 1.14
1400	1400	1451 0.20	1547 0.27	1634 0.33	1717 0.40	1867 0.54	2022 0.70	2162 0.86	<u>2303 1.03</u>	2433 1.21
1500	1500	1540 0.24	1632 0.31	1716 0.38	1794 0.45	1940 0.60	2083 0.76	2221 0.93	2351 1.11	<u>2481 1.29</u>
1600	1600	1630 0.28	1718 0.35	1799 0.43	1874 0.50	2015 0.66	2145 0.82	2281 1.00	2407 1.19	<u>2530 1.38</u>
1700	1700	1720 0.33	1805 0.40	1883 0.48	1955 0.56	2091 0.72	2216 0.89	2343 1.08	2467 1.27	2583 1.47
1800	1800	1812 0.38	1892 0.46	1968 0.54	2038 0.62	2168 0.79	2291 0.97	2405 1.16	2528 1.36	2643 1.56
1900	1900	1903 0.44	1981 0.52	2053 0.61	2121 0.69	2247 0.87	2366 1.06	2477 1.25	2590 1.45	2704 1.66
2000	2000	1995 0.51	2069 0.59	2139 0.68	2205 0.77	2328 0.95	2443 1.15	2552 1.35	2653 1.55	2765 1.77
2100	2100	2087 0.58	2159 0.67	2226 0.76	2290 0.85	2409 1.04	2521 1.24	2627 1.45	2727 1.66	2827 1.88

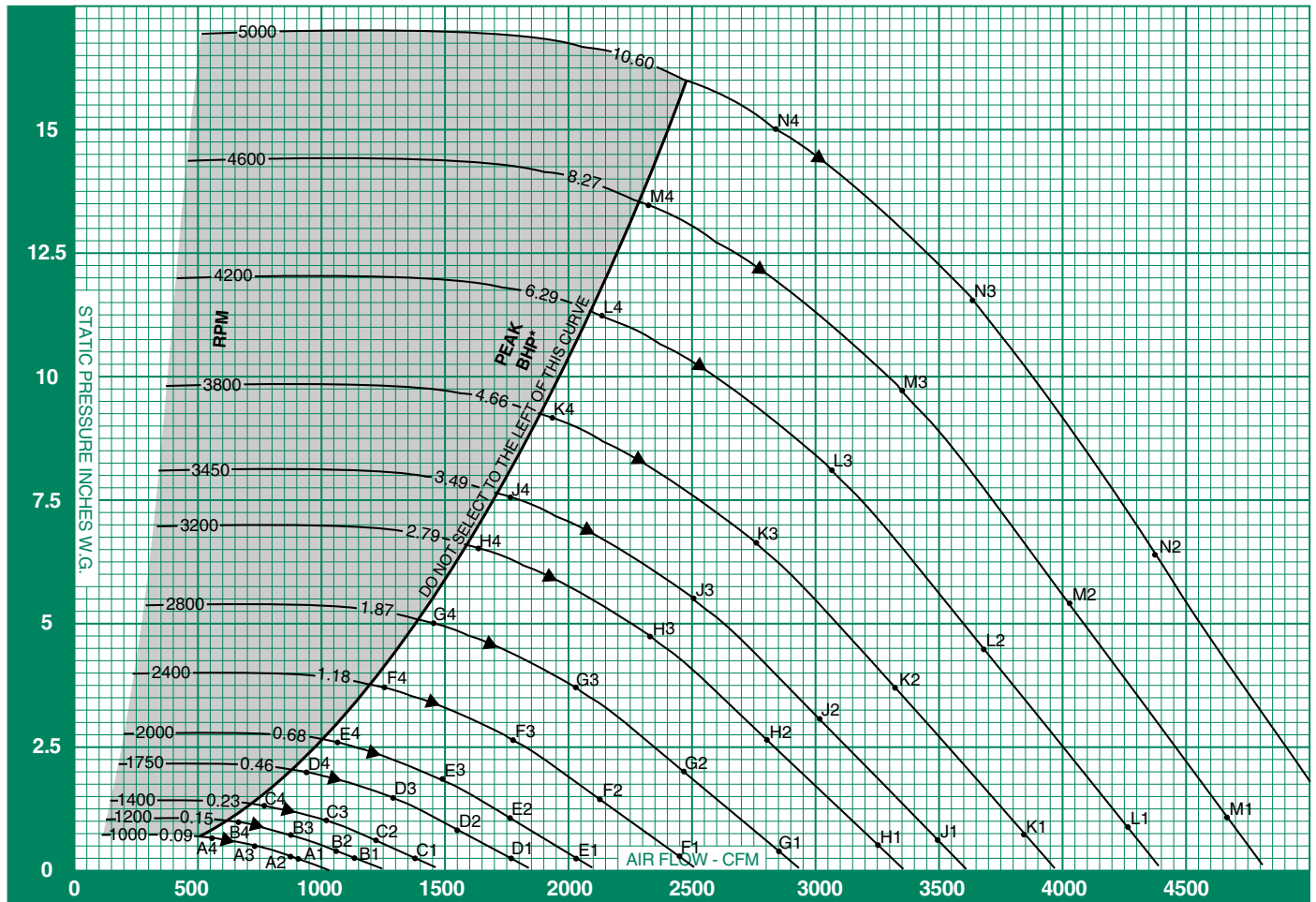
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
1400	1400	2557 1.40	2683 1.59	2803 1.80						
1500	1500	2603 1.48	2717 1.68	2837 1.89	2950 2.11					
1600	1600	<u>2651 1.57</u>	2765 1.78	2873 1.99	2984 2.21	3093 2.44	3197 2.67			
1700	1700	2699 1.67	<u>2813 1.88</u>	2921 2.10	3024 2.32	3127 2.55	3231 2.79	3331 3.03	3428 3.28	
1800	1800	2751 1.77	2862 1.99	<u>2969 2.21</u>	3072 2.44	3170 2.67	3265 2.91	3365 3.16	3461 3.42	3555 3.68
1900	1900	2811 1.88	2912 2.11	3018 2.34	<u>3120 2.57</u>	3218 2.81	3312 3.05	3403 3.30	3495 3.56	3589 3.83
2000	2000	2871 2.00	2972 2.23	3068 2.46	3169 2.70	<u>3266 2.95</u>	<u>3360 3.20</u>	3450 3.46	3538 3.71	3623 3.98
2100	2100	2932 2.12	3032 2.35	3128 2.60	3219 2.84	3315 3.10	3408 3.36	<u>3499 3.62</u>	3586 3.88	3670 4.15
2200	2200	2994 2.24	3093 2.49	3188 2.74	3279 2.99	3367 3.25	3457 3.52	3547 3.78	<u>3634 4.06</u>	3718 4.34
2300	2300	3057 2.38	3155 2.63	3249 2.88	3339 3.15	3426 3.41	3510 3.68	3596 3.96	3683 4.24	<u>3767 4.52</u>
2400	2400	3131 2.52	3218 2.78	3311 3.04	3400 3.31	3486 3.58	3570 3.86	3650 4.14	3732 4.43	3816 4.72
2500	2500	3205 2.68	3287 2.93	3373 3.20	3462 3.48	3547 3.76	3630 4.04	3710 4.33	3788 4.62	3865 4.92
2600	2600	3280 2.84	3361 3.10	3439 3.37	3524 3.65	3609 3.94	3691 4.23	3770 4.53	3848 4.83	3923 5.13
2700	2700	3356 3.01	3436 3.28	3513 3.56	3587 3.84	3671 4.13	3752 4.43	3831 4.73	3908 5.04	3983 5.35
2800	2800	3433 3.19	3512 3.47	3587 3.75	3661 4.04	3733 4.33	3814 4.64	3893 4.95	3969 5.26	4043 5.58
2900	2900	3510 3.38	3588 3.66	3662 3.95	3735 4.25	3805 4.55	3877 4.85	3955 5.17	4030 5.49	4104 5.82
3000	3000	3588 3.58	3664 3.87	3738 4.17	3810 4.47	3879 4.77	3947 5.08	4017 5.40	4092 5.73	4166 6.06
3100	3100	3667 3.78	3742 4.08	3815 4.39	3886 4.70	3954 5.01	4021 5.33	4086 5.65	4155 5.98	4228 6.32
3200	3200	3748 4.00	3820 4.31	3892 4.62	3962 4.93	4030 5.25	4096 5.58	4160 5.91	4223 6.24	4290 6.58
3300	3300	3829 4.23	3899 4.54	3969 4.86	4038 5.18	4106 5.51	4171 5.84	4235 6.18	4297 6.52	4358 6.86

CFM	OV	8.50" SP RPM BHP	9.00" SP RPM BHP	9.50" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP
1900	1900	3679 4.10	3767 4.38							
2000	2000	3713 4.26	3801 4.54	3887 4.83	3970 5.12					
2100	2100	3753 4.43	3835 4.71	3921 5.00	4004 5.30	4165 5.91				
2200	2200	3800 4.62	3880 4.90	3958 5.19	4038 5.49	4199 6.11	4352 6.75			
2300	2300	3848 4.81	3928 5.10	4005 5.40	4081 5.70	4233 6.32	4386 6.97	4533 7.64		
2400	2400	<u>3897 5.01</u>	<u>3976 5.31</u>	4053 5.62	4129 5.92	4274 6.55	4420 7.20	4567 7.87	4709 8.57	4846 9.27
2500	2500	3946 5.22	4025 5.53	<u>4102 5.84</u>	4177 6.15	4322 6.79	4461 7.44	4602 8.12	4743 8.82	4890 9.54
2600	2600	3996 5.44	4074 5.75	4150 6.07	<u>4225 6.39</u>	4370 7.04	4509 7.71	4642 8.38	4777 9.09	4914 9.82
2700	2700	4056 5.67	4126 5.99	4199 6.31	4274 6.64	4418 7.30	4557 7.98	4690 8.67	4818 9.37	4948 10.10
2800	2800	4116 5.90	4186 6.23	4255 6.56	4323 6.89	4467 7.57	<u>4605 8.26</u>	4738 8.97	4866 9.68	4990 10.41
2900	2900	4176 6.15	4246 6.48	4315 6.81	4382 7.15	4516 7.85	4654 8.55	<u>4786 9.27</u>	4914 10.00	5038 10.75
3000	3000	4237 6.40	4307 6.74	4375 7.08	4442 7.43	4571 8.13	4703 8.85	4835 9.59	<u>4962 10.33</u>	5086 11.09
3100	3100	4299 6.66	4368 7.01	4436 7.36	4502 7.71	4631 8.43	4754 9.16	4884 9.91	5011 10.67	<u>5134 11.44</u>
3200	3200	4361 6.93	4429 7.28	4497 7.64	4563 8.00	4691 8.73	4814 9.48	4933 10.24	5060 11.01	
3300	3300	4423 7.21	4492 7.57	4558 7.94	4624 8.30	4751 9.05	4874 9.81	4992 10.58	5109 11.37	
3400	3400	4491 7.51	4554 7.87	4621 8.24	4686 8.62	4812 9.38	4934 10.15	5052 10.94	5166 11.73	
3500	3500	4565 7.82	4622 8.18	4683 8.56	4748 8.94	4874 9.71	4995 10.50	5112 11.30		
3600	3600	4639 8.14	4696 8.52	4752 8.89	4811 9.27	4936 10.06	5056 10.86			

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-135 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
1000	0.25	A1	59	62	58	55	55	51	46	40	2800	0.40	G1	89	88	89	91	81	80	81	78
	0.26	A2	59	62	58	55	55	51	46	40		2.00	G2	88	89	88	88	80	77	76	71
	0.46	A3	59	60	57	54	53	49	45	40											
	0.66	A4	63	64	60	56	55	51	46	42											
1200	0.25	B1	64	67	66	60	60	59	54	49	3200	0.52	H1	93	92	91	96	85	82	85	81
	0.37	B2	64	66	65	60	59	57	51	45		2.61	H2	92	92	91	93	83	80	80	75
	0.66	B3	64	65	63	59	57	55	50	45		4.70	H3	90	92	91	90	83	79	78	73
	0.96	B4	69	68	66	62	59	56	52	47		6.79	H4	92	98	95	94	86	81	79	75
1400	0.25	C1	68	70	73	65	64	64	60	56	3450	0.61	J1	96	94	93	98	87	83	87	83
	0.50	C2	69	70	71	64	62	61	56	50		3.04	J2	94	95	93	95	85	81	82	77
	0.90	C3	68	69	68	63	61	59	54	50		5.47	J3	92	94	93	92	85	81	80	75
	1.30	C4	74	72	72	66	63	60	56	51		7.89	J4	93	101	97	96	88	83	81	77
1750	0.25	D1	75	74	80	72	68	71	68	64	3800	0.74	K1	97	97	95	100	90	86	88	86
	0.78	D2	75	75	78	71	67	68	62	57		3.68	K2	95	97	96	97	89	84	84	80
	1.41	D3	75	75	75	70	66	65	61	56		6.63	K3	94	97	96	94	88	83	82	78
	2.03	D4	81	78	79	73	68	67	62	58		9.58	K4	95	102	100	98	91	86	84	80
2000	0.25	E1	79	78	84	77	72	74	72	69	4200	0.90	L1	99	100	98	102	95	88	90	89
	1.02	E2	79	79	81	75	70	70	66	61		4.50	L2	97	100	99	99	93	87	86	83
	1.84	E3	78	78	78	74	70	68	64	60		8.10	L3	96	99	99	97	91	86	84	81
	2.65	E4	83	83	82	77	72	70	66	61		11.70	L4	96	104	103	101	95	89	86	82
2400	0.29	F1	85	84	87	84	77	77	77	74	4600	1.08	M1	101	103	101	103	98	91	92	91
	1.47	F2	84	84	85	82	75	74	72	66		5.40	M2	99	102	101	101	96	89	88	85
	2.64	F3	83	84	83	80	75	72	70	65		9.72	M3	97	102	101	99	94	89	87	83
	3.82	F4	87	89	87	84	77	74	71	67		14.03	M4	98	106	106	103	98	91	88	85
2800	0.40	G1	89	88	89	91	81	80	81	78	5000	1.28	N1	102	106	103	105	102	93	93	93
	2.00	G2	88	89	88	88	80	77	76	71		6.38	N2	100	105	104	103	99	92	90	88
											11.48	N3	99	104	104	101	97	91	88	86	
											15.00	N4	99	106	107	104	100	93	89	87	

BCS-150

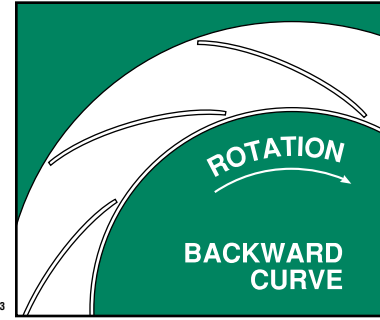
SINGLE WIDTH

WHEEL DIAMETER: 15.00"
 WHEEL CIRCUMFERENCE: 3.93'
 OUTLET AREA: 1.241 SQ. FT.
 OUTLET SIZE: 11¹⁵/₁₆" x 15"
 INLET DIAMETER: 16¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	3046	3973	4655
251°F TO 400°F*	2894	3774	4422
401°F TO 700°F*	2498	3258	3817
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 3.93 x RPM MAX BHP = 0.139 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
869	700	756 0.06	887 0.10	1005 0.14	1115 0.19	1328 0.30				
993	800	822 0.07	947 0.12	1055 0.16	1156 0.21	1348 0.33				
1117	900	885 0.09	1011 0.14	1110 0.19	1206 0.24	1379 0.36	1550 0.50			
1241	1000	953 0.11	1076 0.17	1173 0.22	1260 0.28	1425 0.40	1580 0.54	1731 0.69	1880 0.86	
1365	1100	1023 0.13	1142 0.20	1237 0.26	1320 0.31	1476 0.45	1620 0.59	1760 0.75	1897 0.92	2034 1.09
1489	1200	1094 0.16	1205 0.23	1302 0.30	1383 0.36	1530 0.49	1668 0.64	1797 0.81	1927 0.98	2052 1.16
1613	1300	1169 0.19	1270 0.27	1367 0.34	1447 0.41	1587 0.55	1720 0.70	1844 0.87	1962 1.05	2082 1.24
1738	1400	1245 0.23	1338 0.31	1432 0.39	1512 0.46	1650 0.61	1774 0.77	1895 0.94	2009 1.13	2117 1.32
1862	1500	1321 0.27	1407 0.35	1496 0.44	1578 0.52	1714 0.68	1831 0.84	1947 1.02	2059 1.21	2164 1.41
1986	1600	1398 0.31	1478 0.40	1560 0.49	1643 0.59	1778 0.76	1895 0.93	2003 1.11	2110 1.30	2213 1.50
2110	1700	1476 0.36	1549 0.46	1628 0.55	1707 0.65	1843 0.84	1958 1.02	2062 1.20	2165 1.40	2265 1.61
2234	1800	1554 0.42	1624 0.52	1697 0.62	1771 0.72	1908 0.93	2022 1.12	2125 1.31	2221 1.51	2318 1.72
2358	1900	1632 0.48	1700 0.58	1768 0.69	1836 0.80	1974 1.02	2087 1.23	2189 1.43	2283 1.63	2374 1.84
2482	2000	1711 0.55	1776 0.66	1839 0.77	1905 0.88	2038 1.11	2152 1.34	2253 1.55	2346 1.76	2433 1.98
2607	2100	1790 0.62	1852 0.74	1911 0.85	1975 0.97	2102 1.21	2217 1.45	2318 1.68	2410 1.91	2496 2.13

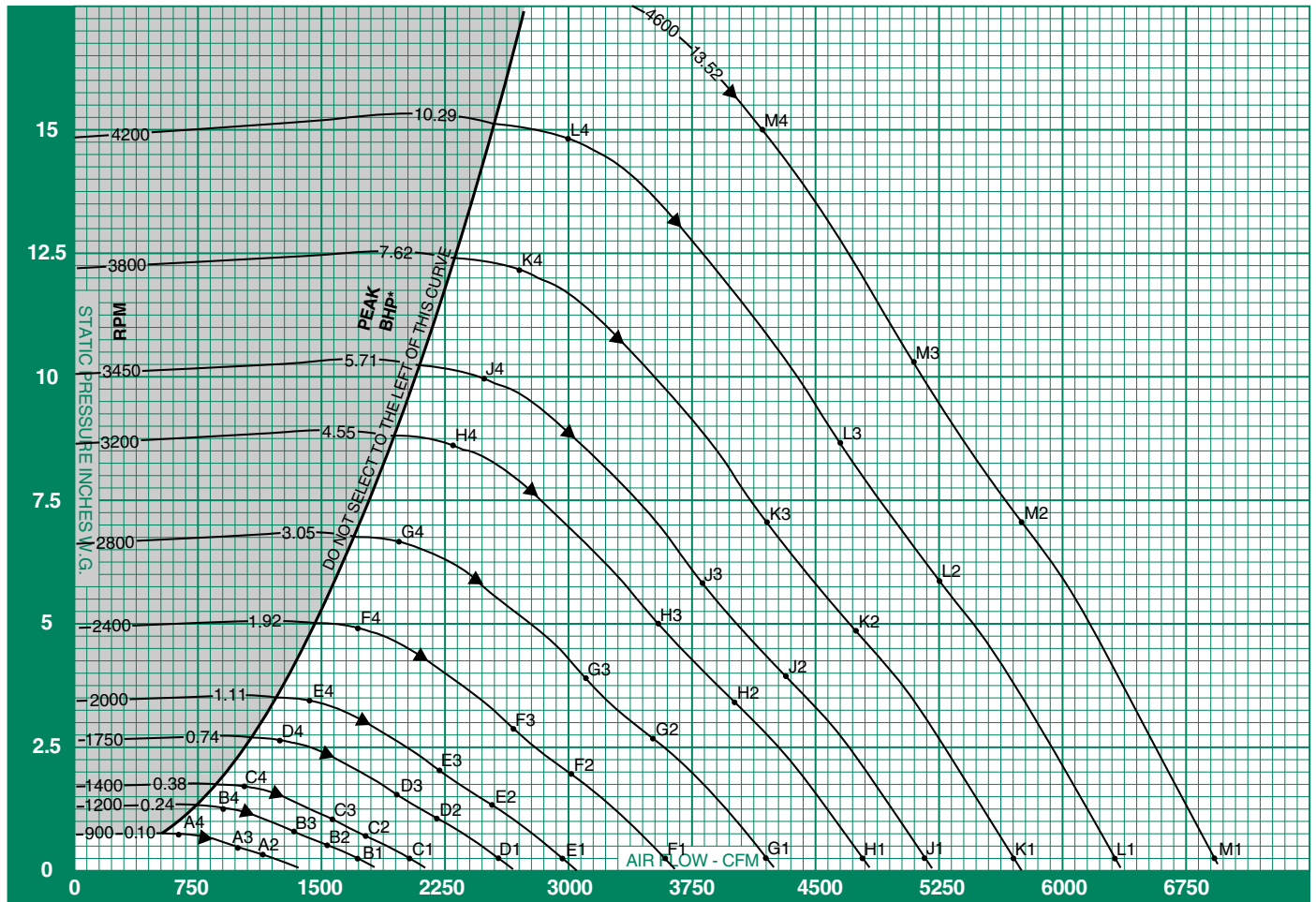
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
1738	1400	2229 1.52	2339 1.73	2446 1.95	2554 2.18	2656 2.41				
1862	1500	2265 1.61	2369 1.83	2472 2.05	2571 2.28	2674 2.52				
1986	1600	2312 1.71	2407 1.93	2503 2.16	2601 2.40	2695 2.64	2790 2.89	2884 3.15	2976 3.42	
2110	1700	2361 1.82	2454 2.05	2543 2.28	2632 2.52	2726 2.77	2816 3.03	2903 3.29	2993 3.56	3082 3.84
2234	1800	2412 1.94	2502 2.17	2590 2.41	2675 2.66	2757 2.91	2847 3.17	2933 3.44	3017 3.71	3099 3.99
2358	1900	2465 2.07	2554 2.31	2639 2.55	2722 2.80	2804 3.06	2882 3.32	2964 3.59	3047 3.88	3128 4.16
2482	2000	2520 2.21	2606 2.45	2690 2.70	2772 2.95	2851 3.21	2929 3.49	3004 3.76	3078 4.04	3159 4.34
2607	2100	2577 2.35	2661 2.60	2743 2.85	2823 3.11	2900 3.38	2976 3.66	3051 3.94	3123 4.23	3194 4.52
2731	2200	2639 2.52	2718 2.76	2798 3.02	2875 3.29	2952 3.56	3026 3.84	3098 4.13	3170 4.42	3240 4.72
2855	2300	2703 2.70	2778 2.94	2854 3.20	2930 3.47	3004 3.75	3078 4.04	3149 4.33	3218 4.62	3287 4.93
2979	2400	2767 2.89	2842 3.14	2913 3.39	2986 3.66	3059 3.95	3130 4.24	3201 4.54	3270 4.84	3336 5.15
3103	2500	2831 3.08	2906 3.35	2977 3.61	3045 3.87	3115 4.16	3185 4.46	3253 4.76	3321 5.07	3388 5.39
3227	2600	2895 3.28	2969 3.56	3040 3.84	3108 4.11	3173 4.39	3241 4.69	3309 4.99	3374 5.31	3440 5.63
3351	2700	2960 3.50	3033 3.78	3104 4.07	3172 4.36	3236 4.64	3299 4.93	3365 5.24	3430 5.56	3493 5.89
3476	2800	3025 3.71	3098 4.02	3168 4.31	3235 4.62	3300 4.91	3362 5.21	3422 5.50	3486 5.83	3548 6.16
3600	2900	3090 3.94	3163 4.26	3232 4.57	3299 4.88	3364 5.19	3425 5.50	3485 5.80	3543 6.11	3605 6.44
3724	3000	3155 4.18	3228 4.51	3297 4.83	3363 5.15	3427 5.47	3489 5.80	3549 6.11	3606 6.43	3663 6.75
3848	3100	3221 4.43	3293 4.77	3362 5.11	3428 5.44	3491 5.77	3553 6.10	3613 6.44	3670 6.76	3726 7.09
3972	3200	3286 4.68	3359 5.04	3427 5.39	3493 5.74	3556 6.08	3617 6.42	3676 6.76	3734 7.11	3789 7.44
4096	3300	3350 4.94	3425 5.32	3492 5.68	3558 6.04	3621 6.40	3681 6.75	3740 7.10	3797 7.46	3853 7.81

CFM	OV	8.50" SP RPM BHP	9.00" SP RPM BHP	9.50" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP
2358	1900	3207 4.45	3286 4.75	3367 5.05	3445 5.36	3597 5.99				
2482	2000	3237 4.63	3313 4.93	3387 5.24	3463 5.55	3615 6.20	3760 6.86			
2607	2100	3268 4.82	3344 5.13	3418 5.44	3490 5.76	3632 6.41	3777 7.09	3917 7.78		
2731	2200	3308 5.02	3375 5.33	3449 5.65	3521 5.98	3660 6.64	3795 7.32	3934 8.03	4068 8.75	
2855	2300	3355 5.24	3421 5.56	3486 5.88	3552 6.20	3690 6.88	3823 7.57	3952 8.28	4086 9.02	4215 9.77
2979	2400	3402 5.46	3468 5.79	3532 6.11	3595 6.45	3721 7.13	3854 7.83	3981 8.56	4104 9.29	4232 10.06
3103	2500	3452 5.70	3516 6.03	3579 6.36	3642 6.70	3762 7.39	3885 8.10	4012 8.84	4134 9.59	4252 10.36
3227	2600	3504 5.96	3567 6.29	3628 6.62	3689 6.96	3809 7.67	3924 8.39	4043 9.13	4165 9.90	4283 10.68
3351	2700	3556 6.22	3618 6.56	3679 6.90	3739 7.25	3856 7.96	3971 8.69	4082 9.44	4196 10.21	4314 11.00
3476	2800	3610 6.49	3670 6.84	3731 7.19	3790 7.54	3905 8.26	4018 9.00	4128 9.76	4235 10.54	4345 11.34
3600	2900	3665 6.79	3725 7.13	3783 7.48	3842 7.85	3956 8.58	4066 9.33	4175 10.10	4282 10.89	4384 11.69
3724	3000	3722 7.09	3781 7.44	3838 7.80	3895 8.16	4008 8.91	4117 9.67	4223 10.45	4329 11.25	4431 12.07
3848	3100	3780 7.42	3837 7.77	3894 8.13	3950 8.50	4060 9.25	4169 10.03	4274 10.82	4376 11.63	4478 12.46
3972	3200	3843 7.78	3896 8.12	3950 8.47	4006 8.85	4115 9.62	4221 10.40	4325 11.21	4426 12.02	4525 12.86
4096	3300	3907 8.16	3959 8.50	4011 8.85	4063 9.21	4170 9.99	4274 10.79	4377 11.60	4478 12.44	4576 13.28
4220	3400	3971 8.55	4023 8.91	4074 9.26	4124 9.62	4226 10.39	4330 11.19	4429 12.01	4530 12.86	4627 13.72
4345	3500	4034 8.95	4087 9.32	4137 9.69	4187 10.05	4284 10.80	4386 11.61	4485 12.45	4582 13.30	
4469	3600	4098 9.35	4150 9.74	4201 10.13	4251 10.50	4347 11.26	4442 12.05	4541 12.90	4636 13.76	

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBGS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-150 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
900	0.27	A2	61	66	65	64	62	56	49	42	2800	0.25	G1	86	92	93	98	91	91	87	83	
	0.40	A3	60	64	64	64	61	55	48	42		2.60	G2	84	92	92	97	89	90	85	78	
	0.68	A4	63	63	62	61	59	54	48	42		3.83	G3	83	91	92	95	88	89	84	77	
1200	0.25	B1	68	71	75	71	71	66	61	56	3200	0.25	H1	88	94	96	100	96	94	91	87	
	0.48	B2	68	71	75	70	70	65	58	52		3.40	H2	87	94	96	99	94	92	89	82	
	0.70	B3	67	70	73	70	70	64	58	51		5.00	H3	85	93	95	97	93	92	88	82	
1400	1.21	B4	74	69	72	67	67	63	57	51	3450	8.60	H4	93	101	97	96	90	89	86	81	
	0.25	C1	72	74	81	75	75	71	67	62		4200	0.25	J1	90	96	98	101	98	96	93	89
	0.65	C2	72	74	80	74	74	70	63	56			3.95	J2	88	95	98	101	96	94	91	85
0.96	C3	71	73	78	73	74	69	62	56	5.81	J3		87	94	97	99	95	93	90	84		
1750	1.65	C4	79	73	77	70	71	67	62	56	3800	9.99	J4	95	103	100	97	93	90	88	83	
	0.25	D1	76	80	85	83	81	78	73	69		4600	0.25	K1	91	98	101	103	101	98	96	91
	1.02	D2	76	80	84	81	79	76	70	63			4.79	K2	90	97	100	102	100	96	94	88
1.50	D3	75	79	82	80	78	76	69	63	7.05	K3		88	96	99	101	98	95	93	87		
2000	2.57	D4	83	82	81	78	76	73	68	62	4800	12.12	K4	96	104	104	100	96	92	91	86	
	0.25	E1	79	83	87	87	84	82	77	73		4400	0.25	L1	93	100	103	105	104	100	98	94
	1.33	E2	78	83	86	86	82	80	74	68			5.86	L2	91	99	103	104	103	98	97	91
1.95	E3	77	82	85	85	81	80	74	67	8.61	L3		90	98	102	103	101	97	96	90		
2400	3.36	E4	85	87	84	83	78	77	72	66	4000	14.81	L4	98	106	107	102	100	94	94	89	
	0.25	F1	83	88	90	93	88	87	83	78		3600	0.25	M1	95	102	105	106	107	102	101	97
	1.91	F2	82	88	89	92	85	85	80	73			7.02	M2	93	101	105	106	106	100	99	94
2.81	F3	80	87	88	90	85	85	79	73	10.33	M3		92	99	104	104	104	99	99	93		
4.84	F4	88	94	88	89	82	82	78	72	15.00	M4	97	104	108	104	104	97	97	93			

BCS-165

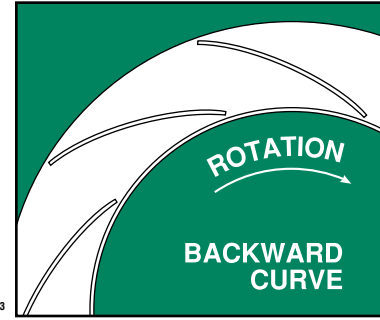
SINGLE WIDTH

WHEEL DIAMETER: 16.50"
 WHEEL CIRCUMFERENCE: 4.32'
 OUTLET AREA: 1.496 SQ. FT.
 OUTLET SIZE: 13¹/₈" x 16⁷/₁₆"
 INLET DIAMETER: 17¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2769	3612	4232
251°F TO 400°F*	2631	3431	4020
401°F TO 700°F*	2271	2962	3470
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 4.32 x RPM MAX BHP = 0.223 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
1051	700	687 0.07	806 0.12	913 0.17	1013 0.23	1207 0.36				
1201	800	747 0.09	861 0.14	959 0.20	<u>1051 0.26</u>	1225 0.40				
1351	900	805 0.11	919 0.17	1010 0.23	1096 0.29	1253 0.44	1409 0.60			
1502	1000	866 0.13	978 0.20	1066 0.27	1146 0.33	<u>1296 0.49</u>	1436 0.66	1574 0.84	1709 1.04	
1652	1100	930 0.16	1038 0.24	1124 0.31	1200 0.38	1342 0.54	<u>1473 0.71</u>	1600 0.90	1725 1.11	1849 1.32
1802	1200	995 0.19	1096 0.28	1183 0.36	1258 0.44	1391 0.60	1517 0.78	1634 0.97	1752 1.18	1865 1.41
1952	1300	1063 0.23	1154 0.32	1243 0.41	1316 0.50	1442 0.66	1563 0.85	<u>1677 1.05</u>	1784 1.27	1893 1.50
2103	1400	1132 0.27	1216 0.37	1302 0.47	1375 0.56	1500 0.74	1613 0.93	1723 1.14	<u>1826 1.36</u>	1925 1.59
2253	1500	1201 0.32	1279 0.42	1360 0.53	1434 0.63	1558 0.83	1665 1.02	1770 1.23	1871 1.46	<u>1968 1.70</u>
2403	1600	1271 0.38	1343 0.49	1418 0.60	1494 0.71	1616 0.92	1722 1.13	1821 1.34	1919 1.57	2012 1.82
2553	1700	1342 0.44	1409 0.55	1480 0.67	1551 0.79	1675 1.02	1780 1.24	1874 1.46	1968 1.69	2059 1.95
2703	1800	1412 0.50	1477 0.63	1543 0.75	1610 0.87	1734 1.12	1838 1.36	1932 1.59	2019 1.82	2107 2.08
2854	1900	1484 0.58	1545 0.71	1607 0.84	1670 0.97	1794 1.23	1897 1.48	1990 1.73	2075 1.97	2158 2.23
3004	2000	1555 0.66	1614 0.79	1671 0.93	1732 1.07	1853 1.35	1956 1.62	2048 1.88	2133 2.14	2211 2.39
3154	2100	1627 0.75	1684 0.89	1737 1.03	1796 1.18	1911 1.47	2016 1.76	2107 2.03	2191 2.31	2269 2.57

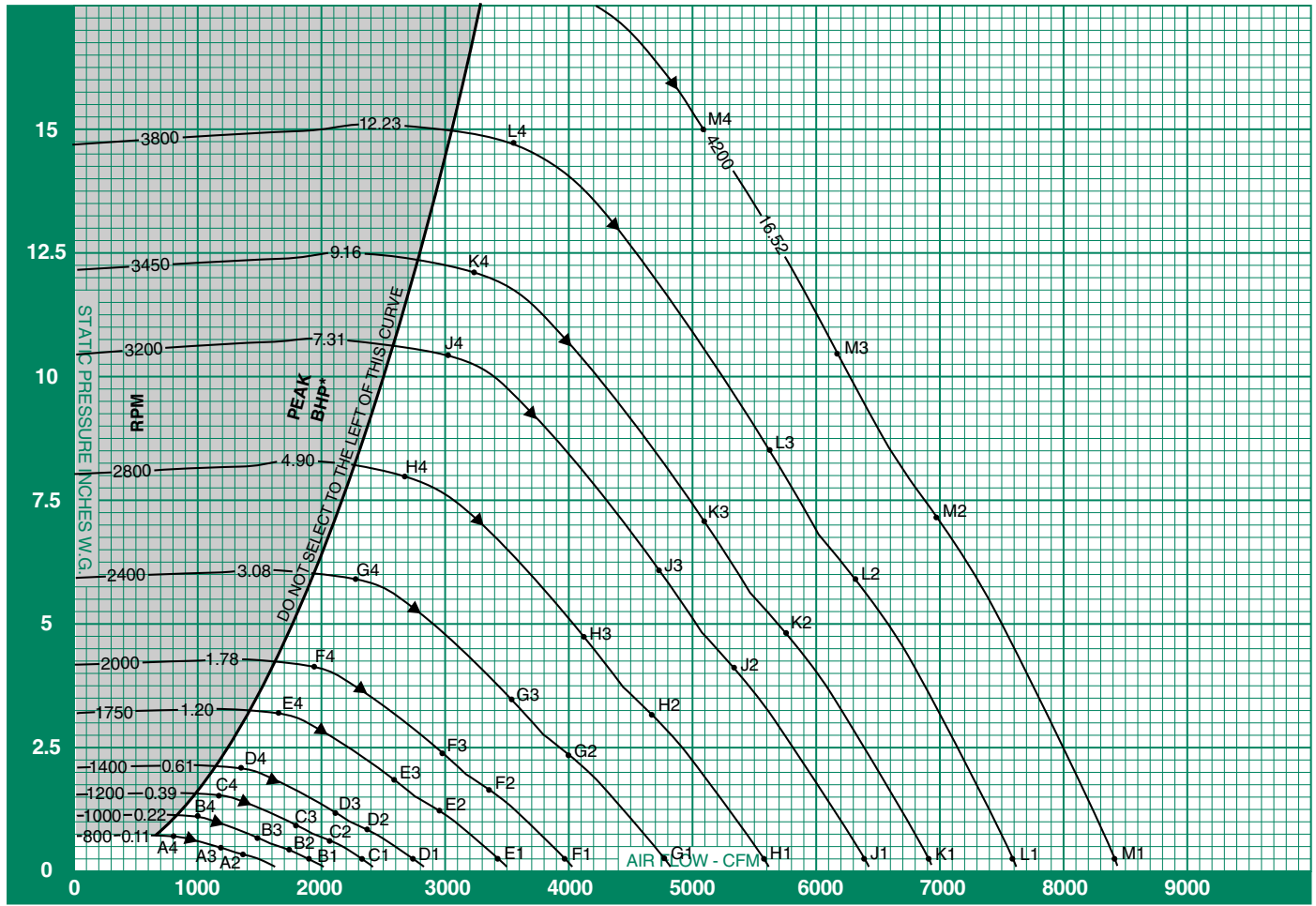
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
2103	1400	2027 1.84	2126 2.09	2224 2.36	2321 2.63	2415 2.92				
2253	1500	2059 1.95	2154 2.21	2248 2.48	2337 2.76	2431 3.05				
2403	1600	<u>2102 2.07</u>	2188 2.34	2276 2.62	2365 2.91	2450 3.20	2536 3.50	2622 3.82	2705 4.14	
2553	1700	2146 2.21	<u>2231 2.48</u>	2312 2.76	2393 3.05	2478 3.36	2560 3.67	2639 3.98	2721 4.31	2802 4.64
2703	1800	2193 2.35	2275 2.63	<u>2355 2.92</u>	2432 3.21	2506 3.52	2588 3.84	2667 4.16	2742 4.49	2817 4.83
2854	1900	2241 2.50	2322 2.79	2399 3.08	<u>2475 3.39</u>	2549 3.70	2620 4.02	2695 4.35	2770 4.69	2844 5.03
3004	2000	2291 2.67	2369 2.96	2446 3.26	2520 3.57	<u>2592 3.89</u>	2662 4.22	2731 4.55	2799 4.89	2872 5.25
3154	2100	2342 2.84	2419 3.14	2493 3.45	2566 3.77	2637 4.09	<u>2705 4.42</u>	2773 4.77	2839 5.11	2903 5.47
3304	2200	2400 3.05	2470 3.34	2543 3.65	2614 3.98	2684 4.31	2751 4.65	<u>2816 4.99</u>	<u>2882 5.35</u>	2946 5.71
3455	2300	2457 3.27	2526 3.56	2594 3.87	2664 4.20	2731 4.53	2798 4.88	2863 5.24	2926 5.59	<u>2988 5.96</u>
3605	2400	2515 3.49	2583 3.80	2649 4.11	2715 4.43	2781 4.78	2845 5.13	2910 5.49	2972 5.86	3033 6.23
3755	2500	2573 3.73	2642 4.05	2706 4.37	2768 4.69	2832 5.03	2896 5.39	2957 5.76	3019 6.13	3080 6.52
3905	2600	2632 3.97	2699 4.31	2764 4.65	2825 4.98	2885 5.31	2947 5.67	3008 6.04	3067 6.42	3127 6.81
4055	2700	2691 4.23	2758 4.58	2822 4.93	2883 5.28	2942 5.62	2999 5.97	3059 6.34	3118 6.73	3175 7.12
4206	2800	2750 4.49	2816 4.86	2880 5.22	2941 5.59	3000 5.94	3056 6.30	3111 6.66	3169 7.05	3226 7.45
4356	2900	2809 4.77	2876 5.16	2938 5.53	2999 5.90	3058 6.28	3114 6.65	3168 7.02	3221 7.39	3277 7.80
4506	3000	2868 5.06	2934 5.45	2997 5.85	3057 6.24	3116 6.62	3172 7.02	3226 7.40	3279 7.78	3330 8.16
4656	3100	2929 5.36	2994 5.77	3056 6.18	3116 6.58	3174 6.98	3230 7.38	3284 7.79	3336 8.18	3387 8.58
4806	3200	2988 5.67	3053 6.09	3115 6.52	3176 6.95	3233 7.35	3288 7.77	3342 8.18	3394 8.60	3445 9.01
4957	3300	3045 5.98	3113 6.43	3175 6.87	3234 7.31	3292 7.74	3346 8.17	3400 8.59	3452 9.02	3503 9.45

CFM	OV	8.50" SP RPM BHP	9.00" SP RPM BHP	9.50" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP
2854	1900	2915 5.38	2987 5.74	3060 6.11	3132 6.49	3270 7.25				
3004	2000	2943 5.61	3012 5.97	3079 6.34	3148 6.72	3286 7.50	3418 8.30			
3154	2100	2971 5.83	3040 6.21	3107 6.59	3173 6.97	3302 7.76	3434 8.58	3561 9.42		
3304	2200	3008 6.08	3068 6.45	3135 6.84	3201 7.24	3327 8.04	3450 8.86	3577 9.72	3698 10.59	
3455	2300	3050 6.34	3110 6.72	3169 7.11	3229 7.51	3355 8.33	3475 9.16	3592 10.02	3714 10.91	3832 11.82
3605	2400	<u>3093 6.61</u>	<u>3153 7.00</u>	3211 7.40	3268 7.80	3383 8.62	3503 9.48	3619 10.35	3730 11.24	3848 12.17
3755	2500	3139 6.90	3196 7.29	3254 7.70	3311 8.11	3420 8.94	3532 9.80	3647 10.70	3758 11.60	3866 12.53
3905	2600	3185 7.21	3242 7.61	3298 8.01	<u>3353 8.43</u>	3463 9.28	3568 10.15	3675 11.05	3786 11.97	3894 12.92
4055	2700	3233 7.52	3289 7.93	3345 8.35	3399 8.77	3506 9.63	3610 10.51	3711 11.42	3814 12.35	3922 13.31
4206	2800	3282 7.86	3337 8.27	3392 8.70	3446 9.12	3550 9.99	<u>3653 10.89</u>	3753 11.81	3850 12.75	3950 13.72
4356	2900	3332 8.21	3386 8.63	3439 9.06	3493 9.49	3597 10.38	3696 11.28	<u>3796 12.22</u>	3892 13.18	3986 14.15
4506	3000	3383 8.58	3437 9.01	3489 9.44	3541 9.88	3644 10.78	3743 11.70	3839 12.64	<u>3935 13.62</u>	4028 14.61
4656	3100	3437 8.97	3488 9.40	3540 9.84	3591 10.29	3691 11.20	3790 12.14	3885 13.09	3978 14.07	<u>4071 15.08</u>
4806	3200	3494 9.41	3542 9.82	3591 10.25	3642 10.71	3741 11.64	3837 12.59	3932 13.56	4024 14.55	4114 15.56
4957	3300	3552 9.87	3599 10.29	3646 10.71	3693 11.15	3791 12.09	3886 13.05	3979 14.04	4071 15.05	4160 16.07
5107	3400	3610 10.35	3657 10.78	3703 11.21	3749 11.64	3842 12.57	3936 13.54	4027 14.54	4118 15.56	4206 16.60
5257	3500	<u>3667 10.82</u>	3715 11.28	3761 11.72	3806 12.17	3894 13.06	3987 14.05	4077 15.06	4165 16.09	
5407	3600	3725 11.32	3773 11.79	3819 12.25	3864 12.71	3951 13.63	4038 14.58	4128 15.61	4215 16.65	

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-165 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
800	0.26	A2	61	68	65	65	61	55	48	42	2400	0.25	G1	87	91	93	96	91	90	86	81
	0.38	A3	60	65	64	64	61	54	48	41		2.31	G2	85	91	93	95	88	88	83	76
	0.65	A4	62	64	61	61	59	53	48	42		3.40	G3	84	90	92	93	88	88	82	75
1000	0.25	B1	67	71	73	70	69	64	58	55	2800	0.25	H1	90	95	96	101	94	94	90	86
	0.40	B2	67	71	72	69	68	62	55	49		3.15	H2	88	95	96	100	92	92	88	81
	0.59	B3	66	70	71	69	67	62	55	48		4.63	H3	87	94	95	98	91	92	87	80
1200	1.02	B4	71	69	69	66	65	60	54	48	3200	7.96	H4	95	103	95	97	89	89	85	79
	0.25	C1	72	75	80	74	74	70	64	60		0.25	J1	92	98	100	103	99	97	94	90
	0.58	C2	72	75	79	73	73	68	61	54		4.11	J2	90	97	99	102	97	95	92	85
1400	0.85	C3	71	73	77	73	73	67	60	54	3450	6.05	J3	89	96	98	100	96	95	91	85
	1.46	C4	78	73	75	70	70	66	60	54		10.40	J4	97	105	100	99	93	92	89	84
	0.25	D1	75	78	84	78	78	74	69	65		0.25	K1	93	99	101	104	101	99	96	92
1750	0.79	D2	75	77	83	77	77	73	66	59	3800	4.78	K2	92	99	101	104	99	97	94	88
	1.16	D3	74	77	81	76	77	72	65	58		7.03	K3	90	98	100	102	98	96	93	87
	1.99	D4	83	77	80	73	74	70	64	59		12.09	K4	98	106	103	100	96	93	91	86
2000	0.25	E1	80	84	88	86	84	81	76	72	4200	0.25	L1	95	101	104	106	104	101	98	94
	1.23	E2	79	83	87	84	82	79	73	66		5.80	L2	93	101	104	105	103	99	97	91
	1.81	E3	78	82	85	83	81	79	72	65		8.53	L3	92	100	103	104	101	98	96	90
2000	3.11	E4	87	85	84	81	78	76	71	65	4200	14.67	L4	100	108	107	103	99	95	94	89
	0.25	F1	83	87	90	91	87	85	80	76		0.25	M1	97	103	106	108	107	103	101	97
	1.61	F2	82	87	90	89	85	83	77	71		7.09	M2	95	102	106	107	106	101	100	94
2000	2.36	F3	81	86	88	88	84	82	77	70	4200	10.42	M3	94	101	105	106	104	100	99	93
	4.06	F4	89	91	87	86	81	80	75	69		15.00	M4	99	106	109	106	104	98	97	92

BCS-182

SINGLE WIDTH

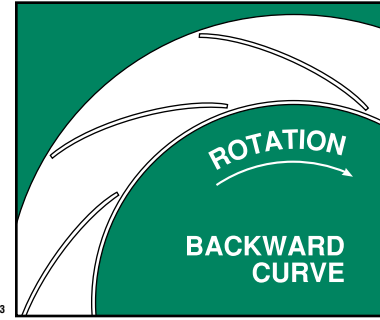
WHEEL DIAMETER: 18.25"
 WHEEL CIRCUMFERENCE: 4.78'
 OUTLET AREA: 1.829 SQ. FT.
 OUTLET SIZE: 14½" x 18¾"
 INLET DIAMETER: 19½" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2339	3052	3808
251°F TO 400°F*	2222	2899	3618
401°F TO 700°F*	1918	2503	3123
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 4.78 x RPM MAX BHP = 0.426 x (RPM/1000)³



CFM	OV	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP			
1280	700	907 0.29								
1463	800	925 0.32	1101 0.50							
1646	900	941 0.35	1118 0.55	1267 0.76						
1829	1000	<u>966 0.38</u>	1137 0.60	1284 0.82	1415 1.05					
2012	1100	1002 0.43	1152 0.64	1303 0.88	1433 1.13	1551 1.39				
2195	1200	1043 0.48	<u>1176 0.69</u>	1320 0.94	1451 1.21	1569 1.48	1678 1.76			
2377	1300	1086 0.54	1210 0.75	1335 1.00	1470 1.29	1587 1.58	1695 1.87			
2560	1400	1131 0.61	1248 0.83	<u>1362 1.07</u>	1485 1.36	1606 1.67	1713 1.98			
2743	1500	1181 0.68	1290 0.91	1397 1.16	1504 1.44	1621 1.76	1732 2.09			
2926	1600	1233 0.76	1334 1.00	1435 1.26	<u>1533 1.53</u>	1636 1.85	1748 2.20			
3109	1700	1290 0.86	1379 1.10	1477 1.36	1570 1.65	<u>1664 1.96</u>	1763 2.30			
3292	1800	1348 0.96	1428 1.21	1520 1.48	1609 1.77	1697 2.08	1787 2.42			
3475	1900	1406 1.07	1479 1.33	1564 1.61	1651 1.90	1734 2.22	<u>1816 2.55</u>			
3658	2000	1465 1.19	1532 1.46	1608 1.74	1693 2.05	1774 2.37	1853 2.71			
3841	2100	1525 1.32	1590 1.60	1660 1.89	1737 2.21	1816 2.54	1891 2.88			

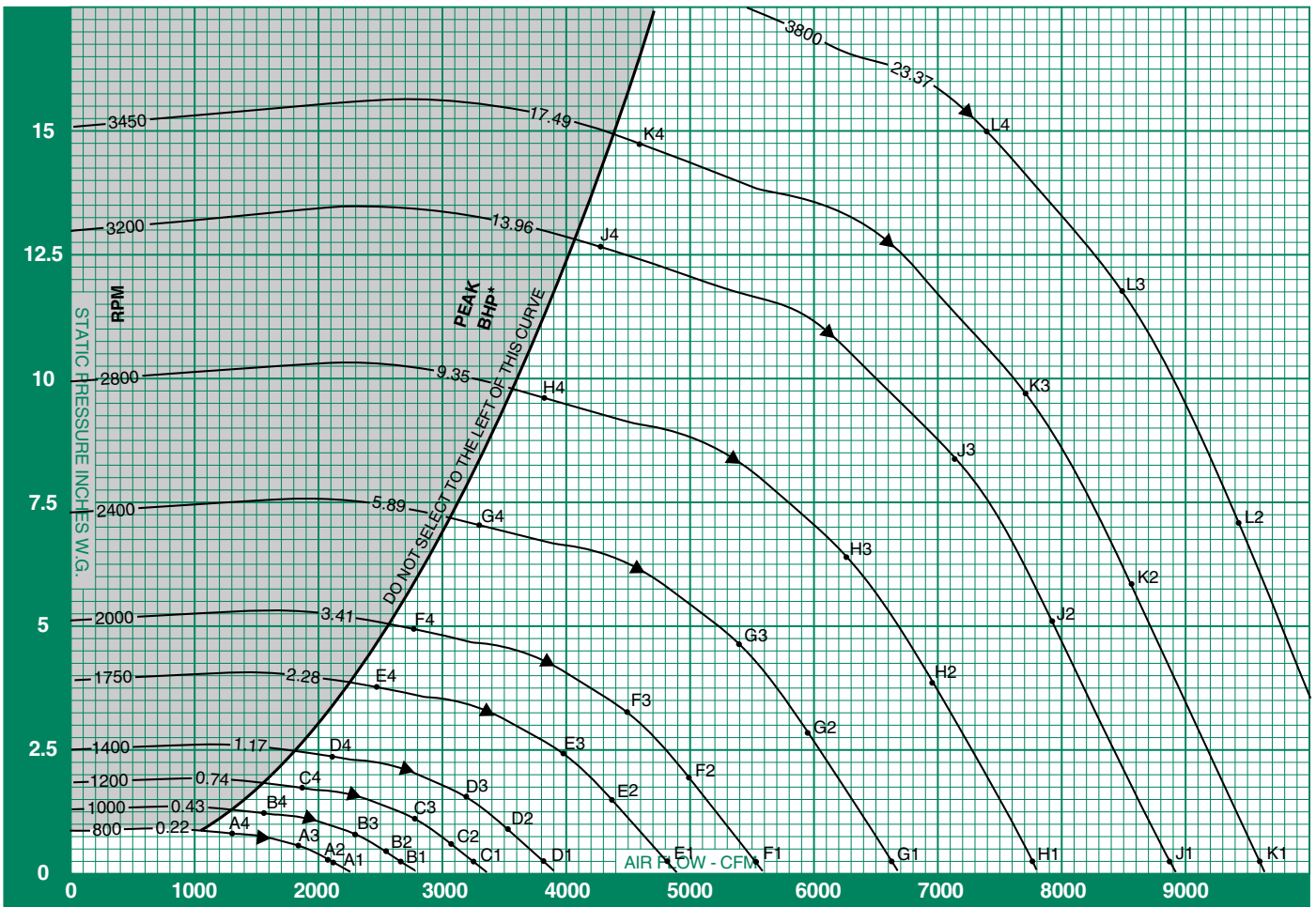
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
2743	1500	1832 2.43	1926 2.77	2017 3.11	2102 3.46					
2926	1600	1851 2.55	1945 2.91	2034 3.27	2120 3.63	2202 4.01	2280 4.38			
3109	1700	1867 2.67	1964 3.05	2053 3.43	2137 3.81	2219 4.20	2297 4.59	2373 4.99	2446 5.39	
3292	1800	1882 2.79	1980 3.19	2071 3.59	2156 3.98	2237 4.39	2315 4.80	2390 5.21	2463 5.62	2534 6.05
3475	1900	1903 2.92	1995 3.31	2088 3.74	2175 4.16	2256 4.58	2333 5.00	2408 5.43	2481 5.86	2551 6.30
3658	2000	<u>1931 3.07</u>	2015 3.46	2103 3.88	2191 4.32	2274 4.77	2352 5.21	2427 5.65	2499 6.10	2569 6.56
3841	2100	1967 3.24	<u>2043 3.62</u>	2121 4.03	2206 4.48	2290 4.94	2370 5.42	2445 5.88	2517 6.34	2587 6.81
4024	2200	2005 3.43	2076 3.81	<u>2149 4.22</u>	2224 4.65	2305 5.11	2385 5.60	2463 6.10	2536 6.58	2606 7.06
4207	2300	2044 3.63	2114 4.02	2181 4.42	<u>2252 4.85</u>	2324 5.30	2400 5.78	2478 6.29	2553 6.81	2625 7.32
4390	2400	2086 3.85	2152 4.24	2219 4.65	2283 5.07	<u>2352 5.52</u>	2420 5.99	2493 6.49	2568 7.02	2640 7.55
4572	2500	2129 4.08	2194 4.48	2257 4.89	2321 5.32	2382 5.76	<u>2448 6.23</u>	2514 6.72	2583 7.23	2655 7.78
4755	2600	2173 4.32	2236 4.73	2298 5.15	2358 5.59	2420 6.03	2479 6.49	2542 6.98	2606 7.49	2670 8.01
4938	2700	2217 4.58	2279 5.00	2340 5.42	2399 5.86	2457 6.32	2516 6.79	2573 7.26	<u>2634 7.76</u>	2695 8.29
5121	2800	2262 4.85	2323 5.28	2382 5.71	2441 6.16	2497 6.62	2554 7.09	2610 7.58	2665 8.07	2723 8.59
5304	2900	2311 5.14	2368 5.58	2426 6.02	2483 6.47	2539 6.94	2593 7.42	2648 7.91	2703 8.41	2756 8.92
5487	3000	2362 5.45	2413 5.89	2471 6.34	2526 6.80	2581 7.27	2635 7.76	2687 8.25	2740 8.76	2793 9.28
5670	3100	2414 5.77	2464 6.22	2515 6.68	2571 7.15	2624 7.63	2677 8.12	2729 8.62	2779 9.13	2831 9.66
5853	3200	2467 6.11	2515 6.57	2562 7.03	2615 7.51	2668 8.00	2720 8.50	2771 9.00	2821 9.53	2869 10.05
6036	3300	2522 6.46	2567 6.93	2613 7.40	2660 7.89	2712 8.39	2764 8.90	2813 9.41	2863 9.94	2911 10.47
6219	3400	2579 6.84	2619 7.31	2665 7.80	2710 8.29	2757 8.79	2808 9.31	2857 9.83	2905 10.36	2953 10.91

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
4024	2200	2739 8.05	2866 9.05	2987 10.06	3103 11.09					
4207	2300	2757 8.33	2883 9.37	3004 10.41	3120 11.47	3231 12.55				
4390	2400	2776 8.62	2902 9.68	3022 10.77	3137 11.86	3248 12.96	3355 14.08	3459 15.22		
4572	2500	2794 8.90	2921 10.00	3041 11.11	3155 12.24	3266 13.38	3373 14.52	3476 15.69	3576 16.88	
4755	2600	2809 9.15	2939 10.33	3059 11.46	3174 12.62	3283 13.80	3390 14.98	3493 16.17	3593 17.38	3690 18.61
4938	2700	2823 9.41	2954 10.60	3078 11.82	3192 13.00	3302 14.20	3408 15.43	3510 16.65	3610 17.89	3707 19.14
5121	2800	2841 9.68	2969 10.89	3094 12.14	3211 13.39	3321 14.61	3426 15.86	3528 17.13	3628 18.40	3724 19.68
5304	2900	2869 10.01	2984 11.17	3109 12.44	3228 13.75	3340 15.03	3445 16.31	3547 17.60	3646 18.91	3742 20.23
5487	3000	<u>2897 10.35</u>	3008 11.52	3124 12.76	3243 14.08	3357 15.43	3464 16.76	3566 18.08	3664 19.41	3760 20.77
5670	3100	2932 10.74	3036 11.89	3142 13.10	3258 14.42	3372 15.80	3482 17.20	3584 18.56	3683 19.92	3778 21.30
5853	3200	2969 11.15	<u>3065 12.28</u>	3170 13.50	3273 14.77	3387 16.16	3496 17.59	3602 19.03	3702 20.44	3797 21.84
6036	3300	3007 11.58	3103 12.72	<u>3198 13.92</u>	3299 15.20	3402 16.54	3511 17.98	3617 19.45	3720 20.95	
6219	3400	3046 12.02	3140 13.19	3231 14.38	3327 15.65	3424 16.97	3526 18.38	3632 19.87	3735 21.39	
6402	3500	3088 12.50	3178 13.66	3269 14.88	<u>3356 16.11</u>	3452 17.45	3546 18.82	3647 20.30	3750 21.84	
6585	3600	3130 12.99	3217 14.17	3306 15.39	3393 16.64	<u>3480 17.94</u>	3574 19.34	3664 20.75	3765 22.30	

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-182 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
800	0.25	A1	70	75	72	68	68	64	58	52	2000	3.27	F3	97	96	98	95	89	88	85	80	
	0.31	A2	70	75	72	68	68	64	58	52		4.96	F4	97	96	99	95	89	88	85	80	
	0.52	A3	70	75	72	68	68	64	58	52		2400	0.25	G1	99	102	102	101	95	92	90	85
	0.79	A4	70	76	72	68	67	64	58	52			2.82	G2	100	102	102	101	95	92	90	85
1000	0.25	B1	77	80	79	74	73	71	65	58	4.70	G3	100	102	102	101	95	92	90	85		
	0.49	B2	76	80	79	74	73	70	65	59	7.15	G4	100	102	102	101	95	92	90	85		
	0.82	B3	76	80	79	74	73	70	65	58	2800	0.25	H1	102	107	106	105	100	96	95	90	
	1.24	B4	76	81	79	74	73	70	64	59		3.84	H2	103	107	105	106	100	96	94	90	
1200	0.25	C1	83	84	84	80	77	75	70	64	6.40	H3	103	107	105	106	100	96	94	90		
	0.71	C2	82	84	84	80	77	75	70	64	9.73	H4	102	107	105	106	99	95	94	90		
	1.18	C3	82	84	84	80	77	75	70	64	3200	0.25	J1	104	111	109	109	104	99	98	94	
	1.79	C4	82	84	85	80	77	75	70	64		5.02	J2	105	111	108	110	104	99	98	94	
1400	0.25	D1	87	88	89	84	81	79	75	69	8.36	J3	105	111	108	110	104	99	98	94		
	0.96	D2	87	87	89	84	81	79	75	69	12.71	J4	105	111	108	110	103	98	98	94		
	1.60	D3	87	87	89	84	80	79	75	69	3450	0.25	K1	106	113	111	111	106	100	100	97	
	2.43	D4	87	87	90	84	80	79	75	69		5.83	K2	106	114	109	112	106	100	100	96	
1750	0.25	E1	94	93	95	91	86	85	82	76	9.72	K3	106	114	109	112	106	100	100	96		
	1.50	E2	94	92	96	91	86	85	82	76	14.77	K4	106	113	109	112	106	100	100	96		
	2.50	E3	94	92	96	91	85	85	82	76	3800	0.25	L1	107	115	114	113	109	103	102	99	
	3.80	E4	94	91	96	91	85	85	81	76		7.07	L2	108	115	112	114	109	103	102	99	
2000	0.25	F1	96	97	98	95	90	88	86	80	11.79	L3	108	115	112	114	109	103	102	99		
	1.96	F2	97	96	98	95	89	88	85	80	15.00	L4	108	115	112	114	109	103	102	99		

BCS-200

SINGLE WIDTH

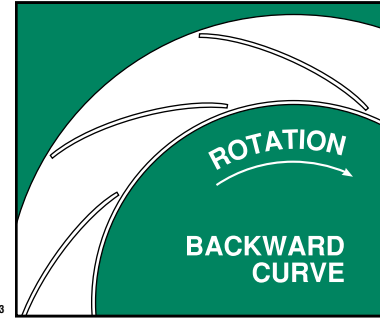
WHEEL DIAMETER: 20.00"
 WHEEL CIRCUMFERENCE: 5.24'
 OUTLET AREA: 2.196 SQ. FT.
 OUTLET SIZE: 15⁷/₈" x 19¹⁵/₁₆"
 INLET DIAMETER: 21¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2134	2785	3475
251°F TO 400°F*	2027	2646	3301
401°F TO 700°F*	1750	2284	2850
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 5.24 x RPM MAX BHP = 0.674 x (RPM/1000)³



CFM	OV	1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1537	700	828	0.35										
1757	800	844	0.38	1004	0.60								
1977	900	859	0.42	1021	0.66	1156	0.91						
2196	1000	<u>881</u>	<u>0.46</u>	1038	0.72	1172	0.98	1292	1.26				
2416	1100	915	0.52	1052	0.77	1189	1.06	1307	1.36	1416	1.67		
2636	1200	952	0.58	<u>1073</u>	<u>0.83</u>	1205	1.13	1324	1.45	1431	1.78	1531	2.11
2855	1300	991	0.65	1104	0.91	1218	1.20	1341	1.55	1448	1.89	1547	2.25
3075	1400	1032	0.73	1139	0.99	<u>1243</u>	<u>1.29</u>	1355	1.63	1465	2.01	1563	2.38
3295	1500	1078	0.82	1178	1.09	1274	1.39	1373	1.73	1479	2.11	1580	2.52
3514	1600	1125	0.92	1217	1.20	1309	1.51	<u>1399</u>	<u>1.84</u>	1493	2.22	1595	2.64
3734	1700	1177	1.03	1258	1.32	1347	1.64	1433	1.98	<u>1518</u>	<u>2.35</u>	1609	2.76
3954	1800	1230	1.15	1303	1.45	1387	1.78	1468	2.13	1548	2.50	1630	2.90
4173	1900	1283	1.28	1350	1.59	1427	1.93	1506	2.29	1582	2.67	<u>1657</u>	<u>3.07</u>
4393	2000	1337	1.43	1398	1.75	1468	2.09	1545	2.46	1619	2.85	1691	3.26
4613	2100	1391	1.58	1451	1.92	1514	2.27	1585	2.65	1657	3.04	1726	3.46

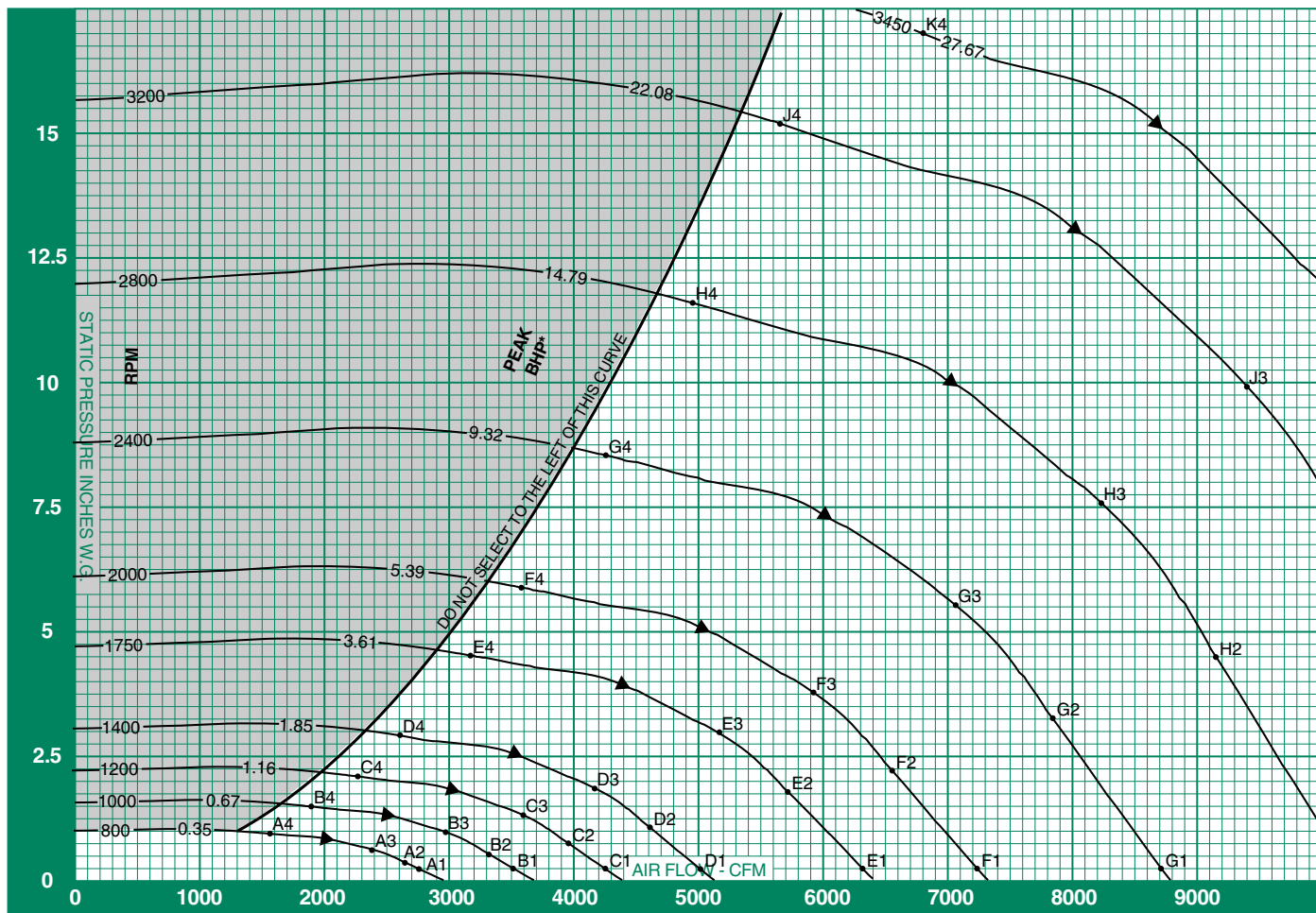
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3295	1500	1672	2.91	1758	3.32	1840	3.73	1918	4.16										
3514	1600	1689	3.07	1775	3.49	1856	3.93	1934	4.37	2009	4.81	2081	5.26						
3734	1700	1704	3.21	1792	3.67	1873	4.12	1950	4.58	2025	5.04	2096	5.51	2165	5.99	2232	6.47		
3954	1800	1718	3.35	1807	3.83	1890	4.31	1967	4.78	2041	5.27	2112	5.76	2181	6.25	2248	6.75	2312	7.26
4173	1900	1737	3.50	1821	3.98	1905	4.49	1985	5.00	2058	5.50	2129	6.01	2197	6.53	2264	7.04	2328	7.57
4393	2000	<u>1762</u>	<u>3.68</u>	1838	4.15	1919	4.66	1999	5.19	2075	5.73	2146	6.26	2214	6.79	2280	7.33	2344	7.88
4613	2100	1795	3.89	<u>1864</u>	<u>4.35</u>	1936	4.84	2013	5.38	2089	5.94	2163	6.51	2231	7.06	2297	7.61	2361	8.18
4833	2200	1829	4.12	1894	4.58	<u>1961</u>	<u>5.07</u>	2030	5.58	2103	6.14	2177	6.72	2247	7.32	2314	7.90	2378	8.48
5052	2300	1866	4.36	1929	4.83	1990	5.31	<u>2055</u>	<u>5.83</u>	2120	6.37	2190	6.95	2261	7.56	2329	8.18	2395	8.80
5272	2400	1904	4.62	1964	5.09	2025	5.59	2083	6.09	<u>2146</u>	<u>6.63</u>	2209	7.19	2275	7.79	2343	8.43	2409	9.07
5492	2500	1943	4.90	2002	5.38	2059	5.88	2118	6.39	2174	6.92	<u>2234</u>	<u>7.48</u>	2294	8.07	2357	8.69	2423	9.34
5711	2600	1983	5.19	2040	5.68	2097	6.19	2152	6.71	2208	7.25	2262	7.80	<u>2320</u>	<u>8.38</u>	2378	8.99	2437	9.62
5931	2700	2023	5.50	2080	6.00	2135	6.51	2189	7.04	2242	7.59	2296	8.15	2348	8.72	<u>2403</u>	<u>9.33</u>	2460	9.96
6151	2800	2064	5.83	2120	6.34	2174	6.86	2227	7.40	2278	7.95	2330	8.52	2382	9.10	2432	9.69	<u>2485</u>	<u>10.31</u>
6370	2900	2109	6.18	2161	6.70	2214	7.23	2266	7.77	2317	8.33	2366	8.91	2416	9.50	2466	10.10	2515	10.71
6590	3000	2156	6.54	2201	7.07	2254	7.62	2305	8.17	2355	8.73	2404	9.32	2452	9.91	2501	10.52	2549	11.15
6810	3100	2203	6.93	2248	7.47	2295	8.02	2346	8.59	2395	9.16	2443	9.75	2490	10.35	2536	10.97	2583	11.60
7029	3200	2251	7.33	2295	7.88	2338	8.44	2386	9.02	2435	9.61	2482	10.20	2528	10.81	2574	11.44	2618	12.07
7249	3300	2301	7.76	2342	8.32	2385	8.89	2427	9.47	2475	10.08	2522	10.68	2567	11.30	2612	11.93	2656	12.58
7469	3400	2353	8.22	2390	8.78	2432	9.36	2472	9.95	2516	10.56	2562	11.18	2607	11.81	2651	12.44	2695	13.10

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4833	2200	2499	9.67	2615	10.87	2725	12.08	2831	13.32										
5052	2300	2516	10.01	2631	11.25	2741	12.51	2847	13.78	2948	15.07								
5272	2400	2533	10.36	2648	11.63	2757	12.93	2863	14.24	2964	15.56	3062	16.91	3156	18.28				
5492	2500	2549	10.69	2665	12.01	2774	13.34	2879	14.70	2980	16.07	3077	17.44	3172	18.85	3263	20.27		
5711	2600	2563	10.99	2682	12.40	2792	13.76	2896	15.15	2996	16.57	3093	17.98	3187	19.42	3279	20.87	3367	22.35
5931	2700	2576	11.30	2696	12.73	2809	14.19	2913	15.61	3013	17.05	3110	18.53	3203	20.00	3294	21.48	3383	22.99
6151	2800	2593	11.63	2709	13.07	2823	14.57	2930	16.08	3030	17.55	3127	19.05	3220	20.57	3310	22.10	3398	23.64
6370	2900	2618	12.02	2723	13.42	2837	14.95	2945	16.51	3047	18.06	3144	19.58	3237	21.14	3327	22.71	3414	24.30
6590	3000	<u>2644</u>	<u>12.43</u>	2745	13.83	2850	15.32	2959	16.91	3063	18.53	3161	20.13	3254	21.71	3344	23.31	3431	24.95
6810	3100	2675	12.90	2771	14.28	2867	15.73	2973	17.32	3077	18.97	3177	20.65	3271	22.29	3361	23.92	3448	25.58
7029	3200	2710	13.39	<u>2797</u>	<u>14.74</u>	2893	16.22	2986	17.74	3090	19.41	3190	21.12	3287	22.86	3378	24.55	3465	26.23
7249	3300	2744	13.91	2831	15.28	<u>2918</u>	<u>16.71</u>	3011	18.25	3104	19.86	3204	21.59	3301	23.36	3394	25.16		
7469	3400	2779	14.44	2865	15.84	2948	17.27	3036	18.79	3125	20.38	3218	22.08	3314	23.87	3408	25.69		
7688	3500	2817	15.01	2900	16.41	2983	17.87	<u>3062</u>	<u>19.34</u>	3150	20.96	3236	22.61	3328	24.38	3422	26.23		
7908	3600	2856	15.60	2936	17.01	3017	18.48	3096	19.99	<u>3176</u>	<u>21.55</u>	3261	23.22	3343	24.92	3435	26.78		

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-200 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
800	0.25	A1	74	79	75	71	70	67	61	54	2000	0.25	F1	100	100	101	98	92	91	88	83
	0.38	A2	74	79	75	71	70	67	61	54		2.35	F2	100	99	101	98	92	91	88	82
	0.63	A3	74	79	75	71	70	67	60	54		3.92	F3	100	99	101	98	92	91	88	82
	0.95	A4	74	79	75	71	70	66	61	55		5.96	F4	100	99	102	98	92	91	88	82
1000	0.25	B1	81	83	82	77	76	73	67	61	2400	0.25	G1	103	106	105	104	98	95	93	88
	0.59	B2	80	84	82	77	76	73	67	61		3.39	G2	103	105	105	104	98	95	93	88
	0.98	B3	80	84	82	77	76	73	67	61		5.65	G3	103	105	105	104	98	95	93	88
	1.49	B4	79	84	82	77	76	73	67	61		8.58	G4	103	105	105	104	97	95	93	88
1200	0.25	C1	86	88	87	83	80	78	73	67	2800	0.25	H1	105	110	109	108	102	99	97	93
	0.85	C2	86	87	88	83	80	78	73	67		4.61	H2	106	110	108	109	102	98	97	93
	1.41	C3	86	87	88	83	80	78	73	67		7.69	H3	106	110	108	109	102	98	97	93
	2.15	C4	85	87	88	82	80	78	73	67		11.68	H4	106	110	108	109	102	98	97	92
1400	0.25	D1	91	91	92	87	83	82	78	71	3200	0.25	J1	108	114	112	112	106	102	101	97
	1.15	D2	91	91	92	87	83	82	78	72		6.02	J2	108	114	111	113	106	101	101	97
	1.92	D3	91	91	92	87	83	82	78	71		10.04	J3	108	114	111	113	106	101	101	97
	2.92	D4	90	90	93	87	83	82	77	72		15.26	J4	108	114	111	113	106	101	100	97
1750	0.25	E1	97	97	98	94	88	88	85	78	3450	0.25	K1	109	116	114	114	109	103	103	99
	1.80	E2	98	95	99	94	88	88	84	78		7.00	K2	110	117	113	115	109	103	103	99
	3.00	E3	98	95	99	94	88	88	84	78		11.67	K3	110	117	113	115	109	103	103	99
	4.56	E4	98	95	99	94	88	88	84	78		17.00	K4	110	117	112	115	108	103	102	99

BCS-222

SINGLE WIDTH

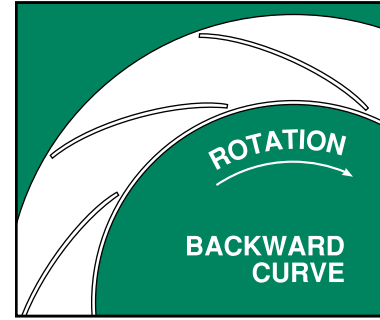
WHEEL DIAMETER: 22.25"
 WHEEL CIRCUMFERENCE: 5.83'
 OUTLET AREA: 2.723 SQ. FT.
 OUTLET SIZE: 17¹/₁₆" x 22³/₁₆"
 INLET DIAMETER: 23¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1885	2460	3303
251°F TO 400°F*	1791	2337	3138
401°F TO 700°F*	1546	2017	2708
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 5.83 x RPM MAX BHP = 1.137 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1905	700	464	0.11	560	0.20	654	0.30	741	0.42										
2178	800	505	0.14	590	0.23	<u>673</u>	<u>0.33</u>	754	0.45	901	0.73								
2450	900	547	0.17	623	0.27	698	0.38	<u>771</u>	<u>0.50</u>	913	0.79								
2722	1000	591	0.21	660	0.32	729	0.44	795	0.56	926	0.85	1049	1.19						
2994	1100	636	0.25	701	0.37	763	0.50	824	0.64	<u>944</u>	<u>0.92</u>	1061	1.26	1171	1.64				
3267	1200	684	0.30	742	0.44	799	0.57	856	0.71	967	1.01	1077	1.35	1183	1.74	1282	2.15		
3539	1300	731	0.36	785	0.50	839	0.65	891	0.80	995	1.12	<u>1097</u>	<u>1.45</u>	1197	1.84	1294	2.26	1385	2.71
3811	1400	779	0.43	829	0.58	880	0.73	928	0.90	1026	1.22	1121	1.57	1214	1.96	1308	2.38	1397	2.85
4083	1500	828	0.50	874	0.66	922	0.83	968	1.00	1059	1.34	1148	1.72	<u>1237</u>	<u>2.09</u>	1325	2.52	1410	2.98
4356	1600	876	0.59	921	0.76	965	0.93	1009	1.11	1094	1.48	1179	1.86	1262	2.25	<u>1345</u>	<u>2.68</u>	1427	3.15
4628	1700	925	0.68	968	0.86	1009	1.05	1051	1.23	1131	1.62	1211	2.01	1290	2.44	1369	2.85	<u>1447</u>	<u>3.32</u>
4900	1800	975	0.79	1016	0.98	1054	1.17	1094	1.37	1170	1.78	1247	2.19	1322	2.62	1396	3.07	<u>1469</u>	<u>3.51</u>
5172	1900	1024	0.91	1063	1.10	1100	1.31	1138	1.51	1211	1.94	1282	2.38	1354	2.81	1425	3.29	1496	3.75
5445	2000	1074	1.04	1112	1.24	1147	1.45	1182	1.67	1253	2.11	1321	2.57	1389	3.03	1457	3.51	1523	4.01
5717	2100	1124	1.18	1160	1.39	1194	1.61	1227	1.84	1295	2.30	1360	2.78	1425	3.27	1490	3.74	1555	4.26

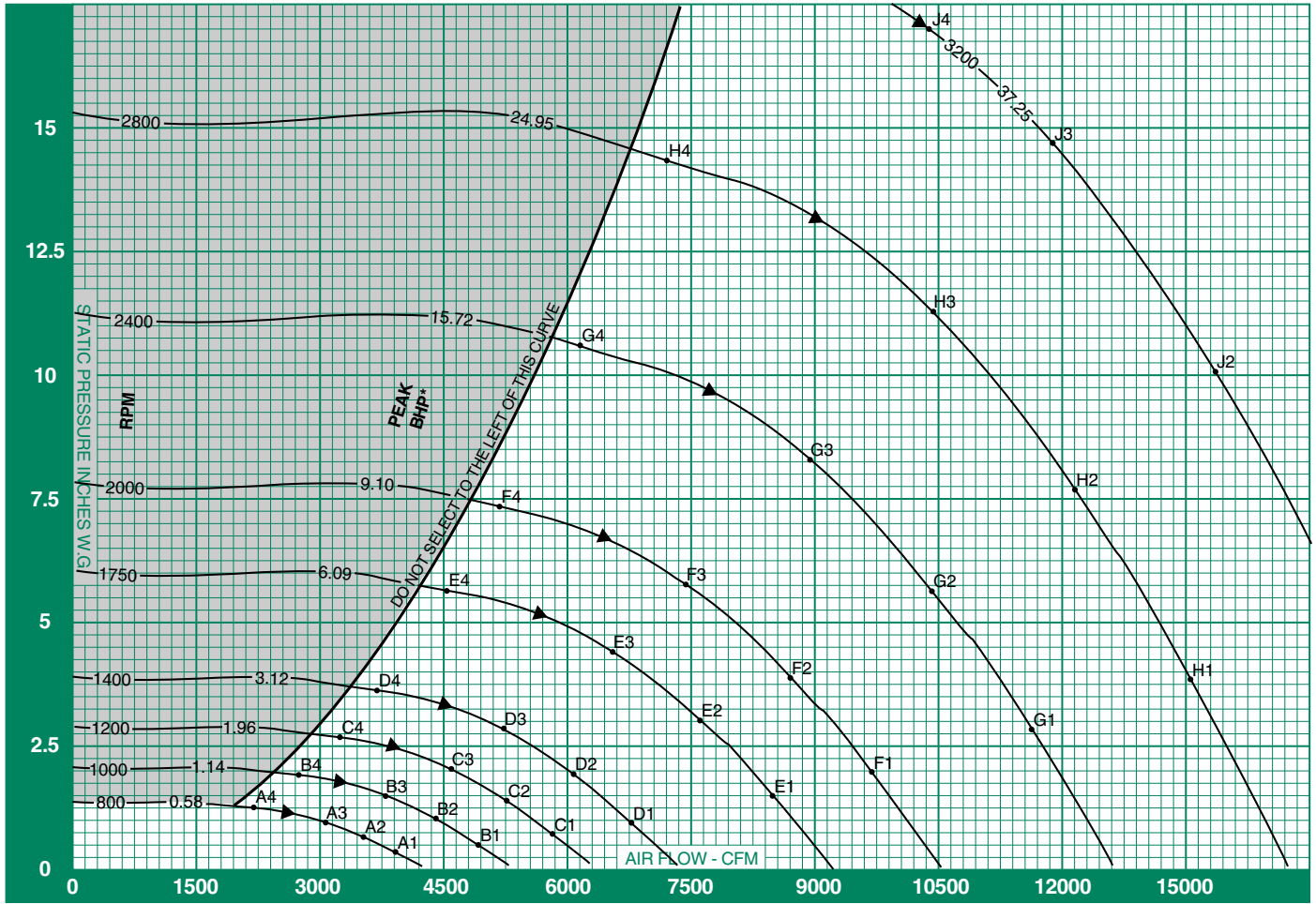
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4083	1500	1494	3.49	1573	4.00	1649	4.52												
4356	1600	1507	3.64	1586	4.17	1661	4.72	1733	5.27	1801	5.84								
4628	1700	1524	3.82	1599	4.35	1673	4.91	1745	5.50	1813	6.08	1879	6.67						
4900	1800	<u>1542</u>	<u>4.02</u>	1616	4.56	1687	5.11	1757	5.70	1825	6.32	1891	6.94	1954	7.56	2015	8.19		
5172	1900	1565	4.24	<u>1634</u>	<u>4.78</u>	1704	5.34	1771	5.93	1838	6.54	1903	7.19	1966	7.85	2027	8.49	2086	9.16
5445	2000	1590	4.49	1657	5.02	<u>1722</u>	<u>5.59</u>	1788	6.18	1853	6.80	1916	7.43	1978	8.11	2039	8.80	2098	9.48
5717	2100	1618	4.79	1681	5.29	1744	5.86	<u>1806</u>	<u>6.45</u>	1870	7.08	1931	7.72	1991	8.37	2052	9.08	2110	9.79
5989	2200	1648	5.08	1708	5.62	1768	6.15	1829	6.75	<u>1888</u>	<u>7.37</u>	1948	8.02	2008	8.69	2065	9.37	2123	10.09
6262	2300	1680	5.37	1737	5.96	1796	6.51	1853	7.07	1911	7.70	<u>1967</u>	<u>8.35</u>	2025	9.02	2082	9.72	2138	10.43
6534	2400	1712	5.68	1769	6.28	1823	6.89	1880	7.47	1934	8.04	1990	8.70	<u>2045</u>	<u>9.38</u>	2099	10.08	2155	10.80
6806	2500	1747	6.03	1801	6.62	1855	7.25	1907	7.88	1962	8.48	2014	9.08	2067	9.76	<u>2120</u>	<u>10.46</u>	2172	11.18
7078	2600	1782	6.40	1835	6.99	1887	7.62	1939	8.27	1989	8.93	2041	9.55	2091	10.18	2143	10.87	<u>2194</u>	<u>11.60</u>
7351	2700	1818	6.78	1870	7.39	1920	8.01	1970	8.68	2020	9.36	2069	10.03	2119	10.68	2167	11.33	2216	12.04
7623	2800	1857	7.16	1905	7.81	1955	8.45	2003	9.10	2052	9.80	2099	10.50	2146	11.20	2195	11.87	2241	12.55
7895	2900	<u>1896</u>	<u>7.57</u>	1943	8.24	1990	8.91	2037	9.57	2084	10.25	2131	10.98	2177	11.71	2222	12.43	2269	13.13
8167	3000	1936	7.99	1981	8.68	2026	9.38	2072	10.06	2118	10.75	2163	11.47	2208	12.22	2252	12.98	2296	13.73
8440	3100	1977	8.43	2020	9.14	2064	9.86	2108	10.58	2153	11.28	2196	11.99	2240	12.74	2284	13.52	2327	14.31
8712	3200	2018	8.89	2061	9.62	2103	10.36	2145	11.10	2188	11.84	2231	12.57	2273	13.30	2316	14.08	2358	14.88
8984	3300	2060	9.37	2102	10.12	2142	10.88	2184	11.64	2224	12.41	2267	13.16	2308	13.91	2349	14.67	2390	15.48
9256	3400	2102	9.88	2143	10.64	2183	11.42	2223	12.20	2263	12.99	2302	13.78	2344	14.55	2384	15.32	2423	16.11

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5989	2200	2235	11.60	2341	13.10	2443	14.64												
6262	2300	2247	11.93	2353	13.51	2455	15.08	2552	16.69										
6534	2400	2261	12.28	2366	13.88	2467	15.54	2564	17.18	2656	18.85								
6806	2500	2278	12.69	2379	14.26	2479	15.95	2576	17.67	2668	19.38	2758	21.12	2844	22.90				
7078	2600	2295	13.12	2395	14.70	2492	16.36	2588	18.12	2681	19.91	2770	21.69	2856	23.50	2940	25.34		
7351	2700	<u>2314</u>	<u>13.57</u>	2412	15.17	2507	16.83	2601	18.57	2693	20.40	2782	22.27	2868	24.11	2952	25.98	3032	27.89
7623	2800	2336	14.05	2429	15.65	2524	17.34	2615	19.06	2706	20.89	2794	22.79	2880	24.73	2964	26.63	3044	28.57
7895	2900	2359	14.55	<u>2451</u>	<u>16.18</u>	2541	17.86	2632	19.62	2720	21.41	2807	23.31	2893	25.28	2976	27.29	3056	29.26
8167	3000	2386	15.17	2474	16.73	2561	18.42	2649	20.19	2737	22.01	2821	23.87	2905	25.84	2988	27.88	3069	29.96
8440	3100	2413	15.83	2498	17.32	2584	19.02	2668	20.78	2754	22.62	2838	24.51	2919	26.43	3001	28.48	3081	30.58
8712	3200	2441	16.51	2525	18.04	2607	19.63	<u>2690</u>	<u>21.42</u>	2771	23.25	2855	25.17	2936	27.12	3014	29.11	3094	31.22
8984	3300	2472	17.15	2552	18.78	2633	20.36	2713	22.08	<u>2793</u>	<u>23.94</u>	2872	25.84	2953	27.83	3031	29.84	3107	31.89
9256	3400	2503	17.80	2581	19.53	2660	21.16	2737	22.80	2816	24.65	<u>2893</u>	<u>26.57</u>	2970	28.54	3048	30.59	3124	32.67
9529	3500	2535	18.48	2612	20.24	2688	21.99	2764	23.66	2839	25.37	2916	27.33	<u>2990</u>	<u>29.31</u>	3065	31.36	3141	33.47
9801	3600	2568	19.17	2644	20.97	2717	22.79	2792	24.55	2866	26.28	2939	28.10	3013	30.12	3085	32.16	3158	34.28

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-222 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
800	0.31	A1	69	72	69	67	64	64	52	40	1750	4.40	E3	93	91	90	84	81	79	77	71	
	0.63	A2	70	71	67	65	62	59	52	45		5.60	E4	103	99	97	91	86	86	81	75	
	0.92	A3	70	71	66	64	62	59	53	47		2000	1.96	F1	97	95	95	91	88	85	86	76
	1.17	A4	77	78	72	69	68	63	57	51			3.92	F2	96	95	94	89	86	83	81	74
1000	0.49	B1	76	78	75	73	70	71	61	49	2400	5.75	F3	95	95	94	89	85	82	80	75	
	0.98	B2	76	76	73	71	68	66	59	52		7.31	F4	106	104	101	95	90	89	85	79	
	1.44	B3	76	76	73	70	67	65	60	54		2800	2.82	G1	100	101	99	97	93	90	89	83
	1.83	B4	84	84	79	75	73	70	64	58			5.64	G2	99	101	99	95	91	88	85	80
1200	0.71	C1	82	82	81	78	75	74	68	56	3200	8.28	G3	99	101	99	95	90	87	85	80	
	1.41	C2	82	81	79	76	73	70	65	58		10.53	G4	109	110	106	101	95	93	90	85	
	2.07	C3	82	81	79	74	72	70	65	59		3200	3.84	H1	103	106	103	102	97	94	92	89
	2.63	C4	91	89	85	80	78	75	70	63			7.68	H2	102	106	103	100	95	92	89	85
1400	0.96	D1	87	85	86	81	79	77	74	62	3200	11.26	H3	101	106	103	100	94	91	88	85	
	1.92	D2	86	85	84	79	77	74	70	63		14.34	H4	111	115	110	107	100	96	94	89	
	2.82	D3	86	85	84	79	76	73	70	64		3200	5.02	J1	105	111	106	106	100	97	95	95
	3.58	D4	96	93	91	85	81	79	74	68			10.03	J2	104	110	106	104	98	95	92	90
1750	1.50	E1	95	91	92	87	85	81	83	71	14.71	J3	104	110	106	104	97	94	92	89		
	3.00	E2	93	91	90	85	83	79	77	70	17.00	J4	108	114	109	108	100	97	95	92		

BCS-245

SINGLE WIDTH

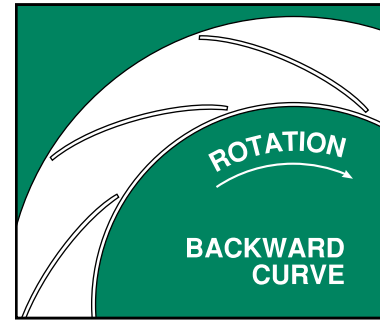
WHEEL DIAMETER: 24.50"
 WHEEL CIRCUMFERENCE: 6.41'
 OUTLET AREA: 3.304 SQ. FT.
 OUTLET SIZE: 19¹/₁₆" x 24¹/₂"
 INLET DIAMETER: 26¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1712	2234	3000
251°F TO 400°F*	1626	2122	2850
401°F TO 700°F*	1404	1832	2460
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 6.41 x RPM MAX BHP = 1.840 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2310	700	422	0.14	509	0.24	594	0.36	673	0.50										
2640	800	458	0.17	535	0.28	<u>611</u>	<u>0.41</u>	684	0.55	818	0.88								
2970	900	497	0.21	566	0.33	634	0.47	<u>700</u>	<u>0.61</u>	829	0.96								
3301	1000	537	0.25	600	0.39	662	0.53	722	0.68	841	1.03	953	1.44						
3631	1100	578	0.31	636	0.45	693	0.61	748	0.77	<u>857</u>	<u>1.12</u>	964	1.53	1063	1.99				
3961	1200	621	0.37	674	0.53	726	0.69	777	0.86	878	1.22	978	1.64	1074	2.10	1164	2.60		
4291	1300	664	0.44	713	0.61	762	0.79	809	0.97	903	1.35	<u>996</u>	<u>1.76</u>	1087	2.23	1175	2.75	1258	3.29
4621	1400	708	0.52	753	0.70	799	0.89	843	1.09	932	1.48	1018	1.90	<u>1103</u>	<u>2.37</u>	1188	2.89	1269	3.45
4951	1500	752	0.61	794	0.81	837	1.01	879	1.21	962	1.63	1043	2.08	1123	2.54	1203	3.06	1281	3.62
5281	1600	796	0.71	836	0.92	876	1.13	916	1.35	994	1.79	1071	2.26	1147	2.73	<u>1222</u>	<u>3.25</u>	1296	3.81
5611	1700	840	0.83	879	1.05	917	1.27	954	1.50	1028	1.97	1100	2.44	1172	2.96	1243	3.46	<u>1314</u>	<u>4.03</u>
5941	1800	885	0.96	922	1.18	957	1.42	993	1.66	1063	2.15	1132	2.66	1201	3.18	1268	3.72	<u>1334</u>	<u>4.26</u>
6272	1900	930	1.10	966	1.34	999	1.58	1033	1.83	1100	2.35	1164	2.88	1230	3.41	1294	3.99	1358	4.55
6602	2000	975	1.26	1010	1.51	1042	1.76	1073	2.03	1138	2.56	1200	3.12	1262	3.68	1323	4.25	1383	4.87
6932	2100	1021	1.43	1054	1.69	1084	1.96	1114	2.23	1176	2.79	1235	3.37	1294	3.96	1353	4.54	1412	5.17

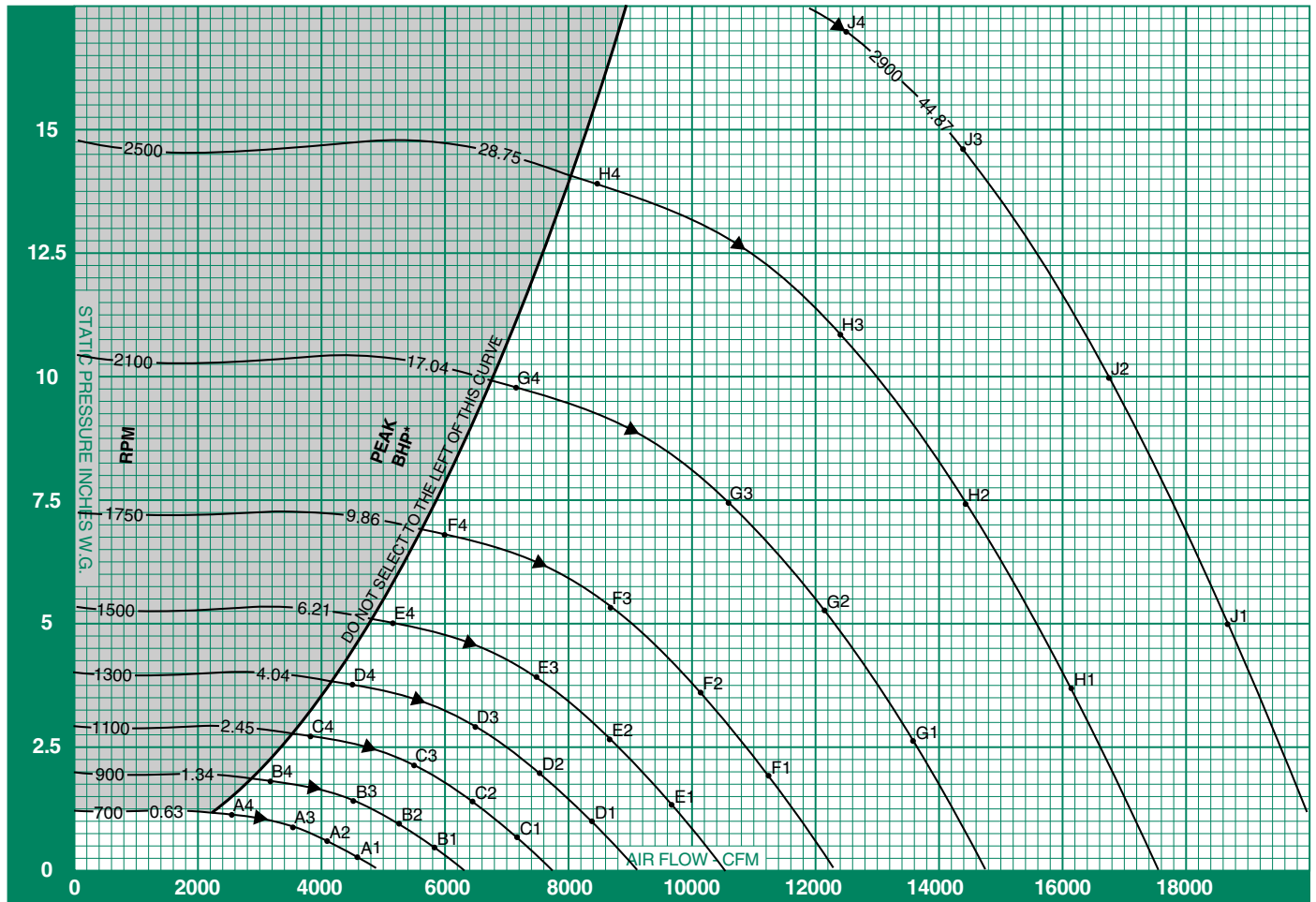
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4951	1500	1357	4.23	1429	4.85	1497	5.48												
5281	1600	1369	4.41	1440	5.06	1508	5.73	1573	6.39	1636	7.08								
5611	1700	1384	4.64	1452	5.27	1520	5.96	1584	6.67	1647	7.37	1706	8.09						
5941	1800	<u>1401</u>	<u>4.87</u>	1468	5.52	1532	6.20	1596	6.92	1658	7.66	1717	8.41	1775	9.16	1830	9.93		
6272	1900	1421	5.14	<u>1484</u>	<u>5.79</u>	1547	6.48	1609	7.19	1669	7.93	1728	8.72	1785	9.51	1841	10.30	1894	11.10
6602	2000	1444	5.45	1505	6.08	<u>1564</u>	<u>6.77</u>	1624	7.50	1682	8.24	1740	9.01	1797	9.83	1852	10.67	1905	11.50
6932	2100	1469	5.81	1527	6.42	1584	7.10	<u>1640</u>	<u>7.82</u>	1698	8.58	1754	9.36	1808	10.15	1863	11.01	1917	11.88
7262	2200	1496	6.16	1552	6.82	1606	7.46	1661	8.18	<u>1715</u>	<u>8.94</u>	1770	9.73	1823	10.54	1876	11.36	1928	12.24
7592	2300	1525	6.51	1578	7.22	1631	7.90	1682	8.57	1735	9.33	<u>1787</u>	<u>10.12</u>	1839	10.94	1891	11.78	1941	12.64
7922	2400	1555	6.89	1606	7.61	1656	8.35	1707	9.05	1757	9.75	1807	10.55	<u>1857</u>	<u>11.37</u>	1906	12.22	1957	13.10
8252	2500	1586	7.31	1635	8.02	1685	8.78	1732	9.55	1781	10.28	1829	11.01	1878	11.83	<u>1925</u>	<u>12.69</u>	1972	13.56
8582	2600	1618	7.75	1666	8.47	1714	9.24	1761	10.03	1806	10.82	1854	11.58	1899	12.34	1946	13.18	<u>1992</u>	<u>14.07</u>
8912	2700	1651	8.22	1698	8.96	1743	9.71	1789	10.52	1834	11.35	1879	12.17	1924	12.95	1968	13.74	2013	14.60
9243	2800	1686	8.68	1730	9.47	1775	10.24	1819	11.03	1863	11.88	1906	12.73	1949	13.58	1993	14.40	2036	15.21
9573	2900	<u>1722</u>	<u>9.18</u>	1764	9.99	1807	10.80	1850	11.60	1892	12.43	1935	13.31	1977	14.20	2018	15.08	2060	15.92
9903	3000	1758	9.69	1799	10.53	1840	11.38	1882	12.20	1923	13.03	1964	13.90	2005	14.81	2045	15.73	2085	16.65
10233	3100	1795	10.22	1835	11.09	1875	11.96	1914	12.83	1955	13.68	1995	14.54	2035	15.45	2074	16.39	2113	17.34
10563	3200	1833	10.78	1871	11.67	1910	12.56	1948	13.46	1987	14.35	2026	15.24	2064	16.13	2103	17.08	2142	18.05
10893	3300	1871	11.36	1909	12.27	1946	13.19	1983	14.11	2020	15.05	2059	15.96	2096	16.87	2133	17.79	2171	18.77
11223	3400	1909	11.97	1946	12.90	1983	13.84	2019	14.79	2055	15.75	2091	16.71	2128	17.64	2165	18.58	2200	19.53

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7262	2200	2030	14.06	2126	15.89	2218	17.75												
7592	2300	2041	14.47	2137	16.38	2229	18.29	2317	20.24										
7922	2400	2053	14.89	2149	16.83	2240	18.84	2328	20.83	2413	22.86								
8252	2500	2068	15.39	2160	17.29	2252	19.33	2339	21.42	2423	23.50	2505	25.61	2583	27.76				
8582	2600	2084	15.91	2175	17.83	2263	19.83	2350	21.97	2434	24.14	2516	26.30	2594	28.49	2670	30.72		
8912	2700	<u>2101</u>	<u>16.45</u>	2190	18.40	2277	20.40	2362	22.51	2446	24.73	2526	27.00	2605	29.23	2681	31.50	2754	33.81
9243	2800	2122	17.04	2206	18.98	2292	21.02	2375	23.11	2457	25.32	2538	27.63	2616	29.98	2691	32.29	2765	34.64
9573	2900	2143	17.64	<u>2226</u>	<u>19.62</u>	2308	21.66	2390	23.79	2470	25.96	2549	28.26	2627	30.65	2702	33.09	2776	35.48
9903	3000	2167	18.39	2247	20.28	2326	22.34	2406	24.48	2485	26.69	2562	28.94	2639	31.33	2714	33.81	2787	36.32
10233	3100	2191	19.19	2268	21.00	2347	23.06	2423	25.19	2501	27.43	2577	29.72	2651	32.05	2725	34.53	2798	37.08
10563	3200	2216	20.01	2293	21.87	2367	23.80	<u>2443</u>	<u>25.97</u>	2516	28.19	2592	30.52	2666	32.88	2737	35.29	2810	37.85
10893	3300	2245	20.79	2318	22.77	2391	24.69	2464	26.77	<u>2537</u>	<u>29.02</u>	2608	31.33	2682	33.74	2753	36.18	2822	38.66
11223	3400	2274	21.58	2344	23.68	2416	25.66	2486	27.65	<u>2557</u>	<u>29.88</u>	<u>2627</u>	<u>32.21</u>	2697	34.61	2768	37.09	2837	39.61
11553	3500	2303	22.40	2372	24.54	2441	26.66	2511	28.69	2578	30.76	2648	33.13	<u>2716</u>	<u>35.54</u>	2784	38.02	2853	40.58
11883	3600	2332	23.25	2401	25.42	2468	27.63	2535	29.76	2602	31.86	2669	34.07	2736	36.52	<u>2802</u>	<u>39.00</u>	2868	41.56

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-245 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY										
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000			
700	0.29	A1	70	72	69	67	65	62	58	50	38	1500	3.92	E3	92	91	89	86	83	80	78	75	69	
	0.58	A2	70	70	67	65	62	58	51	43			4.99	E4	102	98	96	89	86	84	79	73		
	0.85	A3	70	70	66	63	61	58	52	46			1750	1.82	F1	98	94	95	90	88	84	86	74	
	1.09	A4	77	76	72	69	67	62	56	49				3.64	F2	97	95	93	88	86	82	80	74	
900	0.48	B1	76	78	75	73	70	71	60	48		2100	5.33	F3	97	95	94	87	84	82	80	74		
	0.96	B2	76	77	73	71	68	66	59	52			6.79	F4	107	102	100	94	89	88	84	78		
	1.41	B3	76	77	72	70	67	65	60	54			2500	2.62	G1	101	100	99	96	92	89	89	81	
	1.80	B4	84	84	79	75	74	70	64	57				5.24	G2	100	100	98	94	90	87	85	79	
1100	0.72	C1	82	83	81	78	75	75	68	55		2900	7.68	G3	100	100	98	93	89	86	84	79		
	1.44	C2	83	82	79	76	73	71	65	58			9.78	G4	110	109	106	100	94	93	89	83		
	2.11	C3	83	82	79	75	72	70	66	60			3700	3.71	H1	104	106	103	101	97	94	93	88	
	2.68	C4	91	90	86	81	79	76	70	63				7.42	H2	103	106	103	99	95	92	89	85	
1300	1.00	D1	88	87	86	83	80	79	74	62		4500	10.89	H3	103	105	103	99	94	91	89	85		
	2.01	D2	88	87	85	81	78	75	71	63			13.86	H4	113	115	110	106	99	97	94	89		
	2.94	D3	88	87	85	80	77	74	71	65			5500	4.99	J1	107	111	107	106	100	98	96	94	
	3.75	D4	97	94	91	85	82	80	75	69				9.99	J2	106	110	107	104	98	96	93	89	
1500	1.34	E1	93	90	91	86	84	81	80	68		6500	14.65	J3	105	110	107	104	97	95	92	89		
	2.67	E2	92	90	89	84	81	78	75	68			17.00	J4	111	116	112	108	101	98	96	91		

BCS-270

SINGLE WIDTH

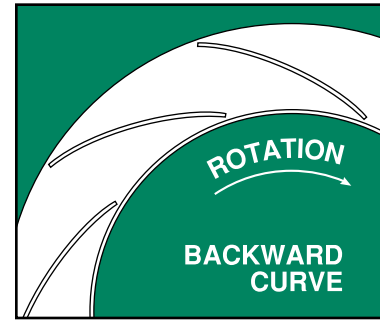
WHEEL DIAMETER: 27.00"
 WHEEL CIRCUMFERENCE: 7.10'
 OUTLET AREA: 4.016 SQ. FT.
 OUTLET SIZE: 21¹/₁₆" x 27"
 INLET DIAMETER: 28¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1553	2027	2722
251°F TO 400°F*	1475	1926	2586
401°F TO 700°F*	1273	1662	2232
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 7.10 x RPM MAX BHP = 2.990 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2806	700	383	0.16	462	0.29	539	0.44	611	0.61										
3207	800	416	0.20	486	0.34	<u>554</u>	<u>0.49</u>	621	0.67	742	1.07								
3608	900	451	0.25	514	0.40	575	0.56	<u>636</u>	<u>0.74</u>	752	1.16								
4009	1000	487	0.31	544	0.47	600	0.65	655	0.83	763	1.25	864	1.75						
4410	1100	524	0.37	577	0.55	628	0.74	679	0.94	<u>778</u>	<u>1.36</u>	875	1.86	965	2.41				
4811	1200	563	0.45	612	0.64	659	0.84	705	1.05	797	1.48	888	1.99	975	2.56	1056	3.16		
5211	1300	602	0.53	647	0.74	691	0.96	734	1.18	820	1.64	<u>904</u>	<u>2.14</u>	987	2.71	1066	3.33	1141	3.99
5612	1400	642	0.63	683	0.85	725	1.08	765	1.32	845	1.80	924	2.31	<u>1001</u>	<u>2.88</u>	1078	3.51	1151	4.19
6013	1500	682	0.74	720	0.98	760	1.22	798	1.47	873	1.98	946	2.53	1019	3.08	1092	3.72	1162	4.39
6414	1600	722	0.87	759	1.12	795	1.37	832	1.64	902	2.18	972	2.74	1040	3.32	<u>1108</u>	<u>3.94</u>	1176	4.63
6815	1700	763	1.01	798	1.27	832	1.54	866	1.82	932	2.39	998	2.96	1063	3.59	1128	4.20	<u>1192</u>	<u>4.89</u>
7216	1800	803	1.16	837	1.44	869	1.72	901	2.01	965	2.61	1027	3.22	1089	3.86	1150	4.52	1211	5.17
7617	1900	844	1.34	876	1.62	906	1.92	937	2.23	998	2.85	1057	3.50	1116	4.14	1175	4.84	1233	5.53
8018	2000	885	1.53	916	1.83	945	2.14	974	2.46	1032	3.11	1088	3.79	1145	4.46	1201	5.17	1255	5.91
8419	2100	926	1.73	956	2.05	984	2.38	1011	2.71	1067	3.39	1121	4.09	1174	4.81	1228	5.51	1281	6.28

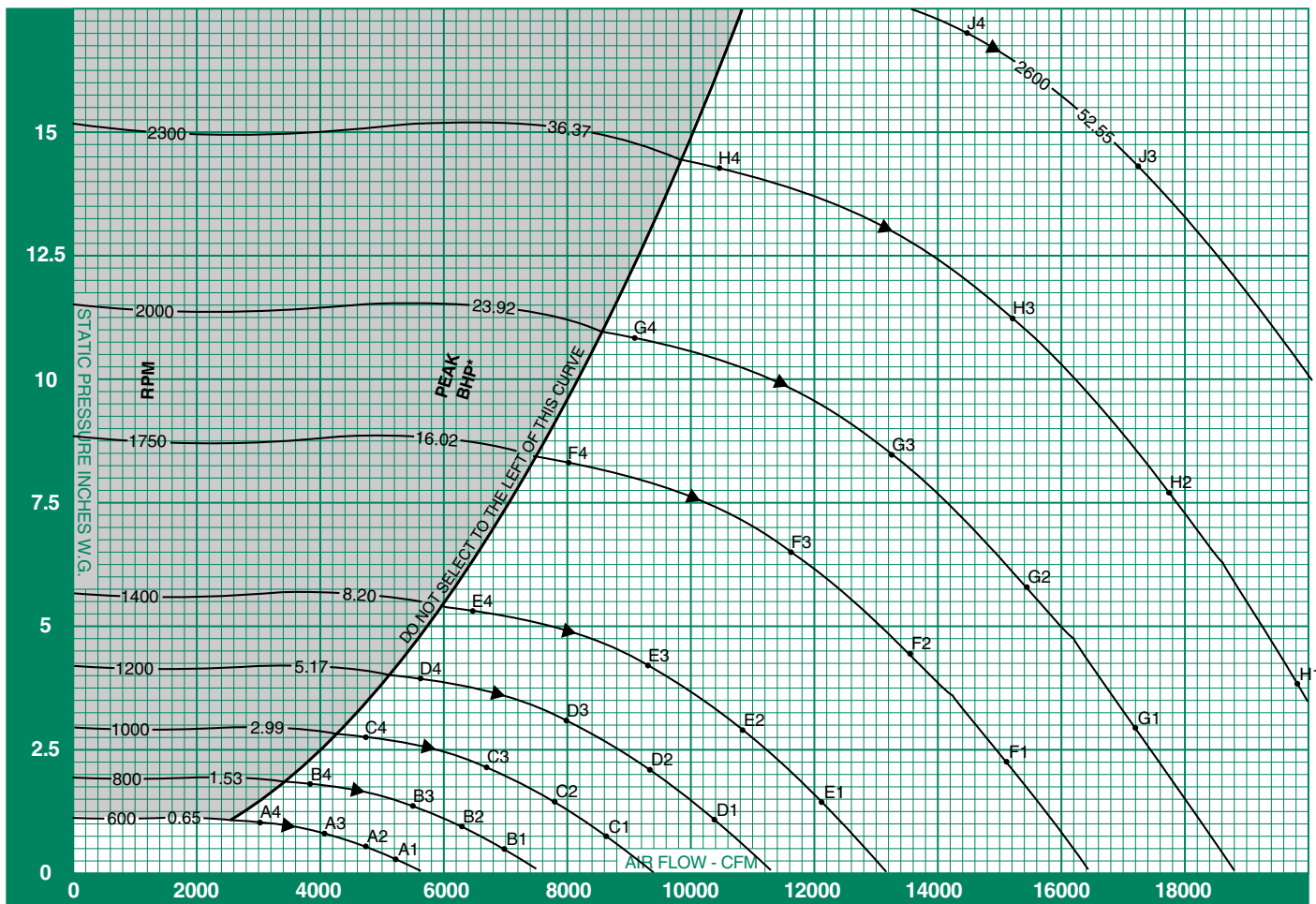
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6013	1500	1231	5.13	1297	5.89	1359	6.66												
6414	1600	1242	5.36	1307	6.15	1369	6.96	1428	7.77	1484	8.60								
6815	1700	1256	5.63	1318	6.40	1379	7.24	1438	8.10	1494	8.95	1548	9.83						
7216	1800	<u>1271</u>	<u>5.92</u>	1332	6.71	1390	7.52	1448	8.40	1504	9.31	1558	10.22	1610	11.13	1661	12.06		
7617	1900	1290	6.24	<u>1347</u>	<u>7.03</u>	1404	7.87	1460	8.73	1515	9.64	1568	10.59	1620	11.55	1670	12.51	1719	13.48
8018	2000	1311	6.62	1365	7.39	1419	8.22	1474	9.10	1527	10.01	1579	10.95	1630	11.94	1680	12.96	1729	13.96
8419	2100	1333	7.05	1385	7.80	<u>1438</u>	<u>8.62</u>	1489	9.50	1541	10.42	1592	11.36	1641	12.33	1691	13.37	1739	14.42
8820	2200	1358	7.48	1408	8.28	1457	9.06	<u>1507</u>	<u>9.94</u>	1556	10.85	1606	11.81	1655	12.80	1702	13.80	1749	14.86
9221	2300	1384	7.91	1432	8.77	1480	9.59	1527	10.41	<u>1575</u>	<u>11.33</u>	<u>1621</u>	<u>12.29</u>	1669	13.29	1716	14.31	1762	15.35
9622	2400	1411	8.37	1458	9.25	1503	10.15	1549	10.99	1594	11.85	1640	12.81	<u>1685</u>	<u>13.81</u>	1730	14.84	1776	15.90
10022	2500	1439	8.88	1484	9.75	1529	10.67	1572	11.60	1617	12.48	1660	13.37	1704	14.37	<u>1747</u>	<u>15.41</u>	1790	16.47
10423	2600	1469	9.42	1512	10.29	1555	11.22	1598	12.18	1639	13.14	1682	14.06	1724	14.98	1766	16.01	<u>1808</u>	<u>17.09</u>
10824	2700	1498	9.98	1541	10.88	1582	11.80	1624	12.78	1665	13.78	1705	14.78	1746	15.73	1786	16.69	1827	17.73
11225	2800	1530	10.55	1570	11.50	1611	12.44	1650	13.40	1691	14.42	1730	15.47	1769	16.50	1808	17.48	1847	18.48
11626	2900	<u>1562</u>	<u>11.14</u>	1601	12.14	1640	13.11	1679	14.09	1717	15.10	1756	16.16	1794	17.24	1831	18.31	1870	19.33
12027	3000	1595	11.77	1633	12.78	1669	13.82	1708	14.82	1745	15.83	1782	16.89	1820	17.99	1856	19.11	1892	20.22
12428	3100	1629	12.41	1665	13.46	1701	14.52	1737	15.58	1774	16.61	1810	17.66	1846	18.77	1882	19.91	1917	21.07
12829	3200	1663	13.09	1698	14.17	1733	15.25	1768	16.35	1803	17.43	1839	18.50	1873	19.59	1909	20.74	1944	21.92
13230	3300	1697	13.80	1732	14.90	1765	16.02	1800	17.14	1833	18.28	1868	19.38	1902	20.49	1935	21.61	1970	22.80
13631	3400	1732	14.54	1766	15.67	1799	16.81	1832	17.96	1865	19.12	1897	20.29	1931	21.42	1964	22.57	1997	23.72

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8820	2200	1842	17.08	1929	19.30	2013	21.56												
9221	2300	1852	17.57	1939	19.90	2023	22.21	2103	24.58										
9622	2400	1863	18.08	1950	20.44	2033	22.88	2113	25.29	2189	27.76								
10022	2500	1877	18.69	1960	21.00	2043	23.48	2122	26.02	2199	28.53	2273	31.10	2344	33.72				
10423	2600	1891	19.32	1973	21.65	2054	24.09	2133	26.68	2209	29.32	2283	31.94	2354	34.60	2422	37.31		
10824	2700	<u>1907</u>	<u>19.98</u>	1988	22.34	2066	24.78	2143	27.34	2219	30.04	2293	32.79	2364	35.50	2432	38.26	2499	41.06
11225	2800	1925	20.69	2002	23.05	2080	25.53	2155	28.07	2230	30.76	2303	33.56	2374	36.41	2442	39.22	2509	42.07
11626	2900	1944	21.43	<u>2020</u>	<u>23.83</u>	2094	26.30	2169	28.89	2241	31.53	2313	34.33	2384	37.23	2452	40.19	2519	43.09
12027	3000	1966	22.33	2039	24.63	2111	27.13	2183	29.73	2255	32.41	2324	35.14	2394	38.06	2463	41.06	2529	44.11
12428	3100	1988	23.30	2058	25.50	2129	28.00	2198	30.60	2269	33.31	2338	36.09	2405	38.92	2473	41.94	2539	45.04
12829	3200	2011	24.31	2081	26.56	2148	28.90	<u>2217</u>	<u>31.54</u>	2283	34.23	2352	37.06	2419	39.94	2484	42.86	2549	45.97
13230	3300	2037	25.25	2103	27.65	2170	29.99	2236	32.51	<u>2302</u>	<u>35.25</u>	2367	38.05	2433	40.98	2498	43.94	2561	46.96
13631	3400	2063	26.21	2127	28.76	2192	31.16	2256	33.58	2321	36.29	<u>2384</u>	<u>39.12</u>	2447	42.03	2512	45.05	2575	48.11
14032	3500	2089	27.21	2153	29.80	2215	32.38	2278	34.85	2339	37.36	2403	40.24	<u>2464</u>	<u>43.16</u>	2526	46.17	2589	49.28
14433	3600	2116	28.23	2179	30.87	2239	33.56	2301	36.15	2361	38.70	2422	41.38	2483	44.35	<u>2542</u>	<u>47.36</u>	2603	50.47

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBGS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-270 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
600	0.26	A1	70	70	68	65	65	59	47	35	1400	4.15	E3	93	92	90	84	81	79	76	70	
	0.52	A2	69	68	66	63	61	56	49	41		5.28	E4	103	100	97	90	87	85	80	74	
	0.76	A3	69	68	65	63	60	56	50	44		1750	2.21	F1	102	97	98	93	91	87	89	77
	0.97	A4	77	75	70	68	66	60	54	48			4.42	F2	101	98	96	91	89	85	83	76
800	0.46	B1	76	79	75	73	70	70	58	46	2000	6.48	F3	100	98	97	90	87	85	83	77	
	0.92	B2	77	77	73	71	68	65	58	51		8.25	F4	110	106	104	97	92	91	87	81	
	1.35	B3	77	77	72	70	67	65	59	53		2300	2.88	G1	104	102	101	97	94	91	91	82
	1.72	B4	85	84	79	75	74	69	63	57			5.77	G2	103	102	100	95	92	89	87	80
1000	0.72	C1	83	84	81	79	76	76	67	55	2600	8.46	G3	103	102	100	95	91	88	86	81	
	1.44	C2	83	83	80	77	74	71	65	58		10.77	G4	113	110	107	101	96	94	91	85	
	2.12	C3	83	83	79	76	73	71	66	60		1400	3.82	H1	106	106	105	102	97	94	94	87
	2.69	C4	92	90	86	81	79	76	70	63			7.63	H2	105	106	104	100	95	92	90	85
1200	1.04	D1	89	89	87	84	81	80	74	62	1750	11.19	H3	105	106	104	99	94	92	89	85	
	2.08	D2	89	88	85	82	78	76	71	64		14.24	H4	115	115	111	106	100	98	95	89	
	3.05	D3	89	88	85	80	78	75	71	65		2000	4.88	J1	109	111	107	105	101	98	97	92
	3.88	D4	98	95	92	86	83	81	76	69			9.75	J2	107	110	107	103	99	96	93	89
1400	1.41	E1	94	92	92	87	85	83	80	68	2300	14.30	J3	107	110	107	103	98	95	92	89	
	2.83	E2	94	92	90	85	83	80	76	69		17.00	J4	114	116	113	108	101	98	96	92	

BCS-300

SINGLE WIDTH

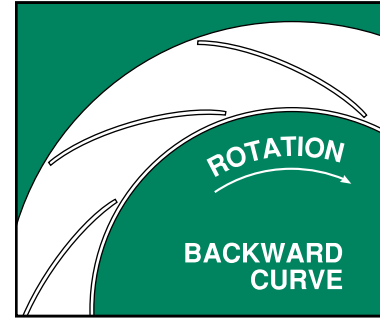
WHEEL DIAMETER: 30.00"
 WHEEL CIRCUMFERENCE: 7.85'
 OUTLET AREA: 4.957 SQ. FT.
 OUTLET SIZE: 23¹³/₁₆" x 30"
 INLET DIAMETER: 31¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1401	1828	2450
251°F TO 400°F*	1331	1737	2328
401°F TO 700°F*	1149	1499	2009
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 7.85 x RPM MAX BHP = 4.889 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
3965	800	372 0.24	440 0.42	499 0.61	561 0.83	665 1.28				
4461	900	405 0.30	464 0.48	521 0.69	<u>573 0.91</u>	677 1.43	765 1.93			
4957	1000	439 0.37	491 0.56	543 0.78	593 1.02	689 1.55	777 2.12			
5453	1100	473 0.45	518 0.65	568 0.89	615 1.14	<u>702 1.67</u>	789 2.30	866 2.92	937 3.55	
5948	1200	508 0.55	548 0.76	594 1.00	638 1.27	721 1.82	802 2.46	878 3.16	949 3.83	1013 4.51
6444	1300	544 0.66	582 0.88	621 1.13	663 1.41	743 2.00	<u>814 2.62</u>	891 3.35	961 4.12	1025 4.84
6940	1400	580 0.78	616 1.03	649 1.27	690 1.57	765 2.19	836 2.84	904 3.55	973 4.35	1037 5.18
7436	1500	616 0.92	650 1.19	681 1.45	717 1.74	788 2.39	858 3.07	<u>920 3.79</u>	986 4.59	1049 5.45
7931	1600	653 1.08	685 1.37	715 1.64	744 1.93	815 2.61	880 3.33	942 4.07	<u>999 4.84</u>	1062 5.73
8427	1700	690 1.25	720 1.57	749 1.85	776 2.15	841 2.84	903 3.59	964 4.37	<u>1020 5.17</u>	<u>1075 6.01</u>
8923	1800	727 1.45	755 1.78	783 2.09	810 2.40	868 3.09	928 3.88	986 4.68	1042 5.52	1094 6.37
9418	1900	764 1.67	791 2.01	818 2.35	843 2.67	895 3.37	954 4.18	1009 5.02	1064 5.88	1116 6.77
9914	2000	801 1.91	827 2.27	853 2.63	877 2.97	923 3.66	981 4.50	1034 5.37	1087 6.27	1138 7.19
10410	2100	838 2.17	864 2.55	888 2.94	912 3.29	957 4.01	1008 4.84	1061 5.74	1110 6.68	1160 7.62
10906	2200	876 2.45	900 2.85	923 3.26	946 3.64	990 4.39	1035 5.21	1087 6.14	1136 7.10	1183 8.08

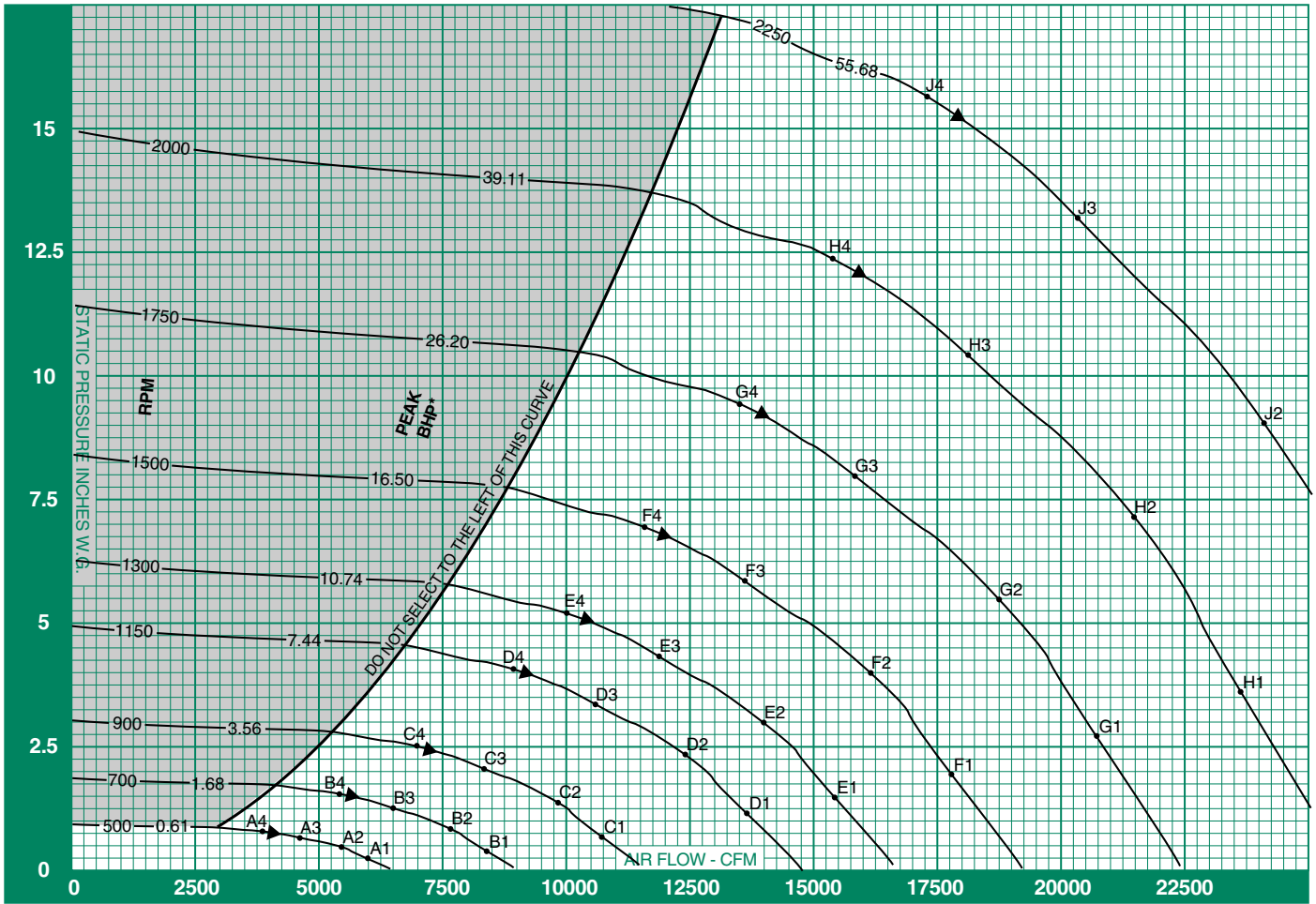
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
8923	1800	<u>1147 7.29</u>	1203 8.30	1255 9.33	1306 10.39	1354 11.43	1400 12.42	1445 13.42	1488 14.44	1530 15.47
9418	1900	1165 7.68	<u>1215 8.66</u>	1268 9.73	1318 10.82	1366 11.94	1412 13.06	1457 14.10	1500 15.15	1542 16.22
9914	2000	1186 8.13	1232 9.09	<u>1281 10.14</u>	1331 11.26	1379 12.40	1425 13.57	1469 14.76	1512 15.88	1554 16.98
10410	2100	1208 8.59	1254 9.59	1297 10.60	1343 11.70	1391 12.88	1437 14.08	1482 15.30	1524 16.54	1566 17.77
10906	2200	1230 9.09	1276 10.11	1319 11.15	<u>1360 12.22</u>	1404 13.37	1450 14.60	1494 15.85	1537 17.12	1578 18.41
11401	2300	1253 9.60	1298 10.65	1340 11.73	1381 12.82	<u>1421 13.93</u>	<u>1463 15.13</u>	1507 16.41	1549 17.71	1591 19.03
11897	2400	1275 10.14	1320 11.22	1362 12.33	1403 13.45	1442 14.59	1480 15.75	<u>1520 16.99</u>	1562 18.32	1603 19.67
12393	2500	1301 10.70	1342 11.82	1385 12.95	1425 14.11	1464 15.28	1502 16.47	1538 17.68	<u>1575 18.94</u>	1616 20.32
12889	2600	1327 11.28	1366 12.44	1407 13.61	1447 14.79	1486 15.99	1523 17.21	1559 18.45	1594 19.70	<u>1629 20.98</u>
13384	2700	1353 11.89	1392 13.08	1430 14.29	1470 15.50	1508 16.73	1545 17.98	1581 19.25	1616 20.53	1650 21.83
13880	2800	1380 12.53	1418 13.75	1455 14.99	1492 16.24	1531 17.50	1567 18.78	1603 20.08	1638 21.39	1672 22.72
14376	2900	1407 13.20	1445 14.45	1482 15.72	1517 17.01	1553 18.31	1590 19.62	1625 20.94	1660 22.29	1693 23.65
14872	3000	1434 13.91	1472 15.18	1508 16.48	1543 17.79	1577 19.13	1612 20.48	1648 21.84	1682 23.21	1715 24.60
15367	3100	1461 14.64	1499 15.94	1535 17.27	1569 18.62	1603 19.98	1636 21.37	1670 22.76	1704 24.16	1738 25.58
15863	3200	1489 15.40	1526 16.74	1561 18.09	1596 19.47	1629 20.87	1661 22.28	1693 23.72	1727 25.15	1760 26.60
16359	3300	1519 16.25	1553 17.57	1588 18.95	1623 20.36	1656 21.79	1688 23.23	1719 24.70	1750 26.18	1782 27.66
16854	3400	1552 17.19	1581 18.43	1616 19.85	1649 21.28	1682 22.74	1714 24.22	1745 25.71	1775 27.22	1805 28.75
17350	3500	1586 18.16	1611 19.39	1643 20.78	1677 22.24	1709 23.73	1741 25.24	1771 26.76	1801 28.30	1830 29.86
17846	3600	1619 19.18	1644 20.44	1671 21.74	1704 23.24	1736 24.76	1767 26.29	1798 27.85	1827 29.42	1856 31.00
18342	3700	1653 20.25	1678 21.53	1702 22.83	1731 24.28	1763 25.82	1794 27.39	1824 28.97	1854 30.57	1882 32.19

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
12393	2500	1695 23.14	1769 26.04	1841 29.02	1909 31.79	1975 34.56	2038 37.36	2100 40.21		
12889	2600	1708 23.86	1782 26.82	1853 29.86	1921 32.97	1987 35.82	2050 38.70	2111 41.61	2170 44.56	
13384	2700	1720 24.60	1795 27.62	1866 30.71	1934 33.88	1999 37.11	2062 40.06	2123 43.04	2182 46.07	2240 49.12
13880	2800	<u>1736 25.43</u>	1807 28.43	1878 31.58	1946 34.81	2011 38.10	2074 41.45	2135 44.50	2194 47.60	2251 50.72
14376	2900	1758 26.41	<u>1820 29.27</u>	1891 32.47	1959 35.75	2024 39.10	2086 42.52	2147 45.99	2206 49.16	2263 52.36
14872	3000	1780 27.42	1841 30.31	<u>1904 33.38</u>	1971 36.72	2036 40.12	2099 43.59	2159 47.13	2218 50.73	2275 54.02
15367	3100	1801 28.47	1862 31.41	1921 34.42	1984 37.70	2049 41.16	2112 44.69	2172 48.29	2230 51.94	2287 55.66
15863	3200	1823 29.55	1884 32.55	1942 35.62	<u>1998 38.73</u>	2062 42.23	2124 45.81	2185 49.46	2243 53.17	2300 56.95
16359	3300	1846 30.66	1906 33.73	1964 36.85	2019 40.02	<u>2075 43.31</u>	2137 46.95	2197 50.66	2256 54.43	2312 58.26
16854	3400	1868 31.81	1928 34.94	1986 38.12	2041 41.35	2094 44.64	<u>2150 48.11</u>	2210 51.88	2268 55.70	2325 59.59
17350	3500	1890 33.00	1950 36.18	2007 39.42	2063 42.72	2116 46.06	2167 49.46	2223 53.12	2281 57.00	2337 60.94
17846	3600	1913 34.23	1973 37.47	2030 40.77	2085 44.12	2137 47.53	2189 50.98	<u>2238 54.49</u>	2294 58.32	2350 62.32
18342	3700	1938 35.47	1995 38.79	2052 42.15	2107 45.57	2159 49.03	2210 52.54	2260 56.11	<u>2308 59.72</u>	2363 63.72
18837	3800	1964 36.76	2018 40.16	2074 43.58	2129 47.05	2181 50.57	2232 54.15	2281 57.77	2329 61.44	<u>2376 65.15</u>
19333	3900	1990 38.08	2043 41.55	2097 45.04	2151 48.58	2203 52.16	2254 55.79	2303 59.47	2351 63.20	2397 66.97

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-300 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
500	0.25	A1	70	67	66	64	64	56	45	34	1300	4.41	E3	90	88	90	84	83	81	77	69	
	0.45	A2	67	65	64	61	61	54	44	35		5.22	E4	90	88	88	83	82	80	76	69	
	0.65	A3	67	64	63	61	60	53	45	37		1500	2.02	F1	95	92	99	91	90	87	86	75
	0.77	A4	65	62	62	60	58	52	46	39			4.04	F2	94	90	96	89	87	85	83	74
700	0.44	B1	73	80	74	73	71	69	57	46	1750	5.88	F3	96	90	95	87	86	84	82	74	
	0.88	B2	71	77	72	71	68	66	56	47		6.95	F4	96	90	93	86	85	83	80	73	
	1.28	B3	70	76	70	70	67	65	57	48		2000	2.75	G1	101	93	104	94	94	90	92	81
	1.51	B4	70	74	69	68	66	63	56	50			5.50	G2	100	92	101	92	92	88	88	79
900	0.73	C1	75	88	80	80	76	77	67	56	2250	8.00	G3	102	91	100	91	90	88	87	79	
	1.45	C2	74	85	78	77	74	74	65	56		9.46	G4	103	92	98	90	89	87	85	78	
	2.12	C3	74	84	76	76	73	73	65	57		1300	3.59	H1	103	98	105	99	97	94	95	86
	2.50	C4	75	82	75	75	72	71	64	57			7.18	H2	102	97	103	97	95	92	91	84
1150	1.19	D1	85	90	89	85	82	82	76	65	1500	10.45	H3	105	97	102	96	93	91	90	84	
	2.38	D2	84	87	87	83	80	79	74	64		12.36	H4	105	98	100	95	92	90	88	82	
	3.45	D3	84	87	86	82	79	78	73	65		1750	4.55	J1	105	103	106	104	99	97	97	90
	4.09	D4	85	86	84	80	78	77	72	65			9.09	J2	104	102	104	101	97	95	94	88
1300	1.52	E1	90	91	94	88	86	84	81	70	2000	13.22	J3	107	102	103	100	96	94	93	87	
	3.04	E2	89	89	91	86	84	82	78	69		15.64	J4	107	103	102	99	95	93	91	86	

BCS-330

SINGLE WIDTH

WHEEL DIAMETER: 33.00"

WHEEL CIRCUMFERENCE: 8.64'

OUTLET AREA: 6.009 SQ. FT.

OUTLET SIZE: 26³/₁₆" x 33¹/₁₆"

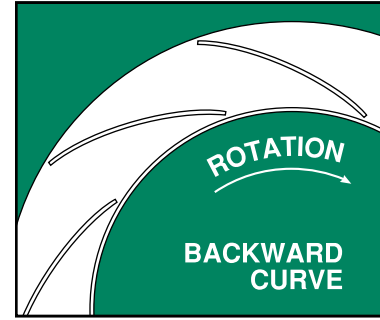
INLET DIAMETER: 34¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1274	1662	2227
251°F TO 400°F*	1210	1579	2116
401°F TO 700°F*	1045	1363	1826
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 8.64 x RPM MAX BHP = 7.874 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4798	800	338	0.29	400	0.50	454	0.73	510	1.01	605	1.55								
5398	900	368	0.36	422	0.59	474	0.83	521	1.10	615	1.73	696	2.34						
5998	1000	399	0.45	446	0.68	494	0.95	539	1.23	627	1.88	706	2.57						
6598	1100	430	0.55	471	0.79	516	1.07	559	1.37	638	2.02	717	2.78	788	3.54	852	4.29		
7198	1200	462	0.67	498	0.92	540	1.21	580	1.53	656	2.21	729	2.97	799	3.82	862	4.63	921	5.45
7797	1300	494	0.80	529	1.07	565	1.37	603	1.71	675	2.42	740	3.17	810	4.06	873	4.99	932	5.85
8397	1400	527	0.95	560	1.24	590	1.54	627	1.90	696	2.65	760	3.44	822	4.30	885	5.26	943	6.27
8997	1500	560	1.12	591	1.44	619	1.75	652	2.10	717	2.89	780	3.72	837	4.58	896	5.55	954	6.59
9597	1600	593	1.31	622	1.66	650	1.98	677	2.33	741	3.16	800	4.02	856	4.92	908	5.86	966	6.93
10197	1700	627	1.52	654	1.90	681	2.24	706	2.60	765	3.44	820	4.35	876	5.28	928	6.25	977	7.28
10797	1800	661	1.75	687	2.15	712	2.53	736	2.90	789	3.74	844	4.69	897	5.67	948	6.67	995	7.71
11396	1900	694	2.02	719	2.44	743	2.84	767	3.23	814	4.07	868	5.05	917	6.07	968	7.12	1015	8.19
11996	2000	728	2.31	752	2.74	775	3.18	798	3.59	840	4.43	892	5.44	940	6.50	988	7.58	1035	8.69
12596	2100	762	2.62	785	3.08	807	3.55	829	3.98	870	4.85	916	5.86	964	6.95	1009	8.08	1055	9.22
13196	2200	796	2.97	818	3.45	839	3.94	860	4.40	900	5.31	941	6.30	988	7.43	1032	8.59	1075	9.78

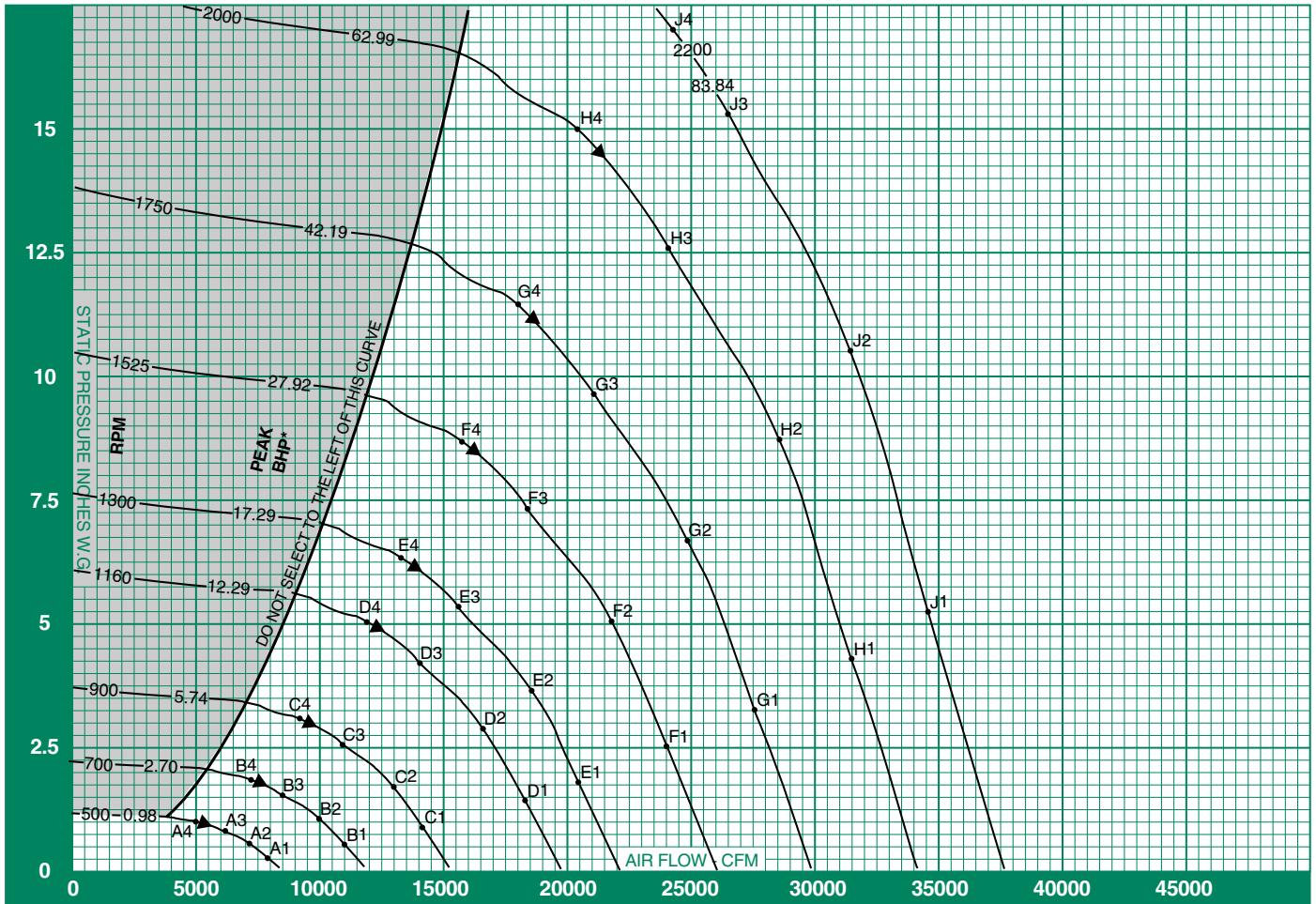
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10797	1800	1043	8.82	1093	10.04	1141	11.29	1187	12.58	1231	13.83	1273	15.03	1314	16.24	1353	17.47	1391	18.72
11396	1900	1059	9.29	1105	10.48	1153	11.77	1198	13.09	1242	14.44	1284	15.80	1325	17.06	1364	18.33	1402	19.62
11996	2000	1078	9.83	1120	11.00	1164	12.26	1210	13.62	1253	15.00	1295	16.42	1335	17.86	1375	19.22	1413	20.55
12596	2100	1098	10.40	1140	11.60	1179	12.83	1221	14.16	1265	15.58	1307	17.03	1347	18.51	1386	20.02	1423	21.50
13196	2200	1119	10.99	1160	12.23	1199	13.49	1236	14.78	1276	16.18	1318	17.66	1358	19.17	1397	20.71	1435	22.28
13796	2300	1139	11.62	1180	12.89	1218	14.19	1256	15.51	1291	16.86	1330	18.31	1370	19.85	1409	21.43	1446	23.03
14396	2400	1159	12.27	1200	13.58	1239	14.92	1276	16.27	1311	17.66	1345	19.06	1381	20.55	1420	22.16	1458	23.80
14995	2500	1182	12.95	1220	14.30	1259	15.67	1296	17.07	1331	18.49	1365	19.93	1398	21.39	1432	22.91	1469	24.58
15595	2600	1206	13.65	1242	15.05	1279	16.46	1316	17.90	1351	19.35	1385	20.83	1418	22.32	1450	23.84	1481	25.39
16195	2700	1230	14.39	1266	15.83	1300	17.29	1336	18.76	1371	20.25	1405	21.76	1437	23.29	1469	24.85	1500	26.42
16795	2800	1254	15.17	1290	16.64	1323	18.13	1357	19.65	1391	21.18	1425	22.73	1457	24.30	1489	25.89	1520	27.50
17395	2900	1279	15.98	1314	17.48	1347	19.02	1379	20.58	1412	22.15	1445	23.73	1478	25.34	1509	26.97	1539	28.61
17995	3000	1304	16.83	1338	18.37	1371	19.94	1403	21.53	1434	23.15	1466	24.78	1498	26.42	1529	28.08	1559	29.76
18595	3100	1328	17.71	1362	19.29	1395	20.90	1427	22.53	1457	24.18	1487	25.86	1518	27.54	1549	29.24	1580	30.96
19194	3200	1353	18.64	1387	20.25	1419	21.89	1451	23.56	1481	25.25	1510	26.96	1539	28.70	1570	30.44	1600	32.19
19794	3300	1381	19.66	1412	21.26	1444	22.93	1475	24.64	1505	26.36	1534	28.11	1563	29.88	1590	31.68	1620	33.47
20394	3400	1411	20.79	1437	22.30	1469	24.02	1499	25.75	1529	27.52	1558	29.30	1586	31.11	1614	32.94	1641	34.78
20994	3500	1441	21.98	1465	23.46	1494	25.14	1524	26.92	1554	28.71	1582	30.54	1610	32.38	1637	34.24	1664	36.13
21594	3600	1472	23.21	1495	24.73	1519	26.31	1549	28.12	1578	29.96	1607	31.81	1634	33.69	1661	35.59	1688	37.52
22194	3700	1503	24.51	1525	26.06	1547	27.63	1574	29.37	1603	31.25	1631	33.14	1658	35.05	1685	36.99	1711	38.95

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14995	2500	1541	28.00	1609	31.51	1673	35.12	1736	38.47	1795	41.82	1853	45.21	1909	48.65				
15595	2600	1552	28.87	1620	32.46	1685	36.13	1746	39.89	1806	43.34	1864	46.83	1919	50.35	1973	53.92		
16195	2700	1564	29.77	1632	33.42	1696	37.16	1758	40.99	1817	44.90	1875	48.47	1930	52.08	1984	55.74	2036	59.44
16795	2800	1578	30.77	1643	34.41	1708	38.22	1769	42.11	1828	46.10	1885	50.15	1941	53.85	1995	57.59	2047	61.38
17395	2900	1598	31.96	1655	35.41	1719	39.29	1781	43.26	1840	47.31	1897	51.44	1952	55.65	2005	59.48	2058	63.35
17995	3000	1618	33.18	1673	36.68	1731	40.39	1792	44.43	1851	48.55	1908	52.75	1963	57.03	2016	61.38	2068	65.36
18595	3100	1638	34.45	1693	38.01	1746	41.65	1804	45.62	1863	49.81	1920	54.08	1975	58.43	2028	62.85	2079	67.35
19194	3200	1658	35.75	1713	39.39	1765	43.09	1816	46.87	1874	51.09	1931	55.43	1986	59.85	2039	64.34	2091	68.90
19794	3300	1678	37.10	1733	40.81	1785	44.59	1836	48.43	1886	52.40	1943	56.81	1997	61.30	2051	65.86	2102	70.49
20394	3400	1698	38.49	1753	42.27	1805	46.12	1855	50.04	1904	54.01	1954	58.22	2009	62.77	2062	67.40	2113	72.10
20994	3500	1719	39.93	1773	43.78	1825	47.70	1875	51.69	1923	55.74	1970	59.85	2021	64.27	2074	68.97	2125	73.74
21594	3600	1739	41.41	1793	45.34	1845	49.33	1895	53.39	1943	57.51	1990	61.69	2035	65.93	2085	70.57	2137	75.41
22194	3700	1762	42.92	1814	46.94	1865	51.01	1915	55.14	1963	59.33	2009	63.58	2054	67.89	2098	72.26	2148	77.10
22793	3800	1786	44.47	1834	48.59	1886	52.73	1935	56.93	1983	61.19	2029	65.52	2074	69.90	2118	74.34	2160	78.83
23393	3900	1809	46.08	1857	50.27	1906	54.50	1956	58.78	2003	63.11	2049	67.51	2094	71.96	2137	76.47	2179	81.04

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-330 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
500	0.27	A1	74	70	69	67	67	59	48	37	1300	5.34	E3	93	91	93	87	86	84	80	72	
	0.54	A2	71	68	67	64	64	57	47	38		6.32	E4	94	91	91	86	84	82	79	72	
	0.79	A3	70	67	66	64	63	56	48	40		1525	2.53	F1	99	95	103	94	93	90	90	79
	0.93	A4	68	66	65	63	61	55	49	42			5.05	F2	98	94	100	92	91	88	87	77
700	1.06	B1	76	83	77	76	74	71	60	49	7.35	F3	100	93	99	91	90	87	86	77		
	1.55	B2	75	80	75	74	71	68	59	50	8.69	F4	101	93	97	90	88	86	84	77		
	1.83	B3	74	79	73	72	70	68	59	51	1750	3.33	G1	104	96	107	97	97	93	95	84	
	1.83	B4	74	78	72	71	69	66	59	52		6.65	G2	103	95	104	95	95	91	91	82	
900	2.56	C1	79	91	83	83	79	80	70	59	9.68	G3	106	95	103	94	93	90	90	82		
	1.76	C2	78	88	81	80	76	77	68	59	11.45	G4	106	96	101	93	92	90	88	81		
	3.03	C3	77	87	79	79	76	76	68	60	2000	4.35	H1	107	101	108	102	100	97	97	89	
	3.03	C4	78	85	78	78	75	74	67	60		8.69	H2	106	100	106	100	98	94	94	87	
1160	1.46	D1	89	93	92	88	86	85	79	68	12.64	H3	108	100	105	99	96	94	93	86		
	2.92	D2	88	91	90	86	83	82	77	67	14.95	H4	109	101	103	98	95	93	91	85		
	4.25	D3	88	90	89	85	83	81	76	68	2200	5.26	J1	108	105	109	106	102	99	99	92	
	5.03	D4	89	89	87	83	82	80	75	68		10.52	J2	107	104	107	104	100	97	96	90	
1300	1.84	E1	93	94	97	90	89	87	84	73	15.30	J3	110	104	106	102	98	96	95	90		
	3.67	E2	92	92	94	88	86	85	81	72	17.00	J4	110	105	105	101	97	95	93	88		

BCS-365

SINGLE WIDTH

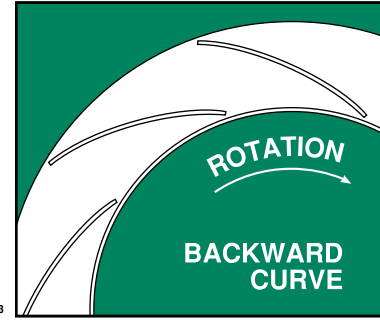
WHEEL DIAMETER: 36.50"
 WHEEL CIRCUMFERENCE: 9.56'
 OUTLET AREA: 7.347 SQ. FT.
 OUTLET SIZE: 29" x 36 1/2"
 INLET DIAMETER: 37 1/2" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1152	1502	2014
251°F TO 400°F*	1094	1427	1913
401°F TO 700°F*	945	1232	1651
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 9.56 x RPM MAX BHP = 13.034 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5870	800	306	0.36	362	0.62	411	0.90	461	1.23	547	1.90								
6604	900	333	0.44	381	0.72	428	1.02	471	1.35	556	2.12	629	2.86						
7338	1000	361	0.55	403	0.83	447	1.16	488	1.50	567	2.29	639	3.14						
8072	1100	389	0.67	426	0.96	467	1.31	506	1.68	577	2.47	649	3.41	712	4.33	770	5.25		
8805	1200	418	0.82	451	1.12	488	1.48	524	1.88	593	2.70	659	3.64	722	4.68	780	5.67	833	6.67
9539	1300	447	0.98	478	1.31	511	1.67	545	2.09	611	2.96	669	3.88	732	4.96	789	6.10	843	7.16
10273	1400	477	1.16	506	1.52	533	1.88	567	2.32	629	3.24	687	4.20	743	5.26	800	6.44	852	7.67
11007	1500	506	1.37	534	1.76	560	2.14	589	2.57	648	3.54	705	4.55	756	5.61	810	6.79	863	8.07
11741	1600	537	1.60	563	2.03	588	2.43	612	2.85	670	3.86	723	4.92	774	6.02	821	7.17	873	8.48
12475	1700	567	1.86	591	2.32	615	2.75	638	3.18	691	4.21	742	5.32	792	6.46	839	7.65	883	8.90
13208	1800	597	2.15	621	2.64	644	3.09	665	3.55	713	4.58	763	5.74	811	6.93	857	8.16	899	9.43
13942	1900	628	2.47	650	2.98	672	3.48	693	3.95	736	4.98	784	6.18	829	7.43	875	8.71	917	10.02
14676	2000	658	2.82	680	3.36	701	3.90	721	4.39	759	5.42	806	6.66	850	7.95	893	9.28	935	10.64
15410	2100	689	3.21	710	3.77	730	4.35	749	4.87	786	5.94	829	7.17	872	8.50	912	9.88	954	11.29
16144	2200	720	3.63	740	4.22	759	4.82	778	5.39	814	6.50	851	7.70	894	9.09	933	10.51	972	11.97

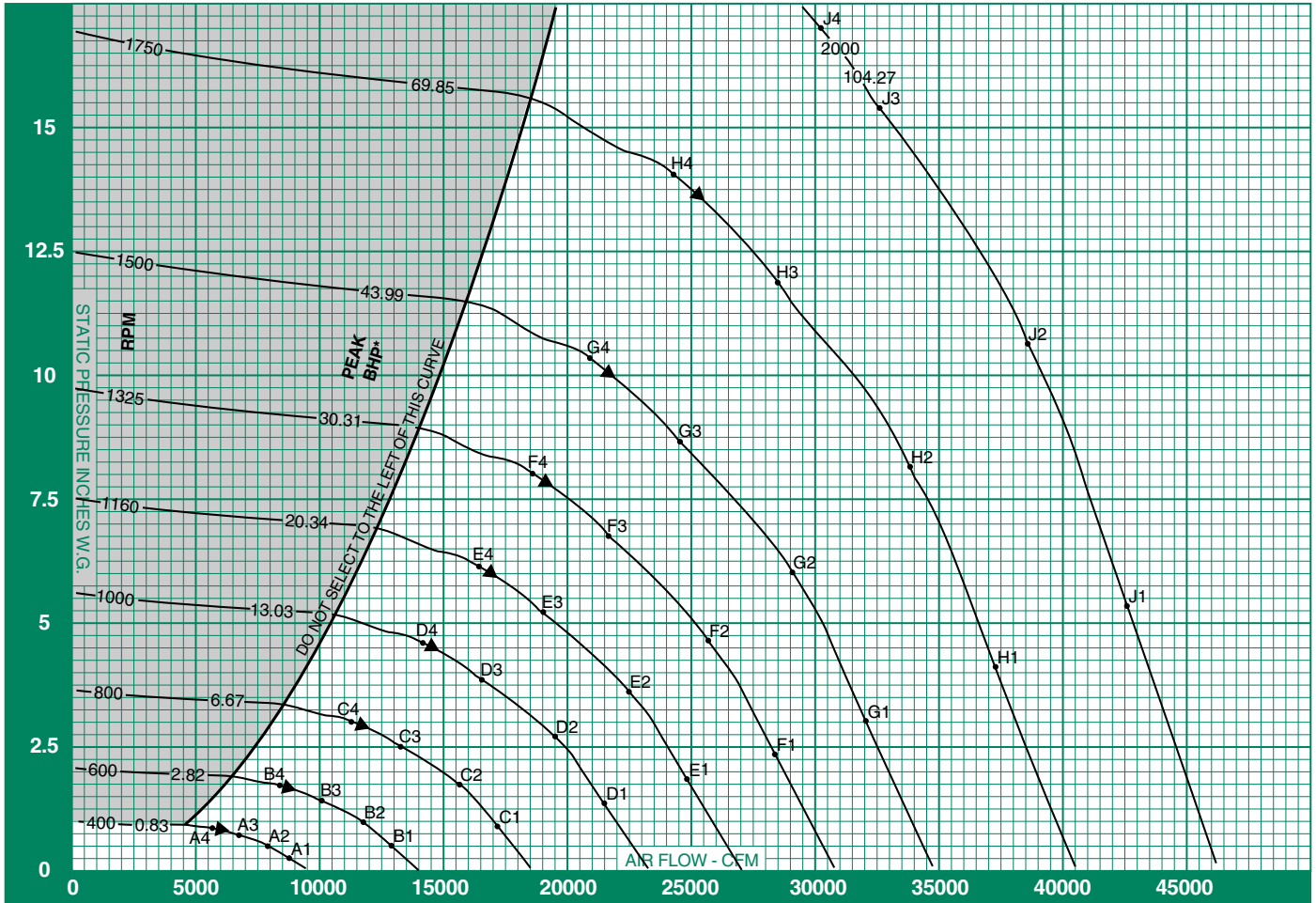
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
13208	1800	943	10.79	988	12.28	1032	13.81	1073	15.39	1113	16.92	1151	18.39	1188	19.87	1223	21.38	1258	22.90
13942	1900	957	11.37	999	12.83	1042	14.40	1083	16.01	1123	17.67	1161	19.33	1198	20.87	1233	22.43	1267	24.01
14676	2000	975	12.03	1013	13.45	1053	15.00	1094	16.66	1133	18.36	1171	20.09	1207	21.85	1243	23.51	1277	25.14
15410	2100	993	12.72	1030	14.19	1066	15.69	1104	17.33	1144	19.06	1181	20.84	1218	22.64	1253	24.49	1287	26.31
16144	2200	1011	13.45	1048	14.96	1084	16.51	1118	18.08	1154	19.79	1192	21.61	1228	23.46	1263	25.34	1297	27.26
16877	2300	1030	14.21	1067	15.77	1102	17.36	1135	18.98	1168	20.62	1202	22.40	1238	24.29	1274	26.21	1307	28.17
17611	2400	1048	15.01	1085	16.61	1120	18.25	1153	19.91	1185	21.60	1216	23.32	1249	25.14	1284	27.11	1318	29.11
18345	2500	1069	15.84	1103	17.50	1138	19.17	1171	20.88	1203	22.62	1234	24.38	1264	26.17	1294	28.03	1328	30.08
19079	2600	1091	16.70	1123	18.41	1156	20.14	1190	21.89	1221	23.67	1252	25.48	1282	27.31	1311	29.17	1339	31.06
19813	2700	1112	17.61	1144	19.36	1175	21.15	1208	22.95	1240	24.77	1270	26.62	1300	28.49	1328	30.40	1356	32.32
20547	2800	1134	18.55	1166	20.35	1196	22.19	1227	24.04	1258	25.91	1288	27.81	1318	29.72	1346	31.67	1374	33.64
21280	2900	1156	19.55	1188	21.39	1218	23.26	1247	25.17	1277	27.10	1307	29.04	1336	31.00	1364	32.99	1392	35.00
22014	3000	1179	20.58	1210	22.47	1239	24.39	1268	26.34	1296	28.32	1325	30.31	1354	32.32	1382	34.36	1410	36.41
22748	3100	1201	21.67	1232	23.60	1261	25.56	1290	27.56	1317	29.58	1344	31.64	1373	33.69	1401	35.77	1428	37.87
23482	3200	1224	22.80	1254	24.78	1283	26.78	1312	28.82	1339	30.89	1366	32.99	1391	35.11	1419	37.24	1446	39.38
24216	3300	1249	24.06	1277	26.00	1306	28.06	1334	30.14	1361	32.25	1387	34.39	1413	36.56	1438	38.75	1465	40.94
24950	3400	1276	25.44	1299	27.28	1328	29.38	1356	31.51	1383	33.66	1409	35.85	1434	38.06	1459	40.30	1484	42.55
25683	3500	1303	26.89	1324	28.70	1350	30.76	1378	32.93	1405	35.13	1431	37.36	1456	39.61	1480	41.89	1504	44.20
26417	3600	1331	28.40	1352	30.26	1373	32.19	1400	34.40	1427	36.65	1453	38.92	1478	41.22	1502	43.54	1526	45.89
27151	3700	1358	29.98	1379	31.88	1399	33.80	1423	35.94	1449	38.23	1475	40.54	1499	42.88	1524	45.25	1547	47.65

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18345	2500	1393	34.25	1454	38.55	1513	42.96	1569	47.06	1623	51.16	1675	55.31	1726	59.52				
19079	2600	1403	35.32	1465	39.70	1523	44.20	1579	48.80	1633	53.03	1685	57.28	1735	61.60	1784	65.96		
19813	2700	1414	36.42	1475	40.88	1533	45.46	1589	50.15	1643	54.93	1695	59.30	1745	63.72	1794	68.19	1841	72.71
20547	2800	1427	37.65	1486	42.09	1544	46.75	1600	51.52	1653	56.39	1705	61.35	1755	65.88	1803	70.46	1850	75.09
21280	2900	1445	39.10	1496	43.32	1554	48.07	1610	52.92	1663	57.88	1715	62.94	1765	68.08	1813	72.76	1860	77.50
22014	3000	1463	40.60	1513	44.87	1565	49.42	1620	54.35	1674	59.39	1725	64.53	1775	69.77	1823	75.10	1870	79.96
22748	3100	1481	42.14	1531	46.50	1578	50.95	1631	55.81	1684	60.94	1736	66.16	1785	71.48	1833	76.89	1880	82.39
23482	3200	1499	43.74	1548	48.19	1596	52.72	1642	57.34	1695	62.51	1746	67.81	1796	73.22	1844	78.71	1890	84.30
24216	3300	1517	45.39	1566	49.93	1614	54.54	1660	59.25	1705	64.11	1756	69.50	1806	74.99	1854	80.57	1900	86.23
24950	3400	1535	47.09	1585	51.72	1632	56.42	1677	61.21	1721	66.08	1767	71.22	1816	76.79	1864	82.45	1911	88.21
25683	3500	1554	48.85	1603	53.56	1650	58.36	1695	63.23	1739	68.19	1781	73.21	1827	78.63	1875	84.37	1921	90.21
26417	3600	1572	50.66	1621	55.47	1668	60.35	1713	65.31	1757	70.35	1799	75.47	1840	80.65	1885	86.33	1932	92.25
27151	3700	1593	52.51	1640	57.43	1686	62.40	1731	67.45	1775	72.58	1817	77.78	1857	83.05	1897	88.40	1942	94.32
27885	3800	1614	54.41	1658	59.44	1705	64.51	1750	69.65	1793	74.86	1835	80.15	1875	85.51	1915	90.94	1953	96.44
28619	3900	1636	56.37	1679	61.50	1723	66.68	1768	71.91	1811	77.21	1853	82.59	1893	88.04	1932	93.55	1970	99.14

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBGS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-365 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
400	0.25	A1	74	66	67	64	64	53	42	31	1160	5.20	E3	92	93	92	88	86	84	79	71	
	0.43	A2	71	65	65	62	61	52	42	33		6.15	E4	93	92	91	86	85	83	78	71	
	0.62	A3	70	63	64	61	60	52	44	36		1325	2.33	F1	97	98	101	94	92	91	87	76
	0.73	A4	67	62	62	60	58	51	45	38			4.67	F2	96	96	98	92	90	88	85	75
600	0.48	B1	79	81	76	75	74	69	58	46	1500	6.79	F3	97	95	97	91	89	87	84	76	
	0.96	B2	76	78	74	72	71	66	57	47		8.03	F4	98	95	95	90	88	86	82	76	
	1.39	B3	76	77	73	72	70	66	57	49		1750	2.99	G1	102	98	106	97	96	93	92	81
	1.65	B4	75	75	72	70	68	64	57	51			5.98	G2	101	97	103	95	93	91	89	80
800	0.85	C1	81	92	83	83	79	80	68	57	2000	8.70	G3	103	96	102	93	92	90	88	80	
	1.70	C2	80	89	81	80	77	76	67	57		10.29	G4	103	96	100	92	91	89	86	79	
	2.47	C3	79	88	80	79	76	75	67	59		1160	4.07	H1	108	100	111	100	100	96	98	87
	2.93	C4	79	86	79	78	75	73	66	60			8.14	H2	107	99	107	98	98	94	94	85
1000	1.33	D1	87	95	90	88	85	85	77	66	1325	11.84	H3	109	98	106	97	96	93	93	85	
	2.66	D2	85	93	88	86	82	82	75	65		14.00	H4	110	99	104	96	95	93	91	84	
	3.87	D3	85	92	87	84	82	81	74	66		1500	5.32	J1	110	105	112	105	103	100	100	92
	4.57	D4	86	90	85	83	81	79	73	67			10.63	J2	109	104	109	103	101	98	97	90
1160	1.79	E1	92	96	96	91	89	88	82	71	1750	15.47	J3	112	104	108	102	99	97	96	90	
	3.58	E2	91	94	93	89	86	85	80	71		17.00	J4	112	105	107	101	98	96	94	89	

BCS-402

SINGLE WIDTH

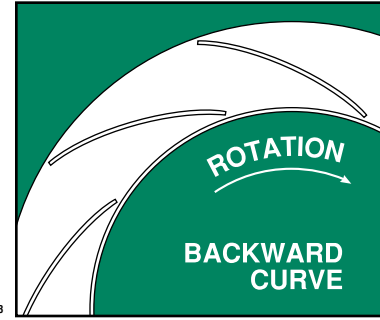
WHEEL DIAMETER: 40.25"
 WHEEL CIRCUMFERENCE: 10.54'
 OUTLET AREA: 8.937 SQ. FT.
 OUTLET SIZE: 31¹⁵/₁₆" x 40⁵/₁₆"
 INLET DIAMETER: 41¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1044	1362	1826
251°F TO 400°F*	992	1294	1735
401°F TO 700°F*	856	1117	1497
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 10.54 x RPM MAX BHP = 21.254 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
7138	800	277 0.43	328 0.75	<u>372</u> 1.09	418 1.50	496 2.31				
8031	900	302 0.54	346 0.87	<u>388</u> 1.24	<u>427</u> 1.64	505 2.57	570 3.48			
8923	1000	327 0.67	366 1.01	405 1.41	442 1.83	514 2.79	579 3.82			
9815	1100	353 0.82	386 1.17	423 1.60	459 2.04	<u>523</u> 3.01	588 4.14	646 5.26	698 6.38	
10708	1200	379 0.99	409 1.36	443 1.80	475 2.28	537 3.28	598 4.43	655 5.69	707 6.89	755 8.11
11600	1300	405 1.19	433 1.59	463 2.03	494 2.54	554 3.60	<u>607</u> 4.72	664 6.04	716 7.42	764 8.71
12493	1400	432 1.41	459 1.85	483 2.29	514 2.82	570 3.94	623 5.11	<u>674</u> 6.40	725 7.83	773 9.33
13385	1500	459 1.66	484 2.14	508 2.60	534 3.13	588 4.31	639 5.53	686 6.82	735 8.26	782 9.81
14277	1600	487 1.94	510 2.46	533 2.95	555 3.47	607 4.70	656 5.99	702 7.32	<u>745</u> 8.72	792 10.31
15170	1700	514 2.26	536 2.82	558 3.34	579 3.87	627 5.12	673 6.47	718 7.86	761 9.30	<u>801</u> 10.83
16062	1800	542 2.61	563 3.20	584 3.76	603 4.32	647 5.57	692 6.98	735 8.43	777 9.93	816 11.47
16954	1900	569 3.00	590 3.62	609 4.23	629 4.81	667 6.06	711 7.52	752 9.04	793 10.59	832 12.18
17847	2000	597 3.43	617 4.08	635 4.74	654 5.34	688 6.59	731 8.10	771 9.67	810 11.28	848 12.93
18739	2100	625 3.90	644 4.58	662 5.29	680 5.92	713 7.22	751 8.71	791 10.34	827 12.02	865 13.72
19631	2200	653 4.42	671 5.13	688 5.86	705 6.55	738 7.90	772 9.37	810 11.05	846 12.78	882 14.55

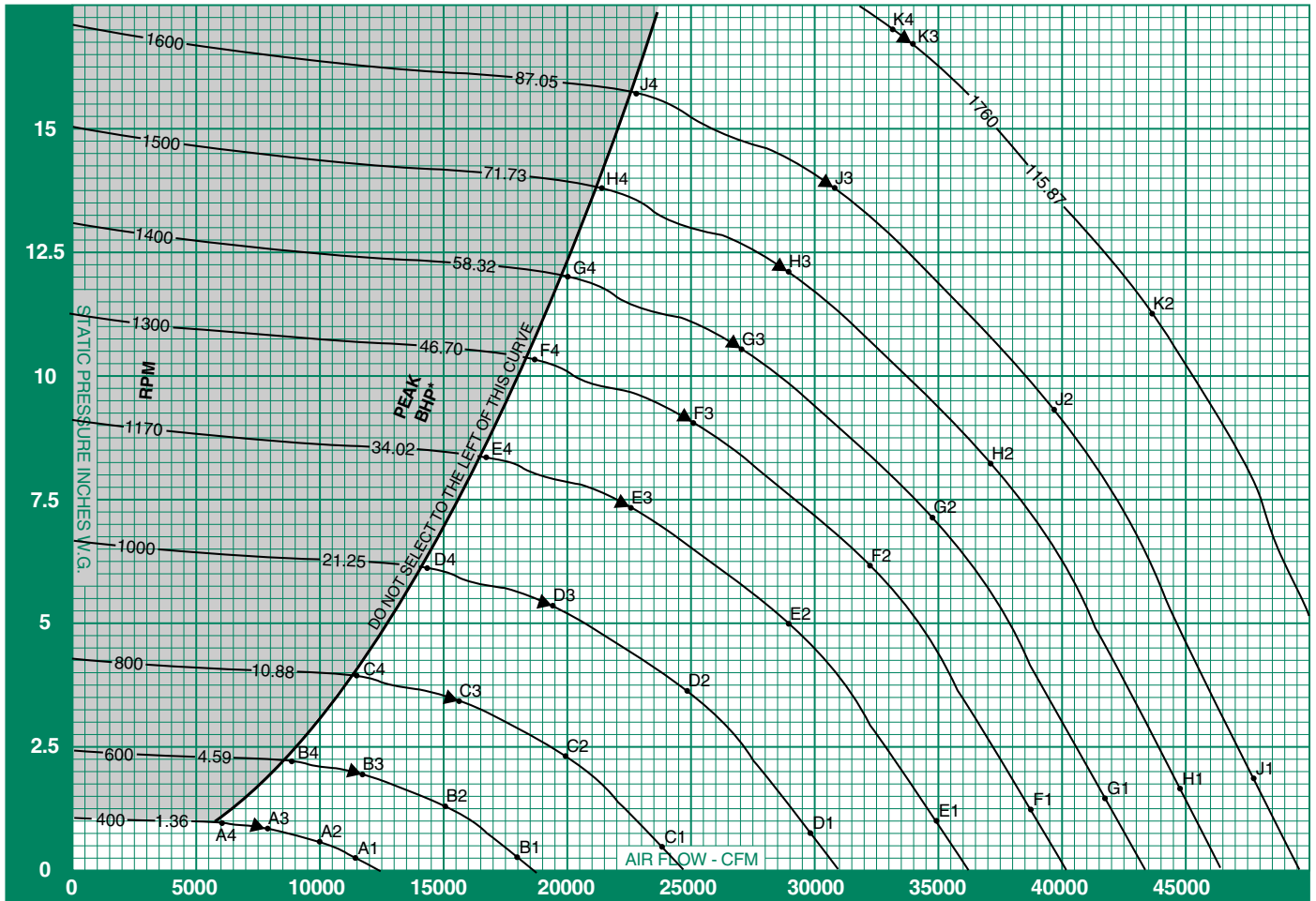
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
16062	1800	855 13.12	896 14.94	936 16.80	973 18.71	1009 20.58	1044 22.36	1077 24.16	1109 25.99	1141 27.85
16954	1900	868 13.82	<u>906</u> 15.60	945 17.51	982 19.47	1018 21.48	1053 23.51	1086 25.38	1118 27.28	1149 29.19
17847	2000	884 14.63	918 16.36	955 18.25	992 20.26	1028 22.32	1062 24.43	1095 26.57	1127 28.59	1158 30.57
18739	2100	901 15.47	934 17.26	<u>967</u> 19.08	1001 21.07	1037 23.18	1071 25.34	1104 27.54	1136 29.78	1167 31.99
19631	2200	917 16.35	951 18.19	983 20.07	<u>1013</u> 21.99	1046 24.07	1081 26.27	1114 28.52	1145 30.81	1176 33.14
20524	2300	934 17.28	967 19.18	999 21.11	1030 23.08	<u>1059</u> 25.08	<u>1090</u> 27.24	1123 29.54	1155 31.88	1186 34.26
21416	2400	951 18.25	984 20.20	1015 22.19	1046 24.21	1075 26.27	1103 28.36	<u>1133</u> 30.58	1164 32.97	1195 35.40
22308	2500	969 19.26	1001 21.28	1032 23.32	1062 25.39	1091 27.50	1119 29.64	1146 31.82	<u>1174</u> 34.09	1205 36.57
23201	2600	989 20.31	1018 22.39	1049 24.49	1079 26.62	1108 28.79	1135 30.98	1162 33.21	1188 35.47	<u>1214</u> 37.77
24093	2700	1009 21.41	1038 23.54	1066 25.72	1095 27.90	1124 30.12	1152 32.37	1179 34.65	1205 36.96	1230 39.30
24986	2800	1028 22.56	1057 24.75	1085 26.98	1112 29.24	1141 31.51	1168 33.81	1195 36.15	1221 38.51	1246 40.91
25878	2900	1049 23.77	1077 26.01	1104 28.29	1131 30.61	1158 32.95	1185 35.31	1211 37.70	1237 40.12	1262 42.56
26770	3000	1069 25.03	1097 27.33	1124 29.66	1150 32.03	1175 34.44	1202 36.86	1228 39.31	1254 41.78	1279 44.28
27663	3100	1089 26.35	1117 28.70	1144 31.09	1170 33.51	1195 35.97	1219 38.47	1245 40.97	1270 43.50	1295 46.05
28555	3200	1110 27.73	1137 30.13	1164 32.57	1189 35.05	1214 37.56	1238 40.11	1262 42.70	1287 45.28	1312 47.89
29447	3300	1132 29.25	1158 31.62	1184 34.12	1209 36.65	1234 39.22	1258 41.82	1281 44.46	1304 47.12	1328 49.79
30340	3400	1157 30.93	1178 33.18	1204 35.73	1229 38.31	1254 40.93	1277 43.59	1301 46.28	1323 49.00	1345 51.75
31232	3500	1182 32.69	1201 34.90	1225 37.40	1250 40.04	1274 42.72	1297 45.43	1320 48.17	1342 50.94	1364 53.75
32124	3600	1207 34.53	1226 36.79	1245 39.14	1270 41.84	1294 44.57	1317 47.33	1340 50.12	1362 52.95	1384 55.81
33017	3700	1232 36.46	1250 38.76	1269 41.10	1290 43.70	1314 46.48	1337 49.30	1360 52.15	1382 55.03	1403 57.94

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
22308	2500	1263 41.65	1319 46.88	1372 52.24	1423 57.23	1472 62.21	1519 67.26	1565 72.37		
23201	2600	1273 42.96	1328 48.28	1381 53.75	1432 59.35	1481 64.48	1528 69.66	1574 74.91	1618 80.21	
24093	2700	<u>1282</u> 44.29	1338 49.72	1391 55.28	1441 60.98	1490 66.80	1537 72.11	1582 77.48	1627 82.92	1669 88.42
24986	2800	1294 45.78	1347 51.18	1400 56.85	1451 62.65	1499 68.58	1546 74.61	1591 80.11	1635 85.68	1678 91.31
25878	2900	1310 47.54	<u>1357</u> 52.68	1409 58.46	1460 64.36	1508 70.38	1555 76.53	1600 82.79	1644 88.48	1687 94.24
26770	3000	1326 49.37	1372 54.56	1419 60.09	1469 66.09	1518 72.22	1564 78.47	1610 84.84	1653 91.32	1696 97.23
27663	3100	1343 51.25	1388 56.55	1431 61.96	1479 67.87	1527 74.10	1574 80.45	1619 86.92	1662 93.50	1705 100.19
28555	3200	1359 53.19	1404 58.60	1447 64.11	<u>1489</u> 69.72	1537 76.01	1583 82.47	1628 89.03	1672 95.72	1714 102.51
29447	3300	1376 55.20	1421 60.71	1464 66.33	1505 72.04	<u>1546</u> 77.96	1593 84.52	1638 91.19	1681 97.97	1723 104.86
30340	3400	1392 57.27	1437 62.89	1480 68.61	1521 74.44	1561 80.35	<u>1602</u> 86.61	1647 93.38	1691 100.27	1733 107.26
31232	3500	1409 59.40	1454 65.14	1496 70.97	1537 76.89	1577 82.92	1615 89.03	1657 95.61	1700 102.60	1742 109.70
32124	3600	1426 61.61	1470 67.45	1513 73.39	1554 79.42	1593 85.55	1631 91.77	<u>1668</u> 98.08	1710 104.98	1752 112.18
33017	3700	1444 63.85	1487 69.83	1529 75.88	1570 82.02	1609 88.26	1647 94.58	<u>1684</u> 101.00	<u>1720</u> 107.50	1761 114.70
33909	3800	1464 66.16	1504 72.29	1546 78.44	1587 84.70	1626 91.04	1664 97.47	1700 103.99	1736 110.59	<u>1771</u> 117.28
34801	3900	1483 68.54	1523 74.78	1563 81.08	1603 87.44	1642 93.89	1680 100.43	1717 107.05	1752 113.76	1787 120.56

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-402 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
400	0.25	A1	82	74	73	74	69	61	53	46	1300	1.23	F1	103	109	109	101	101	100	94	85
	0.58	A2	79	72	69	69	65	58	52	46		6.16	F2	102	107	105	98	95	94	89	82
	0.86	A3	76	71	66	67	63	57	51	45		9.12	F3	103	106	103	96	92	92	87	80
	0.98	A4	76	74	68	70	66	58	51	45		10.35	F4	110	112	104	99	95	94	89	82
600	0.26	B1	90	90	84	85	83	76	68	60	1400	1.43	G1	104	110	112	103	103	102	97	88
	1.31	B2	87	86	80	78	77	71	64	58		7.15	G2	103	108	108	100	97	96	91	84
	1.94	B3	86	84	78	76	74	69	63	57		10.58	G3	104	108	105	98	94	94	89	83
	2.21	B4	91	86	81	78	77	71	64	57		12.01	G4	112	114	107	101	96	96	92	84
800	0.47	C1	94	101	91	91	91	86	77	69	1500	1.64	H1	105	111	115	104	104	104	99	90
	2.33	C2	93	96	88	85	84	80	73	67		8.20	H2	104	110	110	102	98	98	93	86
	3.45	C3	94	94	87	81	82	78	72	66		12.14	H3	105	110	108	100	95	95	91	85
	3.92	C4	101	94	90	84	85	81	73	67		13.78	H4	113	117	109	103	97	98	94	86
1000	0.73	D1	98	105	99	96	96	93	85	77	1600	1.87	J1	106	112	117	106	106	106	101	92
	3.65	D2	97	101	96	91	89	87	80	74		9.34	J2	105	111	113	104	100	99	95	88
	5.40	D3	98	100	94	88	87	84	79	73		13.82	J3	106	112	110	102	96	97	93	87
	6.13	D4	106	102	97	90	89	87	81	74		15.68	J4	114	119	110	105	99	100	96	88
1170	1.00	E1	101	108	105	99	99	97	90	82	1760	2.26	K1	108	114	119	109	108	108	104	96
	4.99	E2	100	105	102	95	93	91	85	78		11.30	K2	107	113	115	107	102	102	98	91
	7.39	E3	101	104	99	93	90	89	84	77		16.72	K3	108	114	112	105	99	99	96	90
	8.39	E4	108	108	101	95	92	91	86	79		17.00	K4	109	115	112	105	99	99	96	90

BCS-445

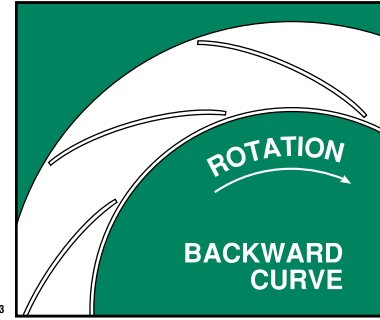
SINGLE WIDTH

WHEEL DIAMETER: 44.50"
 WHEEL CIRCUMFERENCE: 11.65'
 OUTLET AREA: 10.923 SQ. FT.
 OUTLET SIZE: 35⁵/₁₆" x 44⁹/₁₆"
 INLET DIAMETER: 45¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	944	1232	1652
251°F TO 400°F*	897	1170	1569
401°F TO 700°F*	774	1010	1355
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 11.65 x RPM MAX BHP = 35.109 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8726	800	251	0.53	297	0.91	337	1.33	378	1.83	448	2.83								
9816	900	273	0.66	313	1.07	351	1.52	387	2.00	456	3.14	516	4.25						
10907	1000	296	0.82	331	1.24	366	1.72	400	2.23	465	3.41	524	4.67						
11998	1100	319	1.00	349	1.43	383	1.95	415	2.50	473	3.68	532	5.06	584	6.43	632	7.80		
13089	1200	343	1.22	370	1.67	401	2.21	430	2.79	486	4.01	540	5.41	592	6.95	640	8.42	683	9.92
14179	1300	367	1.45	392	1.95	419	2.49	447	3.10	501	4.40	549	5.77	601	7.38	648	9.07	691	10.64
15270	1400	391	1.72	415	2.26	437	2.80	465	3.45	516	4.81	563	6.25	609	7.82	656	9.57	699	11.40
16361	1500	415	2.03	438	2.62	459	3.18	483	3.82	532	5.26	578	6.77	620	8.34	665	10.10	708	11.99
17452	1600	440	2.37	462	3.01	482	3.61	502	4.24	549	5.74	593	7.32	635	8.95	673	10.65	716	12.60
18542	1700	465	2.76	485	3.45	505	4.08	523	4.73	567	6.25	608	7.91	650	9.61	688	11.37	725	13.23
19633	1800	490	3.19	509	3.92	528	4.60	546	5.28	585	6.81	626	8.53	665	10.31	703	12.14	738	14.02
20724	1900	515	3.67	533	4.43	551	5.17	569	5.88	604	7.41	643	9.19	680	11.04	718	12.94	752	14.89
21815	2000	540	4.19	558	4.99	575	5.79	591	6.53	623	8.06	661	9.90	697	11.82	733	13.79	767	15.81
22905	2100	565	4.77	582	5.60	598	6.46	615	7.24	645	8.83	680	10.65	715	12.64	748	14.69	782	16.77
23996	2200	590	5.40	607	6.27	623	7.16	638	8.01	667	9.65	698	11.45	733	13.50	766	15.62	797	17.79

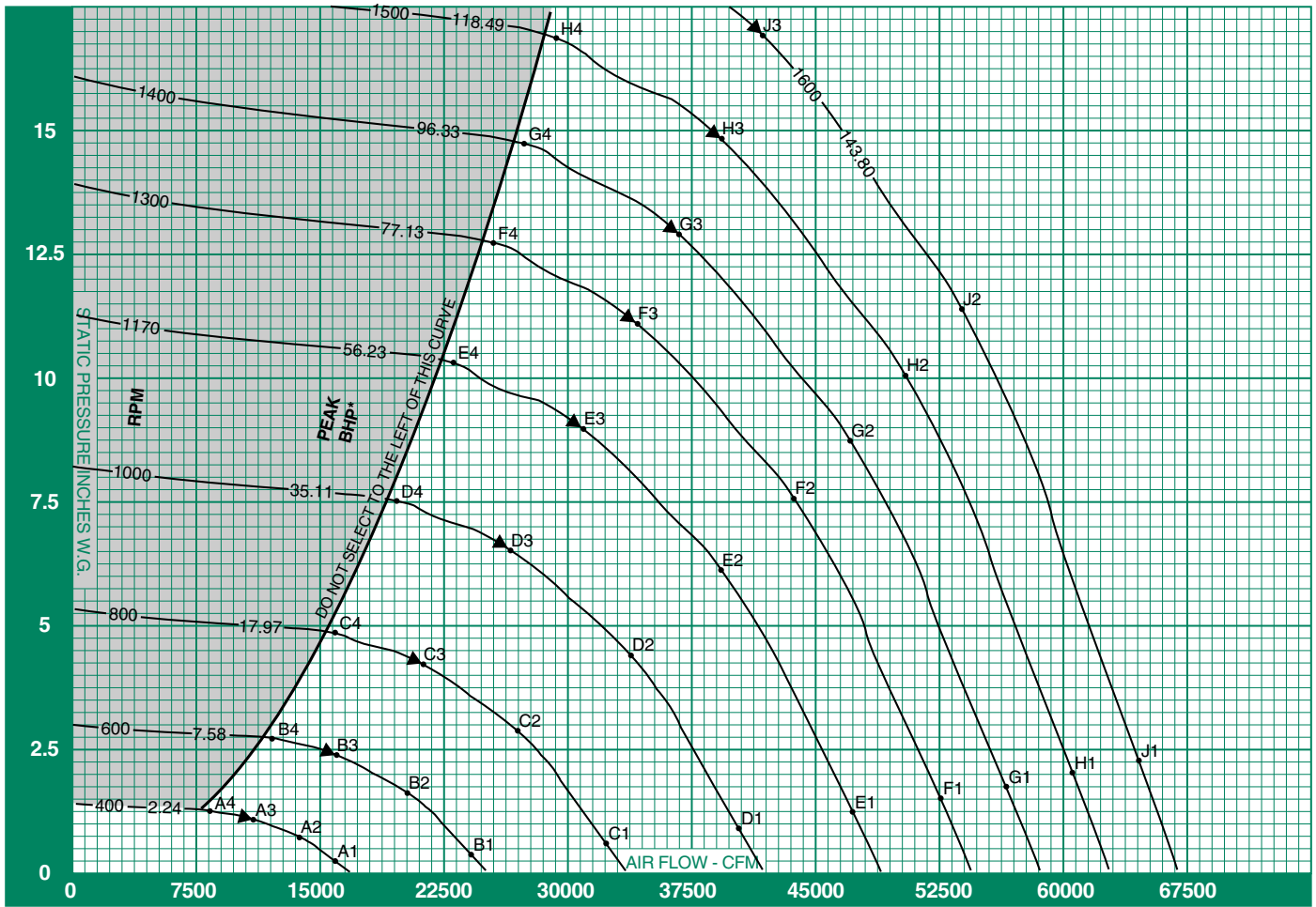
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19633	1800	773	16.04	811	18.26	846	20.53	880	22.87	913	25.15	944	27.33	974	29.54	1003	31.77	1032	34.04
20724	1900	785	16.90	819	19.06	855	21.40	889	23.80	921	26.26	952	28.74	982	31.02	1011	33.34	1040	35.68
21815	2000	800	17.88	831	20.00	863	22.30	897	24.76	929	27.28	960	29.86	990	32.48	1019	34.95	1048	37.37
22905	2100	815	18.91	845	21.09	874	23.33	906	25.75	938	28.34	969	30.97	999	33.66	1028	36.40	1056	39.10
23996	2200	829	19.99	860	22.24	889	24.54	917	26.88	947	29.42	977	32.12	1007	34.86	1036	37.66	1064	40.51
25087	2300	845	21.12	875	23.44	904	25.80	931	28.21	958	30.66	986	33.29	1016	36.10	1045	38.97	1072	41.88
26178	2400	860	22.31	890	24.69	918	27.12	946	29.59	972	32.11	998	34.66	1024	37.37	1053	40.30	1081	43.27
27268	2500	877	23.54	905	26.01	933	28.50	961	31.04	987	33.62	1012	36.23	1037	38.89	1062	41.67	1089	44.70
28359	2600	894	24.82	921	27.37	949	29.94	976	32.54	1002	35.18	1027	37.87	1051	40.59	1075	43.35	1098	46.17
29450	2700	912	26.17	939	28.78	964	31.44	991	34.11	1017	36.82	1042	39.57	1066	42.35	1089	45.18	1112	48.04
30541	2800	930	27.58	956	30.25	981	32.98	1006	35.74	1032	38.51	1057	41.33	1081	44.18	1104	47.07	1127	50.00
31631	2900	948	29.05	974	31.79	999	34.58	1023	37.42	1047	40.28	1072	43.16	1096	46.08	1119	49.03	1142	52.03
32722	3000	967	30.60	992	33.40	1017	36.25	1040	39.15	1063	42.10	1087	45.06	1111	48.04	1134	51.07	1156	54.12
33813	3100	985	32.21	1010	35.08	1035	38.00	1058	40.96	1081	43.97	1103	47.02	1126	50.08	1149	53.17	1171	56.29
34904	3200	1004	33.89	1029	36.83	1053	39.81	1076	42.84	1098	45.92	1120	49.03	1141	52.19	1164	55.35	1186	58.54
35994	3300	1024	35.76	1047	38.65	1071	41.70	1094	44.80	1116	47.94	1138	51.12	1159	54.34	1179	57.60	1202	60.86
37085	3400	1047	37.81	1066	40.55	1089	43.67	1112	46.83	1134	50.04	1155	53.28	1176	56.57	1197	59.90	1217	63.25
38176	3500	1069	39.96	1086	42.66	1108	45.72	1130	48.94	1152	52.21	1173	55.53	1194	58.88	1214	62.27	1234	65.70
39267	3600	1092	42.21	1109	44.97	1126	47.84	1149	51.14	1170	54.47	1191	57.85	1212	61.27	1232	64.72	1251	68.22
40357	3700	1114	44.56	1131	47.38	1147	50.24	1167	53.42	1189	56.82	1210	60.26	1230	63.74	1250	67.26	1269	70.82

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27268	2500	1143	50.91	1193	57.30	1241	63.86	1287	69.95	1331	76.04	1374	82.21	1415	88.47				
28359	2600	1151	52.51	1201	59.02	1249	65.70	1295	72.54	1339	78.82	1382	85.15	1423	91.56	1463	98.05		
29450	2700	1160	54.13	1210	60.77	1258	67.58	1304	74.54	1347	81.65	1390	88.14	1431	94.71	1471	101.36	1510	108.08
30541	2800	1171	55.96	1219	62.56	1266	69.49	1312	76.58	1356	83.83	1398	91.19	1439	97.92	1479	104.73	1518	111.61
31631	2900	1185	58.11	1227	64.40	1275	71.45	1320	78.66	1364	86.03	1407	93.55	1447	101.19	1487	108.16	1526	115.20
32722	3000	1200	60.34	1241	66.69	1283	73.45	1329	80.79	1373	88.28	1415	95.92	1456	103.70	1495	111.62	1534	118.85
33813	3100	1214	62.64	1255	69.12	1295	75.73	1338	82.96	1381	90.57	1424	98.34	1464	106.24	1504	114.29	1542	122.46
34904	3200	1229	65.02	1270	71.63	1309	78.36	1347	85.22	1390	92.91	1432	100.80	1473	108.83	1512	117.00	1550	125.30
35994	3300	1244	67.47	1285	74.21	1324	81.08	1361	88.06	1399	95.29	1441	103.31	1481	111.46	1521	119.75	1559	128.18
37085	3400	1259	70.00	1300	76.87	1339	83.87	1376	90.98	1412	98.22	1449	105.86	1490	114.14	1529	122.56	1567	131.11
38176	3500	1274	72.61	1315	79.62	1353	86.74	1391	93.99	1426	101.35	1461	108.83	1498	116.87	1538	125.41	1576	134.09
39267	3600	1290	75.30	1330	82.44	1368	89.70	1405	97.08	1441	104.57	1476	112.17	1509	119.89	1546	128.32	1584	137.12
40357	3700	1307	78.05	1345	85.36	1383	92.75	1420	100.26	1456	107.88	1490	115.61	1523	123.45	1556	131.39	1593	140.20
41448	3800	1324	80.87	1360	88.36	1398	95.89	1435	103.53	1471	111.28	1505	119.14	1538	127.11	1570	135.18	1602	143.35
42539	3900	1342	83.78	1377	91.41	1414	99.11	1450	106.88	1485	114.77	1520	122.76	1553	130.86	1585	139.06	1616	147.36

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBGS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-445 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
400	0.25	A1	86	78	78	78	73	64	57	49	1170	9.03	E3	104	107	103	96	93	92	87	80	
	0.71	A2	82	76	73	72	68	61	55	49		10.25	E4	112	111	104	98	96	94	89	82	
	1.06	A3	79	74	69	70	66	60	54	48		1300	1.51	F1	106	112	112	104	104	103	97	89
	1.20	A4	80	77	71	73	69	61	55	48			7.53	F2	105	110	108	101	98	97	92	85
600	0.32	B1	94	93	87	88	86	79	71	63	1400	11.15	F3	106	110	106	99	95	95	90	84	
	1.60	B2	91	90	84	82	80	74	67	61		12.66	F4	114	115	107	102	98	97	92	85	
	2.37	B3	90	88	81	79	77	72	66	60		1500	1.75	G1	107	113	115	106	106	105	100	91
	2.70	B4	94	89	84	81	80	75	67	60			8.74	G2	106	112	111	103	100	99	94	87
800	0.57	C1	98	104	94	94	94	89	80	72	1600	12.93	G3	107	112	108	101	97	97	92	86	
	2.85	C2	97	100	91	88	87	83	76	70		14.68	G4	115	118	110	104	99	99	95	87	
	4.22	C3	97	97	90	84	85	81	75	69		1500	2.01	H1	109	114	118	108	107	107	102	93
	4.79	C4	105	98	93	87	88	84	76	70			10.03	H2	108	113	113	105	101	101	96	89
1000	0.89	D1	102	109	102	99	99	96	88	80	1600	14.84	H3	109	113	111	103	98	98	94	88	
	4.46	D2	101	105	99	94	92	90	83	77		16.85	H4	116	120	112	106	100	101	97	89	
	6.60	D3	102	103	97	91	90	88	82	76		1600	2.28	J1	110	115	120	109	109	109	104	95
	7.49	D4	109	105	100	93	92	90	84	77			11.41	J2	109	114	116	107	103	103	98	91
1170	1.22	E1	104	111	108	102	102	100	93	85	1600	16.89	J3	110	115	113	105	99	100	96	90	
	6.10	E2	103	108	105	98	96	94	88	81												

BCS-490

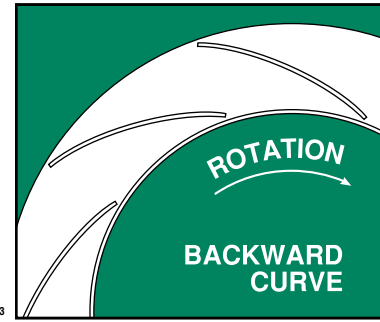
SINGLE WIDTH

American Fan Company

WHEEL DIAMETER: 49.00"
 WHEEL CIRCUMFERENCE: 12.83'
 OUTLET AREA: 13.240 SQ. FT.
 OUTLET SIZE: 38¹/₈" x 49¹/₁₆"
 INLET DIAMETER: 51¹/₂" O.D.

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	858	1119	1500
251°F TO 400°F*	815	1063	1425
401°F TO 700°F*	704	918	1230
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 12.83 x RPM MAX BHP = 56.832 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10580	800	228	0.64	269	1.11	306	1.61	343	2.22	407	3.43								
11902	900	248	0.80	284	1.29	319	1.84	<u>351</u>	<u>2.43</u>	414	3.81	468	5.16						
13225	1000	269	0.99	300	1.50	333	2.09	363	2.71	422	4.14	476	5.66						
14547	1100	290	1.21	317	1.74	348	2.37	377	3.03	<u>430</u>	<u>4.46</u>	483	6.14	531	7.80	574	9.46		
15870	1200	311	1.47	336	2.02	364	2.67	390	3.38	441	4.87	491	6.56	538	8.43	581	10.21	620	12.02
17192	1300	333	1.76	356	2.36	380	3.02	406	3.76	455	5.33	<u>499</u>	<u>7.00</u>	546	8.94	588	10.99	628	12.90
18515	1400	355	2.09	377	2.74	397	3.39	422	4.18	469	5.84	512	7.58	<u>553</u>	<u>9.48</u>	596	11.61	635	13.82
19837	1500	377	2.46	398	3.17	417	3.86	439	4.64	483	6.38	525	8.20	563	10.11	603	12.24	643	14.54
21160	1600	400	2.88	419	3.65	438	4.37	456	5.14	499	6.96	539	8.87	577	10.86	<u>612</u>	<u>12.92</u>	650	15.28
22482	1700	422	3.35	441	4.19	458	4.95	475	5.73	515	7.58	553	9.59	590	11.65	<u>625</u>	<u>13.79</u>	<u>658</u>	<u>16.04</u>
23805	1800	445	3.87	462	4.75	479	5.58	496	6.40	531	8.26	568	10.34	604	12.50	638	14.71	670	17.00
25127	1900	468	4.45	484	5.37	501	6.27	516	7.13	548	8.98	584	11.14	618	13.39	652	15.69	683	18.06
26450	2000	490	5.08	507	6.05	522	7.02	537	7.92	565	9.77	601	12.00	633	14.33	665	16.72	697	19.17
27772	2100	513	5.78	529	6.79	544	7.83	558	8.78	586	10.70	617	12.91	649	15.32	679	17.81	710	20.34
29095	2200	536	6.55	551	7.60	565	8.69	579	9.71	606	11.71	634	13.89	666	16.37	695	18.94	724	21.57

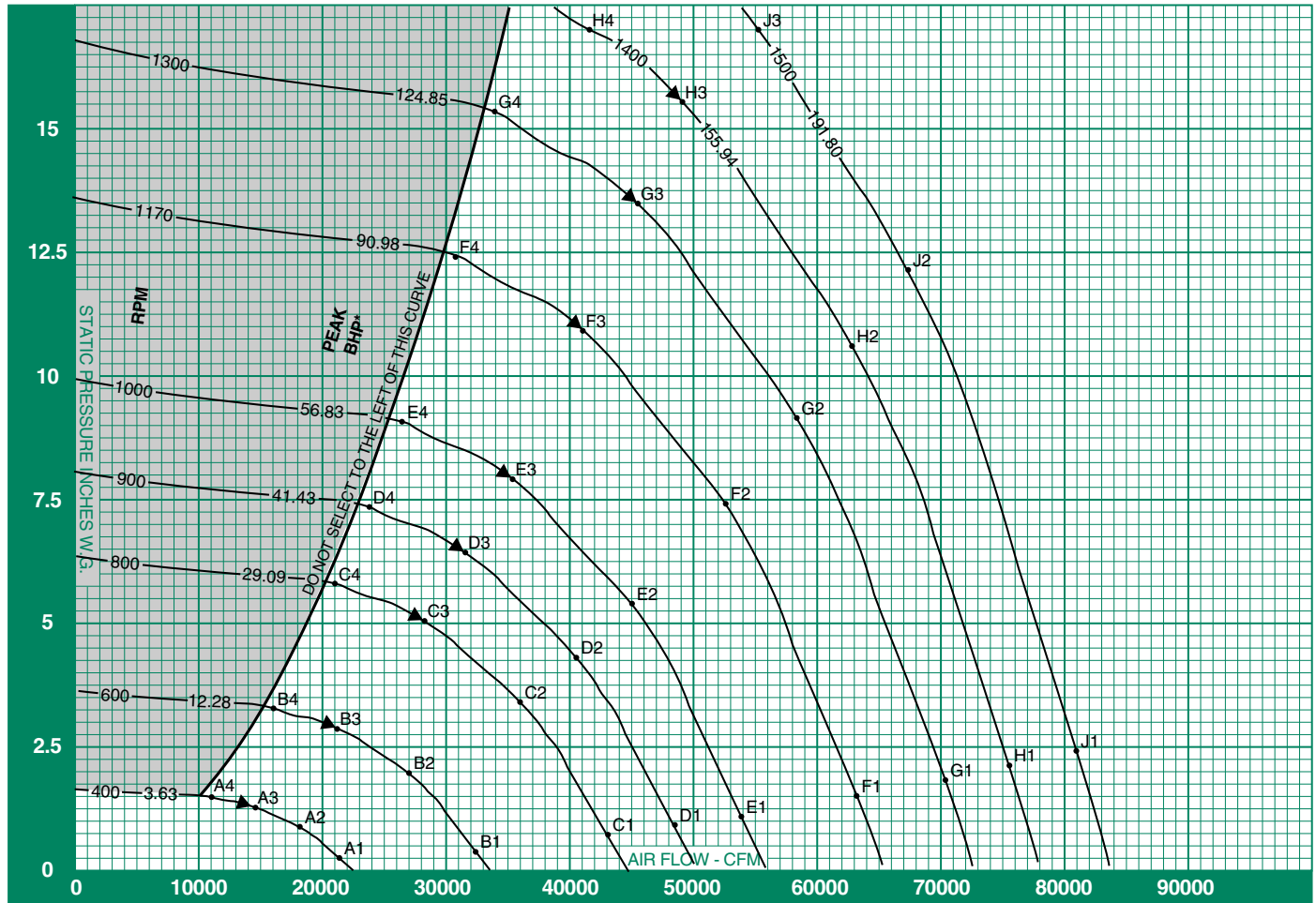
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
23805	1800	702	19.45	736	22.13	769	24.90	799	27.73	829	30.50	857	33.14	885	35.81	911	38.52	937	41.27
25127	1900	713	20.49	<u>744</u>	<u>23.11</u>	776	25.95	807	28.86	836	31.84	865	34.84	892	37.62	918	40.42	944	43.26
26450	2000	726	21.68	754	24.25	<u>784</u>	<u>27.04</u>	815	30.03	844	33.08	872	36.20	899	39.38	926	42.37	951	45.31
27772	2100	740	22.93	768	25.58	794	28.28	<u>823</u>	<u>31.23</u>	852	34.36	880	37.55	907	40.81	933	44.13	959	47.41
29095	2200	753	24.24	781	26.97	807	29.75	832	32.59	<u>860</u>	<u>35.67</u>	888	38.94	915	42.27	941	45.67	966	49.12
30417	2300	767	25.61	794	28.42	821	31.28	846	34.20	870	37.17	<u>896</u>	<u>40.36</u>	923	43.77	949	47.24	974	50.77
31740	2400	781	27.05	808	29.94	834	32.88	859	35.88	883	38.93	906	42.03	<u>930</u>	<u>45.32</u>	956	48.86	982	52.47
33062	2500	796	28.54	822	31.53	848	34.56	872	37.63	896	40.76	919	43.93	942	47.16	<u>964</u>	<u>50.52</u>	989	54.20
34385	2600	812	30.10	836	33.19	861	36.30	886	39.46	910	42.66	933	45.91	955	49.22	976	52.56	<u>997</u>	<u>55.98</u>
35707	2700	829	31.73	852	34.89	875	38.12	900	41.35	923	44.64	946	47.97	968	51.35	989	54.78	1010	58.25
37030	2800	845	33.44	868	36.68	891	39.98	914	43.33	937	46.70	960	50.11	982	53.57	1003	57.07	1023	60.62
38352	2900	861	35.23	885	38.55	907	41.93	929	45.37	951	48.84	973	52.33	995	55.87	1016	59.45	1037	63.08
39675	3000	878	37.10	901	40.50	923	43.96	945	47.47	965	51.04	987	54.63	1009	58.25	1030	61.92	1050	65.62
40997	3100	895	39.05	918	42.53	940	46.07	961	49.66	981	53.31	1001	57.01	1023	60.72	1043	64.47	1064	68.25
42320	3200	912	41.09	934	44.65	956	48.27	977	51.94	997	55.67	1017	59.45	1036	63.28	1057	67.11	1077	70.97
43642	3300	930	43.35	951	46.86	973	50.56	993	54.32	1014	58.12	1033	61.98	1052	65.89	1071	69.84	1091	73.79
44965	3400	950	45.85	968	49.17	989	52.95	1010	56.78	1030	60.67	1049	64.60	1068	68.59	1087	72.62	1105	76.69
46287	3500	971	48.45	987	51.73	1006	55.43	1026	59.34	1046	63.31	1066	67.32	1084	71.39	1103	75.50	1121	79.66
47610	3600	991	51.18	1007	54.53	1023	58.01	1043	62.00	1063	66.05	1082	70.14	1101	74.29	1119	78.48	1136	82.71
48932	3700	1012	54.03	1027	57.45	1042	60.91	1060	64.77	1079	68.89	1098	73.07	1117	77.29	1135	81.56	1153	85.87

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
33062	2500	1038	61.73	1083	69.48	1127	77.43	1169	84.82	1209	92.20	1248	99.68	1285	107.26				
34385	2600	1045	63.66	1091	71.56	1135	79.66	1176	87.95	1216	95.56	1255	103.24	1293	111.01	1329	118.88		
35707	2700	<u>1053</u>	<u>65.64</u>	1099	73.68	1142	81.93	1184	90.38	1224	99.00	1262	106.87	1300	114.83	1336	122.89	1371	131.04
37030	2800	1063	67.85	1107	75.86	1150	84.26	1191	92.85	1231	101.64	1270	110.57	1307	118.73	1343	126.98	1378	135.32
38352	2900	1076	70.46	<u>1114</u>	<u>78.08</u>	1158	86.63	1199	95.38	1239	104.31	1277	113.42	1314	122.69	1351	131.14	1386	139.67
39675	3000	1089	73.16	1127	80.86	1166	89.06	1207	97.96	1247	107.04	1285	116.30	1322	125.74	1358	135.34	1393	144.10
40997	3100	1103	75.95	1140	83.81	<u>1176</u>	<u>91.82</u>	1215	100.58	1255	109.82	1293	119.23	1330	128.82	1366	138.57	1400	148.49
42320	3200	1116	78.83	1153	86.84	1189	95.01	<u>1223</u>	<u>103.33</u>	1262	112.65	1301	122.22	1337	131.95	1373	141.85	1408	151.92
43642	3300	1130	81.80	1167	89.98	1202	98.30	1236	106.77	<u>1270</u>	<u>115.54</u>	1308	125.26	1345	135.15	1381	145.20	1416	155.41
44965	3400	1144	84.87	1180	93.21	1216	101.69	1250	110.32	1282	119.09	<u>1316</u>	<u>128.36</u>	1353	138.40	1389	148.60	1423	158.97
46287	3500	1157	88.04	1194	96.53	1229	105.17	1263	113.96	1295	122.89	1327	131.95	1361	141.70	1396	152.06	1431	162.58
47610	3600	1171	91.31	1208	99.96	1243	108.76	1276	117.71	1309	126.79	1340	136.01	<u>1370</u>	<u>145.36</u>	1404	155.58	1439	166.25
48932	3700	1187	94.64	1221	103.49	1256	112.46	1290	121.56	1322	130.80	1353	140.17	1384	149.68	<u>1413</u>	<u>159.31</u>	1447	169.99
50255	3800	1202	98.06	1235	107.13	1270	116.26	1303	125.52	1335	134.92	1367	144.45	1397	154.11	1426	163.90	<u>1455</u>	<u>173.81</u>
51577	3900	1219	101.59	1251	110.83	1284	120.17	1317	129.59	1349	139.15	1380	148.84	1410	158.66	1439	168.60	1468	178.67

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCS-490 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
400	0.25	A1	89	81	80	81	76	68	60	52	1000	8.00	E3	105	106	100	94	93	90	85	79	
	0.86	A2	85	79	76	75	71	64	58	52		9.08	E4	113	109	103	96	95	93	87	80	
	1.28	A3	83	77	72	73	69	63	57	51		1170	1.48	F1	108	114	111	105	105	103	96	88
	1.45	A4	83	80	74	76	72	64	57	51			7.40	F2	107	111	108	101	99	97	91	84
600	0.39	B1	97	96	90	91	89	82	74	66	1300	10.95	F3	108	110	106	99	96	95	90	83	
	1.95	B2	94	93	87	84	82	77	70	64		12.43	F4	115	114	107	101	98	97	92	85	
	2.88	B3	93	91	84	82	80	75	69	63		1400	1.83	G1	110	116	115	107	107	106	100	91
	3.27	B4	98	92	87	84	83	77	70	63			9.13	G2	108	113	111	104	101	100	95	88
800	0.69	C1	101	108	97	97	97	92	83	75	1500	10.59	H2	110	115	114	106	103	102	97	90	
	3.46	C2	100	103	94	91	90	86	79	73		12.16	J2	111	116	116	108	104	104	99	92	
	5.12	C3	101	100	93	87	88	84	78	72		17.00	1.48	H1	111	117	118	109	109	108	103	94
	5.81	C4	108	101	96	90	91	87	79	72			15.68	H3	111	115	111	104	100	100	95	89
900	0.88	D1	103	110	101	99	99	96	87	79	1500	17.00	H4	115	119	112	106	101	101	96	90	
	4.38	D2	102	106	98	94	93	90	83	76		1500	2.43	J1	112	118	121	111	110	110	105	96
	6.48	D3	103	103	97	91	91	88	81	75			12.16	J2	111	116	116	108	104	104	99	92
	7.35	D4	111	105	100	93	93	90	83	76		17.00	J3	112	117	114	106	102	102	97	91	
1000	1.08	E1	105	112	105	102	102	99	91	83	1500	12.16	J2	111	116	116	108	104	104	99	92	
	5.40	E2	104	108	102	97	95	93	86	80		17.00	J3	112	117	114	106	102	102	97	91	

BCS-542

SINGLE WIDTH

WHEEL DIAMETER: 54.25"

WHEEL CIRCUMFERENCE: 14.20'

OUTLET AREA: 16.255 SQ. FT.

OUTLET SIZE: 43¹/₁₆" x 54³/₈"

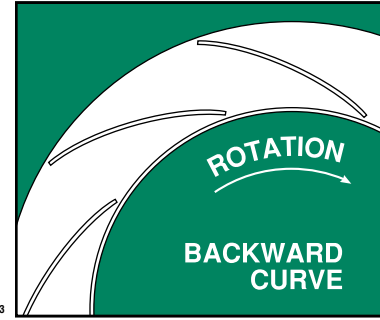
INLET DIAMETER: 56³/₄" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	775	1011	1355
251°F TO 400°F*	736	960	1287
401°F TO 700°F*	636	829	1111
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 14.20 x RPM MAX BHP = 94.539 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12968	800	206	0.79	243	1.36	276	1.98	310	2.72	368	4.20								
14589	900	224	0.98	257	1.58	288	2.25	317	2.98	374	4.67	423	6.32						
16210	1000	243	1.21	271	1.84	300	2.56	328	3.32	381	5.07	430	6.94						
17831	1100	262	1.49	286	2.13	314	2.90	340	3.71	388	5.46	436	7.53	479	9.56	518	11.60		
19453	1200	281	1.81	303	2.48	329	3.28	353	4.15	399	5.96	443	8.04	486	10.33	525	12.52	560	14.74
21074	1300	301	2.16	322	2.89	343	3.70	367	4.61	411	6.54	450	8.58	493	10.96	531	13.48	567	15.82
22695	1400	321	2.56	340	3.36	359	4.16	382	5.12	423	7.16	462	9.29	500	11.62	538	14.23	573	16.94
24316	1500	341	3.02	359	3.89	377	4.73	396	5.68	436	7.82	474	10.05	509	12.39	545	15.01	580	17.82
25937	1600	361	3.53	379	4.48	395	5.36	412	6.30	450	8.53	487	10.87	521	13.31	552	15.83	587	18.73
27558	1700	381	4.10	398	5.13	414	6.06	429	7.02	465	9.30	499	11.75	533	14.28	564	16.90	594	19.67
29179	1800	402	4.74	418	5.82	433	6.84	448	7.84	480	10.12	513	12.67	545	15.32	576	18.04	605	20.84
30800	1900	422	5.45	438	6.58	452	7.68	466	8.73	495	11.01	528	13.66	558	16.41	589	19.23	617	22.13
32421	2000	443	6.23	458	7.42	471	8.61	485	9.70	511	11.97	543	14.71	572	17.56	601	20.50	629	23.50
34042	2100	464	7.09	478	8.33	491	9.60	504	10.76	529	13.12	557	15.83	587	18.78	614	21.83	642	24.93
35663	2200	484	8.02	498	9.32	511	10.65	523	11.90	547	14.35	573	17.02	601	20.07	628	23.22	654	26.44

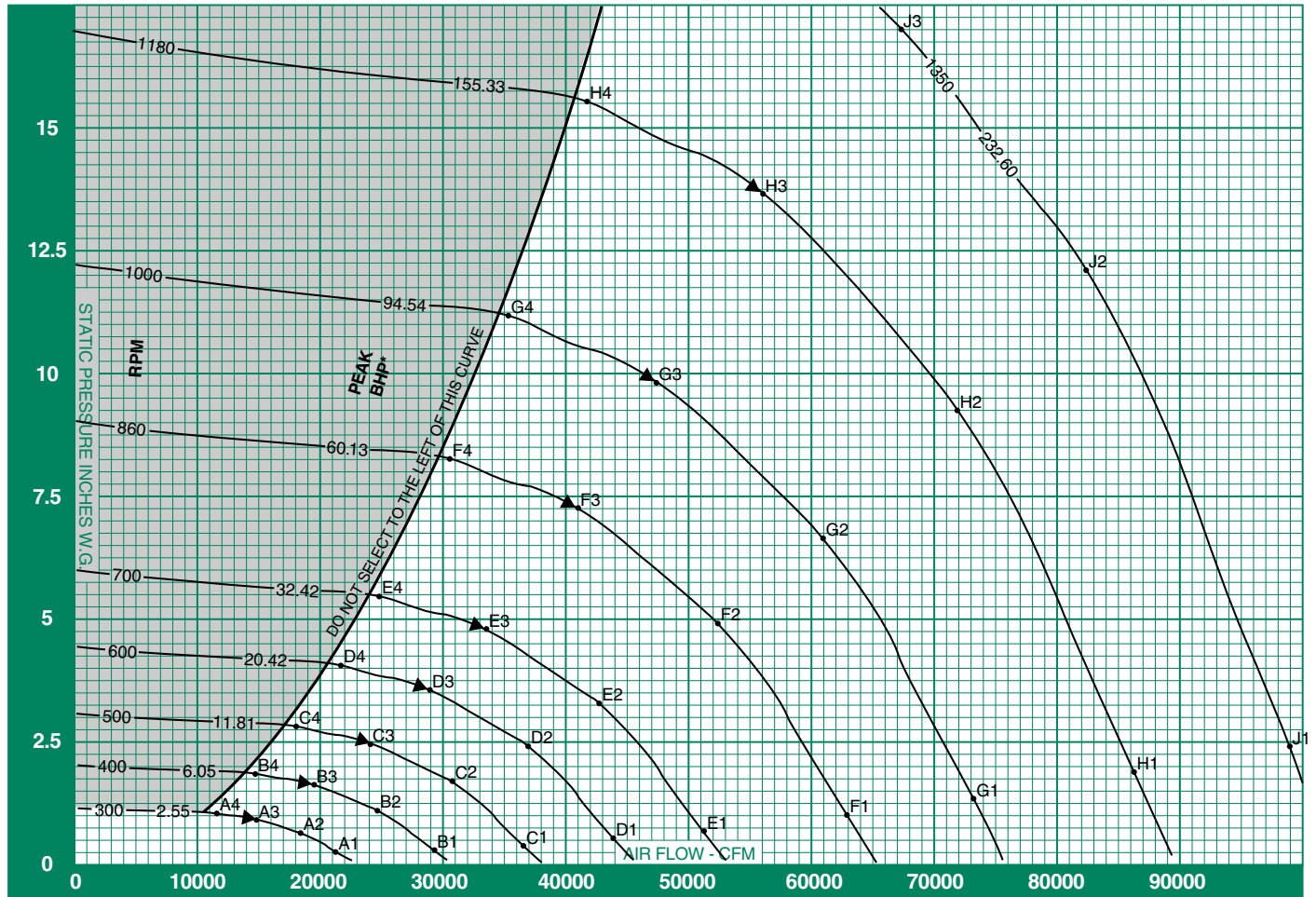
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
29179	1800	634	23.84	665	27.13	694	30.52	722	33.99	749	37.38	774	40.62	799	43.90	823	47.22	846	50.59
30800	1900	644	25.11	<u>672</u>	<u>28.33</u>	701	31.81	729	35.38	755	39.03	781	42.71	806	46.11	830	49.55	853	53.03
32421	2000	656	26.57	681	29.72	708	33.15	736	36.81	762	40.55	788	44.37	812	48.28	836	51.94	859	55.54
34042	2100	668	28.10	693	31.35	<u>717</u>	<u>34.67</u>	743	38.28	769	42.11	795	46.03	819	50.02	843	54.09	866	58.11
35663	2200	680	29.71	705	33.05	729	36.47	<u>752</u>	<u>39.95</u>	776	43.72	802	47.73	826	51.82	850	55.98	873	60.21
37285	2300	693	31.40	718	34.84	741	38.35	764	41.92	<u>786</u>	<u>45.56</u>	<u>809</u>	<u>49.48</u>	833	53.66	857	57.91	880	62.24
38906	2400	705	33.16	730	36.70	753	40.31	776	43.98	798	47.72	818	51.51	<u>840</u>	<u>55.55</u>	864	59.89	887	64.31
40527	2500	719	34.99	742	38.65	766	42.36	788	46.13	810	49.96	830	53.85	850	57.80	<u>871</u>	<u>61.93</u>	894	66.44
42148	2600	734	36.89	755	40.68	778	44.49	800	48.36	822	52.29	842	56.28	862	60.33	882	64.43	<u>901</u>	<u>68.62</u>
43769	2700	748	38.89	770	42.77	791	46.72	813	50.69	834	54.72	855	58.80	874	62.95	894	67.15	912	71.40
45390	2800	763	40.99	784	44.96	805	49.01	825	53.11	846	57.24	867	61.42	887	65.67	906	69.96	924	74.31
47011	2900	778	43.18	799	47.25	819	51.39	839	55.61	859	59.86	879	64.14	899	68.48	918	72.88	936	77.32
48632	3000	793	45.47	814	49.64	834	53.88	853	58.19	872	62.57	892	66.97	911	71.40	930	75.90	949	80.44
50253	3100	808	47.87	829	52.13	849	56.47	868	60.88	886	65.35	904	69.89	924	74.43	942	79.02	961	83.66
51874	3200	823	50.37	844	54.73	863	59.17	882	63.67	901	68.24	919	72.87	936	77.57	955	82.26	973	87.00
53495	3300	840	53.14	859	57.45	878	61.98	897	66.58	916	71.24	933	75.97	950	80.76	967	85.60	986	90.44
55116	3400	858	56.20	874	60.27	893	64.90	912	69.60	930	74.36	948	79.19	965	84.07	982	89.02	998	94.01
56738	3500	877	59.39	891	63.41	909	67.94	927	72.74	945	77.60	962	82.52	979	87.50	996	92.54	1012	97.64
58359	3600	895	62.74	909	66.84	924	71.11	942	76.00	960	80.96	977	85.98	994	91.06	1010	96.19	1027	101.39
59980	3700	914	66.23	928	70.42	941	74.66	957	79.39	975	84.44	992	89.56	1009	94.74	1025	99.97	1041	105.26

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
40527	2500	937	75.67	979	85.16	1018	94.91	1056	103.96	1092	113.01	1127	122.18	1161	131.48				
42148	2600	944	78.03	985	87.71	1025	97.64	1062	107.81	1099	117.14	1134	126.55	1168	136.08	1200	145.72		
43769	2700	951	80.45	992	90.32	1032	100.43	1069	110.78	1105	121.35	1140	131.00	1174	140.76	1207	150.64	1239	160.63
45390	2800	<u>960</u>	<u>83.17</u>	1000	92.98	1039	103.28	1076	113.82	1112	124.58	1147	135.53	1181	145.53	1213	155.64	1245	165.87
47011	2900	972	86.37	<u>1007</u>	<u>95.71</u>	1046	106.19	1083	116.91	1119	127.86	1154	139.03	1187	150.39	1220	160.74	1252	171.21
48632	3000	984	89.68	1018	99.12	<u>1053</u>	<u>109.16</u>	1090	120.07	1126	131.20	1161	142.56	1194	154.12	1227	165.89	1258	176.63
50253	3100	996	93.10	1030	102.73	1062	112.55	1097	123.29	1133	134.61	1168	146.15	1201	157.90	1233	169.85	1265	182.01
51874	3200	1008	96.63	1042	106.45	1074	116.46	<u>1105</u>	<u>126.66</u>	1140	138.09	1175	149.81	1208	161.74	1240	173.88	1272	186.22
53495	3300	1021	100.27	1054	110.29	1086	120.49	1117	130.88	<u>1147</u>	<u>141.63</u>	1182	153.54	1215	165.66	1247	177.98	1279	190.50
55116	3400	1033	104.03	1066	114.25	1098	124.65	1129	135.22	1158	145.97	<u>1189</u>	<u>157.33</u>	1222	169.64	1254	182.15	1286	194.85
56738	3500	1045	107.91	1078	118.33	1110	128.92	1141	139.69	1170	150.63	1198	161.74	1229	173.70	1261	186.39	1293	199.28
58359	3600	1058	111.92	1091	122.53	1122	133.32	1153	144.28	1182	155.41	1210	166.71	<u>1238</u>	<u>178.17</u>	1268	190.71	1300	203.79
59980	3700	1072	116.00	1103	126.86	1135	137.85	1165	149.00	1194	160.33	1222	171.82	1250	183.47	<u>1276</u>	<u>195.28</u>	1307	208.36
61601	3800	1086	120.19	1116	131.32	1147	142.51	1177	153.86	1206	165.38	1234	177.06	1262	188.91	1288	200.90	1314	213.05
63222	3900	1101	124.52	1130	135.86	1160	147.30	1190	158.85	1218	170.57	1246	182.44	1274	194.48	1300	206.67	1326	219.01

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCS-542 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
300	0.25	A1	81	77	76	75	69	61	53	46	700	4.80	E3	101	99	92	88	88	83	77	71	
	0.60	A2	79	74	72	71	65	58	52	46		5.45	E4	107	100	95	90	90	86	78	71	
	0.88	A3	77	72	69	68	63	57	51	45		860	0.98	F1	106	113	102	101	101	97	89	81
	1.00	A4	79	75	72	71	65	58	51	45			4.90	F2	105	108	100	96	95	92	84	78
400	0.25	B1	94	84	85	85	80	71	63	55	1000	7.25	F3	106	105	99	92	93	89	83	77	
	1.06	B2	89	82	79	79	74	67	61	55		8.23	F4	114	106	101	95	96	92	85	78	
	1.57	B3	86	81	75	76	72	66	60	54		1180	1.32	G1	109	115	108	105	105	102	94	86
	1.78	B4	87	84	77	79	75	67	61	54			6.62	G2	107	111	105	100	99	96	89	83
500	0.33	C1	98	92	89	90	87	79	71	63	1350	9.22	G3	109	109	103	97	96	94	88	82	
	1.66	C2	94	90	85	84	81	74	68	61		11.13	G4	116	112	106	99	99	96	90	83	
	2.45	C3	92	88	82	81	78	73	67	61		1180	1.84	H1	111	117	114	108	108	106	100	91
	2.78	C4	95	90	84	84	81	75	68	61			9.22	H2	110	115	111	104	102	100	95	88
600	0.48	D1	101	100	93	94	92	85	77	69	1350	13.65	H3	111	114	109	102	99	98	93	87	
	2.38	D2	98	96	90	88	86	80	73	67		15.50	H4	119	118	111	105	102	101	95	88	
	3.53	D3	97	94	87	85	83	78	72	66		1350	2.41	J1	114	119	120	111	111	110	104	96
	4.01	D4	101	96	90	87	86	81	73	66			12.07	J2	113	117	116	108	105	104	99	92
700	0.65	E1	103	106	97	97	96	91	82	74	17.00	J3	114	117	113	106	102	102	97	91		
	3.25	E2	101	102	94	91	90	85	78	72												

BCS-600

SINGLE WIDTH

WHEEL DIAMETER: 60.00"

WHEEL CIRCUMFERENCE: 15.71'

OUTLET AREA: 19.91 SQ. FT.

OUTLET SIZE: 47⁵/₁₆" x 60³/₁₆"

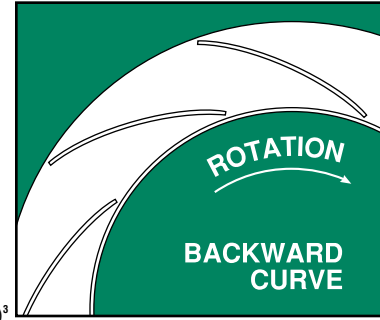
INLET DIAMETER: 63¹/₄" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	700	914	1225
251°F TO 400°F*	665	868	1164
401°F TO 700°F*	574	749	1005
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 15.71 x RPM MAX BHP = 156.448 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15863	800	186	0.96	220	1.66	<u>250</u>	<u>2.42</u>	280	3.32	333	5.14								
17846	900	202	1.20	232	1.94	261	2.76	<u>287</u>	<u>3.64</u>	338	5.72	383	7.73						
19829	1000	219	1.48	245	2.25	272	3.13	297	4.06	345	6.20	388	8.49						
21812	1100	237	1.82	259	2.60	284	3.55	308	4.54	<u>351</u>	<u>6.68</u>	395	9.21	433	11.69	468	14.18		
23795	1200	254	2.21	274	3.03	297	4.01	319	5.07	361	7.30	401	9.83	439	12.64	474	15.31	507	18.03
25778	1300	272	2.64	291	3.54	311	4.52	332	5.64	371	8.00	<u>407</u>	<u>10.49</u>	446	13.41	480	16.48	513	19.35
27761	1400	290	3.13	308	4.11	324	5.09	345	6.27	383	8.75	418	11.36	452	14.22	487	17.40	518	20.72
29744	1500	308	3.69	325	4.75	341	5.78	358	6.95	394	9.57	429	12.30	<u>460</u>	<u>15.16</u>	493	18.36	525	21.80
31727	1600	326	4.32	342	5.48	357	6.56	372	7.70	407	10.43	440	13.30	471	16.28	<u>499</u>	<u>19.37</u>	531	22.91
33709	1700	345	5.02	360	6.28	374	7.42	388	8.59	421	11.37	451	14.37	482	17.47	510	20.68	<u>537</u>	<u>24.06</u>
35692	1800	363	5.80	378	7.12	392	8.36	405	9.59	434	12.38	464	15.50	493	18.74	521	22.06	547	25.49
37675	1900	382	6.67	396	8.05	409	9.40	422	10.68	448	13.46	477	16.71	504	20.08	532	23.53	558	27.07
39658	2000	400	7.62	414	9.07	426	10.53	439	11.87	462	14.64	491	17.99	517	21.48	543	25.07	569	28.74
41641	2100	419	8.67	432	10.19	444	11.75	456	13.16	478	16.04	504	19.36	530	22.97	555	26.70	580	30.49
43624	2200	438	9.81	450	11.40	462	13.02	473	14.55	495	17.55	518	20.82	544	24.55	568	28.40	591	32.34

CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
35692	1800	<u>573</u>	<u>29.16</u>	601	33.19	628	37.33	653	41.58	677	45.72	700	49.68	723	53.70	744	57.76	765	61.88
37675	1900	582	30.72	<u>608</u>	<u>34.66</u>	634	38.91	659	43.28	683	47.74	706	52.24	728	56.40	750	60.61	771	64.87
39658	2000	593	32.50	616	36.36	640	40.54	665	45.02	689	49.60	712	54.28	735	59.05	756	63.53	777	67.93
41641	2100	604	34.38	627	38.35	<u>648</u>	<u>42.41</u>	672	46.82	696	51.51	719	56.30	741	61.19	762	66.17	783	71.08
43624	2200	615	36.34	638	40.43	659	44.61	<u>680</u>	<u>48.86</u>	702	53.48	725	58.38	747	63.38	768	68.47	789	73.65
45607	2300	626	38.40	649	42.61	670	46.91	691	51.28	<u>710</u>	<u>55.73</u>	<u>731</u>	<u>60.52</u>	753	65.63	775	70.84	795	76.13
47590	2400	638	40.56	660	44.89	681	49.31	702	53.80	721	58.37	740	63.01	<u>760</u>	<u>67.94</u>	781	73.26	802	78.67
49573	2500	650	42.80	671	47.28	692	51.81	713	56.42	732	61.11	751	65.87	769	70.71	<u>787</u>	<u>75.75</u>	808	81.27
51556	2600	663	45.13	683	49.76	704	54.43	724	59.16	743	63.96	762	68.84	780	73.79	797	78.81	<u>814</u>	<u>83.93</u>
53539	2700	677	47.58	696	52.32	715	57.15	735	62.01	754	66.93	773	71.93	791	77.00	808	82.13	825	87.34
55522	2800	690	50.14	709	55.00	728	59.95	746	64.97	765	70.02	784	75.14	802	80.32	819	85.58	836	90.90
57505	2900	703	52.82	722	57.80	741	62.87	758	68.02	777	73.22	795	78.46	813	83.77	830	89.14	847	94.58
59488	3000	717	55.62	736	60.72	754	65.91	772	71.18	788	76.53	806	81.91	824	87.34	841	92.84	858	98.39
61471	3100	731	58.55	749	63.77	767	69.08	785	74.47	801	79.94	818	85.49	835	91.05	852	96.66	869	102.34
63454	3200	744	61.61	763	66.95	781	72.38	798	77.89	815	83.47	831	89.14	846	94.88	863	100.62	880	106.42
65437	3300	760	65.01	777	70.27	794	75.81	811	81.44	828	87.15	844	92.93	859	98.79	875	104.71	891	110.63
67419	3400	776	68.74	790	73.72	808	79.39	825	85.14	841	90.96	857	96.86	872	102.84	887	108.89	903	114.99
69402	3500	793	72.65	806	77.56	822	83.11	838	88.98	854	94.92	870	100.94	886	107.04	901	113.20	915	119.44
71385	3600	810	76.74	822	81.76	835	86.98	852	92.97	868	99.03	884	105.17	899	111.38	914	117.66	928	124.02
73368	3700	826	81.01	839	86.14	851	91.33	866	97.11	882	103.29	897	109.55	912	115.88	927	122.28	941	128.75

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
49573	2500	847	92.56	885	104.17	920	116.09	955	127.17	987	138.24	1019	149.46	1050	160.83				
51556	2600	854	95.45	891	107.29	927	119.43	961	131.87	993	143.29	1025	154.80	1056	166.45	1085	178.25		
53539	2700	860	98.41	897	110.48	933	122.85	967	135.51	999	148.44	1031	160.24	1062	172.18	1091	184.26	1120	196.48
55522	2800	<u>868</u>	<u>101.73</u>	904	113.74	939	126.34	973	139.22	1006	152.39	1037	165.78	1068	178.02	1097	190.39	1126	202.90
57505	2900	879	105.65	<u>910</u>	<u>117.07</u>	946	129.90	979	143.01	1012	156.40	1043	170.06	1073	183.96	1103	196.62	1132	209.42
59488	3000	890	109.70	920	121.24	<u>952</u>	<u>133.53</u>	986	146.87	1018	160.49	1049	174.38	1080	188.52	1109	202.93	1138	216.06
61471	3100	901	113.88	931	125.66	960	137.67	992	150.81	1025	164.66	1056	178.77	1086	193.14	1115	207.77	1144	222.64
63454	3200	912	118.20	942	130.21	971	142.46	<u>999</u>	<u>154.93</u>	1031	168.91	1062	183.25	1092	197.85	1121	212.69	1150	227.78
65437	3300	923	122.65	953	134.91	982	147.39	1010	160.09	<u>1037</u>	<u>173.24</u>	1068	187.81	1099	202.63	1128	217.71	1156	233.02
67419	3400	934	127.26	964	139.75	993	152.47	1020	165.40	1047	178.55	<u>1075</u>	<u>192.45</u>	1105	207.51	1134	222.81	1162	238.35
69402	3500	945	132.00	975	144.74	1004	157.70	1031	170.87	1058	184.25	1084	197.84	1111	212.47	1140	228.00	1169	243.77
71385	3600	957	136.90	986	149.88	1015	163.08	1042	176.49	1069	190.10	1094	203.93	<u>1119</u>	<u>217.95</u>	1147	233.28	1175	249.27
73368	3700	969	141.89	998	155.18	1026	168.62	1053	182.26	1080	196.12	1105	210.17	1130	224.43	<u>1154</u>	<u>238.87</u>	1181	254.87
75351	3800	982	147.02	1009	160.63	1037	174.31	1064	188.20	1091	202.30	1116	216.59	1141	231.07	1165	245.75	<u>1188</u>	<u>260.61</u>
77334	3900	995	152.31	1021	166.18	1048	180.18	1076	194.31	1102	208.64	1127	223.17	1152	237.89	1175	252.80	1199	267.89

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCS-600 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
350	0.20	A1	92	85	85	84	79	70	65	68	700	5.88	D3	104	102	95	91	91	86	80	76	
	1.00	A2	88	82	79	78	73	66	62	65		6.67	D4	110	103	98	93	93	89	81	77	
	1.47	A3	85	80	76	76	71	65	61	64		870	1.23	E1	110	116	106	105	105	101	92	84
	1.67	A4	87	83	78	78	73	66	62	65			6.13	E2	109	112	103	99	99	95	88	81
450	0.33	B1	100	92	90	91	87	78	70	72	1000	9.08	E3	110	109	102	96	96	93	86	81	
	1.64	B2	95	89	85	84	81	74	67	69		10.30	E4	117	110	105	98	99	95	88	81	
	2.43	B3	93	88	82	82	79	72	67	68		1180	1.62	F1	112	118	111	108	108	105	97	89
	2.76	B4	94	91	84	85	81	74	67	69			8.10	F2	111	114	108	103	102	99	92	86
580	0.55	C1	104	101	96	96	94	87	79	76	1180	12.00	F3	112	113	107	100	99	97	91	85	
	2.73	C2	101	98	92	90	88	82	75	74		13.61	F4	120	115	109	102	102	99	93	86	
	4.03	C3	100	96	89	87	86	80	74	73		1180	2.26	G1	115	121	117	111	111	109	103	94
	4.58	C4	104	98	92	90	88	83	75	74			11.28	G2	114	118	114	107	105	103	98	91
700	0.79	D1	106	109	100	100	99	94	85	80	1180	16.70	G3	115	117	112	105	102	101	96	90	
	3.97	D2	104	105	97	94	93	88	81	77												

BCS-660

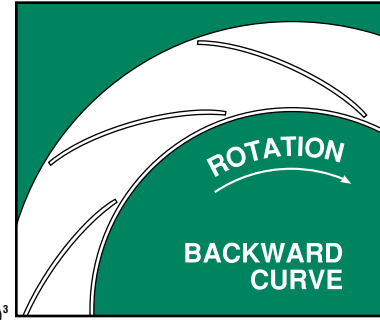
SINGLE WIDTH

WHEEL DIAMETER: 66.00"
 WHEEL CIRCUMFERENCE: 17.28'
 OUTLET AREA: 24.10 SQ. FT.
 OUTLET SIZE: 52³/₈" x 66¹/₄"
 INLET DIAMETER: 69¹/₄" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	637	831	1114
251°F TO 400°F*	605	789	1058
401°F TO 700°F*	522	681	913
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 17.28 x RPM MAX BHP = 251.961 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
19194	800	169	1.16	200	2.01	<u>227</u>	<u>2.93</u>	255	4.02	302	6.22								
21594	900	184	1.45	211	2.34	237	3.34	<u>261</u>	<u>4.41</u>	308	6.92	348	9.36						
23993	1000	199	1.80	223	2.72	247	3.79	270	4.92	313	7.50	353	10.28						
26392	1100	215	2.20	235	3.15	258	4.30	280	5.50	<u>319</u>	<u>8.09</u>	359	11.14	394	14.15	426	17.16		
28792	1200	231	2.67	249	3.66	270	4.85	290	6.14	328	8.83	364	11.90	399	15.29	431	18.53	461	21.81
31191	1300	247	3.20	264	4.28	282	5.47	302	6.83	338	9.67	<u>370</u>	<u>12.70</u>	405	16.23	437	19.95	466	23.41
33591	1400	264	3.79	280	4.97	295	6.16	314	7.58	348	10.59	380	13.75	411	17.20	442	21.06	471	25.07
35990	1500	280	4.46	295	5.75	310	7.00	326	8.41	358	11.58	390	14.88	<u>418</u>	<u>18.34</u>	<u>448</u>	<u>22.21</u>	<u>477</u>	<u>26.37</u>
38389	1600	297	5.22	311	6.62	325	7.94	338	9.32	370	12.63	400	16.10	428	19.69	<u>454</u>	<u>23.43</u>	<u>483</u>	<u>27.72</u>
40789	1700	313	6.07	327	7.59	340	8.98	353	10.40	382	13.76	410	17.39	438	21.14	<u>464</u>	<u>25.02</u>	<u>489</u>	<u>29.11</u>
43188	1800	330	7.02	343	8.62	356	10.12	368	11.61	395	14.98	422	18.76	448	22.67	474	26.69	497	30.84
45587	1900	347	8.07	360	9.74	372	11.37	383	12.93	407	16.29	434	20.21	459	24.30	484	28.47	507	32.76
47987	2000	364	9.22	376	10.98	388	12.74	399	14.36	420	17.72	446	21.77	470	26.00	494	30.34	517	34.78
50386	2100	381	10.49	393	12.33	404	14.21	414	15.92	435	19.41	458	23.43	482	27.80	504	32.31	527	36.90
52785	2200	398	11.88	409	13.79	420	15.76	430	17.61	450	21.24	471	25.19	494	29.71	516	34.36	538	39.13

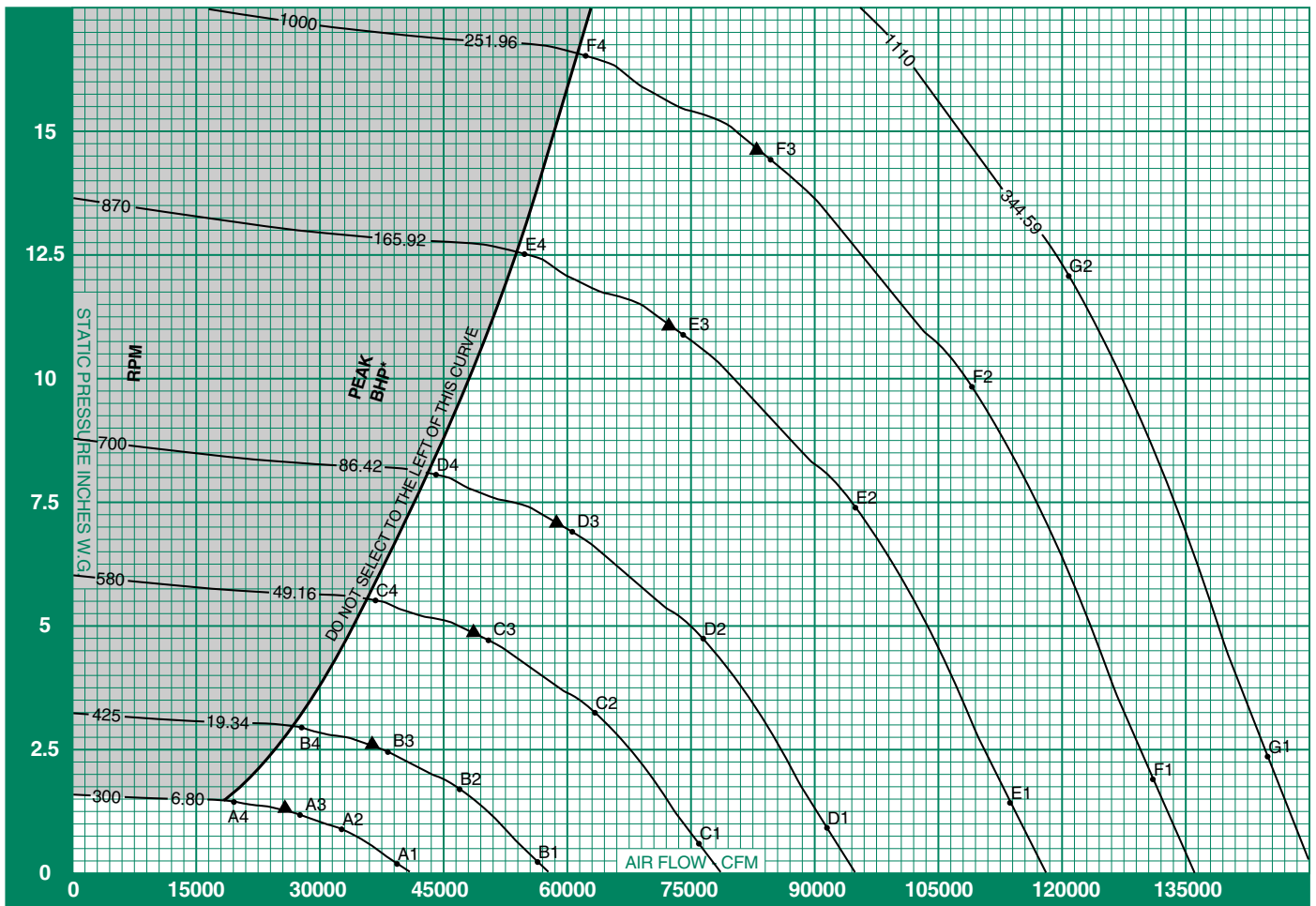
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
43188	1800	521	<u>35.28</u>	547	40.16	571	45.17	593	50.31	615	55.33	637	60.12	657	64.97	677	69.89	696	74.87
45587	1900	529	<u>37.17</u>	<u>552</u>	<u>41.94</u>	576	47.08	599	52.36	621	57.77	642	63.21	662	68.24	682	73.34	701	78.49
47987	2000	539	39.33	560	43.99	582	49.06	605	54.48	627	60.02	648	65.68	668	71.45	687	76.87	706	82.20
50386	2100	549	41.60	570	46.40	<u>590</u>	<u>51.31</u>	611	56.65	632	62.33	653	68.13	673	74.04	693	80.06	712	86.01
52785	2200	559	43.97	580	48.92	599	<u>53.97</u>	<u>618</u>	<u>59.12</u>	638	64.71	659	70.64	679	76.69	699	82.85	717	89.12
55185	2300	569	46.47	590	51.56	609	56.76	628	62.05	<u>646</u>	<u>67.44</u>	<u>665</u>	<u>73.23</u>	685	79.42	704	85.71	723	92.12
57584	2400	580	49.08	600	54.32	619	59.66	638	65.10	656	70.62	673	76.24	<u>691</u>	<u>82.21</u>	710	88.65	729	95.19
59983	2500	591	51.78	610	57.21	629	62.69	648	68.27	665	73.94	683	79.70	699	85.55	<u>716</u>	<u>91.66</u>	735	98.34
62383	2600	603	54.61	621	60.21	640	65.86	658	71.58	675	77.40	692	83.30	709	89.29	725	95.36	<u>740</u>	<u>101.56</u>
64782	2700	615	57.57	633	63.31	650	69.15	668	75.03	686	80.99	702	87.04	719	93.17	735	99.38	750	105.68
67182	2800	627	60.67	645	66.55	662	72.54	678	78.61	696	84.72	712	90.91	729	97.19	744	103.55	760	109.99
69581	2900	639	63.91	657	69.93	673	76.07	690	82.31	706	88.60	723	94.94	739	101.36	754	107.86	770	114.44
71980	3000	652	67.30	669	73.47	685	79.75	701	86.13	717	92.60	733	99.12	749	105.68	765	112.33	780	119.06
74380	3100	664	70.85	681	77.16	698	83.58	713	90.10	729	96.72	743	103.44	759	110.16	775	116.96	790	123.83
76779	3200	677	74.55	694	81.01	710	87.58	725	94.24	741	101.00	755	107.86	770	114.80	785	121.75	800	128.76
79178	3300	691	78.66	706	85.02	722	91.74	738	98.54	753	105.45	767	112.45	781	119.53	795	126.70	810	133.87
81578	3400	706	83.18	719	89.20	734	96.06	750	103.02	765	110.07	779	117.21	793	124.44	807	131.75	820	139.14
83977	3500	721	87.91	732	93.85	747	100.56	762	107.66	777	114.86	791	122.14	805	129.51	819	136.97	832	144.52
86376	3600	736	92.85	747	98.93	759	105.24	774	112.49	789	119.83	803	127.26	817	134.77	831	142.37	844	150.06
88776	3700	751	98.02	763	104.23	774	110.51	787	117.50	801	124.99	816	132.56	829	140.22	843	147.96	856	155.79

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
59983	2500	770	112.00	804	126.05	837	140.47	868	153.88	898	167.27	927	180.84	954	194.60				
62383	2600	776	115.50	810	129.82	842	144.52	873	159.57	903	173.38	932	187.30	960	201.40				
64782	2700	782	119.08	816	133.68	848	148.65	879	163.97	909	179.61	937	193.89	965	208.34	992	222.96		
67182	2800	<u>789</u>	<u>123.10</u>	822	137.62	854	152.87	885	168.46	914	184.39	943	200.60	970	215.40	997	230.37	1023	245.50
69581	2900	799	127.84	<u>827</u>	<u>141.65</u>	860	157.17	890	173.04	920	189.25	948	205.78	976	222.59	1003	237.92	1029	253.40
71980	3000	809	132.73	837	146.71	<u>865</u>	<u>161.57</u>	896	177.71	926	194.19	954	211.00	982	228.12	1008	245.54	1034	261.44
74380	3100	819	137.79	846	152.05	873	166.59	902	182.48	931	199.24	960	216.31	987	233.70	1014	251.40	1040	269.39
76779	3200	829	143.02	856	157.56	883	172.38	<u>908</u>	<u>187.47</u>	937	204.38	966	221.73	993	239.39	1020	257.36	1045	275.62
79178	3300	839	148.41	866	163.24	893	178.34	918	193.71	<u>943</u>	<u>209.62</u>	971	227.25	999	245.19	1025	263.43	1051	281.96
81578	3400	849	153.98	876	169.10	903	184.49	928	200.14	952	216.05	<u>977</u>	<u>232.87</u>	1005	251.08	1031	269.60	1057	288.40
83977	3500	859	159.72	886	175.13	912	190.81	938	206.75	962	222.94	985	239.39	1010	257.09	1037	275.88	1062	294.96
86376	3600	870	165.65	897	181.36	923	197.32	948	213.55	972	230.03	995	246.75	<u>1017</u>	<u>263.71</u>	1043	282.26	1068	301.62
88776	3700	881	171.69	907	187.76	933	204.03	958	220.54	982	237.30	1005	254.31	<u>1027</u>	<u>271.55</u>	<u>1049</u>	<u>289.03</u>	1074	308.40
91175	3800	893	177.90	917	194.36	943	210.92	968	227.73	991	244.78	1015	262.07	1037	279.60	1059	297.35	<u>1080</u>	<u>315.34</u>
93574	3900	905	184.30	929	201.08	953	218.01	978	235.11	1002	252.46	1025	270.03	1047	287.85	1069	305.88	1090	324.15

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCS-660 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
300	0.18	A1	89	84	84	83	76	68	65	68	700	4.80	D2	108	108	100	97	96	91	84	80
	0.88	A2	86	80	78	77	71	64	62	65		7.11	D3	108	105	98	94	93	89	83	79
	1.31	A3	83	78	75	74	69	63	61	64		8.07	D4	114	106	101	96	96	91	84	80
	1.48	A4	85	81	78	77	71	64	62	65		870	1.48	E1	113	119	108	108	108	104	95
425	0.35	B1	102	92	92	92	88	79	71	74	7.42		E2	112	115	106	102	101	98	91	84
1.77	B2	98	90	86	86	82	75	69	71	10.98	E3		113	112	105	99	99	96	89	83	
2.62	B3	95	89	83	84	80	74	68	70	12.47	E4		120	113	108	101	102	98	91	84	
580	2.98	B4	96	92	85	86	83	75	68	71	1000	1.96	F1	115	121	114	111	111	108	100	92
	0.66	C1	107	104	99	99	97	90	82	79		9.81	F2	114	117	111	106	104	102	95	89
	3.30	C2	104	101	95	93	91	85	78	77		14.51	F3	115	116	109	103	102	100	94	88
	4.88	C3	103	99	92	90	88	83	77	76		16.47	F4	123	118	112	105	104	102	96	89
700	5.54	C4	107	101	95	92	91	85	78	76	1110	2.42	G1	117	123	118	113	113	111	104	95
	0.96	D1	110	112	103	103	102	97	88	83		12.08	G2	116	120	115	109	107	105	99	92

BCA-182

SINGLE WIDTH

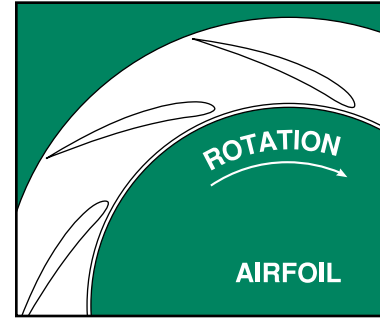
WHEEL DIAMETER: 18.25"
 WHEEL CIRCUMFERENCE: 4.78'
 OUTLET AREA: 1.829 SQ. FT.
 OUTLET SIZE: 14½" x 18¾"
 INLET DIAMETER: 19½" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2346	3061	3825
251°F TO 400°F*	2229	2908	3634
401°F TO 700°F*	1924	2510	3137
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 4.78 x RPM MAX BHP = 0.404 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
1280	700	572 0.07	680 0.13	783 0.19						
1463	800	624 0.09	721 0.15	<u>811</u> <u>0.21</u>	903 0.29					
1646	900	678 0.11	766 0.18	850 0.25	<u>928</u> <u>0.32</u>	1099 0.49				
1829	1000	735 0.14	815 0.21	892 0.28	965 0.36	1110 0.54				
2012	1100	793 0.17	866 0.25	937 0.33	1006 0.41	<u>1135</u> <u>0.59</u>	1274 0.79			
2195	1200	852 0.21	918 0.29	985 0.37	1049 0.46	1173 0.65	1293 0.86	1422 1.08		
2377	1300	912 0.25	974 0.34	1036 0.43	1096 0.52	1213 0.71	<u>1322</u> <u>0.93</u>	1435 1.16	1557 1.41	
2560	1400	972 0.30	1031 0.39	1088 0.49	1145 0.59	1255 0.79	1360 1.01	<u>1460</u> <u>1.25</u>	1567 1.50	1681 1.77
2743	1500	1033 0.35	1089 0.45	1141 0.55	1196 0.66	1299 0.87	1400 1.10	1496 1.34	<u>1591</u> <u>1.61</u>	1689 1.88
2926	1600	1093 0.41	1148 0.52	1198 0.63	1247 0.74	1345 0.97	1442 1.20	1534 1.44	1622 1.72	<u>1713</u> <u>2.00</u>
3109	1700	1155 0.48	1207 0.59	1255 0.71	1300 0.82	1395 1.06	1485 1.31	1575 1.56	1660 1.83	1742 2.13
3292	1800	1216 0.55	1267 0.68	1313 0.80	1356 0.92	1446 1.17	1532 1.43	1617 1.69	1699 1.96	1779 2.26
3475	1900	1278 0.64	1327 0.77	1371 0.89	1413 1.02	1497 1.28	1579 1.55	1660 1.83	1741 2.11	1818 2.40
3658	2000	1340 0.73	1387 0.86	1430 1.00	1470 1.13	1549 1.41	1629 1.69	1706 1.98	1784 2.27	1859 2.57
3841	2100	1403 0.83	1447 0.97	1489 1.11	1528 1.25	1602 1.54	1680 1.83	1753 2.13	1827 2.44	1900 2.75

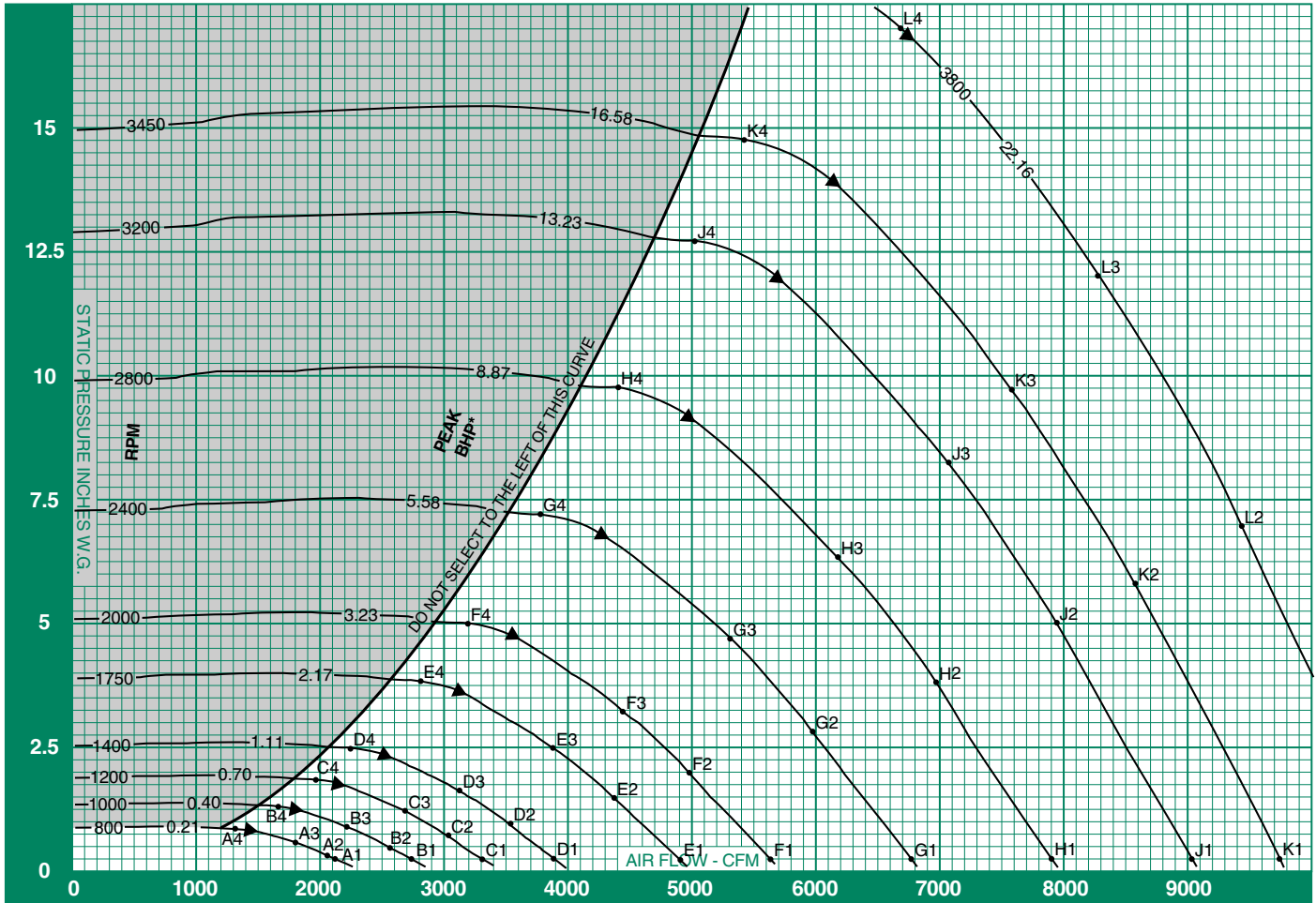
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
3109	1700	1829 2.43	1915 2.74	2011 3.06	2103 3.39					
3292	1800	<u>1855</u> <u>2.58</u>	1939 2.90	2021 3.22	2111 3.56	2199 3.91				
3475	1900	1893 2.73	<u>1964</u> <u>3.06</u>	2045 3.40	2122 3.74	2206 4.10	2290 4.46	2371 4.83		
3658	2000	1931 2.88	2002 3.23	<u>2070</u> <u>3.58</u>	2146 3.94	2220 4.29	2298 4.67	2379 5.05	2457 5.43	
3841	2100	1971 3.06	2040 3.40	2107 3.76	<u>2172</u> <u>4.14</u>	2245 4.51	2315 4.88	2387 5.27	2465 5.67	2540 6.07
4024	2200	2012 3.26	2080 3.60	2145 3.96	2209 4.34	2271 4.73	2340 5.12	2408 5.51	2474 5.91	2548 6.32
4207	2300	2055 3.47	2121 3.82	2184 4.17	2247 4.55	2308 4.95	<u>2367</u> <u>5.35</u>	<u>2432</u> <u>5.76</u>	2498 6.17	2562 6.59
4390	2400	2099 3.70	2163 4.05	2225 4.41	2286 4.78	2346 5.18	2405 5.59	2461 6.02	<u>2522</u> <u>6.44</u>	2586 6.87
4572	2500	2145 3.93	2206 4.30	2267 4.66	2327 5.04	2385 5.42	2443 5.84	2499 6.28	2554 6.72	<u>2610</u> <u>7.16</u>
4755	2600	2191 4.17	2251 4.55	2310 4.93	2368 5.32	2426 5.71	2481 6.11	2537 6.54	2591 6.99	2644 7.45
4938	2700	2240 4.43	2297 4.82	2354 5.21	2411 5.61	2467 6.01	2522 6.42	2576 6.83	2629 7.28	2682 7.75
5121	2800	2290 4.69	2344 5.10	2400 5.51	2455 5.92	2510 6.33	2564 6.74	2617 7.17	2668 7.60	2720 8.06
5304	2900	2341 4.97	2394 5.39	2447 5.81	2500 6.23	2553 6.66	2606 7.08	2658 7.52	2709 7.96	2759 8.40
5487	3000	2392 5.27	2444 5.70	2495 6.13	2547 6.56	2598 7.00	2650 7.44	2701 7.88	2750 8.33	2800 8.78
5670	3100	2443 5.58	2495 6.01	2545 6.46	2593 6.91	2644 7.35	2694 7.81	2744 8.26	2793 8.72	2841 9.18
5853	3200	2495 5.90	2546 6.35	2595 6.80	2643 7.26	2691 7.73	2740 8.19	2788 8.66	2836 9.13	2884 9.60
6036	3300	2547 6.24	2597 6.70	2646 7.16	2694 7.63	2740 8.11	2787 8.59	2834 9.07	2880 9.55	2927 10.03
6219	3400	2600 6.59	2649 7.06	2697 7.54	2744 8.02	2790 8.51	2834 9.00	2880 9.49	2926 9.98	2971 10.48
6402	3500	2655 6.96	2701 7.44	2749 7.93	2795 8.42	2840 8.92	2884 9.42	2927 9.93	2972 10.43	3017 10.94
6585	3600	2712 7.34	2754 7.84	2801 8.34	2847 8.84	2891 9.35	2935 9.86	2977 10.38	3019 10.90	3063 11.42

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
4572	2500	2732 8.05	2852 8.96	2982 9.91	3106 10.88					
4755	2600	2756 8.37	2871 9.30	2989 10.26	3113 11.25	3233 12.26				
4938	2700	<u>2783</u> <u>8.70</u>	2895 9.66	3005 10.63	3121 11.64	3240 12.67	3355 13.71			
5121	2800	2821 9.03	<u>2920</u> <u>10.02</u>	3029 11.02	3133 12.03	3248 13.08	3362 14.15	3473 15.23		
5304	2900	2858 9.37	2954 10.39	3053 11.42	3157 12.45	3258 13.50	3370 14.59	3480 15.70	3587 16.81	
5487	3000	2896 9.72	2991 10.76	<u>3082</u> <u>11.82</u>	3182 12.88	3282 13.95	3378 15.04	3488 16.17	3595 17.32	3699 18.47
5670	3100	2936 10.13	3029 11.14	3120 12.22	<u>3207</u> <u>13.32</u>	3306 14.42	3403 15.53	3496 16.65	3602 17.82	3706 19.01
5853	3200	2977 10.56	3068 11.54	3158 12.64	3244 13.76	<u>3331</u> <u>14.89</u>	3427 16.03	3520 17.17	3610 18.34	3714 19.55
6036	3300	3019 11.01	3108 12.01	3196 13.07	3282 14.21	3365 15.37	3451 16.54	3544 17.71	3634 18.89	3721 20.09
6219	3400	<u>3062</u> <u>11.48</u>	3149 12.50	3235 13.54	3320 14.67	3403 15.85	3483 17.05	<u>3568</u> <u>18.25</u>	3658 19.46	3746 20.68
6402	3500	3105 11.97	3191 13.01	3276 14.07	3358 15.14	3441 16.34	3521 17.56	3598 18.80	3683 20.04	3770 21.28
6585	3600	3148 12.48	3234 13.53	3317 14.61	3399 15.71	3479 16.85	3559 18.09	3636 19.35	<u>3711</u> <u>20.63</u>	3794 21.90
6768	3700	3194 12.99	3277 14.08	3359 15.17	3440 16.29	3519 17.42	3597 18.64	3673 19.91	3748 21.21	<u>3821</u> <u>22.52</u>
6950	3800	3240 13.53	3321 14.64	3402 15.76	3481 16.89	3559 18.04	3635 19.21	3711 20.49	3786 21.81	
7133	3900	3287 14.08	3367 15.22	3446 16.36	3524 17.51	3601 18.68	3676 19.87	3750 21.08	3824 22.42	

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-182 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
800	0.25	A1	67	74	70	67	66	62	58	54	2000	3.27	F3	97	93	96	94	88	86	83	79	
	0.31	A2	67	74	70	67	65	62	58	54		4.96	F4	97	93	96	93	88	86	83	79	
	0.52	A3	67	74	71	67	66	62	58	54		2400	0.25	G1	98	99	100	99	94	91	88	85
	0.79	A4	66	73	70	67	65	62	58	53			2.82	G2	99	99	100	100	93	90	88	84
1000	0.25	B1	73	79	77	73	71	68	64	60	2800	4.70	G3	100	100	99	99	94	91	88	84	
	0.49	B2	73	79	77	73	71	68	64	60		7.15	G4	100	100	99	99	93	90	88	84	
	0.82	B3	73	78	78	73	71	68	64	60		3200	0.25	H1	101	104	102	104	98	94	92	89
	1.24	B4	73	78	77	73	71	68	64	60			3.84	H2	101	105	102	104	98	94	92	89
1200	0.25	C1	80	82	83	79	75	73	69	65	3450	5.02	J2	104	110	104	109	102	97	96	92	
	0.71	C2	80	82	83	78	75	73	69	65		8.36	J3	105	111	104	108	102	97	96	92	
	1.18	C3	80	81	83	79	75	73	69	65		12.71	J4	105	111	104	108	102	97	95	92	
	1.79	C4	80	81	82	78	75	73	69	65		3800	0.25	K1	104	112	106	110	104	99	98	95
1400	0.25	D1	85	84	88	83	79	77	74	69	5.83		K2	105	112	106	111	104	99	98	94	
	0.96	D2	85	84	88	83	79	77	74	69	9.72	K3	106	113	106	110	105	99	98	94		
	1.60	D3	86	84	88	83	79	77	74	69	14.77	K4	106	113	105	110	104	99	97	94		
	2.43	D4	86	84	87	83	79	77	73	69	0.25	L1	106	113	109	112	107	102	100	97		
1750	1.50	E2	93	88	94	90	84	83	80	76		7.07	L2	107	114	109	112	107	102	100	97	
	2.50	E3	94	88	94	90	84	83	80	76		11.79	L3	108	115	109	112	108	102	100	97	
	3.80	E4	94	87	94	89	84	83	80	75		17.00	L4	108	115	109	111	107	101	100	97	
	2000	0.25	F1	95	93	96	94	88	86	84	79											
1.96		F2	96	93	97	94	88	86	83	79												

BCA-200

SINGLE WIDTH

WHEEL DIAMETER: 20.00"

WHEEL CIRCUMFERENCE: 5.24'

OUTLET AREA: 2.196 SQ. FT.

OUTLET SIZE: 15⁷/₈" x 19¹⁵/₁₆"

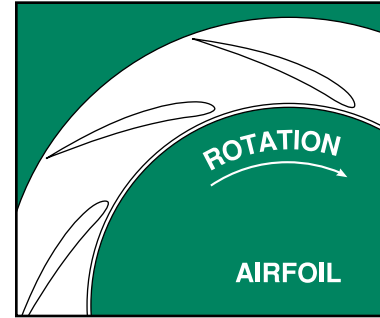
INLET DIAMETER: 21¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2141	2793	3490
251°F TO 400°F*	2034	2653	3316
401°F TO 700°F*	1756	2290	2862
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 5.24 x RPM MAX BHP = 0.639 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1537	700	522	0.09	620	0.15	715	0.23												
1757	800	569	0.11	658	0.18	<u>740</u>	<u>0.26</u>	824	0.34										
1977	900	619	0.14	699	0.21	<u>775</u>	<u>0.29</u>	<u>847</u>	<u>0.39</u>	1003	0.59								
2196	1000	671	0.17	743	0.25	814	0.34	881	0.43	1013	0.64								
2416	1100	724	0.21	790	0.30	855	0.39	918	0.49	<u>1036</u>	<u>0.71</u>	1162	0.95						
2636	1200	778	0.25	838	0.35	899	0.45	958	0.55	1070	0.78	<u>1180</u>	<u>1.03</u>	1298	1.30				
2855	1300	832	0.30	889	0.41	945	0.51	1000	0.63	1107	0.86	1206	1.12	1310	1.40	1420	1.69		
3075	1400	887	0.36	941	0.47	993	0.59	1045	0.70	1145	0.95	1241	1.21	<u>1332</u>	<u>1.50</u>	<u>1430</u>	<u>1.81</u>	1534	2.12
3295	1500	942	0.42	994	0.54	1041	0.67	1091	0.79	1185	1.05	1278	1.32	<u>1365</u>	<u>1.62</u>	<u>1452</u>	<u>1.93</u>	<u>1541</u>	<u>2.26</u>
3514	1600	998	0.50	1048	0.62	1093	0.75	1138	0.89	1228	1.16	1316	1.44	1400	1.73	<u>1480</u>	<u>2.07</u>	<u>1563</u>	<u>2.41</u>
3734	1700	1054	0.58	1102	0.71	1145	0.85	1186	0.99	1273	1.28	1355	1.57	1437	1.88	1515	2.20	<u>1589</u>	<u>2.56</u>
3954	1800	1110	0.67	1156	0.81	1198	0.96	1237	1.10	1319	1.40	1397	1.71	1476	2.03	1551	2.36	<u>1624</u>	<u>2.72</u>
4173	1900	1166	0.77	1210	0.92	1251	1.07	1289	1.23	1366	1.54	1441	1.87	1515	2.20	1588	2.54	<u>1659</u>	<u>2.88</u>
4393	2000	1223	0.88	1265	1.04	1305	1.20	1342	1.36	1413	1.69	1487	2.03	1557	2.37	1627	2.73	<u>1696</u>	<u>3.09</u>
4613	2100	1280	1.00	1321	1.17	1359	1.34	1395	1.50	1462	1.85	1533	2.20	1600	2.56	1668	2.93	1734	3.30

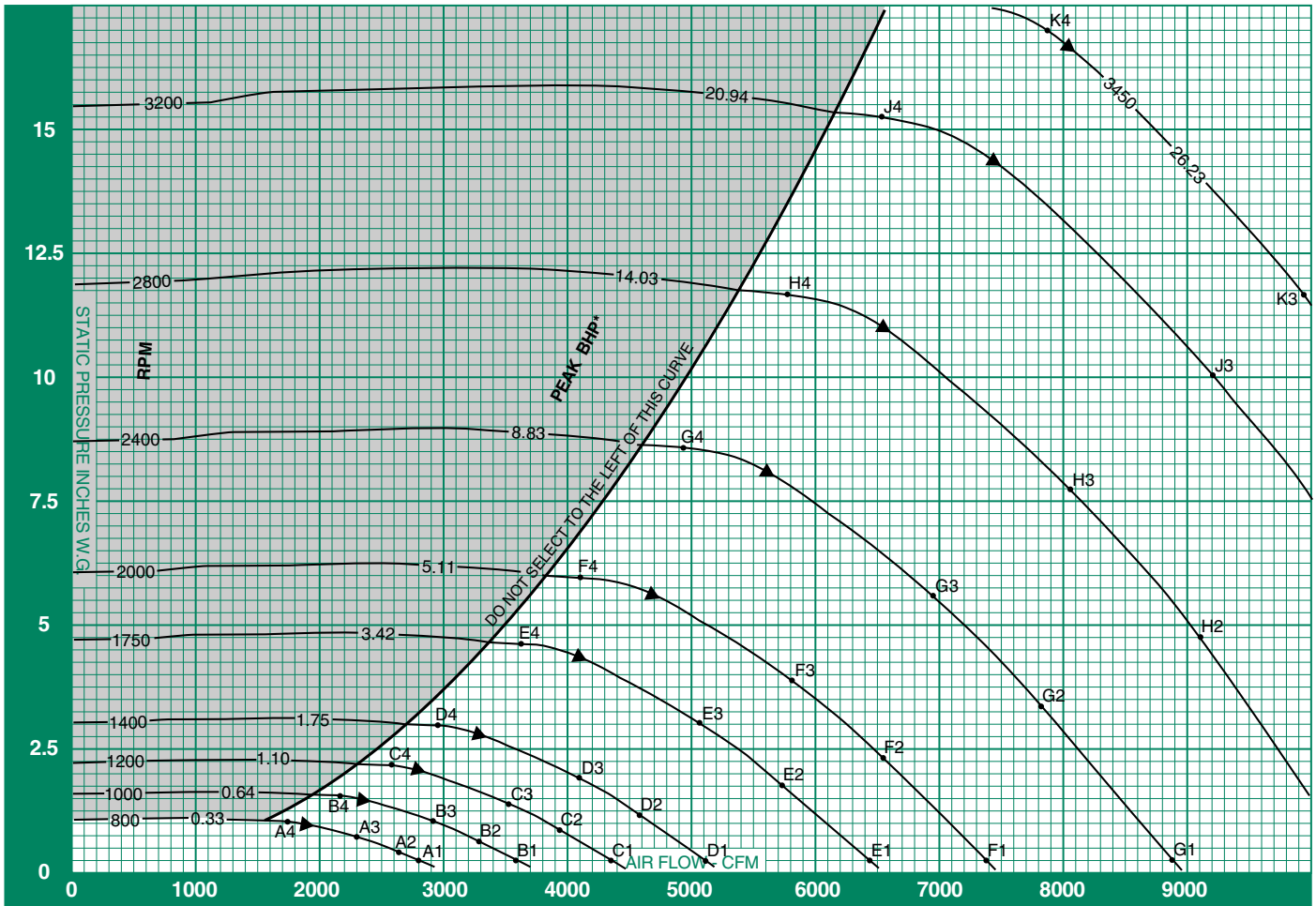
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3734	1700	1669	<u>2.92</u>	1748	3.29	1835	3.68	1919	4.07										
3954	1800	1693	3.10	1770	3.48	1844	3.87	1926	4.28	2006	4.69								
4173	1900	1727	3.27	1793	3.68	1866	4.08	1937	4.49	2013	4.92	2090	5.36	2164	5.80				
4393	2000	1762	3.46	1827	3.88	<u>1889</u>	<u>4.30</u>	<u>1959</u>	<u>4.73</u>	2026	5.16	2097	5.60	2171	6.06	2242	6.52		
4613	2100	1799	3.68	1861	4.08	1923	4.52	1982	4.97	<u>2048</u>	<u>5.41</u>	2113	5.87	2178	6.33	2249	6.81	2318	7.29
4833	2200	1836	3.92	1898	4.32	1957	4.75	2016	5.21	2072	5.68	<u>2135</u>	<u>6.14</u>	2197	6.62	2257	7.10	2325	7.59
5052	2300	1876	4.17	1935	4.58	1993	5.01	2050	5.46	2106	5.94	<u>2160</u>	<u>6.43</u>	<u>2219</u>	<u>6.92</u>	2279	7.41	2337	7.91
5272	2400	1915	4.44	1974	4.86	2031	5.30	2086	5.74	2141	6.22	2194	6.72	2246	7.23	<u>2302</u>	<u>7.74</u>	<u>2360</u>	<u>8.25</u>
5492	2500	1957	4.72	2013	5.16	2069	5.60	2123	6.05	<u>2176</u>	<u>6.51</u>	2229	7.02	2280	7.54	2330	8.07	<u>2382</u>	<u>8.60</u>
5711	2600	1999	5.01	2054	5.47	2108	5.92	2161	6.39	2213	6.86	2264	7.34	2315	7.86	2365	8.40	2413	8.95
5931	2700	2044	5.32	2096	5.79	2148	6.26	2200	6.74	2251	7.22	2302	7.71	2350	8.21	2399	8.75	2447	9.31
6151	2800	2090	5.64	2139	6.12	2190	6.61	2240	7.10	2290	7.60	2339	8.10	2388	8.61	2435	9.13	2482	9.68
6370	2900	2136	5.97	2184	6.47	2233	6.98	2282	7.48	2330	8.00	2378	8.51	2425	9.03	2472	9.56	2518	10.09
6590	3000	2182	6.33	2230	6.84	2276	7.36	2324	7.88	2371	8.41	2418	8.93	2464	9.47	2510	10.00	2555	10.55
6810	3100	2229	6.70	2276	7.22	2322	7.76	2366	8.29	2413	8.83	2458	9.38	2504	9.92	2549	10.47	2593	11.03
7029	3200	2277	7.09	2323	7.62	2368	8.17	2412	8.72	2456	9.28	2500	9.83	2544	10.40	2588	10.96	2632	11.53
7249	3300	2324	7.49	2370	8.04	2415	8.60	2458	9.17	2500	9.74	2543	10.31	2586	10.89	2628	11.47	2671	12.05
7469	3400	2372	7.92	2417	8.48	2461	9.05	2504	9.63	2546	10.21	2586	10.81	2628	11.40	2670	11.99	2711	12.59
7688	3500	2423	8.36	2465	8.94	2508	9.52	2551	10.11	2592	10.71	2632	11.31	2671	11.92	2712	12.53	2753	13.14
7908	3600	2475	8.82	2513	9.42	2556	10.02	2598	10.62	2638	11.23	2678	11.84	2716	12.47	2755	13.09	2795	13.72

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5492	2500	2493	9.67	2602	10.77	2721	11.91	2834	13.06										
5711	2600	<u>2515</u>	<u>10.06</u>	2620	11.17	2728	12.33	2841	13.52	2950	14.72								
5931	2700	2540	10.45	2642	11.60	2742	12.77	2848	13.97	2957	15.21	3061	16.46						
6151	2800	2574	10.85	<u>2664</u>	<u>12.04</u>	2764	13.23	2859	14.45	2963	15.71	3068	16.99	3169	18.28				
6370	2900	2608	11.26	2695	12.48	<u>2786</u>	<u>13.71</u>	2881	14.95	2973	16.21	3075	17.52	3176	18.85	3273	20.19		
6590	3000	2643	11.68	2730	12.92	2813	14.19	2903	15.47	2995	16.76	3083	18.06	3183	19.42	3280	20.80	3375	22.18
6810	3100	2679	12.16	2764	13.38	2847	14.68	2926	16.00	3017	17.32	3105	18.65	3190	20.00	3287	21.41	3382	22.83
7029	3200	2717	12.68	<u>2799</u>	<u>13.86</u>	2881	15.18	2961	16.52	<u>3039</u>	<u>17.89</u>	3127	19.25	3212	20.63	3294	22.02	3389	23.47
7249	3300	2755	13.22	2836	14.43	2916	15.69	2995	17.06	3071	18.45	3149	19.86	3234	21.27	3316	22.69	3396	24.13
7469	3400	2794	13.79	2874	15.01	2952	16.26	3030	17.62	3105	19.03	3178	20.47	<u>3256</u>	<u>21.92</u>	3338	23.37	3418	24.84
7688	3500	2833	14.38	2912	15.62	2989	16.89	3064	18.19	3140	19.63	3213	21.09	3283	22.58	3360	24.07	3440	25.56
7908	3600	2873	14.98	2951	16.25	3027	17.55	3102	18.86	3175	20.24	3247	21.73	3318	23.24	<u>3386</u>	<u>24.77</u>	<u>3462</u>	<u>26.30</u>
8128	3700	2915	15.61	2990	16.91	3065	18.22	3139	19.56	3211	20.92	3282	22.38	3352	23.92	3420	25.47	<u>3487</u>	<u>27.05</u>
8347	3800	2957	16.25	3030	17.58	3105	18.93	3177	20.28	3248	21.67	3317	23.07	3387	24.61	3455	26.19		
8567	3900	2999	16.91	3072	18.28	3144	19.65	3216	21.03	3286	22.44	3354	23.86	3422	25.32	3489	26.93		

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-200 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
800	0.25	A1	70	77	74	70	68	65	61	57	2000	0.25	F1	98	96	99	97	91	89	86	82
	0.38	A2	70	77	74	70	68	65	61	57		2.35	F2	99	96	100	97	91	89	86	82
	0.63	A3	70	77	74	70	68	65	61	56		3.92	F3	100	96	99	97	91	89	86	82
	0.95	A4	70	77	73	70	68	65	61	56		5.96	F4	100	96	99	96	91	89	86	82
1000	0.25	B1	77	82	80	76	74	71	67	63	2400	0.25	G1	101	102	103	102	96	93	91	87
	0.59	B2	77	82	80	76	74	71	67	63		3.39	G2	102	103	103	102	96	93	91	87
	0.98	B3	77	81	81	76	74	71	67	63		5.65	G3	103	103	102	102	97	93	91	87
	1.49	B4	76	81	80	76	73	71	67	62		8.58	G4	103	103	102	102	96	93	91	87
1200	0.25	C1	83	85	86	81	78	76	72	68	2800	0.25	H1	104	108	105	107	101	97	95	92
	0.85	C2	83	85	86	81	78	76	72	68		4.61	H2	105	108	105	107	101	97	95	91
	1.41	C3	84	85	86	82	78	76	72	68		7.69	H3	106	109	105	107	101	97	95	91
	2.15	C4	83	84	86	81	78	76	72	67		11.68	H4	106	109	105	107	100	97	95	91
1400	0.25	D1	88	88	91	86	82	80	77	72	3200	0.25	J1	106	112	108	111	105	100	99	95
	1.15	D2	89	87	91	86	82	80	76	72		6.02	J2	107	113	107	111	105	100	98	95
	1.92	D3	89	87	91	86	82	80	76	72		10.04	J3	108	114	107	111	105	100	99	95
	2.92	D4	89	87	90	85	81	80	76	72		15.26	J4	108	114	107	111	104	100	98	95
1750	0.25	E1	96	92	97	93	87	86	83	78	3450	0.25	K1	108	115	109	113	107	102	101	97
	1.80	E2	97	91	97	92	87	86	83	78		7.00	K2	109	116	109	113	107	102	100	97
	3.00	E3	98	91	97	93	87	86	83	78		11.67	K3	110	117	109	113	107	102	101	97
	4.56	E4	98	91	97	92	87	85	82	78		17.00	K4	110	117	108	113	107	102	100	97

BCA-222

SINGLE WIDTH

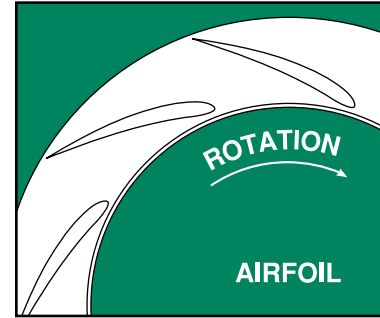
WHEEL DIAMETER: 22.25"
 WHEEL CIRCUMFERENCE: 5.83'
 OUTLET AREA: 2.723 SQ. FT.
 OUTLET SIZE: 17¹¹/₁₆" x 22³/₁₆"
 INLET DIAMETER: 23¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1922	2508	3124
251°F TO 400°F*	1826	2383	2968
401°F TO 700°F*	1576	2056	2562
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 5.83 x RPM MAX BHP = 1.080 x (RPM/1000)³



CFM	OV	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP						
1905	700									
2178	800									
2450	900									
2722	1000									
2994	1100									
3267	1200									
3539	1300									
3811	1400									
4083	1500			1402 2.81						
4356	1600			1419 2.97						
4628	1700			1447 3.19						
4900	1800		1409 3.00	1475 3.42						
5172	1900		1442 3.23	1507 3.67						
5445	2000	1411 3.00	1476 3.47	1540 3.93						
5717	2100	1451 3.24	1513 3.71	1573 4.20						

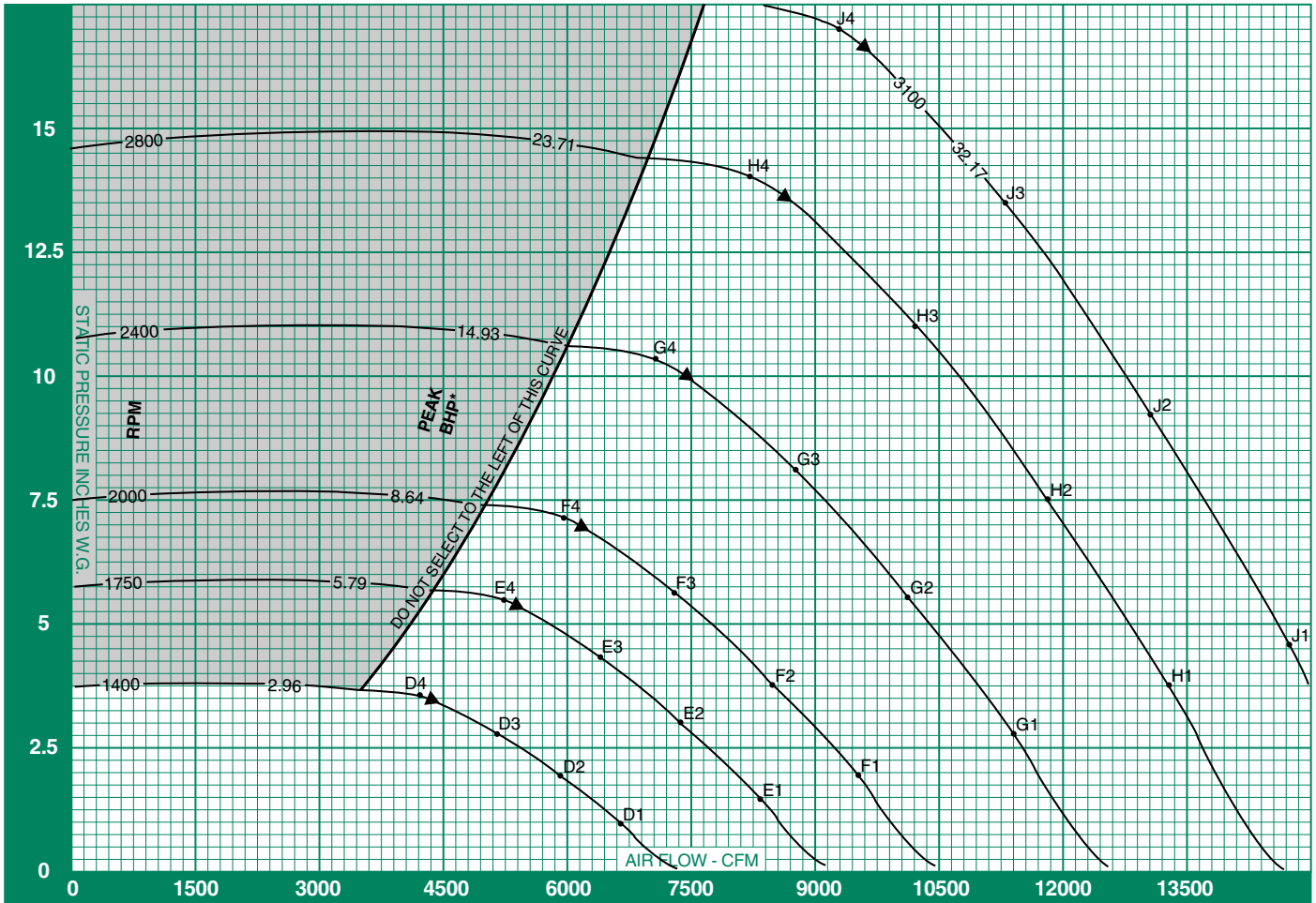
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
4628	1700	1515 3.61	1589 4.10	1662 4.62	1739 5.18	1812 5.77				
4900	1800	1541 3.85	1607 4.30	1677 4.82	1745 5.35	1817 5.95	1887 6.56	1955 7.19		
5172	1900	1570 4.11	1632 4.57	1694 5.05	1760 5.59	1824 6.14	1893 6.76	1960 7.40	2025 8.06	
5445	2000	1601 4.39	1661 4.86	1720 5.34	1778 5.84	1841 6.41	1902 6.99	1966 7.62	2031 8.29	2094 8.97
5717	2100	1634 4.68	1691 5.17	1749 5.67	1804 6.17	1859 6.68	1920 7.28	1978 7.89	2037 8.52	2100 9.22
5989	2200	1667 4.99	1724 5.50	1778 6.01	1833 6.53	1887 7.05	1938 7.59	1996 8.20	2053 8.84	2107 9.48
6262	2300	1701 5.31	1757 5.84	1811 6.37	1863 6.90	1915 7.45	1967 8.00	2016 8.55	2070 9.18	2125 9.83
6534	2400	1738 5.63	1790 6.19	1844 6.74	1895 7.30	1945 7.86	1995 8.42	2045 9.00	2092 9.58	2142 10.20
6806	2500	1774 5.97	1826 6.55	1877 7.14	1928 7.71	1977 8.28	2025 8.87	2073 9.46	2121 10.05	2167 10.66
7078	2600	1813 6.34	1863 6.93	1913 7.53	1961 8.14	2010 8.73	2057 9.33	2103 9.94	2150 10.55	2196 11.17
7351	2700	1852 6.72	1900 7.32	1949 7.94	1996 8.57	2043 9.20	2090 9.81	2136 10.44	2180 11.07	2224 11.70
7623	2800	1892 7.13	1940 7.74	1985 8.37	2032 9.01	2078 9.67	2123 10.32	2168 10.96	2212 11.60	2255 12.26
7895	2900	1933 7.55	1979 8.18	2024 8.82	2069 9.48	2114 10.15	2157 10.83	2201 11.50	2245 12.16	2287 12.83
8167	3000	1974 8.00	2019 8.65	2064 9.30	2107 9.97	2150 10.65	2193 11.35	2235 12.05	2278 12.74	2320 13.43
8440	3100	2016 8.46	2060 9.13	2104 9.80	2146 10.49	2187 11.18	2230 11.89	2271 12.61	2312 13.33	2353 14.05
8712	3200	2058 8.95	2101 9.63	2144 10.33	2186 11.03	2226 11.73	2267 12.45	2308 13.18	2348 13.93	2387 14.68
8984	3300	2100 9.46	2143 10.16	2185 10.87	2226 11.59	2266 12.31	2305 13.04	2344 13.78	2384 14.54	2423 15.31
9256	3400	2143 9.99	2185 10.71	2226 11.44	2266 12.18	2306 12.91	2345 13.66	2383 14.41	2421 15.18	2460 15.97
9529	3500	2187 10.55	2228 11.28	2268 12.03	2308 12.78	2346 13.54	2385 14.30	2422 15.07	2459 15.85	2496 16.65
9801	3600	2231 11.14	2271 11.88	2310 12.64	2349 13.41	2387 14.19	2425 14.97	2462 15.76	2498 16.55	2533 17.36

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
6806	2500	2264 11.98	2363 13.43	2465 14.99	2568 16.67	2666 18.38				
7078	2600	2284 12.42	2380 13.87	2475 15.38	2573 17.04	2672 18.78	2767 20.57			
7351	2700	2312 12.99	2398 14.33	2492 15.87	2582 17.44	2678 19.19	2773 21.00	2865 22.85	2954 24.74	
7623	2800	2341 13.58	2424 14.92	2509 16.37	2599 17.98	2686 19.61	2779 21.43	2871 23.31	2960 25.23	3046 27.19
7895	2900	2370 14.19	2453 15.57	2532 16.96	2617 18.52	2703 20.19	2786 21.88	2877 23.78	2966 25.72	3052 27.71
8167	3000	2402 14.82	2482 16.23	2561 17.66	2636 19.11	2720 20.77	2803 22.50	2883 24.25	2971 26.22	3057 28.23
8440	3100	2434 15.47	2511 16.92	2589 18.38	2665 19.87	2738 21.37	2821 23.13	2901 24.92	2978 26.73	3063 28.75
8712	3200	2467 16.15	2544 17.63	2618 19.13	2693 20.65	2766 22.18	2838 23.77	2918 25.59	2996 27.44	3071 29.31
8984	3300	2500 16.85	2576 18.36	2650 19.89	2722 21.45	2795 23.02	2865 24.61	2936 26.28	3013 28.16	3088 30.06
9256	3400	2534 17.56	2609 19.12	2682 20.69	2752 22.27	2823 23.88	2893 25.50	2961 27.14	3031 28.89	3105 30.83
9529	3500	2570 18.27	2642 19.90	2715 21.50	2785 23.12	2852 24.76	2922 26.42	2989 28.09	3054 29.78	3123 31.61
9801	3600	2606 19.01	2677 20.69	2748 22.35	2817 24.00	2885 25.67	2951 27.37	3018 29.07	3083 30.80	3146 32.54
10073	3700	2643 19.77	2713 21.48	2781 23.22	2850 24.91	2917 26.61	2982 28.34	3047 30.08	3112 31.84	
10345	3800	2680 20.56	2749 22.30	2816 24.08	2883 25.84	2950 27.58	3014 29.34	3077 31.11	3140 32.91	
10618	3900	2719 21.39	2786 23.15	2853 24.96	2917 26.79	2983 28.57	3047 30.36	3109 32.17		

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-222 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
1400	0.94	D1	85	86	92	84	79	76	70	63	2400	2.76	G1	94	100	101	103	95	90	86	80
	1.88	D2	84	86	89	82	78	74	68	62		5.53	G2	93	99	100	100	93	89	84	78
	2.76	D3	83	85	89	82	77	74	68	62		8.11	G3	92	98	99	100	93	88	84	78
	3.50	D4	81	84	89	80	76	73	67	61		10.29	G4	90	97	99	99	91	87	83	77
1750	1.47	E1	89	92	96	92	85	82	77	70	2800	3.76	H1	97	104	104	108	99	94	91	85
	2.94	E2	88	92	94	89	84	80	75	69		7.53	H2	96	103	103	105	97	93	89	83
	4.31	E3	87	91	93	89	83	80	75	69		11.03	H3	95	102	102	105	97	92	89	83
	5.47	E4	85	89	93	88	82	79	74	68		14.00	H4	93	100	102	105	95	91	88	82
2000	1.92	F1	91	95	98	96	89	85	81	74	3100	4.61	J1	99	106	106	110	103	97	94	88
	3.84	F2	90	95	96	94	88	84	79	73		9.23	J2	98	105	106	107	100	96	92	86
	5.63	F3	89	94	96	94	87	83	79	73		13.52	J3	97	104	105	107	100	95	92	86
	7.14	F4	87	92	95	93	86	82	78	72		17.00	J4	95	102	104	107	99	94	91	85

BCA-245

SINGLE WIDTH

WHEEL DIAMETER: 24.50"

WHEEL CIRCUMFERENCE: 6.41'

OUTLET AREA: 3.304 SQ. FT.

OUTLET SIZE: 19⁷/₁₆" x 24¹/₂"

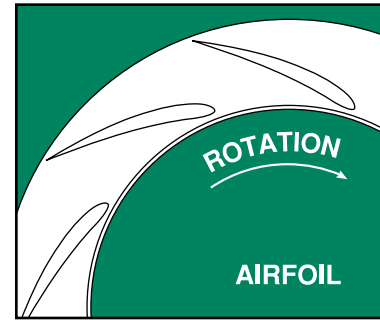
INLET DIAMETER: 26¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1745	2278	2837
251°F TO 400°F*	1658	2164	2695
401°F TO 700°F*	1431	1868	2326
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 6.41 x RPM MAX BHP = 1.748 x (RPM/1000)³



CFM	OV	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP						
2310	700									
2640	800									
2970	900									
3301	1000									
3631	1100									
3961	1200									
4291	1300									
4621	1400									
4951	1500									
5281	1600									
5611	1700			1314 3.86						
5941	1800			1340 4.15						
6272	1900		1309 3.92	1369 4.45						
6602	2000		1341 4.20	1398 4.76						
6932	2100	1318 3.93	1374 4.50	1429 5.10						

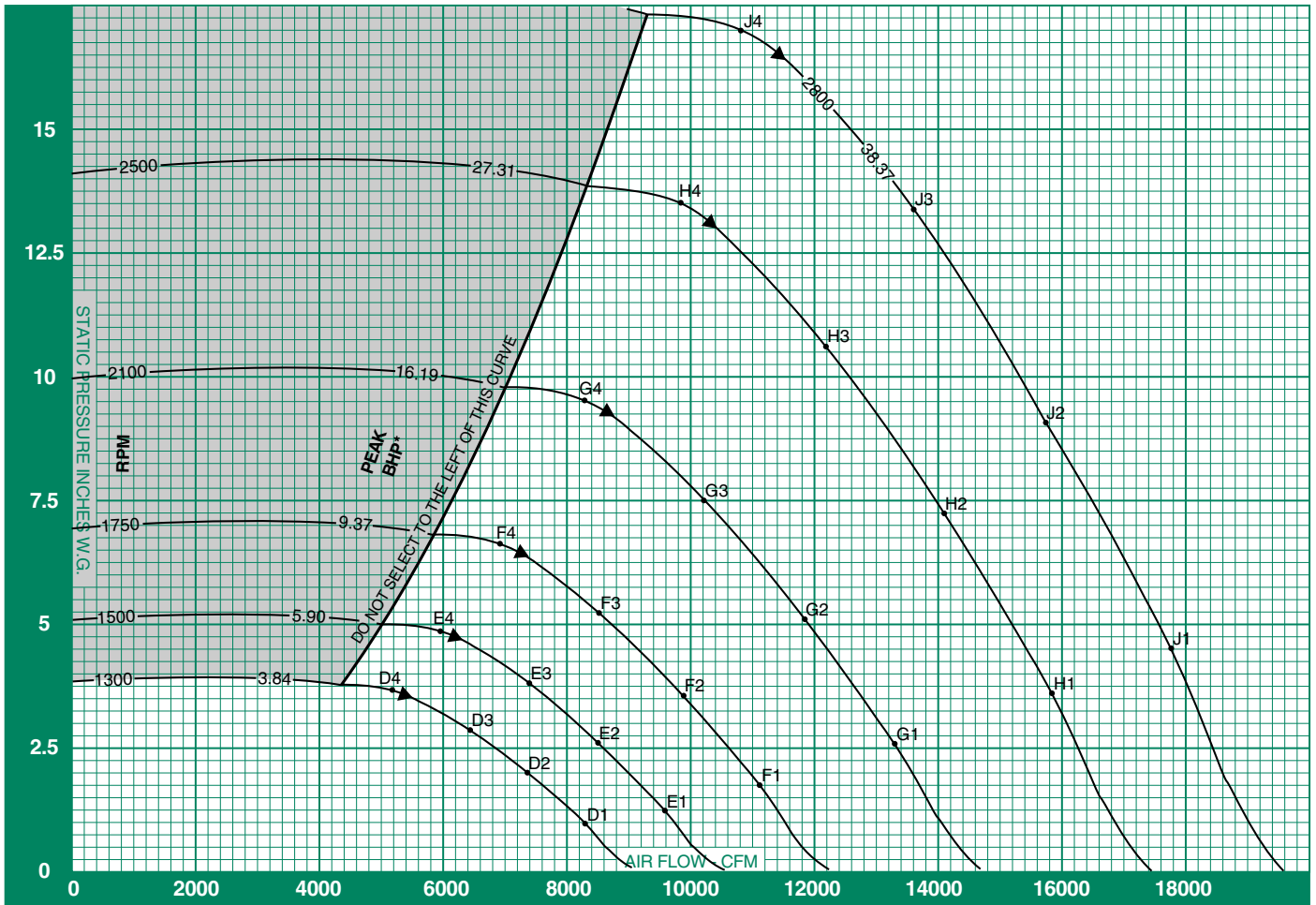
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
5611	1700	1376 4.38	1443 4.97	1510 5.60	1579 6.29	1645 6.99				
5941	1800	1400 4.67	<u>1459 5.22</u>	1523 5.84	1584 6.49	1651 7.22	1714 7.96	1775 8.72		
6272	1900	1426 4.99	1482 5.54	1538 6.12	1599 6.78	1657 7.45	1719 8.20	1780 8.98	1839 9.77	
6602	2000	1454 5.32	1508 5.89	1562 6.47	<u>1615 7.08</u>	1672 7.77	1728 8.48	1786 9.24	1845 10.05	1902 10.88
6932	2100	1484 5.68	1536 6.27	1588 6.87	1639 7.48	<u>1688 8.11</u>	1744 8.83	1797 9.56	1850 10.33	1907 11.17
7262	2200	1513 6.05	1565 6.66	1615 7.29	1665 7.92	1713 8.55	<u>1760 9.20</u>	1813 9.95	1864 10.71	1914 11.49
7592	2300	1545 6.43	1595 7.08	1644 7.72	1692 8.37	1739 9.03	1786 9.70	<u>1831 10.37</u>	<u>1880 11.13</u>	1930 11.92
7922	2400	1578 6.83	1626 7.51	1674 8.18	1721 8.85	1766 9.53	1812 10.21	1857 10.91	1900 11.61	<u>1945 12.37</u>
8252	2500	1611 7.24	1659 7.94	1704 8.65	1751 9.34	1796 10.04	1839 10.75	1883 11.47	1926 12.19	1968 12.92
8582	2600	1646 7.68	1692 8.40	1737 9.13	1781 9.87	1825 10.59	1868 11.31	1910 12.05	1952 12.79	1994 13.54
8912	2700	1682 8.15	1726 8.88	1770 9.63	1813 10.39	1855 11.15	1898 11.90	1939 12.66	1980 13.42	2020 14.19
9243	2800	1719 8.64	1761 9.39	1803 10.15	1846 10.93	1887 11.72	1928 12.51	1969 13.29	2009 14.07	2048 14.86
9573	2900	1755 9.16	1797 9.92	1838 10.70	1879 11.49	1920 12.31	1959 13.13	1999 13.94	2039 14.75	2077 15.56
9903	3000	1793 9.70	1834 10.48	1874 11.28	1913 12.09	1953 12.92	1992 13.76	2030 14.61	2069 15.45	2107 16.28
10233	3100	1831 10.26	1871 11.07	1910 11.89	1949 12.71	1986 13.55	2025 14.41	2063 15.28	2100 16.17	2137 17.03
10563	3200	1869 10.85	1908 11.68	1947 12.52	1985 13.37	2022 14.22	2058 15.09	2096 15.98	2132 16.89	2168 17.80
10893	3300	1908 11.47	1946 12.32	1984 13.18	2021 14.05	2058 14.93	2094 15.81	2129 16.71	2165 17.63	2201 18.56
11223	3400	1946 12.11	1985 12.98	2022 13.87	2058 14.76	2094 15.66	2129 16.56	2164 17.48	2199 18.41	2234 19.36
11553	3500	1986 12.79	2023 13.68	2060 14.58	2096 15.50	2131 16.42	2166 17.34	2200 18.28	2233 19.22	2267 20.18
11883	3600	2026 13.51	2062 14.41	2098 15.33	2134 16.26	2168 17.21	2202 18.16	2236 19.11	2269 20.07	2301 21.04

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
8252	2500	2056 14.53	2146 16.28	2238 18.17	2332 20.21	2422 22.29				
8582	2600	<u>2074 15.06</u>	2162 16.82	2247 18.65	2337 20.66	2427 22.77	2513 24.94			
8912	2700	2100 15.75	<u>2178 17.38</u>	2263 19.24	2345 21.15	2432 23.26	2519 25.46	2602 27.71	2683 30.00	
9243	2800	2126 16.47	2202 18.09	<u>2279 19.85</u>	2361 21.80	2439 23.78	2524 25.99	2607 28.27	2688 30.59	2766 32.96
9573	2900	2152 17.20	2227 18.87	2300 20.57	2376 22.46	2455 24.47	2530 26.53	2613 28.83	2693 31.19	2771 33.59
9903	3000	2181 17.97	2254 19.68	2325 21.41	<u>2394 23.17</u>	2471 25.19	2546 27.28	2619 29.41	2699 31.79	2777 34.23
10233	3100	2211 18.76	2281 20.51	2351 22.29	2420 24.09	<u>2486 25.91</u>	2562 28.05	2634 30.21	2705 32.41	2782 34.86
10563	3200	2240 19.58	2310 21.37	2378 23.19	2446 25.03	2512 26.89	<u>2578 28.83</u>	2650 31.03	2720 33.27	2789 35.54
10893	3300	2270 20.43	2340 22.26	2406 24.12	2472 26.00	2538 27.91	2602 29.83	<u>2666 31.87</u>	2736 34.14	2804 36.45
11223	3400	2301 21.29	2369 23.18	2436 25.08	2500 27.01	2564 28.95	2627 30.92	2689 32.91	<u>2752 35.03</u>	2820 37.38
11553	3500	2334 22.15	2400 24.13	2465 26.07	2529 28.04	2590 30.03	2653 32.03	2715 34.06	2774 36.11	<u>2836 38.32</u>
11883	3600	2367 23.04	2431 25.08	2495 27.09	2559 29.10	2620 31.13	2680 33.18	2741 35.25	2800 37.34	2857 39.45
12214	3700	2400 23.97	2464 26.05	2525 28.15	2588 30.20	2649 32.27	2708 34.36	2767 36.47	2826 38.60	
12544	3800	2434 24.93	2497 27.04	2558 29.19	2618 31.33	2679 33.44	2737 35.57	2794 37.72	2852 39.90	
12874	3900	2470 25.93	2530 28.07	2591 30.26	2649 32.48	2709 34.64	2767 36.82	2824 39.01		

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-245 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
1300	0.98	D1	87	88	93	85	80	75	71	64	2100	2.57	G1	96	100	102	101	94	90	85	79
	1.97	D2	85	87	90	83	78	75	69	63		5.13	G2	95	99	101	98	92	88	83	77
	2.88	D3	85	87	90	83	78	75	69	63		7.53	G3	94	98	100	98	92	88	83	77
	3.66	D4	83	86	89	81	77	74	68	62		9.55	G4	92	97	99	98	90	87	82	76
1500	1.31	E1	90	91	96	89	84	81	75	68	2500	3.64	H1	95	105	105	107	99	94	91	84
	2.62	E2	89	91	94	87	83	79	73	67		7.27	H2	95	104	104	104	97	93	89	83
	3.84	E3	88	90	93	87	82	79	73	67		10.66	H3	97	103	103	104	97	92	89	83
	4.87	E4	86	89	93	85	81	78	72	66		13.54	H4	95	101	103	104	95	91	88	82
1750	1.78	F1	92	95	99	95	88	85	80	73	2800	4.56	J1	101	107	107	111	102	97	94	88
	3.56	F2	91	95	97	92	87	83	78	72		9.13	J2	100	106	107	108	100	96	92	86
	5.23	F3	90	94	96	92	86	83	78	72		13.38	J3	99	105	106	108	100	95	92	86
	6.63	F4	88	93	96	91	85	82	77	71		16.98	J4	97	103	105	108	98	94	91	85

BCA-270

SINGLE WIDTH

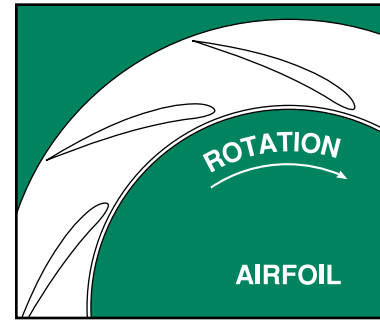
WHEEL DIAMETER: 27.00"
 WHEEL CIRCUMFERENCE: 7.10'
 OUTLET AREA: 4.016 SQ. FT.
 OUTLET SIZE: 21¹/₁₆" x 27"
 INLET DIAMETER: 28¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1584	2067	2574
251°F TO 400°F*	1505	1964	2445
401°F TO 700°F*	1299	1695	2111
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 7.10 x RPM MAX BHP = 2.842 x (RPM/1000)³



CFM	OV	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP						
2806	700												
3207	800												
3608	900												
4009	1000												
4410	1100												
4811	1200					1056	3.00						
5211	1300					1060	3.14	1140	3.79				
5612	1400				999	2.75	1071	3.31	1145	3.95			
6013	1500				1022	2.99	1086	3.52	1155	4.14			
6414	1600				1048	3.24	1110	3.80	1169	4.38			
6815	1700			1013	2.94	1075	3.52	1134	4.10	1192	4.69		
7216	1800			1044	3.19	1103	3.81	1161	4.42	1216	5.04		
7617	1900		1018	2.87	1076	3.47	1133	4.11	1188	4.76	1242	5.40	
8018	2000		1053	3.14	1109	3.77	1163	4.42	1217	5.10	1269	5.78	
8419	2100	1030	2.80	1088	3.43	1143	4.09	1196	4.77	1247	5.47	1296	6.19

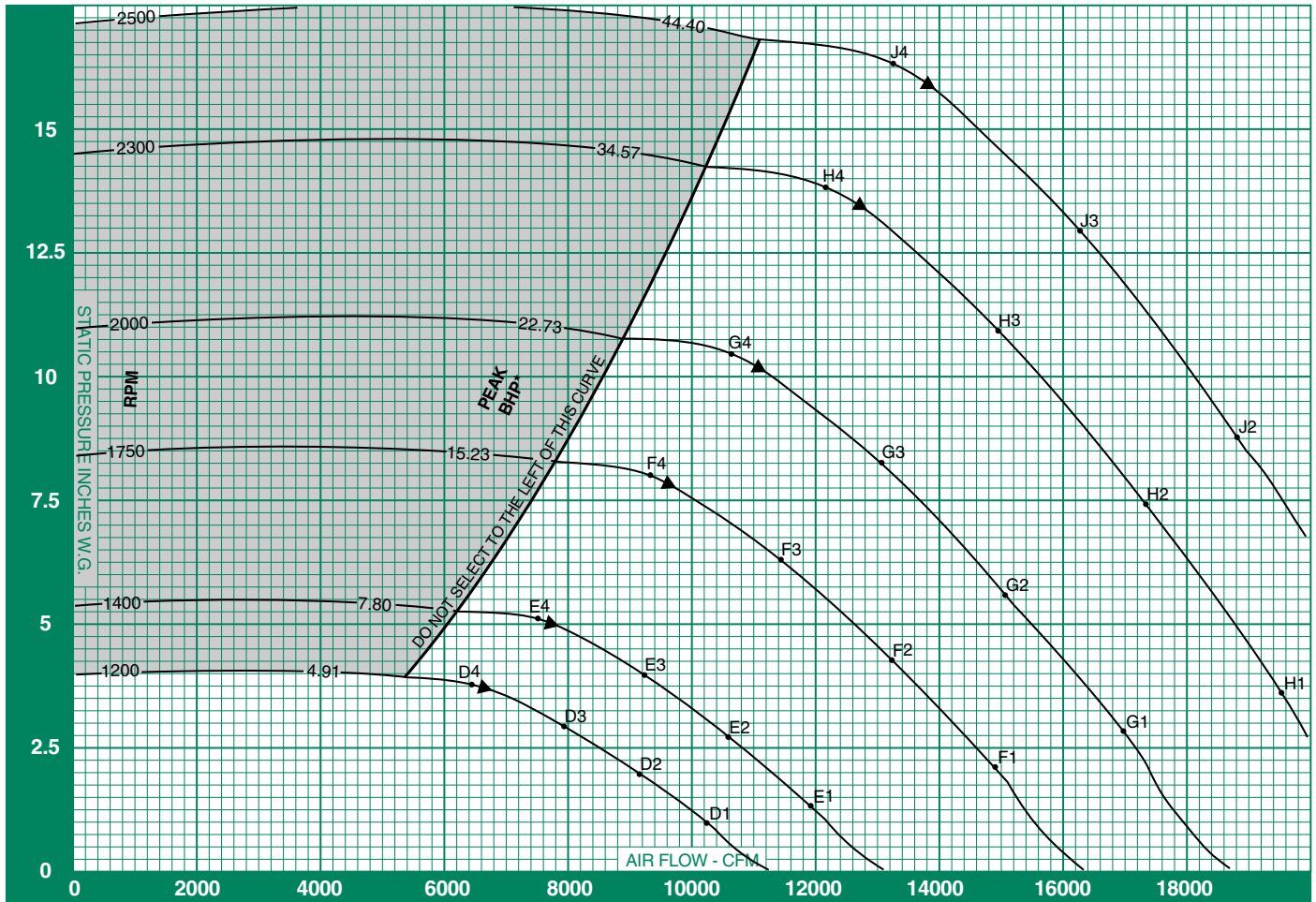
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP									
6815	1700	1249	5.32	1310	6.04	1370	6.80	1433	7.63	1493	8.49								
7216	1800	1270	5.67	1324	6.34	1382	7.10	1438	7.88	1498	8.76	1555	9.67						
7617	1900	1294	6.06	1345	6.73	1396	7.43	1451	8.23	1503	9.05	1560	9.96	1611	10.59				
8018	2000	1319	6.47	1369	7.16	1417	7.86	1465	8.60	1517	9.44	1568	10.29	1620	11.22	1674	12.21	1726	13.21
8419	2100	1346	6.90	1394	7.61	1441	8.34	1487	9.08	1532	9.84	1582	10.72	1630	11.62	1679	12.55	1730	13.57
8820	2200	1373	7.35	1420	8.09	1466	8.85	1511	9.61	1555	10.39	1597	11.17	1645	12.08	1691	13.01	1737	13.96
9221	2300	1402	7.81	1448	8.60	1492	9.38	1535	10.17	1578	10.97	1621	11.78	1661	12.59	1706	13.51	1751	14.48
9622	2400	1432	8.29	1475	9.12	1519	9.93	1562	10.74	1603	11.57	1644	12.40	1685	13.25	1724	14.10	1765	15.02
10022	2500	1462	8.80	1505	9.65	1546	10.51	1589	11.35	1629	12.20	1669	13.06	1709	13.93	1748	14.81	1786	15.69
10423	2600	1494	9.33	1535	10.20	1576	11.09	1616	11.98	1656	12.86	1695	13.74	1733	14.64	1771	15.54	1809	16.45
10824	2700	1527	9.90	1566	10.78	1606	11.69	1645	12.62	1684	13.54	1722	14.45	1760	15.37	1796	16.30	1833	17.24
11225	2800	1559	10.50	1598	11.40	1636	12.32	1675	13.27	1712	14.24	1749	15.19	1787	16.14	1823	17.09	1858	18.05
11626	2900	1593	11.12	1631	12.05	1668	12.99	1705	13.96	1742	14.95	1778	15.95	1814	16.93	1850	17.91	1885	18.90
12027	3000	1627	11.78	1664	12.73	1701	13.70	1736	14.68	1772	15.69	1808	16.71	1842	17.74	1877	18.76	1912	19.77
12428	3100	1661	12.46	1698	13.45	1733	14.44	1768	15.44	1802	16.46	1838	17.50	1872	18.56	1905	19.63	1939	20.69
12829	3200	1696	13.18	1732	14.19	1767	15.21	1801	16.24	1835	17.28	1868	18.33	1902	19.41	1935	20.51	1967	21.61
13230	3300	1731	13.93	1766	14.96	1800	16.01	1834	17.06	1867	18.13	1900	19.20	1932	20.30	1965	21.42	1997	22.55
13631	3400	1766	14.71	1801	15.77	1835	16.84	1867	17.93	1900	19.02	1932	20.12	1963	21.23	1995	22.36	2027	23.51
14032	3500	1802	15.54	1836	16.61	1869	17.71	1902	18.82	1933	19.94	1965	21.06	1996	22.20	2026	23.34	2057	24.51
14433	3600	1838	16.40	1871	17.50	1904	18.62	1936	19.75	1967	20.90	1998	22.05	2029	23.21	2059	24.38	2088	25.56

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP									
10022	2500	1866	17.64	1947	19.77	2031	22.07	2116	24.54	2197	27.07								
10423	2600	1882	18.30	1962	20.43	2039	22.65	2121	25.09	2202	27.66	2281	30.29						
10824	2700	1905	19.13	1976	21.10	2054	23.37	2128	25.69	2207	28.25	2285	30.92	2361	33.65	2434	36.44		
11225	2800	1929	20.00	1998	21.98	2068	24.11	2142	26.47	2213	28.88	2290	31.56	2366	34.33	2439	37.15	2510	40.03
11626	2900	1953	20.89	2021	22.92	2087	24.98	2156	27.27	2227	29.72	2296	32.22	2371	35.01	2444	37.88	2515	40.80
12027	3000	1979	21.82	2045	23.90	2110	26.01	2173	28.14	2242	30.59	2310	33.13	2376	35.72	2449	38.61	2520	41.57
12428	3100	2006	22.78	2070	24.91	2134	27.07	2196	29.26	2256	31.47	2324	34.06	2390	36.69	2454	39.36	2524	42.34
12829	3200	2033	23.78	2096	25.96	2158	28.17	2220	30.40	2279	32.66	2339	35.01	2405	37.69	2469	40.40	2530	43.16
13230	3300	2060	24.81	2123	27.04	2184	29.29	2243	31.58	2303	33.89	2361	36.23	2419	38.70	2483	41.47	2545	44.27
13631	3400	2088	25.85	2150	28.15	2210	30.46	2268	32.80	2327	35.16	2384	37.55	2440	39.96	2497	42.54	2559	45.39
14032	3500	2118	26.90	2177	29.31	2237	31.66	2295	34.05	2351	36.47	2408	38.90	2463	41.37	2517	43.86	2574	46.54
14433	3600	2148	27.99	2206	30.46	2264	32.91	2322	35.34	2377	37.81	2432	40.30	2487	42.81	2541	45.35	2593	47.91
14833	3700	2178	29.11	2236	31.63	2292	34.19	2349	36.67	2404	39.19	2457	41.73	2511	44.29	2564	46.88		
15234	3800	2208	30.27	2266	32.84	2321	35.45	2376	38.05	2431	40.61	2484	43.20	2536	45.82	2588	48.46		
15635	3900	2241	31.50	2296	34.09	2351	36.75	2404	39.44	2458	42.07	2511	44.71	2562	47.38				

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-270 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
1200	1.02	D1	88	90	93	85	81	77	71	64	2000	2.83	G1	98	102	104	102	95	91	87	80
	2.04	D2	87	90	90	84	80	75	69	63		5.65	G2	97	102	103	100	94	90	85	79
	2.98	D3	86	89	90	83	79	75	69	63		8.29	G3	96	101	102	100	93	89	85	79
	3.79	D4	85	88	90	82	78	74	68	62		10.52	G4	94	99	102	99	92	88	84	78
1400	1.39	E1	92	93	98	90	85	82	76	69	2300	3.74	H1	101	106	107	107	99	95	91	85
	2.77	E2	91	93	95	88	84	80	74	68		7.48	H2	100	105	106	104	98	94	89	83
	4.06	E3	90	92	95	88	83	80	74	68		10.96	H3	99	104	105	104	97	93	89	83
	5.16	E4	88	91	95	86	82	79	73	67		13.91	H4	97	102	104	104	96	92	88	82
1750	2.16	F1	96	99	102	98	91	88	83	76	2500	4.42	J1	102	108	108	110	102	97	93	87
	4.33	F2	95	98	100	95	90	86	81	75		8.84	J2	101	107	107	107	100	96	91	85
	6.35	F3	94	97	100	95	89	86	81	75		12.95	J3	100	106	107	107	100	95	91	85
	8.05	F4	92	96	99	94	88	85	80	74		16.44	J4	98	104	106	107	98	94	90	84

BCA-300

SINGLE WIDTH

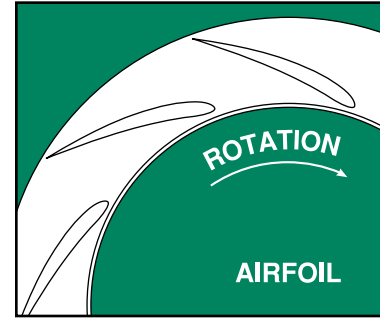
WHEEL DIAMETER: 30.00"
 WHEEL CIRCUMFERENCE: 7.85'
 OUTLET AREA: 4.957 SQ. FT.
 OUTLET SIZE: 23¹³/₁₆" x 30"
 INLET DIAMETER: 31¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1429	1864	2482
251°F TO 400°F*	1358	1771	2358
401°F TO 700°F*	1172	1528	2035
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 7.85 x RPM MAX BHP = 4.589 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
3470	700	352 0.19	420 0.34	485 0.50	555 0.69					
3965	800	382 0.24	444 0.40	<u>501 0.57</u>	559 0.77					
4461	900	414 0.30	472 0.47	524 0.66	<u>573 0.86</u>	681 1.31				
4957	1000	448 0.37	501 0.56	549 0.76	596 0.97	686 1.43	785 1.97			
5453	1100	482 0.46	530 0.65	577 0.87	620 1.09	<u>701 1.57</u>	788 2.11	877 2.72		
5948	1200	517 0.55	562 0.76	606 0.99	647 1.23	724 1.74	<u>797 2.28</u>	880 2.90	960 3.56	
6444	1300	553 0.65	595 0.89	635 1.12	675 1.38	748 1.92	816 2.49	887 3.10	964 3.78	1037 4.50
6940	1400	589 0.77	628 1.04	666 1.28	704 1.55	773 2.11	840 2.71	<u>901 3.33</u>	969 4.01	1041 4.75
7436	1500	625 0.91	662 1.20	699 1.46	733 1.73	801 2.32	863 2.95	923 3.60	<u>981 4.28</u>	1046 5.02
7931	1600	662 1.06	697 1.37	731 1.65	764 1.94	829 2.55	888 3.21	947 3.89	<u>1002 4.59</u>	<u>1057 5.33</u>
8427	1700	699 1.22	732 1.56	765 1.87	796 2.17	858 2.80	916 3.49	971 4.20	1025 4.93	1075 5.68
8923	1800	736 1.41	768 1.76	798 2.11	829 2.42	887 3.07	944 3.78	996 4.52	1049 5.28	1098 6.06
9418	1900	773 1.62	804 1.99	832 2.37	862 2.69	917 3.36	972 4.10	1024 4.87	1073 5.66	1122 6.47
9914	2000	811 1.85	840 2.23	868 2.63	896 2.99	949 3.69	1001 4.44	1052 5.24	1099 6.06	1146 6.90
10410	2100	848 2.10	877 2.50	903 2.92	929 3.32	981 4.04	1030 4.81	1080 5.63	1127 6.48	1170 7.35

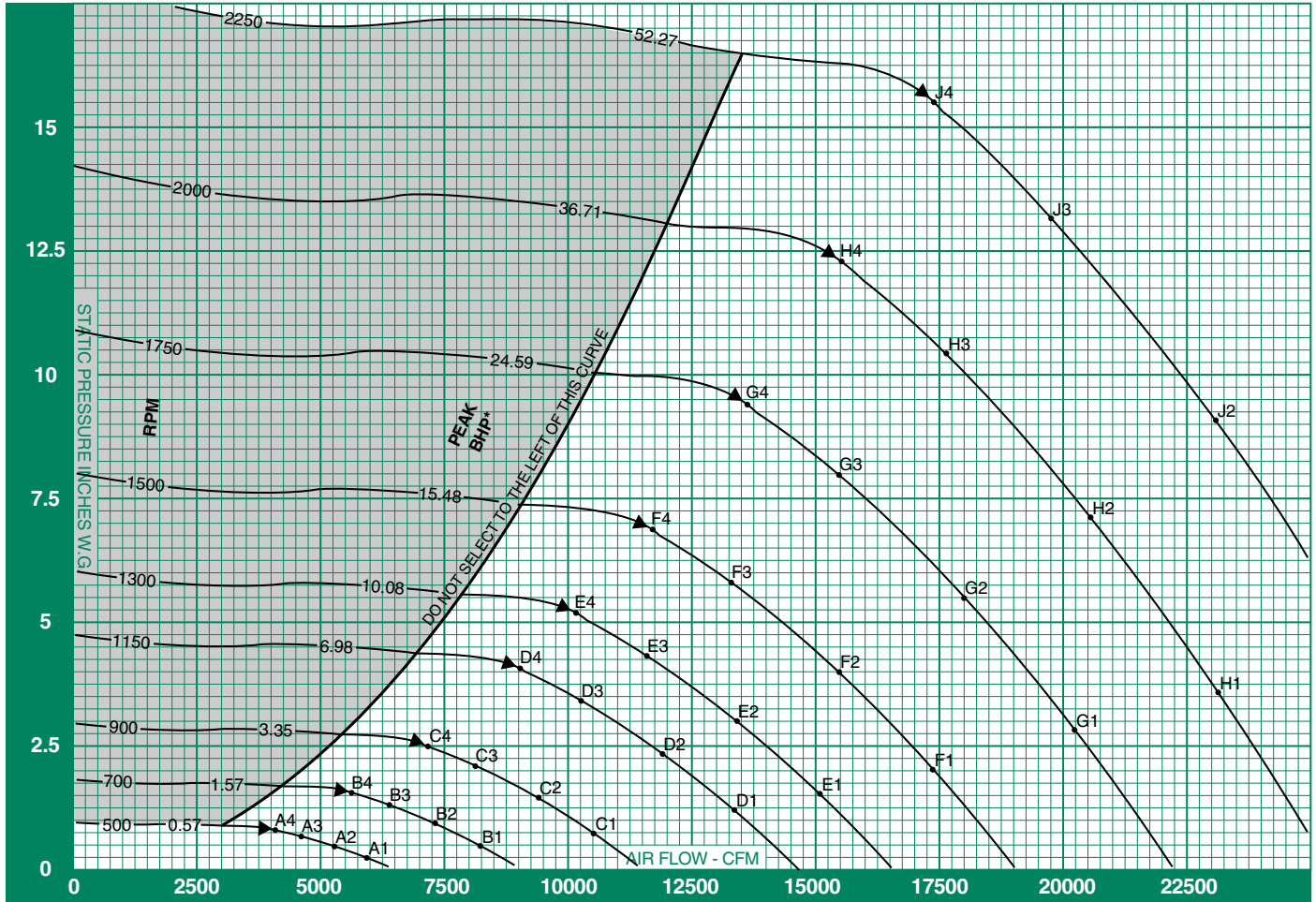
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
8427	1700	1128 6.47	1186 7.32	1245 8.21	1303 9.13	1358 10.09				
8923	1800	<u>1146 6.86</u>	<u>1196 7.70</u>	1250 8.61	1306 9.54	1362 10.51	1415 11.51	1466 12.53		
9418	1900	1169 7.30	1214 8.15	<u>1261 9.04</u>	1313 9.98	1365 10.96	1418 11.98	1469 13.03	1519 14.09	1566 15.18
9914	2000	1192 7.76	1236 8.63	1279 9.53	<u>1324 10.46</u>	1373 11.46	1421 12.47	1472 13.54	1522 14.62	1570 15.74
10410	2100	1216 8.24	1259 9.14	1301 10.07	<u>1342 11.01</u>	<u>1384 11.98</u>	1431 13.02	1477 14.08	1525 15.18	1573 16.31
10906	2200	1240 8.75	1283 9.68	1324 10.63	1364 11.60	1403 12.58	<u>1443 13.59</u>	1487 14.67	1531 15.78	1576 16.92
11401	2300	1266 9.28	1307 10.24	1348 11.22	1387 12.22	1425 13.23	<u>1462 14.26</u>	<u>1500 15.30</u>	1541 16.42	1584 17.57
11897	2400	1294 9.84	1332 10.83	1372 11.84	1411 12.86	1448 13.90	1485 14.96	1520 16.03	<u>1556 17.11</u>	1595 18.26
12393	2500	1322 10.42	1360 11.45	1396 12.49	1435 13.54	1472 14.61	1508 15.69	1543 16.79	<u>1577 17.91</u>	<u>1611 19.03</u>
12889	2600	1350 11.04	1388 12.09	1423 13.16	1459 14.25	1496 15.34	1532 16.46	1566 17.58	1600 18.73	1633 19.88
13384	2700	1379 11.69	1416 12.77	1451 13.87	1485 14.98	1520 16.11	1555 17.25	1590 18.41	1623 19.58	1656 20.76
13880	2800	1408 12.37	1444 13.48	1479 14.60	1513 15.75	1546 16.91	1580 18.08	1614 19.26	1647 20.46	1679 21.67
14376	2900	1437 13.09	1473 14.22	1508 15.38	1541 16.55	1574 17.73	1605 18.94	1638 20.15	1671 21.38	1703 22.62
14872	3000	1466 13.84	1502 15.00	1536 16.18	1569 17.38	1602 18.60	1633 19.83	1663 21.07	1695 22.33	1727 23.60
15367	3100	1496 14.62	1531 15.82	1565 17.03	1598 18.25	1630 19.50	1661 20.75	1691 22.03	1720 23.32	1751 24.62
15863	3200	1528 15.48	1560 16.67	1594 17.91	1627 19.16	1658 20.43	1689 21.72	1719 23.02	1748 24.34	1776 25.67
16359	3300	1560 16.38	1590 17.56	1623 18.82	1656 20.11	1687 21.41	1717 22.72	1747 24.05	1776 25.40	1804 26.76
16854	3400	1592 17.33	1622 18.53	1653 19.78	1685 21.10	1716 22.42	1746 23.77	1775 25.13	1804 26.50	1831 27.89
17350	3500	1625 18.32	1655 19.55	1683 20.80	1714 22.12	1745 23.48	1774 24.85	1803 26.24	1832 27.64	1859 29.06
17846	3600	1658 19.35	1687 20.61	1715 21.89	1744 23.19	1774 24.58	1803 25.98	1832 27.39	1860 28.82	1888 30.27

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
12393	2500	1686 21.43	1764 23.96	1846 26.61	1924 29.34	1999 32.15				
12889	2600	<u>1699 22.24</u>	1774 24.80	1849 27.45	1927 30.21	2003 33.06	2075 35.98	2145 38.95		
13384	2700	1719 23.17	1785 25.68	1858 28.36	1930 31.13	2006 34.01	2078 36.97	2148 40.00	2215 43.07	
13880	2800	1741 24.14	<u>1802 26.65</u>	1868 29.30	1938 32.11	2009 35.00	2082 37.98	2151 41.06	2219 44.19	2284 47.37
14376	2900	1765 25.14	1824 27.71	<u>1883 30.32</u>	1948 33.13	2016 36.05	2084 39.05	2155 42.15	2222 45.32	2288 48.57
14872	3000	1788 26.18	1847 28.81	1904 31.48	<u>1962 34.22</u>	2026 37.15	2091 40.18	2158 43.29	2225 46.49	2291 49.77
15367	3100	1812 27.25	1870 29.94	1926 32.67	1981 35.44	2039 38.32	2101 41.36	2164 44.49	2228 47.71	2294 51.01
15863	3200	1836 28.37	1894 31.11	1950 33.89	2003 36.73	<u>2056 39.60</u>	2113 42.60	2174 45.76	2235 48.99	2297 52.31
16359	3300	1860 29.52	1918 32.31	1973 35.16	2026 38.05	2078 40.99	<u>2130 43.95</u>	2186 47.08	2245 50.35	2304 53.68
16854	3400	<u>1885 30.70</u>	1942 33.56	1997 36.46	2050 39.41	2101 42.40	2151 45.43	<u>2201 48.49</u>	2256 51.74	2314 55.12
17350	3500	1913 31.93	1966 34.85	2021 37.81	2073 40.81	2124 43.86	2174 46.95	2222 50.08	<u>2271 53.23</u>	2325 56.59
17846	3600	1941 33.19	1992 36.18	2045 39.20	2097 42.26	2148 45.36	2197 48.51	2245 51.69	2292 54.91	<u>2339 58.17</u>
18342	3700	1969 34.51	2019 37.54	2069 40.63	2121 43.75	2172 46.91	2220 50.11	2268 53.35	2314 56.63	2360 59.95
18837	3800	1997 35.86	2047 38.95	2096 42.10	2145 45.28	2195 48.50	2244 51.76	2291 55.06	2337 58.39	2382 61.77
19333	3900	2025 37.26	2075 40.41	2123 43.61	2170 46.86	2219 50.13	2268 53.45	2315 56.80	2361 60.20	2405 63.63

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-300 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
500	0.25	A1	67	64	63	61	57	53	50	47	1300	4.41	E3	90	85	86	80	79	76	73	69	
	0.45	A2	66	62	60	58	54	51	48	44		5.19	E4	88	85	86	80	79	77	72	68	
	0.65	A3	62	60	59	57	54	51	47	43		1500	2.02	F1	97	90	96	88	87	83	79	76
	0.77	A4	62	59	59	58	54	50	46	41			4.04	F2	97	89	95	85	83	80	77	73
700	0.44	B1	71	77	71	70	66	62	59	55	1750	5.88	F3	96	87	91	84	83	80	77	73	
	0.88	B2	70	76	68	67	63	60	57	53		6.91	F4	95	87	91	83	83	81	76	72	
	1.28	B3	67	72	67	66	63	60	56	52		2000	2.75	G1	104	91	101	91	88	83	80	
	1.50	B4	68	72	66	66	64	59	55	51			5.50	G2	105	91	100	89	87	85	81	78
900	0.73	C1	74	84	77	76	73	69	65	62	2250	8.00	G3	104	89	95	87	87	84	81	77	
	1.45	C2	73	84	75	73	70	67	63	60		9.09	J2	109	102	103	99	93	91	88	84	
	2.12	C3	72	79	73	72	70	66	63	59		1500	3.59	H1	106	97	102	96	94	91	87	83
	2.49	C4	72	79	72	72	70	66	62	58			7.18	H2	107	97	102	94	91	88	84	81
1150	1.19	D1	85	87	86	82	80	76	72	69	2000	10.45	H3	106	96	97	92	90	88	84	81	
	2.38	D2	85	86	84	79	77	73	70	66		12.28	H4	104	96	98	92	89	88	84	80	
	3.45	D3	84	83	81	78	76	73	69	66		1300	4.55	J1	108	103	103	101	96	94	90	86
	4.06	D4	83	83	81	77	76	73	69	65			9.09	J2	109	102	103	99	93	91	88	84
1300	1.52	E1	90	88	91	85	83	79	75	72	1500	13.22	J3	108	101	99	96	92	91	87	84	
	3.04	E2	91	87	89	82	80	76	73	70		15.54	J4	106	101	100	96	92	91	88	83	

BCA-330

SINGLE WIDTH

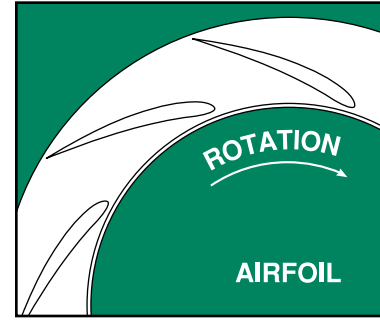
WHEEL DIAMETER: 33.00"
 WHEEL CIRCUMFERENCE: 8.64'
 OUTLET AREA: 6.009 SQ. FT.
 OUTLET SIZE: 26³/₁₆" x 33¹/₁₆"
 INLET DIAMETER: 34¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1299	1695	2256
251°F TO 400°F*	1234	1610	2143
401°F TO 700°F*	1065	1390	1850
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 8.64 x RPM MAX BHP = 7.391 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4198	700	320	0.23	382	0.41	441	0.61	504	0.84										
4798	800	347	0.29	404	0.49	455	0.69	508	0.93										
5398	900	377	0.37	429	0.57	477	0.80	<u>521</u>	<u>1.04</u>	619	1.59								
5998	1000	407	0.45	455	0.67	499	0.92	542	1.17	624	1.73	713	2.38						
6598	1100	438	0.56	482	0.79	525	1.05	564	1.32	<u>638</u>	<u>1.90</u>	716	2.56	797	3.29				
7198	1200	470	0.66	511	0.92	551	1.20	588	1.49	658	2.10	<u>725</u>	<u>2.76</u>	800	3.51	873	4.31		
7797	1300	503	0.79	541	1.08	577	1.36	614	1.67	680	2.32	742	3.01	806	3.75	876	4.57	943	5.44
8397	1400	535	0.93	571	1.25	606	1.55	640	1.87	703	2.56	763	3.28	<u>819</u>	<u>4.03</u>	<u>881</u>	<u>4.86</u>	<u>946</u>	<u>5.75</u>
8997	1500	568	1.10	602	1.45	635	1.76	666	2.09	728	2.81	785	3.57	839	4.36	<u>892</u>	<u>5.18</u>	<u>951</u>	<u>6.08</u>
9597	1600	602	1.28	633	1.66	665	2.00	694	2.34	754	3.09	807	3.88	861	4.70	<u>910</u>	<u>5.56</u>	<u>961</u>	<u>6.44</u>
10197	1700	635	1.48	666	1.89	695	2.26	724	2.62	780	3.39	832	4.22	883	5.08	932	5.96	978	6.87
10797	1800	669	1.71	698	2.13	726	2.55	754	2.93	806	3.72	858	4.58	905	5.47	953	6.39	999	7.34
11396	1900	703	1.96	731	2.41	757	2.87	784	3.26	833	4.07	884	4.96	931	5.89	975	6.85	1020	7.83
11996	2000	737	2.24	764	2.70	789	3.19	814	3.62	862	4.47	910	5.38	956	6.34	999	7.33	1042	8.35
12596	2100	771	2.54	797	3.03	821	3.53	845	4.02	892	4.89	937	5.82	982	6.82	1024	7.84	1064	8.90

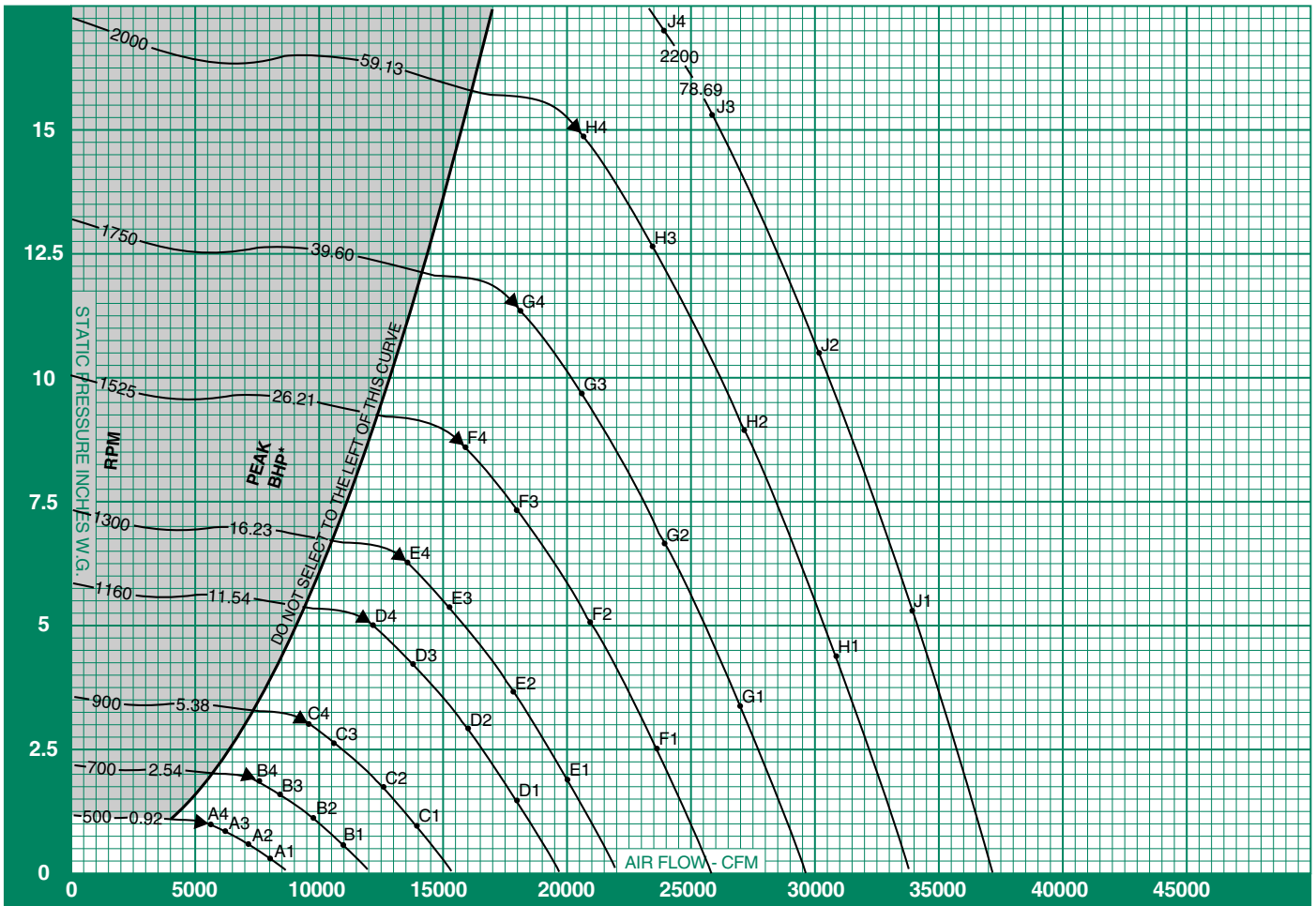
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10197	1700	1026	7.83	1078	8.86	1132	9.93	1184	11.05	1235	12.21								
10797	1800	<u>1042</u>	<u>8.31</u>	1087	9.32	1137	10.41	1187	11.55	1238	12.72	1286	13.93	1333	15.16				
11396	1900	1062	8.83	<u>1103</u>	<u>9.86</u>	1146	10.93	1193	12.08	1241	13.27	1289	14.49	1336	15.76	1380	17.05	1424	18.36
11996	2000	1084	9.39	1124	10.45	<u>1162</u>	<u>11.53</u>	<u>1203</u>	<u>12.66</u>	1248	13.86	1292	15.09	1339	16.38	1384	17.69	1427	19.04
12596	2100	1105	9.97	1145	11.06	1183	12.18	1220	13.32	<u>1258</u>	<u>14.50</u>	1301	15.75	1342	17.04	1386	18.37	1430	19.73
13196	2200	1127	10.58	1166	11.71	1204	12.86	1240	14.03	1275	15.22	<u>1312</u>	<u>16.45</u>	1351	17.75	1392	19.09	1433	20.47
13796	2300	1151	11.23	1188	12.39	1225	13.58	1261	14.78	1295	16.01	<u>1329</u>	<u>17.25</u>	<u>1363</u>	<u>18.52</u>	1401	19.87	1440	21.26
14396	2400	1176	11.90	1211	13.10	1247	14.33	1283	15.57	1317	16.83	1350	18.10	1382	19.40	<u>1414</u>	<u>20.71</u>	1450	22.10
14995	2500	1202	12.61	1236	13.85	1269	15.11	1304	16.38	1338	17.68	1371	18.99	1403	20.32	1433	21.67	<u>1465</u>	<u>23.03</u>
15595	2600	1228	13.36	1261	14.63	1294	15.92	1326	17.24	1360	18.57	1392	19.91	1424	21.28	1454	22.66	1484	24.06
16195	2700	1253	14.15	1287	15.45	1319	16.78	1350	18.13	1382	19.49	1414	20.87	1445	22.27	1476	23.69	1505	25.12
16795	2800	1280	14.97	1313	16.31	1345	17.67	1376	19.05	1405	20.46	1436	21.88	1467	23.31	1497	24.76	1527	26.22
17395	2900	1306	15.84	1339	17.21	1371	18.60	1401	20.02	1431	21.46	1459	22.91	1489	24.38	1519	25.87	1548	27.37
17995	3000	1333	16.74	1365	18.15	1397	19.58	1427	21.03	1456	22.50	1484	23.99	1512	25.50	1541	27.02	1570	28.56
18595	3100	1360	17.69	1392	19.14	1423	20.60	1453	22.09	1482	23.59	1510	25.11	1537	26.66	1564	28.22	1592	29.79
19194	3200	1389	18.73	1419	20.17	1449	21.67	1479	23.19	1507	24.72	1535	26.28	1562	27.86	1589	29.45	1615	31.06
19794	3300	1418	19.83	1446	21.25	1476	22.78	1505	24.33	1533	25.90	1561	27.50	1588	29.11	1614	30.73	1640	32.38
20394	3400	1448	20.97	1475	22.43	1503	23.94	1532	25.53	1560	27.13	1587	28.76	1614	30.40	1640	32.06	1665	33.74
20994	3500	1477	22.16	1504	23.65	1530	25.16	1558	26.77	1586	28.41	1613	30.07	1640	31.75	1665	33.44	1690	35.16
21594	3600	1507	23.41	1534	24.94	1559	26.48	1585	28.06	1613	29.74	1639	31.43	1666	33.15	1691	34.88	1716	36.62

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
14995	2500	1533	25.93	1604	28.99	1678	32.19	1749	35.50	1817	38.90								
15595	2600	<u>1545</u>	<u>26.92</u>	1613	30.01	1681	33.21	1752	36.56	1821	40.01	1886	43.54	1950	47.13				
16195	2700	1563	28.03	1623	31.07	1689	34.32	1755	37.67	1824	41.15	1889	44.73	1953	48.40	2014	52.12		
16795	2800	1583	29.21	<u>1638</u>	<u>32.24</u>	<u>1698</u>	<u>35.46</u>	1762	38.85	1826	42.35	1892	45.96	1956	49.68	2017	53.47	2076	57.32
17395	2900	1604	30.42	1658	33.53	<u>1711</u>	<u>36.69</u>	1771	40.09	1833	43.62	1895	47.25	1959	51.00	2020	54.84	2080	58.77
17995	3000	1626	31.68	1679	34.86	1730	38.09	<u>1784</u>	<u>41.41</u>	1842	44.96	1901	48.62	1961	52.38	2023	56.25	2083	60.22
18595	3100	1647	32.98	1700	36.22	1751	39.53	1801	42.89	1853	46.36	1910	50.05	1967	53.84	2026	57.73	2086	61.73
19194	3200	1669	34.32	1722	37.64	1772	41.01	1821	44.44	<u>1870</u>	<u>47.91</u>	1921	51.55	1977	55.37	2032	59.28	2088	63.30
19794	3300	1691	35.71	1743	39.10	1794	42.54	1842	46.04	1889	49.59	<u>1936</u>	<u>53.18</u>	1987	56.96	2041	60.92	2094	64.95
20394	3400	1714	37.15	1765	40.61	1815	44.12	1863	47.69	1910	51.31	1955	54.98	<u>2001</u>	<u>58.68</u>	2051	62.61	2104	66.69
20994	3500	1739	38.63	1787	42.17	1837	45.75	1885	49.38	1931	53.07	1976	56.81	2020	60.59	<u>2065</u>	<u>64.41</u>	2114	68.48
21594	3600	1764	40.17	1811	43.77	1859	47.43	1906	51.13	1953	54.89	1997	58.69	2041	62.55	2084	66.45	<u>2127</u>	<u>70.38</u>
22194	3700	1790	41.75	1836	45.43	1881	49.16	1928	52.93	1974	56.76	2019	60.63	2062	64.56	2104	68.53	2146	72.54
22793	3800	1815	43.39	1861	47.13	1905	50.94	1950	54.79	1996	58.68	2040	62.62	2083	66.62	2125	70.66	2165	74.74
23393	3900	1841	45.09	1887	48.90	1930	52.77	1973	56.70	2018	60.66	2062	64.67	2105	68.73	2146	72.84	2187	77.00

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-330 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
500	0.27	A1	70	67	66	64	60	56	53	49	1300	5.34	E3	93	88	89	83	82	79	76	72	
	0.54	A2	70	65	63	61	57	54	51	47		6.28	E4	92	88	89	83	82	79	75	71	
	0.79	A3	66	63	62	60	57	53	50	46		1525	2.53	F1	101	93	100	91	90	87	82	79
	0.93	A4	66	63	62	61	57	53	48	44			5.05	F2	102	92	99	89	87	84	80	77
700	0.53	B1	74	80	74	73	69	65	62	58	1750	7.35	F3	101	90	94	87	86	83	80	76	
	1.06	B2	73	79	71	70	66	63	59	56		8.64	F4	99	91	95	87	86	84	80	75	
	1.55	B3	71	75	70	69	66	63	59	55		2000	3.33	G1	107	95	104	94	93	91	86	83
	1.82	B4	71	75	69	69	66	62	58	53			6.65	G2	108	94	103	92	90	87	84	80
900	0.88	C1	77	87	80	79	76	72	68	65	2200	9.68	G3	107	93	98	90	89	87	84	80	
	1.76	C2	77	87	78	76	73	69	66	63		11.37	G4	105	93	99	90	89	88	84	79	
	2.56	C3	75	82	76	75	73	69	66	62		1300	4.35	H1	109	101	105	99	97	94	90	86
	3.01	C4	76	83	75	75	73	69	65	61			8.69	H2	111	100	105	97	94	91	87	84
1160	1.46	D1	89	90	89	85	83	79	75	72	2000	12.64	H3	110	99	100	95	92	90	87	84	
	2.92	D2	89	90	88	82	80	76	73	70		14.86	H4	107	99	101	95	92	91	87	83	
	4.25	D3	88	86	85	81	79	76	72	69		1300	5.26	J1	111	105	106	103	99	97	92	89
	5.00	D4	87	87	85	81	79	76	72	68			10.52	J2	112	105	106	101	96	93	90	86
1300	1.84	E1	94	91	94	88	86	82	78	75	2200	15.30	J3	111	104	102	98	95	93	90	86	
	3.67	E2	94	91	92	85	83	79	76	73		17.00	J4	109	103	102	98	94	93	90	86	

BCA-365

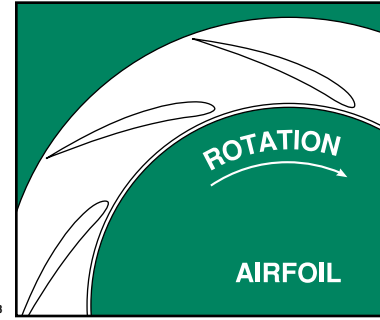
SINGLE WIDTH

WHEEL DIAMETER: 36.50"
 WHEEL CIRCUMFERENCE: 9.56'
 OUTLET AREA: 7.347 SQ. FT.
 OUTLET SIZE: 29" x 36½"
 INLET DIAMETER: 37½" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1175	1532	2040
251°F TO 400°F*	1116	1455	1938
401°F TO 700°F*	964	1256	1673
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 9.56 x RPM MAX BHP = 12.235 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5136	700	289	0.29	345	0.50	398	0.74	456	1.02										
5870	800	314	0.36	365	0.59	412	0.85	459	1.13										
6604	900	341	0.45	388	0.70	431	0.98	471	1.27	560	1.94								
7338	1000	368	0.55	411	0.82	452	1.12	490	1.44	564	2.12	645	2.91						
8072	1100	396	0.68	436	0.96	475	1.28	510	1.62	576	2.33	648	3.13	721	4.02				
8805	1200	425	0.81	462	1.13	498	1.46	532	1.82	595	2.57	655	3.38	723	4.29	789	5.27		
9539	1300	454	0.97	489	1.32	522	1.67	555	2.04	615	2.84	671	3.68	729	4.59	792	5.59	853	6.66
10273	1400	484	1.14	517	1.53	548	1.90	579	2.29	635	3.13	690	4.01	741	4.93	797	5.94	855	7.03
11007	1500	514	1.34	544	1.77	574	2.16	603	2.56	658	3.44	710	4.37	759	5.33	806	6.33	859	7.43
11741	1600	544	1.56	573	2.03	601	2.45	628	2.86	681	3.78	730	4.75	778	5.76	823	6.80	868	7.88
12475	1700	574	1.81	602	2.31	629	2.77	654	3.21	705	4.15	753	5.16	798	6.21	842	7.29	884	8.41
13208	1800	605	2.09	631	2.61	656	3.12	681	3.58	729	4.55	776	5.60	819	6.69	862	7.82	903	8.98
13942	1900	636	2.40	661	2.94	684	3.51	709	3.99	753	4.98	799	6.07	841	7.21	882	8.38	922	9.58
14676	2000	666	2.73	691	3.31	713	3.90	736	4.43	780	5.46	823	6.58	864	7.76	903	8.97	942	10.21
15410	2100	697	3.11	720	3.70	742	4.32	764	4.91	806	5.99	847	7.12	888	8.34	926	9.59	962	10.88

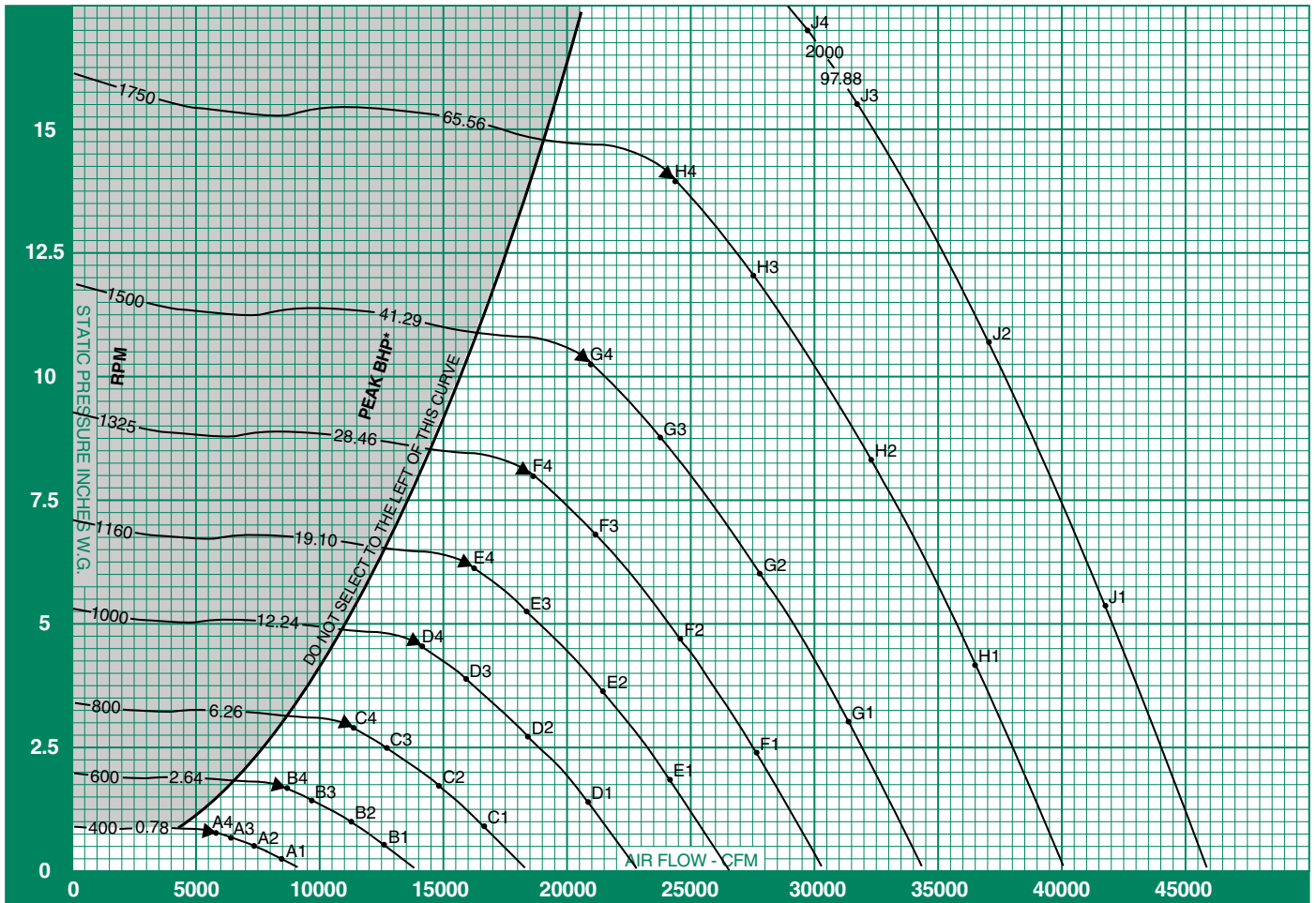
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12475	1700	927	9.57	974	10.83	1023	12.15	1071	13.52	1116	14.93								
13208	1800	942	10.16	983	11.40	1028	12.74	1073	14.12	1119	15.56	1163	17.04	1205	18.55				
13942	1900	961	10.80	997	12.06	1037	13.38	1079	14.78	1122	16.23	1166	17.73	1208	19.28	1248	20.86	1287	22.47
14676	2000	980	11.48	1016	12.78	1051	14.10	1088	15.49	1128	16.96	1168	18.46	1210	20.04	1251	21.65	1290	23.30
15410	2100	999	12.20	1035	13.53	1069	14.90	1103	16.29	1138	17.73	1176	19.27	1214	20.84	1253	22.47	1293	24.14
16144	2200	1019	12.95	1055	14.33	1089	15.74	1121	17.17	1153	18.62	1186	20.12	1222	21.72	1258	23.36	1295	25.04
16877	2300	1041	13.73	1074	15.16	1108	16.61	1140	18.09	1171	19.58	1202	21.10	1233	22.65	1267	24.30	1302	26.01
17611	2400	1063	14.56	1095	16.03	1128	17.53	1160	19.04	1190	20.58	1220	22.15	1249	23.73	1279	25.33	1311	27.03
18345	2500	1087	15.43	1118	16.94	1147	18.48	1179	20.04	1210	21.63	1239	23.23	1268	24.86	1296	26.51	1324	28.17
19079	2600	1110	16.34	1140	17.90	1170	19.48	1199	21.09	1229	22.71	1259	24.36	1287	26.03	1315	27.72	1342	29.43
19813	2700	1133	17.30	1164	18.90	1193	20.52	1221	22.17	1249	23.85	1278	25.54	1307	27.25	1334	28.98	1361	30.73
20547	2800	1157	18.31	1187	19.95	1216	21.62	1244	23.31	1271	25.02	1298	26.76	1326	28.51	1354	30.29	1380	32.08
21280	2900	1181	19.37	1211	21.05	1239	22.76	1267	24.49	1293	26.25	1319	28.03	1346	29.83	1373	31.65	1400	33.48
22014	3000	1205	20.48	1234	22.21	1263	23.96	1290	25.73	1316	27.53	1342	29.35	1367	31.20	1393	33.06	1419	34.94
22748	3100	1229	21.65	1258	23.41	1286	25.20	1313	27.02	1340	28.86	1365	30.72	1390	32.61	1414	34.52	1439	36.44
23482	3200	1256	22.92	1283	24.67	1310	26.51	1337	28.36	1363	30.25	1388	32.15	1413	34.08	1436	36.03	1460	38.00
24216	3300	1282	24.25	1307	26.00	1334	27.87	1361	29.77	1386	31.69	1411	33.64	1436	35.61	1459	37.60	1482	39.61
24950	3400	1309	25.65	1333	27.44	1358	29.28	1385	31.23	1410	33.19	1435	35.18	1459	37.19	1482	39.23	1505	41.28
25683	3500	1336	27.11	1360	28.94	1383	30.79	1409	32.75	1434	34.76	1458	36.79	1482	38.84	1506	40.91	1528	43.01
26417	3600	1363	28.64	1387	30.51	1410	32.40	1433	34.33	1458	36.38	1482	38.46	1506	40.55	1529	42.67	1552	44.80

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18345	2500	1386	31.73	1450	35.46	1517	39.38	1581	43.43	1643	47.59								
19079	2600	1397	32.93	1458	36.71	1519	40.63	1584	44.72	1646	48.94	1705	53.27	1763	57.65				
19813	2700	1413	34.29	1467	38.01	1527	41.98	1587	46.08	1649	50.34	1708	54.73	1765	59.21	1821	63.76		
20547	2800	1431	35.73	1481	39.44	1535	43.38	1593	47.53	1651	51.81	1711	56.23	1768	60.78	1824	65.42	1877	70.12
21280	2900	1450	37.21	1499	41.02	1547	44.88	1601	49.05	1657	53.37	1713	57.81	1771	62.39	1826	67.09	1880	71.89
22014	3000	1470	38.75	1518	42.64	1565	46.60	1613	50.66	1665	55.00	1719	59.47	1773	64.08	1829	68.82	1883	73.67
22748	3100	1489	40.34	1537	44.32	1583	48.36	1628	52.46	1676	56.72	1727	61.23	1779	65.86	1832	70.62	1886	75.52
23482	3200	1509	41.99	1557	46.05	1602	50.17	1646	54.37	1690	58.62	1737	63.06	1787	67.74	1837	72.52	1888	77.43
24216	3300	1529	43.69	1576	47.83	1622	52.05	1665	56.32	1708	60.67	1750	65.06	1796	69.69	1845	74.53	1894	79.46
24950	3400	1550	45.45	1596	49.68	1641	53.98	1685	58.34	1727	62.77	1768	67.26	1809	71.78	1854	76.59	1902	81.59
25683	3500	1572	47.26	1616	51.59	1661	55.97	1704	60.41	1746	64.93	1787	69.50	1826	74.13	1867	78.80	1911	83.78
26417	3600	1595	49.14	1637	53.55	1680	58.02	1724	62.55	1765	67.15	1806	71.80	1845	76.52	1884	81.29	1923	86.10
27151	3700	1618	51.08	1660	55.57	1700	60.14	1743	64.76	1785	69.44	1825	74.18	1864	78.98	1902	83.84	1940	88.74
27885	3800	1641	53.08	1683	57.66	1723	62.31	1763	67.03	1804	71.79	1844	76.61	1883	81.50	1921	86.44	1958	91.44
28619	3900	1665	55.16	1706	59.82	1745	64.55	1784	69.36	1824	74.21	1864	79.12	1903	84.09	1940	89.11	1977	94.19

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-365 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
400	0.25	A1	70	63	63	60	56	53	50	46	1160	5.20	E3	91	90	88	84	82	79	76	72	
	0.43	A2	69	61	61	58	54	51	48	44		6.11	E4	90	90	88	84	82	79	75	71	
	0.62	A3	65	59	60	58	54	50	47	43		1325	2.33	F1	98	95	98	91	89	86	82	78
	0.73	A4	65	59	60	58	54	50	45	41			4.67	F2	99	94	96	88	86	83	79	76
600	0.48	B1	76	78	73	72	68	64	61	57	1500	2.99	G1	104	96	102	94	93	89	85	82	
	0.96	B2	75	76	71	69	65	62	58	55		5.98	G2	105	96	101	91	89	86	83	79	
	1.39	B3	72	73	69	68	65	61	58	54		8.70	G3	104	94	97	90	89	86	82	79	
	1.64	B4	72	73	69	68	65	61	57	52		10.22	G4	102	94	97	89	89	87	82	78	
800	0.85	C1	79	88	80	79	76	72	68	65	1760	4.12	H1	111	98	107	98	97	94	89	86	
	1.70	C2	78	88	77	76	73	69	66	63		8.23	H2	112	97	106	95	94	91	87	84	
	2.47	C3	77	83	76	75	73	69	65	62		11.98	H3	111	96	102	93	93	90	87	83	
	2.91	C4	77	83	75	75	73	69	65	60		14.07	H4	109	97	102	93	92	91	87	82	
1000	1.33	D1	86	92	87	85	82	78	74	71	2000	5.32	J1	113	104	108	102	100	97	93	89	
	2.66	D2	85	91	85	82	79	75	72	69		10.63	J2	114	104	108	100	97	94	90	87	
	3.87	D3	84	87	83	81	78	75	72	68		15.47	J3	113	102	104	98	96	94	90	87	
	4.54	D4	84	88	82	80	79	75	71	67		17.00	J4	112	102	104	98	95	94	90	86	

BCA-402

SINGLE WIDTH

WHEEL DIAMETER: 40.25"

WHEEL CIRCUMFERENCE: 10.54'

OUTLET AREA: 8.937 SQ. FT.

OUTLET SIZE: 31¹⁵/₁₆" x 40⁵/₁₆"

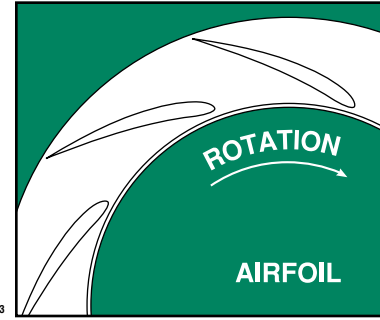
INLET DIAMETER: 41¹/₂" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1065	1389	1850
251°F TO 400°F*	1012	1320	1758
401°F TO 700°F*	873	1139	1517
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = 10.54 x RPM MAX BHP = 19.951 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6246	700	262	0.35	313	0.61	361	0.90	413	1.24										
7138	800	285	0.44	331	0.72	373	1.03	416	1.38										
8031	900	309	0.54	352	0.85	391	1.19	427	1.54	507	2.36								
8923	1000	334	0.67	373	1.00	409	1.36	444	1.75	512	2.58	585	3.54						
9815	1100	359	0.83	395	1.17	430	1.56	462	1.97	523	2.83	587	3.81	654	4.89				
10708	1200	385	0.99	419	1.37	452	1.78	482	2.21	540	3.13	594	4.11	656	5.22	716	6.41		
11600	1300	412	1.18	444	1.60	473	2.02	503	2.48	557	3.45	608	4.47	661	5.58	718	6.80	773	8.10
12493	1400	439	1.39	468	1.87	497	2.31	525	2.78	576	3.80	626	4.88	672	6.00	722	7.23	776	8.55
13385	1500	466	1.63	494	2.16	521	2.62	546	3.11	597	4.18	644	5.31	688	6.48	731	7.70	779	9.04
14277	1600	493	1.90	519	2.47	545	2.98	569	3.48	618	4.60	662	5.78	706	7.00	746	8.26	788	9.59
15170	1700	521	2.20	546	2.81	570	3.37	593	3.90	639	5.05	683	6.27	724	7.55	764	8.87	802	10.22
16062	1800	549	2.54	572	3.17	595	3.80	618	4.35	661	5.53	703	6.81	742	8.14	782	9.51	819	10.91
16954	1900	576	2.91	599	3.58	620	4.26	643	4.85	683	6.05	725	7.39	763	8.76	799	10.19	836	11.65
17847	2000	604	3.33	626	4.02	647	4.74	667	5.39	707	6.64	746	8.00	784	9.43	819	10.91	854	12.42
18739	2100	632	3.78	653	4.50	673	5.25	693	5.97	731	7.28	768	8.66	805	10.14	840	11.67	872	13.23

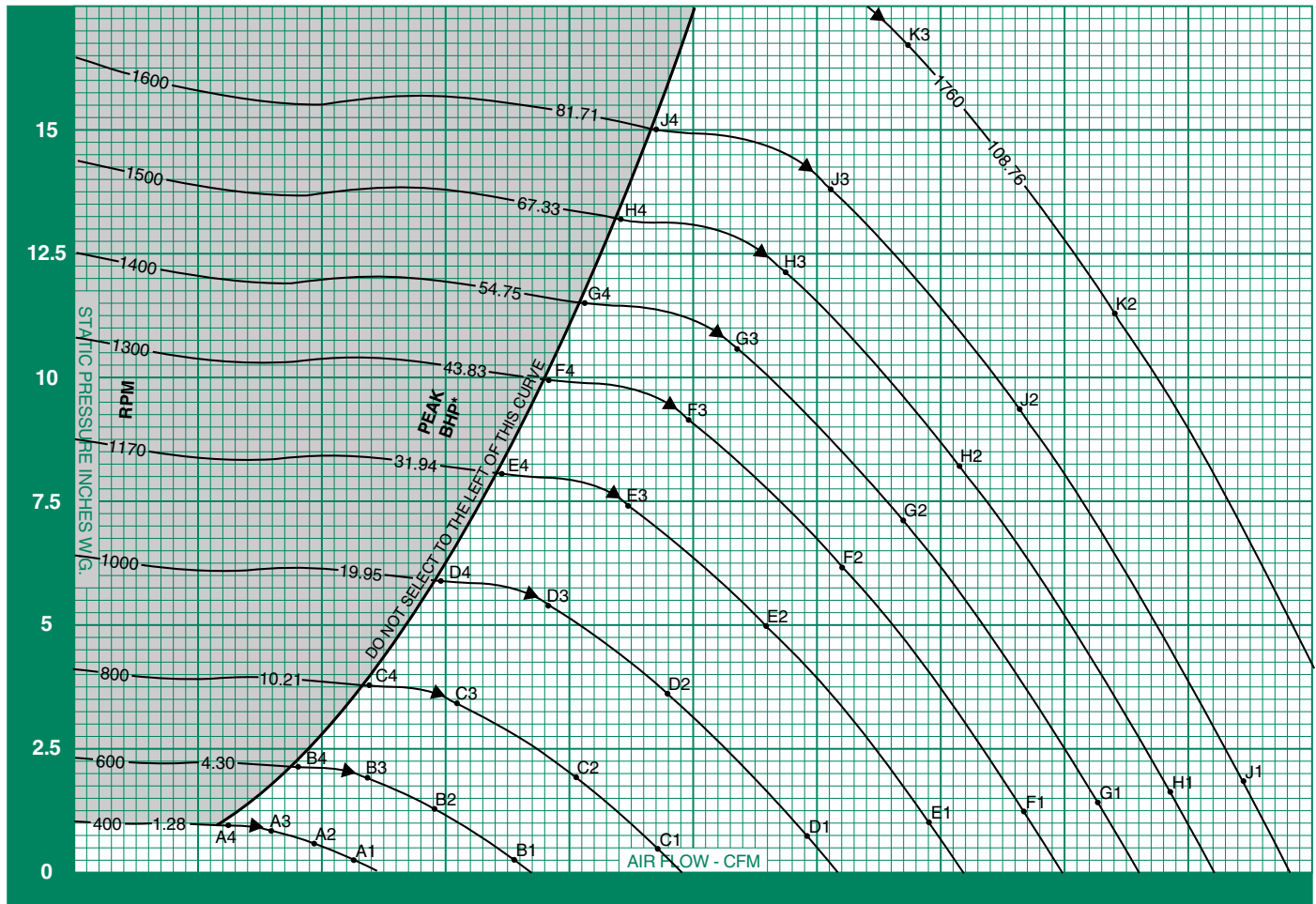
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15170	1700	841	11.64	884	13.17	928	14.78	971	16.44	1012	18.16								
16062	1800	854	12.36	891	13.87	932	15.49	973	17.18	1015	18.92	1054	20.73	1093	22.56				
16954	1900	871	13.14	905	14.66	940	16.26	978	17.97	1017	19.73	1057	21.56	1095	23.45	1132	25.37	1167	27.32
17847	2000	889	13.96	921	15.54	953	17.15	987	18.83	1023	20.62	1059	22.45	1097	24.37	1134	26.32	1170	28.33
18739	2100	906	14.83	939	16.46	970	18.12	1000	19.81	1032	21.57	1066	23.43	1101	25.34	1137	27.33	1172	29.35
19631	2200	924	15.74	956	17.42	987	19.14	1017	20.88	1045	22.65	1075	24.47	1108	26.41	1141	28.41	1175	30.45
20524	2300	944	16.70	974	18.44	1005	20.20	1034	21.99	1062	23.81	1090	25.66	1118	27.55	1149	29.55	1181	31.63
21416	2400	964	17.70	993	19.50	1023	21.31	1052	23.16	1080	25.03	1107	26.93	1133	28.86	1159	30.80	1189	32.87
22308	2500	985	18.76	1013	20.60	1041	22.48	1069	24.37	1097	26.30	1124	28.25	1150	30.23	1175	32.23	1201	34.25
23201	2600	1006	19.87	1034	21.77	1061	23.69	1087	25.64	1115	27.62	1142	29.62	1167	31.65	1192	33.71	1217	35.79
24093	2700	1028	21.04	1055	22.98	1082	24.96	1107	26.97	1133	29.00	1159	31.05	1185	33.13	1210	35.24	1234	37.37
24986	2800	1049	22.27	1076	24.26	1103	26.29	1128	28.34	1152	30.43	1177	32.54	1203	34.67	1228	36.83	1252	39.01
25878	2900	1071	23.56	1098	25.60	1124	27.68	1149	29.78	1173	31.92	1196	34.09	1221	36.28	1245	38.48	1269	40.72
26770	3000	1093	24.91	1119	27.00	1145	29.13	1170	31.29	1194	33.47	1217	35.69	1240	37.94	1263	40.20	1287	42.48
27663	3100	1115	26.32	1141	28.47	1166	30.65	1191	32.86	1215	35.09	1238	37.36	1260	39.65	1282	41.98	1305	44.32
28555	3200	1139	27.87	1163	30.00	1188	32.23	1212	34.49	1236	36.78	1259	39.10	1281	41.44	1303	43.81	1324	46.21
29447	3300	1163	29.49	1185	31.61	1210	33.89	1234	36.20	1257	38.54	1280	40.90	1302	43.30	1323	45.72	1344	48.17
30340	3400	1187	31.19	1209	33.36	1232	35.61	1256	37.97	1279	40.36	1301	42.78	1323	45.23	1344	47.70	1365	50.20
31232	3500	1211	32.97	1233	35.19	1255	37.44	1278	39.82	1300	42.27	1323	44.74	1344	47.23	1365	49.75	1386	52.30
32124	3600	1236	34.83	1257	37.10	1278	39.40	1300	41.75	1322	44.24	1344	46.76	1366	49.31	1387	51.88	1407	54.48

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
22308	2500	1257	38.58	1315	43.13	1376	47.89	1434	52.82	1490	57.87								
23201	2600	1267	40.04	1322	44.64	1378	49.40	1437	54.39	1493	59.52	1546	64.77	1598	70.11				
24093	2700	1281	41.70	1331	46.22	1385	51.05	1439	56.03	1495	61.21	1549	66.55	1601	72.00	1651	77.53		
24986	2800	1298	43.45	1343	47.97	1392	52.75	1445	57.80	1497	63.00	1551	68.38	1604	73.91	1654	79.55	1702	85.27
25878	2900	1315	45.25	1359	49.88	1403	54.58	1452	59.64	1503	64.89	1554	70.30	1606	75.87	1656	81.58	1705	87.42
26770	3000	1333	47.12	1377	51.85	1419	56.67	1462	61.60	1510	66.88	1559	72.32	1608	77.92	1659	83.68	1708	89.58
27663	3100	1351	49.06	1394	53.89	1436	58.81	1477	63.80	1520	68.97	1566	74.46	1613	80.09	1661	85.88	1710	91.83
28555	3200	1368	51.06	1412	55.99	1453	61.01	1493	66.12	1533	71.28	1575	76.69	1620	82.37	1666	88.19	1712	94.16
29447	3300	1386	53.13	1429	58.17	1471	63.29	1510	68.49	1549	73.78	1587	79.11	1629	84.74	1673	90.63	1717	96.62
30340	3400	1405	55.27	1447	60.41	1488	65.64	1528	70.94	1566	76.33	1603	81.78	1641	87.29	1682	93.14	1725	99.21
31232	3500	1426	57.47	1465	62.73	1506	68.06	1545	73.47	1583	78.95	1620	84.51	1656	90.14	1693	95.82	1733	101.87
32124	3600	1447	59.75	1485	65.12	1524	70.56	1563	76.07	1601	81.65	1637	87.32	1673	93.05	1708	98.85	1744	104.71
33017	3700	1467	62.11	1505	67.58	1542	73.13	1581	78.75	1619	84.44	1655	90.20	1690	96.04	1725	101.95	1759	107.91
33909	3800	1488	64.55	1526	70.12	1562	75.78	1599	81.51	1636	87.30	1673	93.16	1708	99.10	1742	105.11	1775	111.19
34801	3900	1510	67.08	1547	72.74	1583	78.50	1617	84.34	1654	90.24	1690	96.21	1725	102.25	1760	108.36	1793	114.54

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-402 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
400	0.25	A1	80	72	74	73	64	58	53	48	1300	1.23	F1	103	109	107	100	101	98	90	83
	0.58	A2	79	69	68	67	60	55	50	45		6.16	F2	104	108	104	95	93	90	84	79
	0.86	A3	76	69	64	64	58	54	48	43		9.12	F3	105	108	102	94	90	88	83	78
	0.98	A4	74	69	63	63	57	53	47	42		10.35	F4	106	108	101	94	89	87	81	77
600	0.26	B1	89	88	83	84	80	72	66	61	1400	1.43	G1	104	110	110	102	103	100	92	86
	1.31	B2	89	85	78	76	73	67	61	56		7.15	G2	105	110	107	97	95	93	86	81
	1.94	B3	88	83	76	73	70	65	60	55		10.58	G3	106	110	105	96	91	90	85	80
	2.21	B4	88	83	76	72	69	64	59	54		12.01	G4	107	111	104	96	91	89	84	79
800	0.47	C1	94	99	89	91	90	81	74	69	1500	1.64	H1	105	111	113	103	105	103	94	88
	2.33	C2	95	97	85	83	82	75	70	65		8.20	H2	106	112	110	99	96	95	89	83
	3.45	C3	96	94	85	79	79	74	69	63		12.14	H3	107	112	108	98	93	92	87	82
	3.92	C4	97	92	85	79	78	72	68	62		13.78	H4	108	113	106	98	92	91	86	81
1000	0.73	D1	98	104	97	95	95	89	81	76	1600	1.87	J1	106	112	115	104	106	105	97	89
	3.65	D2	99	102	94	89	87	82	76	71		9.34	J2	107	113	113	101	98	97	90	85
	5.40	D3	100	100	93	86	84	80	75	70		13.82	J3	108	114	110	100	94	94	89	84
	6.13	D4	101	99	93	85	83	79	74	69		15.68	J4	110	115	108	100	94	93	87	83
1170	1.00	E1	101	107	103	98	99	94	86	80	1760	2.26	K1	108	114	118	107	108	107	100	92
	4.99	E2	102	106	100	93	91	87	81	76		11.30	K2	109	115	115	104	100	99	93	88
	7.39	E3	103	105	98	91	87	85	80	75		16.72	K3	110	116	113	103	97	96	91	87
	8.39	E4	104	105	98	90	87	84	78	74											

BCA-445

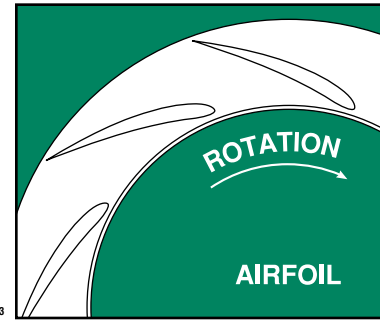
SINGLE WIDTH

WHEEL DIAMETER: 44.50"
 WHEEL CIRCUMFERENCE: 11.65'
 OUTLET AREA: 10.923 SQ. FT.
 OUTLET SIZE: 35⁵/₁₆" x 44⁹/₁₆"
 INLET DIAMETER: 45¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	963	1257	1673
251°F TO 400°F*	915	1194	1589
401°F TO 700°F*	790	1031	1372
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 11.65 x RPM MAX BHP = 32.957 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7635	700	237	0.43	283	0.75	327	1.10	374	1.52										
8726	800	257	0.53	299	0.88	<u>338</u>	<u>1.26</u>	377	1.68										
9816	900	279	0.67	318	1.04	353	1.45	<u>386</u>	<u>1.89</u>	459	2.89								
10907	1000	302	0.82	337	1.22	370	1.67	402	2.13	463	3.15	529	4.33						
11998	1100	325	1.01	357	1.43	389	1.91	418	2.41	<u>473</u>	<u>3.46</u>	531	4.65	591	5.98				
13089	1200	349	1.21	379	1.68	409	2.17	436	2.71	488	3.82	<u>538</u>	<u>5.02</u>	593	6.38	647	7.84		
14179	1300	373	1.44	401	1.96	428	2.47	455	3.04	504	4.22	550	5.47	598	6.82	650	8.31	699	9.90
15270	1400	397	1.70	424	2.28	449	2.82	475	3.40	521	4.65	566	5.96	<u>608</u>	<u>7.33</u>	653	8.83	702	10.45
16361	1500	422	1.99	446	2.64	471	3.21	494	3.81	540	5.11	582	6.49	623	7.92	<u>661</u>	<u>9.41</u>	705	11.05
17452	1600	446	2.32	470	3.02	493	3.64	515	4.26	559	5.62	599	7.06	638	8.56	675	10.10	<u>712</u>	<u>11.72</u>
18542	1700	471	2.69	494	3.43	516	4.12	537	4.77	578	6.17	617	7.67	654	9.23	691	10.84	725	12.50
19633	1800	496	3.11	518	3.88	538	4.64	559	5.32	598	6.76	636	8.32	671	9.95	707	11.62	741	13.34
20724	1900	521	3.56	542	4.37	561	5.21	581	5.93	618	7.40	656	9.03	690	10.71	723	12.45	756	14.23
21815	2000	547	4.06	566	4.91	585	5.79	604	6.59	639	8.12	675	9.78	709	11.53	741	13.33	773	15.18
22905	2100	572	4.62	591	5.50	609	6.42	626	7.30	661	8.90	695	10.59	728	12.40	759	14.26	789	16.18

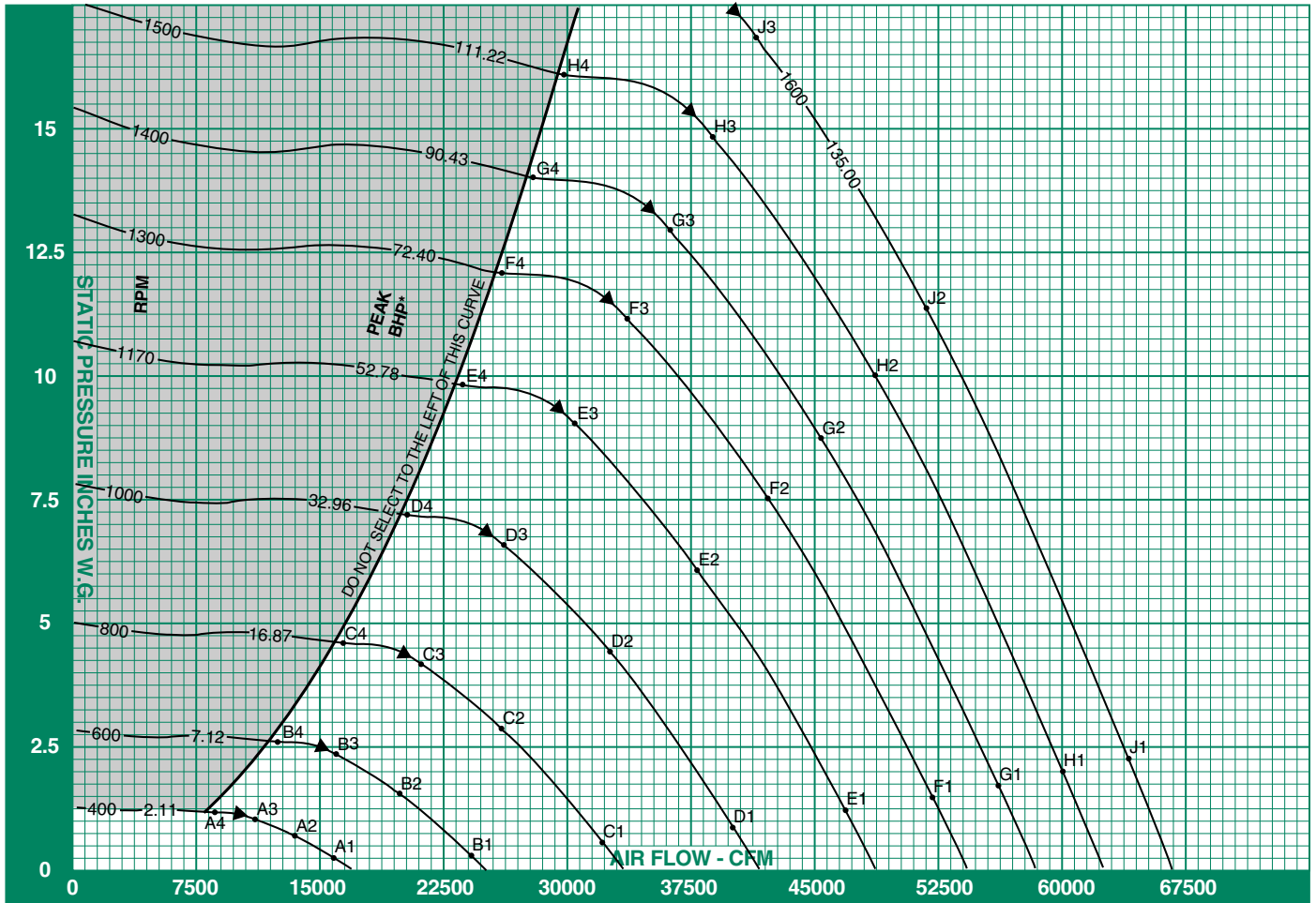
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18542	1700	760	14.23	799	16.10	839	18.06	878	20.10	916	22.19								
19633	1800	773	15.10	806	16.95	843	18.93	880	20.99	918	23.13	954	25.33	988	27.58				
20724	1900	788	16.06	818	17.93	850	19.88	885	21.97	920	24.12	956	26.35	990	28.66	1024	31.01	1056	33.39
21815	2000	804	17.07	833	19.00	862	20.96	<u>892</u>	<u>23.02</u>	925	25.20	958	27.45	993	29.78	1026	32.17	1058	34.63
22905	2100	820	18.13	849	20.12	877	22.15	904	24.21	<u>933</u>	<u>26.36</u>	964	28.64	995	30.98	1028	33.41	1060	35.88
23996	2200	836	19.24	865	21.30	893	23.39	919	25.52	946	27.68	<u>973</u>	<u>29.91</u>	1002	32.28	1032	34.72	1062	37.22
25087	2300	854	20.41	881	22.53	909	24.69	935	26.88	961	29.11	<u>986</u>	<u>31.37</u>	<u>1011</u>	<u>33.67</u>	1039	36.13	1068	38.66
26178	2400	872	21.64	898	23.83	925	26.05	951	28.30	976	30.59	1001	32.92	1025	35.28	<u>1049</u>	<u>37.65</u>	1075	40.18
27268	2500	891	22.93	917	25.18	941	27.47	<u>967</u>	<u>29.79</u>	992	32.14	1017	34.53	1040	36.95	1063	39.40	<u>1086</u>	<u>41.87</u>
28359	2600	910	24.29	935	26.60	960	28.96	984	31.35	1008	33.76	1033	36.21	1056	38.69	1079	41.20	1101	43.75
29450	2700	930	25.72	954	28.09	978	30.51	1001	32.96	1025	35.45	1049	37.96	1072	40.50	1094	43.08	1116	45.68
30541	2800	949	27.22	974	29.66	997	32.13	1020	34.65	1042	37.20	1065	39.78	1088	42.38	1110	45.02	1132	47.69
31631	2900	969	28.80	993	31.29	1016	33.83	1039	36.41	1061	39.02	1082	41.67	1104	44.34	1126	47.04	1148	49.77
32722	3000	988	30.45	1012	33.01	1036	35.61	1058	38.24	1080	40.92	1101	43.63	1121	46.37	1143	49.14	1164	51.93
33813	3100	1008	32.17	1032	34.80	1055	37.46	1077	40.16	1099	42.90	1120	45.67	1140	48.47	1160	51.31	1180	54.17
34904	3200	1030	34.07	1052	36.67	1075	39.40	1097	42.16	1118	44.96	1139	47.79	1159	50.66	1178	53.55	1197	56.49
35994	3300	1052	36.05	1072	38.64	1094	41.42	1116	44.25	1137	47.10	1158	50.00	1178	52.93	1197	55.89	1216	58.88
37085	3400	1074	38.13	1094	40.78	1114	43.53	1136	46.42	1157	49.34	1177	52.30	1197	55.28	1216	58.30	1235	61.36
38176	3500	1096	40.30	1115	43.01	1135	45.76	1156	48.68	1176	51.66	1196	54.68	1216	57.73	1235	60.82	1254	63.93
39267	3600	1118	42.57	1137	45.35	1156	48.15	1175	51.03	1196	54.08	1216	57.16	1235	60.27	1254	63.42	1273	66.60

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27268	2500	1137	47.16	1189	52.71	1244	58.54	1297	64.56	1348	70.73								
28359	2600	<u>1146</u>	<u>48.94</u>	1196	54.57	1246	60.39	1299	66.48	1350	72.75	1399	79.17	1446	85.69				
29450	2700	1159	50.97	1204	56.50	1252	62.40	1301	68.49	1352	74.82	1401	81.35	1448	88.01	1494	94.77		
30541	2800	1174	53.11	<u>1215</u>	<u>58.63</u>	<u>1259</u>	<u>64.47</u>	1307	70.65	1354	77.00	1403	83.58	1450	90.34	1496	97.24	1540	104.23
31631	2900	1190	55.32	1229	60.97	<u>1269</u>	<u>66.71</u>	1314	72.90	1359	79.32	1405	85.92	1453	92.73	1498	99.72	1542	106.86
32722	3000	1206	57.60	1245	63.38	1283	69.27	<u>1323</u>	<u>75.30</u>	1366	81.75	1410	88.40	1455	95.25	1500	102.29	1544	109.50
33813	3100	1222	59.97	1261	65.87	1299	71.88	1336	77.98	<u>1374</u>	<u>84.31</u>	1417	91.01	1459	97.89	1502	104.97	1547	112.25
34904	3200	1238	62.41	1277	68.44	1314	74.58	1350	80.82	1386	87.13	1425	93.74	1466	100.69	1507	107.80	1549	115.10
35994	3300	1254	64.94	1293	71.10	1330	77.36	1366	83.72	1401	90.18	<u>1436</u>	<u>96.70</u>	1473	103.58	1513	110.78	1553	118.11
37085	3400	<u>1271</u>	<u>67.56</u>	1309	73.85	1346	80.23	1382	86.71	1416	93.30	1450	99.97	<u>1484</u>	<u>106.70</u>	1521	113.84	1560	121.27
38176	3500	1290	70.25	1325	76.68	1362	83.19	1398	89.80	1432	96.50	1465	103.30	1498	110.18	<u>1531</u>	<u>117.12</u>	1567	124.52
39267	3600	1308	73.04	1343	79.60	1378	86.25	1414	92.98	1448	99.81	1481	106.73	1513	113.74	1545	120.83	<u>1577</u>	<u>127.99</u>
40357	3700	1327	75.92	1361	82.60	1395	89.39	1430	96.25	1464	103.21	1497	110.25	1529	117.39	1560	124.61	1591	131.90
41448	3800	1346	78.91	1380	85.71	1413	92.62	1446	99.63	1480	106.71	1513	113.88	1545	121.14	1576	128.48	1606	135.91
42539	3900	1365	81.99	1399	88.92	1432	95.95	1463	103.10	1496	110.31	1529	117.60	1561	124.99	1591	132.46	1622	140.01

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream. NOTE: Ratings shown apply also to model QBCA.

CONSTANT SPEED PERFORMANCE CURVES

BCA-445 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY																		
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000											
400	0.25	A1	84	75	76	75	66	60	55	50	1170	1.22	E1	104	110	106	101	102	97	90	83	1600	2.28	J1	110	115	119	107	109	108	100	92
	0.71	A2	82	73	71	70	63	58	53	48		10.03	H2	110	115	113	102	99	98	92	86		11.41	J2	111	116	116	104	101	100	93	88
	1.06	A3	80	72	67	67	61	57	51	46		14.84	H3	111	115	111	101	96	95	90	85		16.89	J3	112	117	113	103	97	97	92	87
	1.20	A4	78	72	66	66	60	56	50	45		16.85	H4	112	116	109	101	95	94	89	84											
600	0.32	B1	93	91	87	88	83	75	69	64	1300	1.51	F1	106	112	110	103	104	101	93	86	1500	2.01	H1	109	114	116	106	108	106	98	91
	1.60	B2	92	88	81	79	76	70	64	59		7.53	F2	107	112	107	98	96	93	87	82		10.03	H2	110	115	113	102	99	98	92	86
	2.37	B3	91	87	79	76	73	68	63	58		11.15	F3	108	111	105	97	93	91	86	81		14.84	H3	111	115	111	101	96	95	90	85
	2.70	B4	91	86	79	75	72	67	62	57		12.66	F4	109	111	104	97	92	90	85	80		16.85	H4	112	116	109	101	95	94	89	84
800	0.57	C1	98	103	92	94	93	85	77	72	1000	0.89	D1	102	107	100	98	98	92	85	79	1170	1.22	E1	104	110	106	101	102	97	90	83
	2.85	C2	99	100	89	86	85	78	73	68		4.46	D2	103	106	97	92	90	85	79	74		6.10	E2	106	109	103	96	94	90	84	79
	4.22	C3	99	97	88	83	82	77	72	67		6.60	D3	104	104	96	89	87	83	78	73											
	4.79	C4	101	96	88	82	81	75	71	65		7.49	D4	105	103	96	88	86	82	77	72											

BCA-490

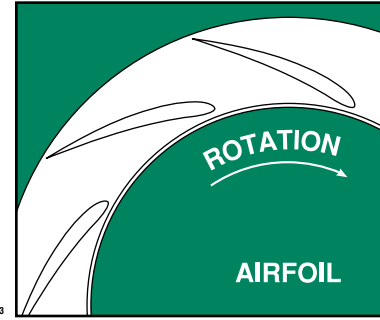
SINGLE WIDTH

WHEEL DIAMETER: 49.00"
 WHEEL CIRCUMFERENCE: 12.83'
 OUTLET AREA: 13.240 SQ. FT.
 OUTLET SIZE: 38¹/₈" x 49¹/₁₆"
 INLET DIAMETER: 51¹/₂" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	875	1141	1520
251°F TO 400°F*	831	1084	1444
401°F TO 700°F*	718	936	1246
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 12.83 x RPM MAX BHP = 53.349 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9257	700	215	0.52	257	0.90	297	1.34	340	1.84										
10580	800	234	0.65	272	1.07	<u>307</u>	<u>1.53</u>	342	2.04										
11902	900	254	0.81	289	1.26	321	1.76	<u>351</u>	<u>2.29</u>	417	3.50								
13225	1000	274	1.00	307	1.48	336	2.02	365	2.59	420	3.82	480	5.25						
14547	1100	295	1.22	325	1.74	353	2.31	380	2.92	<u>429</u>	<u>4.20</u>	482	5.64	537	7.25				
15870	1200	317	1.47	344	2.04	371	2.64	396	3.28	443	4.64	488	6.09	539	7.73	588	9.50		
17192	1300	338	1.74	364	2.38	389	3.00	413	3.68	458	5.12	<u>500</u>	<u>6.63</u>	543	8.27	590	10.08	635	12.00
18515	1400	361	2.06	385	2.76	408	3.42	431	4.13	473	5.64	514	7.23	<u>552</u>	<u>8.89</u>	593	10.71	637	12.67
19837	1500	383	2.42	405	3.20	428	3.89	449	4.61	490	6.20	529	7.87	565	9.61	<u>601</u>	<u>11.41</u>	640	13.40
21160	1600	405	2.82	427	3.67	448	4.41	468	5.16	508	6.81	544	8.56	580	10.37	613	12.25	647	14.21
22482	1700	428	3.27	448	4.16	468	4.99	487	5.78	525	7.48	561	9.30	594	11.19	627	13.14	<u>658</u>	<u>15.15</u>
23805	1800	451	3.77	470	4.70	489	5.62	508	6.45	543	8.20	578	10.09	610	12.06	642	14.09	673	16.18
25127	1900	473	4.32	492	5.30	510	6.32	528	7.19	561	8.97	595	10.95	627	12.99	657	15.10	687	17.26
26450	2000	496	4.93	514	5.96	531	7.02	548	7.99	581	9.85	613	11.86	644	13.98	673	16.16	702	18.40
27772	2100	519	5.60	537	6.67	553	7.78	569	8.85	601	10.79	631	12.83	661	15.03	690	17.29	716	19.61

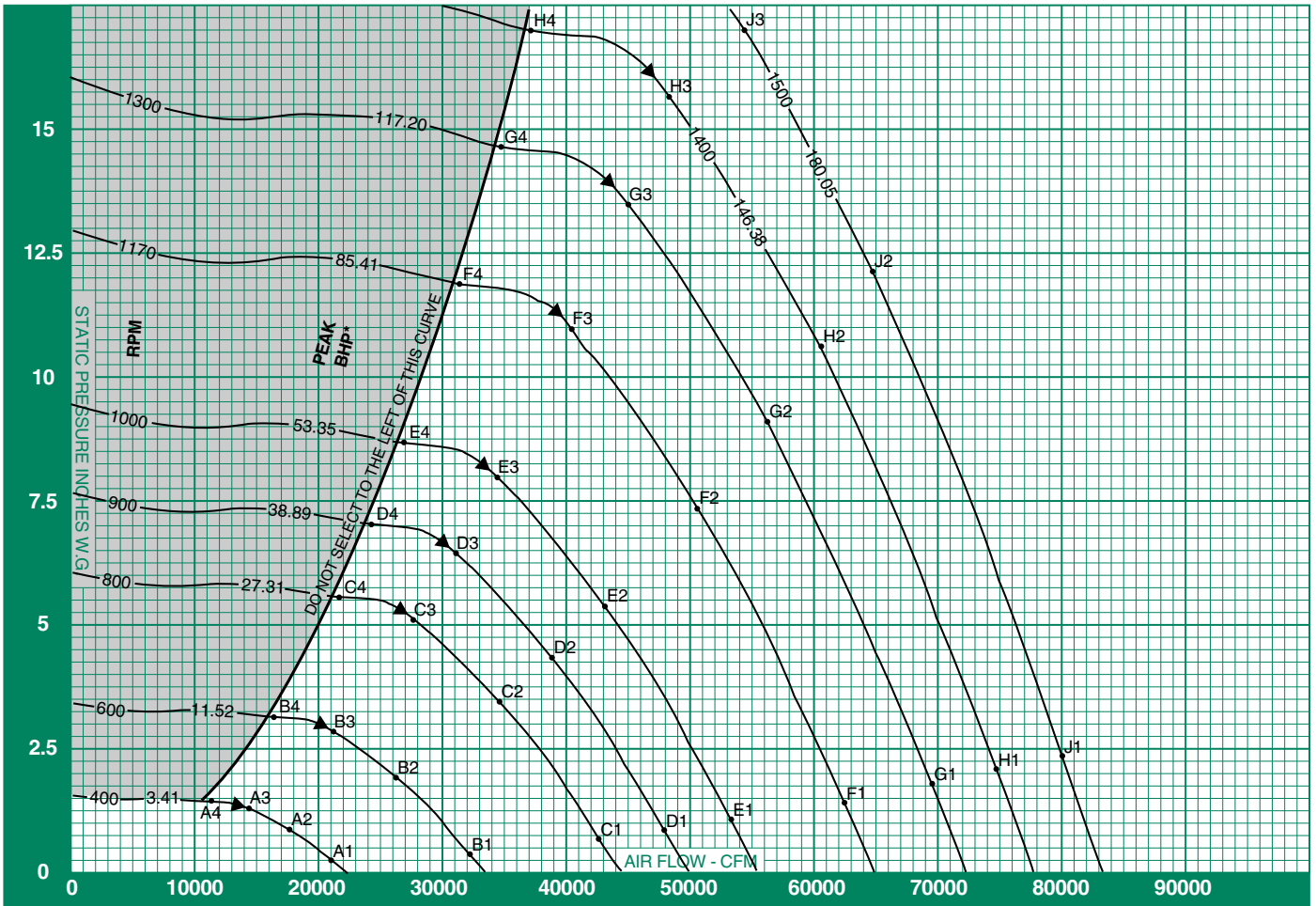
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
22482	1700	691	17.25	726	19.52	762	21.90	798	24.37	832	26.91								
23805	1800	702	18.31	<u>732</u>	<u>20.55</u>	766	22.96	800	25.46	834	28.04	866	30.72	897	33.44				
25127	1900	716	19.47	743	21.73	<u>772</u>	<u>24.11</u>	804	26.64	836	29.25	868	31.95	900	34.75	930	37.60	959	40.49
26450	2000	730	20.69	757	23.03	783	25.42	<u>810</u>	<u>27.91</u>	840	30.56	870	33.28	902	36.11	932	39.01	961	41.99
27772	2100	744	21.98	771	24.39	796	26.86	821	29.36	847	31.96	876	34.73	904	37.56	934	40.50	963	43.50
29095	2200	759	23.33	786	25.82	811	28.36	835	30.94	<u>859</u>	<u>33.56</u>	<u>883</u>	<u>36.27</u>	910	39.14	937	42.10	965	45.13
30417	2300	775	24.75	800	27.32	825	29.94	849	32.59	872	35.29	895	38.03	<u>918</u>	<u>40.83</u>	944	43.80	970	46.88
31740	2400	792	26.24	816	28.89	840	31.59	864	34.32	887	37.10	909	39.91	931	42.77	<u>952</u>	<u>45.65</u>	976	48.72
33062	2500	809	27.81	832	30.53	855	33.31	878	36.12	901	38.97	923	41.87	945	44.80	965	47.77	<u>986</u>	<u>50.77</u>
34385	2600	827	29.45	850	32.26	872	35.11	893	38.01	916	40.93	938	43.90	959	46.91	980	49.96	999	53.04
35707	2700	844	31.19	867	34.06	889	36.99	909	39.96	931	42.98	952	46.02	973	49.11	994	52.23	1014	55.39
37030	2800	862	33.01	884	35.96	906	38.96	926	42.01	947	45.10	967	48.23	988	51.39	1008	54.59	1028	57.82
38352	2900	880	34.91	902	37.94	923	41.02	944	44.14	963	47.31	983	50.52	1003	53.76	1023	57.04	1043	60.35
39675	3000	898	36.91	920	40.02	941	43.17	961	46.37	981	49.61	1000	52.90	1018	56.22	1038	59.58	1057	62.96
40997	3100	916	39.01	937	42.19	958	45.42	978	48.69	998	52.01	1017	55.37	1035	58.77	1053	62.21	1072	65.68
42320	3200	935	41.31	955	44.46	976	47.77	996	51.12	1015	54.51	1034	57.94	1052	61.42	1070	64.93	1087	68.49
43642	3300	955	43.71	974	46.85	994	50.22	1014	53.65	1033	57.11	1051	60.62	1069	64.17	1087	67.76	1104	71.39
44965	3400	975	46.23	993	49.44	1012	52.78	1031	56.28	1050	59.82	1069	63.41	1087	67.03	1104	70.69	1121	74.39
46287	3500	995	48.86	1013	52.15	1031	55.48	1049	59.02	1068	62.64	1086	66.30	1104	70.00	1122	73.74	1138	77.51
47610	3600	1015	51.62	1033	54.98	1050	58.39	1067	61.87	1086	65.57	1104	69.31	1122	73.08	1139	76.89	1156	80.74

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
33062	2500	1032	57.18	1080	63.91	1130	70.98	1178	78.27	1224	85.76								
34385	2600	<u>1040</u>	<u>59.34</u>	1086	66.16	1132	73.22	1180	80.60	1226	88.21	1270	96.00	1313	103.90				
35707	2700	1052	61.80	<u>1093</u>	<u>68.50</u>	1137	75.66	1182	83.04	1228	90.72	1272	98.63	1315	106.71	1356	114.90		
37030	2800	1066	64.39	1103	71.09	1144	78.17	1187	85.67	1230	93.37	1274	101.34	1317	109.53	1358	117.90	1398	126.38
38352	2900	1080	67.07	1116	73.93	<u>1153</u>	<u>80.89</u>	1193	88.39	1234	96.18	1276	104.18	1319	112.44	1361	120.91	1401	129.56
39675	3000	1095	69.84	1131	76.85	1165	83.98	1201	91.30	1240	99.12	1280	107.19	1321	115.49	1363	124.02	1403	132.77
40997	3100	1109	72.71	1145	79.87	1179	87.16	1213	<u>94.55</u>	1248	102.22	1287	110.35	1325	118.69	1364	127.28	1405	136.10
42320	3200	1124	75.67	1160	82.98	1194	90.42	1226	97.99	<u>1259</u>	<u>105.64</u>	1294	113.65	1331	122.08	1368	130.70	1406	139.55
43642	3300	1139	78.74	1174	86.21	1208	93.80	1241	101.51	1272	109.34	<u>1304</u>	<u>117.25</u>	1338	125.59	1374	134.31	1411	143.20
44965	3400	1154	81.91	1189	89.54	1222	97.28	1255	105.14	1286	113.12	1317	121.21	<u>1348</u>	<u>129.37</u>	1381	138.03	1417	147.04
46287	3500	1171	85.18	1204	92.97	1237	100.87	1269	108.88	1301	117.01	1331	125.25	1361	133.59	<u>1390</u>	<u>142.01</u>	1423	150.98
47610	3600	1188	88.56	1219	96.51	1252	104.57	1284	112.74	1315	121.01	1345	129.41	1374	137.91	1403	146.50	<u>1432</u>	<u>155.18</u>
48932	3700	1205	92.05	1236	100.15	1267	108.39	1299	116.71	1330	125.14	1359	133.68	1389	142.33	1417	151.09	1445	159.93
50255	3800	1223	95.67	1253	103.92	1283	112.30	1313	120.80	1344	129.38	1374	138.07	1403	146.87	1431	155.78	1458	164.79
51577	3900	1240	99.41	1271	107.81	1300	116.34	1329	125.00	1359	133.74	1389	142.59	1417	151.54	1445	160.60	1473	169.76

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCA-490 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
400	0.25	A1	88	79	81	80	71	65	60	55	1000	8.00	E3	107	107	99	92	90	86	81	76	
	0.86	A2	85	76	74	73	66	61	56	51		9.08	E4	108	106	99	91	89	85	80	75	
	1.28	A3	83	75	70	70	64	60	54	49		1170	1.48	F1	108	113	109	104	105	100	92	86
	1.45	A4	81	75	69	69	63	59	53	48			7.40	F2	109	112	106	99	97	93	87	82
600	0.39	B1	96	94	90	91	86	78	72	67	1300	10.95	F3	110	111	105	97	93	91	86	81	
	1.95	B2	96	92	84	82	79	73	67	62		12.43	F4	111	111	104	96	93	90	84	79	
	2.88	B3	95	90	82	79	76	71	66	61		1400	1.83	G1	110	115	113	106	107	104	96	89
	3.27	B4	94	89	82	78	75	70	65	60			9.13	G2	111	115	110	101	99	96	90	85
800	0.69	C1	101	106	95	97	96	87	80	75	1500	13.52	G3	111	114	108	100	96	94	89	84	
	3.46	C2	102	103	91	89	88	81	76	71		15.34	G4	113	115	107	100	95	93	87	83	
	5.12	C3	103	100	91	85	84	79	75	69		1400	2.12	H1	111	116	116	108	109	106	98	92
	5.81	C4	104	99	91	85	84	78	74	68			10.59	H2	112	116	113	103	101	99	92	87
900	0.88	D1	103	109	99	99	99	91	84	79	1500	15.68	H3	113	116	111	102	97	96	91	86	
	4.38	D2	104	106	96	92	91	85	79	74		17.00	H4	114	117	110	102	97	95	90	85	
	6.48	D3	105	104	95	89	87	83	78	73		1400	2.43	J1	112	117	119	109	111	109	100	94
	7.35	D4	106	103	95	88	87	82	77	72			12.16	J2	113	118	116	105	102	101	94	89
1000	1.08	E1	105	110	103	101	101	95	87	82	1500	17.00	J3	114	118	114	104	100	99	93	88	
	5.40	E2	106	109	100	95	93	88	82	77												

BCA-542

SINGLE WIDTH

WHEEL DIAMETER: 54.25"

WHEEL CIRCUMFERENCE: 14.20'

OUTLET AREA: 16.255 SQ. FT.

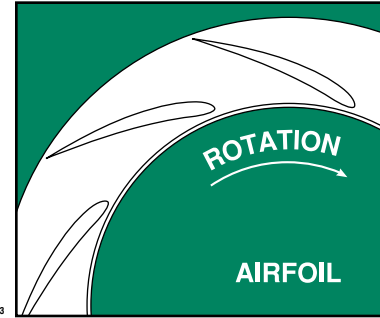
OUTLET SIZE: 43¹/₁₆" x 54³/₈"

INLET DIAMETER: 56³/₄" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	790	1031	1373
251°F TO 400°F*	751	979	1304
401°F TO 700°F*	648	845	1126
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
TIP SPEED (FPM) = 14.20 x RPM MAX BHP = 88.745 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11347	700	195	0.63	232	1.11	268	1.64	307	2.26										
12968	800	211	0.79	246	1.31	<u>277</u>	<u>1.88</u>	309	2.50										
14589	900	229	0.99	261	1.55	290	2.16	<u>317</u>	<u>2.81</u>	376	4.30								
16210	1000	248	1.22	277	1.82	304	2.48	330	3.17	380	4.68	434	6.43						
17831	1100	266	1.50	293	2.13	319	2.83	343	3.57	<u>388</u>	<u>5.14</u>	436	6.91	485	8.89				
19453	1200	286	1.80	311	2.50	335	3.23	358	4.02	400	5.68	<u>441</u>	<u>7.47</u>	487	9.48	531	11.65		
21074	1300	306	2.14	329	2.92	351	3.68	373	4.51	414	6.27	451	8.13	490	10.14	533	12.35	574	14.71
22695	1400	326	2.52	348	3.39	368	4.19	389	5.06	427	6.91	464	8.86	<u>498</u>	<u>10.89</u>	536	13.13	576	15.53
24316	1500	346	2.96	366	3.92	386	4.77	405	5.66	443	7.60	477	9.65	511	11.77	<u>542</u>	<u>13.99</u>	578	16.42
25937	1600	366	3.45	385	4.49	405	5.41	422	6.33	458	8.35	491	10.49	524	12.71	554	15.01	<u>584</u>	<u>17.41</u>
27558	1700	387	4.00	405	5.10	423	6.12	440	7.08	474	9.17	506	11.40	537	13.72	567	16.11	595	18.57
29179	1800	407	4.62	425	5.77	442	6.89	458	7.91	490	10.05	522	12.37	551	14.79	580	17.27	607	19.83
30800	1900	428	5.29	445	6.50	460	7.75	477	8.81	507	11.00	538	13.42	566	15.92	593	18.51	620	21.16
32421	2000	448	6.04	465	7.30	480	8.61	495	9.79	525	12.07	554	14.53	582	17.13	608	19.81	634	22.56
34042	2100	469	6.86	485	8.18	499	9.54	514	10.85	542	13.23	570	15.73	597	18.42	623	21.19	647	24.04

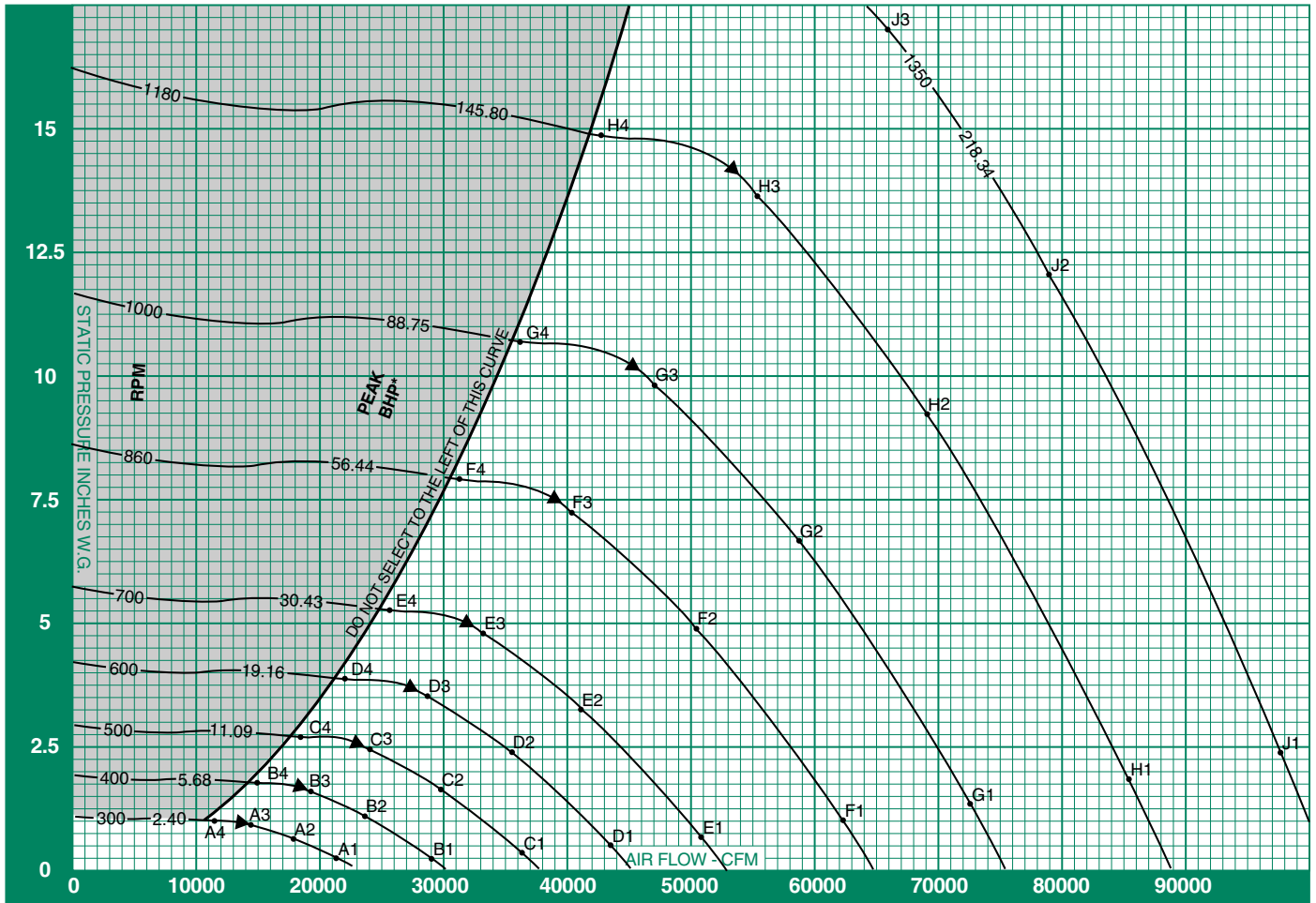
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
27558	1700	<u>624</u>	<u>21.15</u>	656	23.93	688	26.84	720	29.87	751	32.98								
29179	1800	634	22.45	<u>661</u>	<u>25.19</u>	692	28.14	722	31.20	753	34.37	782	37.65	811	40.98				
30800	1900	646	23.87	671	26.64	697	29.55	726	32.65	755	35.85	784	39.17	812	42.59	840	46.09	866	49.63
32421	2000	659	25.36	683	28.23	<u>707</u>	<u>31.15</u>	<u>732</u>	<u>34.21</u>	759	37.46	786	40.79	814	44.27	842	47.82	868	51.46
34042	2100	672	26.94	696	29.90	719	32.92	742	35.99	<u>765</u>	<u>39.18</u>	791	42.57	817	46.04	843	49.65	870	53.33
35663	2200	686	28.60	710	31.65	732	34.76	754	37.93	776	41.14	798	44.46	822	47.98	847	51.60	871	55.32
37285	2300	700	30.34	723	33.49	745	36.69	767	39.95	788	43.26	<u>808</u>	<u>46.62</u>	<u>829</u>	<u>50.04</u>	852	53.69	876	57.46
38906	2400	716	32.16	737	35.42	759	38.72	780	42.07	801	45.47	821	48.92	841	52.43	<u>860</u>	<u>55.96</u>	<u>882</u>	<u>59.72</u>
40527	2500	731	34.08	752	37.43	772	40.83	793	44.28	814	47.77	834	51.32	853	54.91	872	58.56	891	62.23
42148	2600	747	36.10	767	39.54	787	43.04	807	46.59	827	50.18	847	53.82	866	57.50	885	61.24	903	65.02
43769	2700	762	38.23	783	41.75	803	45.34	821	48.99	841	52.68	860	56.41	879	60.19	898	64.02	916	67.89
45390	2800	778	40.46	799	44.08	818	47.76	837	51.49	855	55.28	873	59.12	892	62.99	911	66.91	929	70.87
47011	2900	795	42.80	815	46.51	834	50.28	852	54.11	870	57.99	888	61.92	906	65.90	924	69.91	942	73.97
48632	3000	811	45.25	831	49.06	850	52.92	868	56.84	886	60.81	903	64.84	920	68.92	937	73.03	955	77.18
50253	3100	827	47.82	847	51.72	865	55.68	884	59.69	901	63.75	918	67.87	935	72.04	951	76.26	968	80.51
51874	3200	845	50.63	863	54.50	882	58.55	900	62.66	917	66.82	934	71.03	950	75.28	966	79.59	982	83.95
53495	3300	863	53.58	879	57.43	898	61.56	916	65.76	933	70.01	950	74.31	966	78.66	982	83.06	997	87.50
55116	3400	881	56.67	897	60.61	914	64.69	932	68.98	949	73.33	965	77.72	982	82.16	997	86.65	1013	91.19
56738	3500	899	59.89	915	63.93	931	68.01	948	72.34	965	76.78	981	81.27	997	85.80	1013	90.38	1028	95.01
58359	3600	917	63.27	933	67.40	949	71.57	964	75.84	981	80.37	997	84.95	1013	89.58	1029	94.25	1044	98.97

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
40527	2500	932	70.08	975	78.34	1021	87.00	1064	95.95	1106	105.13								
42148	2600	<u>940</u>	<u>72.74</u>	981	81.10	1022	89.75	1066	98.80	1107	108.12	1147	117.67	1186	127.36				
43769	2700	951	75.76	987	83.96	1027	92.74	1067	101.79	1109	111.20	1149	120.90	1188	130.80	1225	140.84		
45390	2800	963	78.93	<u>997</u>	<u>87.14</u>	1033	95.82	1072	105.01	1111	114.44	1151	124.21	1190	134.26	1227	144.52	1263	154.91
47011	2900	976	82.21	1008	90.62	<u>1041</u>	<u>99.15</u>	1077	108.35	1115	117.89	1153	127.70	1192	137.82	1229	148.21	1265	158.82
48632	3000	989	85.61	1021	94.20	1053	102.94	<u>1085</u>	<u>111.91</u>	1120	121.50	1156	131.38	1193	141.56	1231	152.02	1267	162.74
50253	3100	1002	89.12	1034	97.90	1065	106.83	1096	115.90	1127	125.30	1162	135.27	1197	145.49	1232	156.01	1269	166.82
51874	3200	1015	92.76	1047	101.72	1078	110.84	1108	120.11	<u>1137</u>	<u>129.49</u>	1169	139.31	1202	149.65	1236	160.21	1270	171.06
53495	3300	1029	96.52	1060	105.67	1091	114.97	1121	124.42	1149	134.02	1178	143.72	1209	153.94	1241	164.64	1274	175.53
55116	3400	<u>1043</u>	<u>100.40</u>	1074	109.75	1104	119.24	1133	128.87	1162	138.66	1189	148.57	<u>1217</u>	<u>158.57</u>	1248	169.20	1280	180.23
56738	3500	1058	104.41	1087	113.96	1117	123.64	1147	133.46	1175	143.43	1202	153.53	1229	163.76	<u>1256</u>	<u>174.07</u>	1286	185.07
58359	3600	1073	108.55	1101	118.30	1131	128.18	1160	138.19	1188	148.34	1215	158.62	1241	169.04	1267	179.57	<u>1294</u>	<u>190.21</u>
59980	3700	1089	112.84	1117	122.76	1144	132.86	1173	143.05	1201	153.39	1228	163.86	1254	174.46	1280	185.20	1305	196.03
61601	3800	1104	117.27	1132	127.38	1159	137.66	1186	148.07	1214	158.59	1241	169.25	1267	180.03	1293	190.95	1317	202.00
63222	3900	1120	121.85	1148	132.15	1174	142.60	1200	153.22	1227	163.94	1254	174.78	1280	185.76	1305	196.86	1330	208.08

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCA-542 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
300	0.25	A1	79	76	77	72	65	59	54	49	
	0.60	A2	78	72	70	67	61	55	50	45	
	0.88	A3	76	70	67	64	59	54	49	44	
	1.00	A4	75	70	66	63	58	53	48	43	
400	0.25	B1	92	82	85	84	75	68	63	58	
	1.06	B2	89	79	77	76	69	64	59	54	
	1.57	B3	86	78	73	73	67	63	58	52	
	1.78	B4	85	79	72	72	66	62	56	51	
500	0.33	C1	97	91	89	89	83	75	70	65	
	1.66	C2	95	88	82	81	76	70	65	60	
	2.45	C3	93	86	80	78	74	69	64	59	
	2.78	C4	92	86	79	77	73	68	63	58	
600	0.48	D1	100	98	93	94	89	81	75	70	
	2.38	D2	99	95	87	85	82	76	71	65	
	3.53	D3	98	93	85	82	79	74	69	64	
	4.01	D4	98	92	85	81	78	73	68	63	
700	0.65	E1	102	104	95	97	94	86	80	74	
	3.25	E2	103	101	91	89	87	80	75	70	
	700	4.80	E3	102	99	90	86	84	79	74	69
		5.45	E4	103	98	90	85	83	78	73	68
860		0.98	F1	106	111	100	102	101	93	86	80
		4.90	F2	107	108	97	94	93	87	81	76
	7.25	F3	108	106	96	90	89	85	80	75	
	8.23	F4	109	104	97	90	89	84	79	74	
1000	1.32	G1	109	114	106	104	104	98	91	85	
	6.62	G2	110	112	103	98	96	91	85	80	
	9.80	G3	110	110	102	95	93	89	84	79	
	11.13	G4	112	109	102	94	92	88	83	78	
1180	1.84	H1	112	117	113	108	108	104	96	90	
	9.22	H2	113	116	110	102	100	96	90	85	
	13.65	H3	113	115	108	100	97	94	89	84	
	15.50	H4	115	115	107	100	96	93	88	83	
1350	2.41	J1	114	119	118	110	111	108	100	94	
	12.07	J2	115	119	115	105	103	101	94	89	
	17.00	J3	116	119	113	104	100	98	93	88	

BCA-600

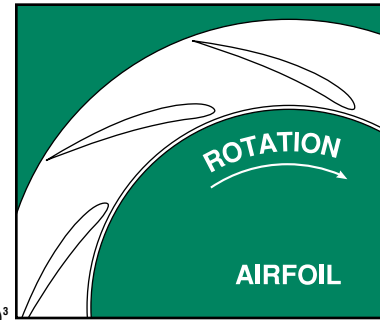
SINGLE WIDTH

WHEEL DIAMETER: 60.00"
 WHEEL CIRCUMFERENCE: 15.71'
 OUTLET AREA: 19.91 SQ. FT.
 OUTLET SIZE: 47⁵/₈" x 60³/₁₆"
 INLET DIAMETER: 63¹/₄" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	714	932	1249
251°F TO 400°F*	678	885	1187
401°F TO 700°F*	585	763	1024
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 15.71 x RPM MAX BHP = 146.859 x (RPM/1000)³



CFM	OV	0.25" SP RPM BHP	0.50" SP RPM BHP	0.75" SP RPM BHP	1.00" SP RPM BHP	1.50" SP RPM BHP	2.00" SP RPM BHP	2.50" SP RPM BHP	3.00" SP RPM BHP	3.50" SP RPM BHP
13880	700	176 0.77	210 1.35	242 2.01	277 2.76					
15863	800	191 0.97	222 1.60	<u>250</u> <u>2.30</u>	279 3.06					
17846	900	207 1.21	236 1.89	262 2.64	<u>286</u> <u>3.43</u>	340 5.26				
19829	1000	224 1.50	250 2.22	275 3.03	298 3.88	343 5.73	392 7.87			
21812	1100	241 1.83	265 2.60	289 3.46	310 4.37	<u>351</u> <u>6.29</u>	394 8.46	438 10.87		
23795	1200	258 2.20	281 3.05	303 3.95	323 4.92	362 6.95	<u>399</u> <u>9.13</u>	440 11.59	480 14.25	
25778	1300	276 2.61	298 3.57	318 4.50	338 5.52	374 7.67	408 9.94	443 12.40	482 15.11	519 17.99
27761	1400	294 3.09	314 4.15	333 5.12	352 6.19	387 8.45	420 10.84	<u>451</u> <u>13.32</u>	<u>485</u> <u>16.06</u>	<u>520</u> <u>18.99</u>
29744	1500	313 3.62	331 4.80	349 5.83	367 6.92	400 9.30	432 11.80	462 14.40	<u>490</u> <u>17.11</u>	<u>523</u> <u>20.09</u>
31727	1600	331 4.23	348 5.50	366 6.62	382 7.74	415 10.22	444 12.84	473 15.55	<u>501</u> <u>18.36</u>	<u>528</u> <u>21.30</u>
33709	1700	349 4.90	366 6.24	382 7.48	398 8.66	429 11.21	458 13.94	485 16.78	512 19.71	<u>538</u> <u>22.72</u>
35692	1800	368 5.65	384 7.05	399 8.43	414 9.67	443 12.29	472 15.13	498 18.09	524 21.13	549 24.25
37675	1900	387 6.48	402 7.95	416 9.48	431 10.78	458 13.45	486 16.41	512 19.48	536 22.64	561 25.88
39658	2000	405 7.39	420 8.93	434 10.53	448 11.97	474 14.76	501 17.78	526 20.96	549 24.24	573 27.59
41641	2100	424 8.39	438 10.01	452 11.67	465 13.27	491 16.18	515 19.24	540 22.54	563 25.93	585 29.41

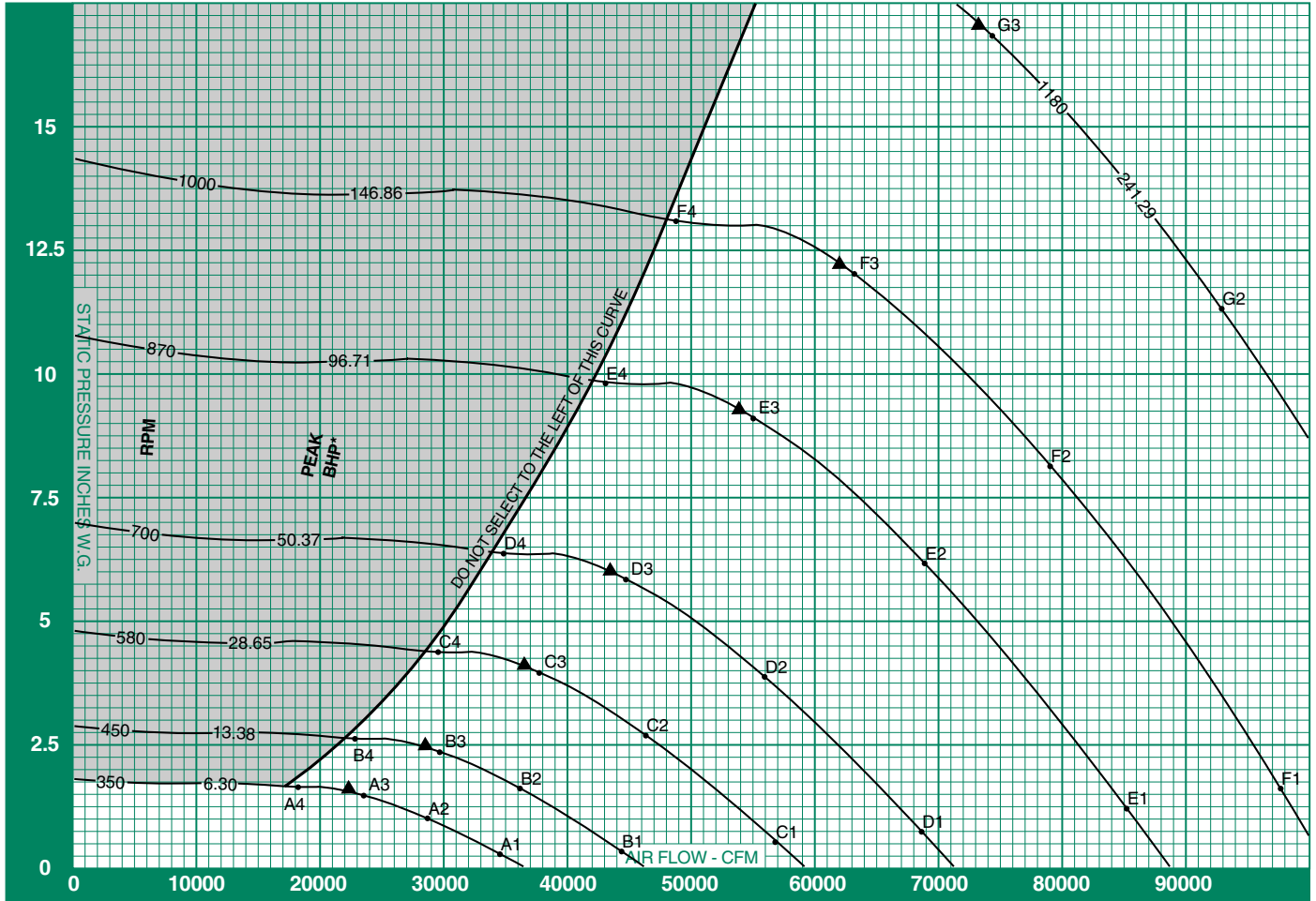
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
33709	1700	564 25.87	593 29.27	622 32.83	651 36.53	679 40.35				
35692	1800	573 27.46	<u>598</u> <u>30.82</u>	625 34.42	653 38.17	681 42.04	707 46.05	733 50.13		
37675	1900	584 29.20	607 32.59	631 36.14	656 39.94	682 43.85	709 47.91	735 52.10	759 56.37	783 60.71
39658	2000	596 31.03	618 34.53	<u>639</u> <u>38.11</u>	<u>662</u> <u>41.84</u>	686 45.82	711 49.89	736 54.15	761 58.49	785 62.95
41641	2100	608 32.95	630 36.57	650 40.27	671 44.02	692 47.92	715 52.07	738 56.32	763 60.73	787 65.23
43624	2200	620 34.98	642 38.72	662 42.52	682 46.39	701 50.33	721 54.38	743 58.69	766 63.12	788 67.67
45607	2300	633 37.11	654 40.97	674 44.88	694 48.87	713 52.92	<u>731</u> <u>57.03</u>	<u>750</u> <u>61.21</u>	771 65.68	792 70.29
47590	2400	647 39.34	666 43.32	686 47.36	705 51.46	724 55.62	742 59.85	760 64.13	<u>778</u> <u>68.45</u>	<u>797</u> <u>73.05</u>
49573	2500	661 41.69	680 45.78	698 49.95	717 54.16	736 58.44	754 62.78	771 67.17	788 71.63	806 76.12
51556	2600	675 44.16	694 48.37	712 52.64	729 56.99	748 61.38	766 65.83	783 70.34	800 74.91	816 79.53
53539	2700	689 46.76	708 51.08	726 55.46	743 59.92	760 64.44	778 69.01	795 73.63	812 78.31	828 83.05
55522	2800	704 49.49	722 53.92	740 58.41	757 62.98	773 67.62	790 72.31	807 77.05	823 81.85	840 86.69
57505	2900	718 52.35	736 56.89	754 61.50	771 66.18	787 70.93	803 75.75	819 80.61	835 85.52	851 90.48
59488	3000	733 55.35	751 60.01	768 64.73	785 69.53	801 74.38	816 79.31	832 84.30	847 89.33	863 94.41
61471	3100	748 58.49	766 63.26	783 68.10	799 73.01	815 77.98	830 83.02	845 88.12	860 93.28	875 98.48
63454	3200	764 61.93	780 66.67	797 71.63	813 76.65	829 81.73	844 86.88	859 92.09	874 97.36	888 102.69
65437	3300	780 65.54	795 70.25	812 75.30	828 80.44	843 85.63	859 90.89	873 96.22	888 101.60	902 107.04
67419	3400	796 69.31	811 74.14	826 79.13	842 84.38	858 89.70	873 95.07	887 100.50	902 106.00	916 111.55
69402	3500	813 73.26	827 78.20	842 83.19	857 88.49	872 93.92	887 99.41	902 104.96	916 110.56	930 116.22
71385	3600	829 77.39	844 82.44	858 87.54	872 92.77	887 98.31	902 103.91	916 109.58	930 115.29	944 121.07

CFM	OV	9.00" SP RPM BHP	10.00" SP RPM BHP	11.00" SP RPM BHP	12.00" SP RPM BHP	13.00" SP RPM BHP	14.00" SP RPM BHP	15.00" SP RPM BHP	16.00" SP RPM BHP	17.00" SP RPM BHP
49573	2500	843 85.73	882 95.83	923 106.42	962 117.36	1000 128.59				
51556	2600	<u>850</u> <u>88.98</u>	887 99.20	924 109.78	964 120.85	1001 132.26	1037 143.93	1072 155.79		
53539	2700	859 92.67	893 102.71	929 113.44	965 124.51	1003 136.03	1039 147.88	1074 160.00	1108 172.28	
55522	2800	871 96.55	<u>901</u> <u>106.58</u>	934 117.21	969 128.45	1004 139.99	1041 151.94	1076 164.23	1109 176.77	1142 189.49
57505	2900	882 100.56	912 110.85	<u>941</u> <u>121.28</u>	974 132.53	1008 144.20	1042 156.21	1077 168.58	1111 181.29	1144 194.27
59488	3000	894 104.71	923 115.23	952 125.92	981 136.89	1013 148.62	1046 160.71	1079 173.16	1113 185.96	1145 199.07
61471	3100	906 109.01	935 119.75	963 130.68	<u>991</u> <u>141.77</u>	1019 153.27	1051 165.46	1082 177.97	1114 190.84	1147 204.06
63454	3200	918 113.46	947 124.43	975 135.58	1002 146.92	<u>1028</u> <u>158.39</u>	1057 170.41	1087 183.05	1117 195.97	1149 209.24
65437	3300	930 118.07	959 129.26	987 140.64	1013 152.20	1039 163.94	<u>1065</u> <u>175.79</u>	1093 188.31	1122 201.38	1152 214.71
67419	3400	943 122.81	971 134.25	998 145.85	1025 157.64	1050 169.61	1075 181.74	<u>1101</u> <u>193.97</u>	1128 206.96	1157 220.47
69402	3500	957 127.71	983 139.40	1010 151.24	1037 163.25	1062 175.44	1087 187.80	1111 200.31	<u>1135</u> <u>212.92</u>	1162 226.38
71385	3600	970 132.78	996 144.70	1022 156.79	1049 169.03	1074 181.45	1098 194.03	1122 206.78	1146 219.66	<u>1170</u> <u>232.67</u>
73368	3700	984 138.02	1010 150.17	1034 162.51	1061 174.99	1086 187.63	1110 200.44	1134 213.41	1157 226.54	1180 239.79
75351	3800	999 143.45	1024 155.81	1048 168.38	1073 181.12	1098 193.99	1122 207.02	1146 220.22	1169 233.57	1191 247.08
77334	3900	1013 149.05	1038 161.64	1062 174.44	1085 187.42	1110 200.53	1134 213.80	1157 227.22	1180 240.80	1203 254.53

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCA-600 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY
* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	
350	0.20	A1	90	83	85	82	74	68	64	67	700	5.88	D3	106	102	93	89	87	82	77	74	
	1.00	A2	87	79	77	75	68	63	60	63		6.39	D4	106	101	93	88	86	81	76	73	
	1.47	A3	85	78	73	72	67	62	59	62		870	1.23	E1	110	115	104	105	104	96	89	84
	1.60	A4	84	78	73	71	66	61	58	61			6.13	E2	111	112	101	97	96	90	84	79
450	0.33	B1	98	90	90	90	82	75	70	72	1000	9.08	E3	112	110	100	94	93	88	83	78	
	1.64	B2	96	87	83	82	76	70	65	67		9.87	E4	112	109	100	93	92	87	83	77	
	2.43	B3	94	86	80	79	74	69	64	66		1180	2.26	G1	115	120	116	111	111	107	99	93
	2.64	B4	93	86	79	78	73	68	63	65			11.28	G2	116	119	113	105	103	99	93	88
580	0.55	C1	103	100	95	96	91	83	77	76	16.70	16.70	G3	117	118	111	103	100	97	92	87	
	2.73	C2	102	97	89	88	84	78	73	72		1180	2.26	G1	115	120	116	111	111	107	99	93
	4.03	C3	101	95	87	84	81	76	71	70			11.28	G2	116	119	113	105	103	99	93	88
	4.39	C4	101	95	87	84	81	76	71	70		16.70	G3	117	118	111	103	100	97	92	87	
700	0.79	D1	106	107	99	100	97	89	83	79	16.70	16.70	G3	117	118	111	103	100	97	92	87	
	3.97	D2	106	104	94	92	90	84	78	75												

BCA-660

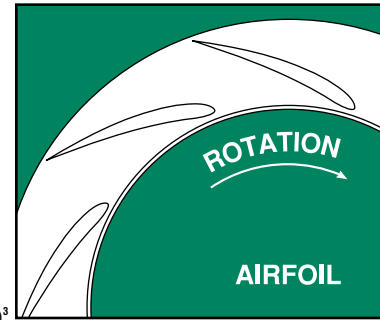
SINGLE WIDTH

WHEEL DIAMETER: 66.00"
 WHEEL CIRCUMFERENCE: 17.28'
 OUTLET AREA: 24.10 SQ. FT.
 OUTLET SIZE: 52³/₈" x 66¹/₄"
 INLET DIAMETER: 69¹/₄" O.D.



CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	649	847	1136
251°F TO 400°F*	617	804	1078
401°F TO 700°F*	532	694	931
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 17.28 x RPM MAX BHP = 236.518 x (RPM/1000)³



CFM	OV	0.25" SP		0.50" SP		0.75" SP		1.00" SP		1.50" SP		2.00" SP		2.50" SP		3.00" SP		3.50" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16795	700	160	0.94	191	1.64	220	2.43	252	3.34										
19194	800	174	1.17	202	1.94	<u>228</u>	<u>2.78</u>	254	3.71										
21594	900	188	1.46	215	2.29	238	3.20	<u>260</u>	4.15	309	6.36								
23993	1000	204	1.81	228	2.69	250	3.67	271	4.69	312	6.93	357	9.52						
26392	1100	219	2.22	241	3.15	262	4.19	282	5.29	<u>319</u>	<u>7.61</u>	358	10.23	399	13.15				
28792	1200	235	2.66	256	3.69	275	4.78	294	5.95	329	8.41	<u>362</u>	<u>11.05</u>	400	14.03	437	17.24		
31191	1300	251	3.16	271	4.32	289	5.44	307	6.68	340	9.28	371	12.03	403	15.00	438	18.28	472	21.77
33591	1400	268	3.73	286	5.02	303	6.20	320	7.49	351	10.23	382	13.11	<u>410</u>	<u>16.12</u>	441	19.43	473	22.98
35990	1500	284	4.38	301	5.80	318	7.06	333	8.37	364	11.25	392	14.28	420	17.43	<u>446</u>	<u>20.70</u>	475	24.31
38389	1600	301	5.11	317	6.65	332	8.01	347	9.37	377	12.36	404	15.53	430	18.82	455	22.22	<u>480</u>	<u>25.77</u>
40789	1700	318	5.93	333	7.55	348	9.05	362	10.48	390	13.57	416	16.87	441	20.30	466	23.84	489	27.49
43188	1800	335	6.83	349	8.54	363	10.20	377	11.71	403	14.87	429	18.31	453	21.89	477	25.57	499	29.35
45587	1900	352	7.84	365	9.62	378	11.47	392	13.04	417	16.28	442	19.86	465	23.57	488	27.39	510	31.31
47987	2000	369	8.94	382	10.81	394	12.74	407	14.49	431	17.87	455	21.51	478	25.36	499	29.33	521	33.39
50386	2100	386	10.15	398	12.11	411	14.12	422	16.06	446	19.58	468	23.28	491	27.27	512	31.37	532	35.58

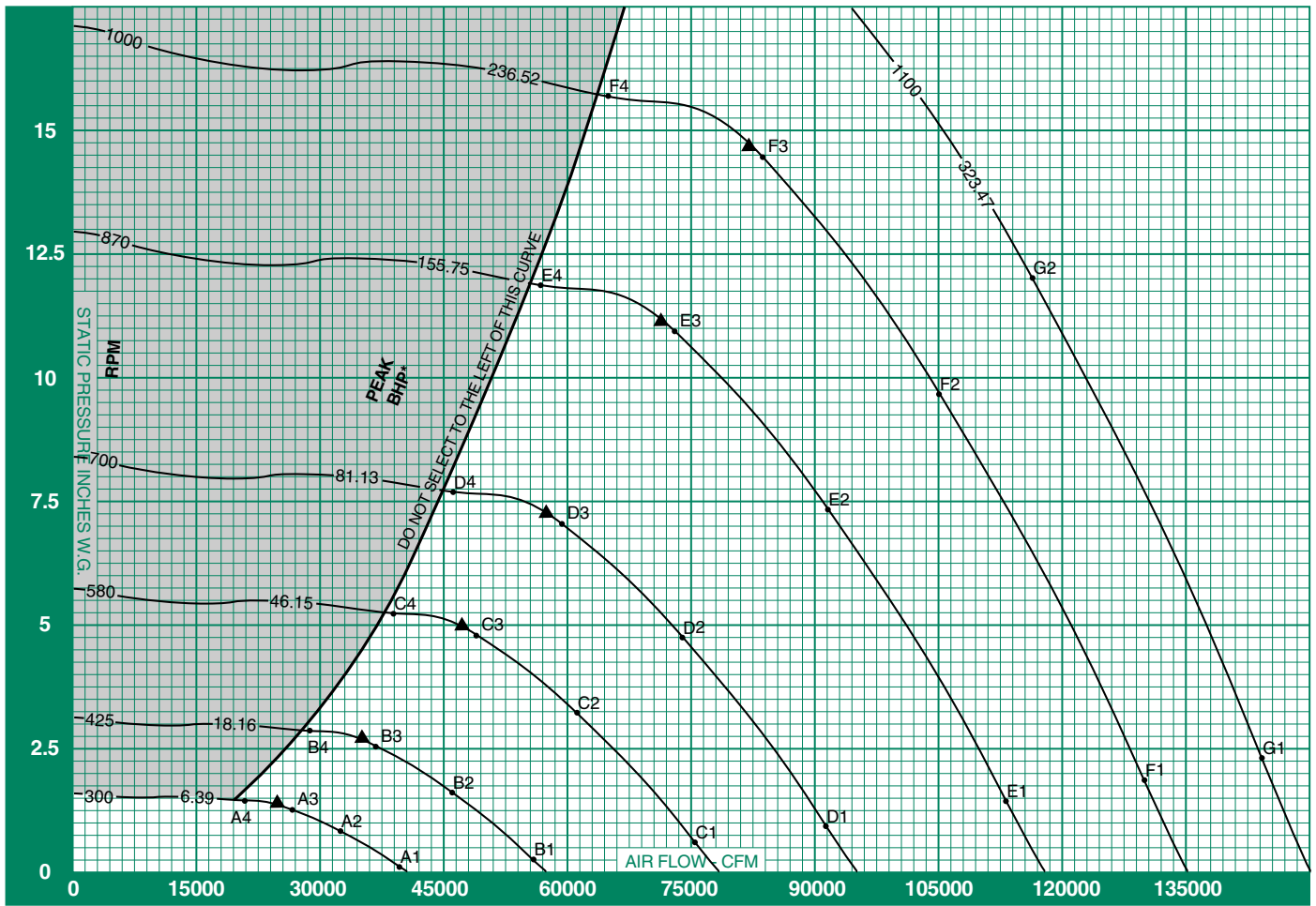
CFM	OV	4.00" SP		4.50" SP		5.00" SP		5.50" SP		6.00" SP		6.50" SP		7.00" SP		7.50" SP		8.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
40789	1700	513	31.30	539	35.42	566	39.73	592	44.21	617	48.82								
43188	1800	521	33.22	<u>544</u>	<u>37.29</u>	568	41.65	594	46.18	619	50.87	643	55.73	666	60.66				
45587	1900	531	35.33	552	39.43	573	43.73	597	48.32	620	53.06	645	57.97	668	63.04	690	68.21	712	73.45
47987	2000	542	37.54	562	41.79	<u>581</u>	<u>46.11</u>	<u>602</u>	<u>50.63</u>	624	55.44	646	60.37	669	65.52	692	70.77	713	76.17
50386	2100	553	39.87	572	44.25	591	48.72	610	53.26	<u>629</u>	<u>57.99</u>	650	63.01	671	68.15	693	73.49	715	78.93
52785	2200	564	42.33	583	46.85	602	51.45	620	56.14	638	60.89	656	65.80	676	71.01	696	76.38	716	81.88
55185	2300	576	44.90	594	49.57	613	54.31	631	59.13	648	64.03	<u>665</u>	<u>69.00</u>	<u>682</u>	<u>74.07</u>	701	79.47	720	85.05
57584	2400	588	47.60	605	52.42	624	57.30	641	62.26	658	67.30	675	72.41	691	77.60	<u>707</u>	<u>82.82</u>	<u>725</u>	<u>88.39</u>
59983	2500	601	50.45	618	55.40	635	60.44	652	65.54	669	70.71	685	75.96	701	81.28	717	86.67	732	92.10
62383	2600	614	53.44	631	58.52	647	63.70	663	68.95	680	74.27	696	79.65	712	85.11	727	90.64	742	96.23
64782	2700	627	56.58	644	61.80	660	67.11	675	72.50	691	77.97	707	83.50	723	89.09	738	94.75	753	100.48
67182	2800	640	59.88	656	65.24	672	70.68	688	76.21	703	81.82	718	87.50	734	93.23	749	99.03	763	104.90
69581	2900	653	63.34	670	68.84	685	74.42	701	80.08	715	85.83	730	91.65	744	97.54	759	103.48	774	109.48
71980	3000	666	66.97	683	72.61	698	78.33	713	84.13	728	90.01	742	95.96	756	102.00	770	108.09	785	114.23
74380	3100	680	70.78	696	76.55	711	82.41	726	88.34	741	94.36	755	100.45	769	106.62	782	112.87	796	119.16
76779	3200	694	74.94	709	80.67	725	86.67	739	92.74	754	98.90	768	105.12	781	111.43	794	117.80	807	124.25
79178	3300	709	79.30	723	85.00	738	91.11	753	97.33	767	103.62	781	109.98	794	116.42	807	122.93	820	129.51
81578	3400	724	83.87	737	89.70	751	95.75	766	102.10	780	108.53	793	115.03	807	121.61	820	128.25	832	134.97
83977	3500	739	88.65	752	94.62	765	100.66	779	107.07	793	113.64	807	120.28	820	127.00	833	133.78	845	140.63
86376	3600	754	93.64	767	99.75	780	105.93	793	112.25	806	118.96	820	125.74	833	132.59	846	139.51	858	146.49

CFM	OV	9.00" SP		10.00" SP		11.00" SP		12.00" SP		13.00" SP		14.00" SP		15.00" SP		16.00" SP		17.00" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
59983	2500	766	103.73	802	115.95	839	128.77	875	142.01	909	155.60								
62383	2600	<u>772</u>	<u>107.66</u>	806	120.04	840	132.84	876	146.23	910	160.03	943	174.16	975	188.50				
64782	2700	781	112.13	812	124.27	844	137.27	877	150.66	912	164.59	945	178.94	976	193.59	1007	208.46		
67182	2800	792	116.83	<u>819</u>	<u>128.97</u>	<u>849</u>	<u>141.82</u>	881	155.42	913	169.39	946	183.85	978	198.72	1009	213.90	1038	229.28
69581	2900	802	121.68	829	134.13	<u>856</u>	<u>146.75</u>	886	160.37	916	174.49	947	189.01	979	203.99	1010	219.36	1040	235.06
71980	3000	813	126.70	839	139.42	865	152.37	892	165.63	921	179.83	951	194.46	981	209.52	1012	225.01	1041	240.87
74380	3100	824	131.91	850	144.90	876	158.12	<u>901</u>	<u>171.54</u>	927	185.45	955	200.21	984	215.34	1013	230.91	1043	246.91
76779	3200	834	137.29	861	150.55	886	164.05	910	177.77	<u>935</u>	<u>191.66</u>	961	206.19	988	221.49	1016	237.12	1044	253.18
79178	3300	845	142.86	872	156.40	897	170.17	921	184.16	944	198.37	<u>968</u>	<u>212.71</u>	993	227.85	1020	243.68	1047	259.80
81578	3400	857	148.60	883	162.44	908	176.48	932	190.75	955	205.22	978	219.90	<u>1001</u>	<u>234.70</u>	1026	250.43	1052	266.76
83977	3500	870	154.53	894	168.68	918	183.00	942	197.53	966	212.28	988	227.24	1010	242.37	<u>1032</u>	<u>257.63</u>	1057	273.92
86376	3600	882	160.66	905	175.09	929	189.72	953	204.53	976	219.55	999	234.78	1020	250.20	1042	265.79	<u>1063</u>	<u>281.53</u>
88776	3700	895	167.01	918	181.70	940	196.64	964	211.73	987	227.03	1009	242.53	1031	258.22	1052	274.11	1073	290.14
91175	3800	908	173.57	931	188.53	953	203.75	975	219.15	998	234.73	1020	250.50	1042	266.47	1062	282.63	1083	298.97
93574	3900	921	180.35	943	195.59	965	211.07	986	226.78	1009	242.65	1031	258.69	1052	274.94	1073	291.37	1093	307.98

Performance shown is for installation type B & D - Free or ducted inlet, Ducted outlet. Underlined ratings indicate maximum static efficiency. Power rating (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.

CONSTANT SPEED PERFORMANCE CURVES

BCA-660 SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .0157}{\text{BHP}}$$

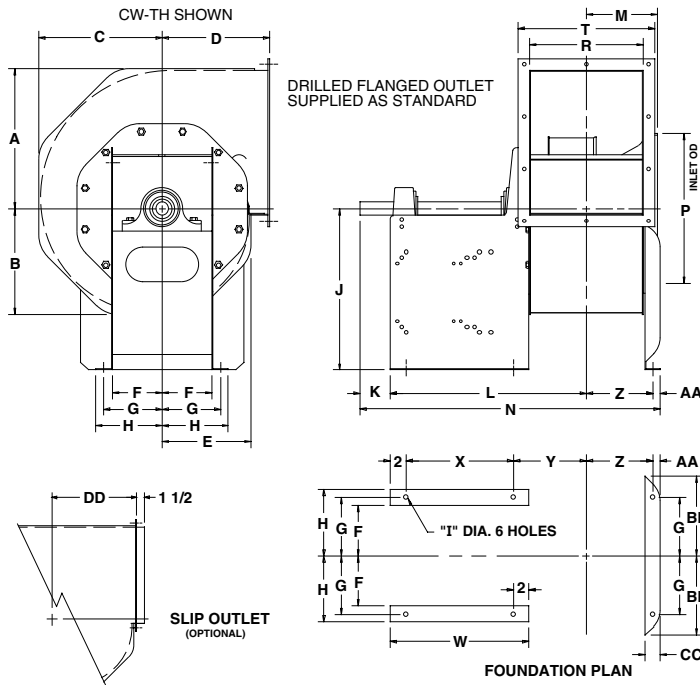
$$\text{Outlet Velocity (OV) in feet per minute} = \frac{\text{CFM}}{\text{Outlet Area}}$$

SOUND POWER LEVELS x 10⁻¹² WATT

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} sound power levels for installation Type B, free inlet, ducted outlet. Ratings do not include the effects of duct end correction.

FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY								FAN RPM	FAN SP	SOUND POINT	BAND / FREQUENCY							
			1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000				1/63	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000
300	0.18	A1	87	83	84	80	72	66	65	68	700	4.80	D2	109	107	97	95	92	86	81	78
	0.88	A2	84	78	76	73	67	61	60	63		7.11	D3	109	105	96	91	90	85	80	77
	1.31	A3	83	76	73	70	65	60	59	62		7.73	D4	110	104	96	91	89	84	79	76
	1.42	A4	82	76	72	70	64	60	58	61		1.48	E1	113	118	107	108	107	99	92	87
425	0.35	B1	101	90	92	92	83	76	71	74	7.42	E2	114	115	103	100	99	93	87	82	
	1.77	B2	98	87	84	83	77	72	66	69	11.00	E3	115	113	103	97	96	91	86	81	
	2.62	B3	95	87	81	80	75	71	65	68	11.94	E4	116	112	103	96	95	90	85	80	
	2.85	B4	94	87	80	80	74	70	65	67	1.96	F1	115	120	112	110	110	104	96	91	
580	0.66	C1	106	103	98	99	94	86	80	79	9.81	F2	116	118	109	104	102	97	91	86	
	3.30	C2	105	100	92	91	87	81	75	75	14.51	F3	117	116	108	101	99	95	90	85	
	4.88	C3	104	98	90	87	84	79	74	73	15.78	F4	118	116	108	101	98	94	89	84	
	5.31	C4	104	98	90	87	84	79	74	73	2.42	G1	117	122	116	112	113	108	100	94	
700	0.96	D1	109	110	101	103	100	92	86	82	12.08	G2	118	121	113	106	104	100	95	89	

**BCA/BCS-122-200
ARRANGEMENT 1
ROTATABLE
HOUSING**



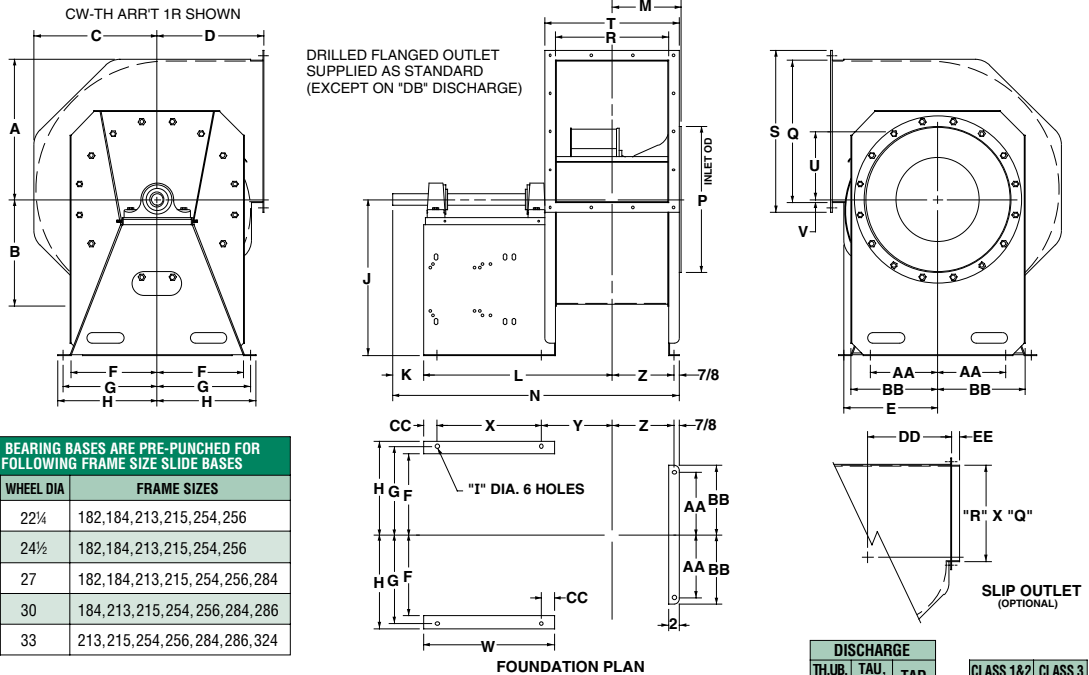
ARR'T 1 BEARING BASES ARE PRE-PUNCHED FOR THE FOLLOWING FRAME SIZE SLIDE BASES

FAN SIZES	WHEEL SIZES	FRAME SIZES
122	12¼	143,145,182,184
135	13½	143,145,182,184
150	15	143,145,182,184
165	16½	143,145,182,184,213,215
182	18¼	143,145,182,184,213,215
200	20	182,184,213,215,254

FAN SIZE	CLASS 1 & 2																CLASS 3																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR
122	12¾	9¾	10¾	10	7¾	5½	6¾	7¼	7/16	15	3½	18¾	6¾	28¾	13¾	12¾	10	15¾	13	5¾	¾	13	9	7¼	6¼	¾	9¾	1¾	8¾	1¾	¼ x ¼	104	1¾	¾ x ¾	127
135	13¾	10¾	11¾	11	8¾	5½	6¾	7¼	7/16	16	3½	18¾	7½	29¾	14¾	13¾	10¾	16¾	13¾	6¾	¾	13	9	7¾	6¾	¾	9¾	1¾	9¾	1¾	¼ x ¼	116	1¾	¾ x ¾	142
150	15¾	11¾	13¼	12	9¾	5½	6¾	7¼	7/16	18	3½	19¾	7¾	30¾	16¾	15¾	12¾	18¾	15¾	7¾	¾	13	9	8¾	7¾	¾	9¾	1¾	10¾	1¾	¼ x ¼	134	1¾	¾ x ¾	162
165	16¾	12¾	14¾	13	10¾	6½	7¾	8¾	¾	19	4	24¾	8¼	37¾	17¾	16¾	13¾	19¾	16¾	7¾	¾	18	14	8¾	8¼	1	11½	2½	11¼	1¾	¾ x ¾	209	1¾	¾ x ¾	253
182	18¼	13¾	16¼	14	11¾	6½	7¾	8¾	¾	21	4	25¼	9	39¾	19¾	18¾	14¾	21¾	17¾	8¾	¾	18	14	9¾	8¼	1	11½	2½	12¼	1¾	¾ x ¾	239	1¾	¾ x ¾	285
200	20	15¾	17¾	15	12¾	6½	7¾	8¾	¾	22	4	29¾	9¾	43¾	21¾	20¾	16¾	23¾	19¾	9¾	¾	21	17	10¾	9½	1	12¾	2½	13¼	1¾	¾ x ¾	275	1¾	½ x ¼	339

*FAN WEIGHT IS APPROXIMATE

**BCA/BCS-222-330
ARRANGEMENT 1
ROTATABLE
HOUSING**



ARR'T 1 BEARING BASES ARE PRE-PUNCHED FOR THE FOLLOWING FRAME SIZE SLIDE BASES

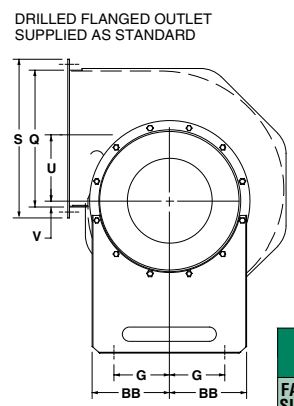
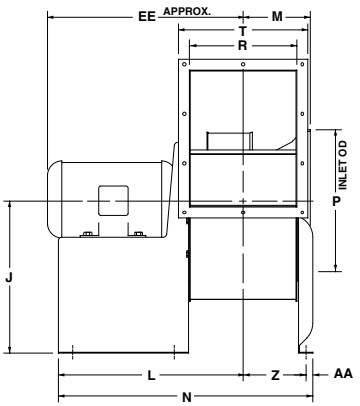
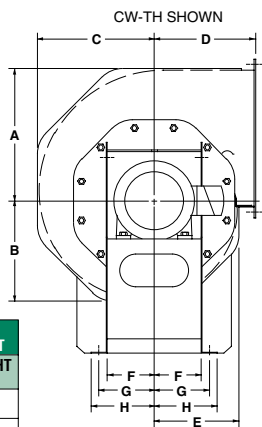
FAN SIZE	WHEEL DIA	FRAME SIZES
222	22¼	182,184,213,215,254,256
245	24½	182,184,213,215,254,256
270	27	182,184,213,215,254,256,284
300	30	184,213,215,254,256,284,286
330	33	213,215,254,256,284,286,324

FAN SIZE	CLASS 1 & 2		CLASS 3	
	SHAFT DIA	KEYWAY	SHAFT DIA	KEYWAY
222	1½	¾ x ¾	1½	½ x ¼
245	1½	¾ x ¾	2¾	½ x ¼
270	1½	¾ x ¾	2¾	½ x ¼
300	1½	½ x ¼	2½	¾ x ¾
330	2¾	½ x ¼	2½	¾ x ¾

DISCHARGE	TH, UB, DB, BH			TAU, BAU, TAD		
	TH	UB	DB, BH	TAU	BAU	TAD
222	22¼	16¾	19½	16	20½	23¾
245	24½	18½	21½	18	22½	26¾
270	26¾	20¾	23¾	19½	24	28¼
300	29¾	22¾	26¼	22	26	30¾
330	32¾	24¾	28¾	24	28¾	33¾

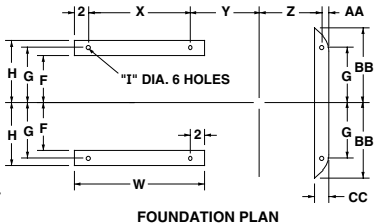
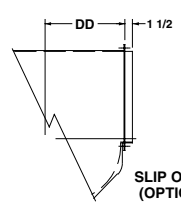
FAN SIZE	DISCHARGE																CLASS 1&2		CLASS 3																	
	A	B	C	D	D	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	DD	DD	EE	FAN WT.* NO MOTOR	FAN WT.* NO MOTOR
222	22¼	16¾	19½	16	20½	23¾	14¾	13¾	15	16	1½	25	5	32¾	10¾	48¾	23¾	22¾	17¾	25¾	20¾	10¾	1¾	23	19	11¾	10¾	10	13¾	2	14¾	18¾	22¾	1¾	393	448
245	24½	18½	21½	18	22½	26¾	15½	15½	17	18	1½	27	5	32¾	12¾	49¾	26¾	24¾	19¾	28¾	23¾	11¾	1¾	23	19	11¾	10¾	12	15½	2	15¾	20¾	24¾	2	468	546
270	26¾	20¾	23¾	19½	24	28¼	17¾	16½	18	19	1¾	30	6	36¾	13¾	54¾	28¾	27¾	21¾	31¾	25¾	13¾	1¾	25	20	13¾	11¾	13	16¾	2½	17¾	22¾	26¾	1¾	616	702
300	29¾	22¾	26¼	22	26	30¾	18¾	18	19½	20½	1¾	33	6	37¾	14¾	57¼	31¾	30¾	24¾	34¾	28¾	14¾	¾	25	20	14¾	13¾	14½	18¾	2½	19¾	24	28¾	2	763	870
330	32¾	24¾	28¾	24	28¾	33¾	20¾	19½	21	22	1¾	36	6½	40¾	15¾	62¾	34¾	33¼	26¾	37¼	30¾	15¾	¾	27	22	15¾	14¾	16	19¾	2½	21¾	26¾	31¾	2	913	1027

*FAN WEIGHT IS APPROXIMATE



**BCA/BCS-122-200
ARRANGEMENT 4
ROTATABLE HOUSING**

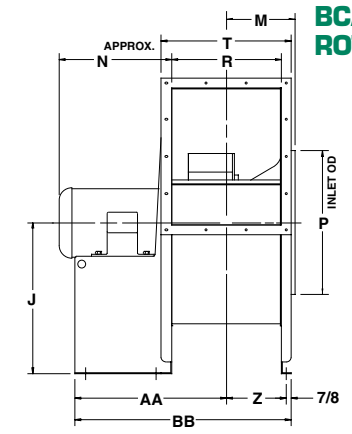
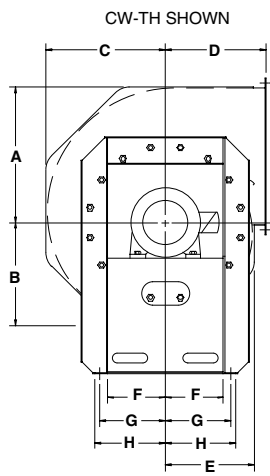
APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290



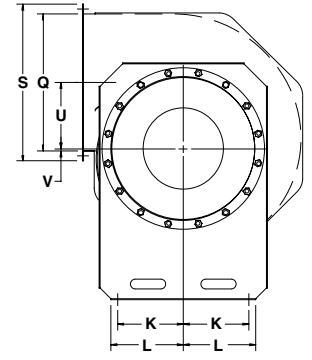
FAN SIZE	APPROXIMATE FAN WEIGHTS LESS MOTOR			
	143/145T CLASS 1&2	182/184T CLASS 3&4	213/215T CLASS 1&2	254/256T CLASS 3&4
122	103	126	102	124
135	115	141	114	139
150	133	161	132	159
165	208	252	206	249
182	235	281	233	278
200	264	328	262	323

FAN SIZE	WHEEL DIA	E E																																			
		A	B	C	D	E	F	G	H	I	J	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD								
122	12 1/4	12 3/8	9 1/8	10 1/8	10	7 1/8	5 1/8	6 1/8	7 1/8	7 1/8	15	18 1/8	6 3/8	24 1/8	13 1/8	12 1/8	10	15 1/8	13	5 3/8	3 1/8	13	9	7 1/8	6 1/8	3 1/8	9 1/8	1 1/8	8 1/8	14 1/8	15 1/8	16 1/8	17 1/8	19 1/8	20 1/8	—	—
135	13 1/2	13 3/8	10 1/8	11 1/8	11	8 1/8	5 1/8	6 3/8	7 1/8	7 1/8	16	18 3/8	7 1/8	25 1/8	14 1/8	13 3/8	10 1/8	16 1/8	13 1/8	6 3/8	7 1/8	13	9	7 1/8	6 1/8	3 1/8	9 1/8	1 1/8	9 1/8	15 1/8	15 1/8	17 1/8	17 1/8	20 1/8	20 1/8	—	—
150	15	15 1/8	11 1/8	13 1/4	12	9 1/8	5 1/8	6 3/8	7 1/8	7 1/8	18	19 3/8	7 1/8	27 1/8	16 1/8	15 1/8	12 3/8	18 1/8	15 3/8	7 3/8	9 1/8	13	9	8 1/8	7 1/8	3 1/8	9 1/8	1 1/8	10 1/8	16	16 1/8	17 1/8	18 1/8	20 3/8	21 1/8	—	—
165	16 1/2	16 1/8	12 1/8	14 1/8	13	10 1/8	6 1/8	7 1/8	8 1/8	9 1/8	19	23 1/8	8 1/4	32 1/8	17 1/8	16 1/8	13 1/8	19 1/8	16 1/8	7 3/8	1 1/8	17	13	8 1/8	8 1/8	1	11 1/8	2 1/8	11 1/8	16 1/8	17 1/8	18 1/8	19	21 1/8	22 1/8	25 1/8	26 1/8
182	18 1/4	18 1/4	13 3/8	16 1/8	14	11 1/8	6 1/8	7 1/8	8 1/8	9 1/8	21	24 1/8	9	34 1/8	19 1/8	18 1/8	14 1/8	21 1/8	17 1/8	8 2/8	1 1/8	17	13	9 1/8	8 1/8	1	11 1/8	2 1/8	12 1/8	17 1/8	17 1/8	19 1/8	19 1/8	22 1/8	22 1/8	26 1/8	27 1/8
200	20	20	15 1/8	17 1/8	15	12 1/8	6 1/8	7 1/8	8 1/8	9 1/8	22	25 1/8	9 1/8	35 1/8	21 1/8	20 1/8	16 1/8	23 1/8	19 1/8	9 1/8	3/8	17	13	10 1/8	9 1/8	1	12 1/8	2 1/8	13 1/8	18	18 1/8	19 1/8	20 1/8	22 1/8	23 1/8	27	27 1/8

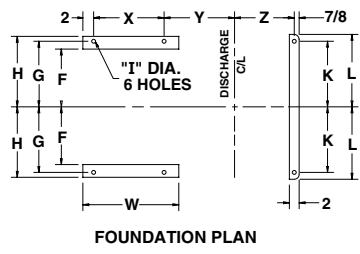
APPROX. TEFC MOTOR WEIGHT AND RELATED DIMENSIONS				
FRAME SIZE	WEIGHT LBS.	N	W	X
182T	75	11 1/8	10 1/8	6
184T	100	12 1/8	12 1/8	6
213T	150	14 1/8	12 1/8	8
215T	175	16 1/8	16 1/8	8
254T	240	19 1/8	16 1/8	12
256T	300	20 1/8	16 1/8	12
284T	403	22 1/8	18 1/8	14
286T	420	23 1/8	18 1/8	14
324T	553	24 1/8	20 1/8	16
326T	627	26 1/8	20 1/8	16
364T	726	27 1/8	21 1/8	17
365T	836	28 1/8	21 1/8	17
404T	1122	32 1/8	24 1/8	20
405T	1300	34	24 1/8	20
444T	1727	38 1/8	27 1/8	23
445T	1846	40 1/8	27 1/8	23



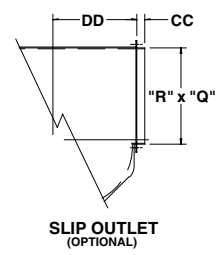
**BCA/BCS-222-330 ARRANGEMENT 4
ROTATABLE HOUSING**



FAN SIZE	APPROXIMATE FAN WEIGHTS LESS MOTOR														
	182/184T CLASS 1&2	213/215T CLASS 3	254/256T CLASS 1&2	284/286T CLASS 3	324/326T CLASS 1&2	364/365T CLASS 3	404/405T CLASS 1&2	444/445T CLASS 3							
222	347	372	351	376	362	387	364	389	366	391	N/A	N/A	N/A		
245	429	462	435	468	447	480	449	482	453	486	453	486	N/A	N/A	
270	537	578	570	611	588	629	592	633	598	639	598	639	609	650	N/A
300	N/A	707	760	727	780	726	779	739	792	740	793	751	804	761	814
330	N/A	889	996	910	1017	917	1024	924	1031	925	1032	938	1045	949	1056



DRILLED FLANGED OUTLET SUPPLIED AS STANDARD



FAN SIZE	CC	TH, UB, BAU, TAD			
		BH	BAU	BAU	TAD
222	1 1/8	14 1/8	18 1/8	22 1/8	
245	2	15 1/8	20 1/8	24 1/8	
270	1 1/8	17 1/8	22 1/8	26 1/8	
300	2	19 1/8	24	28 1/8	
330	2	21 1/8	26 1/8	31 1/8	

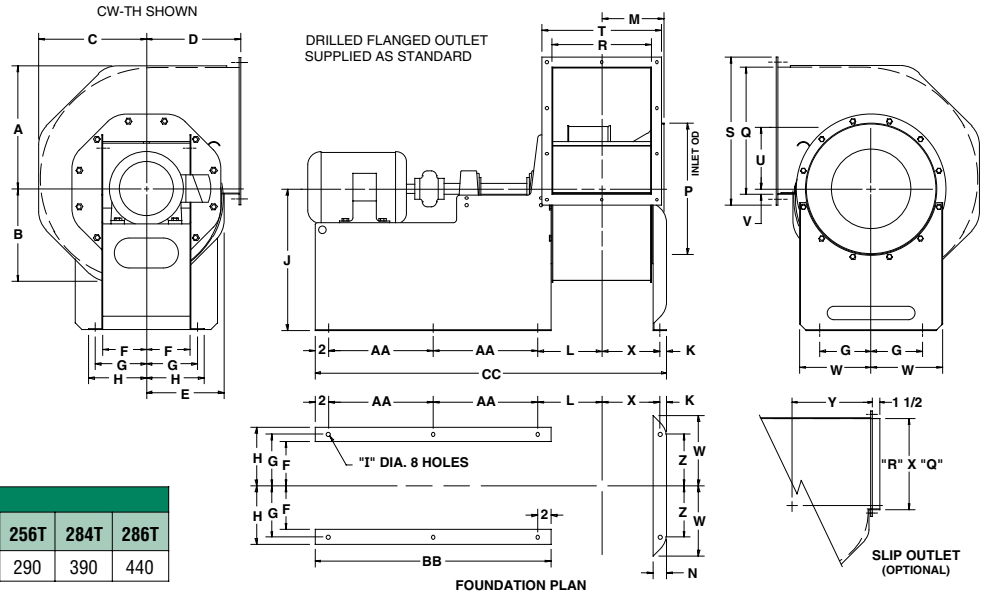
FAN SIZE	TH, UB, BAU, TAD			182/184T		213/215T		254/256T		284/286T		324/326T		364/365T		404/405T		444/445T																					
	A	B	C	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB																				
222	22 1/4	16 1/8	19 1/2	16	20 1/8	23 1/8	14 1/8	8	10	11 1/8	25	10	13 1/8	10 3/8	23 1/8	22 1/8	17 1/8	25 1/8	20 1/8	10 3/8	1 1/8	11 1/8	10 3/8	19 3/8	30 1/8	21 1/8	32 1/8	25 1/8	36 1/8	27 1/8	38 1/8	29 1/8	40 1/8	N/A	N/A	N/A			
245	24 1/8	18 1/8	21 1/8	18	22 1/8	26 1/8	15 1/8	10 1/8	12	13 1/8	27	12	15 1/8	12 3/8	26 1/8	24 1/8	19 1/8	28 1/8	23 1/8	11 1/8	1 1/8	12 1/8	10 3/8	20 1/8	32 1/8	22 1/8	34 1/8	26 1/8	38 1/8	28 1/8	40 1/8	30 1/8	42 1/8	31 1/8	43 1/8	N/A	N/A	N/A	
270	26 1/8	20 1/8	23 1/8	19 1/2	24	28 1/8	17 1/8	11 1/8	13	14 1/8	30	13	16 1/8	13 3/8	28 1/8	27 1/8	21 1/8	31 1/8	25 1/8	13 1/8	1 1/8	13 1/8	11 1/8	21 1/8	34 1/8	23 1/8	36 1/8	27 1/8	40 1/8	29 1/8	42 1/8	31 1/8	44 1/8	32 1/8	45 1/8	35 1/8	48 1/8	N/A	N/A
300	29 1/8	22 1/8	26 1/8	22	26	30 1/8	18 1/8	12 1/8	14	15 1/8	33	14 1/2	18 1/8	14 1/8	31 1/8	30 1/8	24 1/8	34 1/8	28 1/8	14 1/8	1 1/8	15 1/8	13 1/8	N/A	25 1/8	39 1/8	29 1/8	43 1/8	31 1/8	45 1/8	33 1/8	47 1/8	34 1/8	48 1/8	37 1/8	51 1/8	40 1/8	54 1/8	
330	32 1/8	24 1/8	28 1/8	24	28 1/8	33 1/8	20 1/8	12 1/8	14	15 1/8	36	16	19 1/8	15 1/8	34 1/8	33 1/8	26 1/8	37 1/8	30 1/8	15 1/8	1 1/8	16 1/8	14 1/8	N/A	26 1/8	41 1/8	30 1/8	45 1/8	32 1/8	47 1/8	34 1/8	49 1/8	35 1/8	50 1/8	38 1/8	53 1/8	41 1/8	56 1/8	

**BCA/BCS-122-200
ARRANGEMENT 8
ROTATABLE
HOUSING**

CLASS 1 & 2			CLASS 3			
FAN SIZE	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR
122	1 ³ / ₁₆	¼ x ¼	124	1 ⁷ / ₁₆	¾ x ¾	147
135	1 ³ / ₁₆	¼ x ¼	138	1 ⁷ / ₁₆	¾ x ¾	164
150	1 ³ / ₁₆	¼ x ¼	158	1 ⁷ / ₁₆	¾ x ¾	186
165	1 ⁷ / ₁₆	¾ x ¾	247	1 ¹ / ₁₆	¾ x ¾	291
182	1 ⁷ / ₁₆	¾ x ¾	281	1 ¹ / ₁₆	¾ x ¾	327
200	1 ⁷ / ₁₆	¾ x ¾	318	1 ⁵ / ₁₆	½ x ¼	381

*FAN WEIGHT IS APPROXIMATE

APPROXIMATE MOTOR WEIGHT (lbs.)										
FRAME SIZE	143T	145T	182T	184T	213T	215T	254T	256T	284T	286T
WEIGHT	45	52	85	100	150	170	260	290	390	440



FAN SIZE																					143T/145T			182T/184T			213T/215T			254T/256T			284T/286T							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC
122	12 ³ / ₁₆	9 ³ / ₁₆	10 ³ / ₁₆	10	7 ⁷ / ₁₆	5 ¹ / ₂	6 ³ / ₁₆	7 ⁷ / ₁₆	7 ¹ / ₁₆	15	¾	7 ⁷ / ₁₆	6 ³ / ₁₆	1 ¹ / ₁₆	13 ³ / ₁₆	12 ³ / ₁₆	10	15 ⁵ / ₁₆	13	5 ³ / ₃₂	¾	9 ³ / ₁₆	6 ¹ / ₁₆	8 ⁵ / ₁₆	6 ³ / ₁₆	11 ¹ / ₂	27	38 ¹⁵ / ₁₆	12 ¹ / ₂	29	40 ¹⁵ / ₁₆	14 ¹ / ₂	33	44 ¹⁵ / ₁₆	N/A	N/A				
135	13 ³ / ₁₆	10 ³ / ₁₆	11 ¹ / ₁₆	11	8 ¹ / ₁₆	5 ¹ / ₂	6 ³ / ₁₆	7 ⁷ / ₁₆	7 ¹ / ₁₆	16	¾	7 ⁹ / ₃₂	7 ¹ / ₃₂	1 ¹ / ₁₆	14 ³ / ₁₆	13 ³ / ₁₆	10 ³ / ₁₆	16 ³ / ₁₆	13 ¹ / ₁₆	6 ³ / ₁₆	7 ¹ / ₃₂	9 ³ / ₁₆	6 ¹ / ₃₂	9 ⁹ / ₁₆	6 ³ / ₁₆	11 ¹ / ₂	27	39 ¹ / ₁₆	12 ¹ / ₂	29	41 ¹ / ₁₆	14 ¹ / ₂	33	45 ¹ / ₁₆	N/A	N/A				
150	15 ¹ / ₁₆	11 ¹ / ₁₆	13 ¹ / ₁₆	12	9 ³ / ₁₆	5 ¹ / ₂	6 ³ / ₁₆	7 ⁷ / ₁₆	7 ¹ / ₁₆	18	¾	8 ³ / ₃₂	7 ¹ / ₃₂	1 ¹ / ₁₆	16 ¹ / ₂	15 ¹ / ₁₆	12 ³ / ₁₆	18 ¹ / ₁₆	15 ³ / ₁₆	7 ³ / ₃₂	9 ³ / ₃₂	9 ³ / ₁₆	7 ³ / ₃₂	10 ³ / ₁₆	6 ³ / ₁₆	11 ¹ / ₂	27	41 ¹ / ₁₆	12 ¹ / ₂	29	43 ¹ / ₁₆	14 ¹ / ₂	33	47 ³ / ₁₆	N/A	N/A				
165	16 ³ / ₁₆	12 ³ / ₁₆	14 ³ / ₁₆	13	10 ³ / ₁₆	6 ¹ / ₂	7 ³ / ₁₆	8 ³ / ₁₆	9 ³ / ₁₆	19	1	8 ³ / ₁₆	8 ¹ / ₄	2 ¹ / ₁₆	17 ¹ / ₂	16 ³ / ₁₆	13 ³ / ₁₆	19 ³ / ₁₆	16 ³ / ₁₆	7 ³ / ₃₂	1 ¹ / ₃₂	11 ¹ / ₂	8 ¹ / ₁₆	11 ¹ / ₁₆	7 ³ / ₁₆	13 ¹ / ₂	31	46 ¹ / ₁₆	14 ¹ / ₂	33	48 ¹ / ₁₆	15 ¹ / ₂	37	52 ¹ / ₁₆	19	42	57 ¹ / ₁₆	N/A	N/A	
182	18 ¹ / ₄	13 ³ / ₁₆	16 ¹ / ₁₆	14	11 ¹ / ₁₆	6 ¹ / ₂	7 ³ / ₁₆	8 ³ / ₁₆	9 ³ / ₁₆	21	1	9 ¹ / ₂	9	2 ¹ / ₁₆	19 ¹ / ₂	18 ³ / ₁₆	14 ³ / ₁₆	21 ¹ / ₁₆	17 ³ / ₁₆	8 ² / ₃₂	1 ¹ / ₃₂	11 ¹ / ₂	8 ³ / ₁₆	12 ¹ / ₁₆	7 ³ / ₁₆	13 ¹ / ₂	31	48 ³ / ₁₆	14 ¹ / ₂	33	50 ³ / ₁₆	16 ¹ / ₂	37	54 ³ / ₁₆	19	42	59 ³ / ₁₆	N/A	N/A	
200	20	15 ¹ / ₁₆	17 ³ / ₁₆	15	12 ¹ / ₁₆	7	8 ³ / ₁₆	9 ³ / ₁₆	9 ³ / ₁₆	22	1	10 ³ / ₁₆	9 ¹ / ₁₆	2 ¹ / ₁₆	21 ¹ / ₂	20 ³ / ₁₆	16 ³ / ₁₆	23 ¹ / ₁₆	19 ³ / ₁₆	9 ¹ / ₁₆	¾	12 ³ / ₁₆	9 ¹ / ₂	13 ¹ / ₄	7 ³ / ₁₆	14 ¹ / ₂	33	51 ¹ / ₁₆	15 ¹ / ₂	35	53 ¹ / ₁₆	17 ¹ / ₂	39	57 ¹ / ₁₆	20	44	62 ¹ / ₁₆	21	46	64 ¹ / ₁₆

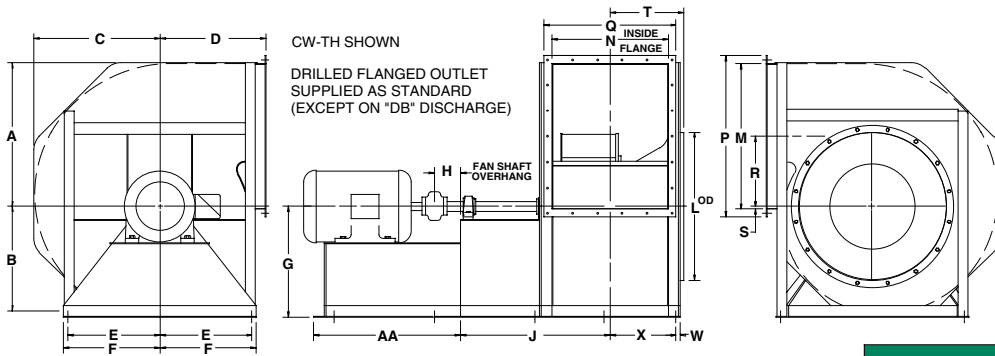
**BCA/BCS-222-330
ARRANGEMENT 8
ROTATABLE
HOUSING**

FAN SIZE	182T / 184T			213T / 215T			254T / 256T			284T / 286T			324T / 326T			364T / 365T		
	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC
222	15	36	56 ¹ / ₁₆	17	40	60 ¹ / ₁₆	19 ¹ / ₂	45	65 ¹ / ₁₆	20 ¹ / ₂	47	67 ¹ / ₁₆	22	50	70 ¹ / ₁₆	N/A		
245	16 ¹ / ₂	39	60 ³ / ₁₆	18 ¹ / ₂	43	64 ³ / ₁₆	21	48	69 ³ / ₁₆	22	50	71 ³ / ₁₆	23 ¹ / ₂	53	74 ³ / ₁₆	24	54	75 ³ / ₁₆
270	17	40	63 ³ / ₁₆	19	44	67 ³ / ₁₆	21 ¹ / ₂	49	72 ³ / ₁₆	22 ¹ / ₂	51	74 ³ / ₁₆	24	54	77 ³ / ₁₆	24 ¹ / ₂	55	78 ³ / ₁₆
300	N/A			19	44	70 ³ / ₁₆	21 ¹ / ₂	49	75 ³ / ₁₆	22 ¹ / ₂	51	77 ³ / ₁₆	24	54	80 ³ / ₁₆	24 ¹ / ₂	55	81 ³ / ₁₆
330	N/A			21	48	76 ¹ / ₁₆	23 ¹ / ₂	53	81 ¹ / ₁₆	24 ¹ / ₂	55	83 ¹ / ₁₆	26	58	86 ¹ / ₁₆	26 ¹ / ₂	59	87 ¹ / ₁₆

APPROXIMATE MOTOR WEIGHT (lbs.)												
FRAME SIZE	182T	184T	213T	215T	254T	256T	284T	286T	324T	326T	364T	365T
WEIGHT	85	100	150	170	260	290	390	440	555	620	750	810

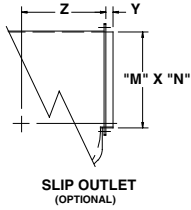
FAN SIZE														DISCHARGE			CLASS 1 & 2				CLASS 3													
	A	B	C	D	D	D	E	F	G	H	I	J	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Y	Y	Z	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR
222	22 ¹ / ₄	16 ¹ / ₁₆	19 ¹ / ₂	16	20 ¹ / ₂	23 ³ / ₄	14 ³ / ₈	8	9 ¹ / ₂	10 ¹ / ₂	1 ¹ / ₁₆	25	12 ³ / ₃₂	10 ² / ₃₂	10	23 ¹ / ₂	22 ³ / ₈	17 ¹ / ₁₆	25 ³ / ₈	20 ¹ / ₁₆	10 ² / ₃₂	1 ³ / ₃₂	13 ³ / ₈	10 ³ / ₃₂	14 ³ / ₈	18 ³ / ₈	22 ¹ / ₈	1 ³ / ₈	1 ¹ / ₁₆	¾ x ¾	474	1 ¹ / ₁₆	½ x ¼	528
245	24 ¹ / ₁₆	18 ¹ / ₂	21 ¹ / ₂	18	22 ¹ / ₂	26 ¹ / ₄	15 ¹ / ₂	9	10 ¹ / ₂	11 ¹ / ₂	1 ¹ / ₁₆	27	12 ³ / ₃₂	12 ³ / ₃₂	12	26 ¹ / ₂	24 ¹ / ₁₆	19 ¹ / ₁₆	28 ¹ / ₁₆	23 ¹ / ₁₆	11 ¹ / ₂	1 ⁵ / ₃₂	15 ¹ / ₂	10 ³ / ₃₂	15 ¹ / ₄	20 ¹ / ₂	24 ¹ / ₄	2	1 ¹ / ₁₆	¾ x ¾	573	2 ³ / ₁₆	½ x ¼	650
270	26 ¹ / ₁₆	20 ³ / ₈	23 ³ / ₈	19 ¹ / ₂	24	28 ¹ / ₄	17 ¹ / ₁₆	10	11 ¹ / ₂	12 ¹ / ₂	1 ³ / ₁₆	30	14 ¹ / ₃₂	13 ³ / ₃₂	13	28 ¹ / ₂	27 ¹ / ₈	21 ¹ / ₁₆	31 ¹ / ₈	25 ¹ / ₁₆	13 ¹ / ₁₆	1 ¹ / ₃₂	16 ¹ / ₁₆	11 ³ / ₃₂	17 ¹ / ₁₆	22 ¹ / ₁₆	26 ¹ / ₁₆	1 ¹ / ₁₆	1 ¹ / ₁₆	¾ x ¾	775	2 ³ / ₁₆	½ x ¼	859
300	29 ³ / ₈	22 ³ / ₈	26 ¹ / ₄	22	26	30 ¹ / ₂	18 ³ / ₁₆	11	12 ¹ / ₂	13 ¹ / ₂	1 ³ / ₁₆	33	15 ¹ / ₃₂	14 ¹ / ₃₂	14 ¹ / ₂	31 ¹ / ₂	30 ³ / ₈	24 ¹ / ₁₆	34 ¹ / ₈	28 ¹ / ₁₆	14 ¹ / ₃₂	1 ⁹ / ₃₂	18 ³ / ₁₆	13 ³ / ₃₂	19 ¹ / ₄	24	28 ¹ / ₂	2	1 ¹ / ₁₆	½ x ¼	936	2 ⁷ / ₁₆	¾ x ¾	1041
330	32 ¹ / ₁₆	24 ¹ / ₁₆	28 ¹ / ₁₆	24	28 ³ / ₄	33 ³ / ₄	20 ³ / ₁₆	11	12 ¹ / ₂	13 ¹ / ₂	1 ³ / ₁₆	36	16 ¹ / ₁₆	15 ¹ / ₃₂	16	34 ¹ / ₂	33 ¹ / ₄	26 ¹ / ₁₆	37 ¹ / ₄	30 ³ / ₁₆	15 ¹ / ₃₂	2 ¹ / ₃₂	19 ¹ / ₁₆	14 ³ / ₈	21 ¹ / ₄	26 ³ / ₄	31 ³ / ₄	2	2 ³ / ₁₆	½ x ¼	1113	2 ¹ / ₁₆	¾ x ¾	1226

*FAN WEIGHT IS APPROXIMATE

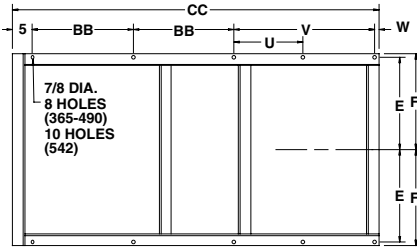


FAN SIZE	Y	DISCHARGE	
		ALL EXCEPT TAD	TAD
365	2	24 $\frac{3}{4}$	39 $\frac{3}{16}$
402	2	27 $\frac{3}{4}$	43
445	2	30 $\frac{3}{4}$	45 $\frac{3}{16}$
490	3	32 $\frac{3}{4}$	52 $\frac{15}{16}$
542	3	36 $\frac{3}{4}$	56 $\frac{3}{4}$

**BCA/BCS
-365-542
ARRANGEMENT
8 FIXED
HOUSING**
Also available in
sizes 600 and 660.
Contact Factory
for drawing.



SLIP OUTLET
(OPTIONAL)



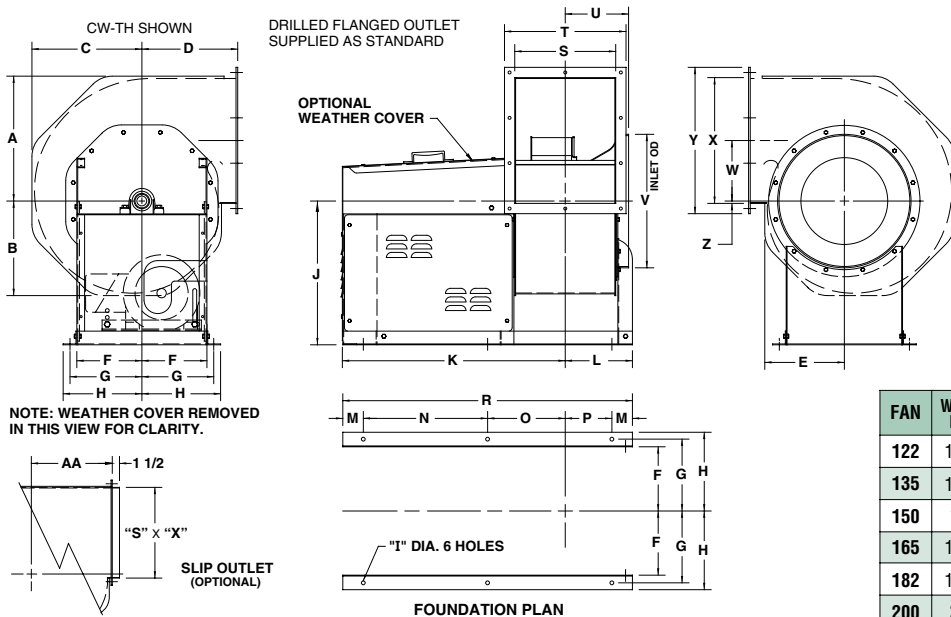
FOUNDATION PLAN

APPROXIMATE MOTOR WEIGHT (lbs.)									
FRAME SIZE	324T	326T	364T	365T	404T	405T	444T	445T	447T
WEIGHT	555	620	750	810	1050	1150	1400	1575	2100

MOTOR FRAME SIZES															
FAN SIZE	324T / 326T			364T / 365T			404T / 405T			444T / 445T			447T		
	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC
365	36	24 $\frac{3}{16}$	91 $\frac{3}{16}$	37	25 $\frac{1}{16}$	92 $\frac{3}{16}$	42	27 $\frac{1}{16}$	97 $\frac{3}{16}$	N/A			N/A		
402	N/A			37	26	96 $\frac{1}{16}$	42	28 $\frac{1}{2}$	101 $\frac{1}{16}$	47	31	106 $\frac{1}{16}$	N/A		
445	N/A			37	27	101 $\frac{1}{16}$	42	29 $\frac{1}{2}$	106 $\frac{3}{16}$	47	32	111 $\frac{1}{16}$	N/A		
490	N/A			38	29 $\frac{1}{16}$	110 $\frac{1}{4}$	43	31 $\frac{1}{16}$	115 $\frac{1}{4}$	48	34 $\frac{1}{16}$	120 $\frac{1}{4}$	53	36 $\frac{3}{16}$	125 $\frac{1}{4}$
542	N/A			N/A			43	32 $\frac{1}{2}$	120 $\frac{3}{16}$	48	35	125 $\frac{3}{16}$	53	37 $\frac{1}{2}$	130 $\frac{3}{16}$

FAN SIZE	DISCHARGE		DISCHARGE G												CLASS 1 & 2				CLASS 3															
	A	B	TH	TAU	UB	BAU	BH	DB	TAD	H	J	L	M	N	P	Q	R	S	T	U	V	W	X	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR					
365	36 $\frac{5}{16}$	27 $\frac{1}{16}$	31 $\frac{1}{16}$	27	42 $\frac{1}{16}$	23 $\frac{1}{4}$	24 $\frac{1}{4}$	28	30	33	35	40	27	33	6 $\frac{1}{2}$	37 $\frac{1}{16}$	37 $\frac{1}{2}$	36 $\frac{3}{4}$	29 $\frac{1}{4}$	40 $\frac{3}{4}$	33 $\frac{1}{4}$	17 $\frac{1}{16}$	1 $\frac{1}{16}$	16 $\frac{3}{16}$	—	35 $\frac{1}{2}$	1	16 $\frac{1}{16}$	2 $\frac{1}{16}$	5/8 x 5/16	1648	2 $\frac{1}{16}$	5/8 x 5/16	1891
402	40	30 $\frac{1}{4}$	35 $\frac{1}{16}$	30	45 $\frac{1}{4}$	25 $\frac{1}{4}$	26 $\frac{1}{4}$	31	33	36	38	43	30	35	7	40 $\frac{3}{32}$	41 $\frac{1}{2}$	40 $\frac{3}{16}$	32 $\frac{3}{16}$	44 $\frac{3}{16}$	36 $\frac{3}{16}$	19 $\frac{3}{32}$	1 $\frac{3}{16}$	18 $\frac{1}{2}$	—	38 $\frac{1}{16}$	1	18 $\frac{3}{32}$	2 $\frac{1}{16}$	5/8 x 5/16	2029	2 $\frac{1}{16}$	3/4 x 3/8	2267
445	44 $\frac{1}{2}$	33 $\frac{1}{32}$	38 $\frac{25}{32}$	33	47 $\frac{1}{16}$	27	28 $\frac{1}{4}$	34	37	40	42	47	33	37	7	43 $\frac{31}{32}$	45 $\frac{1}{2}$	44 $\frac{3}{16}$	35 $\frac{1}{16}$	48 $\frac{3}{16}$	39 $\frac{3}{16}$	21 $\frac{1}{16}$	2 $\frac{1}{16}$	19 $\frac{31}{32}$	—	41 $\frac{1}{16}$	1 $\frac{1}{4}$	19 $\frac{3}{32}$	2 $\frac{1}{16}$	5/8 x 5/16	2333	2 $\frac{1}{16}$	3/4 x 3/8	2627
490	48 $\frac{25}{32}$	36 $\frac{3}{4}$	42 $\frac{1}{16}$	36	56 $\frac{3}{16}$	31 $\frac{1}{4}$	32 $\frac{1}{2}$	37	40	43	46	54	36	44	8	49 $\frac{3}{16}$	51 $\frac{1}{2}$	49 $\frac{3}{16}$	39 $\frac{1}{16}$	55 $\frac{3}{16}$	45 $\frac{1}{16}$	23 $\frac{1}{4}$	2 $\frac{1}{16}$	22 $\frac{3}{4}$	—	45 $\frac{1}{16}$	1 $\frac{1}{4}$	21 $\frac{3}{16}$	2 $\frac{1}{16}$	3/4 x 3/8	3037	3 $\frac{1}{16}$	7/8 x 7/16	3414
542	53 $\frac{13}{16}$	40 $\frac{25}{32}$	47 $\frac{1}{4}$	40	59 $\frac{3}{16}$	33 $\frac{3}{4}$	35	41	45	48	51	59	40	47	8	52 $\frac{27}{32}$	56 $\frac{3}{4}$	54 $\frac{3}{4}$	43 $\frac{3}{16}$	60 $\frac{3}{4}$	49 $\frac{3}{16}$	26 $\frac{1}{4}$	1 $\frac{1}{16}$	24 $\frac{27}{32}$	—	49 $\frac{3}{16}$	1 $\frac{1}{4}$	23 $\frac{3}{32}$	3 $\frac{3}{16}$	3/4 x 3/8	3521	3 $\frac{1}{16}$	7/8 x 7/16	4021

*FAN WEIGHT IS APPROXIMATE



NOTE: WEATHER COVER REMOVED IN THIS VIEW FOR CLARITY.

APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290

**BCA/BCS-122-200
ARRANGEMENT 10
ROTATABLE
HOUSING**

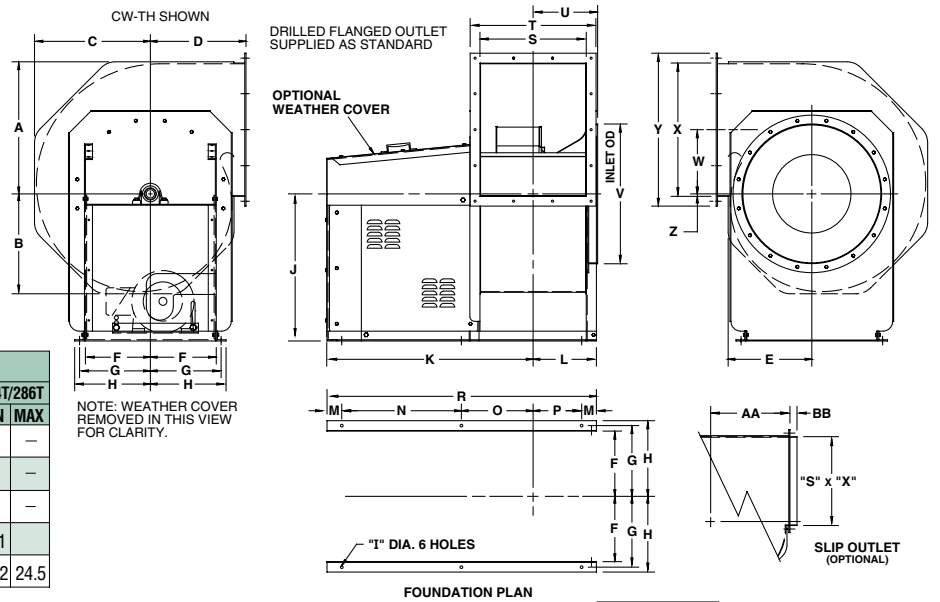
FAN	WHEEL DIA.	MAX FRAME SIZE	MAX FAN SHEAVE O.D.	BELT CENTER DISTANCE									
				143T/145T MIN	143T/145T MAX	182T/184T MIN	182T/184T MAX	213T/215T MIN	213T/215T MAX	254T/256T MIN	254T/256T MAX		
122	12 $\frac{1}{4}$	184T	5 $\frac{1}{2}$	7.8	9.8	6.8	8.8	—	—	—	—	—	—
135	13 $\frac{1}{2}$	184T	6	8.8	10.8	7.8	9.8	—	—	—	—	—	—
150	15	215T	6 $\frac{1}{2}$	10.1	12.5	9.1	11.5	8.4	10.8	—	—	—	—
165	16 $\frac{1}{2}$	215T	7	11.1	13.5	10.1	12.5	9.3	11.8	—	—	—	—
182	18 $\frac{1}{4}$	215T	8	13.1	15.5	12.1	14.5	11.3	13.7	—	—	—	—
200	20	256T	9	13.7	16.9	12.7	15.9	12	15.2	11	14.2	—	—

FAN SIZE	DISCHARGE		DISCHARGE G																				CLASS 1 & 2				CLASS 3					
	A	B	TH	TAU	UB	BAU	BH	DB	TAD	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	Y	Z	AA	SHAFT DIA	KEYWAY	FAN WT.* NO MOTOR	
122	12 $\frac{3}{16}$	9 $\frac{3}{16}$	10 $\frac{3}{16}$	10	10	13 $\frac{3}{4}$	7 $\frac{1}{16}$	6 $\frac{1}{16}$	7 $\frac{1}{16}$	8 $\frac{1}{16}$	7 $\frac{1}{16}$	15	27 $\frac{1}{16}$	6 $\frac{1}{16}$	3	14 $\frac{3}{32}$	10 $\frac{1}{32}$	3 $\frac{1}{16}$	34 $\frac{1}{16}$	10	13	6 $\frac{1}{16}$	13 $\frac{3}{16}$	5 $\frac{3}{32}$	12 $\frac{1}{16}$	15 $\frac{1}{16}$	3 $\frac{1}{16}$	8 $\frac{1}{16}$	1 $\frac{1}{16}$	1/4 x 1/8	170	
135	13 $\frac{3}{16}$	10 $\frac{3}{16}$	11 $\frac{1}{16}$	11	11	13 $\frac{3}{4}$	8 $\frac{1}{16}$	6 $\frac{1}{16}$	7 $\frac{1}{16}$	8 $\frac{1}{16}$	7 $\frac{1}{16}$	16	28 $\frac{3}{32}$	7 $\frac{1}{32}$	3	14 $\frac{3}{4}$	10 $\frac{1}{32}$	4 $\frac{1}{32}$	35 $\frac{1}{2}$	10 $\frac{1}{16}$	13 $\frac{1}{16}$	7 $\frac{1}{32}$	14 $\frac{3}{16}$	6 $\frac{1}{16}$	13 $\frac{3}{16}$	16 $\frac{3}{16}$	7 $\frac{1}{32}$	9 $\frac{1}{16}$	1 $\frac{1}{16}$	1/4 x 1/8	185	
150	15 $\frac{1}{16}$	11 $\frac{1}{16}$	13 $\frac{1}{4}$	12	15	19 $\frac{1}{4}$	9 $\frac{1}{16}$	9 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	7 $\frac{1}{16}$	18	30 $\frac{3}{32}$	8 $\frac{1}{32}$	3	16 $\frac{3}{16}$	11 $\frac{1}{32}$	5 $\frac{1}{32}$	38 $\frac{3}{4}$	12 $\frac{1}{16}$	15 $\frac{1}{16}$	7 $\frac{1}{32}$	16 $\frac{1}{2}$	7 $\frac{1}{32}$	15 $\frac{1}{16}$	18 $\frac{1}{16}$	9 $\frac{1}{32}$	10 $\frac{1}{16}$	1 $\frac{1}{16}$	1/4 x 1/8	235	
165	16 $\frac{3}{16}$	12 $\frac{3}{16}$	14 $\frac{3}{16}$	13	13	18 $\frac{1}{2}$	10 $\frac{3}{16}$	9 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	9 $\frac{1}{16}$	19	31 $\frac{1}{16}$	9 $\frac{1}{16}$	3	17 $\frac{1}{32}$	11 $\frac{1}{32}$	6 $\frac{1}{16}$	40 $\frac{1}{16}$	13 $\frac{3}{16}$	16 $\frac{3}{16}$	8 $\frac{1}{4}$	17 $\frac{1}{2}$	7 $\frac{1}{32}$	16 $\frac{3}{16}$	19 $\frac{1}{16}$	1 $\frac{1}{2}$	11 $\frac{1}{4}$	1 $\frac{1}{16}$	3/8 x 3/16	285	
182	18 $\frac{1}{4}$	13 $\frac{3}{16}$	16 $\frac{1}{16}$	14	14	18 $\frac{1}{2}$	11 $\frac{1}{16}$	9 $\frac{1}{2}$	10 $\frac{1}{2}$	11 $\frac{1}{2}$	9 $\frac{1}{16}$	21	32 $\frac{1}{16}$	9 $\frac{1}{16}$	3	18 $\frac{3}{32}$	11 $\frac{1}{32}$	6 $\frac{1}{16}$	42 $\frac{1}{16}$	14 $\frac{3}{16}$	17 $\frac{3}{4}$	9	19 $\frac{1}{2}$	8 $\frac{27}{32}$	18 $\frac{1}{16}$	21 $\frac{1}{16}$	1 $\frac{1}{2}$	12 $\frac{1}{4}$	1 $\frac{1}{16}$	3/8 x 3/16	320	
200	20	15 $\frac{1}{16}$	17 $\frac{3}{16}$	15	20	22 $\frac{1}{16}$	10 $\frac{3}{16}$	11 $\frac{3}{16}$	12 $\frac{3}{16}$	9 $\frac{1}{16}$	22	37 $\frac{1}{4}$	10 $\frac{1}{2}$	3	20 $\frac{27}{32}$	13 $\frac{1}{32}$	7 $\frac{1}{2}$	47 $\frac{1}{16}$	16 $\frac{1}{16}$	19 $\frac{1}{16}$	16 $\frac{1}{16}$	19 $\frac{1}{16}$	9 $\frac{1}{16}$	21 $\frac{1}{2}$	9 $\frac{1}{16}$	20 $\frac{3}{16}$	23 $\frac{3}{16}$	3 $\frac{1}{16}$	13 $\frac{1}{4}$	1 $\frac{1}{16}$	3/8 x 3/16	375

*FAN WEIGHT IS APPROXIMATE

BCA/BCS-222-330 ARRANGEMENT 10 ROTATABLE HOUSING

APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440



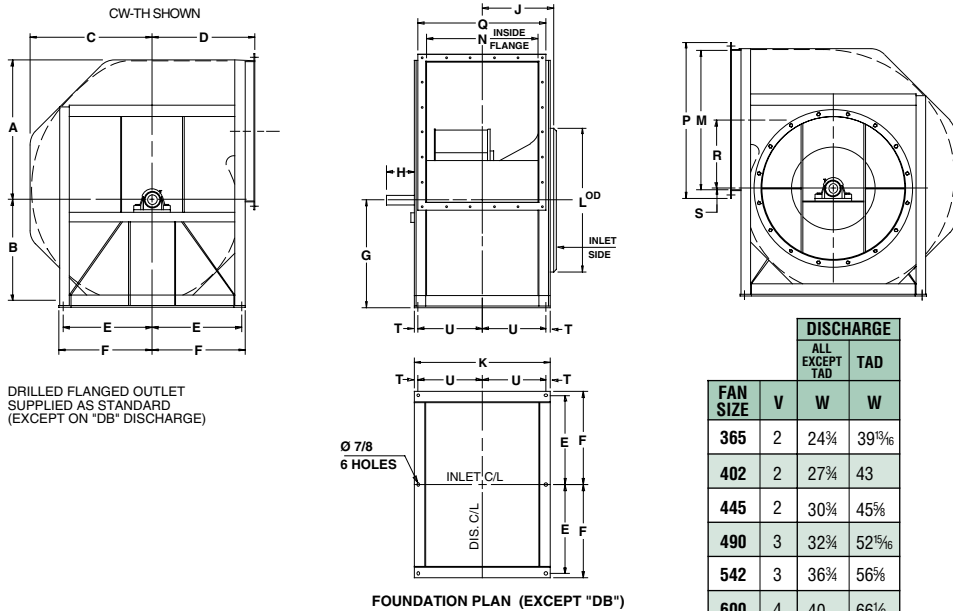
BELT CENTER DISTANCE

FAN SIZE	WHEEL DIA.	MAX FRAME SIZE	MAX FAN SHEAVE O.D.	143T/145T		182T/184T		213T/215T		254T/256T		284T/286T	
				MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX		
222	22 1/4	256T	10	15.7	19.8	14.7	18.8	14	18	13	17	-	-
245	24 1/2	256T	11	17.7	21.8	16.7	20.8	16	20	15	19	-	-
270	27	256T	12	20.7	24.8	19.7	23.8	19	23	18	22	-	-
300	30	286T	13 1/2	22.6	26.7	21.6	25.7	20.8	25	19.8	24	19.1	-
330	33	286T	14 3/4	25.7	29.8	24.7	28.8	24	28	23	27	22.2	24.5

DISCHARGE

FAN SIZE	DISCHARGE			E	F	G	H	I	J	K	L	M	N	O	P	R	S	T	U	V	W	X	Y	Z	DISCHARGE			BB	CLASS 1 & 2			Approx. Fan Wt. No Motor		
	TH, UB DB, BH	TAU, BAU	TAD																						TH, UB DB, BH	TAU, BAU	TAD		SHAFT DIA	KEYWAY	Approx. Fan Wt. No Motor			
222	22 1/4	16 5/8	19 1/2	16	20 1/2	23 3/4	14 1/8	11 1/4	12 1/4	13 3/4	1 1/8	25	39 3/32	10 3/32	3	22 1/32	14 1/8	7 3/32	50 1/8	17 1/8	20 1/8	10 23/32	23 1/2	10 23/32	22 3/8	25 3/8	9 3/32	14 3/8	18 3/8	22 1/8	1 1/8	1 1/8	3/8 x 3/8	565
245	24 1/2	18 1/2	21 1/2	18	22 1/2	26 3/4	15 1/2	12 3/8	13 3/8	14 3/8	1 1/8	27	40 1/32	11 27/32	3	22 29/32	14 1/8	8 27/32	51 1/8	19 1/8	23 1/8	12 3/32	26 1/2	11 1/8	24 1/8	28 1/8	1 5/32	15 3/8	20 1/2	24 3/4	2	1 1/8	3/8 x 3/8	670
270	26 5/8	20 3/8	23 3/8	19 1/2	24	28 1/4	17 1/8	13 1/8	14 3/8	15 1/8	1 1/8	30	42 3/32	12 29/32	3	24 5/32	14 3/8	9 29/32	54 1/8	21 1/8	25 1/8	13 3/32	28 1/2	13 1/8	27 3/8	31 3/8	1 1/32	17 3/8	22 1/8	26 1/8	1 1/8	1 1/8	3/8 x 3/8	805
300	29 3/8	22 3/8	26 1/4	22	26	30 1/2	18 1/8	15	16	17	1 1/8	33	47 3/32	14 3/32	3	27 1/32	16 3/8	11 3/32	61 1/8	24 1/8	28 1/8	14 11/32	31 1/2	14 17/32	30 3/8	34 3/8	1 1/8	19 3/8	24	28 1/2	2	1 3/8	1/2 x 1/4	1000
330	32 3/8	24 3/8	28 3/8	24	28 3/4	33 3/4	20 1/8	16 1/2	17 1/2	18 1/2	1 1/8	36	48 3/32	15 3/32	3	28 3/32	16 3/8	12 3/32	63 1/8	26 1/8	30 1/8	15 1/8	34 1/2	15 3/32	33 1/4	37 1/4	2 1/32	21 1/4	26 3/4	31 1/4	2	2 3/8	1/2 x 1/4	1175

BCA/BCS-365-660 ARRANGEMENT 3 SWSI FIXED HOUSING



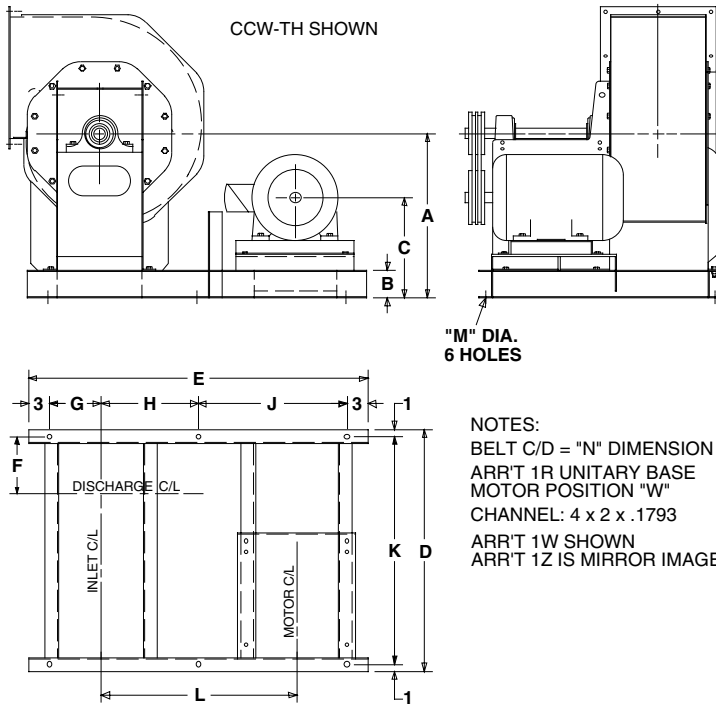
DISCHARGE

FAN SIZE	DISCHARGE		
	V	W	W
365	2	24 3/4	39 1/8
402	2	27 3/4	43
445	2	30 3/4	45 5/8
490	3	32 3/4	52 5/8
542	3	36 3/4	56 5/8
600	4	40	66 1/2
660	4	44 3/4	70 5/8

DISCHARGE

FAN SIZE	DISCHARGE			G																	CLASS 1 & 2		CLASS 3		APPROX. FAN WEIGHT NO MOTOR (LBS.)							
	ALL EXCEPT TAD	TAD		E	F	TH	TAU	UB	BAU	BH	DB	TAD	H	J	K	L	M	N	P	Q	R	S	T	U	SHAFT DIA	KEYWAY	SHAFT DIA	KEYWAY	CLASS 1 & 2	CLASS 3		
365	2	24 3/4	39 1/8	27	42 1/8	23 1/4	24 1/4	28	30	33	35	40	27	33	6 1/2	16 1/8	35 3/8	37 1/2	36 3/4	29 1/4	40 3/4	33 1/4	17 1/8	1 1/8	1	16 1/8	2 3/8	1/2 x 1/4	2 7/8	5/8 x 5/8	1226	1448
402	2	27 3/4	43	30	45 1/4	25 1/4	26 1/4	31	33	36	38	43	30	35	7	18 3/32	38 3/8	41 1/2	40 1/8	32 3/8	44 3/8	36 3/8	19 5/32	1 3/8	1	18 5/32	2 3/8	1/2 x 1/4	2 1/8	5/8 x 5/8	1504	1742
445	2	30 3/4	45 5/8	33	47 3/8	27	28 1/4	34	37	40	42	47	33	37	7	19 3/32	41 1/8	45 1/2	44 1/8	35 3/8	48 3/8	39 3/8	21 1/8	2 3/8	1 1/4	19 3/32	2 1/8	5/8 x 5/8	2 1/8	5/8 x 5/8	1740	1948
490	3	32 3/4	52 5/8	36	56 3/8	31 1/4	32 1/2	37	40	43	46	54	36	44	8	22 3/4	45 1/4	51 1/2	49 3/8	39 3/8	55 3/8	45 3/8	23 3/4	2 3/8	1 1/4	21 3/8	2 1/8	5/8 x 5/8	3 3/8	3/4 x 3/8	2290	2672
542	3	36 3/4	56 5/8	40	59 3/8	33 3/4	35	41	45	48	51	59	40	47	8	24 27/32	49 3/8	56 3/4	54 3/8	43 3/8	60 3/8	49 3/8	26 1/4	1 1/8	1 1/4	23 3/32	2 1/8	5/8 x 5/8	3 3/8	3/4 x 3/8	2694	3172
600	4	40	66 1/2	44	70 1/2	37 3/4	39	46	49	53	57	65	44	56	8	27 7/8	54	63 1/4	60 1/8	47 3/8	68 1/8	55 3/8	29 1/2	1 3/8	1 1/4	25 3/4	2 1/8	3/4 x 3/8	3 1/8	7/8 x 7/8	3073	3667
660	4	44 3/4	70 5/8	48 3/4	74 3/8	40 3/4	42	50	54	58	62	71	49	59	8	29 3/8	58 3/4	69 1/4	66 1/2	52 3/8	74 1/2	60 3/8	32 1/8	1 3/8	1 1/4	28 3/8	3 3/8	3/4 x 3/8	3 1/8	7/8 x 7/8	3381	4195

BCA/BCS-122-200 ARRANGEMENT 1 UNITARY BASE

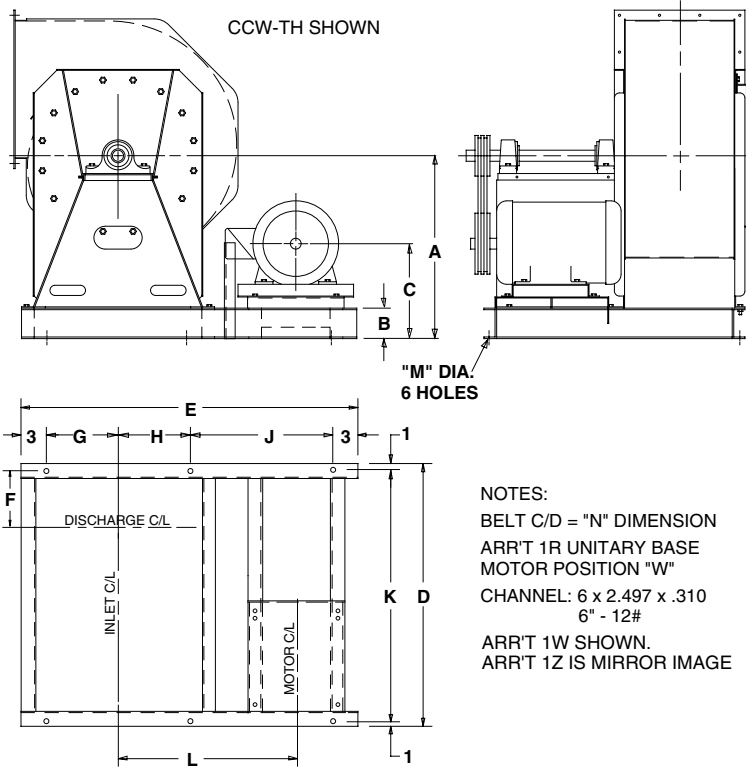


"M" DIA.
6 HOLES

NOTES:
BELT C/D = "N" DIMENSION
ARR'T 1R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 x 2 x .1793
ARR'T 1W SHOWN
ARR'T 1Z IS MIRROR IMAGE

FAN SIZE	FRAME SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N C/D	APPROX. WT. FAN, MOTOR, UNIT	
															CLASS 1 & 2	CLASS 3
122	143T	19	4	10 1/4	27 3/8	30	6 1/8	6 3/8	5 1/4	12	25 3/8	14 1/2	9 1/8	16.9	208	231
	145T			11 1/8		32			6 1/4	13		15 1/2		17.2	216	239
	182T			12 1/8		36			8 1/4	15		18 1/2		19.6	256	279
	184T			14 1/8		39			9 3/4	16 1/2		20		20.5	272	295
	213T			12 1/2		41			10 1/4	17 1/2		22		23.3	332	355
	215T			14 1/4		43			11 1/4	18 1/2		23		24.0	349	375
135	143T	20	4	10 1/4	28 1/8	30	6 1/2	6 3/4	5 1/4	12	26 1/8	14 1/2	9 1/8	17.5	224	250
	145T			11 1/8		32			6 1/4	13		15 1/2		17.6	232	258
	182T			12 1/8		37			8 3/4	15 1/2		19 1/2		17.7	272	298
	184T			14 1/8		40			10 1/4	17		21		20.8	288	314
	213T			12 1/2		42			11 1/4	18 1/2		22		21.7	349	375
	215T			14 1/4		44			12 1/4	19 1/2		23		21.7	371	397
150	143T	22	4	10 1/4	29 3/8	30	7 1/8	6 3/4	5 1/4	12	27 3/8	14 1/2	9 1/8	18.7	244	272
	145T			11 1/8		32			6 1/4	13		15 1/2		18.6	252	280
	182T			12 1/8		37			8 3/4	15 1/2		19 1/2		19.6	292	320
	184T			14 1/8		41			10 1/4	17 1/2		22		20.5	308	336
	213T			12 1/2		43			11 1/4	18 1/2		23		22.1	370	398
	215T			14 1/4		46			12 1/4	19 1/2		24		23.3	392	420
165	182T	23	4	11 1/8	35 1/2	35 1/2	8 1/8	8 1/2	6 1/4	14 3/4	33 3/8	17	1 1/8	20.4	377	421
	184T			12 1/8		37 1/2			7 1/4	15 3/4		18		20.8	393	437
	213T			14 1/8		44 1/2			10 1/4	19 1/4		23 1/2		25.0	452	496
	215T			15 1/8		46 1/2			11 1/4	20 1/4		24 1/2		25.7	474	518
	254T			12 1/2		46			11 1/2	20		25		27.1	584	628
	256T			14 1/4		48			12 1/2	21		26		27.8	617	663
182	182T	25	4	11 1/8	37 3/8	35 1/2	8 3/8	8 1/2	6 1/4	14 3/4	35 3/8	17	1 1/8	21.6	409	455
	184T			12 1/8		37 1/2			7 1/4	15 3/4		18		21.8	425	471
	213T			14 1/8		46			11 1/2	20		25		27.1	484	530
	215T			15 1/8		48			12 1/2	21		26		27.8	506	552
	254T			12 1/2		48			12 1/2	21		26		28.1	617	663
	256T			14 1/4		50			13 1/2	22		27		28.7	648	694
200	182T	26	4	11 1/8	41 1/8	36 1/2	9 1/8	9 3/8	5 1/2	15 1/4	39 1/8	17	1 1/8	22.3	451	515
	184T			12 1/8		38 1/2			6 1/4	16 1/4		18		22.4	467	531
	213T			14 1/8		48 1/2			11 1/4	21 1/4		26 1/2		28.9	525	589
	215T			15 1/8		50 1/2			12 1/4	22 1/4		27 1/2		29.5	547	611
	254T			12 1/2		50 1/2			12 1/2	22 1/4		27 1/2		29.5	660	724
	256T			14 1/4		53 1/2			14 1/4	23 3/4		29		30.5	691	755

BCA/BCS-222-330 ARRANGEMENT 1 UNITARY BASE

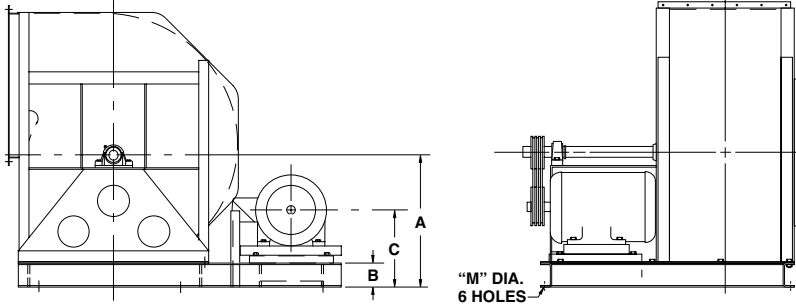


"M" DIA.
6 HOLES

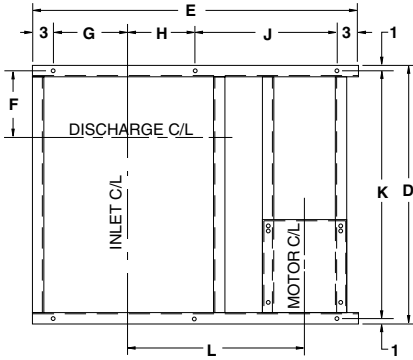
NOTES:
BELT C/D = "N" DIMENSION
ARR'T 1R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 x 2.497 x .310
6" - 12"
ARR'T 1W SHOWN.
ARR'T 1Z IS MIRROR IMAGE

FAN SIZE	FRAME SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N C/D	APPROX. WT. FAN, MOTOR, UNIT	
															CLASS 1 & 2	CLASS 3
222	182T	31	6	13 3/8	45 1/8	47	10 3/8	13	7 1/2	20 1/2	43 3/8	24	3 3/8	29.6	754	809
	184T			14 1/8		50			9	22		26		30.7	770	825
	213T			16 1/8		52			10	23		27		30.7	833	888
	215T			17 3/8		56			12	25		30		32.8	855	910
	254T			18 1/8		59			13 1/2	26 1/2		31		33.4	964	1019
	256T			19 3/8		62			15	28		33		34.9	995	1050
245	182T	33	6	13 3/8	47 3/8	51	10 3/8	15	7 1/2	22 1/2	45 3/8	26	3 3/8	32.4	1109	1164
	184T			14 1/8		54			9	24		28		33.5	1160	1215
	213T			16 1/8		56			10	25		29		33.4	1294	1349
	215T			17 3/8		60			12	27		32		35.5	1360	1415
	254T			18 1/8		63			13 1/2	28 1/2		33		36.0	1526	1581
	256T			19 3/8		66			15	30		35		37.4	1587	1642
270	182T	36	6	14 1/8	51 1/2	56	11 3/8	16	9	25	49 1/2	29	3 3/8	36.0	844	922
	184T			16 1/8		58			10	26		30		35.8	860	938
	213T			17 3/8		60			11	27		31		36.0	923	1001
	215T			18 1/8		66			14	30		35		39.0	945	1023
	254T			19 3/8		69			15 1/2	31 1/2		37		40.4	1054	1132
	256T			22 1/4		73			17 1/2	33 1/2		39		41.4	1085	1163
300	182T	39	6	14 1/8	53 3/8	58	13 3/8	17 1/2	8 1/2	26	51 3/8	30	3 3/8	38.7	1199	1277
	184T			16 1/8		62			10 1/2	28		32		39.2	1250	1328
	213T			17 3/8		64			11 1/2	29		33		39.3	1274	1381
	215T			18 1/8		64			12 1/2	30		33		39.2	1387	1494
	254T			19 3/8		70			14 1/2	32		33		39.3	1418	1525
	256T			22 1/4		73			16	33 1/2		39		43.5	1528	1635
330	182T	42	6	16 1/8	58 3/8	64	14 3/8	19	10	29	56 3/8	33	3 3/8	41.7	1579	1686
	184T			17 3/8		66			11	30		34		41.8	1719	1866
	213T			18 1/8		75			15 1/2	34 1/2		41		47.2	1785	1892
	215T			19 3/8		77			16 1/2	35 1/2		42		47.5	1897	2011
	254T			22 1/4		81			18 1/2	37 1/2		44		48.2	1963	2077
	256T			23 3/4		83			19 1/2	38 1/2		45		48.8	2128	2242

BCA/BCS-365 AND 402 ARRANGEMENT 1 UNITARY

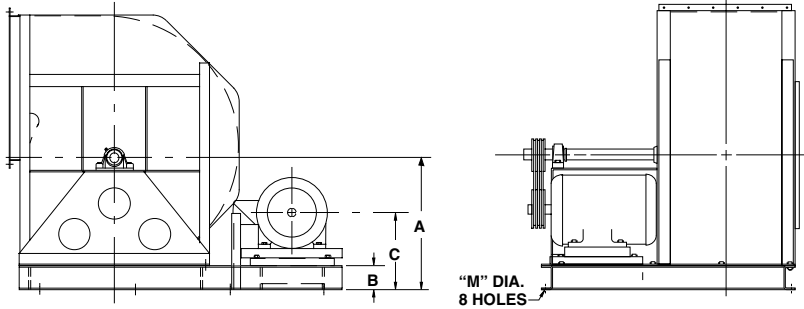


NOTES:
 BELT C/D = "N" DIMENSION
 ARR'T IR UNITARY BASE
 MOTOR POSITION "W"
 CHANNEL: 6 x 2.497 x .310
 6" - 12#
 ARR'T 1W SHOWN,
 ARR'T 1Z IS MIRROR IMAGE

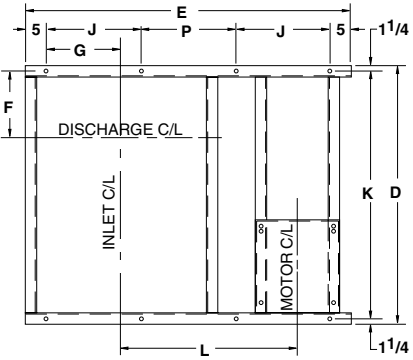


FAN SIZE	FRAME SIZE	A							B	C	D	E	F	G	H	J	K	L	M	N							APPROX. WT. FAN, MOTOR, UNIT		
		TH	TAU	UB	BAU	BH	DB	TAD												TH	TAU	UB	BAU	BH	DB	TAD	CLASS 1 & 2	CLASS 3	
365	254T								16 7/16		69				10 1/4	31 1/2			35		39.2	40.1	41.6	42.8	45.8	38.7	41.6	2084	2329
	256T								17 3/16		71				11 1/4	32 1/2			36		39.7	40.6	42.1	43.2	46.1	39.3	42.1	2115	2360
	284T								18 1/16		74				12 3/4	34			38		41.0	41.8	43.1	44.1	46.8	40.6	43.1	2225	2470
	286T								19 3/4		82				16 3/8	38			45		47.2	47.8	48.9	49.8	52.1	46.9	48.9	2276	2521
	324T	34	36	39	41	46	33	39	6	65 3/16		16 1/2	21 1/4						63 3/16		41.0	41.8	43.1	44.1	46.8	40.6	43.1	2410	2655
	326T								19 3/4		82				16 3/8	38			45		47.2	47.8	48.9	49.8	52.1	46.9	48.9	2476	2721
	364T								22 1/4		86				18 3/4	40			47		48.4	49.0	49.9	50.6	52.7	48.2	49.9	2652	2897
	365T								23 1/4		88				19 3/4	41			47		48.4	49.0	49.9	50.6	52.7	48.2	49.9	2713	2958
	404T								23 1/4		88				19 3/4	41			48		49.2	49.7	50.5	51.2	53.1	49.0	50.5	3007	3252
	405T								23 1/4		88				19 3/4	41			48		49.2	49.7	50.5	51.2	53.1	49.0	50.5	3161	3406
444T								16 7/16		73				10 1/4	33 1/2			37		42.3	43.3	45.0	46.1	49.3	41.9	44.4	2417	2657	
445T								17 3/16		75				11 1/4	34 1/2			38		42.9	43.8	45.4	46.5	49.6	42.4	44.8	2448	2688	
402	324T								18 1/16		78				12 3/4	36			40		44.0	44.9	46.3	47.3	50.2	43.6	45.8	2559	2799
	326T	37	39	42	44	49	36	41	6	69 7/8		18 1/2	23 1/4					67 7/8		44.0	44.9	46.3	47.3	50.2	43.6	45.8	2600	2850	
	364T								19 3/4		87				17 1/4	40 1/2			48		51.0	51.7	52.9	53.8	56.2	50.7	52.5	2744	2984
	365T								22 1/4		91				19 1/4	42 1/2			50		52.1	52.7	53.8	54.5	56.7	51.9	53.4	2810	3050
	404T								23 1/4		93				20 1/4	43 1/2			51		52.8	53.4	54.3	55.1	57.1	52.6	54.0	2988	3228
	405T								23 1/4		93				20 1/4	43 1/2			51		52.8	53.4	54.3	55.1	57.1	52.6	54.0	3049	3289
	444T								23 1/4		93				20 1/4	43 1/2			51		52.8	53.4	54.3	55.1	57.1	52.6	54.0	3343	3583
	445T								23 1/4		93				20 1/4	43 1/2			51		52.8	53.4	54.3	55.1	57.1	52.6	54.0	3497	3737
445T								23 1/4		93				20 1/4	43 1/2			51		52.8	53.4	54.3	55.1	57.1	52.6	54.0	3888	4128	
445T								23 1/4		93				20 1/4	43 1/2			51		52.8	53.4	54.3	55.1	57.1	52.6	54.0	3975	4215	

BCA/BCS- 445 THRU 660 ARRANGEMENT 1 UNITARY

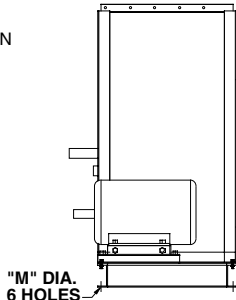
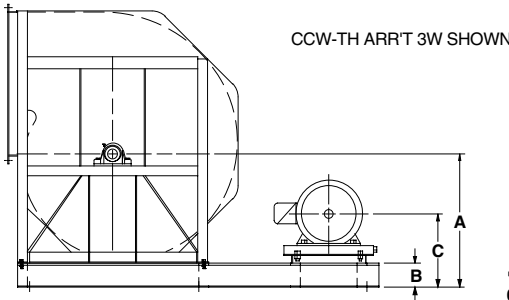


NOTES:
 BELT C/D = "N" DIMENSION
 ARR'T IR UNITARY BASE
 MOTOR POSITION "W"
 CHANNEL: 8 x 2.978 x .353
 8" - 18.7#
 ARR'T 1W SHOWN,
 ARR'T 1Z IS MIRROR IMAGE

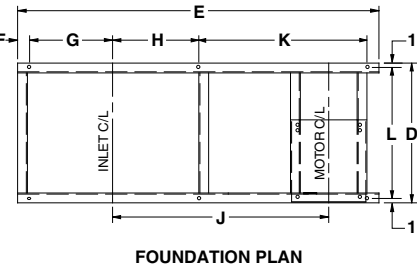


FAN SIZE	FRAME SIZE	A							B	C	D	E	F	G	J	K	L	M	P	N							APPROX. WT. FAN, MOTOR, UNIT			
		TH	TAU	UB	BAU	BH	DB	TAD												TH	TAU	UB	BAU	BH	DB	TAD	CLASS 1 & 2	CLASS 3		
445	324T								20 1/16		82				24	42					47.1	48.5	50.1	51.2	54.2	46.6	48.5	24	3236	3531
	326T								21 3/8		86				25	44					48.4	49.8	51.2	52.3	55.1	48.0	49.8	26	3302	3597
	364T								24 1/4	72 1/2	96	19 1/2	23 1/4		29	70	53		7%		55.9	56.9	58.1	58.9	61.3	55.6	56.9	28	3474	3769
	365T	42	45	48	50	55	41	45	8	24 1/4	72 1/2	96	19 1/2	23 1/4	29	70	53		7%		55.9	56.9	58.1	58.9	61.3	55.6	56.9	28	3535	3830
	404T								25 1/4		100				30	55					57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	3862	4157
	405T								25 1/4		100				30	55					57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4016	4311
	444T								25 5/16		100				30	55					57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4415	4710
	445T								25 5/16		100				30	55					57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4502	4797
447T								20 1/16		92				28	47					52.8	54.4	55.9	57.6	62.6	52.5	56.5	26	3886	4266	
490	324T								21 3/8		94				28	48					53.3	54.9	56.2	57.8	62.6	52.9	56.7	28	3952	4332
	364T								24 1/4	79 1/8	97	21 1/2	27 1/2		29	76 3/8	50		5%		54.1	55.3	56.7	58.2	62.6	53.8	57.2	29	4119	4499
	365T	45	48	51	54	62	44	52	8	24 1/4	79 1/8	97	21 1/2	27 1/2	29	76 3/8	50		5%		54.1	55.3	56.7	58.2	62.6	53.8	57.2	29	4180	4560
	404T								25 1/4		107				33	58					61.3	62.3	63.5	64.7	68.7	61.0	63.9	31	4484	4864
	405T								25 1/4		107				33	58					61.3	62.3	63.5	64.7	68.7	61.0	63.9	31	4638	5018
	444T								25 5/16		107				33	58					61.3	62.3	63.5	64.7	68.7	61.0	63.9	31	5057	5437
	445T								25 5/16		107				33	58					61.3	62.3	63.5	64.7	68.7	61.0	63.9	31	5144	5524
	447T								20 1/16		96				29	49					56.6	58.7	60.4	62.2	67.4	56.1	59.8	28	4638	5018
542	324T								21 3/8		99				30	51					57.8	59.8	61.4	63.2	68.2	57.4	60.9	29	4314	4814
	326T								24 1/4	83 1/4	102	23 3/8	30		31	80 3/4	52		7%		57.6	59.4	60.9	62.5	67.3	57.2	60.4	30	4380	4880
	364T								25 1/4		114				35	63					57.8	59.8	61.4	63.2	68.2	57.4	60.9	29	4549	5049
	365T	49	53	56	59	67	48	55	8	24 1/4	83 1/4	102	23 3/8	30	31	80 3/4	52		7%		57.6	59.4	60.9	62.5	67.3	57.2	60.4	30	4610	5110
	404T								25 1/4		114				35	63					57.6	59.4	60.9	62.5	67.3	57.2	60.4	30	4915	5415
	405T								25 1/4		114				35	63					57.6	59.4	60.9	62.5	67.3	57.2	60.4	30	5069	5569
	444T								25 5/16		114				35	63					67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	5494	5994
	445T								25 5/16		114				35	63					67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	5581	6081
447																														

BCA/BCS-365 AND 402 ARRANGEMENT 3 SWSI UNITARY

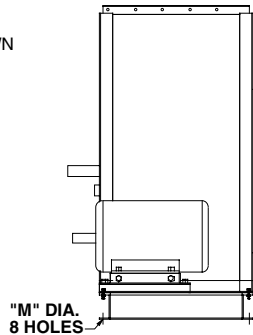
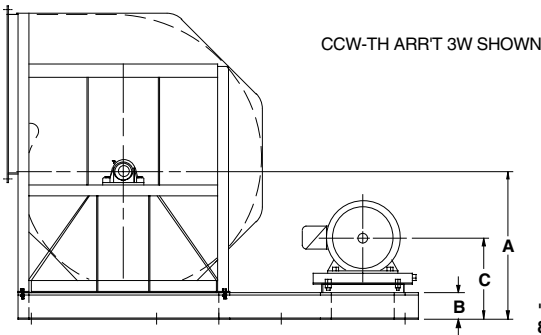


NOTES:
 BELT C/D = "N" DIMENSION
 ARR'T 3R UNITARY BASE
 MOTOR POSITION "W"
 CHANNEL: 6 x 2.497 x .310
 6" - 12#
 ARR'T 3W SHOWN,
 ARR'T 3Z IS MIRROR IMAGE

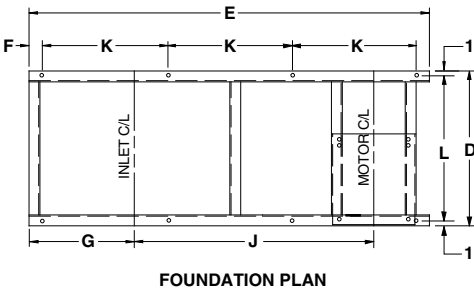


FAN SIZE	FRAME SIZE	CCW-TH						B	C	D	E	F	G	H	J	K	L	M	CCW-TH						APPROX. WT. #					
		CCW-TH	CCW-TAU	CCW-UB	CCW-BAU	CCW-BH	CCW-TAD												N	N	N	N	N	N	N	N	CLASS 1 & 2	CLASS 3		
365	254T	34	36	39	41	46	39	16 1/8	35 3/8	85	3	21 1/4	18 1/2	50 3/4	39 1/2	33 3/8	%	53.8	53.8	54.5	55.7	56.5	58.8	55.7	1820	2042				
	256T							17 1/8										88	19 3/4	52 1/2	41	55.1	55.1	55.8	56.9	57.6	59.9	56.9	1965	2187
	284T							18 1/8										92	21 3/4	54 3/4	43	57.0	57.0	57.5	58.5	59.2	61.3	58.5	2015	2237
	324T							19 1/8										95	23 1/4	56 3/4	44 1/2	58.4	58.4	58.9	59.8	60.5	62.4	59.8	2153	2375
	326T							22 1/4										100	N/A	60.5	60.9	61.7	62.3	63.9	61.7	2442	2664			
	364T							23 1/4										104	N/A	63.8	64.2	64.8	65.3	66.9	64.8	2742	2964			
	365T							23 1/4										104	N/A	63.8	64.2	64.8	65.3	66.9	64.8	2842	3064			
	404T							23 1/4										104	N/A	63.8	64.2	64.8	65.3	66.9	64.8	3135	3357			
	405T							23 1/4										104	N/A	63.8	64.2	64.8	65.3	66.9	64.8	3310	3532			
	444T							23 1/4										104	N/A	63.8	64.2	64.8	65.3	66.9	64.8	2120	2358			
445T	23 1/4	104	N/A	63.8	64.2	64.8	65.3	66.9	64.8	2150	2388																			
402	254T	37	39	42	44	49	41	16 1/8	38 3/8	90	3	23 1/4	18 3/4	54 1/2	42	36 3/8	%	58.3	58.3	59.0	60.2	61.1	63.5	59.8	2120	2358				
	256T							17 1/8										93	20 1/4	56 1/4	43 1/2	59.5	59.5	60.2	61.4	62.2	64.5	61.0	2264	2502
	284T							18 1/8										98	22 3/4	58 3/4	46	61.7	61.7	62.3	63.3	64.1	66.2	63.0	2314	2552
	324T							19 1/8										100	23 3/4	60 3/4	47	62.8	62.8	63.4	64.3	65.1	67.1	64.0	2455	2693
	326T							22 1/4										105	N/A	64.7	65.2	66.0	66.7	68.4	65.7	2520	2758			
	364T							23 1/4										110	N/A	67.9	68.3	68.9	69.7	71.3	68.8	2682	2920			
	365T							23 1/4										110	N/A	67.9	68.3	68.9	69.7	71.3	68.8	2742	2980			
	404T							23 1/4										110	N/A	67.9	68.3	68.9	69.7	71.3	68.8	3041	3279			
	405T							23 1/4										110	N/A	67.9	68.3	68.9	69.7	71.3	68.8	3141	3379			
	444T							23 1/4										110	N/A	67.9	68.3	68.9	69.7	71.3	68.8	3437	3675			
445T	23 1/4	110	N/A	67.9	68.3	68.9	69.7	71.3	68.8	3612	3850																			

BCA/BCS-445-600 ARRANGEMENT 3 SWSI UNITARY

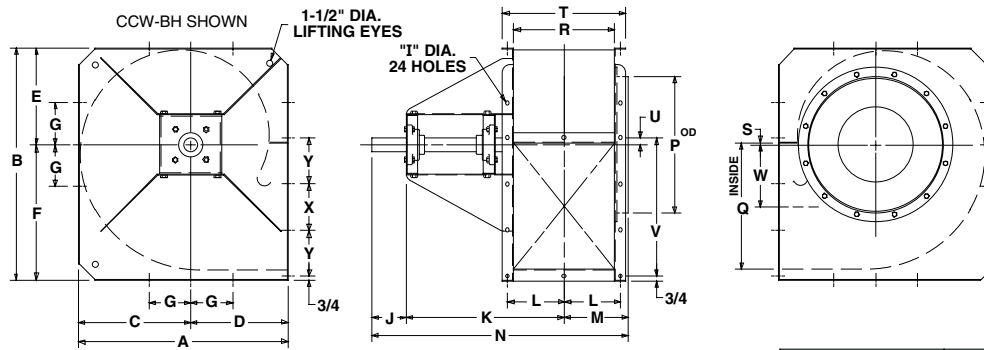


NOTES:
 BELT C/D = "N" DIMENSION
 ARR'T 3R UNITARY BASE
 MOTOR POSITION "W"
 CHANNEL: 8 x 2.978 x .353
 8" - 18.7#
 ARR'T 3W SHOWN,
 ARR'T 3Z IS MIRROR IMAGE



FAN SIZE	FRAME SIZE	CCW-TH						B	C	D	E	F	G	J	K	L	M	CCW-TH						APPROX. WT. #							
		CCW-TH	CCW-TAU	CCW-UB	CCW-BAU	CCW-BH	CCW-TAD											N	N	N	N	N	N	N	N	CLASS 1 & 2	CLASS 3				
445	324T	42	45	48	50	55	45	20 1/8	41 1/8	106	5	28 1/4	64 3/4	32	39 1/8	%	68.3	69.3	70.4	71.2	73.4	69.3	2915	3123							
	326T							21 3/8									109	66 1/2	33	69.5	70.5	71.5	72.3	74.4	70.5	3147	3355				
	364T							24 1/4									112	70 3/4	34	69.7	70.5	71.4	72.1	74.1	70.5	3207	3415				
	365T							25 1/4									115	70 3/4	35	72.7	73.5	74.3	75.0	76.8	73.5	3506	3714				
	404T							25 3/8									115	70 3/4	35	72.7	73.4	74.3	74.9	76.7	73.4	3901	4109				
	444T							25 3/8									115	70 3/4	35	72.7	73.4	74.3	74.9	76.7	73.4	4076	4284				
	445T							25 3/8									115	70 3/4	35	72.7	73.4	74.3	74.9	76.7	73.4	4640	4848				
	447T							25 3/8									115	70 3/4	35	72.7	73.4	74.3	74.9	76.7	73.4	4640	4848				
	324T							20 1/8									112	5	32 1/2	72 3/4	37	43 1/4	%	70.9	72.6	73.2	75.1	78.9	74.2	3506	3888
	326T							21 3/8																115	69	35	72.1	73.8	74.3	76.2	79.9
364T	24 1/4	121	72 3/4	37	75.1	75.9	76.9	78.0	81.4	77.3	4107	4489																			
365T	25 1/4	127	76 3/4	39	79.4	80.2	81.1	82.1	85.2	81.4	4207	4589																			
404T	25 3/8	127	76 3/4	39	79.4	80.2	81.1	82.1	85.2	81.4	4511	4893																			
444T	25 3/8	127	76 3/4	39	79.4	80.2	81.1	82.1	85.2	81.4	4686	5068																			
445T	25 3/8	127	76 3/4	39	79.4	80.2	81.1	82.1	85.2	81.4	5249	5631																			
447T	25 3/8	127	76 3/4	39	79.4	80.2	81.1	82.1	85.2	81.4	5249	5631																			
324T	20 1/8	121	5	35	76 3/4	39	47 1/8	%	78.4	80.0	81.2	82.6	86.6	80.8	3964	4442															
326T	21 3/8								124	74 3/4	38	79.6	81.0	82.2	83.5	87.4								81.8	4029	4507					
364T	24 1/4								127	76 3/4	39	79.6	81.0	82.2	83.5	87.4	81.8	4196	4674												
365T	25 1/4								133	80 3/4	41	79.6	81.0	82.2	83.5	87.4	81.8	4256	4734												
404T	25 3/8								133	80 3/4	41	79.6	81.0	82.2	83.5	87.4	81.8	4555	5033												
444T	25 3/8								133	80 3/4	41	79.6	81.0	82.2	83.5	87.4	81.8	4655	5133												
445T	25 3/8								133	80 3/4	41	79.6	81.0	82.2	83.5	87.4	81.8	4959	5437												
447T	25 3/8								133	80 3/4	41	79.6	81.0	82.2	83.5	87.4	81.8	5134	5612												
324T	20 1/8								127	5	40	77 3/4	41	52	%	81.3	82.5	84.4	86.4	90.7	85.5	5698	6176								
326T	21 3/8															130	75 3/4	40	82.0	83.2	85.0	86.9	91.1	86.4	5933	6411					
364T	24 1/4	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	6005	6483												
365T	25 1/4	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	6182	6660												
404T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	6527	7005												
444T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	6598	7076												
445T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	6598	7076												
447T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	6598	7076												
324T	20 1/8	127	5	40	77 3/4	41	52	%								81.3	82.5	84.4	86.4	90.7	85.5	4410	5004								
326T	21 3/8															130	75 3/4	40	82.0	83.2	85.0	86.9	91.1	86.4	4476	5070					
364T	24 1/4								139	81 3/4	43	83.4	84.5	86.1	87.9	91.8	87.4	4642	5236												
365T	25 1/4								139	81 3/4	43	83.4	84.5	86.1	87.9	91.8	87.4	4703	5297												
404T	25 3/8								139	81 3/4	43	83.4	84.5	86.1	87.9	91.8	87.4	5005	5589												
444T	25 3/8								139	81 3/4	43	83.4	84.5	86.1	87.9	91.8	87.4	5106	5700												
445T	25 3/8								139	81 3/4	43	83.4	84.5	86.1	87.9	91.8	87.4	5411	6005												
447T	25 3/8								139	81 3/4	43	83.4	84.5	86.1	87.9	91.8	87.4	5588	6182												
324T	20 1/8								127	5	40	77 3/4	41	52	%	81.3	82.5	84.4	86.4	90.7	85.5	5933	6527								
326T	21 3/8															130	75 3/4	40	82.0	83.2	85.0	86.9	91.1	86.4	5933	6527					
364T	24 1/4	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	5933	6527												
365T	25 1/4	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	5933	6527												
404T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	5933	6527												
444T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	5933	6527												
445T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	5933	6527												
447T	25 3/8	139	81 3/4	43	83.4	84.5	86.1	87.9								91.8	87.4	5933	6527												

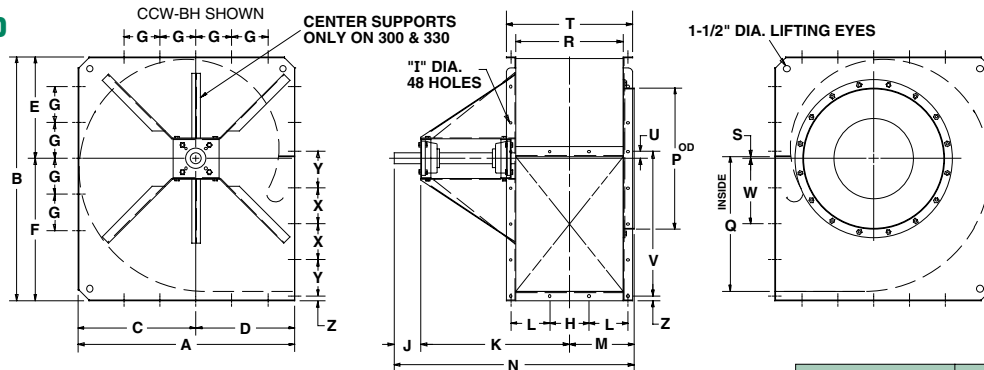
**QBCA/QBCS-122-200
ARRANGEMENT 1**



FAN SIZE	A	B	C	D	E	F	G	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	CLASS 1 & 2			CLASS 3		
																								SHAFT DIA.	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA.	KEYWAY	FAN WT.* NO MOTOR
122	20 ⁷ / ₈	23	10 ⁷ / ₈	10	9 ³ / ₈	13 ⁵ / ₈	5 ¹ / ₂	7 ¹ / ₈	3 ¹ / ₂	16 ³ / ₄	5 ³ / ₄	6 ³ / ₈	26 ³ / ₈	13 ³ / ₈	12 ³ / ₈	9 ³ / ₄	1 ¹ / ₈	13	1 ⁵ / ₈	13 ¹³ / ₁₆	5 ³ / ₃₂	4 ⁹ / ₁₆	4 ⁵ / ₈	1 ³ / ₈	1/4 x 1/8	98	1 ¹ / ₈	3/8 x 3/16	114
135	22 ⁵ / ₁₆	25 ³ / ₁₆	11 ⁵ / ₁₆	11	10 ⁵ / ₁₆	14 ⁷ / ₁₆	5 ¹ / ₂	7 ¹ / ₈	3 ¹ / ₂	17 ¹⁹ / ₃₂	6 ⁷ / ₃₂	7 ¹ / ₃₂	28 ¹ / ₈	14 ³ / ₈	13 ¹ / ₁₆	10 ¹ / ₁₆	5 ³ / ₃₂	13 ⁵ / ₁₆	3 ¹ / ₃₂	15 ¹ / ₁₆	6 ³ / ₁₆	5 ¹ / ₁₆	5	1 ³ / ₈	1/4 x 1/8	111	1 ¹ / ₈	3/8 x 3/16	128
150	25 ¹ / ₄	27 ³ / ₁₆	13 ³ / ₄	12	11 ¹ / ₁₆	16 ³ / ₈	5 ¹ / ₂	7 ¹ / ₈	3 ¹ / ₂	18 ²³ / ₃₂	6 ² / ₃₂	7 ² / ₃₂	29 ⁷ / ₁₆	16 ¹ / ₂	15	11 ⁵ / ₁₆	7 ¹ / ₃₂	15 ³ / ₁₆	1 ¹ / ₃₂	16 ³ / ₈	7 ³ / ₃₂	5 ⁵ / ₈	5 ¹ / ₂	1 ³ / ₈	1/4 x 1/8	132	1 ¹ / ₈	3/8 x 3/16	152
165	27 ³ / ₁₆	30 ³ / ₈	14 ⁹ / ₁₆	13	12 ⁹ / ₁₆	17 ¹³ / ₁₆	6 ¹ / ₂	9 ¹ / ₈	4	21 ¹ / ₁₆	7 ⁷ / ₁₆	8 ¹ / ₄	33 ¹ / ₁₆	17 ¹ / ₂	16 ³ / ₈	13 ³ / ₈	7 ³ / ₃₂	16 ³ / ₈	1 ¹ / ₃₂	18 ¹ / ₈	7 ³ / ₃₂	6 ¹ / ₈	6	1 ¹ / ₈	3/8 x 3/16	198	1 ¹ / ₈	3/8 x 3/16	229
182	30 ¹ / ₁₆	33 ³ / ₈	16 ¹ / ₁₆	14	13 ¹ / ₁₆	19 ⁹ / ₁₆	6 ¹ / ₂	9 ¹ / ₈	4	22 ⁵ / ₈	8 ¹ / ₈	9	35 ⁵ / ₈	19 ¹ / ₂	18 ¹ / ₈	14 ¹ / ₂	7 ¹ / ₃₂	17 ³ / ₄	1 ¹ / ₃₂	19 ⁷ / ₈	8 ² / ₃₂	6 ⁵ / ₈	6 ⁵ / ₈	1 ¹ / ₈	3/8 x 3/16	231	1 ¹ / ₈	3/8 x 3/16	263
200	32 ³ / ₁₆	36 ³ / ₈	17 ³ / ₁₆	15	15 ¹ / ₈	21 ¹ / ₄	6 ¹ / ₂	9 ¹ / ₈	4	24 ³ / ₁₆	8 ³ / ₁₆	9 ¹ / ₁₆	37 ⁷ / ₈	21 ¹ / ₂	19 ³ / ₈	15 ³ / ₈	1 ¹ / ₄	19 ¹ / ₈	1 ¹ / ₈	21 ¹ / ₈	9 ¹ / ₁₆	7 ¹ / ₈	7 ¹ / ₄	1 ¹ / ₈	3/8 x 3/16	265	1 ⁵ / ₈	1/2 x 1/4	311

*FAN WEIGHT IS APPROXIMATE

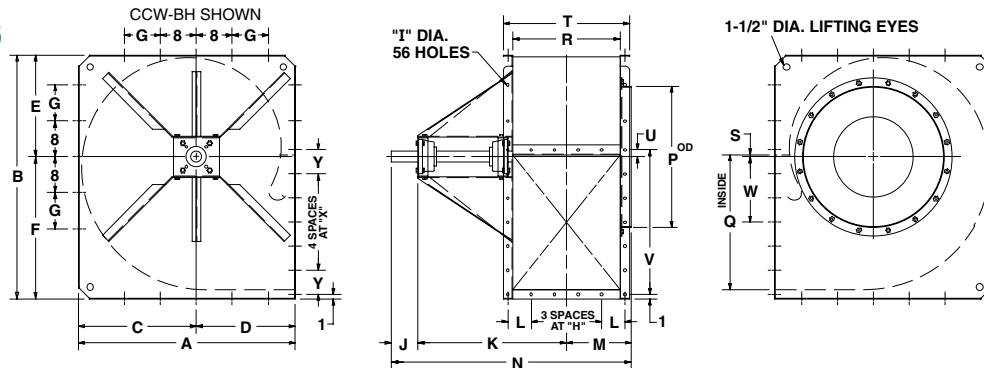
**QBCA/QBCS-222-330
ARRANGEMENT 1**



FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	CLASS 1 & 2			CLASS 3		
																										SHAFT DIA.	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA.	KEYWAY	FAN WT.* NO MOTOR
222	35 ¹ / ₂	40 ⁵ / ₁₆	19 ¹ / ₂	16	16 ¹³ / ₁₆	23 ¹ / ₂	6 ¹ / ₂	6 ⁷ / ₁₆	9 ¹ / ₈	5	26 ⁷ / ₃₂	6 ¹ / ₂	10 ⁹ / ₃₂	41 ¹ / ₁₆	23 ¹ / ₂	22 ¹ / ₈	17 ¹ / ₁₆	9 ³ / ₈	20 ⁵ / ₁₆	1 ¹ / ₃₂	23 ³ / ₈	10 ²⁹ / ₃₂	6	5 ⁵ / ₁₆	3/4	1 ¹ / ₁₆	3/8 x 3/16	337	1 ⁵ / ₈	1/2 x 1/4	380
245	39 ¹ / ₂	44 ³ / ₄	21 ¹ / ₂	18	18 ¹ / ₂	26 ¹ / ₄	6 ¹ / ₂	7 ³ / ₁₆	9 ¹ / ₈	5	27 ¹⁹ / ₃₂	7 ¹ / ₄	11 ³ / ₃₂	44 ³ / ₈	26 ¹ / ₂	24 ¹ / ₁₆	19 ¹ / ₁₆	1 ¹ / ₃₂	23 ¹ / ₁₆	1 ¹⁹ / ₃₂	26 ¹ / ₁₆	11 ¹ / ₈	6 ²⁹ / ₃₂	6 ⁵ / ₈	1	1 ¹ / ₁₆	3/8 x 3/16	408	2 ³ / ₁₆	1/2 x 1/4	473
270	43 ¹ / ₈	49 ¹ / ₁₆	23 ³ / ₈	19 ¹ / ₂	20 ³ / ₈	28 ¹ / ₁₆	6 ¹ / ₂	7 ⁷ / ₁₆	9 ¹ / ₈	6	29 ¹ / ₃₂	7 ⁷ / ₈	12 ³ / ₃₂	48 ⁵ / ₁₆	28 ¹ / ₂	26 ⁵ / ₁₆	21 ¹ / ₈	1 ¹ / ₃₂	25 ¹ / ₁₆	1 ¹ / ₃₂	29 ³ / ₁₆	13 ¹ / ₁₆	7 ¹ / ₁₆	7 ¹ / ₄	1	1 ¹ / ₁₆	3/8 x 3/16	469	2 ³ / ₁₆	1/2 x 1/4	542
300	48 ¹ / ₄	54 ¹ / ₄	26 ¹ / ₄	22	22 ³ / ₈	31 ³ / ₈	8	8 ¹ / ₁₆	9 ¹ / ₈	6	33 ¹ / ₃₂	8 ¹ / ₁₆	14 ³ / ₃₂	53 ³ / ₈	31 ¹ / ₂	29 ¹ / ₁₆	23 ³ / ₁₆	7 ¹ / ₈	28 ¹ / ₁₆	1 ¹ / ₁₆	32 ³ / ₁₆	14 ¹ / ₃₂	7 ³ / ₃₂	8 ¹ / ₈	1	1 ¹ / ₁₆	1/2 x 1/4	634	2 ⁷ / ₁₆	5/8 x 3/16	727
330	52 ¹ / ₁₆	59 ³ / ₈	28 ³ / ₁₆	24	24 ¹ / ₁₆	34 ³ / ₈	8	9 ¹ / ₁₆	9 ¹ / ₈	6 ¹ / ₂	36 ⁷ / ₃₂	9 ¹ / ₂	15 ¹ / ₃₂	58 ¹ / ₁₆	34 ¹ / ₂	33	26 ³ / ₈	1 ¹ / ₃₂	30 ¹ / ₁₆	1 ¹ / ₃₂	35 ¹ / ₄	15 ³ / ₃₂	8 ¹ / ₁₆	8 ³ / ₁₆	1	2 ³ / ₁₆	1/2 x 1/4	772	2 ¹ / ₁₆	5/8 x 5/16	954

*FAN WEIGHT IS APPROXIMATE

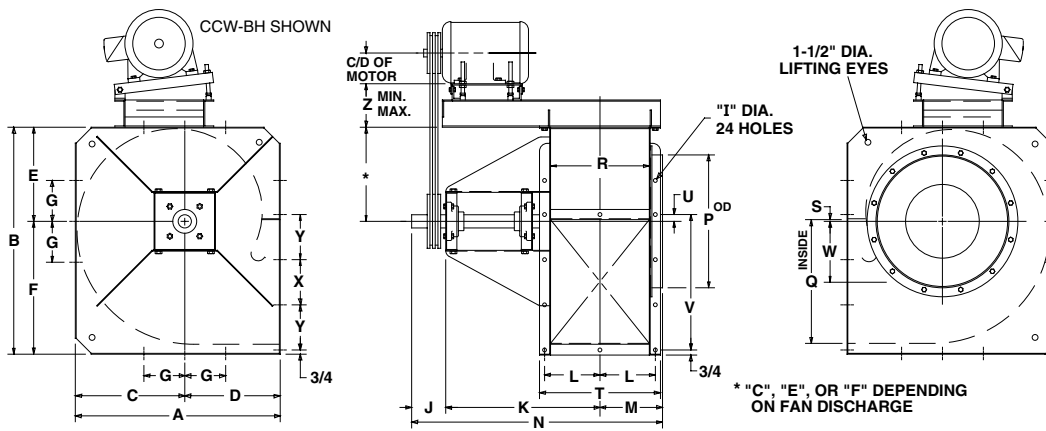
**QBCA/QBCS-365-445
ARRANGEMENT 1**



FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	CLASS 1 & 2			CLASS 3		
																									SHAFT DIA.	KEYWAY	FAN WT.* NO MOTOR	SHAFT DIA.	KEYWAY	FAN WT.* NO MOTOR
365	58 ³ / ₈	65 ¹ / ₂	31 ³ / ₈	27	27 ³ / ₈	38 ¹ / ₁₆	8	6 ¹ / ₄	1 ¹ / ₈	6 ¹ / ₂	37 ¹ / ₁₆	6 ¹ / ₄	16 ¹ / ₁₆	61	37 ¹ / ₂	36 ¹ / ₂	29	1 ³ / ₁₆	33 ³ / ₄	1 ¹ / ₁₆	38 ³ / ₄	17 ¹ / ₁₆	6 ¹ / ₂	6 ³ / ₈	2 ¹ / ₁₆	5/8 x 5/16	1057	2 ¹ / ₁₆	5/8 x 5/16	1201
402	65 ¹ / ₈	72	35 ³ / ₈	30	30 ¹ / ₄	41 ³ / ₄	16	6 ¹ / ₁₆	1 ¹ / ₈	7	40 ³ / ₃₂	6 ³ / ₈	18 ³ / ₃₂	65 ¹ / ₁₆	41 ¹ / ₂	40 ³ / ₁₆	31 ³ / ₁₆	1 ⁵ / ₈	36 ³ / ₁₆	1 ¹ / ₁₆	42 ⁹ / ₁₆	19 ¹ / ₃₂	7 ³ / ₃₂	7 ³ / ₃₂	2 ¹ / ₁₆	5/8 x 3/16	1332	2 ⁵ / ₁₆	3/4 x 3/8	1459
445	71 ¹ / ₁₆	79 ¹ / ₁₆	38 ¹ / ₁₆	33	33 ³ / ₁₆	46	16	7 ¹ / ₂	1 ¹ / ₈	7	41 ²⁷ / ₃₂	7 ¹ / ₃₂	19 ³ / ₃₂	68 ¹ / ₁₆	45 ¹ / ₂	44 ³ / ₁₆	35 ³ / ₁₆	3 ³ / ₃₂	39 ⁹ / ₁₆	1 ² / ₃₂	46 ¹ / ₁₆	21 ¹ / ₁₆	7 ¹ / ₁₆	7 ³ / ₃₂	2 ¹ / ₁₆	5/8 x 5/16	1543	2 ⁵ / ₁₆	3/4 x 3/8	1699

*FAN WEIGHT IS APPROXIMATE

**QBCA/QBCS-122-200
ARRANGEMENT 9**

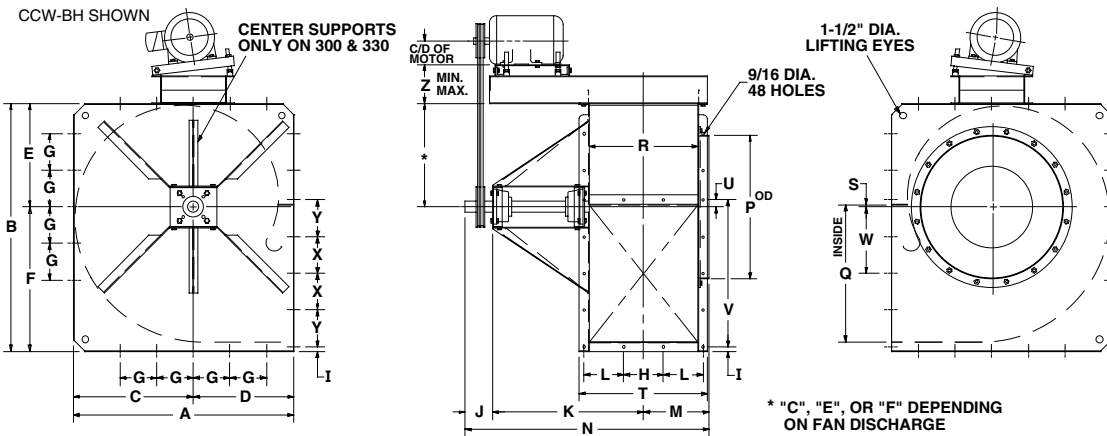


APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
48	25
56	34
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440

APPROXIMATE FAN WEIGHT NO MOTOR								
FAN SIZE	SHAFT DIA	KEYWAY	CLASS 1 & 2		CLASS 3			
			WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA	KEYWAY	WITH H.D. MOTOR BASE	WITH STD. MOTOR BASE
122	1 ³ / ₁₆	¼ x ½	124	134	1 ¹ / ₁₆	¾ x ¾	140	150
135	1 ³ / ₁₆	¼ x ½	138	148	1 ¹ / ₁₆	¾ x ¾	155	165
150	1 ³ / ₁₆	¼ x ½	160	170	1 ¹ / ₁₆	¾ x ¾	180	190
165	1 ⁷ / ₁₆	¾ x ¾	230	263	1 ¹ / ₁₆	¾ x ¾	261	294
182	1 ⁷ / ₁₆	¾ x ¾	264	297	1 ¹ / ₁₆	¾ x ¾	296	329
200	1 ⁷ / ₁₆	¾ x ¾	299	333	1 ¹ / ₁₆	½ x ¼	345	379

FAN SIZE	STD. MOTOR BASE		H.D. MOTOR BASE		Z	Z	FRAME SIZES RANGE	Z	Z	FRAME SIZES RANGE																			
	MIN.	MAX.	MIN.	MAX.																									
122	20 ⁵ / ₁₆	23	10 ⁵ / ₁₆	10	9 ⁵ / ₁₆	13 ⁵ / ₁₆	5 ¹ / ₂	7 ¹ / ₁₆	3 ¹ / ₂	16 ³ / ₄	5 ³ / ₄	6 ³ / ₄	26 ⁹ / ₁₆	13 ³ / ₄	12 ¹ / ₁₆	9 ³ / ₄	½	13	1 ⁵ / ₁₆	13 ¹ / ₁₆	5 ³ / ₃₂	4 ⁹ / ₁₆	4 ⁹ / ₁₆	5 ¹ / ₄	7 ¹ / ₄	48-213T	6 ¹ / ₄	8 ¹ / ₄	182T-256T
135	22 ⁵ / ₁₆	25 ⁵ / ₁₆	11 ⁵ / ₁₆	11	10 ⁵ / ₁₆	14 ⁵ / ₁₆	5 ¹ / ₂	7 ¹ / ₁₆	3 ¹ / ₂	17 ⁹ / ₃₂	6 ⁷ / ₃₂	7 ¹ / ₃₂	28 ¹ / ₁₆	14 ³ / ₁₆	13 ¹ / ₁₆	10 ¹ / ₁₆	5 ³ / ₃₂	13 ¹ / ₁₆	3 ³ / ₃₂	15 ¹ / ₁₆	6 ⁹ / ₁₆	5 ¹ / ₁₆	5	5 ¹ / ₄	7 ¹ / ₄	48-213T	6 ¹ / ₄	8 ¹ / ₄	182T-256T
150	25 ¹ / ₁₆	27 ³ / ₁₆	13 ¹ / ₄	12	11 ¹ / ₁₆	16 ³ / ₁₆	5 ¹ / ₂	7 ¹ / ₁₆	3 ¹ / ₂	18 ²⁹ / ₃₂	6 ² / ₃₂	7 ² / ₃₂	29 ¹ / ₁₆	16 ¹ / ₂	15	11 ⁵ / ₁₆	7 ¹ / ₃₂	15 ¹ / ₁₆	1 ¹ / ₃₂	16 ¹ / ₁₆	7 ⁹ / ₃₂	5 ⁵ / ₁₆	5 ¹ / ₂	5 ¹ / ₄	7 ¹ / ₄	48-213T	6 ¹ / ₄	8 ¹ / ₄	182T-256T
165	27 ³ / ₁₆	30 ³ / ₁₆	14 ³ / ₁₆	13	12 ⁹ / ₁₆	17 ³ / ₁₆	6 ¹ / ₂	9 ¹ / ₁₆	4	21 ¹ / ₁₆	7 ⁷ / ₁₆	8 ¹ / ₄	33 ¹ / ₁₆	17 ¹ / ₂	16 ³ / ₁₆	13 ³ / ₁₆	7 ¹ / ₃₂	16 ³ / ₁₆	1 ¹ / ₃₂	18 ¹ / ₁₆	7 ³ / ₃₂	6 ⁶ / ₁₆	6	6 ¹ / ₄	8 ¹ / ₄	56-215T	8 ¹ / ₄	10	143T-286T
182	30 ¹ / ₁₆	33 ³ / ₁₆	16 ¹ / ₁₆	14	13 ¹ / ₁₆	19 ¹ / ₁₆	6 ¹ / ₂	9 ¹ / ₁₆	4	22 ¹ / ₁₆	8 ¹ / ₁₆	9	35 ¹ / ₁₆	19 ¹ / ₂	18 ¹ / ₁₆	14 ¹ / ₂	7 ¹ / ₃₂	17 ¹ / ₁₆	1 ¹ / ₃₂	19 ¹ / ₁₆	8 ² / ₃₂	6 ⁶ / ₁₆	6 ⁶ / ₁₆	6 ¹ / ₄	8 ¹ / ₄	56-215T	8 ¹ / ₄	10	143T-286T
200	32 ³ / ₁₆	36 ³ / ₁₆	17 ³ / ₁₆	15	15 ¹ / ₁₆	21 ¹ / ₄	6 ¹ / ₂	9 ¹ / ₁₆	4	24 ³ / ₁₆	8 ³ / ₁₆	9 ¹ / ₁₆	37 ¹ / ₁₆	21 ¹ / ₂	19 ¹ / ₁₆	15 ¹ / ₁₆	¼	19 ¹ / ₁₆	1 ¹ / ₁₆	21 ¹ / ₁₆	9 ¹ / ₁₆	7 ¹ / ₁₆	7 ¹ / ₄	6 ¹ / ₄	8 ¹ / ₄	56-215T	8 ¹ / ₄	10	143T-286T

**QBCA/QBCS-222-330
ARRANGEMENT 9**

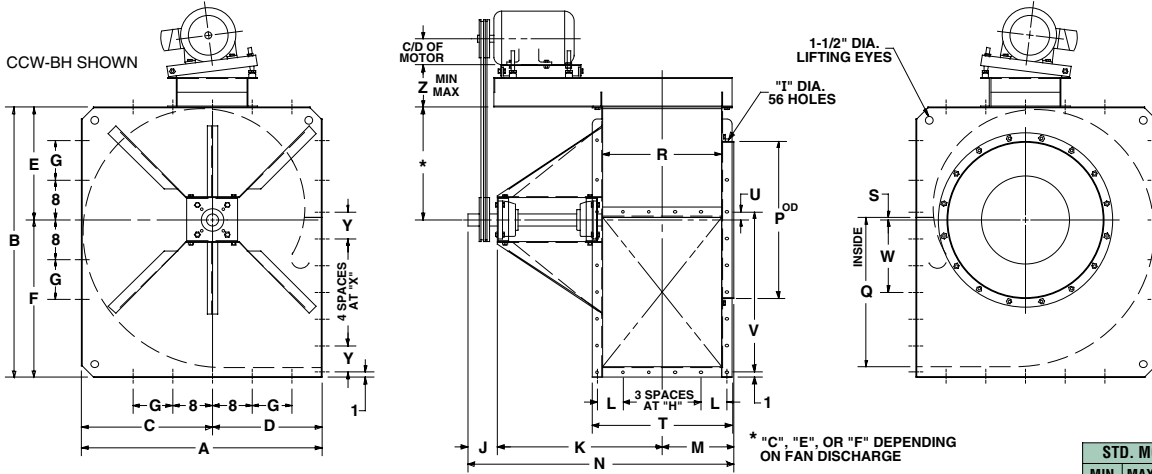


APPROXIMATE FAN WEIGHT NO MOTOR								
FAN SIZE	SHAFT DIA	KEYWAY	CLASS 1 & 2		CLASS 3			
			WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA	KEYWAY	WITH H.D. MOTOR BASE	WITH STD. MOTOR BASE
222	1 ¹ / ₁₆	¾ x ¾	380	408	1 ¹ / ₁₆	½ x ¼	423	451
245	1 ¹ / ₁₆	¾ x ¾	452	497	2 ³ / ₁₆	½ x ¼	517	562
270	1 ¹ / ₁₆	¾ x ¾	515	560	2 ³ / ₁₆	½ x ¼	588	633
300	1 ⁵ / ₁₆	½ x ¼	715	747	2 ⁷ / ₁₆	¾ x ¾	808	840
330	2 ³ / ₁₆	½ x ¼	857	926	2 ¹ / ₁₆	¾ x ¾	1039	1108

APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

FAN SIZE	STD. MOTOR BASE		H.D. MOTOR BASE		Z	Z	FRAME SIZES RANGE	Z	Z	FRAME SIZES RANGE																				
	MIN.	MAX.	MIN.	MAX.																										
222	35 ¹ / ₂	40 ⁵ / ₁₆	19 ¹ / ₂	16	16 ¹ / ₁₆	23 ¹ / ₂	6 ¹ / ₂	6 ¹ / ₁₆	¾	5	26 ⁷ / ₃₂	6 ¹ / ₂	10 ⁹ / ₃₂	41 ³ / ₁₆	23 ¹ / ₂	22 ¹ / ₈	17 ¹ / ₁₆	9 ³ / ₃₂	20 ¹ / ₁₆	1 ⁵ / ₃₂	23 ³ / ₈	10 ²⁵ / ₃₂	6	5 ⁵ / ₁₆	6 ¹ / ₄	8 ¹ / ₄	182T-256T	8 ¹ / ₄	10	143T-286T
245	39 ¹ / ₂	44 ³ / ₄	21 ¹ / ₂	18	18 ¹ / ₂	26 ¹ / ₄	6 ¹ / ₂	7 ³ / ₁₆	1	5	27 ¹ / ₃₂	7 ¹ / ₄	11 ³ / ₃₂	44 ³ / ₁₆	26 ¹ / ₂	24 ¹ / ₁₆	19 ¹ / ₁₆	1 ¹ / ₃₂	23 ¹ / ₁₆	1 ⁵ / ₃₂	26 ¹ / ₁₆	11 ¹ / ₁₆	6 ²⁹ / ₃₂	6 ⁶ / ₁₆	6 ¹ / ₄	8 ¹ / ₄	182T-256T	10 ¹ / ₄	12	143T-326T
270	43 ¹ / ₈	49 ¹ / ₁₆	23 ³ / ₈	19 ¹ / ₂	20 ³ / ₈	28 ¹ / ₁₆	6 ¹ / ₂	7 ⁵ / ₁₆	1	6	29 ¹ / ₃₂	7 ¹ / ₈	12 ² / ₃₂	48 ³ / ₁₆	28 ¹ / ₂	26 ¹ / ₁₆	21 ¹ / ₁₆	3 ¹ / ₃₂	25 ¹ / ₁₆	1 ¹ / ₃₂	29 ³ / ₁₆	13 ¹ / ₁₆	7 ¹ / ₃₂	7 ¹ / ₄	6 ¹ / ₄	8 ¹ / ₄	182T-256T	10 ¹ / ₄	12	143T-326T
300	48 ¹ / ₄	54 ¹ / ₄	26 ¹ / ₄	22	22 ¹ / ₂	31 ¹ / ₈	8	8 ¹ / ₁₆	1	6	33 ¹ / ₃₂	8 ¹ / ₁₆	14 ³ / ₃₂	53 ³ / ₁₆	31 ¹ / ₂	29 ¹ / ₁₆	23 ³ / ₁₆	7 ¹ / ₁₆	28 ¹ / ₁₆	1 ⁹ / ₁₆	32 ³ / ₁₆	14 ¹ / ₃₂	7 ³ / ₃₂	8 ¹ / ₈	8 ¹ / ₄	10	143T-286T	10 ¹ / ₄	12	143T-326T
330	52 ¹ / ₁₆	59 ³ / ₈	28 ¹ / ₁₆	24	24 ¹ / ₁₆	34 ³ / ₁₆	8	9 ¹ / ₁₆	1	6 ¹ / ₂	36 ⁷ / ₃₂	9 ¹ / ₂	15 ¹ / ₃₂	58 ¹ / ₁₆	34 ¹ / ₂	33	26 ³ / ₁₆	1 ⁷ / ₃₂	30 ¹ / ₁₆	1 ² / ₃₂	35 ¹ / ₄	15 ³ / ₃₂	8 ³ / ₁₆	8 ³ / ₁₆	8 ¹ / ₄	10	143T-286T	10 ¹ / ₄	12	143T-326T

QBCA/QBCS-365-445 ARRANGEMENT 9

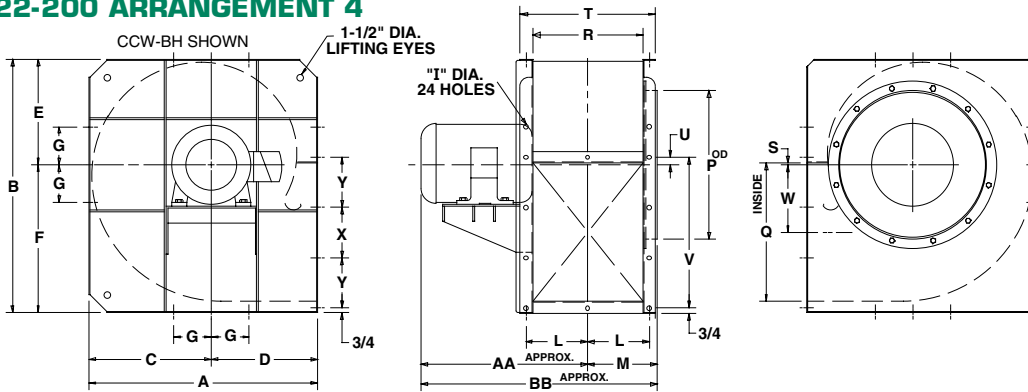


APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

FAN SIZE	STD. MOTOR BASE																			H.D. MOTOR BASE											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	Z	MIN	MAX	FRAME SIZES RANGE	MIN	MAX
365	58 ⁵ / ₁₆	65 ¹ / ₂	31 ¹ / ₈	27	27 ¹ / ₁₆	38 ¹ / ₁₆	8	6 ¹ / ₄	1 ¹ / ₁₆	6 ¹ / ₂	37 ¹ / ₁₆	6 ¹ / ₄	16 ³ / ₁₆	61	37 ¹ / ₂	36 ¹ / ₂	29	1 ³ / ₁₆	33 ¹ / ₄	1 ¹ / ₁₆	38 ³ / ₄	17 ¹ / ₁₆	6 ¹ / ₂	6 ³ / ₈	8 ¹ / ₄	10	143T-286T	10 ¹ / ₄	12	143T-326T	
402	65 ¹ / ₁₆	72	35 ¹ / ₁₆	30	30 ¹ / ₄	41 ¹ / ₄	16	6 ³ / ₁₆	1 ¹ / ₁₆	7	40 ³ / ₃₂	6 ⁷ / ₈	18 ³ / ₃₂	65 ⁷ / ₁₆	41 ¹ / ₂	40 ¹ / ₁₆	31 ¹ / ₁₆	1 ⁵ / ₁₆	36 ³ / ₁₆	1 ¹ / ₁₆	42 ³ / ₁₆	19 ³ / ₃₂	7 ³ / ₃₂	7 ³ / ₃₂	8 ¹ / ₄	10	143T-286T	10 ¹ / ₄	12	143T-326T	
445	71 ¹ / ₁₆	79 ¹ / ₁₆	38 ³ / ₁₆	33	33 ³ / ₁₆	46	16	7 ¹ / ₂	1 ¹ / ₁₆	7	41 ² / ₃₂	7 ¹ / ₃₂	19 ³ / ₃₂	68 ³ / ₁₆	45 ¹ / ₂	44 ¹ / ₁₆	35 ¹ / ₁₆	3 ¹ / ₃₂	39 ⁹ / ₁₆	1 ² / ₃₂	46 ³ / ₁₆	21 ¹ / ₁₆	7 ¹ / ₁₆	7 ² / ₃₂	8 ¹ / ₄	10	143T-286T	10 ¹ / ₄	12	143T-326T	

APPROXIMATE FAN WEIGHT NO MOTOR								
FAN SIZE	SHAFT DIA	KEYWAY	CLASS 1 & 2		CLASS 3			
			WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE		
365	2 ⁷ / ₁₆	5/8 x 5/16	1145	1215	2 ¹ / ₁₆	5/8 x 5/16	1289	1359
402	2 ¹ / ₁₆	5/8 x 5/16	1424	1496	2 ¹⁵ / ₁₆	3/4 x 3/8	1551	1623
445	2 ¹ / ₁₆	5/8 x 5/16	1638	1713	2 ¹⁵ / ₁₆	3/4 x 3/8	1794	1869

QBCA/QBCS-122-200 ARRANGEMENT 4



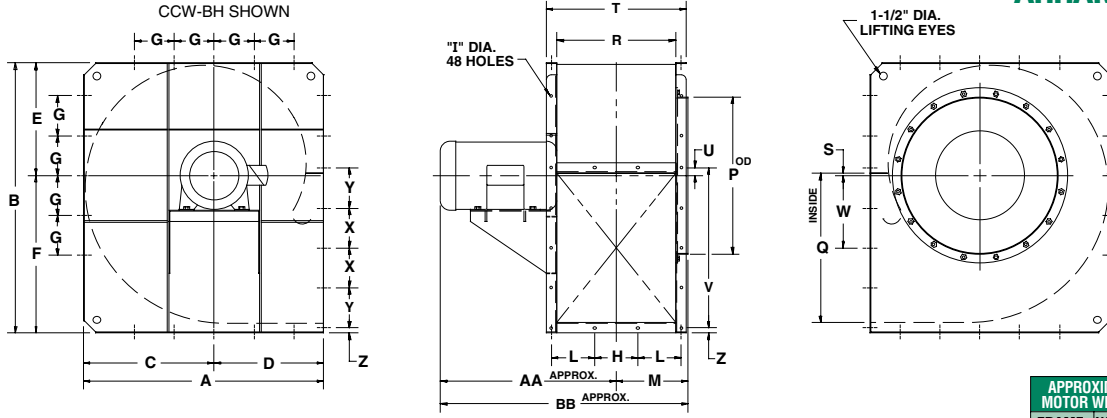
APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
56	34
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290

FAN SIZE	A	B	C	D	E	F	G	I	L	M	P	Q	R	S	T	U	V	W	X	Y
122	20 ⁷ / ₈	23	10 ⁷ / ₈	10	9 ³ / ₈	13 ³ / ₈	5 ¹ / ₂	7 ¹ / ₁₆	5 ³ / ₄	6 ³ / ₁₆	13 ³ / ₈	12 ³ / ₁₆	9 ³ / ₄	1/8	13	1 ⁵ / ₁₆	13 ¹ / ₁₆	5 ³ / ₃₂	4 ³ / ₁₆	4 ⁵ / ₈
135	22 ⁵ / ₁₆	25 ³ / ₁₆	11 ¹⁵ / ₁₆	11	10 ¹ / ₁₆	14 ¹ / ₈	5 ¹ / ₂	7 ¹ / ₁₆	6 ³ / ₃₂	7 ¹ / ₃₂	14 ³ / ₈	13 ¹ / ₁₆	10 ¹ / ₁₆	5/32	13 ¹⁵ / ₁₆	3/32	15 ¹ / ₁₆	6 ³ / ₁₆	5 ¹ / ₁₆	5
150	25 ¹ / ₄	27 ³ / ₁₆	13 ¹ / ₄	12	11 ¹ / ₁₆	16 ³ / ₈	5 ¹ / ₂	7 ¹ / ₁₆	6 ² / ₃₂	7 ² / ₃₂	16 ¹ / ₂	15	11 ¹⁵ / ₁₆	7/32	15 ³ / ₁₆	1 ¹ / ₃₂	16 ³ / ₈	7 ³ / ₃₂	5 ⁵ / ₈	5 ¹ / ₂
165	27 ³ / ₁₆	30 ³ / ₁₆	14 ⁹ / ₁₆	13	12 ³ / ₁₆	17 ¹ / ₁₆	6 ¹ / ₂	9 ¹ / ₁₆	7 ¹ / ₁₆	8 ¹ / ₄	17 ¹ / ₂	16 ³ / ₈	13 ¹ / ₈	7/32	16 ³ / ₈	1 ³ / ₃₂	18 ¹ / ₈	7 ³ / ₃₂	6 ¹ / ₈	6
182	30 ¹ / ₁₆	33 ³ / ₁₆	16 ¹ / ₁₆	14	13 ³ / ₁₆	19 ¹ / ₁₆	6 ¹ / ₂	9 ¹ / ₁₆	8 ¹ / ₈	9	19 ¹ / ₂	18 ¹ / ₈	14 ¹ / ₂	7/32	17 ³ / ₄	1 ³ / ₃₂	19 ¹ / ₈	8 ² / ₃₂	6 ⁵ / ₈	6 ³ / ₈
200	32 ³ / ₁₆	36 ³ / ₁₆	17 ³ / ₁₆	15	15 ¹ / ₈	21 ¹ / ₄	6 ¹ / ₂	9 ¹ / ₁₆	8 ³ / ₁₆	9 ¹ / ₁₆	21 ¹ / ₂	19 ¹ / ₈	15 ⁷ / ₈	1/4	19 ¹ / ₈	1 ¹ / ₈	21 ¹ / ₈	9 ¹ / ₁₆	7 ¹ / ₈	7 ¹ / ₄

FAN SIZE	MOTOR FRAME SIZES																	
	56		143T		145T		182T		184T		213T		215T		254T		256T	
	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB
122	15 ¹ / ₂	22 ¹ / ₁₆	14 ¹ / ₁₆	21 ¹ / ₄	15 ¹ / ₁₆	22 ¹ / ₄	16 ³ / ₈	23 ³ / ₁₆	17 ³ / ₈	24 ³ / ₁₆	19 ¹ / ₄	25 ³ / ₁₆	20 ¹ / ₁₆	27 ³ / ₈	N/A	N/A	N/A	N/A
135	16	23 ¹ / ₃₂	15 ³ / ₁₆	22 ¹ / ₃₂	16 ³ / ₁₆	23 ¹ / ₃₂	17 ¹ / ₁₆	24 ³ / ₃₂	18 ¹ / ₁₆	25 ³ / ₃₂	19 ¹ / ₄	26 ² / ₃₂	21 ¹ / ₄	28 ³ / ₃₂	N/A	N/A	N/A	N/A
150	16 ³ / ₈	24 ³ / ₃₂	15 ³ / ₁₆	23 ³ / ₃₂	16 ³ / ₁₆	24 ¹ / ₃₂	17 ¹ / ₁₆	25 ¹ / ₁₆	18 ¹ / ₁₆	26 ¹ / ₁₆	20 ³ / ₈	28 ¹ / ₃₂	21 ¹ / ₈	29 ¹ / ₃₂	N/A	N/A	N/A	N/A
165	17 ³ / ₁₆	25 ¹ / ₁₆	16 ³ / ₁₆	24 ³ / ₁₆	17 ³ / ₁₆	25 ³ / ₁₆	18 ³ / ₁₆	26 ³ / ₁₆	19 ³ / ₁₆	27 ³ / ₁₆	21	29 ¹ / ₄	22 ¹ / ₂	30 ³ / ₄	25 ¹ / ₄	33 ¹ / ₂	27	35 ¹ / ₄
182	17 ⁷ / ₈	26 ³ / ₈	17 ¹ / ₁₆	26 ¹ / ₁₆	18 ¹ / ₁₆	27 ¹ / ₁₆	19	28	20	29	21 ¹ / ₁₆	30 ¹ / ₁₆	23 ³ / ₁₆	32 ³ / ₁₆	25 ⁵ / ₁₆	34 ⁵ / ₁₆	27 ¹ / ₁₆	36 ¹ / ₁₆
200	18 ³ / ₁₆	28 ¹ / ₄	17 ³ / ₁₆	27 ¹ / ₁₆	18 ³ / ₁₆	28 ¹ / ₁₆	19 ¹ / ₁₆	29 ³ / ₁₆	20 ¹ / ₁₆	30 ³ / ₁₆	22 ³ / ₈	32 ¹ / ₁₆	23 ³ / ₈	33 ³ / ₁₆	26 ³ / ₈	36 ³ / ₁₆	28 ³ / ₈	38 ¹ / ₁₆

FAN SIZE	APPROXIMATE FAN WEIGHTS NO MOTOR											
	56/143/145T			182/184T			213/215T			254/256T		
	CLASS 1 & 2	CLASS 3	CLASS 3	CLASS 1 & 2	CLASS 3	CLASS 3	CLASS 1 & 2	CLASS 3	CLASS 3	CLASS 1 & 2	CLASS 3	
122	97	110	99	112	104	116	N/A	N/A	N/A	N/A	N/A	
135	108	117	109	120	114	123	N/A	N/A	N/A	N/A	N/A	
150	128	140	129	141	134	146	N/A	N/A	N/A	N/A	N/A	
165	177	192	178	193	183	198	199	214	214	214	214	
182	207	223	209	224	213	229	229	245	245	245	245	
200	237	258	239	260	244	264	259	280	280	280	280	

**QBCA/QBCS-222-330
ARRANGEMENT 4**



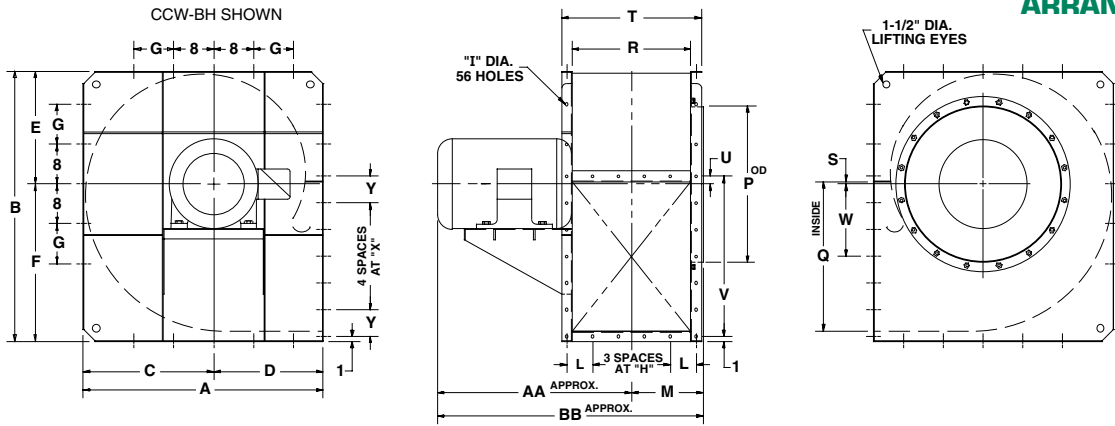
FAN SIZE	A	B	C	D	E	F	G	H	I	L	M	P	Q	R	S	T	U	V	W	X	Y	Z
222	35 1/2	40 3/16	19 1/2	16	16 3/16	23 1/2	6 1/2	6 7/16	9/16	6 1/2	10 3/32	23 1/2	22 1/2	17 1/16	9/32	20 1/16	1 3/32	23 3/8	10 29/32	6	5 1/16	3/4
245	39 1/2	44 3/4	21 1/2	18	18 1/2	26 1/4	6 1/2	7 3/16	9/16	7 1/4	11 3/32	26 1/2	24 7/16	19 1/16	1 1/32	23 1/16	1 5/32	26 1/16	11 1/8	6 23/32	6 5/8	1
270	43 1/2	49 1/16	23 3/8	19 1/2	20 3/8	28 1/16	6 1/2	7 5/16	9/16	7 7/8	12 3/32	28 1/2	26 3/16	21 1/16	1 1/32	25 1/16	1 1/32	29 3/16	13 1/16	7 11/32	7 1/4	1
300	48 1/4	54 1/4	26 1/4	22	22 3/8	31 5/8	8	8 1/16	9/16	8 1/16	14 3/32	31 1/2	29 5/16	23 3/16	7/16	28 1/16	1 1/8	32 3/16	14 1/32	7 3/32	8 1/8	1
330	52 3/16	59 3/8	28 3/16	24	24 3/16	34 3/8	8	9 1/16	9/16	9 1/2	15 1/32	34 1/2	33	26 3/16	1 1/32	30 7/16	1 2/32	35 1/4	15 3/32	8 1/16	8 3/16	1

APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

FAN SIZE	MOTOR FRAME SIZES																			
	182T		184T		213T		215T		254T		256T		284T		286T		324T		326T	
	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB
222	20 3/16	31 3/32	21 1/16	32 3/32	23 1/4	33 7/32	24 3/4	35 11/32	27 1/32	38 1/8	29 3/8	39 3/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
245	21 1/16	33 1/32	22 1/16	34 1/32	24 1/8	36 3/32	25 5/8	37 9/32	28 3/32	40 3/8	30 3/32	42 1/8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
270	22 1/16	34 1/32	23 1/16	36 1/32	25 3/8	38 3/32	26 3/8	39 9/32	29 3/32	42 3/8	31 3/8	44 1/8	32 27/32	45 3/16	34 1/32	47 3/16	N/A	N/A	N/A	N/A
300	N/A	N/A	26 3/16	40 1/32	27 1/16	41 3/32	30 3/32	44 3/8	32 1/32	46 1/4	34 1/32	48 3/16	35 1/32	49 1/16	36 3/32	50 3/16	37 29/32	52 1/16	N/A	N/A
330	N/A	N/A	27 1/2	42 2/32	29	44 11/32	31 29/32	47 1/8	33 1/32	48 3/8	35 3/32	50 3/16	36 29/32	52 1/16	37 19/32	52 15/16	39 3/32	54 1/16	N/A	N/A

FAN SIZE	APPROXIMATE FAN WEIGHT NO MOTOR											
	182/184T		213/215T		254/256T		284/286T		324/326T			
	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	
222	295	321	300	326	315	341	N/A	N/A	N/A	N/A	N/A	
245	363	395	367	400	383	416	N/A	N/A	N/A	N/A	N/A	
270	419	459	424	464	440	480	447	487	N/A	N/A	N/A	
300	N/A	N/A	530	582	546	598	553	605	561	613	N/A	
330	N/A	N/A	629	750	645	766	652	773	661	781	N/A	

**QBCA/QBCS-365-402
ARRANGEMENT 4**



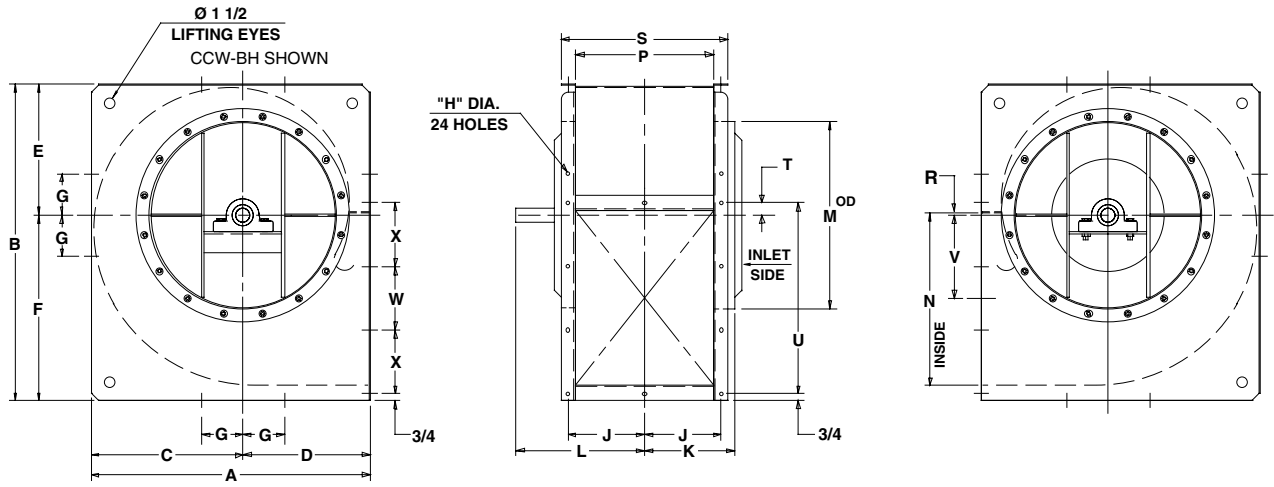
FAN SIZE	A	B	C	D	E	F	G	H	I	L	M	P	Q	R	S	T	U	V	W	X	Y
365	58 3/8	65 1/2	31 1/8	27	27 7/16	38 1/16	8	6 1/4	1 1/16	6 1/4	16 13/16	37 1/2	36 1/2	29	1 3/16	33 1/4	1 1/16	38 3/4	17 1/16	6 1/2	6 3/8
402	65 1/8	72	35 1/8	30	30 1/4	41 1/4	16	6 3/16	1 1/16	6 7/8	18 3/32	41 1/2	40 5/8	31 1/16	1 5/16	36 3/8	1 1/16	42 3/16	19 5/32	7 3/32	7 3/32

FAN SIZE	MOTOR FRAME SIZES															
	213T		215T		254T		256T		284T		286T		324T		326T	
	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB
365	28 7/8	45 1/16	30 3/8	47 3/16	33 3/8	50	34 15/16	51 3/4	36 3/8	53 7/16	38 3/8	54 15/16	39	55 13/16	40 1/2	57 3/8
402	N/A				34 3/32	52 15/16	36 3/32	54 1/16	38 3/32	56 3/8	39 3/32	57 3/8	40 5/32	58 3/8	41 3/32	60 1/4

FAN SIZE	APPROXIMATE FAN WEIGHT NO MOTOR							
	213/215T		254/256T		284/286T		324/326T	
	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	CLASS	
365	890	993	906	1009	913	1016	921	1024
402	N/A	N/A	1110	1233	1117	1240	1126	1249

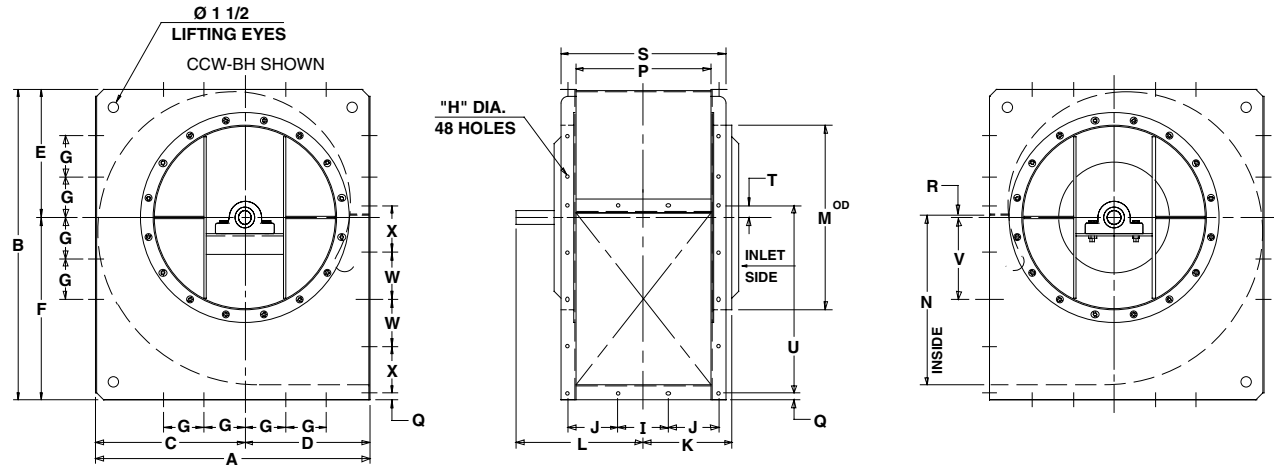
APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

QBCA/QBCS-122-200
ARRANGEMENT 3 SWSI



FAN SIZE	CLASS 1 & 2																			CLASS 3		APPROX. WEIGHT NO MOTOR (LBS.)					
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	SHAFT DIA	KEYWAY	SHAFT DIA	KEYWAY	CL 1 & 2	CL 3
122	20 7/8	23	10 7/8	10	9 3/8	13 3/8	5 1/2	7/16	5 3/4	6 9/16	11	13 3/8	12 3/8	9 3/4	1/8	13	1 5/16	13 13/16	5 3/32	4 9/16	4 3/8	1 1/16	1/4 x 1/8	1 7/16	3/8 x 3/16	96	110
135	22 15/16	25 3/16	11 15/16	11	10 3/8	14 1/8	5 1/2	7/16	6 7/32	7 1/32	11 9/32	14 3/8	13 7/16	10 11/16	9/32	13 5/16	3/32	15 1/16	6 9/16	5 1/16	5	1 3/16	1/4 x 1/8	1 7/16	3/8 x 3/16	110	124
150	25 1/4	27 3/16	13 1/4	12	11 1/8	16 3/8	5 1/2	7/16	6 27/32	7 21/32	12 3/32	16 1/2	15	11 5/16	7/32	15 3/16	1 1/32	16 5/8	7 9/32	5 5/8	5 1/2	1 3/16	1/4 x 1/8	1 7/16	3/8 x 3/16	132	150
165	27 3/8	30 3/8	14 3/8	13	12 3/8	17 13/16	6 1/2	9/16	7 1/16	8 1/4	13 3/8	17 1/2	16 3/8	13 1/8	7/32	16 3/8	1 1/32	18 1/8	7 27/32	6 1/8	6	1 1/16	3/8 x 3/16	1 11/16	3/8 x 3/16	194	218
182	30 1/8	33 3/8	16 1/8	14	13 3/8	19 1/8	6 1/2	9/16	8 1/8	9	13 3/8	19 1/2	18 1/8	14 1/2	7/32	17 3/4	1 1/32	19 1/8	8 27/32	6 3/8	6 3/8	1 1/16	3/8 x 3/16	1 11/16	3/8 x 3/16	226	252
200	32 3/8	36 3/8	17 3/8	15	15 1/8	21 1/4	6 1/2	9/16	8 13/16	9 11/16	14 9/16	21 1/2	19 7/8	15 5/8	1/4	19 1/8	1 1/8	21 5/8	9 11/16	7 1/8	7 1/4	1 1/16	3/8 x 3/16	1 11/16	3/8 x 3/16	262	290

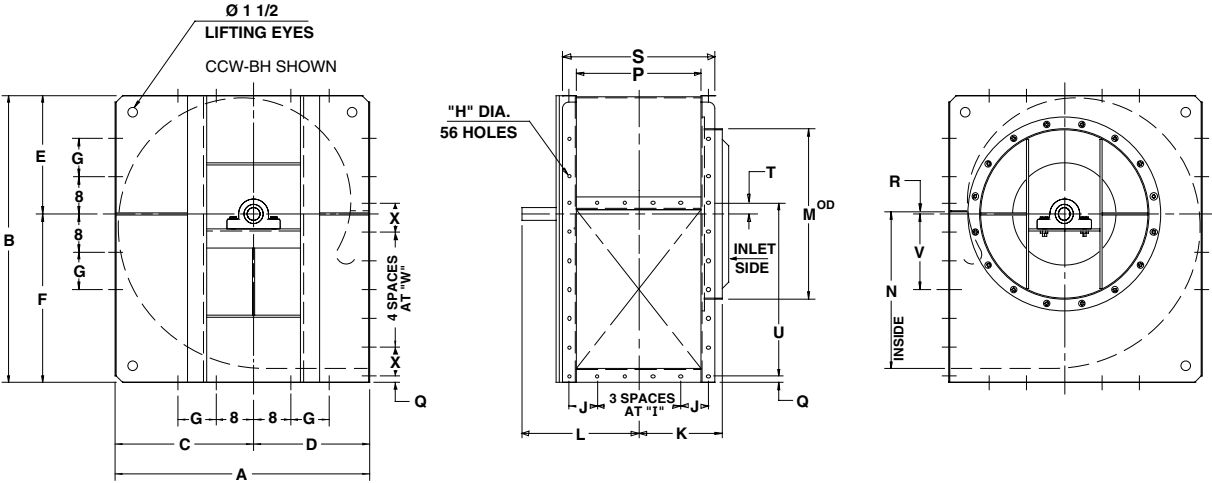
QBCA/QBCS-222-330
ARRANGEMENT 3 SWSI



FAN SIZE	CLASS 1 & 2																			CLASS 3		APPROX. WEIGHT NO MOTOR (LBS.)			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	CL 1 & 2	CL 3
222	35 1/2	40 5/16	19 1/2	16	16 9/16	23 1/2	6 1/2	9/16	6 7/16	6 1/2	10 9/32	16 15/32	23 1/2	22 1/8	17 1/16	3/4	9/32	20 15/16	1 5/32	23 3/8	10 25/32	6	5 5/16	358	394
245	39 1/2	44 3/4	21 1/2	18	18 1/2	26 1/4	6 1/2	9/16	7 3/16	7 1/4	11 3/32	17 27/32	26 1/2	24 7/16	19 1/16	1	1 1/32	23 11/16	1 5/32	26 11/16	11 7/8	6 23/32	6 3/8	438	482
270	43 1/8	49 1/16	23 3/8	19 1/2	20 3/8	28 11/16	6 1/2	9/16	7 5/16	7 7/8	12 3/32	19 27/32	28 1/8	26 15/16	21 1/16	1	1 3/32	25 11/16	1 7/32	29 3/8	13 1/8	7 1/32	7 1/4	482	556
300	48 1/4	54 1/4	26 1/4	22	22 3/8	31 5/8	8	9/16	8 11/16	8 11/16	14 3/32	21 1/32	31 1/2	29 5/16	23 3/16	1	7/16	28 1/8	1 9/16	32 3/8	14 17/32	7 3/32	8 3/8	660	732
330	52 13/16	59 3/8	28 3/16	24	24 3/16	34 9/16	8	9/16	9 1/16	9 1/2	15 1/32	22 23/32	34 1/2	33	26 3/16	1	1 1/32	30 7/8	1 21/32	35 1/4	15 3/32	8 3/16	8 3/16	778	922

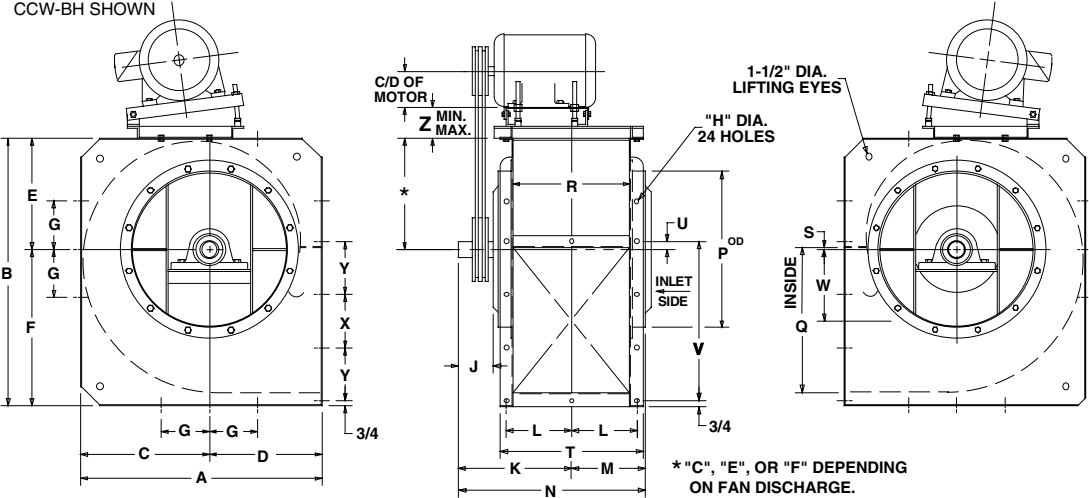
FAN SIZE	CLASS 1 & 2		CLASS 3			
	SHAFT DIA	KEYWAY	NOTE: SIZES 222 THRU 300 HAVE A TURNED DOWN SHAFT THRU BEARINGS		SHAFT DIA. THRU BRGS.	KEYWAY
			SHAFT DIA. BETWEEN BRGS.	KEYWAY		
222	1 11/16	3/8 x 3/16	1 15/16	1/2 x 1/4	1 11/16	3/8 x 3/16
245	1 11/16	3/8 x 3/16	1 15/16	1/2 x 1/4	1 11/16	3/8 x 3/16
270	1 11/16	3/8 x 3/16	1 15/16	1/2 x 1/4	1 11/16	3/8 x 3/16
300	1 15/16	1/2 x 1/4	2 3/16	1/2 x 1/4	1 15/16	1/2 x 1/4
330	1 15/16	1/2 x 1/4	2 3/16	1/2 x 1/4	2 3/16	1/2 x 1/4

**QBCA/QBCS-365-445
ARRANGEMENT 3 SWSI**



FAN SIZE	CLASS 1 & 2																			CLASS 3		APPROX. WEIGHT NO MOTOR (LBS.)							
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	SHAFT DIA	KEYWAY	SHAFT DIA	KEYWAY	CLASS 1 & 2	CLASS 3
365	58 7/8	65 1/2	31 7/8	27	27 1/8	38 1/8	8	1 1/8	6 1/4	6 1/4	16 1/8	24 3/8	37 1/2	36 1/2	29	1	1 3/8	33 1/4	1 1/8	38 3/4	17 1/8	6 1/2	6 3/8	2 1/8	1/2 x 1/4	2 1/8	5/8 x 3/16	1078	1156
402	65 5/8	72	35 1/8	30	30 1/4	41 1/4	16	1 1/8	6 13/16	6 1/8	18 3/32	26 3/8	41 1/2	40 3/8	31 1/8	1	1 5/8	36 3/8	1 1/8	42 3/8	19 13/32	7 3/8	7 3/32	2 1/8	1/2 x 1/4	2 1/8	5/8 x 3/16	1308	1464
445	71 13/16	79 3/8	38 13/16	33	33 1/8	46	16	1 1/8	7 1/2	7 1/32	19 3/32	27 1/8	45 1/2	44 3/8	35 3/8	1	3 1/32	39 3/8	1 7/32	46 13/16	21 3/8	7 13/16	7 25/32	2 1/8	5/8 x 3/16	2 1/8	5/8 x 3/16	1562	1748

**QBCS/QBCA-122-200
ARRANGEMENT 3T SWSI**



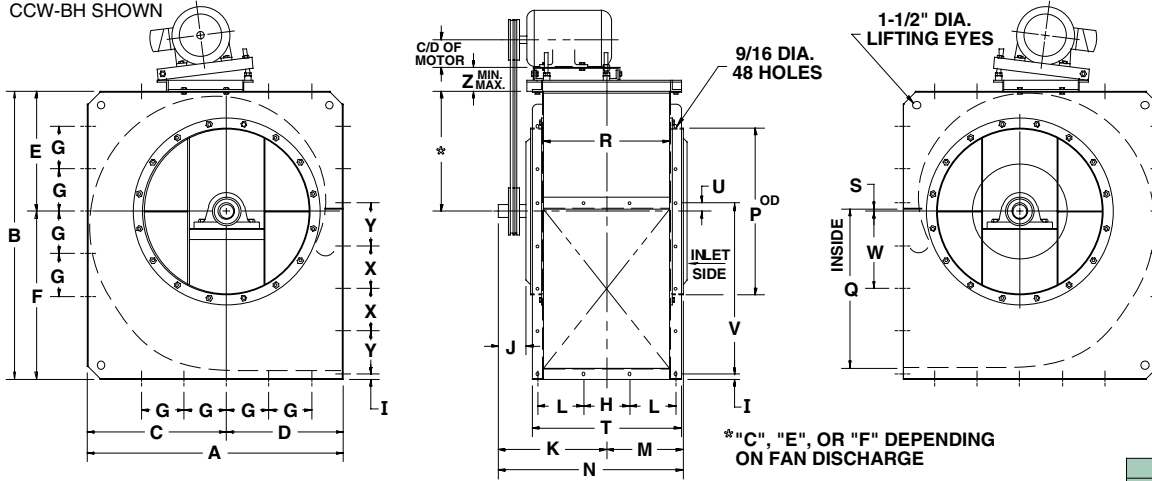
APPROXIMATE MOTOR WEIGHT	
FRAME SIZES	WEIGHT LBS.
48	25
56	34
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440

FAN SIZE	CLASS 1 & 2																			CLASS 3				MOTOR BASE			
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	Z	STD. FRAME SIZES RANGE	H.D. FRAME SIZES RANGE
122	20 7/8	23	10 7/8	10	9 3/8	13 3/8	5 1/2	7/16	3 1/2	11	5 3/4	6 3/8	17 3/8	13 3/8	12 3/8	9 3/4	1/8	13	1 1/8	13 1/8	5 3/32	4 9/16	4 3/8	3 3/4	5 3/4	48-213T	182T-256T
135	22 15/16	25 3/8	11 15/16	11	10 3/8	14 7/8	5 1/2	7/16	3 1/2	11 13/32	6 7/32	7 1/32	18 1/2	14 3/8	13 1/8	10 1/8	5/32	13 15/16	3 1/32	15 1/8	6 3/8	5 1/8	5	3 3/4	5 3/4	48-213T	182T-256T
150	25 1/4	27 13/16	13 1/4	12	11 1/8	16 3/8	5 1/2	7/16	3 1/2	12 3/32	6 23/32	7 23/32	19 3/4	16 1/2	15	11 1/8	7/32	15 3/8	1 1/32	16 3/8	7 9/32	5 5/8	5 1/2	3 3/4	5 3/4	48-213T	182T-256T
165	27 3/8	30 3/8	14 3/8	13	12 3/8	17 3/8	6 1/2	9/16	4	13 3/8	7 1/8	8 1/4	21 1/8	17 1/2	16 3/8	13 3/8	7/32	16 3/8	1 3/32	18 1/8	7 31/32	6 1/8	6	3 3/4	5 3/4	56-215T	143T-286T
182	30 1/8	33 3/8	16 1/8	14	13 3/8	19 3/8	6 1/2	9/16	4	13 3/8	8 1/8	9	22 1/8	19 1/2	18 1/8	14 1/2	7/32	17 3/8	1 3/32	19 3/8	8 27/32	6 3/8	6 3/8	3 3/4	5 3/4	56-215T	143T-286T
200	32 3/8	36 3/8	17 3/8	15	15 1/8	21 1/4	6 1/2	9/16	4	14 3/8	8 3/8	9 1/8	24 1/4	21 1/2	19 3/8	15 3/8	1/4	19 3/8	1 1/8	21 3/8	9 1/8	7 1/8	7 1/4	3 3/4	5 3/4	56-215T	143T-286T

APPROXIMATE FAN WEIGHT LESS MOTOR	CLASS 1 & 2				CLASS 3					
	FAN SIZE	SHAFT DIA	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA. BETWEEN BRGS.	KEYWAY	SHAFT DIA. THRU BRGS.	KEYWAY	WITH STD. MOTOR BASE
122	1 1/8	1/4 x 1/8	105	110	1 1/8	3/8 x 3/16	1 1/8	3/8 x 3/16	119	124
135	1 1/8	1/4 x 1/8	119	124	1 1/8	3/8 x 3/16	1 1/8	3/8 x 3/16	133	138
150	1 1/8	1/4 x 1/8	141	146	1 1/8	3/8 x 3/16	1 1/8	3/8 x 3/16	159	164
165	1 1/8	3/8 x 3/16	204	218	1 1/8	3/8 x 3/16	1 1/8	3/8 x 3/16	228	242
182	1 1/8	3/8 x 3/16	236	250	1 1/8	3/8 x 3/16	1 1/8	3/8 x 3/16	262	276
200	1 1/8	3/8 x 3/16	272	286	1 1/8	3/8 x 3/16	1 1/8	3/8 x 3/16	300	314

QBCA/QBCS-222-330 ARRANGEMENT 3T SWSI

CCW-BH SHOWN

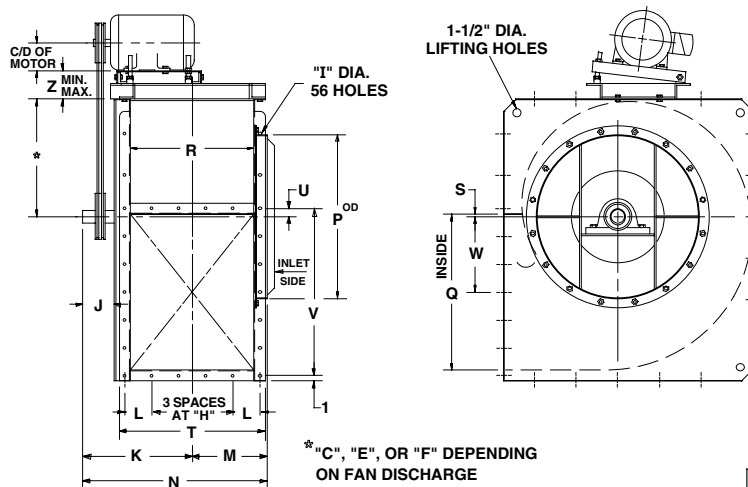
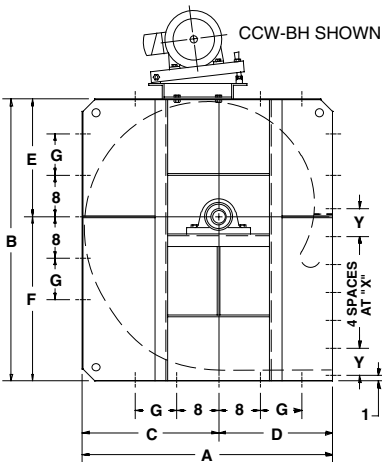


APPROXIMATE MOTOR WEIGHT	
FRAME SIZES	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

FAN SIZE	MOTOR BASE																				MIN	MAX	STD. FRAME SIZES RANGE	H.D. FRAME SIZES RANGE				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U					V	W	X	Y
222	35½	40¾	19½	16	16¼	23½	6½	6¾	¾	5	16¼	6½	10¼	27¼	23½	22½	17¼	¾	20¼	1¾	23¾	10¾	6	5¼	4¼	6¼	182T-256T	143T-286T
245	39½	44¾	21½	18	18½	26¼	6½	7¾	1	5	17¾	7¼	11¾	29¾	26½	24¾	19¾	1½	23¼	1¾	26¼	11¾	6¾	6¾	4¼	6¼	182T-256T	143T-326T
270	43½	49¾	23¾	19½	20¾	28¼	6½	7¾	1	6	19¾	7¾	12¾	32¼	28½	26¼	21¾	1¾	25¼	1¾	29¾	13¾	7¼	7¼	4¼	6¼	182T-256T	143T-326T
300	48¼	54¾	26¼	22	22¾	31¾	8	8¼	1	6	21¾	8¼	14¾	35¾	31½	29¾	23¾	¾	28¾	1¾	32¾	14¾	7¾	8¾	4¼	6¼	143T-286T	143T-326T
330	52¼	59¾	28¾	24	24¾	34¾	8	9¼	1	6½	22¾	9½	15¾	38¼	34½	33	26¾	1¾	30¾	1¾	35¼	15¾	8¾	8¾	4¼	6¼	143T-286T	143T-326T

APPROXIMATE FAN WEIGHTS LESS MOTOR	CLASS 1 & 2					CLASS 3					
	FAN SIZE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA. BETWEEN BRGS.	KEYWAY	SHAFT DIA. THRU BRGS.	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE
	NOTE: SIZE 222 THRU 300 HAVE A TURNED DOWN SHAFT THRU BEARINGS										
222	1¼	¾ x ¾	373	383	1¼	½ x ¼	1¼	¾ x ¾	409	419	
245	1¼	¾ x ¾	453	469	1¼	½ x ¼	1¼	¾ x ¾	497	513	
270	1¼	¾ x ¾	497	513	1¼	½ x ¼	1¼	¾ x ¾	571	587	
300	1¾	½ x ¼	685	691	2¾	½ x ¼	1¾	½ x ¼	757	763	
330	1¾	½ x ¼	803	810	2¾	½ x ¼	2¾	½ x ¼	947	954	

QBCA/QBCS-365-445 ARRANGEMENT 3T SWSI

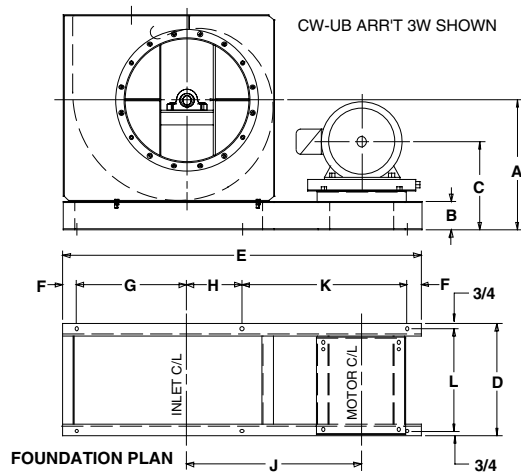


APPROXIMATE MOTOR WEIGHT	
FRAME SIZES	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

FAN SIZE	MOTOR BASE																				MIN	MAX	STD. FRAME SIZES RANGE	H.D. FRAME SIZES RANGE				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U					V	W	X	Y
365	58¾	65½	31¾	27	27¾	38¾	8	6¼	1¼	6½	24¾	6¼	16¾	41	37½	36½	29	1¾	33¼	1¼	38¾	17¼	6½	6¾	5¼	7	143T-286T	143T-326T
402	65¾	72	35¾	30	30¼	41¼	16	6¾	1¼	7	26¾	6¾	18¾	44¾	41½	40¾	31¾	1¾	36¾	1¾	42¾	19¾	7¾	7¾	5¼	7	143T-286T	143T-326T
445	71¾	79¾	38¾	33	33¾	46	16	7½	1¼	7	27¾	7¾	19¾	47¾	45½	44¾	35¾	¾	39¾	1¾	46¾	21¾	7¾	7¾	5¼	7	143T-286T	143T-326T

APPROXIMATE FAN WEIGHT LESS MOTOR								
FAN SIZE	SHAFT DIA.	KEYWAY	CLASS 1 & 2		CLASS 3			
			WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE		
365	2¾	½ x ¼	1254	1261	2¾	¾ x ¾	1476	1483
402	2¾	½ x ¼	1533	1539	2¾	¾ x ¾	1771	1777
445	2¾	¾ x ¾	1769	1776	2¾	¾ x ¾	1977	1984

**QBCS-122-150
ARRANGEMENT 3
SWSI UNITARY**

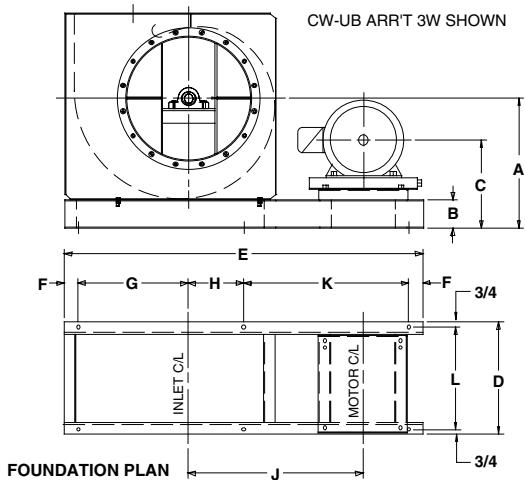


"M" DIA.
6 HOLES

NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 X 2 X .1793
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

FAN SIZE	FRAME SIZE	CW-UB			B	C	D	E	F	CW-UB			CCW-UB			CW-BH/CCW-TH			K	L	M	CW-UB				APPROX. WT. #	
		A	A	A						G	H	J	G	H	J	G	H	J				N	N	N	N	CLASS 1 & 2	CLASS 3
122	143T	14%	13%	17%	10 1/4	13	38	3	10%	5 3/8	18 3/8	6%	9 1/8	22 3/8	7	9	21 3/4	16	11 1/2	3/8	18.7	22.8	22.0	23.0	162	220	
	145T				11 1/8					40	6 3/8		19	10 3/8		23 1/4	10	22 5/8			17	19.3	23.5	22.7	23.4	260	272
	182T				12 1/8					44	8 3/8		21 1/8	12 1/8		26 1/8	12	25 1/2			19	22.0	26.2	25.5	26.0	333	347
	213T				14 1/8					47	9 1/8		23 1/2	14 1/8		27 3/4	13 1/2	27 1/2			20 1/2	23.5	27.8	27.1	27.3	353	367
	215T				14 3/8					49	9 3/8		24 1/4	14 3/8		28 1/8	13 3/4	28 1/8			21 1/2	460	474				
	256T				14 7/8					52	10 1/8		25 3/8	15 1/8		29 1/8	14 1/2	29 1/8			22 1/2	490	504				
135	143T	15 1/8	14 3/8	18%	10 1/4	13 3/8	40	3	11 1/8	5 3/8	18 3/8	7 3/8	9 1/8	22 3/8	8	9	22 3/4	17	12 3/8	3/8	19.7	23.1	23.1	24.3	222	236	
	145T				11 1/8					42	6 3/8		19 3/8	10 1/8		24 3/8	10	23 3/8			18	20.2	24.7	23.8	24.7	232	246
	182T				12 1/8					46	8 1/8		22 3/8	12 1/8		27 3/8	12	26 1/2			20	273	287				
	213T				14 1/8					49	9 1/8		24 1/4	14 3/8		28 3/8	13 1/2	28 1/8			21 1/2	288	302				
	215T				14 3/8					51	9 3/8		25 1/4	14 7/8		29 1/8	13 3/4	29 1/8			22 1/2	349	363				
	256T				14 7/8					54	10 1/8		26 3/8	15 1/8		30 1/8	14 1/2	30 1/8			23 1/2	369	383				
150	143T	17 1/4	15 3/8	20%	10 1/4	15 3/8	43	3	13%	5 3/8	20 3/8	8 3/8	10 1/8	25 3/8	9	9 1/2	24 3/4	18 1/2	13 3/8	3/8	21.5	26.3	25.3	26.7	248	266	
	145T				11 1/8					45	6 3/8		21 1/4	11 1/8		26 3/8	10 1/2	25 5/8			19 1/2	258	276				
	182T				12 1/8					49	8 1/8		24 1/4	13 1/8		29 1/8	12 1/2	28 1/2			21 1/2	299	317				
	213T				14 1/8					52	9 1/8		25 3/4	14 1/8		30 3/8	14	30 3/8			23	314	332				
	215T				14 3/8					54	9 3/8		27 1/4	14 3/8		32 3/8	15 1/2	31 1/8			24 1/2	375	393				
	256T				14 7/8					57	10 1/8		28 3/8	15 3/8		33 1/8	16 1/2	32 1/8			25 1/2	395	413				
284T	15 1/8	60	11 1/8	27 1/4	16 1/8	32 3/8	17 1/2	31 3/8	24 1/2	502	520																
286T	15 3/8	62	11 3/8	27 3/4	16 3/8	32 3/8	17 3/4	31 3/8	24 1/2	532	550																

**QBCA/QBCS-165-200
ARRANGEMENT 3
SWSI UNITARY**

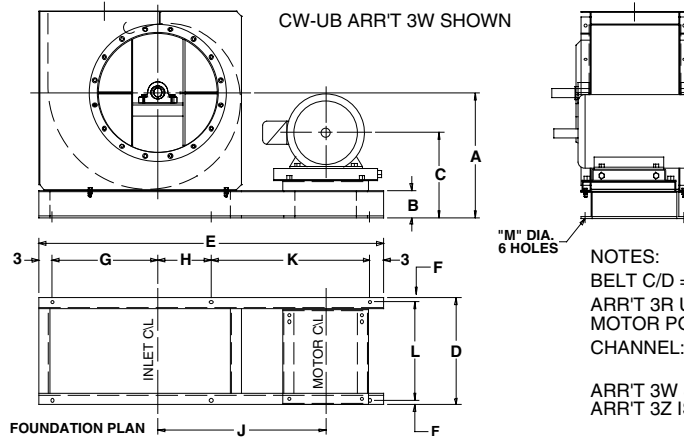


"M" DIA.
6 HOLES

NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 X 2 X .1793
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

FAN SIZE	FRAME SIZE	CW-UB			B	C	D	E	F	CW-UB			CCW-UB			CW-BH/CCW-TH			K	L	M	CW-UB				APPROX. WT. #	
		A	A	A						G	H	J	G	H	J	G	H	J				N	N	N	N	CLASS 1 & 2	CLASS 3
165	182T	18%	16%	21 1/8	11 1/8	16 3/8	48	3	14 3/8	6 3/8	22 3/8	9 3/8	11 1/8	28 3/8	10	11	27 3/4	21	14 3/8	1/8	23.8	28.9	28.1	29.4	365	393	
	184T				12 1/8					52	8 3/8		25 3/8	13 1/8		30 3/8	13	30 3/2			23	26.4	31.5	30.8	31.9	443	471
	213T				14 1/8					55	9 1/8		27 3/8	14 1/8		32 3/8	14 1/2	32 3/8			24 1/2	27.6	32.8	32.2	33.0	463	491
	254T				15 1/8					58	11 1/8		28 3/8	16 1/8		34 1/8	16	33 3/8			26	29.0	34.2	33.7	34.3	568	596
	256T				15 3/8					61	11 3/8		28 3/8	16 3/8		34 1/8	16 1/2	33 3/8			26	598	626				
	284T				15 7/8					64	12 1/8		24 1/4	17 1/8		29 3/8	17 1/2	33 3/8			26 1/2	711	739				
182	182T	20 1/8	17 3/8	23 3/8	11 1/8	17 3/8	51	3	16 3/8	5 3/8	24 1/4	10 3/8	11 1/8	29 3/8	11	11 1/2	29 3/4	22 1/2	16 1/4	1/8	25.5	31.0	30.3	31.9	403	433	
	184T				12 1/8					55	7 3/8		26 3/8	13 1/8		32 3/8	13 1/2	32 3/2			24 1/2	27.9	33.5	32.9	34.3	418	448
	213T				14 1/8					58	9 1/8		28 3/8	15 1/8		34 3/8	15	34 3/8			26	483	513				
	215T				14 3/8					61	10 1/8		30 3/8	16 1/8		35 3/8	16 1/2	35 3/8			27 1/2	503	533				
	254T				15 1/8					64	11 1/8		25 3/8	17 1/8		31 1/2	17 1/2	31 3/8			24	610	640				
	256T				15 3/8					67	12 1/8		28 3/4	18 1/8		34 3/8	18 1/2	34 3/8			26	640	670				
200	182T	21 1/8	19%	25 1/4	11 1/8	19 3/8	54	3	18 3/8	5 3/8	25 3/8	12 3/8	11 1/8	31 1/2	12	12	31 3/4	24	17 3/8	1/8	27.3	33.0	32.5	34.4	753	783	
	184T				12 1/8					58	7 3/8		28 3/4	13 1/8		34 3/8	14	34 3/4			26	803	833				
	213T				14 1/8					61	9 1/8		29 3/8	15 1/8		36 3/8	15 1/2	36 3/8			27 1/2	847	875				
	254T				15 1/8					64	10 3/8		31 3/8	16 3/8		37 1/2	17	37 3/8			29	980	1008				
	256T				15 3/8					67	11 1/8		33 3/8	18 1/8		40 3/8	19	40 3/4			31	1045	1073				
	284T				15 7/8					70	12 1/8		33 3/8	18 3/8		40 3/8	19 1/2	40 3/4			31	447	475				
286T	16 1/8	73	12 3/8	33 3/8	19 1/8	40 3/8	20	40 3/4	31	462	490																

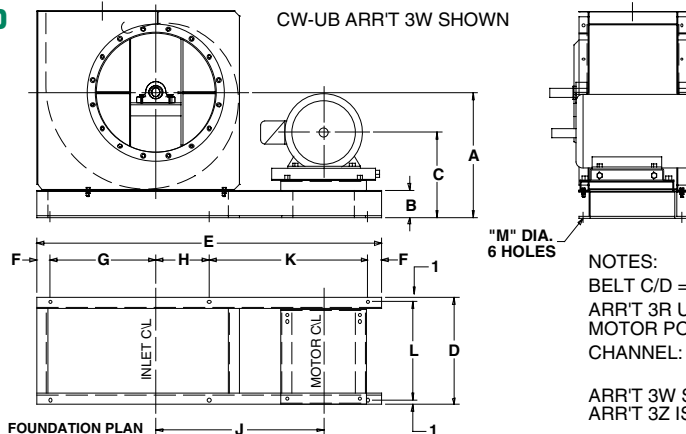
**QBCA/QBCS-222-270
ARRANGEMENT 3
SWSI UNITARY**



NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 X 2.497 X .310
6"-12#
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

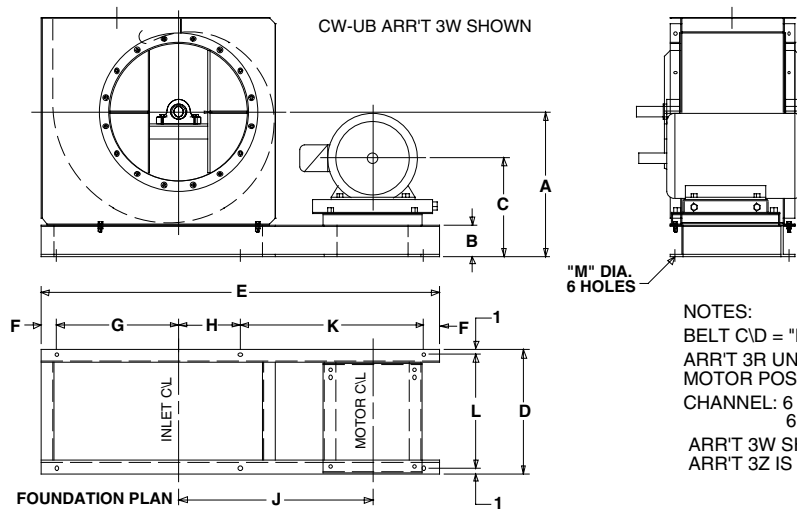
FAN SIZE	FRAME SIZE	CW-UB			B	C	D	E	F	CW-UB			CCW-UB			CW-TH			CW-BH/CCW-TH				M	N	N	N	N	N	APPROX. WT. #	
		CCW-UB	CW-TH	CW-BH						G	H	J	G	H	J	G	H	J	G	H	J	K							L	CLASS 1 & 2
222	182T	25½	22¾	29½	6	13%	20%	58	¾	20½	13%	12¾	33½	16½	9½	31%	13	34%	26	19¾	¾	29.6	35.5	32.5	35.8	38.1	640	676		
	184T																										655	691		
	213T																										722	758		
	215T																										742	778		
	254T																										854	890		
	256T																										884	920		
	284T																										999	1035		
	286T																										1049	1085		
	324T																										1187	1223		
	326T																										1252	1288		
245	182T	27½	24½	32¼	6	13%	23¾	62	1	23¾	12½	36½	18½	9½	33%	12	37%	28	21½	¾	31.6	38.7	34.9	38.2	41.1	739	783			
	184T																									754	798			
	213T																									822	866			
	215T																									842	886			
	254T																									953	997			
	256T																									983	1027			
	284T																									1098	1142			
	286T																									1148	1192			
	324T																									1286	1330			
	326T																									1351	1395			
270	182T	29%	26%	34½	6	14%	25½	71	1	25½	15%	42½	20%	11%	38%	16	43	32½	23¾	¾	37.0	44.7	40.6	44.6	47.5	882	956			
	184T																									902	976			
	213T																									1015	1089			
	215T																									1045	1119			
	254T																									1160	1253			
	256T																									1210	1284			
	284T																									1348	1422			
	286T																									1413	1487			
	324T																									1577	1651			
	326T																									1637	1711			

**QBCA / QBCS-300 AND 330
ARRANGEMENT 3
SWSI UNITARY**



NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 X 2.497 X .310
6"-12#
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

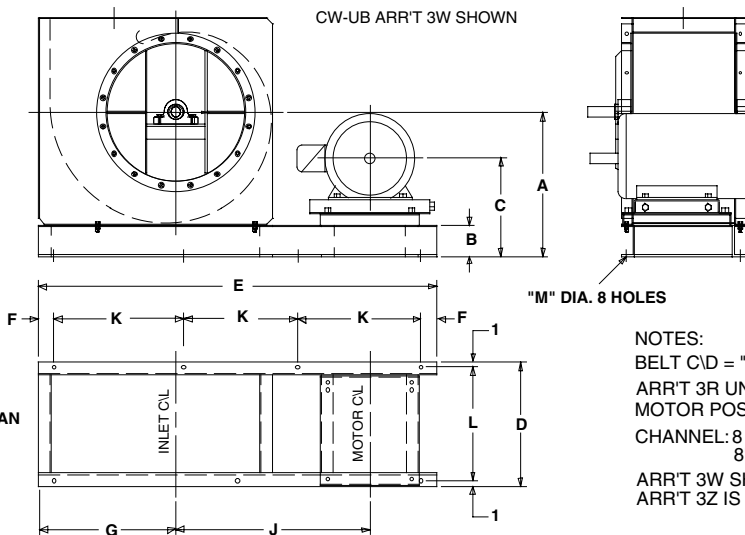
FAN SIZE	FRAME SIZE	CW-UB			B	C	D	E	F	CW-UB			CCW-UB			CW-TH			CW-BH/CCW-TH				M	N	N	N	N	N	APPROX. WT. #	
		CCW-UB	CW-TH	CW-BH						G	H	J	G	H	J	G	H	J	G	H	J	K							L	CLASS 1 & 2
300	213T	32¼	28%	37%	6	14%	28½	76	3	28%	15%	44%	23¼	11%	41%	16	45½	35	26½	¾	40.0	48.2	43.6	47.6	50.2	1080	1152			
	215T																									1100	1172			
	254T																									1213	1285			
	256T																									1243	1315			
	284T																									1357	1429			
	286T																									1407	1479			
	324T																									1546	1618			
	326T																									1611	1683			
	404T																									1775	1847			
	405T																									1835	1907			
330	254T	34¾	30%	40%	6	16¾	30%	84	3	31%	17%	49%	25%	13%	45%	18	50%	39	28¾	¾	43.6	52.6	47.5	52.1	55.6	1350	1494			
	256T																									1380	1524			
	284T																									1495	1639			
	286T																									1545	1699			
	324T																									1683	1827			
	326T																									1748	1892			
	364T																									1912	2056			
	365T																									1972	2116			
	404T																									2272	2416			
	405T																									2372	2516			



**QBCA / QBCS-365 AND 402
ARRANGEMENT 3 SWSI
UNITARY**

NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 X 2.497 X .310
6" - 12"
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

FAN SIZE	FRAME SIZE	CW-UB CCW-UB			CW-BH	B	C	D	E	F	CW-UB			CCW-UB			CW-TH			CW-BH-CCW-TH			M	N	N	N	N	N	APPROX. WT. # FAN, MTR. UNIT			
		A	A	A							G	H	J	G	H	J	G	H	J	G	H	J							K	L	CLASS 1 & 2	CLASS 3
365	254T	37 7/8	33 3/8	44 1/8	6	16 1/8	90	35 1/8	3	35 1/8	6 5/8	42 1/8	17 9/16	52 1/16	24 7/16	21 1/8	56 1/8	28 3/8	13 1/8	48 1/4	18	53 3/8	42	31 1/4	%	47.2	56.9	51.2	55.8	59.9	1673	1751
	256T																														1703	1781
	284T																														1842	1896
	286T																														1868	1946
	324T																														2006	2084
	326T																														2071	2149
	364T																														2235	2313
	365T																														2295	2373
	404T																														2595	2673
	405T																														2695	2773
402	254T	41 1/8	36 1/4	47 3/4	6	16 1/8	96	38 3/8	3	38 3/8	6 1/4	44 3/8	17 3/4	55 3/8	27 1/4	21 1/4	59 3/8	32 3/8	12 3/8	51	18	56 1/8	45	34 3/8	%	50.8	61.1	54.7	59.5	64.3	1927	2083
	256T																														1957	2113
	284T																														2072	2228
	286T																														2122	2278
	324T																														2260	2416
	326T																														2325	2481
	364T																														2489	2645
	365T																														2549	2705
	404T																														2849	3005
	405T																														2949	3105
404T	3244	3400																														
405T	3419	3575																														

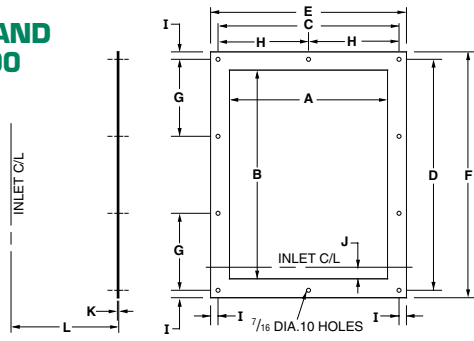


**QBCA/QBCS-445
ARRANGEMENT 3 SWSI
UNITARY**

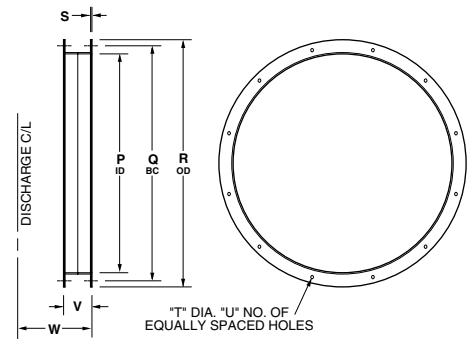
NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 8 X 2.978 X .353
8" - 18.7"
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

FAN SIZE	FRAME SIZE	CW-UB CCW-UB			CW-BH	B	C	D	E	F	CW-UB			CCW-UB			CW-TH			CW-BH-CCW-TH			M	N	N	N	N	N	APPROX. WT. # FAN, MTR. UNIT	
		A	A	A							G	J	G	J	G	J	G	J	K	L	CLASS 1 & 2	CLASS 3								
445	324T	46 1/8	41 7/8	54	8	20 1/8	112	46	5	46	53 1/8	65 1/8	60 3/8	33 3/8	71 3/8	38 3/8	65 3/8	33	66 3/8	34	37 3/8	37 3/8	%	59.2	70.7	63.8	69.3	74.0	2742	2928
	326T																												2807	2993
	364T																												2975	3161
	365T																												3035	3221
	404T																												3343	3529
	405T																												3443	3629
	444T																												3738	3924
	445T																												3913	4099
447T	4476	4662																												

**BCA/BCS-122-200 AND
QBCA/QBCS-122-200
FLANGES**

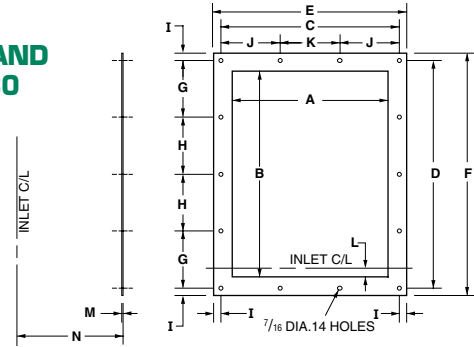


OUTLET FLANGE													
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L
122	51152	10	12 ⁵ / ₁₆	11 ¹ / ₂	13 ¹³ / ₁₆	13	15 ⁵ / ₁₆	4 ⁵ / ₈	5 ³ / ₄	3/4	3/16	3/16	10
135	51153	10 ⁵ / ₁₆	13 ⁹ / ₁₆	12 ⁷ / ₁₆	15 ¹ / ₁₆	13 ¹⁵ / ₁₆	16 ⁹ / ₁₆	5	6 ⁷ / ₃₂	3/4	7/32	3/16	11
150	51154	12 ³ / ₁₆	15 ¹ / ₈	13 ¹¹ / ₁₆	16 ⁵ / ₈	15 ³ / ₁₆	18 ¹ / ₈	5 ¹ / ₂	6 ²⁷ / ₃₂	3/4	9/32	3/16	12
165	51155	13 ³ / ₈	16 ⁵ / ₈	14 ⁷ / ₈	18 ³ / ₈	16 ³ / ₈	19 ⁵ / ₈	6	7 ⁷ / ₁₆	3/4	11/32	1/4	13
182	51156	14 ³ / ₄	18 ³ / ₈	16 ¹ / ₄	19 ⁷ / ₈	17 ³ / ₄	21 ³ / ₈	6 ⁵ / ₈	8 ¹ / ₈	3/4	11/32	1/4	14
200	51157	16 ¹ / ₈	20 ¹ / ₈	17 ⁵ / ₈	21 ⁵ / ₈	19 ¹ / ₈	23 ¹ / ₈	7 ¹ / ₄	8 ¹³ / ₁₆	3/4	3/8	1/4	15

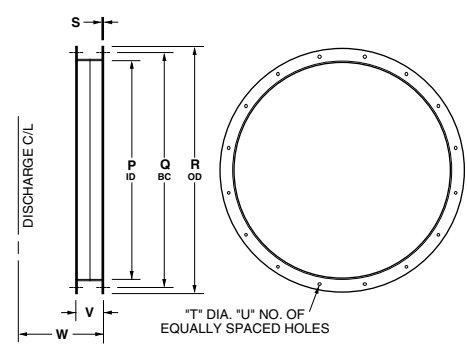


INLET FLANGE									
SIZE	WELDMENT PART NO.	P	Q	R	S	T	U	V	W
122	50176	13 ¹ / ₈	15	16 ¹ / ₈	1/8	9/16	8	3	8 ¹ / ₁₆
135	50177	14 ¹ / ₈	16	17 ¹ / ₈	1/8	9/16	8	3	8 ¹⁷ / ₃₂
150	50178	16 ¹ / ₈	18	19 ¹ / ₈	3/16	9/16	8	3	9 ⁵ / ₃₂
165	50179	17 ¹ / ₈	19	20 ¹ / ₈	3/16	9/16	8	3	9 ⁹ / ₄
182	50180	19 ¹ / ₈	20 ³ / ₄	22 ¹ / ₈	3/16	9/16	12	3	10 ¹ / ₂
200	50181	21 ¹ / ₈	22 ³ / ₄	24 ¹ / ₂	3/16	9/16	12	3	11 ³ / ₁₆

**BCA/BCS-222-330 AND
QBCA/QBCS-222-330
FLANGES**

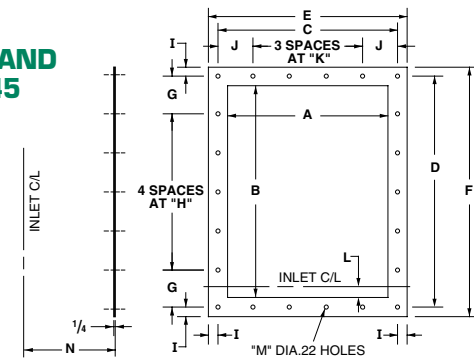


OUTLET FLANGE													TAU	TAD			
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	N	
222	51158	17 ¹⁵ / ₁₆	22 ³ / ₈	31 ¹ / ₄	23 ⁷ / ₈	20 ¹⁵ / ₁₆	25 ³ / ₈	5 ¹⁵ / ₁₆	6	3/4	6 ¹ / ₂	6 ⁷ / ₁₆	13/16	1/4	16	20 ¹ / ₂	23 ³ / ₄
245	51159	19 ¹¹ / ₁₆	24 ¹¹ / ₁₆	21 ¹¹ / ₁₆	26 ¹¹ / ₁₆	23 ¹¹ / ₁₆	28 ¹¹ / ₁₆	6 ⁵ / ₈	6 ²³ / ₃₂	1	7 ¹ / ₄	7 ³ / ₁₆	15/32	1/4	18	22 ¹ / ₂	26 ³ / ₄
270	51160	21 ¹¹ / ₁₆	27 ³ / ₁₆	23 ¹¹ / ₁₆	29 ³ / ₁₆	25 ¹¹ / ₁₆	31 ³ / ₁₆	7 ¹ / ₄	7 ¹¹ / ₃₂	1	7 ⁷ / ₈	7 ¹⁵ / ₁₆	17/32	1/4	19 ¹ / ₂	24	28 ¹ / ₄
300	51161	24 ¹ / ₁₆	30 ³ / ₁₆	26 ¹ / ₁₆	32 ³ / ₁₆	28 ¹ / ₁₆	34 ³ / ₁₆	8 ¹ / ₈	7 ³¹ / ₃₂	1	8 ¹¹ / ₃₂	8 ¹¹ / ₁₆	9/16	1/4	22	26	30 ¹ / ₂
330	51162	26 ⁷ / ₁₆	33 ³ / ₄	28 ⁷ / ₁₆	35 ¹ / ₄	30 ⁷ / ₁₆	37 ¹ / ₄	8 ¹³ / ₁₆	8 ¹³ / ₁₆	1	9 ¹ / ₂	9 ⁷ / ₁₆	2 ¹ / ₃₂	1/4	24	28 ³ / ₄	33 ³ / ₄

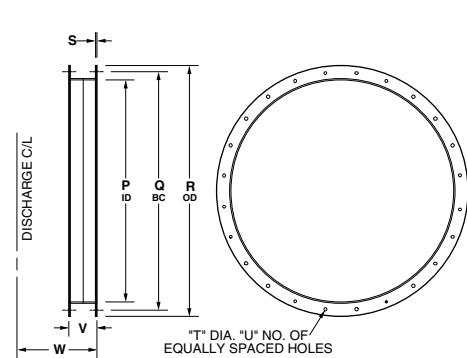


INLET FLANGE									
SIZE	WELDMENT PART NO.	P	Q	R	S	T	U	V	W
222	50182	23 ¹ / ₈	24 ⁷ / ₈	26 ¹ / ₈	3/16	9/16	12	3	12 ⁹ / ₃₂
245	50183	26 ¹ / ₈	28 ³ / ₈	30 ¹ / ₈	3/16	9/16	16	4	14 ⁵ / ₃₂
270	50184	28 ¹ / ₈	30 ³ / ₈	32 ¹ / ₈	3/16	9/16	16	4	15 ⁵ / ₃₂
300	50185	31 ¹ / ₈	33 ³ / ₈	35 ¹ / ₈	3/16	9/16	16	4	16 ¹¹ / ₃₂
330	50186	34 ¹ / ₈	36 ³ / ₈	38 ¹ / ₈	3/16	9/16	16	4	17 ¹⁷ / ₃₂

**BCA/BCS-365-660 AND
QBCA/QBCS-365-445
FLANGES**



OUTLET FLANGE													TAD			
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	N
365	51163	29 ¹ / ₄	36 ³ / ₄	31 ¹ / ₄	38 ³ / ₄	33 ³ / ₄	40 ³ / ₄	6 ³ / ₈	6 ¹ / ₂	1	6 ¹ / ₄	6 ¹ / ₄	11/16	7/16	27	42 ¹ / ₁₆
402	51164	32 ³ / ₁₆	40 ⁹ / ₁₆	34 ⁹ / ₁₆	42 ⁹ / ₁₆	36 ⁹ / ₁₆	44 ⁹ / ₁₆	7 ³ / ₃₂	7 ³ / ₃₂	1	6 ⁷ / ₈	6 ¹³ / ₁₆	13/16	7/16	30	45 ¹ / ₄
445	51165	35 ⁹ / ₁₆	44 ¹³ / ₁₆	37 ⁹ / ₁₆	46 ¹³ / ₁₆	39 ⁹ / ₁₆	48 ¹³ / ₁₆	7 ²⁵ / ₃₂	7 ¹³ / ₁₆	1	7 ¹⁷ / ₃₂	7 ¹ / ₂	27/32	7/16	33	47 ⁷ / ₈
490	51166	39 ⁵ / ₈	49 ⁵ / ₈	42 ⁵ / ₈	52 ⁵ / ₈	45 ⁵ / ₈	55 ⁵ / ₈	8 ²¹ / ₃₂	8 ³ / ₄	1 ¹ / ₂	8 ¹⁹ / ₃₂	8 ⁷ / ₁₆	29/32	11/16	36	56 ³ / ₁₆
542	51167	43 ⁵ / ₁₆	54 ⁵ / ₈	46 ⁵ / ₁₆	57 ⁵ / ₈	49 ⁵ / ₁₆	60 ⁵ / ₈	9 ⁹ / ₁₆	9 ⁵ / ₈	1 ¹ / ₂	9 ⁹ / ₃₂	9 ¹ / ₄	1 ¹ / ₁₆	11/16	40	59 ⁷ / ₈
600	51168	47 ⁷ / ₈	60 ⁷ / ₁₆	51 ⁷ / ₈	64 ⁷ / ₁₆	55 ⁷ / ₈	68 ⁷ / ₁₆	10 ²³ / ₃₂	10 ³ / ₄	2	10 ³ / ₈	10 ³ / ₈	1 ³ / ₁₆	11/16	44	70 ¹ / ₂
660	51169	52 ⁵ / ₈	66 ¹ / ₂	56 ⁵ / ₈	70 ¹ / ₂	60 ⁵ / ₈	74 ¹ / ₂	11 ³ / ₄	11 ³ / ₄	2	11 ⁷ / ₁₆	11 ¹ / ₄	1 ⁵ / ₁₆	11/16	49	74 ⁷ / ₈



INLET FLANGE									
SIZE	WELDMENT PART NO.	P	Q	R	S	T	U	V	W
365	50187	37 ¹ / ₈	39 ³ / ₈	41 ¹ / ₈	3/16	9/16	16	4	18 ¹³ / ₁₆
402	50188	41 ¹ / ₈	43 ³ / ₈	45 ¹ / ₈	3/16	9/16	24	4	20 ⁹ / ₃₂
445	50189	45 ¹ / ₈	47 ³ / ₈	49 ¹ / ₈	3/16	9/16	24	4	21 ³¹ / ₃₂
490	50190	51	54 ¹ / ₂	57	1/4	11/16	24	6	25 ⁵ / ₄
542	50191	56 ¹ / ₄	59 ³ / ₄	62 ¹ / ₄	1/4	11/16	24	6	27 ²⁷ / ₃₂
600	50192	63 ³ / ₄	67 ¹ / ₄	69 ³ / ₄	3/8	11/16	32	6	30 ³ / ₈
660	50193	69 ³ / ₄	73 ¹ / ₄	75 ³ / ₄	3/8	11/16	32	6	32 ¹ / ₂

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