

AEROVENT

INDUSTRIAL VENTILATION SYSTEMS



BACKWARD INCLINED FANS

Model CB-SW / CB-DW

Backward Inclined Fans



**CB DW
Arrangement 3**

Refer to Catalog 725 for model CAE (airfoil wheel) SWSI and DWDI fans.

Refer to Catalog 760 for Utility Blowers featuring model CB (designated as BIUB) and FC (FCUB) fans in Arrangement 10.

Refer to Catalog 760 for Model BAUB (airfoil wheel) ventilation sets in Arrangement 10.



Aerovent, A Twin City Fan Company, certifies that the Model CB-DW fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



Aerovent, A Twin City Fan Company, certifies that the Model CB-SW fans shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Refer to Catalog 726 for sound power levels.

Models CB-SW | CB-DW

This catalog features model CB non-overloading centrifugal fans in SWSI (single width, single inlet) and DWDI (double width, double inlet) design. CAE airfoil fans offer a slightly higher efficiency and less noise than CB fans at a price premium of about 2%. However, the hollow airfoil blades are more susceptible to erosion by particulate matter in the airstream than CB blades and thus Model CAE is recommended for clean air applications only. Both designs are a popular choice for the efficient handling of large volumes of relatively clean air at low to moderate pressures in applications such as:

- HVAC (heating, ventilating and air conditioning)
- Combustion air supply
- Filtration and drying systems
- Fume hood and spray booth and other exhaust systems
- Air pollution control (clean side of dust collectors)
Industrial processes

Please discuss your particular application with the Aerovent representative for your area.

Model CB-SW

Sizes

12.25" to 98.25" wheel diameters

Performance

Airflow to 277,500 CFM

Static pressure to 20" w.g.

Arrangements

Available in Arrangements 1, 3, 4, 8, 9, 9F, 10

Model CB-DW

Sizes

12.25" to 89" wheel diameters

Performance

Airflow to 344,300 CFM

Static pressure to 14" w.g.

Arrangements

Available in Arrangements 3, 3F

Wheel Construction

CB wheels are constructed of steel using flat single thickness blades, solid welded to the rim and back-plate. The inlet-side rim is designed as a proper companion for the inlet cone.

Note that the use of a conical spun shroud (rim) makes CB fans less susceptible to the performance losses associated with poor inlet conditions. All CB wheels are statically and dynamically balanced to grade BV3 per AMCA 204 for smooth operation prior to being assembled in the fan, followed by final balance of the entire rotating assembly.

Housing Construction

All fan housings are continuously welded to provide strength and durability for extended service life — a necessity in all commercial and industrial installations.

All SWSI fans and DWDI Class III and IV fans feature an outlet flange for duct connection as standard. DWDI Class I and II fan outlets are designed for slip-on joint connection. A flanged outlet is available as an option. Inlet collars for slip-joint connections are standard on all SWSI fans. Lifting lugs are standard on all fans. 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.

All fans are available in standard discharge configuration (see page 8). SWSI fans Class I and II, sizes 270 and smaller in Arrangements 1, 4, 9 and 10 are field rotatable to any standard discharge position. To help reduce overall heights, all DWDI fans feature a non-rotatable housing design as standard.

Shaft

Shafts are AISI Grade 1040 or 1045 hot-rolled steel accurately turned, ground, polished, and ring gauged for accuracy. Shafts are generously sized for a first critical speed of at least 1.43 times the maximum speed for the class.

Bearings

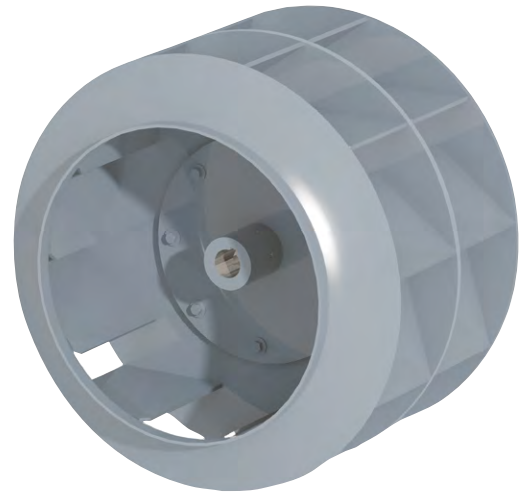
Bearings are heavy duty, grease lubricated, spherical roller or adapter mounted anti-friction ball, self-aligning, pillow block type, selected for minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum fan RPM.

Mechanical Run Test & Final Vibration Check

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



CB SWSI Wheel



CB DWDI Wheel



©2013 Aerovent, Minneapolis, MN. All rights reserved. Catalog illustrations cover the general appearance of Aerovent products at the time of publication, and we reserve the right to make changes in design and construction at any time without notice.

SWSI Arrangements



Arrangement 1 fan with optional unitary base, shaft and V-belt drive guard.

Arrangement 1 SWSI — Single Width, Single Inlet

Arrangement 1 fans are 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, W, X, Y, or Z. The two fan bearings are mounted on the bearing pedestal, out of the airstream. Arrangement 1 fans are thus recommended for high temperature or contaminated air applications. Belt driven configurations offer performance flexibility. If the performance requirements change after the fan has been installed, it is simple and inexpensive to change the drive.

Extended lube line at inlet — standard on all Arrangement 3 fans.



Arrangement 3 SWSI — Single Width, Single Inlet

Arrangement 3 is available in belt driven only. Arrangement 3 SWSI has one bearing located in the airstream. The wheel is mounted between the bearings and supported by the fan housing, which makes it a structurally sound, compact, and economical arrangement.



Direct drive Arrangement 4 with shaft seal.

Arrangement 4 SWSI — Single Width, Single Inlet

Arrangement 4 is available in direct drive only. The fan wheel is mounted directly on the motor shaft with the motor mounted on a pedestal. An Arrangement 4 design offers low maintenance as there are no fan bearings, fan shaft or drive parts to maintain. Arrangement 4 is typically limited to size 365 or smaller.

Typical Direct Drive Speeds

60 Hz OPERATION		50 Hz OPERATION	
Synchronous Speed	Full Load Speed	Synchronous Speed	Full Load Speed
3600	3500	3000	2900
1800	1750	1500	1450
1200	1170	1000	975
900	870	750	725

The actual full load speed of the motor can vary slightly depending upon motor HP and motor design.

Arrangement 8 fan with optional coupling.



Arrangement 8 SWSI — Single Width, Single Inlet

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. Refer to the typical direct drive speeds under Arrangement 4. Recommended for 250 HP and larger applications.

SWSI Arrangements

Arrangement 9

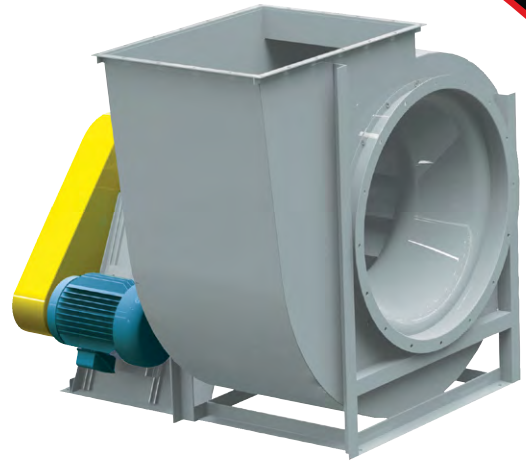
SWSI — Single Width, Single Inlet

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

SWSI — Single Width, Single Inlet (Not Shown)

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

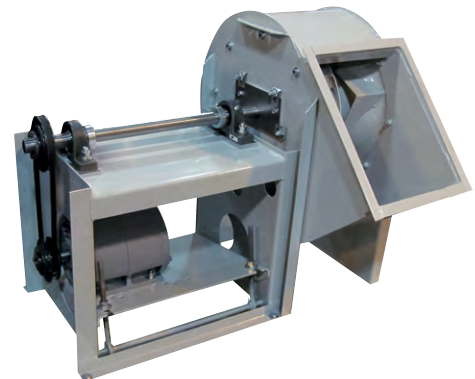


Fan shown is Arrangement 9 CCW-UBD with nonstandard motor location on right-hand side.

Arrangement 10

SWSI — Single Width, Single Inlet

Arrangement 10 is available as belt driven only. For Class I and II fans, sizes 122 through 365, Arrangement 10 units are commonly referred to as Utility Blowers. (Refer to Catalog 760 for more details.) An Arrangement 10 unit has an adjustable motor base mounted inside the bearing pedestal. This arrangement offers a more compact design than the Arrangement 9 and is suitable for roof or outdoor installations with a weather cover.



Class II Arrangement 10 Utility Blowers with optional shaft seal.

Arrangement 3

DWDI fans are generally supplied in Arr. 3 for V-belt drive. The wheel is mounted between the bearings and supported by the fan housing. Since both bearings are located in the airstream, standard DWDI fans should be used for clean air applications with air temperatures limited to 130°F. The motor can be mounted in any of the four standard motor positions: W, X, Y or Z.

Arrangement 3F

Arr. 3F offers an integral extended base to accommodate the motor. The base is prepunched to accept vibration isolators. Arr. 3F is available to Size 660 and for motor positions W and Z as standard. For motor positions X and Y, consult factory.

DWDI Arrangements



Arr. 3F with motor located in "Z" position.

Optional Construction

Split Housings

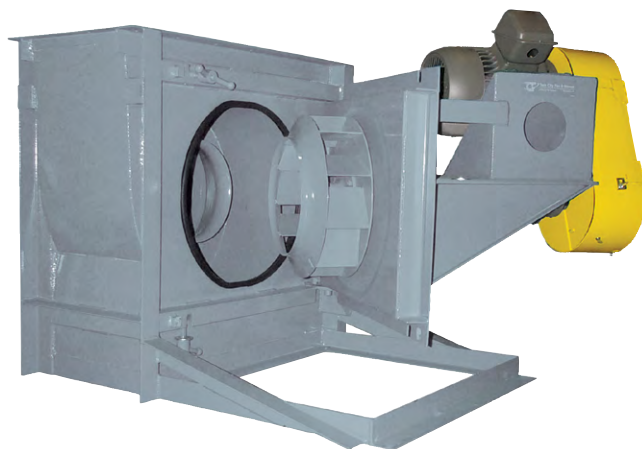
All fans are designed to permit wheel removal through the fan inlet. To suit installation as well as transportation requirements, Aerovent offers horizontal split, pie-shaped, as well as other special split housing designs. Pie-shaped split housings allow fan wheel and shaft removal without disconnecting ductwork.



Fan with horizontal split housing with bolted access door

Swingout Construction

Swingout fans are ideal for applications requiring frequent cleaning and inspection of the fan wheel and interior of the housing such as found in spray painting booth exhaust.



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. Aerovent offers the following classifications of spark resistant construction per AMCA Standard 99-0401-86. It is the specifier 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 airstream must be made of non-ferrous material — usually aluminum and limited to 250°F operation.
- Type B The fan shall have a non-ferrous wheel and non-ferrous ring about the opening through which the shaft passes — usually aluminum wheel and rub ring and limited to 250°F construction.
- Type C The fan shall be so constructed that the shift of the wheel or shaft will not permit two ferrous parts of the fan to rub or strike. This is accomplished with an aluminum inlet cone and rub ring. This construction is limited to 500°F. Construction to 800°F is available using a steel inlet cone with copper/bronze lining.

Notes:

1. Bearings shall be placed outside the airstream. Therefore, do not use Arrangement 3 or 7.
2. The user shall electrically ground all fan parts. Refer to the above listed AMCA standard for full details

Special Metals

To suit the demanding applications of today's industry, Aerovent offers a variety of material for construction, including aluminum and stainless steel. We offer AWS and ASME certified welding procedures and welding technicians to assure quality construction when using special metals as well.

High Temperature Modifications

Construction

Standard fan design options are available to handle airstream temperatures to 800°F. Consult your Aerovent representative for applications over 800°F. 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.



Shaft Cooler and Shaft Seal

Table 1. High Temperature Construction Requirements

TEMPERATURE (°F)	TYPE OF BEARING	LUBRICATION	OTHER REQUIREMENTS	AVAILABLE ARRANGEMENTS
-20°F to +300°F	Ball or Roller	Grease	Standard Fan	Arr. 1, 8, 9, 9F, 10 Arr. 3 and 3F to 130°F Arr. 4 to 180°F
300°F to 500°F	Ball or Roller with (1) Expansion Bearing	High Temp. Grease	Shaft Cooler, Shaft Seal. For Arr. 9 & 10 Fans, a Motor Heat Shield is Included.	Arr. 1, 8, 9, 9F, 10
500°F to 800°F	Ball or Roller with (1) Expansion Bearing	High Temp. Grease	High Temp. Aluminum Paint Shaft Cooler, Shaft Seal. For Arr. 9 & 10 Fans, a Motor Heat Shield is included.	Arr. 1, 8, 9, 9F, 10 (Arr. 9 & 10 Limited to 600°F)

Derating Factors For High Temperature

Fan operation at high temperature adversely affects the strength of fan wheels. As a result, the maximum safe speed must be derated by the factors shown in Table 2.

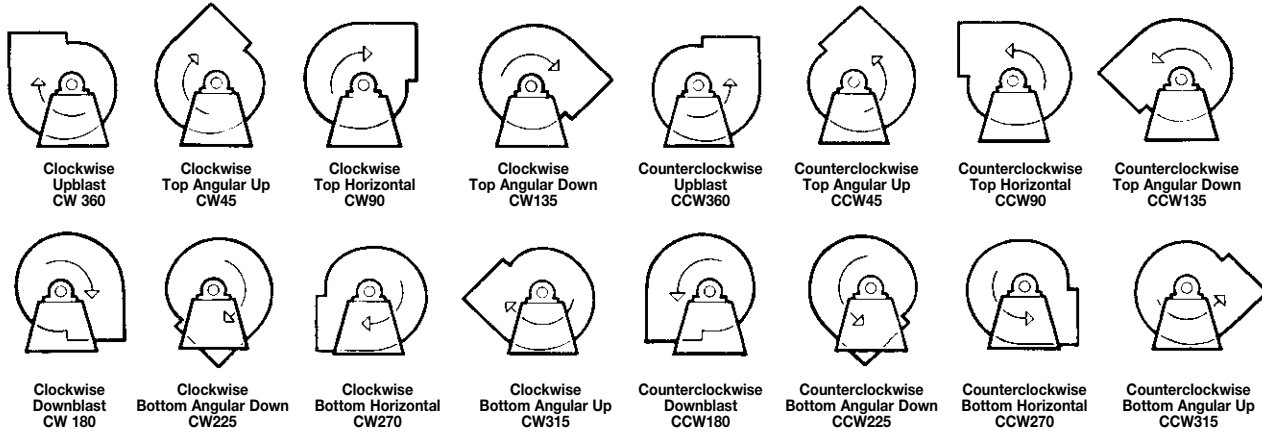
Example: Maximum safe speed at 600°F for a size 365 CB, SWSI, Class II steel wheel = 0.86 x 1283 = 1103 RPM (1283 RPM is maximum RPM at 70°F).

Table 2. Derating Factors For High Temperature

TEMPERATURE (°F)	STANDARD STEEL	STAINLESS STEEL
70	1.00	1.00
200	0.99	0.95
250	0.98	0.93
300	0.98	0.91
400	0.96	0.88
500	0.93	0.84
600	0.90	0.81
700	0.80	0.78
800	0.60	0.75
900	—	0.73
1000	—	0.70

Standard Configuration

Designation for Rotation and Discharge



Direction of rotation is determined from drive side of the fan.

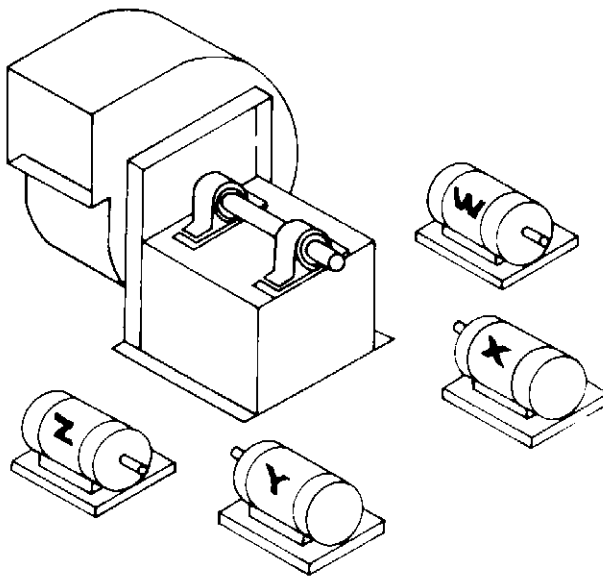
On single inlet fans, the drive side is always considered the side opposite the fan inlet.

On double inlet fans with drives on both sides, the drive side is that with the higher power drive unit.

The direction of discharge is determined in accordance with the diagrams shown above. The angle of discharge references the vertical axis of the fan and is designated in degrees above or below that reference axis.

On fans inverted for ceiling suspension or side-wall mounting, the discharge is determined when the fan is resting on the floor.

Motor Positions



The drawing above illustrates the AMCA motor position standards for Arrangement 1 and 3 fans (Arrangement 1 shown). The location of the motor is determined by facing the drive side of the fan and designating the motor position by letters W, X, Y, or Z, in accordance with the diagram shown above.

Illustrations reprinted from AMCA Publication 99 Standards Handbook, with the express written permission from the Air Movement and Control Association International, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.

Volume Control Devices

Outlet dampers, variable inlet vanes, and variable frequency drives are three popular devices used to control volume for fan systems.

Variable Inlet Vanes

Variable inlet vanes cause the entering air to spin in the direction of wheel rotation, resulting in reduction in volume, static pressure and brake horsepower and thus providing an infinite number of fan curves approximately parallel to the original fan curve. Variable inlet vanes cost about 50% to 80% more than outlet dampers but offer significant savings in energy. Because of their simplicity, inlet vanes can be more reliable when compared to variable frequency drives.

There are two types of variable inlet vanes: nested (internal type) and bolted on (external type).

Nested inlet vanes are built into the fan inlet cone and offer the advantage of saving space and lower cost as opposed to the external type, and they will be provided on all fan sizes 165 and larger. Aerovent offers cantilevered vanes to size 730 Class II fans to minimize insertion losses and noise associated with center hub design.

External inlet vanes are bolted to the inlet of the fan and are available as standard to size 150. Use of external vanes should be considered for hostile environments since operating linkages are shielded from the airstream. Both types of inlet vanes are available to 600°F construction.

Outlet Dampers

The closing of the damper adds to the resistance that the fan is working against. This moves the operating point to the left of the initial rating point. The savings in horsepower depends on the relative position on the fan curve and is usually much less than offered by other methods. Outlet dampers are typically the least expensive option and should be considered when infrequent operation at lesser capacity is desired or when handling hot, humid or particulate laden air.

There are two types of outlet dampers: parallel blade and opposed blade.

Parallel blade dampers are recommended for systems where air volume is modulated between full-open to about 75% of open.

Opposed blade dampers cost about 10% more and are recommended for systems where volume is modulated over the entire range. Opposed blades reduce air volume in a closer relationship to the control arm movement.

Variable Frequency Drive (VFD) Fan Motors

VFD changes the fan speed and can provide the greatest potential for energy savings, although at highest initial cost. VFD should be considered for extended operation at part load conditions, especially below 70% of the full volume operation.

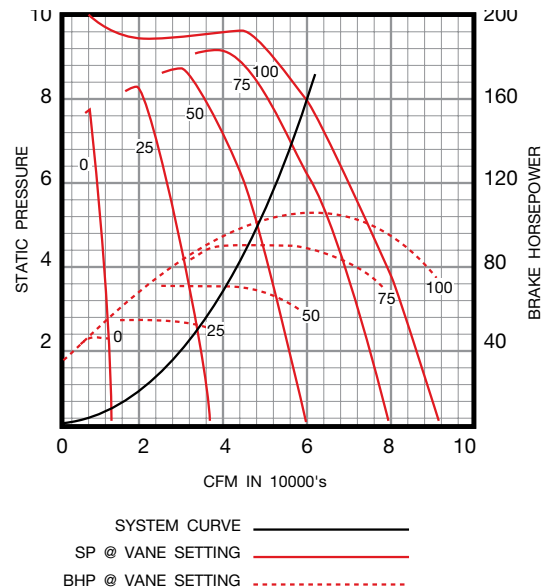


Nested Inlet Vanes



External Inlet Vanes

Performance Curves at Different Vane Settings

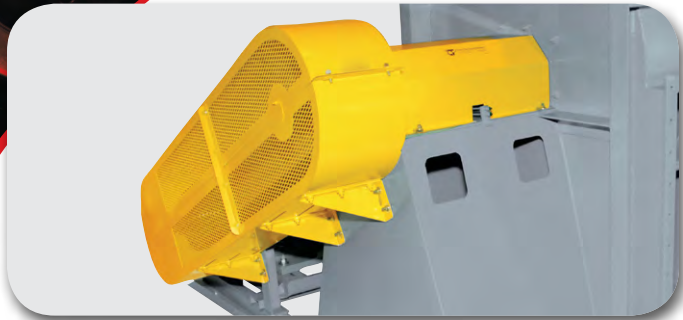


Parallel Blade Outlet Damper



Opposed Blade Outlet Damper

Accessories



Belt, Bearing and Shaft Guard



Unitary Base



Pillow Block Bearing



Shaft Cooler



Belt Guards

A belt guard protects personnel from the moving drive parts. Both standard and totally enclosed type guards are available.

Shaft and Bearing Guards (SWSI)

Solid sheet metal guards cover shaft and bearings and come with extended lube lines to a common point out either side of the guard. A guard spanning the shaft between the bearings is also available to provide easy access to bearings for lubrication and vibration monitoring.

Unitary Base

A 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.

Vibration Isolation Bases

Heavy structural base for fan, motor and drive is designed for use with spring or rubber-in-shear type isolators. Use of flexible connectors at inlet and outlet is required on fans with isolators.

V-Belt Drives

V-belt drives offer an economical yet flexible means of transmitting power to the fans. There are two types of V-belt drives.

- **Adjustable Pitch or Variable Speed Drives**

An adjustable pitch drive offers easy adjustment of speed. The motor pulley pitch can be adjusted when the fan is at rest which can offer speed variation of about 10% from the design speed. This style of sheave can result in higher vibration so adjustable pitch drives are not recommended for use on motors over 10 HP or wherever low vibration is required.

- **Fixed Pitch or Constant Speed Drives**

This type of drive offers low cost and lowest vibration levels. Speed change can often be accomplished by changing only one of the sheaves.

Bearing Upgrades

Unit roller or split pillow block, double row roller bearings are available. Split pillow block roller bearings are not available for fans with less than 1-7/16" diameter bearings and are not recommended for fans with light loadings. Refer to Fan Engineering Data FE-1200 and FE-1300 for the correct type of bearings, selection criteria, maintenance, etc.

Shaft Cooler or Heat Slinger

A cast aluminum shaft cooler is recommended to dissipate the heat and protect the fan bearings for all applications over 300°F.

Special Paint & Protective Coatings

Aerovent has an in-house, specialty coating facility to handle any type of coating requirement. Refer to Protective Coatings Guide FE-400 for more details.

Access Doors

Bolted, quick opening, and raised bolted access doors are available for wheel inspection or maintenance.

Drain

Threaded pipe coupling welded to the lowest point in the housing scroll. All fans come with a weep hole in the bottom of the housing.

Shaft Seal

A shaft seal reduces leakage and protects the bearings from a contaminated airstream. It is constructed of non-asbestos woven fibrous materials (ceramic felt) compressed between an aluminum cover plate and the fan housing. A ceramic felt shaft seal does not make the fan gas tight. A variety of special seals is available for low leakage applications requiring more positive protection, including mechanical type stuffing boxes.

Flanged Inlet

A punched inlet flange is available for duct mounting.

Flanged Outlet (DWDI Class I & II)

A punched or unpunched flange is welded to the fan outlet. An unpunched flanged outlet is standard on all SWSI and DWDI Class III and IV fans.

Inlet/Outlet Companion Flanges

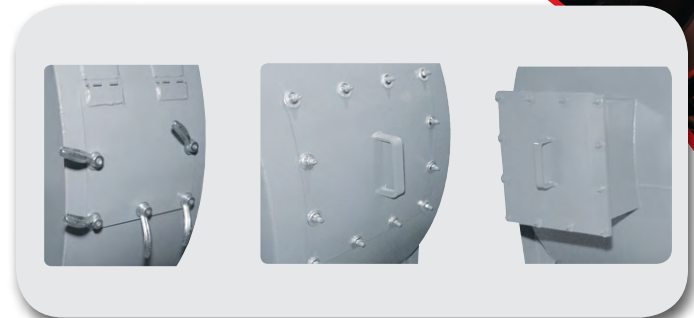
Companion flanges are used for installing the fan to flexible sleeve connections and are punched to match the fan's inlet or outlet.

Inlet and Outlet Screens

Safety screens are available for mounting in the fan inlet or outlet in non-ducted applications.

Other Accessories Available

- Variation in wheel diameter and width
- Inlet boxes
- Bearings RTD
- Piezometer ring airflow measuring system
- Consult factory for other accessories



Quick-Open
Access Door

Bolted
Access Door

Raised Bolted
Access Door



Extended Drain with Plug



Shaft Seal



Inlet Safety Screen



Inlet Companion Flange



Inlet Box



Inlet Box with Shutter

Flow Measurement System

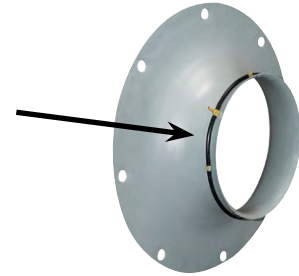
Piezometer Ring (Airflow Measuring System)

A piezometer ring is available on model CB fans, as well as other Aerovent housed and plenum fans, as part of an airflow measuring system, based on the principle of a flow nozzle. The inlet cone of the fan is used as the flow nozzle. The flow can be calculated by measuring the pressure drop through the inlet cone. No tubes or sensors are inserted in the high velocity airstream which could obstruct airflow.

The system, consists of a piezometer ring mounted at the throat and a static pressure tap mounted on the face of the inlet cone. A differential pressure transducer and digital display can also be provided.

The pressure drop is measured from the tap located on the face of the inlet cone to the piezometer ring in the throat. The inlet tap is connected to the high-pressure

Piezometer Ring Mounted at Throat of Inlet Cone



side of the transducer and the piezometer ring is connected to the low-pressure side.

Based on Aerovent laboratory tests, the system was determined to be accurate within +/-5%.

NOTE: Aerovent does not recommend placement of flow measuring probes inside the fan inlet cone in the path of airflow. These devices create disturbances and unpredictable performance losses. Aerovent will not be responsible for loss of performance due to such devices.

Fan Selection Guidelines

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). When specified performance is at a density different

than standard, it must be converted to the equivalent standard conditions before the fan can be selected from the performance tables. The equivalent standard conditions can be calculated by using the Temperature and Altitude Density Ratios shown in Table 3.

Table 3. 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

Example

Assume a 365 CB SWSI fan to handle 15,500 CFM, 2.5" SP, at 300°F and 3000 ft altitude.

1. For the operating conditions of 300°F and 3000 ft altitude, the factor can be found in Table 3 to be 0.624.
2. Divide the operating SP by this factor. Thus, $2.5" \div 0.624 = 4"$ SP, which is the equivalent static pressure at standard air density.

3. From the 365 CB SWSI performance table find the fan RPM and BHP for 15,500 CFM and 4" SP to be 893 RPM and 12.86 BHP (by interpolation) at standard conditions. 12.86 BHP is also referred to as "cold" or "starting" brake horsepower.

To determine the BHP at operating conditions, multiply the BHP at standard conditions by the factor from Table 3 ($12.86 \times 0.624 = 8.04$ BHP). The BHP at operating conditions is 8.04 BHP.

Maximum RPM, Wheel Weights & WR² (moment of inertia in lb-ft²)

CB SWSI

FAN SIZE	CLASS I			CLASS II			CLASS III			CLASS IV		
	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)
122	3167	15	1.7	4119	15	1.7	5208	22	2.4	5608	25	2.7
135	2874	17	2.4	3738	18	2.7	4726	27	3.9	5099	28	3.9
150	2587	20	3.7	3364	21	4.1	4253	31	5.8	4580	33	5.8
165	2352	24	5.7	3058	28	7.0	3867	38	8.4	4167	37	8.4
182	2118	31	8.8	2729	39	10.8	3473	53	13.9	3766	53	13.9
200	1932	38	12.5	2490	49	17.4	3169	63	19.8	3442	75	25.3
222	1737	66	23.6	2238	74	28.8	2848	85	32.0	3088	98	40.3
245	1577	81	38.3	2033	87	42.9	2587	110	50.9	2808	130	66.8
270	1397	94	56.4	1803	103	64.6	2287	132	79.2	2544	152	97.8
300	1257	113	88.8	1623	125	101	2059	172	139	2291	172	136
330	1143	151	149	1475	167	158	1871	215	221	2081	205	200
365	995	198	245	1283	214	260	1727	273	288	1883	252	297
402	903	244	361	1163	254	382	1566	301	437	1706	298	437
445	817	340	566	1052	392	692	1416	412	681	1545	446	776
490	742	393	816	956	455	1001	1286	478	985	1401	550	1195
542	670	461	1209	863	542	1392	1162	604	1570	1260	731	1994
600	606	593	1954	780	642	2066	1050	793	2647	1146	907	3141
660	551	859	3008	710	975	3629	955	1068	4034	1040	1250	4961
730	498	1147	5336	641	1142	5336	863	1274	6160	940	1567	7724
807	450	1391	8228	580	1466	8754	780	1711	10416	851	1980	12378
890	408	1902	13450	526	1908	13451	708	2378	17378	772	2679	20204
982	370	2243	19589	477	2257	19590	641	2777	26316	CONSULT FACTORY		

CB DWDI

FAN SIZE	CLASS I			CLASS II			CLASS III			CLASS IV		
	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)	MAX. RPM	WHEEL WEIGHT (LB)	WR ² (LB-FT ²)
122	3196	20.4	2.7	4168	22.1	2.7	CONSULT FACTORY*			CONSULT FACTORY*		
135	2904	23.7	3.9	3787	32.7	4.5						
150	2594	29.8	5.9	3383	37.7	6.8						
165	2358	37.1	9.3	3075	47.5	11.3						
182	2149	53.2	14.3	2776	59.7	17.2	3504	79.6	23.1	3766	88.1	23.4
200	1961	60.7	20.4	2533	91.3	29.0	3197	100	33.3	3442	122	42.2
222	1762	85.6	35.1	2277	108	45.7	2874	134	52.7	3088	163	66.4
245	1601	119	60.5	2068	130	69.7	2610	164	81.1	2808	217	110
270	1392	140	90.5	1830	172	108	2267	205	129	2544	252	170
300	1253	172	145	1647	208	171	2040	277	234	2290	297	235
330	1139	253	251	1497	275	270	1855	348	378	2081	339	343
365	1015	315	397	1302	342	426	1651	442	581	1883	398	510
402	920	370	585	1181	403	627	1497	460	750	1706	485	753
445	832	558	914	1068	656	1165	1354	635	1152	1545	726	1345
490	748	642	1321	966	763	1690	1222	728	1674	1401	874	2027
542	676	743	1960	872	819	2363	1104	919	2606	1260	1097	3239
600	611	912	3070	789	961	3513	998	1232	4506	1146	1392	5174
660	555	1194	4646	717	1420	6213	907	1606	6760	1040	1918	8291
730	502	1738	9198	648	1752	9201	820	1910	10010	940	2320	13075
807	459	2178	14334	589	2276	14866	746	2729	18438	851	3051	21302
890	416	3085	22490	534	3040	22484	677	3625	29218	772	3949	33373
982	377	3580	32972	484	3528	32965	CONSULT FACTORY			CONSULT FACTORY		

* Operating speeds above 4000 RPM are not recommended. Consult factory.

Features & Weights

CB SWSI Class I

FAN SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
	SIDES	SCROLL	ARR 1 & 9		ARR 3		ARR 1	ARR 3	ARR 9
			SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE			
122	14	14	1	B	1	B	118	100	124
135	14	14	1	B	1	B	135	120	142
150	14	14	1	B	1	B	163	143	171
165	14	14	1	B	1	B	192	192	201
182	14	14	1 ³ / ₁₆	B	1 ³ / ₁₆	B	245	211	257
200	14	14	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	296	239	311
222	12	14	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	387	278	406
245	12	14	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	467	338	490
270	12	14	1 ¹¹ / ₁₆	B	1 ⁷ / ₁₆	B	563	419	591
300	10	12	1 ¹⁵ / ₁₆	B	1 ¹¹ / ₁₆	B	678	624	712
330	10	12	1 ¹⁵ / ₁₆	B	1 ¹¹ / ₁₆	B	819	880	860
365	10	12	1 ¹⁵ / ₁₆	B	1 ¹⁵ / ₁₆	B	1009	948	1059
402	10	12	2 ³ / ₁₆	B	1 ¹⁵ / ₁₆	B	1339	1210	1406
445	10	12	2 ⁷ / ₁₆	B	1 ¹⁵ / ₁₆	B	1573	1530	1652
490	10	12	2 ¹¹ / ₁₆	B	2 ³ / ₁₆	R	1834	1695	1925
542	10	12	2 ¹⁵ / ₁₆	B	2 ⁷ / ₁₆	R	2634	2190	2765
600	10	12	2 ¹⁵ / ₁₆	B	2 ¹⁵ / ₁₆	R	3124	3020	3281
660	10	12	3 ⁷ / ₁₆	R	2 ¹⁵ / ₁₆	R	4007	3850	4207
730	10	10	3 ⁷ / ₁₆	R	3 ⁷ / ₁₆	R	4962	4570	5210
807	10	10	3 ¹⁵ / ₁₆	R	3 ¹⁵ / ₁₆	R	5016	5250	5267
890	7	10	3 ¹⁵ / ₁₆	R	3 ¹⁵ / ₁₆	R	6831	6300	7173
982	7	7	4 ¹⁵ / ₁₆	SR	4 ¹⁵ / ₁₆	SR	8908	7390	9353

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

CB SWSI Class II

FAN SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
	SIDES	SCROLL	ARR 1 & 9		ARR 3		ARR 1	ARR 3	ARR 9
			SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE			
122	14	14	1	B	1	B	123	110	129
135	14	14	1	B	1	B	141	132	148
150	14	14	1 ³ / ₁₆	B	1 ³ / ₁₆	B	173	157	182
165	14	14	1 ³ / ₁₆	B	1 ³ / ₁₆	B	203	211	213
182	14	14	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	261	232	274
200	14	14	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	307	263	322
222	12	14	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	396	306	416
245	12	14	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	489	372	513
270	12	14	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	577	461	605
300	10	12	1 ¹⁵ / ₁₆	B	1 ¹⁵ / ₁₆	B	693	686	728
330	10	12	2 ³ / ₁₆	B	2 ³ / ₁₆	B	855	968	898
365	10	12	2 ⁷ / ₁₆	B	2 ⁷ / ₁₆	B	1080	1043	1134
402	10	12	2 ⁷ / ₁₆	R	2 ⁷ / ₁₆	B	1395	1331	1465
445	10	12	2 ¹¹ / ₁₆	R	2 ¹¹ / ₁₆	R	1640	1683	1722
490	10	12	2 ¹⁵ / ₁₆	R	2 ¹¹ / ₁₆	R	1914	1865	2009
542	10	12	3 ⁷ / ₁₆	R	2 ¹⁵ / ₁₆	R	2762	2409	2900
600	10	12	3 ⁷ / ₁₆	R	3 ⁷ / ₁₆	R	3237	3322	3399
660	10	12	3 ¹⁵ / ₁₆	R	3 ¹⁵ / ₁₆	R	4204	4235	4415
730	10	10	3 ¹⁵ / ₁₆	R	3 ¹⁵ / ₁₆	R	5133	5027	5390
807	10	10	4 ⁷ / ₁₆	SR	4 ⁷ / ₁₆	SR	5238	5775	5500
890	7	10	4 ¹⁵ / ₁₆	SR	4 ¹⁵ / ₁₆	SR	7196	6930	7556
982	7	7	5 ⁷ / ₁₆	SR	5 ⁷ / ₁₆	SR	9138	8128	9594

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

Features & Weights

CB SWSI Class III

FAN SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
	SIDES	SCROLL	ARR 1 & 9		ARR 3		ARR 1	ARR 3	ARR 9
			SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE			
122	10	10	1 ¹ / ₁₆	B	1 ¹ / ₁₆	B	139	195	146
135	10	10	1 ⁷ / ₁₆	B	1 ⁷ / ₁₆	B	159	223	167
150	10	10	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	198	276	208
165	10	10	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	224	363	236
182	10	10	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	293	394	308
200	10	10	1 ¹⁵ / ₁₆	B	1 ¹¹ / ₁₆	B	343	433	360
222	10	10	1 ¹⁵ / ₁₆	B	1 ¹⁵ / ₁₆	R	442	477	465
245	7	7	2 ³ / ₁₆	B	1 ¹⁵ / ₁₆	R	620	539	651
270	7	7	2 ³ / ₁₆	B	1 ¹⁵ / ₁₆	R	740	639	777
300	7	7	2 ⁷ / ₁₆	R	2 ³ / ₁₆	R	950	1029	997
330	7	7	2 ¹¹ / ₁₆	R	2 ⁷ / ₁₆	R	1157	1047	1215
365	7	7	2 ¹¹ / ₁₆	R	2 ⁷ / ₁₆	R	1387	1448	1456
402	7	7	2 ¹⁵ / ₁₆	R	2 ¹¹ / ₁₆	R	1719	1805	1805
445	7	7	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	R	2112	2237	2218
490	7	7	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	R	2478	2543	2602
542	7	7	3 ¹⁵ / ₁₆	R	3 ¹ / ₁₆	R	3509	3245	3684
600	7	7	4 ⁷ / ₁₆	SR	3 ¹⁵ / ₁₆	R	4429	4437	4651
660	7	7	4 ⁷ / ₁₆	SR	3 ¹⁵ / ₁₆	R	5283	5922	5547
730	7	7	4 ¹⁵ / ₁₆	SR	4 ⁷ / ₁₆	SR	6365	6921	6683
807	7	7	4 ¹⁵ / ₁₆	SR	4 ¹⁵ / ₁₆	SR	6376	7986	6694
890	7	7	5 ¹ / ₁₆	SR	5 ⁷ / ₁₆	SR	7662	9516	8045

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

CB SWSI Class IV

FAN SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
	SIDES	SCROLL	ARR 1 & 9		ARR 3		ARR 1	ARR 3	ARR 9
			SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE			
122	7	7	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	176	210	185
135	7	7	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	202	248	212
150	7	7	1 ¹¹ / ₁₆	B	1 ¹¹ / ₁₆	B	236	307	248
165	7	7	1 ¹⁵ / ₁₆	B	1 ¹¹ / ₁₆	R	279	404	293
182	7	7	1 ¹⁵ / ₁₆	B	1 ¹¹ / ₁₆	R	381	438	400
200	7	7	2 ³ / ₁₆	R	1 ¹⁵ / ₁₆	R	469	481	493
222	7	7	2 ³ / ₁₆	R	1 ¹⁵ / ₁₆	R	582	531	611
245	7	7	2 ⁷ / ₁₆	R	2 ³ / ₁₆	R	697	599	732
270	7	7	2 ⁷ / ₁₆	R	2 ³ / ₁₆	R	855	710	898
300	7	7	2 ¹¹ / ₁₆	R	2 ⁷ / ₁₆	R	1079	1144	1133
330	0.25	0.25	2 ¹⁵ / ₁₆	R	2 ¹¹ / ₁₆	R	1472	1556	1546
365	0.25	0.25	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	R	1903	1610	1998
402	0.25	0.25	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	R	2340	2006	2457
445	0.25	0.25	3 ¹⁵ / ₁₆	R	3 ¹ / ₁₆	R	2925	2486	3071
490	0.25	0.25	3 ¹⁵ / ₁₆	R	3 ¹ / ₁₆	R	3376	2825	3545
542	0.25	0.25	4 ⁷ / ₁₆	SR	3 ¹⁵ / ₁₆	R	4391	3607	4611
600	0.25	0.25	4 ¹⁵ / ₁₆	SR	4 ⁷ / ₁₆	SR	5301	4930	5566
660	0.25	0.25	4 ¹⁵ / ₁₆	SR	4 ⁷ / ₁₆	SR	6392	6581	6712
730	0.25	0.25	5 ¹ / ₁₆	SR	4 ¹⁵ / ₁₆	SR	7874	7690	8268
807	0.25	0.25	5 ⁷ / ₁₆	SR	5 ⁷ / ₁₆	SR	7754	8874	8142
890	0.25	0.25	5 ¹⁵ / ₁₆	SR	5 ¹⁵ / ₁₆	SR	9198	10574	9658

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

Features & Weights

CB DWDI Class I & II

FAN SIZE	HOUSING		SHAFT DIAMETER & BEARINGS						BARE FAN WEIGHT (LB.)			
	SIDES	SCROLL	CLASS I			CLASS II			ARR. 3		ARR. 3F	
			SHAFT DIAMETER		BEARING TYPE	SHAFT DIAMETER		BEARING TYPE	CLASS I	CLASS II	CLASS I	CLASS II
			@ BRG.	@ WHEEL		@ BRG.	@ WHEEL					
122	14	14	1 ³ / ₁₆	1 ³ / ₁₆	B	1 ⁷ / ₁₆	1 ⁷ / ₁₆	B	139	153	181	199
135	14	14	1 ³ / ₁₆	1 ³ / ₁₆	B	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆	B	159	174	207	226
150	14	14	1 ⁷ / ₁₆	1 ⁷ / ₁₆	B	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆	B	193	212	251	276
165	14	14	1 ⁷ / ₁₆	1 ⁷ / ₁₆	B	1 ¹⁵ / ₁₆	1 ¹⁵ / ₁₆	B	222	244	289	317
182	12	14	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆	B	1 ¹⁵ / ₁₆	1 ¹⁵ / ₁₆	B	248	273	322	355
200	12	14	1 ¹¹ / ₁₆	1 ¹¹ / ₁₆	B	2 ³ / ₁₆	2 ³ / ₁₆	B	344	378	447	491
222	12	14	1 ¹⁵ / ₁₆	1 ¹⁵ / ₁₆	B	2 ⁷ / ₁₆	2 ⁷ / ₁₆	B	451	496	586	645
245	12	14	2 ³ / ₁₆	2 ³ / ₁₆	B	2 ⁷ / ₁₆	2 ⁷ / ₁₆	B	509	560	662	728
270	12	14	2 ³ / ₁₆	2 ³ / ₁₆	B	2 ¹¹ / ₁₆	2 ¹¹ / ₁₆	R	639	703	831	914
300	10	12	2 ⁷ / ₁₆	2 ⁷ / ₁₆	B	2 ⁷ / ₁₆	2 ¹⁵ / ₁₆	R	895	985	1164	1281
330	10	12	2 ⁷ / ₁₆	2 ⁷ / ₁₆	B	2 ⁷ / ₁₆	3 ¹ / ₁₆	R	1015	1117	1320	1452
365	10	12	2 ¹¹ / ₁₆	2 ¹¹ / ₁₆	B	2 ¹¹ / ₁₆	3 ¹ / ₁₆	R	1352	1487	1758	1933
402	10	12	2 ⁷ / ₁₆	2 ¹⁵ / ₁₆	R	2 ¹¹ / ₁₆	3 ¹ / ₁₆	R	1690	1859	2197	2417
445	10	12	2 ⁷ / ₁₆	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	3 ¹⁵ / ₁₆	R	2100	2310	2730	3003
490	10	12	2 ¹¹ / ₁₆	3 ¹ / ₁₆	R	3 ¹ / ₁₆	3 ¹⁵ / ₁₆	R	2310	2541	3003	3303
542	10	12	2 ¹⁵ / ₁₆	3 ¹⁵ / ₁₆	R	3 ¹ / ₁₆	4 ⁷ / ₁₆	R	2946	3241	3830	4213
600	10	12	3 ¹ / ₁₆	4 ⁷ / ₁₆	R	3 ¹⁵ / ₁₆	4 ¹⁵ / ₁₆	R	4150	4565	—	—
660	10	12	3 ¹ / ₁₆	4 ⁷ / ₁₆	R	3 ¹⁵ / ₁₆	4 ¹⁵ / ₁₆	R	5300	5830	—	—
730	10	10	3 ¹⁵ / ₁₆	4 ¹⁵ / ₁₆	R	3 ¹⁵ / ₁₆	5 ¹⁵ / ₁₆	R	6100	6710	—	—
807	10	10	3 ¹⁵ / ₁₆	5 ⁷ / ₁₆	R	4 ⁷ / ₁₆	6 ⁷ / ₁₆	SR	7580	8338	—	—
890	7	10	3 ¹⁵ / ₁₆	5 ¹⁵ / ₁₆	R	4 ⁷ / ₁₆	6 ¹⁵ / ₁₆	SR	9100	10010	—	—
982	7	7	4 ¹⁵ / ₁₆	6 ⁷ / ₁₆	SR	5 ⁷ / ₁₆	7 ¹ / ₂	SR	11052	12157	—	—

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

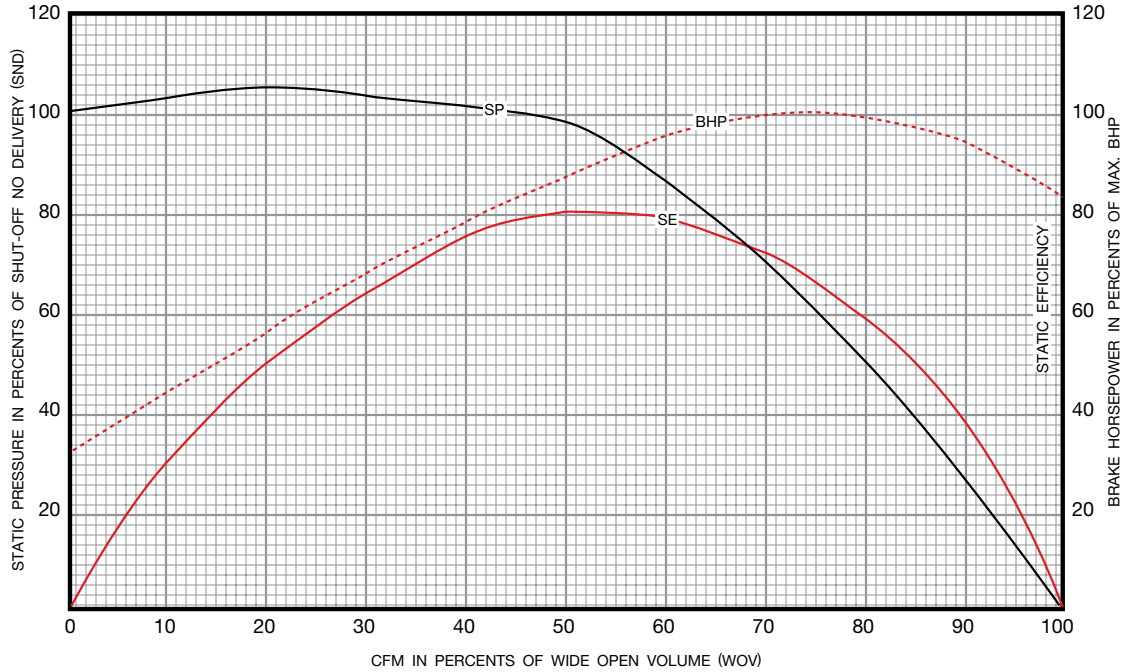
CB DWDI Class III & IV

FAN SIZE	HOUSING				SHAFT DIAMETER & BEARINGS						BARE FAN WEIGHT	
	CLASS III		CLASS IV		CLASS III			CLASS IV			ARR. 3	
	SIDES	SCROLL	SIDES	SCROLL	SHAFT DIAMETER		BEARING TYPE	SHAFT DIAMETER		BEARING TYPE	CLASS III	CLASS IV
					@ BRG.	@ WHEEL		@ BRG.	@ WHEEL			
122	CONSULT FACTORY		CONSULT FACTORY		CONSULT FACTORY			CONSULT FACTORY			CONSULT FACTORY	
135	CONSULT FACTORY		CONSULT FACTORY		CONSULT FACTORY			CONSULT FACTORY			CONSULT FACTORY	
150	CONSULT FACTORY		CONSULT FACTORY		CONSULT FACTORY			CONSULT FACTORY			CONSULT FACTORY	
165	CONSULT FACTORY		CONSULT FACTORY		CONSULT FACTORY			CONSULT FACTORY			CONSULT FACTORY	
182	10	10	7	7	2 ³ / ₁₆	2 ³ / ₁₆	R	2 ⁷ / ₁₆	2 ⁷ / ₁₆	R	464	516
200	10	10	7	7	2 ⁷ / ₁₆	2 ⁷ / ₁₆	R	2 ³ / ₁₆	2 ¹⁵ / ₁₆	SR	628	698
222	10	10	7	7	2 ⁷ / ₁₆	2 ⁷ / ₁₆	R	2 ⁷ / ₁₆	3 ¹ / ₁₆	SR	801	892
245	7	7	7	7	2 ⁷ / ₁₆	2 ¹⁵ / ₁₆	R	2 ¹¹ / ₁₆	3 ¹⁵ / ₁₆	SR	884	982
270	7	7	7	7	2 ¹¹ / ₁₆	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	3 ¹⁵ / ₁₆	SR	1080	1200
300	7	7	7	7	2 ¹¹ / ₁₆	3 ¹ / ₁₆	R	2 ¹⁵ / ₁₆	4 ⁷ / ₁₆	SR	1473	1637
330	7	7	0.25	0.25	2 ¹⁵ / ₁₆	3 ¹ / ₁₆	R	3 ¹ / ₁₆	4 ¹⁵ / ₁₆	SR	1626	1807
365	7	7	0.25	0.25	2 ¹⁵ / ₁₆	3 ¹⁵ / ₁₆	R	3 ¹ / ₁₆	4 ¹⁵ / ₁₆	SR	2043	2271
402	7	7	0.25	0.25	3 ¹ / ₁₆	3 ¹⁵ / ₁₆	R	3 ¹⁵ / ₁₆	5 ⁷ / ₁₆	SR	2554	2838
445	7	7	0.25	0.25	3 ¹ / ₁₆	4 ⁷ / ₁₆	R	3 ¹⁵ / ₁₆	5 ⁷ / ₁₆	SR	3175	3528
490	7	7	0.25	0.25	3 ¹⁵ / ₁₆	4 ¹⁵ / ₁₆	R	4 ⁷ / ₁₆	5 ⁷ / ₁₆	SR	3472	3858
542	7	7	0.25	0.25	3 ¹⁵ / ₁₆	5 ⁷ / ₁₆	R	4 ⁷ / ₁₆	5 ¹⁵ / ₁₆	SR	4400	4890
600	7	7	0.25	0.25	4 ⁷ / ₁₆	5 ⁷ / ₁₆	SR	4 ¹⁵ / ₁₆	6 ⁷ / ₁₆	SR	6189	6877
660	7	7	0.25	0.25	4 ¹⁵ / ₁₆	5 ¹⁵ / ₁₆	SR	5 ⁷ / ₁₆	6 ⁷ / ₁₆	SR	8108	9010
730	7	7	0.25	0.25	4 ¹⁵ / ₁₆	6 ¹⁵ / ₁₆	SR	5 ¹⁵ / ₁₆	7 ¹ / ₂	SR	9333	10370
807	7	7	0.25	0.25	—	—	SR	—	—	SR	11597	12886
890	7	7	0.25	0.25	—	—	SR	—	—	SR	13922	15470
982	7	7	0.25	0.25	—	—	—	—	—	—	—	—

Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Split Pillow Block Roller Bearings

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Typical CB SWSI Performance Curve



Submittal Drawing Index

The submittal drawings on pages 36 through 65 represent only a handful of the standard drawings available for layout purposes. For additional drawings refer to the Aerovent Fan Selector Program or Electronic Catalog, which can be found at www.aerovent.com. For scaled drawings in AutoCad format that can be used for design purposes refer to the FANBLK software. Contact your local Aerovent representative for the Fan Selector and FANBLK software.

SWSI

ARR.	CLASS	SIZE	ROT.	DWG. NO.	LOCATION
1	I & II	122-270	Yes	9237	Fan Selector
		300-730	No	9238	Page 37
		807-982	No	9259	Page 39
	III	122-330	No	9244	Page 44
		365-890	No	9245	Page 46
		122-330	No	9249	Page 52
IV	365-890	No	9250	Page 54	
	I & II	122-270	Yes	9240	Fan Selector
		300-730	No	9834	Page 40
330-730		No	9241	Page 42	
3	I & II	807-982	No	9257	Fan Selector
		122-330	No	9242	Fan Selector
		365-890	No	9243	Fan Selector
	III	122-330	No	9247	Fan Selector
		365-890	No	9248	Fan Selector
		IV	105-200	Yes	16433
222-365	Yes		16434	Fan Selector	

SWSI

ARR.	CLASS	SIZE	ROT.	DWG. NO.	LOCATION	
9	I & II	122-270	Yes	9239	Page 36	
		300-730	No	9238	Page 37	
		122-330	No	9128	Page 48	
	III	365-890	No	9129	Page 50	
		IV	122-330	No	9132	Fan Selector
			365-890	No	9133	Fan Selector
9F	I & II		122-270	Yes	14390	Fan Selector
		122-300	No	14391	Fan Selector	
		330-730	No	14392	Fan Selector	
	III	122-330	No	9130	Fan Selector	
		365-890	No	9131	Fan Selector	
		IV	122-330	No	9134	Fan Selector
365-890	No		9135	Fan Selector		
9SB	I, II & III		245-660	No	15401	Fan Selector
9ST	I, II & III	245-660	No	15402	Fan Selector	
10	I	122-365	Yes	9260	Fan Selector	
		402-600	No	9261	Fan Selector	
	II	122-365	Yes	14301	Fan Selector	
		402-600	No	9261	Fan Selector	

DWDI

ARR.	CLASS	SIZE	ROT.	DWG. NO.	LOCATION
3	I & II	122-270	No	14967	Page 56
		300-730	No	14968	Page 57
		807-982	No	9258	Page 58
3F	I	122-270	No	16026	Page 59
		300-490	No	16027	Page 61
	II	122-270	No	16032	Page 62
		300-490	No	16033	Page 64

CB SWSI | Size 122

Fan Efficiency Grade = FEG80

Outlet Area - 0.86 ft² Wheel Dia. - 12.25 inches Tip Speed - 3.21 x RPM

Max. BHP = 0.076 (RPM÷1000)³

Table for Size 122 fans with columns for CFM, OV, and various SP (Static Pressure) ratings from 0.25" to 4.5". Each cell contains RPM and BHP values.

Table for Size 122 fans with columns for CFM, OV, and various SP (Static Pressure) ratings from 5" to 14". Each cell contains RPM and BHP values.

MAXIMUM RPM: Class I — 3167 Class II — 4119 Class III — 4600 Selections above 4000 RPM not recommended. Consult factory.

CB SWSI | Size 135

Fan Efficiency Grade = FEG80

Outlet Area - 1.05 ft² Wheel Dia. - 13.50 inches Tip Speed - 3.53 x RPM

Max. BHP = 0.124 (RPM÷1000)³

Table for Size 135 fans with columns for CFM, OV, and various SP (Static Pressure) ratings from 0.25" to 4.5". Each cell contains RPM and BHP values.

Table for Size 135 fans with columns for CFM, OV, and various SP (Static Pressure) ratings from 5" to 14". Each cell contains RPM and BHP values.

MAXIMUM RPM: Class I — 2874 Class II — 3738 Class III — 4600 Selections above 4000 RPM not recommended. Consult factory.

Performance certified is for installation Type B & D: Free or ducted inlet, ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

Legend:

- Class I = Regular face to left of Class II Class III = Italic face to right of Class II
Class II = Regular face in light shaded area Class IV = Italic face in darker shaded area
Consult Factory = Bold face Max. Static Efficiency = Underlined

CB SWSI | Size 490

Fan Efficiency Grade = FEG85

Outlet Area - 13.80 ft² Wheel Dia. - 49.00 inches Tip Speed - 12.83 x RPM Max. BHP = 84.69 (RPM ÷ 1000)³

CFM	OV	0.50" SP		1" SP		1.5" 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	RPM	BHP	RPM	BHP
11040	800	243	1.17	320	2.29																		
12420	900	254	1.36	324	2.54																		
13800	1000	267	1.60	332	2.87	392	4.26																
16560	1200	295	2.15	351	3.56	404	5.13	455	6.82														
19320	1400	327	2.88	376	4.46	423	6.18	468	8.01	554	11.94												
22080	1600	360	3.78	403	5.50	446	7.40	486	9.35	564	13.59	640	18.28										
24840	1800	394	4.87	433	6.77	472	8.84	509	10.97	580	15.51	648	20.34	716	25.71								
27600	2000	430	6.24	465	8.28	500	10.49	534	12.78	600	17.67	663	22.85	724	28.28	785	34.19						
30360	2200	466	7.84	498	10.03	530	12.41	562	14.92	623	20.10	681	25.53	739	31.44	794	37.38	849	43.75	905	50.68		
33120	2400	502	9.70	532	12.08	562	14.65	591	17.29	648	22.81	703	28.63	756	34.69	808	41.03	859	47.58	909	54.35	960	61.71
35880	2600	539	11.90	567	14.46	595	17.20	621	19.92	674	25.74	726	31.90	776	38.28	825	44.93	874	51.99	921	59.03	967	66.24
38640	2800	576	14.42	602	17.14	628	20.01	653	22.95	703	29.18	751	35.53	799	42.32	845	49.24	891	56.55	936	64.04	979	71.43
41400	3000	614	17.36	638	20.21	662	23.21	686	26.37	733	32.94	778	39.59	823	46.61	867	53.89	911	61.59	953	69.24	995	77.23
46920	3400	690	24.39	711	27.56	733	30.97	754	34.39	795	41.47	836	48.93	877	56.71	917	64.64	956	72.73	994	80.96	1032	89.52
52440	3800	766	33.13	785	36.65	805	40.44	824	44.19	861	51.88	898	60.00	935	68.46	971	76.97	1007	85.76	1042	94.61	1077	103.81
57960	4200	842	43.76	860	47.74	878	51.85	895	55.88	929	64.24	963	73.04	997	82.22	1030	91.46	1063	100.93	1095	110.36	1127	120.06

MAXIMUM RPM: Class I — 742 Class II — 956 Class III — 1286 Class IV — 1401

CB SWSI | Size 542

Fan Efficiency Grade = FEG85

Outlet Area - 16.92 ft² Wheel Dia. - 54.25 inches Tip Speed - 14.20 x RPM Max. BHP = 140.88 (RPM ÷ 1000)³

CFM	OV	0.50" SP		1" SP		1.5" 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	RPM	BHP	RPM	BHP
13536	800	220	1.44	289	2.80																		
15228	900	230	1.68	293	3.13																		
16920	1000	241	1.95	300	3.52	354	5.22																
20304	1200	267	2.65	317	4.37	365	6.29	411	8.36														
23688	1400	295	3.52	339	5.44	382	7.57	423	9.83	501	14.69												
27072	1600	325	4.62	364	6.74	403	9.08	439	11.46	510	16.72	578	22.41										
30456	1800	356	5.97	392	8.35	426	10.81	460	13.46	524	19.02	586	25.03	646	31.42								
33840	2000	388	7.82	420	10.15	452	12.90	482	15.63	542	21.66	599	28.03	654	34.68	709	41.92						
37224	2200	421	9.62	450	12.32	479	15.24	507	18.22	562	24.55	616	31.44	667	38.46	717	45.80	767	53.67	817	62.03		
40608	2400	454	11.94	481	14.85	508	18.00	534	21.22	585	27.92	635	35.10	683	42.56	730	50.34	776	58.36	821	66.62	867	75.63
43992	2600	487	14.61	512	17.71	537	21.03	561	24.43	609	31.59	656	39.14	701	46.94	746	55.27	789	63.63	832	72.41	873	81.08
47376	2800	521	17.75	544	21.03	567	24.50	590	28.16	635	35.77	679	43.68	722	51.95	764	60.54	805	69.38	845	78.39	885	87.79
50760	3000	555	21.33	577	24.87	598	28.46	620	32.38	662	40.36	703	48.59	744	57.28	784	66.29	822	75.26	861	84.95	899	94.77
54144	3200	590	25.12	611	28.38	635	32.08	656	35.41	698	44.36	741	54.56	782	64.29	821	74.29	858	84.28	896	94.51	933	104.69
57528	3400	623	29.87	643	33.91	662	37.95	681	42.14	719	51.02	756	60.20	792	69.48	828	79.16	863	89.01	898	99.31	932	109.69
64296	3800	692	40.63	709	44.92	727	49.54	744	54.11	778	63.67	812	73.79	845	84.06	877	94.33	910	105.27	941	115.91	973	127.34
71064	4200	761	53.74	777	58.57	793	63.54	809	68.65	840	78.99	870	89.58	900	100.61	930	111.99	960	123.67	989	135.27	1018	147.20

MAXIMUM RPM: Class I — 670 Class II — 863 Class III — 1162 Class IV — 1260

Performance certified is for installation Type B & D: Free or ducted inlet, ducted outlet.
Power rating (BHP) does not include transmission losses.
Performance ratings do not include the effects of appurtenances (accessories).

Legend:

Class I = Regular face to left of Class II Class III = *Italic face* to right of Class II
Class II = **Regular face in light shaded area** Class IV = *Italic face in darker shaded area*
Consult Factory = **Bold face** Max. Static Efficiency = Underlined

CB SWSI | Size 600

Fan Efficiency Grade = FEG85

Outlet Area - 20.70 ft² Wheel Dia. - 60.00 inches Tip Speed - 15.71 x RPM Max. BHP = 233.14 (RPM÷1000)³

Table with 12 columns for fan sizes (0.50" SP to 9" SP) and 2 rows of CFM/OV data. Includes sub-tables for sizes 10" SP to 20" SP.

MAXIMUM RPM: Class I — 606 Class II — 780 Class III — 1050 Class IV — 1146

CB SWSI | Size 660

Fan Efficiency Grade = FEG85

Outlet Area - 25.04 ft² Wheel Dia. - 66.00 inches Tip Speed - 17.28 x RPM Max. BHP = 375.47 (RPM÷1000)³

Table with 12 columns for fan sizes (0.50" SP to 9" SP) and 2 rows of CFM/OV data. Includes sub-tables for sizes 10" SP to 20" SP.

MAXIMUM RPM: Class I — 551 Class II — 710 Class III — 955 Class IV — 1040

Performance certified is for installation Type B & D: Free or ducted inlet, ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

Legend:

- Class I = Regular face to left of Class II Class III = *Italic face* to right of Class II
Class II = Regular face in light shaded area Class IV = *Italic face* in darker shaded area
Consult Factory = **Bold face** Max. Static Efficiency = Underlined

CB DWDI | Size 402

Fan Efficiency Grade = FEG80

Outlet Area - 16.77 ft² Wheel Dia. - 40.25 inches Tip Speed - 10.54 x RPM Max. BHP = 62.63 (RPM÷1000)³

Table with 13 columns for CFM, OV, and SP sizes (0.5" to 14"). It lists RPM and BHP values for various CFM and OV combinations.

MAXIMUM RPM: Class I — 920 Class II — 1181 Class III — 1497 Class IV — 1706

CB DWDI | Size 445

Fan Efficiency Grade = FEG80

Outlet Area - 20.49 ft² Wheel Dia. - 44.50 inches Tip Speed - 11.65 x RPM Max. BHP = 103.5 (RPM÷1000)³

Table with 13 columns for CFM, OV, and SP sizes (0.5" to 14"). It lists RPM and BHP values for various CFM and OV combinations.

MAXIMUM RPM: Class I — 832 Class II — 1068 Class III — 1354 Class IV — 1545

CB DWDI | Size 490

Fan Efficiency Grade = FEG80

Outlet Area - 24.85 ft² Wheel Dia. - 49.00 inches Tip Speed - 12.83 x RPM Max. BHP = 167.5 (RPM÷1000)³

Table with 13 columns for CFM, OV, and SP sizes (0.5" to 14"). It lists RPM and BHP values for various CFM and OV combinations.

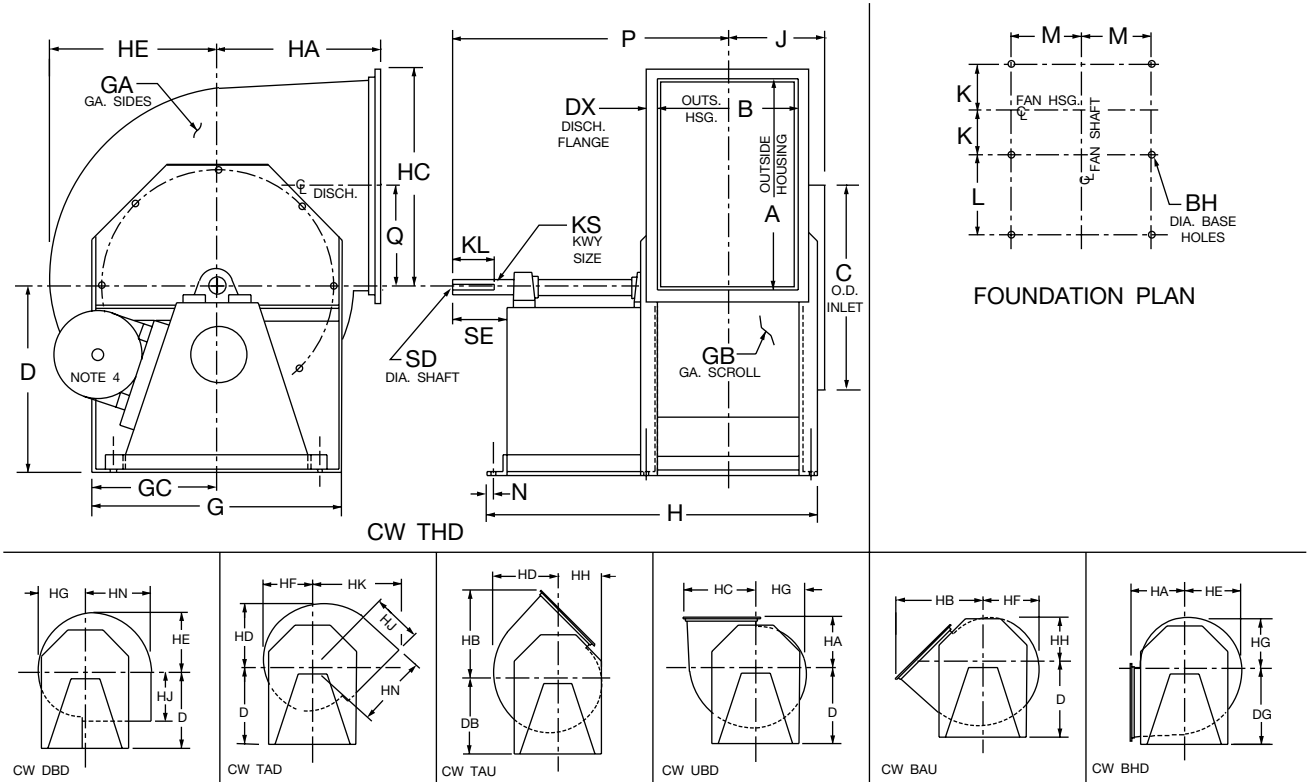
MAXIMUM RPM: Class I — 748 Class II — 966 Class III — 1222 Class IV — 1401

Performance certified is for installation Type B & D: Free or ducted inlet, ducted outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories).

Legend:

Class I = Regular face to left of Class II Class III = Italic face to right of Class II
Class II = Regular face in light shaded area Class IV = Italic face in darker shaded area
Max. Static Efficiency = Underlined

Arrangement 9, SWSI, Rotatable, Class I & II



Notes:

1. Discharge angles are included on all discharges except 'TAD' and 'DBD.'
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. * Shaft diameter is increased to 1.187 on Hi-Temp fans that require shaft coolers.
4. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.

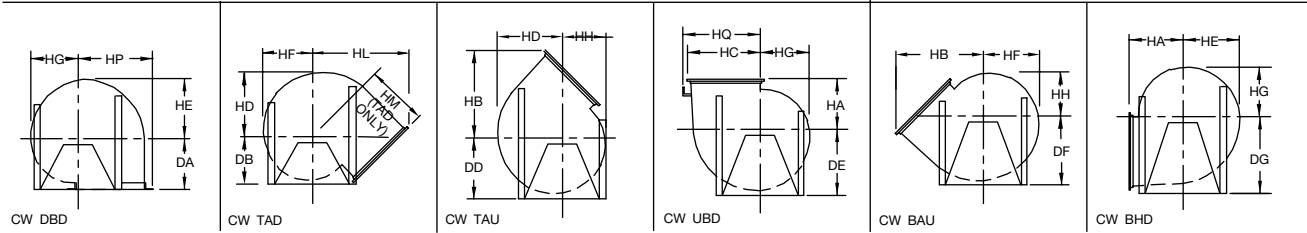
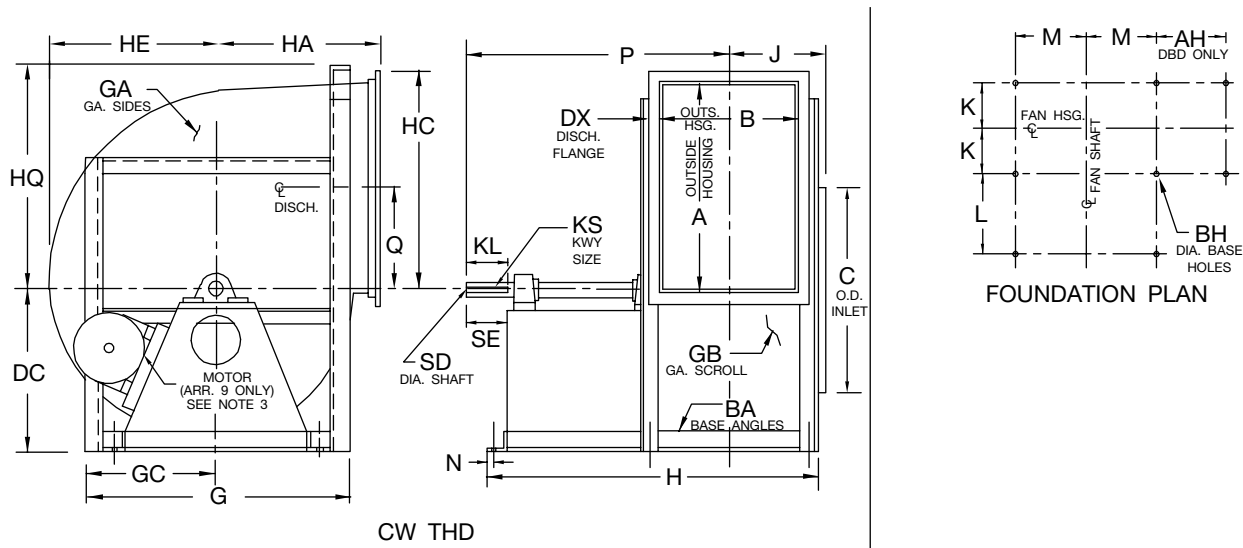
SIZE	A	B	BH	C	D	DX	FR	G	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG
122	13.00	9.75	0.44	13.25	14.50	1.00	145T	16.00	14	14	8.00	27.00	9.75	16.75	13.94	11.19	10.56	9.94	9.31
135	14.31	10.81	0.44	14.56	15.75	1.00	184T	17.50	14	14	8.75	30.63	10.75	18.38	15.25	12.31	11.63	10.94	10.25
150	15.88	11.94	0.44	16.19	17.75	1.00	184T	19.00	14	14	9.50	31.75	11.94	20.31	16.81	13.75	12.88	12.13	11.38
165	17.44	13.19	0.44	17.75	19.00	1.00	215T	20.50	14	14	10.25	36.13	13.13	22.25	18.38	15.06	14.13	13.31	12.50
182	19.38	14.56	0.44	19.50	21.00	1.25	254T	22.50	12	14	11.25	41.88	14.50	24.81	20.56	16.69	15.69	14.75	13.81
200	21.19	15.94	0.56	21.38	22.75	1.25	254T	25.00	12	14	12.50	43.25	15.81	27.00	22.38	18.38	17.31	16.25	15.91
222	23.56	17.69	0.56	23.75	25.50	1.25	256T	27.25	12	14	13.63	45.25	17.69	30.00	24.75	20.44	19.06	17.94	16.81
245	25.94	19.44	0.56	26.06	28.00	1.25	256T	29.75	12	14	14.88	47.00	19.50	33.00	27.13	22.38	21.00	19.75	18.50
270	28.63	21.38	0.56	28.50	30.50	1.50	284T	33.00	12	14	16.50	51.75	21.44	36.44	30.06	24.69	23.19	21.81	20.44

SIZE	HH	HJ	HK	HN	J	K	KL	KS		L	M	N	P	Q	SD		SE
								CL I	CL II						CL I	CL II	
122	8.69	9.25	15.69	12.94	7.44	5.75	2.50	0.25 x 0.13	0.25 x 0.13	14.50	6.75	0.50	22.50	6.44	1.000	1.000*	3.25
135	9.56	10.25	17.31	14.25	8.00	6.31	2.50	0.25 x 0.13	0.25 x 0.13	17.00	7.38	0.50	25.56	7.13	1.000	1.000*	3.25
150	10.63	11.44	19.25	15.81	9.06	6.88	3.00	0.25 x 0.13	0.25 x 0.13	17.00	8.25	0.50	26.63	7.88	1.000	1.187	3.75
165	11.69	12.63	21.19	17.38	9.69	7.50	3.00	0.25 x 0.13	0.25 x 0.13	19.88	8.75	0.63	29.75	8.69	1.000*	1.188	3.75
182	12.88	14.00	23.56	19.31	10.88	8.19	3.50	0.25 x 0.13	0.38 x 0.19	24.25	9.63	0.63	35.31	9.63	1.187	1.437	4.25
200	14.13	15.31	25.75	21.13	11.56	8.88	3.50	0.38 x 0.19	0.38 x 0.19	24.25	10.63	0.63	36.00	10.56	1.437	1.437	4.25
222	15.69	17.19	28.75	23.50	12.44	10.00	4.00	0.38 x 0.19	0.38 x 0.19	23.50	11.75	0.88	37.13	11.75	1.437	1.437	4.75
245	17.25	19.00	31.75	25.88	13.31	10.88	4.50	0.38 x 0.19	0.38 x 0.19	23.50	12.88	0.88	38.50	12.94	1.437	1.687	5.25
270	19.06	20.94	35.00	28.56	14.25	11.81	4.50	0.38 x 0.19	0.38 x 0.19	26.38	14.13	0.88	42.31	14.25	1.687	1.687	5.25

AC9239F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1 & 9, SWSI, Non-Rotatable, Class I & II



Notes:

- Discharge angles are included on all discharges.
- "CW" rotation is shown. "CCW" rotation is similar but opposite.
- Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
- For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

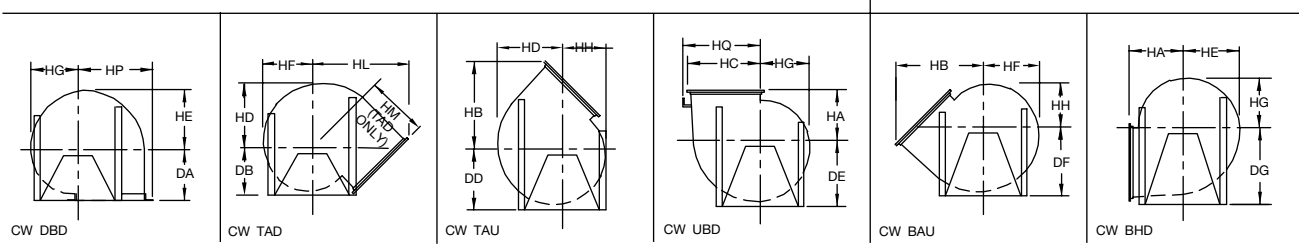
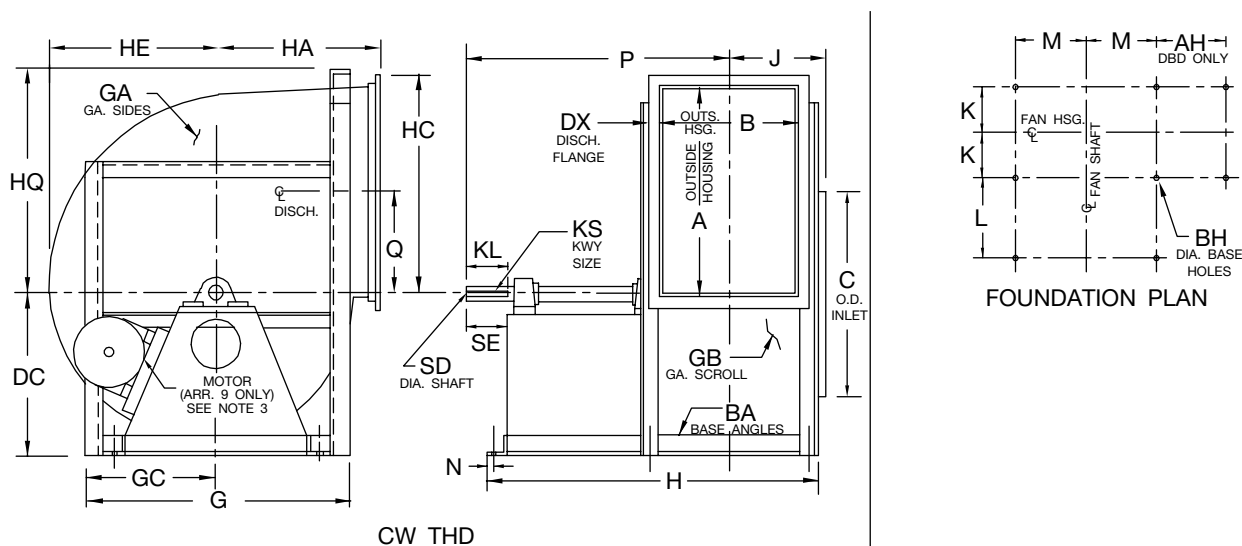
SIZE	A	AH	B	BA	BH	C	DA (Note 4)	DB (Note 4)	DC (Note 4)	DD (Note 4)	DE (Note 4)	DF	DG	DX	FR ARR. 9
300	31.81	17.25	23.81	2.50 x 2.50	0.56	31.63	26.75	26.75	26.75	26.75	28.50	30.00	35.50	1.50	286T
330	35.13	19.06	26.06	2.50 x 2.50	0.56	34.75	30.00	30.00	30.00	30.00	31.00	32.75	39.00	1.50	324T
365	38.69	21.13	28.88	2.50 x 2.50	0.56	38.50	29.00	30.50	29.50	31.50	33.50	35.50	41.00	1.50	324T
402	42.63	23.31	31.81	3.00 x 3.00	0.81	42.44	32.00	32.50	33.00	35.25	37.00	39.50	45.50	1.50	326T
445	47.13	25.81	35.19	3.00 x 3.00	0.81	46.88	35.38	36.25	35.50	38.50	40.00	43.25	50.00	1.50	364T
490	51.94	28.13	38.63	3.00 x 3.00	0.81	51.63	39.00	38.75	39.00	42.25	44.00	47.50	54.75	2.00	364T
542	57.38	31.81	42.88	3.00 x 4.00	0.81	57.13	43.06	42.25	43.50	46.50	49.00	52.25	60.25	2.00	404T
600	63.50	34.94	47.31	3.00 x 4.00	0.81	63.13	47.69	45.00	48.00	51.25	54.00	57.50	66.25	2.00	404T
660	69.69	39.13	52.19	3.50 x 5.00	0.81	69.38	52.44	49.50	52.50	55.75	59.00	63.00	73.25	2.50	405T
730	77.25	42.63	57.56	3.50 x 5.00	0.81	76.75	58.00	54.25	57.00	61.75	64.50	69.50	80.75	2.50	405T

SIZE	G	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
300	41.00	10	12	20.50	55.75	23.81	40.31	33.25	27.44	25.75	24.25	22.75	21.25	47.13	33.44	34.25	
330	44.00	10	12	22.00	60.63	26.25	44.44	36.56	30.13	28.38	26.69	25.00	23.31	51.00	35.56	37.56	
365	48.00	10	12	24.00	63.38	29.00	48.88	40.13	33.50	31.50	29.63	27.75	25.88	55.50	38.38	41.13	
402	52.50	10	12	26.25	67.88	32.00	53.81	44.06	37.00	34.69	32.63	30.56	28.50	60.50	41.56	45.56	
445	56.50	10	12	28.25	72.88	35.38	59.38	48.56	40.88	38.25	36.00	33.75	31.50	65.69	44.38	50.06	
490	61.50	10	12	30.75	76.63	39.00	65.69	53.88	44.88	42.19	39.69	37.19	34.69	72.31	48.44	54.88	
542	67.00	10	12	33.50	87.50	43.06	72.38	59.31	49.75	46.69	43.94	41.19	38.44	78.88	52.31	61.31	59.75
600	73.00	10	12	36.50	91.75	47.69	80.00	65.44	55.00	51.69	48.63	45.56	42.50	86.25	56.56	67.44	65.75
660	80.00	10	12	40.00	101.25	52.44	88.06	72.13	60.38	56.81	53.38	49.94	46.50	94.81	62.00	74.63	72.25
730	88.00	10	10	44.00	109.63	58.00	97.31	79.63	66.94	62.88	59.13	55.38	51.63	104.19	67.69	82.13	79.75

AC9238E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1 & 9, SWSI, Non-Rotatable, Class I & II (cont'd.)



Notes:

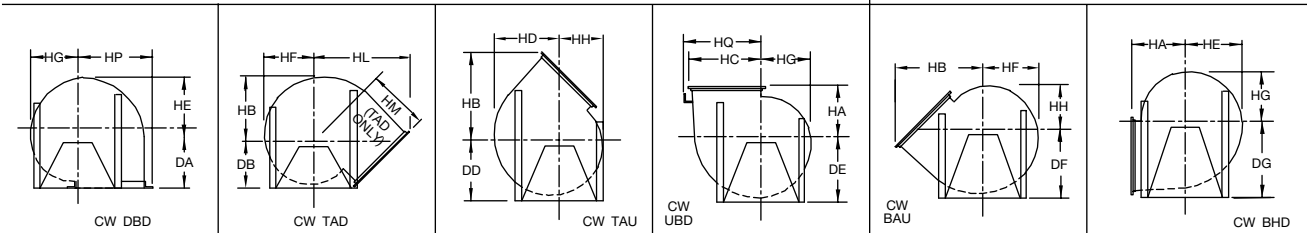
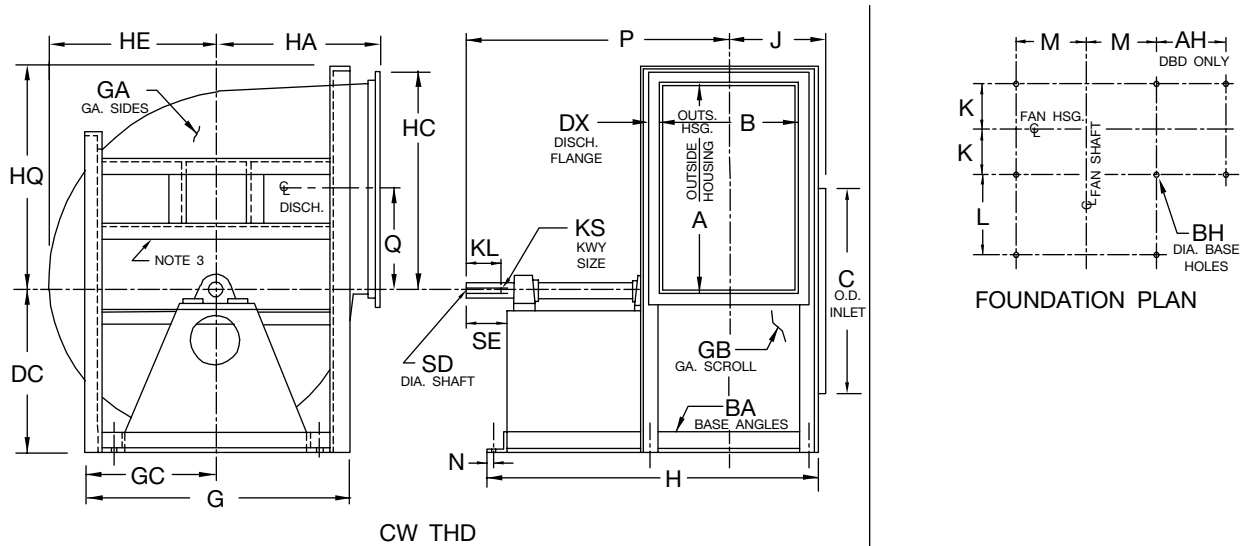
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
4. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

SIZE	J	K	KL	KS		L	M	N	P	Q	SD		SE
				CL I	CL II						CL I	CL II	
300	15.50	13.31	5.00	0.50 x 0.25	0.50 x 0.25	26.88	15.88	1.13	44.56	15.81	1.937	1.937	5.75
330	16.63	14.44	5.00	0.50 x 0.25	0.50 x 0.25	29.50	17.38	1.13	48.31	17.50	1.937	2.187	5.75
365	18.00	15.81	5.00	0.50 x 0.25	0.63 x 0.31	29.50	18.88	1.13	49.69	19.25	1.937	2.437	5.75
402	20.00	17.56	5.00	0.50 x 0.25	0.63 x 0.31	30.00	20.88	1.38	51.69	21.25	2.187	2.437	5.75
445	21.69	19.25	5.50	0.63 x 0.31	0.63 x 0.31	31.63	22.88	1.38	55.50	23.50	2.437	2.687	6.25
490	23.38	20.94	5.50	0.63 x 0.31	0.75 x 0.38	32.00	25.38	1.38	57.56	25.88	2.687	2.937	6.25
542	26.50	23.56	6.00	0.75 x 0.38	0.88 x 0.44	36.63	27.63	1.88	64.81	28.63	2.937	3.437	6.75
600	28.75	25.81	6.00	0.75 x 0.38	0.88 x 0.44	36.38	30.63	1.88	66.81	31.69	2.937	3.437	6.75
660	32.19	28.75	7.00	0.88 x 0.44	1.00 x 0.50	39.00	33.13	2.38	72.88	34.75	3.437	3.937	7.75
730	34.94	31.44	7.50	0.88 x 0.44	1.00 x 0.50	42.00	37.13	2.38	79.06	38.50	3.437	3.937	8.25

AC9238E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class I & II



Notes:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Frame supports vary in construction by size and by discharge position.
4. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

SIZE	A	AH	B	BA	BH	C	DA (Note 4)	DB (Note 4)	DC (Note 4)	DD (Note 4)	DE (Note 4)	DF	DG	DX	G
807	85.44	47.06	63.63	3.50 x 5.00	0.81	84.88	64.19	59.50	63.00	67.50	72.00	76.50	89.00	2.50	95.50
890	94.13	50.25	70.13	3.50 x 5.00	0.81	93.38	70.00	65.50	69.25	73.75	78.25	85.00	97.75	2.50	106.50
982	104.00	53.75	77.50	4.00 x 6.00	0.81	103.50	77.75	71.50	76.50	80.00	86.50	92.00	108.25	2.50	122.00

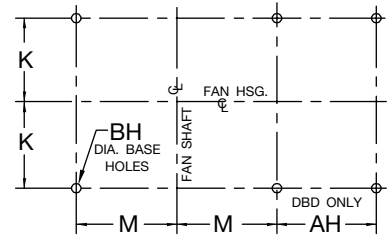
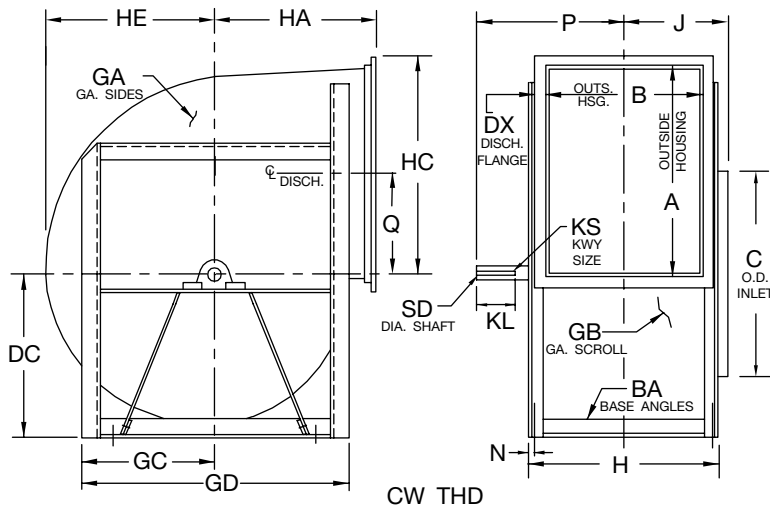
SIZE	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
807	10	10	47.75	118.63	64.19	107.50	87.81	74.00	69.50	65.38	61.25	57.13	113.69	73.00	90.31	87.75
890	7	10	53.25	128.13	70.00	117.75	96.50	81.56	76.63	72.06	67.50	62.94	125.38	80.75	99.00	96.50
982	7	7	61.00	140.63	77.75	130.13	106.31	90.06	84.63	79.56	74.50	69.44	140.06	91.75	109.75	106.75

SIZE	J	K	KL	KS		L	M	N	P	Q	SD		SE
				CL I	CL II						CL I	CL II	
807	37.81	34.44	8.00	1.00 x 0.50	1.00 x 0.50	45.00	40.88	2.38	85.81	42.63	3.937	4.437	9.00
890	41.06	37.69	8.00	1.00 x 0.50	1.25 x 0.63	48.00	46.38	2.38	92.06	46.94	3.937	4.937	9.00
982	45.75	41.88	8.00	1.25 x 0.63	1.25 x 0.63	51.13	53.13	2.88	98.88	51.81	4.937	5.437	9.00

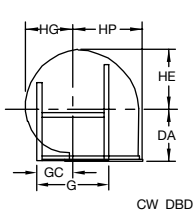
AC9259G

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

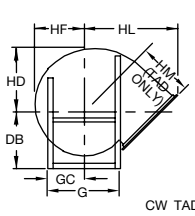
Arrangement 3, SWSI, Non-Rotatable, Class I & II



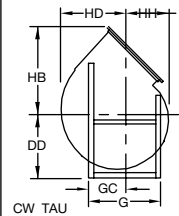
FOUNDATION PLAN



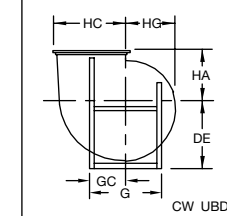
CW DBD



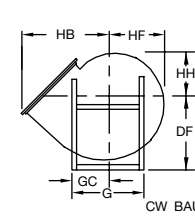
CW TAD



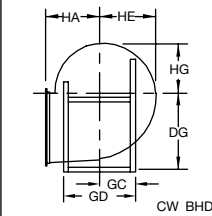
CW TAU



CW UBD



CW BAU



CW BHD

Notes:

1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Bearing bar supports may extend beyond base angles. See drawing AC1000851 for dimensions if space limitations are required for mounting fan.

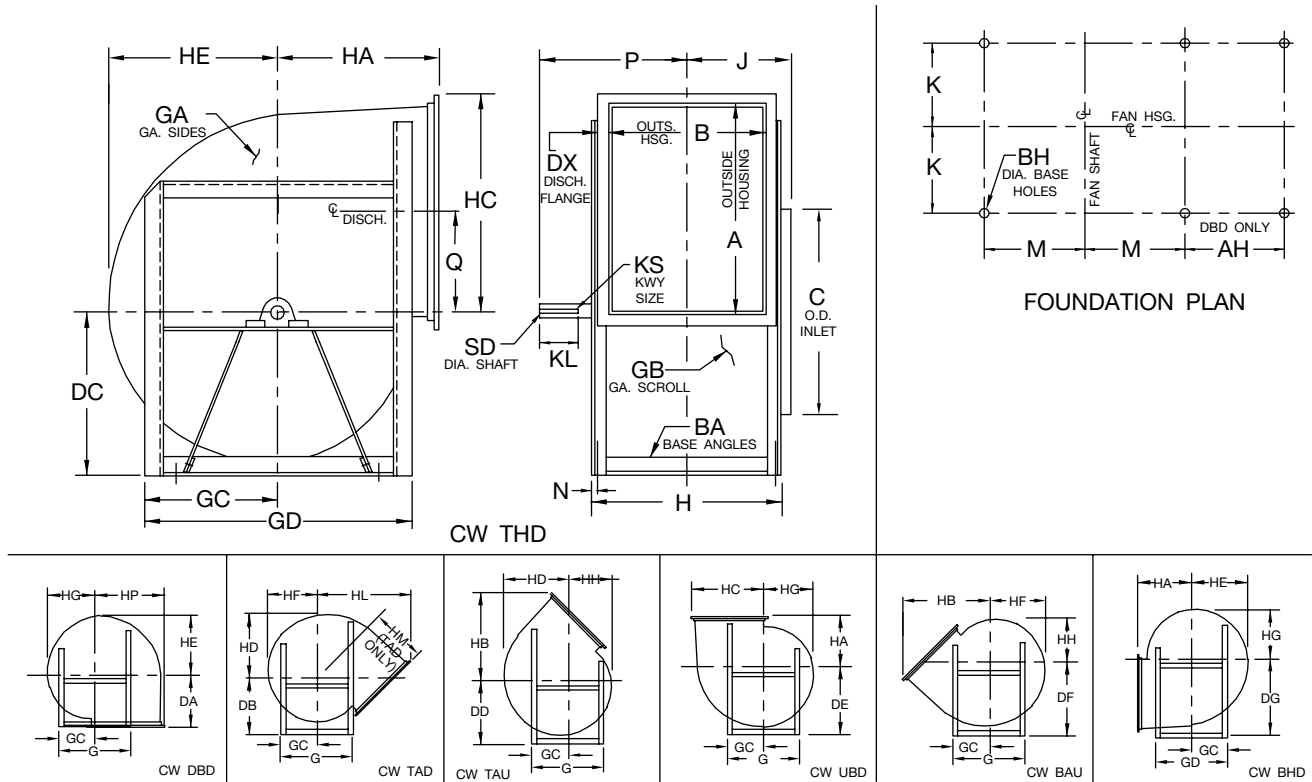
SIZE	A	AH	B	BA	BH	C	DA	DB	DC	DD	DE	DF	DG	DX	G
122	13.00	7.06	9.75	1.50 x 1.50	0.44	13.25	9.75	15.25	10.25	11.00	11.50	12.25	15.00	1.00	19.75
135	14.31	7.75	10.81	1.50 x 1.50	0.44	14.56	10.75	16.00	11.25	12.00	12.75	13.25	16.25	1.00	21.00
150	15.88	8.44	11.94	1.50 x 1.50	0.44	16.19	11.94	16.75	12.25	13.25	14.00	14.75	18.00	1.00	22.75
165	17.44	9.75	13.19	1.50 x 2.00	0.44	17.75	13.13	17.50	13.50	14.50	15.25	16.25	19.50	1.00	24.25
182	19.38	10.81	14.56	1.50 x 2.00	0.44	19.50	14.50	18.50	14.75	15.75	16.75	17.75	21.50	1.25	26.00
200	21.19	11.63	15.94	1.50 x 2.00	0.56	21.38	15.81	19.50	16.25	17.25	18.25	19.25	23.50	1.25	28.00
222	23.56	12.88	17.69	2.00 x 2.00	0.56	23.75	17.69	21.00	18.00	19.25	20.50	22.00	26.00	1.25	31.25
245	25.94	14.13	19.44	2.00 x 2.00	0.56	26.06	19.50	22.00	20.00	21.25	22.50	24.00	28.25	1.25	33.50
270	28.63	15.56	21.38	2.00 x 2.00	0.56	28.50	21.44	23.50	22.00	23.50	24.75	26.25	31.00	1.50	36.00

SIZE	GA	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP
122	14	14	9.88	18.50	12.75	9.75	16.75	13.94	11.19	10.56	9.94	9.31	8.69	22.50	17.88	14.44
135	14	14	10.50	19.75	13.88	10.75	18.38	15.25	12.31	11.63	10.94	10.25	9.56	24.06	18.75	15.75
150	14	14	11.38	21.50	15.00	11.94	20.31	16.81	13.75	12.88	12.13	11.38	10.63	26.00	20.00	17.31
165	14	14	12.13	24.25	17.25	13.13	22.25	18.38	15.06	14.13	13.31	12.50	11.69	27.88	21.06	19.38
182	12	14	13.00	26.00	18.63	14.50	24.81	20.56	16.69	15.69	14.75	13.81	12.88	30.44	22.50	21.31
200	12	14	14.00	28.00	20.00	15.81	27.00	22.38	18.38	17.31	16.25	15.19	14.13	32.75	23.94	23.13
222	12	14	15.63	31.25	21.75	17.69	30.00	24.75	20.44	19.06	17.94	16.81	15.69	36.06	26.25	25.50
245	12	14	16.75	33.50	23.50	19.50	33.00	27.13	22.38	21.00	19.75	18.50	17.25	38.88	27.81	27.88
270	12	14	18.00	36.00	25.38	21.44	36.44	30.06	24.69	23.19	21.81	20.44	19.06	42.38	29.88	30.56

AC9834G

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI, Non-Rotatable, Class I & II (cont'd.)



Notes:

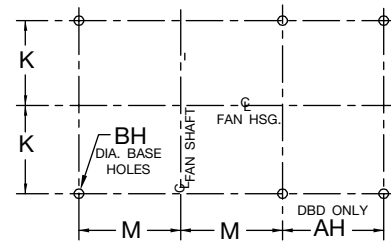
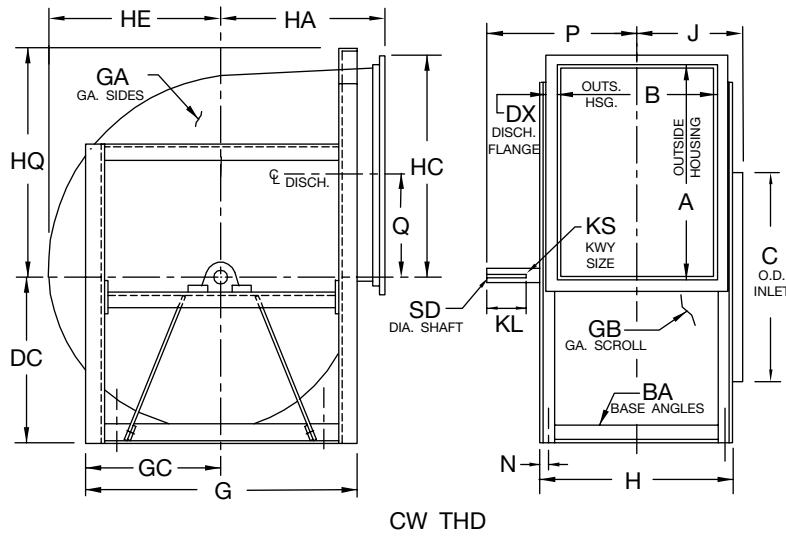
1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Bearing bar supports may extend beyond base angles. See drawing AC1000851 for dimensions if space limitations are required for mounting fan.

SIZE	J	K	KL	KS		M	N	P		Q	SD	
				CL I	CL II			CL I	CL II		CL I	CL II
122	7.44	5.75	2.50	0.25 x 0.13	0.25 x 0.13	6.75	0.63	10.00	10.00	6.44	1.000	1.000
135	8.00	6.31	2.50	0.25 x 0.13	0.25 x 0.13	7.38	0.63	10.56	10.56	7.13	1.000	1.000
150	9.06	6.88	3.00	0.25 x 0.13	0.25 x 0.13	8.25	0.63	11.63	12.00	7.88	1.000	1.187
165	9.69	7.75	3.00	0.25 x 0.13	0.25 x 0.13	8.75	0.88	12.25	12.63	8.69	1.000	1.187
182	10.88	8.44	3.50	0.25 x 0.13	0.38 x 0.19	9.63	0.88	13.81	14.63	9.63	1.187	1.437
200	11.56	9.13	3.50	0.38 x 0.19	0.38 x 0.19	10.63	0.88	15.31	15.31	10.56	1.437	1.437
222	12.44	10.00	4.00	0.38 x 0.19	0.38 x 0.19	11.75	0.88	16.69	16.69	11.75	1.437	1.437
245	13.31	10.88	4.50	0.38 x 0.19	0.38 x 0.19	12.88	0.88	18.06	18.44	12.94	1.437	1.687
270	14.25	11.81	4.50	0.38 x 0.19	0.38 x 0.19	14.13	0.88	19.00	19.38	14.25	1.437	1.687

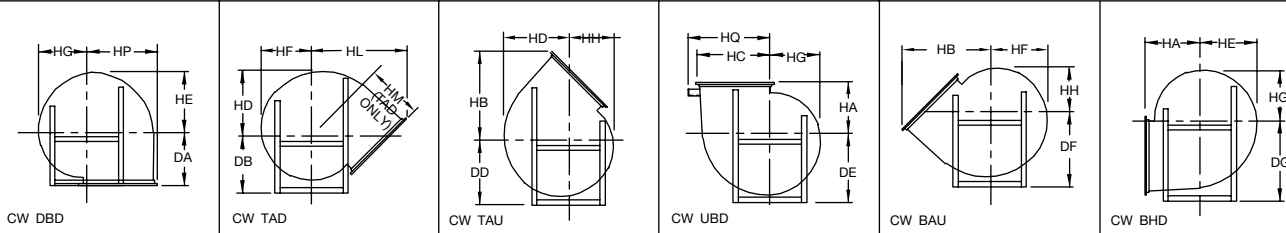
AC9834G

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI, Non-Rotatable, Class I & II



FOUNDATION PLAN



Notes:

1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See drawing AC1000851 for dimensions if space limitations are required for mounting fan.

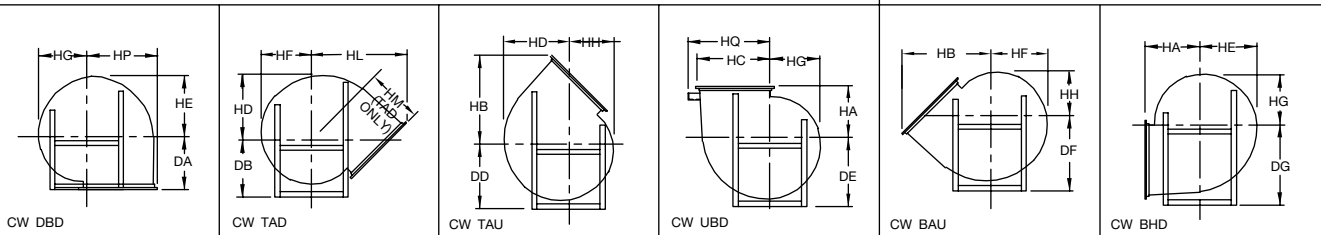
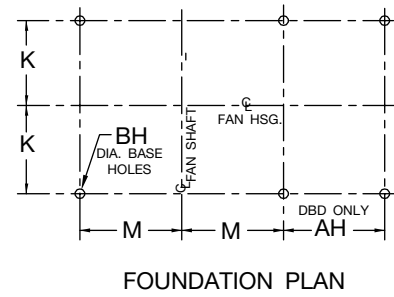
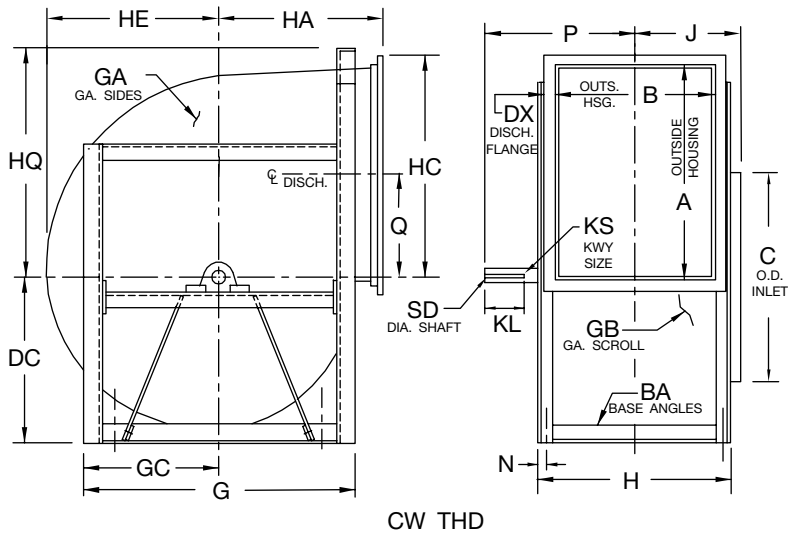
SIZE	A	AH	B	BA	BH	C	DA	DB	DC	DD	DE	DF	DG	DX	G
300	31.81	17.25	23.81	2.50 x 2.50	0.56	31.63	23.81	26.00	24.50	26.00	28.50	29.50	34.25	1.50	41.00
330	35.13	19.06	26.06	2.50 x 2.50	0.56	34.75	26.25	27.75	27.00	28.50	31.00	32.25	37.25	1.50	44.00
365	38.69	21.13	28.88	2.50 x 2.50	0.56	38.50	29.00	30.50	29.50	31.50	33.50	35.50	41.00	1.50	48.00
402	42.63	23.31	31.81	3.00 x 3.00	0.81	42.44	32.00	32.50	33.00	35.25	37.00	39.50	45.50	1.50	52.50
445	47.13	25.81	35.19	3.00 x 3.00	0.81	46.88	35.38	36.25	35.50	38.50	40.00	43.25	50.00	1.50	56.50
490	51.94	28.13	38.63	3.00 x 3.00	0.81	51.63	39.00	38.75	39.00	42.25	44.00	47.50	54.75	2.00	61.50
542	57.38	31.81	42.88	3.00 x 4.00	0.81	57.13	43.06	42.25	43.50	46.50	49.00	52.25	60.25	2.00	67.00
600	63.50	34.94	47.31	3.00 x 4.00	0.81	63.13	47.69	45.00	48.00	51.25	54.00	57.50	66.25	2.00	73.00
660	69.69	39.13	52.19	3.50 x 5.00	0.81	69.38	52.44	49.50	52.50	55.75	59.00	63.00	73.25	2.50	80.00
730	77.25	42.63	57.56	3.50 x 5.00	0.81	76.75	58.00	54.25	57.00	61.75	64.50	69.50	80.75	2.50	88.00

SIZE	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
300	10	12	20.50	28.88	23.81	40.31	33.25	27.44	25.75	24.25	22.75	21.25	47.13	33.44	34.25	
330	10	12	22.00	31.13	26.25	44.44	36.56	30.13	28.38	26.69	25.00	23.31	51.00	35.56	37.56	
365	10	12	24.00	33.88	29.00	48.88	40.13	33.50	31.50	29.63	27.75	25.88	55.50	38.38	41.13	
402	10	12	26.25	37.88	32.00	53.81	44.06	37.00	34.69	32.63	30.56	28.50	60.50	41.56	45.56	
445	10	12	28.25	41.25	35.38	59.38	48.56	40.88	38.25	36.00	33.75	31.50	65.59	44.38	50.06	
490	10	12	30.75	44.63	39.00	65.69	53.88	44.88	42.19	39.69	37.19	34.69	72.31	48.44	54.88	
542	10	12	33.50	50.88	43.06	72.38	59.31	49.75	46.69	43.94	41.19	38.44	78.88	52.31	61.31	59.75
600	10	12	36.50	55.38	47.69	80.00	65.44	55.00	51.69	48.63	45.56	42.50	86.25	56.56	67.44	65.75
660	10	12	40.00	62.25	52.44	88.06	72.13	60.38	56.81	53.38	49.94	46.50	94.81	62.00	74.63	72.25
730	10	10	44.00	67.63	58.00	97.31	79.63	66.94	62.88	59.13	55.38	51.63	104.19	67.69	82.13	79.75

AC9241F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, SWSI, Non-Rotatable, Class I & II (cont'd.)



Notes:

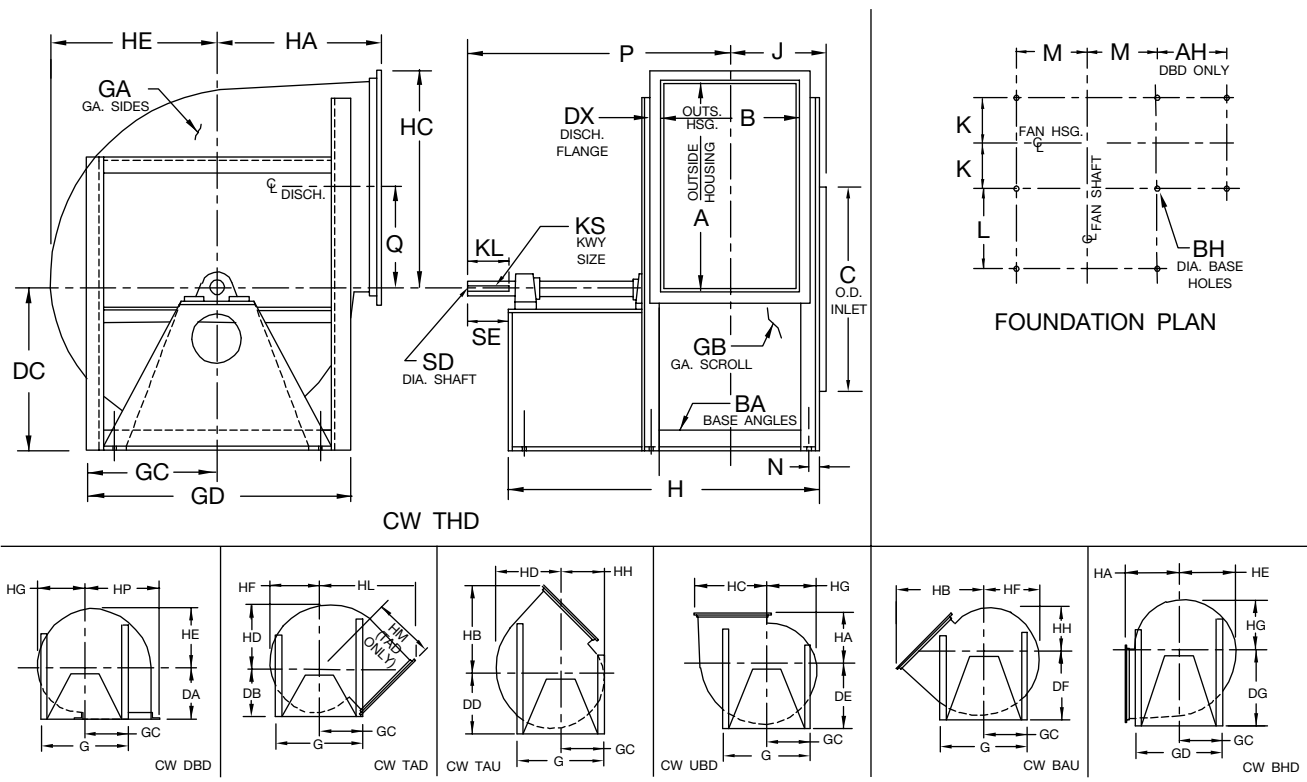
1. Discharge angles are included on all discharges.
2. Inlet bearing bar support is removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See drawing AC1000851 for dimensions if space limitations are required for mounting fan.

SIZE	J	K	KL	KS		M	N	P		Q	SD	
				CL I	CL II			CL I	CL II		CL I	CL II
300	16.00	13.31	5.00	0.38 x 0.19	0.50 x 0.25	15.88	1.13	21.13	21.25	15.81	1.687	1.937
330	17.13	14.44	5.00	0.38 x 0.19	0.50 x 0.25	17.38	1.13	22.25	22.88	17.50	1.687	2.187
365	19.06	15.81	5.00	0.50 x 0.25	0.63 x 0.31	18.88	1.13	23.75	24.63	19.25	1.937	2.437
402	20.50	17.56	5.00	0.50 x 0.25	0.63 x 0.31	20.88	1.38	25.25	26.13	21.25	1.937	2.437
445	22.69	19.25	5.50	0.50 x 0.25	0.63 x 0.31	22.88	1.38	27.44	29.19	23.50	1.937	2.687
490	24.44	20.94	5.50	0.50 x 0.25	0.63 x 0.31	25.38	1.38	30.25	30.88	25.88	2.187	2.687
542	26.56	23.56	6.00	0.63 x 0.31	0.75 x 0.38	27.63	1.88	33.38	33.75	28.63	2.437	2.937
600	29.75	25.81	6.00	0.75 x 0.38	0.88 x 0.44	30.63	1.88	35.50	36.88	31.69	2.937	3.437
660	32.19	28.75	7.00	0.75 x 0.38	1.00 x 0.50	33.13	2.38	39.88	40.81	34.75	2.937	3.937
730	34.88	31.44	7.50	0.88 x 0.44	1.00 x 0.50	37.13	2.38	43.50	44.00	38.50	3.437	3.937

AC9241F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class III



Notes:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans size 182-330 (except TAD 182-200) with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

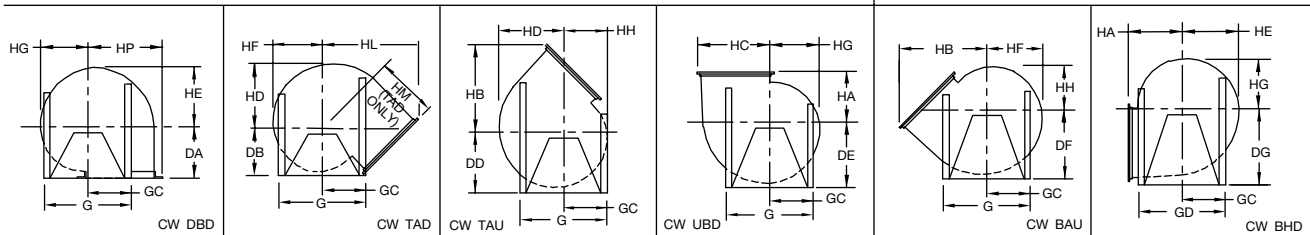
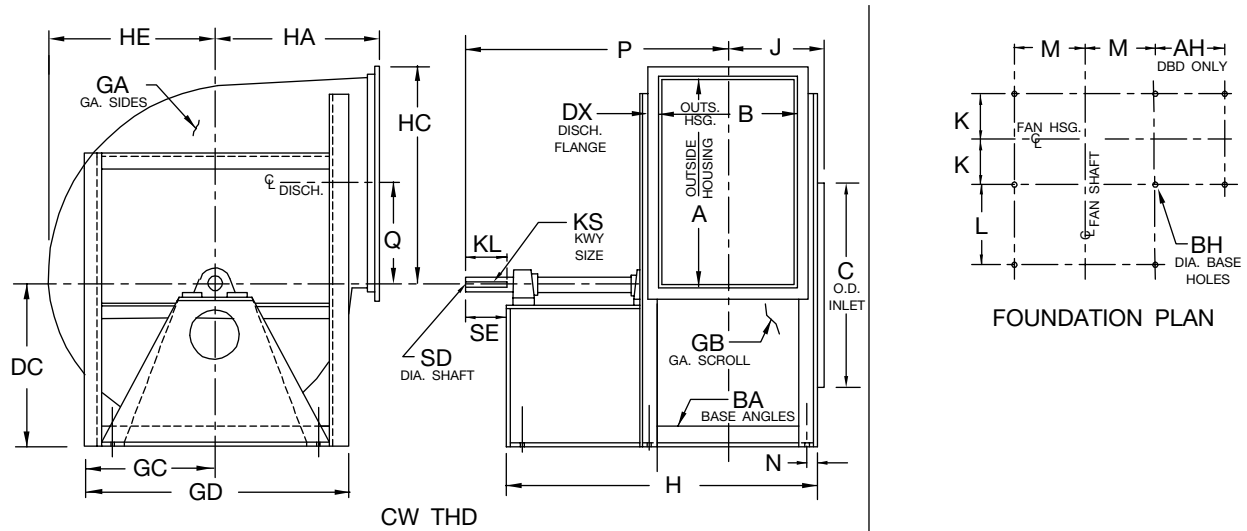
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	G
122	13.13	7.63	9.88	1.50 x 2.00	0.44	13.25	9.75	15.25	10.25	11.00	11.50	12.25	15.50	1.25	19.75
135	14.44	8.31	10.94	1.50 x 2.00	0.44	14.56	10.75	16.00	11.25	12.00	12.75	13.25	16.75	1.25	21.00
150	16.00	9.00	12.06	1.50 x 2.00	0.44	16.19	11.94	16.75	12.25	13.25	14.00	14.75	18.50	1.25	22.75
165	17.56	9.81	13.31	1.50 x 2.00	0.44	17.75	13.13	17.50	13.50	14.50	15.25	16.25	19.50	1.25	24.25
182	19.50	10.88	14.63	2.00 x 2.00	0.56	19.50	14.50	18.50	14.75	15.75	16.75	17.75	22.00	1.25	27.00
200	21.31	11.69	16.00	2.00 x 2.00	0.56	21.38	15.81	19.50	16.25	17.25	18.25	19.25	24.00	1.25	29.00
222	23.69	13.44	17.75	2.50 x 2.50	0.56	23.75	17.69	21.00	18.00	19.25	20.50	22.00	26.50	1.25	32.25
245	26.19	14.63	19.63	2.50 x 2.50	0.56	26.06	19.50	22.00	20.00	21.25	22.50	24.00	28.75	1.50	34.50
270	28.88	16.19	21.56	2.50 x 2.50	0.56	28.50	21.44	23.50	22.00	23.50	24.75	26.25	31.50	1.50	37.00
300	32.00	17.81	23.94	3.00 x 3.00	0.81	31.63	23.81	26.00	24.50	26.00	27.50	29.50	34.75	1.50	42.00
330	35.31	19.63	26.19	3.00 x 3.00	0.81	34.75	26.25	27.75	27.00	28.50	30.00	32.25	37.75	1.50	45.00

SIZE	GA	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP
122	10	10	9.88	18.63	22.38	9.75	17.00	14.25	11.25	10.63	10.00	9.38	8.75	22.94	18.19	15.00
135	10	10	10.50	19.88	24.00	10.75	18.63	15.56	12.38	11.69	11.00	10.31	9.63	24.50	19.06	16.31
150	10	10	11.38	21.63	26.63	11.94	20.56	17.13	13.81	12.94	12.19	11.44	10.69	26.50	20.31	17.88
165	10	10	12.13	23.13	27.88	13.13	22.50	18.69	15.13	14.19	13.38	12.56	11.75	28.31	21.38	19.44
182	10	10	13.50	27.00	30.13	14.50	24.81	20.63	16.75	15.75	14.81	13.88	12.94	31.06	23.31	21.38
200	10	10	14.50	29.00	32.50	15.81	27.06	22.44	18.38	17.38	16.31	15.25	14.19	33.31	24.69	23.19
222	10	10	16.13	32.25	37.25	17.69	30.06	24.81	20.50	19.13	18.00	16.88	15.75	36.69	27.06	26.06
245	7	7	17.25	34.50	40.63	19.50	33.25	27.50	22.50	21.13	19.88	18.63	17.38	38.88	27.50	28.50
270	7	7	18.50	37.00	44.63	21.44	36.50	30.19	24.81	23.31	21.94	20.56	19.19	42.06	29.25	31.19
300	7	7	21.00	42.00	49.50	23.81	40.38	33.31	27.50	25.81	24.31	22.81	21.13	46.75	32.81	34.81
330	7	7	22.50	45.00	53.75	26.25	44.44	36.63	30.19	28.44	26.75	25.06	23.38	50.63	34.94	38.13

AC9244D

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class III (cont'd.)



Notes:

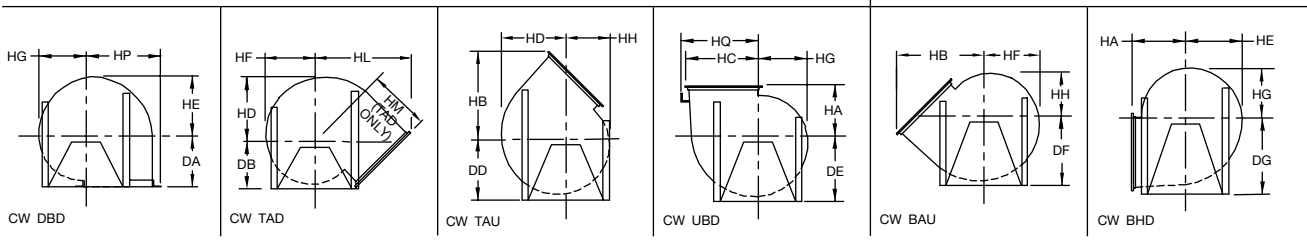
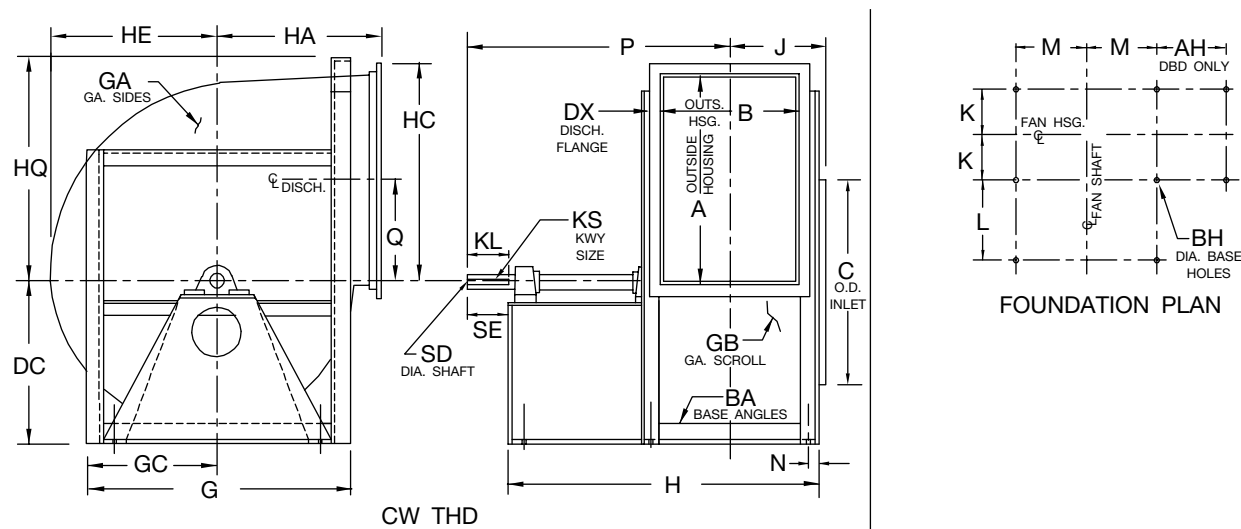
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans size 182-330 (except TAD 182-200) with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

SIZE	J	K	KL	KS	L	M	N	P	Q	SD	SE
122	7.94	6.06	3.00	0.38 x 0.19	7.50	6.50	0.88	18.94	6.44	1.437	3.50
135	8.50	6.63	3.00	0.38 x 0.19	8.00	7.13	0.88	20.00	7.13	1.437	3.50
150	9.06	7.19	3.50	0.38 x 0.19	9.50	8.00	0.88	22.56	7.88	1.687	4.00
165	9.69	7.81	3.50	0.38 x 0.19	9.50	8.75	0.88	23.19	8.69	1.687	4.00
182	10.31	8.44	4.50	0.38 x 0.19	10.50	9.63	0.88	25.81	9.63	1.687	5.00
200	11.00	9.13	4.50	0.50 x 0.25	11.50	10.63	0.88	27.50	10.56	1.937	5.00
222	12.38	10.25	5.00	0.50 x 0.25	13.75	11.50	1.13	31.38	11.75	1.937	5.50
245	13.31	11.19	6.00	0.50 x 0.25	15.25	12.63	1.13	34.81	12.94	2.187	6.50
270	14.31	12.19	6.00	0.50 x 0.25	17.25	13.88	1.13	37.81	14.25	2.187	6.50
300	16.00	13.63	7.00	0.63 x 0.31	19.00	15.63	1.38	42.25	15.81	2.437	7.75
330	17.13	14.75	7.00	0.63 x 0.31	21.00	17.13	1.38	45.38	17.50	2.687	7.75

AC9244D

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class III



Notes:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

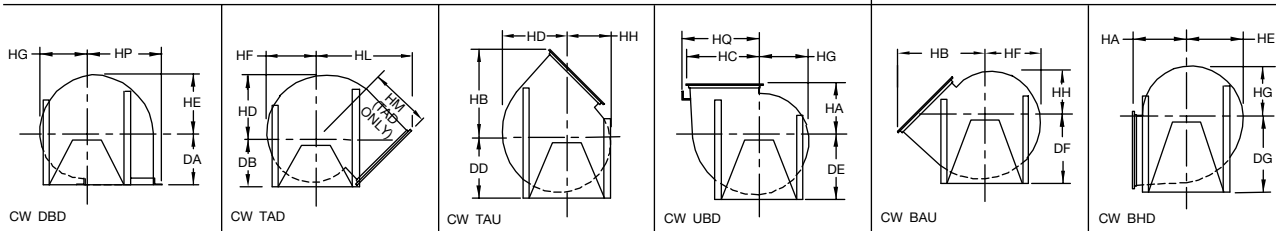
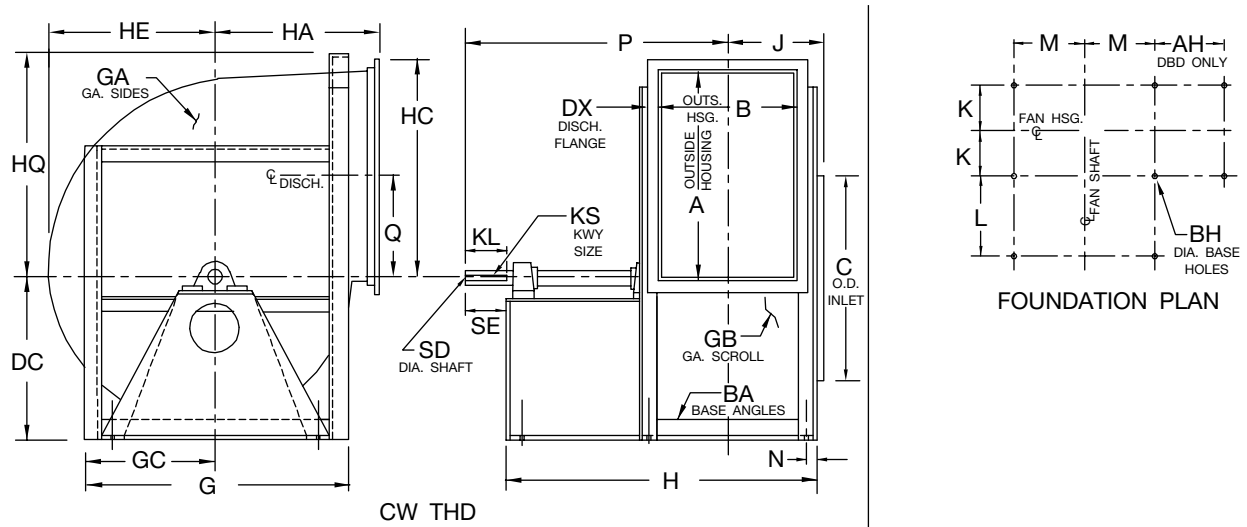
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX
365	38.88	21.69	29.00	3.00 x 3.00	0.81	38.50	29.00	29.25	29.50	31.50	33.50	35.50	41.50	1.50 x 1.50
402	42.81	24.38	31.94	3.00 x 4.00	0.81	42.44	32.00	31.75	33.00	35.25	37.00	39.50	45.50	2.00 x 2.00
445	47.31	26.88	35.31	3.00 x 4.00	0.81	46.88	35.38	36.25	35.50	38.50	40.00	43.25	50.00	2.00 x 2.00
490	52.13	29.19	38.75	3.00 x 4.00	0.81	51.63	39.00	38.75	39.00	42.25	44.00	47.50	54.75	2.00 x 2.00
542	57.56	32.88	43.00	3.50 x 5.00	0.81	57.13	43.06	42.25	43.50	46.50	49.00	52.25	60.75	2.50 x 2.50
600	63.69	36.00	47.44	3.50 x 5.00	0.81	63.13	47.69	45.00	48.00	51.25	54.00	57.50	66.75	2.50 x 2.50
660	69.88	40.19	52.31	4.00 x 6.00	0.81	69.38	52.44	49.50	52.50	55.75	59.00	63.00	73.75	2.50 x 2.50
730	77.38	43.69	57.69	4.00 x 6.00	0.81	76.75	58.00	54.25	57.00	61.75	64.50	69.50	81.25	2.50 x 2.50
807	85.56	48.13	63.75	4.00 x 6.00	0.81	84.88	64.19	59.50	63.00	67.50	72.00	76.50	89.50	2.50 x 2.50
890	94.25	51.31	70.13	4.00 x 6.00	0.81	93.38	70.00	65.50	69.25	73.75	78.25	85.00	98.25	2.50 x 2.50

SIZE	G	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP
365	49.00	7	7	24.50	58.00	29.00	48.94	40.19	33.63	31.56	29.69	27.81	25.94	55.13	37.75	41.69
402	52.50	7	7	26.25	64.00	32.00	54.19	44.63	37.06	34.75	32.69	30.63	28.56	60.38	40.75	46.63
445	56.50	7	7	28.25	70.38	35.38	59.75	49.13	41.00	38.31	36.06	33.81	31.56	66.56	44.94	51.13
490	61.50	7	7	30.75	75.75	39.00	65.69	53.94	44.94	42.25	39.75	37.25	34.75	72.44	48.50	55.94
542	67.00	7	7	33.50	82.00	43.06	72.81	59.88	49.88	46.75	44.00	41.25	38.50	79.75	52.88	62.38
600	74.00	7	7	37.00	89.50	47.69	80.38	66.00	55.06	51.75	48.69	45.63	42.56	87.56	57.81	68.50
660	80.00	7	7	40.00	98.38	52.44	88.13	72.19	60.50	56.88	53.44	50.00	46.56	94.94	62.06	75.69
730	88.00	7	7	44.00	106.75	58.00	97.38	79.69	67.00	62.94	59.19	55.44	51.69	104.25	67.75	83.19
807	96.50	7	7	48.25	115.75	64.19	107.50	87.88	74.13	69.56	65.44	61.31	57.19	114.31	73.75	91.38
890	107.50	7	7	53.75	125.13	70.00	117.75	96.56	81.63	76.69	72.13	67.56	63.00	125.94	81.50	100.06

AC9245E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class III (cont'd.)



Notes:

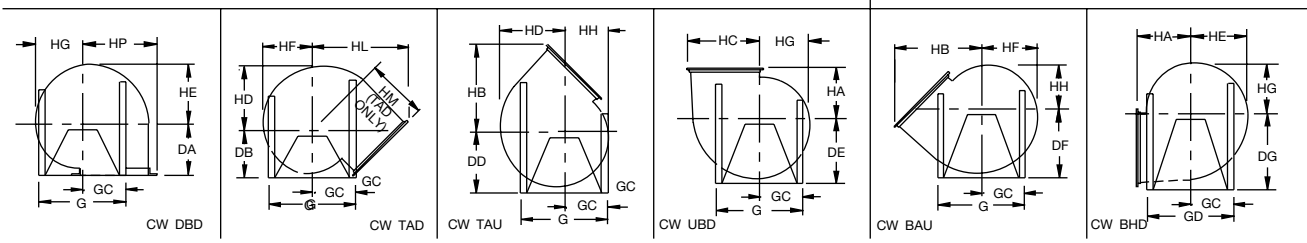
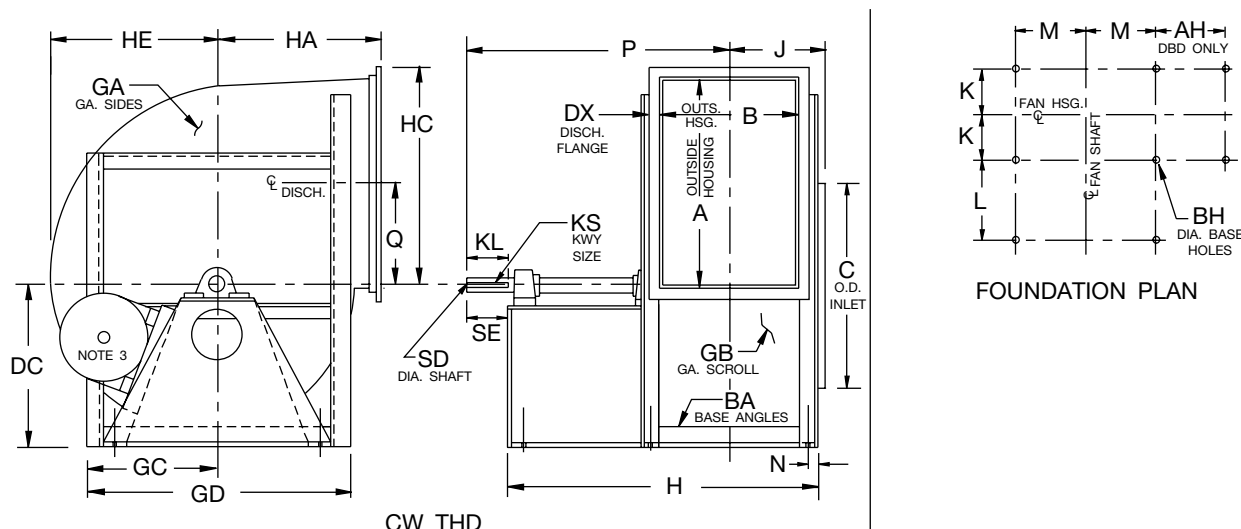
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

SIZE	HQ	J	K	KL	KS	L	M	N	P	Q	SD	SE
365		18.50	16.13	7.00	0.63 x 0.31	22.50	18.63	1.38	48.25	19.25	2.687	7.75
402		21.00	18.13	8.00	0.75 x 0.38	24.00	20.38	1.88	52.75	21.25	2.937	8.75
445		22.69	19.81	8.00	0.88 x 0.44	27.00	22.38	1.88	57.69	23.50	3.437	9.00
490		24.38	21.50	9.00	0.88 x 0.44	29.00	24.88	1.88	62.38	25.88	3.437	10.00
542	59.75	27.50	24.13	9.00	1.00 x 0.50	29.50	27.13	2.38	65.50	28.63	3.937	10.00
600	66.25	29.75	26.38	9.50	1.00 x 0.50	32.50	30.13	2.38	71.25	31.69	4.437	10.50
660	72.38	33.19	29.31	10.00	1.00 x 0.50	35.00	32.63	2.88	77.19	34.75	4.437	11.00
730	79.75	35.88	32.00	10.50	1.25 x 0.63	38.00	36.63	2.88	83.38	38.50	4.937	11.50
807	88.38	38.88	35.00	10.50	1.25 x 0.63	41.00	40.63	2.88	89.38	42.63	4.937	11.50
890	97.00	42.06	38.19	11.00	1.25 x 0.63	44.00	45.88	2.88	96.06	46.94	5.437	12.00

AC9245E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 9, SWSI, Non-Rotatable, Class III



- Notes:**
- Discharge angles are included on all discharges.
 - "CW" rotation is shown. "CCW" rotation is similar but opposite.
 - Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.

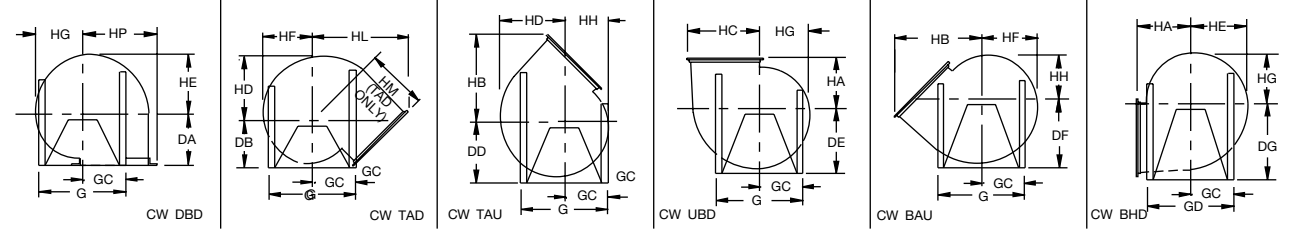
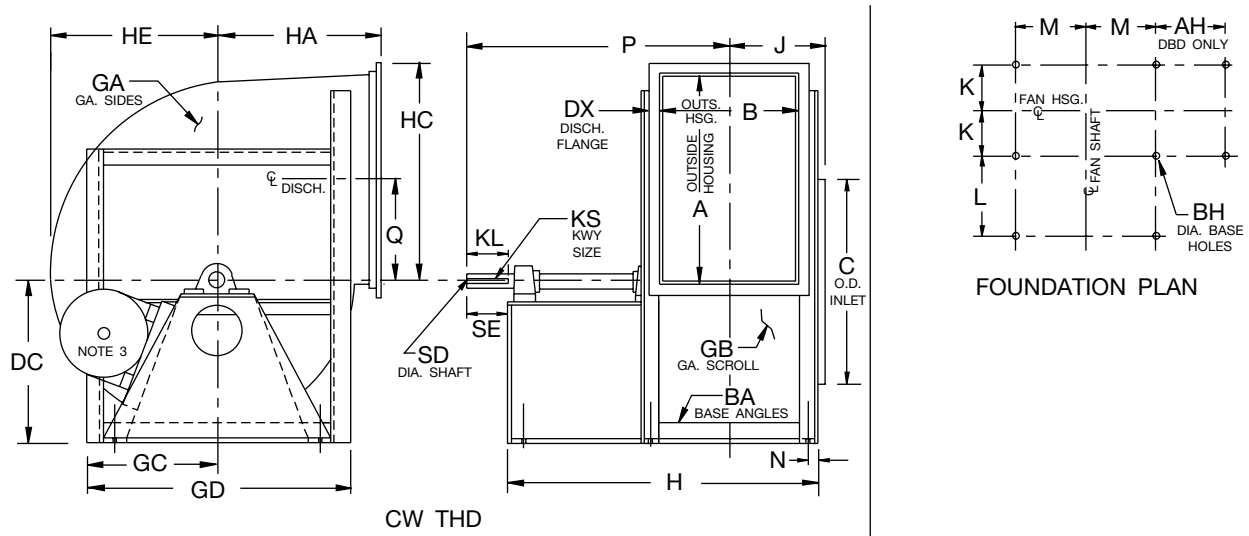
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	FR
122	13.13	7.63	9.88	1.50 x 2.00	0.44	13.25	20.75	20.75	20.75	20.75	20.75	20.75	20.75	1.25	215T
135	14.44	8.31	10.94	1.50 x 2.00	0.44	14.56	23.50	23.50	23.50	23.50	23.50	23.50	23.50	1.25	256T
150	16.00	9.00	12.06	1.50 x 2.00	0.44	16.19	23.75	23.75	23.75	23.75	23.75	23.75	23.75	1.25	256T
165	17.56	9.81	13.31	1.50 x 2.00	0.44	17.75	23.75	23.75	23.75	23.75	23.75	23.75	23.75	1.25	256T
182	19.50	10.88	14.63	2.00 x 2.00	0.56	19.50	26.25	26.25	26.25	26.25	26.25	26.25	26.25	1.25	286T
200	21.31	11.69	16.00	2.00 x 2.00	0.56	21.38	29.50	29.50	29.50	29.50	29.50	29.50	29.50	1.25	326T
222	23.69	13.44	17.75	2.50 x 2.50	0.56	23.75	30.00	30.00	30.00	30.00	30.00	30.00	30.00	1.25	326T
245	26.19	14.63	19.63	2.50 x 2.50	0.56	26.06	30.25	30.25	30.25	30.25	30.25	30.25	30.25	1.50	326T
270	28.88	16.19	21.56	2.50 x 2.50	0.56	28.50	33.00	33.00	33.00	33.00	33.00	33.00	33.00	1.50	365T
300	32.00	17.81	23.94	3.00 x 3.00	0.81	31.63	33.50	33.50	33.50	33.50	33.50	33.50	34.75	1.50	365T
330	35.31	19.63	26.19	3.00 x 3.00	0.81	34.75	34.00	34.00	34.00	34.00	34.00	34.00	37.75	1.50	365T

SIZE	G	GA	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM
122	19.75	10	10	9.88	18.63	32.25	9.75	17.00	14.25	11.25	10.63	10.00	9.38	8.75	22.94	18.19
135	21.00	10	10	10.50	19.88	38.75	10.75	18.63	15.56	12.38	11.69	11.00	10.31	9.63	24.50	19.06
150	22.75	10	10	11.38	21.63	39.88	11.94	20.56	17.13	13.81	12.94	12.19	11.44	10.69	26.50	20.31
165	24.25	10	10	12.13	23.13	41.13	13.13	22.50	18.69	15.13	14.19	13.38	12.56	11.75	28.31	21.38
182	27.00	10	10	13.50	27.00	44.63	14.50	24.81	20.63	16.75	15.75	14.81	13.88	12.94	31.06	23.31
200	29.00	10	10	14.50	29.00	47.50	15.81	27.06	22.44	18.38	17.38	16.31	15.25	14.19	33.31	24.69
222	32.25	10	10	16.13	32.25	50.25	17.69	30.06	24.81	20.50	19.13	18.00	16.88	15.75	36.69	27.06
245	34.50	7	7	17.25	34.50	52.13	19.50	33.25	27.50	22.50	21.13	19.88	18.63	17.38	38.88	27.50
270	37.00	7	7	18.50	37.00	55.25	21.44	36.50	30.19	24.81	23.31	21.94	20.56	19.19	42.06	29.25
300	42.00	7	7	21.00	42.00	58.63	23.81	40.38	33.31	27.50	25.81	24.31	22.81	21.13	46.75	32.81
330	45.00	7	7	22.50	45.00	60.88	26.25	44.44	36.63	30.19	28.44	26.75	25.06	23.38	50.63	34.94

AC9128E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 9, SWSI, Non-Rotatable, Class III (cont'd.)



Notes:

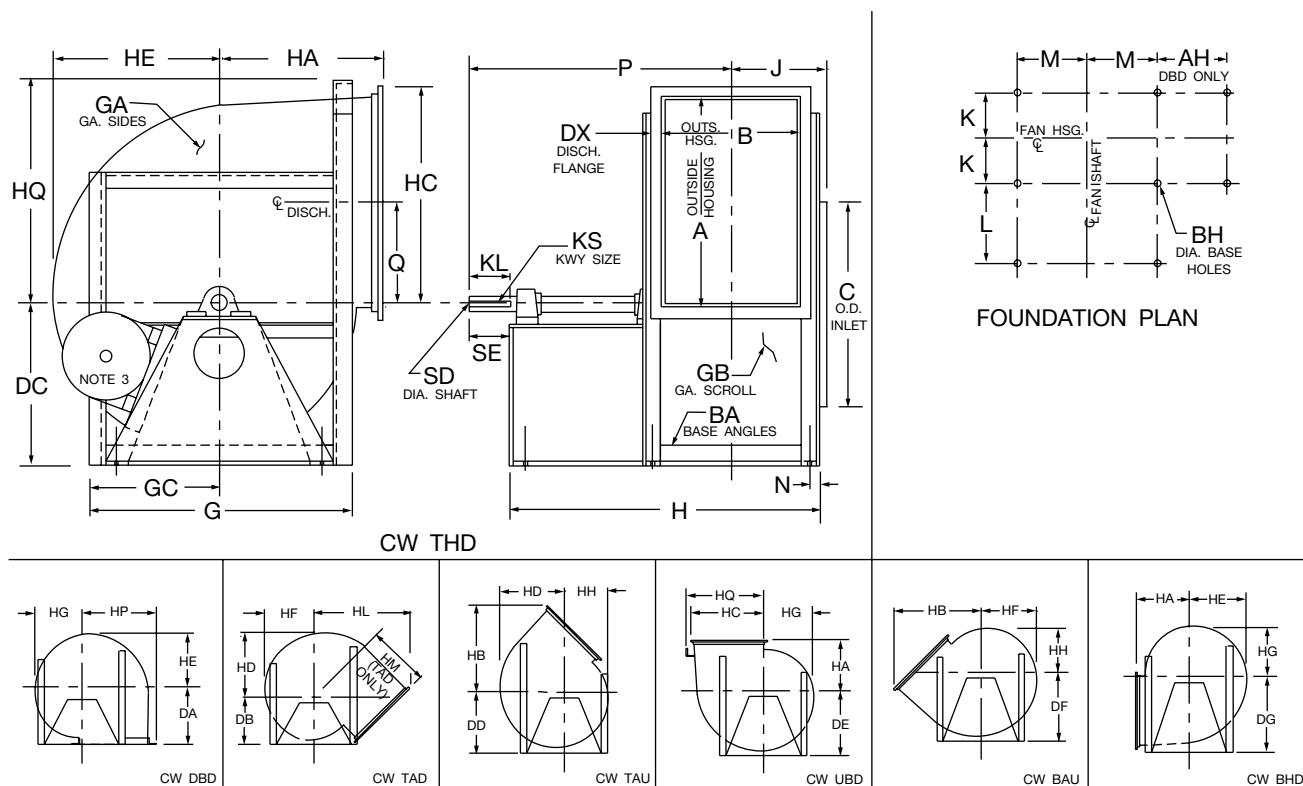
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.

SIZE	HP	J	K	KL	KS	L	M	N	P	Q	SD	SE
122	15.00	7.94	6.06	3.50	0.38 x 0.19	17.38	6.50	0.88	29.31	6.44	1.4375	4.00
135	16.31	8.50	6.63	4.25	0.38 x 0.19	22.75	7.13	0.88	36.00	7.13	1.4375	4.75
150	17.88	9.06	7.19	4.25	0.38 x 0.19	22.75	8.00	0.88	36.56	7.88	1.6875	4.75
165	19.44	9.69	7.81	4.25	0.38 x 0.19	22.75	8.75	0.88	37.19	8.69	1.6875	4.75
182	21.38	10.31	8.44	5.00	0.38 x 0.19	25.00	9.63	0.88	40.81	9.63	1.6875	5.50
200	23.19	11.00	9.13	6.00	0.50 x 0.25	26.50	10.63	0.88	44.25	10.56	1.9375	6.75
222	26.06	12.38	10.25	6.00	0.50 x 0.25	26.75	11.50	1.13	45.63	11.75	1.9375	6.75
245	28.50	13.31	11.19	6.00	0.50 x 0.25	26.75	12.63	1.13	46.56	12.94	2.1875	6.75
270	31.19	14.31	12.19	7.00	0.50 x 0.25	27.88	13.88	1.13	49.69	14.25	2.1875	7.75
300	34.81	16.00	13.63	6.75	0.63 x 0.31	28.13	15.63	1.38	51.38	15.81	2.4375	7.75
330	38.13	17.13	14.75	6.75	0.63 x 0.31	28.13	17.13	1.38	52.50	17.50	2.6875	7.75

AC9128E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 9, SWSI, Non-Rotatable, Class III



Notes:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.

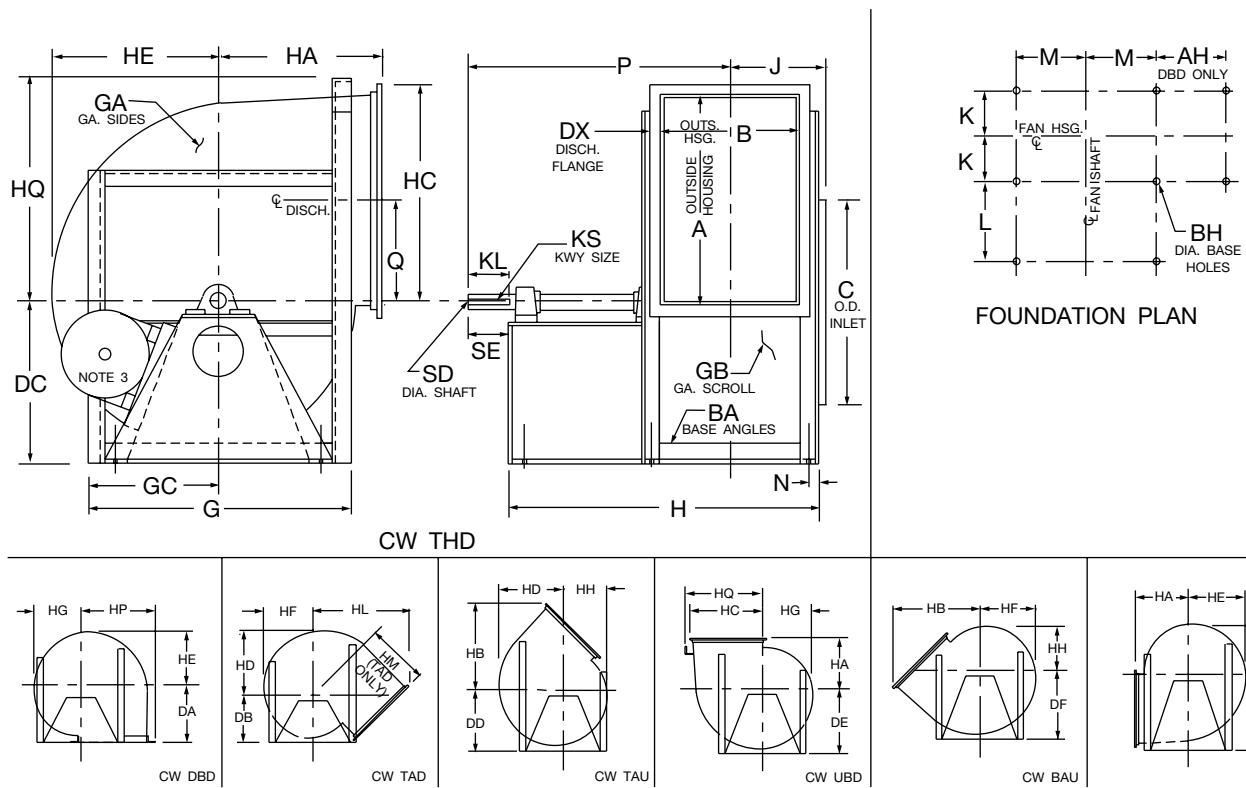
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	FR
365	38.88	21.69	29.00	3.00 x 3.00	0.81	38.50	37.50	37.50	37.50	37.50	37.50	37.50	41.50	1.50	405T
402	42.81	24.38	31.94	3.00 x 4.00	0.81	42.44	40.25	40.25	40.25	40.25	40.25	40.25	45.50	2.00	405T
445	47.31	26.88	35.31	3.00 x 4.00	0.81	46.88	41.00	41.00	41.00	41.00	41.00	43.25	50.00	2.00	405T
490	52.13	29.19	38.75	3.00 x 4.00	0.81	51.63	41.00	41.00	41.00	42.25	44.00	47.50	54.75	2.00	405T
542	57.56	32.88	43.00	3.50 x 5.00	0.81	57.13	43.06	42.25	43.50	46.50	49.00	52.25	60.75	2.50	405T
600	63.69	36.00	47.44	3.50 x 5.00	0.81	63.13	47.69	45.00	48.00	51.25	54.00	57.50	66.75	2.50	405T
660	69.88	40.19	52.31	4.00 x 6.00	0.81	69.38	52.44	49.50	52.50	55.75	59.00	63.00	73.75	2.50	405T
730	77.38	43.69	57.69	4.00 x 6.00	0.81	76.75	58.00	54.25	57.00	61.75	64.50	69.50	81.25	2.50	405T
807	85.56	48.13	63.75	4.00 x 6.00	0.81	84.88	64.19	59.50	63.00	67.50	72.00	76.50	89.50	2.50	405T
890	94.25	51.31	70.13	4.00 x 6.00	0.81	93.38	70.00	65.50	69.25	73.75	78.25	85.00	98.25	2.50	405T

SIZE	G	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP
365	49.00	7	7	24.50	70.38	29.00	48.94	40.19	33.63	31.56	29.69	27.81	25.94	55.13	37.75	41.69
402	52.50	7	7	26.25	81.13	32.00	54.19	44.63	37.06	34.75	32.69	30.63	28.56	60.38	40.75	46.63
445	56.50	7	7	28.25	84.50	35.38	59.75	49.13	41.00	38.31	36.06	33.81	31.56	66.56	44.94	51.13
490	61.50	7	7	30.75	87.88	39.00	65.69	53.94	44.94	42.25	39.75	37.25	34.75	72.44	48.50	55.94
542	67.00	7	7	33.50	93.75	43.06	72.81	59.88	49.88	46.75	44.00	41.25	38.50	79.75	52.88	62.38
600	74.00	7	7	37.00	98.25	47.69	80.38	66.00	55.06	51.75	48.69	45.63	42.56	87.56	57.81	68.50
660	80.00	7	7	40.00	105.13	52.44	88.13	72.19	60.50	56.88	53.44	50.00	46.56	94.94	62.06	75.69
730	88.00	7	7	44.00	110.50	58.00	97.38	79.69	67.00	62.94	59.19	55.44	51.69	104.25	67.75	83.19
807	96.50	7	7	48.25	116.50	64.19	107.50	87.88	74.13	69.56	65.44	61.31	57.19	114.31	73.75	91.38
890	107.50	7	7	53.75	122.88	70.00	117.75	96.56	81.63	76.69	72.13	67.56	63.00	125.94	81.50	100.06

AC9129D

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 9, SWSI, Non-Rotatable, Class III (cont'd.)



Notes:

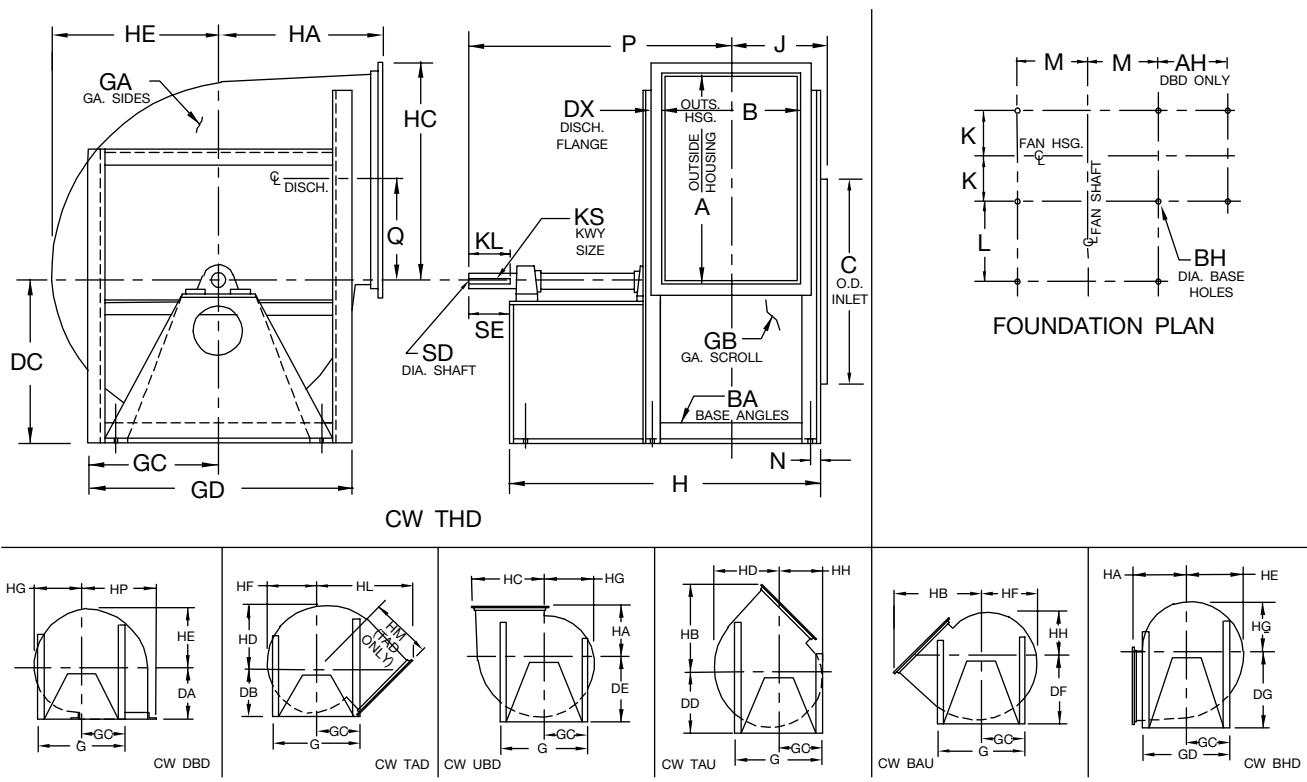
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.

SIZE	HQ	J	K	KL	KS	L	M	N	P	Q	SD	SE
365		18.50	16.13	8.00	0.63 x 0.31	34.88	18.63	1.38	61.88	19.25	2.687	9.00
402		21.00	18.13	8.75	0.75 x 0.38	41.13	20.38	1.88	71.13	21.25	2.937	10.00
445		22.69	19.81	8.75	0.88 x 0.44	41.13	22.38	1.88	72.81	23.50	3.437	10.00
490		24.38	21.50	8.75	0.88 x 0.44	41.13	24.88	1.88	74.50	25.88	3.437	10.00
542	59.75	27.50	24.13	9.00	1.00 x 0.50	41.25	27.13	2.38	77.75	28.63	3.937	10.50
600	66.25	29.75	26.38	9.00	1.00 x 0.50	41.25	30.13	2.38	80.00	31.69	4.437	10.50
660	72.38	33.19	29.31	9.00	1.00 x 0.50	41.75	32.63	2.88	83.44	34.75	4.437	10.50
730	79.75	35.88	32.00	9.00	1.25 x 0.63	41.75	36.63	2.88	86.13	38.50	4.937	10.50
807	88.38	38.88	35.00	9.00	1.25 x 0.63	41.75	40.38	2.88	89.13	42.63	4.937	10.50
890	97.00	42.06	38.19	9.00	1.25 x 0.63	41.75	45.88	2.88	92.31	46.94	5.437	10.50

AC9129D

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class IV



Notes:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans size 122-330 with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

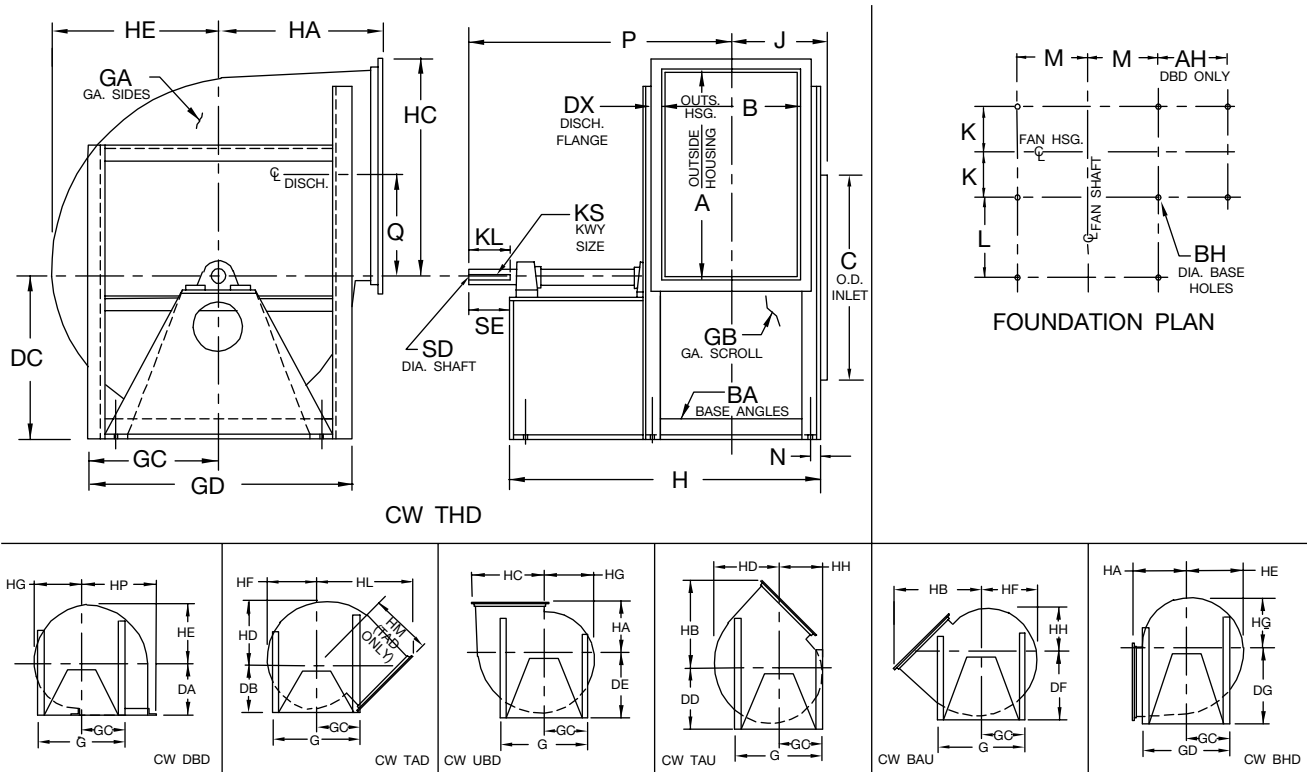
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	G
122	13.25	8.19	10.00	2.50 x 2.50	0.44	13.25	9.75	15.25	10.25	11.00	11.50	12.25	15.50	1.25	19.75
135	14.56	8.88	11.06	2.50 x 2.50	0.44	14.56	10.75	16.00	11.25	12.00	12.75	13.25	16.75	1.25	21.00
150	16.13	9.56	12.19	2.50 x 2.50	0.44	16.19	11.94	16.75	12.25	13.25	14.00	14.75	18.50	1.25	22.75
165	17.69	10.38	13.44	2.50 x 2.50	0.44	17.75	13.13	17.50	13.50	14.50	15.25	16.25	19.50	1.25	24.25
182	19.63	11.94	14.75	3.00 x 3.00	0.56	19.50	14.50	18.50	14.75	15.75	16.75	17.75	22.00	1.50	28.00
200	21.44	12.75	16.13	3.00 x 3.00	0.56	21.38	15.81	19.50	16.25	17.25	18.25	19.25	24.00	1.50	30.00
222	23.81	14.00	17.88	3.00 x 3.00	0.56	23.75	17.69	21.00	18.00	19.25	20.50	22.00	26.50	2.00	32.25
245	26.19	15.25	19.63	3.00 x 3.00	0.56	26.06	19.50	22.00	20.00	21.25	22.50	24.00	28.75	2.00	34.50
270	28.88	16.69	21.56	3.00 x 3.00	0.56	28.50	21.44	23.50	22.00	23.50	24.75	26.25	31.50	2.00	38.00
300	32.00	18.81	23.94	3.00 x 4.00	0.81	31.63	23.81	26.00	24.50	26.00	27.50	29.50	34.75	2.00	42.00
330	35.44	20.69	26.31	3.00 x 4.00	0.81	34.75	26.25	27.75	27.00	28.50	30.00	32.25	37.75	2.00	45.00

SIZE	GA	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP
122	7	7	9.88	18.75	23.50	9.75	17.00	14.31	11.31	10.69	10.06	9.44	8.81	23.00	18.25	15.56
135	7	7	10.50	20.00	25.13	10.75	18.63	15.63	12.44	11.75	11.06	10.38	9.69	24.56	19.13	16.88
150	7	7	11.38	21.75	27.75	11.94	20.63	17.19	13.88	13.00	12.25	11.50	10.75	26.56	20.38	18.44
165	7	7	12.13	23.25	29.00	13.13	22.56	18.75	15.19	14.25	13.44	12.63	11.81	28.38	21.44	20.00
182	7	7	14.00	26.00	32.25	14.50	25.06	20.94	16.81	15.81	14.88	13.94	13.00	31.50	23.63	22.44
200	7	7	15.00	28.00	34.63	15.81	27.25	22.75	18.44	17.44	16.38	15.31	14.25	33.25	24.31	24.25
222	7	7	16.13	32.25	38.38	17.69	30.63	25.63	20.56	19.19	18.06	16.94	15.81	37.44	27.31	26.63
245	7	7	17.25	34.50	41.63	19.50	33.56	28.00	22.50	21.13	19.88	18.63	17.38	39.63	28.00	29.00
270	7	7	19.00	38.00	45.63	21.44	36.88	30.69	24.81	23.31	21.94	20.56	19.19	43.25	30.50	31.69
300	7	7	21.00	42.00	51.50	23.81	40.75	33.81	27.50	25.81	24.31	22.81	21.31	47.50	33.31	35.81
330	0.25	0.25	22.50	45.00	55.88	26.25	44.88	37.19	30.25	28.50	26.81	25.13	23.44	51.38	35.50	39.19

AC9249F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class IV (cont'd.)



Notes:

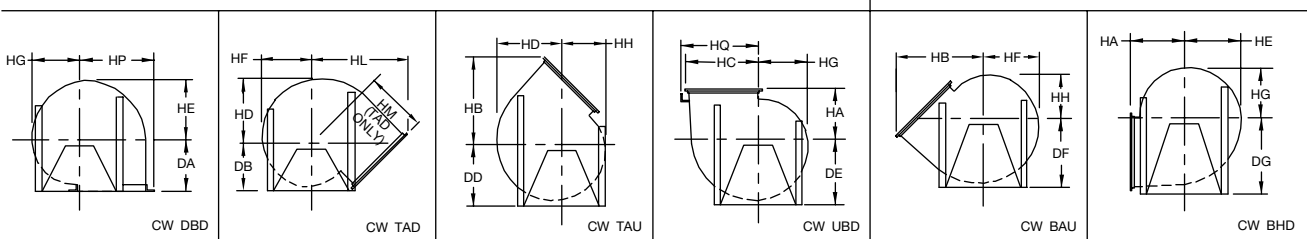
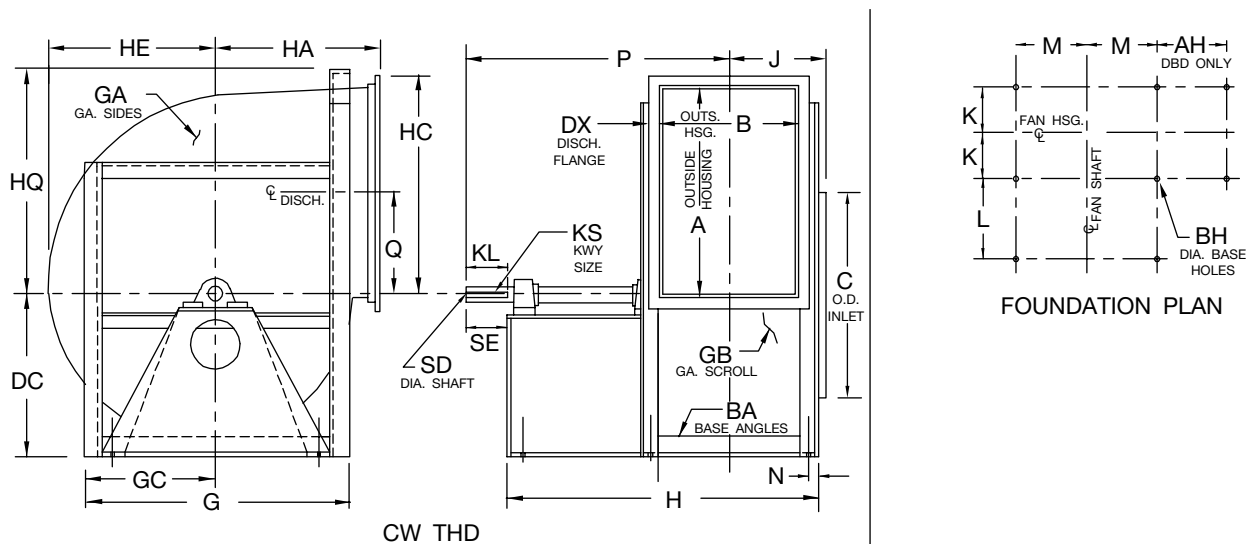
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans size 122-330 with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

SIZE	J	K	KL	KS	L	M	N	P	Q	SD	SE
122	8.50	6.38	4.50	0.38 x 0.19	7.75	6.25	1.13	21.00	6.44	1.687	5.00
135	9.06	6.94	5.00	0.38 x 0.19	8.25	6.88	1.13	22.56	7.13	1.687	5.50
150	9.63	7.50	5.00	0.38 x 0.19	9.75	7.75	1.13	24.63	7.88	1.687	5.50
165	10.25	8.13	5.00	0.50 x 0.25	9.75	8.50	1.13	25.25	8.69	1.937	5.50
182	11.38	9.00	5.50	0.50 x 0.25	11.00	9.13	1.38	27.88	9.63	1.937	6.00
200	12.06	9.69	6.00	0.50 x 0.25	12.00	10.13	1.38	30.06	10.56	2.187	6.50
222	12.94	10.56	6.00	0.50 x 0.25	14.00	11.25	1.38	32.94	11.75	2.187	6.50
245	13.81	11.44	6.50	0.63 x 0.31	15.50	12.38	1.38	36.06	12.94	2.437	7.25
270	14.81	12.44	7.50	0.63 x 0.31	17.50	13.63	1.38	40.06	14.25	2.437	8.25
300	17.00	14.13	8.00	0.63 x 0.31	19.50	15.13	1.88	44.25	15.81	2.687	8.75
330	18.19	15.31	9.00	0.75 x 0.38	21.50	16.63	1.88	48.44	17.50	2.937	9.75

AC9249F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class IV



Notes:

1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

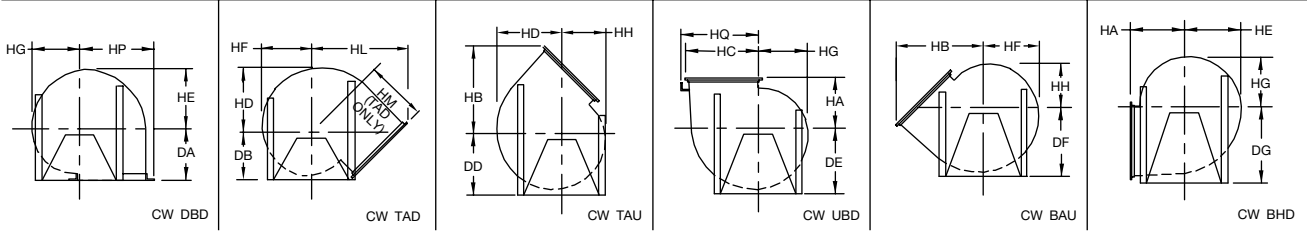
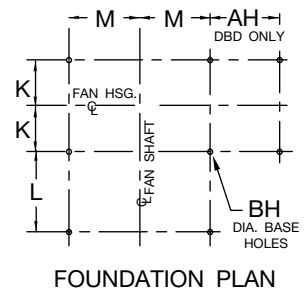
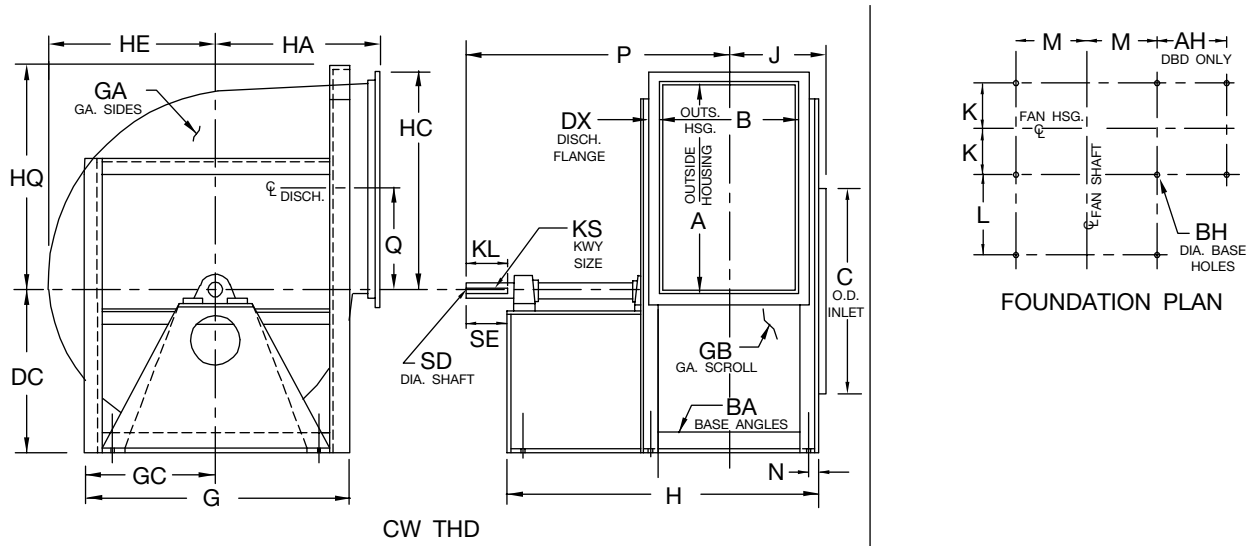
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	G
365	39.00	22.25	29.13	3.00 x 4.00	0.81	38.50	29.00	29.25	29.50	31.50	33.50	35.50	41.50	2.00	49.00
402	42.94	25.44	32.06	3.50 x 5.00	0.81	42.44	32.00	31.75	33.00	35.25	37.00	39.50	46.00	2.00	52.50
445	47.44	28.94	35.44	4.00 x 6.00	0.81	46.88	35.58	36.25	35.50	38.50	40.00	43.25	50.50	2.00	57.50
490	52.25	31.25	38.88	4.00 x 6.00	0.81	51.63	39.00	38.75	39.00	42.25	44.00	47.50	55.75	2.00	62.50
542	57.69	33.94	43.13	4.00 x 6.00	0.81	57.13	43.06	42.25	43.50	46.50	49.00	52.25	61.25	2.50	68.00
600	63.81	37.06	47.56	4.00 x 6.00	0.81	63.13	47.69	45.00	48.00	51.25	54.00	57.50	67.25	2.50	74.00
660	70.00	40.25	52.44	4.00 x 6.00	0.81	69.38	52.44	49.50	52.50	55.75	59.00	63.00	73.75	2.50	81.00
730	77.50	43.75	57.81	4.00 x 6.00	0.81	76.75	58.00	54.25	57.00	61.75	64.50	69.50	81.25	2.50	89.00
807	85.69	48.19	63.88	4.00 x 6.00	0.81	84.88	64.19	59.50	63.00	67.50	72.00	76.50	89.50	2.50	96.50
890	94.38	51.38	70.25	4.00 x 6.00	0.81	93.38	70.00	65.50	69.25	73.75	78.25	85.00	98.25	2.50	107.50

SIZE	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
365	0.25	0.25	24.50	60.13	29.00	49.31	40.75	33.69	31.63	29.75	27.88	26.00	55.88	38.31	42.75	
402	0.25	0.25	26.25	66.13	32.00	54.25	44.69	37.13	34.81	32.75	30.69	28.63	60.44	40.69	47.69	
445	0.25	0.25	28.75	74.50	35.38	59.81	49.19	41.06	38.38	36.13	33.88	31.63	67.13	45.75	53.19	
490	0.25	0.25	31.25	79.88	39.00	65.75	54.00	45.00	42.31	39.81	37.31	34.81	73.00	49.25	58.00	
542	0.25	0.25	34.00	84.13	43.06	72.81	59.94	49.94	46.81	44.06	41.31	38.56	80.31	53.69	63.44	60.38
600	0.25	0.25	37.00	91.63	47.69	80.44	66.06	55.13	51.81	48.75	45.69	42.63	87.69	58.25	69.56	66.38
660	0.25	0.25	40.50	98.50	52.44	88.19	72.25	60.56	56.94	53.50	50.06	46.63	95.50	62.88	75.75	73.00
730	0.25	0.25	44.50	106.88	58.00	97.38	79.75	67.06	63.00	59.25	55.50	51.75	104.88	68.50	83.25	80.38
807	0.25	0.25	48.25	115.88	64.19	107.56	87.94	74.19	69.63	65.50	61.38	57.25	114.38	73.81	91.44	88.50
890	0.25	0.25	53.75	125.25	70.00	117.81	96.63	81.69	76.75	72.19	67.63	63.06	126.00	81.56	100.13	97.13

AC9250F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 1, SWSI, Non-Rotatable, Class IV (cont'd.)



Notes:

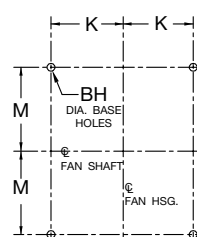
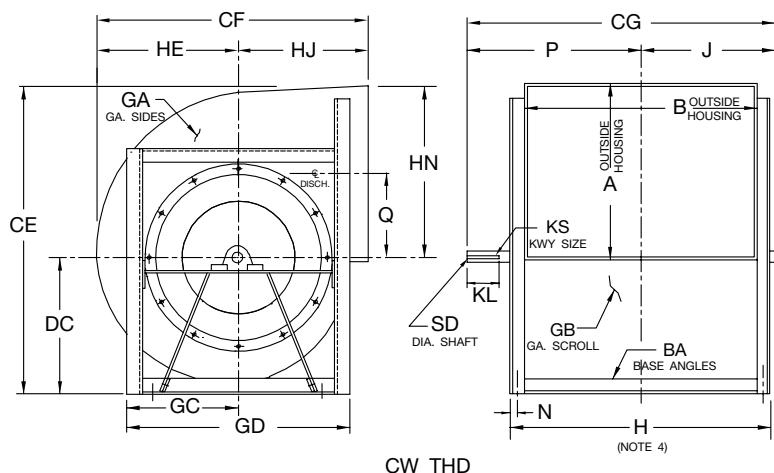
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans with inlet box at 90 degrees or 270 degrees, use "BAU" discharge dimension "DF" for centerline height.

SIZE	J	K	KL	KS	L	M	N	P	Q	SD	SE
365	19.56	16.69	9.00	0.88 x 0.44	23.00	18.63	1.88	51.56	19.25	3.437	10.00
402	22.06	18.69	10.00	0.88 x 0.44	24.50	19.88	2.38	56.06	21.25	3.437	11.00
445	24.75	20.88	10.00	1.00 x 0.50	28.00	21.38	2.88	61.75	23.50	3.937	11.00
490	26.44	22.56	11.00	1.00 x 0.50	30.00	23.88	2.88	66.44	25.88	3.937	12.00
542	28.56	24.69	11.00	1.00 x 0.50	30.00	26.63	2.88	68.56	28.63	4.437	12.00
600	30.81	26.94	12.00	1.25 x 0.63	33.00	29.63	2.88	74.81	31.69	4.937	13.00
660	33.25	29.38	12.00	1.25 x 0.63	35.00	32.63	2.88	79.25	34.75	4.937	13.00
730	35.94	32.06	13.50	1.25 x 0.63	38.00	36.63	2.88	86.44	38.50	5.437	14.50
807	38.94	35.06	13.50	1.25 x 0.63	41.00	40.38	2.88	92.44	42.63	5.437	14.50
890	42.13	38.25	14.00	1.50 x 0.75	44.00	45.88	2.88	99.13	46.94	5.937	15.00

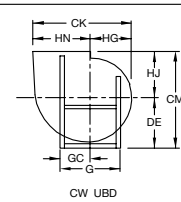
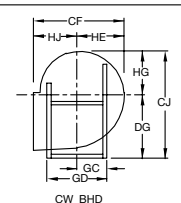
AC9250F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, DWDI, Non-Rotatable, Class I & II



FOUNDATION PLAN



Notes:

1. Inlet bearing bar supports are removable.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For optional flanged outlet and downblast discharge see Dwg. AC14895.
4. Bearing bar supports may extend beyond base angles. See Dwg. AC100648 for dimensions if space limitations are required for mounting fan.

SIZE	A	B	BA	BH	CE	CF	CG		CJ	CK	CM	DC	DE	DG
							CL I	CL II						
122	13.00	17.44	1.50 x 1.50	0.44	23.19	19.81	26.69	28.63	24.31	22.25	20.75	10.25	11.50	15.00
135	14.31	19.44	1.50 x 1.50	0.44	25.50	21.88	28.69	30.63	26.50	24.50	23.00	11.25	12.75	16.25
150	15.88	21.44	1.50 x 1.50	0.44	28.06	24.32	33.13	33.13	29.38	27.19	25.44	12.25	14.00	18.00
165	17.44	23.56	1.50 x 2.00	0.44	30.88	26.76	35.25	35.62	32.00	29.88	27.88	13.50	15.25	19.50
182	19.38	26.00	1.50 x 2.00	0.44	34.06	29.69	38.13	38.50	35.31	33.13	30.75	14.75	16.75	21.50
200	21.19	28.50	1.50 x 2.00	0.56	37.38	32.62	40.63	42.12	38.69	36.31	33.56	16.25	18.25	23.50
222	23.56	31.63	2.00 x 2.00	0.56	41.50	36.25	44.62	46.88	42.81	40.31	37.69	18.00	20.50	26.00
245	25.94	34.81	2.00 x 2.00	0.56	45.88	40.00	49.62	50.75	46.75	44.38	41.50	20.00	22.50	28.25
270	28.63	38.25	2.00 x 2.00	0.56	50.56	44.13	53.00	54.75	51.44	49.00	45.69	22.00	24.75	31.00

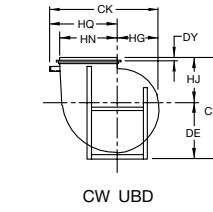
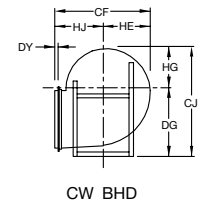
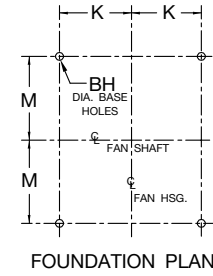
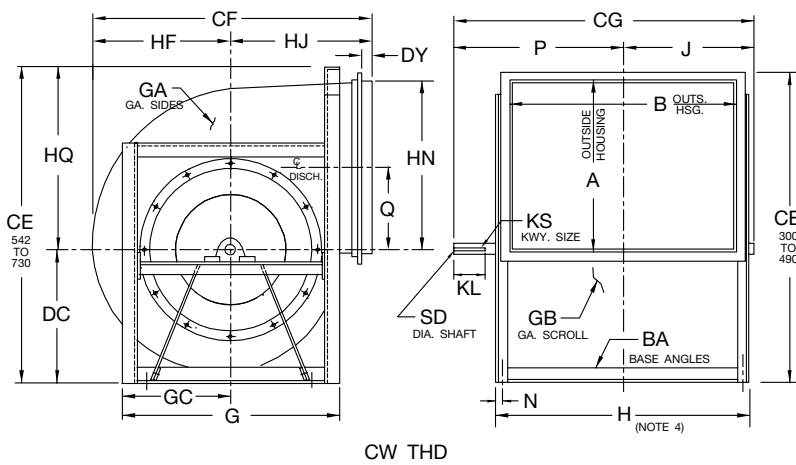
SIZE	G	GA	GB	GC	GD	H	HE	HG	HJ	HN	J		K	KL
											CL I	CL II		
122	19.75	14	14	9.88	18.50	20.50	10.56	9.31	9.25	12.94	11.44	12.38	9.63	3.00
135	21.00	14	14	10.50	19.75	22.50	11.63	10.25	10.25	14.25	12.44	13.38	10.63	3.00
150	22.75	14	14	11.38	21.50	24.50	12.88	11.38	11.44	15.81	14.38	14.38	11.63	3.50
165	24.25	14	14	12.13	24.25	27.63	14.13	12.50	12.63	17.38	15.44	15.56	12.94	3.50
182	26.00	12	14	13.00	26.00	30.00	15.69	13.81	14.00	19.31	16.63	16.75	14.13	4.00
200	28.00	12	14	14.00	28.00	32.50	17.31	15.19	15.31	21.13	17.78	18.56	15.38	4.00
222	31.25	12	14	15.63	31.25	35.63	19.06	16.81	17.19	23.50	19.56	20.63	16.94	4.50
245	33.50	12	14	16.75	33.50	38.88	21.00	18.50	19.00	25.88	21.81	22.31	18.56	5.00
270	36.00	12	14	18.00	36.00	42.25	23.19	20.44	20.94	28.56	23.50	24.31	20.25	5.00

SIZE	KS		M	N	P		Q	SD	
	CL I	CL II			CL I	CL II		CL I	CL II
122	0.25 x 0.13	0.38 x 0.19	6.75	0.63	15.25	16.25	6.44	1.187	1.437
135	0.25 x 0.13	0.38 x 0.19	7.38	0.63	16.25	17.25	7.13	1.187	1.687
150	0.38 x 0.19	0.38 x 0.19	8.25	0.63	18.75	18.75	7.88	1.437	1.687
165	0.38 x 0.19	0.50 x 0.25	8.75	0.88	19.81	20.06	8.69	1.437	1.937
182	0.38 x 0.19	0.50 x 0.25	9.63	0.88	21.50	21.75	9.63	1.687	1.937
200	0.38 x 0.19	0.50 x 0.25	10.63	0.88	22.75	23.56	10.56	1.687	2.187
222	0.50 x 0.25	0.63 x 0.31	11.75	0.88	25.06	26.25	11.75	1.937	2.437
245	0.50 x 0.25	0.63 x 0.31	12.88	0.88	27.81	28.44	12.94	2.187	2.437
270	0.50 x 0.25	0.63 x 0.31	14.13	0.88	29.50	30.44	14.25	2.187	2.687

AC14967D

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, DWDI, Non-Rotatable, Class I & II



Notes:

1. Inlet bearing bar supports are removable.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For optional flanged outlet connection and downblast discharge see Dwg. AC14896.
4. Bearing bar supports may extend beyond base angles. See Dwg. AC1000648 for dimensions if space limitations are required for mounting fan.

SIZE	A	B	BA	BH	CE	CF	CG		CJ	CK
							CL I	CL II		
300	31.81	42.69	2.50 x 2.50	0.56	57.75	49.06	59.13	59.13	57.00	56.00
330	35.13	46.69	2.50 x 2.50	0.56	63.56	54.13	63.13	63.13	62.25	61.56
365	38.69	51.81	2.50 x 2.50	0.56	69.63	60.00	68.88	68.88	68.75	67.88
402	42.63	57.19	3.00 x 3.00	0.81	77.06	66.19	74.13	74.75	76.06	74.62
445	47.13	63.13	3.00 x 3.00	0.81	84.06	73.13	80.00	80.37	83.75	82.31
490	51.94	69.44	3.00 x 3.00	0.81	92.88	80.69	88.00	90.57	91.94	91.07
542	57.38	76.94	3.00 x 4.00	0.81	103.25	89.25	94.75	95.69	101.44	100.94
600	63.50	85.00	3.00 x 4.00	0.81	113.75	98.88	107.07	108.63	111.81	111.31
660	69.69	93.69	3.50 x 5.00	0.81	124.75	108.75	115.81	117.44	123.19	122.19
730	77.25	103.38	3.50 x 5.00	0.81	136.75	120.38	128.00	128.00	136.13	135.13

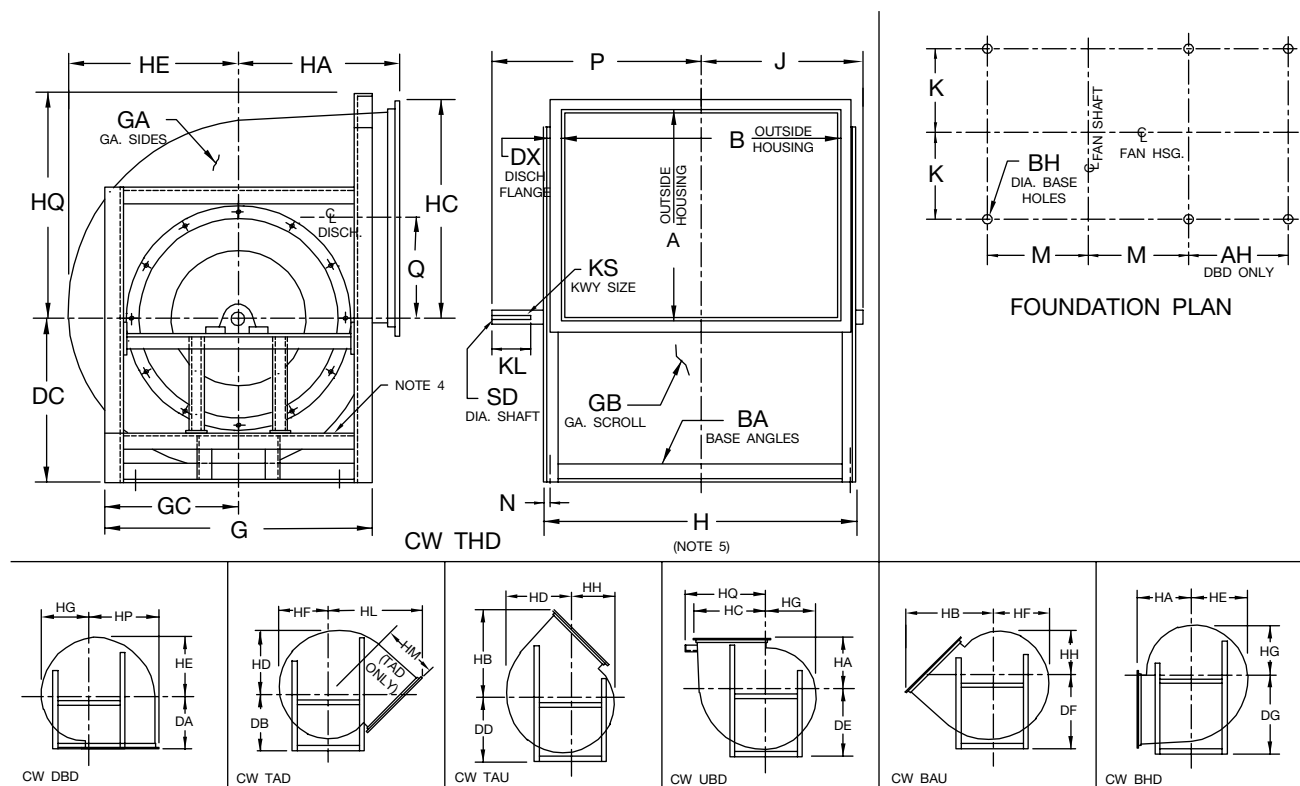
SIZE	CM	DC	DE	DG	DY	G	GA	GB	GC	H	HE	HG	HJ	HN	HQ
300	51.81	24.50	28.50	34.25	1.25	41.00	10	12	20.50	47.75	25.75	22.75	23.31	31.75	
330	56.75	27.00	31.00	37.25	1.50	44.00	10	12	22.00	51.75	28.38	25.00	25.75	35.06	
365	62.00	29.50	33.50	41.00	1.50	48.00	10	12	24.00	56.88	31.50	27.75	28.50	38.63	
402	68.50	33.00	37.00	45.50	1.50	52.50	10	12	26.25	63.25	34.69	30.56	31.50	42.56	
445	74.88	35.50	40.00	50.00	1.50	56.50	10	12	28.25	69.13	38.25	33.75	34.88	47.06	
490	82.50	39.00	44.00	54.75	1.50	61.50	10	12	30.75	75.50	42.19	37.19	38.50	51.88	
542	91.56	43.50	49.00	60.25	1.50	67.00	10	12	33.50	85.00	46.69	41.19	42.56	57.31	59.75
600	101.19	48.00	54.00	62.25	1.50	73.00	10	12	36.50	93.00	51.69	45.56	47.19	63.44	65.75
660	110.94	52.50	59.00	73.25	1.50	80.00	10	12	40.00	103.75	56.81	49.94	51.94	69.63	72.25
730	122.00	57.00	64.50	80.75	1.50	88.00	10	10	44.00	113.38	62.88	55.38	57.50	77.13	79.75

SIZE	J		K	KL	KS		M	N	P		Q	SD	
	CL I	CL II			CL I	CL II			CL I	CL II		CL I	CL II
300	26.25	26.25	22.75	5.50	0.63 x 0.31	0.63 x 0.31	15.88	1.13	32.88	32.88	15.81	2.437	2.437
330	28.25	28.25	24.75	5.50	0.63 x 0.31	0.63 x 0.31	17.38	1.13	34.88	34.88	17.50	2.437	2.437
365	31.13	31.13	27.31	5.50	0.63 x 0.31	0.63 x 0.31	18.88	1.13	37.75	37.75	19.25	2.687	2.687
402	33.50	33.81	30.25	6.00	0.63 x 0.31	0.63 x 0.31	20.88	1.38	40.63	40.94	21.25	2.437	2.687
445	36.44	36.56	33.19	6.00	0.63 x 0.31	0.75 x 0.38	22.88	1.38	43.56	43.81	23.50	2.437	2.937
490	39.94	41.13	36.38	7.00	0.63 x 0.31	0.88 x 0.44	25.38	1.38	48.06	49.44	25.88	2.687	3.437
542	43.75	44.19	40.63	6.00	0.75 x 0.38	0.88 x 0.44	27.63	1.88	51.00	51.50	28.63	2.937	3.437
600	48.88	49.63	44.63	8.00	0.88 x 0.44	1.00 x 0.50	30.63	1.88	58.19	59.00	31.69	3.437	3.937
660	53.25	54.06	49.50	8.00	0.88 x 0.44	1.00 x 0.50	33.13	2.38	62.56	63.38	34.75	3.437	3.937
730	58.81	58.81	54.31	9.00	1.00 x 0.50	1.00 x 0.50	37.13	2.38	69.19	69.19	38.50	3.937	3.937

AC14968F

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3, DWDI, Non-Rotatable, Class I & II



Notes:

1. For slip connection on discharge, contact factory for Dwg. AC15864.
2. Inlet bearing bar supports are removable.
3. "CW" rotation is shown. "CCW" rotation is similar but opposite.
4. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See Dwg. AC1000648 for dimensions if space limitations are required for mounting fan.

SIZE	A	AH	B	BA	BH	DA	DB	DC	DD	DE	DF	DG	DX	G	GA
807	85.44	47.06	114.31	3.50 x 5.00	0.81	64.19	59.50	63.00	67.50	72.00	76.50	89.00	2.50	95.50	10
890	94.13	50.25	126.13	3.50 x 5.00	0.81	70.00	65.50	69.25	73.75	78.25	85.00	97.81	2.50	106.50	7
982	104.00	53.75	139.19	4.00 x 6.00	0.81	77.75	71.50	76.50	80.00	86.50	92.00	108.25	2.50	122.00	7

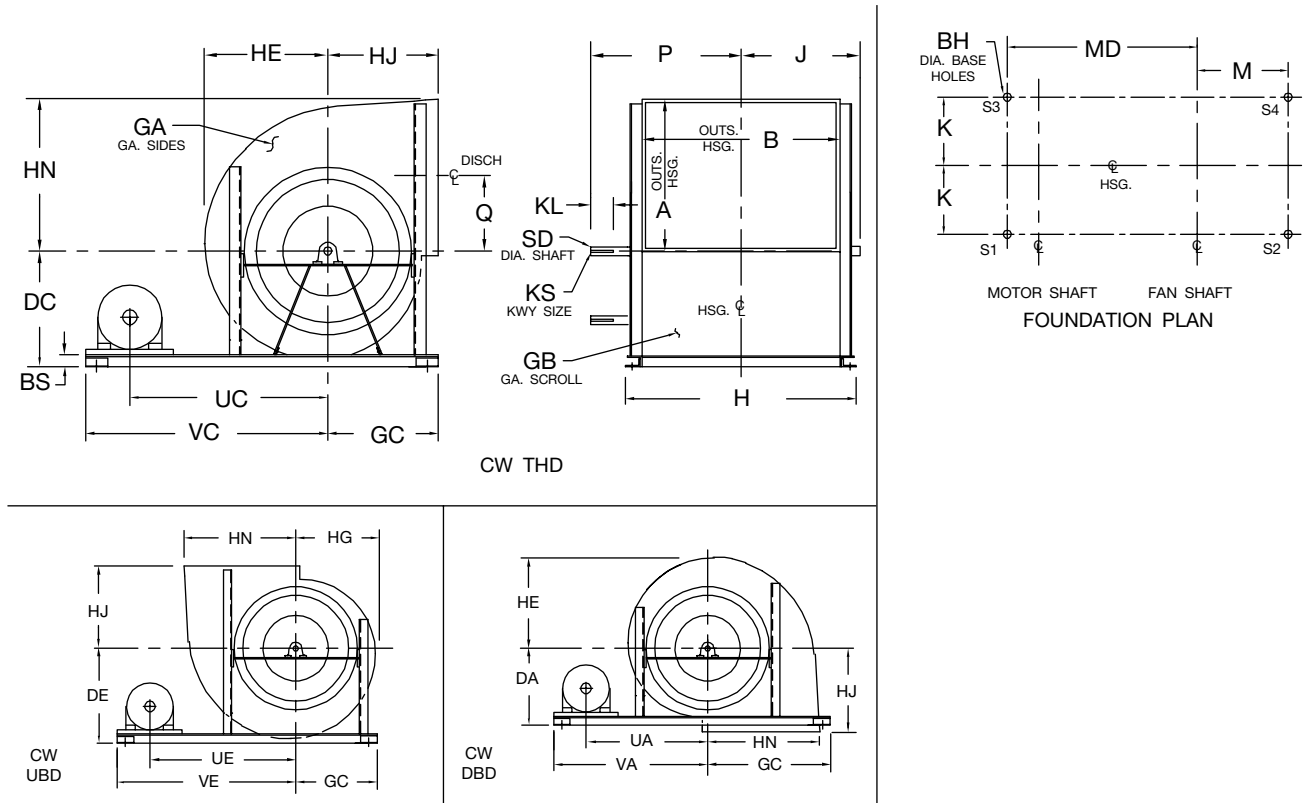
SIZE	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
807	10	47.75	95.50	124.38	64.19	107.50	87.81	74.00	69.50	65.38	61.25	57.13	113.69	73.00	90.31	87.75
890	10	53.25	106.50	136.13	70.00	117.75	96.50	81.56	76.63	72.06	67.50	62.94	125.38	80.75	99.00	96.50
982	7	61.00	122.00	151.25	77.75	130.13	106.31	90.06	84.63	79.56	74.50	69.44	140.06	91.75	109.75	106.75

SIZE	J		K	KL	KS	M	N	P		Q	SD	
	CL I	CL II						CL I	CL II		CL I	CL II
807	64.31	65.56	59.81	9.00	1.00 x 0.50	40.88	2.38	74.69	75.44	42.63	3.937	4.437
890	70.19	71.50	65.69	9.00	1.00 x 0.50	46.38	2.38	80.56	82.00	46.94	3.937	4.437
982	77.81	78.44	72.75	9.00	1.25 x 0.63	53.13	2.88	88.31	88.88	51.81	4.937	5.437

AC9258E

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class I



Notes:

1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, contact factory for Dwg. AC16038.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

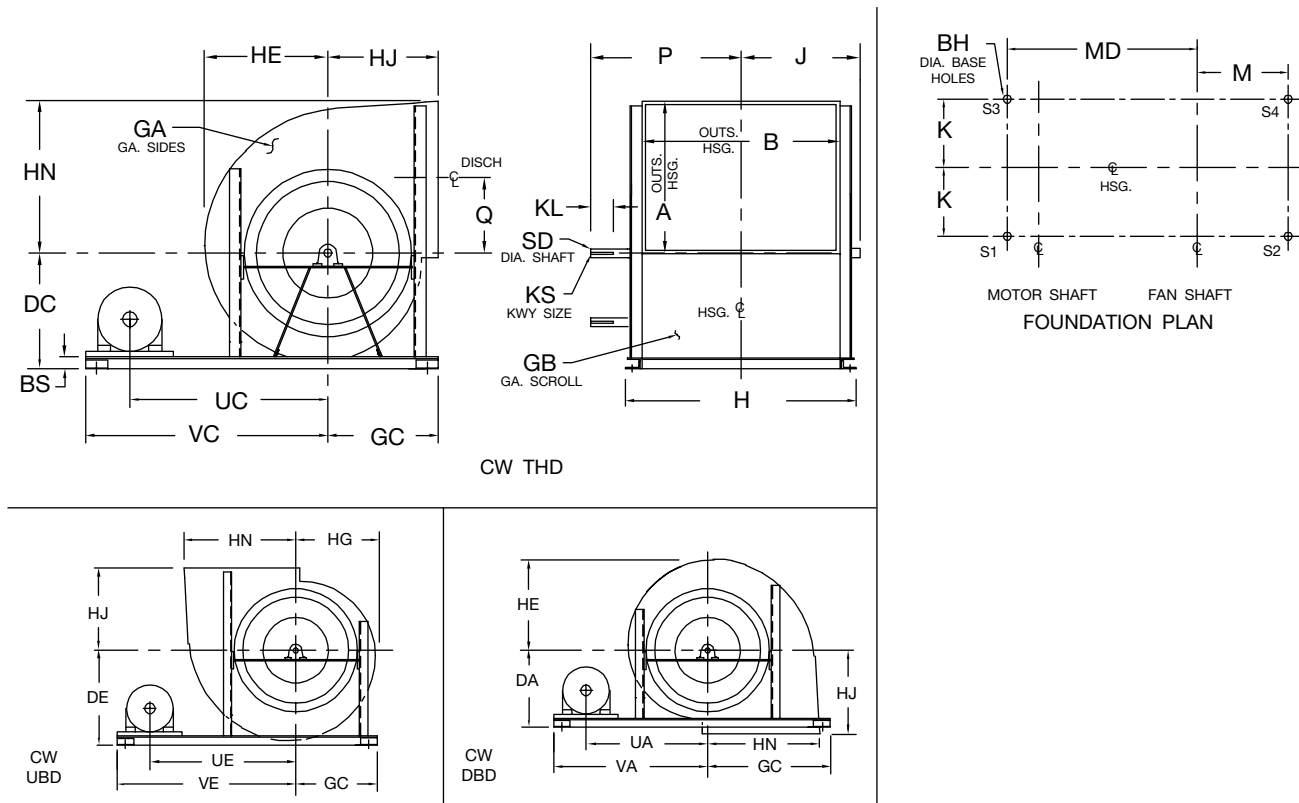
SIZE	A	B	BH	BS	DA	DC	DE	FR	GA	GB	GC			H		HE
											DBD	THD	UBD	DBD	THD/UBD	
122	13.00	17.44	0.69	4.00	12.38	12.38	12.38	184T	14	14	16.00	9.13	11.38	28.00	24.00	10.56
135	14.31	19.44	0.69	4.00	13.00	13.00	13.00	184T	14	14	17.25	9.75	12.00	30.00	26.00	11.63
150	15.88	21.44	0.69	4.00	13.88	13.88	13.88	213T	14	14	18.88	10.63	12.88	32.00	28.00	12.88
165	17.44	23.56	0.69	4.00	14.63	14.63	15.13	215T	14	14	20.38	12.13	13.63	34.13	30.13	14.13
182	19.38	26.00	0.69	4.00	15.50	15.50	16.69	254T	12	14	22.38	13.00	14.50	36.50	32.50	15.69
200	21.19	28.50	0.69	4.00	16.50	16.50	18.31	254T	12	14	24.13	14.00	15.50	39.00	35.00	17.31
222	23.56	31.63	0.69	5.00	18.63	18.63	20.06	254T	12	14	27.00	15.63	17.13	42.38	40.38	19.06
245	25.94	34.81	0.69	5.00	19.75	19.75	22.00	256T	12	14	29.38	18.25	18.25	45.63	43.63	21.00
270	28.63	38.25	0.69	5.00	21.00	21.44	24.19	256T	12	14	32.13	19.50	19.50	49.00	47.00	23.19

SIZE	HG	HJ		HN	J	K		KL	KS	M			MD		
		DBD	THD/UBD			DBD	THD/UBD			DBD	THD	UBD	DBD	THD	UBD
122	9.31	13.88	9.25	12.94	11.44	12.75	10.63	3.00	0.25 x 0.13	13.00	6.13	8.38	23.00	24.25	26.13
135	10.25	14.50	10.25	14.25	12.44	13.75	11.63	3.00	0.25 x 0.13	14.25	6.75	9.00	23.88	25.25	27.38
150	11.38	15.38	11.44	15.81	14.38	14.75	12.63	3.50	0.38 x 0.19	15.88	7.63	9.88	28.13	29.63	32.00
165	12.50	16.13	12.63	17.38	15.44	15.81	13.69	3.50	0.38 x 0.19	17.38	9.13	10.63	29.25	30.88	33.13
182	13.81	17.00	14.00	19.31	16.63	17.00	14.88	4.00	0.38 x 0.19	19.38	10.00	11.50	34.25	36.00	39.00
200	15.19	18.00	15.31	21.13	17.88	18.25	16.13	4.00	0.38 x 0.19	21.13	11.00	12.50	35.50	37.75	40.75
222	16.81	20.13	17.19	23.50	19.56	19.94	18.31	4.50	0.50 x 0.25	24.00	12.63	14.13	37.25	39.50	43.13
245	18.50	21.25	19.00	25.88	21.81	21.56	19.94	5.00	0.50 x 0.25	26.38	15.25	15.25	38.88	41.38	45.25
270	20.44	22.50	20.94	28.56	23.50	23.25	21.63	5.00	0.50 x 0.25	29.13	16.50	16.50	40.75	43.50	47.63

AC16026B

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class I (cont'd.)



Notes:

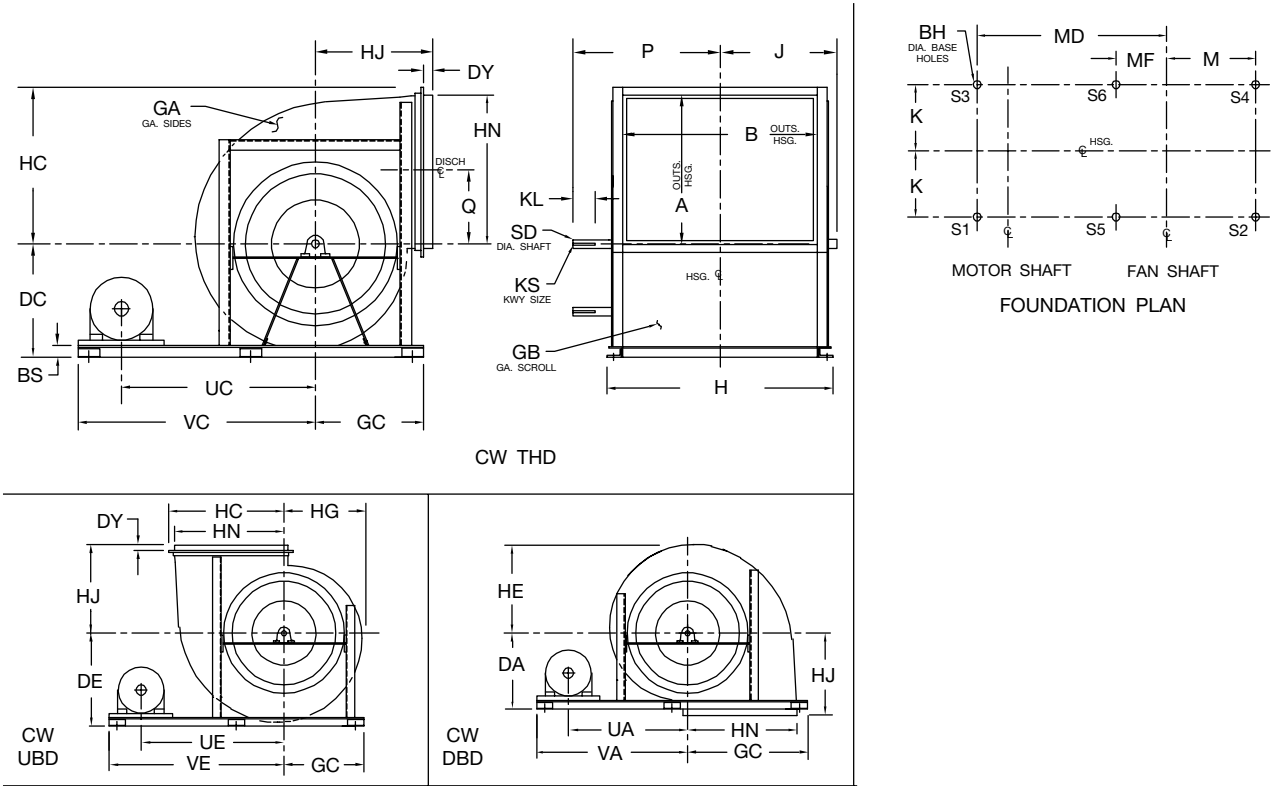
1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, contact factory for Dwg. AC16038.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

SIZE	P	Q	SD	UA	UC	UE	VA	VC	VE
122	15.25	6.44	1.187	19.63	20.88	22.75	26.00	27.25	29.13
135	16.25	7.13	1.187	20.50	21.88	24.00	26.88	28.25	30.38
150	18.75	7.88	1.437	23.63	25.13	27.50	31.13	32.63	35.00
165	19.81	8.69	1.437	24.75	26.38	28.63	32.25	33.88	36.13
182	21.50	9.63	1.687	28.38	30.13	33.13	37.25	39.00	42.00
200	22.75	10.56	1.687	29.63	31.88	34.88	38.50	40.75	43.75
222	25.06	11.75	1.937	31.38	33.63	37.25	40.25	42.50	46.13
245	27.81	12.94	2.187	33.00	35.50	39.38	41.88	44.38	48.25
270	29.50	14.25	2.187	34.88	37.63	41.75	43.75	46.50	50.63

AC16026B

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class I



Notes:

1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, contact factory for Dwg. AC16039.
4. Dimension "MF" applies only when six (6) mounting brackets are required.
5. See ES4-98 for point loads at location "S1," "S2," etc.
6. See Dwg. AC16028 for sizes 542-660. Contact factory for BHD and other UBD orientations.

SIZE	A	B	BH	BS	DA	DC	DE	DY	FR	GA	GB	GC		H		HC
												DBD	THD/UBD	DBD	THD/UBD	
300	31.81	42.69	0.69	5.00	23.00	23.75	26.75	1.25	284T	10	12	35.25	21.50	53.50	51.50	33.25
330	35.13	46.69	0.69	5.00	24.50	26.00	29.38	1.50	286T	10	12	38.63	23.00	57.50	55.50	36.56
365	38.69	51.81	0.81	6.00	27.50	28.75	32.50	1.50	324T	10	12	42.63	25.50	62.63	62.63	40.13
402	42.63	57.19	0.81	6.00	30.00	31.56	35.69	1.50	326T	10	12	46.63	27.25	68.00	68.00	44.06
445	47.13	63.13	0.81	6.00	33.38	34.75	39.25	1.50	364T	10	12	51.13	29.25	73.88	73.88	48.56
490	51.94	69.44	0.81	6.00	37.00	38.19	43.19	1.50	365T	10	12	55.88	31.75	80.25	80.25	53.88

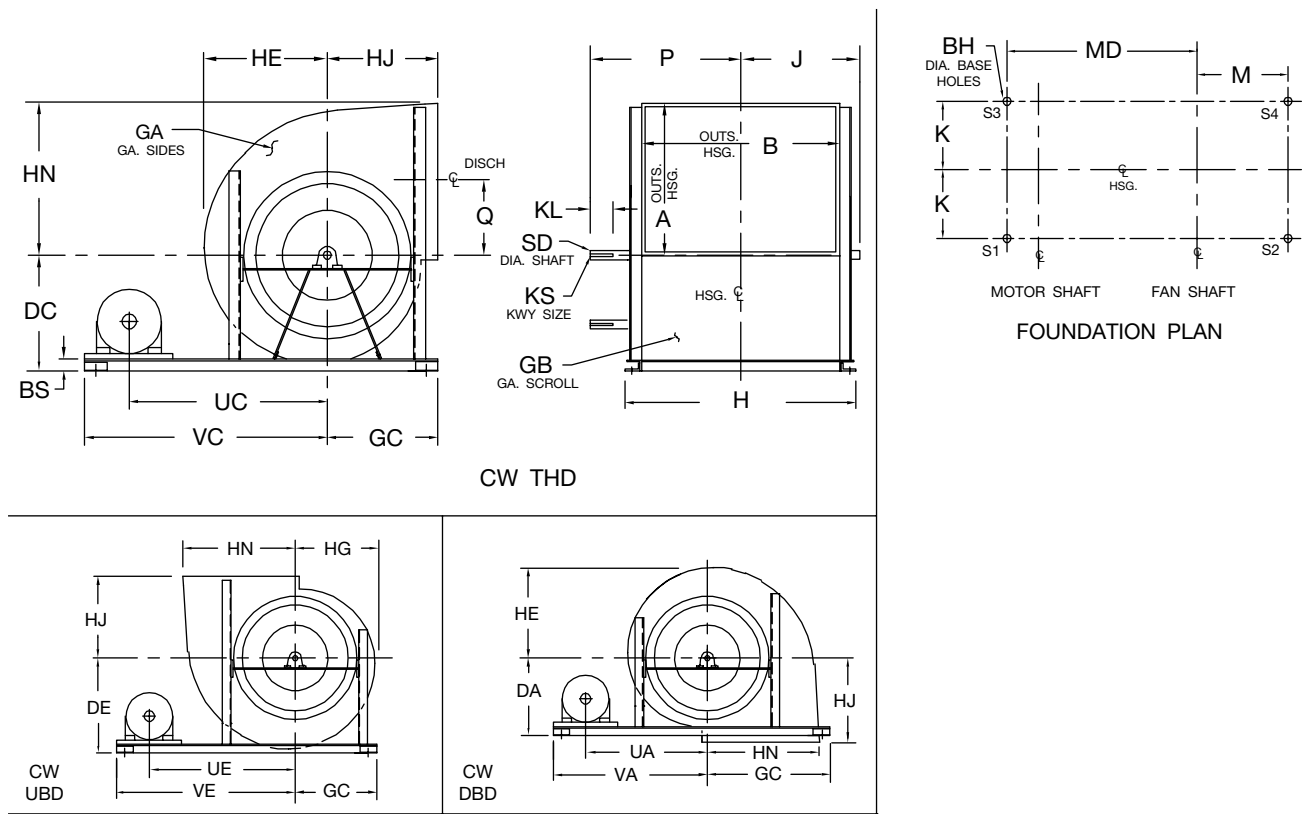
SIZE	HE	HG	HJ		HN	J	K		KL	KS	M		MD		
			DBD	THD/UBD			DBD	THD/UBD			DBD	THD	UBD		
300	25.75	22.75	24.50	23.31	31.75	26.25	25.50	23.88	5.50	0.63 x 0.31	32.25	18.50	45.63	48.63	53.00
330	28.38	25.00	26.00	25.75	35.06	28.25	27.50	25.88	5.50	0.63 x 0.31	35.63	20.00	47.75	51.00	55.63
365	31.50	27.75	29.00	28.50	38.63	31.13	30.06	28.94	5.50	0.63 x 0.31	39.63	22.50	54.13	57.88	63.13
402	34.69	30.56	31.50	31.50	42.56	33.50	32.75	31.63	6.00	0.63 x 0.31	43.63	24.25	56.75	60.63	66.25
445	38.25	33.75	34.88	34.88	47.06	36.44	35.69	34.56	6.00	0.63 x 0.31	48.13	26.25	64.00	68.38	74.38
490	42.19	37.19	38.50	38.50	51.88	39.94	38.88	37.75	7.00	0.63 x 0.31	52.88	28.75	66.75	71.63	78.13

SIZE	MF		P	Q	SD	UA	UC	UE	VA	VC	VE
	DBD	UBD									
300	—	—	32.88	15.81	2.437	38.75	41.75	46.13	48.63	51.63	56.00
330	—	—	34.88	17.50	2.437	40.88	44.13	48.75	50.75	54.00	58.63
365	—	—	37.75	19.25	2.687	45.75	49.50	54.75	57.13	60.88	66.13
402	—	—	40.63	21.25	2.437	48.38	52.25	57.88	59.75	63.63	69.25
445	7.94	—	43.56	23.50	2.437	54.25	58.63	64.63	67.00	71.38	77.38
490	6.94	24.69	48.06	25.88	2.687	57.00	61.88	68.38	69.75	74.63	81.13

AC16027C

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class II



Notes:

1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, see Dwg. AC16044.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

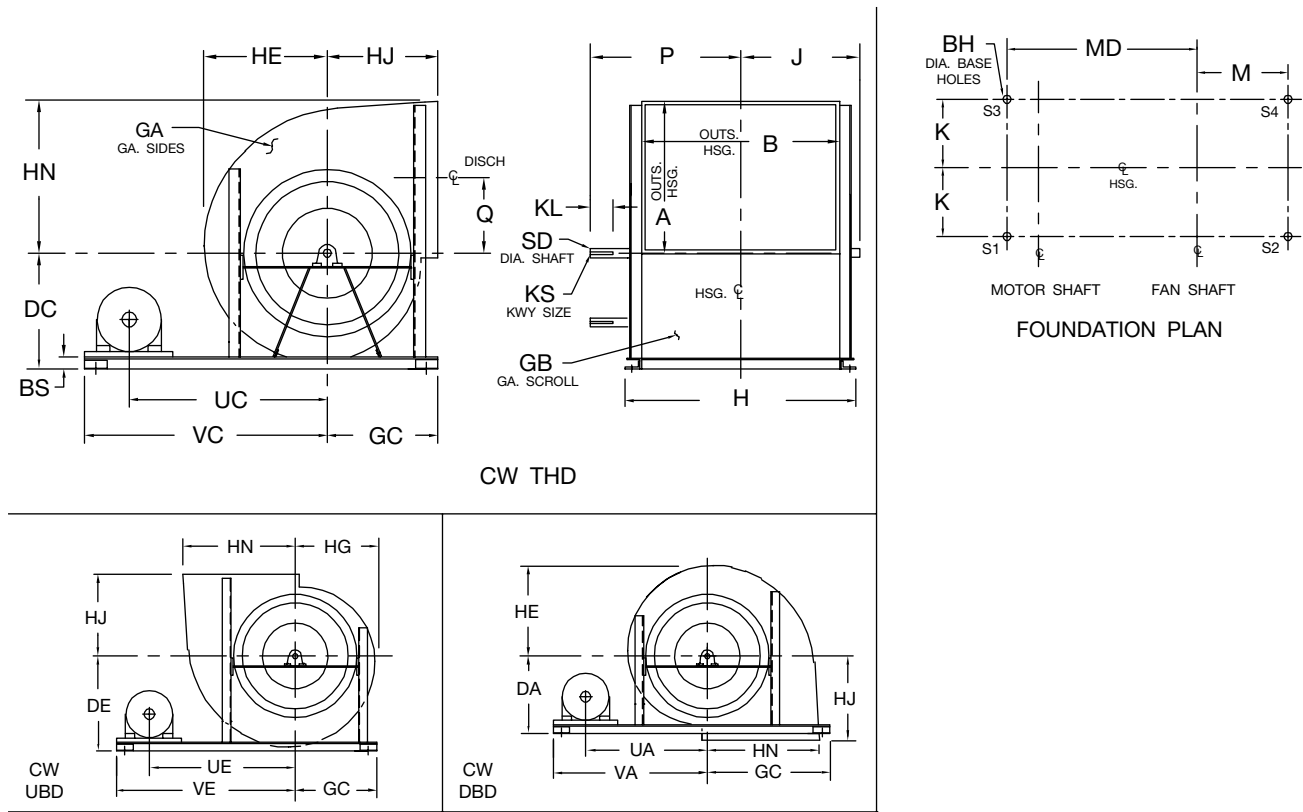
SIZE	A	B	BH	BS	DA	DC	DE	FR	GA	GB	GC			H		HE
											DBD	THD	UBD	DBD	THD/UBD	
122	13.00	17.44	0.69	4.00	12.38	12.38	12.38	215T	14	14	16.00	9.13	11.38	28.00	24.00	10.56
135	14.31	19.44	0.69	4.00	13.00	13.00	13.00	254T	14	14	17.25	9.75	12.00	30.00	26.00	11.63
150	15.88	21.44	0.69	4.00	13.88	13.88	13.88	254T	14	14	18.88	10.63	12.88	32.00	28.00	12.88
165	17.44	23.56	0.69	4.00	14.63	14.63	15.13	256T	14	14	20.38	12.13	13.63	34.13	30.13	14.13
182	19.38	26.00	0.69	4.00	15.50	15.50	16.69	284T	12	14	22.38	13.00	14.50	36.50	32.50	15.69
200	21.19	28.50	0.69	4.00	16.50	16.50	18.31	284T	12	14	24.13	14.00	15.50	39.00	35.00	17.31
222	23.56	31.63	0.69	5.00	18.63	18.63	20.06	286T	12	14	27.00	15.63	17.13	42.38	40.38	19.06
245	25.94	34.81	0.69	5.00	19.75	19.75	22.00	324T	12	14	29.38	18.25	18.25	45.63	43.63	21.00
270	28.63	38.25	0.69	5.00	21.00	21.44	24.19	326T	12	14	32.13	19.50	19.50	49.00	47.00	23.19

SIZE	HG	HJ		HN	J	K		KL	KS	M			MD		
		DBD	THD/UBD			DBD	THD/UBD			DBD	THD	UBD	DBD	THD	UBD
122	9.31	13.88	9.25	12.94	12.38	12.75	10.63	3.00	0.38 x 0.19	13.00	6.13	8.38	26.13	27.38	29.25
135	10.25	14.50	10.25	14.25	13.38	13.75	11.63	3.00	0.38 x 0.19	14.25	6.75	9.00	30.63	32.00	34.13
150	11.38	15.38	11.44	15.81	14.38	14.75	12.63	3.50	0.38 x 0.19	15.88	7.63	9.88	31.75	33.25	35.63
165	12.50	16.13	12.63	17.38	15.56	15.81	13.69	3.50	0.50 x 0.25	17.38	9.13	10.63	32.88	34.50	36.75
182	13.81	17.00	14.00	19.31	16.75	17.00	14.88	4.00	0.50 x 0.25	19.38	10.00	11.50	36.75	38.50	41.50
200	15.19	18.00	15.31	21.13	18.56	18.25	16.13	4.00	0.50 x 0.25	21.13	11.00	12.50	38.00	40.25	43.25
222	16.81	20.13	17.19	23.50	20.63	19.94	18.31	4.50	0.63 x 0.31	24.00	12.63	14.13	39.75	42.00	45.63
245	18.50	21.25	19.00	25.88	22.31	21.56	19.94	5.00	0.63 x 0.31	26.38	15.25	15.25	45.00	47.50	51.38
270	20.44	22.50	20.94	28.56	24.31	23.25	21.63	5.00	0.63 x 0.31	29.13	16.50	16.50	46.88	49.63	54.00

AC16032B

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class II (cont'd.)



Notes:

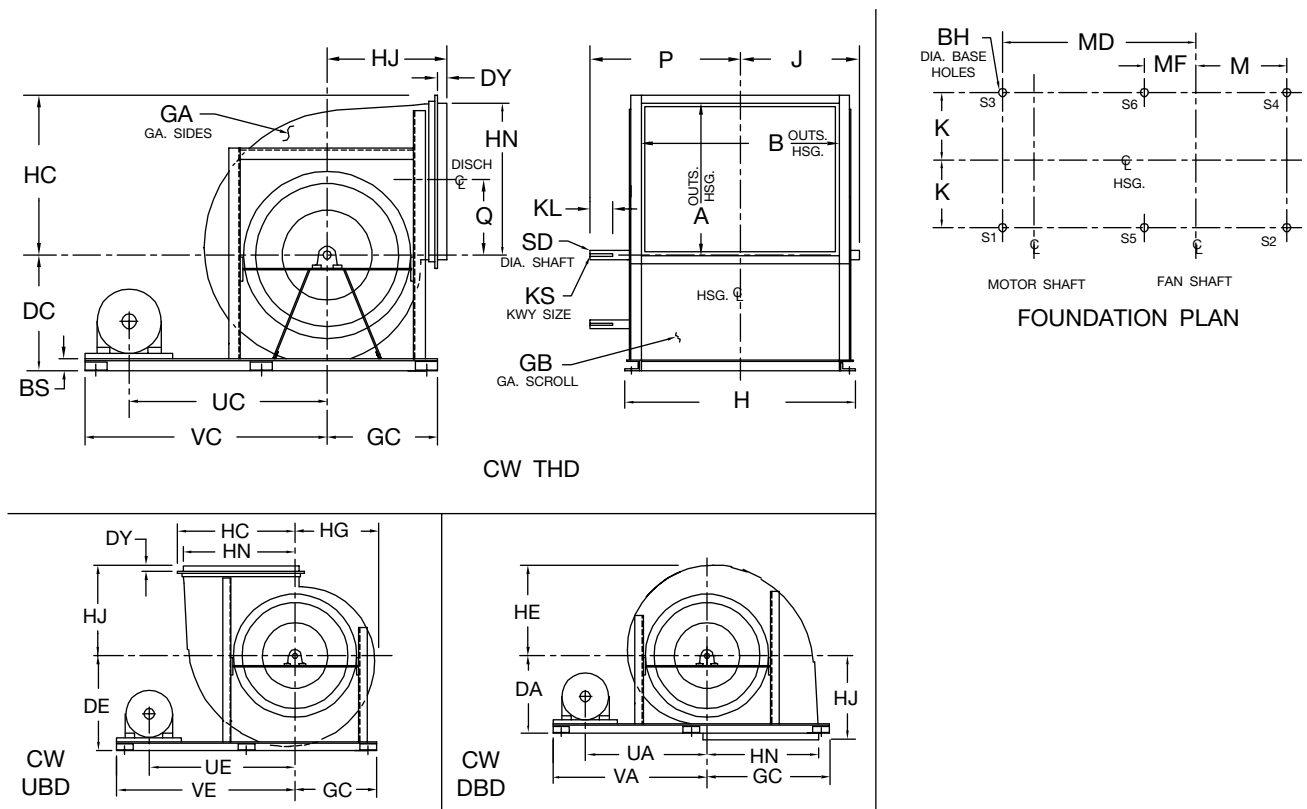
1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, see Dwg. AC16044.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

SIZE	P	Q	SD	UA	UC	UE	VA	VC	VE
122	16.25	6.44	1.437	21.63	22.88	24.75	29.13	30.38	32.25
135	17.25	7.13	1.687	24.75	26.13	28.25	33.63	35.00	37.13
150	18.75	7.88	1.687	25.88	27.38	29.75	34.75	36.25	38.63
165	20.06	8.69	1.937	27.00	28.63	30.88	35.88	37.50	39.75
182	21.75	9.63	1.937	29.88	31.63	34.63	39.75	41.50	44.50
200	23.56	10.56	2.187	31.13	33.38	36.38	41.00	43.25	46.25
222	26.25	11.75	2.437	32.88	35.13	38.75	42.75	45.00	48.63
245	28.44	12.94	2.437	36.63	39.13	43.00	48.00	50.50	54.38
270	30.44	14.25	2.687	38.50	41.25	45.63	49.88	52.63	57.00

AC16032B

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class II



Notes:

1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, contact factory for Dwg. AC16045.
4. Dimension "MF" applies only when six (6) mounting brackets are required.
5. See ES4-98 for point loads at location "S1," "S2," etc.
6. See Dwg. AC16034 for sizes 542-660. Contact factory for BHD and other UBD orientations.

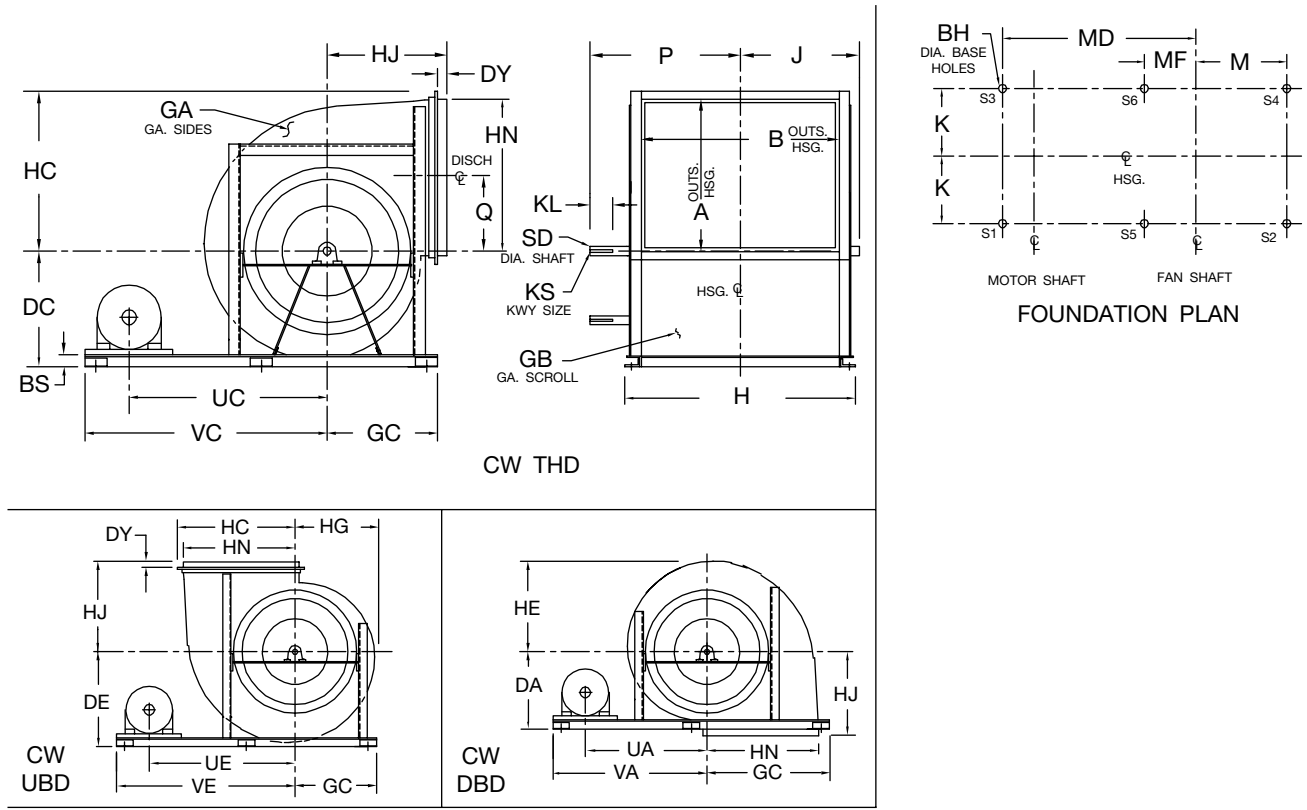
SIZE	A	B	BH	BS	DA	DC	DE	DY	FR	GA	GB	GC		H		HC
												DBD	THD/UBD	DBD	THD/UBD	
300	31.81	42.69	0.69	5.00	23.00	23.75	26.75	1.25	364T	10	12	35.25	21.50	53.50	51.50	33.25
330	35.13	46.69	0.69	5.00	24.50	26.00	29.38	1.50	365T	10	12	38.63	23.00	57.50	55.50	36.56
365	38.69	51.81	0.81	6.00	27.50	28.75	32.50	1.50	365T	10	12	42.63	25.50	62.63	62.63	40.13
402	42.63	57.19	0.81	6.00	30.00	31.56	35.69	1.50	405T	10	12	46.63	27.25	68.00	68.00	44.06
445	47.13	63.13	0.81	6.00	33.38	34.75	39.25	1.50	445T	10	12	51.13	29.25	73.88	73.88	48.56
490	51.94	69.44	0.81	6.00	37.00	38.19	43.19	1.50	445T	10	12	55.88	31.75	80.25	80.25	53.88

SIZE	HE	HG	HJ		HN	J	K		KL	KS	M		MD		
			DBD	THD/UBD			DBD	THD/UBD			DBD	THD	UBD		
300	25.75	22.75	24.50	23.31	31.75	26.25	25.50	23.88	5.50	0.63 x 0.31	32.25	18.50	53.50	56.50	61.25
330	28.38	25.00	26.00	25.75	35.06	28.25	27.50	25.88	5.50	0.63 x 0.31	35.63	20.00	55.75	59.13	64.13
365	31.50	27.75	29.00	28.50	38.63	31.13	30.06	28.94	5.50	0.63 x 0.31	39.63	22.50	58.50	62.25	67.63
402	34.69	30.56	31.50	31.50	42.56	33.81	32.75	31.63	6.00	0.63 x 0.31	43.63	24.25	67.00	71.00	77.13
445	38.25	33.75	34.88	34.88	47.06	36.56	35.69	34.56	6.00	0.75 x 0.38	48.13	26.25	73.68	78.13	84.63
490	42.19	37.19	38.50	38.50	51.88	41.13	38.88	37.75	7.00	0.88 x 0.44	52.88	28.75	76.88	81.75	88.75

AC16033C

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

Arrangement 3F, DWDI, Non-Rotatable, Class II (cont'd.)



Notes:

1. "CW" rotation, motor position "Z" shown. "CCW" rotation, motor position "W" is similar but opposite.
2. Standard Arr. 3F motor location is on the left for "CW" rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
3. For optional flanged outlet, contact factory for Dwg. AC16045.
4. Dimension "MF" applies only when six (6) mounting brackets are required.
5. See ES4-98 for point loads at location "S1," "S2," etc.
6. See Dwg. AC16034 for sizes 542-660. Contact factory for BHD and other UBD orientations.

SIZE	MF			P	Q	SD	UA	UC	UE	VA	VC	VE
	DBD	THD	UBD									
300	—	—	—	32.88	15.81	2.437	43.75	46.75	51.50	56.50	59.50	64.25
330	—	—	—	34.88	17.50	2.437	46.00	49.38	54.38	58.75	62.13	67.13
365	—	—	—	37.75	19.25	2.687	48.75	52.50	57.88	61.50	65.25	70.63
402	11.69	—	—	40.94	21.25	2.687	55.63	59.63	65.75	70.00	74.00	80.13
445	12.75	—	29.19	43.81	23.50	2.937	61.00	65.50	72.00	76.63	81.13	87.63
490	12.00	26.50	30.00	49.44	25.88	3.437	64.25	69.13	76.13	79.88	84.75	91.75

AC16033C

DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

SWSI

Fans shall be Model CB-SW Backward Inclined, as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound 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 be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG).

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. All fans shall be capable of operating over the minimum pressure class limits as specified in AMCA Standard 99.

HOUSING — CB fan housings shall be of heavy gauge, continuously welded construction. Housings with lock seams or partially welded construction are not acceptable. Discharge flanges are to be provided for rigidity and duct connection. Housings shall be suitably braced to prevent vibration or pulsation. Housings shall have tapered spun, aerodynamically designed inlet cones or funnels providing stable flow and high rigidity.

Class I and II sizes 270 and smaller shall be of the rotatable design, convertible to 8 standard discharge configurations.

WHEEL — CB backward inclined wheels shall be single thickness plate type, designed for maximum efficiency and quiet operation, and shall be solid welded to the rim and back plate. Partial welding will not be acceptable on airfoil or backward inclined blades. All wheels shall be statically and dynamically balanced.

SHAFT — Shafts shall be AISI 1040 or 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, spherical roller or adapter mounted anti-friction ball, self-aligning, pillow block type and selected for a minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum fan RPM.

DRIVE — Motor sheaves shall be cast iron, variable pitch on applications 10 HP and smaller, and fixed pitch on 15 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.

ACCESSORIES — When specified, accessories such as belt guards, weather covers, access doors, companion flanges, variable inlet vanes, outlet dampers, piezometer ring airflow measurement device, inlet boxes, shaft coolers, shaft seals, inlet screens, etc., shall be provided by Aerovent to maintain one source responsibility.

When specified, fans shall be supplied with internal or nested type variable inlet vanes for wheel diameters 161/2" and larger. Cantilevered vane blades are to be used through Size 660 to minimize air performance insertion losses and noise. The operating mechanism shall be out of the inlet airstream.

FACTORY BALANCE AND RUN TESTING — All fan wheels shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3. This corresponds to a Balance Quality Grade G6.3. All assembled fans are test run at the rated operating speed or at the maximum RPM of the fan. Vibration readings are recorded in the horizontal, vertical and axial directions on both bearings. Trim balancing is performed if necessary to maintain BV-3 vibration limits. Records shall be maintained and a written copy shall be available upon request.

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

DWDI

Fans shall be Model CB-DW Backward Inclined, as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Performance ratings shall conform to AMCA Standard 205 (fan efficiency grade), 211 (air performance) and 311 (sound 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 be licensed to bear the AMCA certified ratings seal for both sound and air, and fan efficiency grade (FEG).

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. All fans shall be capable of operating over the minimum pressure class limits as specified in AMCA Standard 99.

HOUSING — CB fan housings shall be of heavy gauge, continuously welded construction. Housings with lock seams or partially welded construction are not acceptable. Housings shall be suitably braced to prevent vibration or pulsation. Housings shall have spun, aerodynamically designed inlet cones or inlet venturies for smooth airflow into the wheels.

WHEEL — Wheels shall have tapered spun wheel cones or shrouds, providing stable flow and high rigidity. Wheels shall be of the non-overloading type. CB backward inclined wheels shall be single thickness plate type, continuously welded to the rim and back plate. Blades shall be designed for maximum efficiency and quiet operation. Partial welding will not be acceptable on airfoil or backward inclined blades. Smaller sizes may use extruded aluminum blades. All wheels shall be statically and dynamically balanced. The complete fan assembly shall be test balanced at the operating speed prior to shipment.

SHAFT — Shafts shall be AISI 1040 or 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, spherical roller or adapter mounted anti-friction ball, self-aligning, pillow block type and selected for a minimum average bearing life (AFBMA L-50) in excess of 200,000 hours at the maximum fan RPM.

DRIVE — Motor sheaves shall be cast iron, variable pitch on applications 10 HP and smaller, and fixed pitch on 15 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.

ACCESSORIES — When specified, accessories such as belt guards, access doors, companion flanges, variable inlet vanes, outlet dampers, piezometer ring airflow measurement device, inlet boxes, shaft coolers, shaft seals, inlet screens, etc., shall be provided by Aerovent to maintain one source responsibility.

When specified, fans shall be supplied with internal or nested type variable inlet vanes for wheel diameters 161/2" and larger. Cantilevered vane blades are to be used through Size 660 to minimize air performance insertion losses and noise. The operating mechanism shall be out of the inlet airstream. Double width fans shall have interconnecting linkage to ensure operation in unison.

FACTORY BALANCE AND RUN TESTING — All fan wheels shall be statically and dynamically balanced in accordance with ANSI/AMCA 204 "Balance Quality and Vibration Levels for Fans" to Fan Application Category BV-3. This corresponds to a Balance Quality Grade G6.3. All assembled fans are test run at the rated operating speed or at the maximum RPM of the fan. Vibration readings are recorded in the horizontal, vertical and axial directions on both bearings. Trim balancing is performed if necessary to maintain BV-3 vibration limits. Records shall be maintained and a written copy shall be available upon request.

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

**PROPELLER FANS | TUBEAXIAL & VANEAXIAL FANS | CENTRIFUGAL FANS & BLOWERS | ROOF VENTILATORS
INDUSTRIAL AIR HANDLERS | AIR MAKE-UP | FIBERGLASS FANS | CUSTOM FANS**



AEROVENT
A Twin City Fan Company

AEROVENT 
INDUSTRIAL VENTILATION SYSTEMS

WWW.AEROVENT.COM

5959 Trenton Lane N | Minneapolis, MN 55442 | Phone: 763-551-7500 | Fax: 763-551-7501