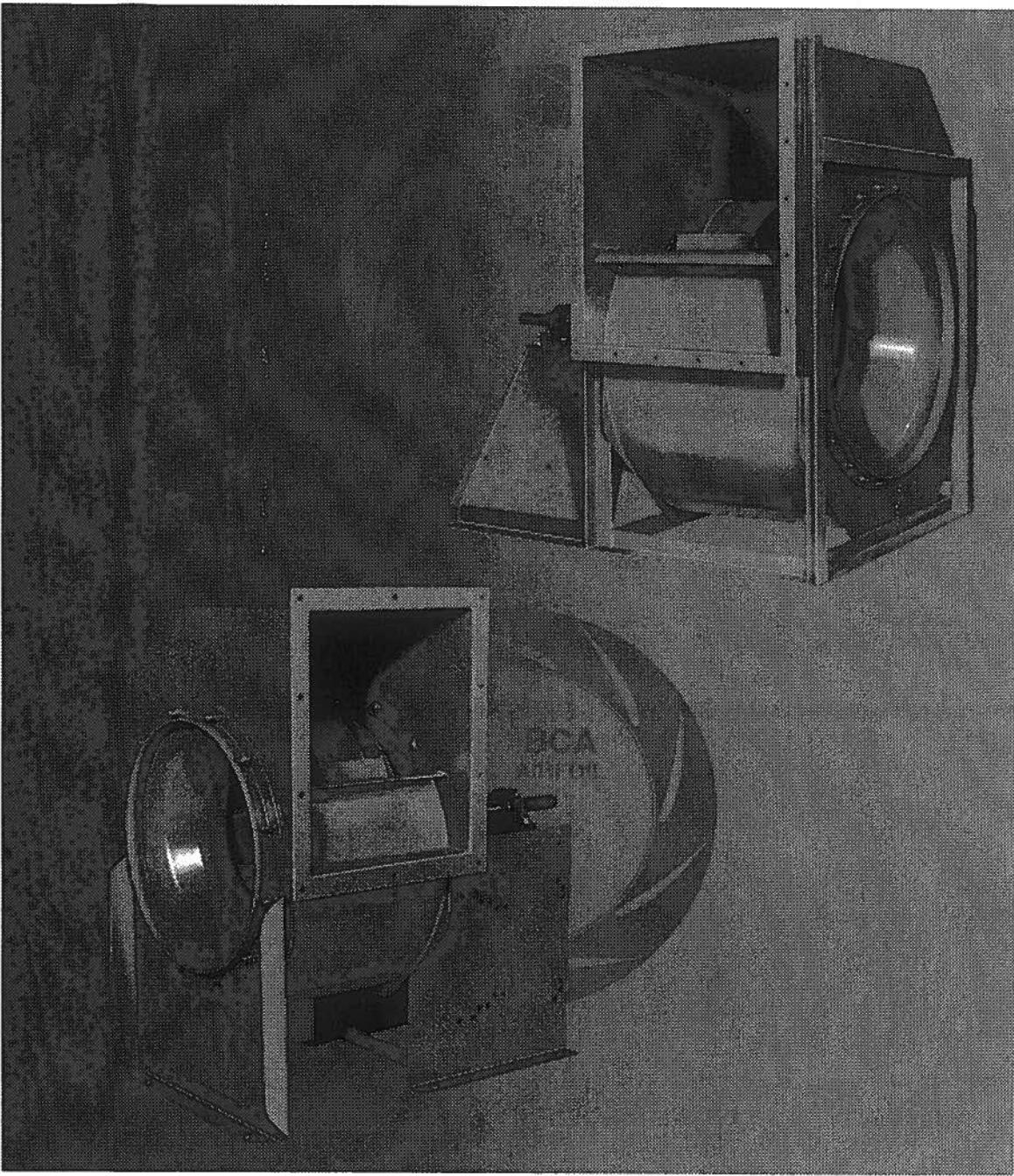


Backwardly Inclined Blowers

Bulletin ASO953

November 2003

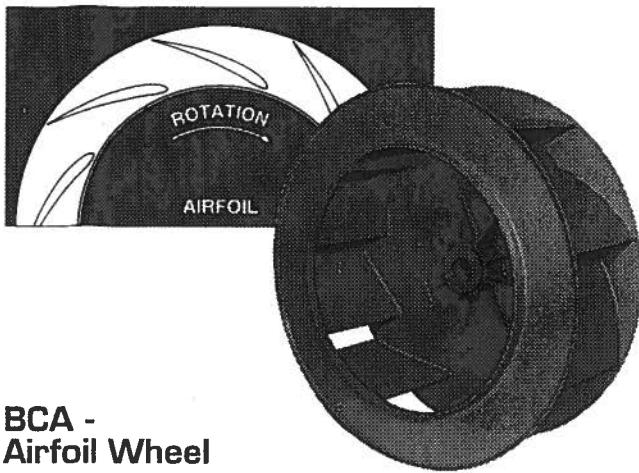
**SINGLE WIDTH
SINGLE INLET
12 $\frac{1}{4}$ " THROUGH
66" DIAMETER**



A Fläkt Woods Company

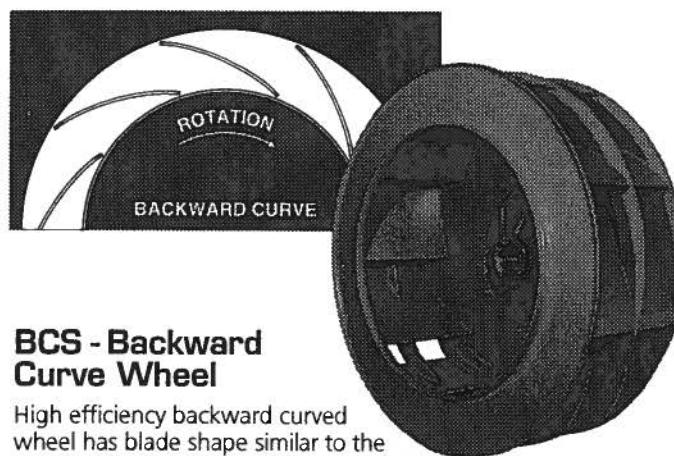
**American
Fan Company**

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.

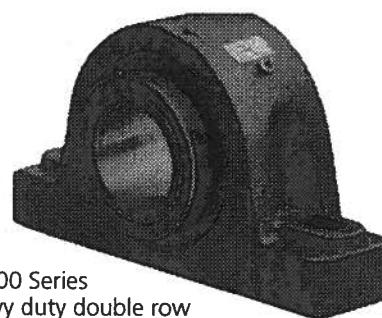
BEARINGS



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 floating labyrinth seals which feature multiple self-centering rings.



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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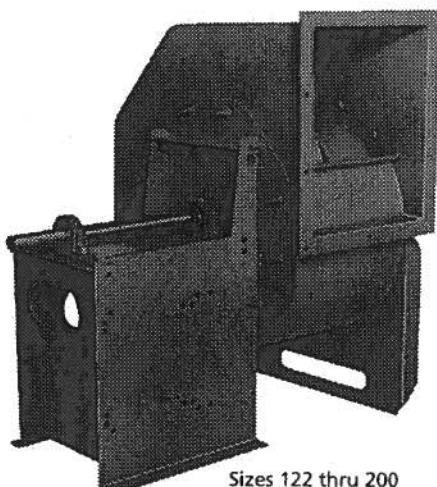
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RATINGS

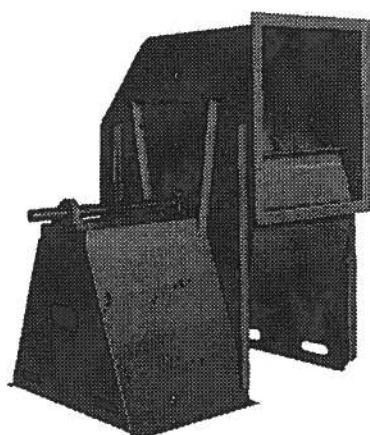


American Fan Company certifies that the models BCA, BCS, QBCA, and QBCS shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified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

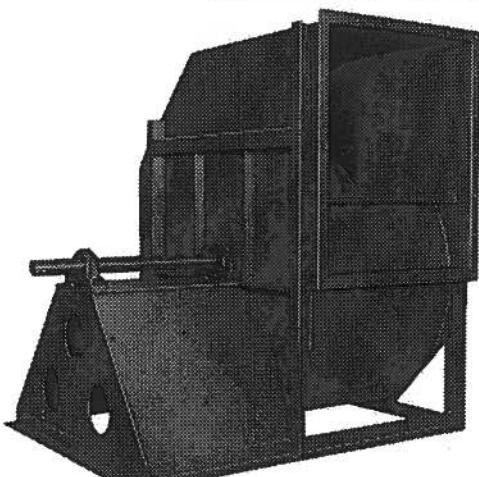
FEATURES



Sizes 122 thru 200



Sizes 222 thru 330



Sizes 365 thru 660

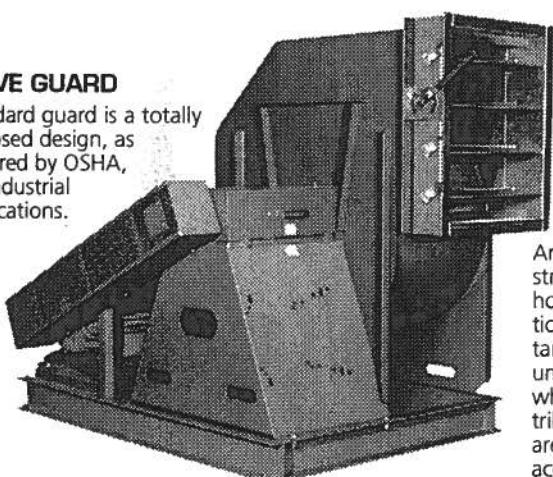
- Choice of two wheel types: Backward Curve (BCS) 12 1/4" diameter through 66" diameter, or Airfoil (BCA) 18 1/4" diameter through 66" diameter.
- Drilled outlet flange and slip collar inlet-standard.
- Pressures to 17" SP wg, Volumes to 100,000 CFM.
- Arrangement 1 bases prepunched for motor slide bases.
- 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

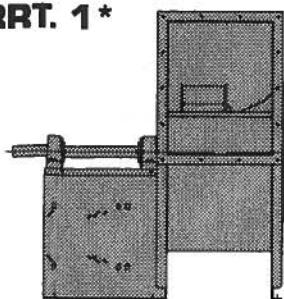
MAJOR INDUSTRIES

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

ARRANGEMENTS

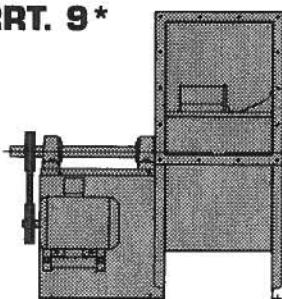
*Also available in "Q" design. See pages 82-91.

ARRT. 1*



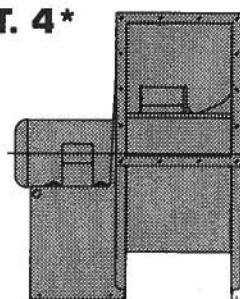
The fan wheel is overhung with both bearings mounted on a common pedestal. ARRT. 1 is suitable for high temperature and/or corrosive environment. Fan can be belt driven or directly coupled to drive motor mounted on a separate base.

ARRT. 9*



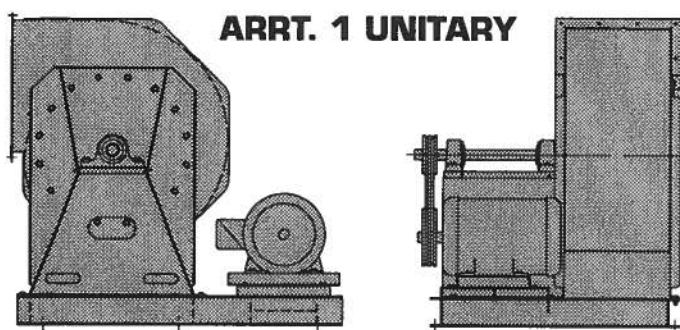
The fan wheel is overhung with both bearings mounted on a common pedestal. Fan is belt driven with drive motor mounted on bearing pedestal for a more compact unit suitable for high temperature and/or corrosive environment.

ARRT. 4*



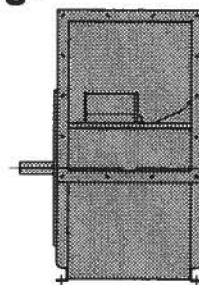
Direct drive fan with wheel mounted directly on motor shaft. Unit is designed for standard temperature applications only. With no belt loss, the direct drive fan operates at a higher efficiency.

ARRT. 1 UNITARY



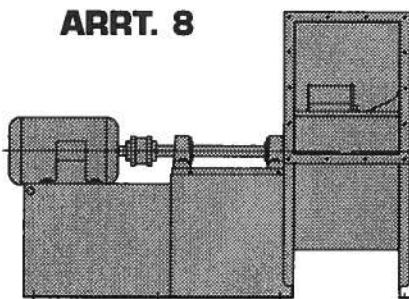
Arrangement 1 fan is mounted on a common channel iron base with motor and slide base. Commonly used when motor frame size exceeds arrangement 9 limitations and for high temperature applications. Also ideal for use with vibration isolators.

ARRT. 3*



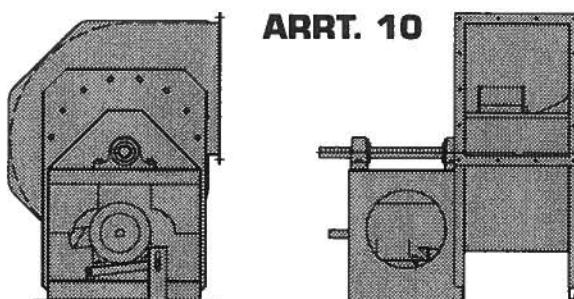
Belt drive or direct drive through coupling. Wheel is center hung with one bearing on each side supported by fan housing. Performance is slightly derated due to bearing in airstream. Designed for clean, dry, normal temperature applications only.

ARRT. 8



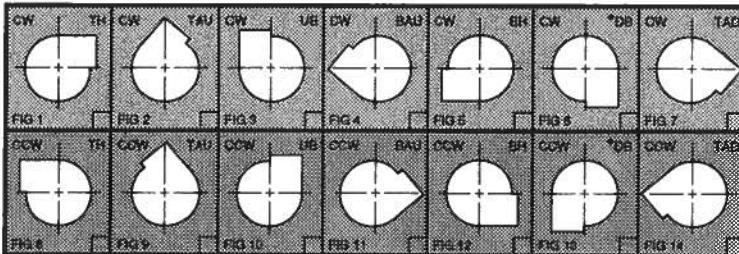
Direct drive fan through shaft and bearings. Efficiency of ARRT. 4 is maintained. However, ARRT. 8 may be used for high temperature and/or corrosive applications which require the motor shaft to be outside of airstream.

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	MFRP IN. PLX	INLET	WHEEL SPINNING	CLASS 1 & 2						CLASS 3									
						HSG. SIDE	HSG. SCROLL	BCS BLADE	BCA BLADE	WHL DEPTH	SHAFT DIA.	BEARINGS	HSG. SIDE	HSG. SCROLL	BCS BLADE	BCA BLADE	WHL DEPTH	SHAFT DIA.	BEARINGS		
122	12	12	12	14	14	12	14	14	-	12	1 1/8	P3-Y219N	10	12	12	14	-	-	10	1 1/8	P-323
135	12	12	12	14	14	12	14	14	-	12	1 1/8	P3-Y219N	10	12	12	14	-	-	10	1 1/8	P-323
150	12	12	12	14	14	12	14	14	-	12	1 1/8	P3-Y219N	10	12	12	14	-	-	10	1 1/8	P-323
165	10	10	10	14	12	12	12	14	-	12	1 1/8	P3-Y223N	10	10	12	12	-	-	10	1 1/8	P-327
182	10	10	10	12	12	12	12	18	12	1 1/8	P3-Y223N	10	10	10	12	18	16	10	1 1/8	P-327	
200	10	10	10	12	12	12	12	18	12	1 1/8	P3-Y223N	10	10	10	12	18	16	10	1 1/8	P-331	
222	7	7	10	12	12	10	12	12	18	10	1 1/8	P3-Y227N	10	10	10	12	18	16	7	1 1/8	P-331
245	7	7	10	12	10	10	12	10	16	10	1 1/8	P3-Y227N	10	10	7	10	16	14	7	2 1/8	P-335
270	14	14	7	12	10	10	12	10	16	10	1 1/8	P3-Y227N	10	10	7	10	16	14	7	2 1/8	P-335
300	14	14	7	12	10	10	12	10	16	7	1 1/8	P3-Y231N	10	10	7	10	16	14	14	2 1/8	P-339
330	14	14	7	12	7	10	12	10	16	7	2 1/8	P3-Y235N	7	7	7	7	16	12	14	2 1/8	P-343
365	14	14	-	12	7	10	10	10	18	7	2 1/8	P3-Y239N	7	7	7	7	16	12	14	2 1/8	P-B22443H
402	14	14	-	12	7	10	10	10	16	7	2 1/8	P-243	7	7	7	7	16	12	14	2 1/8	P-B22447H
445	14	14	-	12	7	10	10	10	16	7	2 1/8	P-243	7	7	7	7	16	12	14	2 1/8	P-B22447H
490	14	14	-	10	14	10	10	7	14	14	2 1/8	P-B22447H	7	7	14	14	12	12	3/16	3/16	P-B22455H
542	14	14	-	10	14	10	10	7	14	14	3/16	P-B22451H	7	7	14	14	12	12	3/16	3/16	P-B22453H
600	14	14	-	10	14	10	10	7	14	14	3/16	P-B22455H	7	7	14	14	10	10	3/16	4 1/8	P-B22571H
660	14	14	-	10	14	10	10	7	14	14	3/16	P-B22463H	7	7	14	14	10	10	3/16	4 1/8	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	178
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	1708
600	60	647	2096	807	2615
660	66	754	2956	949	3720

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

(At Motor Shaft)

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.

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

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

- The RPM obtained is the correct value.
- 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

Temp. °F	Derating Factor		
	Std. Steel	304 stainless	316 stainless
70°	1.0	.91	.91
200°	.98	.84	.88
300°	.95	.79	.81
400°	.95	.75	.79
500°	.90	.72	.78
600°	.86	.70	.76
700°	.82	.69	.74
800°	N/A	N/A	.72
900°	N/A	N/A	Contact Factory
1000°	N/A	N/A	Contact 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 FEET ABOVE SEA LEVEL																			
	0	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	
-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	1.16	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	1.60	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	1.35	1.36	1.41	1.43	1.45	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	1.69	1.72	1.75	1.78	1.81	1.84	1.87	1.90	1.93	1.96	2.00	2.03	2.07	2.11	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	2.28	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	2.16	2.19	2.20	2.20	2.25	2.28	2.30	2.44	2.49	2.50	2.61	2.66	2.74	2.79	2.84	2.90	2.94	3.04
700°	2.19	2.20	2.27	2.32	2.36	2.41	2.45	2.50	2.55	2.60	2.65	2.70	2.75	2.80	2.86	2.91	2.97	3.13	3.16	3.30
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	3.21	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	2.97	3.02	3.06	3.11	3.16	3.21	3.26	3.31	3.36	3.41	3.46	3.51	3.56	3.66
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	3.46	3.50	3.59	3.64	3.71	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°F — 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. $\times 2119 =$ cubic feet/min. (CFM)

Pressure — Pascals (N/m^2) $\times 0.004 =$ inches water

Power — kilowatts (Kw) $\times 1.341 =$ horsepower

Length — centimeters (cm) $\times 0.3937 =$ inches

Temperature — $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$

SELECTING FANS

The following 56 pages contain air and sound performance data on backward curve (BCS) blowers, 12 1/4" through 66" diameter, and airfoil (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.

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

EXAMPLE:

- A fan is required to deliver 1600 CFM at 6.0" SP at .075 lbs./cu. ft. density.
- 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.
- Interpolating on the BCS-122 table the required speed is 3569 RPM, the brakehorsepower is 2.36, and the Class is 1.
- To determine the outlet velocity, divide the CFM by the outlet area. $\frac{1600 \text{ CFM}}{.824 \text{ sq. ft.}} = 1942 \text{ ft. / min. outlet velocity}$
- 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.

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

$$\% \text{ Static Efficiency} = \frac{1600 \text{ CFM} \times 6.0" \text{ SP} \times 0.0157}{2.36 \text{ BHP}} \\ = 63.9\%$$

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. $SL = CF \times SF \times (OV/4005)^2$ where:

SL = Static Pressure Loss

CF = Class Factor

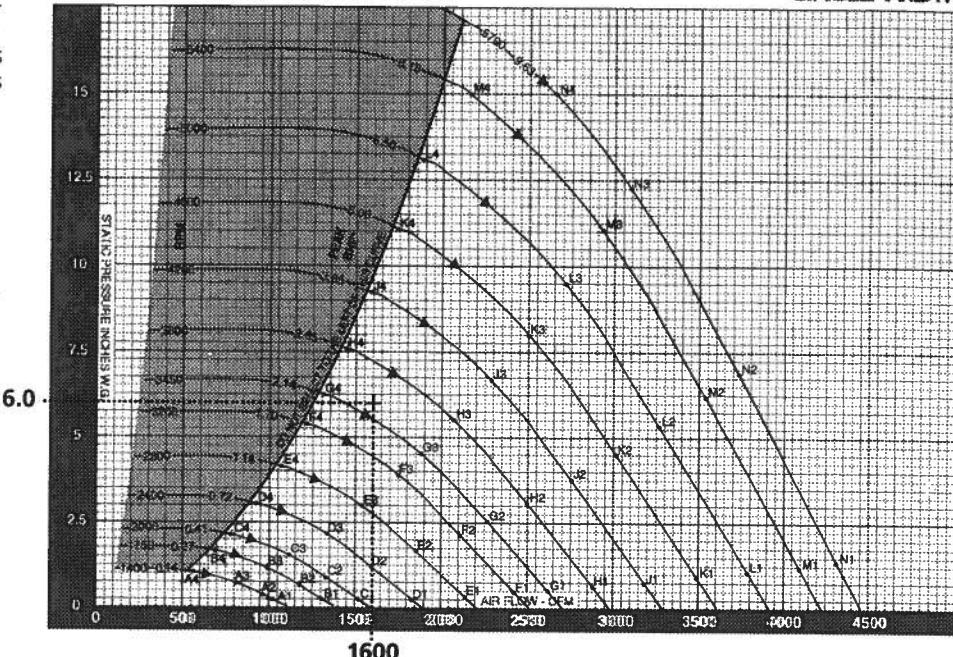
OV = Outlet Velocity (from capacity tables)

SF = Size Factor

CLASS	FACTORS
1 & 2	0.68
3	0.60

CONSTANT SPEED PERFORMANCE CURVES

BCS-122
SINGLE WIDTH



- 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	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	86	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	

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

1600 CFM

1942 ft. / min. OV

6" SP

3569 RPM

2.36 BHP

63.9% Static Efficiency

Sound Power Levels Band / Frequency (Hz)

FAN RPM	FAN SP	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

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:

$$SL = 0.68 \times 0.85 \times (2900/4005)^2$$

$$SL = 0.30"$$

$$6" SP + 0.3" SL = 6.3" SP$$

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.

SIZE	FACTORS	SIZE	FACTORS
FAN SIZE	SIZE FACTOR	FAN SIZE	SIZE FACTOR
122	1.00	300	0.74
135	0.97	330	0.72
150	0.93	365	0.69
165	0.91	402	0.67
182	0.88	445	0.65
200	0.85	490	0.63
222	0.82	542	0.61
245	0.79	600	0.59
270	0.77	660	0.57

BCS-122

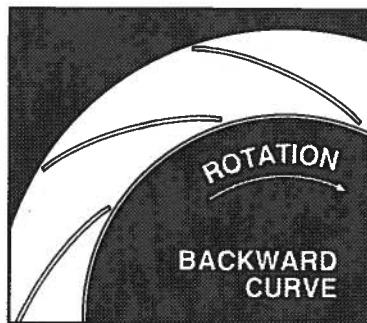
SINGLE WIDTH

American
Fan Company

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.

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	3952	5156	6300
251°F TO 400°F*	3754	4897	6015
401°F TO 700°F*	3241	4227	5474
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 <u>0.11</u>	1409 0.14					
658	800	1033 0.05	1182 0.08	1326 0.12	<u>1461</u> <u>0.16</u>	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	<u>1800</u> <u>0.30</u>	1996 0.41	2188 0.53		
905	1100	1309 0.10	1432 0.14	1544 0.18	1650 0.23	1855 0.33	<u>2049</u> <u>0.45</u>	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	<u>2275</u> <u>0.61</u>	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	<u>2537</u> <u>0.85</u>	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	<u>2734</u> <u>1.06</u>
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

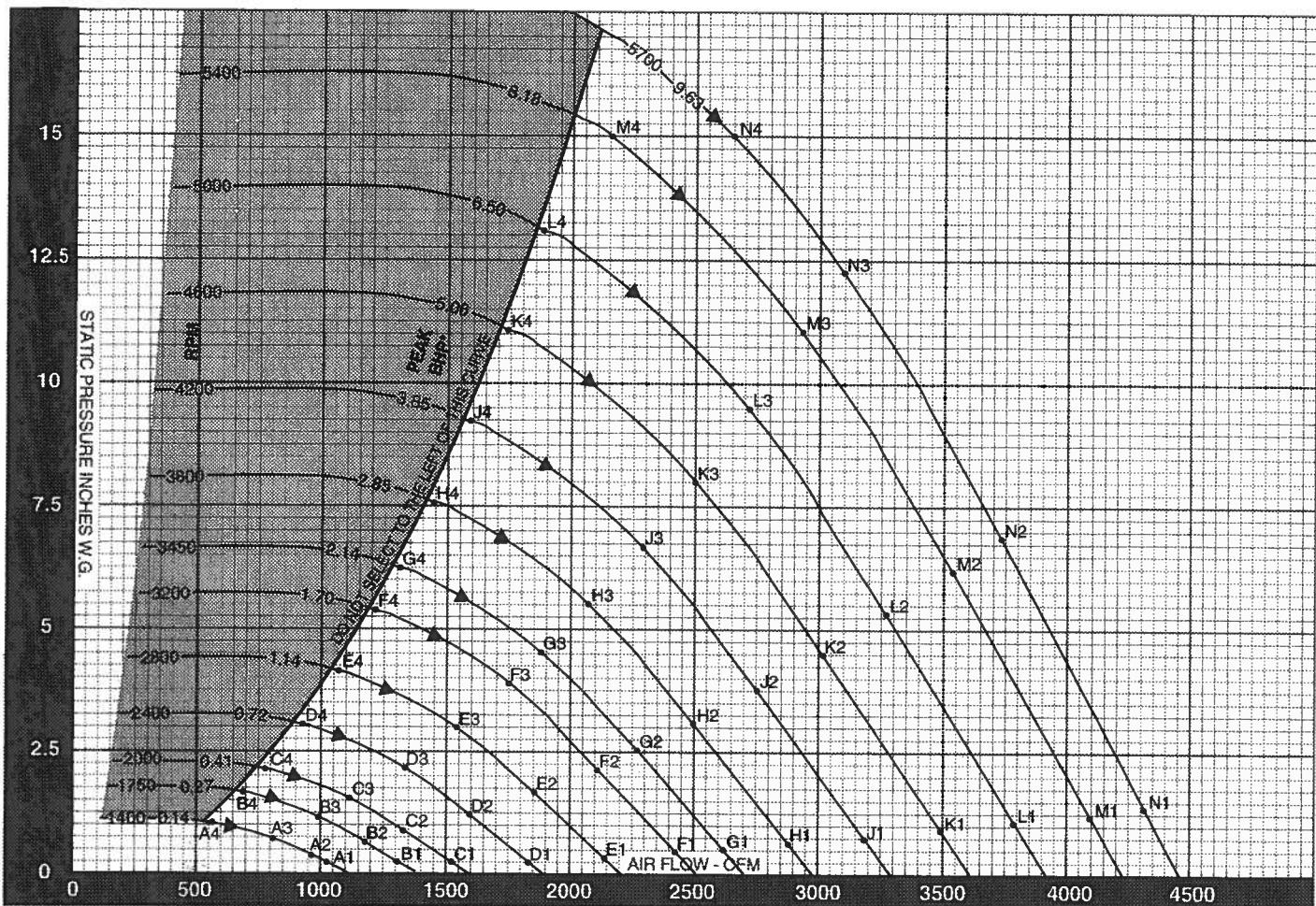
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
1152	1400	2818 1.15	2957 1.31	3089 1.48						
1235	1500	2868 1.22	2995 1.38	3126 1.56	3251 1.73					
1317	1600	2921 1.30	3047 1.46	3166 1.64	3289 1.82	3408 2.01	3523 2.20			
1399	1700	<u>2975</u> <u>1.38</u>	<u>3100</u> <u>1.55</u>	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> <u>1.82</u>	<u>3385</u> <u>2.01</u>	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	<u>3955</u> <u>3.15</u>
1646	2000	3164 1.64	3275 1.83	3381 2.03	3492 2.23	<u>3599</u> <u>2.43</u>	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> <u>2.76</u>	<u>3856</u> <u>2.98</u>	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> <u>3.34</u>	4098 3.57
1894	2300	3369 1.96	3477 2.16	3581 2.38	3680 2.59	3776 2.81	3868 3.03	<u>3963</u> <u>3.26</u>	<u>4058</u> <u>3.49</u>	4151 3.72
1976	2400	3450 2.08	3546 2.29	3649 2.50	3747 2.72	3842 2.95	3934 3.18	<u>4023</u> <u>3.41</u>	4113 3.65	4205 3.89
2058	2500	3532 2.20	3622 2.42	3717 2.64	3815 2.86	3909 3.09	<u>4000</u> <u>3.33</u>	<u>4089</u> <u>3.57</u>	4174 3.81	4259 4.05
2141	2600	3615 2.34	3704 2.56	3790 2.78	3883 3.01	<u>3977</u> <u>3.24</u>	4067 3.48	4155 3.73	4240 3.98	4323 4.23
2223	2700	3699 2.48	3787 2.70	3871 2.93	<u>3953</u> <u>3.16</u>	4045 3.40	4135 3.66	4222 3.90	4307 4.15	4389 4.41
2305	2800	3783 2.68	3870 2.86	<u>3953</u> <u>3.09</u>	<u>4034</u> <u>3.33</u>	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	<u>3954</u> <u>2.94</u>	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	<u>4041</u> <u>3.12</u>	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	4589 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	<u>4055</u> <u>3.38</u>	4152 3.60							
1646	2000	<u>4092</u> <u>3.61</u>	4189 3.74	4284 3.98	<u>4375</u> <u>4.22</u>					
1729	2100	<u>4136</u> <u>3.65</u>	4227 3.88	4321 4.12	4413 4.37	4590 4.87				
1811	2200	<u>4188</u> <u>3.80</u>	4276 4.04	4362 4.27	4450 4.52	4627 5.03	4796 5.56			
1894	2300	<u>4241</u> <u>3.96</u>	4329 4.20	4414 4.45	4497 4.69	4665 5.20	4834 5.74	4986 6.29		
1976	2400	4294 4.13	<u>4382</u> <u>4.37</u>	4467 4.82	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> <u>4.81</u>	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> <u>5.28</u>	4816 5.80	4969 6.34	5118 6.90	5285 7.48	5415 8.09
2223	2700	4469 4.67	4548 4.93	4628 5.20	4710 5.46	<u>4869</u> <u>6.01</u>	5022 6.57	5168 7.14	5310 7.72	5453 8.32
2305	2800	4535 4.86	4613 5.13	4689 5.40	4784 5.67	4923 6.23	<u>5075</u> <u>6.80</u>	5221 7.38	5363 7.97	5499 8.57
2388	2900	<u>4602</u> <u>5.06</u>	4679 5.33	4756 5.61	4829 5.89	4977 6.46	5129 7.04	<u>5225</u> <u>7.63</u>	5415 8.24	5552 8.85
2470	3000	<u>4669</u> <u>5.27</u>	4746 5.55	4821 5.83	4895 6.12	5037 6.70	<u>5183</u> <u>7.29</u>	<u>5328</u> <u>7.88</u>	<u>5489</u> <u>8.51</u>	5605 9.13
2552	3100	<u>4737</u> <u>5.48</u>	4814 5.77	4888 6.06	4961 6.35	5103 6.94	5238 7.54	5382 8.16	5522 8.78	5658 9.42
2635	3200	<u>4806</u> <u>5.71</u>	4881 6.00	4956 6.29	5023 6.59	5169 7.19	5305 7.81	5430 8.43	5576 9.07	
2717	3300	<u>4874</u> <u>5.94</u>	4950 6.23	5024 6.53	5096 6.84	5236 7.45	5371 8.08	5502 8.71	5630 9.36	
2799	3400	<u>4949</u> <u>6.18</u>	5019 6.48	5092 6.79	5184 7.09	5303 7.72	5438 8.36	5567 9.00	5693 9.66	
2882	3500	<u>5031</u> <u>6.44</u>	5094 6.74	5161 7.05	5232 7.30	5371 8.00	5505 8.69	5634 9.30		
2964	3600	<u>5113</u> <u>6.71</u>	<u>5175</u> <u>7.01</u>	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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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	0.25	A1	65	67	69	62	61	61	57	52	3450	4.50	G3	89	91	90	88	82	78	77	72
	0.41	A2	65	66	67	61	59	58	53	47		6.50	G4	89	97	93	92	85	80	78	74
	0.74	A3	65	65	65	60	58	56	51	47		8.61	H1	94	94	92	97	88	83	85	83
	1.07	A4	70	69	68	63	60	57	53	48		3.03	H2	92	94	93	94	86	81	81	77
1750	0.25	B1	71	71	77	69	65	68	64	60	3800	5.46	H3	90	93	92	91	85	80	79	75
	0.64	B2	71	71	75	67	64	65	59	54		7.89	H4	91	99	96	95	88	83	81	77
	1.16	B3	71	71	71	66	63	62	58	53		1.61	H5	94	94	93	94	86	81	81	77
	1.67	B4	77	76	76	70	65	64	59	55		3.46	H6	92	94	93	94	86	81	81	77
2000	0.25	C1	75	75	80	74	69	70	70	65	4200	0.74	J1	96	97	95	99	92	85	87	86
	0.84	C2	75	75	78	72	67	67	63	58		3.71	J2	93	96	95	96	90	84	83	80
	1.51	C3	74	75	75	71	67	65	61	57		6.67	J3	92	96	95	96	88	83	81	78
	2.18	C4	80	79	79	74	69	67	63	59		9.63	J4	93	100	100	98	92	86	83	79
2400	0.25	D1	81	80	83	81	74	74	74	71	4600	0.89	K1	97	100	98	100	95	88	89	88
	1.21	D2	80	80	82	79	72	71	69	63		4.44	K2	95	99	98	98	93	86	85	82
	2.18	D3	79	80	80	77	72	70	67	62		8.80	K3	94	98	98	96	91	86	84	80
	3.15	D4	83	85	84	81	74	71	68	64		11.56	K4	94	102	103	100	95	88	85	82
2800	0.33	E1	86	85	86	88	78	77	78	75	5000	1.05	L1	99	102	100	101	99	90	90	90
	1.65	E2	84	85	85	85	77	74	73	68		5.25	L2	96	101	100	100	96	89	87	85
	2.96	E3	83	85	84	82	76	73	71	66		9.45	L3	95	100	100	98	94	88	85	83
	4.28	E4	86	90	88	86	79	75	73	68		13.65	L4	96	104	105	102	98	91	87	84
3200	0.49	F1	90	88	98	93	82	79	82	78	5400	1.22	M1	100	105	102	103	102	92	91	92
	2.15	F2	88	89	88	90	80	77	77	72		6.12	M2	98	103	102	99	91	89	87	85
	3.87	F3	87	89	87	86	80	76	75	70		11.92	M3	96	102	100	96	90	87	85	83
	5.59	F4	88	95	91	90	83	78	76	72		15.00	M4	97	104	106	103	99	92	88	86
3450	0.50	G1	92	91	89	95	84	80	84	80	5700	1.36	N1	101	106	104	104	104	94	92	94
	2.50	G2	90	91	90	92	82	79	80	74		6.82	N2	99	105	104	103	101	92	90	89

BCS-135

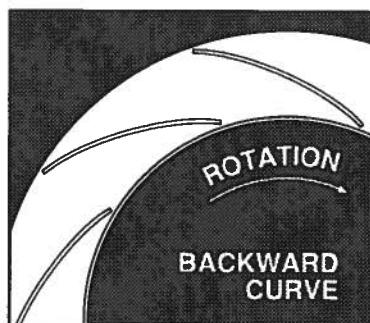
SINGLE WIDTH

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.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	3586	4678	5772
251°F TO 400°F*	3407	4424	5448
401°F TO 700°F*	2941	3966	4981
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	1325 0.20	1546 0.30				
900	900	1019 0.08	1145 0.12	1264 0.17	1375 0.22	1585 0.33	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	1859 0.54	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	2113 0.80	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	2303 1.03	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	2481 1.29
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	2530 1.38
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

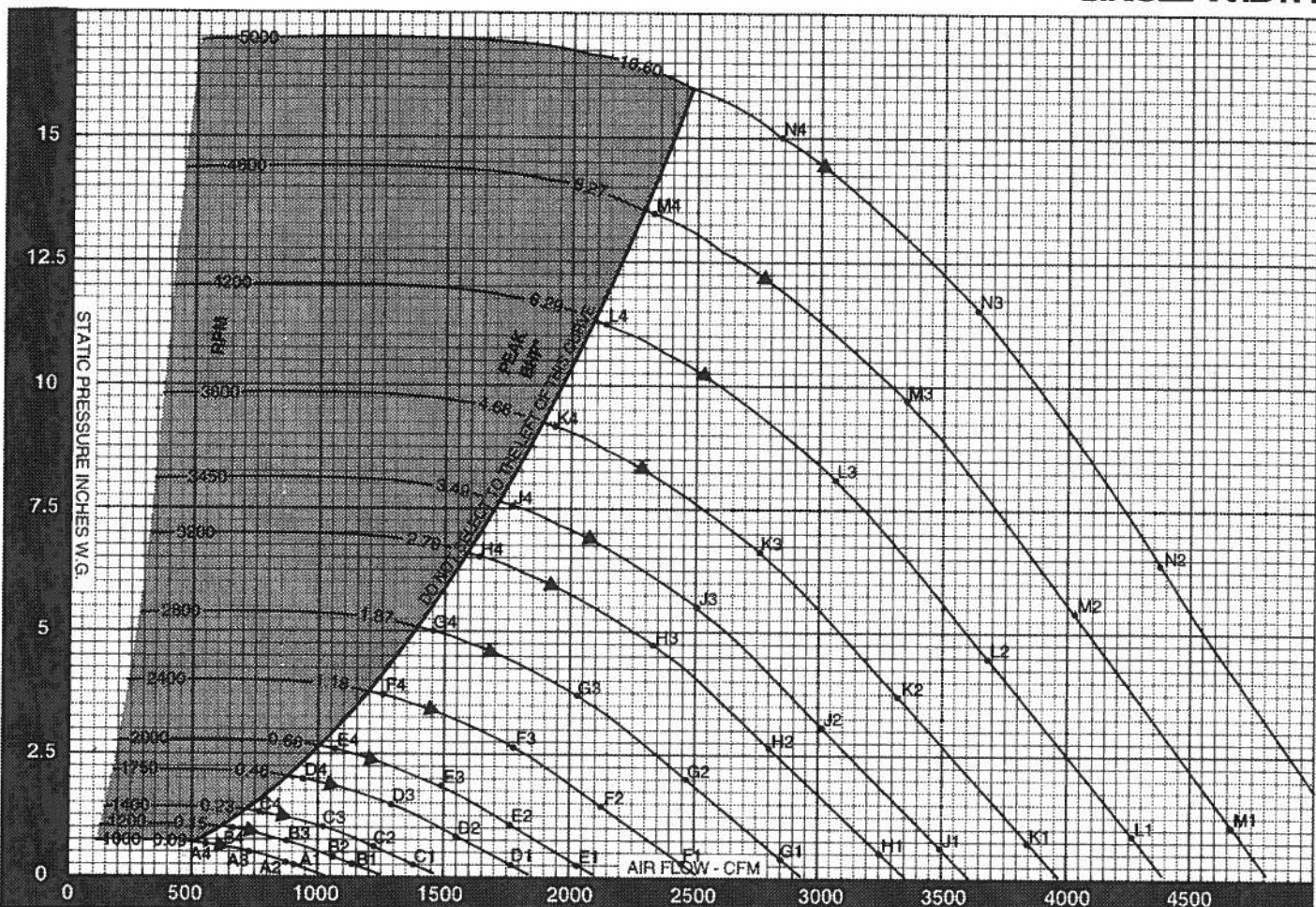
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
1400	1400	2557 1.40	2683 1.59	2803 1.80						
1500	1500	2603 1.48	2717 1.68	2837 1.89	2950 2.11	3093 2.44	3197 2.67			
1600	1600	2651 1.57	2765 1.78	2873 1.99	2984 2.21	3127 2.55	3231 2.79	3331 3.03	3428 3.28	
1700	1700	2699 1.67	2813 1.88	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	2969 2.21	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	3120 2.57	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	3266 2.95	3360 3.20	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	3499 3.62	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	3634 4.06	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	3767 4.52
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	3866 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	4048 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	4229 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	4165 5.91				
2100	2100	3753 4.43	3835 4.71	3921 5.00	4004 5.30	4199 6.11	4382 6.75	4533 7.64		
2200	2200	3800 4.62	3880 4.90	3958 5.19	4038 5.49	4199 6.11	4382 6.97			
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	3897 5.01	3976 5.31	4053 5.82	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	4102 5.84	4177 6.15	4322 6.79	4461 7.44	4602 8.12	4743 8.82	4890 9.54
2600	2600	3998 5.44	4074 5.75	4150 6.07	4225 6.39	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	4605 8.26	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	4788 9.27	4914 10.00	5038 10.75
3000	3000	4237 6.40	4307 6.74	4378 7.08	4442 7.43	4571 8.13	4703 8.85	4835 9.59	4962 10.33	5086 11.09
3100	3100	4299 6.66	4368 7.01	4436 7.36	4502 7.71	4631 8.43	4764 9.16	4884 9.91	5011 10.67	5134 11.44
3200	3200	4361 6.93	4429 7.28	4497 7.84	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	4761 9.05	4874 9.81	4992 10.58	5109 11.37	
3400	3400	4491 7.51	4554 7.87	4621 8.24	4685 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	4746 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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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	3.60	G3	87	88	87	85	79	76	74	69	
	0.26	A2	59	62	58	55	55	51	46	40		5.20	G4	89	94	91	89	82	78	75	71	
	0.46	A3	59	60	57	54	53	49	45	40		0.52	H1	93	92	91	96	85	82	85	81	
	0.66	A4	63	64	60	56	55	51	46	42		2.61	H2	92	92	91	93	83	80	80	75	
1200	0.25	B1	64	67	66	60	60	59	54	49		4.70	H3	90	92	91	90	83	79	78	73	
	0.37	B2	64	66	65	60	59	57	51	45		6.79	H4	92	98	95	94	86	81	79	75	
	0.66	B3	64	65	63	59	57	55	50	45		0.61	J1	96	94	93	98	87	83	87	83	
	0.96	B4	69	68	66	62	59	56	52	47		3.04	J2	94	95	93	95	85	81	82	77	
1400	0.25	C1	68	70	73	65	64	64	60	56		5.47	J3	92	94	93	92	85	81	80	75	
	0.50	C2	69	70	71	64	62	61	56	50		7.89	J4	93	101	97	96	88	83	81	77	
	0.90	C3	68	69	68	63	61	59	54	50		0.74	K1	97	97	95	100	90	86	88	86	
	1.30	C4	74	72	72	66	63	60	56	51		3.88	K2	95	97	96	97	89	84	84	80	
1750	0.25	D1	75	74	80	72	68	71	68	64		6.63	K3	94	97	96	94	88	83	82	78	
	0.78	D2	75	75	78	71	67	68	62	67		9.68	K4	96	102	100	98	91	86	84	80	
	1.41	D3	75	75	75	70	66	66	61	56		4.200	0.90	L1	99	100	98	102	95	88	90	89
	2.03	D4	81	78	79	73	68	67	62	58		4.50	L2	97	100	99	99	93	87	86	83	
2000	0.25	E1	79	78	84	77	72	74	72	69		8.10	L3	96	99	99	97	91	86	84	81	
	1.02	E2	79	79	81	75	70	70	66	61		11.70	L4	96	104	103	101	95	89	86	82	
	1.84	E3	78	78	78	74	70	68	64	60		4.600	1.08	M1	101	103	101	103	98	91	92	91
	2.65	E4	83	83	82	77	72	70	66	61		6.40	M2	99	102	101	101	96	89	88	85	
2400	0.29	F1	85	84	87	84	77	77	77	74		9.72	M3	97	102	101	99	94	88	87	83	
	1.47	F2	84	84	85	82	75	74	72	66		14.03	M4	98	106	106	103	98	91	88	85	
	2.64	F3	83	84	83	80	75	72	70	65		5.000	1.28	N1	102	106	103	105	102	93	93	93
	3.82	F4	87	89	87	84	77	74	71	67		6.38	N2	100	105	104	103	99	92	90	88	
2800	0.40	G1	89	88	89	91	81	80	81	78		11.48	N3	99	104	104	101	97	91	88	86	
	2.00	G2	88	89	88	88	80	77	76	71		15.00	N4	99	106	107	104	100	93	89	87	

BCS-150

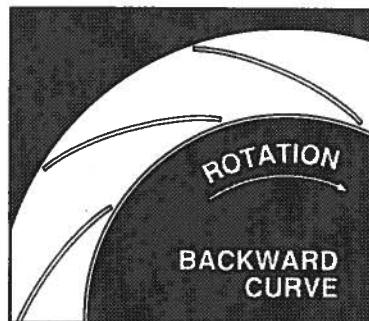
SINGLE WIDTH

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.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	3046	3973	4456
251°F TO 400°F*	2894	3774	4422
401°F TO 700°F*	2498	3259	3957
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

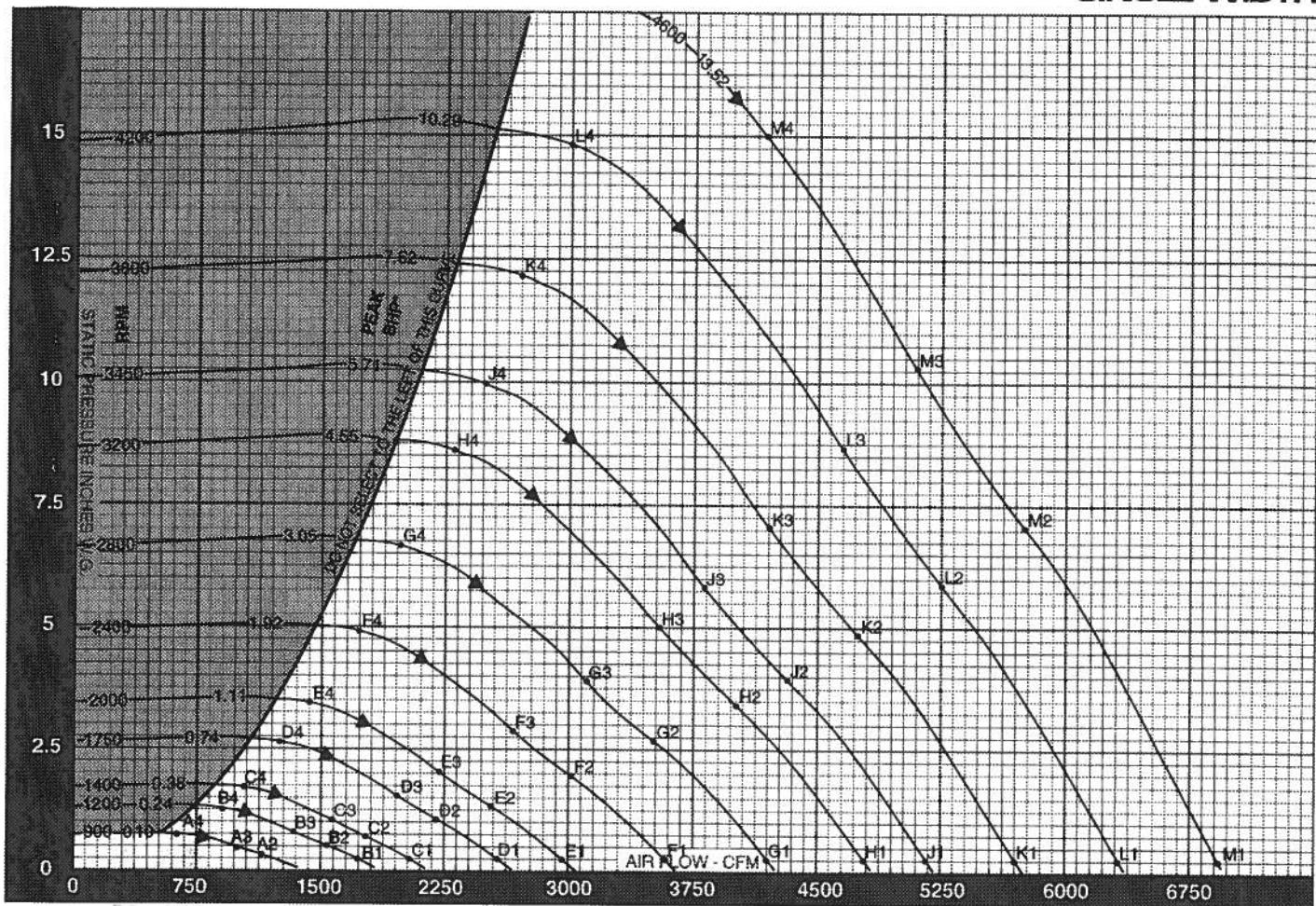
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
1738	1400	2229 1.52	2339 1.73	2446 1.95	2554 2.18	2656 2.41	2772 2.77			
1862	1500	2265 1.61	2369 1.83	2472 2.05	2571 2.28	2674 2.52	2790 2.89	2884 3.15	2976 3.42	
1986	1600	2312 1.71	2407 1.93	2503 2.16	2601 2.40	2695 2.64	2816 3.03	2903 3.29	2993 3.56	3082 3.84
2110	1700	2361 1.82	2454 2.05	2543 2.28	2632 2.52	2726 2.77	2847 3.17	2933 3.44	3017 3.71	3099 3.99
2234	1800	2412 1.94	2502 2.17	2590 2.41	2675 2.66	2757 2.91	2847 3.17			
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 4.68	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	3488 5.83	3548 6.18
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	3158 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	3566 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	3288 4.75	3367 5.05	3445 5.36	3597 5.99				
2482	2000	3237 4.63	3313 4.93	3387 5.24	3463 5.56	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 8.76	
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	3488 5.79	3532 6.11	3595 6.45	3721 7.13	3854 7.83	3981 8.56	4104 9.28	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	3566 6.22	3618 6.66	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 11.26	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	3898 8.12	3950 8.47	4066 8.85	4115 9.62	4221 10.40	4325 11.21	4426 12.02	4525 12.86
4096	3300	3907 8.16	3969 8.50	4011 8.86	4063 9.21	4170 9.99	4274 10.79	4377 11.60	4478 12.44	4576 13.28
4220	3400	3971 8.56	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	4097 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 10.60	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 QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-150
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.015}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		6.58	G4	91	99	92	94	86	86	82	77
	0.48	B2	68	71	75	70	70	65	58	52		3.40	H1	88	94	96	100	96	94	91	87
	0.70	B3	67	70	73	70	70	64	58	51		5.00	H2	87	94	96	99	94	92	89	82
	1.21	B4	74	69	72	67	67	63	57	51		8.60	H3	85	93	95	97	93	92	88	82
1400	0.25	C1	72	74	81	75	75	71	67	62		9.99	J4	93	101	97	96	90	89	86	81
	0.65	C2	72	74	80	74	74	70	63	56		3.95	J2	88	95	98	101	96	94	91	89
	0.96	C3	71	73	78	73	74	69	62	56		5.81	J3	87	94	97	99	95	93	90	84
	1.65	C4	79	73	77	70	71	67	62	56		12.12	K4	96	104	104	100	96	92	91	86
1750	0.25	D1	76	80	85	83	81	78	73	69		4.79	K1	91	98	101	103	101	98	96	91
	1.02	D2	76	80	84	81	79	76	70	63		7.05	K2	90	97	100	102	100	96	94	88
	1.50	D3	75	79	82	80	78	76	69	63		12.12	K3	88	96	99	101	98	95	93	87
	2.57	D4	83	82	81	78	76	73	68	62		14.81	K4	96	104	104	100	96	92	91	86
2000	0.25	E1	79	83	87	87	84	82	77	73		5.86	L1	93	100	103	105	104	100	98	94
	1.33	E2	78	83	86	86	82	80	74	68		8.61	L2	91	99	103	104	103	98	97	91
	1.95	E3	77	82	85	85	81	80	74	67		14.81	L3	90	98	102	103	101	97	96	90
	3.36	E4	85	87	84	83	78	77	72	66		15.00	L4	98	106	107	102	100	94	94	89
2400	0.25	F1	83	88	90	93	88	87	83	78		7.02	M1	95	102	105	106	107	102	101	97
	1.91	F2	82	88	89	92	85	85	80	73		10.33	M2	93	101	106	106	100	99	94	94
	2.81	F3	80	87	88	90	85	85	79	73		15.00	M3	92	99	104	104	104	99	99	93
	4.84	F4	88	94	88	89	82	82	78	72		14.81	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.

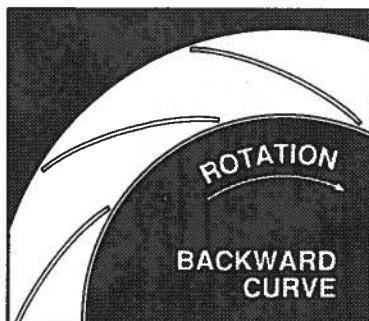
OUTLET SIZE: 13 $\frac{1}{8}$ " x 16 $\frac{7}{16}$ "

INLET DIAMETER: 17 $\frac{1}{2}$ " O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2769	3612	4932
251°F TO 400°F*	2631	3431	4020
401°F TO 700°F*	2271	2882	3270
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	1051 0.26	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	1296 0.49	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	1473 0.71	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	1677 1.05	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	1826 1.36	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	1968 1.70
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

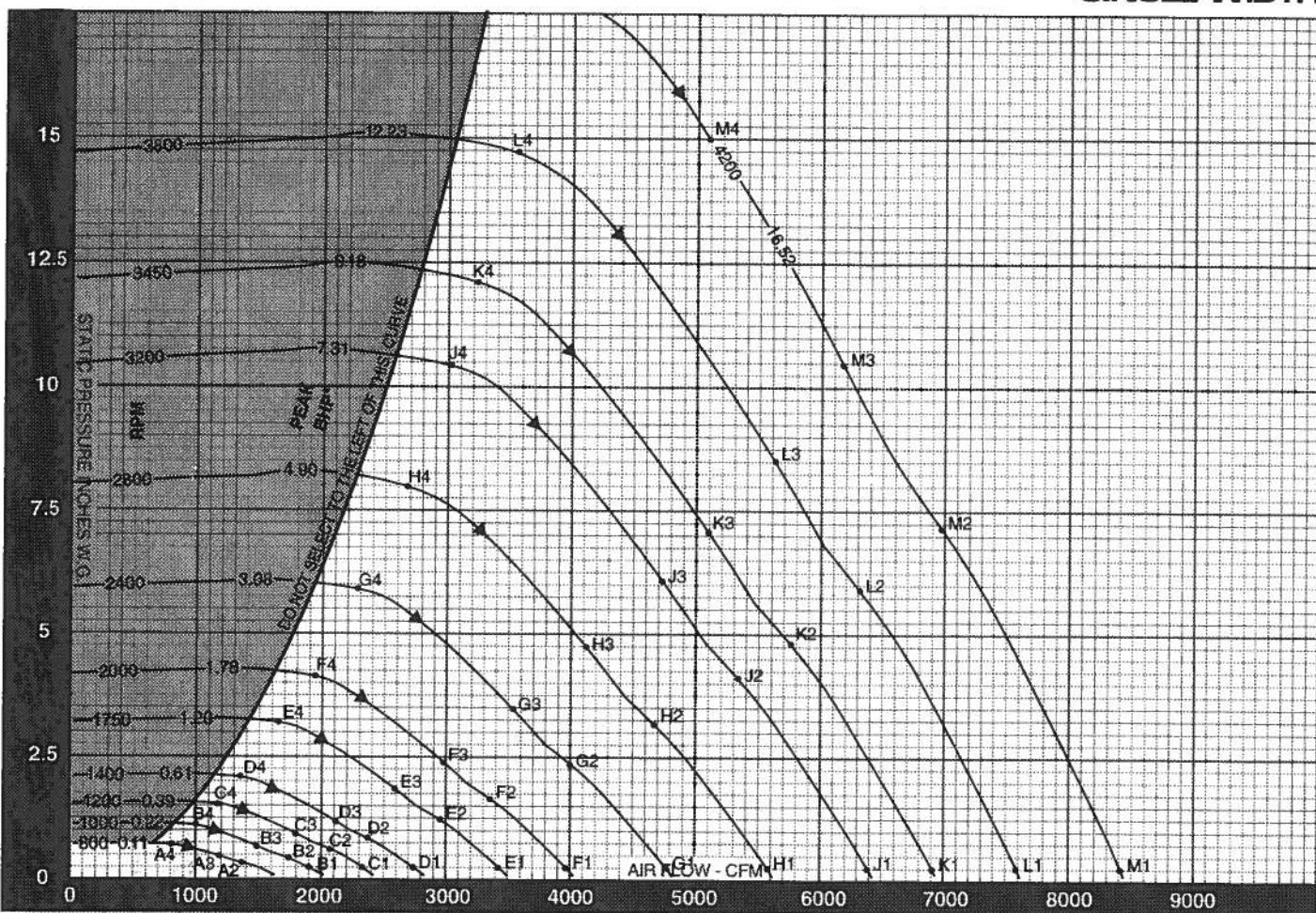
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
2103	1400	2027 1.84	2126 2.09	2224 2.36	2321 2.63	2415 2.92				
2253	1500	2059 1.95	2154 2.21	2248 2.48	2337 2.76	2431 3.05	2520 3.35			
2403	1600	2102 2.07	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	2231 2.48	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	2355 2.92	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	2475 3.39	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	2592 3.89	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	2705 4.42	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	2818 4.99	2882 5.35	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	2988 5.96
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	2898 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	3006 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	3058 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 5.38	2994 5.77	3056 6.18	3116 6.58	3174 6.98	3230 7.38	3284 7.79	3336 8.18	3387 8.56
4806	3200	2988 5.67	3063 6.09	3116 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 6.61	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	3179 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 10.69	
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	3093 6.61	3153 7.00	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	3353 8.43	3463 9.28	3588 10.15	3675 11.05	3786 11.97	3894 12.92
4055	2700	3233 7.52	3280 7.93	3345 8.36	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	3653 10.89	3763 11.81	3860 12.76	3950 13.72
4356	2900	3332 8.21	3388 8.63	3439 9.06	3493 9.49	3597 10.38	3696 11.28	3798 12.22	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	3936 13.62	4028 14.61
4656	3100	3437 8.97	3488 9.40	3540 9.84	3591 10.29	3691 11.20	3790 12.14	3889 13.09	3976 14.07	4071 15.08
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	4110 15.56	4206 16.60
5257	3500	3667 10.82	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 13.62	4038 14.58	4128 15.61	4215 16.05	

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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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
	1.02	B4	71	69	69	66	65	60	54	48		7.96	H4	95	103	95	97	89	89	85	75
1200	0.25	C1	72	75	80	74	74	70	64	60	3200	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
	0.85	C3	71	73	77	73	73	67	60	54		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
1400	0.25	D1	75	78	84	78	78	74	69	65	3450	0.25	K1	93	99	101	104	101	99	96	92
	0.79	D2	75	77	83	77	77	73	66	59		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
1750	0.25	E1	80	84	88	86	84	81	76	72	3800	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
	3.11	E4	87	85	84	81	78	76	71	65		14.67	L4	100	108	107	103	99	95	94	89
2000	0.25	F1	83	87	90	81	87	85	80	76	4200	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
	2.36	F3	81	86	88	88	84	82	77	70		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

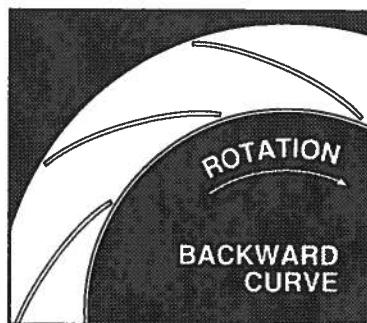
SINGLE WIDTH

WHEEL DIAMETER: 18.25"
 WHEEL CIRCUMFERENCE: 4.78'
 OUTLET AREA: 1.829 SQ. FT.
 OUTLET SIZE: 14 $\frac{1}{2}$ " x 18 $\frac{3}{16}$ "
 INLET DIAMETER: 19 $\frac{1}{2}$ " O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2339	3052	3909
251°F TO 400°F*	2222	2999	3818
401°F TO 700°F*	1918	2602	3223
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	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
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</u> <u>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</u> <u>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</u> <u>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</u> <u>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</u> <u>1.96</u>	1763 2.30									
3292	1800	1348 0.96	1428 1.21	1520 1.48	1609 1.77	<u>1697</u> <u>2.08</u>	1787 2.42									
3475	1900	1406 1.07	1479 1.33	1564 1.61	1651 1.90	1734 2.22	<u>1816</u> <u>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									

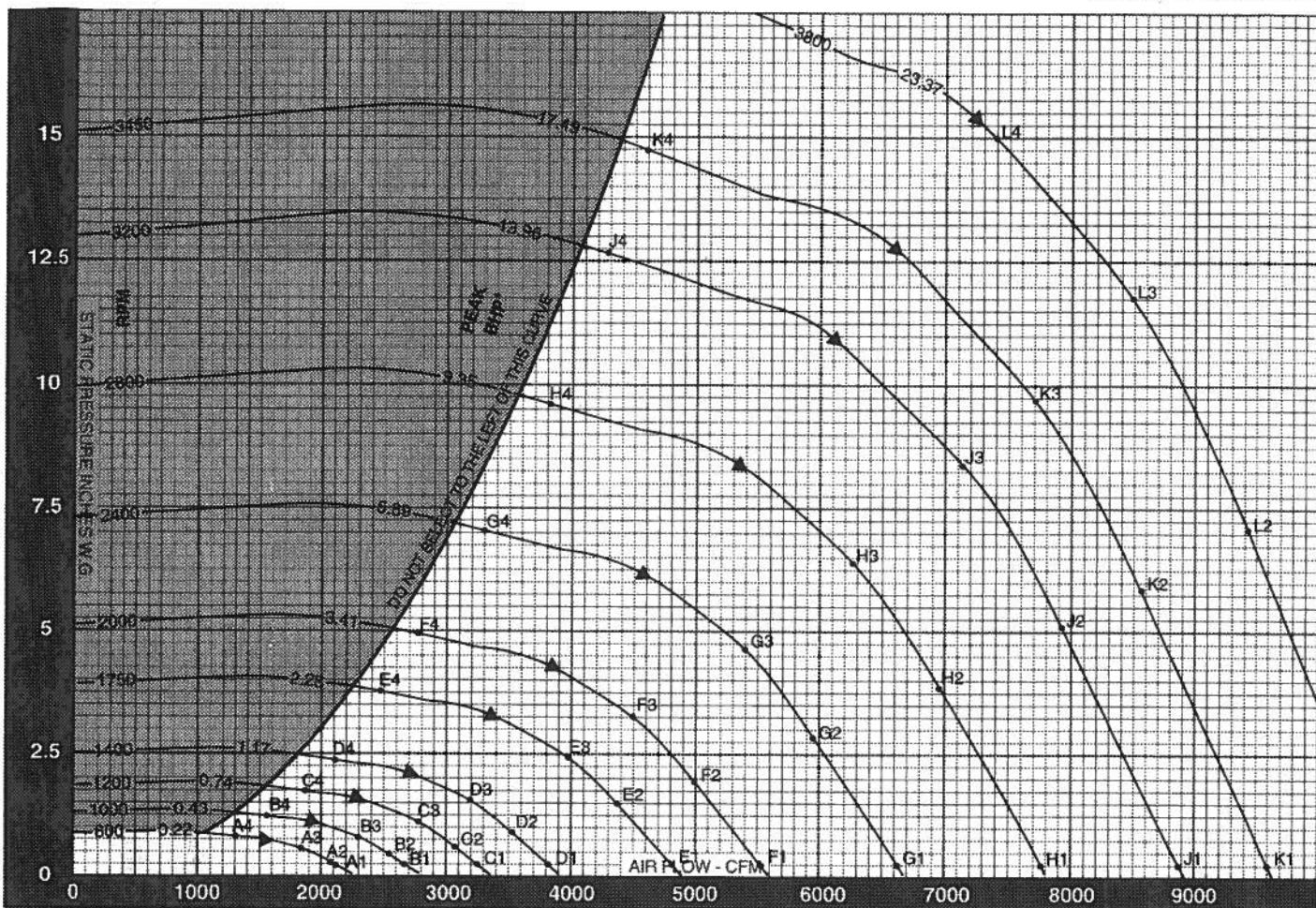
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
2743	1500	1832 2.43	1926 2.77	2017 3.11	2102 3.46					
2926	1600	1851 2.55	1945 2.91	2034 3.27	2120 3.63	2202 4.01	2280 4.38			
3109	1700	1867 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</u> <u>3.07</u>	2015 3.46	2103 3.88	2191 4.32	2274 4.77	<u>2352</u> <u>5.21</u>	2427 5.65	2499 6.10	2569 6.56
3841	2100	1967 3.24	<u>2043</u> <u>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</u> <u>4.22</u>	2224 4.65	2305 5.11	2385 5.60	2463 6.10	2538 6.56	2606 7.06
4207	2300	2044 3.63	2114 4.02	2181 4.42	<u>2252</u> <u>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</u> <u>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</u> <u>6.23</u>	2514 6.72	2583 7.23	2655 7.78
4755	2600	2173 4.32	2236 4.73	2298 5.15	<u>2358</u> <u>5.59</u>	2420 6.03	2479 6.49	<u>2542</u> <u>6.98</u>	2606 7.49	2670 8.01
4938	2700	2217 4.58	2279 5.00	2340 5.42	2399 5.86	2457 6.32	2518 6.79	2573 7.26	<u>2634</u> <u>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	<u>2388</u> <u>5.58</u>	2426 6.02	2483 6.47	2539 6.94	2593 7.42	2648 7.91	2703 8.41	2766 8.92
5487	3000	<u>2362</u> <u>5.45</u>	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	<u>2414</u> <u>6.77</u>	2464 6.22	2516 6.68	2571 7.15	2624 7.63	2677 8.12	2729 8.62	2779 9.13	2831 9.66
5853	3200	<u>2467</u> <u>6.11</u>	2515 6.57	2562 7.03	2615 7.51	2668 8.00	2720 8.50	2771 9.00	2821 9.53	2889 10.05
6036	3300	<u>2522</u> <u>6.46</u>	2587 6.93	2638 7.40	2690 7.89	2742 8.39	2794 8.89	2843 9.41	2893 9.94	2951 10.47
6219	3400	2579 6.84	2619 7.31	2666 7.80	2710 8.29	2767 8.79	2806 9.31	2857 9.83	2905 10.36	2963 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	<u>2739</u> <u>8.05</u>	2866 9.05	2987 10.06	3103 11.09					
4207	2300	<u>2757</u> <u>8.33</u>	2883 9.37	3004 10.41	3120 11.47	3231 12.55				
4390	2400	<u>2776</u> <u>8.62</u>	2902 9.68	3022 10.77	3137 11.86	3248 12.96	3355 14.08	3459 15.22	3576 16.38	3690 18.61
4572	2500	<u>2794</u> <u>8.90</u>	2921 10.00	3041 11.11	3155 12.24	3266 13.38	3373 14.52	3476 15.69	3593 16.87	3707 19.14
4755	2600	<u>2809</u> <u>9.15</u>	2939 10.33	3059 11.46	3174 12.62	3283 13.80	3390 14.98	3493 16.17	3610 17.38	3724 19.68
4938	2700	<u>2823</u> <u>9.41</u>	2954 10.60	3078 11.82	3192 13.00	3302 14.20	3408 15.43	3510 16.65	3610 17.89	3724 20.23
5121	2800	<u>2841</u> <u>9.68</u>	2969 10.89	3094 12.14	3211 13.39	3321 14.61	3426 15.86	3528 17.13	3629 18.40	3724 20.77
5304	2900	<u>2869</u> <u>10.01</u>	2984 11.17	3109 12.44	3228 13.75	3340 15.03	3445 16.31	3547 17.60	3646 18.91	3742 21.30
5487	3000	<u>2897</u> <u>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	<u>2932</u> <u>10.74</u>	3036 11.89	3142 13.10	3258 14.42	3372 15.80	3482 17.20	3584 18.58	3683 19.92	3778 21.30
5853	3200	<u>2969</u> <u>11.15</u>	<u>3085</u> <u>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	<u>3007</u> <u>11.58</u>	3103 12.72	3193 13.92	3299 15.20	3402 16.64	3511 17.98	3617 19.45	3720 20.95	
6219	3400	<u>3046</u> <u>12.02</u>	3140 13.19	3231 14.38	3327 15.65	3424 16.97	3528 18.38	3632 19.87	3735 21.39	
6402	3500	<u>3088</u> <u>12.50</u>	3178 13.66	3269 14.88	3358 16.11	3452 17.45	3556 18.82	3667 20.30	3770 21.84	
6585	3600	<u>3130</u> <u>12.99</u>	3217 14.17	3306 15.39	3363 16.64	3460 17.94	3574 19.34	3684 20.75	3785 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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	95	80
	0.31	A2	70	75	72	68	68	64	58	52		4.96	F4	97	96	99	95	89	88	95	80
	0.52	A3	70	75	72	68	68	64	58	52		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
	0.83	B3	76	80	79	74	73	70	65	58		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		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		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	108	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		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	86	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.

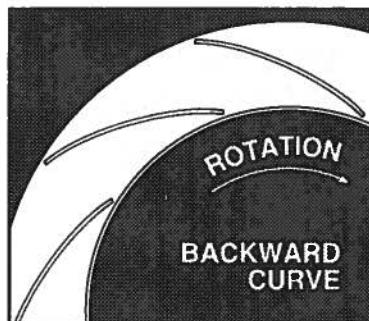
OUTLET SIZE: 15^{7/8}" x 19^{15/16}"

INLET DIAMETER: 21^{1/2}" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2134	2765	3475
251°F TO 400°F*	2027	2945	3381
401°F TO 700°F*	1750	2224	2659
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



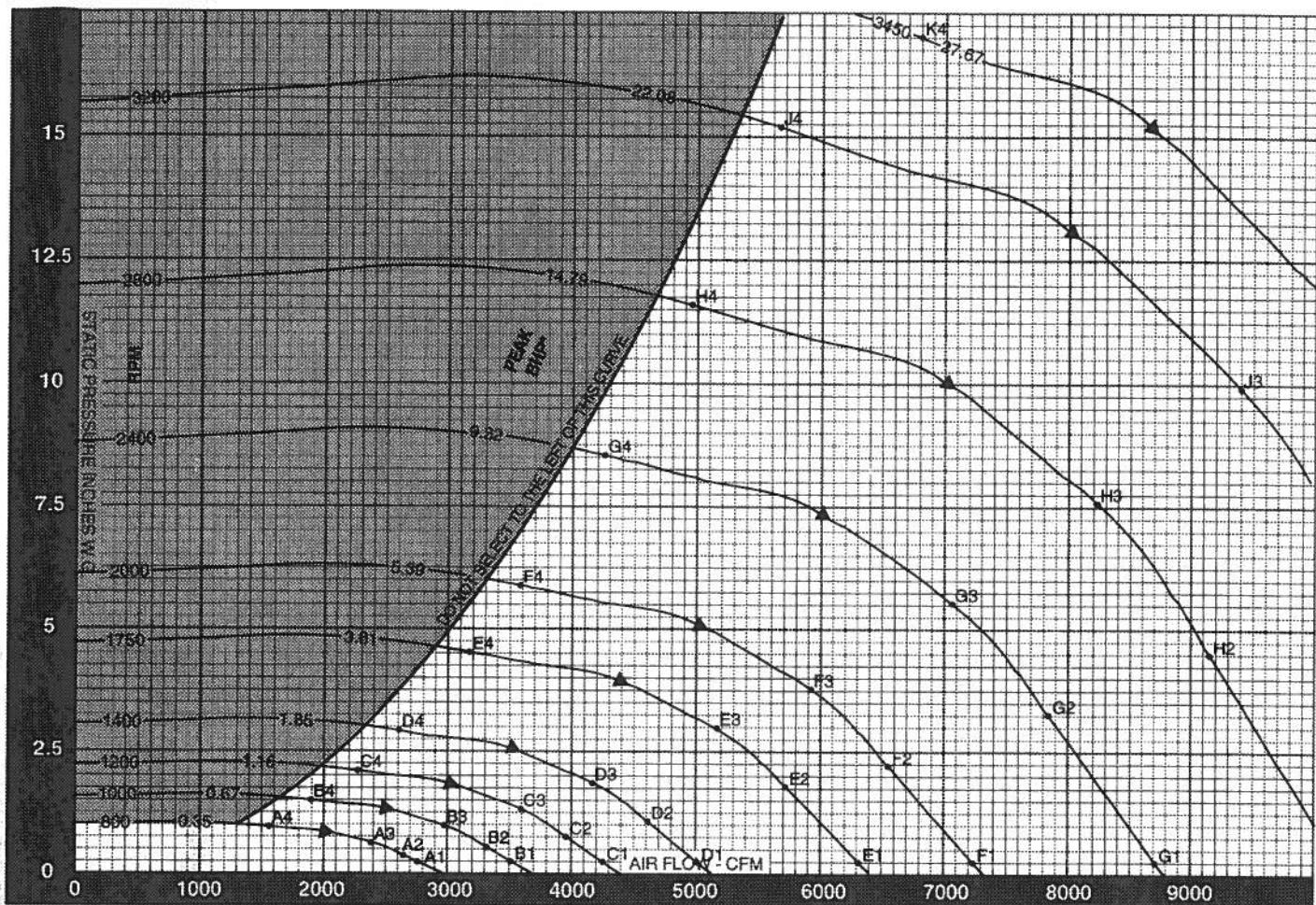
CFM	OV	1.00" SP RPM	BHP	1.50" SP RPM	BHP	2.00" SP RPM	BHP	2.50" SP RPM	BHP	3.00" SP RPM	BHP	3.50" SP RPM	BHP			
1537	700	828	0.35													
1757	800	844	0.38	1004	0.60											
1977	900	859	0.42	1021	0.66	1156	0.91									
2196	1000	<u>881</u>	<u>0.46</u>	1038	0.72	1172	0.98	1292	1.26							
2416	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 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
3295	1500	1672	2.91	1758	3.32	1840	3.73	1918	4.16			2009	4.81	2081	5.26				
3514	1600	1689	3.07	1775	3.49	1856	3.93	1934	4.37	2025	5.04	2096	5.51	<u>2165</u>	<u>5.99</u>	2232	<u>6.47</u>		
3734	1700	1704	3.21	1792	3.67	1873	4.12	1950	4.58	2041	5.27	2112	5.76	2181	6.25	2248	6.75	2312	7.26
3954	1800	1718	3.35	1807	3.83	1890	4.31	1967	4.78	2058	5.50	2129	6.01	2197	6.53	2264	7.04	2328	7.57
4173	1900	1737	3.50	1821	3.98	1905	4.49	1985	5.00	2083	6.09	<u>2146</u>	<u>6.63</u>	2209	7.19	2275	7.79	2343	8.43
4393	2000	<u>1762</u>	<u>3.68</u>	1838	4.15	1919	4.66	1999	5.19	2075	5.73	<u>2146</u>	<u>6.28</u>	2214	6.78	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	8.46
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	<u>2152</u>	<u>6.71</u>	2208	7.25	2262	7.80	<u>2329</u>	<u>8.38</u>	2378	8.99	2437	9.62
5931	2700	2023	5.50	2080	6.00	<u>2135</u>	<u>6.61</u>	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	<u>2161</u>	<u>6.70</u>	2214	7.23	2266	7.77	2317	8.33	2366	8.91	2416	9.50	2466	10.10	2516	10.71
6590	3000	<u>2156</u>	<u>6.54</u>	2201	7.07	2254	7.62	2305	8.17	2355	8.73	2404	9.32	2452	9.91	2501	10.52	2549	11.18
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	2696	13.10

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
4833	2200	<u>2499</u>	<u>9.67</u>	2615	10.87	2725	12.08	2831	13.32	2948	15.07								
5052	2300	<u>2516</u>	<u>10.01</u>	2631	11.25	2741	12.51	2847	13.78	2964	15.56	3062	16.91	<u>3156</u>	<u>18.28</u>	<u>3263</u>	<u>20.27</u>		
5272	2400	<u>2533</u>	<u>10.36</u>	2648	11.63	<u>2757</u>	<u>12.93</u>	2863	14.24	2984	16.07	3077	17.44	3172	18.85				
5492	2500	<u>2549</u>	<u>10.69</u>	2665	12.01	2774	13.34	2879	14.70	2990	16.07	3092	17.44						
5711	2600	<u>2563</u>	<u>10.99</u>	2682	12.40	2792	13.76	2896	15.15	2996	16.67	3093	17.98	<u>3187</u>	<u>19.42</u>	<u>3279</u>	<u>20.87</u>	<u>3367</u>	<u>22.35</u>
5931	2700	<u>2576</u>	<u>11.30</u>	2696	12.73	2809	14.19	2913	15.61	3013	17.05	3110	18.53	<u>3203</u>	<u>20.00</u>	<u>3294</u>	<u>21.48</u>	<u>3383</u>	<u>22.99</u>
6151	2800	<u>2593</u>	<u>11.63</u>	2709	13.07	2823	14.57	2930	16.08	3030	17.55	3127	19.05	<u>3220</u>	<u>20.57</u>	<u>3310</u>	<u>22.10</u>	<u>3398</u>	<u>23.64</u>
6370	2900	<u>2618</u>	<u>12.02</u>	2723	13.42	<u>2837</u>	<u>14.95</u>	2946	16.51	3047	18.06	3144	19.68	<u>3237</u>	<u>21.14</u>	<u>3327</u>	<u>22.71</u>	<u>3414</u>	<u>24.30</u>
6590	3000	<u>2644</u>	<u>12.43</u>	2745	13.83	2850	16.32	2959	16.91	3063	18.53	3161	20.13	<u>3264</u>	<u>21.71</u>	<u>3344</u>	<u>23.31</u>	<u>3431</u>	<u>24.95</u>
6810	3100	<u>2675</u>	<u>12.90</u>	2771	14.28	2887	15.73	2973	17.32	3077	18.97	3177	20.65	<u>3271</u>	<u>22.29</u>	<u>3361</u>	<u>23.92</u>	<u>3448</u>	<u>25.58</u>
7029	3200	<u>2710</u>	<u>13.39</u>	<u>2797</u>	<u>14.74</u>	2993	16.22	2986	17.74	3090	19.41	3190	21.12	<u>3287</u>	<u>22.86</u>	<u>3378</u>	<u>24.55</u>	<u>3465</u>	<u>26.23</u>
7249	3300	<u>2744</u>	<u>13.91</u>	2831	16.28	2918	16.71	3011	18.25	3104	19.86	3204	21.69	<u>3301</u>	<u>23.36</u>	<u>3394</u>	<u>25.16</u>		
7469	3400	<u>2779</u>	<u>14.44</u>	2965	15.84	2948	17.27	3036	19.79	3125	20.38	3							

CONSTANT SPEED PERFORMANCE CURVES

BCS-200
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		3.82	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		4.81	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	92	87	83	82	78	71	67	3200	0.25	J1	108	114	112	112	106	102	101	97
	1.15	D2	91	92	87	83	82	78	72	67		6.02	J2	108	114	111	113	106	101	101	97
	1.92	D3	91	92	87	83	82	78	71	67		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.

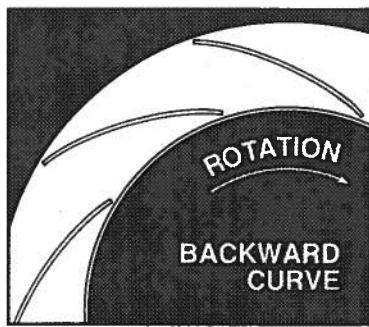
OUTLET SIZE: 17¹/₁₆" X 22³/₁₆"

INLET DIAMETER: 23¹/₂" O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1885	2460	3333
251°F TO 400°F*	1791	2357	3130
401°F TO 700°F*	1546	2017	2743
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
TIP SPEED (FPM) = 5.83 x RPM MAX BHP = 1.137 x (RPM/1000)²



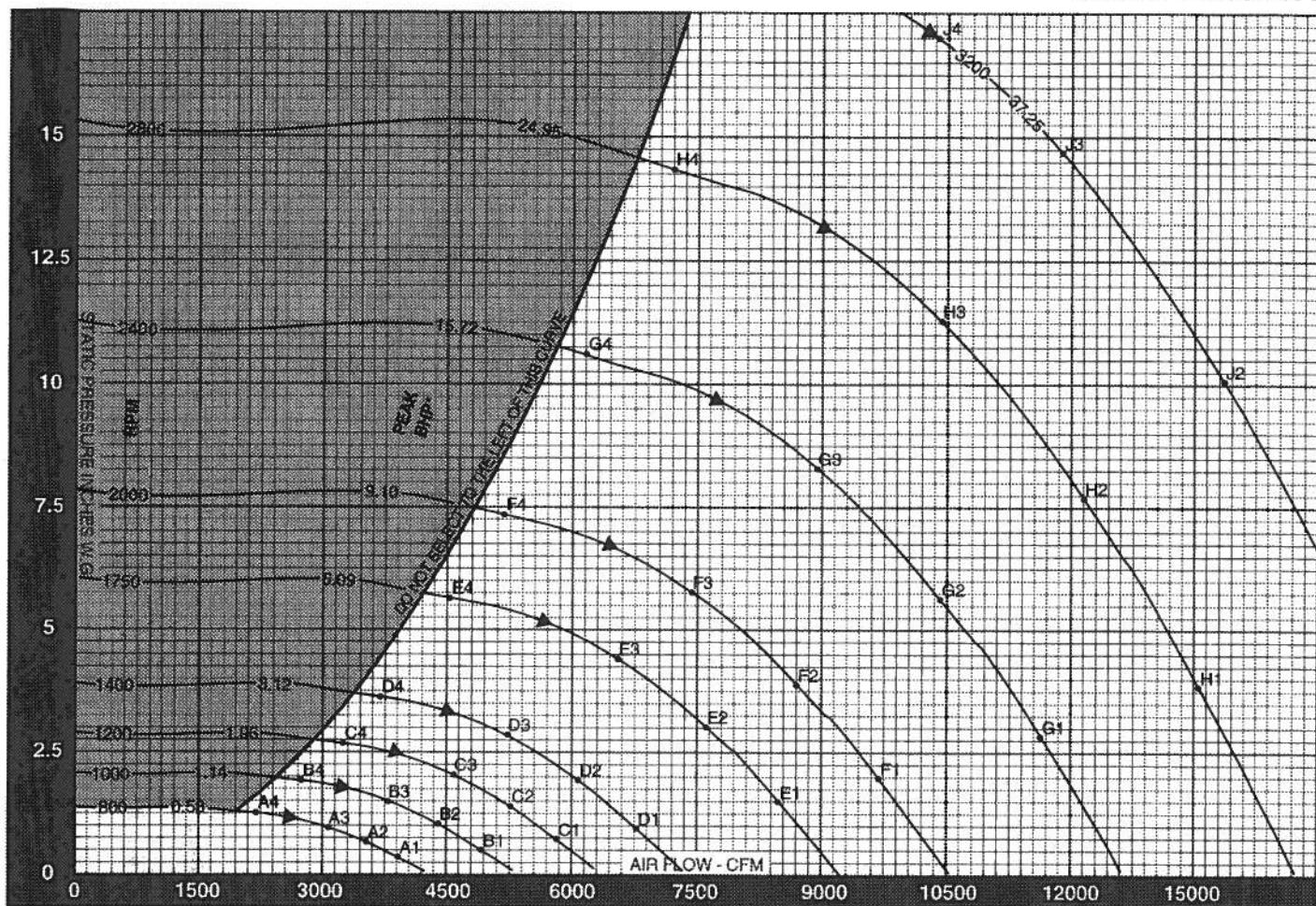
CFM	OV	0.25" SP RPM	0.25" SP BHP	0.50" SP RPM	0.50" SP BHP	0.75" SP RPM	0.75" SP BHP	1.00" SP RPM	1.00" SP BHP	1.50" SP RPM	1.50" SP BHP	2.00" SP RPM	2.00" SP BHP	2.50" SP RPM	2.50" SP BHP	3.00" SP RPM	3.00" SP BHP	3.50" SP RPM	3.50" SP BHP
1905	700	464	0.11	560	0.20	654	0.30	741	0.42										
2178	800	505	0.14	590	0.23	673	0.33	754	0.45	901	0.73								
2450	900	547	0.17	623	0.27	698	0.38	771	0.50	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	944	0.92	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	1097	1.45	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	1237	2.09	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	1345	2.68	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	1447	3.32
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	1469	3.51
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 RPM	4.00" SP BHP	4.50" SP RPM	4.50" SP BHP	5.00" SP RPM	5.00" SP BHP	5.50" SP RPM	5.50" SP BHP	6.00" SP RPM	6.00" SP BHP	6.50" SP RPM	6.50" SP BHP	7.00" SP RPM	7.00" SP BHP	7.50" SP RPM	7.50" SP BHP	8.00" SP RPM	8.00" SP BHP
4083	1500	1494	3.49	1573	4.00	1649	4.52	1733	5.27	1801	5.84								
4356	1600	1507	3.64	1586	4.17	1661	4.72	1745	5.50	1813	6.08	1879	6.67						
4628	1700	1524	3.82	1599	4.35	1673	4.91	1757	5.70	1825	6.32	1891	6.94	1954	7.56	2015	8.19		
4900	1800	1542	4.02	1616	4.56	1687	5.11	1757	5.70	1825	6.32	1903	7.19	1966	7.85	2027	8.49	2086	9.16
5172	1900	1565	4.24	1634	4.78	1704	5.34	1771	5.93	1838	6.54								
5445	2000	1590	4.49	1657	5.02	1722	5.59	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	1806	6.45	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	1888	7.37	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	1967	8.38	2026	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	2045	9.38	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	2120	10.46	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	2194	11.60
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	1896	7.57	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	2206	12.22	2252	12.88	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	11.54	2224	12.41	2267	13.18	2308	13.91	2348	14.67	2390	15.46
9256	3400	2102	9.88	2143	10.64	2183	11.42	2223	12.20	2263	12.99	2302	13.78	2344	14.56	2384	15.32	2423	16.11

CFM	OV	9.00" SP RPM	9.00" SP BHP	10.00" SP RPM	10.00" SP BHP	11.00" SP RPM	11.00" SP BHP	12.00" SP RPM	12.00" SP BHP	13.00" SP RPM	13.00" SP BHP	14.00" SP RPM	14.00" SP BHP	15.00" SP RPM	15.00" SP BHP	16.00" SP RPM	16.00" SP BHP	17.00" SP RPM	17.00" SP BHP
5989	2200	2235	11.60	2341	13.10	2443	14.84	2552	16.69	2658	18.85								
6262	2300	2247	11.93	2353	13.51	2455	15.08	2564	17.18	2668	19.38	2758	21.12	2844	22.80	2936	23.54		
6534	2400	2261	12.28	2366	13.88	2467	15.54	2576	17.67	2678	19.88	2770	21.69	2856	23.60	2940	25.34		
6806	2500	2278	12.69	2379	14.26	2479	15.95	2576	17.87	2678	19.88	2770	21.69	2856	23.60	2940	25.34		
7078	2600	2295	13.12	2395	14.70	2492	16.30	2588	18.12	2681	19.91	2770	21.69	2856	23.60	2940	25.34		
7351	2700	2314	13.57	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	19.00	2706	20.89	2794	22.79	2880	24.73	2964	26.63	3044	28.57
7895	2900	2359	14.55	2451	16.18	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	26.84	2986	27.88	3069	29.96
8440	3100	2413	15.83	2498	17.32</														

CONSTANT SPEED PERFORMANCE CURVES

BCS-222
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		3.92	F1	97	95	95	91	88	85	86	76
	1.17	A4	77	78	72	69	68	63	57	51		5.75	F2	96	95	94	89	86	83	81	74
1000	0.49	B1	76	78	75	73	70	71	61	49		7.31	F3	95	95	94	89	86	82	80	75
	0.98	B2	76	76	73	71	68	66	59	52		2.82	G1	100	101	99	97	93	90	89	83
	1.44	B3	76	76	73	70	67	65	60	54		5.64	G2	99	101	99	95	91	88	85	80
	1.83	B4	84	84	79	75	73	70	64	58		8.28	G3	99	101	99	95	90	87	85	80
1200	0.71	C1	82	82	81	78	75	74	68	56	2400	10.53	G4	109	110	106	101	95	93	90	85
	1.41	C2	82	81	79	76	73	70	65	58		3.84	H1	103	106	103	102	97	94	92	89
	2.07	C3	82	81	79	74	72	70	65	59		7.68	H2	102	106	103	100	95	92	89	85
	2.63	C4	91	89	85	80	78	75	70	63		11.28	H3	101	106	103	100	94	91	88	85
1400	0.96	D1	87	85	86	81	79	77	74	62	3200	14.34	H4	111	115	116	107	100	96	94	89
	1.92	D2	86	85	84	79	77	74	70	63		5.02	J1	105	111	106	106	100	97	95	95
	2.82	D3	86	85	84	79	76	73	70	64		10.03	J2	104	110	106	104	98	95	92	90
	3.58	D4	96	93	91	85	81	79	74	68		14.71	J3	104	110	106	104	97	94	92	89
1750	1.50	E1	95	91	92	87	85	81	83	71		17.00	J4	108	114	109	108	100	97	95	92
	3.00	E2	93	91	90	85	83	79	77	70											

BCS-245

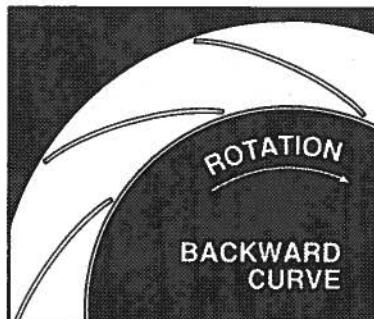
SINGLE WIDTH

WHEEL DIAMETER: 24.50"
 WHEEL CIRCUMFERENCE: 6.41'
 OUTLET AREA: 3.304 SQ. FT.
 OUTLET SIZE: 19 $\frac{1}{16}$ " x 24 $\frac{1}{2}$ "
 INLET DIAMETER: 26 $\frac{1}{2}$ " 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	3010
251°F TO 400°F*	1626	2122	2950
401°F TO 700°F*	1404	1832	2459
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
		BHP								
2310	700	422	0.14	509	0.24	594	0.36	673	0.50	
2640	800	458	0.17	535	0.28	611	0.41	684	0.55	
2970	900	497	0.21	566	0.33	634	0.47	700	0.61	
3301	1000	537	0.25	600	0.39	662	0.53	722	0.68	
3631	1100	578	0.31	636	0.45	693	0.61	748	0.77	
3961	1200	621	0.37	674	0.53	726	0.69	777	0.86	
4291	1300	664	0.44	713	0.61	762	0.79	809	0.97	
4621	1400	708	0.52	753	0.70	799	0.89	843	1.09	
4951	1500	752	0.61	794	0.81	837	1.01	879	1.21	
5281	1600	796	0.71	836	0.92	876	1.13	916	1.35	
5611	1700	840	0.83	879	1.05	917	1.27	954	1.50	
5941	1800	885	0.96	922	1.18	957	1.42	993	1.66	
6272	1900	930	1.10	966	1.34	999	1.58	1033	1.83	
6602	2000	975	1.26	1010	1.51	1042	1.76	1073	2.03	
6932	2100	1021	1.43	1054	1.69	1084	1.96	1114	2.23	

CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP 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	
5611	1700	1384	4.64	1452	5.27	1520	5.96	1584	6.67	
5941	1800	1401	4.87	1468	5.52	1532	6.20	1596	6.92	
6272	1900	1421	5.14	1484	5.79	1547	6.48	1609	7.19	
6602	2000	1444	5.45	1505	6.08	1564	6.77	1624	7.50	
6932	2100	1469	5.81	1527	6.42	1584	7.10	1640	7.82	
7262	2200	1496	6.16	1552	6.82	1606	7.46	1661	8.18	
7592	2300	1525	6.51	1578	7.22	1631	7.90	1682	8.57	
7922	2400	1555	6.89	1606	7.61	1656	8.35	1707	9.05	
8252	2500	1586	7.31	1635	8.02	1685	8.78	1732	9.55	
8582	2600	1618	7.75	1666	8.47	1714	9.24	1761	10.03	
8912	2700	1651	8.22	1698	8.96	1743	9.71	1789	10.52	
9243	2800	1686	8.68	1730	9.47	1775	10.24	1819	11.03	
9573	2900	1722	9.16	1764	9.99	1807	10.80	1850	11.60	
9903	3000	1758	9.69	1799	10.53	1840	11.38	1882	12.20	
10233	3100	1795	10.22	1835	11.09	1875	11.96	1914	12.83	
10563	3200	1833	10.78	1871	11.67	1910	12.56	1948	13.46	
10893	3300	1871	11.36	1909	12.27	1946	13.19	1983	14.11	
11223	3400	1909	11.97	1946	12.90	1983	13.84	2019	14.79	

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	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	
8252	2500	2058	15.39	2160	17.29	2252	19.33	2339	21.42	
8582	2600	2084	15.91	2175	17.83	2263	19.83	2350	21.97	
8912	2700	2101	16.45	2190	18.40	2277	20.40	2362	22.51	
9243	2800	2122	17.04	2206	18.98	2282	21.02	2375	23.11	
9573	2900	2143	17.64	2226	19.62	2308	21.66	2390	23.79	
9903	3000	2167	18.39	2247	20.28	2326	22.34	2406	24.48	
10233	3100	2191	19.19	2268	21.00	2347	23.06	2423	25.19	
10563	3200	2216	20.01	2293	21.87	2367	23.80	2443	25.97	
10893	3300	2245	20.79	2318	22.77	2391	24.69	2464	26.77	
11223	3400	2274	21.58	2344	23.68	2416	25.66	2486	27.65	
11553	3500	2303	22.40	2372	24.54	2441	26.66	2511	28.69	
11883	3600	2332	23.25	2401	25.42	2468	27.63	2535	29.76	

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 QBCS.

BCS-270

SINGLE WIDTH

WHEEL DIAMETER: 27.00"

WHEEL CIRCUMFERENCE: 7.10'

OUTLET AREA: 4.016 SQ. FT.

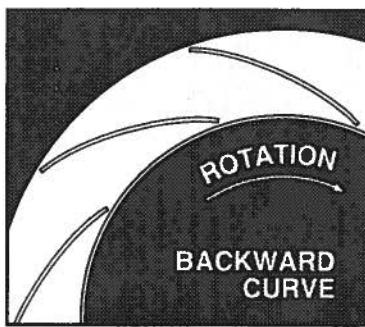
OUTLET SIZE: 21 $\frac{1}{16}$ " x 27"

INLET DIAMETER: 28 $\frac{1}{2}$ " 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	2395
401°F TO 700°F*	1273	1692	2132
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



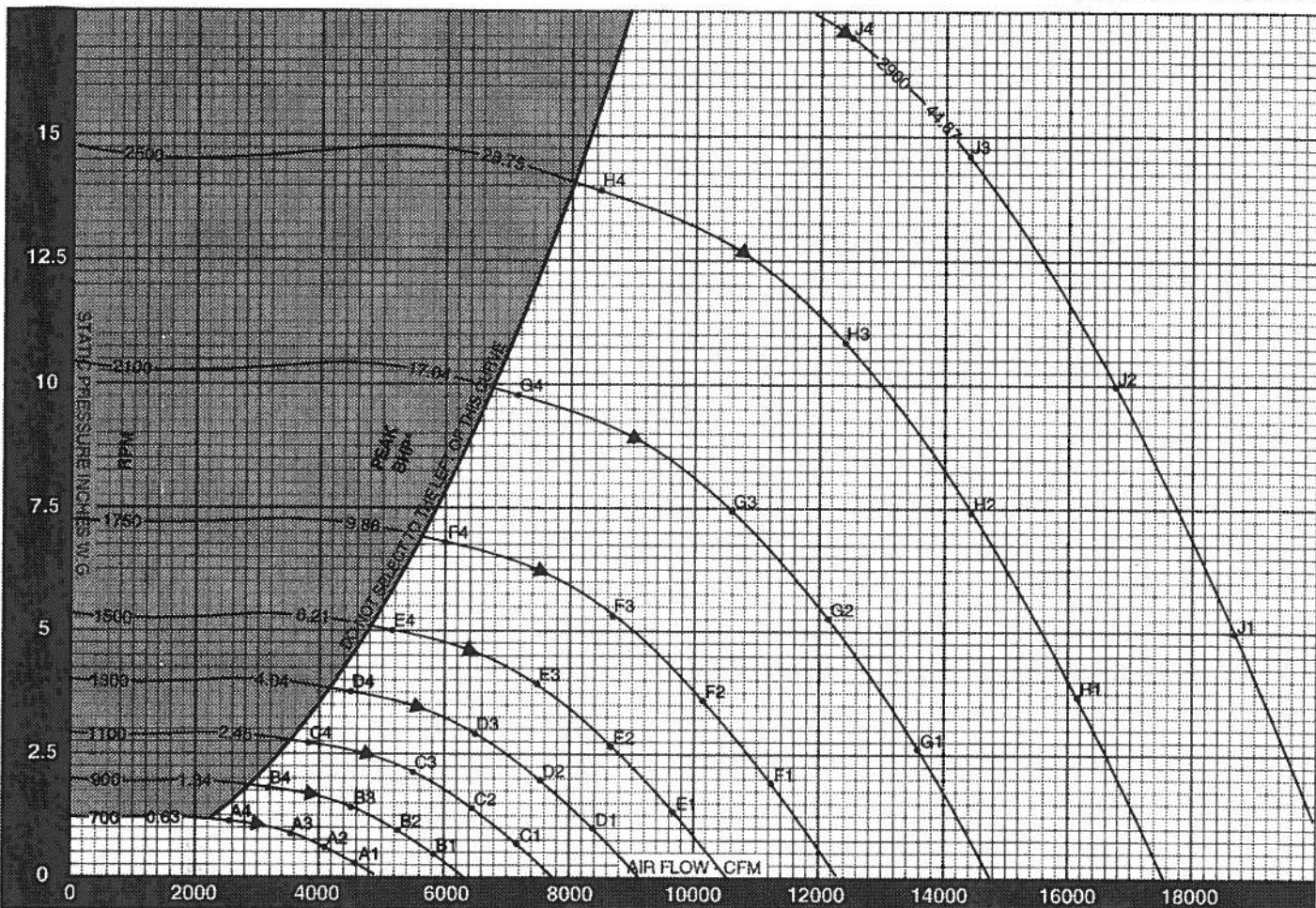
CFM	OV	0.25" SP RPM	0.25" SP BHP	0.50" SP RPM	0.50" SP BHP	0.75" SP RPM	0.75" SP BHP	1.00" SP RPM	1.00" SP BHP	1.50" SP RPM	1.50" SP BHP	2.00" SP RPM	2.00" SP BHP	2.50" SP RPM	2.50" SP BHP	3.00" SP RPM	3.00" SP BHP	3.50" SP RPM	3.50" SP BHP
2806	700	383	0.16	462	0.29	539	0.44	611	0.61	742	1.07	864	1.75	965	2.41				
3207	800	416	0.20	486	0.34	554	0.49	621	0.67	752	1.16	888	1.99	975	2.56	1056	3.16		
3608	900	451	0.25	514	0.40	575	0.56	636	0.74	763	1.25	894	2.14	987	2.71	1066	3.33	1141	3.99
4009	1000	487	0.31	544	0.47	600	0.65	655	0.83	798	1.47	873	1.98	946	2.53	1019	3.08	1092	3.72
4410	1100	524	0.37	577	0.55	628	0.74	679	0.94	778	1.36	875	1.86	1040	3.32	1108	3.94	1176	4.63
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	904	2.14	1001	2.88	1078	3.51	1151	4.19
5612	1400	642	0.63	683	0.85	725	1.08	765	1.32	845	1.80	924	2.31	1019	3.08	1092	3.72	1162	4.39
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		
6414	1600	722	0.87	759	1.12	795	1.37	832	1.64	902	2.18	972	2.74	1040	3.32	1108	3.94	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	1192	4.89
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 RPM	4.00" SP BHP	4.50" SP RPM	4.50" SP BHP	5.00" SP RPM	5.00" SP BHP	5.50" SP RPM	5.50" SP BHP	6.00" SP RPM	6.00" SP BHP	6.50" SP RPM	6.50" SP BHP	7.00" SP RPM	7.00" SP BHP	7.50" SP RPM	7.50" SP BHP	8.00" SP RPM	8.00" SP BHP
6013	1500	1231	5.13	1297	5.89	1359	6.66	1428	7.77	1484	8.60	1548	9.83						
6414	1600	1242	5.36	1307	6.15	1369	6.96	1438	8.10	1494	8.95	1558	10.22	1610	11.13	1661	12.00		
6815	1700	1256	5.63	1318	6.40	1379	7.24	1448	8.40	1504	9.31	1568	10.59	1620	11.55	1670	12.51	1719	13.48
7216	1800	1271	5.92	1332	6.71	1390	7.52	1460	8.73	1515	9.64	1580	11.80	1630	12.94	1680	13.96		
7617	1900	1290	6.24	1347	7.03	1404	8.87	1489	9.50	1541	10.42	1592	11.36	1641	12.33	1691	13.37	1739	14.42
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	1438	8.62	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	1507	9.94	1559	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	1578	11.33	1621	12.29	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	1685	13.81	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	1747	15.41	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	1808	17.09
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	1582	11.14	1601	12.14	1640	13.11	1679	14.09	1717	15.10	1758	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	13.89	1732	14.90	1785	16.02	1800	17.14	1833	18.28	1868	19.38	1902	20.49	1935	21.61	1970	22.80
13631	3400	1732	14.64	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 RPM	9.00" SP BHP	10.00" SP RPM	10.00" SP BHP	11.00" SP RPM	11.00" SP BHP	12.00" SP RPM	12.00" SP BHP	13.00" SP RPM	13.00" SP BHP	14.00" SP RPM	14.00" SP BHP	15.00" SP RPM	15.00" SP BHP	16.00" SP RPM	16.00" SP BHP	17.00" SP RPM	17.00" SP BHP
8820	2200	1842	17.08	1929	19.30	2013	21.56	2103	24.58	2189	27.76	2273	31.10	2344	33.72				
9221	2300	1862	17.57	1939	19.90	2023	22.21	2113	25.29	2200	27.76	2293	32.79	2364	35.60	2432	38.26	2499	41.06
9622	2400	1863	18.08	1950	20.44	2033	22.86	2122	26.02	2198	28.63	2273	31.10	2344	34.60	2422	37.31		
10022	2500	1877	18.69	1960	21.00	2043	23.48	2122	26.02	2198	28.63	2273	31.10	2344	33.72				
10423	2600	1891	19.32	1973	21.65	2054	24.09	2133	26.68	2209	29.32	2293	31.94	2364	34.60	2422	37.31		
10824	2700	1907	19.98	1988	22.34	2066	24.78	2143	27.34	2219	30.04	2293	32.79	2364	35.60	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	2500	42.07
11626	2900	1944	21.43	2020	23.83	2094	26.30	2169	28.89	2241	31.53	2312	34.33	2384	37.2				

CONSTANT SPEED PERFORMANCE CURVES

BCS-245
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

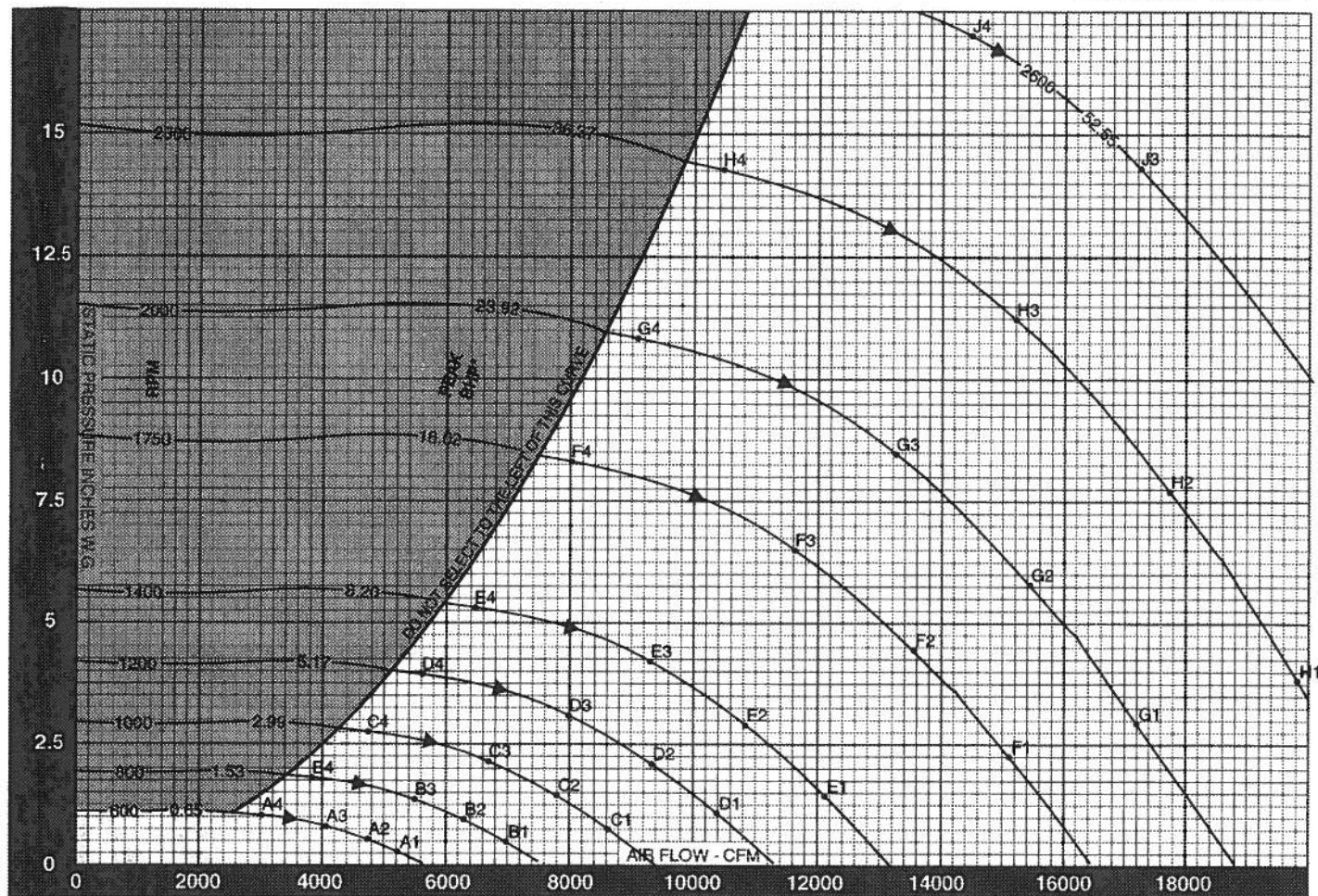
SOUND POWER LEVELS $\times 10^{-12}$ WATT

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								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	50	38	1500	3.92	E3	92	91	89	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		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	73
900	0.48	B1	76	78	75	73	70	71	60	48		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	76
	1.41	B3	76	77	72	70	67	65	60	54		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		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		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		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		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	89	86	84	81	80	68		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

CONSTANT SPEED PERFORMANCE CURVES

BCS-270
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		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		6.48	F3	100	98	97	90	87	85	83	77
	0.92	B2	77	77	73	71	68	66	58	51		8.26	F4	110	106	104	97	92	91	87	81
	1.35	B3	77	77	72	70	67	65	59	53		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		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		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		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		4.88	J1	109	111	107	105	101	98	97	92
	3.98	D4	93	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		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.

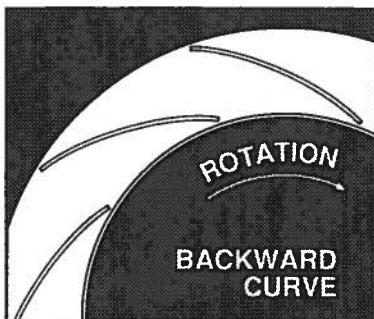
OUTLET SIZE: 23^{13/16}" x 30"

INLET DIAMETER: 31^{1/2}" O.D.

American
Fan Company

CLASS 1		CLASS 2		CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3		
UP TO 250°F	1401	1028	2459		
251°F TO 400°F*	1331	1237	2321		
401°F TO 700°F*	1149	1469	2490		
ABOVE 700°F	CONTACT FACTORY				

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
TIP SPEED (FPM) = 7.85 x RPM MAX BHP = 4.889 x (RPM/1000)²



CFM	OV	0.25" SP RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	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	573	0.91	677	1.43
4957	1000	439	0.37	491	0.56	543	0.78	593	1.02	689	1.55
5453	1100	473	0.45	518	0.65	568	0.89	615	1.14	702	1.67
5948	1200	508	0.55	548	0.76	594	1.00	638	1.27	721	1.82
6444	1300	544	0.66	582	0.88	621	1.13	663	1.41	743	2.00
6940	1400	580	0.78	616	1.03	649	1.27	690	1.57	765	2.19
7436	1500	616	0.92	650	1.19	681	1.45	717	1.74	788	2.39
7931	1600	653	1.08	685	1.37	715	1.64	744	1.93	815	2.61
8427	1700	690	1.25	720	1.57	749	1.85	776	2.15	841	2.84
8923	1800	727	1.45	755	1.78	783	2.09	810	2.40	868	3.09
9418	1900	764	1.67	791	2.01	818	2.35	843	2.67	895	3.37
9914	2000	801	1.91	827	2.27	853	2.63	877	2.97	923	3.66
10410	2100	838	2.17	864	2.55	888	2.94	912	3.29	957	4.01
10906	2200	876	2.45	900	2.85	923	3.26	946	3.64	990	4.39

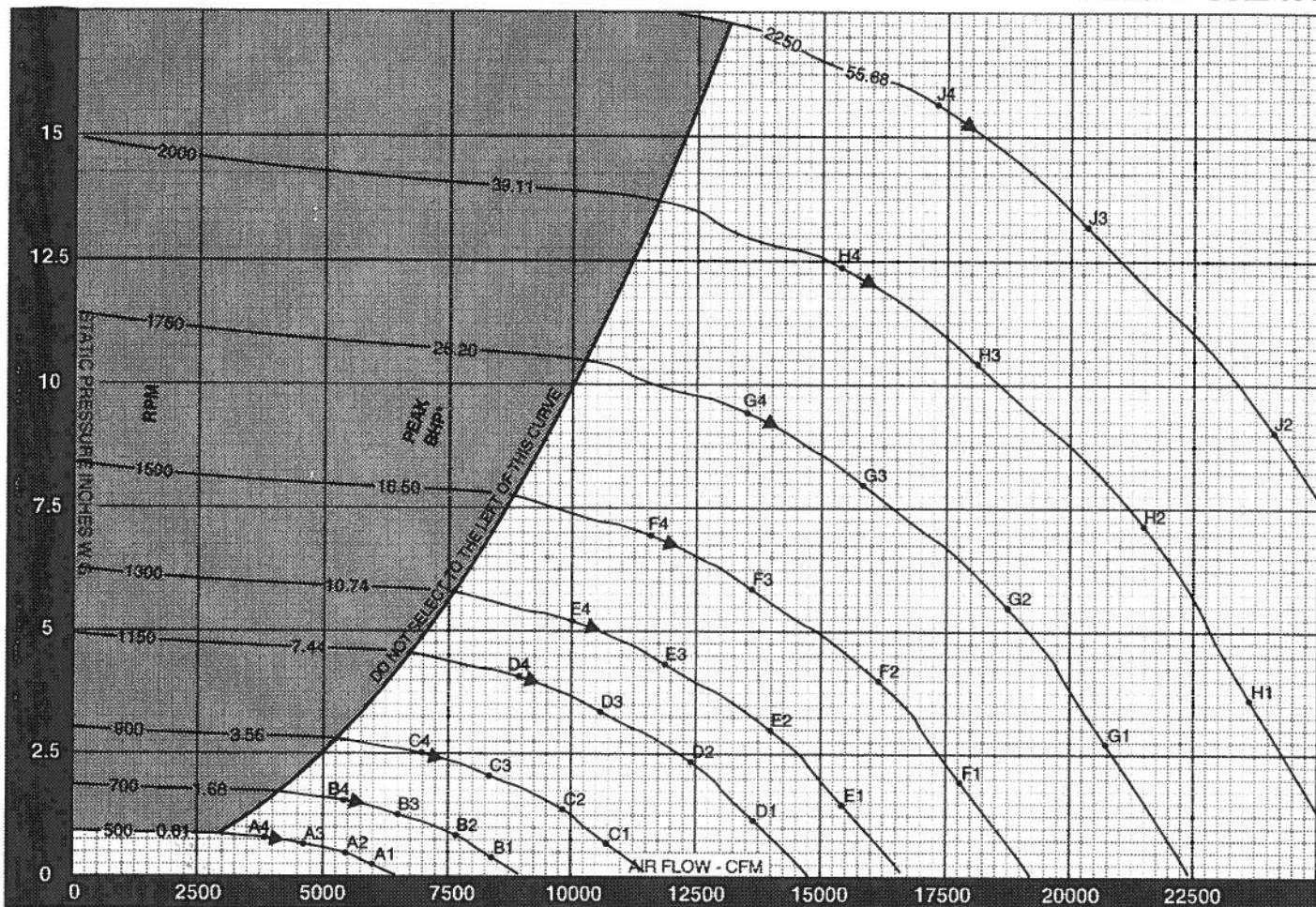
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
8923	1800	1147	7.29	1203	8.30	1255	9.33	1306	10.39	1354	11.43
9418	1900	1165	7.68	1215	8.66	1268	9.73	1318	10.82	1366	11.94
9914	2000	1186	8.13	1232	9.09	1281	10.14	1331	11.26	1379	12.40
10410	2100	1208	8.59	1254	9.59	1297	10.60	1343	11.70	1391	12.88
10906	2200	1230	9.09	1276	10.11	1319	11.15	1360	12.22	1404	13.37
11401	2300	1253	9.60	1298	10.65	1340	11.73	1381	12.82	1421	13.93
11897	2400	1275	10.14	1320	11.22	1362	12.33	1403	13.46	1442	14.59
12393	2500	1301	10.70	1342	11.82	1385	12.95	1425	14.11	1464	15.28
12889	2600	1327	11.28	1366	12.44	1407	13.61	1447	14.79	1486	15.99
13384	2700	1353	11.89	1392	13.08	1430	14.29	1470	15.50	1508	16.73
13880	2800	1380	12.53	1418	13.75	1455	14.99	1492	16.24	1531	17.50
14376	2900	1407	13.20	1445	14.45	1482	15.72	1517	17.01	1553	18.31
14872	3000	1434	13.91	1472	15.18	1508	16.48	1543	17.79	1577	19.13
15367	3100	1461	14.64	1499	15.94	1535	17.27	1569	18.62	1603	19.98
15863	3200	1489	15.40	1526	16.74	1561	18.09	1596	19.47	1629	20.87
16359	3300	1518	16.25	1553	17.57	1588	18.95	1623	20.36	1656	21.79
16854	3400	1552	17.19	1581	18.43	1616	19.85	1649	21.28	1682	22.74
17350	3500	1586	18.16	1611	19.39	1643	20.78	1677	22.24	1709	23.73
17846	3600	1618	19.18	1644	20.44	1671	21.74	1704	23.24	1736	24.76
18342	3700	1653	20.25	1678	21.53	1702	22.83	1731	24.28	1767	26.29

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
12393	2500	1695	23.14	1769	26.04	1841	29.02	1909	31.79	1975	34.56
12889	2600	1708	23.86	1782	26.82	1853	29.86	1921	32.57	1987	35.82
13384	2700	1720	24.60	1795	27.82	1866	30.71	1934	33.08	1999	37.11
13880	2800	1736	25.43	1807	28.43	1878	31.59	1946	34.81	2011	39.10
14376	2900	1758	26.41	1820	29.27	1891	32.47	1969	35.75	2024	39.10
14872	3000	1780	27.42	1841	30.31	1904	33.38	1971	36.72	2036	40.12
15367	3100	1801	28.47	1862	31.41	1921	34.42	1984	37.70	2049	41.16
15863	3200	1823	29.55	1884	32.56	1942	35.62	1998	38.73	2062	42.23
16359	3300	1846	30.66	1908	33.73	1964	36.85	2019	40.02	2075	43.31
16854	3400	1868	31.81	1928	34.94	1986	38.12	2041	41.35	2094	44.84
17350	3500	1890	33.00	1950	36.18	2007	39.42	2063	42.72	2116	46.06
17846	3600	1913	34.23	1973	37.47	2030	40.77	2085	44.12	2137	47.53
18342	3700	1938	35.47	1995	38.79	2052	42.15	2107	45.57	2159	49.03
18837	3800	1964	36.76	2018	40.16	2074	43.58	2129	47.05	2181	50.57
19333	3900	1990	38.08	2043	41.55	2097	45.04	2151	48.58	2203	52.16

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		4.02	F1	95	92	99	91	90	87	86	76
	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		5.88	F3	96	90	95	87	86	84	82	74
	0.88	B2	71	77	72	71	68	66	56	47		6.96	F4	96	90	93	86	85	83	80	73
	1.28	B3	70	76	70	70	67	65	57	48		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		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		10.45	H3	105	97	102	96	93	91	90	84
	2.50	C4	75	82	75	75	72	71	64	57		12.26	H4	105	98	100	95	92	90	88	82
1150	1.19	D1	85	90	89	85	82	82	76	65		3.59	H1	103	98	105	99	97	94	95	86
	2.38	D2	84	87	87	83	80	79	74	64		7.18	H2	102	97	103	97	95	92	91	84
	3.45	D3	84	87	86	82	79	78	73	63		10.45	H3	105	97	102	96	93	91	90	84
	4.09	D4	85	86	84	80	78	77	72	65		12.26	H4	105	98	100	95	92	90	88	82
1300	1.52	E1	90	91	94	88	86	84	81	70		4.55	J1	105	103	106	104	99	97	97	90
	3.04	E2	89	89	91	86	84	82	78	69		9.09	J2	104	102	104	101	97	95	94	88

BCS-330

SINGLE WIDTH

WHEEL DIAMETER: 33.00"

WHEEL CIRCUMFERENCE: 8.64'

OUTLET AREA: 6.009 SQ. FT.

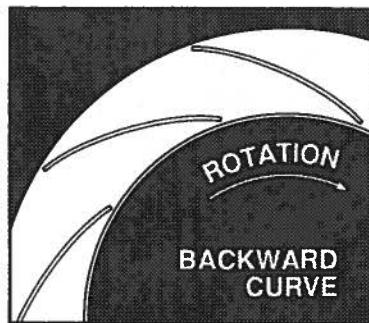
OUTLET SIZE: 26 $\frac{1}{16}$ " x 33 $\frac{1}{16}$ "

INLET DIAMETER: 34 $\frac{1}{2}$ " 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	2247
251°F TO 400°F*	1210	1579	2110
401°F TO 700°F*	1045	1363	1629
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP 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
5998	1000	399	0.45	446	0.68	494	0.95	539	1.23	627	1.88
6598	1100	430	0.55	471	0.79	516	1.07	559	1.37	638	2.02
7198	1200	462	0.67	498	0.92	540	1.21	580	1.53	656	2.21
7797	1300	494	0.80	529	1.07	565	1.37	603	1.71	675	2.42
8397	1400	527	0.95	560	1.24	590	1.54	627	1.90	696	2.65
8997	1500	560	1.12	591	1.44	619	1.75	652	2.10	717	2.89
9597	1600	593	1.31	622	1.66	650	1.98	677	2.33	741	3.16
10197	1700	627	1.52	654	1.90	681	2.24	706	2.60	765	3.44
10797	1800	661	1.75	687	2.15	712	2.53	736	2.90	789	3.74
11396	1900	694	2.02	719	2.44	743	2.84	767	3.23	814	4.07
11996	2000	728	2.31	752	2.74	775	3.18	798	3.59	840	4.43
12596	2100	762	2.62	785	3.08	807	3.55	829	3.98	870	4.85
13196	2200	796	2.97	818	3.45	839	3.94	860	4.40	900	5.31

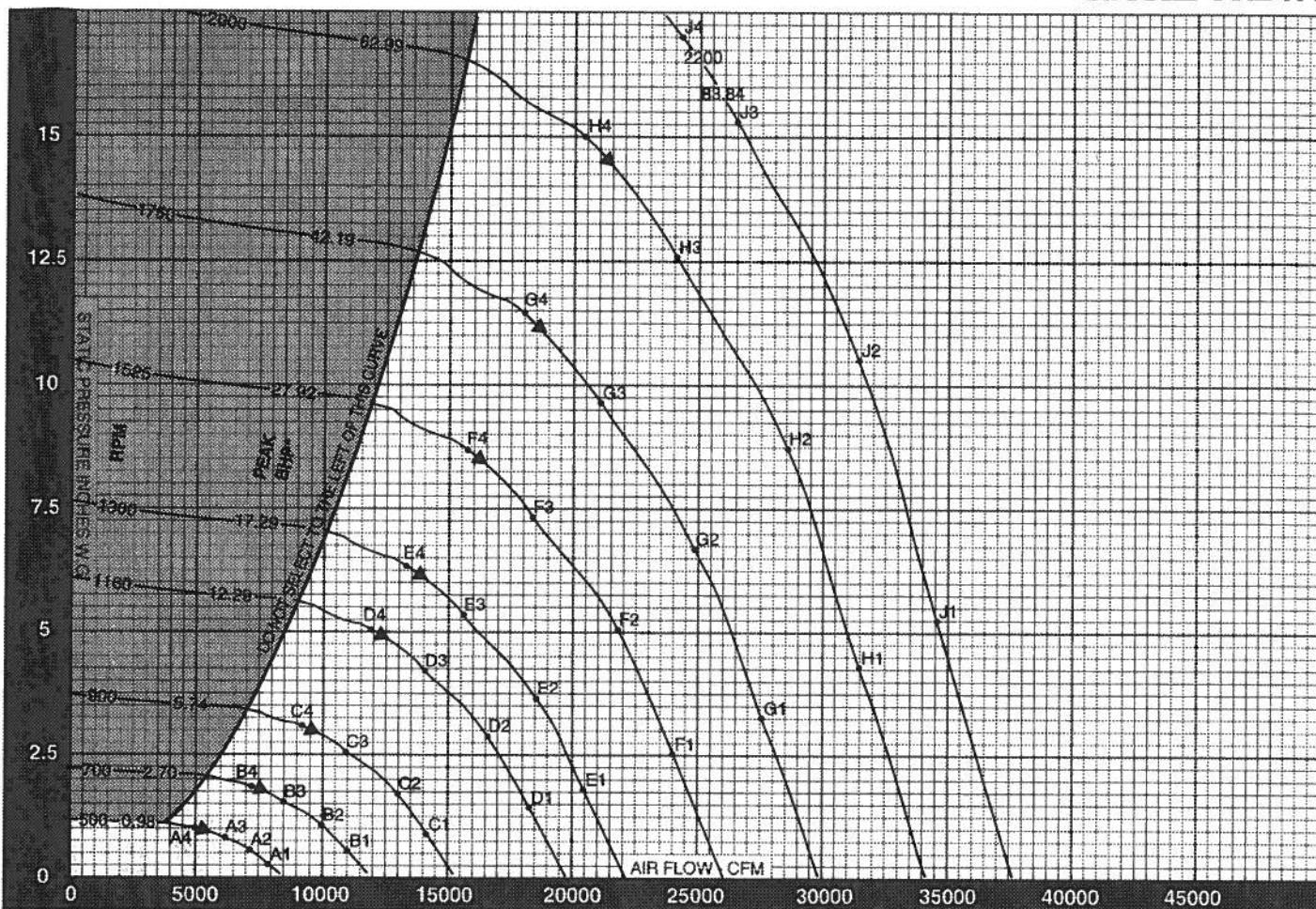
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
10797	1800	1043	8.82	1093	10.04	1141	11.29	1187	12.58	1231	13.83
11396	1900	1059	9.29	1105	10.48	1153	11.77	1198	13.09	1242	14.44
11996	2000	1078	9.83	1120	11.00	1164	12.26	1210	13.62	1253	15.00
12596	2100	1098	10.40	1140	11.60	1179	12.83	1221	14.16	1265	15.58
13196	2200	1119	10.99	1160	12.23	1199	13.49	1236	14.78	1276	16.18
13796	2300	1139	11.62	1180	12.89	1218	14.19	1256	15.51	1291	16.86
14396	2400	1159	12.27	1200	13.58	1239	14.92	1276	16.27	1311	17.66
14995	2500	1182	12.95	1220	14.30	1259	15.67	1296	17.07	1331	18.49
15595	2600	1206	13.65	1242	15.05	1279	16.46	1316	17.90	1351	19.35
16195	2700	1230	14.39	1266	15.83	1300	17.29	1336	18.76	1371	20.25
16795	2800	1254	15.17	1290	16.64	1323	18.13	1357	19.65	1391	21.18
17395	2900	1279	15.98	1314	17.48	1347	19.02	1379	20.58	1412	22.15
17995	3000	1304	16.83	1338	18.37	1371	19.94	1403	21.53	1434	23.15
18595	3100	1328	17.71	1362	19.29	1395	20.90	1427	22.53	1457	24.18
19194	3200	1353	18.64	1387	20.25	1419	21.89	1461	23.56	1481	25.25
19794	3300	1381	19.66	1412	21.26	1444	22.93	1475	24.64	1505	26.36
20394	3400	1411	20.79	1457	22.30	1469	24.02	1499	26.76	1529	27.52
20994	3500	1441	21.98	1465	23.46	1494	25.14	1524	26.92	1554	28.71
21594	3600	1472	23.21	1495	24.73	1519	26.31	1549	28.12	1578	29.96
22194	3700	1503	24.51	1526	26.06	1547	27.63	1574	29.37	1603	31.25

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
14995	2500	1541	28.00	1609	31.51	1673	35.12	1736	38.47	1795	41.82
15595	2600	1652	28.87	1620	32.46	1685	36.13	1746	39.89	1806	43.34
16195	2700	1564	29.77	1632	33.42	1696	37.16	1758	40.99	1817	44.90
16795	2800	1572	30.77	1643	34.41	1703	38.22	1769	42.11	1828	46.10
17395	2900	1698	31.96	1655	35.41	1719	39.29	1781	43.26	1840	47.31
17995	3000	1618	33.18	1673	36.68	1731	40.39	1792	44.43	1851	48.55
18595	3100	1638	34.45	1693	38.01	1746	41.65	1804	45.62	1883	49.81
19194	3200	1658	35.75	1713	39.39	1765	43.09	1816	46.87	1874	51.09
19794	3300	1678	37.10	1733	40.81	1785	44.59	1836	48.43	1886	52.40
20394	3400	1698	38.49	1753	42.27	1805	46.12	1855	50.04	1904	54.01
20994	3500	1719	39.83	1773	43.78	1825	47.70	1875	51.69	1923	55.74
21594	3600	1739	41.41	1793	45.34	1845	49.33	1895	53.39	1943	57.51
22194	3700	1762	42.92	1814	46.94	1865	51.01	1915	55.14	1963	59.33
22793	3800	1786	44.47	1834	48.59	1886	52.73	1935	56.93	1983	61.19
23393	3900	1809	46.08	1857	50.27	1906	54.50	1958	58.78	2003	63.11

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	80	79
	0.93	A4	68	66	65	63	61	55	49	42		5.05	F2	98	94	100	92	91	88	87	77	
700	0.53	B1	76	83	77	76	74	71	60	49		7.35	F3	100	93	99	91	90	87	86	77	
	1.06	B2	75	80	75	74	71	68	59	50		9.69	F4	101	93	97	90	88	86	84	77	
	1.55	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	0.88	C1	79	91	83	83	79	80	70	59	2000	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	
	2.56	C3	77	87	79	79	76	76	68	60		12.64	H1	107	101	108	102	100	97	97	89	
	3.03	C4	78	85	78	78	75	74	67	60		14.95	H2	106	100	106	100	98	94	94	87	
1150	1.46	D1	89	83	92	88	86	85	79	68	2200	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		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 36½"

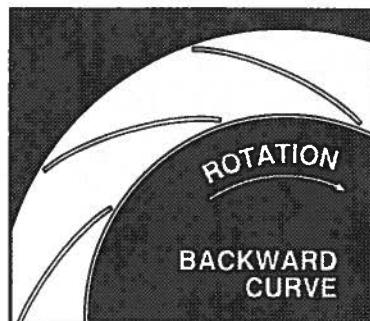
INLET DIAMETER: 37½" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1152	1502	2012
251°F TO 400°F*	1094	1427	1916
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP 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
7338	1000	361	0.55	403	0.83	447	1.16	488	1.50	567	2.29
8072	1100	389	0.67	426	0.96	467	1.31	506	1.68	577	2.47
8805	1200	418	0.82	451	1.12	488	1.48	524	1.88	593	2.70
9539	1300	447	0.98	478	1.31	511	1.67	545	2.09	611	2.96
10273	1400	477	1.16	506	1.52	533	1.88	567	2.32	629	3.24
11007	1500	506	1.37	534	1.76	560	2.14	589	2.57	648	3.54
11741	1600	537	1.60	563	2.03	588	2.43	612	2.85	670	3.86
12475	1700	567	1.86	591	2.32	615	2.75	638	3.18	691	4.21
13208	1800	597	2.15	621	2.64	644	3.09	665	3.55	713	4.58
13942	1900	628	2.47	650	2.98	672	3.48	693	3.95	736	4.98
14676	2000	658	2.82	680	3.36	701	3.90	721	4.39	759	5.42
15410	2100	689	3.21	710	3.77	730	4.35	749	4.87	786	5.94
16144	2200	720	3.63	740	4.22	759	4.82	778	5.39	814	6.50

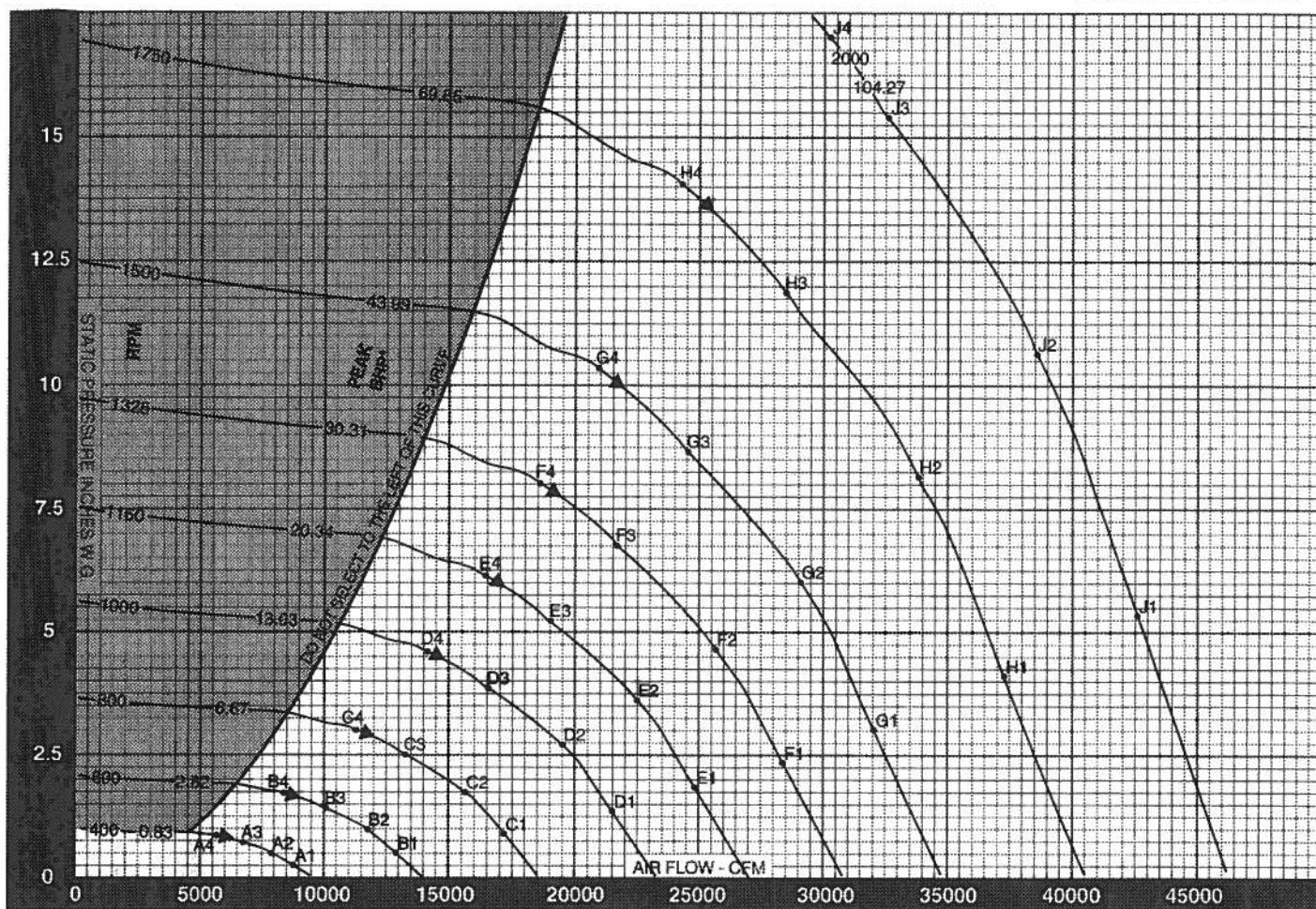
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
13208	1800	943	10.79	988	12.28	1032	13.81	1073	15.39	1113	16.92
13942	1900	957	11.37	999	12.83	1042	14.40	1083	16.01	1123	17.67
14676	2000	975	12.03	1013	13.45	1053	15.00	1094	16.66	1133	18.36
15410	2100	993	12.72	1030	14.19	1066	15.69	1104	17.33	1144	19.06
16144	2200	1011	13.45	1048	14.96	1084	16.51	1118	18.08	1154	19.79
16877	2300	1030	14.21	1067	15.77	1102	17.36	1135	18.98	1168	20.62
17611	2400	1048	15.01	1085	16.61	1120	18.25	1163	19.91	1185	21.60
18345	2500	1069	15.84	1103	17.50	1138	19.17	1171	20.38	1203	22.62
19079	2600	1091	16.70	1123	18.41	1156	20.14	1190	21.89	1221	23.67
19813	2700	1112	17.61	1144	19.36	1175	21.15	1208	22.95	1240	24.77
20547	2800	1134	18.55	1166	20.35	1196	22.19	1227	24.04	1258	25.91
21280	2900	1156	19.55	1188	21.39	1218	23.26	1247	25.17	1277	27.10
22014	3000	1179	20.58	1210	22.47	1239	24.39	1268	26.34	1296	28.32
22748	3100	1201	21.67	1232	23.60	1261	25.56	1290	27.56	1317	29.58
23482	3200	1224	22.80	1254	24.78	1283	26.78	1312	28.82	1339	30.89
24216	3300	1249	24.06	1277	26.00	1306	28.06	1334	30.14	1361	32.25
24950	3400	1276	25.44	1299	27.28	1328	29.38	1356	31.51	1383	33.66
25683	3500	1303	26.89	1324	28.70	1350	30.76	1378	32.93	1405	35.13
26417	3600	1331	28.40	1352	30.26	1373	32.19	1400	34.40	1427	36.85
27151	3700	1358	29.98	1379	31.88	1399	33.80	1423	36.94	1449	39.23

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
18345	2500	1393	34.25	1454	38.55	1513	42.00	1569	47.06	1623	51.16
19079	2600	1403	35.32	1465	39.70	1623	44.20	1579	48.80	1633	53.03
19813	2700	1414	36.42	1475	40.88	1633	45.46	1589	50.18	1643	54.93
20547	2800	1427	37.65	1486	42.09	1544	46.75	1600	51.82	1653	56.39
21280	2900	1445	39.10	1496	43.32	1554	48.07	1610	52.92	1663	57.88
22014	3000	1463	40.60	1513	44.87	1569	49.42	1620	54.35	1674	59.39
22748	3100	1481	42.14	1531	46.50	1578	50.95	1631	56.91	1684	60.94
23482	3200	1499	43.74	1548	48.19	1596	52.72	1642	57.24	1695	62.51
24216	3300	1517	45.39	1566	49.93	1614	54.54	1660	59.25	1705	64.11
24950	3400	1535	47.09	1585	51.72	1632	56.42	1677	61.21	1721	66.08
25683	3500	1554	48.85	1603	53.56	1650	58.36	1695	63.23	1739	68.19
26417	3600	1572	50.66	1621	55.47	1668	60.35	1713	65.31	1757	70.35
27151	3700	1593	52.51	1640	57.43	1686	62.40	1731	67.45	1775	72.58
27885	3800	1614	54.41	1658	59.44	1705	64.51	1750	69.65	1793	74.86
28619	3900	1636	56.37	1679	61.50	1723	66.88	1768	71.91	1811	77.21

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-365
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.015}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

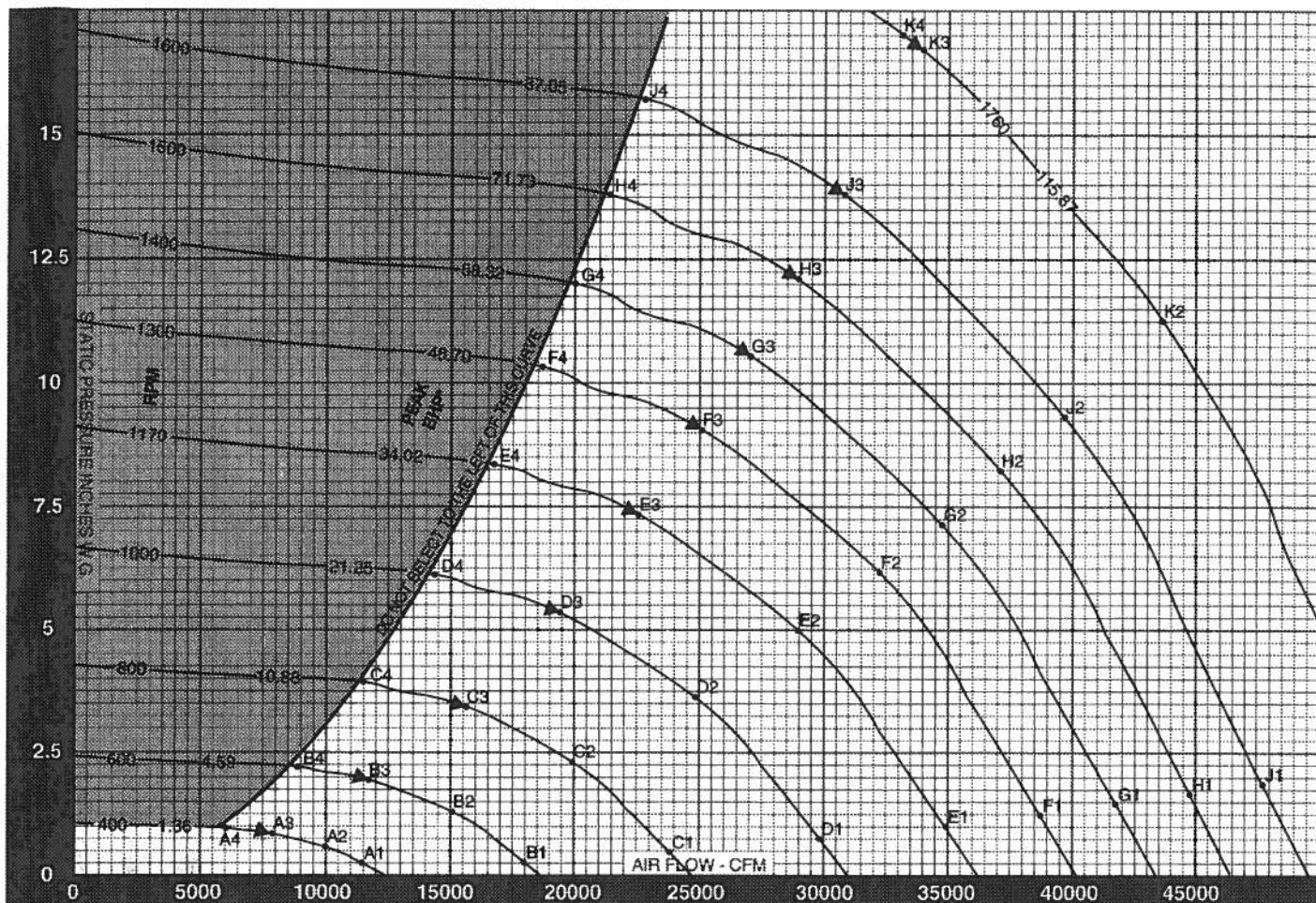
SOUND POWER LEVELS $\times 10^{-12}$ WATT

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								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		2.93	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	76	74	69	58	46		6.79	F3	97	96	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		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		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		4.07	H1	108	100	111	100	96	98	87	77
	2.93	C4	79	86	79	78	75	73	66	60		6.14	H2	107	99	107	98	98	94	94	85
1000	1.33	D1	87	85	90	88	85	85	77	66		11.84	H3	109	98	106	97	96	93	93	85
	2.66	D2	86	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		5.32	J1	110	105	112	105	103	100	99	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		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

CONSTANT SPEED PERFORMANCE CURVES

BCS-402
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

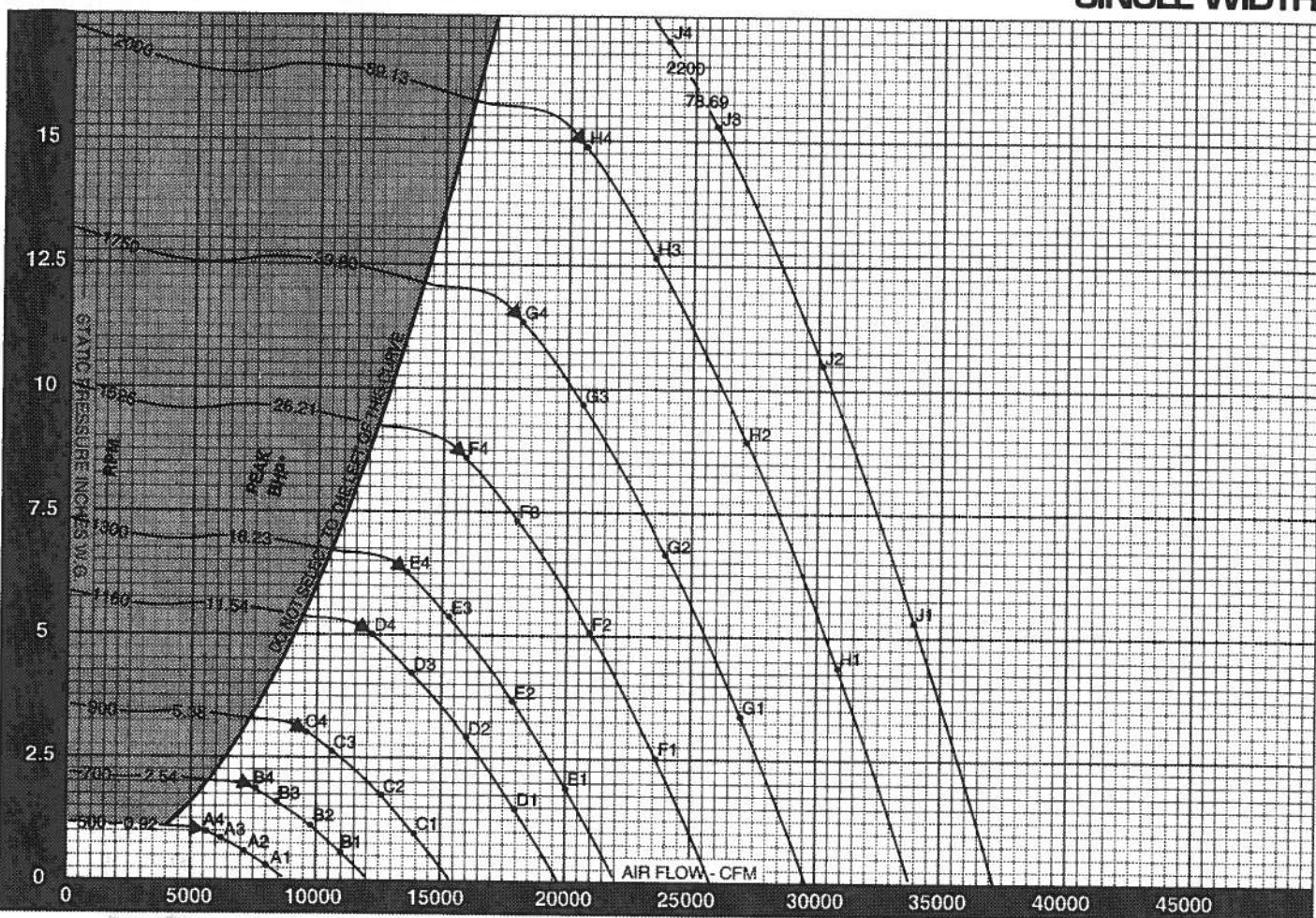
SOUND POWER LEVELS $\times 10^{-12}$ WATT

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.

BAND / FREQUENCY										BAND / FREQUENCY											
FAN RPM	FAN SP	SOUND POINT	1/G3	2/125	3/250	4/500	5/1000	6/2000	7/4000	8/8000	FAN RPM	FAN SP	SOUND POINT	1/G3	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	80	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
	6.40	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	1700	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	108	99	99	96	90

CONSTANT SPEED PERFORMANCE CURVES

BCA-330
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		2.63	F1	101	93	100	91	90	87	82	79
	0.93	A4	66	63	62	61	57	53	48	44		5.95	F2	102	92	99	89	87	84	80	77
700	0.53	B1	74	80	74	73	69	65	62	58		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		3.33	G1	107	95	104	94	93	91	86	83
	1.82	B4	71	75	69	63	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		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		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		12.64	H3	110	99	100	98	92	90	87	84
	2.92	D2	89	90	88	82	80	76	73	70		14.96	H4	107	99	101	98	92	91	87	83
	4.25	D3	88	86	85	81	79	76	72	69		5.26	J1	111	105	106	103	99	97	92	89
	5.00	D4	87	87	85	81	79	78	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		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.

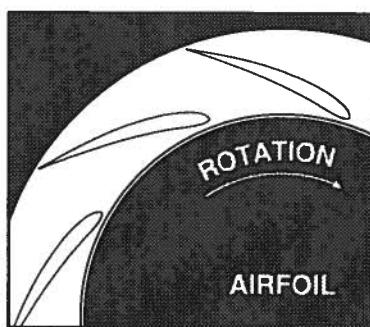
OUTLET SIZE: 29" x 36½"

INLET DIAMETER: 37½" O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1175	1332	1490
251°F TO 400°F*	1116	1455	1693
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)²



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
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

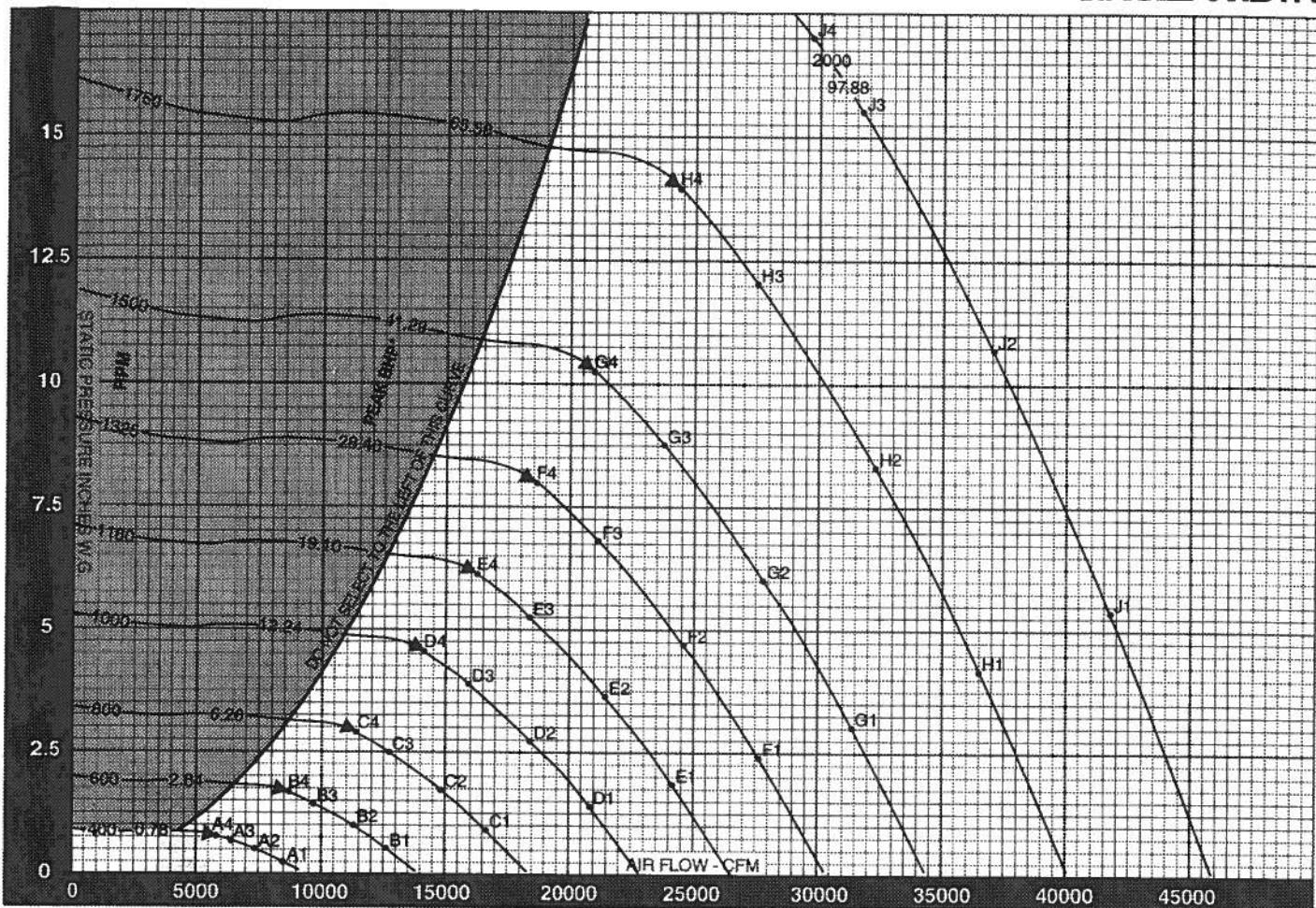
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
12475	1700	927 9.57	974 10.83	1023 12.15	1071 13.52	1116 14.93				
13208	1800	942 10.16	983 11.40	1028 12.74	1073 14.12	1119 15.56	1163 17.04	1208 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 22.66	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 27.59	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	1419 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	1438 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 36.74	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 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
18345	2500	1386 31.73	1450 35.46	1517 39.38	1581 43.43	1643 47.59				
19079	2600	1357 32.98	1458 36.71	1519 40.63	1584 44.72	1646 48.94	1705 53.27	1763 57.66		
19813	2700	1413 34.29	1467 38.01	1527 41.98	1587 46.08	1649 50.34	1708 54.73	1763 59.21	1821 63.76	
20547	2800	1431 35.73	1481 39.44	1536 43.38	1593 47.53	1651 51.01	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	1667 53.37	1713 57.81	1771 62.39	1820 67.09	1880 71.89
22014	3000	1470 38.75	1518 42.64	1565 46.80	1613 50.66	1665 56.00	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 76.52
23482	3200	1509 41.99	1557 46.05	1602 50.17	1646 54.37	1690 58.62	1737 63.05	1787 67.74	1837 72.62	1889 77.43
24216	3300	1529 43.69	1576 47.83	1622 52.05	1665 56.32	1708 60.67	1750 65.06	1798 69.69	1846 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 71.76	1854 76.59	1902 81.59
25683	3500	1572 47.28	1616 51.59	1661 55.97	1704 60.41	1746 64.93	1787 69.50	1826 74.13	1877 78.80	1911 83.78
26417	3600	1596 49.14	1637 53.65	1680 58.02	1724 62.56	1765 67.15	1806 71.80	1846 76.52	1884 81.29	1923 86.19
27151	3700	1616 51.08	1680 55.57	1700 60.14	1743 64.76	1785 69.44	1825 74.16	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 81.60	1921 86.44	1958 91.44
28619	3900	1665 55.18	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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		4.67	F1	98	96	98	91	89	86	82	78
	0.73	A4	65	59	60	58	54	50	45	41		6.79	F2	99	94	96	93	86	83	79	76
600	0.48	B1	76	78	73	72	68	64	61	57	1325	2.33	F1	98	96	98	91	89	86	82	78
	0.96	B2	75	76	71	69	66	62	58	55		4.67	F2	99	94	96	93	86	83	79	76
	1.39	B3	72	73	69	68	65	61	58	54		7.98	F3	98	92	92	87	86	83	79	75
	1.64	B4	72	73	69	68	65	61	57	52		7.98	F4	96	92	93	87	86	83	79	74
800	0.85	C1	79	88	80	79	76	72	68	65	1500	2.99	G1	104	96	102	94	93	89	85	82
	1.70	C2	78	88	77	76	73	69	66	63		5.98	G2	105	96	101	91	89	86	83	79
	2.47	C3	77	83	76	75	73	69	65	62		8.70	G3	104	94	97	90	89	86	82	79
	2.91	C4	77	83	75	75	73	69	65	60		10.22	G4	102	94	97	89	89	87	82	78
1000	1.33	D1	86	92	87	85	82	78	74	71	1700	4.12	H1	111	98	107	98	97	94	89	86
	2.66	D2	85	91	85	82	79	75	72	69		8.23	H2	112	97	106	95	94	91	87	84
	3.87	D3	84	87	83	81	78	75	72	68		11.98	H3	111	95	102	93	93	90	87	83
	4.54	D4	84	88	82	80	79	75	71	67		14.07	H4	109	97	102	93	92	91	87	82
1160	1.79	E1	92	94	93	88	86	82	78	75	2000	5.32	J1	113	104	108	102	100	97	93	89
	3.58	E2	92	93	91	85	83	79	76	73		10.63	J2	114	104	108	100	97	94	90	87
										15.47	J3	113	102	104	98	96	94	90	87		
										17.00	J4	112	102	104	98	95	94	90	86		

BCA-402

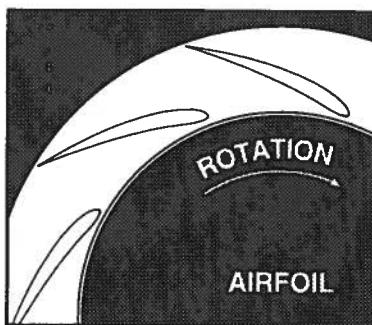
SINGLE WIDTH

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	1388	1560		
251°F TO 400°F*	1012	1320	1460		
401°F TO 700°F*	873	1139	1317		
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
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

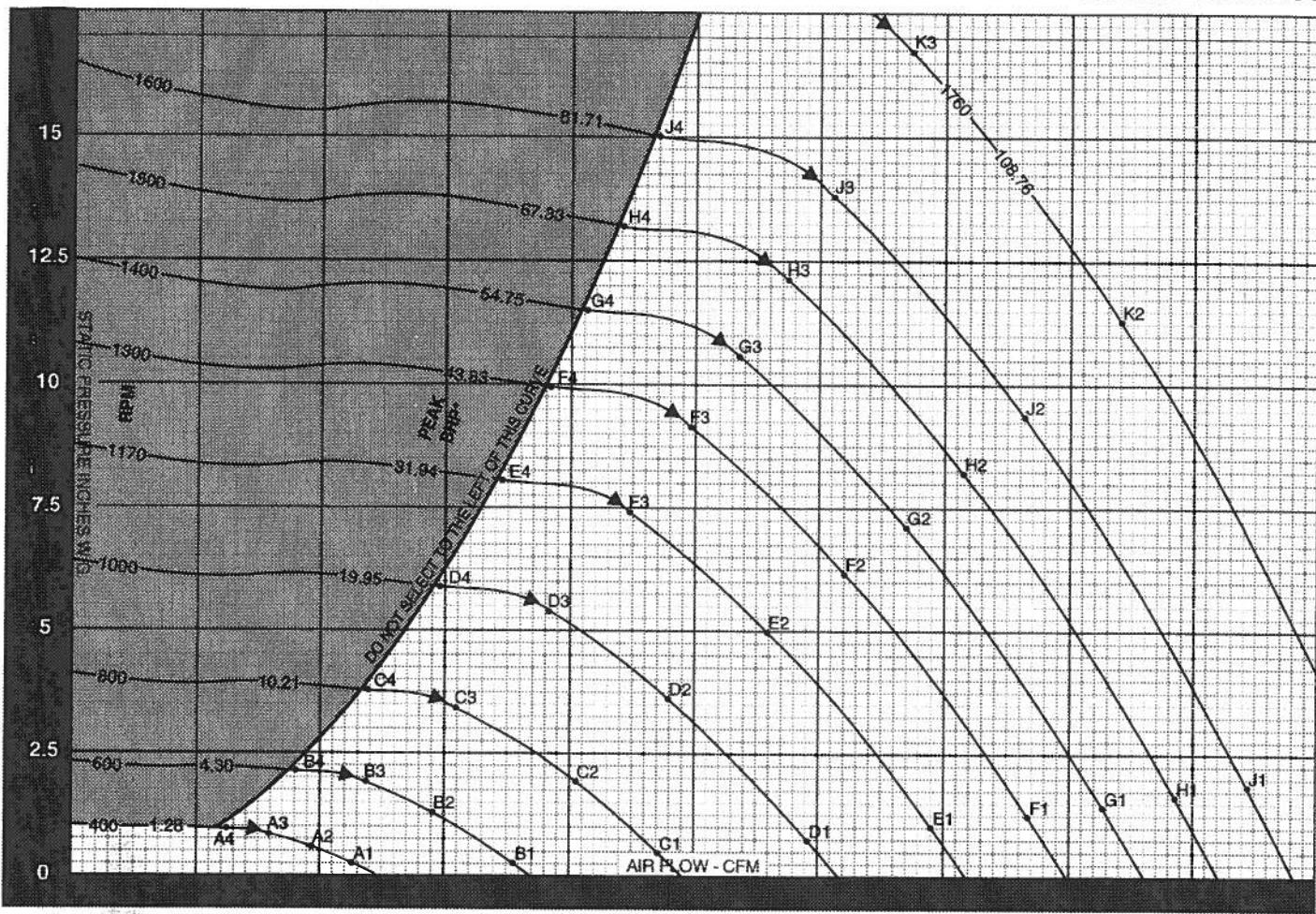
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM
15170	1700	841 11.64	884 13.17	928 14.78	971 16.44	1012 18.16				
16062	1800	854 12.36	891 13.87	932 15.49	973 17.18	1015 18.92	1054 20.73	1093 22.56		
16954	1900	871 13.14	905 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 29.36
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 26.66	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	1176 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 24.86	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	1226 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 38.46	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 41.88	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 41.76	1322 44.24	1344 46.76	1366 49.31	1387 51.88	1407 54.48

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM
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 66.85	1601 72.00	1651 77.83	
24986	2800	1298 43.45	1343 47.92	1392 52.75	1445 57.89	1497 63.00	1551 68.38	1604 73.91	1654 79.55	1702 85.27
25878	2900	1315 45.25	1359 49.86	1403 54.58	1452 59.64	1503 64.89	1554 70.30	1606 75.87	1659 81.58	1705 87.42
26770	3000	1333 47.12	1377 51.85	1419 56.87	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 63.00	1520 68.97	1566 74.46	1613 80.09	1661 85.88	1710 91.83
28555	3200	1368 51.06	1412 56.00	1453 61.01	1493 66.12	1533 71.28	1576 76.69	1620 82.37	1666 88.18	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 66.64	1528 70.94	1566 76.33	1603 81.78	1641 87.29	1682 93.14	1725 99.21
31232	3500	1428 57.47	1465 62.73	1506 68.00	1545 73.47	1583 78.95	1620 84.51	1666 90.14	1693 95.82	1733 101.87
32124	3600	1447 59.75	1485 65.12	1524 70.66	1563 76.07	1601 81.65	1637 87.32	1673 93.05	1708 98.65	1744 104.21
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 107.31
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 102.26	1760 109.36	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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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	109	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	1700	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

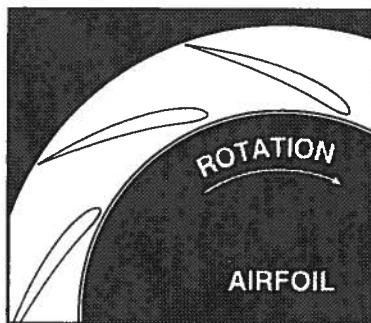
SINGLE WIDTH

WHEEL DIAMETER: 44.50"
WHEEL CIRCUMFERENCE: 11.65'
OUTLET AREA: 10.923 SQ. FT.
OUTLET SIZE: 35 $\frac{5}{16}$ " x 44 $\frac{9}{16}$ "
INLET DIAMETER: 45 $\frac{1}{2}$ " O.D.

American
Fan Company

CLASS 1		CLASS 2		CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3		
UP TO 250°F	963	1257	1473		
251°F TO 400°F*	915	1194	1369		
401°F TO 700°F*	790	1031	1277		
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 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
7635	700	237 0.43	283 0.75	327 1.10	374 1.52					
8726	800	257 0.53	299 0.88	338 1.26	377 1.68					
9816	900	279 0.67	318 1.04	353 1.45	386 1.89	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	473 3.46	531 4.65	591 5.98		
13089	1200	349 1.21	379 1.68	409 2.17	436 2.71	488 3.82	538 5.02	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	608 7.33	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	661 9.41	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	712 11.72
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

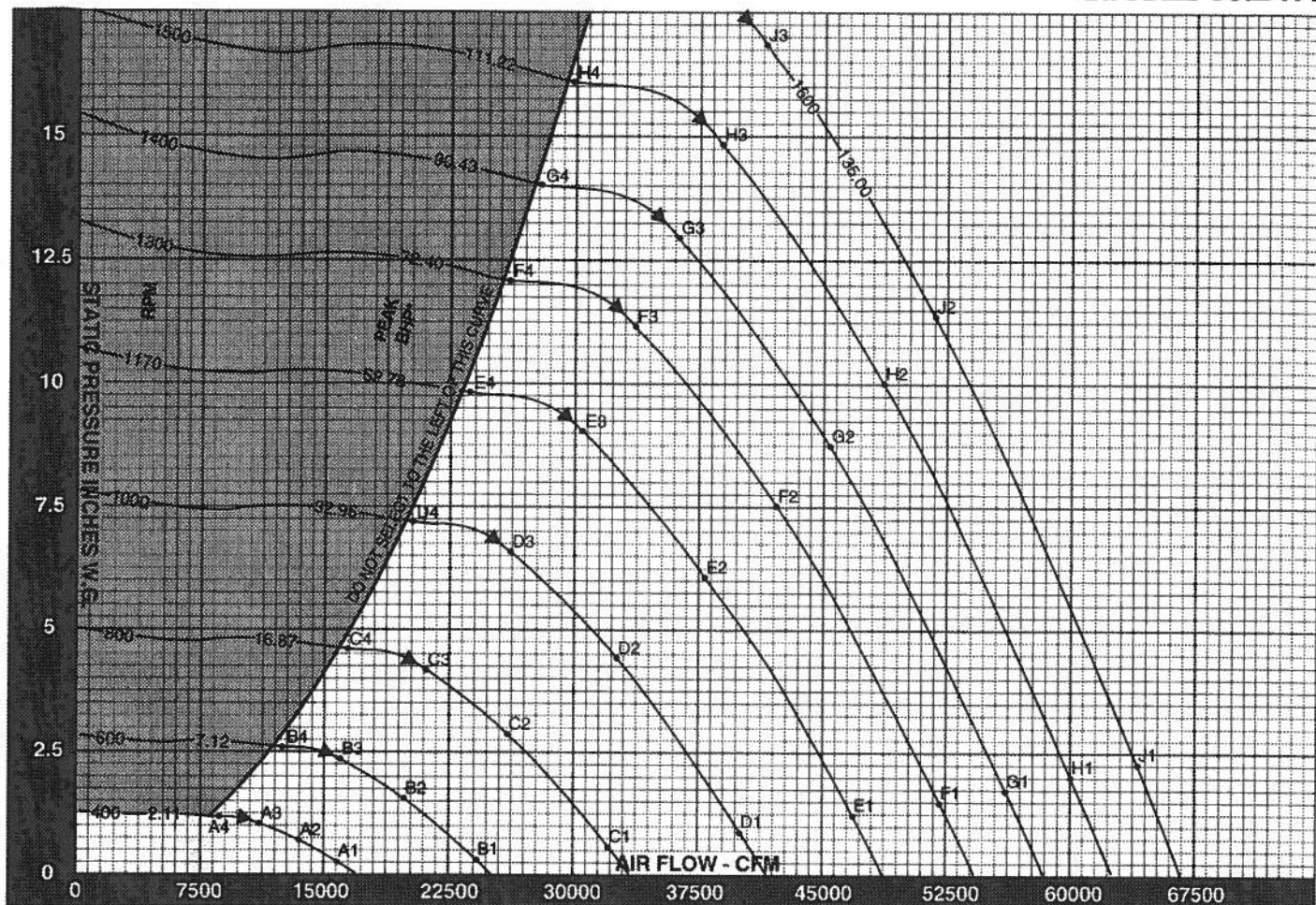
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
18542	1700	760 14.23	799 16.10	839 18.06	878 20.10	916 22.19				
19633	1800	773 15.10	806 16.95	843 18.93	880 20.99	918 23.13	954 25.33	988 27.58		
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	892 23.02	925 25.20	958 27.45	993 29.78	1028 32.17	1058 34.63
22905	2100	820 18.13	849 20.12	877 22.15	904 24.21	933 26.36	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	973 29.91	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	986 31.37	1011 33.67	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	1049 37.65	1075 40.18
27268	2500	891 22.93	917 25.18	941 27.47	967 29.79	992 32.14	1017 34.53	1040 36.95	1063 39.40	1086 41.87
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 35.81	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 52.83	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	1176 51.03	1196 54.08	1216 57.16	1235 60.27	1254 63.42	1273 66.60

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
27268	2500	1137 47.16	1189 52.71	1244 58.54	1297 64.56	1348 70.73				
28359	2600	1146 48.94	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	1540 104.23
30541	2800	1174 53.11	1215 58.63	1259 64.47	1307 70.65	1354 77.00	1403 83.58	1450 90.34	1496 97.24	1542 106.86
31631	2900	1190 55.32	1229 60.97	1269 66.71	1314 72.90	1359 79.32	1405 85.92	1453 92.73	1498 99.72	
32722	3000	1208 57.60	1245 63.38	1283 69.27	1323 75.40	1366 81.75	1410 88.40	1465 95.25	1500 102.29	1544 109.50
33813	3100	1222 59.97	1261 66.87	1299 71.88	1336 77.98	1374 84.31	1417 91.01	1459 97.89	1502 104.97	1547 112.25
34904	3200	1238 62.41	1277 59.44	1314 74.58	1350 80.92	1388 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	1436 96.70	1473 103.58	1513 110.78	1553 118.11
37085	3400	1271 67.56	1309 73.85	1346 80.23	1382 86.71	1416 93.30	1450 99.97	1481 106.70	1521 113.84	1560 121.27
38176	3500	1280 70.25	1325 76.68	1362 83.19	1398 89.80	1432 96.50	1465 103.30	1498 110.18	1531 117.12	1567 124.52
39267	3600	1298 73.04	1343 79.60	1378 86.25	1414 92.98	1448 99.81	1481 106.73	1513 113.74	1545 120.83	1577 127.99
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	1369 85.71	1413 92.62	1446 99.63	1480 106.71	1513 113.88	1545 121.14	1576 128.48	1606 136.91
42539	3900	1365 81.89	1399 88.92	1432 95.95	1463 103.10	1496 110.31	1529 117.00	1561 124.00	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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	9.03	E3	106	108	102	94	90	88	83	78
	0.71	A2	82	73	71	70	63	58	53	48		10.25	E4	108	108	101	93	90	87	82	77
	1.06	A3	80	72	67	67	61	57	51	46		1.51	F1	106	112	110	103	104	101	93	86
	1.20	A4	78	72	66	66	60	56	50	45		7.53	F2	107	112	107	98	96	93	87	82
600	0.32	B1	93	91	87	88	83	75	69	64		11.16	F3	108	111	105	97	93	91	86	81
	1.60	B2	92	88	81	79	76	70	64	59		12.86	F4	109	111	104	97	92	90	85	80
	2.37	B3	91	87	79	76	73	69	63	58		1.75	G1	108	113	113	105	106	103	95	89
	2.70	B4	91	86	79	75	72	67	62	57		8.74	G2	109	113	110	100	98	96	89	84
800	0.57	C1	98	103	92	94	93	85	77	72		12.93	G3	109	113	108	99	94	93	88	83
	2.85	C2	99	100	89	86	85	78	73	68		14.68	G4	111	114	107	99	94	92	87	82
	4.22	C3	99	97	88	83	82	77	72	67		1.03	H1	109	114	116	106	108	106	98	91
	4.79	C4	101	96	88	82	81	75	71	65		10.03	H2	110	115	113	102	99	96	92	86
1000	0.89	D1	102	107	100	98	98	92	85	79		14.84	H3	111	115	111	101	96	95	90	85
	4.46	D2	103	106	97	92	90	85	79	74		16.85	H4	112	116	109	101	95	94	89	84
	6.60	D3	104	104	96	89	87	83	78	73		2.28	J1	110	115	119	107	109	108	100	92
	7.49	D4	105	103	96	88	86	82	77	72		11.41	J2	111	116	116	104	101	100	93	88
1170	1.22	E1	104	110	106	101	102	97	90	83		16.89	J3	112	117	113	103	97	97	92	87
	6.10	E2	106	109	103	96	94	90	84	79											

BCA-490

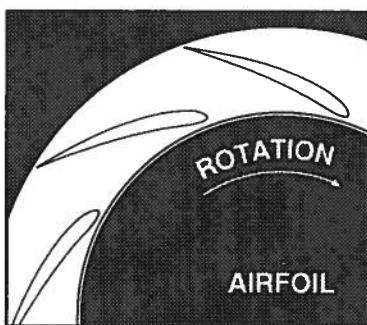
SINGLE WIDTH

WHEEL DIAMETER: 49.00"
WHEEL CIRCUMFERENCE: 12.83'
OUTLET AREA: 13.240 SQ. FT.
OUTLET SIZE: 38 $\frac{1}{8}$ " x 49 $\frac{1}{16}$ "
INLET DIAMETER: 51 $\frac{1}{2}$ " O.D.

American
Fan Company

	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)*



AIRFOIL

CFM	OV	0.25" SP RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
9257	700	215	0.52	257	0.90	297	1.34	340	1.84	
10580	800	234	0.65	272	1.07	307	1.53	342	2.04	
11902	900	254	0.81	289	1.26	321	1.76	351	2.29	
13225	1000	274	1.00	307	1.48	336	2.02	365	2.59	420
14547	1100	295	1.22	325	1.74	353	2.31	380	2.92	429
15870	1200	317	1.47	344	2.04	371	2.64	396	3.28	443
17192	1300	338	1.74	364	2.38	389	3.00	413	3.68	458
18515	1400	361	2.06	385	2.76	408	3.42	431	4.13	473
19837	1500	383	2.42	405	3.20	428	3.89	449	4.61	490
21160	1600	405	2.82	427	3.67	448	4.41	468	5.16	508
22482	1700	428	3.27	448	4.16	468	4.99	487	5.78	525
23805	1800	451	3.77	470	4.70	489	5.62	508	6.45	543
25127	1900	473	4.32	492	5.30	510	6.32	528	7.19	561
26450	2000	496	4.93	514	5.96	531	7.02	548	7.99	581
27772	2100	519	5.60	537	6.67	553	7.78	569	8.85	601

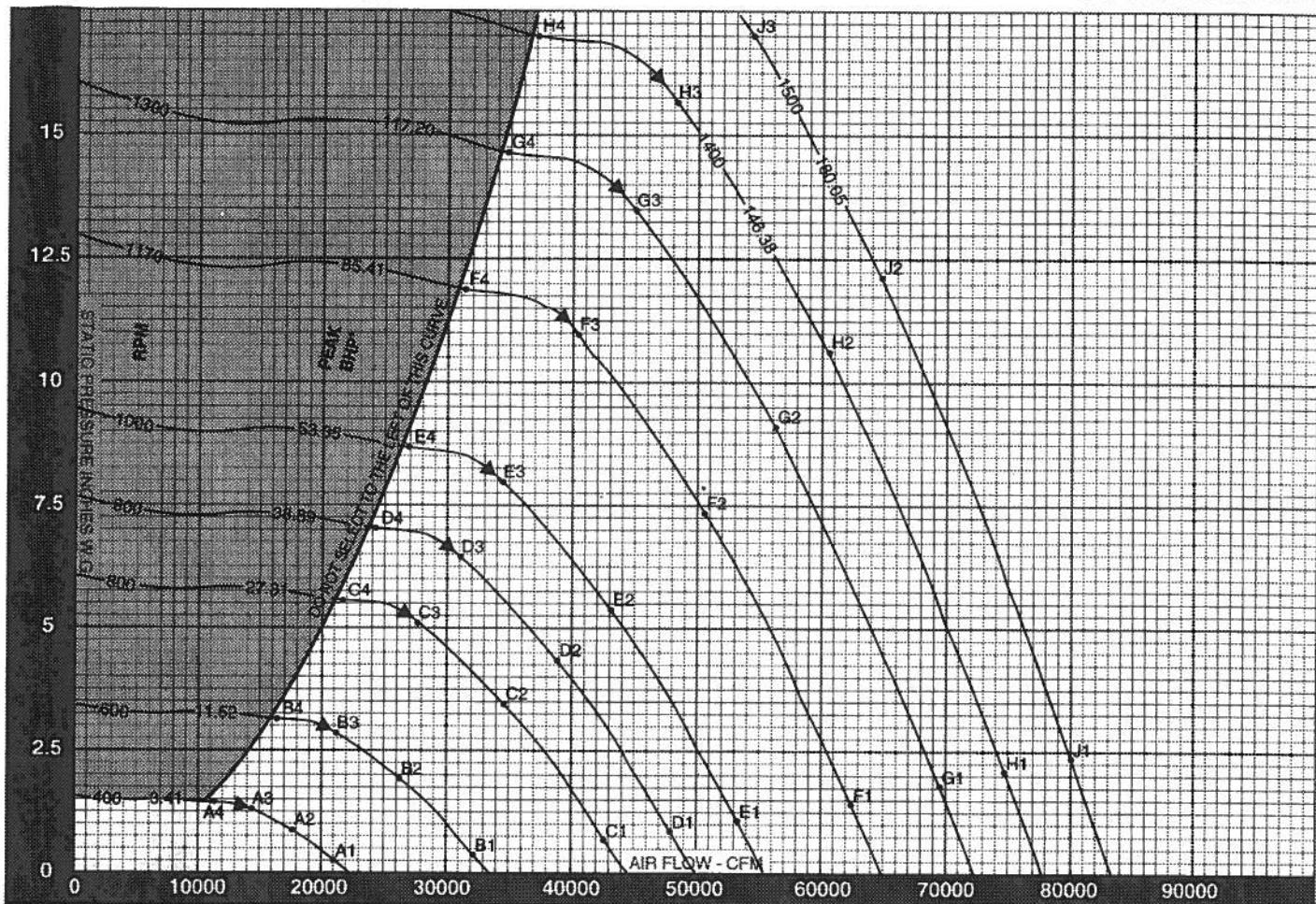
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
22482	1700	691	17.25	726	19.52	762	21.90	798	24.37	832
23805	1800	702	18.31	732	20.55	766	22.96	800	25.46	834
25127	1900	716	19.47	743	21.73	772	24.11	804	26.64	836
26450	2000	730	20.69	757	23.03	783	25.42	810	27.91	840
27772	2100	744	21.98	771	24.39	796	26.86	821	29.36	847
29095	2200	759	23.33	786	25.82	811	28.36	835	30.94	859
30417	2300	775	24.75	800	27.32	825	29.94	849	32.59	872
31740	2400	792	26.24	816	28.89	840	31.59	864	34.32	887
33062	2500	809	27.81	832	30.53	855	33.31	878	36.12	901
34385	2600	827	29.45	850	32.26	872	35.11	893	38.01	916
35707	2700	844	31.19	867	34.06	889	36.99	909	39.96	931
37030	2800	862	33.01	884	35.96	906	38.96	926	42.01	947
38352	2900	880	34.91	902	37.94	923	41.02	944	44.14	963
39675	3000	898	36.91	920	40.02	941	43.17	961	46.37	981
40997	3100	916	39.01	937	42.19	958	45.42	978	48.69	998
42320	3200	935	41.31	955	44.46	976	47.77	996	51.12	1015
43642	3300	955	43.71	974	46.85	994	50.22	1014	53.65	1033
44965	3400	975	46.23	993	49.44	1012	52.78	1031	56.28	1050
46287	3500	995	48.86	1013	52.15	1031	55.48	1049	59.02	1068
47610	3600	1015	61.62	1033	54.98	1050	58.39	1067	61.37	1086

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
33062	2500	1032	57.18	1080	63.91	1130	70.98	1178	78.27	1224
34385	2600	1040	59.34	1086	66.16	1132	73.22	1180	80.60	1226
35707	2700	1052	61.80	1093	68.50	1137	75.66	1182	83.04	1228
37030	2800	1066	64.39	1109	71.09	1144	78.17	1187	85.67	1230
38352	2900	1080	67.07	1116	73.93	1153	80.89	1193	88.39	1234
39675	3000	1095	69.84	1131	76.85	1165	83.98	1201	91.30	1240
40997	3100	1109	72.71	1145	79.87	1179	87.16	1213	94.63	1248
42320	3200	1124	75.67	1160	82.98	1194	90.42	1226	97.09	1259
43642	3300	1139	78.74	1174	86.21	1208	93.80	1241	101.61	1272
44965	3400	1154	81.91	1189	89.54	1222	97.28	1255	105.14	1286
46287	3500	1171	85.18	1204	92.97	1237	100.87	1269	108.88	1301
47610	3600	1188	88.56	1219	96.51	1262	104.57	1284	112.74	1315
48932	3700	1205	92.05	1236	100.15	1267	108.39	1299	116.71	1330
50255	3800	1223	95.67	1263	103.92	1283	112.30	1313	120.30	1344
51577	3900	1240	99.41	1271	107.81	1300	116.34	1328	125.00	1359

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		11.70	1.48	F1	108	113	109	104	105	109	92	86
	1.45	A4	81	75	69	69	63	59	53	48		7.40	F2	109	112	108	99	97	93	87	82	
600	0.39	B1	96	94	90	91	86	78	72	67		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	
	2.48	B3	96	90	82	79	76	71	66	61		1300	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		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		15.88	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		1500	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		17.00	J3	114	118	114	104	100	99	93	88	
	5.40	E2	106	109	100	95	93	88	82	77												

BCA-542

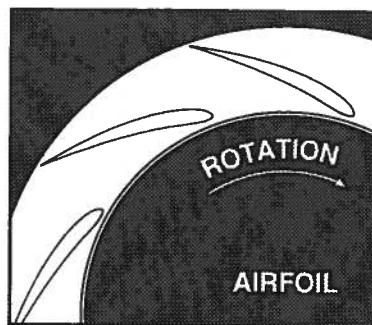
SINGLE WIDTH

WHEEL DIAMETER: 54.25"
WHEEL CIRCUMFERENCE: 14.20'
OUTLET AREA: 16.255 SQ. FT.
OUTLET SIZE: 43 $\frac{1}{16}$ " x 54 $\frac{3}{8}$ "
INLET DIAMETER: 56 $\frac{1}{4}$ " 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	1323
251°F TO 400°F*	751	979	1261
401°F TO 700°F*	648	945	1268
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
		BHP								
11347	700	195	0.63	232	1.11	268	1.64	307	2.26	
12968	800	211	0.79	246	1.31	277	1.88	309	2.50	
14589	900	229	0.99	261	1.55	290	2.16	317	2.81	
16210	1000	248	1.22	277	1.82	304	2.48	330	3.17	
17831	1100	266	1.50	293	2.13	319	2.83	343	3.57	
19453	1200	286	1.80	311	2.50	335	3.23	358	4.02	
21074	1300	306	2.14	329	2.92	351	3.68	373	4.51	
22695	1400	326	2.52	348	3.39	368	4.19	389	5.06	
24316	1500	346	2.96	366	3.92	386	4.77	405	5.66	
25937	1600	366	3.45	385	4.49	405	5.41	422	6.33	
27558	1700	387	4.00	405	5.10	423	6.12	440	7.08	
29179	1800	407	4.62	425	5.77	442	6.89	458	7.91	
30800	1900	428	5.29	445	6.50	460	7.75	477	8.81	
32421	2000	448	6.04	465	7.30	480	8.61	495	9.79	
34042	2100	469	6.86	485	8.18	499	9.54	514	10.85	

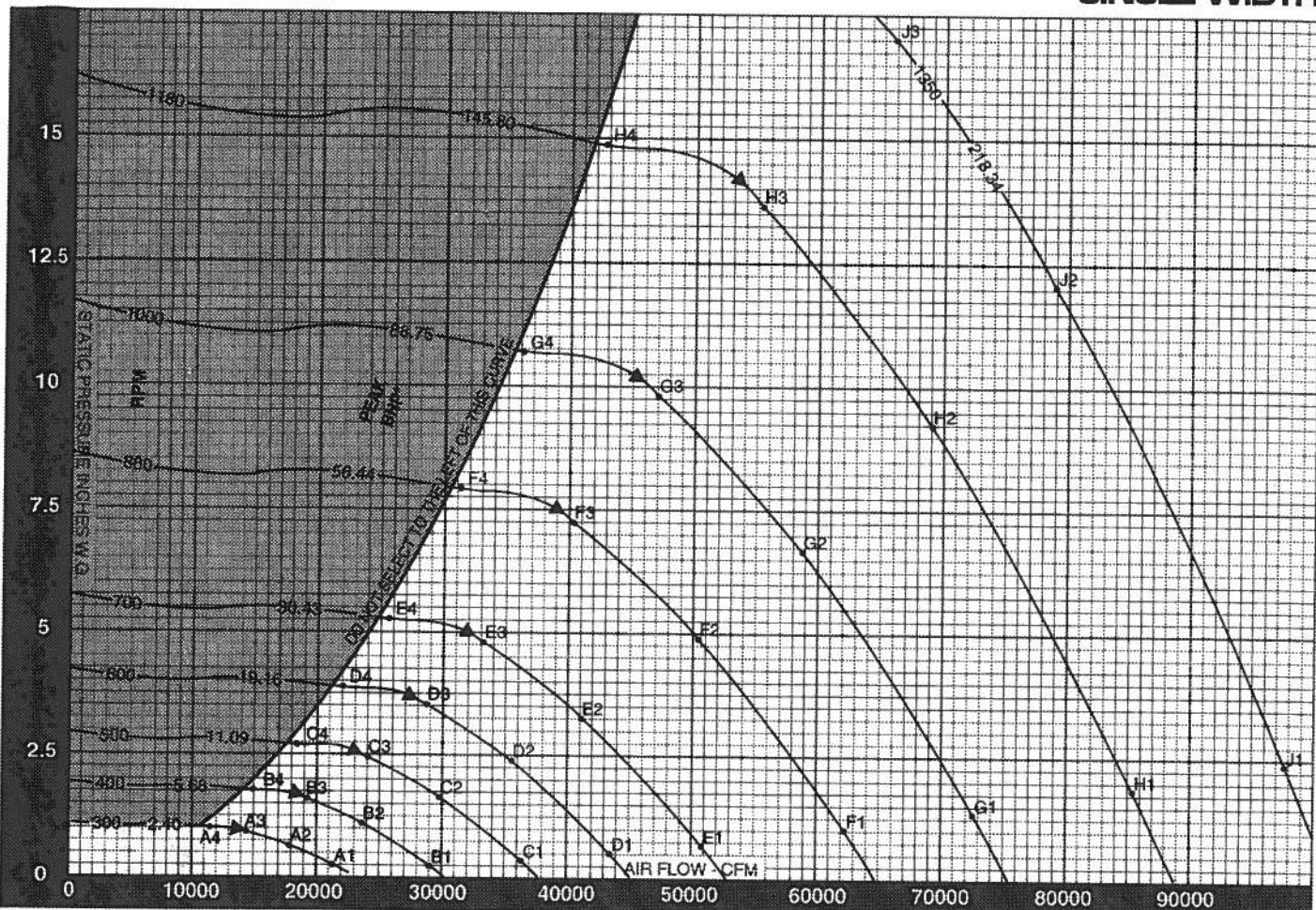
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
27558	1700	624	21.15	656	23.93	688	26.84	720	29.87	751	32.98
29179	1800	634	22.45	661	25.19	692	28.14	722	31.20	753	34.37
30800	1900	646	23.87	671	26.64	697	29.55	726	32.65	755	35.85
32421	2000	659	25.36	683	28.23	707	31.15	732	34.21	759	37.46
34042	2100	672	26.94	696	29.90	719	32.92	742	35.99	765	39.18
35663	2200	686	28.60	710	31.65	732	34.76	754	37.93	776	41.14
37285	2300	700	30.34	723	33.49	745	36.69	767	39.95	788	43.26
38906	2400	716	32.16	737	35.42	759	38.72	780	42.07	801	45.47
40527	2500	731	34.08	752	37.43	772	40.83	793	44.28	814	47.77
42148	2600	747	36.10	767	39.54	787	43.04	807	46.59	827	50.18
43769	2700	762	38.23	783	41.75	803	45.34	821	48.99	841	52.68
45390	2800	778	40.46	799	44.08	818	47.76	837	51.49	856	55.28
47011	2900	795	42.80	815	46.51	834	50.28	852	54.11	870	57.99
48632	3000	811	45.25	831	49.06	850	52.92	868	56.04	886	60.81
50253	3100	827	47.82	847	51.72	865	55.68	884	59.69	901	63.75
51874	3200	845	50.63	863	54.50	882	58.55	900	62.66	917	66.82
53495	3300	863	53.68	879	57.43	898	61.56	916	65.76	933	70.01
55116	3400	881	56.67	897	60.61	914	64.69	932	68.98	949	73.33
56738	3500	899	59.89	915	63.93	931	68.01	948	72.34	965	76.78
58359	3600	917	63.27	933	67.40	949	71.57	964	75.84	981	81.27

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
40527	2500	932	70.08	975	78.34	1021	87.00	1064	95.95	1106	105.13
42148	2600	940	72.74	981	81.10	1022	89.75	1068	98.80	1107	108.12
43769	2700	951	75.76	987	83.96	1027	92.74	1087	101.79	1109	111.20
45390	2800	963	78.93	997	87.14	1033	95.82	1072	105.01	1111	114.44
47011	2900	976	82.21	1008	90.62	1041	99.15	1077	108.35	1115	117.89
48632	3000	989	85.61	1021	94.20	1053	102.94	1085	111.91	1120	121.50
50253	3100	1002	89.12	1034	97.90	1065	106.83	1096	115.90	1127	125.30
51874	3200	1015	92.76	1047	101.72	1078	110.84	1108	120.11	1137	129.49
53495	3300	1029	96.52	1060	105.67	1091	114.97	1121	124.42	1149	134.02
55116	3400	1043	100.40	1074	109.75	1104	119.24	1133	128.87	1162	138.60
56738	3500	1058	104.41	1087	113.96	1117	123.64	1147	133.46	1175	143.43
58359	3600	1073	108.55	1101	118.30	1131	128.18	1160	138.19	1188	148.34
59980	3700	1089	112.84	1117	122.76	1144	132.86	1173	143.05	1201	153.39
61601	3800	1104	117.27	1132	127.38	1159	137.66	1186	148.07	1214	158.59
63222	3900	1120	121.85	1146	132.15	1174	142.60	1200	153.22	1227	163.94

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.

CONSTANT SPEED PERFORMANCE CURVES

BCA-542
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	79	76	77	72	65	59	54	49	700	4.80	E3	102	99	90	86	84	79	74	69
	0.60	A2	78	72	70	67	61	55	50	45		5.45	E4	103	98	90	85	83	78	73	68
	0.88	A3	76	70	67	64	59	54	49	44		8.60	F1	106	111	100	102	101	93	86	80
	1.00	A4	75	70	66	63	58	53	48	43		4.80	F2	107	108	97	94	93	87	81	76
400	0.25	B1	92	82	85	84	76	68	63	58		7.25	F3	108	106	96	90	89	85	80	75
	1.06	B2	89	79	77	76	69	64	59	54		8.23	F4	109	104	97	90	89	84	79	74
	1.37	B3	86	78	73	73	67	63	58	52		1000	G1	109	114	106	104	104	98	91	85
	1.78	B4	85	79	72	72	66	62	56	51		6.62	G2	110	112	103	98	96	91	85	80
500	0.33	C1	97	91	89	89	83	75	70	65		9.80	G3	110	110	102	95	93	89	84	79
	1.66	C2	95	88	82	81	76	70	65	60		11.13	G4	112	109	102	94	92	88	83	78
	2.45	C3	93	86	80	78	74	69	64	59		1180	H1	112	117	113	108	108	104	96	90
	2.78	C4	92	86	79	77	73	68	63	58		9.22	H2	113	116	110	102	100	96	90	85
600	0.49	D1	100	98	93	94	89	81	75	70		13.85	H3	113	115	108	100	97	94	89	84
	2.38	D2	99	95	87	85	82	76	71	65		15.50	H4	115	115	107	100	96	93	88	83
	3.53	D3	98	93	85	82	79	74	69	64		1350	J1	114	119	118	110	111	108	100	94
	4.01	D4	98	92	85	81	78	73	68	63		12.07	J2	115	119	115	105	103	101	94	89
700	0.65	E1	102	104	95	97	94	86	80	74		17.00	J3	116	119	113	104	100	98	93	88
	3.25	E2	103	101	91	89	87	80	75	70		17.00	J4	116	119	113	104	100	98	93	88

BCA-600

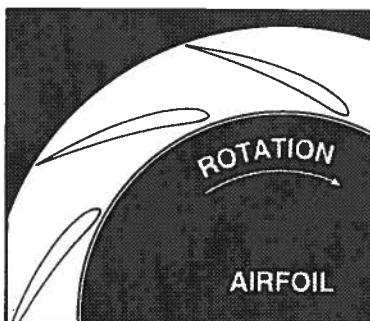
SINGLE WIDTH

WHEEL DIAMETER: 60.00"
WHEEL CIRCUMFERENCE: 15.71'
OUTLET AREA: 19.91 SQ. FT.
OUTLET SIZE: 47 $\frac{5}{8}$ " x 60 $\frac{3}{16}$ "
INLET DIAMETER: 63 $\frac{1}{4}$ " 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	1149
251°F TO 400°F*	678	885	1087
401°F TO 700°F*	585	769	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	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
BHP		BHP								
13880	700	176	0.77	210	1.35	242	2.01	277	2.76	
15863	800	191	0.97	222	1.60	250	2.30	279	3.06	
17846	900	207	1.21	236	1.89	262	2.64	286	3.43	
19829	1000	224	1.50	250	2.22	275	3.03	298	3.88	
21812	1100	241	1.83	265	2.60	289	3.46	310	4.37	
23795	1200	258	2.20	281	3.05	303	3.95	323	4.92	
25778	1300	276	2.61	298	3.57	318	4.50	338	5.52	
27761	1400	294	3.09	314	4.15	333	5.12	352	6.19	
29744	1500	313	3.62	331	4.80	349	5.83	367	6.92	
31727	1600	331	4.23	348	5.50	366	6.62	382	7.74	
33709	1700	349	4.90	366	6.24	382	7.48	398	8.66	
35692	1800	368	5.65	384	7.05	399	8.43	414	9.67	
37675	1900	387	6.48	402	7.95	416	9.48	431	10.78	
39658	2000	405	7.39	420	8.93	434	10.53	448	11.97	
41641	2100	424	8.39	438	10.01	452	11.67	465	13.27	

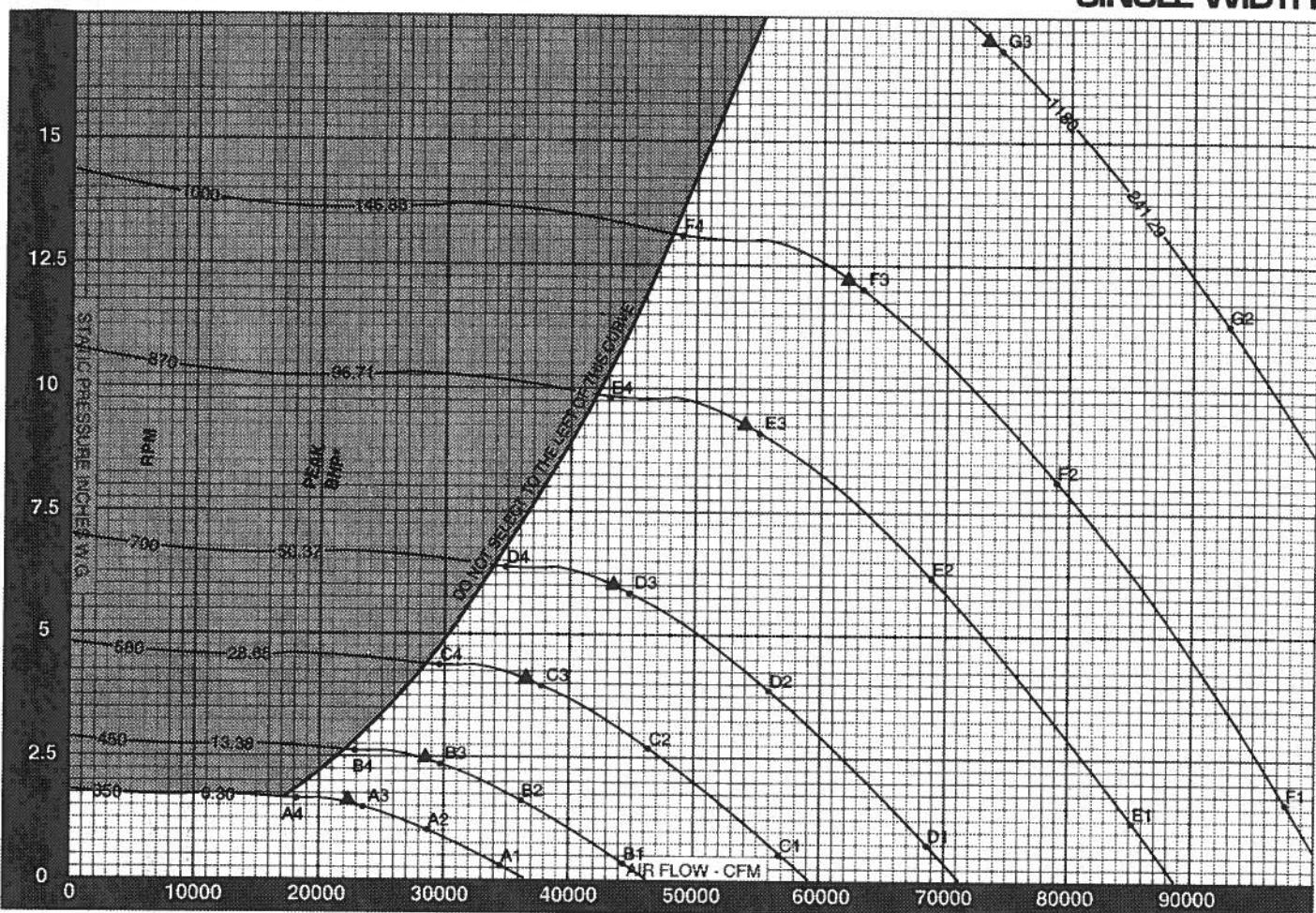
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
BHP		BHP									
33709	1700	564	25.87	593	29.27	622	32.83	651	36.53	679	40.35
35692	1800	573	27.46	598	30.82	625	34.42	653	38.17	681	42.04
37675	1900	584	29.20	607	32.59	631	36.14	656	39.94	682	43.85
39658	2000	596	31.03	618	34.53	639	38.11	662	41.84	686	45.82
41641	2100	608	32.95	630	36.57	650	40.27	671	44.02	692	47.92
43624	2200	620	34.98	642	38.72	662	42.52	682	46.39	701	50.33
45607	2300	633	37.11	654	40.97	674	44.88	694	48.87	713	52.92
47590	2400	647	39.34	666	43.32	686	47.36	705	51.46	724	55.62
49573	2500	661	41.69	680	45.78	698	49.95	717	54.16	736	58.44
51556	2600	675	44.16	694	48.37	712	52.64	729	56.99	748	61.38
53539	2700	689	46.76	708	51.08	726	55.46	743	59.92	760	64.44
55522	2800	704	49.49	722	53.92	740	58.41	757	62.98	773	67.62
57505	2900	718	52.35	736	58.89	754	61.60	771	66.18	787	70.93
59488	3000	733	55.35	751	60.01	760	64.73	785	69.53	801	74.38
61471	3100	748	58.49	766	63.26	783	68.10	799	73.01	815	77.98
63454	3200	764	61.93	780	66.67	797	71.63	813	76.65	829	81.73
65437	3300	780	65.54	795	70.25	812	75.30	828	80.44	843	85.63
67419	3400	796	69.31	811	74.14	826	79.13	842	84.38	858	89.70
69402	3500	813	73.26	827	78.20	842	83.19	857	88.49	872	93.92
71385	3600	829	77.39	844	82.44	858	87.54	872	92.77	887	98.31

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	15.00" SP RPM	17.00" SP RPM	
BHP		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
49573	2500	843	85.73	882	95.83	923	106.42	962	117.36	1000	128.59
51556	2600	850	88.98	887	99.20	924	109.78	964	120.85	1001	132.26
53539	2700	859	92.67	893	102.71	929	113.44	965	124.51	1003	136.03
55522	2800	871	96.55	901	106.58	934	117.21	969	128.45	1004	139.99
57505	2900	882	100.56	912	110.85	941	121.28	974	132.63	1006	144.20
59488	3000	894	104.71	923	115.23	952	125.92	981	136.89	1013	148.62
61471	3100	906	109.01	935	119.73	963	130.88	991	141.77	1019	153.27
63454	3200	918	113.46	947	124.43	975	135.58	1002	146.82	1028	158.39
65437	3300	930	118.07	959	129.28	987	140.64	1013	152.20	1039	163.94
67419	3400	943	122.81	971	134.25	998	145.85	1025	157.64	1049	169.61
69402	3500	957	127.71	983	139.40	1010	151.24	1037	163.25	1062	175.44
71385	3600	970	132.78	996	144.70	1022	156.79	1049	169.03	1074	181.45
73368	3700	984	138.02	1010	159.17	1034	162.51	1061	174.99	1088	187.63
75351	3800	999	143.45	1024	155.81	1048	168.38	1073	181.12	1098	193.99
77334	3900	1013	149.05	1038	161.64	1062	174.44	1085	187.42	1110	200.53

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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

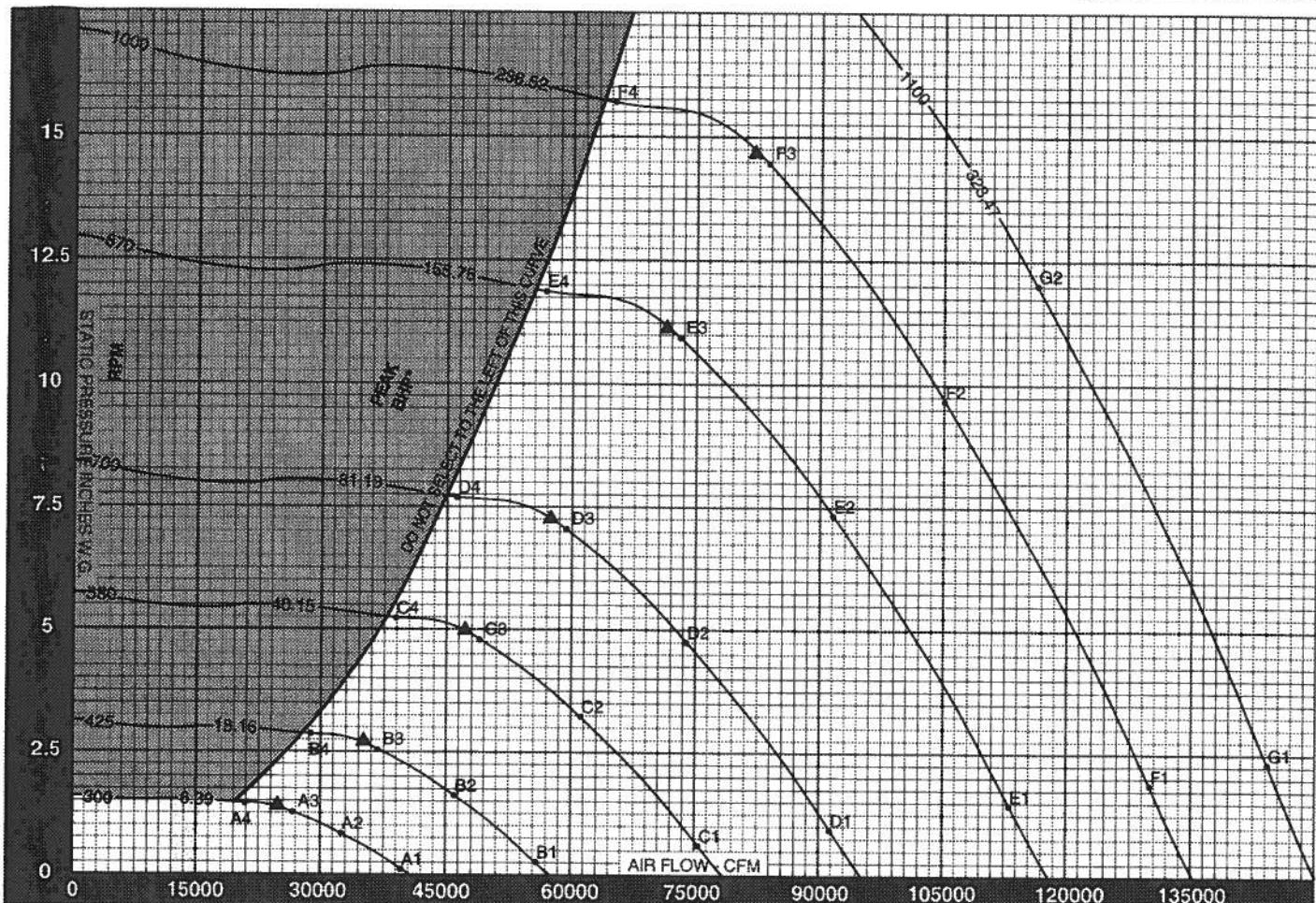
SOUND POWER LEVELS $\times 10^{-12}$ WATT

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								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		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	870	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		1.62	F1	112	117	109	108	107	101	94	88
	2.64	B4	93	86	79	78	73	68	63	65		8.10	F2	113	115	106	101	99	94	89	83
580	0.55	C1	103	100	95	96	91	83	77	76	1100	12.00	F3	114	113	105	98	96	92	87	82
	2.73	C2	102	97	89	88	84	78	73	72		13.04	F4	115	113	105	98	95	91	87	81
	4.03	C3	101	95	87	84	81	76	71	70		2.26	G1	115	120	116	111	111	107	99	93
	4.39	C4	101	95	87	84	81	76	71	70		11.28	G2	116	119	113	105	103	99	93	88
700	0.79	D1	106	107	99	100	97	89	83	79	1450	16.70	G3	117	118	111	103	100	97	92	87
	3.97	D2	106	104	94	92	90	84	78	75											

CONSTANT SPEED PERFORMANCE CURVES

BCA-660
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.015}{\text{BHP}}$$

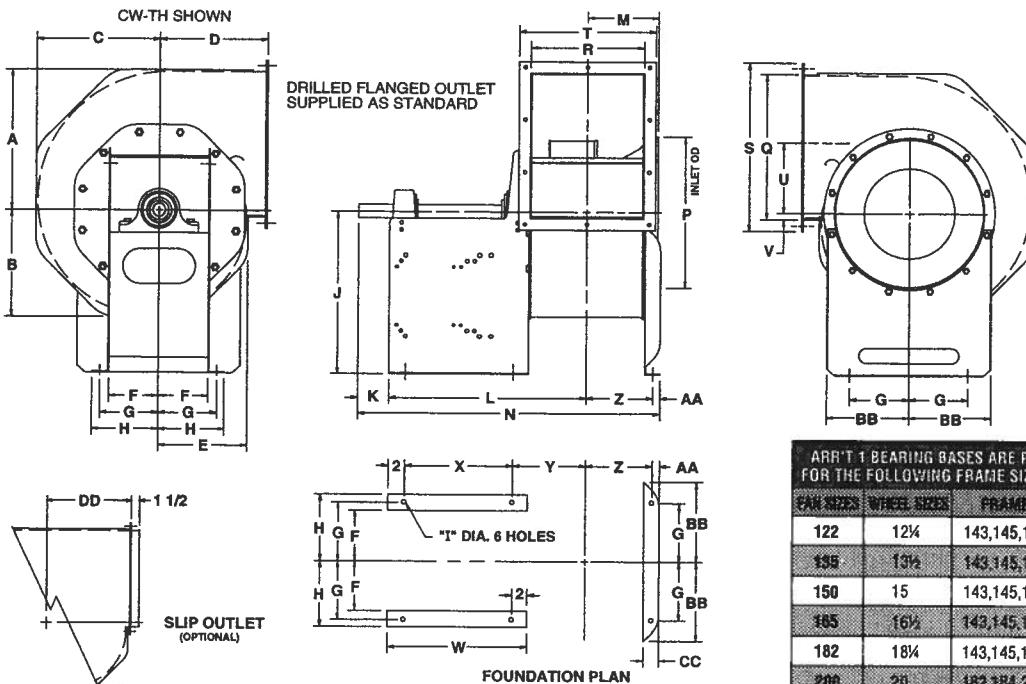
$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	96	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	0.98	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		
FRAME SIZE	WEIGHT, LB/HR	FRAME SIZES
122	12½	143,145,182,184
135	13½	143,145,182,184
150	15	143,145,182,184
165	16½	143,145,182,184,212,215
182	18½	143,145,182,184,213,215
200	20	182,184,213,215,264

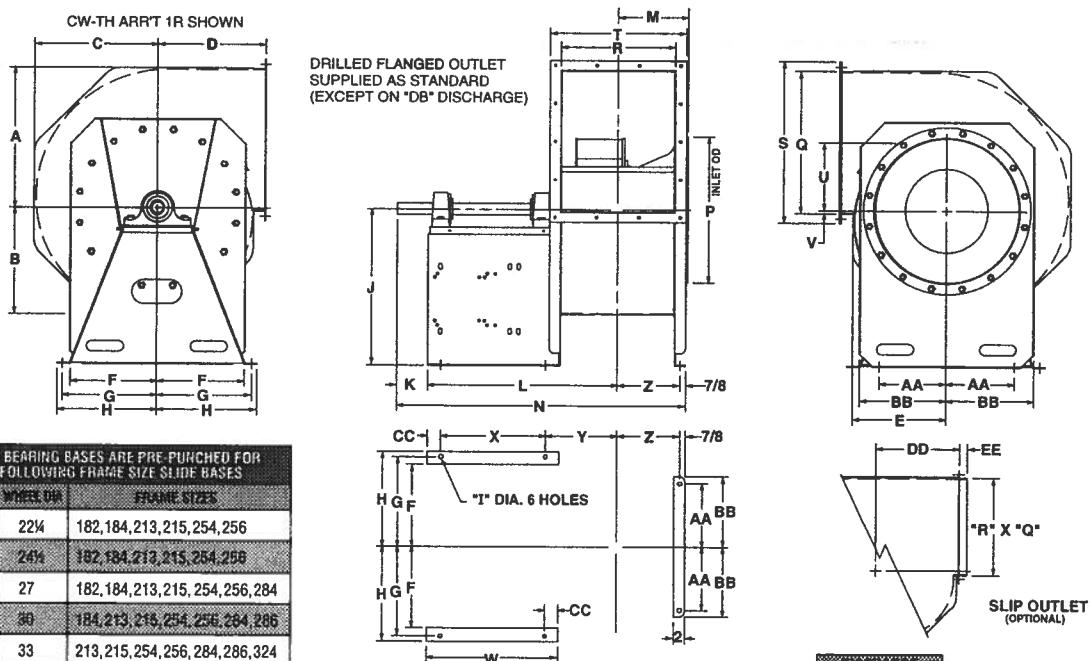
FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	SHFT KEYWAY	FAN WT. NO MOTOR	SHFT KEYWAY	FAN WT. NO MOTOR			
122	12½	9%	10½	10	7½	5½	6%	7½	7½	15	3½	18½	6%	28½	13%	12½	10	15½	13	5½	¾	13	9	7½	6½	¾	9%	1½	8½	1½	14½	104	17½	¾ x ¾	127	
135	13½	10%	11½	11	8%	5½	8%	7½	7½	18	3½	18½	7½	29½	14%	13½	10½	16½	13½	6%	7½	13	9	7½	6½	¾	9%	1½	9½	1½	14½	116	17½	¾ x ¾	142	
150	15½	11%	13½	12	9%	5½	6%	7½	7½	18	3½	19½	7½	30½	16%	15½	12½	18½	15½	7½	¾	13	9	8½	7½	¾	9%	1½	10½	1½	14½	134	17½	¾ x ¾	162	
165	16½	12%	14½	13	10%	6½	7½	8½	8½	19	4	24%	8½	37%	17½	16%	13½	19%	16%	7½	½	18	14	8½	6½	½	1	11½	2½	11½	1½	209	17½	¾ x ¾	253	
182	18½	13%	16½	14	11%	6½	7½	8½	8½	21	4	25½	9	39½	19½	18½	14½	21½	17½	8½	½	18	14	9½	8½	½	1	11½	2½	12½	1½	239	17½	¾ x ¾	285	
200	20	15%	17%	15	12%	6½	7½	8½	8½	22	4	29½	9½	43%	21½	20½	16½	23½	19½	9½	¾	21	17	10%	9½	1	1	12½	2½	13½	1½	¾ x ¾	275	17½	½ x ¼	339

*FAN WEIGHT IS APPROXIMATE

BCA/BCS-222-330
ARRANGEMENT 1
ROTATABLE HOUSING

CLASS 1A	CLASS 3
222	1½
245	2½
270	1½
300	1½
330	2½

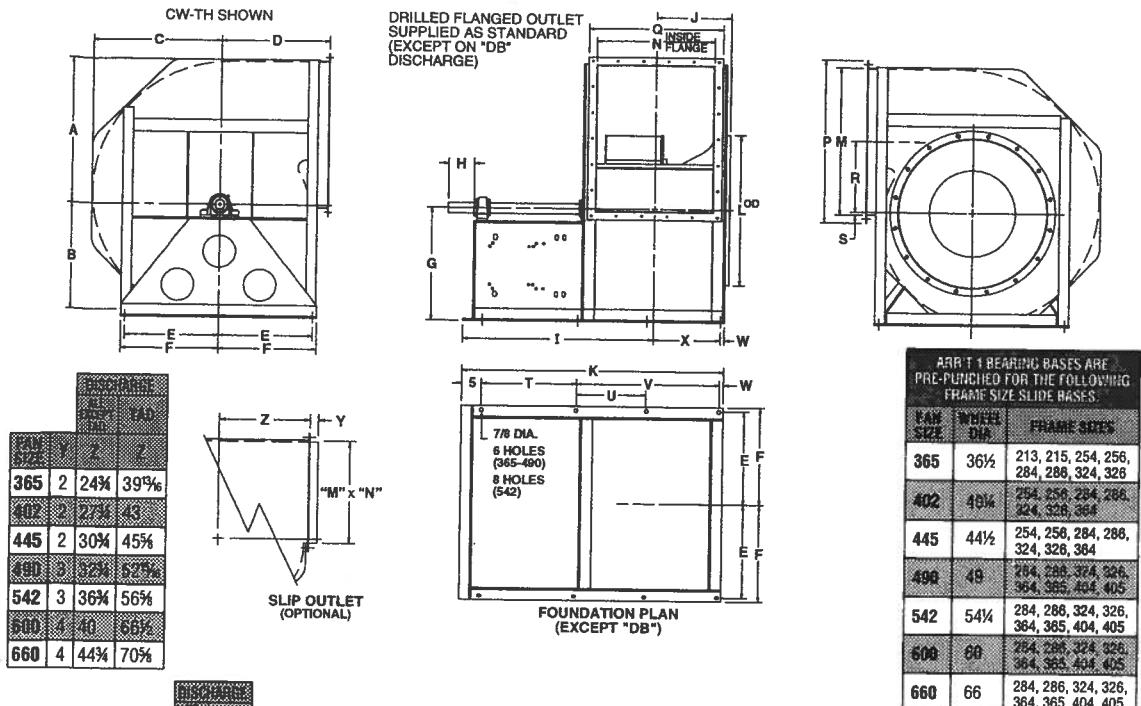
ARR'T 1 BEARING BASES ARE PRE-PUNCHED FOR THE FOLLOWING FRAME SIZE SLIDE BASES									
FRAME SIZE	WEIGHT, LB/HR	FRAME SIZES							
222	22½	182,184,213,215,254,256							
245	24½	182,184,213,215,254,256							
270	27	182,184,213,215,254,256,284							
300	30	184,213,215,254,256,284,286							
330	33	213,215,254,256,284,286,324							



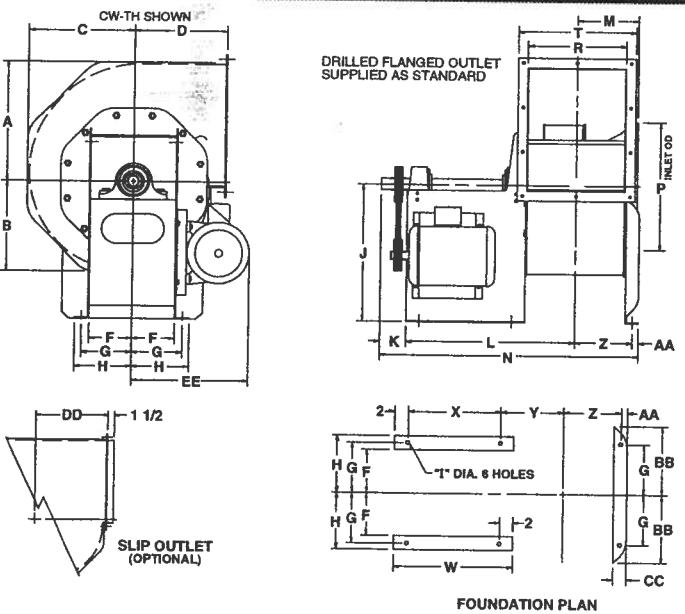
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	DD	DD	DD	DD				
222	22½	16½	19½	16	20½	23½	14½	13½	15	16	1½	25	5	32½	10½	48½	23½	22½	17½	25%	20½	½	23	19	11½	10½	10	13½	2	14½	18½	22½	1½	393	448		
245	24½	18½	21½	18	22½	26½	15½	15½	17	18	1½	27	5	32½	12½	49½	20½	24½	19½	25½	23½	11½	½	23	19	11½	10½	12	15½	2	15½	20½	24½	2	468	546	
270	26½	20%	23%	19½	24	28½	17½	16½	18	19	1½	30	6	36½	13½	54½	28½	27½	21½	31%	25½	13½	½	25	20	13½	11½	13	16½	2½	17½	22½	26½	1½	616	702	
300	29½	22½	26½	22	26	30½	18½	16	19½	20½	1½	33	6	37½	14½	57½	31½	30½	24½	34½	28½	14½	½	25	20	14½	13½	14	14½	18½	22½	14½	24	28½	2	763	870
330	32½	24½	28½	24	28½	33½	20½	19½	21	22	½	36	6½	40½	15½	62½	34½	33½	26½	37½	30½	15½	½	27	22	15½	14½	16	19½	2½	21½	26½	31½	2	913	1027	

*FAN WEIGHT IS APPROXIMATE

**BCA/BCS-365-660
ARRANGEMENT 1
FIXED HOUSING**



Frame 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	Approx. Motor & Base Weight													
365	36%	27%	31%	27	42%	23%	24%	28	30	33	35	40	27	33	6%	47%	16%	65	37%	36%	29%	40%	33%	17%	1%	23%	—	35%	1	16%	2%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	326T			
402	40	30%	35%	40	45%	25%	26%	31	33	36	38	43	30	35	7	40%	18%	63%	41%	40%	32%	34%	36%	19%	24%	—	38%	1	18%	1	10%	27%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	364T		
445	44%	33%	38%	33	47%	27	28%	34	37	40	42	47	33	37	7	51%	19%	72%	45%	44%	35%	48%	39%	21%	2%	24%	—	41%	1	19%	2%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	364T			
490	48%	36%	42%	36	56%	31%	32%	37	40	43	46	54	36	44	8	56%	22%	76%	51%	49%	39%	55%	45%	23%	2%	27%	—	45%	1	21%	2	12%	25%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	405T	
542	53%	40%	47%	40	59%	33%	35	41	45	48	51	59	40	47	8	58%	24%	83%	56%	54%	43%	60%	49%	26%	1%	27%	24%	49%	1	23%	3%	3%	3%	31% x 16%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	405T
600	59%	44%	52%	44	70%	37%	39	46	49	53	57	65	44	56	8	62%	26%	89%	63%	60%	47%	68%	55%	29%	1%	27%	27%	65%	11	26%	3%	3%	3%	31% x 16%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	405T
660	65%	49%	57%	48%	74%	40%	42	50	54	58	62	71	49	59	8	65	30%	94%	69%	66%	52%	74%	60%	32%	1%	29%	29%	58%	14	28%	3%	3%	3%	31% x 16%	5% x 5%	21% x 16%	5% x 5%	21% x 16%	405T



Frame Size	BELT CENTER DISTANCE			
	115/142	122/149	135/172	200/254
122	12%	12%	13%	16%
135	13%	13%	14%	16%
150	15%	15%	15%	16%
165	16%	16%	16%	16%
182	18%	18%	18%	18%
200	20%	20%	20%	20%

Frame Size	CLASS 1 & 2				CLASS 3			
	SHAFT LENGTH	SHAFT DIAMETER	NUMBER OF TEETH	TEETH PER INCH	SHAFT LENGTH	SHAFT DIAMETER	NUMBER OF TEETH	TEETH PER INCH
143T	50	1/2	14	14	50	1/2	14	14
145T	58	1/2	16	16	58	1/2	16	16
182T	94	1/2	20	20	94	1/2	20	20
184T	110	1/2	22	22	110	1/2	22	22
213T	164	1/2	26	26	164	1/2	26	26
215T	186	1/2	28	28	186	1/2	28	28
254T	279	1/2	32	32	279	1/2	32	32

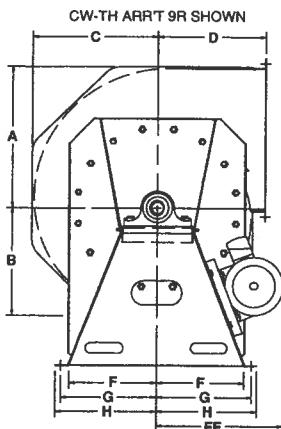
**BCA/BCS-122-200
ARRANGEMENT 9
ROTATABLE HOUSING**

Frame 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	AA	BB	CC	DD	CLASS 1 & 2		CLASS 3				
122	12%	9%	10%	10	7%	5%	6%	7%	7	15	31	18%	6%	28%	13%	12%	10	15%	13	5%	13	9	7%	6%	4%	9%	1%	8%	1%	1%	1/4 x 1/6	104	1%	5% x 5%	127	
135	13%	10%	11%	11	8%	5%	6%	7%	7	16	31	18%	7%	29%	14%	13%	10%	16%	13%	6%	13	9	7%	6%	4%	9%	1%	8%	1%	1%	1/4 x 1/6	116	1%	5% x 5%	142	
150	15%	11%	13%	12	9%	5%	6%	7%	7	18	31	19%	7%	30%	16%	15%	12%	18%	15%	7%	13	9	8%	7%	3%	9%	1%	10%	1%	1%	1/4 x 1/6	134	1%	5% x 5%	162	
165	16%	12%	14%	13	10%	6%	7%	8%	8	19	4	24%	8%	37%	17%	16%	13%	19%	16%	7%	13	9	8%	7%	3%	9%	1%	10%	1%	1%	1/4 x 1/6	134	1%	5% x 5%	162	
182	18%	13%	16%	14	11%	6%	7%	8%	8	21	4	25%	9	39%	19%	18%	14%	21%	17%	8%	18	14	9%	8%	1%	11%	2%	11%	1%	1%	1/4 x 1/6	209	11%	5% x 5%	253	
200	20%	15%	17%	15	12%	6%	7%	8%	8	22	4	29%	9	47%	43%	21%	20%	16%	23%	19%	9%	21	17	10%	9%	1%	12%	2%	13%	1%	1%	1/4 x 1/6	276	15%	5% x 5%	329

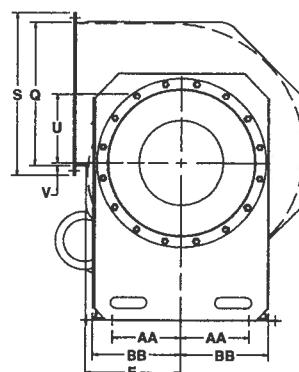
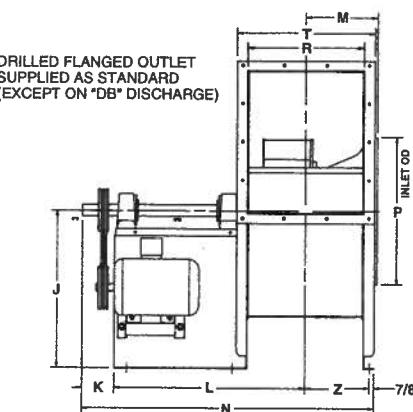
* FAN WEIGHT IS APPROXIMATE

BCA/BCS-222-330
ARRANGEMENT 9
ROTATABLE
HOUSING

DISCHARGE			
FAN SIZE	H.P.	T.A.D.	EFF.
222	1 1/2	36 x 3%	15%
240	1 1/2	55 x 3%	21%
270	1 1/2	36 x 3%	23%
300	1 1/2	55 x 3%	24%
330	2 1/2	55 x 3%	21 1/2%



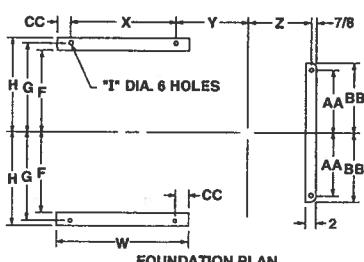
DRIVES NOT SHOWN IN THIS VIEW.



APPROX. MOTOR & SLIDE BASE WT.	
FRAME WEIGHT	SLIDE BASE WT.
182T	94
184T	110
213T	164
215T	186
254T	279
256T	310
284T	412
286T	463
324T	587

DISCHARGE DISTANCE											
FAN SIZE	200	224	240	270	300	330	200	224	240	270	300
222	20.0	20.0	21.3	22	21.3	24	—	—	—	—	—
240	—	—	21.3	22	23.4	24.2	—	—	—	—	—
270	27	23.0	22.6	23.6	24.2	25%	24.6	27.7%	—	—	—
300	30	24.6	24.6	24.9	24.9	25.6	24.9	23.2	—	—	—
330	33	—	—	27.8	25%	27.8	27.8	28.2	29.1	29.0	32%

*284-T ONLY



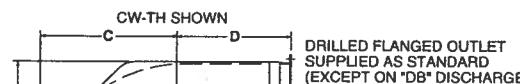
FOUNDATION PLAN

DISCHARGE		CLASS 1		CLASS 2		CLASS 3	
FAN SIZE	H.P.	T.A.D.	EFF.	FAN SIZE	H.P.	T.A.D.	EFF.
222	2 1/2	16%	19 1/2	16	20 1/2	23 1/4	14%
240	3 1/2	19 1/2	20	22	20 1/2	25 1/2	15%
270	26%	20%	23%	19 1/2	24	28 1/4	17 1/2%
300	23 1/2	22 1/2	25%	22	26	30 1/2	18 1/2%
330	32%	24%	28%	24	28 1/4	33 1/4	20%

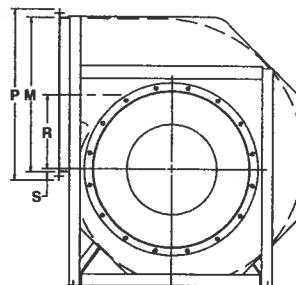
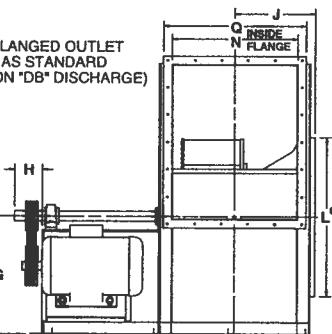
*FAN WEIGHT IS APPROXIMATE

BCA/BCS-365-660
ARRANGEMENT 9
FIXED HOUSING

DISCHARGE			
FAN SIZE	H.P.	T.A.D.	EFF.
365	1400	1645	
402	1710	1950	
445	1940	2235	
490	2520	2900	
542	2910	3410	
600	3700	4347	
660	4690	5400	



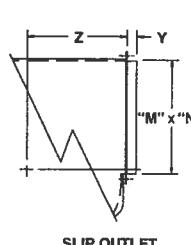
DRILLED FLANGED OUTLET
SUPPLIED AS STANDARD
(EXCEPT ON "DB" DISCHARGE)



APPROXIMATE MOTOR AND SLIDE BASE WT.

FRAME WEIGHT	SLIDE BASE WT.
213T	164
215T	186
254T	279
256T	310
284T	412
286T	463

FAN SIZE	H.P.	T.A.D.	EFF.
365	2 1/2	24%	39 1/2%
402	2	27%	43%
445	2	30%	45%
490	3	32%	52%
542	3	36%	56%
600	4	40%	66%
660	4	44%	70%



FOUNDATION PLAN
(EXCEPT "DB")

DISCHARGE		CLASS 1		CLASS 2		CLASS 3	
FAN SIZE	H.P.	T.A.D.	EFF.	FAN SIZE	H.P.	T.A.D.	EFF.
365	36%	27%	31%	27	42 1/2	23 1/4	24%
402	40	35%	30	45 1/2	26 1/4	31 1/4	36%
445	44 1/2	33%	38 1/2%	33	47%	37	40%
490	49 1/2	32%	41%	27	28 1/4	34	42%
542	53 1/2	40 1/2%	47%	27	34	42	44%
600	59 1/2	44 1/2%	42	70 1/2	37 1/4	49 1/2	47%
660	65 1/2	49 1/2%	57 1/2%	48 1/2	74%	40 1/2%	50%

DISCHARGE

CLASS 1

CLASS 2

CLASS 3

H.P.

T.A.D.

EFF.

CLASS 1

CLASS 2

CLASS 3

H.P.

T.A.D.

EFF.

CLASS 1

CLASS 2

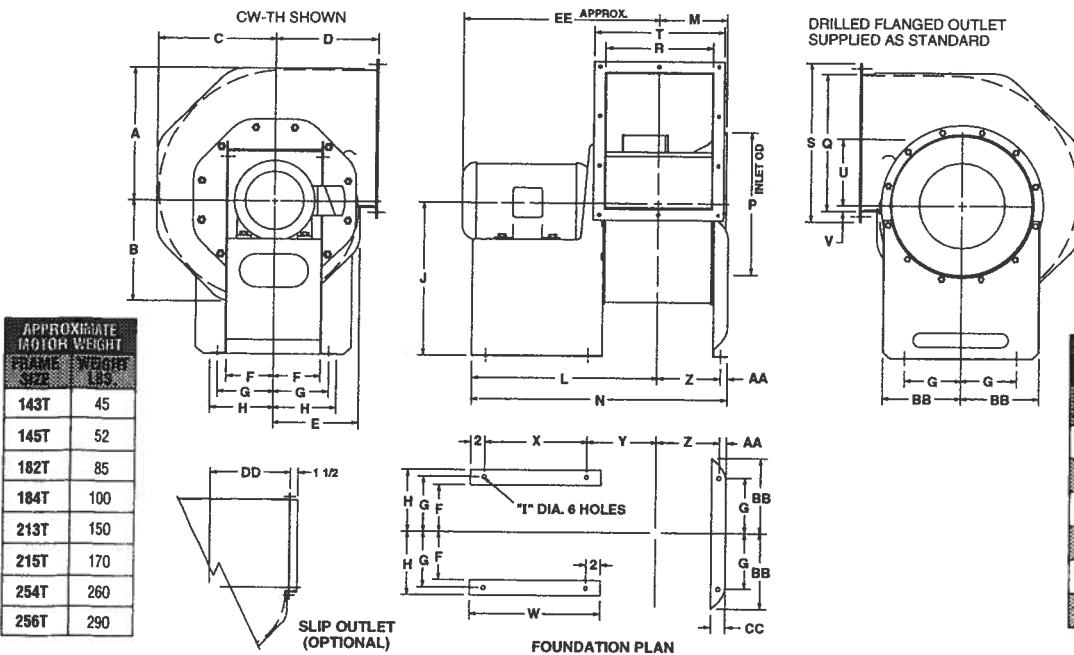
CLASS 3

H.P.

T.A.D.

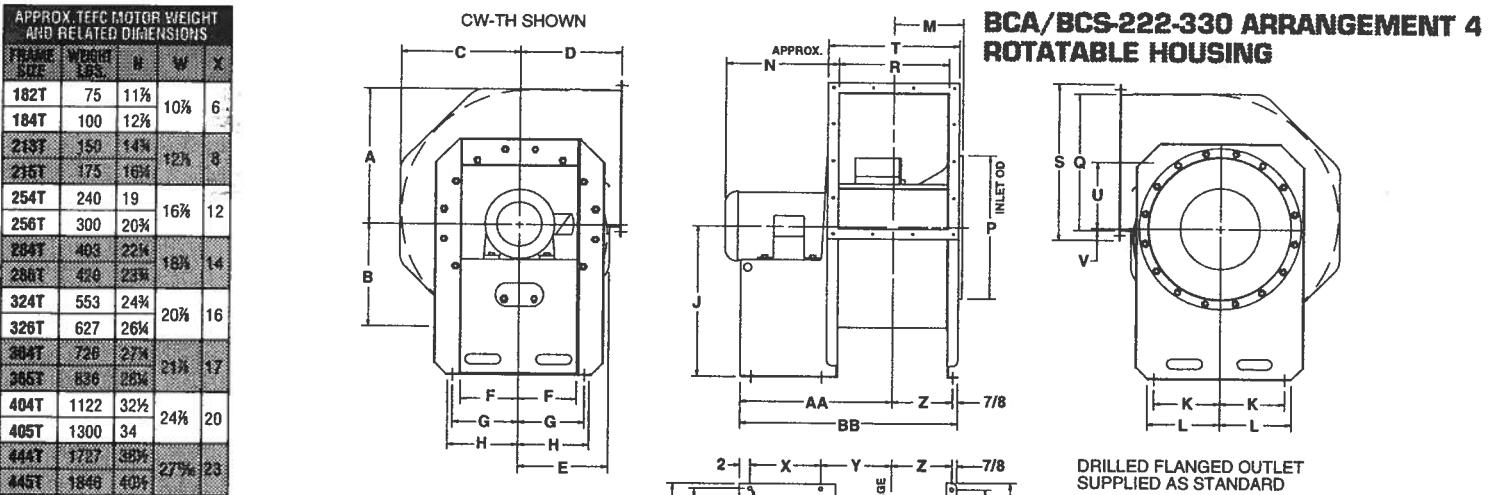
EFF.

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

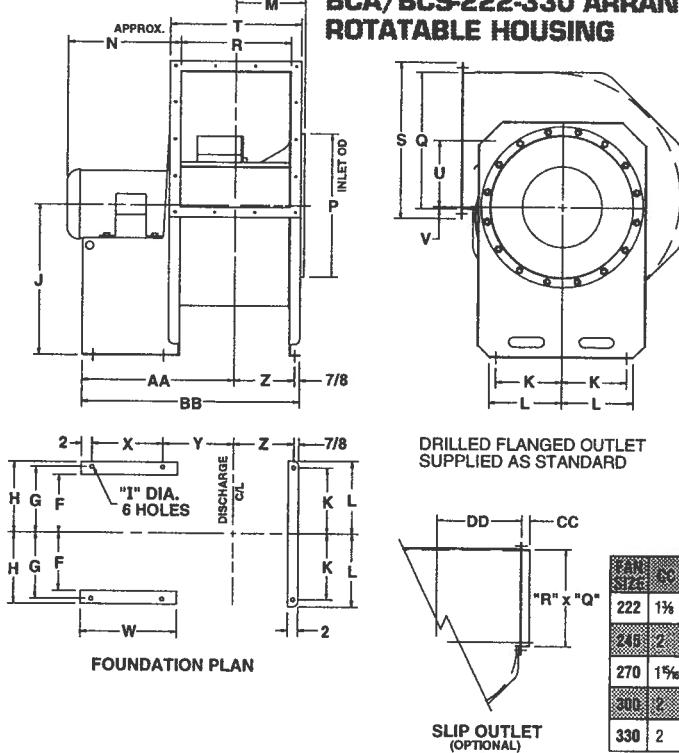


APPROXIMATE FAN WEIGHTS LESS MOTOR							
FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	CLASS 7
122	103	126	102	125	101	124	
135	115	141	114	140	113	139	
150	133	161	132	160	131	159	
165	166	252	206	250	205	249	203
182	235	281	233	279	232	278	231
200	264	320	262	326	261	325	232

FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	CLASS 7	EE																																				
								122T	145T	182T	215T	241T	255T	265T	280T																													
122	12 1/4	12%	9%	10%	10	7 1/2	5 1/2	6%	7 1/2	9 1/2	15	18 1/2	6 1/2	24%	13%	12 1/2%	10	15 1/2%	13	5 1/2%	3%	13	9	7 1/2	6 1/2%	3%	9%	1%	8 1/2%	14 1/2%	15 1/2%	16%	17 1/2%	19%	20 1/2%	—	—							
135	13 1/2	13 1/2%	13 1/2%	14%	11	8 1/2	5 1/2	6%	7 1/2	9 1/2	16	19 1/2	7 1/2	23 1/2	4 1/2	19 1/2%	10 1/2%	10 1/2%	10 1/2	13 1/2	13 1/2	9	7 1/2	6 1/2%	3%	9%	1%	10 1/2%	15 1/2%	15 1/2%	17 1/2%	17 1/2%	20 1/2%	20 1/2%	—	—								
150	15	15 1/2%	11 1/2%	13 1/4	12	9 1/2	5 1/2	6%	7 1/2	9 1/2	18	19 1/2	7 1/2	27 1/2	16 1/2	15 1/2	12 1/2%	18%	15 1/2	7 1/2	3 1/2	13	9	8 1/2	7 1/2	3 1/2	4%	9%	1%	10 1/2%	16	16 1/2%	17 1/2%	18%	20 1/2%	21 1/2%	—	—						
165	16 1/2	16 1/2%	12 1/2%	14%	13	10 1/2	5 1/2	6%	7 1/2	9 1/2	19	23 1/2	8 1/2	32 1/2	17 1/2	15 1/2	13 1/2%	19 1/2	16 1/2	13 1/2	13 1/2	13 1/2	13	8 1/2	7 1/2	3 1/2	4	1	11 1/2	21 1/2	11 1/2	15 1/2	17 1/2	19 1/2	21 1/2	22 1/2%	26 1/2%	26 1/2%	26 1/2%	26 1/2%	27 1/2%	27 1/2%	—	—
182	18 1/4	18 1/4%	13 1/4%	16 1/8	14	11 1/2	6 1/2	7 1/2	8 1/2	9 1/2	21	24 1/2	9	34 1/2	19 1/2	18%	14%	21 1/2	17 1/2	8 1/2	1/2	17	13	9 1/2	8 1/2	1	1	11 1/2	21 1/2	17 1/2	19 1/2	19 1/2	22 1/2%	22 1/2%	26 1/2%	27 1/2%	27 1/2%	27 1/2%	27 1/2%	27 1/2%	—	—		
200	20	20%	19%	17 1/2	15	12 1/2	5 1/2	7 1/2	8 1/2	9 1/2	22	25 1/2	9 1/2	35 1/2	21 1/2	20 1/2	16 1/2	23 1/2	19 1/2	9 1/2	4	17	13	10 1/2	9 1/2	1	1	12 1/2	21 1/2	13 1/2	18 1/2	19 1/2	20 1/2	20 1/2	23 1/2%	27 1/2%	27 1/2%	27 1/2%	27 1/2%	27 1/2%	—	—		



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



APPROXIMATE FAN WEIGHTS LESS MOTOR							
FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	CLASS 7
222/241T	347	372	351	376	362	387	364
245/264T	429	462	435	460	447	480	449
270/280T	537	578	570	611	588	629	592
300/314T	N/A	707	760	727	780	726	739
330/344T	N/A	889	996	910	1017	917	1024

FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	CLASS 7	TD																																	
								TD	TD	TD	TD	TD	TD	TD	TD																										
222	224	16%	19%	16	20 1/2	23 1/2	14%	8	10	11 1/2	25	10	13%	10 1/2	23 1/2	22 1/2	17 1/2	25%	20 1/2	10 1/2	19 1/2	30%	21 1/2	32 1/2	25 1/2	36%	27 1/2	38 1/2	29 1/2	40%	N/A	N/A	N/A								
245	249	16%	21 1/2	18	22 1/2	25 1/2	16%	10	12	13 1/2	27	12	15%	12 1/2	25 1/2	24 1/2	21 1/2	19 1/2	20 1/2	12 1/2	19 1/2	22 1/2	34 1/2	26 1/2	38 1/2	28 1/2	40 1/2	30 1/2	42 1/2	31 1/2	43 1/2	N/A	N/A	N/A							
270	266	20%	23%	19%	24	28 1/2	17 1/2	11	13	14 1/2	30	13	16%	13 1/2	28 1/2	27 1/2	21 1/2	31 1/2	25 1/2	13 1/2	11 1/2	10 1/2	19 1/2	30%	22 1/2	34 1/2	27 1/2	40%	29 1/2	42 1/2	31 1/2	44 1/2	32 1/2	45 1/2	35 1/2	48 1/2	N/A	N/A	N/A		
300	294	22%	25%	22	26	30 1/2	18 1/2	12	14	15 1/2	33	12	16%	14 1/2	30 1/2	29 1/2	24 1/2	34 1/2	28 1/2	14 1/2	12 1/2	11 1/2	19 1/2	31 1/2	34 1/2	29 1/2	43 1/2	31 1/2	45 1/2	33 1/2	46 1/2	34 1/2	49 1/2	35 1/2	54 1/2	N/A	N/A	N/A			
330	32%	24%	28%	24	28	33	20%	12%	14	15 1/2	36	16	19%	15%	34 1/2	33 1/2	26%	37	30%	15 1/2	2 1/2	16 1/2	14%	N/A	26 1/2	41 1/2	30 1/2	45 1/2	32 1/2	47 1/2	34 1/2	49 1/2	35 1/2	50 1/2	38 1/2	53 1/2	41 1/2	56 1/2	N/A	N/A	N/A

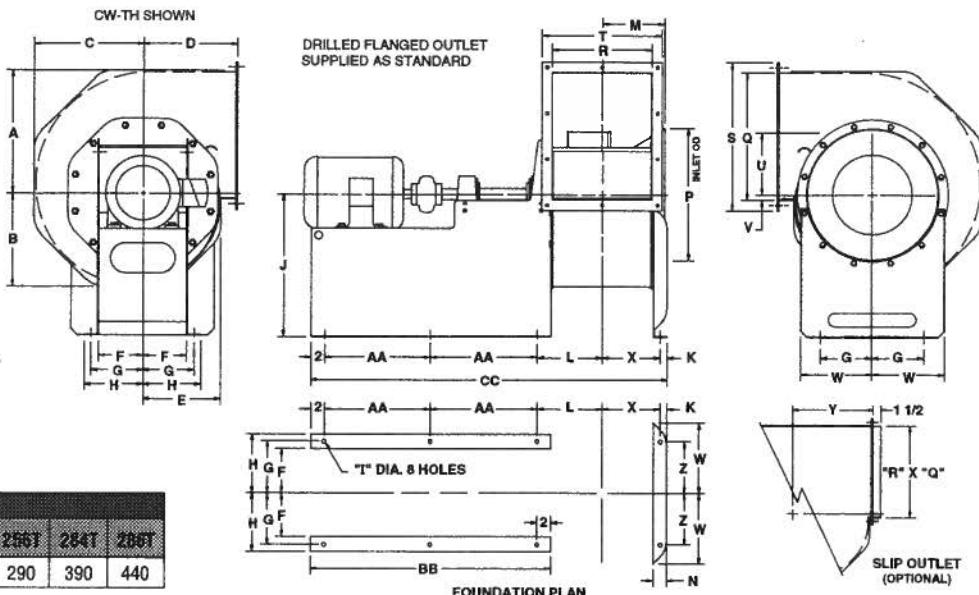
BCA/BCS-122-200
ARRANGEMENT 8
ROTATABLE
HOUSING

FAN SIZE	CLASS 1 & 2			CLASS 3		
	SHAFT DIA.	KEYWAY	FAN WT. NO MOTOR	SHAFT DIA.	KEYWAY	FAN WT. NO MOTOR
122	1 1/8	1/4 x 1/8	124	1 1/8	3/8 x 3/8	147
135	1 1/8	1/4 x 3/8	138	1 1/8	3/8 x 3/8	164
150	1 1/8	1/4 x 1/8	158	1 1/8	3/8 x 3/8	186
165	1 1/8	3/8 x 3/8	247	1 1/8	3/8 x 3/8	291
182	1 1/8	3/8 x 3/8	281	1 1/8	3/8 x 3/8	327
200	1 1/8	3/8 x 3/8	318	1 1/8	3/8 x 3/8	381

*FAN WEIGHT IS APPROXIMATE

APPROXIMATE MOTOR WEIGHT (lbs.)

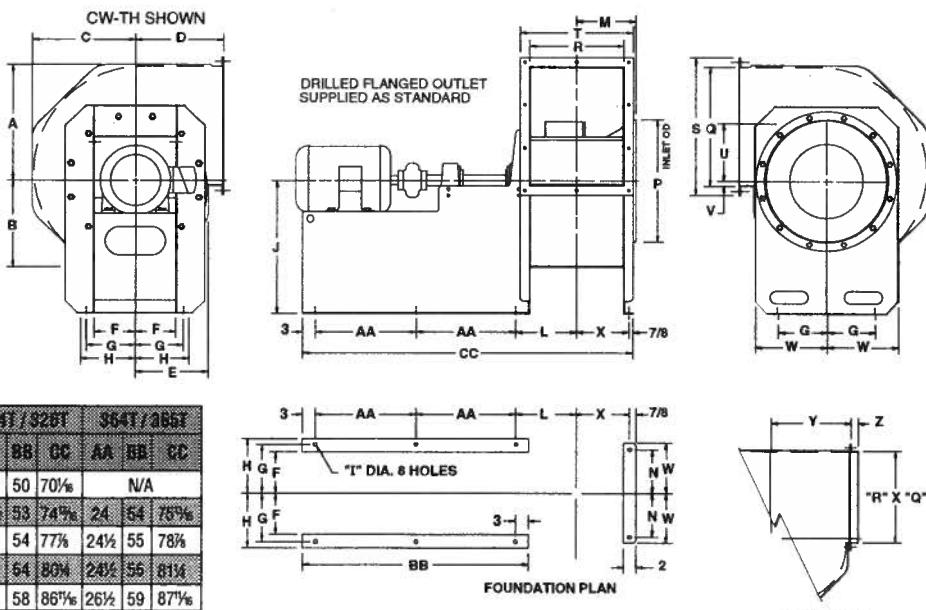
FRAME SIZE	143T	145T	182T	184T	213T	219T	254T	256T	284T	286T
WEIGHT	45	52	85	100	150	170	260	290	390	440



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	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC			
	122	12%	9%	10%	10	7%	5 1/2	6%	7%	7%	7%	15	3%	7%	6%	1%	13%	12 1/2	10	15 1/2	13	5 1/2	6%	9%	6 1/8	8 1/8	6%	11%	27	38 1/2	12 1/2	29	40 1/2	14 1/2	33	44 1/2	N/A	N/A		
135	13%	10%	11%	11	8%	6 1/2	6%	7%	7%	7%	16	3%	7%	7%	1%	14%	13 1/2	10 1/2	16%	13 1/2	6%	7%	9%	6 7/8	8 9/8	6%	11%	27	39%	12 1/2	29	41%	14 1/2	33	45%	N/A	N/A			
150	15 1/2%	11 1/2%	13 1/2%	12	9%	5 1/2	6%	7%	7%	7%	18	3%	8 1/2	7 1/2	1%	16 1/2	15 1/2	12 1/2	18%	15%	7 1/2	9 1/2	9%	7 1/2	10%	6 1/2	11%	27	41 1/2	12 1/2	29	43 1/2	14 1/2	33	47 1/2	N/A	N/A			
165	16%	12%	14%	13	10%	6 1/2	7%	8%	7%	19	1	8%	8 1/4	2%	17%	16 1/2	13 1/2	19%	16 1/2	7 1/2	1%	11 1/2	8 1/4	11 1/4	7 1/2	13%	31	46%	14 1/2	33	48%	15%	37	52%	19 1/2	42	57%	N/A		
182	18%	13%	16%	14	11%	6 1/2	7%	8%	7%	21	1	9 1/2	9	2%	19 1/2	18%	14%	21%	17%	8 1/2	1 1/2	11 1/2	8 1/4	12 1/4	7%	13%	31	48 1/2	14 1/2	33	50 1/2	16%	37	54 1/2	19 1/2	42	59%	N/A		
200	20	15%	17%	15	12%	7	8%	9%	8%	22	1	10%	9 1/2	2%	21 1/2	20 1/2	18%	23 1/2	19%	9 1/2	3	12 1/2	9 1/2	13 1/2	7%	14%	33	51 1/2	15 1/2	35	53 1/2	17 1/2	39	57 1/2	20 1/2	44	62 1/2	21 1/2	64%	N/A

BCA/BCS-222-330
ARRANGEMENT 8
ROTATABLE
HOUSING

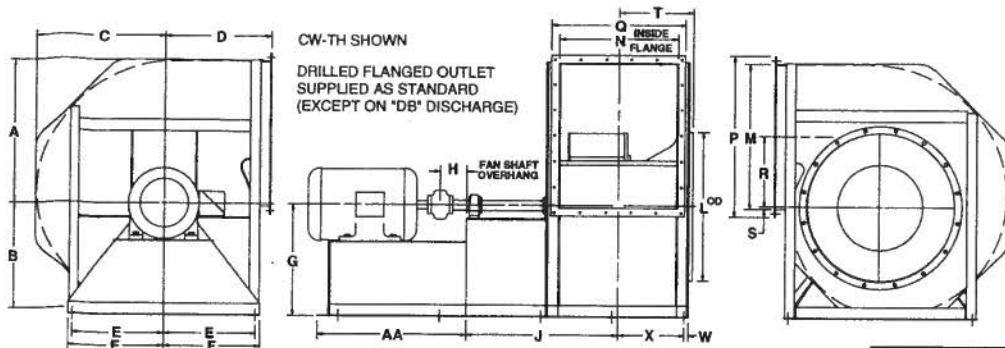
FAN SIZE	182T / 184T	213T / 215T	254T / 256T	284T / 286T	324T / 326T	354T / 356T															
	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC
222	15	36	56%	17	40	60%	19 1/2	45	65%	20%	47	67%	22	50	70%	N/A					
245	16%	39	68%	18 1/2	43	64%	21	48	69%	22	59	71%	23	53	74%	24	54	75%			
270	17	40	63%	19	44	67%	21 1/2	49	72%	22%	51	74%	24	54	77%	24 1/2	55	78%			
300	N/A			19	44	70%	21 1/2	49	75%	22%	51	77%	24	54	80%	24 1/2	55	81%			
330	N/A			21	48	76%	23 1/2	53	81%	24 1/2	55	83%	26	58	86%	26 1/2	59	87%			



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

FAN SIZE	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	DD								
	222	22 1/2	16%	19%	16	20 1/2	23%	14%	8 9/16	10%	1 1/16	25	12 1/2%	10 1/2%	10	23 1/2	22%	17 1/2%	25%	20 1/2%	10 1/2%	13%	10 1/2%	14%	18%	22%	1%	1 1/8	3/8 x 3/8	474	1 1/8	1/2 x 1/4	528		
245	24%	18 1/2	21%	18	22 1/2	26%	16%	9	10 1/2	11 1/2	1 1/2	27	12 1/2%	12 1/2%	12	26%	24%	19%	22%	23%	11 1/2	1 1/2	15%	10 1/2%	15%	15%	20%	24%	2	1 1/8	3/8 x 3/8	573	2 1/8	1/2 x 1/4	650
270	26%	20%	23%	19 1/2	24	28%	17 1/2%	10	11 1/2	12 1/2%	1 1/2	30	14 1/2%	13 1/2%	13	28%	27%	21 1/2%	31%	25 1/2%	13 1/2%	13 1/2%	16 1/2%	17 1/2%	22 1/2%	26 1/2%	1 1/8	1 1/8	3/8 x 3/8	775	2 1/8	1/2 x 1/4	859		
300	29%	22%	26%	22	26	30%	18%	11	12 1/2	13 1/2%	1 1/2	33	15 1/2%	14 1/2%	14	31%	30%	24 1/2%	34%	28%	14 1/2%	18%	18%	13%	19%	24	28%	2	1 1/8	1/2 x 1/4	936	2 7/8	3/8 x 3/8	1041	
330	32%	24%	28%	24	28%	33%	20%	11	12 1/2	13 1/2%	1 1/2	36	16 1/2%	15 1/2%	16	34%	33%	26%	37%	30%	15 1/2%	2 1/2	19 1/2%	14%	21 1/2	26%	31 1/2%	2	2 1/8	1/2 x 1/4	1113	2 1/8	5/8 x 5/8	1226	

*FAN WEIGHT IS APPROXIMATE

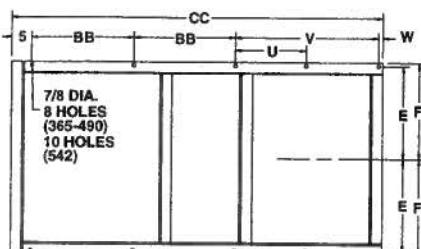


BCA/BCS-365-542 ARRANGEMENT 8 FIXED HOUSING

Also available in sizes 600 and 660. Contact Factory for drawing.

FAN SIZE	DISCHARGE		
	X	Y	Z
365	2	24 1/4	39 1/8
402	2	27 1/4	43
445	2	30 1/4	45 1/8
490	3	32 1/4	52 1/8
542	3	36 1/4	56 1/8

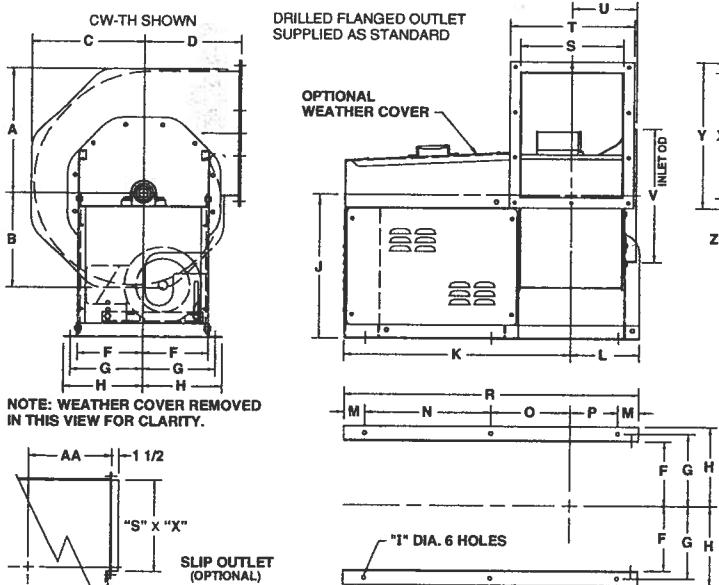
APPROXIMATE MOTOR WEIGHT (lbs.)								
FRAME SIZE	324T	326T	364T	366T	404T	406T	444T	446T
WEIGHT	555	620	750	810	1050	1150	1400	1575
								2100



FOUNDATION PLAN

FAN SIZE	DISCHARGE		DISCHARGE		CLASS 1 & 2																		CLASS 3											
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	SHAFT DIA.	KEYWAY DIAMETER	FRONT. DIA.	SHAFT DIA.	KEYWAY DIAMETER	FRONT. DIA.		
365	36 1/8%	27 1/8	31 1/8	27	42 1/8	23 1/4	24 1/4	28	30	33	35	40	27	33	6 1/2	37 1/8	37 1/8	36 1/4	29 1/4	40 1/4	33 1/4	17 1/8	1 1/8	16 1/8	—	35 1/2	1	16 1/8	2 1/16	5/8 x 1/8	1648	2 1/16	5/8 x 1/8	1891
402	40	30 1/4	35 1/4	30	45 1/8	25 1/4	26 1/4	31	33	36	38	43	30	35	7	40 1/8	41 1/8	40 1/8	32 1/8	44 1/8	36 1/8	19 1/8	1 1/8	18 1/8	—	38 1/2	1	18 1/8	2 1/16	5/8 x 1/8	2029	2 1/16	5/8 x 1/8	2267
445	44 1/2	33 1/2	38 1/2	33	47 1/8	27	28 1/4	34	37	40	42	47	33	37	7	43 1/2	45 1/2	44 1/2	35 1/2	48 1/2	39 1/2	21 1/8	2 1/2	19 1/2	—	41 1/2	1/4	19 1/2	2 1/16	5/8 x 1/8	2333	2 1/16	5/8 x 1/8	2627
490	48 1/8	36 1/4	42 1/4	36	56 1/8	31 1/4	32 1/4	37	40	43	46	54	36	44	8	49 1/8	51 1/8	49 1/8	35 1/8	55 1/8	45 1/8	23 1/8	7 1/8	22 1/8	—	45 1/2	1/4	21 1/8	2 1/16	5/8 x 1/8	3037	2 1/16	5/8 x 1/8	3414
542	53 1/8	40 1/2	47 1/4	40	59 1/8	33 1/4	35	41	45	48	51	59	40	47	8	52 1/2	56 1/2	54 1/2	43 1/2	60 1/2	49 1/2	26 1/2	1 1/2	24 1/2	2 1/2	49 1/2	1/4	23 1/2	3 1/16	3/4 x 1/8	3521	3 1/16	3/4 x 1/8	4021

*FAN WEIGHT IS APPROXIMATE



BCA/BCS-122-200 ARRANGEMENT 10 ROTATABLE HOUSING

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

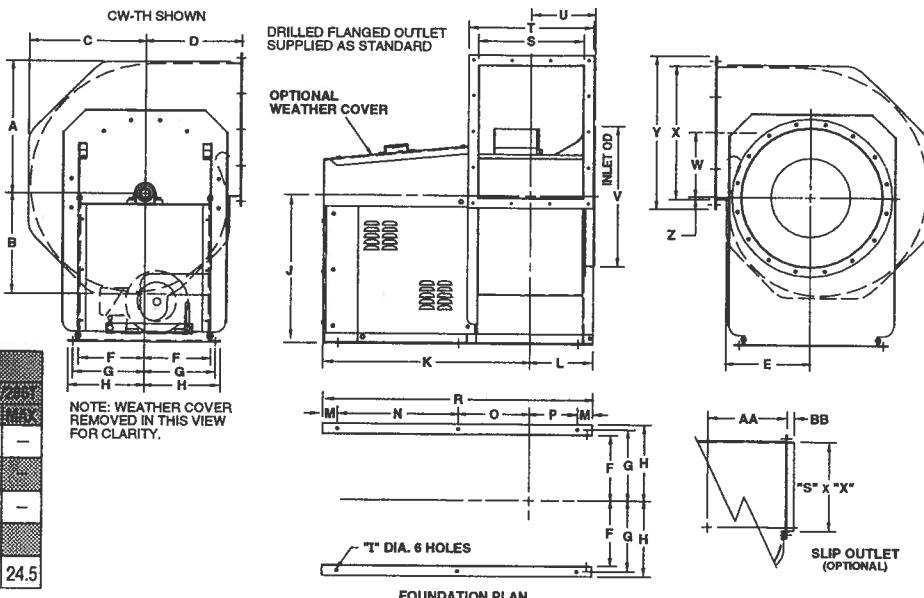
FAN	WHEEL SIZ	MAX FRAME SIZE	MAX FAN SHEAVE DIA.	BELT CENTER DISTANCE			
				122/143T	182/184T	213/215T	254/256T
122	12 1/4	184T	5 1/2	7.8	9.8	6.8	8.8
135	13 1/4	184T	6	8.8	10.8	7.8	9.8
150	15	215T	6 1/2	10.1	12.5	9.1	11.5
165	16 1/4	215T	7	11.1	13.5	10.1	12.5
182	18 1/4	215T	8	13.1	15.5	12.1	14.5
200	20	256T	9	13.7	16.9	12.7	13.9

FAN SIZE	DISCHARGE		DISCHARGE		CLASS 1 & 2																		CLASS 3								
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	KEYWAY DIA.	FRONT. DIA.	SHAFT DIA.	KEYWAY DIA.
122	12 1/8	9 1/8	10 1/8	10	10	13 1/4	7 1/8	6 1/2	7 1/8	8 1/8	7 1/8	15	27 1/8	6 1/2	3 1/2	14 1/2	10 1/2	3 1/2	34 1/8	10	13	6 1/8	13 1/8	5 1/2	12 1/8	15 1/8	8 1/8	1 1/8	1 1/8	170	
135	13 1/8	10 1/8	11 1/8	11	11	13 1/4	8 1/8	6 1/2	7 1/8	8 1/8	7 1/8	16	28 1/8	7 1/8	3	14 1/4	10 1/2	4 1/2	35 1/8	10 1/2	13 1/8	7 1/8	14 1/8	6 1/8	13 1/8	16 1/8	9 1/8	1 1/8	1 1/8	186	
150	15 1/8	11 1/8	13 1/4	12	15	19 1/4	9 1/2	10 1/2	11 1/2	1 1/8	18	30 1/2	8 1/2	3	16 1/4	11 1/2	5 1/2	38 1/4	12 1/4	15 1/4	7 1/2	16 1/4	7 1/2	15 1/4	18 1/4	10 1/2	1 1/8	1 1/8	235		
165	16 1/8	12 1/8	14 1/8	13	13	18 1/2	10 1/2	11 1/2	1 1/8	19	31 1/2	9 1/2	3	17 1/2	11 1/2	6 1/2	40 1/2	13 1/2	16 1/2	8 1/2	17 1/2	7 1/2	16 1/2	19 1/2	11 1/2	1 1/8	1 1/8	285			
182	18 1/4	13 1/8	16 1/8	14	14	18 1/2	11 1/2	9 1/2	10 1/2	11 1/2	1 1/8	21	32 1/2	9 1/2	3	18 1/2	11 1/2	6 1/2	42 1/2	14 1/2	17 1/2	9 1/2	19 1/2	8 1/2	18 1/2	21 1/2	12 1/2	1 1/8	1 1/8	320	
200	20	15 1/4	17 1/8	15	15	20	12 1/8	10 1/8	11 1/8	12 1/8	1 1/8	22	37 1/4	10 1/8	3	20 1/8	13 1/8	7 1/8	47 1/4	16 1/4	19 1/4	9 1/4	21 1/4	9 1/4	20 1/4	23 1/4	13 1/4	1 1/8	1 1/8	375	

*FAN WEIGHT IS APPROXIMATE

BCA/BCS-222-330
ARRANGEMENT 10
ROTATABLE
HOUSING

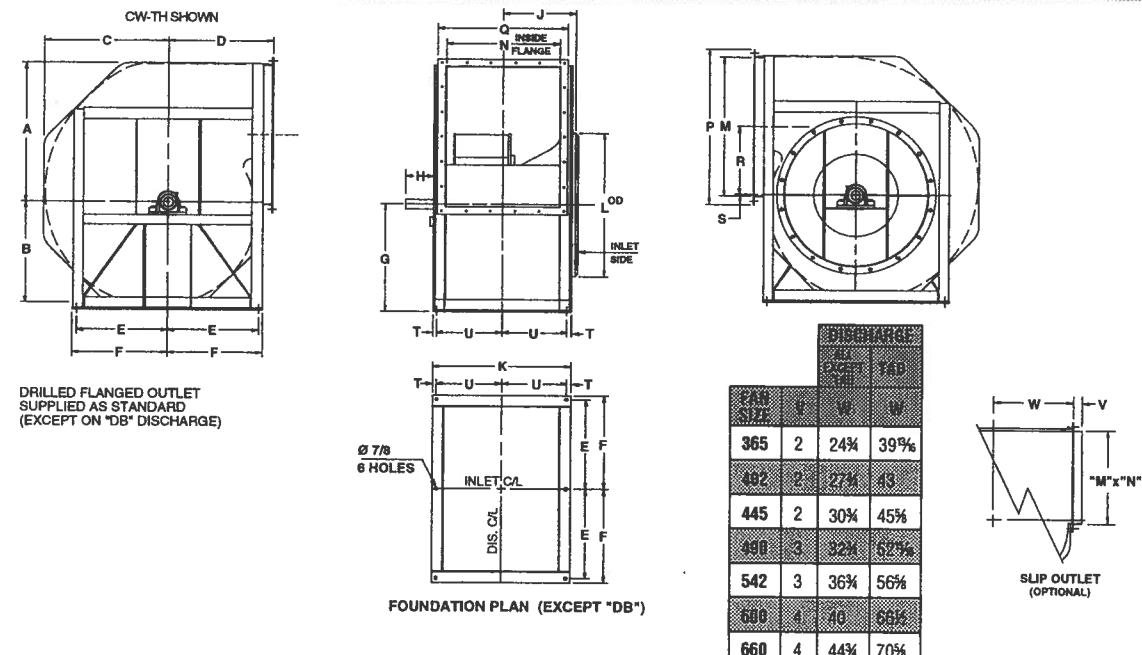
APPROXIMATE MOTOR WEIGHT	
FRONT WEIGHT	135
SIZE	135
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440



CENTRE COUPLED DISTANCE																		
CAN		WHEEL		DISCHARGE		TOD		TAD		TOD		TAD		TOD		TAD		
222	224	256T	10	15.7	19.8	14.7	18.8	14	18	13	17	-	-	-	-	-	-	
245	247	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	22.6	26.7	21.6	25.7	20.8	26	19.6	24	19.1	-	-	-	-	-	-
330	33	286T	14	25.7	29.8	24.7	28.8	24	28	23	27	22.2	24.5	-	-	-	-	-

CAN SIZE	CENTRE COUPLED DISTANCE															DISCHARGE TOD TAD		CLASS 3 NET WT. WEIGHT																
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z								
222	224	16%	19½	16	20½	23%	14½	11½	12½	13½	1½	25	39½	10½	3	22½	14½	7½	50%	17½	20%	10½	23½	10½	22%	9½	14%	18½	22%	1½	11½	¾ x ½	565	
245	247	18%	21½	18	22½	26%	15½	12½	13½	14½	1½	27	40½	11½	3	22½	14½	9½	51½	19½	23½	12½	26½	17½	24½	25½	½ x ½	15½	20½	24½	2½	17½	¾ x ½	670
270	26½	20%	23%	19½	24	28½	17½	13½	14½	15½	1½	30	42½	12½	3	24½	14½	9½	54½	21½	25½	13½	28½	13½	27½	31½	1½	17½	22½	26½	1½	11½	¾ x ½	805
300	29½	22½	25½	22	26	30%	18½	16	16	17	½	33	47½	14½	3	27½	16½	12½	63½	26½	30%	15½	34½	15½	33½	37½	2½	21½	26½	31½	2½	14½	1½ x ¼	1000
330	32%	24½	28%	24	28½	33%	20%	16½	17½	18½	1½	36	48½	15½	3	28½	16½	12½	63½	26½	30%	15½	34½	15½	33½	37½	2½	21½	26½	31½	2½	2½	½ x ¼	1175

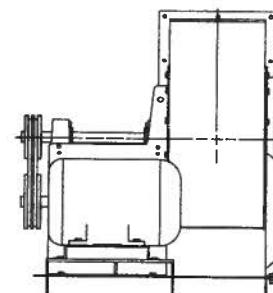
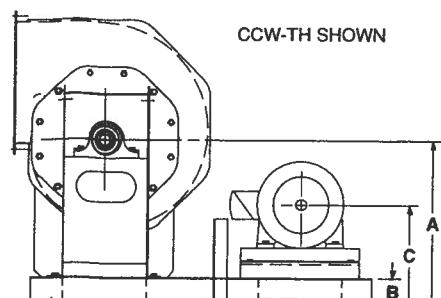
BCA/BCS-365-660
ARRANGEMENT 3
SWSI FIXED
HOUSING



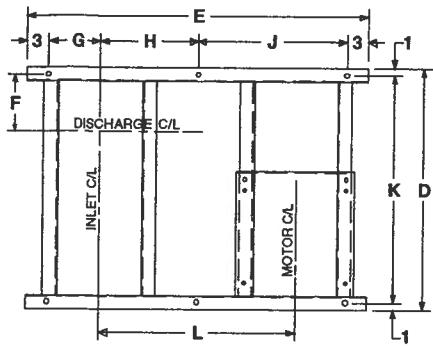
CAN SIZE	CENTRE COUPLED DISTANCE															DISCHARGE TOD TAD		CLASS 3 NET WT. WEIGHT														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z						
365	36½	27½	31½	27	42½	23½	24½	28	30	33	35	40	27	33	6½	16½	35%	37½	36½	29½	40½	33½	17½	1½	1	16½	2½	½ x ¼	2½	5½ x ½	1226	1448
402	40	30½	35½	30	45½	25½	26½	31	33	36	38	43	30	35	7	19½	36%	41½	41½	32½	44½	36½	19½	½	1	16½	2½	½ x ¼	2½	5½ x ½	1504	1742
445	44½	33%	38½	33	47%	27	28½	34	37	40	42	47	33	37	7	19½	41½	45½	44½	35½	48½	39%	21%	½	1	19½	2½	½ x ¼	2½	5½ x ½	1740	1948
490	49½	36½	42½	36	50%	31½	32½	37	40	43	46	54	36	44	8	22½	45½	61½	49½	39½	56½	45%	23%	½	1	21½	2½	½ x ¼	3½	5½ x ½	2290	2572
542	53%	40½	47½	40	59%	33%	35	41	45	48	51	59	40	47	8	24½	49½	56½	54%	43½	60%	49%	26½	1½	1½	23½	2½	½ x ¼	3½	5½ x ½	2694	3172
600	53½	44½	52½	44	70%	37½	39	46	49	53	57	63	44	56	6	27½	54	63½	60½	47½	58½	55½	29%	½	1	25½	2½	½ x ¼	3½	5½ x ½	3073	3667
660	65%	49½	57½	48½	74%	40%	42	50	54	58	62	71	49	59	8	29½	58½	69½	66½	52%	74½	60%	32½	1½	1½	28%	3½	½ x ¼	3½	5½ x ½	3381	4195

BCA/BCS-122-200 ARRANGEMENT 1 UNITARY BASE

APPENDIX VI
Belt Widths, Base



"M" DIA.
6 HOLES



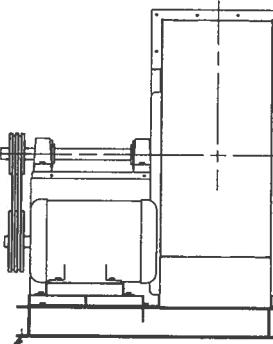
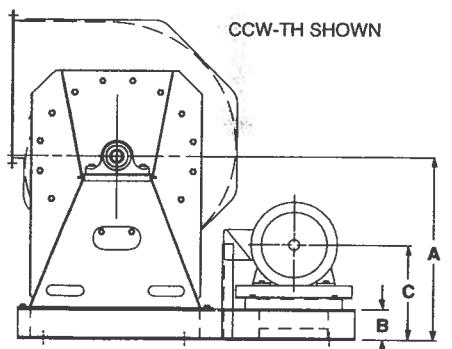
NOTES:

BELT C/D = "N" DIMENSION
ARRT 1R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 x 2 x .1793
ARRT 1W SHOWN
ARRT 1Z IS MIRROR IMAGE

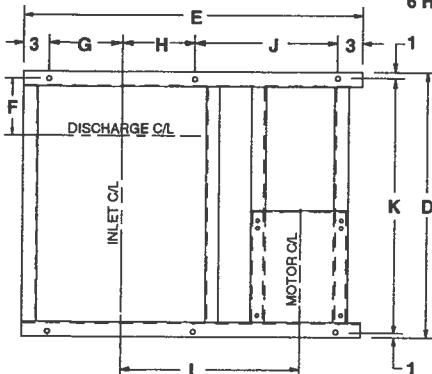
FRAMING SIZE	A	B	C	D	E	F	G	H	J	K	L	M	CLASS 1		CLASS 2	
													18	20	22	24
122	19	4	10%		30			5 1/4	12			14 1/4	%	16.9	208	231
			11%		32			6 1/4	13			15 1/2		17.2	216	239
			12%		36			8 1/4	15			18 1/4		19.6	256	279
			14%		39			9 1/4	16 1/4			20	%	20.5	332	355
														462	485	516
														493	516	
135	23	4	10%		30			5 1/4	12			14 1/4	%	17.5	224	256
			11%		32			6 1/4	13			15 1/2		17.6	232	264
			12%		37			8 1/4	15 1/4			18 1/4		20.8	348	375
			14%		40			10 1/4	17			21	%	21.7	372	405
														472	510	556
														589	666	
150	22	4	10%		30			5 1/4	12			14 1/2	%	18.7	244	272
			11%		32			6 1/4	13			15 1/2		18.6	262	280
			12%		37 1/2			9	15 1/4			20		22.1	308	336
			14%		41			10 1/4	17 1/2			22	%	23.3	370	398
			15%		43			11 1/4	18 1/2			23		499	527	556
														530	558	
165	23	4	11%		35			6 1/4	14 1/4			17	%	20.4	377	421
			12%		37			7 1/4	15			18		20.8	433	457
			14%		44			10 1/4	19			23		23.0	452	486
			15%		46			11 1/4	20			24	%	25.7	504	556
														522	572	
														589	666	
182	25	4	11%		35			6 1/4	14 1/4			17	%	21.6	409	455
			12%		37			7 1/4	15 1/4			18		21.8	425	471
			14%		46			11 1/4	20			25	%	27.1	505	552
			15%		48			12 1/4	21			26		648	694	
														756	802	
														807	853	
200	26	4	11%		36			5 1/4	15 1/4			17	%	22.3	447	481
			12%		38			6 1/4	16 1/4			18		22.4	467	500
			14%		48			12 1/4	22			27	%	28.9	552	592
			15%		50			13 1/4	26			29		592	632	
														644	684	
														700	741	

BCA/BCS-222-330 ARRANGEMENT 1 UNITARY BASE

APPENDIX VI
Belt Widths, Base



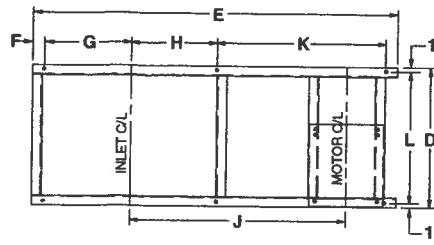
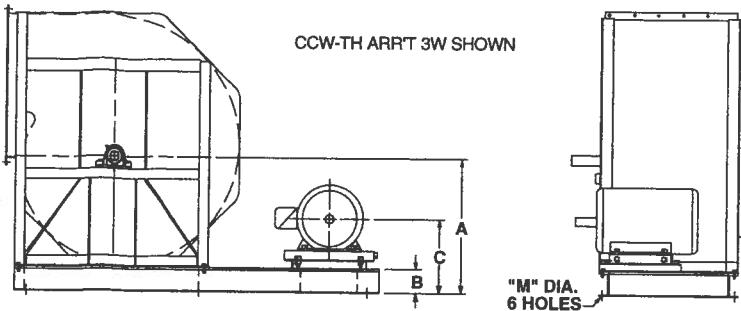
"M" DIA.
6 HOLES



NOTES:
BELT C/D = "N" DIMENSION
ARRT 1R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 x 2.497 x .310
6" - 12#
ARRT 1W SHOWN.
ARRT 1Z IS MIRROR IMAGE

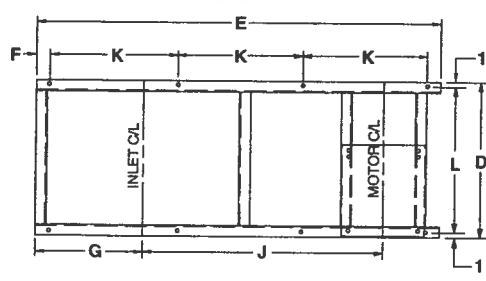
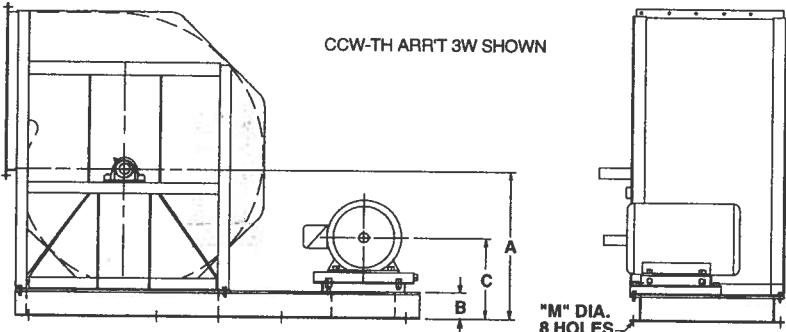
FRAMING SIZE	A	B	C	D	E	F	G	H	J	K	L	M	CLASS 1		CLASS 2	
													18	20	22	24
222	31	6	13%		47			7 1/2	20 1/2			24	%	29.6	754	809
			14%		50			9	22			26		30.7	833	888
			16%		52			10	23			27		30.7	855	910
			17%		56			12	25			30	%	32.8	984	1019
					59			13 1/2	26 1/2			31		1099	1164	
					62			15	28			33		1160	1215	
248	33	6	13%		51			7 1/4	22 1/4			25	%	33.4	824	886
			14%		54			9	24			26		33.5	844	900
			15%		58			10	25			27		34.4	864	923
			17%		60			12	27			29	%	36.0	1160	1223
			18%		68			13 1/2	28 1/2			31		1244	1349	
			19%		69			15	30			33		1334	1415	
270	36	6	14%		56			9	25			29	%	36.0	1092	1178
			16%		58			10	26			30		35.8	1223	1309
			17%		60			11	27			31		1254	1340	
			18%		66			14	30			35	%	36.0	1415	1501
			19%		69			15 1/2	31 1/2			37		1621	1707	
			20%		73			16	32 1/4			39		1787	1873	
300	39	6	14%		56			8 1/2	26			30	%	40.4	1848	1934
			15%		59			10 1/2	28			34		2135	2221	
			17%		64			11 1/2	29			35		2326	2322	
			18%		64			12 1/2	30			37	%	41.4	1955	2059
			19%		73			13 1/2	30 1/2			39		2452	2520	
			20%		76			14 1/2	31 1/2			41		2598	2696	
330	42	6	14%		53			12 1/2	35			34	%	48.2	2476	2590
			15%		57			13 1/2	37 1/2			41		2577	2691	
			16%		64			14 1/2	39 1/2			44		2686	2990	
			17%		66			15 1/2	41			45	%	48.8	3043	3157
			18%		77			16 1/2	43 1/2			47		3197	3372	
			19%		81			17 1/2	45			48		3377	3460	
345	44	6	14%		79			18 1/2	46			49	%	49.3	1659	1767
			15%		83			19 1/2	48 1/2			50		1690	1704	
			16%		64			20 1/2	50			51		1892	2011	
			17%	</												

BCA/BCS-365 AND 402 ARRANGEMENT 3 SWSI UNITARY



FRAME SIZE	A	A'	A''	A'''	A''''	B	C	D	E	F	G	H	J	K	L	M	N	N'	N''	N'''	N''''	#	H	W	CLASS	CLASS								
365	34	36	39	41	46	39	6	16%	85			18 1/4	50%	39%										53.8	53.8	54.5	55.7	56.5	58.8	55.7	1820	2042		
								17%	88			19 3/4	52%	41												55.1	55.1	55.8	56.9	57.6	59.9	56.9	1965	2187
								18%	92			21 1/4	54%	43												57.0	57.0	57.5	58.5	59.2	61.3	58.5	2015	2237
								19%	95			23 1/4	56%	44%												58.4	58.4	58.9	59.8	60.5	62.4	58.8	2153	2375
								22%	100			25 1/4	59%	47												N/A	60.5	60.9	61.7	62.3	63.9	61.7	2218	2440
								23%	104			27 3/4	62%	49												N/A	63.8	64.2	64.8	65.3	66.9	64.8	2392	2604
								24%	108			29 1/4	65%	52												N/A	66.7	67.1	67.7	68.3	69.9	67.7	3135	3357
								25%	112			31 1/4	68%	55												N/A	67.9	68.3	69.1	69.7	71.3	69.8	3310	3532
402	37	39	42	44	49	41	8	16%	99			104 1/4	54%	42												58.3	58.3	58.8	60.2	61.1	63.5	59.8	2120	2350
								17%	103			20 1/4	56%	43												59.5	59.5	60.2	61.4	62.2	64.5	61.0	2207	2415
								18%	106			22 1/4	58%	46												61.7	61.7	62.3	63.3	64.1	66.2	63.0	2250	2478
								19%	110			23 1/4	60%	47												62.8	62.8	63.4	64.3	65.1	67.1	64.0	2395	2623
								20%	114			25 1/4	63%	49												N/A	64.7	65.2	66.0	66.7	68.4	65.7	2451	2673
								21%	118			26 1/4	66%	52												N/A	67.9	68.3	69.1	69.7	71.3	69.8	3137	3359

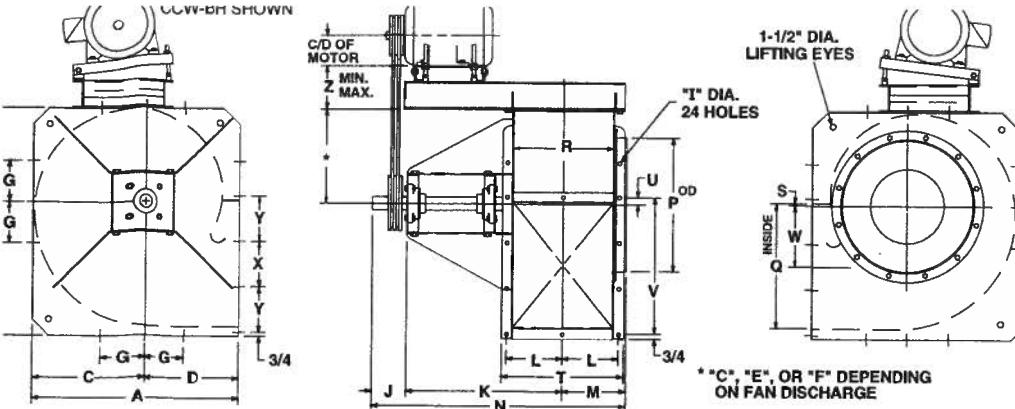
BCA/BCS-445-600 ARRANGEMENT 3 SWSI UNITARY



FRAME SIZE	A	A'	A''	A'''	A''''	B	C	D	E	F	G	H	J	K	L	M	N	N'	N''	N'''	N''''	#	H	W	CLASS	CLASS					
445	42	45	48	50	55	45	8	20%	106			64%	32											68.3	69.3	70.4	71.2	73.4	69.3	2915	3123
								21%	109			66%	33											69.5	70.5	71.5	72.3	74.4	70.5	2980	3188
								24%	112	5	284	67%	34	39%	%								69.7	70.5	71.4	72.1	74.1	70.5	3147	3356	
								25%	115			70%	35											72.7	73.5	74.3	75.0	76.8	73.5	3506	3714
								25%	115			70%	35											72.7	73.4	74.3	74.9	76.7	73.4	4640	4848
402	42	45	48	51	54	62	52	6	20%	112			67%	34										70.9	72.5	73.2	75.1	78.9	74.2	2626	2838
								21%	115			69	35											72.1	73.8	74.2	76.2	78.9	75.3	3571	3783
								24%	121	5	325	72%	37	43%	%								75.1	75.9	76.3	78.0	81.4	77.3	3798	4180	
								25%	127			76%	39											79.4	80.2	81.1	82.1	85.2	81.4	4207	4489
								25%	127			76%	39											79.4	80.2	81.1	82.1	85.2	81.4	4511	4893
542	49	53	56	59	67	55	8	20%	121			73%	37											78.4	80.0	81.2	82.6	86.6	80.8	3984	4442
								21%	124			74%	38											79.6	81.0	82.2	83.5	87.4	81.8	4029	4507
								24%	127	5	35	76%	39	47%	%								79.6	82.1	83.0	84.4	88.0	82.8	4256	4734	
								25%	133			80%	41											83.8	85.0	86.1	87.2	90.6	85.7	5134	5612
								25%	133			80%	41											83.8	85.0	86.0	87.2	90.5	85.7	5698	6178
600	54	57	61	65	73	64	8	20%	127			74%	39										81.3	82.5	84.4	86.4	89.7	85.5	4410	5004	
								21%	130			75%	40											82.0	83.2	85.0	86.9	91.1	86.4	4476	5070
								24%	133	5	40	77%	41	52	#								83.4	84.5	86.1	87.9	91.8	87.4	5095	5550	
								25%	133			81%	43											86.3	87.3	88.9	90.6	94.3	90.1	5411	5986
								25%	133			81%	43											86.3	87.3	88.9	90.6	94.3	90.1	5599	6182

NOTES:
BELT C/D = "N" DIMENSION
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 x 2.497 x .310
8" - 18#
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE

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

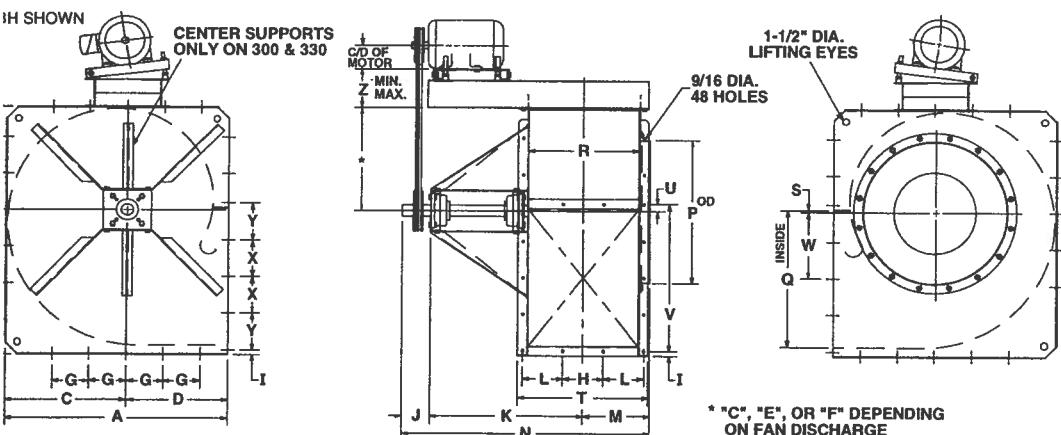


* "C", "E", OR "F" DEPENDING
ON FAN DISCHARGE

APPROXIMATE FAN WEIGHT NO MOTOR						
CLASS 1 & 2				CLASS 3		
FR. SIZE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.	KEYWAY
122	1 1/8	1/4 x 1/8	124	134	1 1/8	3/8 x 3/16
135	1 3/8	1/4 x 1/8	138	148	1 1/8	3/8 x 3/16
150	1 1/8	1/4 x 1/8	160	170	1 1/8	3/8 x 3/16
165	1 7/8	5/8 x 3/16	230	263	1 1/8	3/8 x 3/16
182	1 7/8	3/8 x 3/16	264	297	1 1/8	3/8 x 3/16
200	1 7/8	3/8 x 3/16	299	333	1 1/8	3/8 x 3/16
					345	379

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

STD. MOTOR BASE																								H.D. MOTOR BASE				
MIN. MAX												MIN. MAX												FRAME SIZE	MIN. MAX			
20%	23	10 1/8	10	9 1/8	13 1/8	5 1/2	7/8	3 1/2	16 1/4	5 1/4	6 1/8	26 1/8	13 1/8	12 1/8	9 3/4	1/8	13	5 1/8	13 1/8	5 1/2	4 1/8	4 1/8	5 1/4	7 1/4	48-213T	6 1/4	8 1/4	182T-256T
22%	25	11 1/8	11	10 1/8	14 1/8	5 1/2	7/8	3 1/2	17 1/8	6 1/8	7 1/8	26 1/8	14 1/8	13 1/8	10 1/8	1/8	13 1/8	5 1/8	15 1/8	6 1/8	5 1/8	5 1/8	5 1/4	7 1/4	48-213T	6 1/4	8 1/4	182T-256T
25%	27	13 1/4	12	11 1/8	16 1/8	5 1/2	7/8	3 1/2	18 1/2	6 1/2	7 1/2	29	16 1/2	15	11 1/8	7/2	15 1/8	1 1/2	16 1/8	7 1/2	5 1/8	5 1/8	5 1/4	7 1/4	48-213T	6 1/4	8 1/4	182T-256T
27%	30	14 1/8	13	12 1/8	17 1/8	6 1/8	7/8	4	21 1/8	7 1/8	8 1/8	38 1/8	17 1/8	16 1/8	13 1/8	7/2	16 1/8	1 1/8	18 1/8	7 1/8	6 1/8	6 1/8	6 1/4	8 1/4	56-215T	8 1/4	10	143T-286T
30%	33	16 1/8	14	13 1/8	19 1/8	6 1/2	9/8	4	22 1/8	8 1/8	9	35	19 1/8	18 1/8	14 1/2	7/2	17 1/8	1 1/2	19 1/8	8 1/8	6 1/8	6 1/8	6 1/4	8 1/4	56-215T	8 1/4	10	143T-286T
32%	36	17 1/8	15	15 1/8	21 1/8	6 1/8	9/8	4	24 1/8	8 1/8	9 1/8	47 1/8	21 1/8	19 1/8	16 1/8	4	19 1/8	1 1/8	21 1/8	9 1/8	7 1/4	8 1/4	8 1/4	8 1/4	56-215T	8 1/4	10	143T-286T



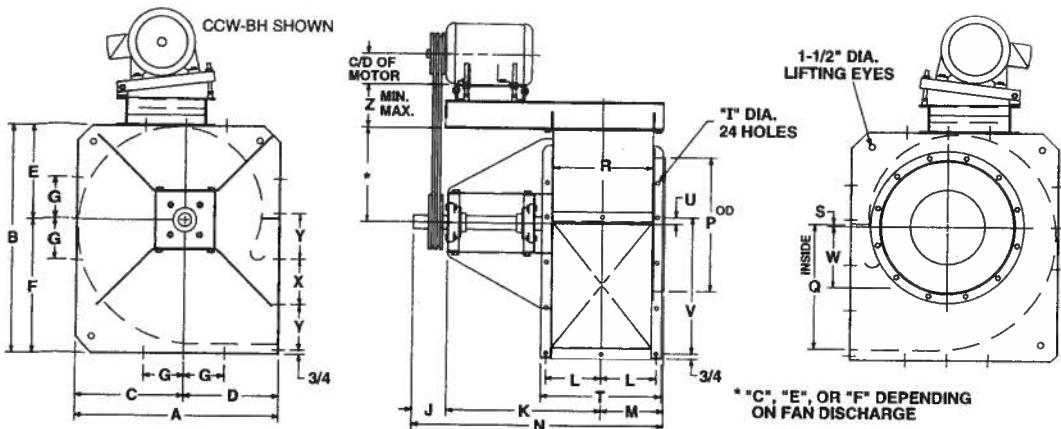
**QBCA/QBCS-222-330
ARRANGEMENT 9**

APPROXIMATE FAN WEIGHT NO MOTOR						
CLASS 1 & 2				CLASS 3		
FR. SIZE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE
222	1 1/8	3/8 x 3/16	380	408	1 1/8	1/2 x 1/4
245	1 7/8	3/8 x 3/16	452	497	2 1/8	1/2 x 1/4
270	1 1/8	3/8 x 3/16	515	560	2 1/8	1/2 x 1/4
300	1 5/8	1/2 x 1/4	715	747	2 1/8	3/8 x 5/16
330	2 1/8	1/2 x 1/4	857	926	2 1/8	5/8 x 5/16
					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

STD. MOTOR BASE																								H.D. MOTOR BASE				
MIN. MAX												MIN. MAX												FRAME SIZE	MIN. MAX			
i 1/2	40%	19 1/2	16	16 1/8	23 1/2	6 1/2	6 1/8	5	26 7/8	6 1/2	10 1/8	41 1/8	23 1/2	22 1/2	17 1/8	1/2	20 1/8	1 1/2	23 1/8	10 1/8	6	5 1/8	6 1/4	8 1/4	182T-256T	8 1/4	10	143T-286T
i 1/2	44%	21 1/2	18	18 1/8	26 1/4	6 1/2	7 1/8	5	27 1/8	7 1/4	11 1/8	44 1/8	26 1/4	24 1/4	19 1/8	1/2	23 1/8	1 1/2	26 1/8	11 1/8	6 1/8	6 1/4	8 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T
1/2	49%	19 1/2	19 1/2	20%	28 1/8	6 1/2	7 5/8	1	29 1/2	7 1/8	12 1/2	48 1/8	28 1/2	26 5/8	21 1/8	1/2	25 1/8	1 1/2	29 1/8	13 1/8	7 1/2	7 1/4	8 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T
1/2	54%	21 1/2	22	22 1/8	31 1/8	8	8 1/8	1	33 1/2	8 1/8	14 1/8	53 1/8	31 1/2	29 1/2	23 1/8	1/2	28 1/8	1 1/2	32 1/8	14 1/8	7 1/2	8 1/4	8 1/4	10	143T-286T	10 1/4	12	143T-326T
1/2	59%	28 1/8	24	24 1/8	34 1/8	8	9 1/8	1	36 1/2	9 1/2	15 1/8	58 1/8	34 1/2	33	26 1/8	1/2	30 1/8	1 1/2	35 1/8	15 1/2	8 1/8	8 1/8	8 1/4	10	143T-286T	10 1/4	12	143T-326T

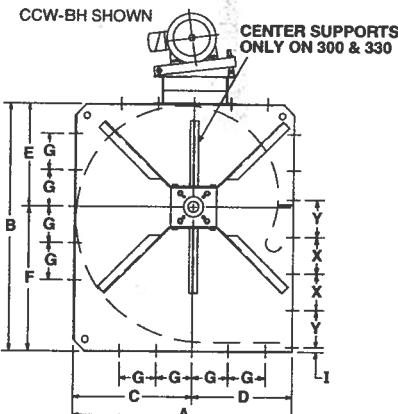
QBCA/QBCS-122-200
ARRANGEMENT 9



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			
CLASS 1 & 2		CLASS 3	
SHAFT DIA.	KEYWAY WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.
122	1 $\frac{1}{8}$ 1/4 x 1/8	124	134
135	1 $\frac{1}{8}$ 1/4 x 1/8	138	148
150	1 $\frac{1}{8}$ 1/4 x 1/8	160	170
165	1 $\frac{1}{8}$ 5/16 x 3/16	230	263
182	1 $\frac{1}{8}$ 5/16 x 3/16	264	297
200	1 $\frac{1}{8}$ 5/16 x 3/16	299	333

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



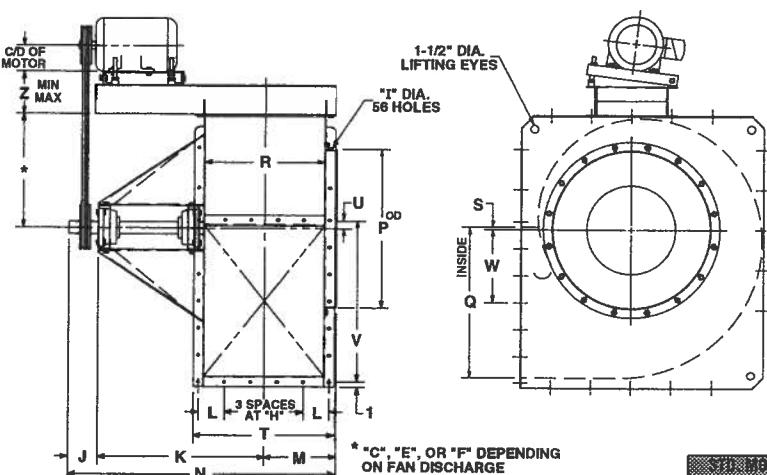
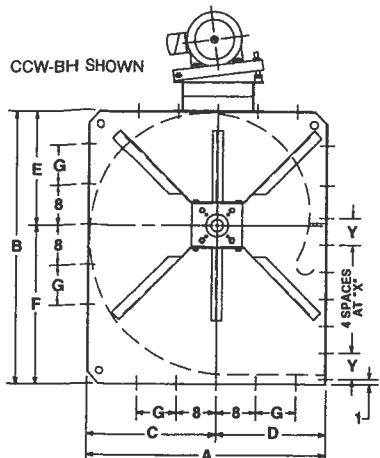
QBCA/QBCS-222-330
ARRANGEMENT 9

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

APPROXIMATE FAN WEIGHT NO MOTOR			
CLASS 1 & 2		CLASS 3	
SHAFT DIA.	KEYWAY WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.
222	1 $\frac{1}{8}$ 3/8 x 3/16	380	408
245	1 $\frac{1}{8}$ 1/2 x 1/8	452	437
270	1 $\frac{1}{8}$ 3/8 x 3/16	515	560
300	1 $\frac{1}{8}$ 1/2 x 1/8	716	747
330	2 $\frac{1}{8}$ 1/2 x 1/4	857	926

FRAME 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	STD. MOTOR BASE		H.D. MOTOR BASE			
																												WEIGHT LBS.		WEIGHT LBS.	
222	35 1/2	40 1/2	19 1/2	16	16%	23 1/2	6 1/2	6 1/2	5/8	5	26 3/2	6 1/2	10 1/2	41 1/8	23 1/2	22 1/2	17 1/2	5/8	20 1/2	15 1/2	23 1/2	10 1/2	6	5 1/2	6 1/4	8 1/4	182T-256T	8 1/4	10	143T-286T	
245	39 1/2	44 1/2	21 1/2	19	18 1/2	26 1/2	6 1/2	7 1/2	1 1/2	5	27 1/2	7 1/2	11 1/2	44 1/8	28 1/2	24 1/2	19 1/4	7/8	23 1/2	15 1/2	26 1/2	11 1/2	6 1/2	6 1/4	6 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T	
270	43%	49 1/2	23%	19 1/2	20%	28 1/8	6 1/2	7 1/2	1	6	29 1/2	7 1/2	12 1/2	48 1/8	28 1/2	26 1/2	21 1/2	7/8	25 1/2	17 1/2	29 1/2	13 1/2	7 1/2	7 1/4	6 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T	
300	48 1/2	54 1/2	26 1/2	22	22 1/2	31 1/2	7 1/2	8 1/2	1 1/2	6	33 1/2	8 1/2	14 1/2	63 1/8	31 1/2	29 1/2	23 1/4	7 1/2	28 1/2	19 1/2	32 1/2	14 1/2	7 1/2	8 1/4	8 1/4	10	143T-286T	10 1/4	12	143T-326T	
330	52%	59%	28 1/2	24	24 1/8	34 1/2	8	9 1/2	1	6 1/2	36 1/2	9 1/2	15 1/2	58 1/8	34 1/2	33	26 1/2	7/8	30 1/2	12 1/2	35 1/4	15 1/2	8 1/2	8 1/2	8 1/2	8 1/2	10	143T-286T	10 1/4	12	143T-326T

QBCA/QBCS-365-445 ARRANGEMENT 9

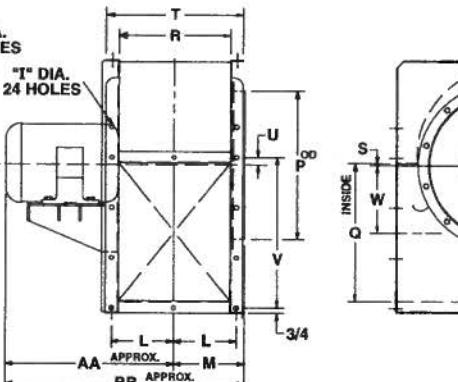
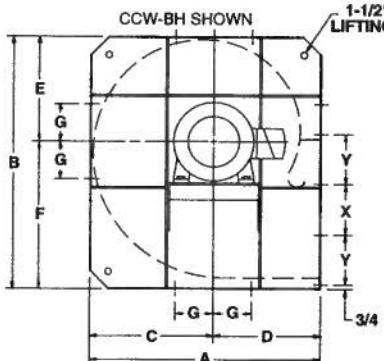


APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

FAN SIZE	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	
365	58½	65½	31½	27	27½	38½	8	6½	1½	6½	37½	6½	16½	61	37½	36½	29	7½	33½	1½	38½	17½	6½	6½	8½	10
402	65½	72	36½	36	30½	41½	16	6½	1½	7	40½	6½	18½	65½	41½	40½	31½	7½	36½	1½	42½	10½	7½	7½	8½	10
445	71½	79½	38½	33	33½	46	16	7½	1½	7	41½	7½	19½	68½	45½	44½	35½	3½	39½	1½	46½	21½	7½	7½	8½	10

FAN SIZE	APPROXIMATE FAN WEIGHT NO MOTOR		CLASS 1-2	CLASS 3		CLASS 1-2	CLASS 3			
	SHAFT DIA.	KEYWAY		WITH STEEL MOTOR BASE	WITH IRON MOTOR BASE		SHAFT DIA.	KEYWAY	WITH STEEL MOTOR BASE	WITH IRON MOTOR BASE
365	2 7/16	5/8 x 3/8	1145	1215	2 7/16	5/8 x 3/8	1289	1359		
402	2 9/16	5/8 x 3/8	1424	1496	2 9/16	5/8 x 3/8	1551	1623		
445	2 13/16	5/8 x 3/8	1638	1713	2 13/16	5/8 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	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y
122	20½	23	10½	10	9½	13%	5½	7½	5¾	6½	13%	12½	9½	1½	13	5½	13½	5½	4½	4½	4½			
135	22½	25½	11½	11	10½	14½	5½	7½	6¾	7½	14½	13½	10½	1½	13½	5½	15½	6½	5½	5				
150	25½	27½	13½	12	11½	16½	5½	7½	6½	7½	16½	15	11½	7½	15½	1½	16½	7½	5½	5½				
165	27½	30½	14½	13	12½	17½	8½	9½	7½	8½	17½	16½	13½	½	16½	1½	18½	7½	6½	6				
182	30½	33½	16½	14	13½	19½	6½	%	8½	9	19½	18½	14½	½	17½	1½	19½	8½	6½	6½				
200	32½	36½	17½	15	15½	21½	6½	½	8½	9½	21½	19½	15½	½	19½	1½	21½	9½	7½	7½				

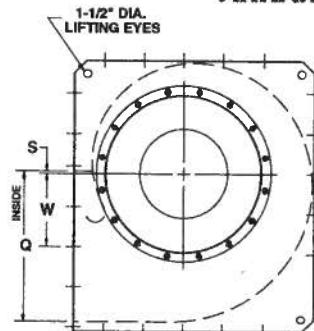
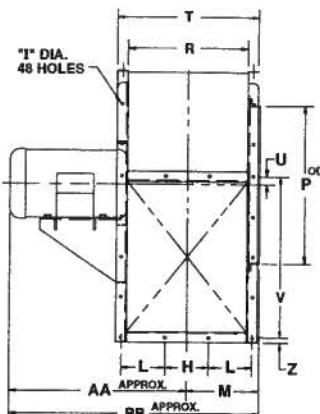
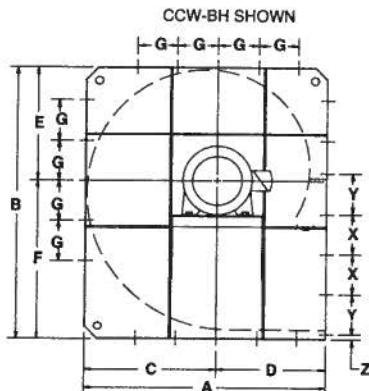
MOTOR FRAME SIZES

	56	143T	145T	182T	184T	213T	215T	254T	266T							
AA	15½	22½	14½	21½	15½	22½	16%	23½	17½	24%	19½	25%	20%	27%	N/A	N/A
BB	22½															
AA																
BB																
AA	15½	22½	14½	21½	15½	22½	16%	23½	17½	24%	19½	25%	20%	27%	N/A	N/A
BB	22½															
AA																
BB																

APPROXIMATE FAN WEIGHTS NO MOTOR

FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5
122	97	110	99	112	104
135	108	117	109	120	114
150	128	140	129	141	134
165	177	192	178	183	183
182	207	223	209	224	213
200	237	258	239	260	244

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

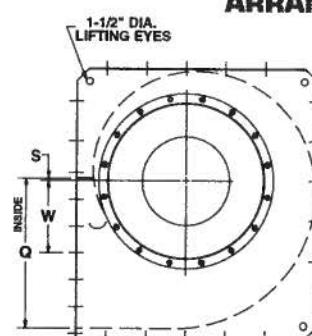
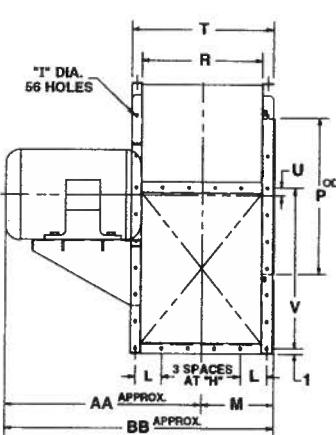
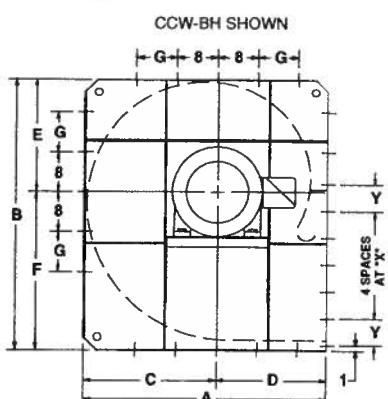


FRM SIZE	A	B	C	D	E	F	G	H	I	L	M	P	Q	R	S	T	U	V	W	X	Y	Z
222	35 1/2	40%	19 1/2	16	16 1/4	23 1/2	6 1/2	6 7/16	%	6 1/2	10 1/2	23 1/2	22 1/2	17 1/2	1/2	20 1/2	1 1/2	23 1/2	10 1/2	6	5 1/2	3/4
245	38 1/2	44%	21 1/2	18	18 1/2	28 1/2	6 1/2	7 1/2	%	7 1/2	11 1/2	26 1/2	24 1/2	19 1/2	1/2	23 1/2	1 1/2	26 1/2	11 1/2	6 1/2	6 1/2	1
270	43 1/2	49 1/2	23 1/2	19 1/2	20 1/2	28 1/2	6 1/2	7 1/2	%	7 1/2	12 1/2	28 1/2	26 1/2	21 1/2	1/2	25 1/2	1 1/2	29 1/2	13 1/2	7 1/2	7 1/2	1
300	48 1/2	54%	26 1/2	22	22 1/2	31 1/2	8	8 1/2	%	8 1/2	14 1/2	31 1/2	29 1/2	23 1/2	1/2	28 1/2	1 1/2	32 1/2	14 1/2	7 1/2	8 1/2	1
330	52 1/2	59%	28 1/2	24	24 1/2	34 1/2	8	9 1/2	%	9 1/2	15 1/2	34 1/2	33	26 1/2	1/2	30 1/2	1 1/2	35 1/2	15 1/2	8 1/2	8 1/2	1

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

MOTOR FRAME SIZES											
FRM SIZE	182T	184T	213T	244T	254T	264T	280T	312T	324T	330T	336T
FRM SIZE	AA	BB	AA								
222	20%	31%	21%	32 1/2	23 1/2	33 1/2	24%	35 1/2	27 1/2	38 1/2	29 1/2
245	21 1/2	33%	22 1/2	34 1/2	24 1/2	36 1/2	25%	37 1/2	28 1/2	40%	30 1/2
270	22 1/2	34 1/2	23 1/2	36 1/2	25 1/2	38 1/2	26%	39 1/2	29 1/2	42 1/2	N/A
300	N/A	N/A	26 1/2	40 1/2	27 1/2	41 1/2	30 1/2	44 1/2	32 1/2	46 1/2	34 1/2
330	N/A	N/A	27 1/2	42 1/2	29	44 1/2	31 1/2	47 1/2	33 1/2	48 1/2	35 1/2

APPROXIMATE FAN WEIGHT NO MOTOR											
FRM SIZE	182/184T	213/215T	254/256T	264/266T	280/284T	312/314T	324/326T	330/336T	336/338T	344/346T	352/354T
FRM SIZE	CLASS										
222	295	321	300	326	315	341	N/A	N/A	N/A	N/A	N/A
245	363	395	367	400	393	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	530	582	646	595	653	605	661	613	N/A	N/A
330	N/A	629	750	645	766	652	773	661	781	N/A	N/A



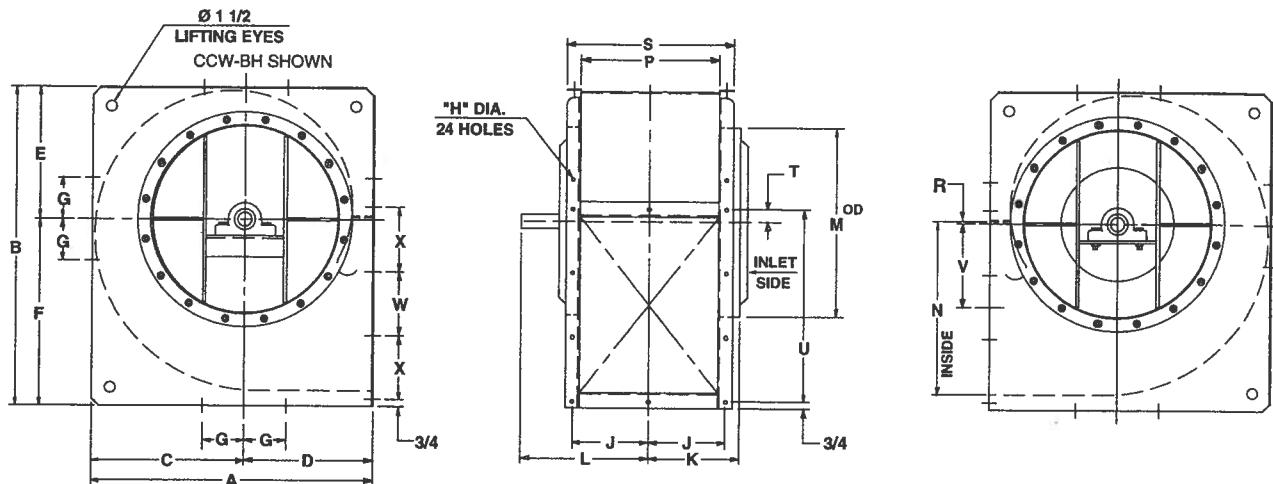
FRM SIZE	A	B	C	D	E	F	G	H	I	L	M	P	Q	R	S	T	B	V	W	X	Y
365	58%	65%	31%	27	27 1/2	38 1/2	8	6 1/2	7 1/2	6 1/4	16 1/2	37 1/2	36 1/2	29	1 1/2	33 1/4	1 1/2	38 3/4	17 1/2	6 1/2	6 3/4
402	65%	72	35%	30	30%	41%	16	6 1/2	7 1/2	6 1/2	18 1/2	41 1/2	40 1/2	31 1/2	5 1/2	36 1/2	1 1/2	42 1/2	19 1/2	7 3/2	7 3/2

MOTOR FRAME SIZES											
FRM SIZE	213T	215T	244T	254T	264T	280T	312T	324T	330T	336T	338T
FRM SIZE	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA
365	28%	45 1/2	30%	47 1/2	33 1/2	50	34 1/2	51 1/2	36%	53 1/2	38 1/2
402	N/A	34 1/2	52 1/2	36 1/2	54 1/2	38 1/2	56%	39 1/2	57%	40 1/2	58 1/2

APPROXIMATE FAN WEIGHT NO MDTR											
FRM SIZE	213/215T	244/256T	264/266T	280/284T	312/314T	324/326T	330/336T	336/338T	344/346T	352/354T	358/360T
FRM SIZE	CLASS										
365	890	993	906	1009	913	1016	921	1024	N/A	1110	1233
402	N/A	1110	1233	1117	1240	1126	1249	N/A	N/A	N/A	N/A

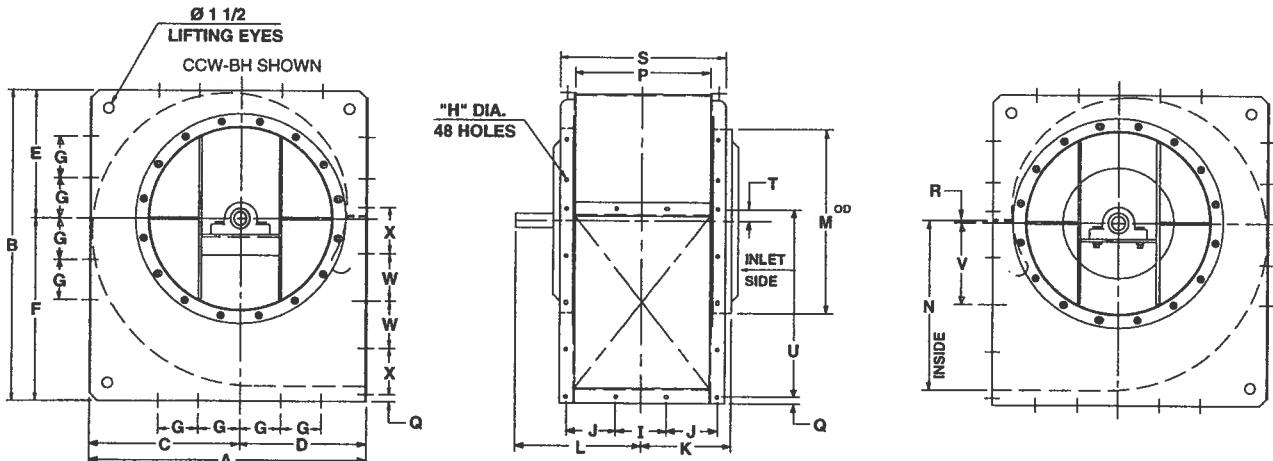
APPROXIMATE MOTOR WEIGHT TUBES WEIGHT SIZE	lb
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

QBCA/QBCS-122-200
ARRANGEMENT 3 SWSI



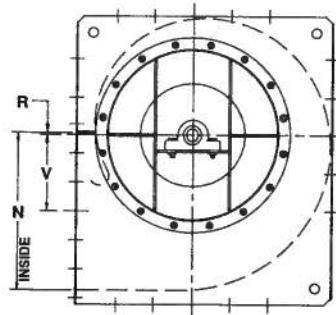
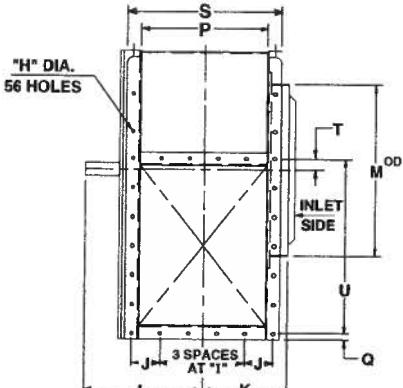
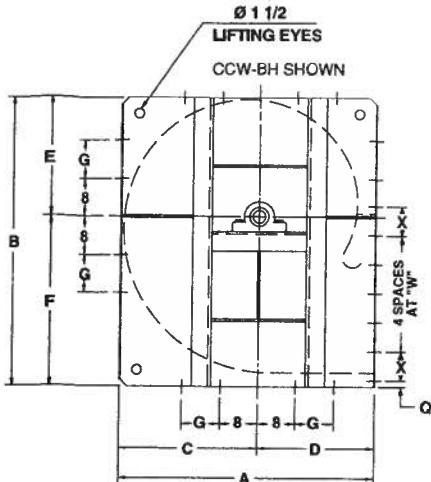
FAN SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X	CLASS 1 & 2		CLASS 3		APPROX. WEIGHT NO MOTOR (LB.)	
																						SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.		
122	20%	23	10%	10	9%	13%	5%	7/8	5 1/4	6%	11	13%	12%	9%	1/8	13	5%	13%	5 1/2	4%	4%	1 1/16	1/4 x 1/8	3/8 x 3/16	96	110	
135	22%	26%	11%	11	10%	14%	6%	7/8	6 1/2	7 1/2	11	14%	13%	10%	1/8	13	5%	13%	6 1/2	5%	6	1 1/16	1/4 x 1/8	3/8 x 3/16	110	124	
150	25 1/4	27%	13 1/4	12	11 1/8	16%	5 1/2	7/8	6 7/8	7 1/2	12 1/2	16 1/2	15	11 1/8	7/2	15	15%	11 1/2	16%	7 1/2	5%	5 1/2	1 1/16	1/4 x 1/8	3/8 x 3/16	132	150
165	27%	30%	14%	13	12 1/8	17%	6%	7/8	6 1/2	13 1/2	17 1/2	16 1/2	13 1/2	7/2	16	13%	18%	7 1/2	8 1/2	6%	6	1 1/16	1/4 x 1/8	3/8 x 3/16	194	218	
182	30 1/8	33%	16 1/8	14	13%	19%	6 1/2	9/16	8 1/8	9	13 1/8	19 1/8	18%	14 1/2	7/2	17	13 1/2	19%	8 7/8	6%	6 1/2	1 1/16	3/8 x 3/16	3/8 x 3/16	226	252	
200	32%	35%	17%	15	16 1/8	21%	6 1/2	1 1/8	9 1/8	9 1/8	19 1/2	19 1/2	18 1/2	9 1/8	19 1/2	19	21%	9 1/8	7 1/8	7 1/8	1 1/8	3/8 x 3/16	3/8 x 3/16	262	290		

QBCA/QBCS-222-330
ARRANGEMENT 3 SWSI

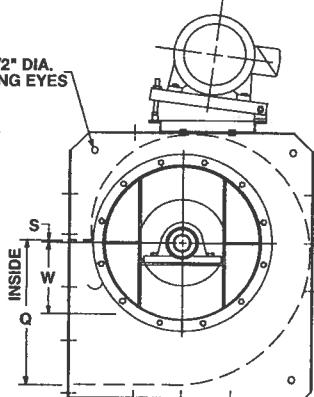
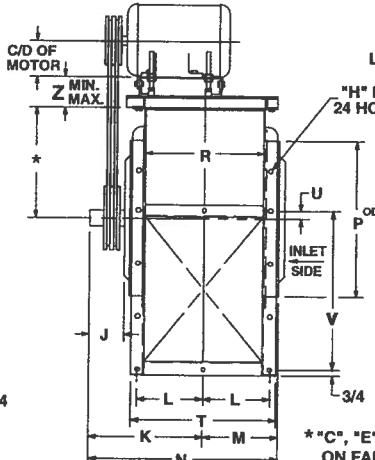
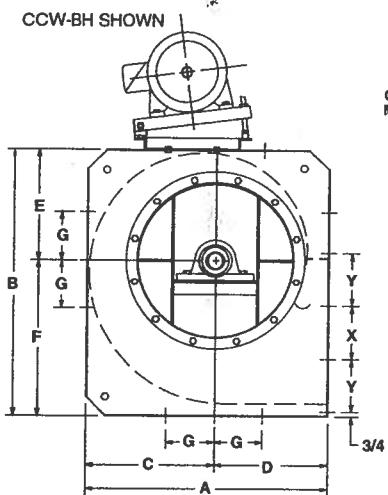


FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	CLASS 1 & 2		CLASS 3		APPROX. WEIGHT NO MOTOR (LB.)
																								SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	
222	35 1/2	40 1/8	19 1/2	16	16 1/8	23 1/2	6 1/2	9/16	6 7/8	6 1/2	10 1/2	16 1/2	23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

CLASS 3							
SHDN. GEAR WHEEL DIA.							
222	11/16	3/8 x 3/16	1 1/8	1 1/2 x 1/4			
245	1 1/8	3/8 x 3/16	1 1/8	1 1/2 x 1/4			
270	1 1/8	3/8 x 3/16	1 1/8	1 1/2 x 1/4			
300	1 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	1/2 x 1/4	1 1/2 x 1/4	1 1/2 x 1/4
330	1 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	1/2 x 1/4	1 1/2 x 1/4	1 1/2 x 1/4



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	CLASS 1&2		CLASS 3		APPROX. WEIGHT NO MOTOR (LBS.)	
																								SHAFT DIA.	KEYWAY	SHAFT DIA.	KEYWAY	CLASS 1&2	CLASS 3
365	58%	65 1/2	31 1/2	27	27 1/2	38 1/2	8	1 1/2	6 1/4	16 1/2	24 1/2	37 1/2	36 1/2	29	1	1 1/2	33 1/2	1 1/2	38 1/2	17 1/2	6 1/2	6 1/2	2 1/2	1 1/2 x 1/2	2 1/2	5/8 x 5/8	1078	1156	
402	65%	72	36 1/2	30	30 1/2	41 1/2	16	1 1/2	6 1/2	18 1/2	26 1/2	41 1/2	40 1/2	31 1/2	1	1 1/2	36 1/2	1 1/2	42 1/2	19 1/2	7 1/2	7 1/2	2 1/2	3 1/2 x 1/2	2 1/2	5/8 x 5/8	1308	1464	
445	71 1/2	79 1/2	38 1/2	33	33 1/2	46	16	1 1/2	7 1/2	7 1/2	19 1/2	27 1/2	45 1/2	44 1/2	35 1/2	1	1 1/2	39 1/2	1 1/2	46 1/2	21 1/2	7 1/2	7 1/2	2 1/2	5/8 x 5/8	2 1/2	5/8 x 5/8	1562	1748



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

FRAME SIZE	APPROXIMATE MOTOR WEIGHT	
	WEIGHT LBS.	WEIGHT KGS.
48	25	11
56	34	15
143T	45	20
145T	52	23
182T	85	38
184T	100	45
213T	150	68
215T	170	77
254T	260	118
256T	290	132
284T	390	177
286T	440	199

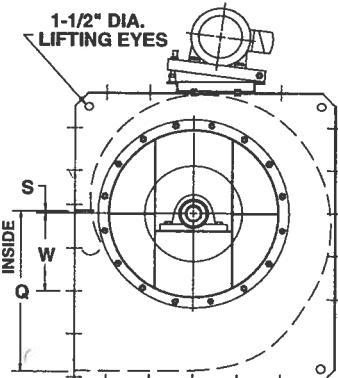
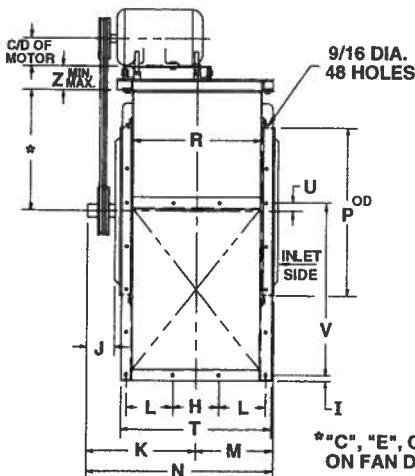
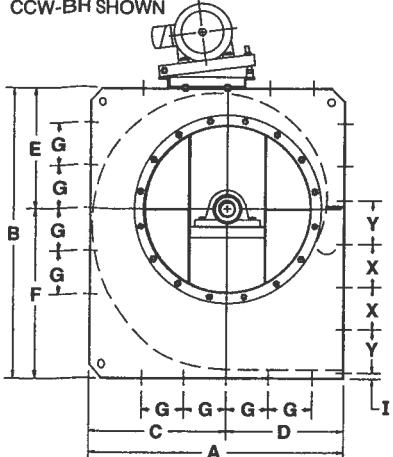
* "C", "E", OR "F" DEPENDING
ON FAN DISCHARGE.

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	MOTOR BASE				
																								WEIGHT LBS.	WEIGHT KGS.			
122	20%	23	10 1/2	10	9 1/2	13 1/2	5 1/2	7 1/2	3 1/2	11	5 1/2	6 1/2	17 1/2	13 1/2	12 1/2	9 1/2	1	1 1/2	13 1/2	5 1/2	4 1/2	4 1/2	3 1/2	3 1/2	5 1/2	48-213T	182T-256T	
135	22 1/2%	25 1/2	11 1/2	11	10 1/2	14 1/2	5 1/2	7 1/2	3 1/2	11 1/2	6 1/2	7 1/2	18 1/2	14 1/2	13 1/2	10 1/2	3	1 1/2	13 1/2	7 1/2	5 1/2	5 1/2	3 1/2	3 1/2	5 1/2	48-213T	182T-256T	
150	25 1/2%	27 1/2	13 1/2	12	11 1/2	16 1/2	5 1/2	7 1/2	3 1/2	12 1/2	6 7/8	7 1/2	19 1/2	16 1/2	15	11 1/2	7 1/2	15 1/2	1 1/2	16 1/2	7 1/2	5 1/2	5 1/2	3 1/2	3 1/2	5 1/2	48-213T	182T-256T
165	27 1/2%	30 1/2	14 1/2	13	12 1/2	17 1/2	6 1/2	9 1/2	4	13 1/2	7 1/2	8 1/2	21 1/2	17 1/2	16 1/2	13 1/2	7 1/2	16 1/2	1 1/2	18 1/2	7 1/2	6 1/2	6 1/2	3 1/2	3 1/2	5 1/2	36-215T	143T-286T
182	30 1/2%	33 1/2	16 1/2	14	13 1/2	19 1/2	6 1/2	9 1/2	4	13 1/2	8 1/2	9	22 1/2	19 1/2	18 1/2	14 1/2	7 1/2	17 1/2	1 1/2	19 1/2	8 1/2	6 1/2	6 1/2	3 1/2	3 1/2	5 1/2	56-215T	143T-286T
200	32 1/2%	36 1/2	17 1/2	15	15 1/2	21 1/2	6 1/2	9 1/2	4	14 1/2	8 1/2	9 1/2	24 1/2	20 1/2	19 1/2	15 1/2	4	19 1/2	1 1/2	21 1/2	9 1/2	7 1/2	7 1/2	3 1/2	3 1/2	5 1/2	56-215T	143T-286T

FAN SIZE	CLASS 1&2		CLASS 3	
	SHAFT DIA.	KEYWAY	WITH CHG. MOTOR BASE	WITH H.D. MOTOR BASE
122	1 1/2	1 1/2 x 1/2	105	110
135	1 1/2	1 1/2 x 1/2	119	124
150	1 1/2	1 1/2 x 1/2	141	146
165	1 1/2	1 1/2 x 1/2	204	218
182	1 1/2	1 1/2 x 1/2	236	250
200	1 1/2	1 1/2 x 1/2	272	286

QBKA/QBCS-222-330 ARRANGEMENT 3T SWSI

CCW-BH SHOWN



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

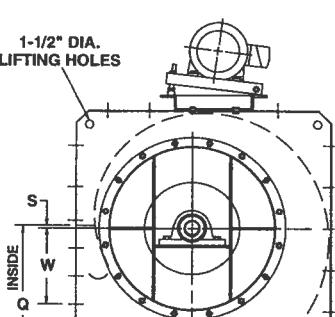
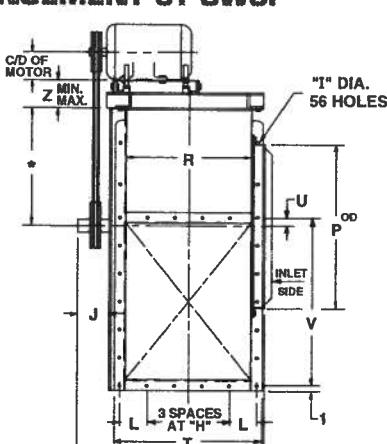
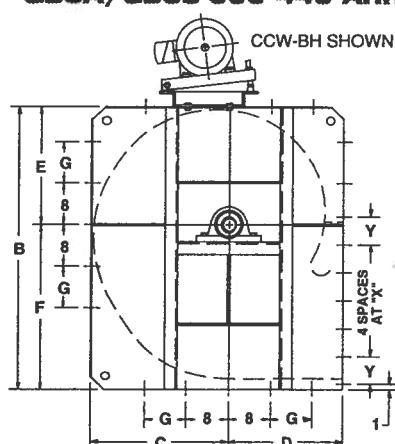
* "C", "E", OR "F" DEPENDING ON FAN DISCHARGE

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	Z ₁	NET WT. IN LBS.		
																											MIN.	MAX.	
222	35 1/2	40 1/2	19 1/2	16	16 1/2	23 1/2	6 1/2	6 7/8	5	16 1/2	6 1/2	10 1/2	27 1/2	23 1/2	22 1/2	17 1/2	9 1/2	20 1/2	1 1/2	23 1/2	9 1/2	26 1/2	11 1/2	6 1/2	5 1/2	4 1/2	6 1/2	182T-256T	143T-286T
240	39 1/2	44 1/2	21 1/2	18	18 1/2	26 1/2	6 1/2	7 1/2	1	12 1/2	7 1/2	10 1/2	28 1/2	26 1/2	24 1/2	19 1/2	7 1/2	23 1/2	9 1/2	26 1/2	11 1/2	6 1/2	5 1/2	4 1/2	6 1/2	182T-265T	143T-286T		
270	43 1/2	49 1/2	23 1/2	19 1/2	20 1/2	28 1/2	6 1/2	7 1/2	1	6	19 1/2	7 1/2	12 1/2	32 1/2	28 1/2	26 1/2	21 1/2	9 1/2	25 1/2	1 1/2	29 1/2	13 1/2	7 1/2	7 1/2	4 1/2	6 1/2	182T-256T	143T-326T	
300	48 1/2	54 1/2	25 1/2	22	22 1/2	31 1/2	8	8 1/2	1	6	21 1/2	8 1/2	14 1/2	35 1/2	31 1/2	29 1/2	23 1/2	7 1/2	28 1/2	1 1/2	32 1/2	14 1/2	7 1/2	8 1/2	4 1/2	6 1/2	143T-286T	143T-326T	
330	52 1/2	59 1/2	28 1/2	24	24 1/2	34 1/2	8	9 1/2	1	6 1/2	22 1/2	9 1/2	15 1/2	38 1/2	34 1/2	33	26 1/2	7 1/2	30 1/2	1 1/2	35 1/2	15 1/2	8 1/2	8 1/2	4 1/2	6 1/2	143T-286T	143T-326T	

FAN SIZE	SHAFT SIZE	KEYWAY	CLASS 1 & 2		CLASS 3		SHAFT SIZE	KEYWAY																				
			WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE																						
222	1 1/8	3/8 x 3/8	373	383	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8
240	1 1/8	3/8 x 3/8	453	469	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8
270	1 1/8	3/8 x 3/8	497	513	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8
300	1 1/8	3/8 x 3/8	685	691	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8	1 1/8	1/2 x 1/4	1 1/8	3/8 x 3/8
330	1 1/8	1/2 x 1/4	803	810	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4	2 1/8	1/2 x 1/4

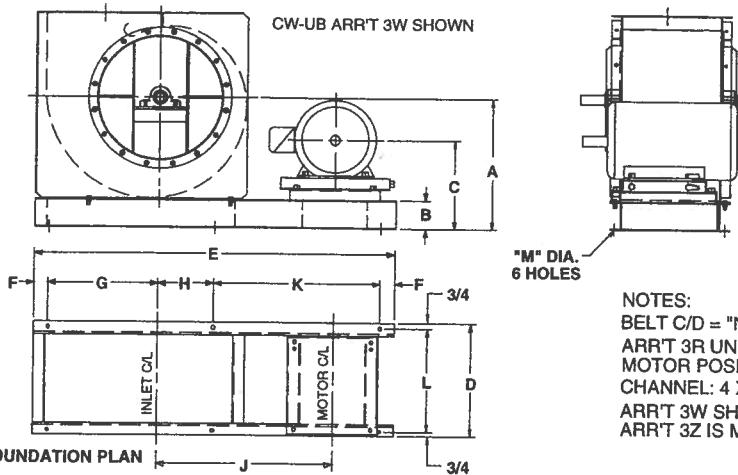
* "C", "E", OR "F" DEPENDING ON FAN DISCHARGE

58



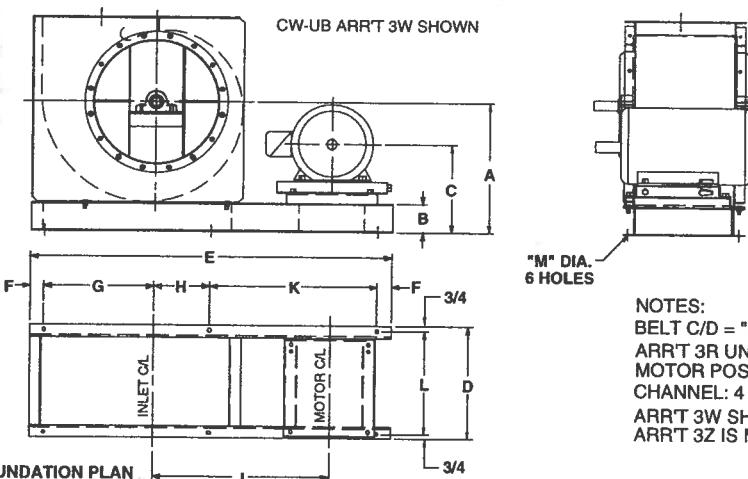
APPROXIMATE MOTOR WEIGHT	
FRAME SIZE	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

QBCS-122-150
ARRANGEMENT 3
SWSI UNITARY



NOTES:
BELT C/D = "N" DIM.
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 X 2 X .1793
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE.

ITEM	FRAME	A	A'	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	CLASS 122		
122		14%	13%	17%	4	10 1/4	38			5%	18%			9%	22%	9	21 1/4	16			18.7	22.8	22.0	23.0	162	220					
						11%	40			6%	19			10%	23%	10	22%	17			19.3	23.5	22.7	23.4	216	230	260	272			
						12%	44			8%	21 1/2			12%	26%	12	25%	19			22.0	26.2	25.5	26.0	333	347	353	367			
						14%	47			9%	23 1/2			14%	27%	13 1/2	27%	20 1/2			23.5	27.8	27.1	27.3	460	474	490	504			
150		17%	15%	20%	4	10 1/4	43			5%	20%			10 1/4	25%	9 1/2	24%	18 1/2			21.5	26.3	25.3	26.7	248	268	258	276			
						11%	45			6%	21 1/4			11 1/2	26%	10 1/2	25%	19 1/2			22.0	26.8	25.9	27.1	299	317	314	332			
						12%	49			8%	24%			13 1/2	29%	12 1/2	28%	21 1/2			24.6	29.4	28.6	29.5	375	393	395	413			
						14%	52			9%	25%			14%	30%	14 1/2	30%	23			25.9	30.8	30.1	30.7	502	520	532	550			
						15%	55			11%	27 1/4			16 1/2	32%	15 1/2	31%	24 1/2			27.3	32.3	31.6	32.0	645	663	695	713			

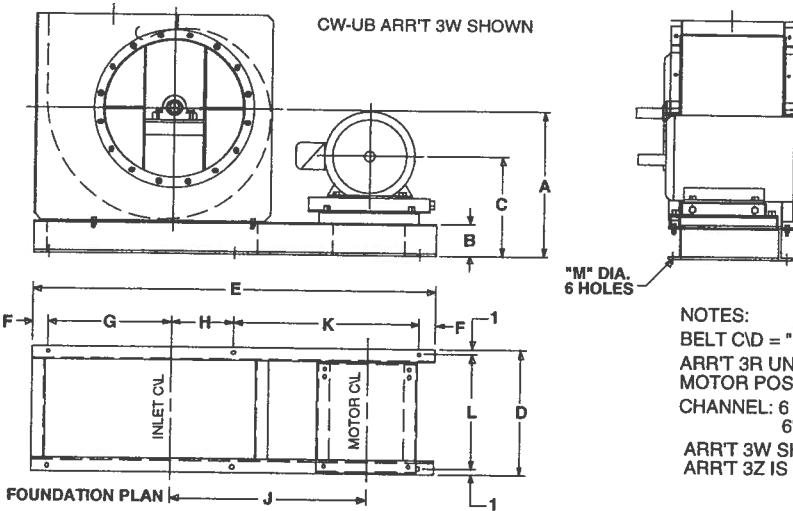


QBCA/QBCS-165-200
ARRANGEMENT 3
SWSI UNITARY

NOTES:
BELT C/D = "N" DIM.
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 X 2 X .1793
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE.

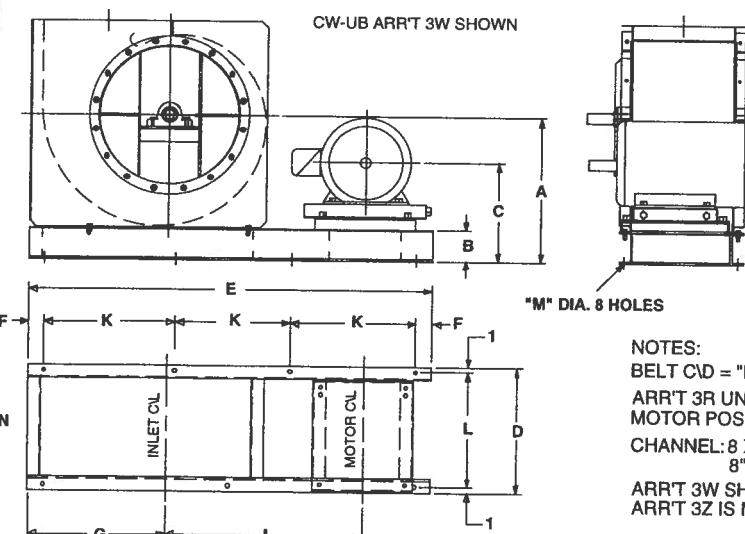
ITEM	FRAME	A	A'	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	CLASS 165		
165		18%	16%	21%	4	11%	48			6%	22%			11%	28%	11	27%	21			23.8	28.9	28.1	29.4	365	383					
						12%	52			8%	25%			13%	30%	13	30%	23			26.4	31.5	30.8	31.9	443	471	463	491			
						14%	55			9%	27%			14%	32%	14 1/2	32%	24 1/2			27.6	32.8	32.2	33.0	568	596	598	626			
						15%	58			11%	28%			16 1/2	34%	16 1/2	34%	26			29.0	34.2	33.7	34.3	711	739	761	789			
200		20%	17%	23%	4	11%	54			5%	25%			11%	31%	12	31%	24			27.3	33.0	32.5	34.4	447	475	462	490			
						12%	58			7%	28%			13%	34%	14	34%	26			29.6	35.5	35.1	36.7	527	555	547	575			
						14%	61			9%	29%			15%	36%	15 1/2	36%	27 1/2			30.7	36.7	36.4	37.7	656	684	686	714			
						15%	64			10%	31%			16%	37%	16 1/2	37%	29			32.0	38.0	37.8	38.9	797	825	847	875			
						16 1/2%	68			12%	33%			18%	40%	19	40%	31			34.2	40.3	40.2	41.0	980	1008	1045	1073			

**QBKA / QBKS-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.

CAT. NO.	FRAME NO.	CW-UB				CW-UD				CW-H				CW-H-COMB				CW-3R				CW-3H				Arrangement 3 SWSI UNITARY											
		A	B	C	D	E	F	G	H	I	J	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z						
365	254T							16 1/8				6 1/8	42 1/8					17 1/8	52 1/8			13 1/8	48 1/4			18	53 1/8	42			47.2	56.9	51.2	55.8	59.9	1673 1751	
	256T							17 1/8				8 3/8	43%					19 1/8	54 1/8			14%	49%			19 1/2	54%	43 1/2			48.2	58.0	52.3	57.0	60.9	1703 1781	
	284T							18 1/8				9 7/8	46 1/8					21 1/8	56 1/8	28%		16%	52 1/4			21 1/2	57%	45 1/2			50.0	59.8	54.3	59.0	62.5	1842 1896	
	286T							19 1/4				10 1/8	47 1/8					22 1/8	58 1/8			18%	53%			23	58%	47			51.0	61.1	55.6	60.3	63.6	1868 1946	
	324T							22 1/4				11 1/8	47 1/8					25 1/8	61 1/8			N/A	N/A			25 1/2	61%	49 1/2			2006 2084	2071 2149					
	326T							23 1/4				12 1/8	50%					27 1/8	64 1/8			N/A	N/A			28	65%	52			2235 2313	2295 2373					
	364T							23 1/4				13 1/8	54 1/8					29 1/8	67 1/8													52.9	63.2	N/A	62.6	65.4	2595 2673
	365T							23 1/4				14 1/8	50%					31 1/4	70 1/4													56.2	66.6	N/A	66.2	68.6	2695 2773
	404T							23 1/4				15 1/8	54 1/8					32 1/4	71 1/4													56.2	66.6	N/A	66.2	68.6	2990 3068
	405T							23 1/4				16 1/8	54 1/8					33 1/4	72 1/4													3165 3243					
402	254T							16 1/8				9 6	44%					17 1/8	55 1/8			12 1/8	56 1/8	45			50.8	61.1	54.7	59.3	64.3	1907 1992					
	256T							17 1/8				9 9	45%					19 1/8	57 1/8			14 1/8	52 1/4			19 1/2	57%	46 1/2			51.7	62.2	55.9	60.7	65.6	1922 2226	
	260T							18 1/8				10 3	38 1/8					21 1/8	59 1/8	32%		16%	55	27		21 1/2	60%	48 1/2			53.2	63.9	57.7	62.6	66.8	2260 2418	
	261T							19 1/4				10 6	39 1/4					22 1/8	61 1/8			17 1/8	56 1/8	34 1/8			23	56%	50			54.4	65.1	59.0	63.9	67.8	2445 2565
	262T							19 1/4				11 1/4	50					23 1/8	63 1/8			18%	58%	34 1/8			55.3	67.1	61.1	66.1	69.5	2446 2566					
	364T							22 1/4				12 1/4	52%					25 1/4	64 1/4			20%	59%	35 1/4			56.1	67.4	61.1	66.1	69.5	2446 2565					
	365T							23 1/4				12 1/8	56%					27 1/8	66 1/8			N/A	N/A	36 1/8			56.1	67.4	61.1	66.1	69.5	2446 2565					
	404T							23 1/4				13 1/4	56%					29 1/8	68 1/8			20%	60%	36 1/8			56.1	67.4	61.1	66.1	69.5	2446 2565					
	405T							23 1/4				14 1/4	56%					31 1/8	70 1/8			22%	62%	36 1/8			56.1	67.4	61.1	66.1	69.5	2446 2565					
	406T							23 1/4				15 1/4	56%					33 1/8	72 1/8			24%	64%	36 1/8			56.1	67.4	61.1	66.1	69.5	2446 2565					

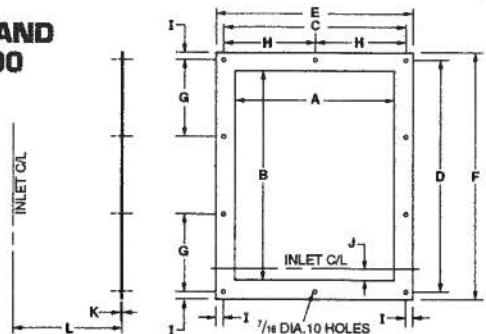


**QBKA/QBKS-445
ARRANGEMENT 3 SWSI
UNITARY**

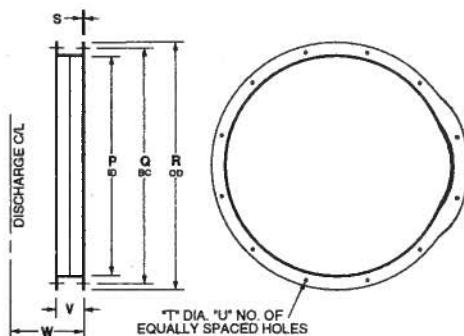
NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 8 X 2.978 X .353
8" - 18.7"
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

CAT. NO.	FRAME NO.	CW-UB				CW-UD				CW-H				CW-H-COMB				CW-3R				CW-3H				Arrangement 3 SWSI UNITARY					
		A	B	C	D	E	F	G	H	I	J	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
445	324T							20 1/8				112	53%					65 1/8	60 1/8			66 1/8	34			59.2	70.7	63.8	69.3	74.0	2742 2928
	326T							21%				115	54%					67 1/8	61 1/8			67 1/8	35			60.2	71.8	65.0	70.6	75.0	2807 2993
	364T							24 1/4				121	58%	33%			71 1/8	38%	65%		71%	37			62.8	74.7	68.0	73.7	77.6	2975 3161	
	365T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3035 3221
	404T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.0	69.5	75.1	78.8	3343 3529
	405T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3443 3629
	444T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3738 3924
	445T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3913 4099
	447T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.0	69.5	75.1	78.8	4476 4662

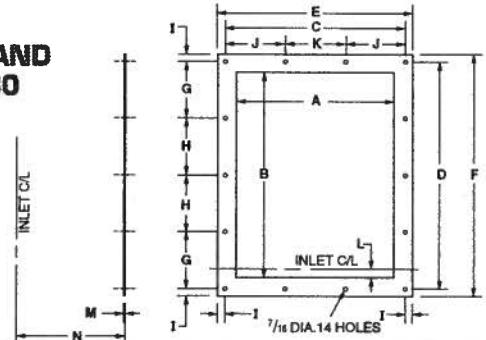
**BCA/BCS-122-200 AND
QBCA/QBCS-122-200
FLANGES**



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 ¹ / ₄	3 ¹ / ₄	3 ¹ / ₁₆	3 ¹ / ₁₆	10
135	51153	10 ⁷ / ₁₆	13 ⁷ / ₁₆	12 ⁷ / ₁₆	15 ⁷ / ₁₆	13 ⁷ / ₁₆	16 ⁷ / ₁₆	5	6 ⁷ / ₃₂	7 ¹ / ₁₆	7 ¹ / ₁₆	7 ¹ / ₁₆	11
150	51154	12 ³ / ₁₆	15 ¹ / ₈	13 ¹¹ / ₁₆	16 ⁵ / ₈	15 ¹ / ₈	18 ¹ / ₈	5 ¹ / ₂	6 ⁷ / ₃₂	9 ¹ / ₃₂	9 ¹ / ₃₂	9 ¹ / ₃₂	12
165	51158	13 ³ / ₈	16 ⁷ / ₈	14 ⁷ / ₈	18 ⁷ / ₈	16 ⁷ / ₈	19 ⁷ / ₈	6	7 ⁷ / ₁₆	11 ¹ / ₁₆	11 ¹ / ₁₆	11 ¹ / ₁₆	13
182	51156	14 ³ / ₈	18 ³ / ₈	16 ¹ / ₄	19 ⁷ / ₈	17 ³ / ₄	21 ¹ / ₈	6 ⁶ / ₈	8 ¹ / ₈	3 ¹ / ₄	11 ¹ / ₃₂	1 ¹ / ₄	14
200	51157	16 ¹ / ₈	20 ⁷ / ₈	17 ⁷ / ₈	21 ¹ / ₈	19 ⁷ / ₈	23 ¹ / ₈	7 ¹ / ₄	8 ⁷ / ₁₆	1 ¹ / ₄	7 ¹ / ₁₆	1 ¹ / ₁₆	15

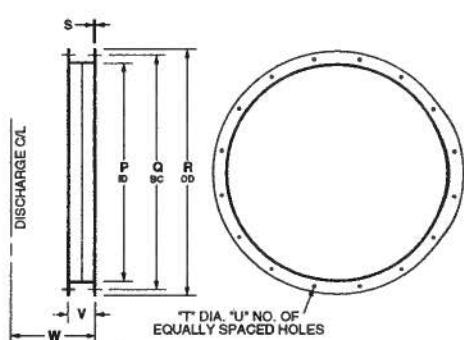


**BCA/BCS-222-330 AND
QBCA/QBCS-222-330
FLANGES**

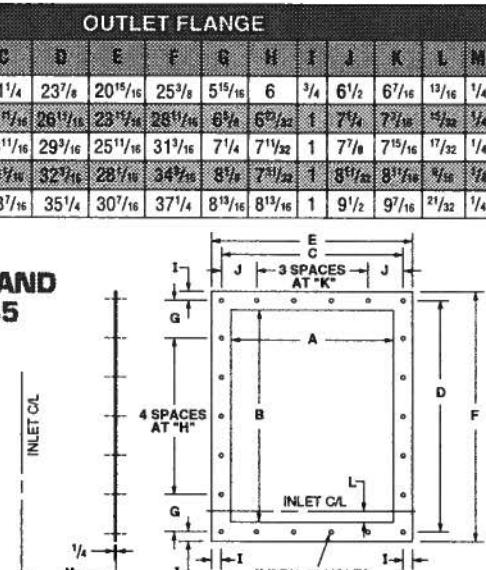


OUTLET FLANGE																	
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	R	
222	51158	17 ¹⁵ / ₁₆	22 ³ / ₈	31 ¹ / ₄	23 ⁷ / ₈	20 ¹⁵ / ₁₆	25 ³ / ₈	5 ¹⁵ / ₁₆	6	3 ¹ / ₄	6 ¹ / ₂	6 ⁷ / ₁₆	13 ¹³ / ₁₆	1 ¹ / ₄	16	20 ¹ / ₂	23 ³ / ₄
245	51159	19 ¹¹ / ₁₆	24 ⁷ / ₈	21 ¹¹ / ₁₆	26 ¹¹ / ₁₆	22 ¹¹ / ₁₆	26 ¹¹ / ₁₆	6 ⁷ /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

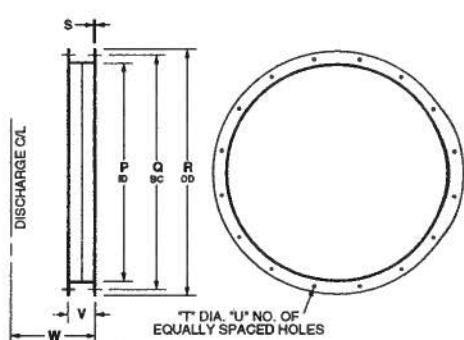
INLET FLANGE													
SIZE	WELDMENT PART NO.	P	Q	R	S	T	U	V	W				
222	50176	13 ¹ / ₈	15	16 ¹ / ₈	1 ¹ / ₁₆	8	3	8 ¹ / ₁₆					
245	50177	14 ¹ / ₈	16	17 ¹ / ₈	1 ¹ / ₁₆	8	3	8 ¹ / ₁₆					
270	50178	16 ¹ / ₈	18	19 ¹ / ₈	3 ¹ / ₁₆	8	3	9 ¹ / ₃₂					
300	50179	17 ¹ / ₈	19	20 ¹ / ₈	3 ¹ / ₁₆	8	3	9 ¹ / ₃₂					
330	50180	19 ¹ / ₈	20 ³ / ₄	22 ¹ / ₈	3 ¹ / ₁₆	12	3	10 ¹ / ₂					
	50181	21 ¹ / ₈	22 ³ / ₄	24 ¹ / ₈	3 ¹ / ₁₆	12	3	11 ¹ / ₁₆					



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



OUTLET FLANGE																
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	R
365	51163	29 ¹ / ₄	36 ³ / ₈	31 ¹ / ₄	38 ³ / ₈	33 ¹ / ₄	40 ³ / ₈	6 ¹ / ₈	6 ¹ / ₂	1	6 ¹ / ₄	6 ¹ / ₄	1 ¹ / ₁₆	7 ¹ / ₁₆	27	42 ¹ / ₁₆
402	51164	32 ⁷ / ₁₆	40 ⁷ / ₁₆	34 ⁷ / ₁₆	42 ⁷ / ₁₆	36 ⁷ / ₁₆	44 ⁷ / ₁₆	7 ¹ / ₈	7 ¹ / ₃₂	1	6 ¹ / ₈	6 ⁷ / ₁₆	1 ¹ / ₁₆	30	45 ¹ / ₁₆	
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 ³ / ₃₂	7 ¹ / ₁₆	33	47 ¹ / ₁₆
490	51166	39 ⁷ / ₁₆	49 ⁷ / ₁₆	42 ⁷ / ₁₆	52 ⁷ / ₁₆	45 ⁷ / ₁₆	63 ⁷ / ₁₆	8 ¹ / ₈	8 ¹ / ₁₆	1	8 ¹ / ₈	8 ⁷ / ₁₆	2 ⁷ / ₃₂	11 ¹ / ₁₆	36	66 ⁷ / ₁₆
542	51167	43 ⁵ / ₁₆	54 ⁵ / ₁₆	46 ⁵ / ₁₆	57 ⁵ / ₁₆	49 ⁵ / ₁₆	60 ⁵ / ₁₆	9 ¹ / ₁₆	9 ⁹ / ₁₆	1	9 ¹ / ₃₂	9 ¹ / ₄	1 ¹ / ₁₆	40	59 ⁷ / ₁₆	
600	51168	47 ⁷ / ₁₆	60 ⁷ / ₁₆	51 ⁷ / ₁₆	64 ⁷ / ₁₆	55 ⁷ / ₁₆	68 ⁷ / ₁₆	10 ³ / ₁₆	10 ¹¹ / ₁₆	2	10 ¹ / ₁₆	10 ⁷ / ₁₆	1 ¹ / ₁₆	44	70 ⁷ / ₁₆	
660	51169	52 ⁵ / ₈	66 ¹ / ₂	56 ⁵ / ₈	70 ¹ / ₂	60 ⁵ / ₈	74 ¹ / ₂	11 ¹ / ₄	11 ³ / ₄	2	11 ⁷ / ₁₆	11 ¹ / ₄	15 ¹ / ₁₆	11 ¹ / ₁₆	49	74 ⁷ / ₁₆



2933 Symmes Road,
Fairfield, Ohio 45014
t: 513-874-2400
f: 513-870-6249
e: americanfan@flaktwoods.com
w: www.flaktwoods.com

**American
Fan Company**

LITHO IN U.S.A.

BCS-445

American
Fan Company

SINGLE WIDTH

WHEEL DIAMETER: 44.50"

WHEEL CIRCUMFERENCE: 11.65'

OUTLET AREA: 10.923 SQ. FT.

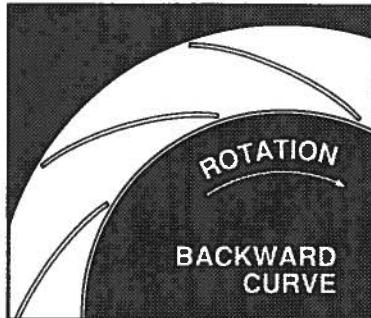
OUTLET SIZE: $35\frac{5}{16}$ " x $44\frac{9}{16}$ "

INLET DIAMETER: 45 $\frac{1}{2}$ " O.D.

CLASS 1		CLASS 2		CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3		
UP TO 250°F	944	1232	1662		
251°F TO 400°F*	897	1170	1560		
401°F TO 700°F*	774	1010	1350		
ABOVE 700°F	CONTACT FACTORY				

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED

TIP SPEED (FPM) = $11.65 \times RPM$ MAX BHP = $35.109 \times (RPM/1000)^3$



CFM	OV	0.25" SP RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP 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	
10907	1000	296	0.82	331	1.24	366	1.72	400	2.23	465	3.41	
11998	1100	319	1.00	349	1.43	383	1.95	415	2.50	473	3.68	
13089	1200	343	1.22	370	1.67	401	2.21	430	2.79	486	4.01	
14179	1300	367	1.45	392	1.95	419	2.49	447	3.10	501	4.40	
15270	1400	391	1.72	415	2.26	437	2.80	465	3.45	516	4.81	
16361	1500	415	2.03	438	2.62	459	3.18	483	3.82	532	5.26	
17452	1600	440	2.37	462	3.01	482	3.61	502	4.24	549	5.74	
18542	1700	465	2.76	485	3.45	505	4.08	523	4.73	567	6.25	
19633	1800	490	3.19	509	3.92	528	4.60	546	5.28	585	6.81	
20724	1900	515	3.67	533	4.43	551	5.17	569	5.88	604	7.41	
21815	2000	540	4.19	558	4.99	575	5.79	591	6.53	623	8.06	
22905	2100	565	4.77	582	5.60	598	6.46	615	7.24	645	8.83	
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		

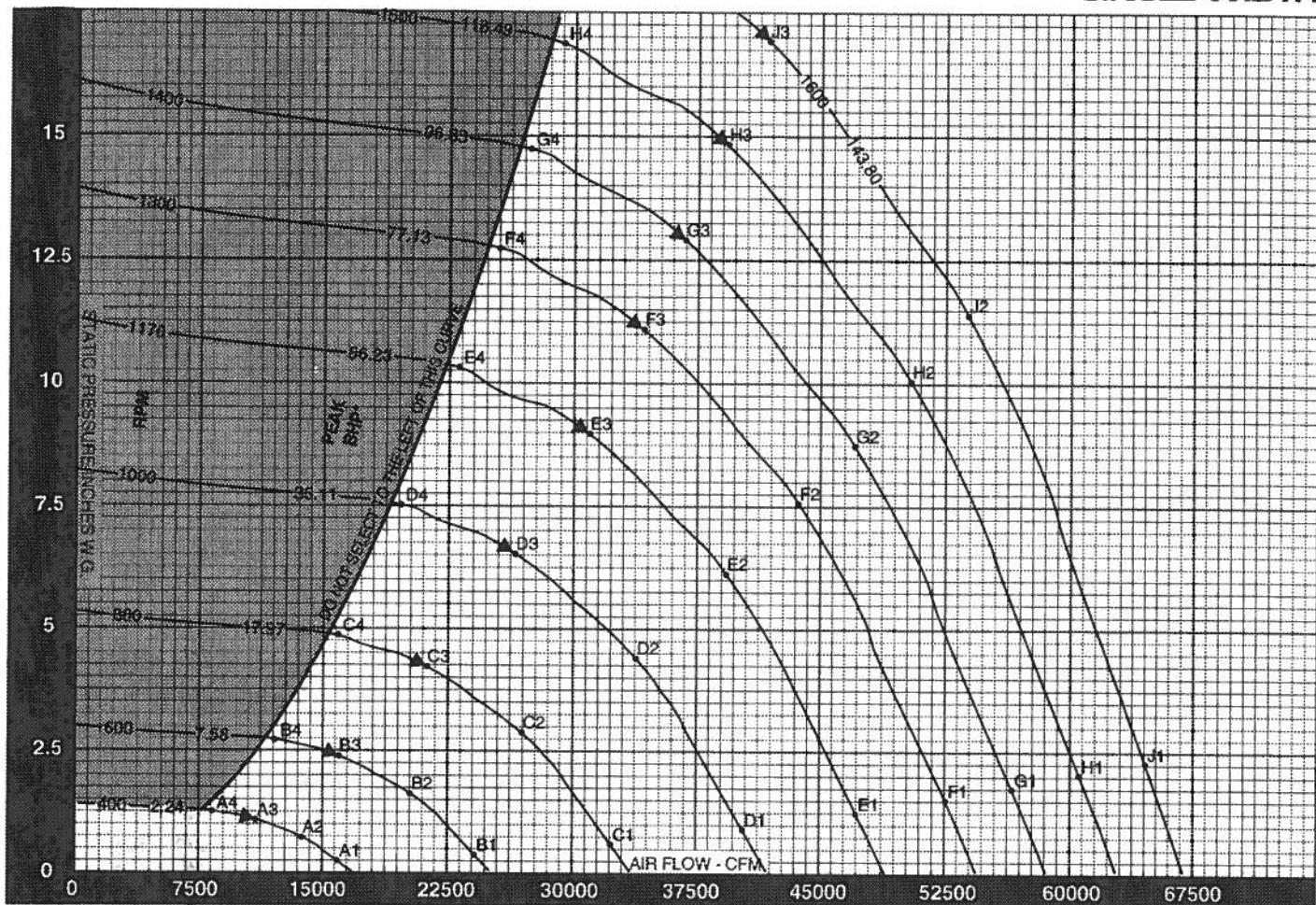
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
19633	1800	773	16.04	811	18.26	846	20.53	880	22.87	913	25.15
20724	1900	785	16.90	819	19.06	855	21.40	889	23.80	921	26.26
21815	2000	800	17.88	831	20.00	863	22.30	897	24.76	929	27.28
22905	2100	815	18.91	845	21.09	874	23.33	906	25.75	938	28.34
23996	2200	829	19.99	860	22.24	889	24.54	917	26.88	947	29.42
25087	2300	845	21.12	875	23.44	904	25.80	931	28.21	958	30.66
26178	2400	860	22.31	890	24.69	918	27.12	946	29.69	972	32.11
27268	2500	877	23.54	905	26.01	933	28.50	961	31.04	987	33.62
28359	2600	894	24.82	921	27.37	949	29.94	976	32.54	1002	35.18
29450	2700	912	26.17	939	28.78	964	31.44	981	34.11	1017	36.82
30541	2800	930	27.58	956	30.25	981	32.98	1006	35.74	1032	38.51
31631	2900	948	29.05	974	31.79	999	34.58	1023	37.42	1047	40.28
32722	3000	967	30.60	992	33.40	1017	36.26	1040	39.15	1063	42.10
33813	3100	985	32.21	1010	35.08	1036	38.00	1058	40.98	1081	43.97
34904	3200	1004	33.89	1029	36.83	1053	39.81	1076	42.84	1098	45.72
35994	3300	1024	35.76	1047	38.65	1071	41.70	1094	44.60	1116	47.94
37085	3400	1047	37.81	1068	40.55	1089	43.67	1112	46.83	1134	50.04
38176	3500	1069	39.96	1086	42.66	1108	45.72	1130	48.94	1152	52.21
39267	3600	1092	42.21	1109	44.97	1126	47.84	1149	51.14	1170	54.47
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
										1260	70.82

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
27268	2500	1143	50.91	1193	57.30	1241	63.86	1287	69.95	1331	76.04
28359	2600	1161	52.51	1201	59.02	1249	65.70	1295	72.54	1339	78.82
29450	2700	1180	54.13	1210	60.77	1258	67.88	1304	74.94	1347	81.65
30541	2800	1171	55.96	1219	62.56	1266	69.49	1312	76.56	1366	83.83
31631	2900	1185	58.11	1227	64.40	1275	71.45	1320	78.66	1364	86.03
32722	3000	1200	60.34	1241	66.69	1283	73.45	1329	80.79	1373	88.28
33813	3100	1214	62.64	1255	69.12	1285	75.73	1338	82.96	1381	90.57
34904	3200	1229	65.92	1270	71.63	1309	78.36	1347	92.22	1390	92.91
35994	3300	1244	67.47	1285	74.21	1324	81.09	1361	98.05	1399	95.29
37085	3400	1269	70.00	1300	76.87	1339	83.87	1376	99.98	1412	98.22
38176	3500	1274	72.61	1315	79.62	1353	86.74	1391	93.99	1426	101.35
39267	3600	1290	75.30	1330	82.44	1368	89.70	1405	97.08	1441	104.67
40357	3700	1307	78.05	1345	85.36	1383	92.75	1420	100.26	1456	107.88
41448	3800	1324	80.87	1360	88.36	1398	95.89	1435	103.53	1471	111.28
42539	3900	1342	83.78	1377	91.41	1414	99.11	1450	106.83	1485	114.77
										1520	122.76
										1553	130.89
										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 QBCS.

CONSTANT SPEED PERFORMANCE CURVES

BCS-445
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.015}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		7.93	F2	105	110	108	101	98	97	92	85	
600	0.32	B1	94	93	87	88	86	79	71	63		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	116	107	99	97	92	86	80	
	2.37	B3	90	88	81	79	77	72	66	60		1400	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		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	98	89	
1000	0.89	D1	102	109	102	99	99	96	88	80		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	
	9.60	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		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

WHEEL DIAMETER: 49.00"

WHEEL CIRCUMFERENCE: 12.83'

OUTLET AREA: 13.240 SQ. FT.

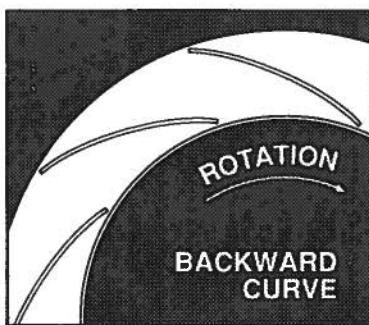
OUTLET SIZE: 38^{7/8}" x 49^{1/16}"

INLET DIAMETER: 51^{1/2}" O.D.

American
Fan Company

	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)*



CFM	OV	0.25" SP RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP 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	351	2.43	414	3.81
13225	1000	269	0.99	300	1.50	333	2.09	363	2.71	422	4.14
14547	1100	290	1.21	317	1.74	348	2.37	377	3.03	430	4.46
15870	1200	311	1.47	336	2.02	364	2.67	390	3.38	441	4.87
17192	1300	333	1.76	356	2.36	380	3.02	406	3.76	455	5.33
18515	1400	355	2.09	377	2.74	397	3.39	422	4.18	469	5.84
19837	1500	377	2.46	398	3.17	417	3.86	439	4.64	483	6.38
21160	1600	400	2.88	419	3.65	438	4.37	456	5.14	499	6.96
22482	1700	422	3.35	441	4.19	458	4.95	475	5.73	515	7.58
23805	1800	445	3.87	462	4.75	479	5.58	496	6.40	531	8.26
25127	1900	468	4.45	484	5.37	501	6.27	516	7.13	548	8.98
26450	2000	490	5.08	507	6.05	522	7.02	537	7.92	565	9.77
27772	2100	513	5.78	529	6.79	544	7.83	558	8.78	586	10.70
29095	2200	536	6.55	551	7.60	565	8.69	579	9.71	606	11.71

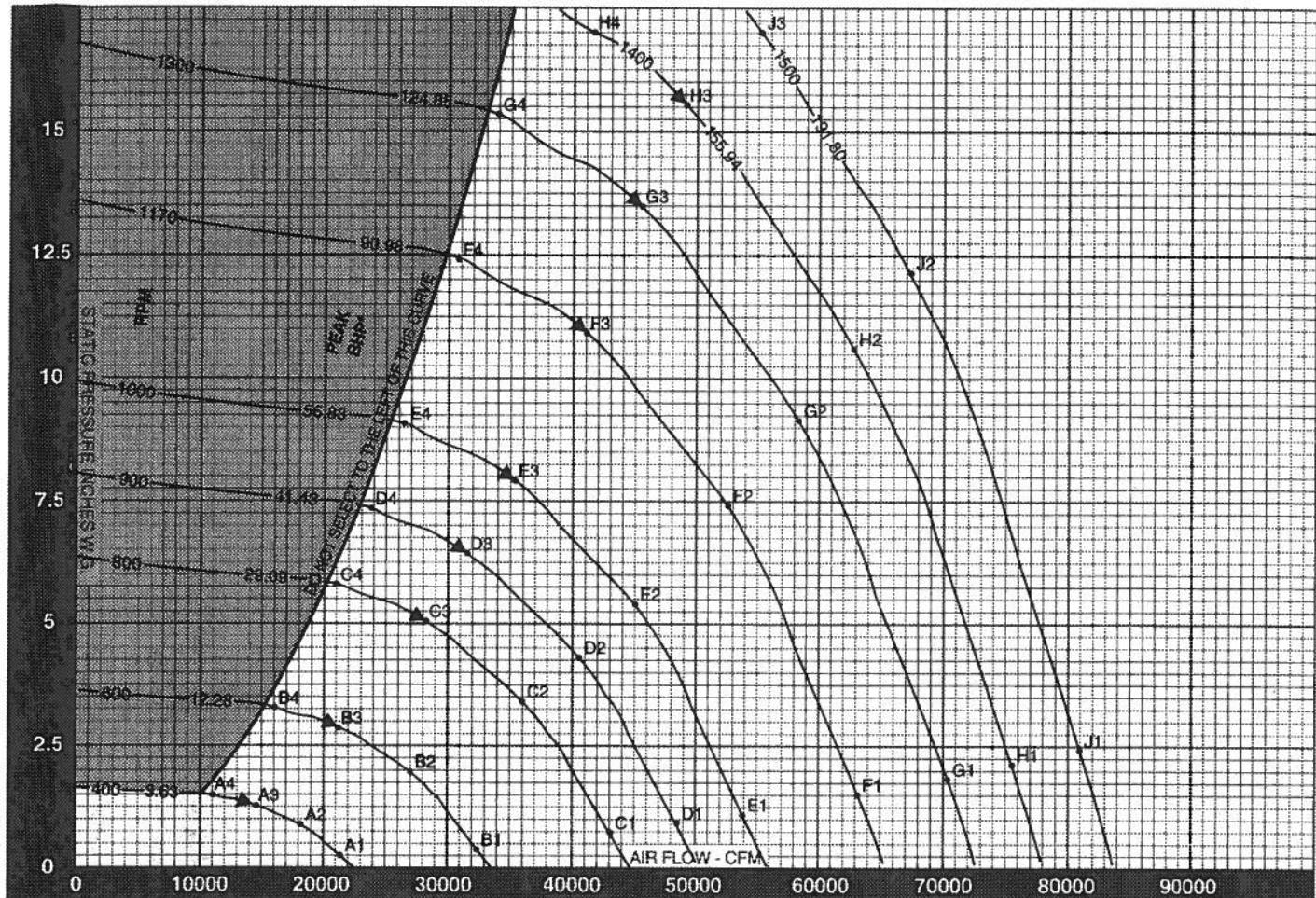
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
23805	1800	702	19.45	736	22.13	769	24.90	799	27.73	829	30.50
25127	1900	713	20.49	744	23.11	776	25.95	807	28.86	836	31.84
26450	2000	726	21.68	754	24.25	784	27.04	815	30.03	844	33.08
27772	2100	740	22.93	768	25.58	794	28.28	823	31.23	852	34.36
29095	2200	753	24.24	781	26.97	807	29.75	832	32.59	860	35.87
30417	2300	767	25.61	794	28.42	821	31.28	846	34.20	870	37.17
31740	2400	781	27.05	808	29.94	834	32.88	859	35.88	883	38.93
33062	2500	796	28.54	822	31.53	848	34.56	872	37.63	896	40.76
34385	2600	812	30.10	836	33.19	861	36.30	886	39.46	910	42.86
35707	2700	829	31.73	852	34.89	875	38.12	900	41.35	923	44.84
37030	2800	845	33.44	868	36.68	891	39.98	914	43.33	937	46.70
38352	2900	861	35.23	885	38.55	907	41.93	929	45.37	951	48.84
39675	3000	878	37.10	901	40.50	923	43.96	945	47.47	965	51.04
40997	3100	895	39.05	918	42.53	940	46.07	961	49.66	981	53.31
42320	3200	912	41.09	934	44.65	956	48.27	977	51.94	997	55.67
43642	3300	930	43.35	951	46.86	973	50.56	993	54.32	1014	58.12
44965	3400	950	45.85	968	49.17	989	52.95	1010	56.78	1030	60.67
46287	3500	971	48.45	987	51.73	1006	55.49	1026	59.34	1046	63.31
47610	3600	991	51.18	1007	54.53	1023	58.01	1043	62.00	1063	66.05
48932	3700	1012	54.03	1027	57.45	1042	60.91	1060	64.77	1079	68.89

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
33062	2500	1038	51.73	1083	69.48	1127	77.43	1169	84.82	1209	92.20
34385	2600	1045	63.66	1091	71.56	1135	79.66	1176	87.96	1216	95.56
35707	2700	1053	65.64	1099	73.68	1142	81.93	1184	90.38	1224	99.00
37030	2800	1063	67.85	1107	75.88	1150	84.26	1191	92.85	1231	101.64
38352	2900	1070	70.46	1114	78.08	1158	88.63	1199	95.38	1239	104.31
39675	3000	1089	73.16	1127	80.86	1166	88.08	1207	97.96	1247	107.04
40997	3100	1103	76.95	1140	83.81	1176	91.82	1216	100.58	1255	109.82
42320	3200	1116	78.83	1153	86.84	1189	95.01	1223	103.99	1262	112.65
43642	3300	1130	81.80	1167	89.98	1202	99.30	1236	106.77	1270	115.54
44965	3400	1144	84.87	1180	93.21	1216	101.69	1250	110.32	1282	119.09
46287	3500	1157	88.04	1194	96.53	1229	105.17	1263	113.96	1295	122.89
47610	3600	1171	91.31	1208	99.96	1243	108.78	1276	117.71	1309	126.79
48932	3700	1187	94.64	1221	103.49	1256	112.48	1290	121.58	1322	130.80
50255	3800	1202	99.06	1235	107.13	1270	116.26	1303	126.62	1335	134.92
51577	3900	1219	101.59	1251	110.83	1284	120.17	1317	129.59	1349	139.15

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-490
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		11.70	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		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		1300	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		13.52	G3	110	113	109	102	98	98	93	86	
	3.46	C2	100	103	94	91	90	86	79	73		15.34	G4	117	118	110	105	100	100	95	88	
	5.12	C3	101	100	93	87	88	84	78	72		1400	2.12	H1	111	117	118	109	109	108	103	94
	5.81	C4	108	101	96	90	91	87	79	72		10.59	H2	110	115	114	106	103	102	97	90	
900	0.88	D1	103	110	101	99	99	86	87	79		15.68	H3	111	115	111	104	100	100	95	89	
	4.38	D2	102	106	98	94	93	90	83	76		17.00	H4	115	119	112	106	101	101	96	90	
	6.48	D3	103	103	97	91	91	88	81	75		1500	2.43	J1	112	118	121	111	110	110	105	96
	7.35	D4	111	105	100	93	93	90	83	76		12.16	J2	111	116	116	108	104	104	99	92	
1000	1.08	E1	105	112	105	102	102	99	91	83		17.00	J3	112	117	114	106	102	102	97	91	
	5.40	E2	104	108	102	97	95	93	86	80		17.00	J4	112	117	114	106	102	102	97	91	

BCS-542

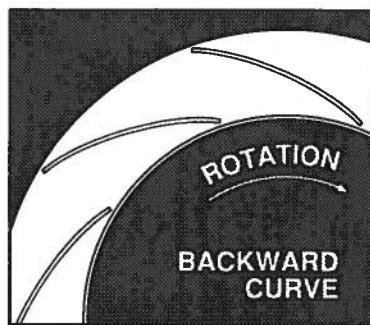
SINGLE WIDTH

WHEEL DIAMETER: 54.25"
 WHEEL CIRCUMFERENCE: 14.20'
 OUTLET AREA: 16.255 SQ. FT.
 OUTLET SIZE: 43 $\frac{1}{16}$ " x 54 $\frac{3}{8}$ "
 INLET DIAMETER: 56 $\frac{3}{4}$ " 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	1369
251°F TO 400°F*	736	960	1287
401°F TO 700°F*	636	829	1036
ABOVE 700°F	CONTACT FACTORY		

*SPECIAL HI-TEMP CONSTRUCTION REQUIRED
 TIP SPEED (FPM) = 14.20 x RPM MAX BHP = 94.539 x (RPM/1000)*



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
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

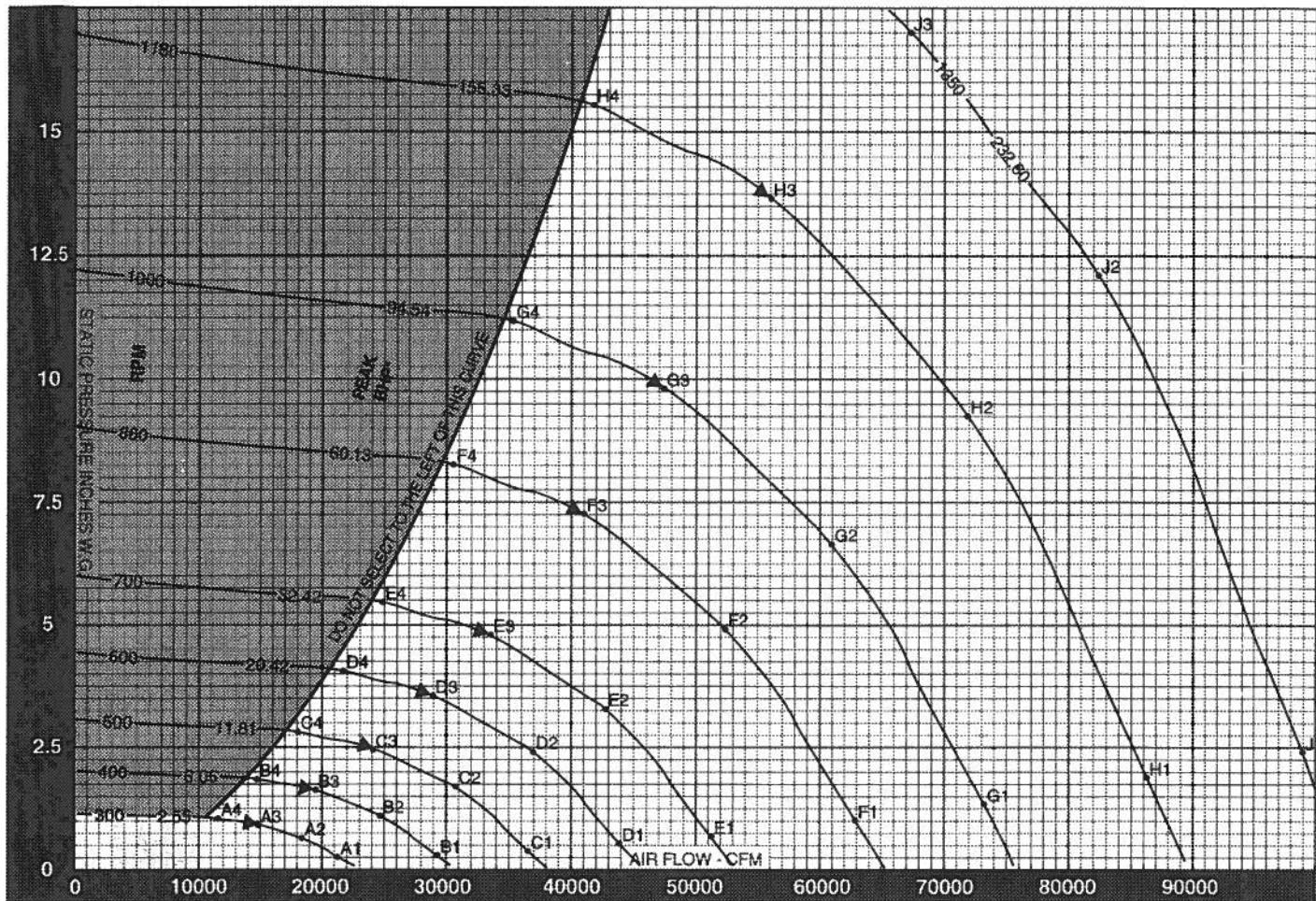
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
29179	1800	634 23.84	665 27.13	694 30.52	722 33.99	749 37.38	774 40.62	799 43.90	823 47.22	848 50.59
30800	1900	644 25.11	672 28.33	701 31.81	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	838 51.94	859 55.54
34042	2100	668 28.10	693 31.35	717 34.67	743 38.28	769 42.11	796 46.03	819 50.02	843 54.00	866 58.11
35663	2200	680 29.71	705 33.05	729 36.47	752 39.95	776 43.72	802 47.73	828 51.82	850 55.88	873 60.21
37285	2300	693 31.40	718 34.84	741 38.35	764 41.92	786 45.56	809 49.48	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	840 55.55	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	871 61.93	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	901 69.62
43769	2700	748 38.89	770 42.77	791 46.72	813 50.59	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 85.80	986 90.44
55116	3400	858 56.20	874 60.27	893 64.90	912 69.00	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 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
40527	2500	937 75.67	979 85.16	1018 94.91	1056 103.96	1092 113.01	1127 122.16	1161 131.48		
42148	2600	944 78.03	985 87.71	1025 97.64	1062 107.81	1099 117.14	1134 126.55	1169 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 150.04	1239 160.63
45390	2800	969 83.17	1000 92.98	1039 103.28	1076 113.82	1112 124.58	1147 135.53	1181 145.53	1213 155.84	1245 165.87
47011	2900	972 86.37	1007 95.71	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	1016 99.12	1053 109.18	1090 120.07	1126 131.20	1161 142.56	1194 154.12	1227 165.89	1258 176.63
50253	3100	996 93.10	1036 102.73	1062 112.58	1097 123.29	1133 134.61	1168 146.15	1201 157.90	1233 169.85	1265 182.01
51874	3200	1008 96.63	1042 105.45	1074 116.40	1102 126.69	1140 138.09	1173 149.81	1208 161.74	1240 173.99	1272 186.22
53495	3300	1021 100.27	1054 110.29	1086 120.49	1117 130.68	1147 141.63	1182 153.54	1215 165.66	1247 177.98	1279 190.60
55116	3400	1033 104.03	1066 114.26	1098 124.65	1129 135.22	1158 145.97	1189 157.33	1222 169.64	1254 182.15	1286 194.88
56738	3500	1045 107.91	1078 118.33	1110 129.92	1141 139.99	1170 150.63	1198 161.74	1223 173.70	1261 186.39	1293 199.28
58359	3600	1068 111.92	1091 122.53	1122 133.32	1163 144.28	1182 155.41	1210 166.71	1238 178.17	1268 190.71	1300 203.79
59980	3700	1072 116.00	1103 126.86	1135 137.85	1185 149.00	1184 160.33	1222 171.82	1250 183.47	1276 195.28	1307 206.36
61601	3800	1086 120.19	1116 131.32	1147 142.51	1177 153.36	1206 165.39	1234 177.06	1262 188.91	1288 200.90	1314 213.06
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 219.91

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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_{w1} 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		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	96	92	85	79	73	
	1.57	B3	86	81	75	76	72	66	60	54		1000	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		9.80	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		13.85	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

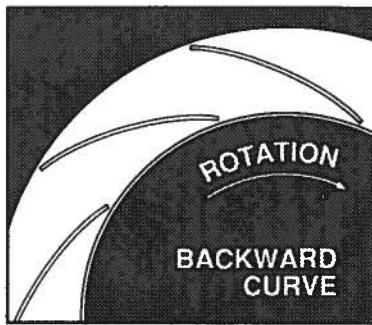
American
Fan Company

SINGLE WIDTH

WHEEL DIAMETER: 60.00"
WHEEL CIRCUMFERENCE: 15.71'
OUTLET AREA: 19.91 SQ. FT.
OUTLET SIZE: 47 $\frac{7}{16}$ " x 60 $\frac{3}{16}$ "
INLET DIAMETER: 63 $\frac{1}{4}$ " O.D.

	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	1141
401°F TO 700°F*	574	749	1016
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM	
		BHP									
15863	800	186	0.96	220	1.66	250	2.42	280	3.32	333	5.14
17846	900	202	1.20	232	1.94	261	2.76	287	3.64	338	5.72
19829	1000	219	1.48	245	2.25	272	3.13	297	4.06	345	6.20
21812	1100	237	1.82	259	2.60	284	3.55	308	4.54	351	6.68
23795	1200	254	2.21	274	3.03	297	4.01	319	5.07	361	7.30
25778	1300	272	2.64	291	3.54	311	4.52	332	5.64	371	8.00
27761	1400	290	3.13	308	4.11	324	5.09	345	6.27	383	8.75
29744	1500	308	3.69	325	4.75	341	5.78	358	6.95	394	9.57
31727	1600	326	4.32	342	5.48	357	6.56	372	7.70	407	10.43
33709	1700	345	5.02	360	6.28	374	7.42	388	8.59	421	11.37
35692	1800	363	5.80	378	7.12	392	8.36	405	9.59	434	12.38
37675	1900	382	6.67	396	8.05	409	9.40	422	10.68	448	13.46
39658	2000	400	7.62	414	9.07	426	10.53	439	11.87	462	14.64
41641	2100	419	8.67	432	10.19	444	11.75	456	13.16	478	16.04
43624	2200	438	9.81	450	11.40	462	13.02	473	14.55	495	17.55

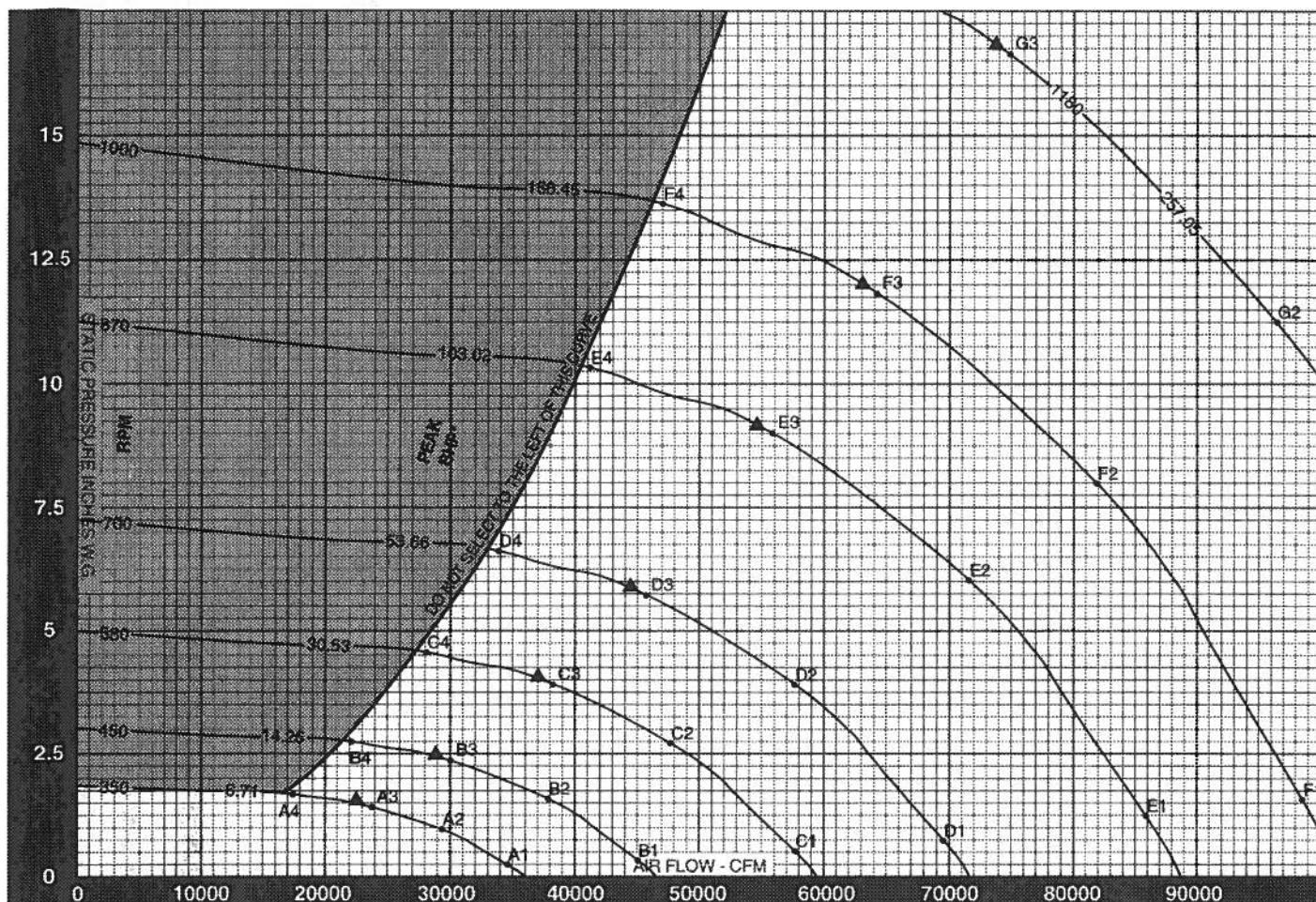
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
35692	1800	573	29.16	601	33.19	628	37.33	653	41.58	677	45.72
37675	1900	582	30.72	608	34.66	634	38.91	659	43.28	683	47.74
39658	2000	593	32.50	616	36.36	640	40.54	665	45.02	689	49.60
41641	2100	604	34.38	627	38.35	648	42.41	672	46.82	696	51.51
43624	2200	615	36.34	638	40.43	659	44.61	680	48.86	702	53.48
45607	2300	626	38.40	649	42.61	670	46.91	691	51.28	710	55.73
47590	2400	638	40.56	660	44.89	681	49.31	702	53.30	721	58.37
49573	2500	650	42.80	671	47.28	692	51.81	713	56.42	732	61.11
51556	2600	663	45.13	683	49.76	704	54.43	724	59.16	743	63.96
53539	2700	677	47.58	696	52.32	715	57.15	735	62.01	754	66.93
55522	2800	690	50.14	709	55.00	728	59.95	746	64.97	765	70.02
57505	2900	703	52.82	722	57.80	741	62.87	758	68.02	777	73.22
59488	3000	717	55.62	736	60.72	754	65.81	772	71.18	788	76.53
61471	3100	731	58.56	749	63.77	767	69.08	788	74.47	801	79.94
63454	3200	744	61.61	763	66.95	781	72.38	798	77.89	815	83.47
65437	3300	760	65.01	777	70.27	794	75.81	811	81.44	828	87.15
67419	3400	776	68.74	790	73.72	808	79.39	825	86.14	841	90.96
69402	3500	793	72.65	806	77.56	822	83.11	838	88.98	854	94.82
71385	3600	810	76.74	822	81.76	835	88.98	852	92.97	868	99.03
73368	3700	826	81.01	839	86.14	851	91.33	866	97.11	882	103.29

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
49573	2500	847	92.56	885	104.17	920	116.00	956	127.17	987	138.24
51556	2600	854	95.45	891	107.29	927	118.43	961	131.87	993	143.29
53539	2700	860	98.41	897	110.48	933	122.85	967	135.51	999	148.44
55522	2800	868	101.73	904	113.74	939	126.34	973	139.22	1006	152.39
57505	2900	879	105.65	910	117.07	946	129.90	979	143.01	1012	158.40
59488	3000	880	109.70	920	121.24	952	133.53	986	146.87	1018	160.49
61471	3100	901	113.88	931	125.86	960	137.87	992	150.81	1025	164.66
63454	3200	912	118.20	942	130.21	971	142.46	999	154.93	1031	168.91
65437	3300	923	122.65	953	134.91	962	147.39	1010	160.09	1037	173.24
67419	3400	934	127.26	964	139.76	993	152.47	1020	166.40	1047	178.55
69402	3500	945	132.00	975	144.74	1004	157.70	1031	170.87	1058	184.25
71385	3600	957	136.90	986	149.89	1015	163.08	1042	176.49	1069	190.10
73368	3700	969	141.89	998	155.18	1026	168.62	1053	182.26	1080	196.12
75351	3800	982	147.02	1009	160.63	1037	174.31	1064	188.20	1091	202.30
77334	3900	995	152.31	1021	166.18	1048	180.18	1076	194.31	1102	208.64

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		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		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	98	88	82	82	79	72	67	68		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		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		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		11.28	G2	114	118	114	107	105	103	98	91

BCS-660

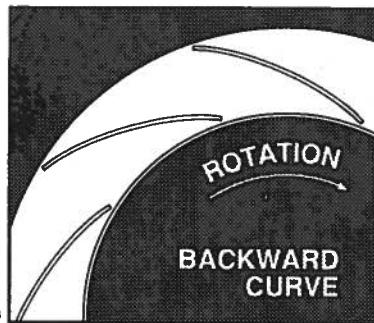
SINGLE WIDTH

WHEEL DIAMETER: 66.00"
WHEEL CIRCUMFERENCE: 17.28'
OUTLET AREA: 24.10 SQ. FT.
OUTLET SIZE: 52¹/₈" x 66¹/₄"
INLET DIAMETER: 69¹/₄" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	637	631	614
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM	
		BHP									
19194	800	169	1.16	200	2.01	227	2.93	255	4.02	302	6.22
21594	900	184	1.45	211	2.34	237	3.34	261	4.41	308	6.92
23993	1000	199	1.80	223	2.72	247	3.79	270	4.92	313	7.50
26392	1100	215	2.20	235	3.15	258	4.30	280	5.50	319	8.09
28792	1200	231	2.67	249	3.66	270	4.85	290	6.14	328	8.83
31191	1300	247	3.20	264	4.28	282	5.47	302	6.83	338	9.67
33591	1400	264	3.79	280	4.97	295	6.16	314	7.58	348	10.59
35990	1500	280	4.46	295	5.75	310	7.00	326	8.41	358	11.58
38389	1600	297	5.22	311	6.62	325	7.94	338	9.32	370	12.63
40789	1700	313	6.07	327	7.59	340	8.98	353	10.40	382	13.76
43188	1800	330	7.02	343	8.62	356	10.12	368	11.61	395	14.98
45587	1900	347	8.07	360	9.74	372	11.37	383	12.93	407	16.29
47987	2000	364	9.22	376	10.98	388	12.74	399	14.36	420	17.72
50386	2100	381	10.49	393	12.33	404	14.21	414	15.92	435	19.41
52785	2200	398	11.88	409	13.79	420	15.76	430	17.61	450	21.24

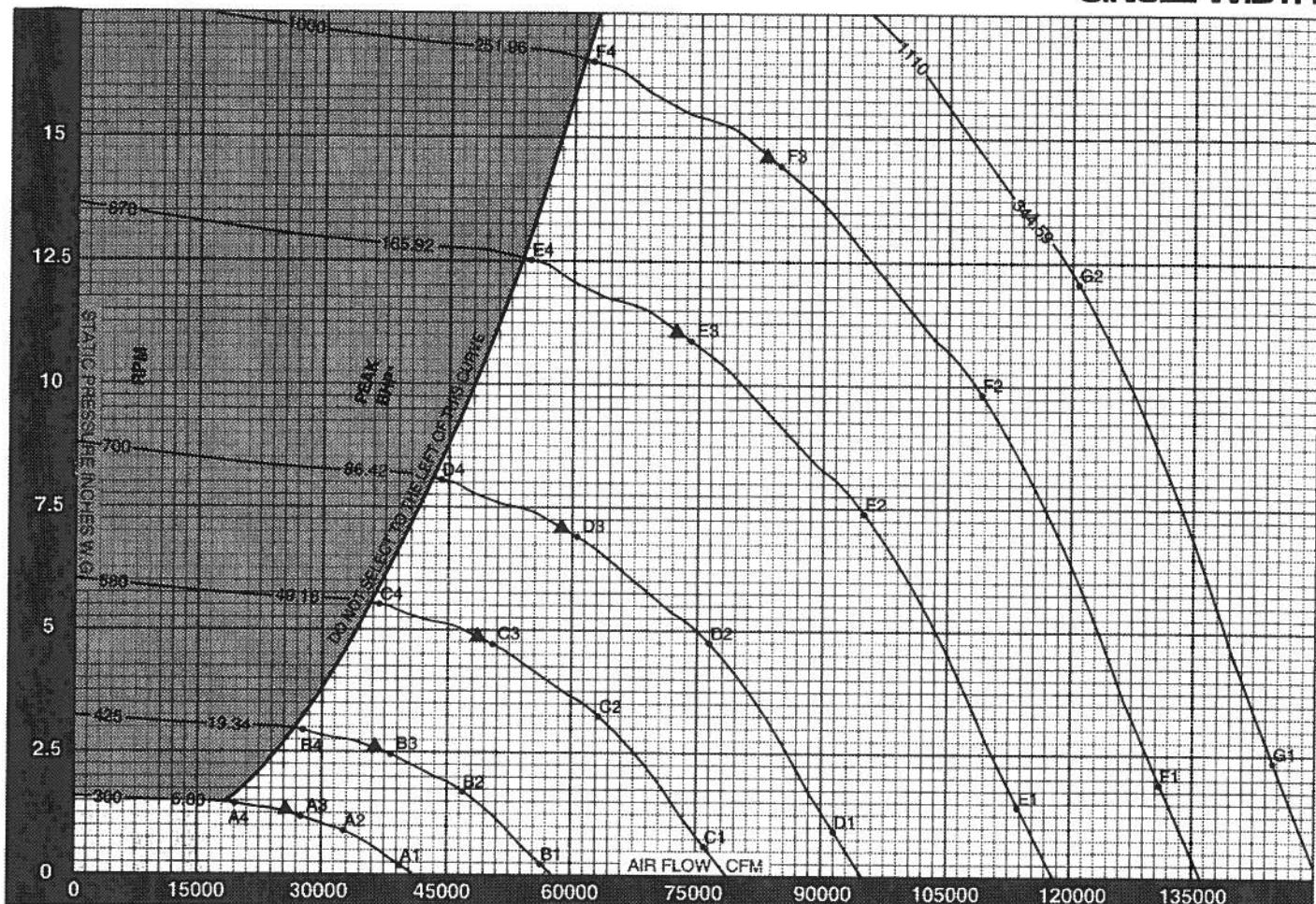
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
43188	1800	521	35.28	547	40.16	571	45.17	593	50.31	615	55.33
45587	1900	529	37.17	552	41.94	576	47.08	599	52.36	621	57.77
47987	2000	539	39.33	560	43.99	582	49.06	605	54.48	627	60.02
50386	2100	549	41.60	570	46.40	590	51.31	611	56.65	632	62.33
52785	2200	559	43.97	580	48.92	599	53.97	618	59.12	638	64.71
55185	2300	569	46.47	590	51.56	609	56.76	628	62.05	646	67.44
57584	2400	580	49.08	600	54.32	619	59.66	638	63.10	656	70.62
59983	2500	591	51.78	610	57.21	629	62.69	648	68.27	665	73.94
62383	2600	603	54.61	621	60.21	640	65.86	658	71.58	675	77.40
64782	2700	615	57.57	633	63.31	650	69.15	668	75.03	688	80.99
67182	2800	627	60.67	645	66.56	662	72.54	678	78.61	696	84.72
69581	2900	639	63.91	657	69.93	673	76.07	690	82.31	706	88.60
71980	3000	662	67.30	669	73.47	685	79.76	701	86.13	717	92.60
74380	3100	664	70.85	681	77.16	688	83.58	713	90.10	729	96.72
76779	3200	677	74.55	694	81.01	710	87.58	725	94.24	741	101.00
79178	3300	691	78.66	706	85.02	722	91.74	738	98.54	753	105.45
81578	3400	706	83.18	719	89.20	734	96.06	750	109.02	765	110.67
83977	3500	721	87.91	722	93.85	747	100.58	762	107.66	777	114.86
86376	3600	736	92.85	747	98.93	759	105.24	774	112.49	789	119.83
88776	3700	751	98.02	763	104.23	774	110.51	787	117.50	801	124.99

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
59983	2500	770	112.00	804	126.05	837	140.47	868	153.88	898	167.27
62383	2600	776	115.50	810	129.82	842	144.52	873	159.57	903	173.38
64782	2700	782	119.08	816	133.68	848	148.05	879	163.97	909	179.61
67182	2800	789	123.10	822	137.62	854	162.87	885	168.46	914	184.39
69581	2900	799	127.84	827	141.65	860	167.17	890	173.04	920	189.25
71980	3000	809	132.73	837	146.71	865	161.57	896	177.71	928	194.19
74380	3100	819	137.79	846	162.05	873	166.59	902	182.48	931	199.24
76779	3200	829	143.02	866	157.58	883	172.38	908	187.47	937	204.38
79178	3300	839	148.41	866	163.24	893	178.34	918	193.71	943	209.62
81578	3400	849	163.98	876	169.10	903	184.49	928	200.14	952	216.06
83977	3500	859	159.72	886	173.13	912	190.81	938	206.75	962	222.94
86376	3600	870	166.66	897	181.36	923	197.32	948	213.55	972	230.93
88776	3700	881	171.69	907	187.76	933	204.03	958	220.54	982	237.30
91176	3800	893	177.90	917	194.36	943	210.92	968	227.73	991	244.78
93574	3900	905	184.39	929	201.08	953	218.01	978	235.11	1002	252.46

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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_w 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		1.48	E1	113	119	108	108	108	104	95	87
425	0.35	B1	102	92	92	82	88	78	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
	2.82	B3	95	89	83	84	80	74	68	70		12.47	E4	120	113	108	101	102	98	91	84
	2.98	B4	96	92	85	86	83	75	68	71		1.96	F1	116	121	114	111	111	108	100	92
580	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
	5.54	C4	107	101	95	92	91	85	78	76		2.42	G1	117	123	118	113	113	111	104	95
700	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

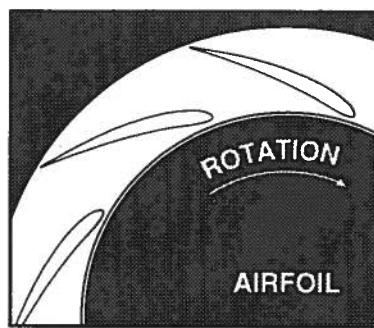
WHEEL DIAMETER: 18.25"
WHEEL CIRCUMFERENCE: 4.78'
OUTLET AREA: 1.829 SQ. FT.
OUTLET SIZE: 14 $\frac{1}{2}$ " x 18 $\frac{3}{16}$ "
INLET DIAMETER: 19 $\frac{1}{2}$ " O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2346	3061	3926
251°F TO 400°F*	2229	2908	3834
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	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM	
		BHP									
1280	700	572	0.07	680	0.13	783	0.19				
1463	800	624	0.09	721	0.15	811	0.21	903	0.29		
1646	900	678	0.11	766	0.18	850	0.25	928	0.32	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	1135	0.59
2195	1200	852	0.21	918	0.29	985	0.37	1049	0.46	1173	0.65
2377	1300	912	0.25	974	0.34	1036	0.43	1096	0.52	1213	0.71
2560	1400	972	0.30	1031	0.39	1088	0.49	1145	0.59	1255	0.79
2743	1500	1033	0.35	1089	0.45	1141	0.55	1196	0.66	1299	0.87
2926	1600	1093	0.41	1148	0.52	1198	0.63	1247	0.74	1345	0.97
3109	1700	1155	0.48	1207	0.59	1255	0.71	1300	0.82	1395	1.06
3292	1800	1216	0.55	1267	0.68	1313	0.80	1356	0.92	1446	1.17
3475	1900	1278	0.64	1327	0.77	1371	0.89	1413	1.02	1497	1.28
3658	2000	1340	0.73	1387	0.86	1430	1.00	1470	1.13	1549	1.41
3841	2100	1403	0.83	1447	0.97	1489	1.11	1528	1.25	1602	1.54

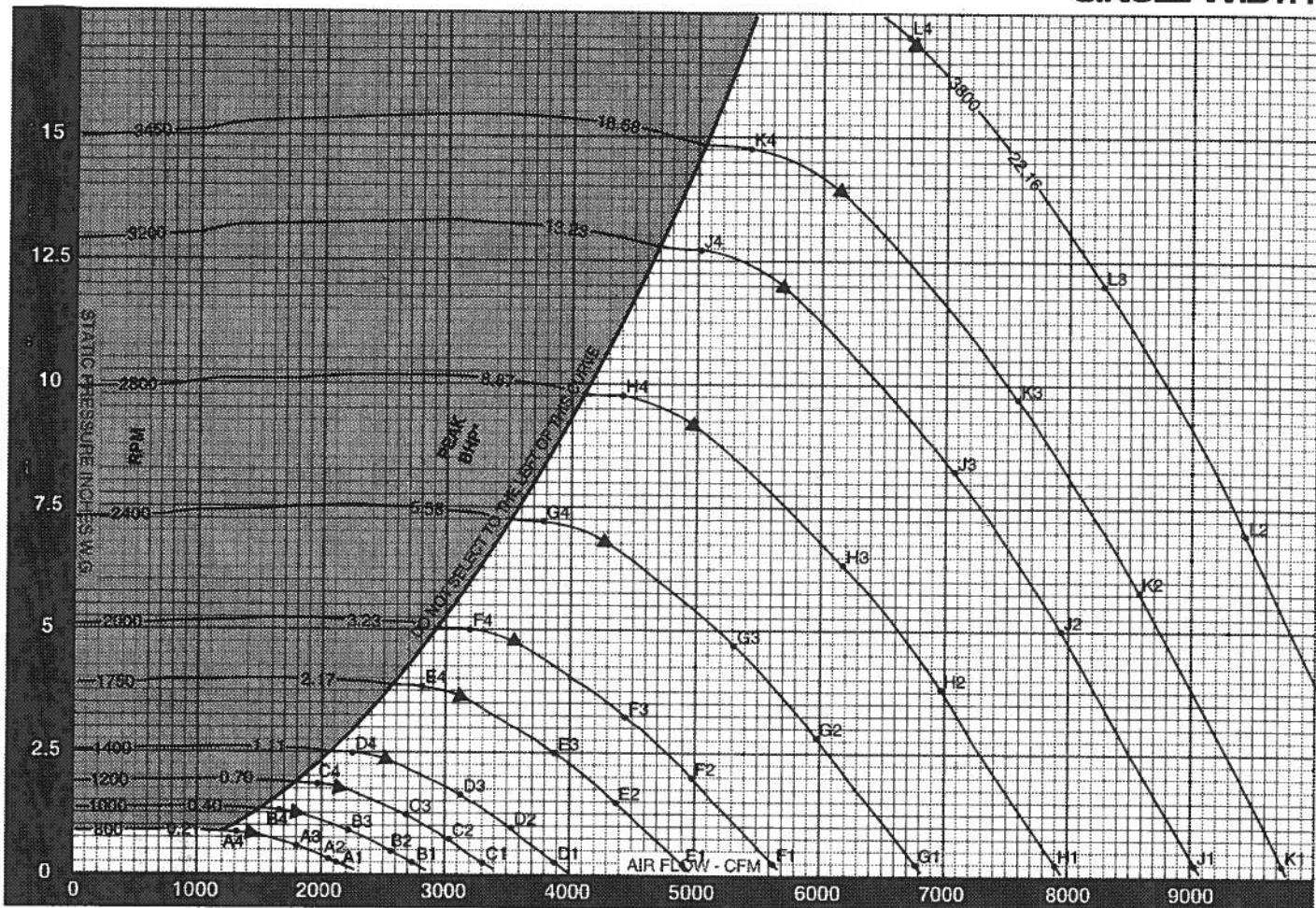
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
3109	1700	1829	2.43	1915	2.74	2011	3.06	2103	3.39		
3292	1800	1855	2.58	1939	2.90	2021	3.22	2111	3.56	2199	3.91
3475	1900	1893	2.73	1964	3.06	2045	3.40	2122	3.74	2206	4.10
3658	2000	1931	2.88	2002	3.23	2070	3.58	2146	3.94	2220	4.29
3841	2100	1971	3.06	2040	3.40	2107	3.76	2172	4.14	2245	4.51
4024	2200	2012	3.26	2080	3.60	2145	3.96	2209	4.34	2271	4.73
4207	2300	2055	3.47	2121	3.82	2184	4.17	2247	4.55	2308	4.95
4390	2400	2099	3.70	2163	4.05	2225	4.41	2286	4.78	2346	5.18
4572	2500	2145	3.93	2206	4.30	2267	4.66	2327	5.04	2385	5.42
4755	2600	2191	4.17	2251	4.55	2310	4.93	2368	5.32	2426	5.71
4938	2700	2240	4.43	2297	4.82	2354	5.21	2411	5.61	2467	6.01
5121	2800	2290	4.69	2344	5.10	2400	5.51	2455	5.92	2510	6.33
5304	2900	2341	4.97	2394	5.39	2447	5.81	2500	6.23	2559	6.66
5487	3000	2382	5.27	2444	5.70	2498	6.13	2547	6.56	2598	7.00
5670	3100	2443	5.58	2495	6.01	2545	6.46	2593	6.91	2644	7.35
5853	3200	2495	5.90	2546	6.35	2595	6.80	2649	7.26	2691	7.73
6036	3300	2547	6.24	2597	6.70	2646	7.18	2694	7.63	2740	8.11
6219	3400	2600	6.56	2649	7.06	2697	7.54	2744	8.02	2790	8.51
6402	3500	2655	6.96	2701	7.44	2749	7.93	2795	8.42	2840	8.92
6585	3600	2712	7.34	2754	7.84	2801	8.34	2847	8.84	2891	9.35

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
4572	2500	2732	8.05	2882	8.98	2982	9.91	3106	10.88		
4755	2600	2758	8.37	2871	9.30	2989	10.26	3113	11.25	3233	12.26
4938	2700	2783	8.70	2895	9.66	3005	10.63	3121	11.64	3240	12.67
5121	2800	2821	9.03	2920	10.02	3029	11.02	3133	12.03	3248	13.08
5304	2900	2858	9.37	2954	10.39	3053	11.42	3157	12.45	3258	13.50
5487	3000	2896	9.72	2991	10.76	3082	11.82	3182	12.88	3282	13.95
5670	3100	2936	10.13	3029	11.14	3120	12.22	3207	13.22	3306	14.42
5853	3200	2977	10.56	3068	11.54	3158	12.64	3244	13.76	3331	14.89
6036	3300	3019	11.01	3108	12.01	3196	13.07	3282	14.21	3365	15.37
6219	3400	3062	11.48	3149	12.50	3235	13.54	3320	14.67	3403	15.85
6402	3500	3105	11.97	3191	13.01	3276	14.07	3358	15.14	3441	16.34
6585	3600	3148	12.48	3234	13.53	3317	14.61	3399	15.71	3479	16.85
6768	3700	3194	12.99	3277	14.08	3359	15.17	3440	16.29	3519	17.42
6950	3800	3240	13.53	3321	14.64	3402	16.76	3481	16.89	3559	18.04
7133	3900	3287	14.08	3367	15.22	3446	16.36	3524	17.51	3601	18.68

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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_w 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		2.82	G2	99	99	100	100	99	94	91	88
	0.79	A4	66	73	70	67	65	62	58	53		4.70	G3	100	100	99	99	94	91	88	84
1000	0.25	B1	73	79	77	73	71	68	64	60		7.15	G4	100	100	99	99	93	90	88	84
	0.49	B2	73	79	77	73	71	68	64	60		3.84	H2	101	105	102	104	98	94	92	89
	0.82	B3	73	78	78	73	71	68	64	60		6.40	H3	102	106	102	104	98	94	92	89
	1.24	B4	73	78	77	73	71	68	64	60		9.73	H4	103	105	102	104	98	94	92	86
1200	0.25	C1	80	82	83	79	75	73	69	65	2400	0.25	H1	101	104	102	104	98	94	92	89
	0.71	C2	80	82	83	78	75	73	69	65		5.02	J2	104	110	104	109	102	97	96	92
	1.18	C3	80	81	83	79	75	73	69	65		8.36	J3	105	111	104	108	102	97	96	92
	1.79	C4	80	81	82	78	75	73	69	65		12.71	J4	105	111	104	108	102	97	95	92
1400	0.25	D1	85	84	88	83	79	77	74	69	2800	0.25	J1	103	109	105	108	102	97	96	93
	0.96	D2	86	84	88	83	79	77	74	69		5.02	J2	104	110	104	109	102	97	96	92
	1.60	D3	86	84	88	83	79	77	74	69		8.36	J3	105	111	104	108	102	97	96	92
	2.43	D4	86	84	87	83	79	77	73	69		12.71	J4	105	111	104	108	102	97	95	92
1750	0.25	E1	93	88	94	90	84	83	80	76	3200	0.25	K1	104	112	106	110	104	99	98	95
	1.50	E2	93	88	94	90	84	83	80	76		5.83	K2	105	112	106	111	104	99	98	94
	2.50	E3	94	88	94	90	84	83	80	76		9.72	K3	106	113	106	110	105	99	98	94
	3.80	E4	94	87	94	89	84	83	80	75		14.77	K4	106	113	105	110	104	99	97	94
2000	0.25	F1	95	93	96	94	88	86	84	79	3450	0.25	L1	106	113	109	112	107	102	100	97
	1.96	F2	96	93	97	94	88	86	83	79		7.07	L2	107	114	109	112	107	102	100	97

BCA-200

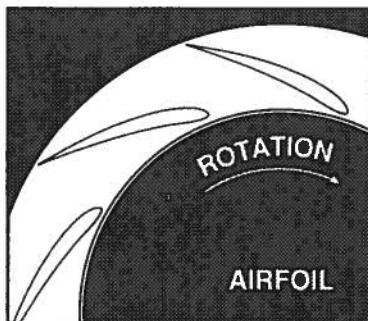
SINGLE WIDTH

WHEEL DIAMETER: 20.00"
WHEEL CIRCUMFERENCE: 5.24'
OUTLET AREA: 2.196 SQ. FT.
OUTLET SIZE: 15^{5/8}" x 19^{15/16}"
INLET DIAMETER: 21^{1/2}" O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	2141	2293	3439
251°F TO 400°F*	2034	2053	3316
401°F TO 700°F*	1756	2390	2452
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM
1537	700	522	0.09	620	0.15	715	0.23			
1757	800	569	0.11	658	0.18	740	0.26	824	0.34	
1977	900	619	0.14	699	0.21	775	0.29	847	0.39	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	1036 0.71
2636	1200	778	0.25	838	0.35	899	0.45	958	0.55	1070 0.78
2855	1300	832	0.30	889	0.41	945	0.51	1000	0.63	1107 0.86
3075	1400	887	0.36	941	0.47	993	0.59	1045	0.70	1145 0.95
3295	1500	942	0.42	994	0.54	1041	0.67	1091	0.79	1185 1.05
3514	1600	998	0.50	1048	0.62	1093	0.75	1138	0.89	1228 1.16
3734	1700	1054	0.58	1102	0.71	1145	0.85	1186	0.99	1273 1.28
3954	1800	1110	0.67	1156	0.81	1198	0.96	1237	1.10	1319 1.40
4173	1900	1166	0.77	1210	0.92	1251	1.07	1289	1.23	1366 1.54
4393	2000	1223	0.88	1265	1.04	1305	1.20	1342	1.36	1413 1.69
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

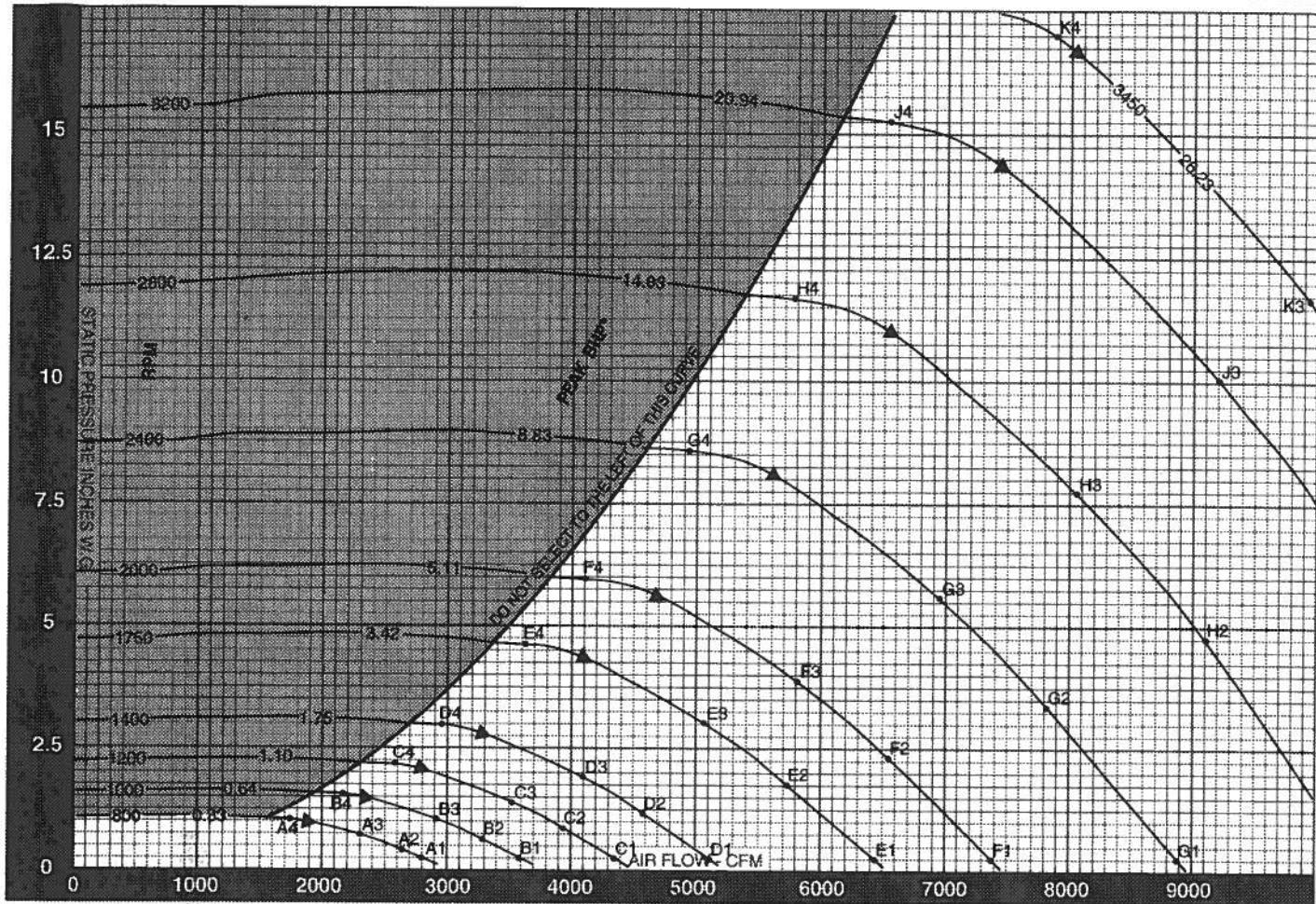
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
3734	1700	1669	2.92	1748	3.29	1835	3.68	1919	4.07		
3954	1800	1693	3.10	1770	3.48	1844	3.87	1926	4.28	2006 4.69	
4173	1900	1727	3.27	1793	3.68	1866	4.08	1937	4.49	2013 4.92	
4393	2000	1762	3.46	1827	3.88	1889	4.30	1959	4.73	2026 5.16	
4613	2100	1799	3.68	1861	4.08	1923	4.52	1982	4.97	2048 5.41	
4833	2200	1836	3.92	1898	4.32	1957	4.75	2016	5.21	2072 5.68	
5052	2300	1876	4.17	1935	4.58	1993	5.01	2050	5.46	2106 5.94	
5272	2400	1915	4.44	1974	4.86	2031	5.30	2086	5.74	2141 6.22	
5492	2500	1957	4.72	2013	5.16	2069	5.60	2123	6.05	2176 6.51	
5711	2600	1999	5.01	2054	5.47	2108	5.92	2161	6.39	2213 6.86	
5931	2700	2044	5.32	2096	5.79	2148	6.26	2200	6.74	2251 7.22	
6151	2800	2090	5.64	2139	6.12	2190	6.61	2240	7.10	2290	7.60
6370	2900	2136	5.97	2184	6.47	2233	6.88	2282	7.48	2330	8.00
6590	3000	2182	6.33	2230	6.84	2276	7.36	2324	7.88	2371	8.41
6810	3100	2229	6.70	2276	7.22	2322	7.76	2366	8.29	2413 8.83	
7029	3200	2277	7.09	2323	7.62	2368	8.17	2412	8.72	2456 9.28	
7249	3300	2324	7.49	2370	8.04	2415	8.60	2458	9.17	2500 9.83	
7469	3400	2372	7.92	2417	8.48	2461	9.05	2504	9.63	2546 10.21	
7688	3500	2423	8.36	2465	8.94	2508	9.52	2551	10.11	2592	10.71
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 RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
5492	2500	2493	9.87	2602	10.77	2721	11.91	2834	13.06		
5711	2600	2513	10.08	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	
6151	2800	2574	10.85	2684	12.04	2764	13.23	2859	14.45	2963	15.71
6370	2900	2608	11.28	2695	12.48	2786	13.71	2881	14.95	2973	16.21
6590	3000	2643	11.68	2730	12.92	2813	14.19	2903	15.47	2995	16.76
6810	3100	2679	12.18	2764	13.38	2847	14.68	2928	16.00	3017	17.32
7029	3200	2717	12.68	2799	13.88	2881	15.18	2981	16.52	3039	17.98
7249	3300	2755	13.22	2836	14.43	2916	15.69	2995	17.06	3071	18.45
7469	3400	2794	13.79	2874	15.01	2952	16.26	3030	17.62	3105	19.03
7688	3500	2833	14.38	2912	15.62	2989	16.89	3064	18.19	3140	19.63
7908	3600	2873	14.98	2951	16.25	3027	17.55	3102	18.98	3175	20.24
8128	3700	2915	15.61	2990	16.91	3065	18.22	3139	19.66	3211	20.92
8347	3800	2957	16.25	3030	17.68	3105	18.93	3177	20.26	3248	21.67
8567	3900	2999	16.91	3072	18.25	3144	19.65	3216	21.03	3286	22.44
										3354	23.86
										3422	25.32
										3499	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



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								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	89	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		3.82	F3	100	96	99	97	91	89	86	82
	0.95	A4	70	77	73	70	68	65	61	56		5.98	F4	100	96	99	91	89	86	82	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
	0.39	B2	77	82	80	76	74	71	67	63		3.39	G2	102	103	103	102	96	93	91	87
	0.58	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	116	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

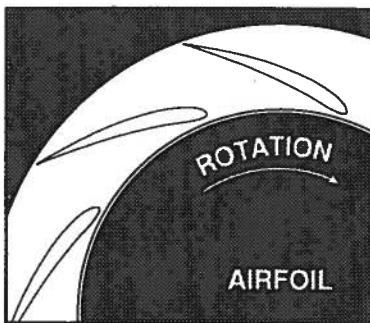
SINGLE WIDTH

WHEEL DIAMETER: 22.25"
WHEEL CIRCUMFERENCE: 5.83'
OUTLET AREA: 2.723 SQ. FT.
OUTLET SIZE: 17^{11/16}" x 22^{3/16}"
INLET DIAMETER: 23^{1/2}" O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1922	2500	3124
251°F TO 400°F*	1826	2363	2968
401°F TO 700°F*	1576	2056	2662
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										
4356	1600										
4628	1700										
4900	1800										
5172	1900										
5445	2000										
5717	2100	1411 3.00	1409 3.00	1447 3.19	1475 3.42	1507 3.67	1540 3.93	1573 4.20	1513 3.71	1451 3.24	1905 700

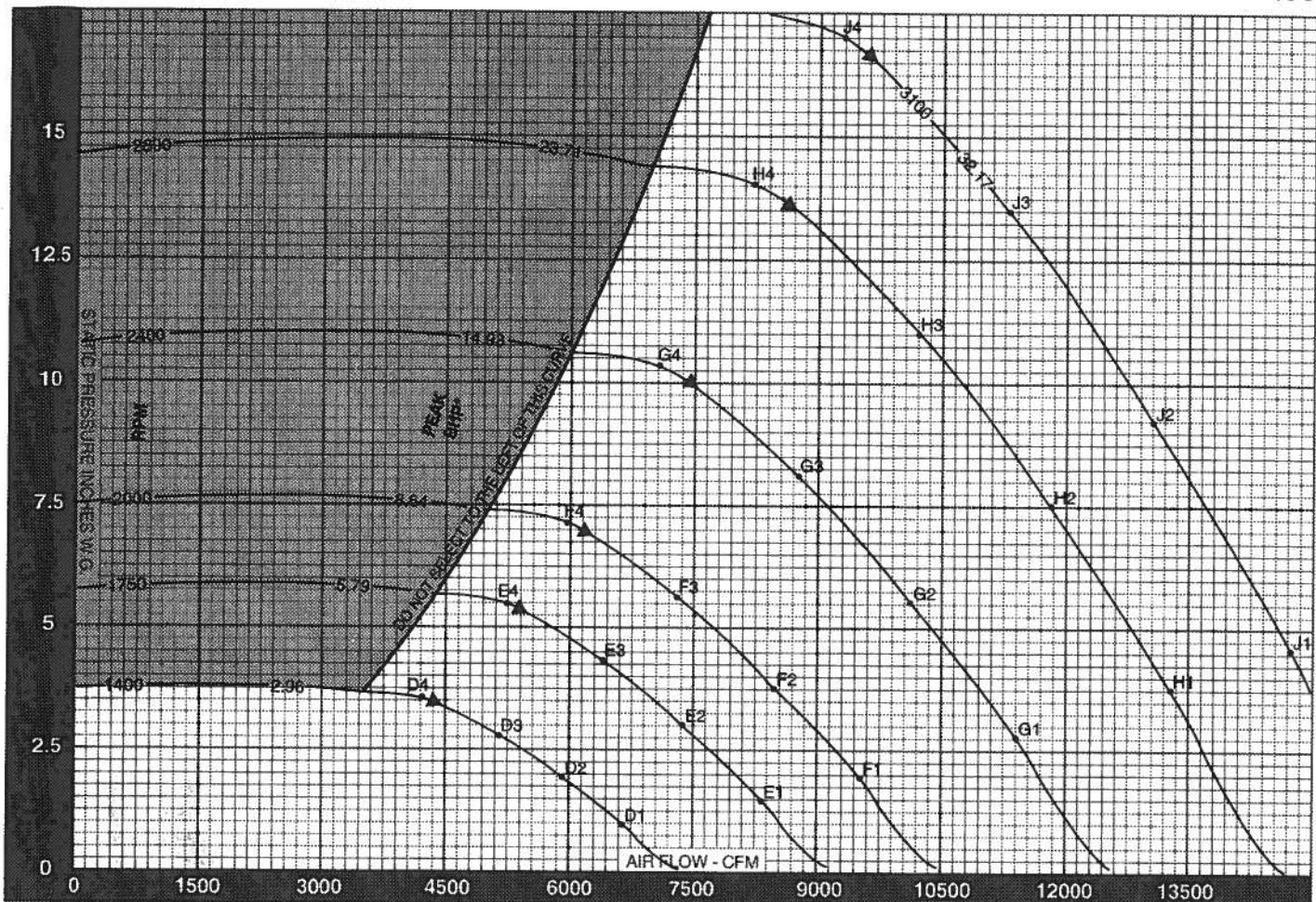
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
4628	1700	1515 3.61	1589 4.10	1662 4.62	1739 5.18	1812 5.77	1887 6.56	1965 7.19		
4900	1800	1541 3.85	1607 4.30	1677 4.82	1745 5.35	1817 5.95	1887 6.56	1965 7.19	2025 8.06	
5172	1900	1570 4.11	1632 4.57	1694 5.05	1760 5.59	1824 6.14	1893 6.76	1960 7.40	2031 8.29	2094 8.97
5445	2000	1601 4.39	1661 4.86	1720 5.34	1788 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	1869 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	1981 8.14	2018 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 8.96	2101 9.63	2144 10.33	2186 11.03	2228 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 11.58	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	2469 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	2668 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 22.66	2883 24.26	2971 26.22	3057 28.23
8440	3100	2434 15.47	2511 16.92	2589 18.38	2665 19.37	2738 21.37	2821 23.13	2901 24.92	2978 26.73	3063 28.75
8712	3200	2467 16.15	2544 17.63	2619 19.13	2693 20.65	2768 22.16	2858 23.77	2938 26.59	3011 27.44	3091 29.31
8984	3300	2500 16.85	2576 18.36	2660 19.89	2722 21.45	2795 23.02	2868 24.61	2936 26.28	3013 28.16	3088 30.06
9256	3400	2534 17.56	2600 19.12	2682 20.69	2752 22.27	2823 23.88	2893 26.50	2961 27.14	3031 28.89	3105 30.33
9529	3500	2570 18.27	2642 19.88	2715 21.50	2785 23.12	2852 24.76	2922 26.42	2998 28.09	3084 29.78	3123 31.61
9801	3600	2606 19.01	2677 20.69	2745 22.35	2817 24.00	2885 25.67	2951 27.37	3018 29.07	3083 30.80	3145 32.54
10073	3700	2643 19.77	2713 21.48	2781 23.22	2850 24.91	2917 26.61	2982 28.34	3047 30.06	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	3108 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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	98	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	68		7.53	H2	96	103	103	105	97	93	89	83
	4.31	E3	87	91	93	89	83	80	76	69		11.03	H3	95	102	102	105	97	92	89	83
	5.47	E4	86	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	4.81	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

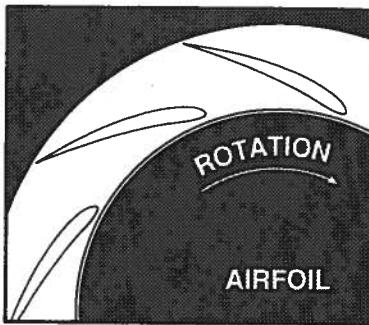
SINGLE WIDTH

WHEEL DIAMETER: 24.50"
 WHEEL CIRCUMFERENCE: 6.41'
 OUTLET AREA: 3.304 SQ. FT.
 OUTLET SIZE: 19 $\frac{7}{16}$ " x 24 $\frac{1}{2}$ "
 INLET DIAMETER: 26 $\frac{1}{2}$ " O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1745	2270	2457
251°F TO 400°F*	1658	2154	2355
401°F TO 700°F*	1431	1860	2026
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							

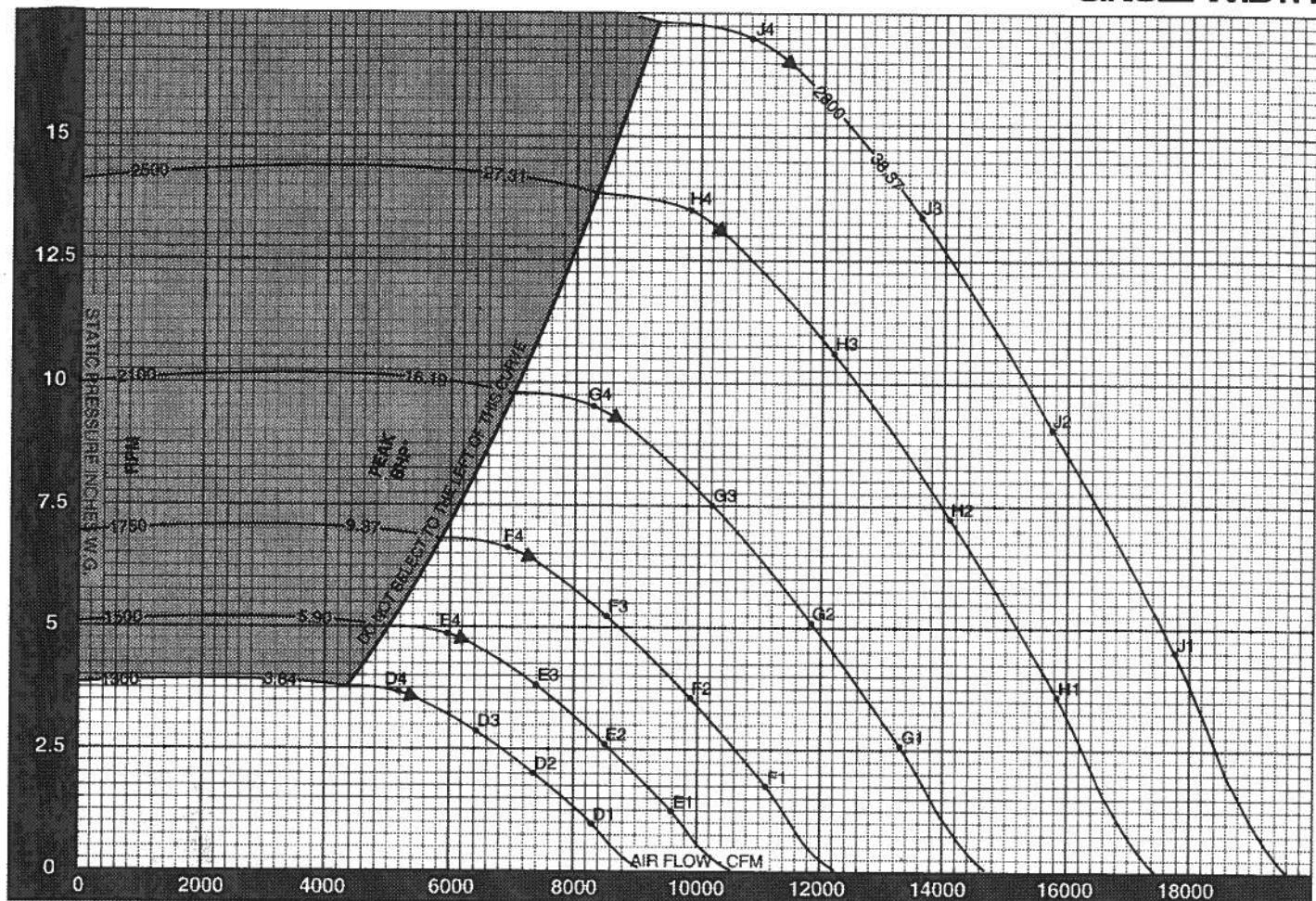
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
5611	1700	1376 4.38	1443 4.97	1510 5.60	1579 6.29	1645 6.99	1714 7.66	1775 8.22		
5941	1800	1400 4.67	1459 5.22	1523 5.84	1584 6.49	1651 7.22	1714 7.96	1780 8.68	1839 9.77	
6272	1900	1426 4.99	1482 5.54	1538 6.12	1599 6.78	1657 7.45	1719 8.20	1786 8.98	1846 10.05	1902 10.88
6602	2000	1454 5.32	1508 5.89	1562 6.47	1615 7.08	1672 7.77	1728 8.48	1786 9.24	1846 10.05	1902 10.88
6932	2100	1484 5.68	1536 6.27	1588 6.87	1639 7.48	1688 8.11	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	1760 9.20	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	1831 10.37	1880 11.13	1930 11.92
7922	2400	1578 6.83	1626 7.51	1674 8.18	1721 8.85	1766 9.53	1812 10.21	1867 10.91	1900 11.61	1945 12.37
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	1830 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	2089 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	2168 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	2074 15.06	2162 16.82	2247 18.65	2337 20.66	2427 22.77	2513 24.94			
8912	2700	2100 15.75	2178 17.38	2263 19.24	2345 21.18	2432 23.26	2519 25.46	2602 27.71	2683 30.00	
9243	2800	2126 16.47	2202 18.09	2278 19.85	2361 21.80	2439 23.78	2524 25.99	2607 28.27	2688 30.59	2765 32.96
9573	2900	2152 17.20	2227 18.87	2300 20.57	2376 22.46	2468 24.47	2530 26.53	2613 28.83	2693 31.19	2771 33.59
9903	3000	2181 17.97	2264 19.68	2328 21.41	2394 23.17	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	2486 25.91	2562 28.05	2634 30.21	2705 32.41	2782 34.86
10563	3200	2240 19.58	2310 21.37	2378 23.19	2448 25.03	2512 26.89	2578 28.82	2650 31.03	2720 33.27	2799 35.54
10893	3300	2270 20.43	2340 22.26	2406 24.12	2472 26.00	2538 27.91	2602 29.83	2666 31.82	2736 34.14	2804 36.45
11223	3400	2301 21.29	2369 23.18	2436 25.08	2500 27.01	2564 29.95	2627 30.92	2689 32.91	2752 35.03	2820 37.38
11553	3500	2334 22.15	2400 24.13	2465 26.07	2529 28.04	2590 30.03	2653 32.03	2716 34.06	2774 36.11	2836 38.32
11883	3600	2367 23.04	2431 25.09	2495 27.09	2559 29.10	2620 31.13	2680 33.18	2741 35.26	2800 37.34	2867 39.45
12214	3700	2400 23.97	2464 26.09	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	2678 33.44	2737 35.57	2794 37.72	2852 39.90	
12874	3900	2470 25.93	2530 28.07	2561 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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times .015}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	106	107	99	94	91	84
	2.62	E2	89	91	94	87	93	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	86	91	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: 21 $\frac{1}{16}$ " x 27"

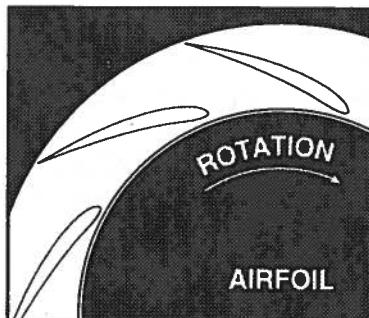
INLET DIAMETER: 28 $\frac{1}{2}$ " O.D.



CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2
UP TO 250°F	1584	2067
251°F TO 400°F*	1505	1964
401°F TO 700°F*	1299	1693
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	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
2806	700															
3207	800															
3608	900															
4009	1000															
4410	1100															
4811	1200															
5211	1300															
5612	1400															
6013	1500															
6414	1600															
6815	1700															
7216	1800															
7617	1900															
8018	2000															
8419	2100	1030 2.80		1018 2.87	1044 3.19	1076 3.47	1013 2.94	1044 3.19	1075 3.52	1022 2.99	1048 3.24	1110 3.80	1134 4.10	1140 3.79	1140 3.79	1140 3.79

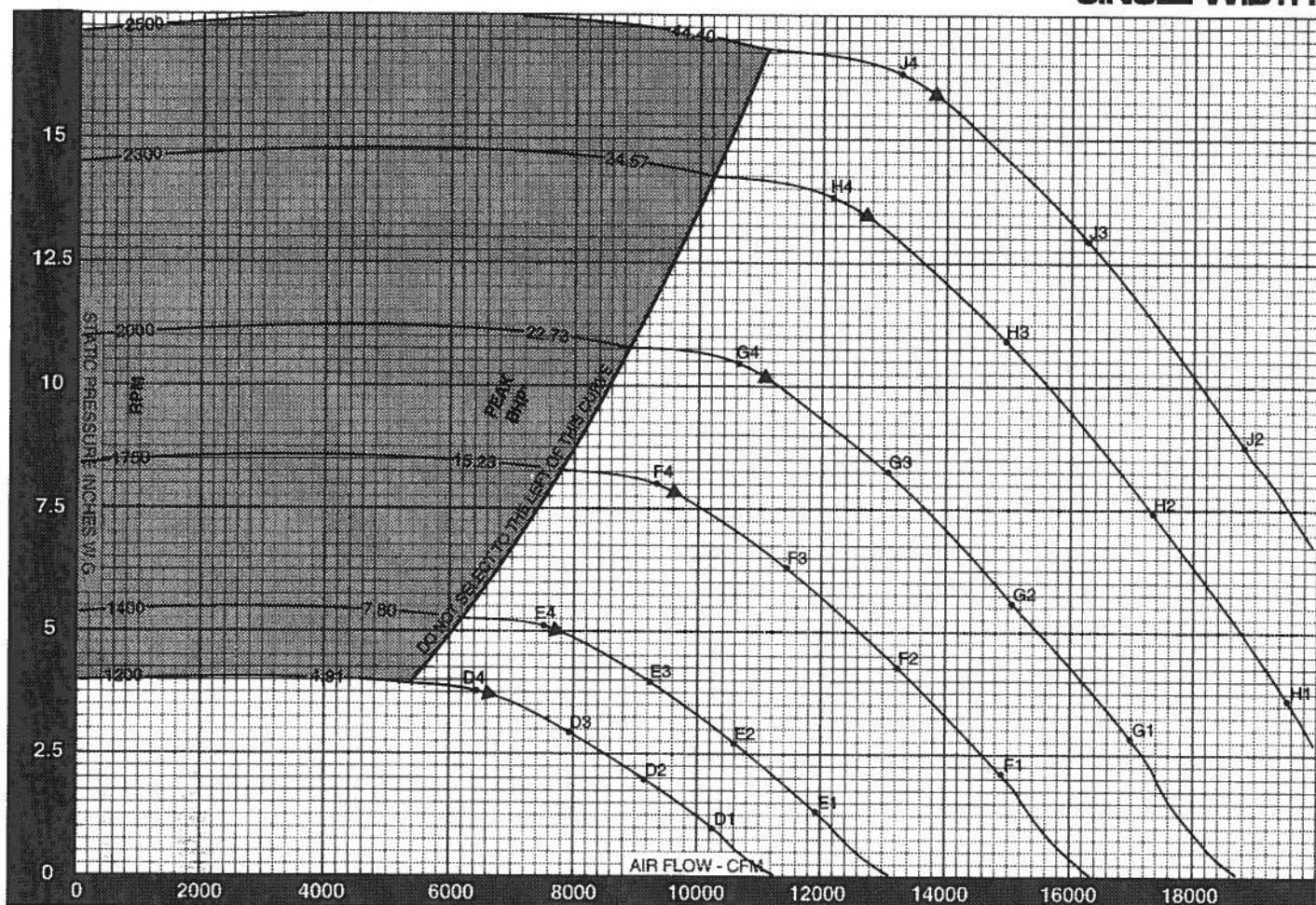
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
6815	1700	1249 5.32	1310 6.04	1370 6.80	1433 7.63	1493 8.49	1555 9.67	1611 10.59		
7216	1800	1270 5.67	1324 6.34	1382 7.10	1438 7.88	1498 8.76	1556 9.96	1618 10.80	1669 11.87	
7617	1900	1294 6.06	1345 6.73	1396 7.43	1451 8.23	1503 9.05	1560 10.29	1620 11.22	1674 12.21	1726 13.21
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 11.99	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	1633 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 22.59
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 22.08	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 17.84	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	2351 33.65	2434 36.44	2510 40.03
10824	2700	1905 19.13	1976 21.10	2054 23.37	2128 26.69	2207 29.25	2285 30.92	2351 33.63	2439 37.16	2515 40.80
11225	2800	1929 20.00	1998 21.98	2068 24.11	2142 26.47	2218 28.88	2290 31.56	2366 34.33	2450 37.88	2520 41.57
11626	2900	1953 20.89	2021 22.92	2087 24.98	2156 27.27	2227 29.72	2298 32.22	2371 35.01	2444 37.88	2524 42.34
12027	3000	1979 21.82	2045 23.90	2110 26.01	2173 28.14	2242 30.59	2310 33.13	2376 35.72	2449 38.81	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	2464 39.36	2530 43.16
12829	3200	2033 23.78	2098 25.98	2158 28.17	2220 30.40	2279 32.66	2339 35.01	2403 37.69	2479 40.40	2545 44.27
13230	3300	2060 24.81	2123 27.04	2184 29.29	2243 31.58	2303 33.89	2361 36.23	2429 38.79	2493 41.47	2559 45.39
13631	3400	2088 25.85	2150 28.15	2210 30.40	2268 32.60	2327 36.16	2384 37.55	2440 39.96	2507 42.54	
14032	3500	2118 26.90	2177 29.31	2237 31.68	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 46.86	
15234	3800	2208 30.27	2266 32.84	2321 36.45	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	2468 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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	2.89	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	98	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
	5.15	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.

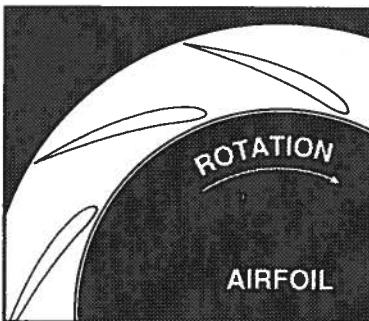
OUTLET SIZE: 23^{13/16}" x 30"

INLET DIAMETER: 31^{1/2}" 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	2432
251°F TO 400°F*	1358	1771	2339
401°F TO 700°F*	1172	1528	2135
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	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	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	501	0.57	559	0.77		
4461	900	414	0.30	472	0.47	524	0.66	573	0.86		
4957	1000	448	0.37	501	0.56	549	0.76	596	0.97	686	1.43
5453	1100	482	0.46	530	0.65	577	0.87	620	1.09	701	1.57
5948	1200	517	0.55	562	0.76	606	0.99	647	1.23	724	1.74
6444	1300	553	0.65	595	0.89	635	1.12	675	1.38	748	1.92
6940	1400	589	0.77	628	1.04	666	1.28	704	1.55	773	2.11
7436	1500	625	0.91	662	1.20	699	1.46	733	1.73	801	2.32
7931	1600	662	1.06	697	1.37	731	1.65	764	1.94	829	2.55
8427	1700	699	1.22	732	1.56	765	1.87	796	2.17	858	2.80
8923	1800	736	1.41	768	1.76	798	2.11	829	2.42	887	3.07
9418	1900	773	1.62	804	1.99	832	2.37	862	2.69	917	3.36
9914	2000	811	1.85	840	2.23	868	2.63	896	2.99	949	3.69
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

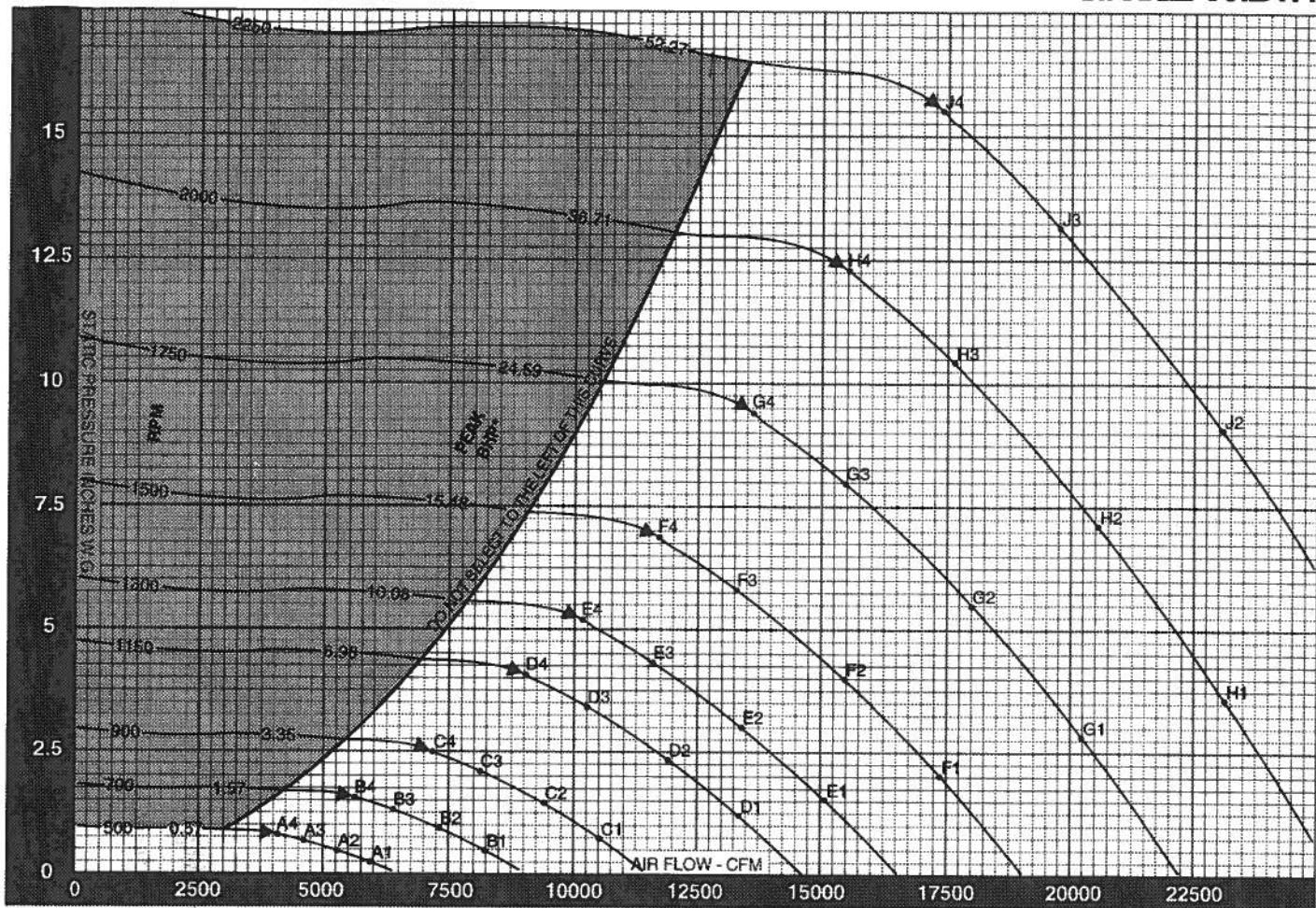
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
8427	1700	1128	6.47	1186	7.32	1245	8.21	1303	9.13	1358	10.09
8923	1800	1146	6.86	1196	7.70	1250	8.61	1306	9.54	1362	10.51
9418	1900	1169	7.30	1214	8.15	1261	9.04	1313	9.98	1365	10.96
9914	2000	1192	7.76	1236	8.63	1279	9.53	1324	10.46	1373	11.46
10410	2100	1216	8.24	1259	9.14	1301	10.07	1342	11.01	1384	11.98
10906	2200	1240	8.75	1283	9.68	1324	10.63	1364	11.60	1403	12.58
11401	2300	1266	9.28	1307	10.24	1348	11.22	1387	12.22	1425	13.23
11897	2400	1294	9.84	1332	10.83	1372	11.84	1411	12.86	1448	13.80
12393	2500	1322	10.42	1360	11.45	1396	12.49	1435	13.54	1472	14.61
12889	2600	1350	11.04	1388	12.09	1423	13.16	1459	14.25	1496	15.34
13384	2700	1379	11.69	1416	12.77	1451	13.87	1485	14.98	1520	16.11
13880	2800	1408	12.37	1444	13.48	1479	14.60	1513	15.75	1546	16.91
14376	2900	1437	13.09	1473	14.22	1508	15.28	1641	16.55	1574	17.73
14872	3000	1468	13.84	1502	15.00	1536	16.18	1569	17.38	1602	18.60
15367	3100	1498	14.62	1531	15.82	1665	17.03	1598	18.25	1630	19.50
15863	3200	1528	15.48	1560	16.67	1694	17.91	1627	19.16	1658	20.43
16359	3300	1560	16.38	1590	17.56	1623	18.82	1656	20.11	1687	21.41
16854	3400	1592	17.33	1622	18.53	1653	19.78	1685	21.10	1716	22.42
17350	3500	1625	18.32	1655	19.55	1683	20.80	1714	22.12	1745	23.48
17846	3600	1658	19.35	1687	20.61	1715	21.89	1744	23.19	1774	24.58

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
12393	2500	1686	21.43	1764	23.96	1846	26.61	1924	29.24	1999	32.15
12889	2600	1699	22.24	1774	24.80	1849	27.45	1927	30.21	2003	33.06
13384	2700	1719	23.17	1785	25.68	1858	28.36	1930	31.13	2006	34.01
13880	2800	1741	24.14	1802	26.85	1860	29.30	1938	32.11	2006	36.00
14376	2900	1765	25.14	1824	27.71	1883	30.32	1948	33.13	2016	36.05
14872	3000	1788	26.18	1847	28.81	1904	31.48	1962	34.22	2026	37.15
15367	3100	1812	27.25	1870	29.94	1926	32.67	1981	35.44	2039	38.32
15863	3200	1836	28.37	1894	31.11	1950	33.89	2003	36.73	2058	39.60
16359	3300	1860	29.52	1918	32.31	1973	36.16	2026	39.05	2078	40.98
16854	3400	1885	30.70	1942	33.56	1987	36.46	2050	39.41	2101	42.40
17350	3500	1913	31.83	1966	34.85	2021	37.81	2073	40.81	2124	43.86
17846	3600	1941	33.19	1992	36.18	2045	39.20	2097	42.26	2148	45.36
18342	3700	1969	34.51	2019	37.54	2069	40.63	2121	43.75	2172	46.91
18837	3800	1997	35.86	2047	38.85	2096	42.10	2145	45.28	2193	48.50
19333	3900	2025	37.28	2075	40.41	2123	43.81	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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		2.82	F1	97	90	86	88	87	83	79	76
	0.77	A4	62	59	59	58	54	50	46	41		4.04	F2	97	89	95	95	83	80	77	73
700	0.44	B1	71	77	71	70	66	62	59	55		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		2.75	G1	104	91	101	91	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		8.00	G3	104	89	95	87	87	84	81	77
	1.45	C2	73	84	75	73	70	67	63	60		9.40	G4	102	90	96	87	86	85	81	76
	2.12	C3	72	79	73	72	70	66	63	59		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		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		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		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

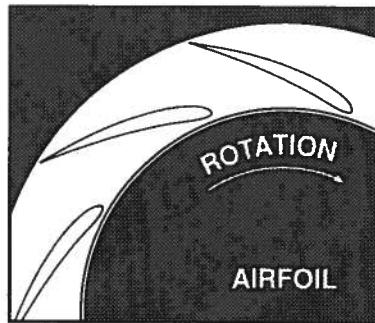
SINGLE WIDTH

WHEEL DIAMETER: 33.00"
WHEEL CIRCUMFERENCE: 8.64'
OUTLET AREA: 6.009 SQ. FT.
OUTLET SIZE: 26 $\frac{3}{16}$ " x 33 $\frac{1}{16}$ "
INLET DIAMETER: 34 $\frac{1}{2}$ " O.D.

American
Fan Company

CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2
UP TO 250°F	1299	1695
251°F TO 400°F*	1234	1610
401°F TO 700°F*	1065	1390
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP 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	521	1.04	
5998	1000	407	0.45	455	0.67	499	0.92	542	1.17	
6598	1100	438	0.56	482	0.79	525	1.05	564	1.32	638
7198	1200	470	0.66	511	0.92	551	1.20	588	1.49	658
7797	1300	503	0.79	541	1.08	577	1.36	614	1.67	680
8397	1400	535	0.93	571	1.25	606	1.55	640	1.87	703
8997	1500	568	1.10	602	1.45	635	1.76	666	2.09	728
9597	1600	602	1.28	633	1.66	665	2.00	694	2.34	754
10197	1700	635	1.48	666	1.89	695	2.26	724	2.62	780
10797	1800	669	1.71	698	2.13	726	2.55	754	2.93	806
11396	1900	703	1.96	731	2.41	757	2.87	784	3.26	833
11996	2000	737	2.24	764	2.70	789	3.19	814	3.62	862
12596	2100	771	2.54	797	3.03	821	3.53	845	4.02	892

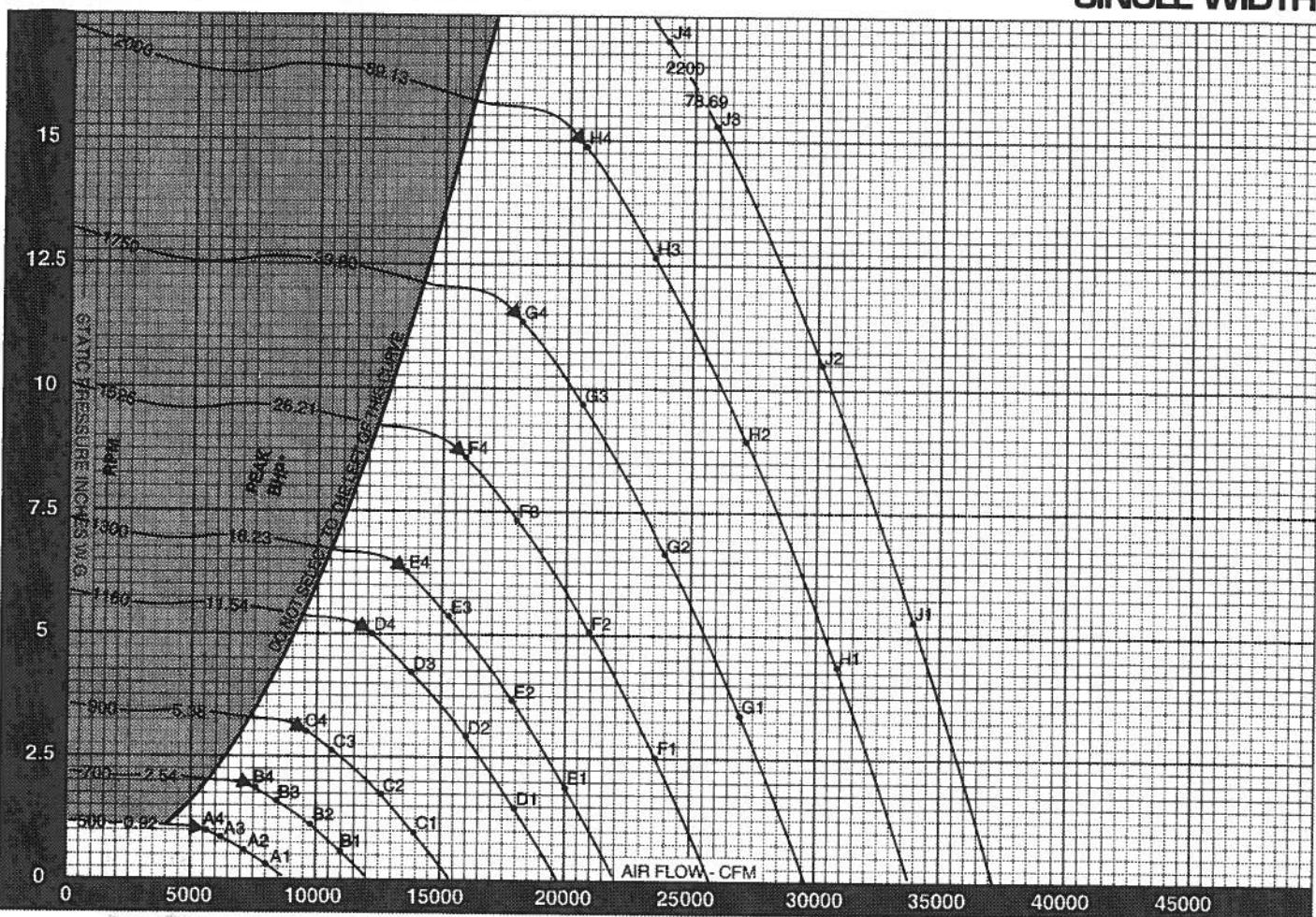
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM
		BHP								
10197	1700	1026	7.83	1078	8.86	1132	9.93	1184	11.05	1235
10797	1800	1042	8.31	1087	9.32	1137	10.41	1187	11.55	1238
11396	1900	1062	8.83	1103	9.86	1146	10.93	1193	12.08	1241
11996	2000	1084	9.39	1124	10.45	1162	11.53	1203	12.66	1248
12596	2100	1105	9.97	1145	11.06	1183	12.18	1220	13.32	1258
13196	2200	1127	10.58	1166	11.71	1204	12.86	1240	14.03	1275
13796	2300	1151	11.23	1188	12.39	1225	13.58	1261	14.78	1295
14396	2400	1176	11.90	1211	13.10	1247	14.33	1283	15.57	1317
14995	2500	1202	12.61	1236	13.85	1269	15.11	1304	16.38	1338
15595	2600	1228	13.36	1261	14.63	1294	15.92	1326	17.24	1360
16195	2700	1253	14.15	1287	15.45	1319	16.78	1350	18.13	1382
16795	2800	1280	14.97	1313	16.31	1345	17.67	1376	19.05	1405
17395	2900	1306	15.84	1339	17.21	1371	18.60	1401	20.02	1431
17995	3000	1333	16.74	1365	18.15	1397	19.58	1427	21.03	1456
18595	3100	1360	17.69	1392	19.14	1423	20.80	1453	22.09	1482
19194	3200	1389	18.73	1419	20.17	1449	21.67	1479	23.19	1507
19794	3300	1418	19.83	1446	21.25	1476	22.78	1505	24.33	1533
20394	3400	1448	20.97	1475	22.43	1503	23.94	1532	25.53	1560
20994	3500	1477	22.16	1504	23.65	1530	25.16	1558	26.77	1586
21594	3600	1507	23.41	1534	24.94	1559	26.48	1586	28.06	1613

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP
14995	2500	1533	25.93	1604	28.99	1678	32.19	1749	35.50	1817
15595	2600	1545	26.92	1613	30.01	1681	33.21	1752	36.56	1821
16195	2700	1563	28.03	1623	31.07	1689	34.32	1755	37.67	1824
16795	2800	1583	29.21	1638	32.24	1696	36.46	1762	38.85	1826
17395	2900	1604	30.42	1658	33.53	1711	36.89	1771	40.03	1833
17995	3000	1626	31.68	1679	34.86	1730	38.09	1784	41.41	1842
18595	3100	1647	32.98	1700	36.22	1751	39.53	1801	42.89	1853
19194	3200	1669	34.32	1722	37.64	1772	41.01	1821	44.44	1870
19794	3300	1691	35.71	1743	39.10	1794	42.54	1842	46.04	1888
20394	3400	1714	37.15	1765	40.61	1815	44.12	1863	47.69	1910
20994	3500	1739	38.63	1787	42.17	1837	45.75	1885	49.38	1931
21594	3600	1764	40.17	1811	43.77	1859	47.43	1908	51.13	1953
22194	3700	1790	41.75	1838	45.43	1881	49.16	1928	52.93	1974
22793	3800	1815	43.39	1861	47.13	1905	50.94	1950	54.79	1996
23393	3900	1841	45.09	1887	49.90	1930	52.77	1973	58.70	2018

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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		2.63	F1	101	93	100	91	90	87	82	79
	0.93	A4	66	63	62	61	57	53	48	44		5.95	F2	102	92	99	89	87	84	80	77
700	0.53	B1	74	80	74	73	69	65	62	58		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		3.33	G1	107	95	104	94	93	91	86	83
	1.82	B4	71	75	69	63	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		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		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		12.64	H3	110	99	100	98	92	90	87	84
	2.92	D2	89	90	88	82	80	76	73	70		14.96	H4	107	99	101	98	92	91	87	83
	4.25	D3	88	86	85	81	79	76	72	69		5.26	J1	111	105	106	103	99	97	92	89
	5.00	D4	87	87	85	81	79	78	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		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

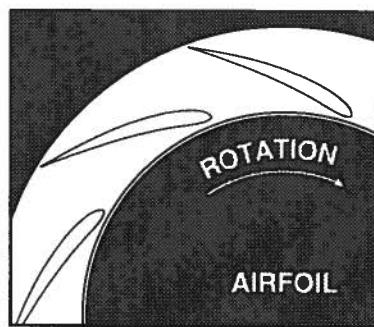
SINGLE WIDTH

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

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	1175	1332	1490
251°F TO 400°F*	1116	1455	1693
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 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
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

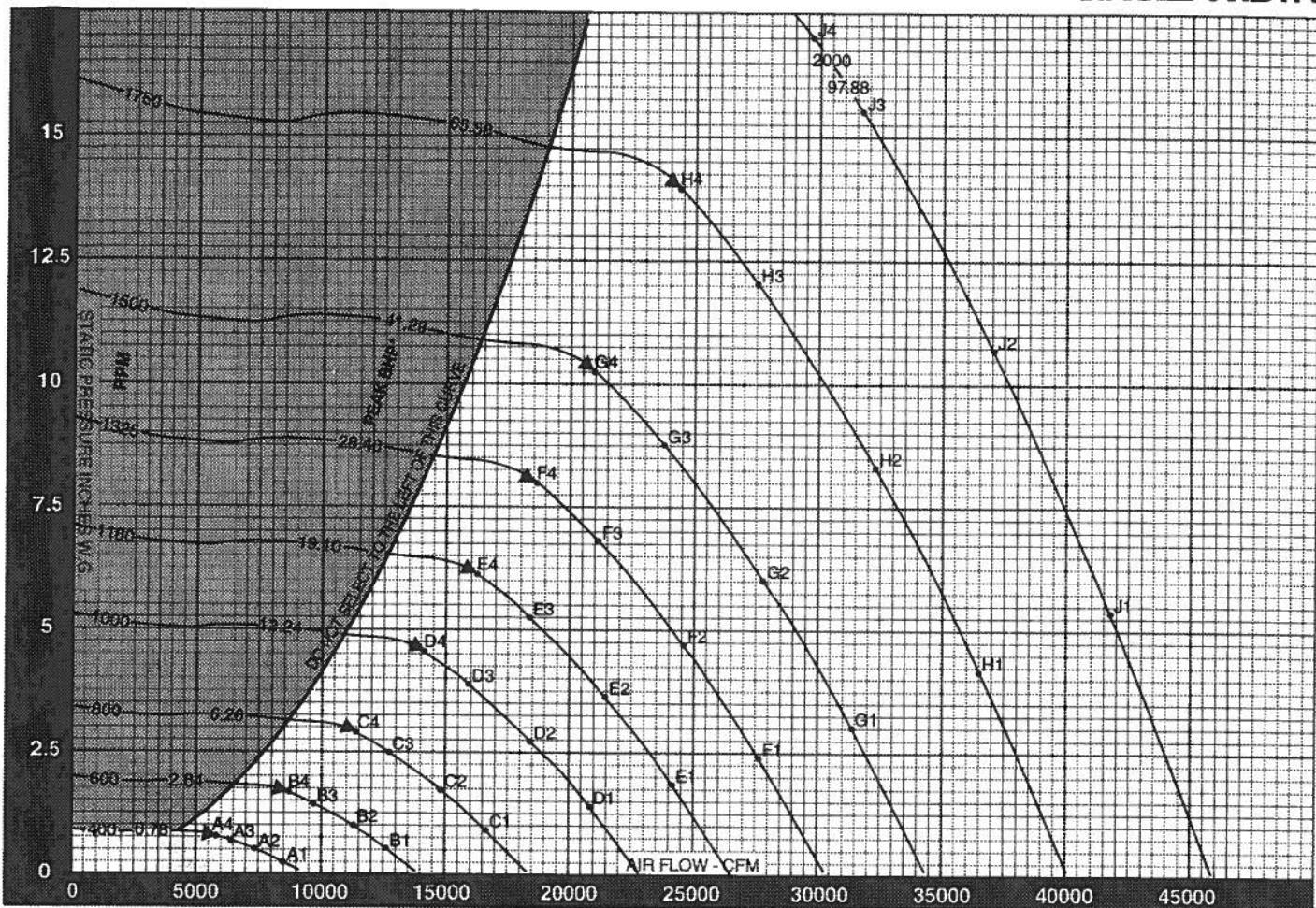
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
12475	1700	927 9.57	974 10.83	1023 12.15	1071 13.52	1116 14.93				
13208	1800	942 10.16	983 11.40	1028 12.74	1073 14.12	1119 15.56	1163 17.04	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	1246 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 22.66	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 27.59	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	1419 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	1438 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 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
18345	2500	1386 31.73	1450 35.46	1517 39.38	1581 43.43	1643 47.69				
19079	2600	1357 32.98	1458 36.71	1519 40.63	1584 44.72	1646 48.94	1705 53.27	1763 57.66		
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	1536 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	1667 53.37	1713 57.81	1771 62.39	1820 67.09	1880 71.89
22014	3000	1470 38.75	1518 42.64	1565 46.80	1613 50.66	1665 56.00	1719 59.47	1773 64.08	1829 68.82	1889 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 76.52
23482	3200	1509 41.99	1557 46.05	1602 50.17	1646 54.37	1690 58.62	1737 63.05	1787 67.74	1837 72.62	1889 77.43
24216	3300	1529 43.69	1576 47.83	1622 52.05	1665 56.32	1708 60.67	1750 65.06	1798 69.69	1846 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 71.76	1854 76.59	1902 81.59
25683	3500	1572 47.28	1616 51.59	1661 55.97	1704 60.41	1746 64.93	1787 69.50	1826 74.13	1887 78.80	1911 83.78
26417	3600	1596 49.14	1637 53.65	1680 58.02	1724 62.56	1765 67.15	1806 71.80	1846 76.52	1884 81.29	1923 86.19
27151	3700	1616 51.08	1680 55.57	1700 60.14	1743 64.76	1785 69.44	1825 74.16	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 81.60	1921 86.44	1958 91.44
28619	3900	1665 55.18	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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		4.67	F2	98	96	98	91	89	86	82	78
	0.73	A4	65	59	60	58	54	50	45	41		6.79	F3	99	94	96	93	86	83	79	76
600	0.48	B1	76	78	73	72	68	64	61	57	1325	2.33	F1	98	96	98	91	89	86	82	78
	0.96	B2	75	76	71	69	66	62	58	55		4.67	F2	99	94	96	93	86	83	79	76
	1.39	B3	72	73	69	68	65	61	58	54		7.98	F3	98	92	92	87	86	83	79	75
	1.64	B4	72	73	69	68	65	61	57	52		9.6	F4	96	92	93	87	86	83	79	74
800	0.85	C1	79	88	80	79	76	72	68	65	1500	2.99	G1	104	96	102	94	93	89	85	82
	1.70	C2	78	88	77	76	73	69	66	63		5.98	G2	105	96	101	91	89	86	83	79
	2.47	C3	77	83	76	75	73	69	65	62		8.70	G3	104	94	97	90	89	86	82	79
	2.91	C4	77	83	75	75	73	69	65	60		10.22	G4	102	94	97	89	89	87	82	78
1000	1.33	D1	86	92	87	85	82	78	74	71	1700	4.12	H1	111	98	107	98	97	94	89	86
	2.66	D2	85	91	85	82	79	75	72	69		8.23	H2	112	97	106	95	94	91	87	84
	3.87	D3	84	87	83	81	78	75	72	68		11.98	H3	111	95	102	93	93	90	87	83
	4.54	D4	84	88	82	80	79	75	71	67		14.07	H4	109	97	102	93	92	91	87	82
1160	1.79	E1	92	94	93	88	86	82	78	75	2000	5.32	J1	113	104	108	102	100	97	93	89
	3.58	E2	92	93	91	85	83	79	76	73		10.63	J2	114	104	108	100	97	94	90	87
										15.47	J3	113	102	104	98	96	94	90	87		
										17.00	J4	112	102	104	98	95	94	90	86		

BCA-402

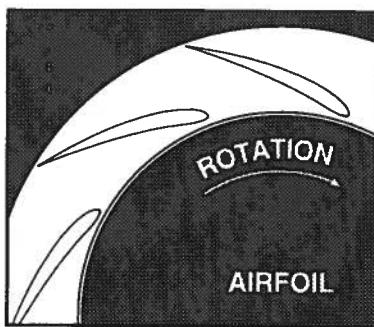
SINGLE WIDTH

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	CLASS 4	CLASS 5
UP TO 250°F	1065	1388	1560		
251°F TO 400°F*	1012	1320	1450		
401°F TO 700°F*	873	1139	1317		
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 RPM	0.35" BHP	0.50" SP RPM	0.60" BHP	0.75" SP RPM	0.85" BHP	1.00" SP RPM	0.90" BHP	1.50" SP RPM	1.60" BHP	2.00" SP RPM	1.80" BHP	2.50" SP RPM	2.60" BHP	3.00" SP RPM	2.80" BHP	3.50" SP RPM	3.40" 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

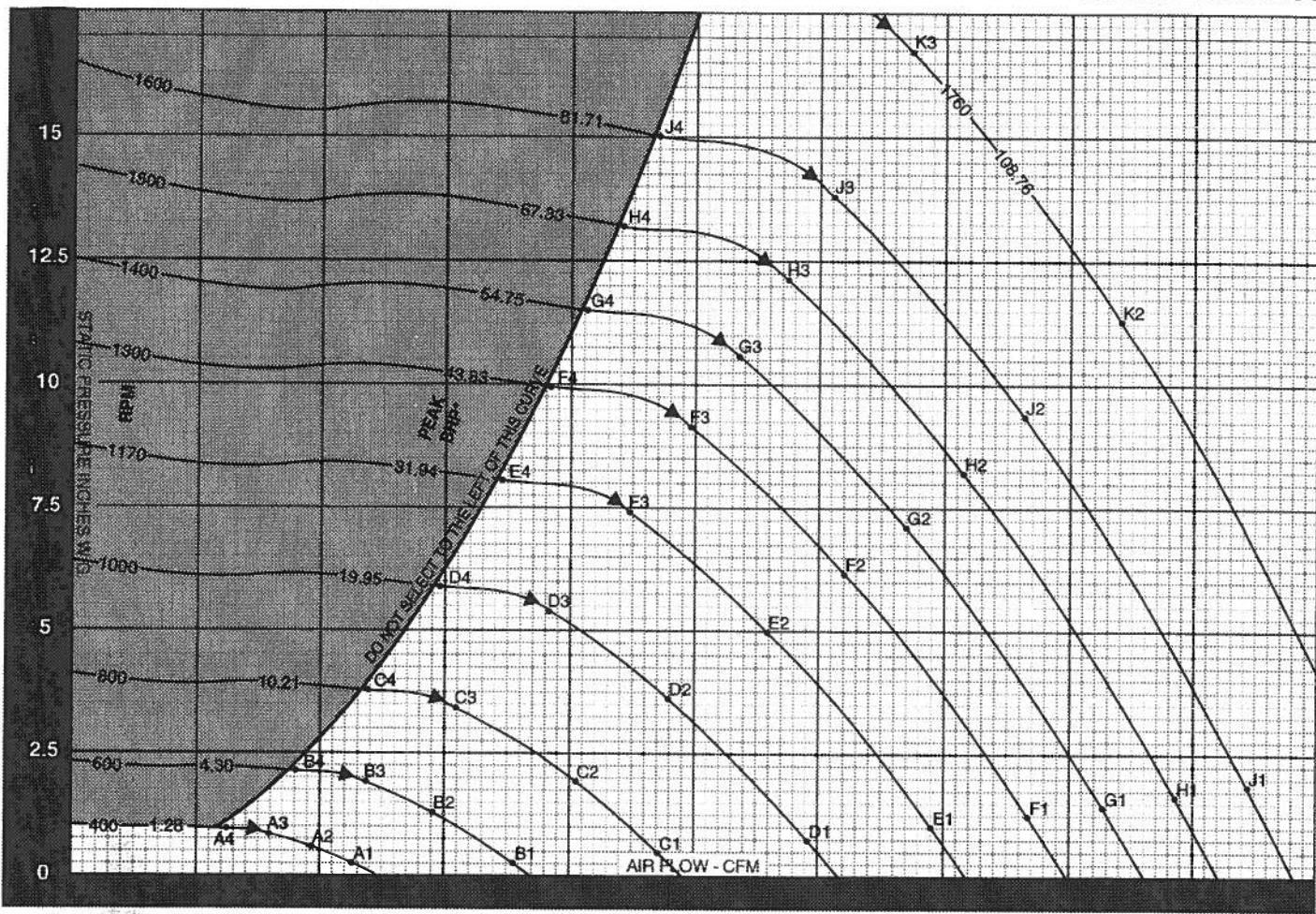
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
CFM	OV	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15170	1700	841	11.64	884	13.17	928	14.78	971	16.44	1012	18.16
16062	1800	854	12.36	891	13.87	932	15.49	973	17.18	1015	18.92
16954	1900	871	13.14	905	14.66	940	16.26	978	17.97	1017	19.73
17847	2000	889	13.96	921	15.54	953	17.15	987	18.83	1023	20.62
18739	2100	906	14.83	939	16.46	970	18.12	1000	19.81	1032	21.57
19631	2200	924	15.74	956	17.42	987	19.14	1017	20.88	1045	22.65
20524	2300	944	16.70	974	18.44	1005	20.20	1034	21.99	1062	23.81
21416	2400	964	17.70	993	19.50	1023	21.31	1052	23.16	1080	25.03
22308	2500	985	18.76	1013	20.60	1041	22.48	1069	24.37	1097	26.30
23201	2600	1006	19.87	1034	21.77	1061	23.69	1087	25.64	1115	27.82
24093	2700	1028	21.04	1055	22.98	1082	24.96	1107	26.97	1133	29.00
24986	2800	1049	22.27	1076	24.26	1103	26.29	1128	28.34	1152	30.43
25878	2900	1071	23.56	1098	25.60	1124	27.68	1149	29.78	1173	31.92
26770	3000	1093	24.91	1119	27.00	1145	29.13	1170	31.29	1194	33.47
27663	3100	1115	26.32	1141	28.47	1166	30.65	1191	32.96	1215	35.09
28555	3200	1138	27.87	1163	30.00	1188	32.23	1212	34.49	1236	36.78
29447	3300	1163	29.49	1185	31.61	1210	33.89	1234	36.20	1257	38.54
30340	3400	1187	31.19	1209	33.36	1232	35.61	1256	37.97	1279	40.36
31232	3500	1211	32.97	1233	35.19	1255	37.44	1278	39.82	1300	42.27
32124	3600	1236	34.83	1257	37.10	1278	39.40	1300	41.76	1322	44.24

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
CFM	OV	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
24093	2700	1281	41.70	1331	46.22	1385	51.05	1439	56.03	1495	61.21
24986	2800	1298	43.45	1343	47.97	1392	52.75	1445	57.80	1497	63.00
25878	2900	1315	45.25	1359	49.86	1403	54.58	1452	59.64	1503	64.89
26770	3000	1333	47.12	1377	51.85	1419	56.87	1462	61.60	1510	66.88
27663	3100	1351	49.06	1394	53.89	1436	58.81	1477	63.80	1520	68.97
28555	3200	1369	51.06	1412	56.00	1453	61.01	1493	66.12	1533	71.28
29447	3300	1386	53.13	1429	58.17	1471	63.29	1510	68.49	1549	73.78
30340	3400	1405	55.27	1447	60.41	1488	66.84	1528	70.94	1566	76.33
31232	3500	1428	57.47	1465	62.73	1506	68.00	1545	73.47	1583	78.95
32124	3600	1447	59.75	1485	65.12	1524	70.66	1563	76.07	1601	81.65
33017	3700	1467	62.11	1505	67.58	1542	73.13	1581	78.75	1619	84.44
33909	3800	1488	64.55	1526	70.12	1562	75.78	1599	81.51	1636	87.30
34801	3900	1510	67.08	1547	72.74	1583	78.50	1617	84.34	1654	90.24

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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	109	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	1700	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

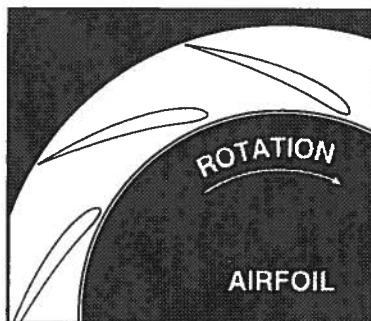
SINGLE WIDTH

WHEEL DIAMETER: 44.50"
WHEEL CIRCUMFERENCE: 11.65'
OUTLET AREA: 10.923 SQ. FT.
OUTLET SIZE: 35 $\frac{5}{16}$ " x 44 $\frac{9}{16}$ "
INLET DIAMETER: 45 $\frac{1}{2}$ " O.D.

American
Fan Company

CLASS 1		CLASS 2		CLASS 3	
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3		
UP TO 250°F	963	1257	1473		
251°F TO 400°F*	915	1194	1369		
401°F TO 700°F*	790	1031	1277		
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 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
7635	700	237 0.43	283 0.75	327 1.10	374 1.52					
8726	800	257 0.53	299 0.88	338 1.26	377 1.68					
9816	900	279 0.67	318 1.04	353 1.45	386 1.89	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	473 3.46	531 4.65	591 5.98		
13089	1200	349 1.21	379 1.68	409 2.17	436 2.71	488 3.82	538 5.02	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	608 7.33	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	661 9.41	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	712 11.72
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

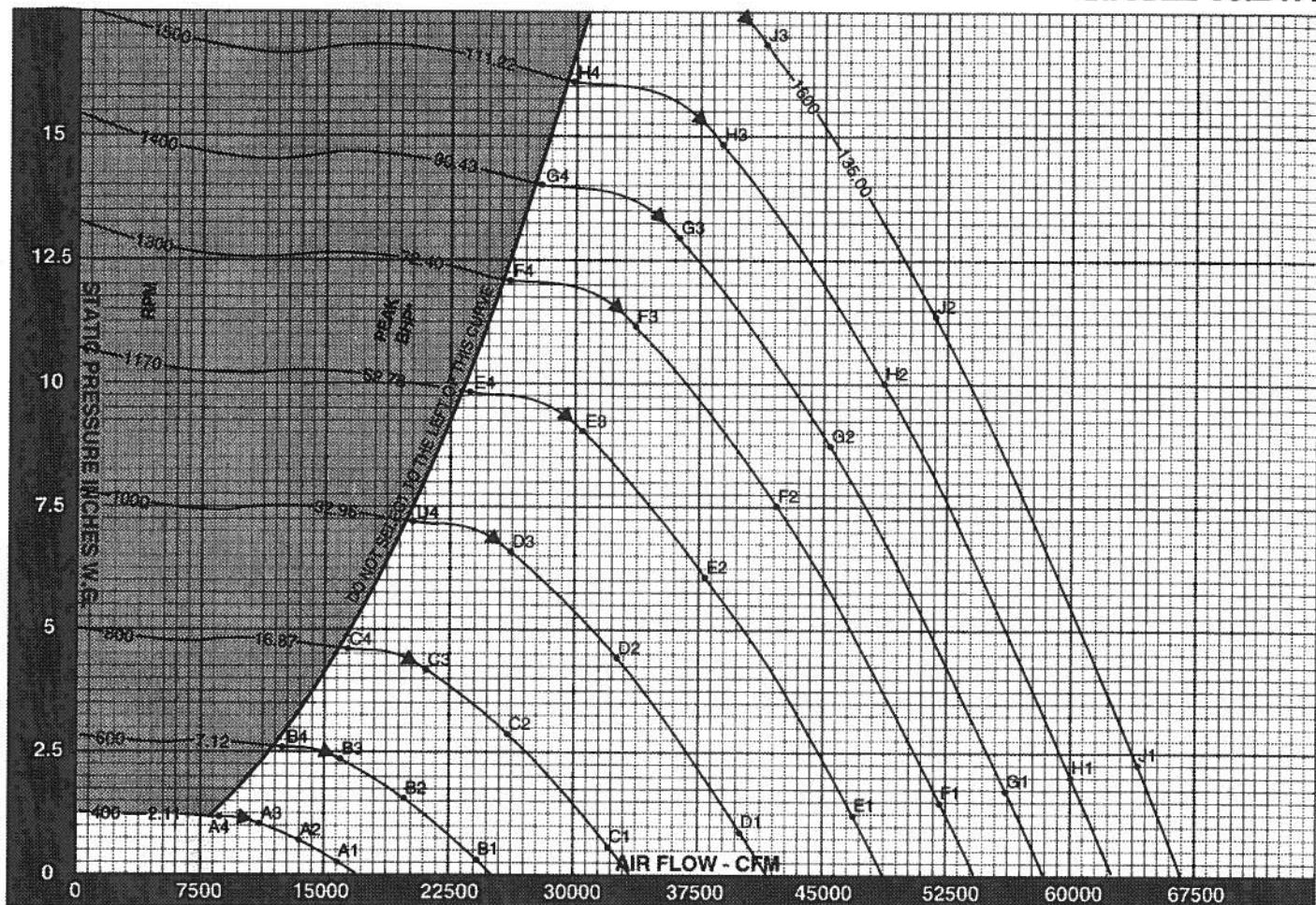
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
18542	1700	760 14.23	799 16.10	839 18.06	878 20.10	916 22.19				
19633	1800	773 15.10	806 16.95	843 18.93	880 20.99	918 23.13	954 25.33	988 27.58		
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	892 23.02	925 25.20	958 27.45	993 29.78	1028 32.17	1058 34.63
22905	2100	820 18.13	849 20.12	877 22.15	904 24.21	933 26.36	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	973 29.91	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	986 31.37	1011 33.67	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	1049 37.65	1075 40.18
27268	2500	891 22.93	917 25.18	941 27.47	967 29.79	992 32.14	1017 34.53	1040 36.95	1063 39.40	1086 41.87
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 46.68
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 35.81	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 52.83	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	1176 51.03	1196 54.08	1216 57.16	1235 60.27	1254 63.42	1273 66.60

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
27268	2500	1137 47.16	1189 52.71	1244 58.54	1297 64.56	1348 70.73				
28359	2600	1146 48.94	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	1540 104.23
30541	2800	1174 53.11	1215 58.63	1259 64.47	1307 70.65	1354 77.00	1403 83.58	1450 90.34	1496 97.24	1542 106.86
31631	2900	1190 55.32	1229 60.97	1269 66.71	1314 72.90	1359 79.32	1405 85.92	1453 92.73	1498 99.72	
32722	3000	1208 57.60	1245 63.38	1283 69.27	1323 75.40	1366 81.75	1410 88.40	1465 95.25	1500 102.29	1544 109.50
33813	3100	1222 59.97	1261 66.87	1299 71.88	1336 77.98	1374 84.31	1417 91.01	1459 97.89	1502 104.97	1547 112.25
34904	3200	1238 62.41	1277 59.44	1314 74.58	1350 80.92	1388 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	1436 96.70	1473 103.58	1513 110.78	1553 118.11
37085	3400	1271 67.56	1309 73.85	1346 80.23	1382 86.71	1416 93.30	1450 99.97	1481 106.70	1521 113.84	1560 121.27
38176	3500	1289 70.25	1325 76.68	1362 83.19	1398 89.80	1432 96.50	1465 103.30	1498 110.18	1531 117.12	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	1577 127.99
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 136.91
42539	3900	1365 81.89	1399 88.92	1432 95.95	1463 103.10	1496 110.31	1529 117.00	1561 124.00	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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	9.03	E3	106	108	102	94	90	88	83	78
	0.71	A2	82	73	71	70	63	58	53	48		10.25	E4	108	108	101	93	90	87	82	77
	1.06	A3	80	72	67	67	61	57	51	46		1.51	F1	106	112	110	103	104	101	93	86
	1.20	A4	78	72	66	66	60	56	50	45		7.53	F2	107	112	107	98	96	93	87	82
600	0.32	B1	93	91	87	88	83	75	69	64		11.16	F3	108	111	105	97	93	91	86	81
	1.60	B2	92	88	81	79	76	70	64	59		12.86	F4	109	111	104	97	92	90	85	80
	2.37	B3	91	87	79	76	73	69	63	58		1.75	G1	108	113	113	105	106	103	95	89
	2.70	B4	91	86	79	75	72	67	62	57		8.74	G2	109	113	110	100	98	96	89	84
800	0.57	C1	98	103	92	94	93	85	77	72		12.93	G3	109	113	108	99	94	93	88	83
	2.85	C2	99	100	89	86	85	78	73	68		14.68	G4	111	114	107	99	94	92	87	82
	4.22	C3	99	97	88	83	82	77	72	67		1.03	H1	109	114	116	106	108	106	98	91
	4.79	C4	101	96	88	82	81	75	71	65		10.03	H2	110	115	113	102	99	96	92	86
1000	0.89	D1	102	107	100	98	98	92	85	79		14.84	H3	111	115	111	101	96	95	90	85
	4.46	D2	103	106	97	92	90	85	79	74		16.85	H4	112	116	109	101	95	94	89	84
	6.60	D3	104	104	96	89	87	83	78	73		2.28	J1	110	115	119	107	109	108	100	92
	7.49	D4	105	103	96	88	86	82	77	72		11.41	J2	111	116	116	104	101	100	93	88
1170	1.22	E1	104	110	106	101	102	97	90	83		16.89	J3	112	117	113	103	97	97	92	87
	6.10	E2	106	109	103	96	94	90	84	79											

BCA-490

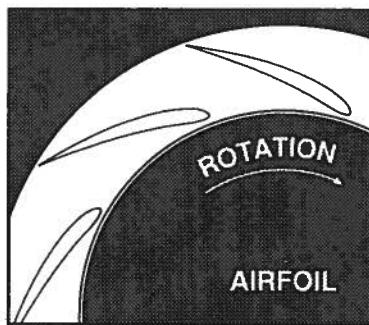
SINGLE WIDTH

WHEEL DIAMETER: 49.00"
WHEEL CIRCUMFERENCE: 12.83'
OUTLET AREA: 13.240 SQ. FT.
OUTLET SIZE: 38 $\frac{7}{8}$ " x 49 $\frac{1}{16}$ "
INLET DIAMETER: 51 $\frac{1}{2}$ " O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	875	1041	1320
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)*



CFM	OV	0.25" SP RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
9257	700	215	0.52	257	0.90	297	1.34	340	1.84		
10580	800	234	0.65	272	1.07	307	1.53	342	2.04		
11902	900	254	0.81	289	1.26	321	1.76	351	2.29		
13225	1000	274	1.00	307	1.48	336	2.02	365	2.59	420	3.82
14547	1100	295	1.22	325	1.74	353	2.31	380	2.92	429	4.20
15870	1200	317	1.47	344	2.04	371	2.64	396	3.28	443	4.64
17192	1300	338	1.74	364	2.38	389	3.00	413	3.68	458	5.12
18515	1400	361	2.06	385	2.76	408	3.42	431	4.13	473	5.64
19837	1500	383	2.42	405	3.20	428	3.89	449	4.61	490	6.20
21160	1600	405	2.82	427	3.67	448	4.41	468	5.16	508	6.81
22482	1700	428	3.27	448	4.16	468	4.99	487	5.78	525	7.48
23805	1800	451	3.77	470	4.70	489	5.62	508	6.45	543	8.20
25127	1900	473	4.32	492	5.30	510	6.32	528	7.19	561	8.97
26450	2000	496	4.93	514	5.96	531	7.02	548	7.99	581	9.85
27772	2100	519	5.60	537	6.67	553	7.78	569	8.85	601	10.79

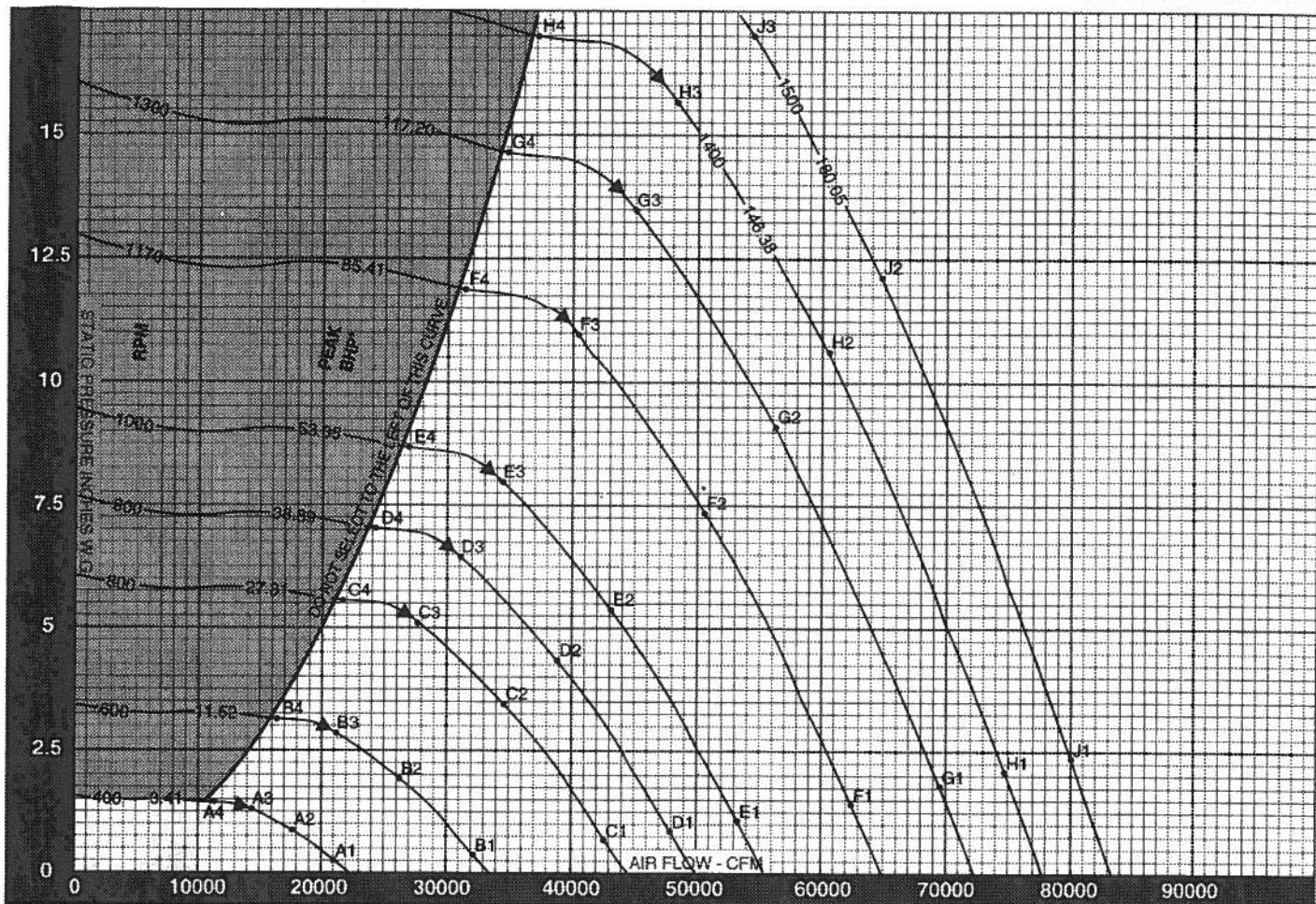
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
22482	1700	691	17.25	726	19.52	762	21.90	798	24.37	832	26.91
23805	1800	702	18.31	732	20.55	766	22.96	800	25.46	834	28.04
25127	1900	716	19.47	743	21.73	772	24.11	804	26.64	836	29.25
26450	2000	730	20.69	757	23.03	783	25.42	810	27.91	840	30.56
27772	2100	744	21.98	771	24.39	796	26.86	821	29.36	847	31.96
29095	2200	759	23.33	786	25.82	811	28.36	835	30.94	859	33.56
30417	2300	775	24.75	800	27.32	825	29.94	849	32.59	872	35.29
31740	2400	792	26.24	816	28.89	840	31.59	864	34.32	887	37.10
33062	2500	809	27.81	832	30.53	855	33.31	878	36.12	901	38.97
34385	2600	827	29.45	850	32.26	872	35.11	893	38.01	916	40.93
35707	2700	844	31.19	867	34.06	889	36.99	909	39.96	931	42.98
37030	2800	862	33.01	884	35.96	906	38.96	926	42.01	947	45.10
38352	2900	880	34.91	902	37.94	923	41.02	944	44.14	963	47.31
39675	3000	898	36.91	920	40.02	941	43.17	961	46.37	981	49.81
40997	3100	916	39.01	937	42.19	958	45.42	978	48.69	998	52.01
42320	3200	935	41.31	955	44.46	976	47.77	996	51.12	1015	54.51
43642	3300	955	43.71	974	46.85	994	50.22	1014	53.85	1033	57.11
44965	3400	975	46.23	993	49.44	1012	52.78	1031	56.28	1050	59.82
46287	3500	995	48.86	1013	52.15	1031	55.48	1049	59.02	1068	62.84
47610	3600	1015	61.62	1033	54.98	1050	58.39	1067	61.37	1086	65.57

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	
33062	2500	1032	57.18	1080	63.91	1130	70.98	1178	78.27	1224	85.76
34385	2600	1040	59.34	1086	66.16	1132	73.22	1180	80.60	1226	88.21
35707	2700	1052	61.80	1093	68.50	1137	75.66	1182	83.04	1228	90.72
37030	2800	1066	64.39	1109	71.09	1144	78.17	1187	85.67	1230	93.37
38352	2900	1080	67.07	1116	73.93	1153	80.89	1193	88.39	1234	96.18
39675	3000	1095	69.84	1131	76.85	1185	83.98	1201	91.30	1240	99.12
40997	3100	1109	72.71	1145	79.87	1179	87.16	1213	94.65	1248	102.22
42320	3200	1124	75.67	1160	82.98	1194	90.42	1226	97.09	1258	105.04
43642	3300	1139	78.74	1174	86.21	1208	93.80	1241	101.61	1272	109.34
44965	3400	1154	81.91	1189	89.54	1222	97.28	1255	105.14	1286	113.12
46287	3500	1171	85.18	1204	92.97	1237	100.87	1269	108.88	1301	117.01
47610	3600	1188	88.56	1219	96.51	1262	104.57	1284	112.74	1315	121.01
48932	3700	1205	92.05	1236	100.15	1267	108.39	1299	116.71	1330	125.14
50255	3800	1223	95.67	1263	103.92	1283	112.30	1313	120.30	1344	129.38
51577	3900	1240	99.41	1271	107.81	1300	116.34	1328	125.00	1359	133.74

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

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	109	92	86
	1.45	A4	81	75	69	69	63	59	53	48		7.40	F2	109	112	108	99	97	93	87	82	
600	0.39	B1	96	94	90	91	86	78	72	67		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	
	2.48	B3	96	90	82	79	76	71	66	61		1300	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		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		15.89	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		1500	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		17.00	J3	114	118	114	104	100	99	93	88	
	5.40	E2	106	109	100	95	93	88	82	77												

BCA-542

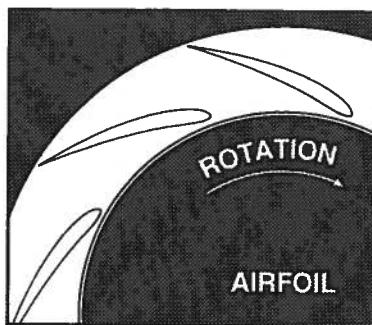
SINGLE WIDTH

WHEEL DIAMETER: 54.25"
WHEEL CIRCUMFERENCE: 14.20'
OUTLET AREA: 16.255 SQ. FT.
OUTLET SIZE: 43 $\frac{1}{16}$ " x 54 $\frac{3}{8}$ "
INLET DIAMETER: 56 $\frac{1}{4}$ " 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	1323
251°F TO 400°F*	751	979	1261
401°F TO 700°F*	648	945	1268
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 RPM	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	3.50" SP RPM
		BHP								
11347	700	195	0.63	232	1.11	268	1.64	307	2.26	
12968	800	211	0.79	246	1.31	277	1.88	309	2.50	
14589	900	229	0.99	261	1.55	290	2.16	317	2.81	
16210	1000	248	1.22	277	1.82	304	2.48	330	3.17	
17831	1100	266	1.50	293	2.13	319	2.83	343	3.57	
19453	1200	286	1.80	311	2.50	335	3.23	358	4.02	
21074	1300	306	2.14	329	2.92	351	3.68	373	4.51	
22695	1400	326	2.52	348	3.39	368	4.19	389	5.06	
24316	1500	346	2.96	366	3.92	386	4.77	405	5.66	
25937	1600	366	3.45	385	4.49	405	5.41	422	6.33	
27558	1700	387	4.00	405	5.10	423	6.12	440	7.08	
29179	1800	407	4.62	425	5.77	442	6.89	458	7.91	
30800	1900	428	5.29	445	6.50	460	7.75	477	8.81	
32421	2000	448	6.04	465	7.30	480	8.61	495	9.79	
34042	2100	469	6.86	485	8.18	499	9.54	514	10.85	

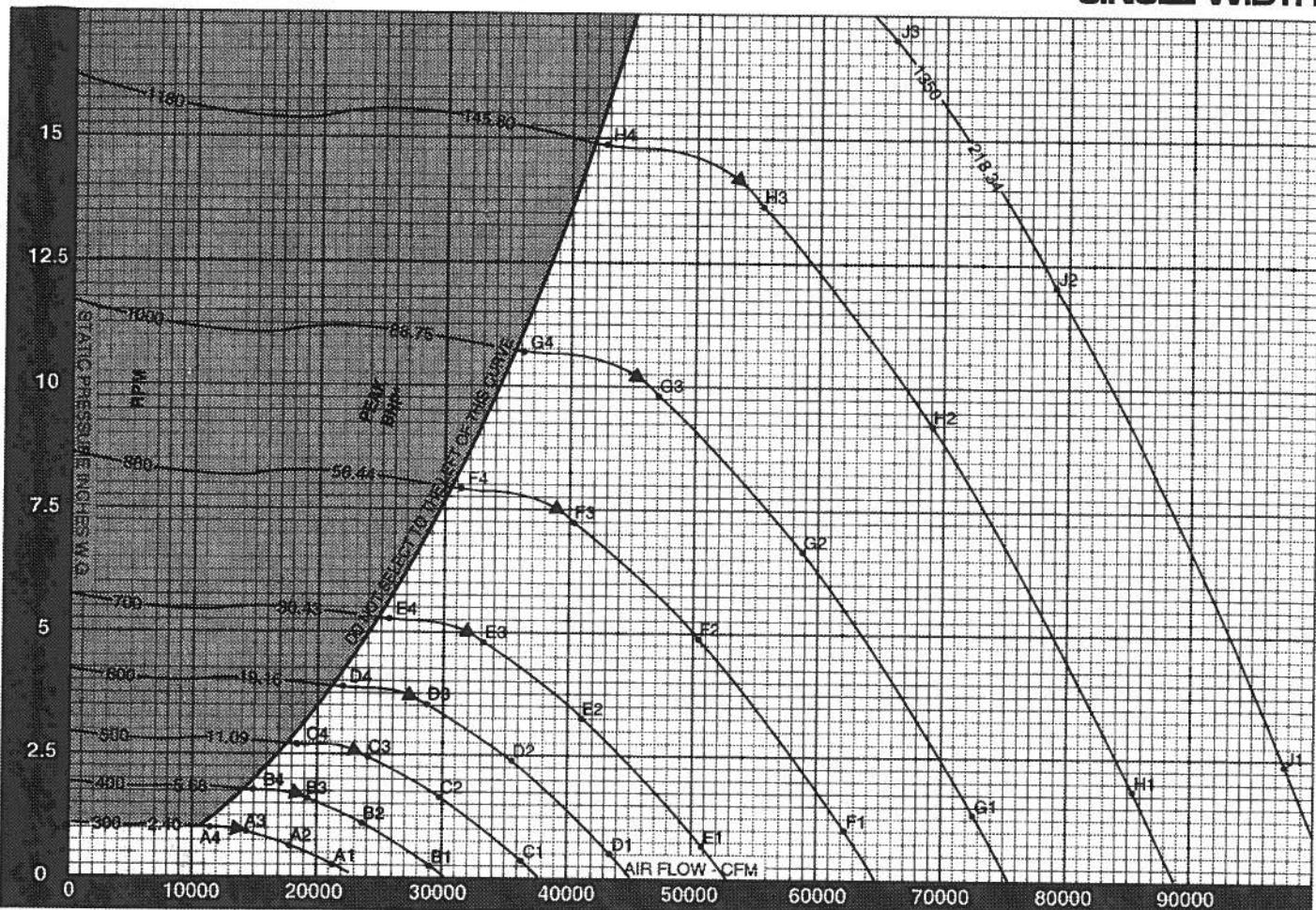
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
27558	1700	624	21.15	656	23.93	688	26.84	720	29.87	751	32.98
29179	1800	634	22.45	661	25.19	692	28.14	722	31.20	753	34.37
30800	1900	646	23.87	671	26.64	697	29.55	726	32.65	755	35.85
32421	2000	659	25.36	683	28.23	707	31.15	732	34.21	759	37.46
34042	2100	672	26.94	696	29.90	719	32.92	742	35.99	765	39.18
35663	2200	686	28.60	710	31.65	732	34.76	754	37.93	776	41.14
37285	2300	700	30.34	723	33.49	745	36.69	767	39.95	788	43.26
38906	2400	716	32.16	737	35.42	759	38.72	780	42.07	801	45.47
40527	2500	731	34.08	752	37.43	772	40.83	793	44.28	814	47.77
42148	2600	747	36.10	767	39.54	787	43.04	807	46.59	827	50.18
43769	2700	762	38.23	783	41.75	803	45.34	821	48.99	841	52.68
45390	2800	778	40.46	799	44.08	818	47.76	837	51.49	856	55.28
47011	2900	795	42.80	815	46.51	834	50.28	852	54.11	870	57.99
48632	3000	811	45.25	831	49.06	850	52.92	868	56.04	886	60.81
50253	3100	827	47.82	847	51.72	865	55.68	884	59.69	901	63.75
51874	3200	845	50.63	863	54.50	882	58.55	900	62.66	917	66.82
53495	3300	863	53.68	879	57.43	898	61.56	916	65.76	933	70.01
55116	3400	881	56.67	897	60.61	914	64.69	932	68.98	949	73.33
56738	3500	899	59.89	915	63.93	931	68.01	948	72.34	965	76.78
58359	3600	917	63.27	933	67.40	949	71.57	964	75.84	981	80.37

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	16.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	
40527	2500	932	70.08	975	78.34	1021	87.00	1064	95.95	1106	105.13
42148	2600	940	72.74	981	81.10	1022	89.75	1068	98.80	1107	108.12
43769	2700	951	75.76	987	83.96	1027	92.74	1087	101.79	1109	111.20
45390	2800	963	78.93	997	87.14	1033	95.82	1072	105.01	1111	114.44
47011	2900	976	82.21	1008	90.62	1041	99.15	1077	108.35	1115	117.89
48632	3000	989	85.61	1021	94.20	1053	102.94	1085	111.91	1120	121.50
50253	3100	1002	89.12	1034	97.90	1065	106.83	1096	115.90	1127	125.30
51874	3200	1015	92.76	1047	101.72	1078	110.84	1108	120.11	1137	129.49
53495	3300	1029	96.52	1060	105.67	1091	114.97	1121	124.42	1149	134.02
55116	3400	1043	100.40	1074	109.75	1104	119.24	1133	128.87	1162	138.60
56738	3500	1058	104.41	1087	113.96	1117	123.64	1147	133.46	1175	143.43
58359	3600	1073	108.55	1101	118.30	1131	128.18	1160	138.19	1188	148.34
59980	3700	1089	112.84	1117	122.76	1144	132.86	1173	143.05	1201	153.39
61601	3800	1104	117.27	1132	127.38	1159	137.66	1186	148.07	1214	158.59
63222	3900	1120	121.85	1146	132.15	1174	142.60	1200	153.22	1227	163.94

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.

CONSTANT SPEED PERFORMANCE CURVES

BCA-542
SINGLE WIDTH



▲ PEAK STATIC EFFICIENCY

* PEAK BHP DOES NOT INCLUDE DRIVE LOSSES

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

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	79	76	77	72	65	59	54	49	700	4.80	E3	102	99	90	86	84	79	74	69
	0.60	A2	78	72	70	67	61	55	50	45		5.45	E4	103	98	90	85	83	78	73	68
	0.88	A3	76	70	67	64	59	54	49	44		8.60	F1	106	111	100	102	101	93	86	80
	1.00	A4	75	70	66	63	58	53	48	43		4.80	F2	107	108	97	94	93	87	81	76
400	0.25	B1	92	82	85	84	76	68	63	58		7.25	F3	108	106	96	90	89	85	80	75
	1.06	B2	89	79	77	76	69	64	59	54		8.23	F4	109	104	97	90	89	84	79	74
	1.37	B3	86	78	73	73	67	63	58	52		1000	G1	109	114	106	104	104	98	91	85
	1.78	B4	85	79	72	72	66	62	56	51		6.62	G2	110	112	103	98	96	91	85	80
500	0.33	C1	97	91	89	89	83	75	70	65		9.80	G3	110	110	102	95	93	89	84	79
	1.66	C2	95	88	82	81	76	70	65	60		11.13	G4	112	109	102	94	92	88	83	78
	2.45	C3	93	86	80	78	74	69	64	59		1180	H1	112	117	113	108	108	104	96	90
	2.78	C4	92	86	79	77	73	68	63	58		9.22	H2	113	116	110	102	100	96	90	85
600	0.49	D1	100	98	93	94	89	81	75	70		13.85	H3	113	115	108	100	97	94	89	84
	2.38	D2	99	95	87	85	82	76	71	65		15.50	H4	115	115	107	100	96	93	88	83
	3.53	D3	98	93	85	82	79	74	69	64		1350	J1	114	119	118	110	111	108	100	94
	4.01	D4	98	92	85	81	78	73	68	63		12.07	J2	115	119	115	105	103	101	94	89
700	0.65	E1	102	104	95	97	94	86	80	74		17.00	J3	116	119	113	104	100	98	93	88
	3.25	E2	103	101	91	89	87	80	75	70		17.00	J4	116	119	113	104	100	98	93	88

BCA-600

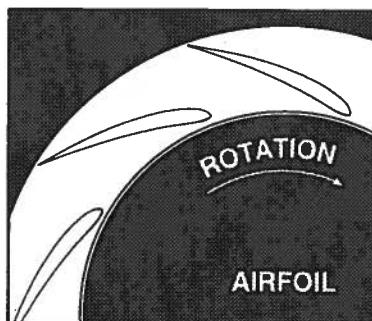
SINGLE WIDTH

WHEEL DIAMETER: 60.00"
WHEEL CIRCUMFERENCE: 15.71'
OUTLET AREA: 19.91 SQ. FT.
OUTLET SIZE: 47 $\frac{5}{8}$ " x 60 $\frac{3}{16}$ "
INLET DIAMETER: 63 $\frac{1}{4}$ " 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	1149
251°F TO 400°F*	678	885	1087
401°F TO 700°F*	585	769	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	0.50" SP RPM	0.75" SP RPM	1.00" SP RPM	1.50" SP RPM	2.00" SP RPM	2.50" SP RPM	3.00" SP RPM	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	250	2.30	279	3.06	
17846	900	207	1.21	236	1.89	262	2.64	286	3.43	
19829	1000	224	1.50	250	2.22	275	3.03	298	3.88	
21812	1100	241	1.83	265	2.60	289	3.46	310	4.37	
23795	1200	258	2.20	281	3.05	303	3.95	323	4.92	
25778	1300	276	2.61	298	3.57	318	4.50	338	5.52	
27761	1400	294	3.09	314	4.15	333	5.12	352	6.19	
29744	1500	313	3.62	331	4.80	349	5.83	367	6.92	
31727	1600	331	4.23	348	5.50	366	6.62	382	7.74	
33709	1700	349	4.90	366	6.24	382	7.48	398	8.66	
35692	1800	368	5.65	384	7.05	399	8.43	414	9.67	
37675	1900	387	6.48	402	7.95	416	9.48	431	10.78	
39658	2000	405	7.39	420	8.93	434	10.53	448	11.97	
41641	2100	424	8.39	438	10.01	452	11.67	465	13.27	

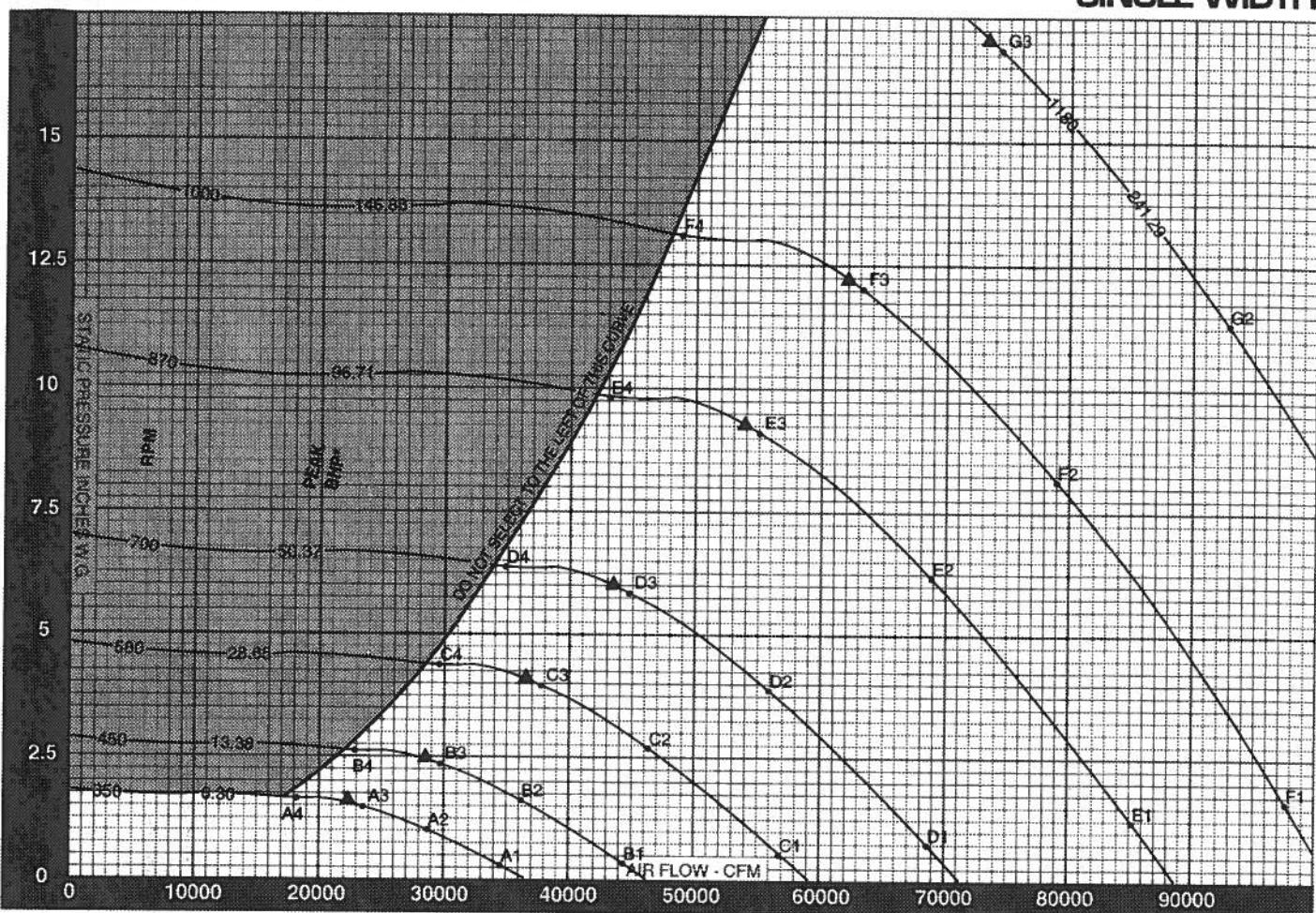
CFM	OV	4.00" SP RPM	4.50" SP RPM	5.00" SP RPM	5.50" SP RPM	6.00" SP RPM	6.50" SP RPM	7.00" SP RPM	7.50" SP RPM	8.00" SP RPM	
		BHP									
33709	1700	564	25.87	593	29.27	622	32.83	651	36.53	679	40.35
35692	1800	573	27.46	598	30.82	625	34.42	653	38.17	681	42.04
37675	1900	584	29.20	607	32.59	631	36.14	656	39.94	682	43.85
39658	2000	596	31.03	618	34.53	639	38.11	662	41.84	686	45.82
41641	2100	608	32.95	630	36.57	650	40.27	671	44.02	692	47.92
43624	2200	620	34.98	642	38.72	662	42.52	682	46.39	701	50.33
45607	2300	633	37.11	654	40.97	674	44.88	694	48.87	713	52.92
47590	2400	647	39.34	666	43.32	686	47.36	705	51.46	724	55.62
49573	2500	661	41.69	680	45.78	698	49.95	717	54.16	736	58.44
51556	2600	675	44.16	694	48.37	712	52.64	729	56.99	748	61.38
53539	2700	689	46.76	708	51.08	726	55.46	743	59.92	760	64.44
55522	2800	704	49.49	722	53.92	740	58.41	757	62.98	773	67.62
57505	2900	718	52.35	736	58.89	754	61.60	771	66.18	787	70.93
59488	3000	733	55.35	751	60.01	760	64.73	785	69.53	801	74.38
61471	3100	748	58.49	766	63.26	783	68.10	799	73.01	815	77.98
63454	3200	764	61.93	780	66.67	797	71.63	813	76.65	829	81.73
65437	3300	780	65.54	795	70.25	812	75.30	828	80.44	843	85.63
67419	3400	796	69.31	811	74.14	826	79.13	842	84.38	858	89.70
69402	3500	813	73.26	827	78.20	842	83.19	857	88.49	872	93.92
71385	3600	829	77.39	844	82.44	858	87.54	872	92.77	887	98.31

CFM	OV	9.00" SP RPM	10.00" SP RPM	11.00" SP RPM	12.00" SP RPM	13.00" SP RPM	14.00" SP RPM	15.00" SP RPM	15.00" SP RPM	17.00" SP RPM	
		BHP	BHP	BHP	BHP	BHP	BHP	BHP	BHP	RPM	
49573	2500	843	85.73	882	95.83	923	106.42	962	117.36	1000	128.59
51556	2600	850	88.98	887	99.20	924	109.78	964	120.85	1001	132.26
53539	2700	859	92.67	893	102.71	929	113.44	965	124.51	1003	136.03
55522	2800	871	96.55	901	106.58	934	117.21	969	128.45	1004	139.99
57505	2900	882	100.56	912	110.85	941	121.28	974	132.63	1006	144.20
59488	3000	894	104.71	923	115.23	952	125.92	981	136.89	1013	148.62
61471	3100	906	109.01	935	119.73	963	130.88	991	141.77	1019	153.27
63454	3200	918	113.46	947	124.43	975	135.58	1002	146.82	1028	158.39
65437	3300	930	118.07	959	129.28	987	140.64	1013	152.20	1039	163.94
67419	3400	943	122.81	971	134.25	998	145.85	1025	157.64	1049	169.81
69402	3500	957	127.71	983	139.40	1010	151.24	1037	163.25	1062	175.44
71385	3600	970	132.78	996	144.70	1022	156.79	1049	169.03	1074	181.45
73368	3700	984	138.02	1010	159.17	1034	162.51	1061	174.99	1088	187.63
75351	3800	999	143.45	1024	155.81	1048	168.38	1073	181.12	1098	193.99
77334	3900	1013	149.05	1038	161.64	1062	174.44	1085	187.42	1110	200.53

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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.0157}{\text{BHP}}$$

$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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		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	870	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		1.62	F1	112	117	109	108	107	101	94	88
	2.64	B4	93	86	79	78	73	68	63	65		8.10	F2	113	115	106	101	99	94	89	83
580	0.55	C1	103	100	95	96	91	83	77	76	1100	12.00	F3	114	113	105	98	96	92	87	82
	2.73	C2	102	97	89	88	84	78	73	72		13.04	F4	115	113	105	98	95	91	87	81
	4.03	C3	101	95	87	84	81	76	71	70		2.26	G1	115	120	116	111	111	107	99	93
	4.39	C4	101	95	87	84	81	76	71	70		11.28	G2	116	119	113	105	103	99	93	88
700	0.79	D1	106	107	99	100	97	89	83	79	1450	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.

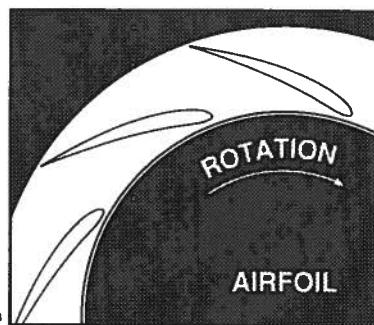
OUTLET SIZE: 52¹/₈" x 66¹/₄"

INLET DIAMETER: 69¹/₄ O.D.

American
Fan Company

	CLASS 1	CLASS 2	CLASS 3
MAX SPEEDS	CLASS 1	CLASS 2	CLASS 3
UP TO 250°F	649	647	666
251°F TO 400°F*	617	604	628
401°F TO 700°F*	532	524	541
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 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
16795	700	160 0.94	191 1.64	220 2.43	252 3.34					
19194	800	174 1.17	202 1.94	228 2.78	254 3.71					
21594	900	188 1.46	215 2.29	238 3.20	260 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	319 7.61	358 10.23	399 13.15		
28792	1200	235 2.66	256 3.69	275 4.78	294 5.95	329 8.41	362 11.05	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	410 16.12	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	446 20.70	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	480 25.77
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

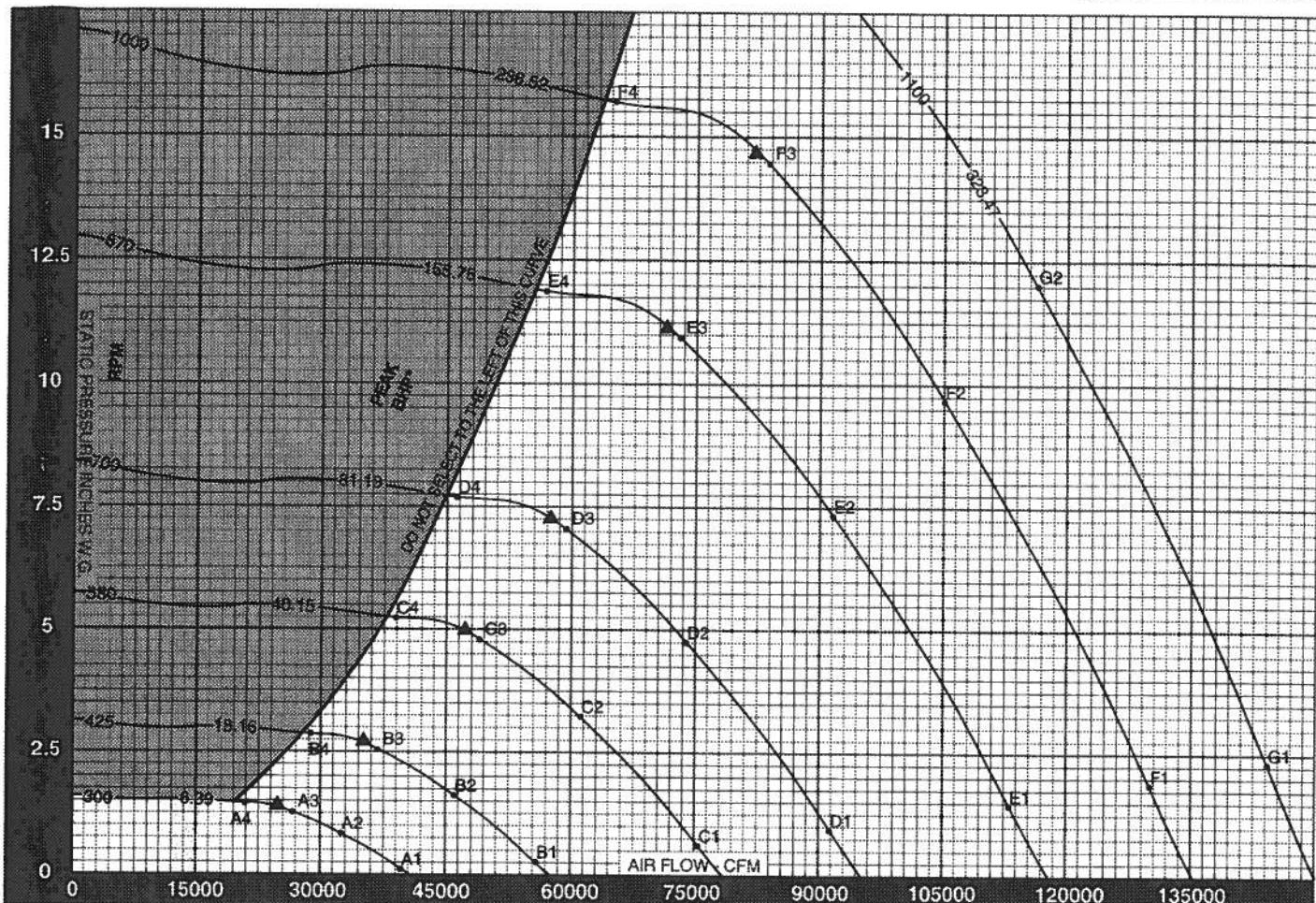
CFM	OV	4.00" SP RPM BHP	4.50" SP RPM BHP	5.00" SP RPM BHP	5.50" SP RPM BHP	6.00" SP RPM BHP	6.50" SP RPM BHP	7.00" SP RPM BHP	7.50" SP RPM BHP	8.00" SP RPM BHP
40789	1700	513 31.30	539 35.42	566 39.73	592 44.21	617 48.82				
43188	1800	521 33.22	544 37.29	568 41.65	594 46.18	619 50.87	643 55.73	666 60.66		
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	581 46.11	602 50.63	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	629 57.99	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	665 69.00	682 74.07	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	707 82.82	725 88.39
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 99.09	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	758 102.00	770 108.09	785 114.23
74380	3100	680 70.78	696 76.55	711 82.41	726 88.34	741 94.36	755 100.46	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	765 100.58	779 107.07	793 113.64	807 120.28	820 127.03	833 133.78	845 140.63
86376	3600	754 93.64	767 99.75	780 105.93	793 112.26	806 118.96	820 125.74	833 132.59	846 139.51	859 146.49

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
59983	2500	766 103.73	802 115.95	839 128.77	876 142.01	908 155.80				
62383	2600	772 107.66	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	877 150.68	912 164.59	945 178.94	976 193.53	1007 208.46	
67182	2800	792 116.83	819 128.97	849 141.82	881 155.42	913 169.29	946 183.85	978 198.72	1009 213.90	1039 229.28
69581	2900	802 121.68	829 134.13	856 146.75	886 160.37	916 174.49	947 189.01	979 203.99	1010 219.39	1040 235.06
71980	3000	813 126.70	839 139.42	865 152.37	892 166.63	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	901 171.54	927 185.45	955 200.21	984 215.34	1013 230.91	1043 246.91
76779	3200	834 137.29	861 160.55	888 164.05	910 177.77	935 191.66	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	944 198.27	968 212.71	993 227.95	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	1001 234.70	1026 250.43	1052 266.76
83977	3500	870 154.53	894 168.98	918 183.00	942 197.53	966 212.28	988 227.24	1010 242.37	1032 257.63	1057 273.92
86376	3600	882 160.66	905 175.09	929 189.72	953 204.53	976 218.65	999 234.78	1020 250.20	1042 266.79	1063 281.52
88776	3700	895 167.01	918 181.70	940 196.84	964 211.73	987 227.03	1009 242.53	1031 258.22	1052 274.11	1073 290.14
91176	3800	908 173.57	931 188.53	963 203.75	976 219.15	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	986 226.76	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

$$\% \text{ STATIC EFFICIENCY} = \frac{\text{CFM} \times \text{SP} \times 0.015}{\text{BHP}}$$

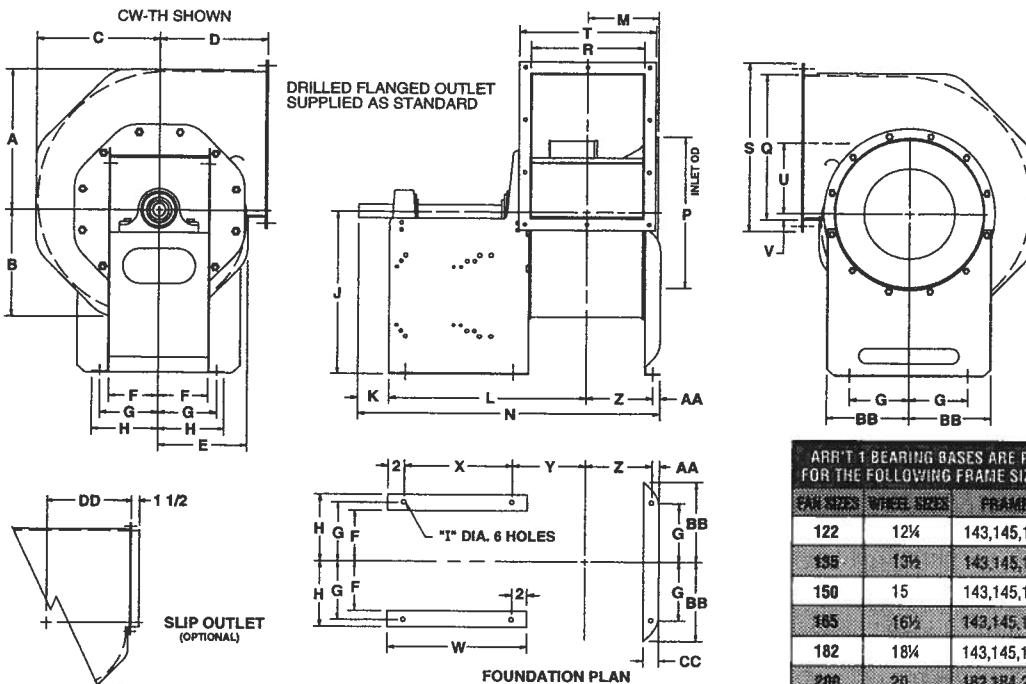
$$\text{Outlet Velocity (OV)} = \frac{\text{CFM}}{\text{Outlet Area}}$$

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								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	96	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	0.98	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		
FRAME SIZE	WEIGHT, LB/HR	FRAME SIZES
122	12½	143,145,182,184
135	13½	143,145,182,184
150	15	143,145,182,184
165	16½	143,145,182,184,212,215
182	18½	143,145,182,184,213,215
200	20	182,184,213,215,264

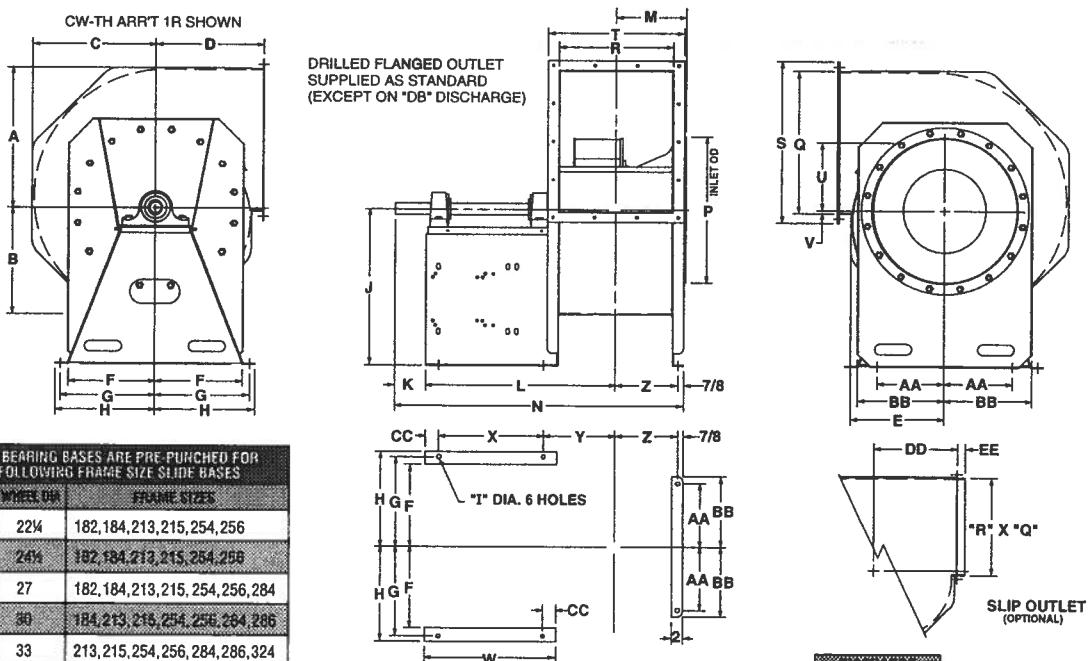
FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	SHFT KEYWAY	FAN WT. NO MOTOR	SHFT KEYWAY	FAN WT. NO MOTOR		
122	12½	9%	10½	10	7½	5½	6%	7½	7½	15	3½	18½	6%	28½	13%	12½	10	15½	13	5½	¾	13	9	7½	6½	¾	9%	1½	8½	1½	14½	104	17½	¾ x ¾	127
135	13½	10½	11½	11	8½	5½	8%	7½	7½	18	3½	18½	7½	29½	14%	13½	10½	16½	13½	6%	7½	13	9	7½	6½	¾	9%	1½	9½	1½	14½	116	17½	¾ x ¾	142
150	15½	11½	13½	12	9%	5½	6%	7½	7½	18	3½	19½	7½	30½	16%	15½	12½	18½	15½	7½	¾	13	9	8½	7½	¾	9%	1½	10½	1½	14½	134	17½	¾ x ¾	162
165	16½	12½	14½	13	10%	6½	7½	8½	8½	19	4	24%	8½	37%	17½	16%	13½	19%	16%	7½	½	18	14	8½	6½	½	1	11½	2½	11½	1½	209	17½	¾ x ¾	253
182	18½	13½	16½	14	11%	6½	7½	8½	8½	21	4	25½	9	39½	19½	18½	14½	21½	17½	8½	½	18	14	9½	8½	½	1	11½	2½	12½	1½	239	17½	¾ x ¾	285
200	20	15½	17½	15	12½	6½	7½	8½	8½	22	4	29½	9½	43%	21½	20½	16½	23½	19½	9½	¾	21	17	10½	9½	¾	1	12½	2½	13½	1½	275	17½	½ x ¼	339

*FAN WEIGHT IS APPROXIMATE

BCA/BCS-222-330
ARRANGEMENT 1
ROTATABLE HOUSING

CLASS 1A	CLASS 3
222	1½
245	2½
270	1½
300	1½
330	2½

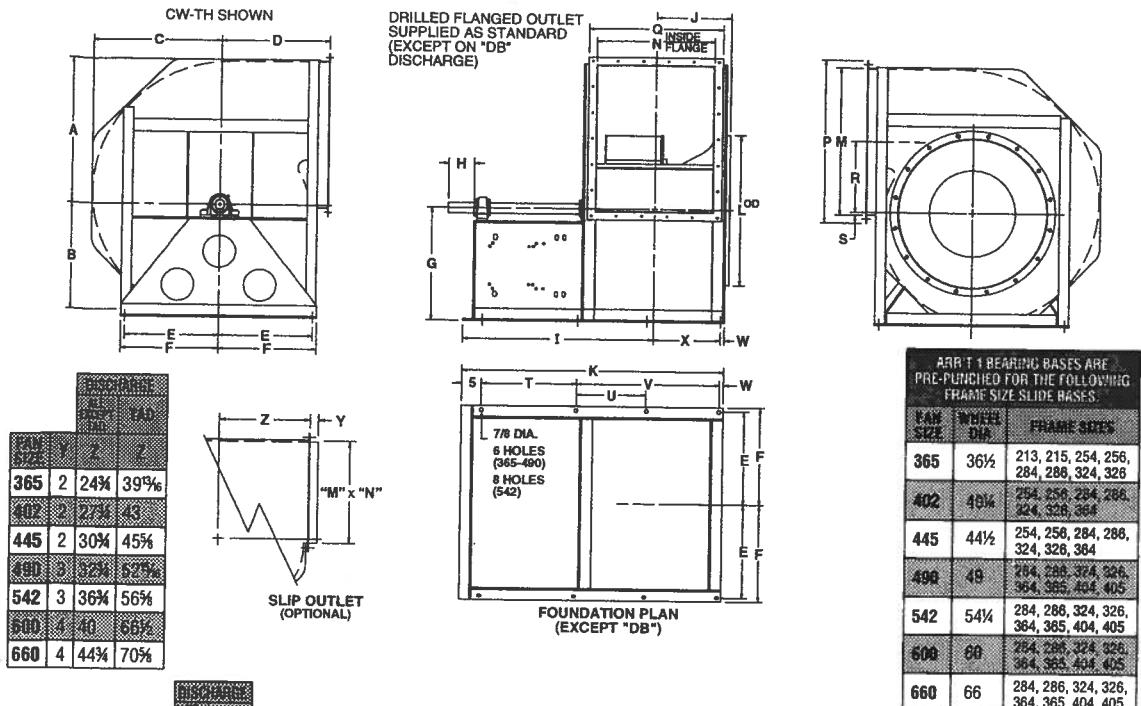
ARR'T 1 BEARING BASES ARE PRE-PUNCHED FOR THE FOLLOWING FRAME SIZE SLIDE BASES									
FRAME SIZE	WEIGHT, LB/HR	FRAME SIZES							
222	22½	182,184,213,215,254,256							
245	24½	182,184,213,215,254,256							
270	27	182,184,213,215,254,256,284							
300	30	184,213,215,254,256,284,286							
330	33	213,215,254,256,284,286,324							



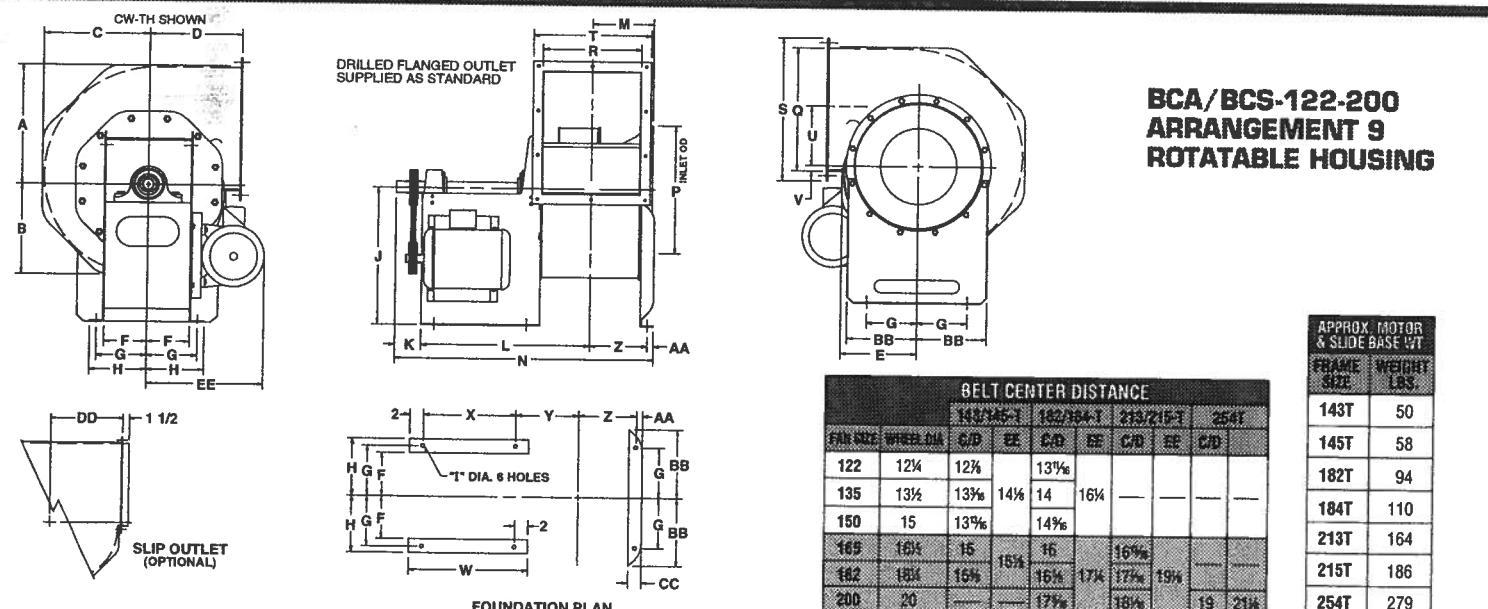
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	DD	DD	DD	DD				
222	22½	16½	19½	16	20½	23½	14½	13½	15	16	1½	25	5	32½	10½	48½	23½	22½	17½	25%	20½	½	23	19	11½	10½	10	13½	2	14½	18½	22½	1½	393	448		
245	24½	18½	21½	18	22½	26½	15½	15½	17	18	1½	27½	5	32½	12½	49½	24½	24½	19½	25½	23½	11½	½	23	19	11½	10½	12	15½	2	15½	20½	24½	2	468	546	
270	26½	20%	23%	19½	24	28½	17½	16½	18	19	1½	30	6	36½	13½	54%	28½	27½	21½	31%	25½	13½	½	25	20	13½	11½	13	16½	2½	17½	22½	26½	1½	616	702	
300	29½	22½	26½	22	26	30½	18½	16	19½	20½	1½	33	6	37½	14½	57½	31½	30½	24½	34½	28½	14½	½	25	20	14½	13½	14	14½	18½	22½	14½	24	28½	2	763	870
330	32½	24½	28½	24	28½	33½	20½	19½	21	22	½	36	6½	40½	15½	62½	34½	33½	26½	37½	30½	15½	½	27	22	15½	14½	16	19½	2½	21½	26½	31½	2	913	1027	

*FAN WEIGHT IS APPROXIMATE

**BCA/BCS-365-660
ARRANGEMENT 1
FIXED HOUSING**



FRAME 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	INLET OD	OUTLET OD	CLASS 1 & 2	CLASS 3	MAX. CAPACITY (CFM)					
365	36%	27%	31%	27	42½	23¼	24¼	28	30	33	35	40	27	33	6%	47%	16%	65	37%	36%	29½	40%	33½	17½	1½	23½	—	35½	1	16½	2½	5½ x 5½	2½ x 3½	3267	
402	40	30½	35½	40	45½	25½	26½	31	33	36	38	43	30	35	7	40½	18%	63%	41%	40%	32½	34½	36%	19½	24½	—	38½	1	18½	2½	5½ x 5½	2½ x 3½	3647		
445	44½	33%	38½	33	47%	27	28½	34	37	40	42	47	33	37	7	51½	19½	72%	45½	44%	35%	48½	39½	21%	2½	24½	—	41%	1/4	19½	2½	5½ x 5½	2½ x 3½	3647	
490	48½	36½	42½	36	56%	31½	32½	37	40	43	46	54	36	44	8	56½	22%	76%	51%	49%	39%	55%	45½	23½	1½	27½	—	45½	1/4	21½	2½	5½ x 5½	2½ x 3½	4057	
542	53%	40½	47½	40	59%	33%	35	41	45	48	51	59	40	47	8	58½	24½	83½	56%	54%	43%	60%	49½	26½	1½	27½	24½	49½	1/4	23½	3½	3½ x 3½	3½ x 1½	4057	
660	55½	44%	52½	44	70%	37½	39	46	49	53	57	65	44	56	8	62%	26%	89%	63½	60%	47½	68%	65%	29½	1½	27½	27½	65½	1/4	26½	3½	3½ x 3½	3½ x 1½	4057	
660	65½	49%	57%	48%	74%	40%	42	50	54	58	62	71	49	59	8	65	30%	94%	69%	66½	52%	74½	60%	32½	1½	29%	29%	58%	1/4	28½	3½	3½ x 3½	47½	1 x 1½	4057

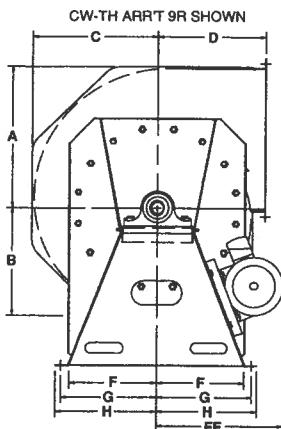


FRAME SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	CLASS 1 & 2		CLASS 3							
																									SHAFT LENGTH (IN.)	NUMBER OF BELTS	SHAFT LENGTH (IN.)	NUMBER OF BELTS						
122	12%	9%	10%	10	7%	5½	6%	7%	7½	15	3½	18½	6%	28½	13%	12%	10	15%	13	5½	½	13	9	7½	6½	¾	9%	1%	8½	1½	104	1½	¾ x 3½	127
135	13%	10%	11%	11	8%	5½	6%	7%	7½	16	3½	18½	7½	29½	14%	13%	10%	16%	13	6½	½	13	9	7½	6½	¾	9%	1%	9½	1½	116	1½	¾ x 3½	142
150	15½	11½	13%	12	9%	5½	6%	7%	7½	18	3½	19½	7½	30½	16½	15%	12½	18%	15%	7½	½	13	9	8½	7½	¾	9%	1%	10½	1½	¾ x 3½	162		
165	16%	12%	14%	13	10%	6½	7%	8%	8½	19	4	24½	8½	37½	17½	16½	13%	19½	16½	7½	½	13	9	8½	8½	¾	9%	1%	10½	1½	¾ x 3½	173		
182	18½	13%	16½	14	11%	6½	7%	8%	8½	21	4	25½	9	39½	19½	18%	14%	21%	17½	8½	½	18	14	9½	8½	¾	1	11½	2½	11½	1½	¾ x 3½	239	
200	20	15%	17%	15	12%	6½	7%	8%	8½	22	4	29½	9½	43½	21½	20½	16½	23½	19½	9½	½	21	17	10%	9½	1	12½	2½	13½	7½	¾ x 3½	285		

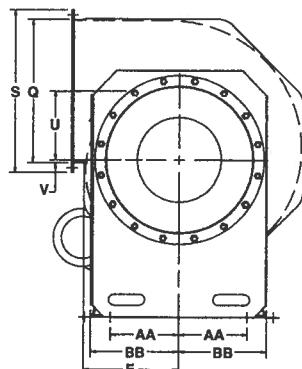
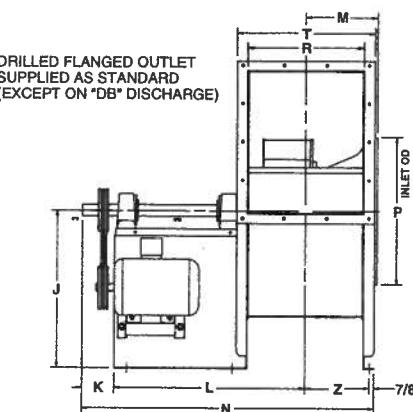
* FAN WEIGHT IS APPROXIMATE 73

BCA/BCS-222-330
ARRANGEMENT 9
ROTATABLE
HOUSING

DISCHARGE			
FAN SIZE	H.P.	T.A.D.	EFF.
222	1 1/2	36 x 3%	15%
240	1 1/2	55 x 3%	21%
270	1 1/2	36 x 3%	23%
300	1 1/2	55 x 3%	24%
330	2 1/2	55 x 3%	21 1/2%



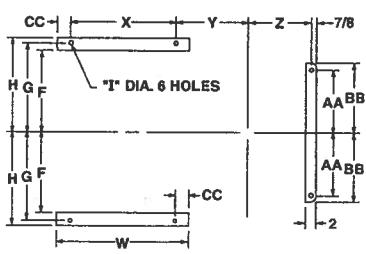
DRIVES NOT SHOWN IN THIS VIEW.



APPROX. MOTOR & SLIDE BASE WT.	
FRAME WEIGHT	SLIDE BASE WT.
182T	94
184T	110
213T	164
215T	186
254T	279
256T	310
284T	412
286T	463
324T	587

DISCHARGE DISTANCE											
FAN SIZE	200	224	240	270	300	330	200	224	240	270	300
222	20.0	20.0	21.3	22	21.3	24	—	—	—	—	—
240	—	—	21.3	22	23.4	24.2	—	—	—	—	—
270	27	23.0	22.6	23.6	24.2	25%	24.6	27.7%	—	—	—
300	30	24.6	24.6	24.9	24.9	25.6	24.9	23.2	—	—	—
330	33	—	—	27.8	25%	27.8	27.8	28.2	29.1	29.0	32%

*284-T ONLY



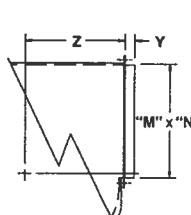
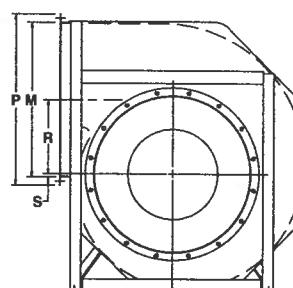
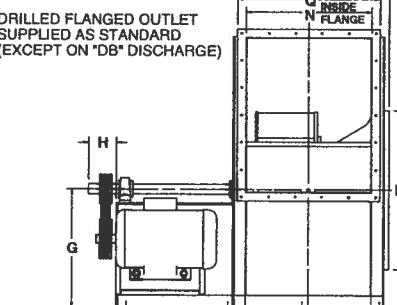
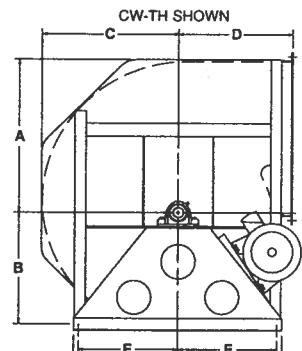
FOUNDATION PLAN

DISCHARGE		CLASS 1 & 2		CLASS 3	
FAN SIZE	H.P.	T.A.D.	EFF.	FAN WEIGHT	MOTOR & SLIDE BASE WT.
222	22 1/4	16%	19 1/2	16	20 1/2
240	24	10%	21 1/2	18	22 1/2
270	26%	20%	23%	19 1/2	24 1/2
300	29 1/2	22%	25%	22	26 1/2
330	32%	24%	28%	24	30 1/2

*FAN WEIGHT IS APPROXIMATE

BCA/BCS-365-660
ARRANGEMENT 9
FIXED HOUSING

DISCHARGE			
FAN SIZE	H.P.	T.A.D.	EFF.
365	1400	1645	
402	1710	1950	
445	1940	2235	
490	2520	2900	
542	2910	3410	
600	3700	4347	
660	4690	5400	



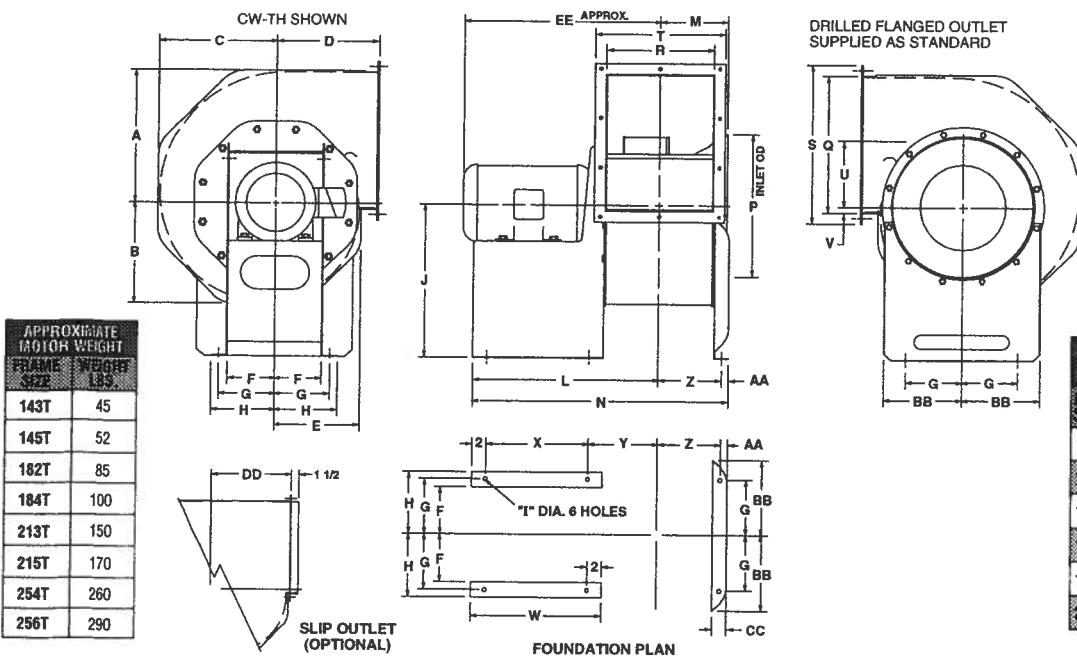
FOUNDATION PLAN
(EXCEPT "DB")

APPROXIMATE MOTOR AND SLIDE BASE WEIGHT	
FRAME WEIGHT	SLIDE BASE WT.
213T	164
215T	186
254T	279
256T	310
284T	412
286T	463

DISCHARGE											
FAN SIZE	A	B	C	D	E	F	G	H	I	J	K
365	36 1/2%	27%	31%	27	42 1/4	23 1/4	24 1/4	28	30	33	35
402	40	35%	30	45 1/4	26 1/4	31	33	36	38	43	30
445	44 1/2%	33%	38 1/2%	33	47	27	28 1/4	34	37	40	42
490	49 1/2%	33%	38 1/2%	33	47	27	28 1/4	34	37	40	43
542	53%	40 1/2%	47 1/4	40	59	33	48	51	59	40	47
600	59%	44 1/2%	42	70 1/4	37 1/4	39	49	49	63	67	65
660	65 1/2%	49 1/2%	57 1/2%	48 1/4	74%	40 1/4	58	62	71	49	59

DISCHARGE

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



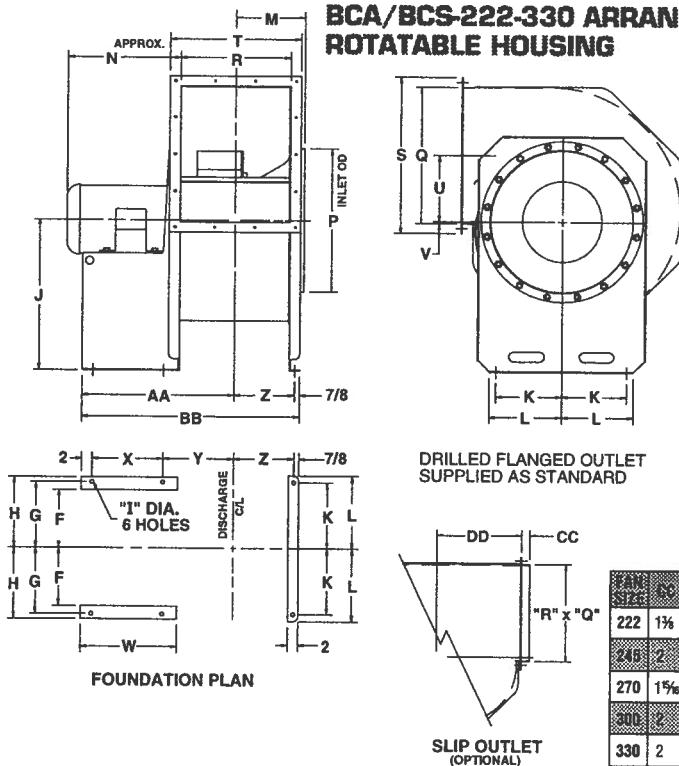
APPROXIMATE MOTOR WEIGHT	
FAN SIZE: 122	
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290

APPROXIMATE FAN WEIGHTS LESS MOTOR			
FAN SIZE	CLASS 1	CLASS 2	CLASS 3
122	103	126	102
135	115	141	114
150	133	161	132
165	206	252	206
182	235	281	233
200	294	328	262

FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	EE	
							143T	145T
122	12 1/4	12%	9%	10%	10	7 1/2	5 1/2	6%
135	13 1/2	13%	11%	11	8 1/2	6 1/2	7 1/2	7 1/2
150	15	15%	11%	13 1/4	12	9 1/2	5 1/2	6%
165	16 1/2	16%	12%	14	11 1/2	7 1/2	8 1/2	8 1/2
182	18 1/4	18 1/4	13%	16 1/8	14	11 1/2	6 1/2	7 1/2
200	20	20	15%	17 1/2	15	12 1/2	7 1/2	8 1/2

APPROX. TEFC MOTOR WEIGHT AND RELATED DIMENSIONS		
FAN SIZE	WEIGHT LBS.	H
102T	75	11%
145T	100	12%
213T	150	14%
256T	175	16%
254T	240	19
256T	300	20%
254T	403	22%
256T	420	23%
324T	553	24%
326T	627	26%
254T	726	27%
256T	836	28%
404T	1122	32%
405T	1300	34
444T	1727	40%
445T	1848	40%

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



APPROXIMATE FAN WEIGHTS LESS MOTOR									
FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	CLASS 7	CLASS 8	CLASS 9
222	347	372	351	376	362	387	364	389	366
254	429	462	435	460	447	480	449	492	453
270	537	578	570	611	588	629	592	633	598
300	N/A	707	760	727	780	726	779	739	792
330	N/A	889	996	910	1017	917	1024	924	1031

FAN SIZE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6	EE		
							182/184T	213/215T	
222	224	16%	19%	16	20 1/2	23%	14%	8	10
254	245	16%	21%	18	22 1/2	25%	16%	12	13
270	26%	20%	23%	19%	24	28%	17%	11	13
300	294	22%	26%	22	26	30%	18%	13	16
330	32%	24%	28%	24	28	33%	20%	15	17

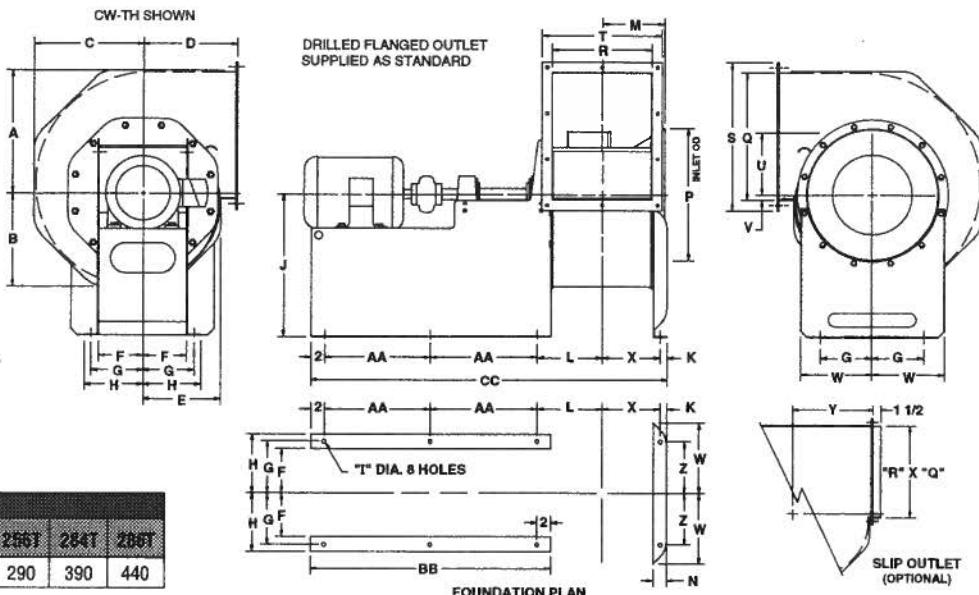
BCA/BCS-122-200
ARRANGEMENT 8
ROTATABLE
HOUSING

FAN SIZE	CLASS 1 & 2			CLASS 3		
	SHAFT DIA.	KEYWAY	FAN WT. NO MOTOR	SHAFT DIA.	KEYWAY	FAN WT. NO MOTOR
122	1 1/8	1/4 x 1/8	124	1 1/8	3/8 x 3/8	147
135	1 1/8	1/4 x 3/8	138	1 1/8	3/8 x 3/8	164
150	1 1/8	1/4 x 1/8	158	1 1/8	3/8 x 3/8	186
165	1 1/8	3/8 x 3/8	247	1 1/8	3/8 x 3/8	291
182	1 1/8	3/8 x 3/8	281	1 1/8	3/8 x 3/8	327
200	1 1/8	3/8 x 3/8	318	1 1/8	3/8 x 3/8	381

*FAN WEIGHT IS APPROXIMATE

APPROXIMATE MOTOR WEIGHT (lbs.)

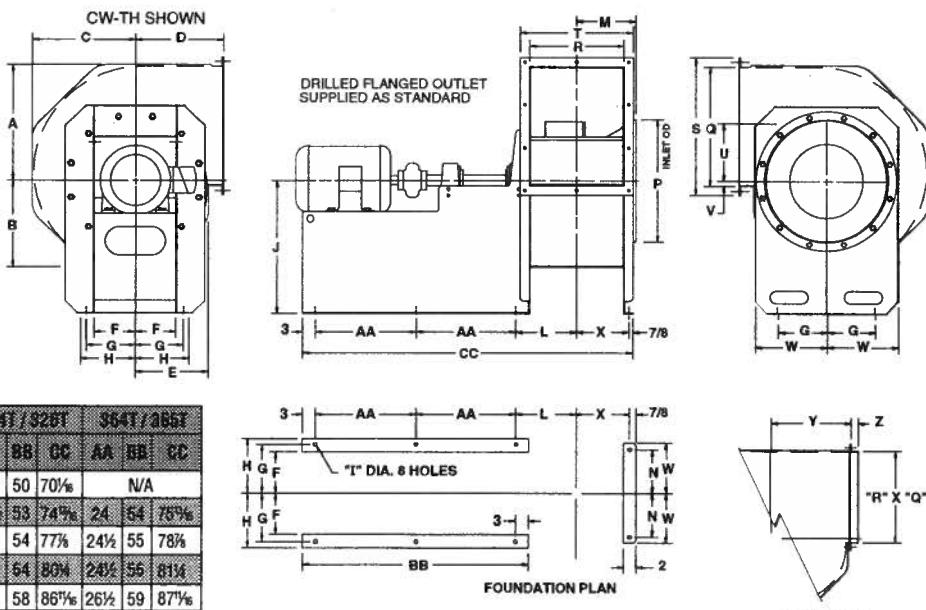
FRAME SIZE	143T	145T	182T	184T	213T	219T	254T	256T	284T	286T
WEIGHT	45	52	85	100	150	170	260	290	390	440



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	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC				
	122	12%	9%	10%	10	7%	5 1/2	6%	7%	7%	7%	15	3%	7%	6%	1%	13%	12 1/2	10	15 1/2	13	5 3/8	16	9%	6 1/8	8 1/8	6%	11%	27	38 1/2	12 1/2	29	40%	14%	33	44 1/2	N/A	N/A			
135	13%	10%	11%	11	8%	6%	6%	7%	7%	7%	16	3%	7%	7%	1%	14%	13%	10%	16%	13%	6%	7%	9%	6 7/8	8 9/16	6%	11%	27	39%	12 1/2	29	41%	14%	33	45%	N/A	N/A				
150	15 1/8	11 1/8	13 1/8	12	9%	5 1/2	6%	7%	7%	7%	18	3%	8 1/2	7 1/2	1%	16 1/2	15%	12%	18%	15%	7 1/2	9 1/2	9%	7 1/2	10%	6%	11%	27	41 1/2	12 1/2	29	43%	14%	33	47%	N/A	N/A				
165	16%	12%	14%	13	10%	6%	7%	8%	8%	8%	19	1	8%	8%	2%	17%	16 1/2	13%	19%	16%	7 1/2	1%	11%	8 1/8	11 1/4	7%	13%	31	46%	14%	33	48%	15%	37	52%	19	42	57%	N/A	N/A	
182	18%	13%	16%	14	11%	6 1/2	7%	8%	8%	8%	21	1	9 1/2	9	2%	19%	18%	14%	21%	17%	8 1/2	1 1/2	11%	8 1/8	12 1/4	7%	13%	31	48 1/2	14%	33	50%	16%	37	54%	19	42	59%	N/A	N/A	
200	20	15%	17%	15	12%	7	8%	9%	9%	9%	22	1	10%	9%	2%	21%	20%	16%	23%	19%	9 1/2	3	12 1/4	9%	13%	7	14%	33	51%	15%	35	53%	17%	39	57%	20	44	62%	21	46	64%

BCA/BCS-222-330
ARRANGEMENT 8
ROTATABLE
HOUSING

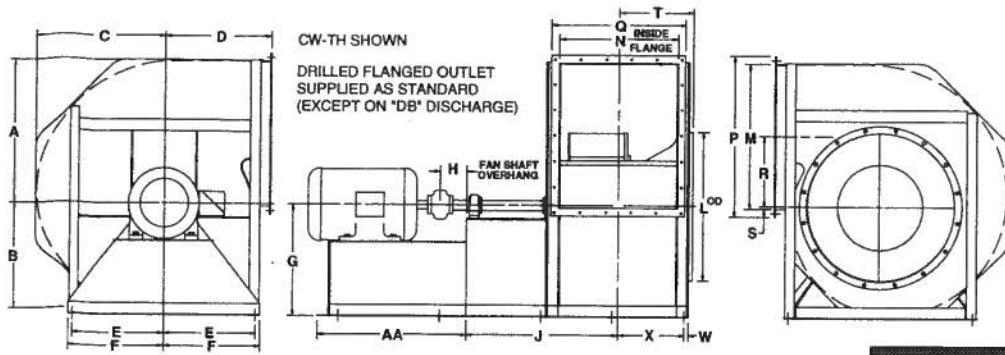
FAN SIZE	182T / 184T	183T / 215T	254T / 256T	284T / 286T	324T / 326T	354T / 356T															
	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC	AA	BB	CC
222	15	36	56%	17	40	60%	19 1/2	45	65%	20%	47	67%	22	50	70%	N/A					
245	16%	39	68%	18 1/2	43	64%	21	48	69%	22	59	71%	23	53	74%	24	54	75%			
270	17	40	63%	19	44	67%	21 1/2	49	72%	22%	51	74%	24	54	77%	24 1/2	55	78%			
300	N/A			19	44	70%	21 1/2	49	75%	22%	51	77%	24	54	80%	24 1/2	55	81%			
330	N/A			21	48	76%	23 1/2	53	81%	24 1/2	55	83%	26	58	86%	26 1/2	59	87%			



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

FAN SIZE	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	DD							
	222	22 1/4	16%	19%	16	20 1/2	23%	14%	8 9/16	10%	1 1/8	25	12 1/2%	10 1/2%	10	23 1/2	22%	17 1/2%	25%	20 1/2%	10 3/8	13%	10 1/2	14%	18%	22%	1%	1 1/8	3/8 x 3/8	474	1 1/8	1/2 x 1/4	528	
245	24%	18 1/2	21 1/2	18	22 1/2	26 1/2	16 1/2	9	10 1/2	11 1/2	1 1/8	27	12 1/2	12 1/2	12	26	24%	19%	22%	23%	11 1/2	14%	15%	10 1/2	15%	20%	24%	2	1 1/8	3/8 x 3/8	573	2 1/2	1/2 x 1/4	650
270	26%	20%	23%	19 1/2	24	28%	17 1/2	10	11 1/2	12 1/2	1 1/8	30	14 1/2	13 1/2	13	28	27%	21%	31%	25 1/8	13 1/8	13 1/2	16 1/8	17 1/8	22 1/8	26 1/8	1 1/8	1 1/8	3/8 x 3/8	775	2 1/2	1/2 x 1/4	859	
300	29%	22%	26%	22	26	30%	18%	11	12 1/2	13 1/2	1 1/8	33	15 1/2	14 1/2	14	31%	30%	24%	34%	28%	14 1/2	18%	13%	19%	24	28%	2	1 1/8	1/2 x 1/4	936	2 7/8	3/8 x 3/8	1041	
330	32%	24%	28%	24	28%	33%	20%	11	12 1/2	13 1/2	1 1/8	36	16 1/2	15 1/2	16	34 1/2	33 1/2	26%	37 1/2	30%	15 1/2	2 1/2	19 1/2	14%	21 1/2	26%	31 1/2	2	2 1/2	1/2 x 1/4	1113	2 1/8	5/8 x 5/8	1226

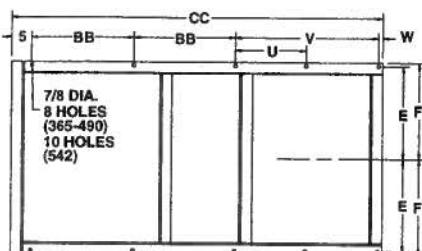
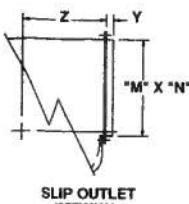
*FAN WEIGHT IS APPROXIMATE



BCA/BCS-365-542 ARRANGEMENT 8 FIXED HOUSING

Also available in sizes 600 and 660. Contact Factory for drawing.

FAN SIZE	DISCHARGE			
	X	Y	Z	TAD
365	2	24 $\frac{1}{4}$	39 $\frac{5}{8}$	
402	2	27 $\frac{1}{4}$	43	
445	2	30 $\frac{1}{4}$	45 $\frac{1}{8}$	
490	3	32 $\frac{1}{4}$	52 $\frac{5}{8}$	
542	3	36 $\frac{1}{4}$	56 $\frac{1}{8}$	



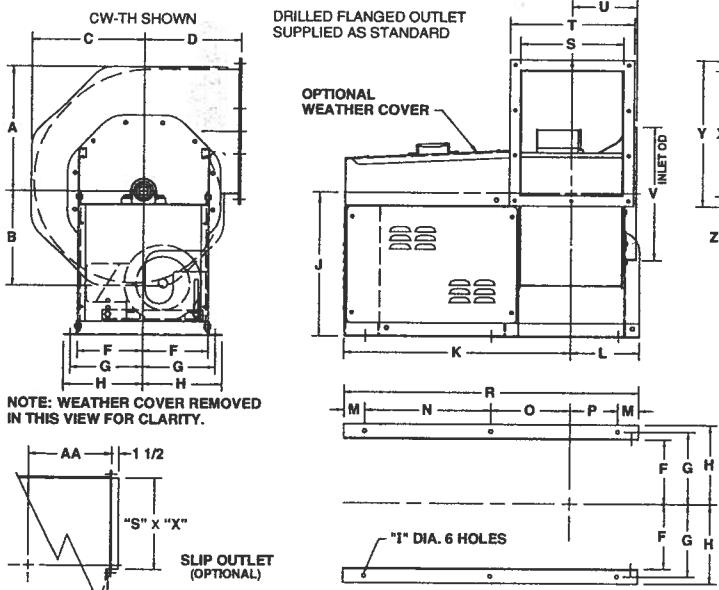
FOUNDATION PLAN

APPROXIMATE MOTOR WEIGHT (lbs.)

FRAME SIZE	324T	326T	364T	366T	404T	406T	444T	446T	447T
WEIGHT	555	620	750	810	1050	1150	1400	1575	2100

FAN SIZE	DISCHARGE															CLASS 1 & 2					CLASS 3													
	A	B	C	D	E	F	T	H	TA	UB	BA	FH	DB	TAD	H	J	L	M	N	P	Q	R	S	T	U	V	W	X	SHAFT DIA.	KEYWAY DIAMETER	FRONT. DIA.	SHAFT DIA.	KEYWAY DIAMETER	FRONT. DIA.
365	36 $\frac{5}{8}$	27 $\frac{1}{8}$	31 $\frac{1}{8}$	27	42 $\frac{1}{8}$	23 $\frac{1}{4}$	24 $\frac{1}{4}$	28	30	33	35	40	27	33	6 $\frac{1}{2}$	37 $\frac{1}{8}$	37 $\frac{1}{8}$	36 $\frac{1}{4}$	29 $\frac{1}{4}$	40 $\frac{1}{4}$	33 $\frac{1}{4}$	17 $\frac{1}{8}$	1 $\frac{1}{8}$	16 $\frac{1}{8}$	—	35 $\frac{1}{2}$	1	16 $\frac{1}{8}$	2 $\frac{1}{16}$	5 $\frac{1}{8}$	1648	2 $\frac{1}{16}$	5 $\frac{1}{8}$	1891
402	40	30 $\frac{1}{4}$	35 $\frac{1}{4}$	30	45 $\frac{1}{8}$	25 $\frac{1}{4}$	26 $\frac{1}{4}$	31	33	36	38	43	30	35	7	40 $\frac{1}{8}$	41 $\frac{1}{8}$	40 $\frac{1}{8}$	32 $\frac{1}{8}$	44 $\frac{1}{8}$	36 $\frac{1}{8}$	19 $\frac{1}{8}$	4 $\frac{1}{8}$	18 $\frac{1}{8}$	—	38 $\frac{1}{2}$	1	18 $\frac{1}{8}$	2 $\frac{1}{16}$	5 $\frac{1}{8}$	2029	2 $\frac{1}{16}$	4 $\frac{1}{8}$	2267
445	44 $\frac{1}{8}$	33 $\frac{1}{8}$	38 $\frac{1}{8}$	33	47 $\frac{1}{8}$	27	28 $\frac{1}{4}$	34	37	40	42	47	33	37	7	43 $\frac{3}{8}$	45 $\frac{1}{2}$	44 $\frac{1}{8}$	35 $\frac{1}{8}$	48 $\frac{1}{8}$	39 $\frac{1}{8}$	21 $\frac{1}{8}$	2 $\frac{1}{2}$	19 $\frac{1}{8}$	—	41 $\frac{1}{8}$	1	19 $\frac{1}{8}$	2 $\frac{1}{16}$	5 $\frac{1}{8}$	2333	2 $\frac{1}{16}$	4 $\frac{1}{8}$	2627
490	48 $\frac{1}{8}$	36 $\frac{1}{8}$	42 $\frac{1}{8}$	36	56 $\frac{1}{8}$	31 $\frac{1}{4}$	32 $\frac{1}{4}$	37	40	43	46	54	36	44	8	49 $\frac{1}{8}$	51 $\frac{1}{8}$	49 $\frac{1}{8}$	35 $\frac{1}{8}$	55 $\frac{1}{8}$	45 $\frac{1}{8}$	23 $\frac{1}{8}$	7 $\frac{1}{8}$	22 $\frac{1}{8}$	—	45 $\frac{1}{8}$	1	21 $\frac{1}{8}$	2 $\frac{1}{16}$	5 $\frac{1}{8}$	3037	2 $\frac{1}{16}$	4 $\frac{1}{8}$	3414
542	53 $\frac{1}{8}$	40 $\frac{1}{2}$	47 $\frac{1}{4}$	40	59 $\frac{1}{8}$	33 $\frac{1}{8}$	35	41	45	48	51	59	40	47	8	52 $\frac{1}{2}$	56 $\frac{1}{8}$	54 $\frac{1}{8}$	43 $\frac{1}{8}$	60 $\frac{1}{8}$	49 $\frac{1}{8}$	26 $\frac{1}{8}$	1 $\frac{1}{8}$	24 $\frac{1}{2}$	24 $\frac{1}{2}$	49 $\frac{1}{8}$	1	23 $\frac{1}{8}$	3 $\frac{1}{16}$	4 $\frac{1}{8}$	3521	3 $\frac{1}{16}$	7 $\frac{1}{8}$	4021

*FAN WEIGHT IS APPROXIMATE



FRAME SIZE	APPROXIMATE MOTOR WEIGHT									
	143T	145T	182T	184T	213T	215T	254T	256T	260	290
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 DIA.	BELT CENTER DISTANCE			
				122/143T	142/145T	182/184T	213/215T
122	12 $\frac{1}{4}$	184T	5 $\frac{1}{2}$	7.8	9.8	6.8	8.8
135	13 $\frac{1}{4}$	184T	8	8.8	10.8	7.8	9.8
150	15	215T	6 $\frac{1}{2}$	10.1	12.5	9.1	11.5
165	16 $\frac{1}{4}$	215T	7	11.1	13.5	10.1	12.5
182	18 $\frac{1}{4}$	215T	8	13.1	15.5	12.1	14.5
200	20	256T	9	13.7	16.9	12.7	13.9
				12	15.2	11	14.2

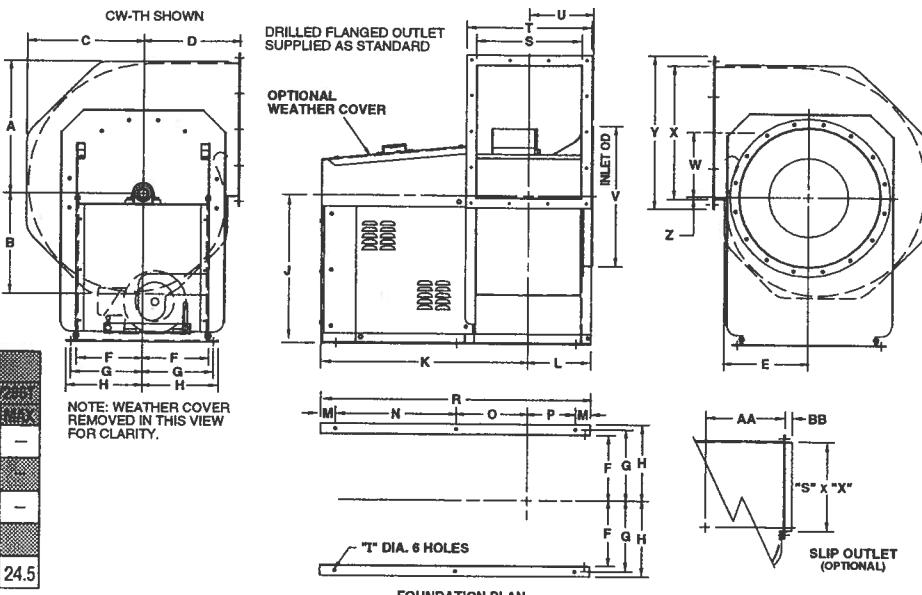
FAN SIZE	DISCHARGE															CLASS 1 & 2																
	A	B	C	D	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	SHAFT DIA.	KEYWAY DIAMETER	FRONT. DIA.	
122	12 $\frac{1}{8}$	9 $\frac{1}{8}$	10 $\frac{1}{8}$	10	10	13 $\frac{1}{4}$	7 $\frac{1}{8}$	6 $\frac{1}{8}$	7 $\frac{1}{8}$	8 $\frac{1}{8}$	7 $\frac{1}{8}$	15	27 $\frac{1}{8}$	6 $\frac{1}{8}$	3	14 $\frac{1}{32}$	10 $\frac{1}{32}$	3 $\frac{1}{32}$	34 $\frac{1}{8}$	10	13	6 $\frac{1}{8}$	13 $\frac{1}{8}$	5 $\frac{3}{32}$	12 $\frac{1}{32}$	15 $\frac{1}{32}$	3 $\frac{1}{32}$	8 $\frac{1}{8}$	1 $\frac{1}{8}$	1 $\frac{1}{8}$	1 $\frac{1}{8}$	170
135	13 $\frac{1}{8}$	10 $\frac{1}{8}$	11 $\frac{1}{8}$	11	11	13 $\frac{1}{4}$	8 $\frac{1}{8}$	6 $\frac{1}{8}$	7 $\frac{1}{8}$	8 $\frac{1}{8}$	7 $\frac{1}{8}$	16	28 $\frac{1}{8}$	7 $\frac{1}{8}$	3	14 $\frac{1}{32}$	10 $\frac{1}{32}$	4 $\frac{1}{32}$	35 $\frac{1}{8}$	10 $\frac{1}{8}$	13 $\frac{1}{8}$	7 $\frac{1}{8}$	14 $\frac{1}{8}$	6 $\frac{1}{8}$	13 $\frac{1}{8}$	16 $\frac{1}{8}$	7 $\frac{1}{8}$	9 $\frac{1}{8}$	13 $\frac{1}{8}$	7 $\frac{1}{8}$	186	
150	15 $\frac{1}{8}$	11 $\frac{1}{8}$	13 $\frac{1}{4}$	12	15	19 $\frac{1}{4}$	9 $\frac{1}{8}$	9 $\frac{1}{8}$	10 $\frac{1}{8}$	11 $\frac{1}{8}$	7 $\frac{1}{8}$	18	30 $\frac{1}{8}$	8 $\frac{1}{2}$	3	16 $\frac{1}{32}$	11 $\frac{1}{32}$	5 $\frac{1}{32}$	38 $\frac{1}{8}$	12 $\frac{1}{8}$	15 $\frac{1}{8}$	7 $\frac{1}{2}$	16 $\frac{1}{2}$	7 $\frac{1}{2}$	15 $\frac{1}{8}$	18 $\frac{1}{8}$	18 $\frac{1}{8}$	15 $\frac{1}{8}$	18 $\frac{1}{8}$	10 $\frac{1}{8}$	1 $\frac{1}{8}$	235
165	16 $\frac{1}{8}$	12 $\frac{1}{8}$	14 $\frac{1}{8}$	13	13	18 $\frac{1}{2}$	10 $\frac{1}{8}$	11 $\frac{1}{8}$	7 $\frac{1}{8}$	19	31 $\frac{1}{8}$	9 $\frac{1}{8}$	3	17 $\frac{1}{32}$	11 $\frac{1}{32}$	6 $\frac{1}{32}$	40 $\frac{1}{8}$	13 $\frac{1}{8}$	16 $\frac{1}{8}$	8 $\frac{1}{2}$	17 $\frac{1}{2}$	7 $\frac{1}{2}$	16 $\frac{1}{8}$	19 $\frac{1}{8}$	7 $\frac{1}{8}$	11 $\frac{1}{8}$	13 $\frac{1}{8}$	7 $\frac{1}{8}$	1 $\frac{1}{8}$	285		
182	18 $\frac{1}{8}$	13 $\frac{1}{8}$	16 $\frac{1}{8}$	14	14	18 $\frac{1}{2}$	11 $\frac{1}{8}$	9 $\frac{1}{2}$	10 $\frac{1}{8}$	11 $\frac{1}{8}$	%	21	32 $\frac{1}{8}$	9 $\frac{1}{8}$	3	18 $\frac{1}{32}$	11 $\frac{1}{32}$	6 $\frac{1}{32}$	42 $\frac{1}{8}$	14 $\frac{1}{8}$	17 $\frac{1}{8}$	9	19 $\frac{1}{2}$	8 $\frac{7}{32}$	18 $\frac{1}{8}$	21 $\frac{1}{8}$	1 $\frac{1}{2}$	12 $\frac{1}{4}$	17 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	320
200	20	15 $\frac{1}{8}$	17 $\frac{1}{8}$	15	15	20	12 $\frac{1}{8}$	10 $\frac{1}{8}$	11 $\frac{1}{8}$	12 $\frac{1}{8}$	%	22	37 $\frac{1}{4}$	10 $\frac{1}{8}$	3	20 $\frac{1}{8}$	13 $\frac{1}{8}$	7 $\frac{1}{8}$	47 $\frac{1}{8}$	16 $\frac{1}{8}$	19 $\frac{1}{8}$	9 $\frac{1}{8}$	21 $\frac{1}{2}$	9 $\frac{1}{8}$	20 $\frac{1}{8}$	23 $\frac{1}{8}$	%	13 $\frac{1}{8}$	17 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	375

*FAN WEIGHT IS APPROXIMATE

**BCA/BCS-222-330
ARRANGEMENT 10
ROTATABLE
HOUSING**

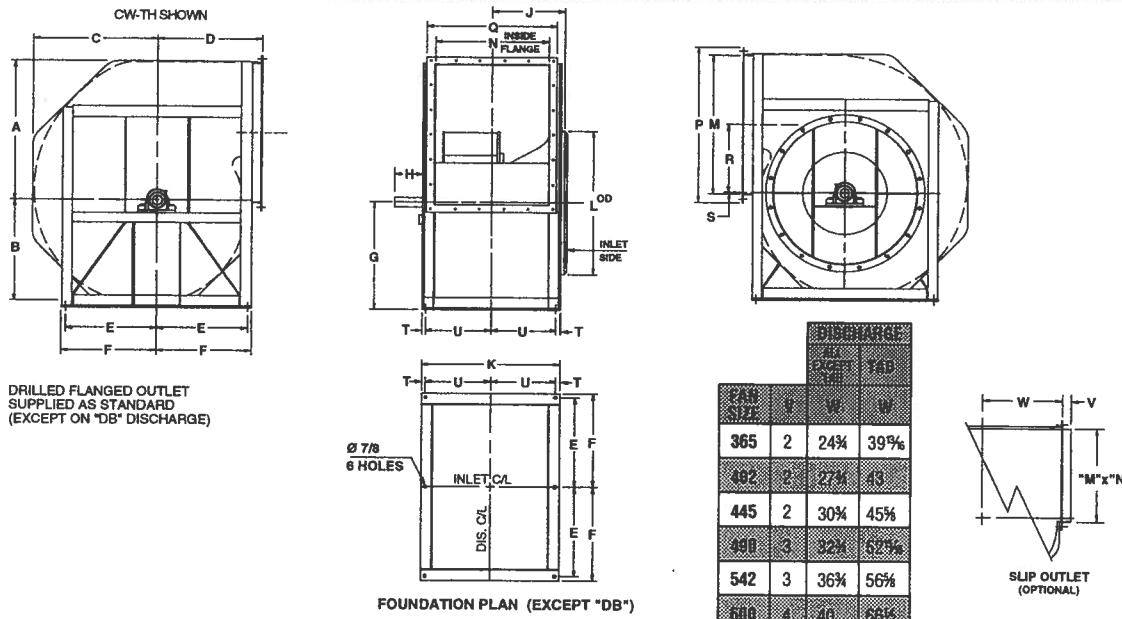
APPROXIMATE MOTOR WEIGHT	
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440

HOTEL CENTER CITY EAST														
SPN #	WEEK END													
222	224	256T	10	15.7	19.8	14.7	18.8	14	18	13	17	-	-	-
245	244	256T	11	17	21.6	16.7	20.6	19	20	15	19	-	-	-
270	27	256T	12	20.7	24.8	19.7	23.8	19	23	18	22	-	-	-
300	30	286T	13%	22.6	25.7	24.6	25.7	20.8	25	19.9	24	19.1	-	-
330	33	286T	14%	25.7	29.8	24.7	28.8	24	28	23	27	22.2	24.5	-



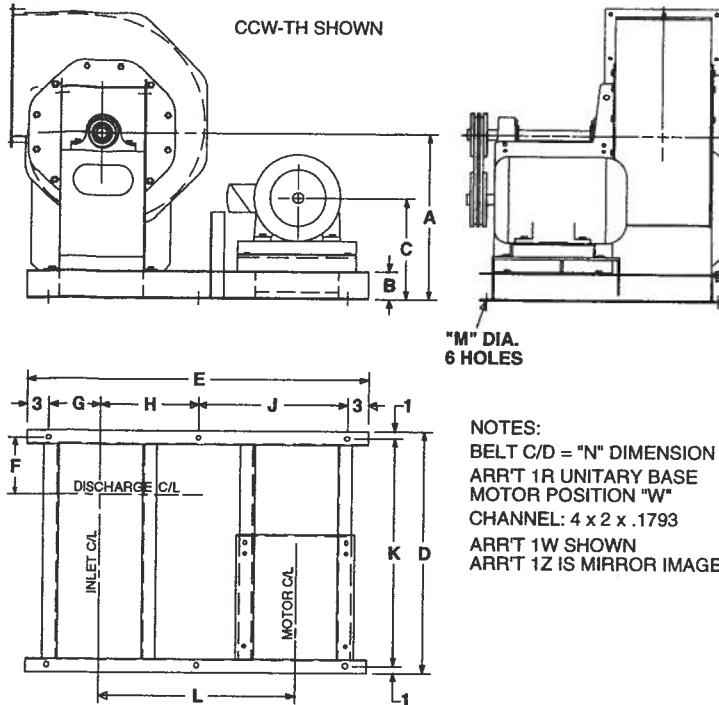
ITEM NO.	DESCRIPTION	CLASS	TAD	NOTE: CLASS 3 NOT AVAILABLE	
				CLASS 1	CLASS 2
222	224	16%	19½	16	20%
	23%	14%	11½	12½	13½
			7½	25	39½
				10½	3
				22½	14½
				7½	50%
				17½	20%
				10½	23½
				23½	10½
				22%	25%
				½	14%
				18%	22%
				1%	1½
				¾ x ½	565
245	24½	18½	21½	18	22½
	26½	15½	12½	13½	14½
		16½	27	10½	11½
			3	22½	14½
				8½	5½
				19½	22½
				12½	26½
				13½	24½
				28½	28½
				½	15%
				20%	24½
				2	1½
				¾ x ½	670
270	26%	20%	23%	19½	24
	28½	17½	13½	14½	15½
		1½	30	42½	12½
			3	24½	14½
				9½	54%
				21½	25%
				13½	28½
				13½	31½
				27%	½
				17%	22½
				26%	15%
				1½	¾ x ½
				805	
300	24%	22½	26	20½	18%
	26½	16	16	17	7½
		33	42½	14½	3
			22½	10½	12½
				12½	6½
				24½	28½
				14½	31½
				14½	20%
				24½	34%
				2	19½
				24	28½
				2	1½
				¾ x ½	100½
330	32%	24½	28%	24	28½
	33%	20%	16½	17½	18½
		1½	36	48½	15½
			3	28½	16½
				12½	63½
				26½	30%
				15%	34½
				15½	33½
				37½	½
				21½	26½
				31½	2
				2½	2½
				½ x ¼	1175

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



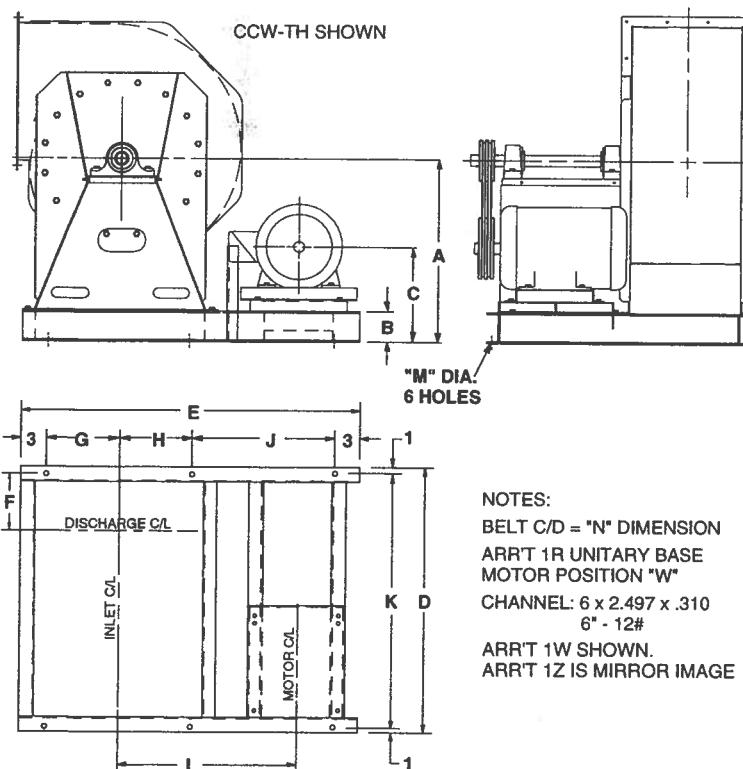
NAME	A	B	C	D	E	F	I	H	TAD	UB	BAU	BH	OB	TAD	H	J	K	L	M	N	P	Q	R	S	T	B	CLASS 1-2		CLASS 3		CLASS 4-5	
																										SHIPS	SHIPS	SHIPS	SHIPS			
365	36%	27%	31%	27	42%	23%	24%	28	30	33	35	40	27	33	6%	16%	35%	37%	36%	29%	40%	33%	17%	1%	1	16%	2%	1/2 x 1	2%	% x %	1226	1448
412	40	30%	35%	30	45%	25%	26%	31	33	36	38	43	30	35	7	13%	30%	41%	40%	32%	44%	36%	19%	5%	1	18%	2%	1/2 x 1	2%	% x %	1504	1742
445	44%	33%	38%	33	47%	27	28%	34	37	40	42	47	33	37	7	19%	41%	45%	44%	35%	48%	39%	21%	2%	1	19%	2%	% x %	21%	% x %	1740	1948
490	48%	36%	42%	30	50%	31%	32%	37	40	43	46	54	36	44	8	22%	45%	51%	40%	39%	55%	45%	23%	5%	1	21%	2%	% x %	3%	% x %	2290	2572
542	53%	40%	47%	40	59%	33%	35	41	45	48	51	59	40	47	8	24%	49%	56%	54%	43%	60%	49%	26%	1%	1	23%	2%	% x %	3%	% x %	2694	3172
680	58%	44%	52%	44	70%	37%	39	46	49	53	57	63	44	56	9	27%	54	60%	60%	47%	58%	55%	29%	1%	1	25%	2%	% x %	3%	% x %	3973	3957
660	65%	49%	57%	48%	74%	40%	42	50	54	58	62	71	49	59	8	29%	58%	69%	66%	52%	74%	60%	32%	1%	1	28%	3%	% x %	31%	% x %	3381	4195

BCA/BCS-122-200 ARRANGEMENT 1 UNITARY BASE

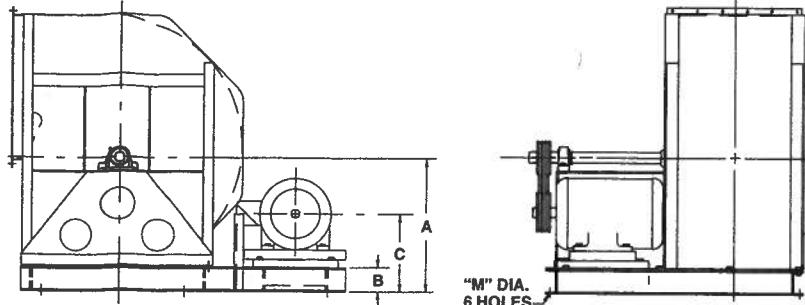


FAN TYPE #	FRANE SIZE	A	B	C	D	E	F	G	H	J	K	L	M	CLASS		CLASS		
														N	O	P	Q	
122	143T				10½				5½	12			14½		16.9	208	231	
	145T				11½			32	6½	13			15½		17.2	216	239	
	182T				12½			36	6½	15			18½		19.6	256	279	
	184T				14½			39	9½	16½			20		20.5	332	355	
	213T															354	377	
	215T															462	485	
135	254T															493	516	
	256T															224	256	
	143T				10½			30		5½	12			14½		17.5	232	256
	145T				11½			32		6½	13			15½		17.6	248	268
	182T				12½			37		8½	15½			18½		20.8	318	334
	184T				14½			40		10½	17			21		21.7	372	397
150	213T															22.1	392	420
	215T															23.3	499	527
	254T															530	558	
	256T															638	666	
	284T															689	717	
	286T															20.4	377	421
165	182T				11½			35%		6½	14½			17		20.4	383	437
	184T				12½			37%		7½	15			18		20.8	452	496
	213T				14½			44%		10½	19			23½		23.0	474	516
	215T				15½			46%		11½	20			24½		25.7	504	556
	254T															224	258	
	256T															22.3	287	321
182	284T				11½			35%		6½	14½			17		21.6	409	455
	286T				12½			37%		7½	15½			18		21.8	425	471
	182T				14½			46		11½	20			25		27.1	506	552
	184T				15½			48		12½	21			26		27.8	648	694
	213T															22.3	467	511
	215T															22.4	547	611
200	254T				11½			36%		5½	15½			17		22.3	487	531
	256T				12½			38%		6½	16½			18		22.4	556	600
	284T				14½			48%		11½	21			26½		23.0	597	641
	286T				15½			50%		12½	22½			27½		23.5	651	695
	324T									13½	26½			29		23.6	702	746
	326T									14½	30			33		23.6	744	788
222	324T				19½			62		15	28			33		29.6	754	809
	326T															30.7	833	888
	328T															30.7	855	910
	324T															30.7	984	1019
	326T															32.8	1109	1164
	328T															33.4	1160	1215
248	324T				13½			51		7½	22½			25		32.3	1224	1349
	326T				14½			54		9	24			26		33.4	1300	1423
	328T				15½			56		10	23			27		33.4	1323	1446
	324T				17½			60		12	25			30		33.4	1345	1468
	326T				18½			60		13½	26½			31		33.4	1367	1490
	328T				19½			66		15	30			33		33.4	1389	1512
270	324T				14½			51½		7½	22½			25		36.0	1092	1178
	326T				16½			58		9	24			26		35.8	1223	1309
	328T				17½			60		10	25			27		36.0	1254	1340
	324T				18½			66		11	27			29		36.0	1384	1450
	326T				19½			69		14	30			31		39.0	1415	1501
	328T				20½			73		15½	31½			35		40.4	1621	1707
304	404T				14½			51½		16	32½			37		40.4	1787	1873
	405T				16½			58		17½	33½			39		41.4	1948	2034
	406T				17½			62		18½	36½			41		41.4	2135	2221
	407T				18½			64		19½	38½			42		41.4	2236	2322
	408T				19½			66		20	40			43		41.4	2359	2445
	409T				20½			68		21	42			44		41.4	2486	2572
326	424T				14½			53½		10½	28			30		41.7	1559	1673
	425T				15½			59		11½	29			31		41.7	1590	1704
	426T				16½			64		12½	30			34		41.8	1696	1810
	427T				17½			64		13½	31½			34		41.8	1747	1861
	428T				18½			66		14½	34½			41		42.2	1897	2011
	429T				19½			77		15½	35½			42		42.5	2128	2242
330	364T				14½			58%		16½	35½			44		42.8	2189	2303
	365T				15½			77		18½	37½			44		42.8	2476	2590
	404T				19½			81		19½	38½			45		42.8	2577	2691
	405T				20½			83		20	40½			46		42.8	2866	2980
	444T				21½											42.8	3043	3157
	445T				23½													

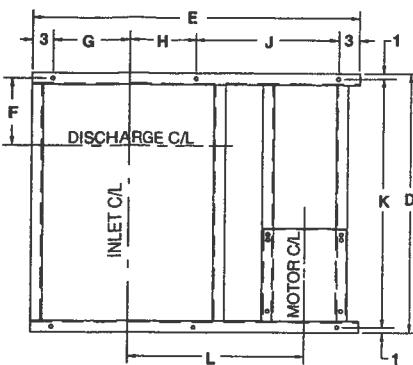
APPENDIX VI
FAN SIZES, DIM.



BCA/BCS-365 AND 402 ARRANGEMENT 1 UNITARY

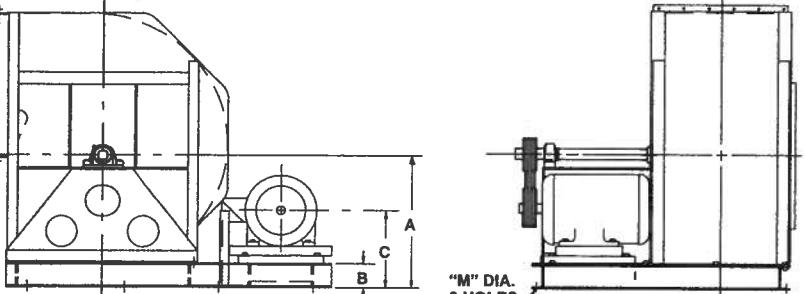


NOTES:
BELT C/D = "N" DIMENSION
ARRT IR UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 x 2.497 x .310
6" - 12#
ARRT 1W SHOWN,
ARRT 1Z IS MIRROR IMAGE

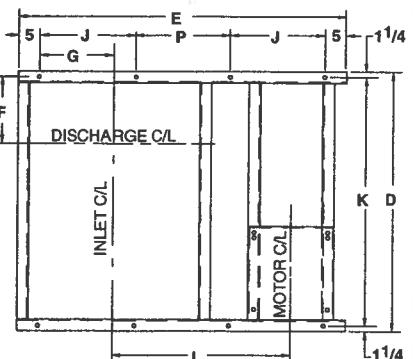


ITEM	DESCRIPTION	QTY	UNIT	COST	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	CLASS	PAGE	
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
365	254T																												2064	2329
	256T																												2115	2360
	264T																												2225	2470
	266T																												2276	2521
	324T																												2410	2655
	326T																												2476	2721
	364T	34	36	39	41	46	33	39	6																			2652	2897	
	365T																												2713	2958
	365T																												3007	3252
	404T																												3161	3406
	405T																												3553	3798
	444T																												3640	3885
402	254T																												2413	2655
	256T																												2441	2690
	264T																												2461	2700
	266T																												2501	2740
	324T																												2551	2790
	326T																												2601	2840
	364T	31	33	35	37	41	49	36	41	6																	2651	2890		
	365T																												2701	2940
	365T																												2751	2990
	404T																												2801	3040
	405T																												2851	3090
	444T																												2901	3140
	445T																												2951	3190

BCA / BCS- 445 THRU 660 ARRANGEMENT 1 UNITARY

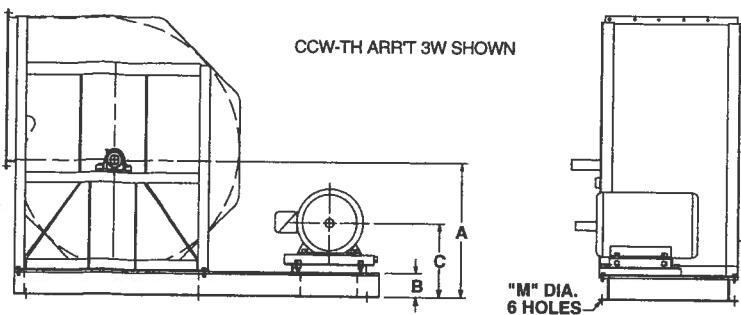


NOTES:
BELT C/D = "N" DIMENSION
ARR'T IR UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 8 x 2.978 x .353
 8" - 18.7"
ARR'T 1W SHOWN,
ARR'T 1Z IS MIRROR IMAGE

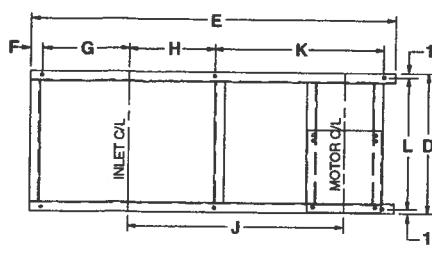


FAN ID#	NAME	S/N	TYPE	HORN	LNB	DAW	BYPASS	AD	P	C	U	E	P	S	J	K	L	M	N			O			CLASS	CLASS			
																			T	F	A	B	D	E					
445	324T								8	20%		82				24		42		47.1	48.5	50.1	51.2	54.2	46.6	48.5	24	3236	3531
	326T									21%		86				25		44		48.4	49.8	51.2	52.3	55.1	48.0	49.8	26	3302	3597
	364T																			55.9	56.9	58.1	58.9	61.3	55.6	56.9	28	3474	3769
	365T																			57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	3535	3830
	404T	42	45	48	50	55	41	45	8	24%	72%	96	19%	23%		29	70	53	%	55.9	56.9	58.1	58.9	61.3	55.6	56.9	28	3862	4157
	405T																			57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4016	4311
	444T																			57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4415	4710
	445T																			57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4502	4797
	447T																			57.5	58.4	59.5	60.3	62.5	57.2	58.4	30	4634	4929
490	324T									20%		92				28		42		52.8	54.4	55.9	57.6	52.4	52.8	56.8	26	3456	3757
	326T									21%		94				28		48		53.3	54.9	56.2	57.8	52.4	53.7	57.4	26	3413	3749
	364T																			54.1	55.1	56.7	58.2	52.4	53.8	57.2	26	3494	3800
	365T																			61.3	62.3	63.5	64.7	59.7	61.0	63.9	31	3500	3804
	404T	45	48	51	54	56	44	54	8	24%	79%	97	21%	27%		29	50	56	%	61.3	62.3	63.5	64.7	68.7	61.0	63.9	31	3454	3757
	405T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	3484	3788
	444T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	3581	3885
	445T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	3581	3885
	447T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	3581	3885
542	324T									20%		96				29		49		56.6	58.7	60.4	62.2	67.4	56.1	59.8	28	4314	4614
	326T									21%		99				30		51		57.8	59.8	61.4	63.2	68.2	57.4	60.9	29	4380	4680
	364T																			57.6	59.4	60.9	62.5	67.3	57.2	60.4	30	4549	5049
	365T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	4610	5110
	404T	49	53	56	59	67	48	55	8	24%	83%	102	23%	30	31	80%	52	%	57.6	59.4	60.9	62.5	67.3	57.2	60.4	30	4915	5415	
	405T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	5089	5569
	444T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	5484	5994
	445T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	5581	6081
	447T																			67.3	68.8	70.1	71.5	75.6	67.0	69.7	34	5713	6213
600	324T									20%		102				32		54		62.4	65.1	67.4	69.9	75.2	62.4	71.8	32	3430	3830
	326T									21%		109				33		56		64.0	66.2	68.4	70.6	75.9	63.7	70.2	33	3455	3855
	364T																			64.3	66.7	67.8	70.1	75.0	63.4	68.5	34	3522	3822
	365T																			73.8	75.1	76.8	83.1	73.1	76.3	77.7	34	3683	3883
	404T	56	57	61	63	73	52	64	8	24%	89%	112	25%	34	34	87%	57	%	64.3	66.7	67.8	70.1	75.0	63.4	68.5	34	3683	3883	
	405T																			73.8	75.1	76.8	83.1	73.1	76.3	77.7	34	3683	3883
	444T																			73.8	75.1	76.8	83.1	73.1	76.3	77.7	34	3683	3883
	445T																			73.8	75.1	76.8	83.1	73.1	76.3	77.7	34	3683	3883
	447T																			73.8	75.1	76.8	83.1	73.1	76.3	77.7	34	3683	3883
660	324T									20%		112				34		57		68.1	70.4	72.8	75.4	81.5	67.6	73.4	34	6228	6938
	326T									21%		115				35		59		69.5	71.7	74.1	76.5	82.6	69.0	74.7	35	6294	7004
	364T																			68.8	70.9	73.1	75.4	81.2	68.3	73.7	36	6484	7174
	365T																			80.0	81.7	83.6	85.6	90.6	79.6	84.1	40	6525	7235
	404T	58	62	66	70	79	57	67	8	24%	94%	118	28%	37	36	91%	60	%	68.8	70.9	73.1	75.4	81.2	68.3	73.7	36	6823	7533	
	405T																			80.0	81.7	83.6	85.6	90.6	79.6	84.1	40	6924	7634
	444T																			80.0	81.7	83.6	85.6	90.6	79.6	84.1	40	7253	7963
	445T																			80.0	81.7	83.6	85.6	90.6	79.6	84.1	40	7430	8140
	447T																			80.0	81.7	83.6	85.6	90.6	79.6	84.1	40	8014	8724

BCA/BCS-365 AND 402 ARRANGEMENT 3 SWSI UNITARY

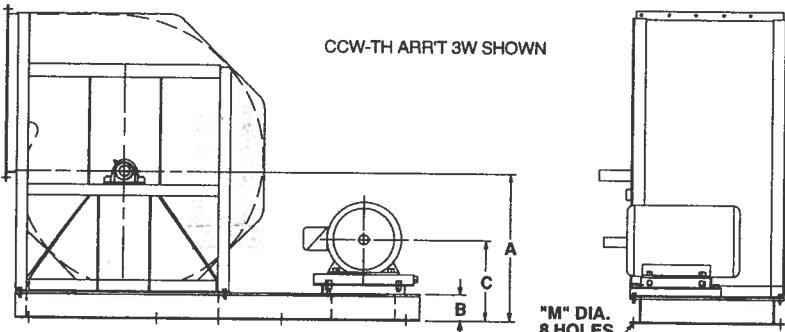


NOTES:
BELT C/D = "N" DIMENSION
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 6 x 2.497 x .310
6"- 12#
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE

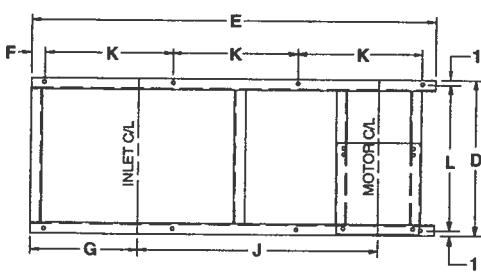


FOUNDATION PLAN

BCA/BCS-445-600 ARRANGEMENT 3 SWSI UNITARY



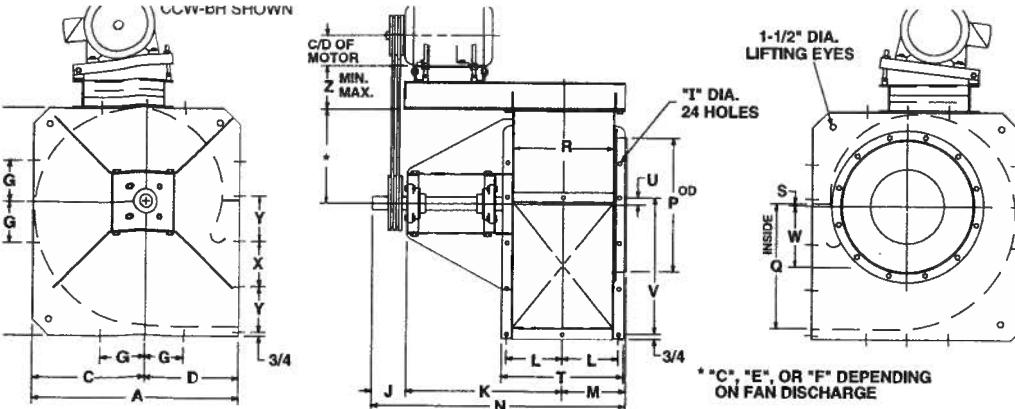
NOTES:
BELT C/D = "N" DIMENSION
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 8 x 2.978 x .353
8"- 18.7#
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE



FOUNDATION PLAN

FAB SIZE	FRAME SIZE	GATE LAYER										POLY LAYER										APPROX. W/L RATIO							
		CH-13 CONTH	CH-14 CONTH	CH-15 ZONE1	CH-16 ZONE2	CH-17 ZONE3	CH-18 ZONE4	CH-19 ZONE5	CH-20 ZONE6	A	A	B	C	D	E	F	G	J	K	L	M	N	N	N	N	N	CLASS 12.2	CLASS 12.2	
445	324T									20%								64%	32			68.3	69.3	70.4	71.2	73.4	69.3	32195	3123
	326T									21%								66%	33			69.5	70.5	71.5	72.3	74.4	70.5	3207	3188
	364T									21%								67%	34			69.7	70.5	71.4	72.1	74.1	70.5	3147	3356
	365T									24%								70%	35			72.7	73.5	74.3	75.0	76.8	73.5	3506	3415
	404T	42	45	48	50	55	45	8	24%	41%	112	5	28%				39%					72.7	73.4	74.3	74.9	76.7	73.4	3606	3814
	405T									25%								70%	35									3901	4109
	444T									25%								70%	35									4076	4284
	445T									25%								70%	35									4640	4848
400	324T									20%								112	34			70.9	72.6	73.2	75.1	78.9	74.2	3506	3888
	326T									21%								115	35			72.1	73.8	74.3	76.2	79.9	75.3	3571	3953
	364T									21%								121	35			73.1	75.8	76.9	78.0	81.4	77.3	3799	4120
	365T									24%								121	37	43%		73.1	75.8	76.9	78.0	81.4	77.3	3799	4180
	404T	45	48	51	54	62	52	8	24%	45%	121	5	32%				72%	37	43%			73.1	75.8	76.9	78.0	81.4	77.3	4077	4489
	405T									25%								127	39			73.4	80.2	81.1	82.1	85.2	81.4	4551	4693
	444T									25%								127	39			73.4	80.2	81.1	82.1	85.2	81.4	4656	5068
	445T									25%								127	39			73.4	80.2	81.1	82.1	85.2	81.4	5249	5631
542	324T									20%								121	37			78.4	80.0	81.2	82.6	86.6	80.8	3964	4442
	326T									21%								124	38			79.6	81.0	82.2	83.5	87.4	81.8	4029	4507
	364T									21%								127	39			79.6	82.1	83.0	84.4	88.0	82.8	4196	4574
	365T									24%								133	41			83.8	85.0	86.1	87.2	90.6	85.7	4256	4734
	404T	49	53	56	59	67	55	8	24%	49%	127	5	35%				76%	39			83.8	85.0	86.0	87.2	90.5	85.7	4555	5033	
	405T									25%								133	41			83.8	85.0	86.0	87.2	90.5	85.7	4655	5133
	444T									25%								133	41			83.8	85.0	86.0	87.2	90.5	85.7	4959	5437
	445T									25%								133	41			83.8	85.0	86.0	87.2	90.5	85.7	5134	5612
	447T									25%								133	43			83.8	85.0	86.0	87.2	90.5	85.7	5698	6176
600	324T									20%								127	39			81.3	82.5	84.4	86.4	90.7	85.5	4410	5004
	326T									21%								130	40			82.0	83.2	85.0	86.9	91.1	86.4	4426	5070
	364T									21%								133	43			83.4	84.5	86.1	87.9	91.8	87.4	4502	5107
	365T									24%								133	43			83.4	84.5	86.1	87.9	91.8	87.4	4692	5209
	404T	54	57	61	65	73	64	8	24%	54	133	5	40				77%	41	52			83.4	85.0	86.0	87.2	90.5	85.7	5002	5590
	405T									25%								133	43			83.4	85.0	86.0	87.2	90.5	85.7	5105	5700
	444T									25%								133	43			83.4	85.0	86.0	87.2	90.5	85.7	5411	6006
	445T									25%								133	43			83.4	85.0	86.0	87.2	90.5	85.7	5508	6182
	447T									25%								133	43			83.4	85.0	86.0	87.2	90.5	85.7	5933	6527

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

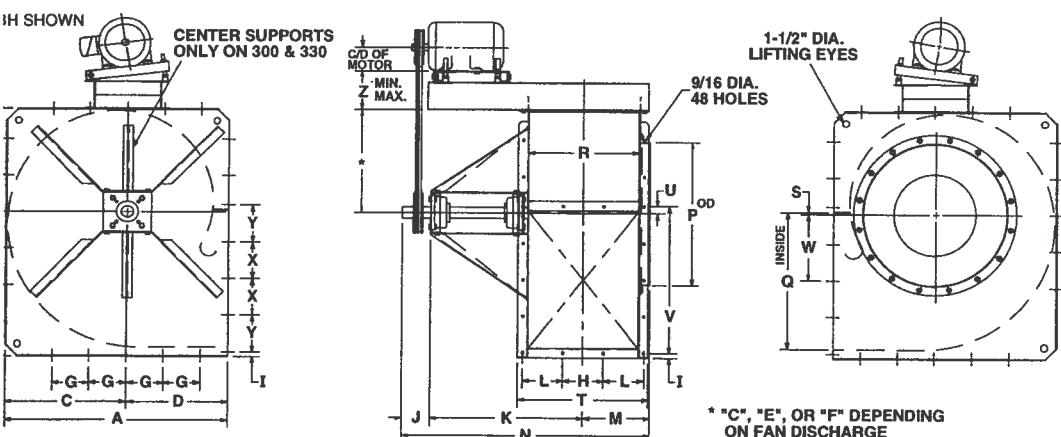


* "C", "E", OR "F" DEPENDING
ON FAN DISCHARGE

APPROXIMATE FAN WEIGHT NO MOTOR						
CLASS 1 & 2				CLASS 3		
FR. SIZE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.	KEYWAY
122	1 1/8	1/4 x 1/8	124	134	1 1/8	3/8 x 3/16
135	1 3/8	1/4 x 1/8	138	148	1 1/8	3/8 x 3/16
150	1 1/8	1/4 x 1/8	160	170	1 1/8	3/8 x 3/16
165	1 7/8	5/8 x 3/16	230	263	1 1/8	3/8 x 3/16
182	1 7/8	3/8 x 3/16	264	297	1 1/8	3/8 x 3/16
200	1 7/8	3/8 x 3/16	299	333	1 1/8	3/8 x 3/16
					345	379

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

STD. MOTOR BASE																								H.D. MOTOR BASE			
MIN. MAX												MIN. MAX												MIN. MAX	MIN. MAX		
20%	23	10 1/2	10	9 1/2	13 1/2	5 1/2	7/8	3 1/2	16 1/4	5 1/4	6 1/2	26 1/2	13 1/2	12 1/2	9 3/4	1/8	13	5 1/2	4 1/2	4 1/2	5 1/4	7 1/4	48-213T	6 1/4	8 1/4	182T-256T	
22%	25	11 1/2	11	10 1/2	14 1/2	5 1/2	7/8	3 1/2	17 1/2	6 1/2	7 1/2	26 1/2	14 1/2	13 1/2	10 1/2	1/2	13 1/2	7 1/2	15 1/2	6 1/2	5 1/2	5 1/4	7 1/4	48-213T	6 1/4	8 1/4	182T-256T
25%	27	13 1/2	12	11 1/2	16 1/2	5 1/2	7/8	3 1/2	18 1/2	6 1/2	7 1/2	29	16 1/2	15	11 1/2	7/2	15 1/2	1 1/2	16 1/2	7 1/2	5 1/2	5 1/4	7 1/4	48-213T	6 1/4	8 1/4	182T-256T
27%	30	14 1/2	13	12 1/2	17 1/2	5 1/2	7/8	4	21 1/2	7 1/2	8 1/2	38 1/2	17 1/2	16 1/2	12 1/2	7/2	16 1/2	1 1/2	18 1/2	7 1/2	6	6 1/2	6 1/4	56-215T	8 1/4	10	143T-286T
30%	33	16 1/2	14	13 1/2	19 1/2	6 1/2	9/16	4	22 1/2	8 1/2	9	35	19 1/2	18 1/2	14 1/2	7 1/2	17 1/2	1 1/2	19 1/2	8 1/2	6 1/2	6 1/4	8 1/4	56-215T	8 1/4	10	143T-286T
32%	36	17 1/2	15	15 1/2	21 1/2	6 1/2	9/16	4	24 1/2	8 1/2	9 1/2	47 1/2	21 1/2	19 1/2	16 1/2	4 1/2	19 1/2	1 1/2	21 1/2	9 1/2	7 1/4	8 1/4	8 1/4	56-215T	8 1/4	10	143T-286T



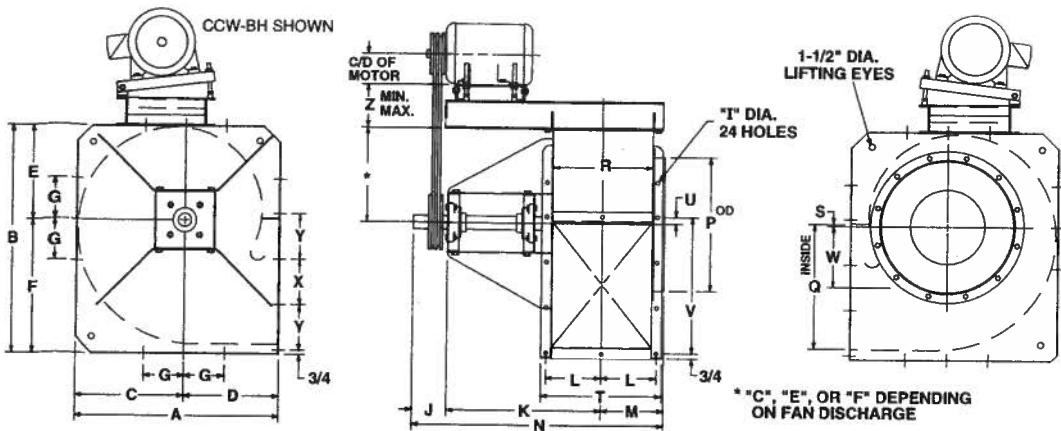
**QBCA/QBCS-222-330
ARRANGEMENT 9**

APPROXIMATE FAN WEIGHT NO MOTOR						
CLASS 1 & 2				CLASS 3		
FR. SIZE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE
222	1 1/8	3/8 x 3/16	380	408	1 1/8	1/2 x 1/4
245	1 7/8	3/8 x 3/16	452	497	2 1/8	1/2 x 1/4
270	1 7/8	3/8 x 3/16	515	560	2 1/8	1/2 x 1/4
300	1 7/8	1/2 x 1/4	715	747	2 1/8	3/8 x 5/16
330	2 1/8	1/2 x 1/4	857	926	2 1/8	5/8 x 5/16
					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

STD. MOTOR BASE																								H.D. MOTOR BASE				
MIN. MAX												MIN. MAX												MIN. MAX	MIN. MAX			
i 1/2	40%	19 1/2	16	16 1/2	23 1/2	6 1/2	6 1/8	5	26 7/8	6 1/2	10 1/2	41 1/8	23 1/2	22 1/2	17 1/2	1/2	20 1/2	1 1/2	23 1/2	10 1/2	6	5 1/8	6 1/4	8 1/4	182T-256T	8 1/4	10	143T-286T
i 1/2	44%	21 1/2	18	18 1/2	26 1/2	6 1/2	7 1/8	5	27 1/2	7 1/2	11 1/2	44 1/2	26 1/2	24 1/2	19 1/2	1/2	23 1/2	1 1/2	26 1/2	11 1/2	6 1/2	6 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T	
1/2	49%	19 1/2	19 1/2	20%	28 1/2	6 1/2	7 5/16	1	29 1/2	7 1/2	12 1/2	48 1/2	28 1/2	26 5/8	21 1/2	1/2	25 1/2	1 1/2	29 1/2	13 1/2	7 1/2	7 1/2	8 1/4	182T-256T	10 1/4	12	143T-326T	
1/2	54%	21 1/2	22	22 1/2	31 1/2	8	8 1/8	1	33 1/2	8 1/8	14 1/2	53 1/2	31 1/2	29 1/2	23 1/2	1/2	28 1/2	1 1/2	32 1/2	14 1/2	7 1/2	8 1/4	8 1/4	143T-286T	10 1/4	12	143T-326T	
1/2	59%	28 1/2	24	24 1/2	34 1/2	8	9 1/8	1	36 1/2	9 1/2	15 1/2	58 1/2	34 1/2	33	26 1/2	1/2	30 1/2	1 1/2	35 1/2	15 1/2	8 1/8	8 1/8	8 1/4	10	143T-286T	10 1/4	12	143T-326T

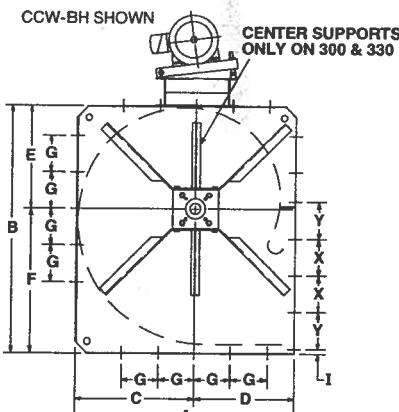
**QBCA/QBCS-122-200
ARRANGEMENT 9**



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						
CLASS 1 & 2			CLASS 3			
SHAFT DIA.	KEYWAY	WITH H.D. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.	KEYWAY	
122	1 1/8	1/4 x 1/8	124	134	1 1/8	3/8 x 3/8
135	1 1/8	3/8 x 3/8	138	148	1 1/8	3/8 x 3/8
150	1 1/8	1/4 x 1/8	160	170	1 1/8	3/8 x 3/8
165	1 1/8	3/8 x 3/8	230	263	1 1/8	3/8 x 3/8
182	1 1/8	3/8 x 3/8	264	297	1 1/8	3/8 x 3/8
200	1 1/8	3/8 x 3/8	299	333	1 1/8	3/8 x 3/8

FRAME SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Z'	STD. MOTOR BASE		H.D. MOTOR BASE	
																												MIN. Z		MAX.	
122	20%	23	10%	10	9%	13%	5 1/2	7/8	3 1/2	16%	5%	6 1/8	26 1/8	13%	12%	9 1/4	1/8	13	7/8	13%	5 1/2	4%	4%	5 1/4	7/4	48-213T	6 1/4	8 1/4	182T-256T		
135	22%	25%	11 1/2	11	10%	14%	5 1/2	7/8	3 1/2	12%	5 1/2	7/8	28 1/8	14%	19 1/4	10 1/8	7/8	13%	7/2	15 1/8	6 1/8	5 1/4	6	6 1/4	7/4	48-213T	6 1/4	8 1/4	182T-256T		
150	25%	27%	13 1/4	12	11%	16%	5 1/2	7/8	3 1/2	18 1/2	6 1/8	7 1/2	29 1/8	16 1/2	15	11%	7 1/2	15 1/8	1 1/2	16%	7 1/2	5%	5 1/2	5 1/4	7/4	48-213T	6 1/4	8 1/4	182T-256T		
165	27%	30%	14%	13	12%	17%	6 1/2	9/8	4	21%	7 1/8	9/8	33 1/8	17%	18 1/4	13 1/8	7 1/8	16%	8 1/2	18 1/8	6 1/4	6	6 1/4	8 1/4	56-215T	8 1/4	10	143T-286T			
182	30 1/8	33%	16 1/8	14	13%	19%	6 1/2	9/8	4	22%	8 1/8	9	35%	19 1/8	18 1/8	14 1/2	7 1/2	17 1/4	1 1/2	19 1/8	8 1/2	6%	6 1/8	6 1/4	8 1/4	56-215T	8 1/4	10	143T-286T		
200	32 1/8	36%	17 1/8	15	16 1/8	21 1/8	6 1/2	9/8	4	24%	8 1/8	9 1/8	37 1/8	21 1/8	19 1/8	15 1/4	7 1/8	19 1/4	1 1/2	21 1/8	9 1/8	7 1/8	7 1/8	6 1/4	8 1/4	56-215T	8 1/4	10	143T-286T		



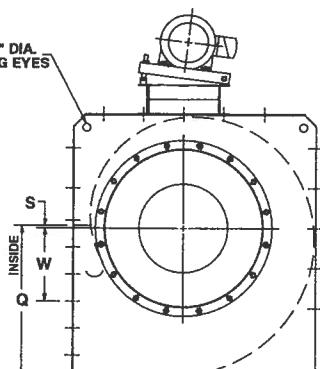
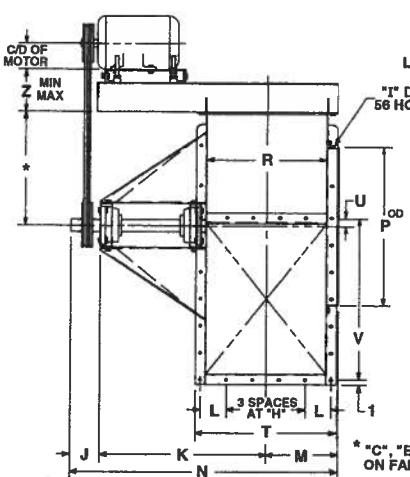
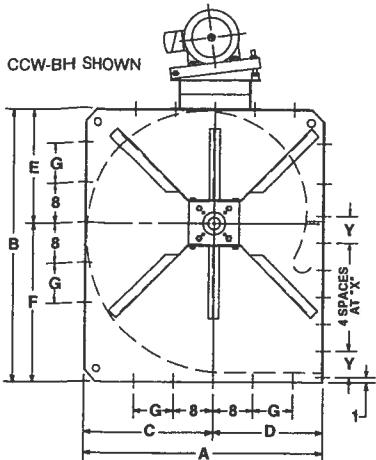
**QBCA/QBCS-222-330
ARRANGEMENT 9**

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

APPROXIMATE FAN WEIGHT NO MOTOR						
CLASS 1 & 2			CLASS 3			
SHAFT DIA.	KEYWAY	WITH H.D. MOTOR BASE	SHAFT DIA.	KEYWAY	WITH H.D. MOTOR BASE	
222	1 1/8	3/8 x 3/8	380	408	1 1/8	1/2 x 1/4
245	1 1/8	1/2 x 1/4	452	437	2 1/8	1/2 x 1/4
270	1 1/8	3/8 x 3/8	515	560	2 1/8	1/2 x 1/4
300	1 1/8	1/2 x 1/4	716	747	2 1/8	3/8 x 3/8
330	2 1/8	1/2 x 1/4	857	926	2 1/8	5/8 x 5/8

FRAME SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Z'	STD. MOTOR BASE		H.D. MOTOR BASE	
																												MIN. Z		MAX.	
222	35 1/2	40 1/8	19 1/2	16	16 1/8	23 1/8	6 1/2	6 1/8	5/8	26 1/8	6 1/2	10 1/2	41 1/8	23 1/2	22 1/8	17 1/8	5/8	20 1/8	15 1/2	23 1/8	10 1/2	6	5 1/8	6 1/4	8 1/4	182T-256T	8 1/4	10	143T-286T		
245	39 1/2	44 1/8	21 1/2	18	18 1/8	26 1/8	6 1/2	7 1/8	1	27 1/8	7 1/2	11 1/8	44 1/8	28 1/2	24 1/8	19 1/8	5/8	23 1/8	15 1/2	26 1/8	11 1/8	6 1/8	6 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T			
270	43 1/2	49 1/8	23	19 1/2	20%	28 1/8	6 1/2	7 1/8	1	29 1/8	7 1/2	12 1/8	48 1/8	28 1/2	26 1/8	21 1/8	5/8	25 1/8	17 1/2	29 1/8	13 1/8	7 1/2	7 1/4	8 1/4	182T-256T	10 1/4	12	143T-326T			
300	48 1/2	54 1/8	26 1/2	22	22 1/8	31 1/8	8	8 1/8	1	33 1/8	8 1/2	14 1/8	53 1/8	31 1/2	29 1/8	23 1/8	7 1/2	28 1/8	19 1/8	32 1/8	14 1/8	7 1/2	8 1/4	8 1/4	10 1/4	12	143T-326T				
330	52 1/2	59 1/8	28 1/8	24	24 1/8	34 1/8	8	9 1/8	1	36 1/8	9 1/2	15 1/8	58 1/8	34 1/2	33	26 1/8	1 1/2	30 1/8	12 1/8	35 1/8	15 1/8	8 1/8	8 1/4	8 1/4	10 1/4	12	143T-326T				

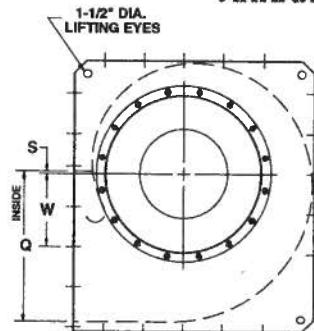
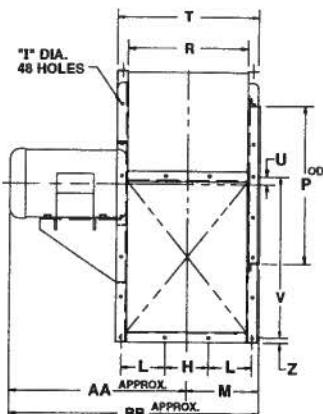
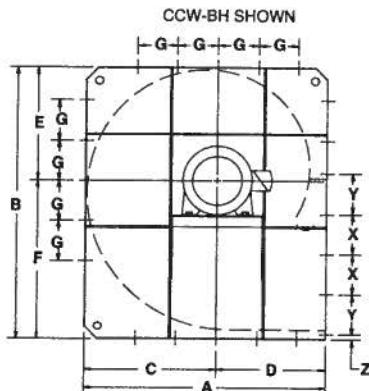
QBCA/QBCS-365-445 ARRANGEMENT 9



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

APPROXIMATE FAN WEIGHT NO MOTOR	
CLASS	CLASS
122	97
135	108
150	128
165	177
182	207
200	237
223	223
244	244
264	264
289	289
309	309
330	330
359	359
389	389
419	419
449	449
479	479
509	509
539	539
569	569
599	599
629	629
659	659
689	689
719	719
749	749
779	779
809	809
839	839
869	869
899	899
929	929
959	959
989	989
1019	1019

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

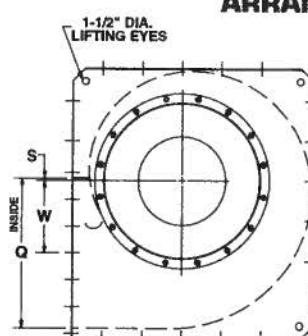
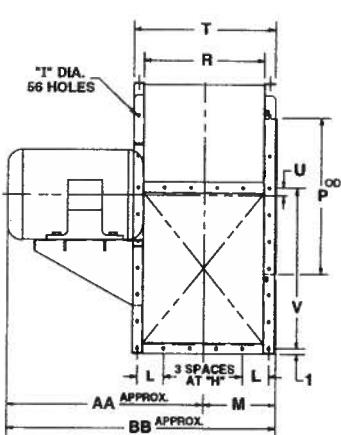
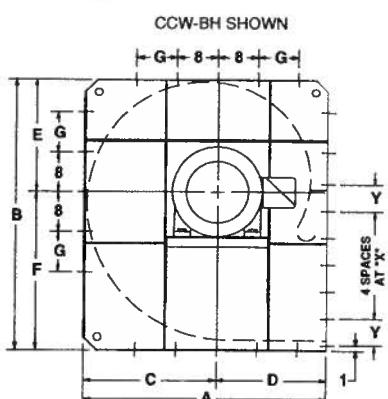


FRM SIZE	A	B	C	D	E	F	G	H	I	L	M	P	Q	R	S	T	U	V	W	X	Y	Z
222	35 1/2	40%	19 1/2	16	16 1/4	23 1/2	6 1/2	6 7/16	%	6 1/2	10 1/2	23 1/2	22 1/2	17 1/2	1/2	20 1/2	1 1/2	23 1/2	10 1/2	6	5 1/2	3/4
245	38 1/2	44%	21 1/2	18	18 1/2	28 1/2	6 1/2	7 1/2	%	7 1/2	11 1/2	26 1/2	24 1/2	19 1/2	1/2	23 1/2	1 1/2	26 1/2	11 1/2	6 1/2	6 1/2	1
270	43 1/2	49 1/2	23 1/2	19 1/2	20 1/2	28 1/2	6 1/2	7 1/2	%	7 1/2	12 1/2	28 1/2	26 1/2	21 1/2	1/2	25 1/2	1 1/2	29 1/2	13 1/2	7 1/2	7 1/2	1
300	48 1/2	54%	26 1/2	22	22 1/2	31 1/2	8	8 1/2	%	8 1/2	14 1/2	31 1/2	29 1/2	23 1/2	1/2	28 1/2	1 1/2	32 1/2	14 1/2	7 1/2	8 1/2	1
330	52 1/2	59%	28 1/2	24	24 1/2	34 1/2	8	9 1/2	%	9 1/2	15 1/2	34 1/2	33	26 1/2	1/2	30 1/2	1 1/2	35 1/2	15 1/2	8 1/2	8 1/2	1

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

MOTOR FRAME SIZES											
FRM SIZE	182T	184T	213T	244T	254T	264T	280T	312T	324T	330T	336T
FRM SIZE	AA	BB	AA								
222	20%	31%	21%	32 1/2	23 1/2	33 1/2	24%	35 1/2	27 1/2	38 1/2	29 1/2
245	21 1/2	33%	22 1/2	34 1/2	24 1/2	36 1/2	25%	37 1/2	28 1/2	40%	30 1/2
270	22 1/2	34 1/2	23 1/2	36 1/2	25 1/2	38 1/2	26%	39 1/2	29 1/2	42 1/2	N/A
300	N/A	N/A	26 1/2	40 1/2	27 1/2	41 1/2	30 1/2	44 1/2	32 1/2	46 1/2	34 1/2
330	N/A	N/A	27 1/2	42 1/2	29	44 1/2	31 1/2	47 1/2	33 1/2	48 1/2	35 1/2

APPROXIMATE FAN WEIGHT NO MOTOR											
FRM SIZE	182/184T	213/215T	254/256T	264/266T	280/284T	312/314T	324/326T	330/336T	336/338T	344/346T	352/354T
FRM SIZE	CLASS										
222	295	321	300	326	315	341	N/A	N/A	N/A	N/A	N/A
245	363	395	367	400	393	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	530	582	646	595	653	605	661	613	N/A	N/A
330	N/A	629	750	645	766	652	773	661	781	N/A	N/A



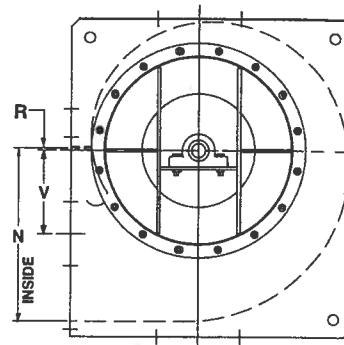
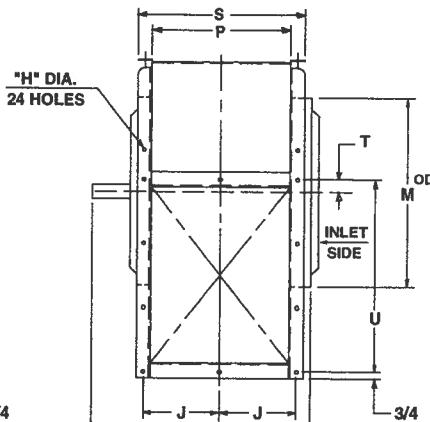
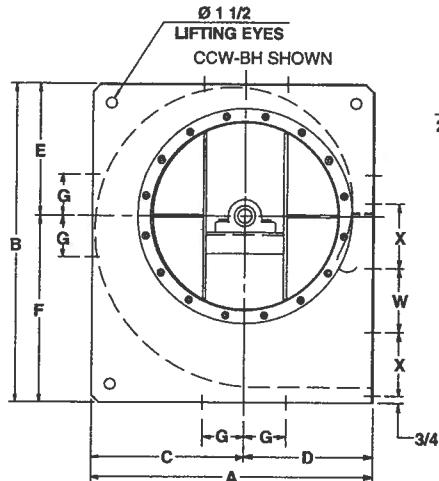
FRM SIZE	A	B	C	D	E	F	G	H	I	L	M	P	Q	R	S	T	B	V	W	X	Y
365	58%	65%	31%	27	27 1/2	38 1/2	8	6 1/2	7 1/2	6 1/4	16 1/2	37 1/2	36 1/2	29	1 1/2	33 1/4	1 1/2	38 3/4	17 1/2	6 1/2	6 3/4
402	65%	72	35%	30	30%	41%	16	6 1/2	7 1/2	6 1/2	18 1/2	41 1/2	40 1/2	31 1/2	5 1/2	36 1/2	1 1/2	42 1/2	19 1/2	7 3/2	7 3/2

MOTOR FRAME SIZES											
FRM SIZE	213T	215T	244T	254T	264T	280T	312T	324T	330T	336T	338T
FRM SIZE	AA	BB	AA	BB	AA	BB	AA	BB	AA	BB	AA
365	28%	45 1/2	30%	47 1/2	33 1/2	50	34 1/2	51 1/2	36%	53 1/2	38 1/2
402	N/A	34 1/2	52 1/2	36 1/2	54 1/2	38 1/2	56%	39 1/2	57%	40 1/2	58 1/2

APPROXIMATE FAN WEIGHT NO MDTR											
FRM SIZE	213/215T	244/246T	254/256T	264/266T	280/284T	312/314T	324/326T	330/338T	336/338T	344/346T	352/354T
FRM SIZE	CLASS										
365	890	993	906	1009	913	1016	921	1024	N/A	1110	1233
402	N/A	1110	1233	1117	1240	1126	1249	N/A	1126	1249	N/A

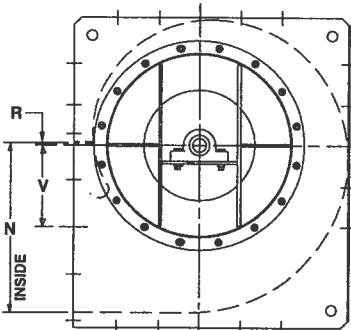
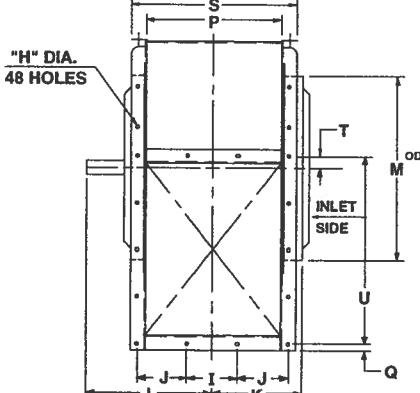
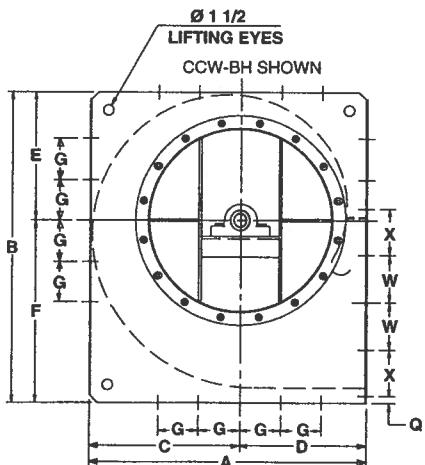
APPROXIMATE MOTOR WEIGHT TUBES WEIGHT SIZE	lb
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

QBCA/QBCS-122-200
ARRANGEMENT 3 SWSI



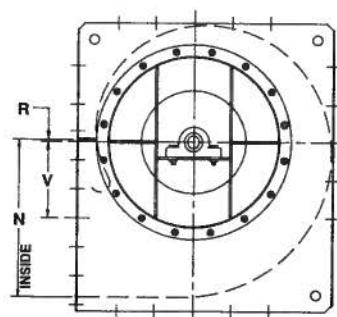
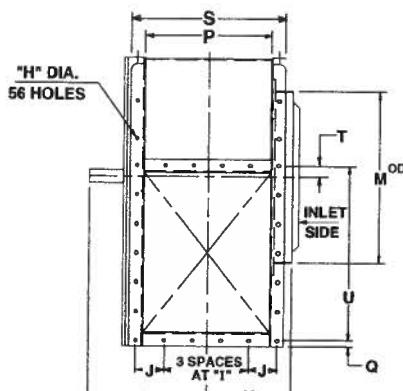
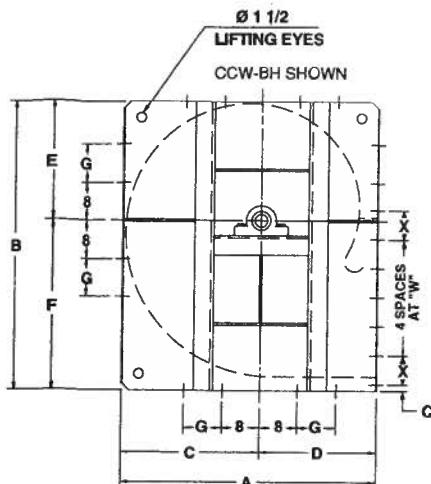
FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	CLASS 1 & 2		CLASS 3		APPROX. WEIGHT NO MOTOR (LB.)				
																									SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.					
122	20%	23	10%	10	9%	13%	5%	7/8	5 1/4	6%	11	13%	12 1/2	9 1/2	1 1/2	13	5 1/2	4%	4%	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1/4 x 1/8	1 1/16	3/8 x 3/16	96	110				
135	22%	26%	11%	11	10%	14%	6%	7/8	6 1/2	7 1/2	11 1/2	14 1/2	13 1/2	10 1/2	1 1/2	13 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1/4 x 1/8	1 1/16	3/8 x 3/16	110	124
150	25 1/2	27%	13 1/4	12	11 1/8	16%	5 1/2	7/8	6 7/8	7 1/2	12 1/2	16 1/2	15	11 1/8	7/2	15 1/2	1 1/2	16 1/2	7 1/2	5 1/2	5 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1/4 x 1/8	1 1/16	3/8 x 3/16	132	150		
165	27%	30%	14 1/4	13	12 1/8	17 1/8	6%	7/8	6 1/4	13 1/8	17 1/8	16 1/4	13 1/4	7/2	16 1/4	1 1/2	18 1/8	7 1/8	5 1/2	5 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1/4 x 1/8	1 1/16	3/8 x 3/16	194	218			
182	30 1/8	33%	16 1/8	14	13%	19%	6 1/2	9/16	8 1/8	9	13 1/8	19 1/8	18 1/8	14 1/2	7/2	17 1/8	1 1/2	19 1/8	8 7/8	6 1/2	6 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	3/8 x 3/16	1 1/16	3/8 x 3/16	226	252		
200	32%	35%	17%	15	16 1/8	21%	6 1/2	1 1/8	9 1/8	9 1/8	14 1/8	21 1/2	19 1/8	16 1/4	1 1/2	19 1/8	1 1/2	21 1/8	9 1/8	7 1/2	7 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	3/8 x 3/16	1 1/16	3/8 x 3/16	262	290		

QBCA/QBCS-222-330
ARRANGEMENT 3 SWSI

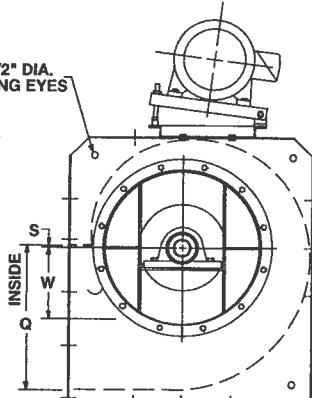
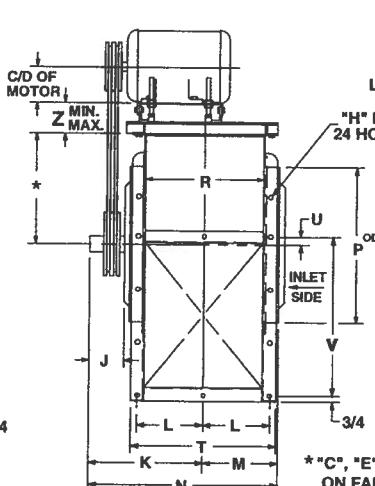
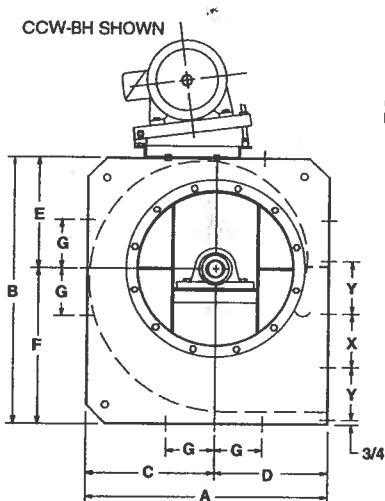


FAN SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	CLASS 1 & 2		CLASS 3		APPROX. WEIGHT NO MOTOR (LB.)
																									SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	SHDN. GEAR WHEEL DIA.	
222	35 1/2	40 1/8	19 1/2	16	16 1/8	23 1/2	6 1/2	9/16	6 7/8	6 1/2	10 1/2	16 1/2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

CLASS 3											
QBCA/QBCS-222-330			QBCA/QBCS-245-330			QBCA/QBCS-270-330			QBCA/QBCS-300-330		
SHDN. GEAR WHEEL DIA.											
222	11 1/2	3/8 x 3/16	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
245	11 1/2	3/8 x 3/16	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
270	11 1/2	3/8 x 3/16	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
300	11 1/2	1/2 x 1/4	2 1/8	1/2 x 1/4							
330	11 1/2	1/2 x 1/4	2 1/8	1/2 x 1/4							



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	SHAFT DIA.	KEYWAY	SHAFT DIA.	KEYWAY	APPROX. WEIGHT NO MOTOR (LBS.)	CLASS 1&2	CLASS 3	CLASS 1&2	CLASS 3
365	58%	65 1/2	31 1/2	27	27 1/2	38 1/2	8	1 1/2	6 1/4	6 1/4	16 1/2	24 1/2	37 1/2	36 1/2	29	1	1 1/2	33 1/2	1 1/2	38 1/2	17 1/2	6 1/2	6 1/2	2 1/2	1/2 x 1/2	2 1/2	5/8 x 5/8	1078	1156			
402	65%	72	36 1/2	30	30 1/2	41 1/2	16	1 1/2	6 1/2	6 1/2	18 1/2	26 1/2	41 1/2	40 1/2	31 1/2	1	1 1/2	36 1/2	1 1/2	42 1/2	19 1/2	7 1/2	7 1/2	2 1/2	3/4 x 1/2	2 1/2	3/8 x 3/8	1398	1464			
445	71 1/2	79 1/2	38 1/2	33	33 1/2	46	16	1 1/2	7 1/2	7 1/2	19 1/2	27 1/2	45 1/2	44 1/2	35 1/2	1	1 1/2	39 1/2	1 1/2	46 1/2	21 1/2	7 1/2	7 1/2	2 1/2	5/8 x 5/8	2 1/2	5/8 x 5/8	1562	1748			



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

FRAME NO.	APPROXIMATE MOTOR WEIGHT
48	25
56	34
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440

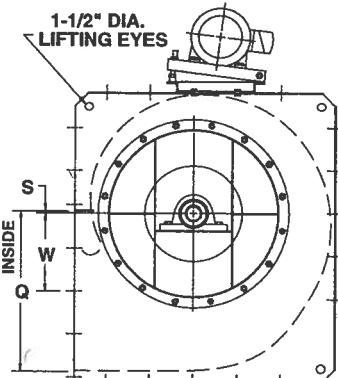
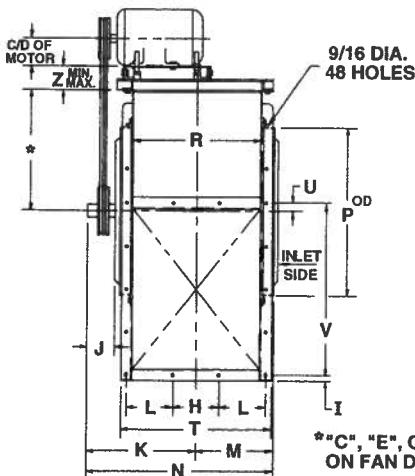
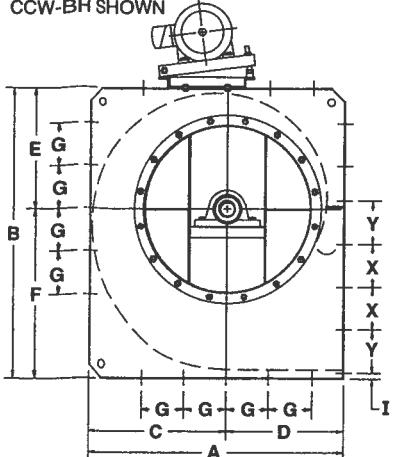
* "C", "E", OR "F" DEPENDING ON FAN DISCHARGE.

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	Z'	SHAFT DIA.	KEYWAY	SHAFT DIA.	KEYWAY	FRAME NO.	MOTOR BASE	SHFT. DIA.	SHFT. DIA.	KEYWAY	KEYWAY	APPROX. WEIGHT NO. MOTOR (LBS.)
122	20%	23	10 1/2	10	9 1/2	13 1/2	5 1/2	7/16	3 1/2	11	5 1/2	6 1/2	17 1/2	13 1/2	12 1/2	9 1/2	1 1/2	13 1/2	5 1/2	13 1/2	5 1/2	4 1/2	4 1/2	3 1/2	5 1/2	48-213T	48-213T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T
135	22 1/2%	25 1/2	11 1/2	11	10 1/2	14 1/2	5 1/2	7/16	3 1/2	12 1/2	6 7/8	7 1/2	18 1/2	14 1/2	13 1/2	10 1/2	1 1/2	13 1/2	7/8	13 1/2	7/8	5 1/2	5 1/2	3 1/2	5 1/2	48-213T	48-213T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T
150	25 1/4	27 1/2	13 1/4	12	11 1/2	16 1/2	5 1/2	7/16	3 1/2	12 1/2	6 7/8	7 1/2	19 1/2	16 1/2	15	11 1/2	7/2	15 1/2	1 1/2	16 1/2	7/2	5 1/2	5 1/2	3 1/2	5 1/2	48-213T	48-213T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T	182T-256T
165	27 1/2%	30 1/2	14 1/2	13	12 1/2	17 1/2	6 1/2	7/16	4	13 1/2	7 1/2	8 1/2	21 1/2	17 1/2	16 1/2	13 1/2	7/2	16 1/2	1 1/2	18 1/2	7 1/2	6 1/2	6 1/2	3 1/2	5 1/2	36-215T	36-215T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T
182	30 1/2%	33 1/2	16 1/2	14	13 1/2	19 1/2	6 1/2	7/16	4	13 1/2	8 1/2	9	22 1/2	19 1/2	18 1/2	14 1/2	7/2	17 1/2	1 1/2	19 1/2	8 1/2	6 1/2	6 1/2	3 1/2	5 1/2	56-215T	56-215T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T
200	32 1/2%	36 1/2	17 1/2	15	15 1/2	21 1/2	6 1/2	7/16	4	14 1/2	8 1/2	9 1/2	24 1/2	20 1/2	19 1/2	15 1/2	4	19 1/2	1 1/2	21 1/2	9 1/2	7 1/2	7 1/2	3 1/2	5 1/2	56-215T	56-215T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T	143T-286T

FAN SIZE	CLASS 1&2												CLASS 3												
	SHAFT DIA.	KEYWAY	WITH SHFT. DIA.	WITH H.D.O.	SHAFT DIA.	KEYWAY	WITH SHFT. DIA.	KEYWAY	WITH SHFT. DIA.	KEYWAY	WITH H.D.O.	SHAFT DIA.	KEYWAY	WITH SHFT. DIA.	KEYWAY	WITH SHFT. DIA.	KEYWAY	WITH H.D.O.	SHAFT DIA.	KEYWAY	WITH SHFT. DIA.	KEYWAY	WITH H.D.O.	SHAFT DIA.	
122	1 3/16	1/4 x 1/8	105	110	1 7/16	3/8 x 3/8	119	124	1 7/16	3/8 x 3/8	124	1 3/4	1/4 x 1/8	133	138	1 7/16	3/8 x 3/8	138	143	1/4 x 1/8	1/4 x 1/8	143	148	1 7/16	3/8 x 3/8
135	1 7/16	1/4 x 3/16	119	124	1 7/16	3/8 x 3/8	133	138	1 7/16	3/8 x 3/8	138	1 3/4	1/4 x 3/16	141	146	1 7/16	3/8 x 3/8	146	151	1/4 x 3/16	1/4 x 3/16	151	156	1 7/16	3/8 x 3/8
150	1 3/16	1/4 x 3/16	141	146	1 7/16	3/8 x 3/8	159	164	1 7/16	3/8 x 3/8	164	1 3/4	1/4 x 3/16	165	170	1 7/16	3/8 x 3/8	170	175	1/4 x 3/16	1/4 x 3/16	175	180	1 7/16	3/8 x 3/8
165	1 7/16	1/4 x 3/16	165	170	1 7/16	3/8 x 3/8	186	191	1 7/16	3/8 x 3/8	191	1 3/4	1/4 x 3/16	182	236	1 11/16	3/8 x 3/8	236	250	1/4 x 3/16	1/4 x 3/16	250	262	1 11/16	3/8 x 3/8
182	1 7/16	3/8 x 3/16	272	286	1 7/16	3/8 x 3/8	300	314	1 7/16	3/8 x 3/8	314	1 3/4	3/8 x 3/16	200	214	1 11/16	3/8 x 3/8	214	228	3/8 x 3/16	3/8 x 3/16	228	242	1 11/16	3/8 x 3/8

QBKA/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

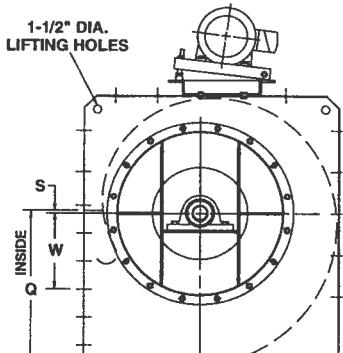
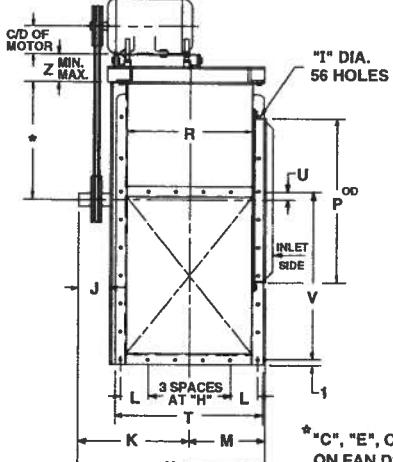
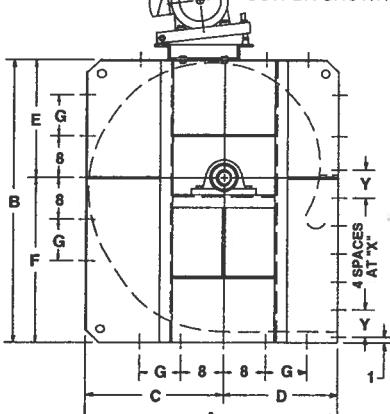
* "C", "E", OR "F" DEPENDING ON FAN DISCHARGE

FAN SIZES	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	NET WEIGHT		
																										INCHES	INCHES	
222	35½	40%	19½	16	16%	23½	6½	6½	¾	5	16½	6½	10%	27½	23½	22%	17½	¾	20%	1½	23%	10½	6	5%	4½	6½	182T-256T	143T-286T
240	39½	44%	21½	18	18%	26½	6½	7½	1	5	17½	7½	10%	28½	26½	24%	19%	¾	23%	9½	26%	11%	6½	6½	4½	6½	182T-265T	143T-326T
270	43½	49%	23%	19½	20%	28½	6½	7½	1	6	19½	7½	12½	32½	28½	26½	21%	¾	25%	1½	29%	13½	7½	7½	4½	6½	182T-256T	143T-326T
300	48½	54%	25½	22	22%	31½	8	8½	1	6	21½	8½	14%	35½	31½	29%	23%	¾	28%	1½	32%	14%	7½	8½	4½	6½	143T-286T	143T-326T
330	52%	59%	28½	24	24%	34%	8	9½	1	6½	22½	9½	15½	38½	34½	33	26%	¾	30½	1½	35½	15½	8½	8½	4½	6½	143T-286T	143T-326T

FAN SIZES	SHAFT SIZES		KEYWAY		WITH STD. MOTOR BASE		WITH H.D. MOTOR BASE		SHAFT SIZES		KEYWAY		WITH STD. MOTOR BASE		WITH H.D. MOTOR BASE		SHAFT SIZES		KEYWAY		WITH STD. MOTOR BASE			
	222	240	¾ x ¾	¾ x ¾	373	453	383	469	1½	1½	½ x ¼	½ x ¼	1½	1½	¾ x ¾	¾ x ¾	409	497	419	513				
222	1½	1½	¾ x ¾	¾ x ¾	373	453	383	469	1½	1½	½ x ¼	½ x ¼	1½	1½	¾ x ¾	¾ x ¾	409	497	419	513				
240	1½	1½	¾ x ¾	¾ x ¾	497	685	513	691	1½	1½	½ x ¼	½ x ¼	1½	1½	¾ x ¾	¾ x ¾	571	757	587	763				
270	1½	1½	¾ x ¾	¾ x ¾	803	810	810	810	2½	2½	½ x ¼	½ x ¼	2½	2½	½ x ¼	½ x ¼	947	947	947	954				
330	1½	1½	½ x ¼	½ x ¼																				

QBKA/QBCS-365-445 ARRANGEMENT 3T SWSI

CCW-BH SHOWN



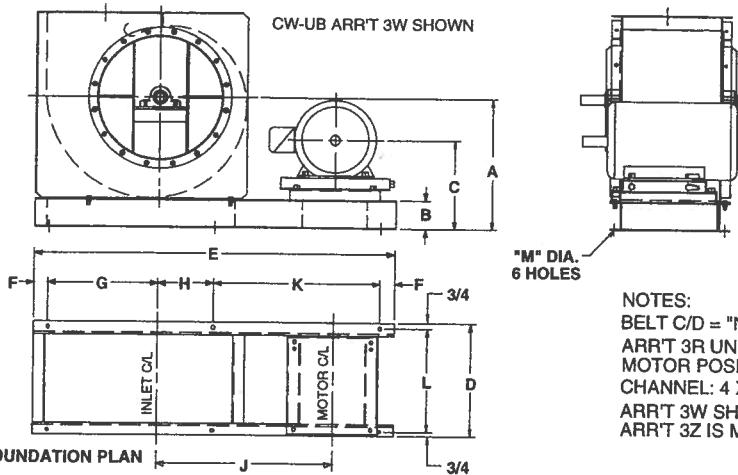
APPROXIMATE MOTOR WEIGHT	
FRAME SIZES	WEIGHT LBS.
143T	45
145T	52
182T	85
184T	100
213T	150
215T	170
254T	260
256T	290
284T	390
286T	440
324T	555
326T	620

* "C", "E", OR "F" DEPENDING ON FAN DISCHARGE

FAN SIZES	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Z	NET WEIGHT			
																									INCHES	INCHES		
365	58%	65½	31½	27	27½	38½	8	6½	⅛	6½	24½	6½	16½	41	37½	36½	29	¾	33½	1½	38½	17½	6½	6%	5½	7	143T-286T	143T-326T
402	66½	72	35½	30	30%	41%	16	6½	⅛	7	26½	6½	18½	41½	41½	40½	31½	¾	36½	1½	42%	19½	7½	7½	5½	7	143T-286T	143T-326T
445	71½	79½	38½	33	33%	46	16	7½	⅛	7	27½	7½	19½	47½	45½	44%	35½	¾	39½	1½	46½	21½	7½	7½	5½	7	143T-286T	143T-326T

APPROXIMATE FAN WEIGHT LESS MOTOR									
CLASS 1 & 2					CLASS 3				
FAN SIZES	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.	KEYWAY	WITH STD. MOTOR BASE	WITH H.D. MOTOR BASE	SHAFT DIA.
365	2½	½ x ¼	1254	1261	2½	¾ x ¾	1476	1483	
402	2½	½ x ¼	1533	1539	2½	¾ x ¾	1771	1777	
445	2½	¾ x ¾	1769	1776	2½	¾ x ¾	1977	1984	

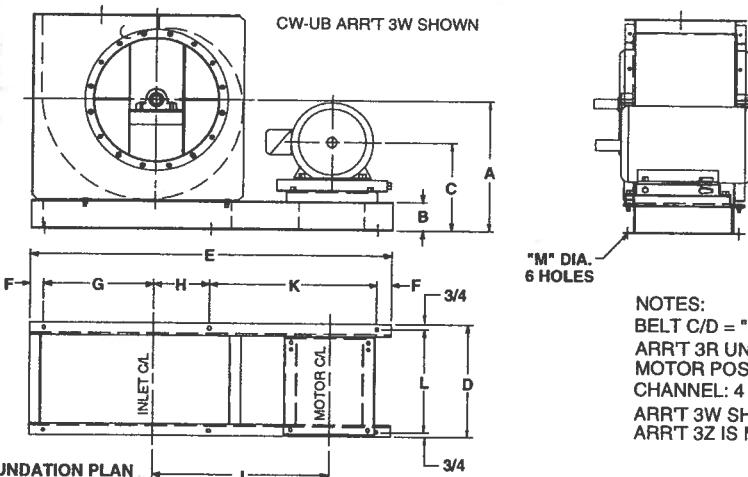
QBCS-122-150
ARRANGEMENT 3
SWSI UNITARY



"M" DIA.
6 HOLES

NOTES:
BELT C/D = "N" DIM.
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 X 2 X .1793
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE.

ITEM	FRAME	A	A'	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	CLASS 122		
122		14%	13%	17%	4	10 1/4	38			5%	18%			9%	22%	9	21 1/4	16			18.7	22.8	22.0	23.0	162	220					
						11%	40			6%	19			10%	23%	10	22%	17			19.3	23.5	22.7	23.4	216	230	260	272			
						12%	44			8%	21 1/2			12%	26%	12	25%	19			22.0	26.2	25.5	26.0	333	347	353	367			
						14%	47			9%	23 1/2			14%	27%	13 1/2	27%	20 1/2			23.5	27.8	27.1	27.3	460	474	490	504			
150		17%	15%	20%	4	10 1/4	43			5%	20%			10 1/4	25%	9 1/2	24 1/4	18 1/2			21.5	26.3	25.3	26.7	248	268					
						11%	45			6%	21 1/4			11 1/2	26%	10 1/2	25%	19 1/2			22.0	26.8	25.9	27.1	258	276	299	317			
						12%	49			8%	24%			13 1/2	29%	12 1/2	28%	21 1/2			24.6	29.4	28.6	29.5	314	332	375	393			
						14%	52			9%	25%			14%	30%	14	30%	23			25.9	30.8	30.1	30.7	502	520	535	550			
						15%	55			11%	27 1/4			16 1/2	32%	15 1/2	31%	24 1/2			27.3	32.3	31.6	32.0	645	663	695	713			



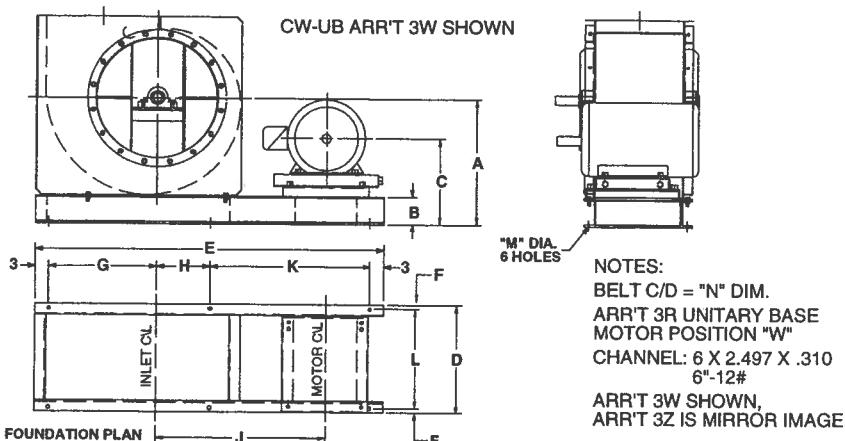
"M" DIA.
6 HOLES

NOTES:
BELT C/D = "N" DIM.
ARRT 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 4 X 2 X .1793
ARRT 3W SHOWN,
ARRT 3Z IS MIRROR IMAGE.

QBCA/QBCS-165-200
ARRANGEMENT 3
SWSI UNITARY

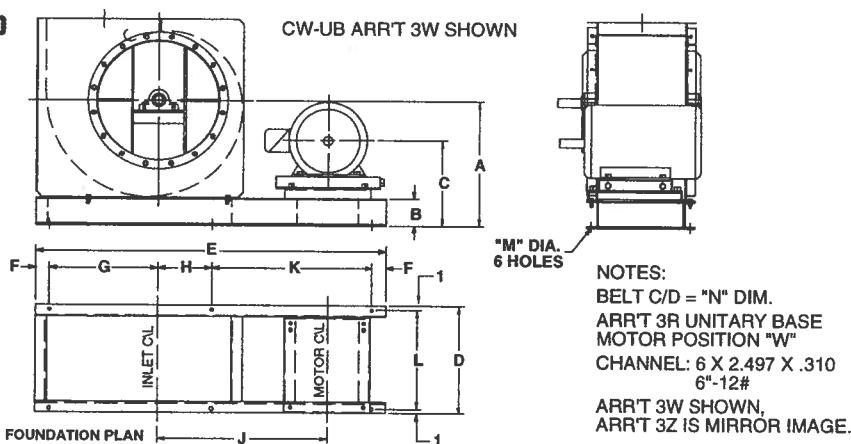
ITEM	FRAME	A	A'	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	CLASS 165		
165		18%	16%	21%	4	11%	48			6%	22%			11%	28%	11	27%	21			23.8	28.9	28.1	29.4	365	383					
						12%	52			8%	25%			13%	30%	13	30%	23			26.4	31.5	30.8	31.9	443	471					
						14%	55			9%	27%			14%	32%	14	32%	24			27.6	32.8	32.2	33.0	568	596					
						15%	58			11%	28%			16%	34%	16	33%	26			29.0	34.2	33.7	34.3	711	739					
200		20%	17%	23%	4	11%	54			5%	25%			11%	31%	12	31%	24			27.3	33.0	32.5	34.4	447	475					
						12%	58			7%	28%			13%	34%	14	34%	26			29.6	35.5	35.1	36.7	527	555					
						14%	61			9%	29%			15%	36%	15	36%	27%			30.7	36.7	36.4	37.7	547	575					
						15%	64			10%	31%			16%	37%	16	37%	29			32.0	38.0	37.8	38.9	568	684					
						16%	68			12%	33%			18%	40%	19	40%	31			34.2	40.3	40.2	41.0	980	1008					

QBKA/QBCS-222-270
ARRANGEMENT 3
SWSI UNITARY



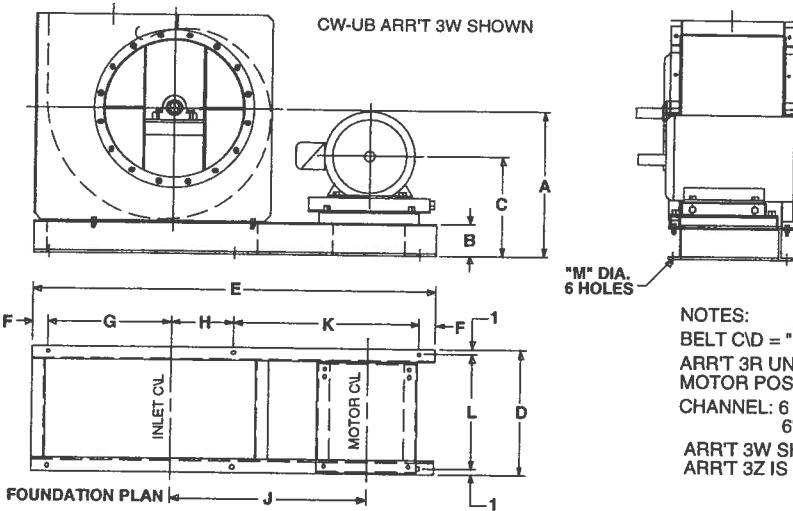
ITEM	A	B	C	D	E	F	CW-UB		CW-UB		CW-TH		CW-BH/CW-BH		CW-BH/CW-BH		CW-BH/CW-BH		CW-BH/CW-BH		CW-BH/CW-BH			
							G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Z
222	25½	22%	29½	6	13%	58	5½	27½	12½	33%	9½	31½	13	34%	26	29.6	35.5	32.5	35.8	38.1	640	676		
245	22%	24%	32½	6	16%	65	7½	30	14½	36½	11½	34	15½	39½	16½	40%	31	29.6	35.5	32.5	35.8	38.1	640	676
270	29%	26%	34½	6	17½	75	10½	37½	20%	13½	31½	16½	39½	21½	44%	34½	29.6	35.5	32.5	35.8	38.1	640	676	

QBKA / QBCS-300 AND 330
ARRANGEMENT 3
SWSI UNITARY



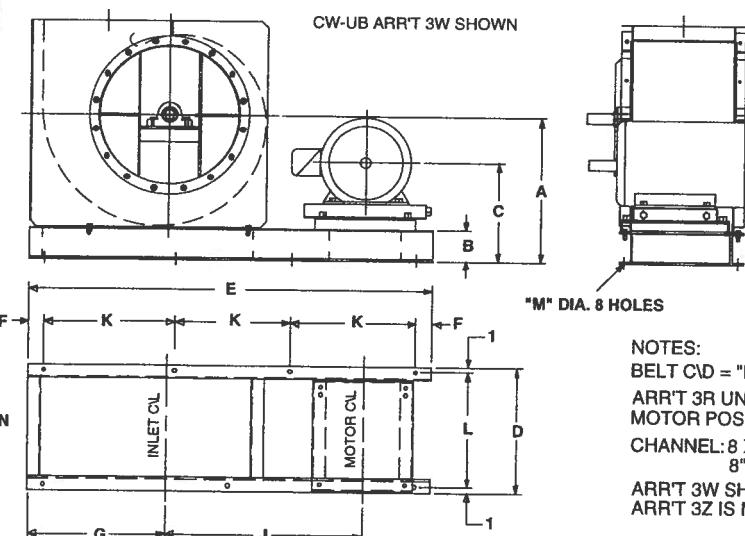
ITEM	A	B	C	D	E	F	CW-UB		CW-UB		CW-TH		CW-BH/CW-BH										
							G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
300	32½	28%	37%	6	14%	76	6½	35%	15%	44%	11½	41½	16½	42%	13½	44%	19½	48%	14½	45½	16½	40.0	48.2
330	31%	30%	40%	6	16½	91	7½	39½	17½	49½	18½	45½	19½	46½	19½	46½	21½	48%	14½	45½	19½	49.1	44.6

**QBKA / QBKS-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.

CAT. NO.	FRAME NO.	CW-UB				CW-UD				CW-H				CW-H-COMB				CW-3R				CW-3H				Arrangement 3 SWSI UNITARY											
		A	B	C	D	E	F	G	H	I	J	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z						
365	254T							16 1/8				6 1/8	42 1/8					17 1/8	52 1/8			13 1/8	48 1/4			18	53 1/8	42			47.2	56.9	51.2	55.8	59.9	1673 1751	
	256T							17 1/8				8 3/8	43%					19 1/8	54 1/8			14%	49%			19 1/2	54%	43 1/2			48.2	58.0	52.3	57.0	60.9	1703 1781	
	284T							18 1/8				9 7/8	46 1/8					21 1/8	56 1/8	28%		16%	52 1/4			21 1/2	57%	45 1/2			50.0	59.8	54.3	59.0	62.5	1842 1896	
	286T							19 1/4				10 1/8	47 1/8					22 1/8	58 1/8			18%	53%			23	58%	47			51.0	61.1	55.6	60.3	63.6	1868 1946	
	324T							22 1/4				11 1/8	47 1/8					25 1/8	61 1/8			N/A	N/A			25 1/2	61%	49 1/2			2006 2084	2071 2149					
	326T							23 1/4				12 1/8	50%					27 1/8	64 1/8			N/A	N/A			28	65%	52			2235 2313	2295 2373					
	364T							23 1/4				13 1/8	54 1/8					29 1/8	67 1/8													52.9	63.2	N/A	62.6	65.4	2595 2673
	365T							23 1/4				14 1/8	50%					31 1/4	70 1/4													56.2	66.6	N/A	66.2	68.6	2695 2773
	404T							23 1/4				15 1/8	54 1/8					32 1/4	71 1/4													56.2	66.6	N/A	66.2	68.6	2990 3068
	405T							23 1/4				16 1/8	54 1/8					33 1/4	72 1/4													3165 3243					
402	254T							16 1/8				9 6	44%					17 1/4	55 1/4			12 1/8	51			18	55%	45			50.8	61.1	54.7	59.3	64.3	1907 1992	
	256T							17 1/8				9 9	45%					19 1/4	57 1/4			14 1/8	52 1/4			19 1/2	57%	46 1/2			51.7	62.2	55.9	60.7	65.6	1922 2226	
	260T							18 1/8				10 3	46 1/8					21 1/4	59 1/4			16%	55			21 1/2	60%	48 1/2			53.2	63.9	57.7	62.6	66.8	2260 2418	
	261T							19 1/4				10 6	50					22 1/4	61 1/4			17 1/8	56 1/4			23	61%	50			54.4	65.1	59.0	63.9	67.8	2445 2565	
	326T							22 1/4				11 1	52%					25 1/4	64 1/4			20%	59%			25 1/2	64%	52 1/2			58.1	67.1	61.1	66.1	69.5	2540 3006	
	364T							23 1/4				11 6	56%					27 1/4	66 1/4			N/A	N/A			28	66%	55			59.4	70.4	N/A	69.6	72.6	3241 3403	
	365T							23 1/4				12 1/8	56 1/8					34 1/4	74 1/4													59.4	70.4	N/A	69.6	72.6	3241 3403
	404T							23 1/4				13 1/8	56 1/8					35 1/4	75 1/4													59.4	70.4	N/A	69.6	72.6	3241 3403
	405T							23 1/4				14 1/8	56 1/8					36 1/4	76 1/4													59.4	70.4	N/A	69.6	72.6	3241 3403
	406T							23 1/4				15 1/8	56 1/8					37 1/4	77 1/4													59.4	70.4	N/A	69.6	72.6	3241 3403

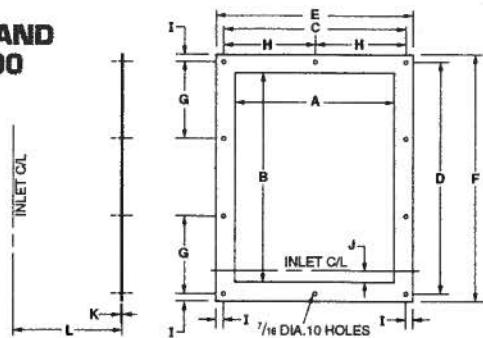


**QBKA/QBKS-445
ARRANGEMENT 3 SWSI
UNITARY**

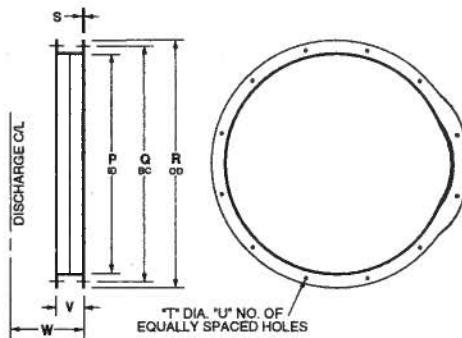
NOTES:
BELT C/D = "N" DIM.
ARR'T 3R UNITARY BASE
MOTOR POSITION "W"
CHANNEL: 8 X 2.978 X .353
8" - 18.7"
ARR'T 3W SHOWN,
ARR'T 3Z IS MIRROR IMAGE.

CAT. NO.	FRAME NO.	CW-UB				CW-UD				CW-H				CW-H-COMB				CW-3R				CW-3H				Arrangement 3 SWSI UNITARY					
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z				
445	324T							20 1/8				112	53%					65 1/8	60 1/8			66 1/8	34			59.2	70.7	63.8	69.3	74.0	2742 2928
	326T							21%				115	54%					67 1/8	61 1/8			67 1/8	35			60.2	71.8	65.0	70.6	75.0	2807 2993
	364T							24 1/4				121	58%	33%			71 1/8	38%	65%		71%	37			62.8	74.7	68.0	73.7	77.6	2975 3161	
	365T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3035 3221
	404T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.0	69.5	75.1	78.8	3343 3529
	405T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3443 3629
	444T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3738 3924
	445T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.1	69.5	75.1	78.8	3913 4099
	447T							25 1/4				124	60%					72 1/8	67 1/8			73%	38			64.1	76.0	69.5	75.1	78.8	4476 4662

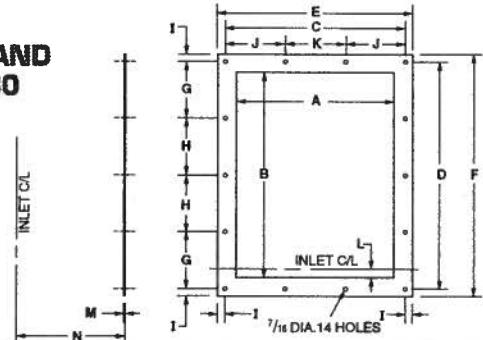
**BCA/BCS-122-200 AND
QBCA/QBCS-122-200
FLANGES**



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 ¹ / ₄	3 ¹ / ₄	3 ¹ / ₁₆	3 ¹ / ₁₆	10
135	51153	10 ⁷ / ₁₆	13 ⁹ / ₁₆	12 ⁷ / ₈	15 ⁵ / ₁₆	13 ⁹ / ₁₆	16 ⁷ / ₁₆	5	6 ⁷ / ₃₂	7 ¹ / ₁₆	3 ¹ / ₁₆	3 ¹ / ₁₆	11
150	51154	12 ⁹ / ₁₆	15 ¹ / ₈	13 ¹¹ / ₁₆	16 ⁵ / ₈	15 ¹ / ₈	18 ¹ / ₈	5 ¹ / ₂	6 ⁷ / ₃₂	9 ¹ / ₃₂	3 ¹ / ₁₆	3 ¹ / ₁₆	12
165	51158	13 ³ / ₈	16 ⁷ / ₈	14 ⁷ / ₈	18 ⁷ / ₈	16 ⁷ / ₈	19 ¹ / ₈	6	7 ¹ / ₁₆	11 ¹ / ₃₂	7 ¹ / ₁₆	7 ¹ / ₁₆	13
182	51156	14 ³ / ₈	18 ³ / ₈	16 ¹ / ₄	19 ⁷ / ₈	17 ³ / ₄	21 ¹ / ₈	6 ⁶ / ₈	8 ¹ / ₈	3 ¹ / ₄	11 ¹ / ₃₂	1 ¹ / ₄	14
200	51157	16 ¹ / ₈	20 ⁷ / ₈	17 ³ / ₈	21 ¹ / ₈	19 ¹ / ₈	23 ¹ / ₈	7 ¹ / ₄	8 ¹ / ₁₆	7 ¹ / ₈	7 ¹ / ₈	1 ¹ / ₄	15

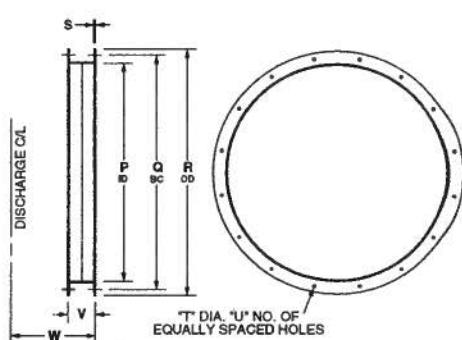


**BCA/BCS-222-330 AND
QBCA/QBCS-222-330
FLANGES**

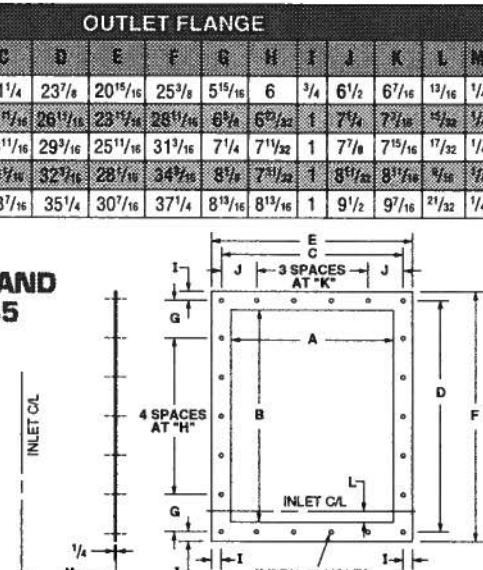


OUTLET FLANGE													
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L
222	51158	17 ¹⁵ / ₁₆	22 ³ / ₈	31 ¹ / ₄	23 ⁷ / ₈	20 ¹⁵ / ₁₆	25 ³ / ₈	5 ¹⁵ / ₁₆	6	3 ¹ / ₄	6 ¹ / ₂	6 ⁷ / ₁₆	13 ¹⁵ / ₁₆
245	51159	19 ¹¹ / ₁₆	24 ⁷ / ₈	21 ¹¹ / ₁₆	26 ¹¹ / ₁₆	23 ¹¹ / ₁₆	26 ¹¹ / ₁₆	6 ⁷ / ₈	6 ⁷ / ₃₂	1	7 ¹ / ₈	7 ¹ / ₈	14 ¹⁵ / ₁₆
270	51160	21 ¹¹ / ₁₆	27 ³ / ₈	23 ¹¹ / ₁₆	29 ³ / ₁₆	25 ¹¹ / ₁₆	31 ³ / ₁₆	7 ¹ / ₄	7 ¹ / ₃₂	1	7 ¹ / ₈	7 ¹⁵ / ₁₆	17 ³¹ / ₃₂
300	51161	24 ⁷ / ₁₆	30 ⁷ / ₁₆	26 ⁷ / ₁₆	32 ⁷ / ₁₆	28 ⁷ / ₁₆	34 ⁷ / ₁₆	8 ¹ / ₂	7 ¹ / ₃₂	1	3 ¹ / ₂	8 ¹ / ₁₆	9 ¹ / ₂
330	51162	26 ⁷ / ₁₆	33 ¹ / ₄	28 ⁷ / ₁₆	35 ¹ / ₄	30 ⁷ / ₁₆	37 ¹ / ₄	8 ¹⁵ / ₁₆	8 ¹³ / ₁₆	1	9 ¹ / ₂	9 ⁷ / ₁₆	21 ³¹ / ₃₂

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



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



OUTLET FLANGE													
SIZE	PART NO.	A	B	C	D	E	F	G	H	I	J	K	L
365	51163	29 ¹ / ₄	36 ³ / ₈	31 ¹ / ₄	38 ³ / ₈	33 ¹ / ₄	40 ³ / ₈	6 ³ / ₈	6 ¹ / ₂	1	6 ¹ / ₄	6 ¹ / ₄	11 ¹ / ₁₆
402	51164	32 ⁷ / ₁₆	40 ⁷ / ₁₆	34 ⁷ / ₁₆	42 ⁷ / ₁₆	36 ⁷ / ₁₆	44 ⁷ / ₁₆	7 ⁷ / ₁₆	7 ⁷ / ₃₂	1	6 ⁷ / ₈	6 ⁷ / ₁₆	17 ¹⁵ / ₁₆
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 ³¹ / ₃₂
490	51166	39 ⁷ / ₁₆	49 ⁷ / ₁₆	42 ⁷ / ₁₆	52 ⁷ / ₁₆	45 ⁷ / ₁₆	63 ⁷ / ₁₆	8 ⁷ / ₁₆	8 ⁷ / ₁₆	1	8 ¹⁵ / ₁₆	8 ⁷ / ₁₆	36 ⁶³ / ₆₄
542	51167	43 ⁵ / ₁₆	54 ⁵ / ₁₆	46 ⁵ / ₁₆	57 ⁵ / ₁₆	49 ⁵ / ₁₆	60 ⁵ / ₁₆	9 ⁵ / ₁₆	9 ⁵ / ₁₆	1	9 ⁹ / ₃₂	9 ¹ / ₄	11 ⁵ / ₁₆
600	51168	47 ⁷ / ₁₆	60 ⁷ / ₁₆	51 ⁷ / ₁₆	64 ⁷ / ₁₆	55 ⁷ / ₁₆	68 ⁷ / ₁₆	10 ⁷ / ₁₆	10 ⁷ / ₁₆	2	10 ¹⁵ / ₁₆	10 ⁷ / ₁₆	11 ⁷ / ₁₆
660	51169	52 ⁵ / ₈	66 ¹ / ₂	56 ⁵ / ₈	70 ¹ / ₂	60 ⁵ / ₈	74 ¹ / ₂	11 ¹ / ₄	11 ¹ / ₄	2	11 ⁷ / ₁₆	11 ¹ / ₄	15 ⁵ / 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 ¹ / ₁₆	16	4	18 ¹³ / ₁₆	
402	50188	41 ¹ / ₈	43 ³ / ₈	45 ¹ / ₈	4 ¹ / ₁₆	24	4	20 ¹ / ₂	
445	50189	45 ¹ / ₈	47 ³ / ₈	49 ¹ / ₈	3 ¹ / ₁₆	24	4	21 ³¹ / ₃₂	
490	50190	51	54 ¹ / ₈	57	1 ¹ / ₁₆	24	6	28 ¹ / ₂	
542	50191	56 ¹ / ₈	59 ³ / ₈	62 ¹ / ₈	1 ¹ / ₁₆	24	6	27 ²⁷ / ₃₂	
600	50192	63 ¹ / ₈	67 ³ / ₈	69 ¹ / ₈	1 ¹ / ₁₆	32	6	30 ¹ / ₂	
660	50193	69 ¹ / ₈	73 ¹ / ₄	75 ¹ / ₄	3 ¹ / ₈	32	6	32 ¹ / ₂	

2933 Symmes Road,
Fairfield, Ohio 45014
t: 513-874-2400
f: 513-870-6249
e: americanfan@flaktwoods.com
w: www.flaktwoods.com

**American
Fan Company**