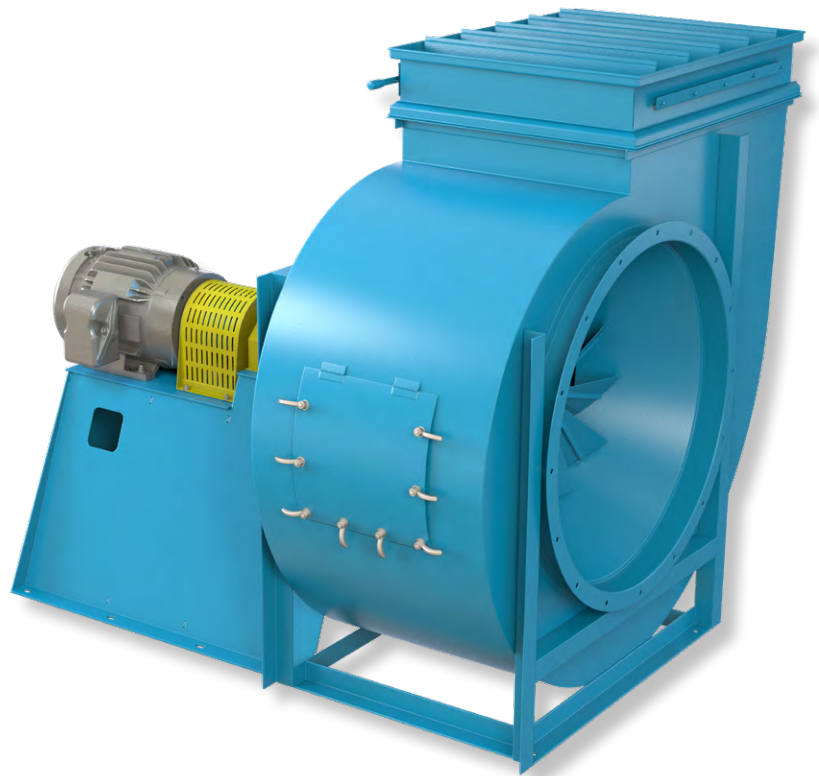




INDUSTRIAL PROCESS AND  
COMMERCIAL VENTILATION SYSTEMS

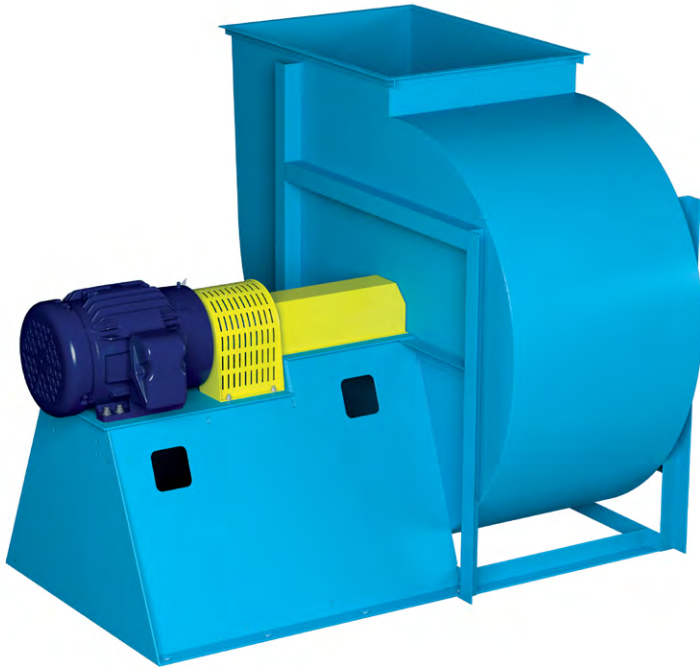
# BACKWARD CURVED HIGH PRESSURE FANS

MODEL BCS



## Overview

### BCS



The BCS fan from Twin City Fan & Blower is a high efficiency backward curved industrial fan designed for handling relatively clean air in high pressure applications. Typical industries include general HVAC (exhaust, filtration, return and supply, air of commercial buildings), automotive, fertilizer, metal and mineral processing, pulp and paper, petrochemical, pharmaceutical, power, water and wastewater treatment.

Because the BCS features a wider wheel and housing, producing a high volume of air at a lower velocity, the need for an expansion easé is eliminated.

BCS fans are available with a variety of construction options and accessories, offering the versatility and flexibility required in today's industrial applications.

#### Typical Applications Include

Air Pollution Control (including filtration and dust collection), Chemical/Corrosive Process, Combustion Air Drying Process Exhaust, Forced Draft on Fluid Bed Boilers, General HVAC, General Manufacturing, High Temperature Applications, Induced Draft After Baghouse and other Process, Moisture Blow-Off, Product Cooling, Water Treatment

#### Wheel Types

Backward Curved

#### Configurations

Available in direct and belt driven Arrangements 1, 3SI, 4, 7SI, 8, 9, 9H and 9F

#### Optional Construction

High Temperature, Nominally Leaktight Construction, Spark Resistant, Split Housings



Arrangement 9



For complete product performance, drawings and available accessories, download our Fan Selector program at [tcf.com](http://tcf.com).

## Overview

### BCS

#### Sizes and Performance

16.5" to 89" wheel diameters  
Airflow to 280,000 CFM  
Static pressure to 40" w.g.  
Airstream temperatures to 800°F

#### Construction

- Design 14 — for tip speeds up to 14,000 FPM
- Design 17 — for tip speeds up to 17,000 FPM
- Design 22 — for tip speeds up to 22,000 FPM
- Design 26 — for tip speeds up to 26,000 FPM



RTO System with Model BCS

## WHEEL DESIGN

The BCS wheel features heavy-gauge steel construction and a non-overloading wheel design, suitable for applications requiring large volumes of air at moderate to high pressures.

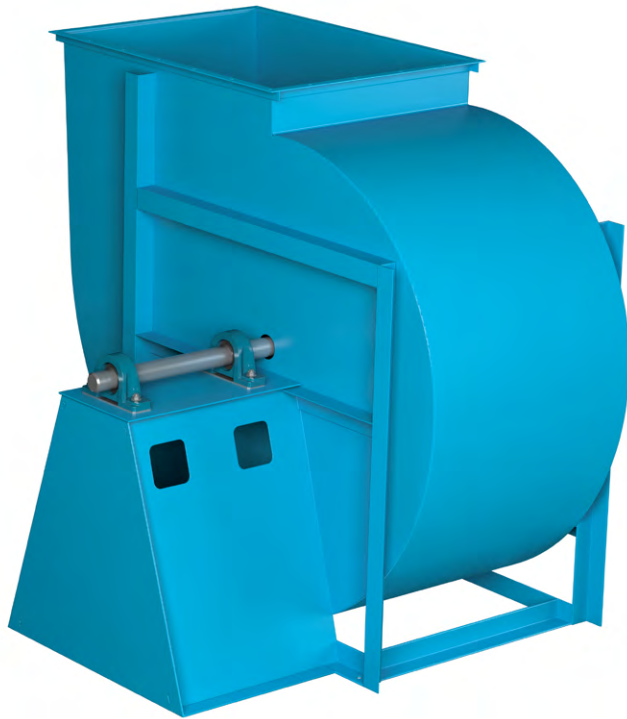
The high efficiency wheel features backward curved blades of single thickness, continuously welded to the rim and backplate.

A conical spun shroud (rim) makes BCS fans less susceptible to the performance losses associated with poor inlet conditions.

All BCS wheels are statically and dynamically balanced to grade G6.3 per ANSI S2.19 for smooth operation prior to assembly of the fan, followed by a final balance of the entire rotating assembly.



BCS Wheel & Blade Profile



## Housings

Heavy-gauge, reinforced, continuously welded housings provide strength and durability for extended service life — a necessity in all commercial and industrial installations.

Outlet flanges for duct-connection as well as rigidity are standard. Inlet collars for slip-joint connection and lifting lugs are also standard. All housings are reinforced with rigid bracing to increase structural integrity. The support angles are intermittently welded and caulked between welds to prevent bleed-through corrosion. Precisely positioned cutoff plates and aerodynamically spun inlet cones provide high efficiency and smooth airflow through the fan.

## Shaft

Shafts are AISI Grade 1045 hot-rolled steel accurately turned, ground, polished and ring gauged for accuracy. Shafts are generously sized for first critical speed of at least 1.43 times the maximum speed for the class.

## Bearings

Bearings are heavy-duty, grease-lubricated, anti-friction ball or roller, self-aligning, pillow block type and are selected for minimum average bearing life (ABMA L-50) in excess of 200,000 hours at the maximum fan RPM.



## INSTALLATION PHOTOS



Process Fans for Wood Pelletizing



Dust Collection System



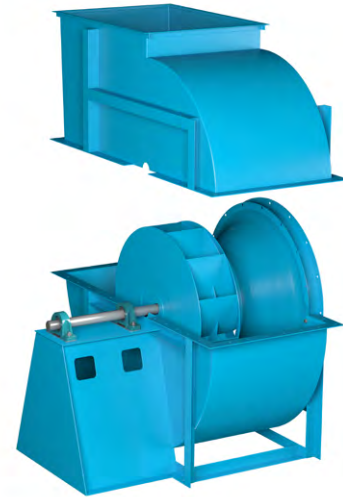
Exhaust Fans for Nuclear Plant

## Split Housing

A flanged horizontal split housing is available on the fan's centerline. A pie-shaped or 3-way split are also available for wheel removal without disturbing the ductwork.

## High Temperature Construction

Standard fan design options are available to handle airstream temperatures to 800°F. Consult your Twin City Fan & Blower representative for applications over 800°F or when aluminum (spark resistant) or stainless steel construction is required. The fan bearings should be kept outside of the hot airstream and below 130°F ambient. High temperature operating limits, available arrangements and necessary modifications are shown in Table 1.



Horizontal Split Housings  
(also available with Pie-Shaped & Three-Way Split Housings)

Table 1. High Temperature Construction Requirements

TEMPERATURE (°F)	TYPE OF BEARING	LUBRICATION	OTHER REQUIREMENTS	AVAILABLE ARRANGEMENTS
-22° to 300°	Ball or Roller	Grease	Standard Fan	1, 8, 9, 9F
301° to 500°	Ball or Roller	High Temp. Grease	Shaft Cooler, Shaft Seal Expansion & Non-Expansion Bearings	1, 8, 9, 9F
501° to 600°	Ball or Roller	High Temp. Grease	Same as 301° to 500° With Additional of High Temp Aluminum Paint	1, 8, 9, 9F
601° to 800°	Ball or Roller	High Temp. Grease	Same as 501° to 600° With Modification of Bearing Pedestal	1, 8, 9F

## High Temperature Derating Factors

When elevated temperatures are encountered, maximum RPM allowable must be derated according to the table below. For stainless steel derates, contact the factory.

AIRSTREAM TEMPERATURE (°F)	WHEEL MATERIAL STANDARD STEEL	
	DES. 17	DES. 14, 22, 26
70	1.00	1.00
200	0.99	0.97
250	0.98	0.96
300	0.98	0.95
350	0.97	0.94
400	0.96	0.93
450	0.94	0.92
500	0.93	0.92
550	0.92	0.91
600	0.90	0.90
650	0.89	0.89
700	0.88	0.87
750	0.87	0.86
800	0.84	0.84
Above 800	Consult Factory	

## Spark Resistant Construction

Fan applications may involve the handling of potentially explosive or flammable particles, fumes or vapors. Such applications require careful consideration by the system designer to insure the safe handling of such gases. Twin City Fan & Blower offers the following classifications of spark resistant construction per AMCA Standard 99-0401-86. It is the specifier's or the user's responsibility to specify the type of spark resistant construction with full recognition of the potential hazards and the degree of protection required.

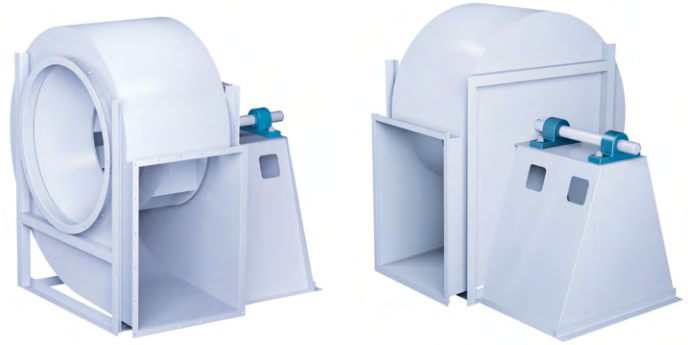
Type A: All parts of the fan in contact with the air or gas being handled shall be made of nonferrous material — usually aluminum and limited to 250°F.

Type B: The fan shall have a nonferrous wheel or impeller and nonferrous ring about the opening through which the shaft passes — usually aluminum wheel and rub ring and limited to 250°F.

Type C: The fan shall be so constructed that a shift of the wheel or impeller or shaft will not permit two ferrous parts of the fan to rub or strike. This construction is limited to 500°F. Construction to 800°F is available using a steel inlet cone with copper/bronze lining.

## Arrangement 1

Arrangement 1 is usually belt driven. The wheel is overhung on the shaft, i.e., mounted at the end of the shaft. The motor can be mounted in any of the four AMCA standard motor positions shown on page 10. The two fan bearings are mounted on the bearing pedestal, out of the airstream, which makes them ideal for high temperature or contaminated air applications. Belt driven configurations offer performance flexibility.



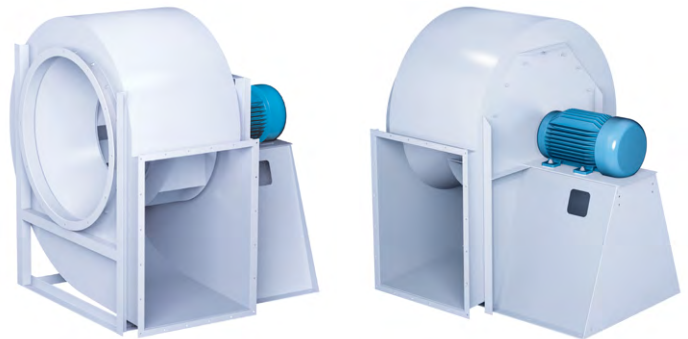
## Arrangement 3SI

Arrangement 3SI is usually direct drive. Like the Arrangement 3, the wheel is mounted between the bearings. The Arrangement 3SI utilizes an attached inlet box to locate the bearing outside of the airstream on independent bearing pedestals which allows for elevated operating temperatures and relatively clean air. The Arrangement 3SI includes a pie split housing for easy wheel removal. The motor is located by the customer off the fan assembly and direct coupled to the shaft opposite of the inlet box side.



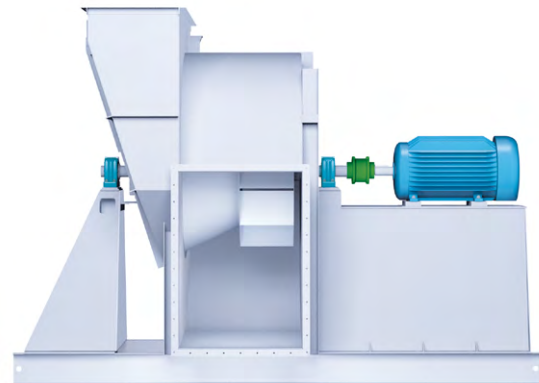
## Arrangement 4

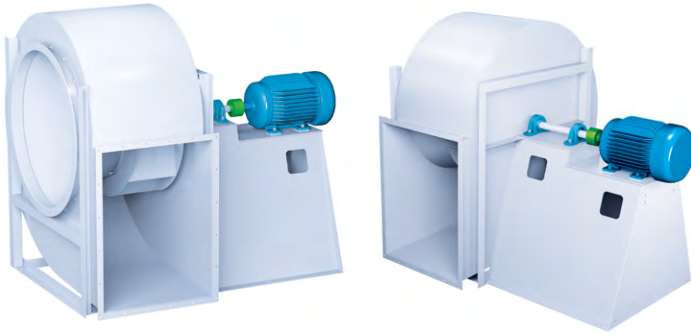
Arrangement 4 is a direct drive fan. The wheel is mounted directly to the motor shaft with the motor mounted to a pedestal. Arrangement 4 offers low maintenance since there are no fan bearings, fan shaft or drive parts to maintain. Arrangement 4 fans are typically limited up to size 365.



## Arrangement 7SI

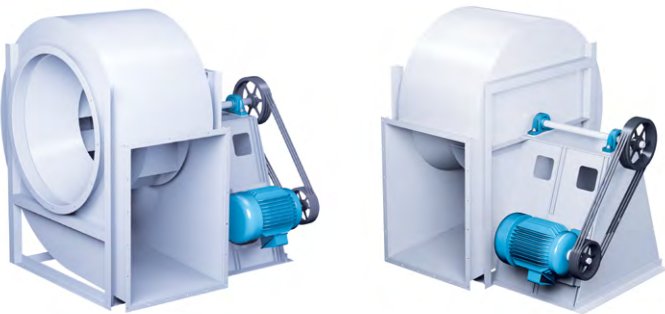
Arrangement 7SI is direct drive. Like the Arrangement 3SI, the wheel is mounted between the bearings. The Arrangement 7SI includes an integrated inlet box to locate the bearing outside of the airstream. The pedestal is designed to accommodate the motor, flexible coupling and one bearing. A pie split housing is provided for easy wheel removal. The fan assembly is then mounted on a unitary base as standard. An inertia base is an available option.





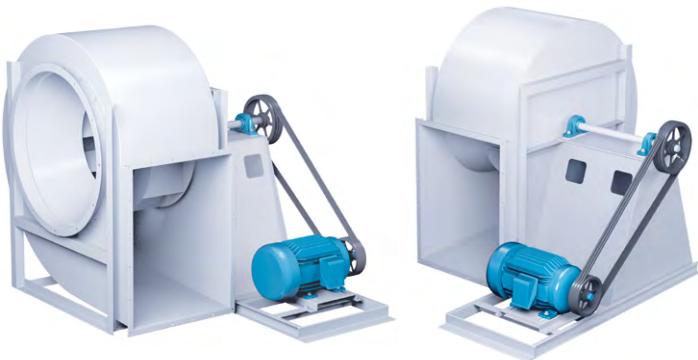
### Arrangement 8

Arrangement 8 is a modified version of Arrangement 1 used for direct drive. The Arrangement 1 bearing pedestal is extended to accommodate the motor. A flexible coupling connects the fan and motor shaft.



### Arrangement 9

Arrangement 9 is available as belt driven only. A motor slide base is mounted on the side of the bearing pedestal. This arrangement permits the unit to ship as a complete assembly with the motor and drive mounted. Typically, the motor is mounted on the left side of the pedestal for CW rotation fans and on the right side for CCW rotation fans.



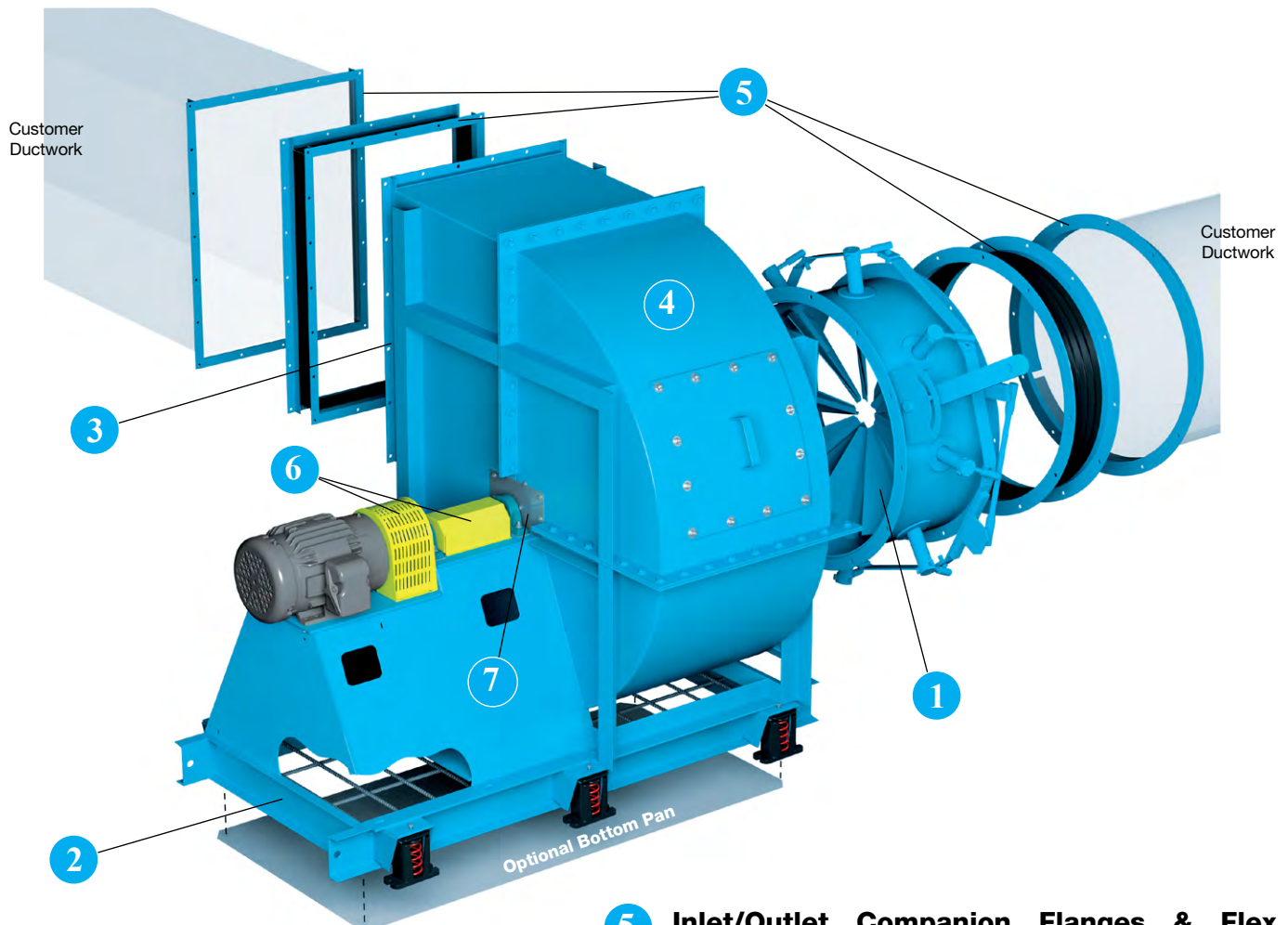
### Arrangement 9F

Arrangement 9F is available when an Arrangement 9 requires a motor which is too large to mount on the bearing pedestal. The fan frame is extended to accommodate the motor, for horizontal mounting, similar to an Arrangement 1 fan. Arrangement 9F is not suitable for mounting vibration isolators directly under the fan.



### Arrangement 9H

Arrangement 9H is available for motor mounting on the side of the bearing pedestal when horizontal motor adjustment is preferred. The pedestal is extended on one side to accommodate the motor for horizontal mounting. Typically, the motor is mounted on the left side of the pedestal for CW rotation fans and on the right side for CCW rotation fans.



**1 External Inlet Vane** For reduced flow situations with relatively clean air, inlet vane type dampers are available to maintain fan efficiency. The inlet vanes are external type attached to the inlet of the fan. Standard construction inlet vanes are suitable in applications up to 300°F. High temperature inlet vanes are also available for temperatures up to 600°F.

**2 Inertia Base** See description on page 11.

**3 Flanged Inlet/Outlet** Punched inlet flanges are available for duct mounting. Punched outlet flanges are welded to the fan outlet.

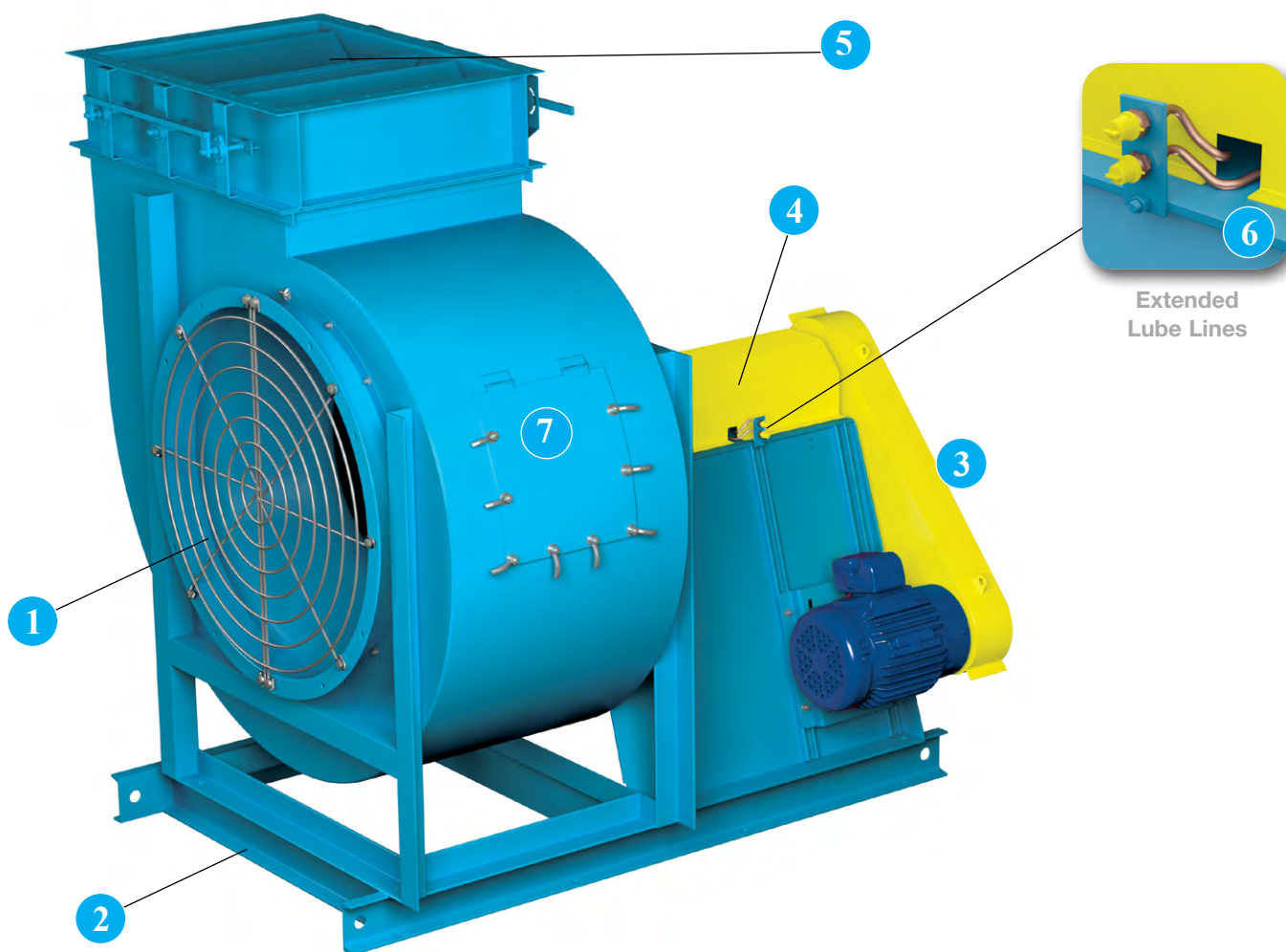
**4 Split Housing, Pie-Shaped** All sizes are designed to permit wheel removal through the fan inlet. Sizes 270 and larger are available with a horizontal, pie-shaped or 3-way split housing, which allows removal of the wheel and shaft without disconnecting ductwork.

**5 Inlet/Outlet Companion Flanges & Flex Connectors (Round & Rectangular)** Companion flanges are commonly connected to a user's duct for easy installation of flexible connections between the fan and duct. Companion flanges and flex connectors are punched to match the fan's inlet or outlet hole patterns.

**6 Coupling & Shaft Guards (Exposed Bearings)** A metal guard spanning the shaft between the bearings, allowing open access to the bearings for lubrication and vibration or temperature monitoring. A metal guard covering shaft and bearing is available. Coupling guard is designed to cover the rotating shaft and drive components.

**7 Shaft Seals** A variety of shaft seals are available to prevent contaminants in the airstream from passing through the shaft hole in the fan housing. The shaft seal is provided as standard on all fans with applications over 300°F and fans with split housings. Although shaft seals minimize air leakage, they are not a gas-tight design.





- 1 Inlet/Outlet Safety Screens** Available for mounting in the fan inlet or outlet in non-ducted applications.
- 2 Unitary Base** See description on page 11.
- 3 Belt Guard** Belt guard protects personnel from the moving drive parts. OSHA and quick access guards are available.
- 4 Shaft & Bearing Guard** Sheet metal guard cover shaft and bearings. An exposed bearing shaft guard spanning the shaft between the bearings is available to provide open access to bearings for lubrication and vibration or temperature monitoring.
- 5 Outlet Dampers** Double surface airfoil blades are available in either parallel or opposed blade design.

- 6 Lube Lines** Allow for easy lubrication of bearings on belt driven units without disassembly by extending lubrication lines from fan bearings to exterior of pedestal.
- 7 Quick Access Door** For quick wheel inspection and maintenance. Access doors are specified where examination and cleaning of the fan interior is required.

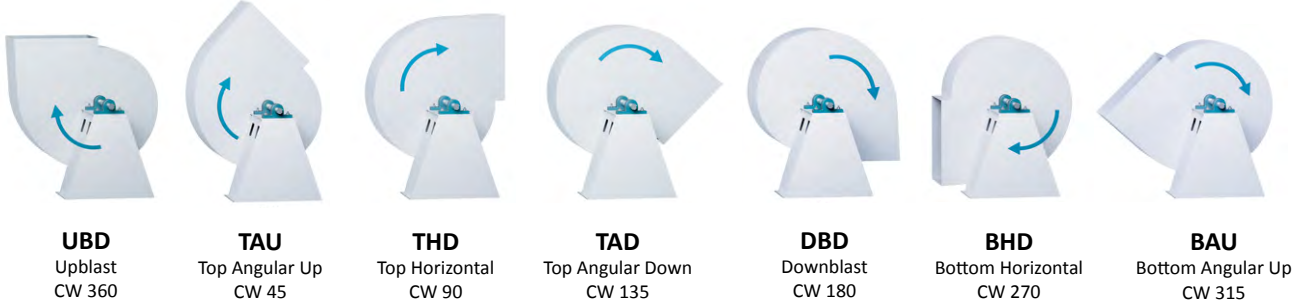
### Other Accessories Include:

- Piezometer Ring
- Drain
- Inlet Boxes
- Insulation Pins
- Bearing RTD
- Vibration Sensors
- Isolation Base
- Raised/Bolted Access Door
- Special Width & Diameter Wheels

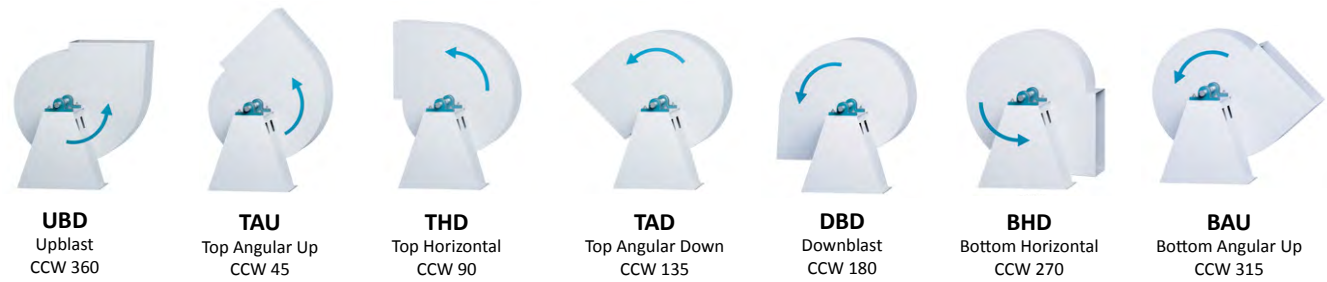
# STANDARD CONFIGURATIONS



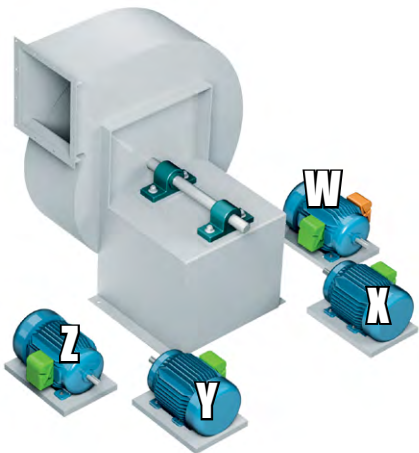
## CLOCKWISE (CW) - ROTATION & DISCHARGE (ROTATION VIEW FROM DRIVE SIDE)



## COUNTER CLOCKWISE (CCW) - ROTATION & DISCHARGE (ROTATION VIEW FROM DRIVE SIDE)



## MOTOR POSITIONS



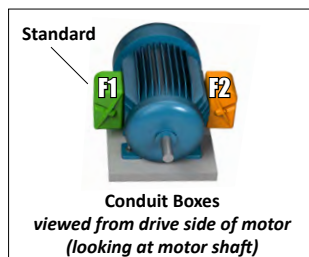
Arrangement 1



Arrangement 9



Arrangement 9F



## Unitary Bases

The structural steel base provides common support to fan, motor and drive including guards. This style of base is designed for use without isolators and requires adequate foundation integrity for proper operation.



## Isolation Bases

Isolation bases provide a common support to fan, motor and drive, including guards. Constructed with heavy duty structural channels and includes spring isolations. Not available on Arrangement 8. Flexible connectors at inlet and outlet are required.



## Inertia Bases

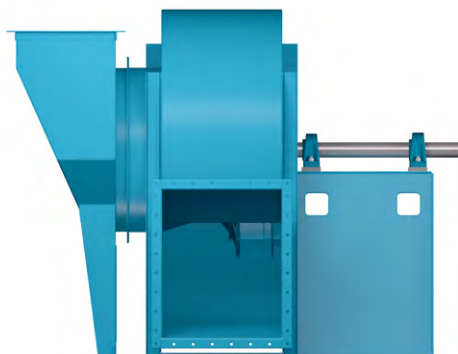
Inertia bases provide a common support to fan, motor and drive including guards and utilize heavy duty structural channel with spring isolators. Inertia bases incorporate reinforcing rods and require customer supplied concrete. Inertia bases are typically used on longer, direct drive fans to mitigate assembly deflection, maintaining proper alignment between the motor, coupling, shaft and bearings. Flexible connectors at inlet and outlet are required.



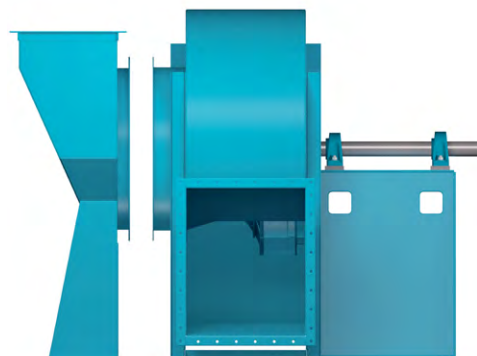
# INLET BOXES



**INTEGRAL INLET BOX  
(ATTACHED)**



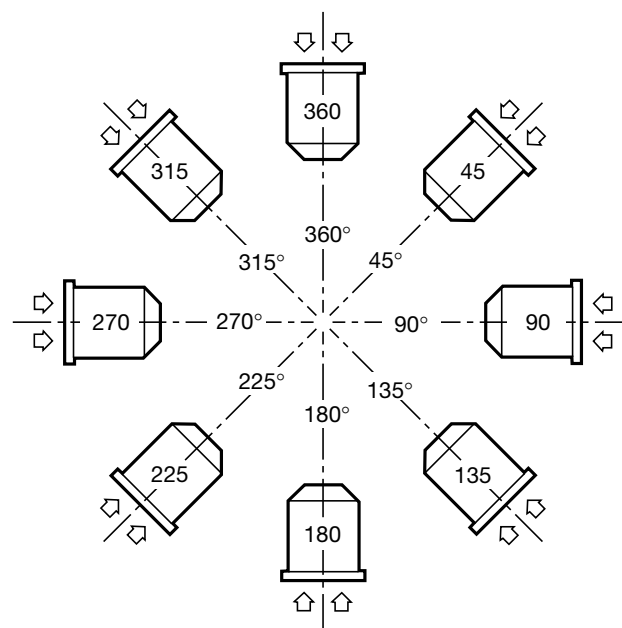
**DETACHED INLET BOX  
(BOLT ON)**



**DETACHED INLET BOX  
(FREE STANDING)**

## Inlet Box Positions for Centrifugal Fans

INLET BOX POSITIONS AND DESCRIPTIONS	
45	Angular Down Intake
90	Horizontal Right Intake
135	Angular Up Intake
180	Bottom Up Intake
225	Angular Up Intake
270	Horizontal Left Intake
315	Angular Down Intake
360	Top Down Intake



Reference line is the Top Vertical Axis through center of fan shaft.

Position of inlet box and air entry to inlet box is determined from drive side of fan.

Position of inlet box is designated in degrees clockwise from Top Vertical Axis as shown.

Positions 135° to 225° in some cases interfere seriously with floor structure.

**Performance Correction For Temperature & Altitude**

The performance tables in this catalog are based on fans handling standard air at a density of 0.075 pounds per cubic foot. This is equivalent to air at 70°F at sea level (29.92 Hg barometric pressure). Thus, when specified performance is at a density different

than standard, it must be converted to the equivalent standard conditions before entering the performance tables. The equivalent standard conditions can be calculated by using the Temperature and Altitude Density Ratios shown below.

*Temperature and Altitude Density Ratios*

AIR TEMP °F	ALTITUDE IN FEET ABOVE SEA LEVEL											
	0	1000	2000	3000	4000	5000	6000	7000	8000	9000	10000	15000
	BAROMETRIC PRESSURE IN INCHES OF MERCURY											
	29.92	28.86	27.82	26.82	25.84	24.90	23.98	23.09	22.22	21.39	20.58	16.89
-50	1.293	1.247	1.201	1.159	1.116	1.076	1.036	0.997	0.960	0.924	0.889	0.729
0	1.152	1.111	1.071	1.032	0.995	0.959	0.923	0.889	0.856	0.824	0.792	0.650
50	1.039	1.003	0.967	0.932	0.897	0.864	0.833	0.801	0.772	0.743	0.715	0.586
70	1.000	0.964	0.930	0.896	0.864	0.832	0.801	0.772	0.743	0.714	0.688	0.564
100	0.946	0.912	0.880	0.848	0.818	0.787	0.758	0.730	0.703	0.676	0.651	0.534
150	0.869	0.838	0.808	0.770	0.751	0.723	0.696	0.671	0.646	0.620	0.598	0.490
200	0.803	0.774	0.747	0.720	0.694	0.668	0.643	0.620	0.596	0.573	0.552	0.453
250	0.747	0.720	0.694	0.669	0.645	0.622	0.598	0.576	0.555	0.533	0.514	0.421
300	0.697	0.672	0.648	0.624	0.604	0.580	0.558	0.538	0.518	0.498	0.480	0.393
350	0.654	0.631	0.608	0.586	0.565	0.544	0.524	0.505	0.486	0.467	0.450	0.369
400	0.616	0.594	0.573	0.552	0.532	0.513	0.493	0.476	0.458	0.440	0.424	0.347
450	0.582	0.561	0.542	0.522	0.503	0.484	0.466	0.449	0.433	0.416	0.401	0.328
500	0.552	0.532	0.513	0.495	0.477	0.459	0.442	0.426	0.410	0.394	0.380	0.311
550	0.525	0.506	0.488	0.470	0.454	0.437	0.421	0.405	0.390	0.375	0.361	0.296
600	0.500	0.482	0.465	0.448	0.432	0.416	0.400	0.386	0.372	0.352	0.344	0.282
650	0.477	0.460	0.444	0.427	0.412	0.397	0.382	0.368	0.354	0.341	0.328	0.269
700	0.457	0.441	0.425	0.410	0.395	0.380	0.366	0.353	0.340	0.326	0.315	0.258
750	0.439	0.423	0.407	0.393	0.379	0.365	0.351	0.338	0.326	0.313	0.303	0.248
800	0.420	0.404	0.389	0.375	0.362	0.350	0.336	0.323	0.311	0.300	0.290	0.237
850	0.404	0.391	0.376	0.363	0.349	0.336	0.324	0.312	0.300	0.289	0.279	0.228
900	0.389	0.376	0.363	0.349	0.336	0.324	0.312	0.300	0.289	0.279	0.268	0.220
950	0.376	0.363	0.350	0.337	0.325	0.313	0.301	0.290	0.279	0.269	0.259	0.212
1000	0.363	0.350	0.338	0.325	0.314	0.302	0.291	0.280	0.270	0.259	0.250	0.205

**Maximum RPM, Wheel Weights & WR<sup>2</sup>**

FAN SIZE	DESIGN 14			DESIGN 17			DESIGN 22			DESIGN 26		
	MAX. RPM	WEIGHT (LB)	WR <sup>2</sup> (LB-FT <sup>2</sup> )	MAX. RPM	WEIGHT (LB)	WR <sup>2</sup> (LB-FT <sup>2</sup> )	MAX. RPM	WEIGHT (LB)	WR <sup>2</sup> (LB-FT <sup>2</sup> )	MAX. RPM	WEIGHT (LB)	WR <sup>2</sup> (LB-FT <sup>2</sup> )
165	3241	31	8	4399 *	42	12	—	—	—	—	—	—
182	2931	41	12	3977	70	21	—	—	—	—	—	—
200	2674	53	20	3629	86	32	—	—	—	—	—	—
222	2404	82	35	3262	116	52	3777	126	59	—	—	—
245	2183	97	53	2963	140	75	3560	153	85	—	—	—
270	1981	106	82	2687	149	100	3112	162	112	3678	167	146
300	1783	131	127	2420	161	129	2801	173	146	3310	194	170
330	1621	186	219	2199	201	199	2546	207	214	3009	229	242
365	1467	224	291	1987	237	295	2302	294	391	2720	273	360
402	1329	265	427	1802	317	511	2088	349	595	2467	344	561
445	1202	412	781	1631	456	804	1888	492	898	2231	493	895
490	1092	481	1136	1481	613	1399	1780	686	1636	2027	702	1669
542	986	627	1792	1338	841	2387	1549	898	2642	1831	920	2673
600	891	746	2667	1082	949	3322	1401	983	3479	1655	1319	4859
660	810	1026	4053	984	1387	5704	1273	1309	5276	1504	1597	6829
730	735	1204	5980	890	1693	8759	1180	1548	7775	1360	2028	10773
807	663	1492	9358	804	2014	12992	1041	1992	12522	1230	2611	17107
890	602	1974	14185	730	2392	19054	944	2779	22036	1116	3835	30972

\* Maximum operating speed is limited to 4000 RPM. RPM listed above 4000 is for derating due to elevated temperatures.

Shaft & Bearings Data

FAN SIZE	DESIGN BCS	ARRANGEMENT 1, 9 & 9F			ARRANGEMENT 8	
		MAX. MTR. HP	SHAFT DIA.	BRGS.	SHAFT DIA.	BRGS.
165	14	10	1.188	SDB	1.4375	HDB-C
	17	15	1.688	HDB	1.6875	HDB-C
182	14	10	1.438	HDB	1.4375	HDB-C
	17	25	1.688	RB-C	1.9375*	HDB-C*
200	14	15	1.438	HDB	1.6875	HDB-C
	17	30	1.938	RB-C	2.1875	HDB-C
222	14	15	1.688	HDB	1.6875	HDB-C
	17	40	1.938	RB-C	2.4375	HDB-C
	22	60	2.438	RB-C	2.9375*	HSHDB*
245	14	20	1.938	HDB	1.6875	HDB-C
	17	50	2.188	RB-C	2.6875	RB
	22	75	2.438	RB-C	2.9375*	HSHDB*
270	14	25	1.938	HDB	1.9375	HDB
	17	75	2.188	RB-C	2.4375	HDB-C
	22	100	2.438	RB-C	2.9375*	HSHDB*
	26	125	2.938	SRB	2.9375*	RB*
300	14	30	2.188	HDB	1.9375	HDB
	17	100	2.438	RB-C	2.6875	RB
	22	125	2.688	RB-C	2.9375	RB
	26	150	2.938	SRB	3.4375*	HSHDB*
330	14	40	2.188	HDB	2.1875	HDB
	17	100	2.438	RB-C	2.6875	RB
	22	150	2.938	RB-C	2.9375*	RB-C*
	26	150	2.938	SRB	3.4375*	RB*
365	14	50	2.438	HDB	2.1875	HDB
	17	125	2.688	RB-C	2.6875	RB
	22	150	2.938	RB-C	3.4375	RB
	26	250	3.438	SRB	3.4375*	RB*
402	14	60	2.438	RB	2.1875	HDB
	17	150	2.938	RB-C	2.9375	RB
	22	200	3.438	RB-C	3.4375	RB
	26	350	3.938	SRB	3.4375*	HSHDB*

FAN SIZE	DESIGN BCS	ARRANGEMENT 1, 9 & 9F			ARRANGEMENT 8	
		MAX. MTR. HP	SHAFT DIA.	BRGS.	SHAFT DIA.	BRGS.
445	14	75	2.688	RB	2.4375	RB
	17	200	3.438	RB-C	3.4375	RB
	22	300	3.938	RB-C	3.9375	RB
490	14	100	2.938	RB	2.4375	RB
	17	250	3.938	RB-C	3.4375	RB
	22	350	3.938	RB-C	3.9375*	RB*
542	14	125	3.438	RB	2.6875	RB
	17	300	3.938	RB-C	3.9375	RB
	22	400	4.438	RB-C	3.9375	RB
600	14	125	3.438	RB	2.6875	RB
	17	250	3.938	RB-C	3.4375	RB
	22	500	4.938	SRB	3.9375	RB
	26	500	4.938	SRB	4.4375*	RB*
660	14	150	3.938	RB	3.4375	RB
	17	300	3.938	RB-C	3.9375	RB
	22	500	4.938	SRB	4.4375*	RB*
	26	500	4.938	SRB	4.9375*	SRB*
730	14	200	3.938	RB	3.9375	RB
	17	350	4.438	RB-C	4.4375*	RB*
	22	500	4.938	SRB	4.9375*	RB*
	26	500	5.438	SRB	5.9375*	SRB*
807	14	250	4.438	SRB	3.9375	RB
	17	450	4.938	SRB	4.4375*	RB*
	22	500	4.938	SRB	5.4375*	SRB*
	26	500	5.438	SRB	5.9375*	SRB*
890	14	300	4.938	SRB	4.4375*	RB*
	17	500	4.938	SRB	4.9375*	RB*
	22	500	4.938	SRB	5.4375*	SRB*
	26	500	6.938	SRB	5.9375*	SRB*

\* Denotes bearing selections that may not be suitable for all applications. Consult Twin City Fan for application suitability.

BEARING CODES:

- SDB = Standard Duty Ball Bearing
- HDB = Heavy Duty Ball Bearing
- RB = Roller Bearing
- RB-C = Concentric Roller Bearing
- SRB = Roller Bearing with Split Pillow Block Housing
- HSRB = High-Speed Roller Bearing with Split Pillow Block Housing

Bare Fan Weights (lb)

FAN SIZE	DESIGN 14					DESIGN 17					DESIGN 22				DESIGN 26	
	ARR. 1	ARR. 4	ARR. 8	ARR. 9	ARR. 9F	ARR. 1	ARR. 4	ARR. 8	ARR. 9	ARR. 9F	ARR. 1	ARR. 8	ARR. 9	ARR. 9F	ARR. 1	ARR. 8
165	270	206	305	320	—	330	245	344	420	—	—	—	—	—	—	—
182	320	265	361	380	—	390	320	431	500	—	—	—	—	—	—	—
200	350	311	404	410	—	460	375	588	590	—	—	—	—	—	—	—
222	460	402	523	500	—	560	483	628	680	—	700	922	890	893	—	—
245	530	496	645	580	—	710	677	880	840	—	770	1113	940	943	—	—
270	610	585	761	690	—	810	—	1022	970	865	970	1411	1190	1194	1282	1667
300	810	703	914	830	—	1040	—	1277	1190	1080	1170	1463	1370	1238	1523	1980
330	990	—	1128	1050	—	1210	—	1547	1450	1309	1590	1976	1890	1672	1943	2526
365	1090	—	1413	1144	1197	1430	—	1858	1501	1573	1889	2456	1983	2078	2340	3042
402	1406	—	1825	1476	1546	1810	—	2353	1901	1991	2386	3101	2505	2624	3035	3945
445	1660	—	2152	1742	1824	2219	—	2885	2330	2441	3122	4059	3278	3434	3720	4835
490	1940	—	2514	2035	2131	2811	—	3655	2952	3093	3730	4849	3917	4103	4569	5940
542	2847	—	3675	2985	3123	3708	—	4821	3894	4079	4752	6178	4990	5227	5635	7326
600	3341	—	4312	3503	3665	4460	—	5798	4683	4906	5676	7379	5960	6244	6765	8795
660	4255	—	5517	4466	4676	5538	—	7199	5815	6091	6864	8923	7207	7551	7930	10308
730	5195	—	6735	5452	5709	7001	—	9101	7351	7701	8099	10528	8504	8908	9603	12484
807	5264	—	6835	5526	—	8739	—	11361	9176	9613	10134	13174	10641	11147	11878	15441
890	7262	—	9421	7622	—	10334	—	13434	10851	11367	12366	16075	12984	13602	15110	19643

Max. RPM	Design 14 3241	Design 17 4399*	Design 22 NA	Design 26 NA
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**165 BCS**

Outlet Area: 1.57 ft<sup>2</sup>

Wheel Diameter: 16.50"

Tip Speed (FPM): 4.32 x RPM

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		4.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1000	637	774	0.12	1031	0.26														
1200	764	827	0.14	1051	0.28														
1400	892	885	0.17	1091	0.32	1276	0.50	1457	0.72										
1600	1019	947	0.21	1141	0.37	1311	0.55	1471	0.76	1630	1.02								
1800	1146	1017	0.25	1199	0.43	1355	0.62	1503	0.83	1646	1.07	1787	1.34						
2000	1274	1094	0.31	1258	0.50	1409	0.71	1546	0.92	1678	1.16	1806	1.41	1933	1.71	2060	2.05		
2200	1401	1173	0.38	1319	0.57	1466	0.79	1596	1.02	1720	1.27	1840	1.53	1956	1.80	2071	2.11	2187	2.47
2400	1529	1254	0.45	1386	0.65	1525	0.89	1652	1.14	1768	1.39	1881	1.66	1991	1.94	2098	2.24	2204	2.56
2600	1656	1336	0.54	1459	0.75	1585	0.99	1710	1.26	1823	1.53	1929	1.80	2033	2.09	2135	2.40	2234	2.71
2800	1783	1418	0.63	1535	0.86	1649	1.11	1769	1.39	1880	1.68	1983	1.97	2081	2.26	2178	2.58	2272	2.90
3000	1911	1502	0.74	1613	0.99	1718	1.24	1829	1.53	1939	1.84	2040	2.14	2134	2.45	2226	2.77	2316	3.11
3200	2038	1587	0.86	1694	1.13	1792	1.39	1893	1.68	1998	2.00	2098	2.33	2191	2.66	2279	2.99	2365	3.33
3400	2166	1672	1.00	1775	1.28	1868	1.55	1961	1.85	2059	2.18	2157	2.52	2249	2.87	2335	3.22	2418	3.57
3600	2293	1758	1.15	1857	1.45	1946	1.74	2033	2.04	2123	2.37	2216	2.72	2307	3.09	2393	3.46	2474	3.83
3800	2420	1844	1.31	1939	1.63	2026	1.94	2108	2.25	2191	2.58	2278	2.94	2366	3.32	2452	3.72	2532	4.10
4000	2548	1931	1.49	2022	1.83	2106	2.16	2185	2.48	2263	2.82	2344	3.18	2427	3.57	2511	3.98	2591	4.39

CFM	OV	5" SP		5.5" SP		6" SP		6.5" SP		7" SP		7.5" SP		8" SP		8.5" SP		9" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2600	1656	2332	3.05	2429	3.42	2528	3.83	2625	4.26	2721	4.71								
2800	1783	2365	3.24	2456	3.59	2547	3.97	2637	4.37	2729	4.81	2819	5.28	2908	5.76				
3000	1911	2405	3.45	2492	3.80	2578	4.17	2662	4.56	2747	4.97	2831	5.41	2916	5.88	3001	6.38	3084	6.89
3200	2038	2450	3.68	2533	4.04	2615	4.42	2696	4.80	2776	5.20	2855	5.62	2934	6.06	3013	6.52	3093	7.03
3400	2166	2499	3.93	2579	4.30	2658	4.69	2736	5.08	2812	5.48	2888	5.89	2963	6.32	3037	6.76	3112	7.23
3600	2293	2553	4.20	2629	4.58	2705	4.97	2780	5.38	2854	5.79	2926	6.20	2998	6.63	3070	7.07	3140	7.52
3800	2420	2609	4.49	2683	4.88	2756	5.28	2827	5.69	2899	6.11	2969	6.54	3039	6.98	3107	7.42	3175	7.87
4000	2548	2667	4.80	2740	5.21	2810	5.61	2880	6.03	2948	6.46	3015	6.89	3083	7.34	3149	7.79	3215	8.26
4200	2675	2725	5.11	2798	5.54	2867	5.97	2935	6.40	3001	6.83	3066	7.27	3130	7.72	3195	8.19	3258	8.66
4400	2803	2784	5.43	2856	5.88	2925	6.33	2992	6.78	3056	7.23	3120	7.69	3182	8.14	3244	8.61	3305	9.09
4600	2930	2843	5.76	2915	6.24	2984	6.71	3050	7.18	3113	7.64	3175	8.11	3236	8.58	3296	9.06	3355	9.54
4800	3057	2904	6.12	2974	6.60	3042	7.09	3108	7.59	3172	8.08	3233	8.56	3293	9.05	3351	9.54	3409	10.04
5000	3185	2968	6.50	3035	6.99	3101	7.49	3166	8.00	3230	8.52	3291	9.03	3350	9.53	3408	10.04	3465	10.55
5200	3312	3034	6.90	3097	7.39	3162	7.91	3225	8.43	3288	8.96	3349	9.50	3409	10.03	3466	10.56	3522	11.09
5400	3439	3103	7.33	3163	7.83	3224	8.35	3286	8.89	3347	9.43	3408	9.98	3467	10.54	3524	11.09	3580	11.64
5600	3567	3174	7.80	3231	8.30	3289	8.82	3348	9.36	3408	9.92	3467	10.48	3525	11.05	3582	11.62	3638	12.20

CFM	OV	9.5" SP		10" SP		10.5" SP		11" SP		11.5" SP		12" SP		13" SP		14" SP		15" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3600	2293	3211	8.00	3281	8.49	3351	9.01	3421	9.55	3492	10.12	3562	10.70	3702	11.94				
3800	2420	3243	8.34	3310	8.82	3376	9.31	3442	9.82	3509	10.37	3575	10.92	3709	12.12	3842	13.40	3972	14.72
4000	2548	3280	8.72	3344	9.20	3408	9.69	3472	10.20	3535	10.71	3598	11.25	3724	12.38	3851	13.61	3977	14.91
4200	2675	3321	9.14	3384	9.63	3446	10.12	3507	10.62	3568	11.13	3628	11.65	3748	12.75	3868	13.91	3988	15.16
4400	2803	3366	9.58	3427	10.08	3487	10.58	3546	11.08	3605	11.60	3664	12.13	3779	13.20	3894	14.33		
4600	2930	3414	10.04	3473	10.55	3531	11.06	3589	11.58	3646	12.10	3703	12.63	3815	13.71	3926	14.83		
4800	3057	3466	10.54	3522	11.04	3579	11.57	3635	12.09	3690	12.62	3746	13.17	3855	14.27	3962	15.39		
5000	3185	3520	11.06	3575	11.58	3630	12.11	3684	12.64	3737	13.17	3791	13.72	3898	14.85				
5200	3312	3576	11.61	3630	12.14	3683	12.67	3736	13.22	3788	13.76	3840	14.32	3943	15.45				
5400	3439	3634	12.18	3687	12.73	3739	13.27	3790	13.82	3841	14.38	3891	14.94	3991	16.08				
5600	3567	3692	12.77	3744	13.33	3796	13.90	3846	14.46	3896	15.03	3945	15.59						
5800	3694	3750	13.36	3802	13.94	3854	14.54	3904	15.12	3953	15.70								
6000	3822	3808	13.96	3861	14.58	3912	15.19	3961	15.79										
6200	3949	3867	14.59	3919	15.22	3970	15.85												
6400	4076	3926	15.22	3977	15.87														
6600	4204	3987	15.89																

\*Maximum operating speed is limited to 4000 RPM. RPM listed above 4000 is for derating due to elevated temperatures.

Underlined numbers indicate maximum static efficiency.

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

BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 2931	Design 17 3977	Design 22 NA	Design 26 NA
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**182 BCS**

Outlet Area: 1.92 ft<sup>2</sup>

Wheel Diameter: 18.25"

Tip Speed (FPM): 4.78 x RPM

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		4.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1200	625	696	0.14																
1450	755	744	0.17	948	0.34														
1700	885	798	0.21	984	0.39	1152	0.60												
1950	1016	855	0.26	1030	0.46	1184	0.68	1329	0.93	1474	1.24								
2200	1146	919	0.31	1083	0.53	1225	0.76	1359	1.02	1488	1.30	1616	1.64						
2450	1276	990	0.38	1138	0.61	1274	0.86	1398	1.13	1518	1.42	1633	1.73	1748	2.09	1863	2.51		
2700	1406	1063	0.46	1195	0.70	1328	0.98	1445	1.26	1556	1.55	1664	1.87	1769	2.21	1873	2.59	1978	3.02
2950	1536	1138	0.56	1257	0.80	1382	1.10	1497	1.40	1601	1.71	1703	2.04	1802	2.38	1899	2.75	1994	3.14
3200	1667	1213	0.66	1324	0.93	1438	1.23	1550	1.55	1652	1.88	1748	2.22	1842	2.58	1933	2.95	2022	3.34
3450	1797	1290	0.79	1395	1.07	1497	1.37	1605	1.72	1705	2.07	1798	2.43	1886	2.79	1973	3.18	2058	3.57
3700	1927	1367	0.92	1468	1.23	1561	1.53	1661	1.89	1759	2.27	1850	2.65	1936	3.03	2018	3.42	2099	3.83
3950	2057	1446	1.08	1542	1.40	1630	1.73	1720	2.08	1814	2.48	1904	2.88	1988	3.29	2068	3.70	2145	4.11
4200	2188	1525	1.25	1617	1.60	1700	1.94	1783	2.30	1871	2.70	1959	3.13	2042	3.56	2120	3.99	2195	4.42
4450	2318	1604	1.44	1692	1.81	1773	2.17	1850	2.54	1931	2.94	2014	3.38	2096	3.84	2174	4.30	2247	4.75
4700	2448	1684	1.65	1769	2.04	1846	2.42	1920	2.81	1994	3.21	2072	3.66	2151	4.13	2228	4.61	2301	5.10
4950	2578	1764	1.88	1846	2.30	1921	2.70	1992	3.10	2061	3.51	2133	3.96	2208	4.44	2282	4.94	2355	5.45

CFM	OV	5" SP		5.5" SP		6" SP		6.5" SP		7" SP		7.5" SP		8" SP		8.5" SP		9" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3450	1797	2142	3.99	2224	4.42	2305	4.87	2386	5.36	2468	5.90	2550	6.47	2630	7.06				
3700	1927	<u>2179</u>	<u>4.25</u>	<u>2257</u>	<u>4.69</u>	2334	5.14	2411	5.61	2486	6.11	2562	6.64	2638	7.21	2714	7.82	2789	8.45
3950	2057	<u>2221</u>	<u>4.55</u>	<u>2296</u>	<u>4.99</u>	<u>2370</u>	<u>5.45</u>	2442	5.92	2514	6.41	2585	6.91	2656	7.45	2727	8.02	2798	8.62
4200	2188	<u>2267</u>	<u>4.86</u>	<u>2339</u>	<u>5.32</u>	<u>2410</u>	<u>5.79</u>	<u>2480</u>	<u>6.27</u>	<u>2549</u>	<u>6.77</u>	2616	7.26	2684	7.79	2751	8.34	2817	8.90
4450	2318	2317	5.20	2386	5.67	2454	6.15	<u>2521</u>	<u>6.65</u>	<u>2587</u>	<u>7.15</u>	<u>2653</u>	<u>7.67</u>	<u>2717</u>	<u>8.18</u>	2781	8.72	2845	9.28
4700	2448	2370	5.57	2436	6.05	2502	6.55	2566	7.05	<u>2630</u>	<u>7.56</u>	<u>2693</u>	<u>8.09</u>	<u>2755</u>	<u>8.62</u>	<u>2817</u>	<u>9.17</u>	<u>2878</u>	<u>9.73</u>
4950	2578	2423	5.95	2489	6.46	2553	6.97	2615	7.48	2676	8.00	<u>2736</u>	<u>8.53</u>	<u>2797</u>	<u>9.09</u>	<u>2857</u>	<u>9.65</u>	2916	10.22
5200	2708	2477	6.35	2543	6.88	2605	7.41	2666	7.94	2725	8.47	2784	9.02	<u>2842</u>	<u>9.58</u>	<u>2899</u>	<u>10.14</u>	<u>2956</u>	<u>10.72</u>
5450	2839	2532	6.76	2597	7.32	2659	7.87	2719	8.43	2777	8.98	2834	9.54	2890	10.11	2945	10.68	<u>3000</u>	<u>11.27</u>
5700	2969	2587	7.18	2651	7.76	2713	8.35	2773	8.93	2830	9.50	2886	10.08	2941	10.67	2995	11.26	3048	11.86
5950	3099	2644	7.63	2706	8.23	2767	8.83	2827	9.45	2884	10.05	2940	10.66	2993	11.25	3046	11.86	3098	12.47
6200	3229	2703	8.11	2763	8.72	2822	9.34	2881	9.97	<u>2938</u>	<u>10.60</u>	<u>2993</u>	<u>11.23</u>	3047	11.87	3099	12.50	3150	13.13
6450	3359	2765	8.62	2822	9.24	2879	9.87	2936	10.52	2992	11.17	3047	11.83	3101	12.50	3152	13.14	3203	13.80
6700	3490	2830	9.19	2883	9.80	2937	10.43	2992	11.09	3047	11.76	3101	12.44	3155	13.13	3206	13.81	3257	14.50
6950	3620	2896	9.78	2947	10.40	2998	11.03	3051	11.70	3103	12.37	3156	13.07	3209	13.78	3260	14.49	3310	15.20
7200	3750	<u>2965</u>	<u>10.43</u>	3013	11.04	3061	11.67	3111	12.34	3162	13.03	3213	13.74	3264	14.46	3314	15.18	3364	15.92

CFM	OV	9.5" SP		10" SP		11" SP		12" SP		13" SP		14" SP		15" SP		16" SP		17" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5700	2969	3100	12.45	3153	13.08	3257	14.35	3359	15.64	3460	16.98	3559	18.34	3657	19.76	3755	21.26	3852	22.82
5950	3099	3149	13.09	3200	13.72	3300	15.00	3399	16.32	<u>3497</u>	<u>17.67</u>	3594	19.06	3689	20.48	3783	21.94	3877	23.48
6200	3229	3200	13.76	3249	14.39	3346	15.69	3442	17.03	3538	18.42	<u>3631</u>	<u>19.81</u>	<u>3724</u>	<u>21.25</u>	3815	22.71	3906	24.23
6450	3359	<u>3252</u>	<u>14.45</u>	3300	15.10	3395	16.43	3488	17.78	3580	19.17	<u>3672</u>	<u>20.62</u>	<u>3762</u>	<u>22.07</u>	<u>3851</u>	<u>23.55</u>	3939	25.06
6700	3490	3305	15.17	3353	15.85	3446	17.21	3537	18.59	3626	19.99	3715	21.44	<u>3803</u>	<u>22.93</u>	<u>3890</u>	<u>24.44</u>	<u>3975</u>	<u>25.96</u>
6950	3620	3359	15.91	3406	16.60	3498	18.01	3587	19.42	3675	20.86	3760	22.30	<u>3846</u>	<u>23.81</u>	<u>3930</u>	<u>25.34</u>		
7200	3750	3413	16.66	3460	17.39	3552	18.85	3639	20.29	3725	21.76	3809	23.24	3891	24.74	<u>3974</u>	<u>26.30</u>		
7450	3880	<u>3467</u>	<u>17.43</u>	3514	18.18	3605	19.69	3692	21.19	3777	22.70	3859	24.21	3940	25.74				
7700	4010	3521	18.21	3568	18.99	3659	20.56	3746	22.12	3829	23.65	3910	25.20						
7950	4141	3577	19.03	3622	19.82	3713	21.44	3800	23.06	3883	24.66	3963	26.25						
8200	4271	3634	19.88	3678	20.69	3767	22.34	3853	24.00	3936	25.66								
8450	4401	<u>3692</u>	<u>20.77</u>	3735	21.59	3822	23.27	3907	24.97										
8700	4531	3753	21.72	3794	22.54	3878	24.24	<u>3961</u>	<u>25.96</u>										
8950	4661	3815	22.71	3855	23.54	3936	25.25												
9200	4792	3879	23.76	3917	24.59														
9450	4922	3945	24.88																

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.



Max. RPM	Design 14 2674	Design 17 3629	Design 22 NA	Design 26 NA
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**200 BCS**

Outlet Area: 2.30 ft<sup>2</sup>

Wheel Diameter: 20.00"

Tip Speed (FPM): 5.24 x RPM

CFM	OV	0.5" SP		1" SP		1.5" SP		2" SP		2.5" SP		3" SP		3.5" SP		4" SP		4.5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1500	652	642	0.17	851	0.38														
1800	783	688	0.21	870	0.42	1042	0.69												
2100	913	738	0.26	905	0.48	1056	0.74	1203	1.07										
2400	1043	791	0.32	949	0.56	1087	0.83	1217	1.13	1346	1.50								
2700	1174	851	0.39	998	0.66	1126	0.94	1246	1.25	1362	1.59	1476	1.99						
3000	1304	916	0.48	1048	0.75	1172	1.06	1284	1.39	1391	1.73	1495	2.11	1598	2.54	1701	3.03		
3300	1435	983	0.58	1100	0.86	1221	1.20	1327	1.54	1428	1.90	1525	2.28	1620	2.69	1713	3.14	1807	3.65
3600	1565	1051	0.69	1158	0.99	1270	1.34	1375	1.72	1470	2.09	1562	2.49	1651	2.90	1738	3.34	1824	3.82
3900	1696	1120	0.82	1220	1.14	1322	1.50	1424	1.90	1517	2.31	1603	2.71	1688	3.14	1770	3.59	1851	4.06
4200	1826	1190	0.97	1285	1.32	1377	1.68	1474	2.10	1565	2.53	1649	2.96	1729	3.40	1808	3.87	1885	4.35
4500	1957	1261	1.14	1352	1.51	1436	1.88	1525	2.31	1615	2.77	1698	3.23	1775	3.69	1850	4.17	1923	4.66
4800	2087	1333	1.33	1420	1.73	1499	2.12	1580	2.55	1665	3.02	1747	3.52	1823	4.01	1895	4.50	1965	5.00
5100	2217	1405	1.54	1488	1.96	1564	2.38	1638	2.81	1717	3.29	1797	3.81	1873	4.34	1944	4.86	2011	5.38
5400	2348	1477	1.77	1557	2.22	1630	2.66	1700	3.11	1772	3.59	1847	4.12	1922	4.67	1993	5.23	2059	5.78
5700	2478	1550	2.03	1627	2.51	1697	2.97	1764	3.44	1831	3.92	1901	4.46	1972	5.02	2042	5.61	2108	6.19
6000	2609	1623	2.31	1697	2.82	1766	3.31	1829	3.79	1892	4.29	1957	4.82	2024	5.40	2092	6.01	2158	6.63

CFM	OV	5" SP		5.5" SP		6" SP		6.5" SP		7" SP		7.5" SP		8" SP		8.5" SP		9" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4200	1826	1960	4.84	2035	5.36	2108	5.91	2181	6.49	2254	7.12	2328	7.80	2401	8.52				
4500	1957	1995	5.17	2066	5.70	2136	6.24	2205	6.81	2273	7.40	2341	8.03	2409	8.70	2478	9.43	2546	10.18
4800	2087	2034	5.53	2102	6.07	2169	6.62	2235	7.19	2300	7.77	2364	8.38	2428	9.02	2492	9.70	2556	10.41
5100	2217	2077	5.91	2142	6.46	2206	7.03	2270	7.62	2332	8.21	2393	8.81	2454	9.44	2515	10.09	2575	10.77
5400	2348	2123	6.33	2186	6.90	2247	7.47	2308	8.07	2368	8.68	2427	9.29	2486	9.93	2544	10.58	2601	11.24
5700	2478	2171	6.77	2232	7.36	2291	7.95	2349	8.55	2407	9.17	2464	9.81	2521	10.46	2577	11.12	2632	11.78
6000	2609	2220	7.23	2280	7.85	2338	8.46	2394	9.08	2450	9.71	2505	10.36	2559	11.01	2613	11.69	2667	12.38
6300	2739	2270	7.72	2329	8.36	2386	9.00	2442	9.65	2495	10.28	2548	10.94	2601	11.62	2653	12.30	2705	13.00
6600	2870	2319	8.20	2379	8.89	2435	9.55	2490	10.23	2543	10.90	2595	11.58	2645	12.25	2696	12.96	2745	13.65
6900	3000	2370	8.72	2428	9.42	2485	10.13	2539	10.83	2592	11.54	2642	12.23	2692	12.94	2741	13.65	2789	14.36
7200	3130	2422	9.26	2478	9.98	2534	10.71	2588	11.45	2641	12.19	2691	12.92	2740	13.65	2788	14.38	2835	15.11
7500	3261	2477	9.85	2530	10.57	2584	11.32	2638	12.09	2690	12.86	2740	13.62	2789	14.39	2836	15.14	2883	15.91
7800	3391	2534	10.48	2585	11.21	2636	11.97	2688	12.75	2739	13.54	2789	14.33	2838	15.13	2885	15.92	2931	16.72
8100	3522	2593	11.16	2641	11.89	2690	12.65	2740	13.45	2789	14.25	2839	15.08	2887	15.90	2935	16.74	2980	17.55
8400	3652	2654	11.88	2699	12.61	2746	13.39	2793	14.18	2841	15.00	2889	15.84	2937	16.70	2984	17.56	3029	18.40
8700	3783	2717	12.67	2760	13.40	2804	14.17	2849	14.97	2895	15.80	2941	16.64	2987	17.51	3033	18.39	3078	19.27

CFM	OV	9.5" SP		10" SP		11" SP		12" SP		13" SP		14" SP		15" SP		16" SP		17" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6600	2870	2795	14.38	2844	15.11	2942	16.62	3037	18.15	3131	19.73	3224	21.38	3317	23.12	3409	24.95	3502	26.92
6900	3000	2837	15.10	2884	15.83	2979	17.37	3072	18.94	3163	20.53	3253	22.18	3342	23.88	3431	25.68	3519	27.54
7200	3130	2882	15.87	2928	16.62	3018	18.15	3109	19.76	3198	21.39	3285	23.04	3372	24.76	3457	26.51	3542	28.34
7500	3261	2928	16.66	2973	17.44	3061	19.00	3148	20.61	3235	22.28	3320	23.97	3404	25.69	3487	27.45	3569	29.26
7800	3391	2976	17.51	3020	18.30	3106	19.89	3191	21.53	3274	23.20	3357	24.92	3439	26.68	3520	28.47	3600	30.29
8100	3522	3025	18.38	3068	19.19	3153	20.83	3235	22.49	3316	24.18	3397	25.93	3477	27.72	3556	29.54		
8400	3652	3074	19.27	3117	20.11	3201	21.81	3282	23.51	3361	25.23	3439	26.99	3516	28.78	3593	30.63		
8700	3783	3123	20.17	3166	21.05	3249	22.80	3329	24.55	3407	26.32	3483	28.10	3559	29.93				
9000	3913	3172	21.09	3215	22.00	3298	23.83	3378	25.65	3455	27.47	3529	29.27	3603	31.13				
9300	4043	3222	22.04	3264	22.97	3347	24.87	3427	26.76	3503	28.63	3577	30.50						
9600	4174	3273	23.03	3314	23.98	3396	25.92	3476	27.89	3551	29.81	3625	31.75						
9900	4304	3325	24.06	3365	25.02	3446	27.02	3524	29.02	3600	31.02								
10200	4435	3379	25.15	3418	26.13	3496	28.14	3574	30.21										
10500	4565	3434	26.28	3472	27.28	3547	29.30	3623	31.39										
10800	4696	3491	27.49	3527	28.48	3600	30.52												
11100	4826	3550	28.77	3585	29.77														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 2404	Design 17 3262	Design 22 3777	Design 26 NA
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**222 BCS**

Outlet Area: 2.85 ft<sup>2</sup>

Wheel Diameter: 22.25"

Tip Speed (FPM): 5.83 x RPM

CFM	OV	1" SP		2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1800	632	731	0.41																
2200	772	753	0.49																
2600	912	<u>783</u>	<u>0.57</u>	1036	1.19														
3000	1053	822	0.67	1057	1.33														
3400	1193	868	0.78	<u>1084</u>	<u>1.49</u>	1279	2.30												
3800	1333	917	0.91	<u>1118</u>	<u>1.66</u>	1302	2.51	1469	3.44										
4200	1474	970	1.06	1158	1.86	<u>1330</u>	<u>2.75</u>	1491	3.73	1640	4.77								
4600	1614	1025	1.23	1202	2.08	<u>1364</u>	<u>3.02</u>	1517	4.04	1661	5.12	1796	6.27						
5000	1754	1082	1.42	1249	2.32	1402	3.30	<u>1547</u>	<u>4.37</u>	1685	5.49	1816	6.68	1940	7.92				
5400	1895	1140	1.63	1300	2.59	1445	3.62	<u>1582</u>	<u>4.72</u>	<u>1714</u>	<u>5.90</u>	1840	7.12	1961	8.41	2076	9.75	2186	11.13
5800	2035	1200	1.86	1352	2.89	1490	3.96	1621	5.11	<u>1746</u>	<u>6.32</u>	<u>1868</u>	<u>7.60</u>	1984	8.92	2097	10.31	2204	11.73
6200	2175	1261	2.12	1406	3.21	1538	4.33	1664	5.53	<u>1783</u>	<u>6.78</u>	<u>1899</u>	<u>8.11</u>	<u>2012</u>	<u>9.48</u>	2120	10.89	2225	12.36
6600	2316	1324	2.42	1462	3.56	1589	4.74	1709	5.98	1823	7.27	<u>1934</u>	<u>8.64</u>	<u>2042</u>	<u>10.06</u>	<u>2147</u>	<u>11.52</u>	2250	13.04
7000	2456	1388	2.74	1518	3.93	1641	5.18	1756	6.46	1866	7.80	1973	9.22	<u>2076</u>	<u>10.67</u>	<u>2178</u>	<u>12.19</u>	<u>2277</u>	<u>13.75</u>
7400	2596	1453	3.10	1576	4.33	1695	5.65	1805	6.98	1911	8.37	2014	9.82	<u>2114</u>	<u>11.33</u>	<u>2211</u>	<u>12.88</u>	<u>2307</u>	<u>14.49</u>
7800	2737	1518	3.50	1635	4.77	1750	6.15	1857	7.55	1959	8.98	2058	10.48	2154	12.02	2248	13.62	2340	15.27

CFM	OV	10" SP		11" SP		12" SP		13" SP		14" SP		15" SP		16" SP		17" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
5800	2035	2308	13.21																
6200	2175	2327	13.89	2425	15.45	2520	17.04												
6600	2316	2348	14.58	2444	16.19	2537	17.83	2628	19.52										
7000	2456	2373	15.34	2467	16.98	2557	18.65	2646	20.38	2732	22.13	2817	23.95						
7400	2596	2400	16.12	2491	17.79	2580	19.51	2667	21.29	2751	23.08	2834	24.92	2915	26.80	2994	28.70		
7800	2737	2430	16.95	2519	18.68	2605	20.42	2690	22.22	2773	24.07	2854	25.95	2933	27.86	3011	29.81	3087	31.79
8200	2877	2463	17.81	<u>2549</u>	<u>19.58</u>	2633	21.38	2716	23.23	2797	25.10	2877	27.03	2954	28.97	3030	30.95	3105	32.98
8600	3018	2499	18.71	<u>2582</u>	<u>20.53</u>	<u>2664</u>	<u>22.39</u>	<u>2744</u>	<u>24.26</u>	2823	26.18	2901	28.14	2977	30.12	3052	32.16	3125	34.21
9000	3158	2538	19.68	2618	21.53	<u>2697</u>	<u>23.42</u>	<u>2775</u>	<u>25.36</u>	<u>2852</u>	<u>27.32</u>	2928	29.32	3002	31.33	3076	33.41	3148	35.51
9400	3298	2578	20.66	2656	22.56	2733	24.51	<u>2808</u>	<u>26.47</u>	<u>2883</u>	<u>28.49</u>	<u>2957</u>	<u>30.53</u>	<u>3030</u>	<u>32.61</u>	<u>3101</u>	<u>34.69</u>	3172	36.83
9800	3439	2621	21.72	2696	23.64	2771	25.64	<u>2844</u>	<u>27.65</u>	<u>2917</u>	<u>29.72</u>	<u>2988</u>	<u>31.78</u>	<u>3059</u>	<u>33.90</u>	<u>3129</u>	<u>36.04</u>	<u>3198</u>	<u>38.21</u>
10200	3579	2665	22.81	2739	24.81	2811	26.82	2882	28.87	<u>2953</u>	<u>30.98</u>	<u>3022</u>	<u>33.09</u>	<u>3091</u>	<u>35.26</u>	<u>3160</u>	<u>37.48</u>	<u>3227</u>	<u>39.68</u>
10600	3719	2710	23.95	2782	25.98	2853	28.06	2922	30.15	2991	32.30	<u>3059</u>	<u>34.48</u>	<u>3126</u>	<u>36.69</u>	<u>3192</u>	<u>38.91</u>	<u>3258</u>	<u>41.19</u>
11000	3860	2758	25.18	2827	27.22	2896	29.34	2964	31.49	3031	33.67	3097	35.89	<u>3162</u>	<u>38.13</u>	<u>3227</u>	<u>40.42</u>	<u>3291</u>	<u>42.74</u>
11400	4000	2806	26.43	2874	28.54	2941	30.69	3007	32.87	3073	35.12	3137	37.36	3201	39.67	<u>3264</u>	<u>41.99</u>	<u>3326</u>	<u>44.33</u>
11800	4140	2856	27.77	2922	29.91	2987	32.09	3052	34.33	3116	36.61	3179	38.91	3241	41.24	<b>3302</b>	<b>43.58</b>	<b>3363</b>	<b>45.99</b>

CFM	OV	19" SP		20" SP		21" SP		22" SP		23" SP		24" SP		25" SP		26" SP		27" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
9000	3158	3219	37.65	<b>3288</b>	<b>39.79</b>	<b>3356</b>	<b>41.97</b>	<b>3424</b>	<b>44.22</b>	<b>3490</b>	<b>46.45</b>	<b>3556</b>	<b>48.75</b>	<b>3620</b>	<b>51.03</b>				
9400	3298	3242	39.02	<b>3310</b>	<b>41.20</b>	<b>3377</b>	<b>43.43</b>	<b>3443</b>	<b>45.68</b>	<b>3509</b>	<b>48.00</b>	<b>3573</b>	<b>50.30</b>	<b>3636</b>	<b>52.63</b>	<b>3699</b>	<b>55.01</b>	<b>3761</b>	<b>57.41</b>
9800	3439	<b>3267</b>	<b>40.45</b>	<b>3334</b>	<b>42.68</b>	<b>3400</b>	<b>44.94</b>	<b>3465</b>	<b>47.23</b>	<b>3529</b>	<b>49.56</b>	<b>3592</b>	<b>51.90</b>	<b>3655</b>	<b>54.31</b>	<b>3716</b>	<b>56.69</b>	<b>3777</b>	<b>59.13</b>
10200	3579	<b>3294</b>	<b>41.94</b>	<b>3359</b>	<b>44.18</b>	<b>3424</b>	<b>46.48</b>	<b>3488</b>	<b>48.81</b>	<b>3552</b>	<b>51.21</b>	<b>3614</b>	<b>53.60</b>	<b>3675</b>	<b>56.00</b>	<b>3736</b>	<b>58.47</b>		
10600	3719	<b>3323</b>	<b>43.48</b>	<b>3387</b>	<b>45.78</b>	<b>3451</b>	<b>48.14</b>	<b>3514</b>	<b>50.51</b>	<b>3576</b>	<b>52.91</b>	<b>3637</b>	<b>55.32</b>	<b>3697</b>	<b>57.76</b>	<b>3757</b>	<b>60.26</b>		
11000	3860	<b>3354</b>	<b>45.06</b>	<b>3417</b>	<b>47.43</b>	<b>3479</b>	<b>49.80</b>	<b>3541</b>	<b>52.23</b>	<b>3602</b>	<b>54.68</b>	<b>3662</b>	<b>57.13</b>	<b>3721</b>	<b>59.60</b>				
11400	4000	<b>3388</b>	<b>46.72</b>	<b>3449</b>	<b>49.12</b>	<b>3509</b>	<b>51.52</b>	<b>3570</b>	<b>54.01</b>	<b>3629</b>	<b>56.47</b>	<b>3688</b>	<b>58.97</b>	<b>3747</b>	<b>61.52</b>				
11800	4140	<b>3423</b>	<b>48.40</b>	<b>3483</b>	<b>50.87</b>	<b>3542</b>	<b>53.34</b>	<b>3601</b>	<b>55.85</b>	<b>3659</b>	<b>58.36</b>	<b>3717</b>	<b>60.92</b>	<b>3774</b>	<b>63.48</b>				
12200	4281	<b>3460</b>	<b>50.15</b>	<b>3519</b>	<b>52.67</b>	<b>3576</b>	<b>55.16</b>	<b>3634</b>	<b>57.74</b>	<b>3691</b>	<b>60.31</b>	<b>3747</b>	<b>62.88</b>						
12600	4421	<b>3499</b>	<b>51.97</b>	<b>3556</b>	<b>54.51</b>	<b>3613</b>	<b>57.09</b>	<b>3669</b>	<b>59.69</b>	<b>3724</b>	<b>62.27</b>								
13000	4561	<b>3540</b>	<b>53.88</b>	<b>3596</b>	<b>56.47</b>	<b>3651</b>	<b>59.07</b>	<b>3705</b>	<b>61.66</b>	<b>3760</b>	<b>64.35</b>								
13400	4702	<b>3582</b>	<b>55.85</b>	<b>3636</b>	<b>58.44</b>	<b>3690</b>	<b>61.08</b>	<b>3744</b>	<b>63.78</b>										
13800	4842	<b>3625</b>	<b>57.87</b>	<b>3678</b>	<b>60.51</b>	<b>3731</b>	<b>63.20</b>												
14200	4982	<b>3669</b>	<b>59.96</b>	<b>3721</b>	<b>62.64</b>	<b>3773</b>	<b>65.38</b>												
14600	5123	<b>3714</b>	<b>62.11</b>	<b>3766</b>	<b>64.89</b>														
15000	5263	<b>3761</b>	<b>64.39</b>																

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 2183	Design 17 2963	Design 22 3560	Design 26 NA
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**245 BCS**

Outlet Area: 3.45 ft<sup>2</sup>

Wheel Diameter: 24.50"

Tip Speed (FPM): 6.41 x RPM

CFM	OV	2" SP		3" SP		4" SP		5" SP		6" SP		7" SP		8" SP		9" SP		10" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3500	1014	954	1.56																
4000	1159	978	1.75	1157	2.72														
4500	1304	1008	1.97	1177	2.98														
5000	1449	1044	2.21	1203	3.29	1331	4.11												
5500	1594	1085	2.48	1233	3.60	1373	4.82	1505	6.14	1628	7.52								
6000	1739	1129	2.78	1269	3.96	<u>1401</u>	<u>5.24</u>	1527	6.59	1647	8.04	1760	9.54						
6500	1884	1176	3.11	1308	4.34	1434	5.69	<u>1554</u>	<u>7.10</u>	1669	8.58	1779	10.14	1883	11.75	1984	13.43		
7000	2029	1225	3.48	1351	4.78	1470	6.16	<u>1584</u>	<u>7.64</u>	<u>1694</u>	<u>9.17</u>	1801	10.78	1903	12.46	2001	14.19	2095	15.96
7500	2174	1275	3.87	1395	5.23	1509	6.68	1618	8.20	<u>1724</u>	<u>9.81</u>	<u>1826</u>	<u>11.47</u>	1925	13.19	2020	14.96	2112	16.79
8000	2319	1327	4.31	1443	5.75	1551	7.24	1656	8.83	<u>1757</u>	<u>10.49</u>	<u>1854</u>	<u>12.19</u>	<u>1950</u>	<u>13.97</u>	2043	15.80	2133	17.69
8500	2464	1380	4.77	1492	6.30	1596	7.85	1696	9.49	1793	11.20	<u>1887</u>	<u>12.97</u>	<u>1978</u>	<u>14.79</u>	<u>2068</u>	<u>16.68</u>	2156	18.63
9000	2609	1434	5.28	1542	6.88	1642	8.50	1738	10.19	1831	11.95	1922	13.79	<u>2010</u>	<u>15.67</u>	<u>2096</u>	<u>17.60</u>	<u>2181</u>	<u>19.60</u>
9500	2754	1490	5.84	1593	7.51	1690	9.21	1783	10.96	1872	12.76	1960	14.66	<u>2045</u>	<u>16.60</u>	<u>2128</u>	<u>18.60</u>	<u>2209</u>	<u>20.63</u>
10000	2899	1546	6.44	1646	8.19	1740	9.97	1829	11.77	1915	13.63	2000	15.58	2082	17.58	<u>2162</u>	<u>19.62</u>	<u>2241</u>	<u>21.73</u>
10500	3043	1603	7.09	1699	8.90	1790	10.76	1877	12.64	1960	14.56	2041	16.54	2121	18.60	2199	20.72	<u>2275</u>	<u>22.87</u>
11000	3188	1662	7.80	1753	9.66	1842	11.61	1926	13.57	2006	15.53	2085	17.58	2162	19.69	2237	21.84	2311	24.06

CFM	OV	11" SP		12" SP		13" SP		14" SP		15" SP		16" SP		17" SP		18" SP		19" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7500	2174	2202	18.70	2288	20.63														
8000	2319	2220	19.64	2304	21.61	2386	23.65												
8500	2464	2241	20.62	2323	22.65	2403	24.73	2482	26.88	2558	29.04								
9000	2609	2264	21.65	2345	23.74	2423	25.87	2500	28.07	2575	30.30	2648	32.56	2720	34.88				
9500	2754	2290	22.74	2368	24.86	2445	27.05	2520	29.28	2594	31.59	2666	33.92	2736	36.27	2805	38.67	2873	41.12
10000	2899	2318	23.87	2395	26.09	2469	28.29	2543	30.59	2615	32.92	2685	35.28	2754	37.70	2822	40.17	2888	42.64
10500	3043	2350	25.08	<u>2423</u>	<u>27.31</u>	2496	29.61	2568	31.96	2638	34.32	2707	36.74	2775	39.22	2841	41.71	2906	44.24
11000	3188	2384	26.34	<u>2455</u>	<u>28.63</u>	<u>2525</u>	<u>30.97</u>	<u>2595</u>	<u>33.38</u>	2664	35.82	2731	38.27	2797	40.76	2863	43.35	2927	45.94
11500	3333	2420	27.64	2489	30.00	<u>2557</u>	<u>32.40</u>	<u>2625</u>	<u>34.87</u>	2691	37.33	<u>2757</u>	<u>39.86</u>	2822	42.43	2886	45.03	2949	47.67
12000	3478	2458	29.01	2525	31.42	2591	33.87	<u>2657</u>	<u>36.40</u>	<u>2721</u>	<u>38.92</u>	<u>2785</u>	<u>41.50</u>	<u>2848</u>	<u>44.11</u>	<u>2911</u>	<u>46.78</u>	<u>2972</u>	<u>49.44</u>
12500	3623	2498	30.46	2563	32.92	2628	35.45	2691	37.99	<u>2754</u>	<u>40.60</u>	<u>2816</u>	<u>43.24</u>	<u>2877</u>	<u>45.89</u>	<u>2938</u>	<u>48.60</u>	<u>2998</u>	<u>51.33</u>
13000	3768	2539	31.96	2603	34.50	2665	37.03	2727	39.65	<u>2788</u>	<u>42.30</u>	<u>2849</u>	<u>45.02</u>	<u>2908</u>	<u>47.72</u>	<u>2967</u>	<u>50.47</u>	<u>3026</u>	<u>53.28</u>
13500	3913	2582	33.55	2644	36.13	2705	38.74	2765	41.40	2825	44.12	<u>2883</u>	<u>46.83</u>	<u>2941</u>	<u>49.60</u>	<u>2999</u>	<u>52.45</u>	<u>3056</u>	<u>55.30</u>
14000	4058	2626	35.21	2686	37.82	2746	40.51	2805	43.24	2863	45.99	2920	48.78	<u>2977</u>	<u>51.63</u>	<u>3033</u>	<u>54.49</u>	<u>3088</u>	<u>57.37</u>
14500	4203	2671	36.93	2730	39.62	2788	42.34	2846	45.14	2902	47.92	2958	50.77	<u>3013</u>	<u>53.64</u>	<u>3068</u>	<u>56.58</u>	<u>3122</u>	<u>59.53</u>
15000	4348	2718	38.78	2775	41.49	2832	44.28	2888	47.11	2943	49.95	<u>2998</u>	<u>52.88</u>	<u>3051</u>	<u>55.76</u>	<u>3105</u>	<u>58.77</u>	<u>3158</u>	<u>61.78</u>

CFM	OV	20" SP		21" SP		22" SP		23" SP		24" SP		25" SP		26" SP		27" SP		28" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
11000	3188	<u>2990</u>	<u>48.58</u>	<u>3051</u>	<u>51.20</u>	<u>3112</u>	<u>53.90</u>	<u>3173</u>	<u>56.68</u>	<u>3232</u>	<u>59.44</u>	<u>3290</u>	<u>62.21</u>	<u>3348</u>	<u>65.07</u>				
12000	3478	<u>3033</u>	<u>52.17</u>	<u>3093</u>	<u>54.94</u>	<u>3152</u>	<u>57.74</u>	<u>3210</u>	<u>60.58</u>	<u>3267</u>	<u>63.44</u>	<u>3324</u>	<u>66.37</u>	<u>3379</u>	<u>69.26</u>	<u>3434</u>	<u>72.22</u>	<u>3489</u>	<u>75.25</u>
12500	3623	<u>3058</u>	<u>54.13</u>	<u>3116</u>	<u>56.90</u>	<u>3174</u>	<u>59.74</u>	<u>3231</u>	<u>62.61</u>	<u>3288</u>	<u>65.57</u>	<u>3343</u>	<u>68.49</u>	<u>3398</u>	<u>71.49</u>	<u>3452</u>	<u>74.49</u>	<u>3505</u>	<u>77.50</u>
13000	3768	<u>3084</u>	<u>56.10</u>	<u>3141</u>	<u>58.94</u>	<u>3198</u>	<u>61.84</u>	<u>3254</u>	<u>64.76</u>	<u>3310</u>	<u>67.75</u>	<u>3364</u>	<u>70.70</u>	<u>3418</u>	<u>73.73</u>	<u>3472</u>	<u>76.85</u>	<u>3524</u>	<u>79.90</u>
13500	3913	<u>3113</u>	<u>58.20</u>	<u>3169</u>	<u>61.11</u>	<u>3224</u>	<u>64.02</u>	<u>3279</u>	<u>67.00</u>	<u>3333</u>	<u>69.98</u>	<u>3387</u>	<u>73.04</u>	<u>3440</u>	<u>76.10</u>	<u>3493</u>	<u>79.24</u>	<u>3545</u>	<u>82.39</u>
14000	4058	<u>3143</u>	<u>60.31</u>	<u>3198</u>	<u>63.30</u>	<u>3252</u>	<u>66.28</u>	<u>3306</u>	<u>69.33</u>	<u>3359</u>	<u>72.37</u>	<u>3412</u>	<u>75.48</u>	<u>3464</u>	<u>78.58</u>	<u>3515</u>	<u>81.69</u>		
14500	4203	<u>3176</u>	<u>62.54</u>	<u>3229</u>	<u>65.55</u>	<u>3282</u>	<u>68.62</u>	<u>3334</u>	<u>71.68</u>	<u>3386</u>	<u>74.78</u>	<u>3438</u>	<u>77.95</u>	<u>3489</u>	<u>81.11</u>	<u>3539</u>	<u>84.25</u>		
15000	4348	<u>3210</u>	<u>64.80</u>	<u>3262</u>	<u>67.89</u>	<u>3313</u>	<u>70.96</u>	<u>3364</u>	<u>74.10</u>	<u>3415</u>	<u>77.28</u>	<u>3466</u>	<u>80.51</u>	<u>3516</u>	<u>83.73</u>				
15500	4493	<u>3246</u>	<u>67.18</u>	<u>3297</u>	<u>70.32</u>	<u>3347</u>	<u>73.47</u>	<u>3397</u>	<u>76.66</u>	<u>3446</u>	<u>79.85</u>	<u>3495</u>	<u>83.09</u>	<u>3544</u>	<u>86.37</u>				
16000	4638	<u>3283</u>	<u>69.61</u>	<u>3333</u>	<u>72.81</u>	<u>3382</u>	<u>76.01</u>	<u>3431</u>	<u>79.27</u>	<u>3479</u>	<u>82.52</u>	<u>3527</u>	<u>85.82</u>						
16500	4783	<u>3322</u>	<u>72.17</u>	<u>3370</u>	<u>75.36</u>	<u>3419</u>	<u>78.69</u>	<u>3466</u>	<u>81.93</u>	<u>3513</u>	<u>85.24</u>	<u>3560</u>	<u>88.59</u>						
17000	4928	<u>3362</u>	<u>74.81</u>	<u>3409</u>	<u>78.06</u>	<u>3456</u>	<u>81.36</u>	<u>3503</u>	<u>84.73</u>	<u>3549</u>	<u>88.08</u>								
17500	5072	<u>3403</u>	<u>77.53</u>	<u>3449</u>	<u>80.83</u>	<u>3495</u>	<u>84.18</u>	<u>3541</u>	<u>87.60</u>										
18000	5217	<u>3445</u>	<u>80.34</u>	<u>3490</u>	<u>83.69</u>	<u>3536</u>	<u>87.16</u>												
18500	5362	<u>3488</u>	<u>83.26</u>	<u>3532</u>	<u>86.64</u>														
19000	5507	<u>3532</u>	<u>86.28</u>																

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 1981	Design 17 2687	Design 22 3112	Design 26 3678
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**270 BCS**

Outlet Area: 4.19 ft<sup>2</sup>

Wheel Diameter: 27.00"

Tip Speed (FPM): 7.07 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
6000	1432	933	2.57	1224	5.31	1466	8.41	1685	11.95										
6500	1551	960	2.81	1239	5.66	1476	8.89	1687	12.46										
7000	1671	990	3.08	1255	6.02	1488	9.38	1693	13.03	1883	17.04								
7500	1790	1022	3.38	1274	6.41	1503	9.91	1702	13.64	1887	17.72	2061	22.13						
8000	1909	1056	3.70	1295	6.82	1518	10.44	1715	14.32	1894	18.44	2063	22.89	2224	27.67				
8500	2029	1092	4.06	1319	7.26	1533	10.96	1729	15.01	1904	19.22	2069	23.74	2226	28.57	2376	33.67		
9000	2148	1129	4.45	1346	7.75	1551	11.53	1744	15.71	1917	20.07	2078	24.67	2230	29.49	2377	34.66	2519	40.13
9500	2267	1167	4.86	1374	8.26	1571	12.12	1759	16.41	1931	20.93	2089	25.63	2238	30.54	2381	35.73	2520	41.25
10000	2387	1206	5.31	1404	8.81	1594	12.77	1775	17.13	1946	21.81	2102	26.64	2248	31.64	2388	36.90	2523	42.41
10500	2506	1246	5.80	1436	9.40	1619	13.46	1793	17.88	1961	22.68	2116	27.66	2260	32.79	2397	38.11	2529	43.68
11000	2625	1287	6.33	1470	10.04	1645	14.17	1814	18.70	1977	23.58	2131	28.71	2274	34.00	2409	39.44	2538	45.06
11500	2745	1329	6.90	1504	10.69	1673	14.93	1836	19.53	1994	24.50	2146	29.76	2288	35.19	2422	40.78	2549	46.50
12000	2864	1371	7.50	1540	11.41	1702	15.72	1861	20.45	2013	25.47	2162	30.84	2303	36.41	2435	42.10	2561	47.97
12500	2983	1414	8.16	1577	12.18	1733	16.57	1886	21.37	2035	26.52	2179	31.95	2318	37.63	2450	43.51	2575	49.53
13000	3103	1457	8.84	1614	12.96	1766	17.49	1913	22.35	2058	27.59	2197	33.07	2334	38.89	2465	44.91	2589	51.06
13500	3222	1500	9.57	1653	13.83	1799	18.43	1942	23.40	2082	28.70	2218	34.30	2351	40.18	2480	46.30	2603	52.57

CFM	OV	20" SP		22" SP		23" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
12500	2983	2693	55.59	2808	61.88	2864	65.08	2920	68.38	2974	71.63	3028	74.98	3082	78.42	3135	81.89	3188	85.46
13000	3103	2707	57.32	2820	63.69	2875	66.92	2929	70.19	2983	73.54	3036	76.92	3089	80.38	3141	83.87	3192	87.36
13500	3222	2720	58.97	2833	65.54	2887	68.80	2941	72.16	2994	75.55	3046	78.95	3097	82.37	3148	85.87	3199	89.46
14000	3341	2735	60.72	2846	67.35	2900	70.72	2953	74.11	3006	77.60	3057	81.02	3108	84.54	3158	88.06	3208	91.68
14500	3461	2750	62.47	2861	69.29	2914	72.68	2967	76.17	3019	79.69	3069	83.13	3120	86.75	3169	90.29	3218	93.92
15000	3580	2765	64.21	2875	71.14	2929	74.70	2981	78.21	3032	81.75	3083	85.37	3132	88.93	3181	92.57	3230	96.30
15500	3699	2780	65.94	2890	73.06	2943	76.63	2995	80.23	3046	83.86	3097	87.59	3146	91.24	3194	94.90	3242	98.64
16000	3819	2797	67.79	2905	74.97	2958	78.64	3010	82.33	3061	86.04	3111	89.78	3160	93.53	3208	97.28	3256	101.13
16500	3938	2815	69.68	2921	76.94	2973	80.63	3025	84.42	3076	88.22	3125	91.96	3174	95.80	3222	99.65	3270	103.59
17000	4057	2834	71.60	2938	78.96	2990	82.76	3040	86.49	3091	90.40	3140	94.23	3189	98.15	3237	102.09	3284	106.03
17500	4177	2854	73.56	2956	81.02	3007	84.87	3057	88.71	3106	92.55	3155	96.48	3204	100.51	3252	104.53	3298	108.46
18000	4296	2876	75.63	2976	83.20	3025	87.01	3074	90.89	3123	94.85	3171	98.80	3219	102.84	3267	106.97	3313	110.99
18500	4415	2899	77.78	2997	85.43	3045	89.28	3093	93.21	3141	97.21	3188	101.19	3236	105.34	3282	109.38	3328	113.50
19000	4535	2923	80.00	3019	87.71	3066	91.60	3113	95.57	3160	99.61	3206	103.62	3253	107.80	3299	111.96	3344	116.09
19500	4654	2948	82.29	3042	90.07	3089	94.08	3134	97.98	3180	102.07	3226	106.21	3271	110.32	3316	114.50	3361	118.75
20000	4773	2974	84.67	3066	92.51	3112	96.54	3157	100.56	3202	104.67	3246	108.75	3291	113.00	3335	117.21	3379	121.48

CFM	OV	30" SP		31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	3819	3303	104.97	3349	108.80	3394	112.61	3439	116.50	3484	120.48	3528	124.43	3572	128.46	3615	132.45	3658	136.53
16500	3938	3316	107.43	3362	111.36	3407	115.27	3452	119.27	3496	123.24	3540	127.29	3583	131.32	3626	135.41	3668	139.48
17000	4057	3330	109.97	3376	114.00	3421	118.01	3465	122.00	3509	126.07	3552	130.12	3595	134.24	3637	138.33		
17500	4177	3345	112.59	3390	116.61	3435	120.72	3479	124.81	3522	128.87	3565	133.01	3608	137.24	3650	141.42		
18000	4296	3359	115.10	3404	119.20	3449	123.40	3493	127.59	3536	131.75	3579	135.99	3621	140.20	3663	144.49		
18500	4415	3374	117.71	3419	121.91	3464	126.19	3507	130.35	3550	134.60	3593	138.94	3635	143.25	3676	147.51		
19000	4535	3389	120.30	3434	124.60	3478	128.87	3522	133.23	3565	137.56	3607	141.87	3649	146.27				
19500	4654	3406	123.08	3450	127.38	3493	131.64	3537	136.10	3579	140.41	3622	144.92	3663	149.28				
20000	4773	3423	125.82	3466	130.12	3509	134.50	3552	138.95	3594	143.36	3636	147.85	3678	152.42				
20500	4893	3441	128.62	3483	132.94	3526	137.43	3568	141.88	3610	146.40	3652	151.00						
21000	5012	3460	131.49	3502	135.93	3544	140.44	3585	144.89	3626	149.40	3667	153.99						
21500	5131	3480	134.42	3521	138.88	3562	143.40	3603	147.97	3644	152.61								
22000	5251	3502	137.54	3542	142.01	3582	146.54	3622	151.13	3662	155.78								
22500	5370	3524	140.64	3564	145.22	3603	149.76	3642	154.36										
23000	5489	3548	143.97	3587	148.55	3625	153.07	3664	157.79										
23500	5609	3572	147.30	3610	151.87	3648	156.51												

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 1783	Design 17 2420	Design 22 2801	Design 26 3310
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**300 BCS**

Outlet Area: 5.17 ft<sup>2</sup>

Wheel Diameter: 30.00"

Tip Speed (FPM): 7.85 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
7500	1451	843	3.21	1104	6.62	1321	10.48	1517	14.86										
8000	1547	863	3.46	1115	6.98	1328	10.95	1518	15.35										
8500	1644	884	3.72	1126	7.33	1337	11.45	1522	15.91	1695	20.89								
9000	1741	907	4.01	1139	7.71	1347	11.96	1528	16.51	1696	21.50	1855	26.95						
9500	1838	931	4.32	1153	8.09	1358	12.49	1536	17.16	1700	22.20	1855	27.67						
10000	1934	957	4.66	1170	8.53	1369	13.02	1546	17.85	1706	22.95	1858	28.48	2002	34.39				
10500	2031	983	5.02	1188	8.98	1380	13.54	1556	18.53	1714	23.75	1862	29.32	2003	35.26	2139	41.62		
11000	2128	1010	5.40	1207	9.46	1393	14.11	1567	19.23	1723	24.58	1868	30.21	2006	36.19	2139	42.57	2267	49.29
11500	2224	1037	5.80	1227	9.96	1407	14.69	1578	19.93	1733	25.44	1876	31.18	2011	37.20	2142	43.66	2267	50.38
12000	2321	1065	6.23	1248	10.48	1423	15.32	1589	20.63	1744	26.32	1885	32.18	2018	38.30	2145	44.71	2269	51.55
12500	2418	1094	6.70	1271	11.06	1440	15.97	1602	21.40	1754	27.16	1895	33.20	2026	39.42	2151	45.92	2272	52.75
13000	2515	1124	7.20	1294	11.64	1458	16.65	1615	22.14	1766	28.08	1905	34.22	2035	40.58	2158	47.16	2277	54.06
13500	2611	1154	7.73	1319	12.29	1477	17.37	1630	22.95	1777	28.95	1916	35.27	2045	41.78	2166	48.43	2283	55.40
14000	2708	1184	8.29	1344	12.95	1497	18.11	<u>1646</u>	<u>23.78</u>	1790	29.90	1927	36.33	2055	42.96	2176	49.82	2290	56.78
14500	2805	1214	8.86	1370	13.65	1518	18.90	1663	24.65	1803	30.84	1938	37.37	2066	44.19	2185	51.11	2299	58.27
15000	2901	1245	9.49	1396	14.37	1540	19.72	1681	25.56	1817	31.80	1950	38.47	2077	45.42	2196	52.54	2308	59.75

CFM	OV	20" SP		22" SP		23" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	3095	<u>2435</u>	<u>70.57</u>	<u>2486</u>	<u>74.44</u>	<u>2537</u>	<u>78.44</u>	<u>2587</u>	<u>82.47</u>	<u>2636</u>	<u>86.53</u>	<u>2732</u>	<u>94.79</u>	<u>2779</u>	<u>98.99</u>	<u>2826</u>	<u>103.29</u>	<u>2873</u>	<u>107.72</u>
17000	3288	<u>2455</u>	<u>73.94</u>	<u>2506</u>	<u>78.01</u>	<u>2556</u>	<u>82.12</u>	<u>2605</u>	<u>86.26</u>	<u>2653</u>	<u>90.42</u>	<u>2747</u>	<u>98.89</u>	<u>2793</u>	<u>103.18</u>	<u>2838</u>	<u>107.47</u>	<u>2883</u>	<u>111.88</u>
18000	3482	<u>2477</u>	<u>77.45</u>	<u>2527</u>	<u>81.61</u>	<u>2577</u>	<u>85.92</u>	<u>2625</u>	<u>90.16</u>	<u>2672</u>	<u>94.41</u>	<u>2764</u>	<u>103.06</u>	<u>2809</u>	<u>107.45</u>	<u>2854</u>	<u>111.94</u>	<u>2898</u>	<u>116.43</u>
19000	3675	<u>2499</u>	<u>80.94</u>	<u>2549</u>	<u>85.29</u>	<u>2598</u>	<u>89.67</u>	<u>2646</u>	<u>94.09</u>	<u>2693</u>	<u>98.54</u>	<u>2784</u>	<u>107.47</u>	<u>2829</u>	<u>112.06</u>	<u>2872</u>	<u>116.52</u>	<u>2916</u>	<u>121.21</u>
20000	3868	<u>2523</u>	<u>84.55</u>	<u>2572</u>	<u>89.02</u>	<u>2620</u>	<u>93.51</u>	<u>2668</u>	<u>98.11</u>	<u>2714</u>	<u>102.63</u>	<u>2805</u>	<u>111.92</u>	<u>2849</u>	<u>116.59</u>	<u>2893</u>	<u>121.37</u>	<u>2935</u>	<u>126.01</u>
21000	4062	<u>2551</u>	<u>88.45</u>	<u>2598</u>	<u>92.97</u>	<u>2645</u>	<u>97.58</u>	<u>2691</u>	<u>102.19</u>	<u>2737</u>	<u>106.92</u>	<u>2826</u>	<u>116.35</u>	<u>2870</u>	<u>121.19</u>	<u>2913</u>	<u>126.02</u>	<u>2956</u>	<u>130.98</u>
22000	4255	<u>2581</u>	<u>92.42</u>	<u>2627</u>	<u>97.11</u>	<u>2672</u>	<u>101.76</u>	<u>2717</u>	<u>106.51</u>	<u>2761</u>	<u>111.24</u>	<u>2849</u>	<u>120.99</u>	<u>2892</u>	<u>125.90</u>	<u>2935</u>	<u>130.92</u>	<u>2977</u>	<u>135.92</u>
23000	4449	<u>2615</u>	<u>96.77</u>	<u>2659</u>	<u>101.46</u>	<u>2702</u>	<u>106.15</u>	<u>2745</u>	<u>110.93</u>	<u>2788</u>	<u>115.79</u>	<u>2874</u>	<u>125.79</u>	<u>2916</u>	<u>130.79</u>	<u>2958</u>	<u>135.90</u>	<u>2999</u>	<u>140.97</u>
24000	4642	<u>2651</u>	<u>101.31</u>	<u>2693</u>	<u>106.01</u>	<u>2735</u>	<u>110.81</u>	<u>2777</u>	<u>115.70</u>	<u>2819</u>	<u>120.70</u>	<u>2901</u>	<u>130.71</u>	<u>2942</u>	<u>135.84</u>	<u>2983</u>	<u>141.05</u>	<u>3023</u>	<u>146.21</u>
25000	4836	<u>2689</u>	<u>106.07</u>	<u>2730</u>	<u>110.89</u>	<u>2771</u>	<u>115.81</u>	<u>2811</u>	<u>120.69</u>	<u>2852</u>	<u>125.79</u>	<u>2931</u>	<u>135.89</u>	<u>2971</u>	<u>141.15</u>	<u>3010</u>	<u>146.34</u>	<u>3049</u>	<u>151.60</u>
26000	5029	<u>2729</u>	<u>111.06</u>	<u>2768</u>	<u>115.88</u>	<u>2808</u>	<u>120.92</u>	<u>2847</u>	<u>125.91</u>	<u>2887</u>	<u>131.12</u>	<u>2964</u>	<u>141.40</u>	<u>3002</u>	<u>146.60</u>	<u>3040</u>	<u>151.90</u>	<u>3078</u>	<u>157.29</u>
27000	5222	<u>2771</u>	<u>116.29</u>	<u>2809</u>	<u>121.24</u>	<u>2848</u>	<u>126.40</u>	<u>2886</u>	<u>131.51</u>	<u>2924</u>	<u>136.69</u>	<u>2999</u>	<u>147.17</u>	<u>3036</u>	<u>152.46</u>	<u>3073</u>	<u>157.83</u>	<u>3110</u>	<u>163.30</u>
28000	5416	<u>2815</u>	<u>121.79</u>	<u>2852</u>	<u>126.87</u>	<u>2889</u>	<u>132.02</u>	<u>2926</u>	<u>137.24</u>	<u>2963</u>	<u>142.54</u>	<u>3036</u>	<u>153.21</u>	<u>3072</u>	<u>158.59</u>	<u>3108</u>	<u>164.05</u>	<u>3144</u>	<u>169.59</u>
29000	5609	<u>2861</u>	<u>127.60</u>	<u>2897</u>	<u>132.79</u>	<u>2932</u>	<u>137.92</u>	<u>2968</u>	<u>143.25</u>	<u>3003</u>	<u>148.51</u>	<u>3074</u>	<u>159.39</u>	<u>3109</u>	<u>164.86</u>	<u>3144</u>	<u>170.40</u>	<u>3179</u>	<u>176.01</u>
30000	5803	<u>2909</u>	<u>133.76</u>	<u>2943</u>	<u>138.91</u>	<u>2978</u>	<u>144.28</u>	<u>3012</u>	<u>149.58</u>	<u>3046</u>	<u>154.94</u>	<u>3115</u>	<u>166.02</u>	<u>3149</u>	<u>171.59</u>	<u>3183</u>	<u>177.21</u>	<u>3217</u>	<u>182.91</u>
30500	5899	<u>2933</u>	<u>136.87</u>	<u>2967</u>	<u>142.14</u>	<u>3001</u>	<u>147.49</u>	<u>3035</u>	<u>152.91</u>	<u>3068</u>	<u>158.24</u>	<u>3136</u>	<u>169.42</u>	<u>3169</u>	<u>174.95</u>	<u>3203</u>	<u>180.70</u>	<u>3236</u>	<u>186.36</u>

CFM	OV	30" SP		31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	3095	<u>2919</u>	<u>112.16</u>	<u>2964</u>	<u>116.59</u>	<u>3010</u>	<u>121.26</u>	<u>3054</u>	<u>125.79</u>	<u>3099</u>	<u>130.56</u>	<u>3143</u>	<u>135.31</u>	<u>3186</u>	<u>140.03</u>	<u>3229</u>	<u>144.86</u>	<u>3271</u>	<u>149.64</u>
17000	3288	<u>2928</u>	<u>116.39</u>	<u>2972</u>	<u>120.88</u>	<u>3016</u>	<u>125.48</u>	<u>3059</u>	<u>130.07</u>	<u>3102</u>	<u>134.77</u>	<u>3145</u>	<u>139.57</u>	<u>3188</u>	<u>144.49</u>	<u>3230</u>	<u>149.37</u>	<u>3272</u>	<u>154.36</u>
18000	3482	<u>2941</u>	<u>120.91</u>	<u>2984</u>	<u>125.48</u>	<u>3027</u>	<u>130.17</u>	<u>3069</u>	<u>134.82</u>	<u>3111</u>	<u>139.57</u>	<u>3152</u>	<u>144.29</u>	<u>3194</u>	<u>149.25</u>	<u>3235</u>	<u>154.17</u>	<u>3275</u>	<u>159.06</u>
19000	3675	<u>2958</u>	<u>125.77</u>	<u>3000</u>	<u>130.42</u>	<u>3042</u>	<u>135.17</u>	<u>3083</u>	<u>139.90</u>	<u>3124</u>	<u>144.72</u>	<u>3164</u>	<u>149.51</u>	<u>3204</u>	<u>154.39</u>	<u>3244</u>	<u>159.36</u>	<u>3283</u>	<u>164.28</u>
20000	3868	<u>2977</u>	<u>130.76</u>	<u>3019</u>	<u>135.62</u>	<u>3059</u>	<u>140.30</u>	<u>3100</u>	<u>145.23</u>	<u>3140</u>	<u>150.12</u>	<u>3179</u>	<u>154.96</u>	<u>3218</u>	<u>159.89</u>	<u>3257</u>	<u>164.92</u>	<u>3296</u>	<u>170.05</u>
21000	4062	<u>2998</u>	<u>135.93</u>	<u>3039</u>	<u>140.85</u>	<u>3079</u>	<u>145.73</u>	<u>3119</u>	<u>150.72</u>	<u>3158</u>	<u>155.66</u>	<u>3197</u>	<u>160.70</u>	<u>3236</u>	<u>165.84</u>	<u>3274</u>	<u>170.92</u>		
22000	4255	<u>3019</u>	<u>141.04</u>	<u>3059</u>	<u>146.00</u>	<u>3100</u>	<u>151.22</u>	<u>3139</u>	<u>156.26</u>	<u>3178</u>	<u>161.40</u>	<u>3217</u>	<u>166.64</u>	<u>3255</u>	<u>171.82</u>	<u>3292</u>	<u>176.94</u>		
23000	4449	<u>3040</u>	<u>146.14</u>	<u>3081</u>	<u>151.42</u>	<u>3121</u>	<u>156.67</u>	<u>3160</u>	<u>161.88</u>	<u>3199</u>	<u>167.20</u>	<u>3237</u>	<u>172.48</u>	<u>3275</u>	<u>177.86</u>				
24000	4642	<u>3063</u>	<u>151.46</u>	<u>3103</u>	<u>156.80</u>	<u>3142</u>	<u>162.10</u>	<u>3181</u>	<u>167.49</u>	<u>3220</u>	<u>172.99</u>	<u>3258</u>	<u>178.44</u>	<u>3295</u>	<u>183.82</u>				
25000	4836	<u>3088</u>	<u>156.95</u>	<u>3127</u>	<u>162.38</u>	<u>3166</u>	<u>167.90</u>	<u>3204</u>	<u>173.36</u>	<u>3242</u>	<u>178.90</u>	<u>3280</u>	<u>184.54</u>						
26000	5029	<u>3116</u>	<u>162.75</u>	<u>3154</u>	<u>168.28</u>	<u>3191</u>	<u>173.73</u>	<u>3228</u>	<u>179.26</u>	<u>3266</u>	<u>185.04</u>	<u>3302</u>	<u>190.56</u>						
27000	5222	<u>3147</u>	<u>168.86</u>	<u>3183</u>	<u>174.34</u>	<u>3219</u>	<u>179.89</u>	<u>3255</u>	<u>185.51</u>	<u>3291</u>	<u>191.20</u>								
28000	5416	<u>3179</u>	<u>175.05</u>	<u>3215</u>	<u>180.76</u>	<u>3250</u>	<u>186.39</u>	<u>3285</u>	<u>192.11</u>										
28500	5513	<u>3196</u>	<u>178.30</u>	<u>3231</u>	<u>183.96</u>	<u>3266</u>	<u>189.70</u>	<u>3301</u>	<u>195.53</u>										
29000	5609	<u>3214</u>	<u>181.71</u>	<u>3248</u>	<u>187.31</u>	<u>3283</u>	<u>193.17</u>												
29500	5706	<u>3232</u>	<u>185.11</u>	<u>3266</u>	<u>190.84</u>	<u>3300</u>	<u>196.64</u>												

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 1621	Design 17 2199	Design 22 2546	Design 26 3009
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**330 BCS**

Outlet Area: 6.26 ft<sup>2</sup>

Wheel Diameter: 33.00"

Tip Speed (FPM): 8.64 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
8000	1278	731	3.35	979	7.16	1187	11.65												
9000	1438	757	3.77	993	7.79	1190	12.44												
10000	1597	787	4.24	1008	8.45	1200	13.30	1371	18.70										
11000	1757	822	4.80	1027	9.23	1214	14.24	1379	19.84	1531	25.87								
12000	1917	859	5.41	1050	10.03	1230	15.27	1391	21.03	1537	27.23	1676	33.91	1807	40.86				
13000	2077	899	6.11	1077	10.90	1247	16.36	1405	22.27	1548	28.70	1682	35.57	1809	42.74	1931	50.27		
14000	2236	939	6.86	1107	11.84	1267	17.52	1421	23.66	1562	30.25	1692	37.28	1814	44.61	1933	52.40	2047	60.44
15000	2396	981	7.71	1141	12.91	1292	18.77	1438	25.12	1577	31.88	1705	39.10	1824	46.62	1939	54.60	2049	62.78
16000	2556	1023	8.63	1176	14.03	1320	20.10	1458	26.67	1593	33.64	1719	40.96	1837	48.75	1948	56.82	2055	65.23
17000	2716	1066	9.64	1214	15.29	1350	21.51	1482	28.31	1611	35.53	1735	43.04	1851	50.92	1961	59.25	2065	67.81
18000	2875	1110	10.74	1254	16.68	1383	23.06	1509	30.05	1631	37.44	1751	45.17	1867	53.31	1975	61.73	2077	70.45
19000	3035	1155	11.94	1294	18.13	1417	24.68	1538	31.87	1655	39.48	1770	47.47	1882	55.70	1990	64.34	2091	73.24
20000	3195	1201	13.26	1335	19.70	1454	26.49	1569	33.80	1681	41.58	1791	49.80	1900	58.34	2005	67.05	2106	76.16
21000	3355	1248	14.69	1376	21.36	1492	28.39	1602	35.88	1710	43.87	1816	52.30	1920	61.05	2022	69.99	2122	79.30
22000	3514	1295	16.22	1418	23.15	1531	30.42	1637	38.11	1740	46.21	1842	54.82	1942	63.79	2041	73.04	2138	82.49
23000	3674	1343	17.88	1461	25.09	1571	32.58	1673	40.44	1773	48.79	1871	57.55	1967	66.67	2062	76.16	2156	85.85

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
16000	2556	2159	73.95	2260	82.93	2358	92.16	2406	96.88										
17000	2716	2166	76.72	2264	85.89	2359	95.24	2406	100.05	2453	105.01	2499	109.97	2544	114.94				
18000	2875	2176	79.57	2271	88.88	2364	98.50	2410	103.44	2455	108.38	2500	113.44	2544	118.49	2588	123.67	2631	128.84
19000	3035	2188	82.50	2281	91.99	2372	101.83	2417	106.90	2461	111.96	2504	117.00	2547	122.16	2590	127.43	2632	132.68
20000	3195	2202	85.60	2294	95.32	2383	105.32	2426	110.34	2469	115.50	2512	120.79	2554	126.06	2595	131.29	2636	136.64
21000	3355	2217	88.84	2308	98.73	2395	108.81	2438	114.03	2480	119.25	2522	124.61	2563	129.95	2603	135.27	2644	140.87
22000	3514	2232	92.19	2323	102.29	2409	112.53	2451	117.76	2493	123.16	2534	128.56	2574	133.95	2614	139.48	2653	144.97
23000	3674	2248	95.73	2338	105.97	2424	116.42	2466	121.79	2507	127.19	2547	132.59	2587	138.15	2626	143.70	2665	149.39
24000	3834	2266	99.49	2354	109.87	2439	120.42	2481	125.89	2522	131.40	2562	136.94	2601	142.49	2640	148.19	2678	153.88
25000	3994	2285	103.25	2371	113.88	2455	124.67	2496	130.13	2537	135.75	2577	141.38	2616	147.03	2654	152.69	2692	158.52
26000	4153	2307	107.21	2390	118.04	2472	129.05	2512	134.55	2552	140.18	2592	145.96	2631	151.72	2669	157.47	2707	163.40
27000	4313	2331	111.24	2411	122.31	2490	133.46	2530	139.23	2569	144.93	2608	150.74	2646	156.50	2684	162.39	2722	168.43
28000	4473	2357	115.46	2434	126.65	2511	138.16	2549	143.91	2587	149.72	2625	155.62	2663	161.60	2701	167.70	2738	173.74
29000	4633	2384	119.76	2459	131.16	2534	142.94	2571	148.87	2608	154.85	2645	160.87	2681	166.78	2718	172.95	2754	179.02
30000	4792	2413	124.31	2486	135.91	2559	147.90	2594	153.77	2630	159.90	2666	166.08	2701	172.13	2737	178.41	2772	184.56
31000	4952	2443	128.99	2514	140.77	2585	152.93	2620	159.07	2654	165.11	2689	171.41	2723	177.60	2758	184.03	2792	190.31

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
24000	3834	2716	159.71	2753	165.49	2790	171.41	2826	177.27	2863	183.44	2898	189.34	2934	195.55	2969	201.67	3004	207.89
25000	3994	2730	164.50	2766	170.27	2803	176.36	2839	182.40	2874	188.37	2909	194.47	2944	200.68	2979	207.01		
26000	4153	2744	169.33	2781	175.42	2817	181.47	2852	187.47	2887	193.60	2922	199.87	2956	206.06	2991	212.58		
27000	4313	2759	174.45	2795	180.44	2831	186.61	2866	192.74	2901	199.01	2936	205.43	2970	211.78	3003	218.05		
28000	4473	2774	179.71	2810	185.83	2846	192.09	2881	198.31	2916	204.69	2950	211.03	2984	217.51				
29000	4633	2790	185.20	2826	191.49	2861	197.70	2896	204.04	2931	210.53	2965	216.95	2998	223.31				
30000	4792	2808	191.00	2843	197.32	2877	203.53	2912	210.05	2946	216.49	2980	223.05						
31000	4952	2826	196.63	2861	203.24	2895	209.70	2929	216.25	2962	222.67	2996	229.42						
32000	5112	2847	202.66	2880	209.15	2914	215.91	2947	222.52	2980	229.20								
33000	5272	2870	208.83	2902	215.45	2934	222.11	2966	228.81	2998	235.55								
34000	5431	2894	215.02	2926	221.94	2957	228.69	2988	235.51										
35000	5591	2920	221.55	2950	228.27	2981	235.30												
35500	5671	2933	224.77	2963	231.63	2993	238.55												
36000	5751	2947	228.21	2976	234.96	3006	242.02												
36500	5831	2960	231.41	2990	238.52														
37000	5911	2974	234.82	3004	242.05														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 1467	Design 17 1987	Design 22 2302	Design 26 2720
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### 365 BCS

Outlet Area: 7.66 ft<sup>2</sup>

Wheel Diameter: 36.50"

Tip Speed (FPM): 9.56 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
10000	1305	665	4.19	887	8.88	1073	14.40												
11000	1436	684	4.61	897	9.50	1076	15.21												
12000	1567	706	5.07	909	10.19	1083	16.07	1239	22.64										
13000	1697	731	5.61	922	10.94	1093	17.00	1243	23.72	1383	31.02								
14000	1828	758	6.20	937	11.71	1104	17.96	1251	24.89	1386	32.38	1514	40.38						
15000	1958	786	6.83	955	12.53	1116	19.02	1261	26.13	1392	33.78	1516	41.98	1634	50.60				
16000	2089	815	7.52	976	13.43	1129	20.14	1272	27.41	1401	35.29	1521	43.65	1636	52.49	1746	61.72		
17000	2219	845	8.28	998	14.36	1144	21.31	1283	28.75	1411	36.82	1528	45.33	1640	54.39	1747	63.79	1850	73.56
18000	2350	876	9.12	1022	15.38	1161	22.49	1296	30.25	1422	38.43	1538	47.19	1647	56.40	1751	66.00	1851	75.89
19000	2480	907	10.01	1048	16.50	1181	23.80	1309	31.71	1433	40.10	1548	49.02	1655	58.39	1757	68.22	1855	78.39
20000	2611	938	10.96	1075	17.68	1203	25.20	1326	33.36	1446	41.98	1559	50.96	1665	60.54	1765	70.52	1861	80.91
21000	2742	971	12.03	1104	19.00	1225	26.59	1344	34.99	1459	43.82	1571	53.08	1676	62.78	1775	72.98	1869	83.53
22000	2872	1003	13.12	1133	20.37	1250	28.19	1364	36.73	<u>1474</u>	<u>45.74</u>	1583	55.23	1687	65.08	1785	75.42	1878	86.18
23000	3003	1036	14.31	1162	21.78	1275	29.80	1385	38.52	<u>1492</u>	<u>47.82</u>	1597	57.54	1699	67.57	1796	78.01	1888	88.92
24000	3133	1070	15.60	1193	23.37	1302	31.57	1407	40.38	<u>1511</u>	<u>49.92</u>	<u>1612</u>	<u>59.86</u>	1711	70.07	1808	80.81	1899	91.81
25000	3264	1104	16.96	1223	24.96	1329	33.37	1431	42.41	1531	52.07	1629	62.26	1725	72.75	1819	83.54	1910	94.77

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
18000	2350	1949	86.31																
19000	2480	1950	88.89	<b>2043</b>	<b>99.85</b>														
20000	2611	1954	91.66	<b>2044</b>	<b>102.67</b>	<b>2132</b>	<b>114.06</b>	<b>2175</b>	<b>119.86</b>	<b>2218</b>	<b>125.83</b>								
21000	2742	1959	94.34	<b>2048</b>	<b>105.71</b>	<b>2134</b>	<b>117.27</b>	<b>2176</b>	<b>123.13</b>	<b>2218</b>	<b>129.16</b>	<b>2259</b>	<b>135.17</b>	<b>2300</b>	<b>141.35</b>				
22000	2872	1967	97.26	<b>2053</b>	<b>108.66</b>	<b>2137</b>	<b>120.40</b>	<b>2179</b>	<b>126.51</b>	<b>2220</b>	<b>132.60</b>	<b>2260</b>	<b>138.66</b>	<b>2300</b>	<b>144.88</b>	<b>2340</b>	<b>151.26</b>	<b>2379</b>	<b>157.60</b>
23000	3003	1976	100.22	<b>2061</b>	<b>111.88</b>	<b>2143</b>	<b>123.78</b>	<b>2183</b>	<b>129.79</b>	<b>2223</b>	<b>135.96</b>	<b>2263</b>	<b>142.27</b>	<b>2302</b>	<b>148.54</b>	<b>2341</b>	<b>154.95</b>	<b>2379</b>	<b>161.32</b>
24000	3133	1986	103.27	<b>2069</b>	<b>114.98</b>	<b>2150</b>	<b>127.12</b>	<b>2190</b>	<b>133.37</b>	<b>2229</b>	<b>139.59</b>	<b>2268</b>	<b>145.98</b>	<b>2306</b>	<b>152.31</b>	<b>2344</b>	<b>158.78</b>	<b>2382</b>	<b>165.39</b>
25000	3264	<b>1997</b>	<b>106.48</b>	<b>2079</b>	<b>118.34</b>	<b>2159</b>	<b>130.68</b>	<b>2198</b>	<b>136.95</b>	<b>2236</b>	<b>143.21</b>	<b>2274</b>	<b>149.63</b>	<b>2312</b>	<b>156.20</b>	<b>2349</b>	<b>162.72</b>	<b>2386</b>	<b>169.38</b>
26000	3394	<b>2008</b>	<b>109.73</b>	<b>2090</b>	<b>121.86</b>	<b>2169</b>	<b>134.35</b>	<b>2207</b>	<b>140.62</b>	<b>2245</b>	<b>147.07</b>	<b>2282</b>	<b>153.49</b>	<b>2319</b>	<b>160.08</b>	<b>2356</b>	<b>166.83</b>	<b>2392</b>	<b>173.52</b>
27000	3525	<b>2019</b>	<b>113.09</b>	<b>2101</b>	<b>125.42</b>	<b>2179</b>	<b>138.01</b>	<b>2217</b>	<b>144.43</b>	<b>2255</b>	<b>151.05</b>	<b>2292</b>	<b>157.66</b>	<b>2328</b>	<b>164.24</b>	<b>2364</b>	<b>170.98</b>	<b>2400</b>	<b>177.88</b>
28000	3655	<b>2031</b>	<b>116.67</b>	<b>2112</b>	<b>129.08</b>	<b>2190</b>	<b>141.87</b>	<b>2228</b>	<b>148.43</b>	<b>2265</b>	<b>155.00</b>	<b>2302</b>	<b>161.77</b>	<b>2338</b>	<b>168.52</b>	<b>2373</b>	<b>175.23</b>	<b>2408</b>	<b>182.11</b>
29000	3786	<b>2044</b>	<b>120.39</b>	<b>2124</b>	<b>133.00</b>	<b>2201</b>	<b>145.83</b>	<b>2239</b>	<b>152.49</b>	<b>2276</b>	<b>159.18</b>	<b>2312</b>	<b>165.88</b>	<b>2348</b>	<b>172.78</b>	<b>2383</b>	<b>179.65</b>	<b>2418</b>	<b>186.70</b>
30000	3916	<b>2057</b>	<b>124.02</b>	<b>2136</b>	<b>136.93</b>	<b>2213</b>	<b>150.10</b>	<b>2250</b>	<b>156.67</b>	<b>2287</b>	<b>163.45</b>	<b>2323</b>	<b>170.25</b>	<b>2359</b>	<b>177.28</b>	<b>2393</b>	<b>184.06</b>	<b>2428</b>	<b>191.26</b>
31000	4047	<b>2072</b>	<b>127.87</b>	<b>2149</b>	<b>140.97</b>	<b>2225</b>	<b>154.39</b>	<b>2262</b>	<b>161.13</b>	<b>2298</b>	<b>167.84</b>	<b>2334</b>	<b>174.74</b>	<b>2370</b>	<b>181.86</b>	<b>2404</b>	<b>188.74</b>	<b>2439</b>	<b>196.07</b>
32000	4178	<b>2089</b>	<b>131.91</b>	<b>2163</b>	<b>145.09</b>	<b>2237</b>	<b>158.62</b>	<b>2274</b>	<b>165.59</b>	<b>2310</b>	<b>172.48</b>	<b>2346</b>	<b>179.54</b>	<b>2381</b>	<b>186.56</b>	<b>2415</b>	<b>193.54</b>	<b>2449</b>	<b>200.72</b>
33000	4308	<b>2107</b>	<b>135.98</b>	<b>2179</b>	<b>149.44</b>	<b>2251</b>	<b>163.18</b>	<b>2287</b>	<b>170.19</b>	<b>2322</b>	<b>177.09</b>	<b>2358</b>	<b>184.36</b>	<b>2392</b>	<b>191.32</b>	<b>2427</b>	<b>198.68</b>	<b>2461</b>	<b>205.99</b>

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
29000	3786	<b>2452</b>	<b>193.68</b>	<b>2486</b>	<b>200.83</b>	<b>2519</b>	<b>207.90</b>	<b>2552</b>	<b>215.11</b>	<b>2585</b>	<b>222.47</b>	<b>2618</b>	<b>229.96</b>	<b>2650</b>	<b>237.33</b>	<b>2682</b>	<b>244.83</b>	<b>2714</b>	<b>252.45</b>
30000	3916	<b>2462</b>	<b>198.40</b>	<b>2495</b>	<b>205.48</b>	<b>2528</b>	<b>212.72</b>	<b>2561</b>	<b>220.12</b>	<b>2593</b>	<b>227.42</b>	<b>2625</b>	<b>234.86</b>	<b>2657</b>	<b>242.44</b>	<b>2689</b>	<b>250.16</b>	<b>2720</b>	<b>257.73</b>
31000	4047	<b>2472</b>	<b>203.12</b>	<b>2505</b>	<b>210.34</b>	<b>2538</b>	<b>217.74</b>	<b>2571</b>	<b>225.32</b>	<b>2603</b>	<b>232.79</b>	<b>2634</b>	<b>240.15</b>	<b>2666</b>	<b>247.93</b>	<b>2697</b>	<b>255.57</b>		
32000	4178	<b>2483</b>	<b>208.12</b>	<b>2516</b>	<b>215.47</b>	<b>2549</b>	<b>223.02</b>	<b>2581</b>	<b>230.48</b>	<b>2612</b>	<b>237.84</b>	<b>2644</b>	<b>245.64</b>	<b>2675</b>	<b>253.32</b>	<b>2706</b>	<b>261.15</b>		
33000	4308	<b>2494</b>	<b>213.23</b>	<b>2527</b>	<b>220.68</b>	<b>2559</b>	<b>228.08</b>	<b>2591</b>	<b>235.67</b>	<b>2623</b>	<b>243.44</b>	<b>2654</b>	<b>251.11</b>	<b>2685</b>	<b>258.94</b>	<b>2715</b>	<b>266.65</b>		
34000	4439	<b>2505</b>	<b>218.47</b>	<b>2538</b>	<b>226.03</b>	<b>2570</b>	<b>233.51</b>	<b>2602</b>	<b>241.19</b>	<b>2634</b>	<b>249.08</b>	<b>2664</b>	<b>256.59</b>	<b>2695</b>	<b>264.57</b>				
35000	4569	<b>2517</b>	<b>224.00</b>	<b>2549</b>	<b>231.45</b>	<b>2581</b>	<b>239.07</b>	<b>2613</b>	<b>246.86</b>	<b>2644</b>	<b>254.55</b>	<b>2675</b>	<b>262.44</b>	<b>2706</b>	<b>270.54</b>				
36000	4700	<b>2529</b>	<b>229.50</b>	<b>2561</b>	<b>237.16</b>	<b>2593</b>	<b>244.95</b>	<b>2624</b>	<b>252.62</b>	<b>2656</b>	<b>260.73</b>	<b>2686</b>	<b>268.44</b>	<b>2717</b>	<b>276.62</b>				
37000	4830	<b>2542</b>	<b>235.17</b>	<b>2574</b>	<b>243.08</b>	<b>2605</b>	<b>250.82</b>	<b>2636</b>	<b>258.68</b>	<b>2667</b>	<b>266.69</b>	<b>2697</b>	<b>274.53</b>						
38000	4961	<b>2557</b>	<b>241.25</b>	<b>2587</b>	<b>248.88</b>	<b>2618</b>	<b>256.88</b>	<b>2649</b>	<b>264.99</b>	<b>2679</b>	<b>272.91</b>	<b>2709</b>	<b>280.95</b>						
39000	5091	<b>2572</b>	<b>247.13</b>	<b>2602</b>	<b>255.08</b>	<b>2632</b>	<b>263.09</b>	<b>2662</b>	<b>271.18</b>	<b>2692</b>	<b>279.35</b>								
40000	5222	<b>2588</b>	<b>253.08</b>	<b>2618</b>	<b>261.37</b>	<b>2647</b>	<b>269.41</b>	<b>2676</b>	<b>277.50</b>	<b>2706</b>	<b>285.97</b>								
41000	5352	<b>2606</b>	<b>259.41</b>	<b>2635</b>	<b>267.72</b>	<b>2663</b>	<b>275.80</b>	<b>2692</b>	<b>284.23</b>	<b>2720</b>	<b>292.40</b>								
42000	5483	<b>2624</b>	<b>265.62</b>	<b>2652</b>	<b>273.90</b>	<b>2680</b>	<b>282.27</b>	<b>2708</b>	<b>290.73</b>										
43000	5614	<b>2643</b>	<b>272.06</b>	<b>2671</b>	<b>280.60</b>	<b>2698</b>	<b>288.93</b>												
44000	5744	<b>2663</b>	<b>278.73</b>	<b>2690</b>	<b>287.22</b>	<b>2717</b>	<b>295.81</b>												

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 1329	Design 17 1802	Design 22 2088	Design 26 2467
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**402 BCS**

Outlet Area: 9.31 ft<sup>2</sup>

Wheel Diameter: 40.25"

Tip Speed (FPM): 10.54 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
15000	1611	648	6.39	828	12.69	985	19.92	1124	27.93										
16000	1719	666	6.91	838	13.44	993	20.87	1128	29.05	1255	38.03								
17000	1826	686	7.49	849	14.20	1001	21.82	1134	30.22	1257	39.36	1373	49.07						
18000	1933	707	8.13	863	15.05	1010	22.88	1141	31.42	1261	40.74	1374	50.63	1482	61.12				
19000	2041	729	8.82	878	15.93	1019	23.96	1149	32.68	1267	42.20	1377	52.27	1482	62.88				
20000	2148	751	9.55	894	16.84	1029	25.08	1158	34.05	1274	43.70	1382	53.99	1485	64.87	1583	76.10		
21000	2256	774	10.35	911	17.80	1041	26.27	1167	35.48	1282	45.28	1388	55.73	1488	66.70	1585	78.29	1678	90.26
22000	2363	797	11.19	929	18.83	1055	27.54	1176	36.91	1290	46.87	1395	57.52	1494	68.79	1588	80.46	1679	92.60
23000	2470	820	12.08	948	19.92	1070	28.85	1186	38.40	1299	48.63	1403	59.42	1500	70.78	1593	82.76	1682	95.09
24000	2578	843	13.01	969	21.16	1085	30.14	1198	40.01	1308	50.42	1411	61.33	1508	73.01	1599	85.09	1686	97.57
25000	2685	867	14.03	989	22.36	1102	31.59	1211	41.63	1318	52.32	1420	63.42	1515	75.07	1605	87.33	1691	100.07
26000	2793	891	15.09	1011	23.72	1119	33.03	1225	43.29	1328	54.16	1429	65.57	1524	77.45	1613	89.87	1698	102.81
27000	2900	916	16.26	1033	25.12	1138	34.66	1240	45.02	<u>1340</u>	<u>56.15</u>	1438	67.72	1532	79.75	1621	92.40	1705	105.50
28000	3008	941	17.48	1055	26.57	1157	36.31	1256	46.84	<u>1353</u>	<u>58.16</u>	1448	69.96	1541	82.25	1629	94.95	1712	108.15
29000	3115	966	18.75	1077	28.07	1177	38.06	1273	48.77	<u>1367</u>	<u>60.24</u>	<u>1459</u>	<u>72.26</u>	1550	84.76	1638	97.77	1721	111.20
30000	3222	991	20.07	1100	29.70	1197	39.84	1291	50.81	1382	62.41	1472	74.75	1560	87.39	1646	100.45	1729	114.09

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
28000	3008	1792	121.94	<u>1869</u>	<u>136.11</u>	<u>1943</u>	<u>150.51</u>	<u>1980</u>	<u>158.00</u>	<u>2016</u>	<u>165.44</u>	<u>2052</u>	<u>173.05</u>	<u>2088</u>	<u>180.84</u>	<u>2123</u>	<u>188.56</u>	<u>2158</u>	<u>196.46</u>
29000	3115	1800	125.10	<u>1875</u>	<u>139.22</u>	<u>1949</u>	<u>154.04</u>	<u>1985</u>	<u>161.53</u>	<u>2021</u>	<u>169.22</u>	<u>2056</u>	<u>176.84</u>	<u>2091</u>	<u>184.64</u>	<u>2125</u>	<u>192.34</u>	<u>2159</u>	<u>200.20</u>
30000	3222	<u>1807</u>	<u>128.05</u>	<u>1883</u>	<u>142.72</u>	<u>1955</u>	<u>157.46</u>	<u>1991</u>	<u>165.16</u>	<u>2026</u>	<u>172.83</u>	<u>2060</u>	<u>180.42</u>	<u>2095</u>	<u>188.47</u>	<u>2129</u>	<u>196.43</u>	<u>2162</u>	<u>204.27</u>
31000	3330	<u>1816</u>	<u>131.45</u>	<u>1890</u>	<u>145.96</u>	<u>1962</u>	<u>161.04</u>	<u>1997</u>	<u>168.69</u>	<u>2032</u>	<u>176.55</u>	<u>2066</u>	<u>184.37</u>	<u>2100</u>	<u>192.37</u>	<u>2133</u>	<u>200.29</u>	<u>2166</u>	<u>208.38</u>
32000	3437	<u>1824</u>	<u>134.70</u>	<u>1898</u>	<u>149.44</u>	<u>1970</u>	<u>164.83</u>	<u>2004</u>	<u>172.40</u>	<u>2039</u>	<u>180.45</u>	<u>2072</u>	<u>188.19</u>	<u>2106</u>	<u>196.41</u>	<u>2139</u>	<u>204.54</u>	<u>2171</u>	<u>212.58</u>
33000	3545	<u>1832</u>	<u>138.03</u>	<u>1907</u>	<u>153.21</u>	<u>1977</u>	<u>168.37</u>	<u>2012</u>	<u>176.34</u>	<u>2046</u>	<u>184.30</u>	<u>2079</u>	<u>192.21</u>	<u>2112</u>	<u>200.34</u>	<u>2145</u>	<u>208.67</u>	<u>2177</u>	<u>216.91</u>
34000	3652	<u>1841</u>	<u>141.62</u>	<u>1915</u>	<u>156.83</u>	<u>1986</u>	<u>172.44</u>	<u>2020</u>	<u>180.30</u>	<u>2054</u>	<u>188.40</u>	<u>2087</u>	<u>196.47</u>	<u>2119</u>	<u>204.49</u>	<u>2152</u>	<u>213.00</u>	<u>2183</u>	<u>221.13</u>
35000	3759	<u>1851</u>	<u>145.42</u>	<u>1923</u>	<u>160.51</u>	<u>1994</u>	<u>176.34</u>	<u>2028</u>	<u>184.29</u>	<u>2062</u>	<u>192.52</u>	<u>2095</u>	<u>200.74</u>	<u>2127</u>	<u>208.90</u>	<u>2159</u>	<u>217.29</u>	<u>2190</u>	<u>225.58</u>
36000	3867	<u>1861</u>	<u>149.16</u>	<u>1932</u>	<u>164.45</u>	<u>2002</u>	<u>180.32</u>	<u>2036</u>	<u>188.37</u>	<u>2070</u>	<u>196.70</u>	<u>2103</u>	<u>205.03</u>	<u>2135</u>	<u>213.32</u>	<u>2167</u>	<u>221.86</u>	<u>2198</u>	<u>230.32</u>
37000	3974	<u>1871</u>	<u>152.79</u>	<u>1942</u>	<u>168.62</u>	<u>2011</u>	<u>184.62</u>	<u>2045</u>	<u>192.82</u>	<u>2078</u>	<u>200.97</u>	<u>2111</u>	<u>209.39</u>	<u>2143</u>	<u>217.79</u>	<u>2175</u>	<u>226.45</u>	<u>2206</u>	<u>235.05</u>
38000	4082	<u>1883</u>	<u>156.79</u>	<u>1952</u>	<u>172.71</u>	<u>2020</u>	<u>188.92</u>	<u>2054</u>	<u>197.30</u>	<u>2087</u>	<u>205.61</u>	<u>2119</u>	<u>213.86</u>	<u>2151</u>	<u>222.35</u>	<u>2183</u>	<u>231.10</u>	<u>2214</u>	<u>239.82</u>
39000	4189	<u>1895</u>	<u>160.63</u>	<u>1963</u>	<u>176.95</u>	<u>2030</u>	<u>193.44</u>	<u>2063</u>	<u>201.77</u>	<u>2095</u>	<u>209.98</u>	<u>2128</u>	<u>218.69</u>	<u>2160</u>	<u>227.31</u>	<u>2191</u>	<u>235.86</u>	<u>2222</u>	<u>244.66</u>
40000	4296	<u>1909</u>	<u>164.85</u>	<u>1975</u>	<u>181.32</u>	<u>2040</u>	<u>197.87</u>	<u>2072</u>	<u>206.16</u>	<u>2105</u>	<u>214.91</u>	<u>2137</u>	<u>223.53</u>	<u>2168</u>	<u>232.01</u>	<u>2199</u>	<u>240.70</u>	<u>2230</u>	<u>249.61</u>
41000	4404	<u>1923</u>	<u>169.01</u>	<u>1987</u>	<u>185.53</u>	<u>2051</u>	<u>202.46</u>	<u>2083</u>	<u>211.06</u>	<u>2115</u>	<u>219.78</u>	<u>2146</u>	<u>228.32</u>	<u>2177</u>	<u>237.02</u>	<u>2208</u>	<u>245.90</u>	<u>2239</u>	<u>254.97</u>
42000	4511	<u>1937</u>	<u>173.10</u>	<u>2000</u>	<u>189.89</u>	<u>2063</u>	<u>207.19</u>	<u>2094</u>	<u>215.82</u>	<u>2125</u>	<u>224.53</u>	<u>2156</u>	<u>233.35</u>	<u>2187</u>	<u>242.30</u>	<u>2217</u>	<u>251.07</u>	<u>2248</u>	<u>260.35</u>
43000	4619	<u>1952</u>	<u>177.42</u>	<u>2014</u>	<u>194.46</u>	<u>2076</u>	<u>212.06</u>	<u>2106</u>	<u>220.73</u>	<u>2136</u>	<u>229.45</u>	<u>2167</u>	<u>238.58</u>	<u>2197</u>	<u>247.49</u>	<u>2227</u>	<u>256.52</u>	<u>2257</u>	<u>265.69</u>

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
34000	3652	<u>2215</u>	<u>229.76</u>	<u>2246</u>	<u>238.26</u>	<u>2277</u>	<u>246.95</u>	<u>2307</u>	<u>255.49</u>	<u>2338</u>	<u>264.52</u>	<u>2368</u>	<u>273.37</u>	<u>2397</u>	<u>282.03</u>	<u>2427</u>	<u>291.19</u>	<u>2456</u>	<u>300.12</u>
35000	3759	<u>2222</u>	<u>234.40</u>	<u>2252</u>	<u>242.78</u>	<u>2283</u>	<u>251.67</u>	<u>2313</u>	<u>260.42</u>	<u>2343</u>	<u>269.33</u>	<u>2372</u>	<u>278.07</u>	<u>2402</u>	<u>287.32</u>	<u>2431</u>	<u>296.37</u>	<u>2460</u>	<u>305.56</u>
36000	3867	<u>2229</u>	<u>238.99</u>	<u>2259</u>	<u>247.54</u>	<u>2289</u>	<u>256.29</u>	<u>2319</u>	<u>265.22</u>	<u>2349</u>	<u>274.34</u>	<u>2378</u>	<u>283.29</u>	<u>2407</u>	<u>292.40</u>	<u>2436</u>	<u>301.68</u>	<u>2464</u>	<u>310.75</u>
37000	3974	<u>2236</u>	<u>243.55</u>	<u>2267</u>	<u>252.59</u>	<u>2297</u>	<u>261.51</u>	<u>2326</u>	<u>270.28</u>	<u>2355</u>	<u>279.24</u>	<u>2384</u>	<u>288.38</u>	<u>2413</u>	<u>297.70</u>	<u>2441</u>	<u>306.82</u>		
38000	4082	<u>2244</u>	<u>248.45</u>	<u>2274</u>	<u>257.30</u>	<u>2304</u>	<u>266.37</u>	<u>2333</u>	<u>275.30</u>	<u>2362</u>	<u>284.43</u>	<u>2391</u>	<u>293.75</u>	<u>2419</u>	<u>302.89</u>	<u>2447</u>	<u>312.20</u>		
39000	4189	<u>2252</u>	<u>253.39</u>	<u>2282</u>	<u>262.37</u>	<u>2312</u>	<u>271.58</u>	<u>2341</u>	<u>280.66</u>	<u>2370</u>	<u>289.95</u>	<u>2398</u>	<u>299.07</u>	<u>2426</u>	<u>308.37</u>	<u>2454</u>	<u>317.87</u>		
40000	4296	<u>2261</u>	<u>258.77</u>	<u>2290</u>	<u>267.50</u>	<u>2320</u>	<u>276.82</u>	<u>2349</u>	<u>286.03</u>	<u>2377</u>	<u>295.09</u>	<u>2406</u>	<u>304.74</u>	<u>2434</u>	<u>314.21</u>	<u>2461</u>	<u>323.47</u>		
41000	4404	<u>2269</u>	<u>263.92</u>	<u>2299</u>	<u>273.10</u>	<u>2328</u>	<u>282.16</u>	<u>2357</u>	<u>291.46</u>	<u>2385</u>	<u>300.65</u>	<u>2413</u>	<u>310.04</u>	<u>2441</u>	<u>319.65</u>				
42000	4511	<u>2277</u>	<u>269.12</u>	<u>2307</u>	<u>278.43</u>	<u>2336</u>	<u>287.61</u>	<u>2365</u>	<u>297.01</u>	<u>2394</u>	<u>306.65</u>	<u>2421</u>	<u>315.77</u>	<u>2449</u>	<u>325.50</u>				
43000	4619	<u>2286</u>	<u>274.66</u>	<u>2316</u>	<u>284.17</u>	<u>2345</u>	<u>293.50</u>	<u>2373</u>	<u>302.65</u>	<u>2402</u>	<u>312.40</u>	<u>2430</u>	<u>322.00</u>	<u>2457</u>	<u>331.43</u>				
44000	4726	<u>2296</u>	<u>280.52</u>	<u>2325</u>	<u>289.88</u>	<u>2353</u>	<u>299.03</u>	<u>2382</u>	<u>308.73</u>	<u>2410</u>	<u>318.24</u>	<u>2438</u>	<u>327.95</u>	<u>2465</u>	<u>337.48</u>				
45000	4834	<u>2306</u>	<u>286.30</u>	<u>2334</u>	<u>295.54</u>	<u>2363</u>	<u>305.29</u>	<u>2391</u>	<u>314.82</u>	<u>2419</u>	<u>324.51</u>	<u>2446</u>	<u>333.97</u>						
47000	5048	<u>2327</u>	<u>297.82</u>	<u>2355</u>	<u>307.64</u>	<u>2382</u>	<u>317.17</u>	<u>2410</u>	<u>327.20</u>	<u>2437</u>	<u>336.95</u>	<u>2464</u>	<u>346.83</u>						
49000	5263	<u>2352</u>	<u>310.16</u>	<u>2378</u>	<u>319.88</u>	<u>2405</u>	<u>330.07</u>	<u>2431</u>	<u>339.90</u>	<u>2457</u>	<u>349.81</u>								
51000	5478	<u>2379</u>	<u>322.74</u>	<u>2404</u>	<u>332.63</u>	<u>2430</u>	<u>343.05</u>	<u>2455</u>	<u>353.14</u>										
53000	5693	<u>2407</u>	<u>335.44</u>	<u>2432</u>	<u>345.84</u>	<u>2457</u>	<u>356.37</u>												



Max. RPM	Design 14 1202	Design 17 1631	Design 22 1888	Design 26 2231
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**445 BCS**

Outlet Area: 11.39 ft<sup>2</sup>

Wheel Diameter: 44.50"

Tip Speed (FPM): 11.65 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
17000	1493	569	7.16	740	14.56	885	23.18	1015	32.71										
18500	1624	588	7.89	750	15.62	892	24.51	1017	34.32	1134	45.02								
20000	1756	609	8.70	761	16.74	901	25.95	1022	36.01	1135	47.00								
21500	1888	632	9.63	775	17.95	910	27.42	1030	37.87	1139	49.11	1242	61.07						
23000	2019	656	10.64	791	19.23	920	29.03	1038	39.67	1145	51.26	1245	63.54	1341	76.57				
24500	2151	681	11.75	809	20.61	931	30.70	1048	41.73	1153	53.54	1250	66.06	1343	79.34	1432	93.16		
26000	2283	706	12.94	828	22.06	945	32.54	1057	43.75	1162	55.94	1257	68.69	1347	82.17	1434	96.36	1518	111.13
27500	2414	731	14.20	849	23.69	961	34.47	1068	46.01	1171	58.37	1265	71.40	1354	85.30	1438	99.64	1520	114.73
29000	2546	757	15.60	871	25.43	978	36.45	1081	48.43	1181	61.05	1275	74.45	1362	88.49	1444	103.06	1524	118.46
30500	2678	783	17.08	894	27.29	996	38.52	1095	50.82	1191	63.73	1284	77.40	1370	91.64	1452	106.74	1530	122.35
32000	2809	810	18.70	918	29.30	1015	40.70	1111	53.38	1203	66.63	1294	80.63	1380	95.22	1460	110.34	1537	126.27
33500	2941	837	20.42	942	31.38	1036	43.15	1128	56.02	1217	69.68	1304	83.84	1389	98.72	1469	114.18	1545	130.34
35000	3073	865	22.30	967	33.65	1058	45.74	1146	58.78	1232	72.74	1316	87.31	1399	102.49	1478	118.09	1554	134.64
36500	3205	893	24.28	992	36.01	1080	48.37	1165	61.69	1248	75.89	1330	90.99	1410	106.43	1488	122.38	1563	139.00
38000	3336	922	26.45	1017	38.48	1104	51.33	1185	64.77	1266	79.36	1345	94.69	1422	110.46	1498	126.68	1572	143.50
39500	3468	951	28.74	1043	41.19	1128	54.37	1206	68.04	1284	82.81	1361	98.50	1435	114.50	1509	131.14	1582	148.34

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
36500	3205	1634	156.15	1702	173.81	1768	192.05	1800	201.25	1832	210.69	1863	220.03	1894	229.59	1925	239.36	1955	248.96
38000	3336	1643	160.96	1710	178.74	1775	197.17	1807	206.65	1838	216.06	1869	225.71	1900	235.61	1930	245.37	1960	255.35
39500	3468	1652	165.90	1719	184.01	1784	202.89	1815	212.29	1846	221.97	1876	231.55	1906	241.38	1936	251.46	1965	261.38
41000	3600	1662	171.27	1729	189.72	1793	208.64	1824	218.25	1854	227.80	1884	237.64	1914	247.74	1943	257.72	1972	267.94
42500	3731	1672	176.64	1738	195.26	1802	214.47	1833	224.26	1863	234.01	1893	244.07	1922	254.02	1951	264.25	1980	274.75
44000	3863	1683	182.23	1748	201.18	1811	220.48	1842	230.41	1872	240.30	1902	250.54	1931	260.71	1960	271.16	1988	281.48
45500	3995	1695	187.96	1758	207.04	1821	226.94	1851	236.71	1881	246.77	1911	257.15	1940	267.46	1969	278.12	1997	288.64
47000	4126	1708	193.77	1770	213.44	1831	233.36	1861	243.44	1891	253.76	1920	263.94	1949	274.41	1978	285.19	2006	295.87
48500	4258	1723	199.99	1782	219.61	1842	240.03	1872	250.49	1901	260.74	1930	271.20	1959	281.91	1987	292.46	2015	303.29
50000	4390	1738	206.05	1796	226.23	1854	246.88	1883	257.37	1912	268.02	1940	278.41	1969	289.44	1997	300.26	2024	310.86
51500	4522	1754	212.36	1811	232.98	1867	253.85	1895	264.42	1923	275.10	1951	285.90	1979	296.87	2007	308.03	2034	318.92
53000	4653	1771	218.96	1827	239.99	1882	261.32	1909	272.01	1936	282.77	1963	293.61	1990	304.57	2017	315.66	2044	326.91
54500	4785	1789	225.88	1843	246.91	1897	268.63	1923	279.30	1950	290.56	1976	301.48	2003	312.92	2029	324.01	2055	335.21
56000	4917	1807	232.77	1860	254.15	1913	276.23	1939	287.31	1965	298.54	1990	309.47	2016	320.97	2042	332.56	2067	343.75
57500	5048	1826	240.05	1878	261.75	1929	283.74	1955	295.21	1980	306.38	2005	317.70	2031	329.66	2056	341.27	2080	352.47
59000	5180	1845	247.33	1896	269.33	1946	291.61	1971	303.01	1996	314.57	2021	326.29	2046	338.16	2070	349.70	2094	361.36

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
44000	3863	2016	292.06	2043	302.46	2071	313.53	2098	324.40	2124	335.01	2151	346.32	2177	357.35	2203	368.57	2229	379.99
45500	3995	2024	299.00	2052	310.08	2079	320.96	2105	331.63	2132	342.99	2158	354.11	2184	365.44	2209	376.48		
47000	4126	2033	306.43	2060	317.26	2087	328.36	2114	339.73	2140	350.87	2165	361.75	2191	373.35	2216	384.67		
48500	4258	2042	313.96	2069	324.95	2096	336.26	2122	347.35	2148	358.70	2174	370.32	2199	381.66	2224	393.23		
50000	4390	2051	321.71	2078	332.84	2105	344.27	2131	355.53	2157	367.08	2182	378.39	2207	389.94				
51500	4522	2061	330.03	2088	341.39	2114	352.51	2140	363.90	2166	375.59	2191	387.04	2216	398.80				
53000	4653	2071	338.35	2097	349.50	2124	361.37	2149	372.45	2175	384.31	2200	395.91	2225	407.78				
54500	4785	2082	347.04	2108	358.54	2133	369.71	2159	381.59	2184	393.16	2209	404.96						
56000	4917	2093	355.52	2119	367.44	2144	378.98	2169	390.68	2194	402.55	2219	414.62						
57500	5048	2105	364.23	2130	376.09	2155	388.06	2180	400.16	2205	412.40	2229	424.26						
59000	5180	2119	373.65	2143	385.49	2167	397.40	2191	409.40	2216	422.07								
60500	5312	2133	382.74	2157	395.09	2180	406.96	2204	419.46	2228	432.04								
62000	5443	2148	392.16	2171	404.38	2194	416.72	2217	429.17										
63500	5575	2164	402.00	2186	414.05	2209	426.80												
65000	5707	2180	411.73	2202	424.16	2224	436.74												
66500	5838	2197	421.95	2219	434.77														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 1092	Design 17 1481	Design 22 1780	Design 26 2027
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**490 BCS**

Outlet Area: 13.80 ft<sup>2</sup>

Wheel Diameter: 49.00"

Tip Speed (FPM): 12.83 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
20000	1449	511	8.38	669	17.23	802	27.58	922	39.06										
22000	1594	530	9.36	679	18.64	808	29.28	923	41.15										
24000	1739	550	10.39	690	20.14	817	31.21	928	43.46	1031	56.73								
26000	1884	573	11.62	703	21.68	826	33.16	935	45.81	1034	59.41	1128	73.96						
28000	2029	597	12.97	720	23.48	836	35.31	944	48.37	1040	62.27	1131	77.26	1218	93.07				
30000	2174	622	14.47	738	25.33	848	37.65	953	50.98	1048	65.31	1136	80.57	1220	96.72	1301	113.67	1378	131.07
32000	2319	647	16.07	757	27.27	862	40.07	963	53.85	1057	68.50	1144	84.27	1225	100.65	1303	117.85	1379	135.90
34000	2464	672	17.78	778	29.45	878	42.62	974	56.84	1067	71.99	1152	87.88	1232	104.77	1308	122.37	1381	140.57
36000	2609	698	19.69	801	31.90	895	45.25	987	59.98	1077	75.59	1161	91.74	1240	108.99	1315	127.11	1386	145.66
38000	2754	725	21.81	824	34.43	914	48.16	1002	63.26	1088	79.32	1171	95.99	1249	113.46	1323	131.96	1393	151.02
40000	2899	752	24.06	848	37.17	934	51.24	1019	66.81	1101	83.27	1181	100.30	1259	118.33	1331	136.75	1400	156.15
42000	3043	780	26.54	873	40.16	956	54.69	1037	70.51	1115	87.18	1193	104.99	1268	123.07	1341	142.25	1409	161.88
44000	3188	808	29.16	898	43.30	978	58.19	1056	74.39	1132	91.65	1206	109.70	1279	128.35	1350	147.62	1418	167.67
46000	3333	836	31.93	923	46.59	1001	61.95	1076	78.51	1149	96.04	1221	114.65	1291	133.74	1360	153.36	1427	173.65
48000	3478	865	34.98	948	50.04	1025	66.01	1097	82.88	1167	100.64	1237	119.74	1304	139.14	1371	159.31	1437	180.11
50000	3623	894	38.22	974	53.82	1050	70.41	1119	87.53	1187	105.76	1254	125.03	1319	144.88	1384	165.70	1448	186.89

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
44000	3188	1483	188.60	1545	210.03	1604	231.64	1634	243.15	1663	254.53	1691	265.72	1719	277.17	1747	288.87	1775	300.81
46000	3333	1492	195.01	1553	216.62	1612	238.93	1641	250.39	1669	261.71	1697	273.33	1725	285.24	1752	296.93	1780	309.40
48000	3478	1501	201.60	1562	223.66	1620	246.12	1649	257.92	1677	269.60	1704	281.11	1732	293.44	1759	305.56	1785	317.44
50000	3623	1511	208.77	1571	230.86	1629	253.78	1657	265.39	1685	277.38	1712	289.22	1739	301.40	1766	313.89	1792	326.16
52000	3768	1521	215.92	1581	238.72	1638	261.61	1666	273.43	1694	285.68	1721	297.81	1748	310.30	1774	322.60	1800	335.21
54000	3913	1532	223.32	1591	246.62	1648	270.16	1676	282.21	1703	294.14	1730	306.48	1757	319.24	1783	331.83	1808	344.19
56000	4058	1545	231.28	1602	254.83	1658	278.77	1685	290.66	1713	303.38	1739	315.41	1766	328.35	1792	341.15	1817	353.76
58000	4203	1558	238.84	1614	263.23	1668	287.27	1695	299.59	1722	312.19	1749	325.07	1775	337.73	1801	350.74	1826	363.52
60000	4348	1573	246.99	1627	271.74	1680	296.52	1706	308.88	1733	321.97	1759	334.75	1785	347.78	1810	360.52	1835	373.56
62000	4493	1589	255.45	1641	280.32	1693	305.94	1719	318.93	1744	331.51	1770	344.82	1795	357.75	1820	370.90	1845	384.31
64000	4638	1606	264.27	1657	289.70	1707	315.45	1732	328.58	1757	341.82	1781	354.58	1806	368.07	1831	381.75	1855	395.00
66000	4783	1624	273.51	1673	298.95	1722	325.21	1746	338.35	1770	351.68	1794	365.11	1818	378.64	1842	392.30	1866	406.09
68000	4928	1642	282.71	1690	308.61	1738	335.36	1761	348.45	1785	362.33	1808	375.78	1832	390.02	1855	403.71	1878	417.49
70000	5072	1661	292.43	1708	318.76	1754	345.37	1778	359.58	1801	373.39	1823	386.76	1846	400.93	1869	415.29	1891	429.09
72000	5217	1681	302.71	1726	328.87	1772	356.47	1794	369.97	1817	384.30	1839	398.18	1861	412.24	1883	426.47	1905	440.87
74000	5362	1701	313.05	1745	339.56	1790	367.53	1812	381.53	1834	395.72	1856	410.12	1877	424.03	1899	438.79	1920	453.05

CFM	OV	32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP		40" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
52000	3768	1825	347.58	1851	360.81	1876	373.73	1900	386.33	1925	399.79	1949	412.88	1973	426.20	1997	439.76	2021	453.53
54000	3913	1833	356.86	1858	369.85	1883	383.14	1907	396.11	1932	409.98	1956	423.48	1979	436.59	2003	450.60	2026	464.17
56000	4058	1842	366.72	1867	380.02	1891	393.02	1915	406.31	1939	419.91	1963	433.78	1986	447.27	2009	461.01		
58000	4203	1851	376.69	1876	390.24	1900	403.51	1924	417.11	1947	430.37	1971	444.58	1994	458.42	2017	472.53		
60000	4348	1860	386.92	1885	400.66	1909	414.14	1933	427.99	1956	441.51	1979	455.34	2002	469.47	2025	483.91		
62000	4493	1870	398.00	1894	411.37	1918	425.05	1942	439.08	1965	452.79	1988	466.86	2011	481.26				
64000	4638	1879	408.47	1903	422.18	1927	436.18	1951	450.46	1974	464.38	1997	478.62	2020	493.22				
66000	4783	1890	420.08	1914	434.27	1937	447.99	1960	461.95	1983	476.17	2006	490.68						
68000	4928	1901	431.39	1925	446.13	1948	460.36	1970	474.07	1993	488.71	2016	503.58						
70000	5072	1914	443.67	1936	457.64	1959	472.44	1981	486.69	2004	501.83	2026	516.42						
72000	5217	1927	455.44	1949	470.09	1971	484.84	1993	499.68	2015	514.66								
74000	5362	1942	468.17	1963	482.75	1984	497.45	2006	512.98	2027	527.84								
76000	5507	1957	480.67	1978	495.79	1999	511.07	2019	525.74										
78000	5652	1973	493.73	1994	509.38	2014	524.43												
80000	5797	1990	507.41	2010	522.81														
82000	5942	2007	520.98	2026	536.09														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 986	Design 17 1338	Design 22 1549	Design 26 1831
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**542 BCS**

Outlet Area: 16.92 ft<sup>2</sup>

Wheel Diameter: 54.25"

Tip Speed (FPM): 14.20 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
25000	1478	465	10.52	606	21.45	725	34.17	833	48.42										
27500	1625	482	11.70	615	23.20	732	36.48	835	51.16	931	67.09								
30000	1773	502	13.11	626	25.15	740	38.83	839	53.85	932	70.39	1019	87.86						
32500	1921	523	14.65	639	27.16	748	41.25	846	56.84	935	73.68	1019	91.59	1099	110.50				
35000	2069	545	16.35	654	29.30	758	44.08	855	60.18	941	77.29	1023	95.92	1100	115.17	1175	135.72		
37500	2216	568	18.26	671	31.66	769	46.93	863	63.42	949	81.21	1028	100.07	1103	119.95	1175	140.68	1245	162.50
40000	2364	592	20.39	690	34.31	783	50.08	873	67.19	957	85.15	1035	104.53	1108	124.85	1178	146.14	1246	168.41
42500	2512	615	22.58	710	37.15	798	53.29	883	70.83	966	89.51	1043	109.22	1115	130.10	1183	151.78	1249	174.52
45000	2660	639	25.03	731	40.21	815	56.84	896	74.89	976	94.21	1052	114.33	1123	135.57	1190	157.81	1254	180.87
47500	2807	664	27.75	752	43.37	833	60.59	911	79.24	987	99.05	1061	119.63	1131	141.09	1197	163.68	1260	187.24
50000	2955	689	30.64	775	47.02	851	64.37	926	83.47	999	103.86	1071	125.25	1140	147.19	1206	170.37	1268	194.31
52500	3103	715	33.84	798	50.82	872	68.87	943	88.18	1013	108.99	1082	130.98	1149	153.39	1214	176.81	1276	201.35
55000	3251	741	37.23	821	54.82	893	73.47	961	93.18	1029	114.64	1095	137.07	1160	160.27	1223	183.89	1284	208.53
57500	3398	767	40.81	844	59.01	914	78.19	980	98.51	1045	120.22	1109	143.23	1171	166.83	1233	191.38	1293	216.45
60000	3546	794	44.78	868	63.64	936	83.31	1000	104.20	1063	126.46	1124	149.63	1184	173.81	1244	199.09	1303	224.92
62500	3694	821	48.99	892	68.48	959	88.89	1021	110.29	1081	132.73	1140	156.33	1199	181.41	1256	206.89	1313	233.21

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
55000	3251	1343	234.57	1398	260.62	1452	287.90	1478	301.57	1504	315.61	1530	330.02	1555	344.12	1580	358.53	1605	373.27
57500	3398	1351	242.50	1406	269.20	1459	296.72	1485	310.83	1511	325.37	1536	339.65	1561	354.30	1585	368.60	1610	383.95
60000	3546	1360	251.26	1415	278.48	1467	306.08	1493	320.59	1518	334.90	1543	349.64	1567	364.07	1591	378.87	1615	394.03
62500	3694	1369	260.12	1423	287.46	1476	316.18	1501	330.38	1526	345.05	1551	360.18	1575	375.03	1599	390.29	1622	405.19
65000	3842	1379	269.43	1432	297.20	1484	325.95	1509	340.37	1534	355.29	1559	370.75	1583	385.96	1606	400.86	1629	416.16
67500	3989	1390	278.99	1442	307.49	1493	336.57	1518	351.34	1543	366.56	1567	381.53	1591	397.00	1614	412.21	1637	427.85
70000	4137	1402	288.71	1452	317.48	1503	347.82	1527	362.40	1552	378.05	1576	393.38	1599	408.36	1623	424.57	1646	440.48
72500	4285	1415	298.52	1464	328.34	1513	358.82	1537	374.03	1561	389.53	1585	405.34	1608	420.72	1631	436.48	1654	452.65
75000	4433	1430	309.34	1477	339.33	1524	370.10	1548	386.07	1571	401.50	1594	417.16	1617	433.08	1640	449.31	1663	465.90
77500	4580	1445	320.00	1491	350.65	1537	382.29	1559	397.61	1582	413.83	1605	430.22	1627	446.01	1650	462.85	1672	479.14
80000	4728	1461	331.19	1506	362.45	1550	393.98	1572	410.09	1594	426.39	1616	442.80	1638	459.36	1660	476.09	1682	493.03
82500	4876	1477	342.31	1521	374.09	1565	406.94	1586	422.95	1608	439.99	1629	456.44	1650	473.01	1671	489.69	1693	507.40
85000	5024	1495	354.81	1537	386.36	1580	419.71	1601	436.38	1622	453.29	1642	469.56	1663	486.92	1684	504.47	1704	521.24
87500	5171	1512	366.61	1554	399.33	1595	432.35	1616	449.65	1636	466.35	1657	484.14	1677	501.30	1697	518.67	1717	536.25
90000	5319	1531	379.93	1572	413.08	1612	446.53	1632	463.62	1652	480.95	1672	498.54	1691	515.45	1711	533.47	1731	551.74
92500	5467	1550	393.32	1590	426.87	1629	460.67	1648	477.52	1668	495.47	1687	512.77	1707	531.24	1726	548.99	1745	566.96

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
62500	3694	1645	420.44	1668	436.03	1691	451.97	1714	468.23	1736	483.98	1758	500.03	1780	516.34	1802	532.95	1823	548.91
65000	3842	1652	431.83	1675	447.89	1697	463.50	1720	480.27	1742	496.54	1763	512.28	1785	529.17	1806	545.46	1827	562.03
67500	3989	1660	443.91	1683	460.39	1705	476.43	1727	492.82	1748	508.71	1770	525.79	1791	542.32	1812	559.15		
70000	4137	1668	456.05	1691	472.88	1712	488.44	1734	505.21	1756	522.40	1777	539.04	1798	556.01	1818	572.39		
72500	4285	1677	469.27	1699	485.52	1721	502.24	1742	518.50	1763	535.13	1784	552.14	1805	569.52	1826	587.27		
75000	4433	1685	482.01	1707	498.52	1729	515.45	1750	531.94	1771	548.87	1792	566.20	1813	583.95				
77500	4580	1694	495.72	1716	512.64	1737	529.01	1759	546.69	1780	563.84	1801	581.43	1821	598.50				
80000	4728	1704	510.21	1725	526.78	1746	543.61	1767	560.76	1788	578.24	1809	596.12	1829	613.38				
82500	4876	1714	524.40	1735	541.60	1756	559.03	1777	576.71	1797	593.72	1818	612.01						
85000	5024	1725	539.03	1745	556.02	1766	574.15	1786	591.50	1807	610.08	1827	627.90						
87500	5171	1737	553.98	1757	571.81	1777	589.76	1797	607.85	1817	626.13								
90000	5319	1750	569.25	1770	587.94	1789	605.75	1808	623.66	1828	642.72								
92500	5467	1764	585.14	1783	603.51	1802	622.10	1821	640.87										
95000	5615	1779	601.78	1797	619.80	1816	639.07												
97500	5762	1794	618.24	1812	636.90	1830	655.77												
100000	5910	1809	634.53	1827	653.82														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 891	Design 17 1082	Design 22 1401	Design 26 1655
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**600 BCS**

Outlet Area: 20.70 ft<sup>2</sup>

Wheel Diameter: 60.00"

Tip Speed (FPM): 15.71 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
30000	1449	417	12.54	547	25.93	655	41.36	753	58.59										
33000	1594	433	14.04	554	27.87	660	43.94	754	61.77										
36000	1739	450	15.66	563	30.12	667	46.75	758	65.21	842	85.08								
39000	1884	468	17.43	575	32.67	675	49.82	764	68.81	845	89.27	921	110.84						
42000	2029	488	19.50	588	35.20	683	53.01	771	72.55	850	93.60	924	115.99	994	139.28				
45000	2174	508	21.70	602	37.84	692	56.33	778	76.36	856	97.98	928	120.93	996	144.90	1062	170.23	1126	196.90
48000	2319	528	24.04	618	40.85	704	60.09	786	80.61	863	102.65	934	126.26	1001	151.20	1064	176.67	1126	203.71
51000	2464	549	26.69	636	44.29	717	63.89	795	85.09	871	107.82	941	131.86	1006	157.04	1068	183.41	1128	210.91
54000	2609	571	29.68	654	47.80	731	67.87	806	89.92	879	113.14	949	137.94	1013	163.60	1074	190.66	1132	218.50
57000	2754	592	32.69	673	51.63	747	72.37	819	95.09	888	118.73	956	143.81	1020	170.13	1080	197.64	1137	226.09
60000	2899	614	36.05	693	55.84	763	76.90	832	100.11	899	124.81	965	150.65	1028	177.35	1087	205.08	1144	234.57
63000	3043	637	39.79	713	60.23	781	82.08	847	105.76	911	130.90	974	157.30	1036	184.80	1095	213.23	1151	242.96
66000	3188	660	43.74	733	64.81	799	87.35	862	111.38	924	137.21	985	164.54	1045	192.74	1103	221.67	1158	251.41
69000	3333	683	47.93	754	69.90	818	93.06	879	117.81	938	143.84	997	171.84	1054	200.37	1111	230.19	1166	260.82
72000	3478	707	52.58	775	75.25	837	98.94	896	124.31	953	150.87	1010	179.43	1065	208.68	1120	239.12	1174	270.41
75000	3623	730	57.27	796	80.86	857	105.38	914	131.29	969	158.38	1024	187.41	1078	217.73	1130	248.30	1183	280.58

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
63000	3043	1204	273.43	1255	304.77	1305	337.36	1329	353.56	1354	370.97	1377	387.15	1401	404.53	1425	422.33	1448	439.63
66000	3188	1211	282.74	1261	314.39	1310	347.43	1334	364.29	1358	381.60	1381	398.50	1404	415.79	1427	433.46	1450	451.51
69000	3333	1218	292.09	1268	324.63	1316	357.92	1340	375.36	1363	392.45	1386	409.99	1409	427.99	1431	445.48	1453	463.34
72000	3478	1226	302.46	1276	335.68	1323	369.08	1347	387.04	1369	403.80	1392	421.93	1414	439.60	1436	457.72	1458	476.27
75000	3623	1234	313.08	1283	346.22	1331	381.13	1354	398.67	1376	415.89	1399	434.53	1421	452.75	1442	470.48	1464	489.65
78000	3768	1242	323.68	1291	357.87	1338	392.57	1361	410.42	1384	428.93	1406	447.09	1427	464.80	1449	483.99	1470	502.68
81000	3913	1251	334.78	1299	369.56	1346	405.25	1369	423.45	1391	441.30	1413	459.77	1435	478.85	1456	497.49	1477	516.64
84000	4058	1262	347.02	1308	381.87	1354	418.02	1376	435.79	1399	455.01	1421	473.81	1442	492.16	1463	511.10	1484	530.62
87000	4203	1273	358.67	1318	394.64	1363	431.54	1385	450.00	1407	468.84	1428	487.13	1450	506.90	1471	526.17	1491	544.88
90000	4348	1285	370.68	1329	407.72	1372	444.65	1394	463.94	1415	482.52	1436	501.43	1458	521.80	1478	540.45	1499	560.65
93000	4493	1298	383.30	1341	421.13	1383	459.14	1404	478.41	1425	497.88	1445	516.55	1466	536.57	1487	556.95	1507	576.60
96000	4638	1312	396.64	1353	434.19	1394	472.95	1414	492.22	1435	512.69	1455	532.28	1475	552.07	1495	572.09	1515	592.44
99000	4783	1326	409.85	1367	448.95	1406	487.32	1426	507.45	1446	527.89	1466	548.50	1485	568.13	1505	589.10	1524	609.10
102000	4928	1341	423.92	1380	462.56	1419	502.45	1439	523.40	1458	543.57	1477	564.00	1496	584.67	1515	605.47	1534	626.41
105000	5072	1357	438.95	1395	478.07	1433	518.47	1452	539.12	1471	560.09	1489	580.17	1508	601.69	1526	622.28	1545	644.29
108000	5217	1373	454.04	1410	493.56	1447	534.33	1466	555.76	1484	576.35	1502	597.21	1520	618.35	1538	639.74	1556	661.40

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
81000	3913	1497	535.21	1518	555.32	1538	574.80	1558	594.70	1578	615.03	1597	634.58	1616	654.49	1636	676.00	1655	696.64
84000	4058	1504	549.60	1525	570.18	1545	590.15	1564	609.40	1584	630.27	1603	650.37	1622	670.85	1641	691.74		
87000	4203	1512	565.27	1532	585.13	1552	605.49	1571	625.19	1590	645.32	1609	665.90	1628	686.89	1647	708.33		
90000	4348	1519	580.23	1539	600.35	1559	621.01	1578	641.05	1598	662.83	1616	682.59	1635	704.05	1654	726.00		
93000	4493	1527	596.66	1547	617.18	1566	636.96	1586	658.48	1605	679.32	1624	700.71	1642	721.28				
96000	4638	1535	613.12	1555	634.19	1574	654.43	1593	675.11	1612	696.26	1631	717.91	1649	738.73				
99000	4783	1544	630.56	1563	651.10	1582	671.96	1601	693.19	1620	714.80	1638	735.52						
102000	4928	1553	647.55	1572	668.90	1591	690.53	1609	711.12	1628	733.38	1646	754.63						
105000	5072	1563	665.16	1582	687.47	1600	708.66	1618	730.07	1636	751.71	1654	773.63						
108000	5217	1574	683.28	1592	705.33	1610	727.50	1628	749.82	1646	772.36								
111000	5362	1586	702.05	1603	723.71	1621	746.93	1638	768.88	1655	790.97								
114000	5507	1599	721.80	1616	744.29	1633	767.02	1649	788.53										
117000	5652	1612	741.30	1628	763.16	1645	786.70												
120000	5797	1625	760.57	1641	783.18														
123000	5942	1639	781.08	1655	804.45														
126000	6087	1654	802.93																

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 810	Design 17 984	Design 22 1273	Design 26 1504
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**660 BCS**

Outlet Area: 25.04 ft<sup>2</sup>

Wheel Diameter: 66.00"

Tip Speed (FPM): 17.28 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
30000	1198	361	12.67	487	27.49														
33000	1318	369	13.86	491	29.23	593	47.23												
36000	1438	378	15.04	496	31.05	595	49.75												
39000	1558	390	16.54	502	33.11	599	52.44	685	73.74										
42000	1677	402	18.05	509	35.44	604	55.22	687	77.01	765	100.86								
45000	1797	415	19.71	516	37.67	609	57.95	691	80.58	766	104.82	837	130.70						
48000	1917	430	21.71	525	40.14	615	61.06	695	83.93	769	109.15	838	135.62	904	163.72				
51000	2037	444	23.64	535	42.71	621	64.25	701	87.93	773	113.53	840	140.57	904	169.03				
54000	2157	459	25.82	546	45.47	628	67.65	707	92.01	777	117.68	843	145.52	906	174.98	966	205.45		
57000	2276	475	28.30	558	48.47	637	71.48	713	96.26	783	122.68	847	150.64	908	180.37	967	211.72	1023	243.66
60000	2396	490	30.74	570	51.49	646	75.07	719	100.49	789	127.77	852	156.12	912	186.50	969	218.05	1024	250.77
63000	2516	506	33.51	584	55.09	656	78.91	726	104.96	794	132.55	858	162.12	917	192.98	973	225.20	1027	258.76
66000	2636	522	36.44	598	58.76	667	83.04	735	110.02	801	138.37	864	168.24	922	199.34	977	232.00	1030	266.16
70000	2796	544	40.72	617	63.90	683	89.03	748	116.85	810	145.74	871	176.11	929	208.07	984	241.98	1035	276.15
74000	2955	566	45.27	637	69.58	700	95.48	761	123.47	<u>821</u>	<u>153.64</u>	880	185.17	937	217.82	<u>991</u>	<u>251.92</u>	<u>1042</u>	<u>287.37</u>
78000	3115	589	50.37	657	75.53	718	102.42	776	130.96	<u>834</u>	<u>162.17</u>	890	194.46	945	227.74	<u>999</u>	<u>262.95</u>	<u>1049</u>	<u>298.55</u>

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
74000	2955	<u>1091</u>	<u>324.19</u>	<u>1138</u>	<u>361.84</u>	<u>1184</u>	<u>400.82</u>	<u>1206</u>	<u>420.06</u>	<u>1229</u>	<u>440.83</u>	<u>1251</u>	<u>461.04</u>	<u>1273</u>	<u>481.74</u>	<u>1294</u>	<u>501.78</u>	<u>1316</u>	<u>523.49</u>
78000	3115	<u>1097</u>	<u>335.75</u>	<u>1144</u>	<u>374.91</u>	<u>1189</u>	<u>414.66</u>	<u>1211</u>	<u>434.87</u>	<u>1232</u>	<u>454.50</u>	<u>1254</u>	<u>475.73</u>	<u>1275</u>	<u>496.31</u>	<u>1296</u>	<u>517.33</u>	<u>1317</u>	<u>538.80</u>
82000	3275	<u>1105</u>	<u>349.08</u>	<u>1150</u>	<u>387.61</u>	<u>1194</u>	<u>427.78</u>	<u>1216</u>	<u>448.80</u>	<u>1237</u>	<u>469.29</u>	<u>1258</u>	<u>490.31</u>	<u>1279</u>	<u>511.86</u>	<u>1299</u>	<u>532.67</u>	<u>1320</u>	<u>555.17</u>
86000	3435	<u>1112</u>	<u>361.76</u>	<u>1158</u>	<u>402.28</u>	<u>1201</u>	<u>442.69</u>	<u>1222</u>	<u>463.32</u>	<u>1243</u>	<u>484.55</u>	<u>1264</u>	<u>506.39</u>	<u>1284</u>	<u>527.58</u>	<u>1304</u>	<u>549.28</u>	<u>1324</u>	<u>571.48</u>
90000	3594	<u>1120</u>	<u>375.85</u>	<u>1165</u>	<u>416.20</u>	<u>1208</u>	<u>457.57</u>	<u>1229</u>	<u>478.79</u>	<u>1250</u>	<u>500.69</u>	<u>1270</u>	<u>522.01</u>	<u>1290</u>	<u>543.93</u>	<u>1310</u>	<u>566.41</u>	<u>1329</u>	<u>588.12</u>
94000	3754	<u>1128</u>	<u>389.99</u>	<u>1173</u>	<u>431.67</u>	<u>1216</u>	<u>473.89</u>	<u>1237</u>	<u>495.59</u>	<u>1257</u>	<u>516.83</u>	<u>1277</u>	<u>538.72</u>	<u>1297</u>	<u>561.28</u>	<u>1316</u>	<u>583.13</u>	<u>1336</u>	<u>606.90</u>
98000	3914	<u>1138</u>	<u>405.84</u>	<u>1181</u>	<u>447.25</u>	<u>1223</u>	<u>489.57</u>	<u>1244</u>	<u>511.69</u>	<u>1265</u>	<u>534.54</u>	<u>1285</u>	<u>556.88</u>	<u>1304</u>	<u>578.66</u>	<u>1323</u>	<u>601.06</u>	<u>1343</u>	<u>625.48</u>
102000	4073	<u>1148</u>	<u>421.03</u>	<u>1190</u>	<u>463.63</u>	<u>1232</u>	<u>507.79</u>	<u>1252</u>	<u>529.38</u>	<u>1272</u>	<u>551.53</u>	<u>1292</u>	<u>574.30</u>	<u>1312</u>	<u>597.76</u>	<u>1331</u>	<u>620.59</u>	<u>1350</u>	<u>644.15</u>
106000	4233	<u>1159</u>	<u>436.42</u>	<u>1200</u>	<u>480.52</u>	<u>1240</u>	<u>524.47</u>	<u>1260</u>	<u>546.97</u>	<u>1280</u>	<u>569.92</u>	<u>1300</u>	<u>593.40</u>	<u>1319</u>	<u>616.06</u>	<u>1338</u>	<u>639.32</u>	<u>1357</u>	<u>663.23</u>
110000	4393	<u>1172</u>	<u>453.46</u>	<u>1211</u>	<u>497.72</u>	<u>1250</u>	<u>543.02</u>	<u>1270</u>	<u>566.70</u>	<u>1289</u>	<u>589.38</u>	<u>1308</u>	<u>612.42</u>	<u>1327</u>	<u>635.88</u>	<u>1346</u>	<u>659.83</u>	<u>1365</u>	<u>684.34</u>
114000	4553	<u>1185</u>	<u>470.16</u>	<u>1223</u>	<u>515.36</u>	<u>1261</u>	<u>562.01</u>	<u>1280</u>	<u>585.68</u>	<u>1299</u>	<u>609.59</u>	<u>1317</u>	<u>632.35</u>	<u>1336</u>	<u>656.85</u>	<u>1355</u>	<u>681.75</u>	<u>1373</u>	<u>705.57</u>
118000	4712	<u>1199</u>	<u>487.84</u>	<u>1236</u>	<u>533.85</u>	<u>1273</u>	<u>581.40</u>	<u>1291</u>	<u>605.03</u>	<u>1309</u>	<u>628.91</u>	<u>1327</u>	<u>652.92</u>	<u>1346</u>	<u>678.68</u>	<u>1364</u>	<u>703.21</u>	<u>1382</u>	<u>728.04</u>
122000	4872	<u>1214</u>	<u>506.60</u>	<u>1250</u>	<u>553.37</u>	<u>1286</u>	<u>601.71</u>	<u>1303</u>	<u>625.01</u>	<u>1321</u>	<u>650.07</u>	<u>1339</u>	<u>675.49</u>	<u>1356</u>	<u>699.59</u>	<u>1374</u>	<u>725.41</u>	<u>1391</u>	<u>749.86</u>
126000	5032	<u>1229</u>	<u>525.32</u>	<u>1264</u>	<u>572.72</u>	<u>1299</u>	<u>621.68</u>	<u>1316</u>	<u>646.00</u>	<u>1334</u>	<u>672.17</u>	<u>1351</u>	<u>697.20</u>	<u>1368</u>	<u>722.53</u>	<u>1384</u>	<u>746.57</u>	<u>1401</u>	<u>772.33</u>
130000	5192	<u>1245</u>	<u>545.36</u>	<u>1279</u>	<u>593.33</u>	<u>1313</u>	<u>642.86</u>	<u>1330</u>	<u>668.19</u>	<u>1347</u>	<u>693.92</u>	<u>1363</u>	<u>718.41</u>	<u>1380</u>	<u>744.82</u>	<u>1396</u>	<u>769.93</u>	<u>1413</u>	<u>797.03</u>
134000	5351	<u>1262</u>	<u>566.86</u>	<u>1295</u>	<u>615.34</u>	<u>1328</u>	<u>665.37</u>	<u>1344</u>	<u>690.19</u>	<u>1361</u>	<u>716.93</u>	<u>1377</u>	<u>742.46</u>	<u>1393</u>	<u>768.31</u>	<u>1409</u>	<u>794.49</u>	<u>1425</u>	<u>820.96</u>

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
90000	3594	<u>1349</u>	<u>611.69</u>	<u>1368</u>	<u>634.42</u>	<u>1387</u>	<u>657.60</u>	<u>1406</u>	<u>681.24</u>	<u>1424</u>	<u>703.88</u>	<u>1442</u>	<u>726.88</u>	<u>1461</u>	<u>751.79</u>	<u>1479</u>	<u>775.58</u>	<u>1497</u>	<u>799.76</u>
94000	3754	<u>1355</u>	<u>629.87</u>	<u>1373</u>	<u>651.98</u>	<u>1392</u>	<u>675.99</u>	<u>1410</u>	<u>699.03</u>	<u>1429</u>	<u>724.05</u>	<u>1447</u>	<u>748.00</u>	<u>1465</u>	<u>772.40</u>	<u>1482</u>	<u>795.59</u>	<u>1500</u>	<u>820.79</u>
98000	3914	<u>1361</u>	<u>647.70</u>	<u>1380</u>	<u>671.92</u>	<u>1398</u>	<u>695.22</u>	<u>1416</u>	<u>719.01</u>	<u>1434</u>	<u>743.32</u>	<u>1452</u>	<u>768.10</u>	<u>1469</u>	<u>791.75</u>	<u>1487</u>	<u>817.46</u>	<u>1504</u>	<u>841.97</u>
102000	4073	<u>1368</u>	<u>666.90</u>	<u>1387</u>	<u>691.72</u>	<u>1405</u>	<u>715.66</u>	<u>1423</u>	<u>740.13</u>	<u>1440</u>	<u>763.58</u>	<u>1458</u>	<u>789.12</u>	<u>1475</u>	<u>813.54</u>	<u>1492</u>	<u>838.42</u>		
106000	4233	<u>1376</u>	<u>687.84</u>	<u>1394</u>	<u>711.66</u>	<u>1412</u>	<u>736.11</u>	<u>1430</u>	<u>761.19</u>	<u>1447</u>	<u>785.22</u>	<u>1464</u>	<u>809.78</u>	<u>1481</u>	<u>834.86</u>	<u>1498</u>	<u>860.42</u>		
110000	4393	<u>1383</u>	<u>707.91</u>	<u>1401</u>	<u>732.07</u>	<u>1419</u>	<u>756.90</u>	<u>1437</u>	<u>782.40</u>	<u>1454</u>	<u>806.96</u>	<u>1471</u>	<u>832.04</u>	<u>1488</u>	<u>857.71</u>				
114000	4553	<u>1391</u>	<u>729.84</u>	<u>1409</u>	<u>754.62</u>	<u>1427</u>	<u>779.94</u>	<u>1444</u>	<u>804.21</u>	<u>1462</u>	<u>830.77</u>	<u>1479</u>	<u>856.29</u>	<u>1496</u>	<u>882.49</u>				
118000	4712	<u>1399</u>	<u>751.65</u>	<u>1417</u>	<u>777.24</u>	<u>1435</u>	<u>803.30</u>	<u>1452</u>	<u>828.18</u>	<u>1469</u>	<u>853.56</u>	<u>1486</u>	<u>879.50</u>	<u>1503</u>	<u>906.04</u>				
122000	4872	<u>1408</u>	<u>774.54</u>	<u>1426</u>	<u>801.19</u>	<u>1443</u>	<u>826.51</u>	<u>1460</u>	<u>852.21</u>	<u>1477</u>	<u>878.34</u>	<u>1494</u>	<u>904.92</u>						
126000	5032	<u>1418</u>	<u>798.29</u>	<u>1435</u>	<u>824.45</u>	<u>1452</u>	<u>850.89</u>	<u>1469</u>	<u>877.62</u>	<u>1485</u>	<u>902.90</u>	<u>1502</u>	<u>930.34</u>						
130000	5192	<u>1429</u>	<u>822.70</u>	<u>1445</u>	<u>848.48</u>	<u>1462</u>	<u>876.20</u>	<u>1478</u>	<u>902.34</u>	<u>1494</u>	<u>928.67</u>								
134000	5351	<u>1441</u>	<u>847.76</u>	<u>1457</u>	<u>874.88</u>	<u>1473</u>	<u>902.22</u>	<u>1488</u>	<u>927.85</u>	<u>1504</u>	<u>955.47</u>								
138000	5511	<u>1453</u>	<u>872.28</u>	<u>1469</u>	<u>900.46</u>	<u>1484</u>	<u>927.14</u>	<u>1500</u>	<u>955.96</u>										
142000	5671	<u>1466</u>	<u>898.18</u>	<u>1482</u>	<u>927.45</u>	<u>1497</u>	<u>955.19</u>												
146000	5831	<u>1480</u>	<u>925.62</u>	<u>1495</u>	<u>954.07</u>														
150000	5990	<u>1494</u>	<u>952.87</u>																

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 735	Design 17 890	Design 22 1180	Design 26 1360
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**730 BCS**

Outlet Area: 30.63 ft<sup>2</sup>

Wheel Diameter: 73.00"

Tip Speed (FPM): 19.11 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
40000	1306	332	16.68	444	35.66	537	57.78												
45000	1469	345	18.95	450	38.67	539	61.79	619	87.38										
50000	1632	359	21.32	458	42.33	544	66.15	620	92.57	692	121.81								
55000	1796	375	24.07	466	45.92	551	71.02	624	98.20	693	128.43	757	159.98						
60000	1959	393	27.33	478	50.27	558	76.10	630	104.26	696	135.13	758	167.91	817	202.38				
65000	2122	411	30.79	491	54.73	566	81.61	637	110.76	702	142.85	761	176.06	818	211.56	873	248.92		
70000	2285	430	34.72	505	59.47	576	87.54	645	118.12	708	150.33	766	184.70	821	221.07	874	259.24	925	298.77
75000	2449	450	39.24	521	64.96	588	93.90	653	125.47	715	158.63	773	194.44	826	231.20	878	270.95	927	311.14
80000	2612	469	43.83	538	70.93	601	100.55	663	133.45	723	167.90	780	204.24	833	242.58	883	282.56	930	323.12
85000	2775	489	49.04	555	77.09	616	108.16	674	141.41	731	176.96	787	214.47	839	253.06	889	294.62	935	336.11
90000	2938	510	54.90	574	84.37	631	115.83	687	150.34	741	186.80	795	225.57	847	265.76	895	306.58	941	349.64
95000	3102	531	61.16	593	92.02	647	124.13	701	159.82	753	197.49	804	237.05	854	277.80	902	319.88	948	364.20
100000	3265	552	67.82	612	100.09	665	133.77	716	169.99	766	208.69	814	248.58	863	291.51	910	334.71	955	379.09
105000	3428	574	75.30	631	108.61	683	143.72	731	180.24	779	219.71	826	261.32	872	304.49	918	349.41	962	394.50
110000	3591	596	83.29	650	117.60	701	154.03	748	192.09	794	232.40	839	274.72	883	318.63	927	364.64	970	411.11
115000	3754	618	91.81	670	127.60	720	165.42	765	204.16	809	245.17	852	287.94	895	333.36	937	380.06	979	428.48

CFM	OV	20" SP		22" SP		23" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
95000	3102	992	410.34	1034	457.51	1054	480.92	1074	505.02	1094	529.78	1114	555.20	1133	579.72	1152	604.78	1172	631.99
100000	3265	998	425.26	1040	474.05	1060	498.36	1080	523.45	1099	547.81	1118	572.84	1137	598.49	1156	624.80	1175	651.72
105000	3428	1005	441.75	1046	490.45	1066	515.52	1086	541.45	1105	566.68	1124	592.67	1142	617.76	1161	645.15	1179	671.53
110000	3591	1012	458.83	1053	508.58	1073	534.23	1092	559.35	1111	585.31	1130	612.10	1148	638.04	1166	664.69	1184	692.02
115000	3754	1020	477.33	1060	527.33	1080	553.54	1099	579.13	1118	605.66	1137	633.16	1155	659.84	1173	687.29	1190	713.74
120000	3918	1029	496.81	1068	547.71	1087	573.29	1106	599.57	1125	626.68	1143	652.94	1162	681.88	1179	708.21	1197	737.14
125000	4081	1038	515.41	1076	567.67	1095	594.46	1114	621.81	1132	648.12	1151	676.86	1168	702.82	1186	731.40	1204	760.89
130000	4244	1049	535.85	1086	589.95	1104	616.63	1122	643.67	1140	671.15	1158	699.18	1176	727.83	1193	755.28	1210	783.43
135000	4407	1061	557.11	1096	611.11	1114	639.49	1131	666.38	1149	695.34	1166	722.87	1183	750.82	1201	781.22	1218	810.30
140000	4571	1073	577.96	1107	632.95	1124	661.11	1141	689.70	1158	718.51	1175	747.59	1192	776.98	1209	806.78	1225	834.98
145000	4734	1086	600.14	1119	656.00	1136	685.52	1152	713.67	1169	744.12	1185	773.02	1201	802.11	1218	833.46	1234	863.09
150000	4897	1100	623.84	1132	680.48	1148	709.50	1164	738.97	1180	768.85	1196	799.20	1212	829.94	1228	861.00	1243	890.15
152500	4979	1107	635.66	1139	693.55	1155	723.23	1170	751.44	1186	782.01	1202	813.02	1217	842.40	1233	874.26	1248	904.25
155000	5060	1114	647.51	1145	704.75	1161	735.03	1177	765.79	1192	795.03	1208	826.72	1223	856.77	1238	887.20	1254	920.20
157500	5142	1121	659.34	1152	717.75	1168	748.67	1183	778.09	1199	809.98	1214	840.29	1229	871.01	1244	902.13	1259	933.60
160000	5224	1129	672.98	1159	730.77	1175	762.29	1190	792.34	1205	822.85	1220	853.80	1235	885.14	1250	916.92	1265	949.09

CFM	OV	30" SP		31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
130000	4244	1227	812.36	1244	842.11	1261	872.76	1277	902.16	1293	932.29	1309	963.10	1324	992.37	1340	1024.53	1355	1055.04
135000	4407	1235	839.99	1251	868.33	1268	899.50	1284	929.35	1300	960.02	1315	989.24	1331	1021.44	1346	1052.05		
140000	4571	1242	865.72	1258	894.93	1275	926.90	1291	957.36	1307	988.57	1322	1018.20	1338	1050.93	1353	1082.12		
145000	4734	1250	893.07	1266	923.44	1282	954.31	1298	985.70	1314	1017.72	1329	1048.01	1345	1081.34	1360	1112.99		
150000	4897	1259	921.65	1275	953.48	1290	983.41	1306	1016.06	1321	1046.80	1336	1078.02	1352	1112.20				
152500	4979	1264	936.61	1279	967.00	1295	999.96	1310	1030.96	1325	1062.33	1340	1094.13	1355	1126.37				
155000	5060	1269	951.22	1284	982.45	1299	1013.90	1314	1045.63	1329	1077.65	1344	1110.09	1359	1142.93				
157500	5142	1274	965.49	1289	997.56	1304	1029.86	1319	1062.37	1334	1095.20	1348	1125.84						
160000	5224	1279	979.40	1294	1012.32	1309	1045.46	1323	1076.42	1338	1110.00	1353	1143.88						
162500	5305	1285	995.43	1300	1029.08	1314	1060.72	1328	1092.50	1343	1126.94	1357	1159.09						
165000	5387	1291	1011.32	1305	1043.29	1319	1075.60	1334	1110.68	1348	1143.51								
167500	5468	1297	1027.08	1311	1059.72	1325	1092.68	1339	1126.04	1353	1159.74								
170000	5550	1303	1042.71	1317	1076.01	1331	1109.70	1345	1143.72	1358	1175.56								
172500	5632	1309	1058.28	1323	1092.19	1337	1126.54	1350	1158.68										
175000	5713	1315	1073.74	1329	1108.29	1343	1143.26	1356	1176.04										
177500	5795	1322	1091.54	1335	1124.24	1349	1159.90												

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 663	Design 17 804	Design 22 1041	Design 26 1230
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**807 BCS**

Outlet Area: 37.49 ft<sup>2</sup>

Wheel Diameter: 80.75"

Tip Speed (FPM): 21.14 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
50000	1334	302	20.87	402	44.17	485	71.27												
55000	1467	312	23.21	407	47.36	487	75.45	560	107.09										
60000	1600	322	25.50	412	50.68	491	79.99	560	111.94										
65000	1734	334	28.29	418	54.38	495	84.28	563	117.83	625	153.39								
70000	1867	346	31.14	426	58.57	501	89.64	567	123.79	627	160.40	685	200.41						
75000	2001	359	34.37	435	62.87	506	94.70	571	129.50	630	167.37	686	208.22	739	250.86				
80000	2134	373	38.07	444	67.03	512	100.22	577	136.62	635	175.47	689	216.91	740	260.12	789	305.26		
85000	2267	387	41.99	455	72.06	520	106.53	582	143.32	640	183.43	692	224.90	742	269.42	790	315.91	836	363.84
90000	2401	401	46.17	467	77.62	528	112.40	588	150.78	645	191.50	697	234.50	746	280.05	792	326.69	837	375.81
95000	2534	416	50.98	479	83.26	538	119.36	595	158.70	650	199.89	702	244.05	750	290.20	796	339.00	839	388.01
100000	2667	430	55.70	492	89.54	548	126.24	603	166.88	656	209.23	707	253.83	755	301.33	800	350.72	843	401.97
105000	2801	445	61.07	505	96.02	559	133.80	611	174.63	663	219.23	713	265.05	760	312.55	804	362.12	846	413.78
110000	2934	461	67.17	518	102.72	570	141.42	621	183.89	<u>670</u>	<u>228.65</u>	718	275.10	765	324.14	809	374.84	851	428.12
115000	3067	476	73.16	532	110.29	582	149.84	631	193.06	679	239.53	<u>725</u>	<u>287.05</u>	771	337.26	814	387.83	856	442.42
120000	3201	492	79.93	546	118.18	595	159.17	642	203.14	688	250.15	<u>732</u>	<u>298.39</u>	777	350.25	820	402.72	861	456.89
125000	3334	508	87.07	560	126.44	608	168.72	653	213.26	697	260.57	741	311.50	783	362.73	825	416.18	866	471.83

CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
115000	3067	<u>895</u>	<u>497.24</u>	<u>933</u>	<u>554.47</u>	<u>970</u>	<u>613.59</u>	<u>988</u>	<u>643.44</u>	<u>1006</u>	<u>674.07</u>	<u>1024</u>	<u>705.44</u>	1041	735.42	1059	768.21	1076	799.58
120000	3201	<u>900</u>	<u>513.10</u>	<u>938</u>	<u>572.11</u>	<u>974</u>	<u>631.39</u>	<u>992</u>	<u>662.36</u>	<u>1009</u>	<u>692.14</u>	<u>1027</u>	<u>724.76</u>	1044	756.01	1061	787.99	1077	818.34
125000	3334	<u>905</u>	<u>529.07</u>	<u>942</u>	<u>587.71</u>	<u>978</u>	<u>648.66</u>	<u>996</u>	<u>680.60</u>	<u>1013</u>	<u>711.40</u>	<u>1030</u>	<u>743.01</u>	1047	775.40	1063	806.30	1080	840.18
130000	3468	<u>910</u>	<u>545.47</u>	<u>947</u>	<u>605.21</u>	<u>983</u>	<u>667.70</u>	<u>1000</u>	<u>698.45</u>	<u>1017</u>	<u>730.12</u>	<u>1034</u>	<u>762.68</u>	1051	796.11	1067	828.09	1083	860.77
135000	3601	<u>916</u>	<u>564.12</u>	<u>953</u>	<u>625.05</u>	<u>988</u>	<u>686.81</u>	<u>1005</u>	<u>718.27</u>	<u>1022</u>	<u>750.73</u>	<u>1038</u>	<u>781.94</u>	1055	816.27	1071	849.18	1087	882.88
140000	3734	<u>921</u>	<u>580.93</u>	<u>958</u>	<u>643.49</u>	<u>993</u>	<u>706.21</u>	<u>1010</u>	<u>738.24</u>	<u>1027</u>	<u>771.42</u>	<u>1043</u>	<u>803.33</u>	1059	836.13	1075	869.87	1091	904.46
145000	3868	<u>928</u>	<u>601.23</u>	<u>963</u>	<u>662.03</u>	<u>998</u>	<u>726.18</u>	<u>1015</u>	<u>758.71</u>	<u>1032</u>	<u>792.35</u>	<u>1048</u>	<u>824.85</u>	1064	858.34	1080	892.84	1096	928.26
150000	4001	<u>934</u>	<u>618.94</u>	<u>969</u>	<u>682.42</u>	<u>1004</u>	<u>748.65</u>	<u>1020</u>	<u>779.66</u>	<u>1037</u>	<u>813.90</u>	<u>1053</u>	<u>846.83</u>	1069	880.83	1085	915.94	1101	952.08
155000	4134	<u>942</u>	<u>639.78</u>	<u>976</u>	<u>704.38</u>	<u>1009</u>	<u>768.74</u>	<u>1026</u>	<u>803.05</u>	<u>1042</u>	<u>835.81</u>	<u>1058</u>	<u>869.41</u>	1074	903.92	1090	939.48	1106	976.15
160000	4268	<u>950</u>	<u>659.71</u>	<u>983</u>	<u>725.59</u>	<u>1016</u>	<u>792.94</u>	<u>1032</u>	<u>826.20</u>	<u>1048</u>	<u>860.08</u>	<u>1064</u>	<u>894.64</u>	1080	930.04	1095	963.68	1111	1000.90
165000	4401	<u>958</u>	<u>679.11</u>	<u>990</u>	<u>745.78</u>	<u>1022</u>	<u>814.09</u>	<u>1038</u>	<u>848.78</u>	<u>1054</u>	<u>883.96</u>	<u>1070</u>	<u>919.74</u>	1085	953.57	1101	990.77	1116	1026.09
170000	4535	<u>967</u>	<u>700.25</u>	<u>999</u>	<u>769.67</u>	<u>1030</u>	<u>839.02</u>	<u>1045</u>	<u>872.94</u>	<u>1061</u>	<u>909.71</u>	<u>1076</u>	<u>944.35</u>	1091	979.45	1106	1015.06	1121	1051.35
175000	4668	<u>977</u>	<u>723.36</u>	<u>1008</u>	<u>793.20</u>	<u>1038</u>	<u>863.00</u>	<u>1053</u>	<u>898.63</u>	<u>1068</u>	<u>934.57</u>	<u>1083</u>	<u>970.78</u>	<u>1098</u>	<u>1007.36</u>	<u>1112</u>	<u>1041.62</u>	<u>1127</u>	<u>1079.12</u>
180000	4801	<u>987</u>	<u>746.32</u>	<u>1017</u>	<u>816.42</u>	<u>1046</u>	<u>886.36</u>	<u>1061</u>	<u>923.38</u>	<u>1075</u>	<u>958.29</u>	<u>1090</u>	<u>996.23</u>	<u>1104</u>	<u>1031.67</u>	<u>1119</u>	<u>1070.23</u>	<u>1133</u>	<u>1106.31</u>
185000	4935	<u>997</u>	<u>769.21</u>	<u>1026</u>	<u>839.36</u>	<u>1055</u>	<u>911.83</u>	<u>1069</u>	<u>947.58</u>	<u>1084</u>	<u>986.50</u>	<u>1098</u>	<u>1023.28</u>	<u>1112</u>	<u>1060.48</u>	<u>1126</u>	<u>1097.86</u>	<u>1140</u>	<u>1135.55</u>
190000	5068	<u>1008</u>	<u>794.41</u>	<u>1036</u>	<u>864.57</u>	<u>1064</u>	<u>936.98</u>	<u>1078</u>	<u>974.02</u>	<u>1092</u>	<u>1011.55</u>	<u>1106</u>	<u>1049.65</u>	1120	1088.23	1134	1127.36	1147	1163.74

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
145500	3881	<u>1112</u>	<u>965.76</u>	<u>1127</u>	<u>1000.44</u>	<u>1142</u>	<u>1035.88</u>	<u>1157</u>	<u>1072.14</u>	<u>1171</u>	<u>1106.30</u>	<u>1186</u>	<u>1143.99</u>	1200	1179.48	1214	1215.59	<u>1229</u>	<u>1255.32</u>
150000	4001	<u>1116</u>	<u>986.58</u>	<u>1131</u>	<u>1021.92</u>	<u>1146</u>	<u>1058.15</u>	<u>1160</u>	<u>1092.35</u>	<u>1175</u>	<u>1130.15</u>	<u>1189</u>	<u>1165.82</u>	1203	1202.17	1218	1242.21		
155000	4134	<u>1121</u>	<u>1011.28</u>	<u>1136</u>	<u>1047.31</u>	<u>1150</u>	<u>1081.48</u>	<u>1165</u>	<u>1119.28</u>	<u>1179</u>	<u>1155.03</u>	<u>1194</u>	<u>1194.53</u>	1208	1231.79	1222	1269.84		
160000	4268	<u>1126</u>	<u>1036.41</u>	<u>1141</u>	<u>1073.00</u>	<u>1155</u>	<u>1107.73</u>	<u>1170</u>	<u>1146.25</u>	<u>1184</u>	<u>1182.73</u>	<u>1198</u>	<u>1220.02</u>	1212	1258.07	1226	1296.91		
165000	4401	<u>1131</u>	<u>1062.25</u>	<u>1146</u>	<u>1099.30</u>	<u>1160</u>	<u>1134.42</u>	<u>1175</u>	<u>1173.49</u>	<u>1189</u>	<u>1210.59</u>	<u>1203</u>	<u>1248.57</u>	1217	1287.37	1230	1323.78		
170000	4535	<u>1136</u>	<u>1088.33</u>	<u>1151</u>	<u>1126.17</u>	<u>1165</u>	<u>1161.86</u>	<u>1180</u>	<u>1201.45</u>	<u>1194</u>	<u>1238.91</u>	<u>1208</u>	<u>1277.41</u>	1222	1316.85				
175000	4668	<u>1142</u>	<u>1117.25</u>	<u>1156</u>	<u>1153.08</u>	<u>1171</u>	<u>1192.63</u>	<u>1185</u>	<u>1229.91</u>	<u>1199</u>	<u>1268.01</u>	<u>1213</u>	<u>1306.94</u>	1227	1346.86				
180000	4801	<u>1148</u>	<u>1145.79</u>	<u>1162</u>	<u>1182.81</u>	<u>1176</u>	<u>1220.34</u>	<u>1190</u>	<u>1258.55</u>	<u>1204</u>	<u>1297.42</u>	<u>1218</u>	<u>1337.11</u>						
185000	4935	<u>1154</u>	<u>1173.56</u>	<u>1168</u>	<u>1211.91</u>	<u>1182</u>	<u>1250.78</u>	<u>1196</u>	<u>1290.13</u>	<u>1210</u>	<u>1330.09</u>	<u>1223</u>	<u>1367.42</u>						
190000	5068	<u>1161</u>	<u>1203.37</u>	<u>1175</u>	<u>1243.33</u>	<u>1189</u>	<u>1283.67</u>	<u>1202</u>	<u>1321.21</u>	<u>1216</u>	<u>1362.46</u>	<u>1229</u>	<u>1400.87</u>						
195000	5201	<u>1169</u>	<u>1235.21</u>	<u>1182</u>	<u>1273.73</u>	<u>1195</u>	<u>1312.44</u>	<u>1209</u>	<u>1354.77</u>	<u>1222</u>	<u>1394.07</u>								
200000	5335	<u>1177</u>	<u>1265.95</u>	<u>1190</u>	<u>1306.14</u>	<u>1203</u>	<u>1346.64</u>	<u>1216</u>	<u>1387.29</u>	<u>1229</u>	<u>1428.25</u>								
205000	5468	<u>1185</u>	<u>1296.09</u>	<u>1198</u>	<u>1337.64</u>	<u>1211</u>	<u>1379.63</u>	<u>1223</u>	<u>1418.58</u>										
210000	5601	<u>1194</u>	<u>1329.09</u>	<u>1206</u>	<u>1368.57</u>	<u>1219</u>	<u>1411.91</u>												
215000	5735	<u>1203</u>	<u>1361.68</u>	<u>1215</u>	<u>1402.44</u>	<u>1228</u>	<u>1447.16</u>												
220000	5868	<u>1213</u>	<u>1397.45</u>	<u>1225</u>	<u>1439.53</u>														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.

Max. RPM	Design 14 602	Design 17 730	Design 22 944	Design 26 1116
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**890 BCS**

Outlet Area: 45.54 ft<sup>2</sup>

Wheel Diameter: 89.00"

Tip Speed (FPM): 23.30 x RPM

CFM	OV	2" SP		4" SP		6" SP		8" SP		10" SP		12" SP		14" SP		16" SP		18" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
70000	1537	288	29.70	372	59.78	443	94.12	508	133.22										
75000	1647	296	32.16	376	63.30	447	99.17	509	138.54	567	181.36								
80000	1757	305	34.98	381	67.23	450	103.45	511	144.05	568	188.48								
85000	1866	314	37.85	386	70.86	454	108.48	514	149.97	569	194.94	621	242.82						
90000	1976	324	41.18	393	75.33	458	113.72	518	156.59	571	201.72	622	250.99	670	302.11				
95000	2086	334	44.65	400	79.68	463	119.70	521	162.29	574	209.10	624	259.63	671	311.97	716	366.61		
100000	2196	344	48.28	408	84.59	468	125.44	525	169.11	578	217.37	626	267.58	672	321.03	716	376.53	759	435.38
105000	2306	355	52.53	416	89.50	474	131.59	530	177.11	582	225.64	629	276.37	674	330.68	717	387.19	759	446.69
110000	2415	366	57.02	425	95.10	480	137.44	534	184.05	585	232.89	633	286.29	677	341.20	719	398.58	760	458.93
115000	2525	376	61.27	434	100.77	487	143.98	539	191.71	590	242.83	636	294.81	680	351.36	722	410.89	761	470.21
120000	2635	387	66.21	443	106.52	495	151.33	545	199.99	594	251.60	640	304.89	684	362.90	725	422.70	764	484.30
125000	2745	398	71.38	453	113.13	503	158.69	551	207.86	599	261.45	644	315.30	687	372.86	728	434.19	766	495.85
130000	2855	410	77.35	463	119.93	511	166.06	558	216.66	604	270.89	649	327.33	691	384.65	732	447.39	770	510.88
135000	2964	421	83.01	473	126.94	520	174.47	565	225.33	610	281.14	653	337.70	695	396.81	735	458.81	773	523.71
140000	3074	433	89.52	483	134.18	529	182.96	573	235.13	616	290.96	658	349.23	699	409.07	739	472.37	777	538.56
145000	3184	444	95.67	494	142.52	538	191.53	581	244.93	623	301.98	664	361.86	704	422.98	743	486.31	781	553.58

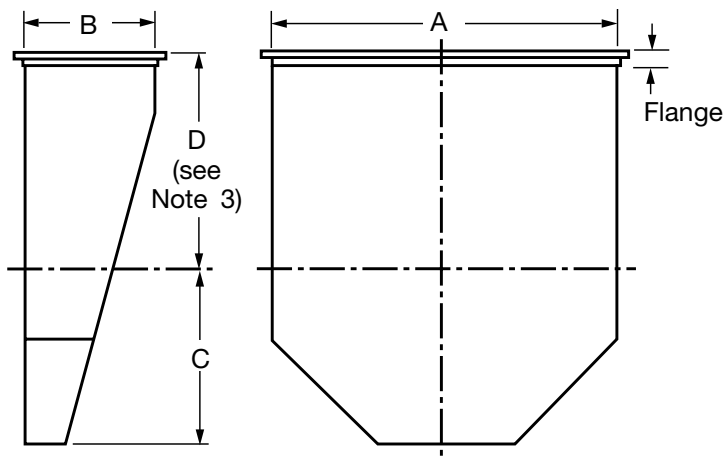
CFM	OV	20" SP		22" SP		24" SP		25" SP		26" SP		27" SP		28" SP		29" SP		30" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
140000	3074	813	606.63	847	675.27	880	745.80	897	783.85	913	820.27	929	857.54	945	895.68	961	934.68	976	971.59
145000	3184	816	620.85	850	691.12	883	763.64	899	800.19	915	837.72	931	876.23	947	915.67	962	953.01	977	991.15
150000	3294	820	637.39	854	709.25	886	781.02	902	818.55	918	857.16	933	893.94	949	934.56	964	973.15	979	1012.55
155000	3404	824	654.22	857	724.85	890	800.80	905	836.54	921	876.12	936	913.86	951	952.60	966	992.25	981	1032.81
160000	3513	828	671.53	861	743.14	893	817.84	909	857.10	924	894.70	939	933.36	954	973.03	969	1013.72	984	1055.41
165000	3623	832	689.06	865	761.88	897	837.70	913	877.71	928	916.09	943	955.58	958	996.19	972	1034.73	987	1077.40
170000	3733	836	706.57	869	781.04	901	857.89	916	895.57	931	934.56	946	974.73	961	1016.10	976	1058.64	990	1099.00
175000	3843	840	723.73	873	800.34	905	878.61	920	916.74	935	956.22	950	997.06	965	1039.17	979	1079.22	993	1120.30
180000	3953	845	742.98	877	819.47	909	899.62	924	938.42	939	978.42	954	1019.71	968	1059.16	983	1103.17	997	1144.98
185000	4062	851	764.28	882	841.05	913	920.66	928	960.31	943	1001.05	958	1042.95	972	1082.82	987	1127.37	1001	1169.83
190000	4172	856	782.12	887	862.10	917	941.39	932	982.16	947	1023.82	962	1066.54	976	1107.03	990	1148.66	1004	1191.49
195000	4282	863	804.73	892	882.45	922	964.76	937	1006.85	951	1046.45	966	1090.19	980	1131.51	994	1173.85	1008	1217.26
200000	4392	869	824.21	898	904.92	927	987.53	942	1031.12	956	1072.06	970	1113.66	984	1155.98	998	1199.22	1012	1243.41
205000	4502	876	846.24	904	926.68	933	1012.71	947	1054.74	961	1097.16	975	1140.16	989	1183.78	1002	1224.49	1016	1269.71
210000	4611	883	868.05	911	951.19	938	1033.77	952	1077.50	966	1121.56	980	1166.08	993	1207.51	1007	1253.16	1020	1295.78
215000	4721	890	889.68	917	972.26	945	1060.81	958	1102.73	971	1145.07	985	1191.22	998	1234.18	1012	1281.35	1025	1325.32

CFM	OV	31" SP		32" SP		33" SP		34" SP		35" SP		36" SP		37" SP		38" SP		39" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
170000	3733	1004	1140.29	1018	1182.57	1032	1225.75	1045	1266.22	1059	1311.15	1072	1353.18	1086	1399.80	1099	1443.29	1112	1487.53
175000	3843	1007	1162.46	1021	1205.59	1035	1249.74	1048	1291.17	1062	1337.19	1075	1380.33	1088	1424.19	1101	1468.89	1114	1514.30
180000	3953	1011	1187.95	1024	1228.37	1038	1273.38	1051	1315.69	1065	1362.66	1078	1406.79	1091	1451.71	1104	1497.54	1116	1539.99
185000	4062	1014	1209.90	1028	1254.68	1041	1296.75	1055	1343.66	1068	1387.77	1081	1432.75	1094	1478.70	1106	1521.36		
190000	4172	1018	1235.64	1032	1281.08	1045	1323.91	1058	1367.77	1071	1412.63	1084	1458.43	1097	1505.19	1109	1548.72		
195000	4282	1022	1261.88	1035	1304.04	1049	1351.27	1062	1395.82	1075	1441.37	1088	1488.03	1100	1531.49	1113	1580.05		
200000	4392	1026	1288.71	1039	1331.35	1052	1375.13	1066	1424.13	1078	1466.27	1091	1513.52	1104	1561.92	1116	1607.00		
205000	4502	1030	1315.87	1043	1359.15	1056	1403.50	1069	1448.96	1082	1495.56	1095	1543.41	1107	1588.14				
210000	4611	1034	1342.99	1047	1387.20	1060	1432.26	1073	1478.38	1086	1525.52	1099	1573.83	1111	1619.01				
215000	4721	1038	1369.89	1051	1415.10	1064	1461.18	1077	1508.08	1090	1555.96	1102	1600.55	1115	1650.55				
220000	4831	1043	1400.23	1056	1446.81	1068	1489.85	1081	1537.78	1094	1586.65	1106	1631.99						
230000	5051	1053	1459.00	1065	1504.35	1078	1554.39	1090	1600.63	1102	1647.40	1115	1699.27						
240000	5270	1064	1518.23	1076	1567.01	1088	1615.99	1100	1665.28	1112	1715.03								
250000	5490	1077	1583.26	1088	1630.43	1100	1682.65	1111	1730.80										
260000	5709	1090	1646.97	1101	1696.66	1112	1746.95												
270000	5929	1104	1714.07	1115	1766.38														

Underlined numbers indicate maximum static efficiency.  
 Performance is for BCS with outlet duct and with or without inlet duct.  
 BHP is a fan shaft brake horsepower and does not include belt drive losses.



### Inlet Boxes



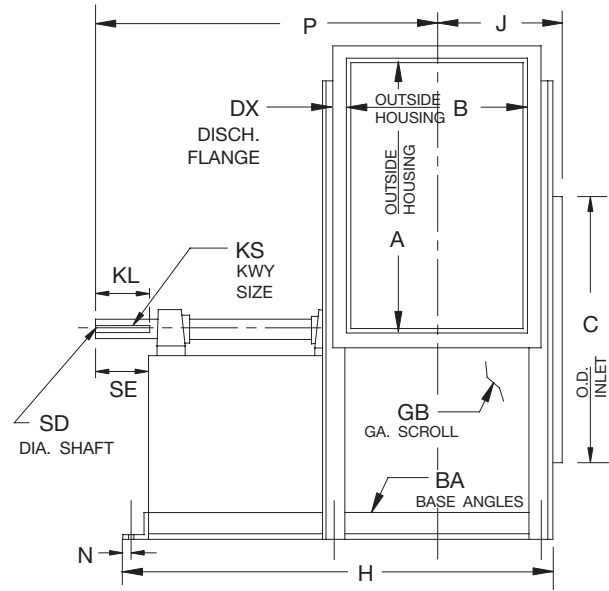
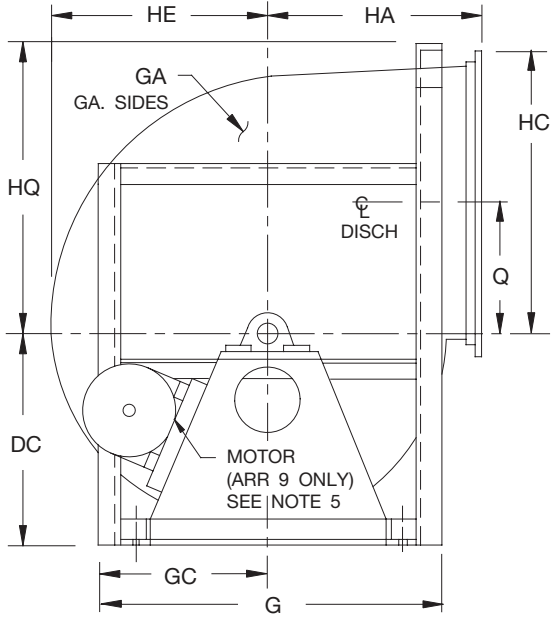
FAN SIZE	A	B	C			D	INLET AREA (SQ. FT.)	FLANGE		
			CL. 14	CL. 17	CL. 22 & 26			CL. 14	CL. 17	CL. 22 & 26
165	27.25	9.00	10.75	10.75	—	11.25	1.70	1.00 X 1.00	1.00 X 1.00	—
182	30.00	10.00	12.13	12.13	—	12.39	2.08	1.25 X 1.25	1.25 X 1.25	—
200	33.00	11.00	13.44	13.44	—	13.53	2.52	1.25 X 1.25	1.25 X 1.25	—
222	36.75	12.25	15.31	14.81	14.31	15.00	3.13	1.25 X 1.25	1.25 X 1.25	2.50 X 2.50
245	40.50	13.50	15.50	15.50	15.50	16.47	3.80	1.25 X 1.25	1.50 X 1.50	2.50 X 2.50
270	44.50	14.75	17.44	17.44	17.44	18.10	4.56	1.50 X 1.50	1.50 X 1.50	2.50 X 2.50
300	49.50	16.50	22.75	19.81	19.81	20.05	5.67	1.50 X 1.50	1.50 X 1.50	2.50 X 2.50
330	54.50	18.25	26.00	22.25	22.25	22.01	6.91	1.50 X 1.50	1.50 X 1.50	2.50 X 2.50
365	60.25	20.00	25.00	25.00	25.00	24.29	8.37	1.50 X 1.50	1.50 X 1.50	2.50 X 2.50
402	66.50	22.25	28.00	28.00	27.50	26.73	10.28	1.50 X 1.50	2.00 X 2.00	2.50 X 2.50
445	73.50	24.50	31.38	31.38	30.38	29.50	12.51	1.50 X 1.50	2.00 X 2.00	2.50 X 2.50
490	81.00	27.00	35.00	35.00	34.00	32.43	15.19	2.00 X 2.00	2.00 X 2.00	2.50 X 2.50
542	89.50	30.00	39.06	38.56	38.06	35.85	18.65	2.00 X 2.00	2.50 X 2.50	2.50 X 2.50
600	99.00	33.00	43.69	43.19	42.69	39.60	22.69	2.00 X 2.00	2.50 X 2.50	2.50 X 2.50
660	109.00	36.50	47.94	47.44	47.44	43.51	27.63	2.50 X 2.50	2.50 X 2.50	2.50 X 2.50
730	120.50	40.00	52.50	52.00	52.00	48.07	33.47	2.50 X 2.50	2.50 X 2.50	2.50 X 2.50
807	134.00	44.50	58.50	58.00	58.00	53.12	41.41	2.50 X 2.50	2.50 X 2.50	2.50 X 2.50
890	147.00	49.00	64.75	64.25	64.25	58.50	50.02	2.50 X 2.50	2.50 X 2.50	2.50 X 2.50

**NOTES:**

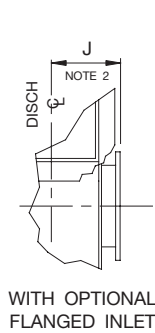
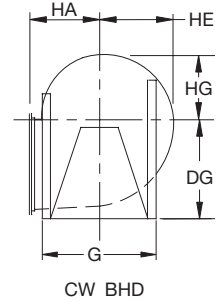
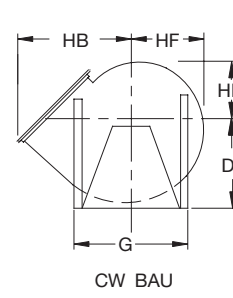
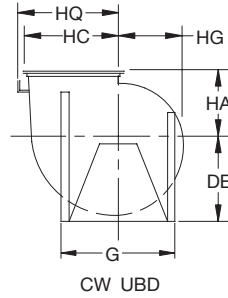
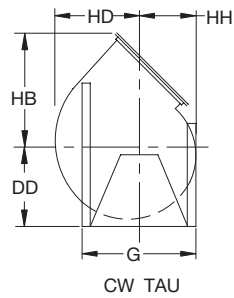
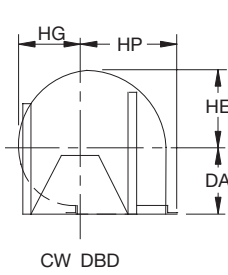
1. Dimensions are not to be used for construction.
2. Dimensions are in inches unless otherwise noted.
3. For Integral Inlet Box, consult factory for "D" dimensions.



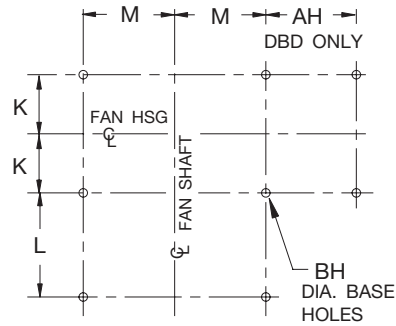
Arrangements 1 & 9, Class 14



CW THD



WITH OPTIONAL FLANGED INLET



FOUNDATION PLAN  
(FOR DBD SEE NOTE 1)  
MOTOR LOCATION 'L' (LEFT) SHOWN

SIZE	A	AH	B	BA	BH	C	DA		DC		DD		DE		DF		DG	
							ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9
							SEE NOTE 4											
165	17.44	9.75	13.19	1.50 x 2.00	0.44	17.75	13.13	20.00	13.50	20.00	14.50	20.00	15.25	20.00	16.25	20.00	19.50	20.00
182	19.38	10.81	14.56	1.50 x 2.00	0.44	19.50	14.50	23.00	14.75	23.00	15.75	23.00	16.75	23.00	17.75	23.00	22.00	23.00
200	21.19	11.63	15.94	1.50 x 2.00	0.56	21.38	15.81	23.00	16.25	23.00	17.25	23.00	18.25	23.00	19.25	23.00	24.00	23.00
222	23.56	12.88	17.69	2.00 x 2.00	0.56	23.75	17.69	23.00	18.00	23.00	19.25	23.00	20.50	23.00	22.00	23.00	26.50	25.50
245	25.94	14.13	19.44	2.00 x 2.00	0.56	26.06	19.50	23.00	20.00	23.00	21.25	23.00	22.50	23.00	24.00	23.00	28.75	28.00
270	28.63	15.56	21.38	2.00 x 2.00	0.56	28.50	21.44	26.00	22.00	26.00	23.50	26.00	24.75	26.00	26.25	26.00	31.50	30.50
300	31.81	17.25	23.81	2.50 x 2.50	0.56	31.63	26.75	26.75	26.75	26.75	26.75	26.75	28.50	28.50	30.00	30.00	35.50	35.50
330	35.13	19.06	26.06	2.50 x 2.50	0.56	34.75	30.00	30.00	30.00	30.00	30.00	30.00	31.00	31.00	32.75	32.75	39.00	39.00
365	38.69	21.13	28.88	2.50 x 2.50	0.56	38.50	29.00	29.00	29.50	29.50	31.50	31.50	33.50	33.50	35.50	35.50	41.00	41.00
402	42.63	23.31	31.81	3.00 x 3.00	0.81	42.44	32.00	32.00	33.00	33.00	35.25	35.25	37.00	37.00	39.50	39.50	45.50	45.50
445	47.13	25.81	35.19	3.00 x 3.00	0.81	46.88	35.38	35.38	35.50	35.50	38.50	38.50	40.00	40.00	43.25	43.25	50.00	50.00
490	51.94	28.13	38.63	3.00 x 3.00	0.81	51.63	39.00	39.00	39.00	39.00	42.25	42.25	44.00	44.00	47.50	47.50	54.75	54.75
542	57.38	31.81	42.88	3.00 x 4.00	0.81	57.13	43.06	43.06	43.50	43.50	46.50	46.50	49.00	49.00	52.25	52.25	60.25	60.25
600	63.50	34.94	47.31	3.00 x 4.00	0.81	63.13	47.69	47.69	48.00	48.00	51.25	51.25	54.00	54.00	57.50	57.50	66.25	66.25
660	69.69	39.13	52.19	3.50 x 5.00	0.81	69.38	52.44	52.44	52.50	52.50	55.75	55.75	59.00	59.00	63.00	63.00	73.25	73.25
730	77.25	42.63	57.56	3.50 x 5.00	0.81	76.75	58.00	58.00	57.00	57.00	61.75	61.75	64.50	64.50	69.50	69.50	80.75	80.75
807	85.44	47.06	63.63	3.50 x 5.00	0.81	84.88	64.19	64.19	63.00	63.00	67.50	67.50	72.00	72.00	76.50	76.50	89.00	89.00
890	94.13	50.25	70.13	3.50 x 5.00	0.81	93.38	70.00	70.00	69.25	69.25	73.75	73.75	78.25	78.25	85.00	85.00	97.75	97.75

SIZE	DX	FR ARR 9	G	GA	GB	GC	H		HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ	J
							ARR 1	ARR 9											
165	1.00 x 1.00	215T	24.25	14	14	12.13	29.25	36.63	13.13	22.25	18.38	15.06	14.13	13.31	12.50	11.69	19.38	-	10.19
182	1.25 x 1.25	254T	26.00	12	14	13.00	31.63	42.38	14.50	24.81	20.56	16.69	15.69	14.75	13.81	12.88	21.31	-	11.38
200	1.25 x 1.25	254T	28.00	12	14	14.00	34.00	43.75	15.81	27.00	22.38	18.38	17.31	16.25	15.19	14.13	23.13	-	12.06
222	1.25 x 1.25	256T	31.25	12	14	15.63	38.25	45.25	17.69	30.00	24.75	20.44	19.06	17.94	16.81	15.69	25.50	-	12.94
245	1.25 x 1.25	256T	33.50	12	14	16.75	41.50	47.00	19.50	33.00	27.13	22.38	21.00	19.75	18.50	17.25	27.88	-	13.81
270	1.50 x 1.50	284T	36.00	12	14	18.00	45.38	51.75	21.44	36.44	30.06	24.69	23.19	21.81	20.44	19.06	30.56	-	15.25
300	1.50 x 1.50	286T	41.00	10	12	20.50	55.75	55.75	23.81	40.31	33.25	27.44	25.75	24.25	22.75	21.25	34.25	-	17.00
330	1.50 x 1.50	324T	44.00	10	12	22.00	60.63	60.63	26.25	44.44	36.56	30.13	28.38	26.69	25.00	23.31	37.56	-	18.13
365	1.50 x 1.50	324T	48.00	10	12	24.00	63.38	63.38	29.00	48.88	40.13	33.50	31.50	29.63	27.75	25.88	41.13	-	19.50
402	1.50 x 1.50	326T	52.50	10	12	26.25	67.88	67.88	32.00	53.81	44.06	37.00	34.69	32.63	30.56	28.50	45.56	-	22.00
445	1.50 x 1.50	364T	56.50	10	12	28.25	72.88	72.88	35.38	59.38	48.56	40.88	38.25	36.00	33.75	31.50	50.06	-	24.69
490	2.00 x 2.00	364T	61.50	10	12	30.75	76.63	76.63	39.00	65.69	53.88	44.88	42.19	39.69	37.19	34.69	54.88	-	26.38
542	2.00 x 2.00	404T	67.00	10	12	33.50	87.50	87.50	43.06	72.38	59.31	49.75	46.69	43.94	41.19	38.44	61.31	59.75	28.50
600	2.00 x 2.00	404T	73.00	10	12	36.50	91.75	91.75	47.69	80.00	65.44	55.00	51.69	48.63	45.56	42.50	67.44	65.75	31.75
660	2.50 x 2.50	405T	80.00	10	12	40.00	101.25	101.25	52.44	88.06	72.13	60.38	56.81	53.38	49.94	46.50	74.63	72.25	34.25
730	2.50 x 2.50	405T	88.00	10	10	44.00	109.63	109.63	58.00	97.31	79.63	66.94	62.88	59.13	55.38	51.63	82.13	79.75	36.94
807	2.50 x 2.50	405T	95.50	10	10	47.75	118.63	118.63	64.19	107.50	87.81	74.00	69.50	65.38	61.25	57.13	90.31	87.75	40.94
890	2.50 x 2.50	405T	106.50	7	10	53.25	128.13	128.13	70.00	117.75	96.50	81.56	76.63	72.06	67.50	62.94	99.00	96.50	45.19

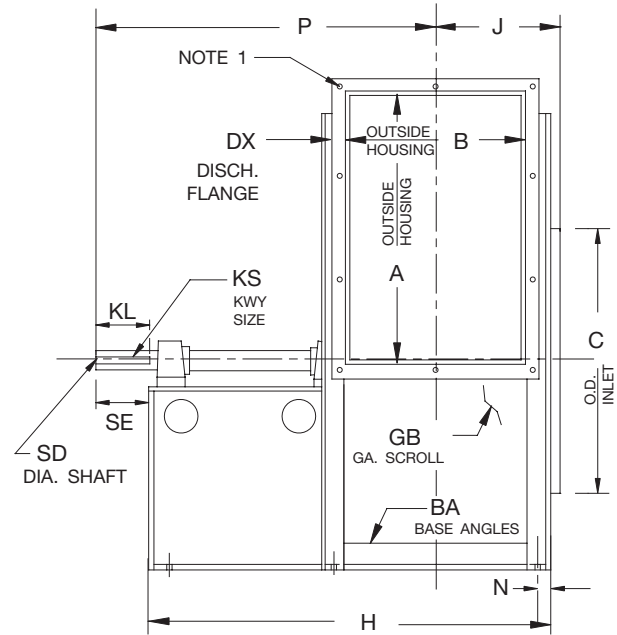
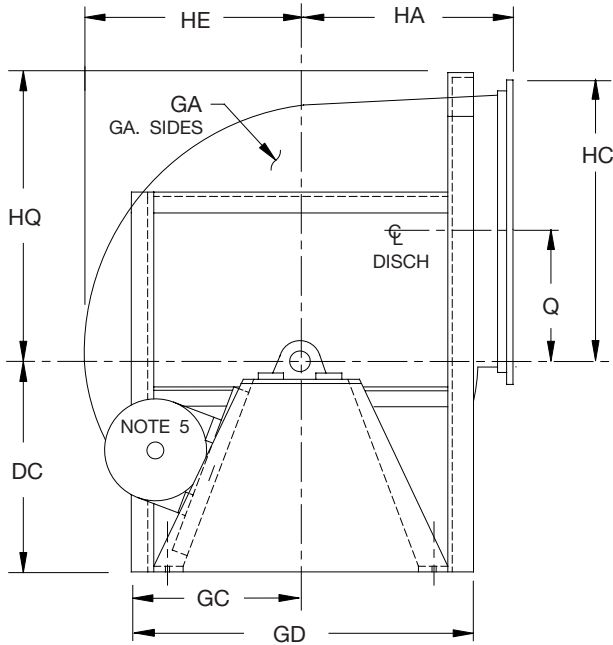
SIZE	K	KL	KS	L		M	N	P		Q	SD	SE
				ARR 1	ARR 9			ARR 1	ARR 9			
165	7.75	3.00	0.25 x 0.13	12.50	19.88	8.75	0.88	22.38	29.75	8.69	1.19	3.75
182	8.44	3.50	0.38 x 0.19	13.50	24.25	9.63	0.88	24.56	35.31	9.63	1.44	4.25
200	9.13	3.50	0.38 x 0.19	14.50	24.25	10.63	0.88	26.25	36.00	10.56	1.44	4.25
222	10.00	4.00	0.38 x 0.19	16.50	23.50	11.75	0.88	30.13	37.13	11.75	1.69	4.75
245	10.88	4.50	0.50 x 0.25	18.00	23.50	12.88	0.88	33.00	38.50	12.94	1.94	5.25
270	11.81	4.50	0.50 x 0.25	20.00	26.38	14.13	0.88	35.94	42.31	14.25	1.94	5.25
300	13.31	5.00	0.50 x 0.25	26.88	26.88	15.88	1.13	44.56	44.56	15.81	2.19	5.75
330	14.44	5.00	0.50 x 0.25	29.50	29.50	17.38	1.13	48.31	48.31	17.50	2.19	5.75
365	15.81	5.00	0.63 x 0.31	29.50	29.50	18.88	1.13	49.69	49.69	19.25	2.44	5.75
402	17.56	5.00	0.63 x 0.31	30.00	30.00	20.88	1.38	51.69	51.69	21.25	2.44	5.75
445	19.25	5.50	0.63 x 0.31	31.63	31.63	22.88	1.38	55.50	55.50	23.50	2.69	6.25
490	20.94	5.50	0.75 x 0.38	32.00	32.00	25.38	1.38	57.56	57.56	25.88	2.94	6.25
542	23.56	6.00	0.88 x 0.44	36.63	36.63	27.63	1.88	64.81	64.81	28.63	3.44	6.75
600	25.81	6.00	0.88 x 0.44	36.38	36.38	30.63	1.88	66.81	66.81	31.69	3.44	6.75
660	28.75	7.00	1.00 x 0.50	39.00	39.00	33.13	2.38	72.88	72.88	34.75	3.94	7.75
730	31.44	7.50	1.00 x 0.50	42.00	42.00	37.13	2.38	79.06	79.06	38.50	3.94	8.25
807	34.44	8.00	1.00 x 0.50	45.00	45.00	40.88	2.38	85.81	85.81	42.63	4.44	9.00
890	37.69	8.00	1.25 x 0.63	48.00	48.00	46.38	2.38	92.06	92.06	46.94	4.94	9.00

AC17014E

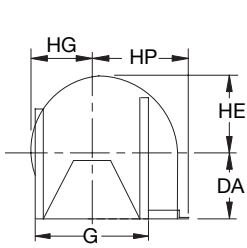
**NOTES:**

1. Punched outlet flanges are included on all discharges per AC14986, or for 'DBD' AC14867.
2. Optional punched inlet per AS363.
3. 'CW' rotation is shown. 'CCW' rotation is similar but opposite.
4. For fans with inlet box at 90° or 270° use 'BAU' discharge dimension 'DF' for centerline height.
5. 'FR' equals maximum motor frame. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation units (unless otherwise specified).

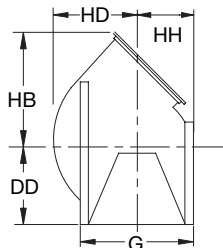
**Arrangements 1 & 9, Class 17**



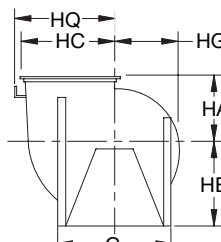
**CW THD**



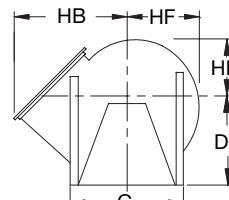
**CW DBD**



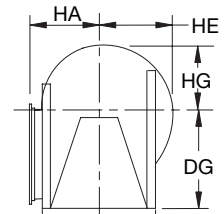
**CW TAU**



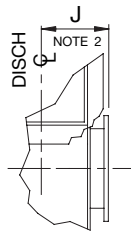
**CW UBD**



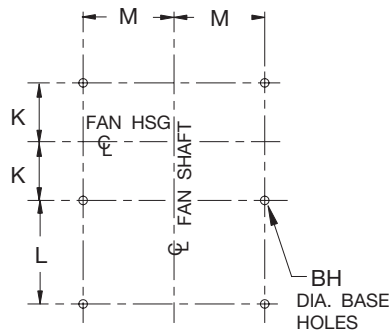
**CW BAU**



**CW BHD**



**WITH OPTIONAL  
FLANGED INLET**



**FOUNDATION PLAN  
(FOR DBD SEE NOTE 1)**

SIZE	A	B	BA	BH	C	DA		DC		DD		DE		DF		DG	
						ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9
						SEE NOTE 4 FOR ARRANGEMENT 1										ARR 1	ARR 9
165	17.56	13.31	1.50 x 2.00	0.44	17.75	13.13	23.75	13.50	23.75	14.50	23.75	15.25	23.75	16.25	23.75	19.50	23.75
182	19.50	14.63	2.00 x 2.00	0.56	19.50	14.50	26.25	14.75	26.25	15.75	26.25	16.75	26.25	17.75	26.25	22.00	26.25
200	21.31	16.00	2.00 x 2.00	0.56	21.38	15.81	29.50	16.25	29.50	17.25	29.50	18.25	29.50	19.25	29.50	24.00	29.50
222	23.69	17.75	2.50 x 2.50	0.56	23.75	17.69	30.00	18.00	30.00	19.25	30.00	20.50	30.00	22.00	30.00	26.50	30.00
245	26.19	19.63	2.50 x 2.50	0.56	26.06	19.50	30.25	20.00	30.25	21.25	30.25	22.50	30.25	24.00	30.25	28.75	30.25
270	28.88	21.56	2.50 x 2.50	0.56	28.50	21.44	33.00	22.00	33.00	23.50	33.00	24.75	33.00	26.25	33.00	31.50	33.00
300	32.00	23.94	3.00 x 3.00	0.81	31.63	23.81	33.50	24.50	33.50	26.00	33.50	27.50	33.50	29.50	33.50	34.75	34.75
330	35.31	26.19	3.00 x 3.00	0.81	34.75	26.25	37.75	27.00	37.75	28.50	37.75	30.00	37.75	32.25	37.75	37.75	37.75
365	38.88	29.00	3.00 x 3.00	0.81	38.50	29.00	37.75	29.50	37.75	31.50	37.75	33.50	37.75	35.50	37.75	41.50	41.50
402	42.81	31.94	3.00 x 4.00	0.81	42.44	32.00	40.25	33.00	40.25	35.25	40.25	37.00	40.25	39.50	40.25	45.50	45.50
445	47.31	35.31	3.00 x 4.00	0.81	46.88	35.38	41.00	35.50	41.00	38.50	41.00	40.00	41.00	43.25	43.25	50.00	50.00
490	52.13	38.75	3.00 x 4.00	0.81	51.63	39.00	41.00	39.00	41.00	42.25	42.25	44.00	44.00	47.50	47.50	54.75	54.75
542	57.56	43.00	3.50 x 5.00	0.81	57.13	43.06	43.06	43.50	43.50	46.50	46.50	49.00	49.00	52.25	52.25	60.75	60.75
600	63.69	47.44	3.50 x 5.00	0.81	63.13	47.69	47.69	48.00	48.00	51.25	51.25	54.00	54.00	57.50	57.50	66.75	66.75
660	69.88	52.31	4.00 x 6.00	0.81	69.38	52.44	52.44	52.50	52.50	55.75	55.75	59.00	59.00	63.00	63.00	73.75	73.75
730	77.38	57.69	4.00 x 6.00	0.81	76.75	58.00	58.00	57.00	57.00	61.75	61.75	64.50	64.50	69.50	69.50	81.25	81.25
807	85.56	63.75	4.00 x 6.00	0.81	84.88	64.19	64.19	63.00	63.00	67.50	67.50	72.00	72.00	76.50	76.50	89.50	89.50
890	94.25	70.13	4.00 x 6.00	0.81	93.38	70.00	70.00	69.25	69.25	73.75	73.75	78.25	78.25	85.00	85.00	98.25	98.25

SIZE	DX	FR ARR 9	G	GA	GB	GC	GD	H		HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ
								ARR 1	ARR 9										
165	1.25 x 1.25	256T	24.25	10	10	12.13	23.13	27.88	41.13	13.13	22.50	18.69	15.13	14.19	13.38	12.56	11.75	19.44	-
182	1.25 x 1.25	286T	27.00	10	10	13.50	27.00	30.13	44.63	14.50	24.81	20.63	16.75	15.75	14.81	13.88	12.94	21.38	-
200	1.25 x 1.25	326T	29.00	10	10	14.50	29.00	32.50	47.50	15.81	27.06	22.44	18.38	17.38	16.31	15.25	14.19	23.19	-
222	1.25 x 1.25	326T	32.25	10	10	16.13	32.25	37.25	50.25	17.69	30.06	24.81	20.50	19.13	18.00	16.88	15.75	26.06	-
245	1.50 x 1.50	326T	34.50	7	7	17.25	34.50	40.63	52.13	19.50	33.25	27.50	22.50	21.13	19.88	18.63	17.38	28.50	-
270	1.50 x 1.50	365T	37.00	7	7	18.50	37.00	44.63	55.25	21.44	36.50	30.19	24.81	23.31	21.94	20.56	19.19	31.19	-
300	1.50 x 1.50	365T	42.00	7	7	21.00	42.00	49.50	58.63	23.81	40.38	33.31	27.50	25.81	24.31	22.81	21.31	34.81	-
330	1.50 x 1.50	405T	45.00	7	7	22.50	45.00	53.75	67.63	26.25	44.44	36.63	30.19	28.44	26.75	25.06	23.38	38.13	-
365	1.50 x 1.50	405T	49.00	7	7	24.50	49.00	58.00	70.38	29.00	48.94	40.19	33.63	31.56	29.69	27.81	25.94	41.69	-
402	2.00 x 2.00	405T	52.50	7	7	26.25	52.50	64.00	81.13	32.00	54.19	44.63	37.06	34.75	32.69	30.63	28.56	46.63	-
445	2.00 x 2.00	405T	56.50	7	7	28.25	56.50	70.38	84.50	35.38	59.75	49.13	41.00	38.31	36.06	33.81	31.56	51.13	-
490	2.00 x 2.00	405T	61.50	7	7	30.75	61.50	75.75	87.88	39.00	65.69	53.94	44.94	42.25	39.75	37.25	34.75	55.94	-
542	2.50 x 2.50	405T	67.00	7	7	33.50	67.00	82.00	93.75	43.06	72.81	59.88	49.88	46.75	44.00	41.25	38.50	62.38	59.75
600	2.50 x 2.50	405T	74.00	7	7	37.00	74.00	89.50	98.25	47.69	80.38	66.00	55.06	51.75	48.69	45.63	42.56	68.50	66.25
660	2.50 x 2.50	405T	80.00	7	7	40.00	80.00	98.38	105.13	52.44	88.13	72.19	60.50	56.88	53.44	50.00	46.56	75.69	72.38
730	2.50 x 2.50	405T	88.00	7	7	44.00	88.00	106.75	110.50	58.00	97.38	79.69	67.00	62.94	59.19	55.44	51.69	83.19	79.75
807	2.50 x 2.50	405T	96.50	7	7	48.25	96.50	115.75	116.50	64.19	107.50	87.88	74.13	69.56	65.44	61.31	57.19	91.38	88.38
890	2.50 x 2.50	405T	107.50	7	7	53.75	107.50	125.13	122.88	70.00	117.75	96.56	81.63	76.69	72.13	67.56	63.00	100.06	97.00

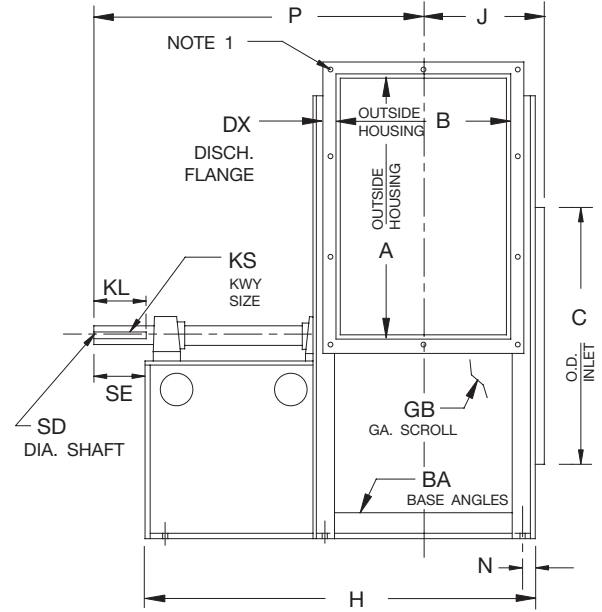
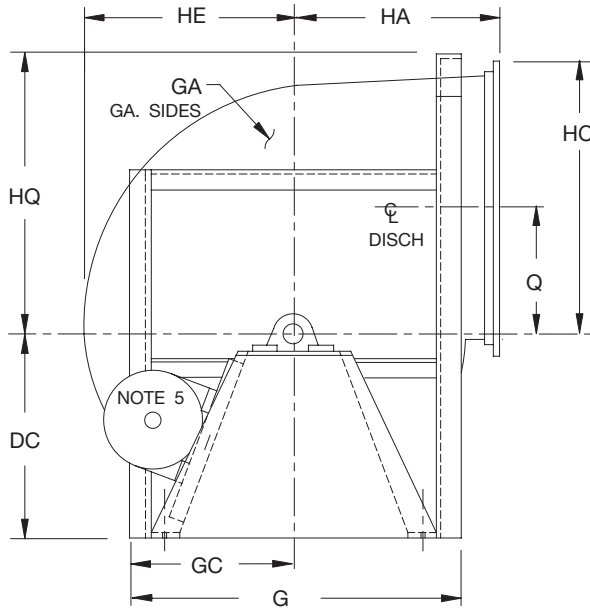
SIZE	J	K	KL		KS	L		M	N	P		Q	SD	SE	
			ARR 1	ARR 9		ARR 1	ARR 9			ARR 1	ARR 9			ARR 1	ARR 9
165	10.25	7.81	3.50	4.25	0.38 x 0.19	9.50	22.75	8.75	0.88	23.19	37.19	8.69	1.69	4.00	4.75
182	11.38	8.44	4.50	5.00	0.38 x 0.19	10.50	25.00	9.63	0.88	25.81	40.81	9.63	1.69	5.00	5.50
200	12.06	9.13	4.50	6.00	0.50 x 0.25	11.50	26.50	10.63	0.88	27.50	44.25	10.56	1.94	5.00	6.75
222	12.94	10.25	5.00	6.00	0.50 x 0.25	13.75	26.75	11.50	1.13	31.38	45.63	11.75	1.94	5.50	6.75
245	13.94	11.19	6.00	6.00	0.50 x 0.25	15.25	26.75	12.63	1.13	34.81	46.56	12.94	2.19	6.50	6.75
270	15.38	12.19	6.00	6.50	0.50 x 0.25	17.25	27.88	13.88	1.13	37.81	48.94	14.25	2.19	6.50	7.00
300	17.06	13.63	7.00	6.50	0.63 x 0.31	19.00	28.13	15.63	1.38	42.25	50.63	15.81	2.44	7.75	7.00
330	18.19	14.75	7.00	7.50	0.63 x 0.31	21.00	34.88	17.13	1.38	45.38	59.50	17.50	2.44	7.75	8.00
365	19.56	16.13	7.00	7.50	0.63 x 0.31	22.50	34.88	18.63	1.38	48.25	60.88	19.25	2.69	7.75	8.00
402	22.06	18.13	8.00	7.50	0.75 x 0.38	24.00	41.13	20.38	1.88	52.75	69.13	21.25	2.94	8.75	8.00
445	24.81	19.81	8.00	7.50	0.88 x 0.44	27.00	41.13	22.38	1.88	57.69	70.81	23.50	3.44	9.00	8.00
490	26.50	21.50	9.00	7.50	1.00 x 0.50	29.00	41.13	24.88	1.88	62.38	72.50	25.88	3.94	10.00	8.00
542	28.63	24.13	9.00	7.50	1.00 x 0.50	29.50	41.25	27.13	2.38	65.50	75.25	28.63	3.94	10.00	8.00
600	31.88	26.38	9.50	7.50	1.00 x 0.50	32.50	41.25	30.13	2.38	71.25	77.50	31.69	3.94	10.50	8.00
660	34.31	29.31	10.00	7.50	1.00 x 0.50	35.00	41.75	32.63	2.88	77.19	80.94	34.75	3.94	11.00	8.00
730	37.00	32.00	10.50	7.50	1.00 x 0.50	38.00	41.75	36.63	2.88	83.38	83.63	38.50	4.44	11.50	8.00
807	41.00	35.00	10.50	7.50	1.25 x 0.63	41.00	41.75	40.38	2.88	89.38	86.63	42.63	4.94	11.50	8.00
890	45.19	38.19	11.00	7.50	1.25 x 0.63	44.00	41.75	45.88	2.88	96.06	89.81	46.94	4.94	12.00	8.00

BC14952F - ARR. 1  
BC14955E - ARR. 9

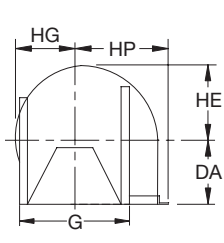
**NOTES:**

1. Punched outlet flanges are included on all discharges per AC14987, or for 'DBD' AC14868.
2. Optional punched inlet per AS363.
3. 'CW' rotation is shown. 'CCW' rotation is similar but opposite.
4. For fans with inlet box at 90° or 270° use 'BAU' discharge dimension 'DF' for centerline height.
5. 'FR' equals maximum motor frame. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation units (unless otherwise specified).

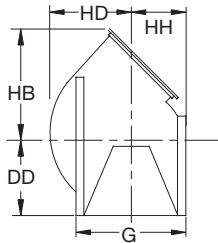
**Arrangements 1 (Sizes 222-890) & 9 (Sizes 222-542), Class 22**



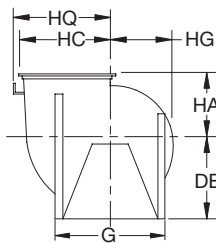
**CW THD**



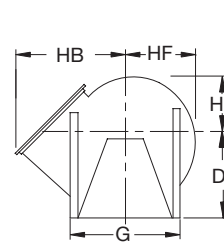
**CW DBD**



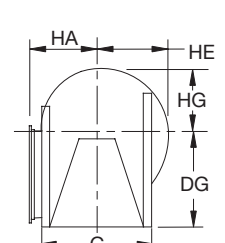
**CW TAU**



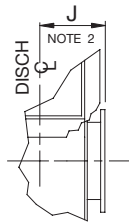
**CW UBD**



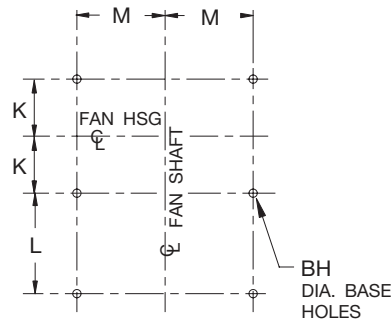
**CW BAU**



**CW BHD**



**WITH OPTIONAL FLANGED INLET**



**FOUNDATION PLAN (FOR DBD SEE NOTE 1)**

SIZE	A	B	BA	BH	C	DA		DC		DD		DE		DF		DG	
						ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9	ARR 1	ARR 9
						SEE NOTE 4										ARR 1	ARR 9
222	23.81	17.88	3.00 x 3.00	0.56	23.75	17.69	33.75	18.00	33.75	19.25	33.75	20.50	33.75	22.00	33.75	26.50	33.75
245	26.19	19.63	3.00 x 3.00	0.56	26.06	19.50	34.00	20.00	34.00	21.25	34.00	22.50	34.00	24.00	34.00	28.75	34.00
270	28.88	21.56	3.00 x 3.00	0.56	28.50	21.44	34.00	22.00	34.00	23.50	34.00	24.75	34.00	26.25	34.00	31.50	34.00
300	32.00	23.94	3.00 x 4.00	0.81	31.63	23.81	34.75	24.50	34.75	26.00	34.75	27.50	34.75	29.50	34.75	34.75	34.75
330	35.44	26.31	3.00 x 4.00	0.81	34.75	26.25	37.75	27.00	37.75	28.50	37.75	30.00	37.75	32.25	37.75	37.75	37.75
365	39.00	29.13	3.00 x 4.00	0.81	38.50	29.00	41.00	29.50	41.00	31.50	41.00	33.50	41.00	35.50	41.00	41.50	41.50
402	42.94	32.06	3.50 x 5.00	0.81	42.44	32.00	41.50	33.00	41.50	35.25	41.50	37.00	41.50	39.50	41.50	46.00	46.00
445	47.44	35.44	4.00 x 6.00	0.81	46.88	35.38	42.50	35.50	42.50	38.50	42.50	40.00	42.50	43.25	43.25	50.50	50.50
490	52.25	38.88	4.00 x 6.00	0.81	51.63	39.00	42.50	39.00	42.50	42.25	42.50	44.00	44.00	47.50	47.50	55.75	55.25
542	57.69	43.13	4.00 x 6.00	0.81	57.13	43.06	43.50	43.50	43.50	46.50	46.50	49.00	49.00	52.25	52.25	61.25	61.25
600	63.81	47.56	4.00 x 6.00	0.81	63.13	47.69	-	48.00	-	51.25	-	54.00	-	57.50	-	67.25	-
660	70.00	52.44	4.00 x 6.00	0.81	69.38	52.44	-	52.50	-	55.75	-	59.00	-	63.00	-	73.75	-
730	77.50	57.81	4.00 x 6.00	0.81	76.75	58.00	-	57.00	-	61.75	-	64.50	-	69.50	-	81.25	-
807	85.69	63.88	4.00 x 6.00	0.81	84.88	64.19	-	63.00	-	67.50	-	72.00	-	76.50	-	89.50	-
890	94.38	70.25	4.00 x 6.00	0.81	93.38	70.00	-	69.25	-	73.75	-	78.25	-	85.00	-	98.25	-

SIZE	DX	FR ARR 9	G	GA	GB	GC	H		HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ
							ARR 1	ARR 9										
							222	2.00 x 2.00										
245	2.00 x 2.00	365T	34.50	7	7	17.25	41.63	54.00	19.50	33.56	28.00	22.50	21.13	19.88	18.63	17.38	29.00	-
270	2.00 x 2.00	365T	38.00	7	7	19.00	45.63	56.00	21.44	36.88	30.69	24.81	23.31	21.94	20.56	19.19	31.69	-
300	2.00 x 2.00	365T	42.00	7	7	21.00	51.50	60.38	23.81	40.75	33.81	27.50	25.81	24.31	22.81	21.31	35.81	-
330	2.00 x 2.00	405T	45.00	0.25	0.25	22.50	55.88	69.38	26.25	44.88	37.19	30.25	28.50	26.81	25.13	23.44	39.19	-
365	2.00 x 2.00	405T	49.00	0.25	0.25	24.50	60.13	78.25	29.00	49.31	40.75	33.69	31.63	29.75	27.88	26.00	42.75	-
402	2.00 x 2.00	405T	52.50	0.25	0.25	26.25	66.13	83.25	32.00	54.25	44.69	37.13	34.81	32.75	30.69	28.63	47.69	-
445	2.00 x 2.00	405T	57.50	0.25	0.25	28.75	74.50	88.25	35.38	59.81	49.19	41.06	38.38	36.13	33.88	31.63	53.19	-
490	2.00 x 2.00	405T	62.50	0.25	0.25	31.25	79.88	91.63	39.00	65.75	54.00	45.00	42.31	39.81	37.31	34.81	58.00	-
542	2.50 x 2.50	405T	68.00	0.25	0.25	34.00	84.13	95.88	43.06	72.81	59.94	49.94	46.81	44.06	41.31	38.56	63.44	60.38
600	2.50 x 2.50	-	74.00	0.25	0.25	37.00	91.63	-	47.69	80.44	66.06	55.13	51.81	48.75	45.69	42.63	69.56	66.38
660	2.50 x 2.50	-	81.00	0.25	0.25	40.50	98.50	-	52.44	88.19	72.25	60.56	56.94	53.50	50.06	46.63	75.75	73.00
730	2.50 x 2.50	-	89.00	0.25	0.25	44.50	106.88	-	58.00	97.38	79.75	67.06	63.00	59.25	55.50	51.75	83.25	80.38
807	2.50 x 2.50	-	96.50	0.25	0.25	48.25	115.88	-	64.19	107.56	87.94	74.19	69.63	65.50	61.38	57.25	91.44	88.50
890	2.50 x 2.50	-	107.50	0.25	0.25	53.75	125.25	-	70.00	117.81	96.63	81.69	76.75	72.19	67.63	63.06	100.13	97.13

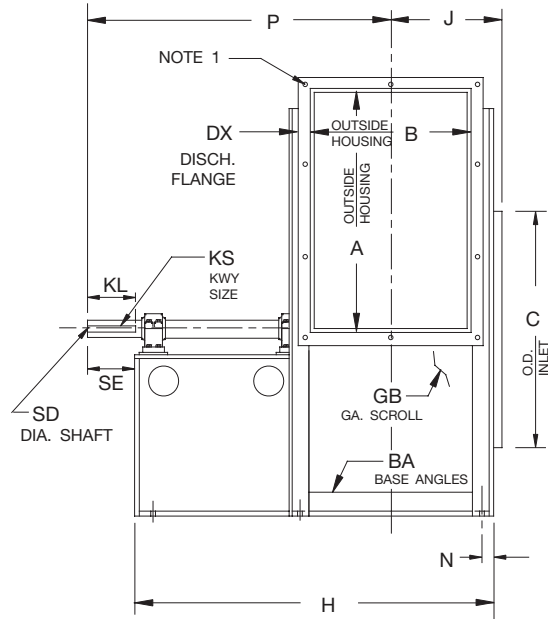
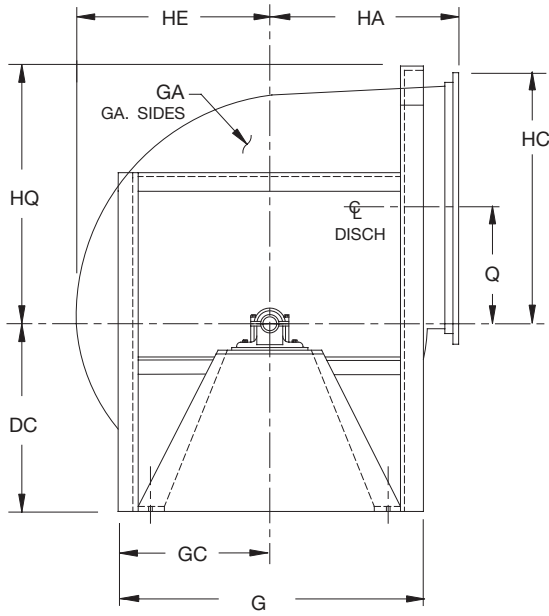
SIZE	J	K	KL		KS	L		M	N	P		Q	SD	SE	
			ARR 1	ARR 9		ARR 1	ARR 9			ARR 1	ARR 9			ARR 1	ARR 9
			222	13.00		10.56	6.00			7.00	0.63 x 0.31			14.00	28.13
245	13.94	11.44	6.50	7.00	0.63 x 0.31	15.50	27.88	12.38	1.38	36.06	49.19	12.94	2.44	7.25	8.00
270	15.38	12.44	7.50	6.50	0.63 x 0.31	17.50	27.88	13.63	1.38	40.06	49.19	14.25	2.44	8.25	7.00
300	17.06	14.13	8.00	6.50	0.63 x 0.31	19.50	28.38	15.13	1.88	44.25	51.38	15.81	2.69	8.75	7.00
330	18.25	15.31	9.00	7.50	0.75 x 0.38	21.50	35.00	16.63	1.88	48.44	60.19	17.50	2.94	9.75	8.00
365	19.63	16.69	9.00	7.50	0.75 x 0.38	23.00	41.13	18.63	1.88	51.56	67.69	19.25	2.94	10.00	8.00
402	22.13	18.69	10.00	7.50	0.88 x 0.44	24.50	41.63	19.88	2.38	56.06	70.19	21.25	3.44	11.00	8.00
445	24.88	20.88	10.00	7.50	1.00 x 0.50	28.00	41.75	21.38	2.88	61.75	72.50	23.50	3.94	11.00	8.00
490	26.56	22.56	11.00	7.50	1.00 x 0.50	30.00	41.75	23.88	2.88	66.44	74.19	25.88	3.94	12.00	8.00
542	28.69	24.69	11.00	7.50	1.00 x 0.50	30.00	41.75	26.63	2.88	68.56	76.31	28.63	4.44	12.00	8.00
600	31.94	26.94	12.00	-	1.25 x 0.63	33.00	-	29.63	2.88	74.81	-	31.69	4.94	13.00	-
660	34.38	29.38	12.00	-	1.25 x 0.63	35.00	-	32.63	2.88	79.25	-	34.75	4.94	13.00	-
730	37.06	32.06	13.50	-	1.25 x 0.63	38.00	-	36.63	2.88	86.44	-	38.50	4.94	14.50	-
807	41.06	35.06	13.50	-	1.25 x 0.63	41.00	-	40.38	2.88	92.44	-	42.63	4.94	14.50	-
890	45.25	38.25	14.00	-	1.25 x 0.63	44.00	-	45.88	2.88	99.13	-	46.94	4.94	15.00	-

BC14953E - ARR. 1  
BC14956E - ARR. 9

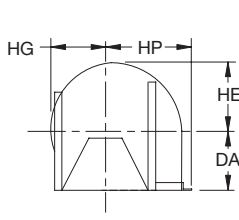
NOTES:

1. Punched outlet flanges are included on all discharges per AC14988, or for 'DBD' AC14869.
2. Optional punched inlet per AS363.
3. 'CW' rotation is shown. 'CCW' rotation is similar but opposite.
4. For fans with inlet box at 90° or 270° use 'BAU' discharge dimension 'DF' for centerline height.
5. 'FR' equals maximum motor frame. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation units (unless otherwise specified).

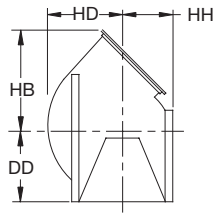
Arrangement 1, Class 26



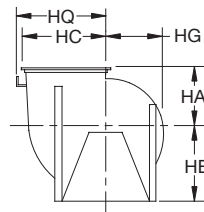
CW THD



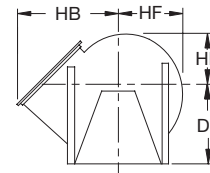
CW DBD



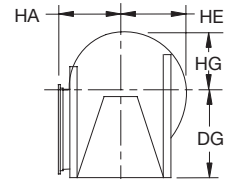
CW TAU



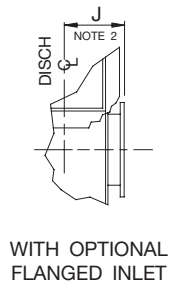
CW UBD



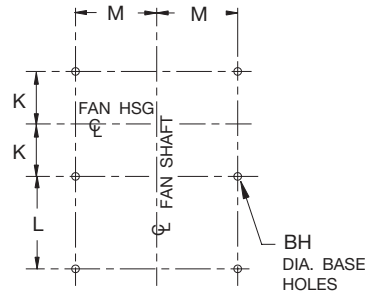
CW BAU



CW BHD



WITH OPTIONAL FLANGED INLET



FOUNDATION PLAN (FOR DBD SEE NOTE 1)



SIZE	A	B	BA	BH	C	DA	DC	DD	DE	DF	DG	DX	G	GA
						SEE NOTE 4								
270	28.88	21.56	3.00 x 3.00	0.56	28.50	21.44	22.00	23.50	24.75	26.25	31.50	2.00 x 2.00	38.00	7
300	32.00	23.94	3.00 x 4.00	0.81	31.63	23.81	24.50	26.00	27.50	29.50	34.75	2.00 x 2.00	42.00	7
330	35.44	26.31	3.00 x 4.00	0.81	34.75	26.25	27.00	28.50	30.00	32.25	37.75	2.00 x 2.00	45.00	0.25
365	39.00	29.13	3.00 x 4.00	0.81	38.50	29.00	29.50	31.50	33.50	35.50	41.50	2.00 x 2.00	49.00	0.25
402	42.94	32.06	3.50 x 5.00	0.81	42.44	32.00	33.00	35.25	37.00	39.50	46.00	2.00 x 2.00	53.50	0.25
445	47.44	35.44	4.00 x 6.00	0.81	46.88	35.38	35.50	38.50	40.00	43.25	50.50	2.00 x 2.00	58.50	0.25
490	52.25	38.88	4.00 x 6.00	0.81	51.63	39.00	39.00	42.25	44.00	47.50	55.75	2.00 x 2.00	63.50	0.25
542	57.69	43.13	4.00 x 6.00	0.81	57.13	43.06	43.50	46.50	49.00	52.25	61.25	2.50 x 2.50	69.00	0.25
600	63.81	47.56	4.00 x 6.00	0.81	63.13	47.69	48.00	51.25	54.00	57.50	67.25	2.50 x 2.50	75.00	0.25
660	70.00	52.44	4.00 x 6.00	0.81	69.38	52.44	52.50	55.75	59.00	63.00	73.75	2.50 x 2.50	81.00	0.25
730	77.50	57.81	4.00 x 6.00	0.81	76.75	58.00	57.00	61.75	64.50	69.50	81.25	2.50 x 2.50	89.00	0.25
807	85.69	63.88	4.00 x 6.00	0.81	84.88	64.19	63.00	67.50	72.00	76.50	89.50	2.50 x 2.50	96.50	0.25
890	94.38	70.25	4.00 x 6.00	0.81	93.38	70.00	69.25	73.75	78.25	85.00	98.25	2.50 x 2.50	107.50	0.25

SIZE	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ	J	K	KL
270	7	19.00	45.63	21.44	36.88	30.69	24.81	23.31	21.94	20.56	19.19	31.69	-	15.38	12.44	7.50
300	7	21.00	51.50	23.81	40.75	33.81	27.50	25.81	24.31	22.81	21.31	35.81	-	17.06	14.13	8.00
330	0.25	22.50	55.88	26.25	44.88	37.19	30.25	28.50	26.81	25.13	23.44	39.19	-	18.25	15.31	9.00
365	0.25	24.50	60.13	29.00	49.31	40.75	33.69	31.63	29.75	27.88	26.00	42.75	-	19.63	16.69	9.00
402	0.25	26.75	66.13	32.00	54.25	44.69	37.13	34.81	32.75	30.69	28.63	47.69	-	22.13	18.69	10.00
445	0.25	29.25	74.50	35.38	59.81	49.19	41.06	38.38	36.13	33.88	31.63	53.19	-	24.88	20.88	10.00
490	0.25	31.75	79.88	39.00	65.75	54.00	45.00	42.31	39.81	37.31	34.81	58.00	-	26.56	22.56	11.00
542	0.25	34.50	84.13	43.06	72.81	59.94	49.94	46.81	44.06	41.31	38.56	63.44	60.38	28.69	24.69	11.00
600	0.25	37.50	91.63	47.69	80.44	66.06	55.13	51.81	48.75	45.69	42.63	69.56	66.38	31.94	26.94	12.00
660	0.25	40.50	98.50	52.44	88.19	72.25	60.56	56.94	53.50	50.06	46.63	75.75	73.00	34.38	29.38	12.00
730	0.25	44.50	106.88	58.00	97.38	79.75	67.06	63.00	59.25	55.50	51.75	83.25	80.38	37.06	32.06	13.50
807	0.25	48.25	115.88	64.19	107.56	87.94	74.19	69.63	65.50	61.38	57.25	91.44	88.50	41.06	35.06	13.50
890	0.25	53.75	125.25	70.00	117.81	96.63	81.69	76.75	72.19	67.63	63.06	100.13	97.13	45.25	38.25	14.00

SIZE	KS	L	M	N	P	Q	SD	SE
270	0.75 x 0.38	17.50	13.63	1.38	40.06	14.25	2.94	8.25
300	0.75 x 0.38	19.50	15.13	1.88	44.25	15.81	2.94	8.75
330	0.75 x 0.38	21.50	16.63	1.88	48.44	17.50	2.94	9.75
365	0.88 x 0.44	23.00	18.63	1.88	51.56	19.25	3.44	10.00
402	1.00 x 0.50	24.50	19.88	2.38	56.06	21.25	3.94	11.00
445	1.00 x 0.50	28.00	21.38	2.88	61.75	23.50	3.94	11.00
490	1.00 x 0.50	30.00	23.88	2.88	66.44	25.88	4.44	12.00
542	1.25 x 0.63	30.00	26.63	2.88	68.56	28.63	4.94	12.00
600	1.25 x 0.63	33.00	29.63	2.88	74.81	31.69	4.94	13.00
660	1.25 x 0.63	35.00	32.63	2.88	79.25	34.75	4.94	13.00
730	1.25 x 0.63	38.00	36.63	2.88	86.44	38.50	5.44	14.50
807	1.25 x 0.63	41.00	40.38	2.88	92.44	42.63	5.44	14.50
890	1.75 x 0.88	44.00	45.88	2.88	99.13	46.94	6.94	15.00

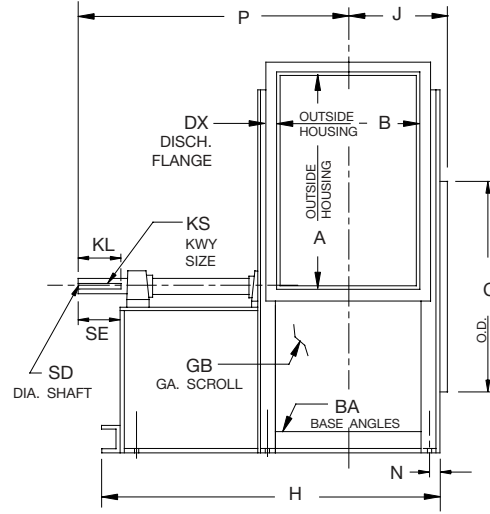
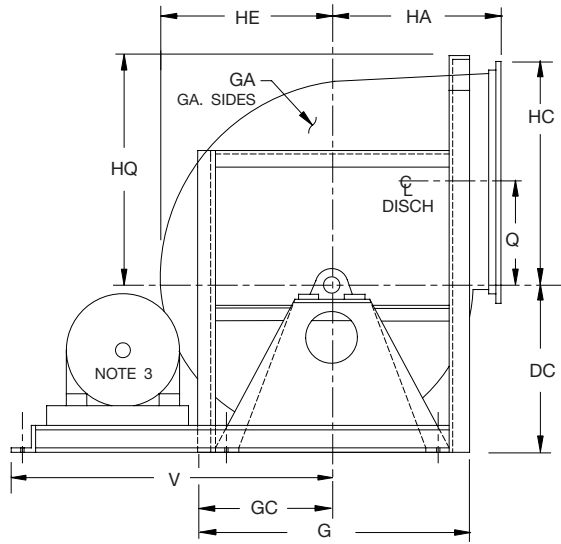
AC14954D

**NOTES:**

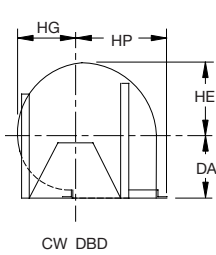
1. Punched outlet flanges are included on all discharges per AC14988, or for 'DBD' AC14869.
2. Optional punched inlet per AS363.
3. 'CW' rotation is shown. 'CCW' rotation is similar but opposite.
4. For fans with inlet box at 90° or 270° use 'BAU' discharge dimension 'DF' for centerline height.



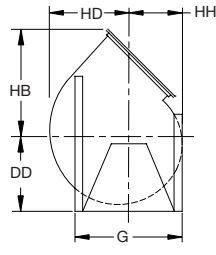
Arrangements 9F, Class 14



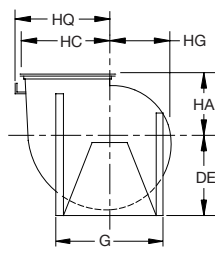
CW THD



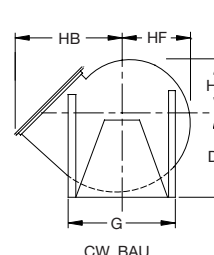
CW DBD



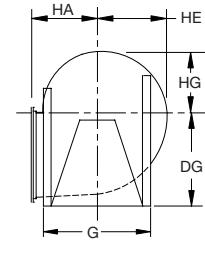
CW TAU



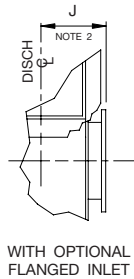
CW UBD



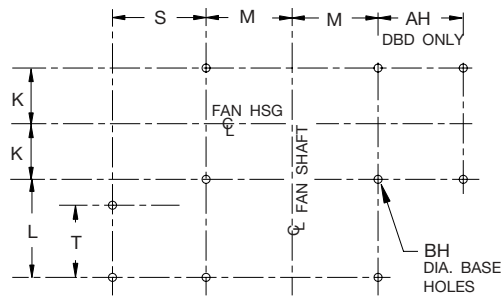
CW BAU



CW BHD



WITH OPTIONAL FLANGED INLET



FOUNDATION PLAN  
(FOR DBD SEE NOTE 1)  
MOTOR LOCATION 'L' (LEFT) SHOWN

SIZE	A	AH	B	BA	BH	C	DA	DC	DD	DE	DF	DG	DX	FR	G	GA
165	17.44	9.75	13.19	1.50 x 2.00	0.44	17.75	13.13	13.50	14.50	15.25	16.25	19.50	1.00 x 1.00	215T	24.25	14
182	19.38	10.81	14.56	1.50 x 2.00	0.44	19.50	14.50	14.75	15.75	16.75	17.75	21.50	1.25 x 1.25	256T	26.00	12
200	21.19	11.63	15.94	1.50 x 2.00	0.56	21.38	15.81	16.25	17.25	18.25	19.25	23.50	1.25 x 1.25	256T	28.00	12
222	23.56	12.88	17.69	2.00 x 2.00	0.56	23.75	17.69	18.00	19.25	20.50	22.00	26.00	1.25 x 1.25	256T	31.25	12
245	25.94	14.13	19.44	2.00 x 2.00	0.56	26.06	19.50	20.00	21.25	22.50	24.00	28.25	1.25 x 1.25	286T	33.50	12
270	28.63	15.56	21.38	2.00 x 2.00	0.56	28.50	21.44	22.00	23.50	24.75	26.25	31.00	1.50 x 1.50	286T	36.00	12
300	31.81	17.25	23.81	2.50 x 2.50	0.56	31.63	23.81	24.50	26.00	27.50	29.50	34.25	1.50 x 1.50	286T	41.00	10
330	35.13	19.06	26.06	2.50 x 2.50	0.56	34.75	26.25	27.00	28.50	30.00	32.25	37.25	1.50 x 1.50	326T	44.00	10
365	38.69	21.13	28.88	2.50 x 2.50	0.56	38.50	29.00	29.50	31.50	33.50	35.50	41.00	1.50 x 1.50	326T	48.00	10
402	42.63	23.31	31.81	3.00 x 3.00	0.81	42.44	32.00	33.00	35.25	37.00	39.50	45.50	1.50 x 1.50	365T	52.50	10
445	47.13	25.81	35.19	3.00 x 3.00	0.81	46.88	35.38	35.50	38.50	40.00	43.25	50.00	1.50 x 1.50	365T	56.50	10
490	51.94	28.13	38.63	3.00 x 3.00	0.81	51.63	39.00	39.00	42.25	44.00	47.50	54.75	2.00 x 2.00	405T	61.50	10
542	57.38	31.81	42.88	3.00 x 4.00	0.81	57.13	43.06	43.50	46.50	49.00	52.25	60.25	2.00 x 2.00	405T	67.00	10
600	63.50	34.94	47.31	3.00 x 4.00	0.81	63.13	47.69	48.00	51.25	54.00	57.50	66.25	2.00 x 2.00	445T	73.00	10
660	69.69	39.13	52.19	3.50 x 5.00	0.81	69.38	52.44	52.50	55.75	59.00	63.00	73.25	2.50 x 2.50	445T	80.00	10
730	77.25	42.63	57.56	3.50 x 5.00	0.81	76.75	58.00	57.00	61.75	64.50	69.50	80.75	2.50 x 2.50	445T	88.00	10

SIZE	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ	J	K	KL	KS
165	14	12.13	37.00	13.13	22.25	18.38	15.06	14.13	13.31	12.50	11.69	19.38	-	10.19	7.75	3.00	0.25 x 0.13
182	14	13.00	43.88	14.50	24.81	20.56	16.69	15.69	14.75	13.81	12.88	21.31	-	11.38	8.44	3.50	0.38 x 0.19
200	14	14.00	45.25	15.81	27.00	22.38	18.38	17.31	16.25	15.19	14.13	23.13	-	12.06	9.13	3.50	0.38 x 0.19
222	14	15.63	47.00	17.69	30.00	24.75	20.44	19.06	17.94	16.81	15.69	25.50	-	12.94	10.00	4.00	0.38 x 0.19
245	14	16.75	51.25	19.50	33.00	27.13	22.38	21.00	19.75	18.50	17.25	27.88	-	13.81	10.88	4.50	0.50 x 0.25
270	14	18.00	53.13	21.44	36.44	30.06	24.69	23.19	21.81	20.44	19.06	30.56	-	15.25	11.81	4.50	0.50 x 0.25
300	14	20.50	56.63	23.81	40.31	33.25	27.44	25.75	24.25	22.75	21.25	34.25	-	17.00	13.31	5.00	0.50 x 0.25
330	12	22.00	60.31	26.25	44.44	36.56	30.13	28.38	26.69	25.00	23.31	37.56	-	18.13	14.44	5.00	0.50 x 0.25
365	12	24.00	63.06	29.00	48.88	40.13	33.50	31.50	29.63	27.75	25.88	41.13	-	19.50	15.81	5.00	0.63 x 0.31
402	12	26.25	68.81	32.00	53.81	44.06	37.00	34.69	32.63	30.56	28.50	45.56	-	22.00	17.56	5.00	0.63 x 0.31
445	12	28.25	72.19	35.38	59.38	48.56	40.88	38.25	36.00	33.75	31.50	50.06	-	24.69	19.25	5.50	0.63 x 0.31
490	12	30.75	81.19	39.00	65.69	53.88	44.88	42.19	39.69	37.19	34.69	54.88	-	26.38	20.94	5.50	0.75 x 0.38
542	12	33.50	87.44	43.06	72.38	59.31	49.75	46.69	43.94	41.19	38.44	61.31	59.75	28.50	23.56	6.00	0.88 x 0.44
600	12	36.50	98.44	47.69	80.00	65.44	55.00	51.69	48.63	45.56	42.50	67.44	65.75	31.75	25.81	6.00	0.88 x 0.44
660	12	40.00	105.31	52.44	88.06	72.13	60.38	56.81	53.38	49.94	46.50	74.63	72.25	34.25	28.75	7.00	1.00 x 0.50
730	10	44.00	110.69	58.00	97.31	79.63	66.94	62.88	59.13	55.38	51.63	82.13	79.75	36.94	31.44	7.50	1.00 x 0.50

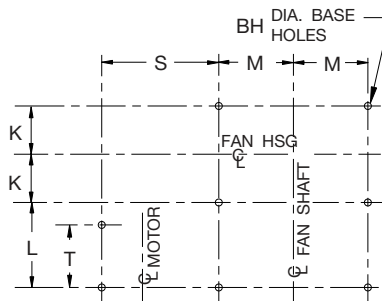
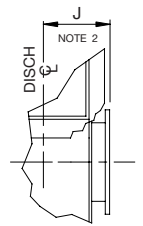
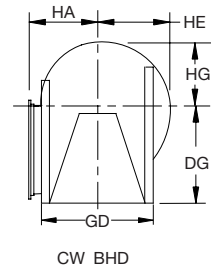
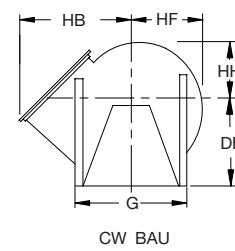
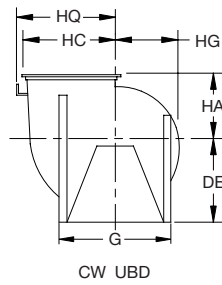
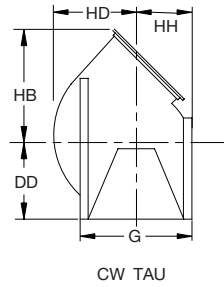
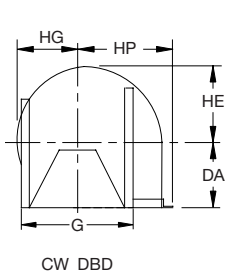
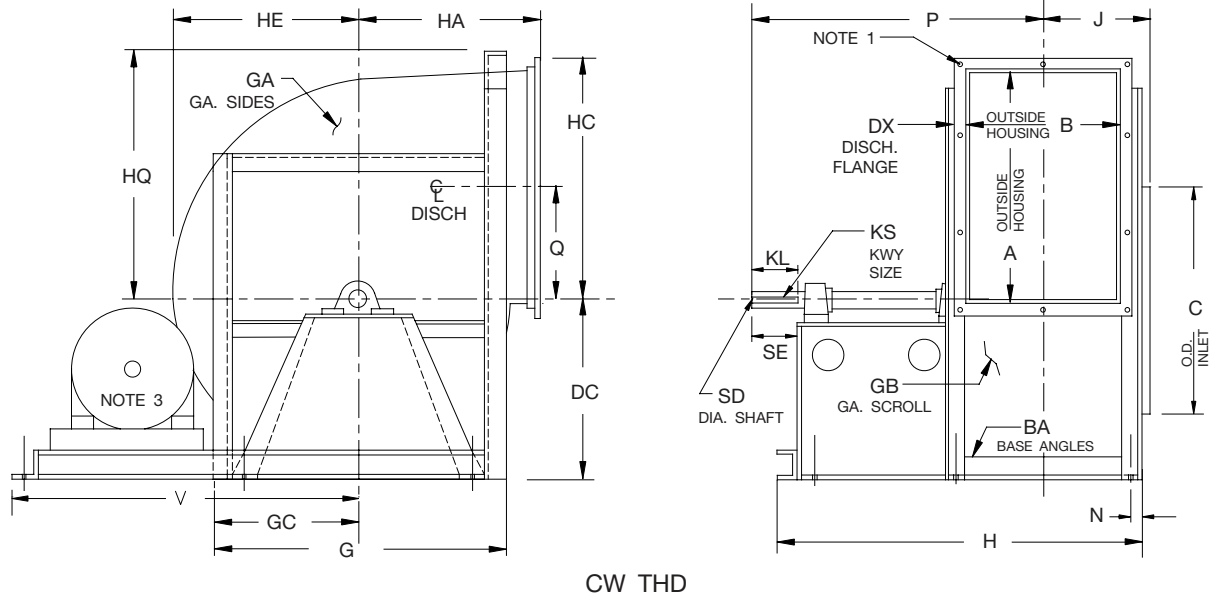
SIZE	L	M	N	P	Q	S	SD	SE	T	V
165	16.75	8.75	0.88	30.13	8.69	23.88	1.19	3.75	15.00	33.50
182	21.75	9.63	0.88	36.31	9.63	27.75	1.44	4.25	19.75	38.50
200	21.75	10.63	0.88	37.00	10.56	27.75	1.44	4.25	19.75	39.50
222	21.75	11.75	0.88	38.38	11.75	27.75	1.69	4.75	19.75	40.63
245	24.25	12.88	0.88	42.25	12.94	30.25	1.94	5.25	22.25	44.25
270	24.25	14.13	0.88	43.19	14.25	30.25	1.94	5.25	22.25	45.50
300	24.50	15.88	1.13	45.44	15.81	30.50	2.19	5.75	22.25	47.50
330	27.00	17.38	1.13	49.06	17.50	34.38	2.19	5.75	24.50	53.13
365	27.00	18.88	1.13	50.44	19.25	34.38	2.44	5.75	24.50	54.63
402	29.00	20.88	1.38	54.19	21.25	38.88	2.44	5.75	26.25	61.13
445	29.00	22.88	1.38	56.38	23.50	38.88	2.69	6.25	26.25	63.13
490	34.50	25.38	1.38	63.56	25.88	44.50	2.94	6.25	31.75	71.25
542	35.00	27.63	1.88	67.19	28.63	45.00	3.44	6.75	31.75	74.00
600	41.50	30.63	1.88	75.94	31.69	48.50	3.44	6.75	38.25	80.50
660	42.00	33.13	2.38	80.38	34.75	48.50	3.94	7.75	38.25	83.00
730	42.00	37.13	2.38	83.56	38.50	48.50	3.94	8.25	38.25	87.00

AC17015D

**NOTES:**

1. Punched outlet flanges are included on all discharges per AC14986, or for 'DBD' AC17016.
2. Optional punched inlet per AS363.
3. 'FR' equals maximum motor frame. Standard Arr. 9F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation units (unless otherwise specified).

**Arrangement 9F, Class 17**



SIZE	A	B	BA	BH	C	DA	DC	DD	DE	DF	DG	DX	FR	G
165	17.56	13.31	1.50 x 2.00	0.44	17.75	13.13	13.50	14.50	15.25	16.25	19.50	1.25 x 1.25	256T	24.25
182	19.50	14.63	2.00 x 2.00	0.56	19.50	14.50	14.75	15.75	16.75	17.75	22.00	1.25 x 1.25	286T	27.00
200	21.31	16.00	2.00 x 2.00	0.56	21.38	15.81	16.25	17.25	18.25	19.25	24.00	1.25 x 1.25	326T	29.00
222	23.69	17.75	2.50 x 2.50	0.56	23.75	17.69	18.00	19.25	20.50	22.00	26.50	1.25 x 1.25	326T	32.25
245	26.19	19.63	2.50 x 2.50	0.56	26.06	19.50	20.00	21.25	22.50	24.00	28.75	1.50 x 1.50	326T	34.50
270	28.88	21.56	2.50 x 2.50	0.56	28.50	21.44	22.00	23.50	24.75	26.25	31.50	1.50 x 1.50	365T	37.00
300	32.00	23.94	3.00 x 3.00	0.81	31.63	23.81	24.50	26.00	27.50	29.50	34.75	1.50 x 1.50	365T	42.00
330	35.31	26.19	3.00 x 3.00	0.81	34.75	26.25	27.00	28.50	30.00	32.25	37.75	1.50 x 1.50	365T	45.00
365	38.88	29.00	3.00 x 3.00	0.81	38.50	29.00	29.50	31.50	33.50	35.50	41.50	1.50 x 1.50	405T	49.00
402	42.81	31.94	3.00 x 4.00	0.81	42.44	32.00	33.00	35.25	37.00	39.50	45.50	2.00 x 2.00	445T	52.50
445	47.31	35.31	3.00 x 4.00	0.81	46.88	35.38	35.50	38.50	40.00	43.25	50.00	2.00 x 2.00	445T	56.50
490	52.13	38.75	3.00 x 4.00	0.81	51.63	39.00	39.00	42.25	44.00	47.50	54.75	2.00 x 2.00	445T	61.50
542	57.56	43.00	3.50 x 5.00	0.81	57.13	43.06	43.50	46.50	49.00	52.25	60.75	2.50 x 2.50	445T	67.00
600	63.69	47.44	3.50 x 5.00	0.81	63.13	47.69	48.00	51.25	54.00	57.50	66.75	2.50 x 2.50	445T	74.00
660	69.88	52.31	4.00 x 6.00	0.81	69.38	52.44	52.50	55.75	59.00	63.00	73.75	2.50 x 2.50	445T	80.00
730	77.38	57.69	4.00 x 6.00	0.81	76.75	58.00	57.00	61.75	64.50	69.50	81.25	2.50 x 2.50	445T	88.00
807	85.56	63.75	4.00 x 6.00	0.81	84.88	64.19	63.00	67.50	72.00	76.50	89.50	2.50 x 2.50	445T	96.50
890	94.25	70.13	4.00 x 6.00	0.81	93.38	70.00	69.25	73.75	78.25	85.00	98.25	2.50 x 2.50	445T	107.50

SIZE	GA	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ
165	10	10	12.13	23.13	43.63	13.13	22.50	18.69	15.13	14.19	13.38	12.56	11.75	19.44	-
182	10	10	13.50	27.00	47.13	14.50	24.81	20.63	16.75	15.75	14.81	13.88	12.94	21.38	-
200	10	10	14.50	29.00	48.94	15.81	27.06	22.44	18.38	17.38	16.31	15.25	14.19	23.19	-
222	10	10	16.13	32.25	51.69	17.69	30.06	24.81	20.50	19.13	18.00	16.88	15.75	26.06	-
245	7	7	17.25	34.50	53.56	19.50	33.25	27.50	22.50	21.13	19.88	18.63	17.38	28.50	-
270	7	7	18.50	37.00	56.69	21.44	36.50	30.19	24.81	23.31	21.94	20.56	19.19	31.19	-
300	7	7	21.00	42.00	60.06	23.81	40.38	33.31	27.50	25.81	24.31	22.81	21.31	34.81	-
330	7	7	22.50	45.00	62.31	26.25	44.44	36.63	30.19	28.44	26.75	25.06	23.38	38.13	-
365	7	7	24.50	49.00	71.94	29.00	48.94	40.19	33.63	31.56	29.69	27.81	25.94	41.69	-
402	7	7	26.25	52.50	82.69	32.00	54.19	44.63	37.06	34.75	32.69	30.63	28.56	46.63	-
445	7	7	28.25	56.50	86.06	35.38	59.75	49.13	41.00	38.31	36.06	33.81	31.56	51.13	-
490	7	7	30.75	61.50	89.44	39.00	65.69	53.94	44.94	42.25	39.75	37.25	34.75	55.94	-
542	7	7	33.50	67.00	95.31	43.06	72.81	59.88	49.88	46.75	44.00	41.25	38.50	62.38	59.75
600	7	7	37.00	74.00	99.81	47.69	80.38	66.00	55.06	51.75	48.69	45.63	42.56	68.50	66.25
660	7	7	40.00	80.00	106.69	52.44	88.13	72.19	60.50	56.88	53.44	50.00	46.56	75.69	72.38
730	7	7	44.00	88.00	112.06	58.00	97.38	79.69	67.00	62.94	59.19	55.44	51.69	83.19	79.75
807	7	7	48.25	96.50	118.06	64.19	107.50	87.88	74.13	69.56	65.44	61.31	57.19	91.38	88.38
890	7	7	53.75	107.50	124.44	70.00	117.75	96.56	81.63	76.69	72.13	67.56	63.00	100.06	97.00

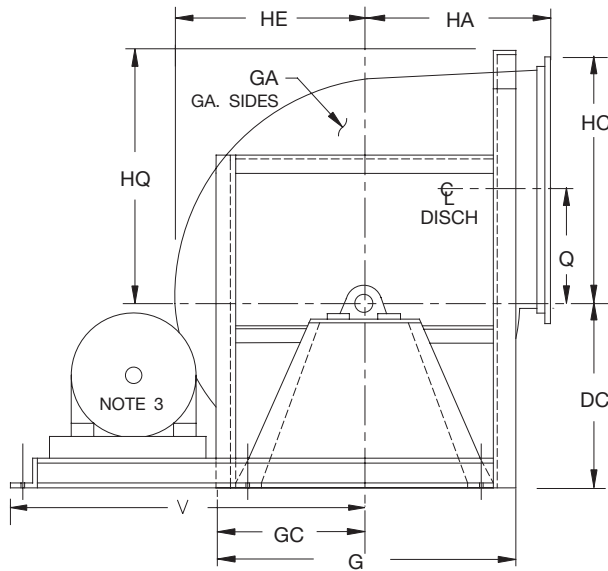
SIZE	J	K	KL	KS	L	M	N	P	Q	S	SD	SE	T	V
165	10.25	7.81	4.25	0.38 x 0.19	22.75	8.75	0.88	37.19	8.69	28.88	1.69	4.75	20.75	38.75
182	11.38	8.44	5.00	0.38 x 0.19	25.00	9.63	0.88	40.81	9.63	30.25	1.69	5.50	23.00	41.00
200	12.06	9.13	6.00	0.50 x 0.25	26.50	10.63	0.88	44.25	10.56	34.75	1.94	6.75	24.25	46.75
222	12.94	10.25	6.00	0.50 x 0.25	26.75	11.50	1.13	45.63	11.75	35.00	1.94	6.75	24.25	47.88
245	13.94	11.19	6.00	0.50 x 0.25	26.75	12.63	1.13	46.56	12.94	35.00	2.19	6.75	24.25	49.00
270	15.38	12.19	7.00	0.50 x 0.25	27.88	13.88	1.13	49.69	14.25	39.13	2.19	7.75	25.38	54.38
300	17.06	13.63	6.75	0.63 x 0.31	28.13	15.63	1.38	51.38	15.81	39.38	2.44	7.75	25.38	56.38
330	18.19	14.75	6.75	0.63 x 0.31	28.13	17.13	1.38	52.50	17.50	39.38	2.44	7.75	25.38	57.88
365	19.56	16.13	8.00	0.63 x 0.31	34.88	18.63	1.38	61.88	19.25	44.50	2.69	9.00	32.13	64.50
402	22.06	18.13	8.75	0.75 x 0.38	41.13	20.38	1.88	71.13	21.25	48.50	2.94	10.00	37.88	70.25
445	24.81	19.81	8.75	0.88 x 0.44	41.13	22.38	1.88	72.81	23.50	48.50	3.44	10.00	37.88	72.25
490	26.50	21.50	8.75	1.00 x 0.50	41.13	24.88	1.88	74.50	25.88	48.50	3.94	10.00	37.88	74.75
542	28.63	24.13	9.00	1.00 x 0.50	41.25	27.13	2.38	77.75	28.63	48.50	3.94	10.50	37.50	77.00
600	31.88	26.38	9.00	1.00 x 0.50	41.25	30.13	2.38	80.00	31.69	48.50	3.94	10.50	37.50	80.00
660	34.31	29.31	9.00	1.00 x 0.50	41.75	32.63	2.88	83.44	34.75	48.50	3.94	10.50	37.50	82.50
730	37.00	32.00	9.00	1.00 x 0.50	41.75	36.63	2.88	86.13	38.5	48.50	4.44	10.50	37.50	86.50
807	41.00	35.00	9.00	1.25 x 0.63	41.75	40.38	2.88	89.13	42.63	48.50	4.94	10.50	37.50	90.25
890	45.19	38.19	9.00	1.25 x 0.63	41.75	45.88	2.88	92.31	46.94	48.50	4.94	10.50	37.50	95.75

BC14957G

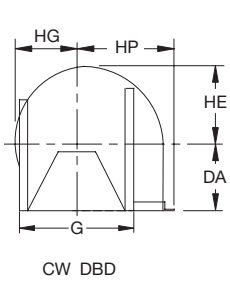
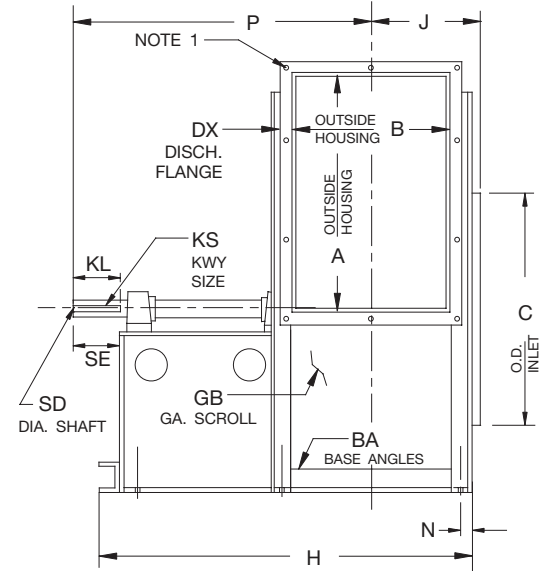
**NOTES:**

1. Punched outlet flanges are included on all discharges per AC14987, or for 'DBD' AC14924.
2. Optional punched inlet per AS363.
3. 'FR' equals maximum motor frame. Standard Arr. 9F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation units (unless otherwise specified).

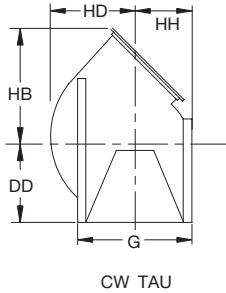
Arrangement 9F, Class 22



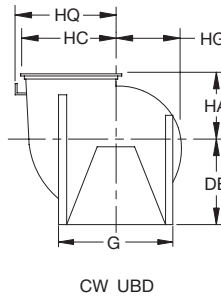
CW THD



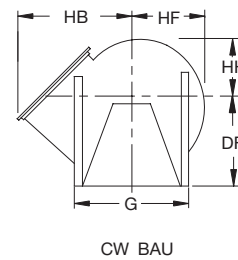
CW DBD



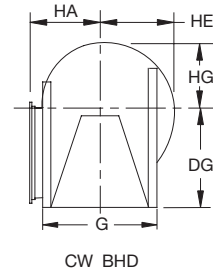
CW TAU



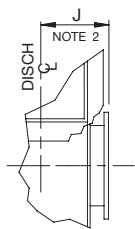
CW UBD



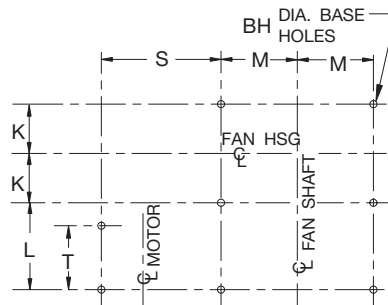
CW BAU



CW BHD



WITH OPTIONAL FLANGED INLET



FOUNDATION PLAN  
(FOR DBD SEE NOTE 1)  
MOTOR LOCATION 'L' (LEFT) SHOWN

SIZE	A	B	BA	BH	C	DA	DC	DD	DE	DF	DG	DX	FR	G
222	23.81	17.88	3.00 x 3.00	0.56	23.75	17.69	18.00	19.25	20.50	22.00	26.50	2.00 x 2.00	365T	32.25
245	26.19	19.63	3.00 x 3.00	0.56	26.06	19.50	20.00	21.25	22.50	24.00	28.75	2.00 x 2.00	365T	34.50
270	28.88	21.56	3.00 x 3.00	0.56	28.50	21.44	22.00	23.50	24.75	26.25	31.50	2.00 x 2.00	365T	38.00
300	32.00	23.94	3.00 x 4.00	0.81	31.63	23.81	24.50	26.00	27.50	29.50	34.75	2.00 x 2.00	365T	42.00
330	35.44	26.31	3.00 x 4.00	0.81	34.75	26.25	27.00	28.50	30.00	32.25	37.75	2.00 x 2.00	405T	45.00
365	39.00	29.13	3.00 x 4.00	0.81	38.50	29.00	29.50	31.50	33.50	35.50	41.50	2.00 x 2.00	445T	49.00
402	42.94	32.06	3.50 x 5.00	0.81	42.44	32.00	33.00	35.25	37.00	39.50	46.00	2.00 x 2.00	445T	52.50
445	47.44	35.44	4.00 x 6.00	0.81	46.88	35.38	35.50	38.50	40.00	43.25	50.50	2.00 x 2.00	445T	57.50
490	52.25	38.88	4.00 x 6.00	0.81	51.63	39.00	39.00	42.25	44.00	47.50	55.25	2.00 x 2.00	445T	62.50
542	57.69	43.13	4.00 x 6.00	0.81	57.13	43.06	43.50	46.50	49.00	52.25	61.25	2.50 x 2.50	445T	68.00

SIZE	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HP	HQ
222	7	7	16.13	53.94	17.69	30.63	25.63	20.56	19.19	18.06	16.94	15.81	26.63	-
245	7	7	17.25	55.44	19.50	33.56	28.00	22.50	21.13	19.88	18.63	17.38	29.00	-
270	7	7	19.00	57.44	21.44	36.88	30.69	24.81	23.31	21.94	20.56	19.19	31.69	-
300	7	7	21.00	61.81	23.81	40.75	33.81	27.50	25.81	24.31	22.81	21.31	35.81	-
330	0.25	0.25	22.50	70.94	26.25	44.88	37.19	30.25	28.50	26.81	25.13	23.44	39.19	-
365	0.25	0.25	24.50	79.81	29.00	49.31	40.75	33.69	31.63	29.75	27.88	26.00	42.75	-
402	0.25	0.25	26.25	84.81	32.00	54.25	44.69	37.13	34.81	32.75	30.69	28.63	47.69	-
445	0.25	0.25	28.75	89.81	35.38	59.81	49.19	41.06	38.38	36.13	33.88	31.63	53.19	-
490	0.25	0.25	31.25	93.19	39.00	65.75	54.00	45.00	42.31	39.81	37.31	34.81	58.00	-
542	0.25	0.25	34.00	97.44	43.06	72.81	59.94	49.94	46.81	44.06	41.31	38.56	63.44	60.38

SIZE	J	K	KL	KS	L	M	N	P	Q	S	SD	SE	T	V
222	13.00	10.56	7.00	0.63 x 0.31	28.13	11.25	1.38	48.31	11.75	39.38	2.44	7.75	25.38	52.00
245	13.94	11.44	7.00	0.63 x 0.31	27.88	12.38	1.38	49.19	12.94	39.38	2.44	8.00	25.13	53.13
270	15.38	12.44	7.00	0.63 x 0.31	27.88	13.63	1.38	50.19	14.25	39.38	2.44	8.00	25.13	54.38
300	17.06	14.13	7.00	0.63 x 0.31	28.38	15.13	1.88	52.38	15.81	39.88	2.69	8.00	25.13	56.38
330	18.25	15.31	8.25	0.75 x 0.38	35.00	16.63	1.88	61.69	17.50	45.00	2.94	9.50	31.75	63.00
365	19.63	16.69	8.75	0.75 x 0.38	41.13	18.63	1.88	69.69	19.25	48.50	2.94	10.00	37.88	68.50
402	22.13	18.69	8.75	0.88 x 0.44	41.63	19.88	2.38	72.19	21.25	48.50	3.44	10.00	37.88	69.75
445	24.88	20.88	9.00	1.00 x 0.50	41.75	21.38	2.88	75.00	23.50	48.50	3.94	10.50	37.50	71.25
490	26.56	22.56	9.00	1.00 x 0.50	41.75	23.88	2.88	76.69	25.88	48.50	3.94	10.50	37.50	73.75
542	28.69	24.69	9.00	1.00 x 0.50	41.75	26.63	2.88	78.81	28.63	48.50	4.44	10.50	37.50	76.50

BC14958E

**NOTES:**

1. Punched outlet flanges are included on all discharges per AC14988, or for 'DBD' AC14925.
2. Optional punched inlet per AS363.
3. 'FR' equals maximum motor frame. Standard Arr. 9F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation units (unless otherwise specified).





## Model BCS

Fans shall be Model BCS, Backward Curved High Pressure Blowers, as manufactured by Twin City Fan & Blower, Minneapolis, Minnesota.

**PERFORMANCE** — Fans shall be tested in accordance with ANSI/AMCA Standard 210 (air performance) and 300 (sound performance) in an AMCA accredited laboratory.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the peak efficiency to ensure quiet and stable operation. Fans shall have a non-overloading design with self-limiting horsepower characteristics and shall reach a peak in the normal selection area.

**CONSTRUCTION** — Fan housings and bearing pedestals shall be of heavy-gauge, continuously welded construction. Housings with partially welded construction are not acceptable. Housings shall be suitably braced to prevent vibration or pulsation. Discharge flanges shall be provided for rigidity and duct connection. Discharge flanges are punched as standard. All units are furnished with lifting lugs.

**WHEEL** — BCS backward curved wheels shall be single thickness, designed for maximum efficiency and quiet operation, and shall be continuously welded to the rim and back plate. Partial welding is not acceptable on backward curved blades. All wheels shall be statically and dynamically balanced.

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

**BEARINGS** — Bearings shall be heavy duty, grease lubricated, anti-friction ball or roller, self-aligning, pillow block type and selected for a minimum average bearing life (ABMA L-50) in excess of 200,000 hours at the maximum fan RPM.

**DRIVE** — Motor sheaves shall be cast iron, variable pitch on applications 20 HP and smaller, and fixed pitch on 25 HP and larger. Drives and belts shall be located external to the fan casing and rated for 150% of the required motor HP.

**FINISH AND COATING** — The entire fan assembly, excluding the shaft, shall be thoroughly degreased and deburred before application of a rust-preventative primer. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly. The fan shaft shall be coated with a petroleum-based rust protectant. Aluminum components shall be unpainted.

**ACCESSORIES** — When specified, accessories such as access doors, drains, inlet and outlet flanges, belt guards, shaft and bearing guards, outlet screens, outlet dampers, inlet vanes, spark resistant construction, split housings, high temperature construction, shaft seals, inlet boxes and shaft coolers shall be provided by Twin City Fan & Blower to maintain one-source responsibility.

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

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



## Model

### BC-SW

#### Sizes

12.25" to 98.25" wheel diameters

#### Performance

Airflow to 277,500 CFM  
Static pressure to 20" w.g.

#### Arrangements

1, 3, 3F, 3SI, 4, 7SI, 8, 9, 9F and 10



See Catalog 300 for more information



## Model

### BAE-SW

#### Sizes

12.25" to 98.25" wheel diameters

#### Performance

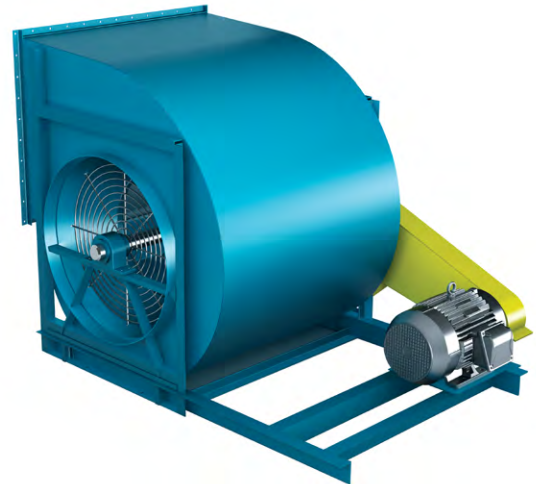
Airflow to 277,500 CFM  
Static pressure to 20" w.g.

#### Arrangements

1, 3, 3F, 3SI, 4, 7SI, 8, 9, 9F and 10



See Catalog 370 for more information



## Model

### BCFS

#### Sizes

16.5" to 60" wheel diameters

#### Performance

Airflow to 151,000 CFM  
Static pressure to 34" w.g.

#### Arrangements

1, 8, 9, 9F and 10



See Catalog 410 for more information



# INDUSTRIAL PROCESS AND COMMERCIAL VENTILATION SYSTEMS

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CENTRIFUGAL ROOF & WALL EXHAUSTERS | CEILING VENTILATORS | GRAVITY VENTILATORS | DUCT BLOWERS  
RADIAL BLADED FANS | RADIAL TIP FANS | HIGH EFFICIENCY INDUSTRIAL FANS | PRESSURE BLOWERS  
LABORATORY EXHAUST FANS | FILTERED SUPPLY FANS | MANCOOLERS | FIBERGLASS FANS | CUSTOM FANS



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