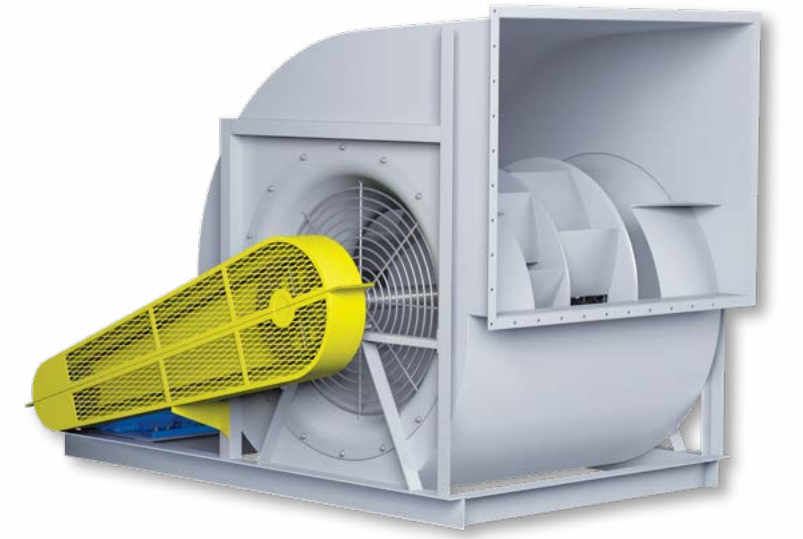
AEROVENT

INDUSTRIAL VENTILATION SYSTEMS

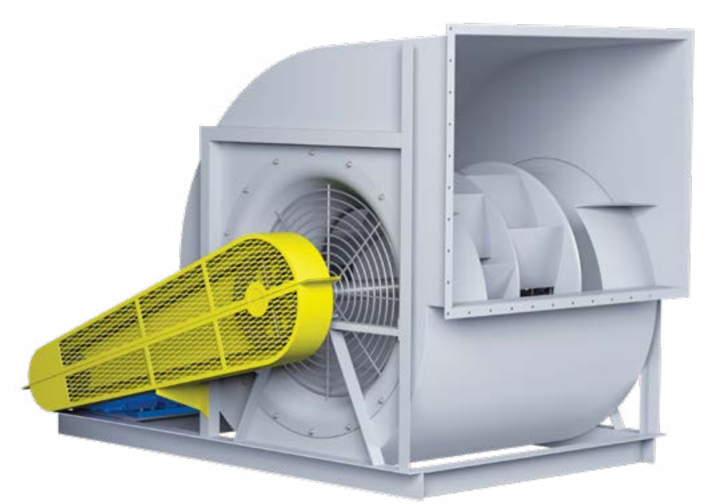
AIRFOIL FANS



MODELS: CAE-SW / CAE-DW

CATALOG 725

APRIL 2024



CAE DWDI
Arrangement 3F

CAE-SW
Arrangement 8

Models CAE-SW and CAE-DW are available with the UL/cUL 705 listing for electrical, File No. E158680.

Aerovent, a Twin City Fan Company, certifies that the Model CAE-SW and CAE-DW fans shown herein are licensed to bear the AMCA Seal. Certified performance data may be found in Aerovent's Fan Selector software.

Scan the QR code to search Aerovent's AMCA-certified products.

Models

CAE-SW I CAE-DW

This catalog features the CAE airfoil impeller design. It includes both the SWSI (single width, single inlet) and the DWDI (double width, double inlet) designs. The newly designed airfoil blades offer higher efficiencies and better sound characteristics than our previous designs.

Aerovent has established itself as a leader in the design and manufacture of quality air moving equipment and continues to advance by implementing a philosophy that stresses quality in all of its operations. Our products are known for their rugged construction and reliability of operation. Aerovent offers flexibility in design and construction of fans coupled with superior service before and after the sale.

Typical Applications Include

Air Handling Units, General HVAC, Combustion Air Supply, Filtration and Drying systems, Fume Hood and Spray Booth Exhaust Systems, Air Pollution Control (Clean Side of Dust Collectors) and other Industrial Processes

Arrangements

Available in Single Width Arrangements 1, 3, 3F, 3SI, 7SI, 8, 9, 9F, 9H and 10

Available in Double Width Arrangements 3, 3DI, 3F, 7 and 7DI

Drive Configurations

Available in Both Direct and Belt Driven Configurations

Impeller Types

Airfoil

Standard Construction

Class I, II, III and IV

Optional Construction

Aluminum, High Temp and Spark Resistant

Certifications

AMCA Sound/Air, FEI, UL 705 Listed for Electrical

For complete product performance, drawings and available accessories, download our Fan Selector software at *aerovent.com*.

Models

CAE-SW I CAE-DW

Model CAE-SW

Sizes
12.25" to 98.25" impeller diameters

Performance
Airflow to 233,100 CFM
Static pressure to 20" w.g.

Arrangements
Available in Arrangements 1, 3, 3F, 3SI, 4, 7SI, 8, 9, 9F, 9H, 10

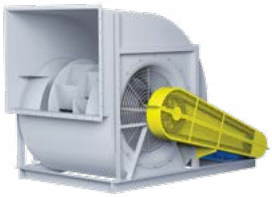
Model CAE-DW

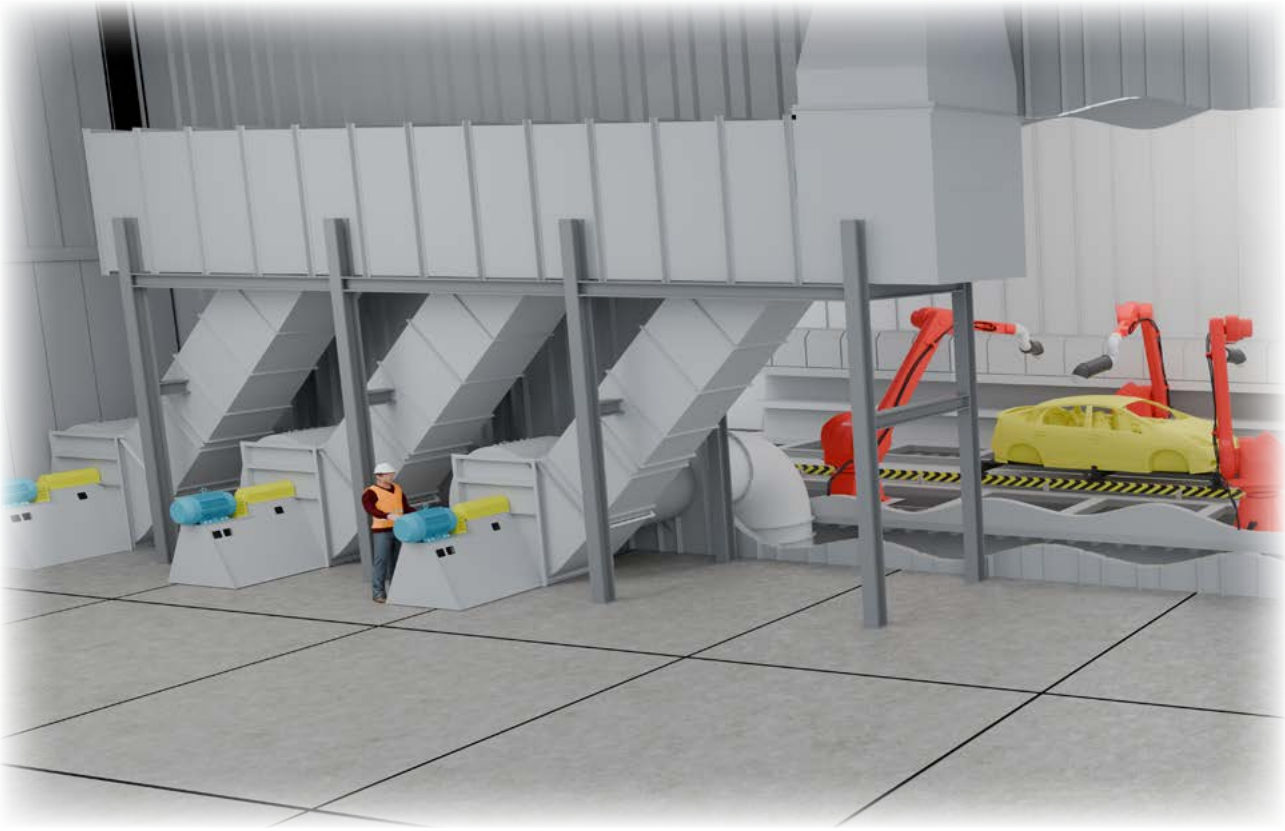
Sizes
12.25" to 98.25" impeller diameters

Performance
Airflow to 419,500 CFM
Static pressure to 14" w.g.

Arrangements
Available in Arrangements 3, 3F, 3DI, 7DI

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS



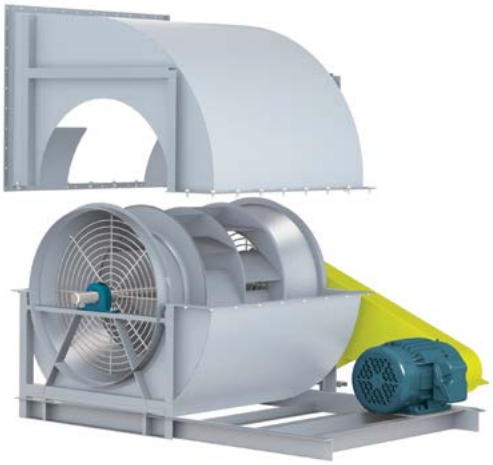


Automotive Paintbooth Application

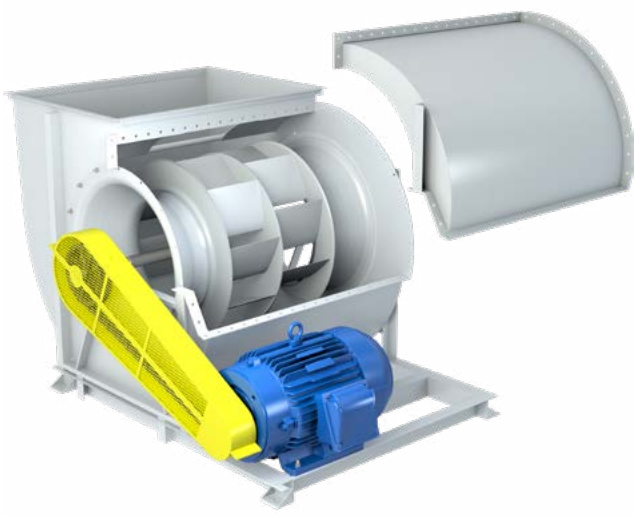
Construction Features

CAE-SW Impeller

CAE-DW Impeller



Split Housings
(Horizontal or Pie-Shaped)



Optional Construction:

- Split Housings
- High Temperature Construction (see page 5)

Impeller Construction

High efficiency, non-overloading airfoil impellers are provided on all sizes and arrangements. Impellers shall have precision spun, flat inlet cones to allow higher efficiencies over the performance range of the fan. Aluminum impellers using extruded aluminum blades are provided as standard on sizes 165 and smaller and are available as an option on larger units.

The CAE-DW impellers shall have staggered blades for improved sound characteristics. All hollow blade impellers shall be continuously-welded around all edges. All impellers shall be statically and dynamically balanced on precision electronic balancers to a Balance Quality Grade G6.3 per ANSI/AMCA 204 or better.

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 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. CAE-SW fans Class I and II, sizes 270 and smaller in Arrangements 1, 4 and 9 are field rotatable to any standard discharge position. To help reduce overall heights, all CAE-DW 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 anti-friction ball (CAE-DW bearings are adapter mounted), 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.

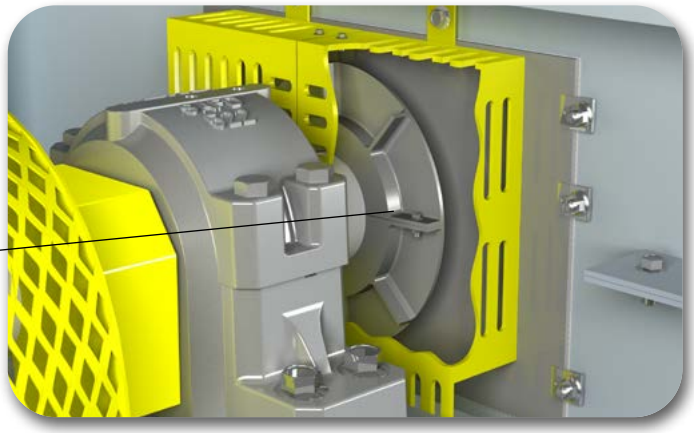
AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

High Temperature 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 (Heat Slinger)

Cast aluminum shaft cooler dissipates the heat transferred to the shaft from the airstream protecting the fan bearings. Recommended for applications over 300°F.



Shaft Cooler & Safety Guard

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 impellers. As a result, the maximum safe speed must be derated. Consult Fan Selector (FS10) software for maximum safe speeds at elevated operating temperatures.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

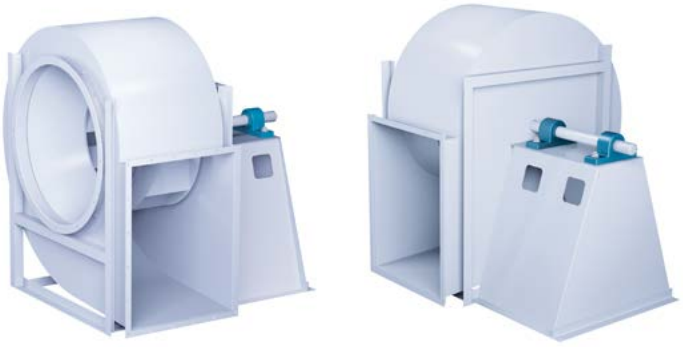
Energy Regulations

Aerovent supports energy efficiency regulations enacted by the U.S. Department of Energy (DOE) and specific states. The selection and application of fan products is a significant part of these regulations. Engineers and specifiers must understand how to apply Aerovent products to their specific applications to meet applicable DOE and state regulatory requirements. Aerovent has made significant investments in product testing and development to provide efficient products. Developments in Aerovent's Fan Selector software are in place to aid your decision in product selection to assist with meeting the efficiency requirements as stipulated in the applicable regulations.

Arrangements

Arrangement 1
SWSI — Single Width, Single Inlet

Arrangement 1 is usually belt driven. The impeller 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, which makes them ideal for high temperature or contaminated air applications. Belt driven configurations offer performance flexibility.



Arrangement 3
SWSI — Single Width, Single Inlet

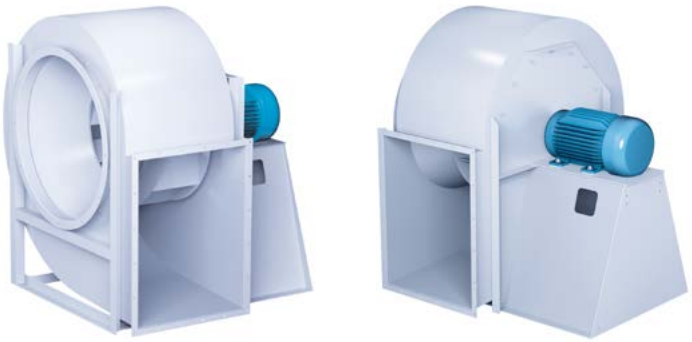
Arrangement 3 is configured with the impeller mounted between the bearings making it structurally sound and compact. The arrangement 3 has one bearing located in the airstream. The motor can be mounted in any of the four AMCA standard motor positions, W, X, Y or Z.

Arrangement 3F
SWSI — Single Width, Single Inlet

Arrangement 3F is an Arrangement 3 with extended angle frame to mount the motor and horizontal slide base as an assembly. Arrangement 3F is not suitable for mounting vibration isolators directly under the fan.

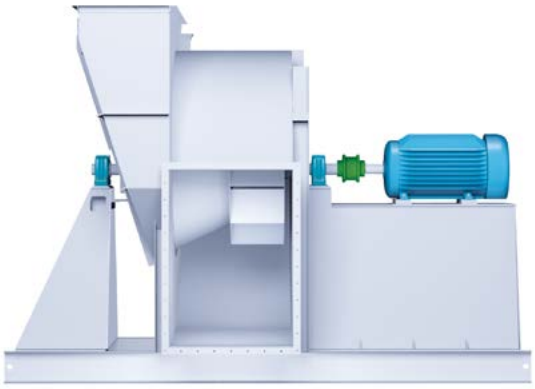
Arrangement 3SI
SWSI — Single Width, Single Inlet

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



Arrangement 4
SWSI — Single Width, Single Inlet

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



Arrangement 7SI
SWSI — Single Width, Single Inlet

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

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.

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

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

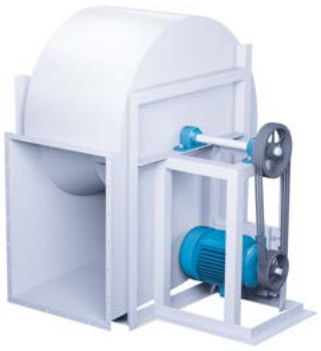
Arrangement 9H
SWSI — Single Width, Single Inlet

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

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 Ventilating Sets. (Refer to Catalog 760 for more details.) Arrangement 10 units have adjustable motor bases mounted inside the bearing pedestal. This arrangement offers a more compact design than the Arrangement 9 and is suitable for roof or outdoor installations when supplied with the optional weather cover.

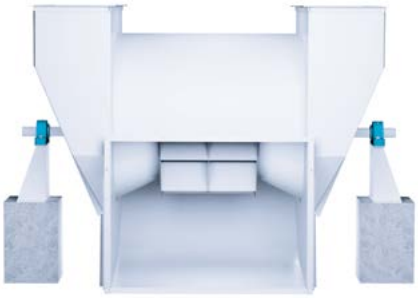
Sizes 122-365
(Vent Sets)



Sizes 402-600, Class I & II

Arrangement 3
DWDI — Double Width, Double Inlet

DWDI fans are generally supplied in Arr. 3 for V-belt drive. The impeller 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.

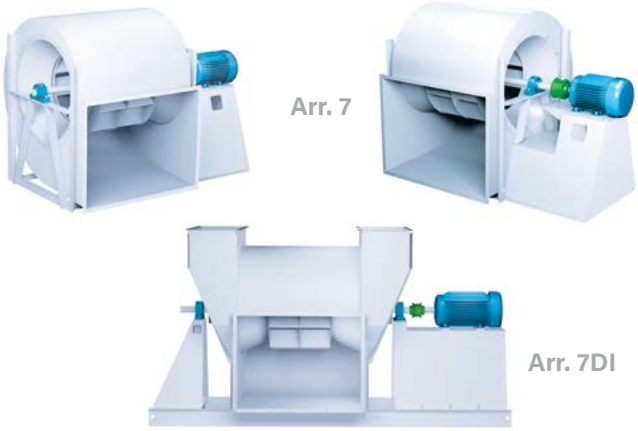


Arrangement 3DI
DWDI — Double Width, Double Inlet

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

Arrangement 3F
DWDI — Double Width, Double Inlet

Arrangement 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.



Arrangement 7 & 7DI
DWDI — Double Width, Double Inlet

Arrangement 7 and 7DI are direct drive. Like the Arrangement 3 and 3DI, the impeller is mounted between the bearings, but the 7 and 7DI incorporate a pedestal designed to accommodate the motor, flexible coupling and one bearing. The Arrangement 7DI utilizes integrated inlet boxes to locate the bearings outside of the airstream allowing for elevated operating temperatures and relatively clean air. A pie split housing is provided for easy impeller removal. The Arrangement 7DI fan assembly is then mounted on a unitary base as standard. An inertia base is an available option.

Options/Accessories

External Inlet Vanes

Extended Lube Lines

1. **Belt Guard** Belt guard protects personnel from the moving drive parts. OSHA and quick access guards are available. Arrangement 10 offers a standard weather cover.

2. **Shaft Guard, Bearing Guard & Extended Lube Lines** Sheet metal guards cover shaft and bearings and come with extended lube lines to a common point outside of the guard. A guard spanning the shaft between the bearings is available to provide open access to bearings for lubrication and vibration monitoring.

3. **Vibration Isolation Bases** provide a common support to fan, motor and drive including guards and utilize heavy-duty structural channel. Vibration isloation bases require spring or rubber-in-shear type isolators that are designed to limit forces transmitted to the support structure of an operating fan. Flexible connectors at inlet and outlet are also required (as shown).

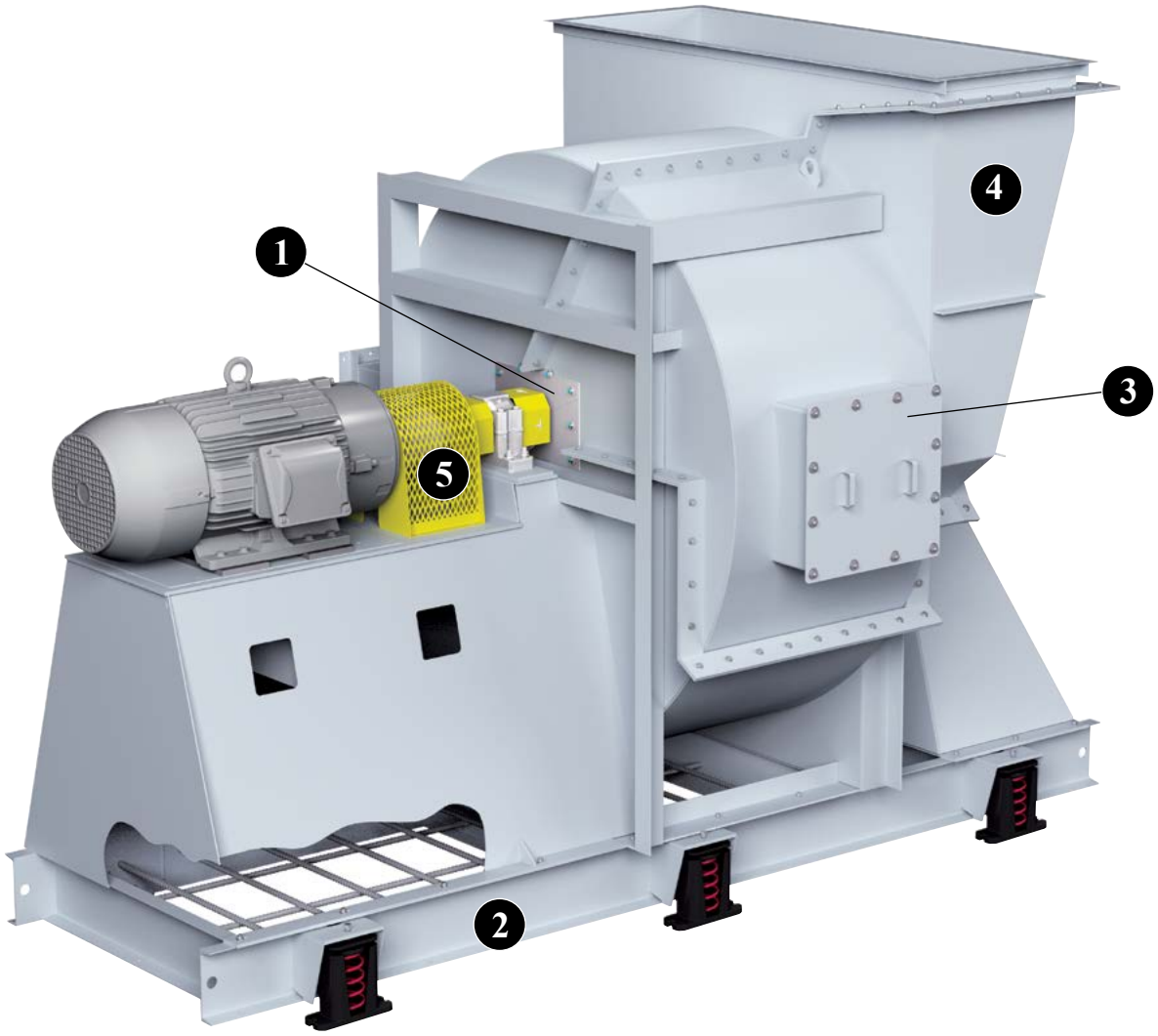
4. **Drain with Plug** Threaded pipe coupling welded to the lowest point in the housing scroll. All fans come with a weep hole in the bottom of the housing as standard.

5. **Bolted Access Doors** for impeller inspection and maintenance. See page 11 for raised access doors.

6. **Nested & External Inlet Vanes** Variable inlet vanes cause the entering air to spin in the direction of impeller 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. Both types are available to 600°F construction.

7. **Flanged Inlets/Outlets** Punched inlet flanges are available for duct mounting (as shown). Punched or unpunched outlet flanges are welded to the fan outlet. Unpunched flanged outlet is standard on all SWSI and DWDI Class III and IV fans.

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



1 **Shaft Seals** reduce leakage and protect the bearings from a contaminated airstream. Standard seals are constructed of Tetraglas compressed between an aluminum cover plate and the fan housing. The standard shaft seal is not gas tight. Special seals are available for low leakage applications requiring more protection.

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

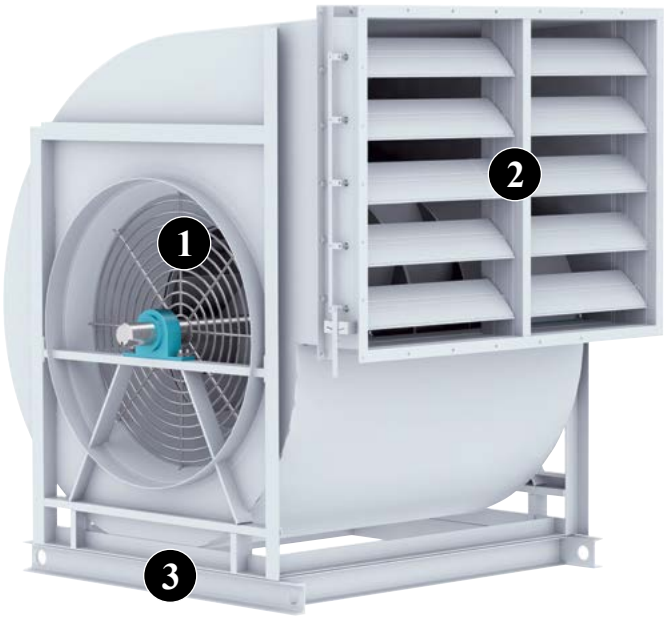
3 **Raised Access Doors** for impeller inspection and maintenance.

4 **Inlet Boxes** are designed to minimize pressure drop and are recommended for applications where uniform flow is difficult to obtain due to limited space. Inlet boxes can be designed to be either detachable or integral (shown above) to the fan.

5 **Coupling Guards** are designed to cover the rotating shaft and drive components.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Options/Accessories



1. **Inlet & Outlet Safety Screens** are available for mounting in the fan inlet or outlet in non-ducted applications.

2. **Outlet Dampers (Opposed or Parallel Blade)** Outlet dampers add resistance to the fan by shifting the operating point to the left of the rating point. The horsepower savings depends on the relative position on the fan curve and is usually much less than 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. **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. Both types are available to 750°F construction.

3. **Unitary Base** utilize structural channel to support the fan assembly and are designed for use without isolators.

OTHER OPTIONS/ACCESSORIES INCLUDE

Variable Frequency Drive (VFD) A VFD changes the fan speed for reduced volume operation and deliberate acceleration rates at start up. A VFD can provide the greatest potential for energy savings. A VFD should be considered for extended operation at part load conditions, especially below 70% of the full volume operation.

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** drives offer easy adjustment of speed. The motor pulley pitch can be adjusted when the fan is at rest offering 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** offer low cost and the lowest vibration levels. Speed change can often be accomplished by changing only one of the sheaves.

Special Paint & Protective Coatings are available for many applications. are available for many applications. Refer to Engineering Supplement ES-122 (Protective Coatings Chemical Resistance Guide) for more details.

Bearing Upgrades to unit roller with non-split pillow block or spherical roller with split pillow block housings (bearing races not split) are available. Spherical roller bearings with split pillow block housings are not available for fans with less than 1-7/16" diameter bearings nor recommended for fans with lightly loaded bearings. Refer to Fan Engineering Data FE-1200 (Fan Bearing Selection) and FE-1300 (Fan Bearing Maintenance & Troubleshooting) for the correct type of bearings, selection criteria, maintenance, etc.

- Bearing RTD (temperature sensors)
- Vibration sensors
- Piezometer ring airflow measuring system. Refer to Engineering Supplement ES-130 (Airflow Measuring System Using Piezometer Ring).
- Steel wall & aluminum clad insulated housings
- Insulation pins
- Consult factory for other accessories

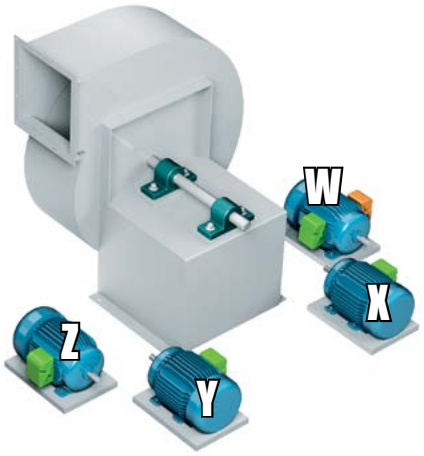
CLOCKWISE (CW) - ROTATION & DISCHARGE (ROTATION VIEW FROM DRIVE SIDE)

UBD Upblast CW 360 | **TAU** Top Angular Up CW 45 | **THD** Top Horizontal CW 90 | **TAD** Top Angular Down CW 135 | **DBD** Downblast CW 180 | **BAD** Bottom Angular Down CW 225 | **BHD** Bottom Horizontal CW 270 | **BAU** Bottom Angular Up CW 315

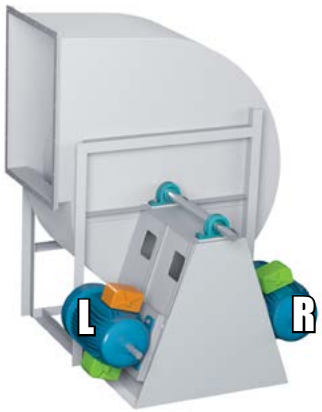
COUNTER CLOCKWISE (CCW) - ROTATION & DISCHARGE (ROTATION VIEW FROM DRIVE SIDE)

UBD Upblast CCW 360 | **TAU** Top Angular Up CCW 45 | **THD** Top Horizontal CCW 90 | **TAD** Top Angular Down CCW 135 | **DBD** Downblast CCW 180 | **BAD** Bottom Angular Down CCW 225 | **BHD** Bottom Horizontal CCW 270 | **BAU** Bottom Angular Up CCW 315

MOTOR POSITIONS

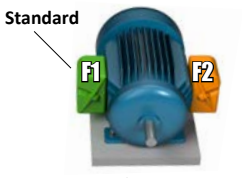


Arrangements 1 & 3



Arrangement 9

Arrangement 9F



Conduit Boxes
viewed from drive side of motor (looking at motor shaft)

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INDUSTRIAL VENTILATION SYSTEMS

Unitary Bases

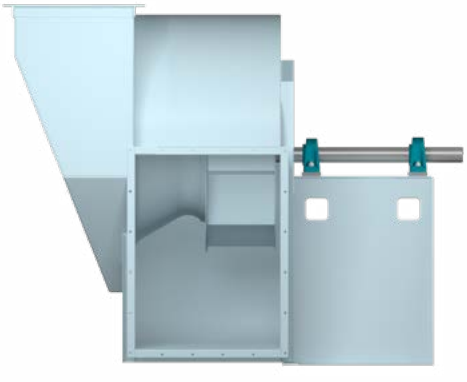
A structural steel base provides common support to fan, motor and drive including guards. This style of base is designed for use without isolators and requires adequate foundation integrity for proper operation.

Isolation Bases

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

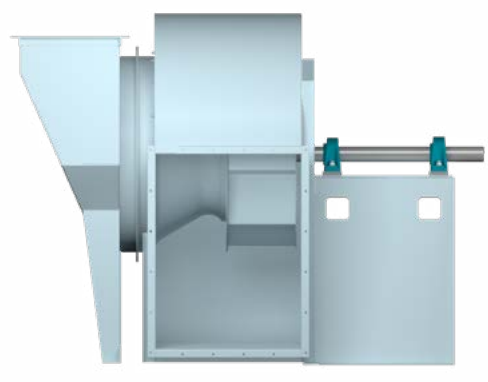
Inertia Bases

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



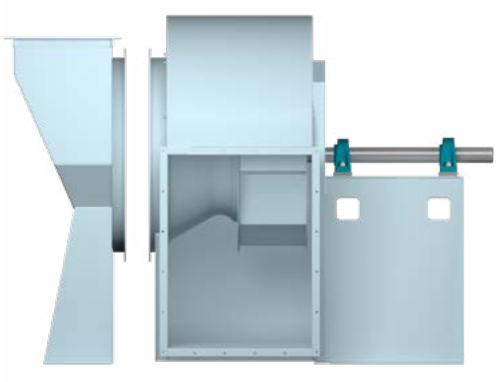
INTEGRAL INLET BOX (ATTACHED)

Arrangement 1 fan with attached or integral inlet box. Can be supplied in Arrangement 8.



DETACHED INLET BOX (BOLT ON)

Arrangement 1 fan with detached inlet box. Can be supplied in Arrangement 8.



DETACHED INLET BOX (FREE STANDING)

Self-supporting units with independent mounting frames.

Inlet Box Positions for Centrifugal Fans

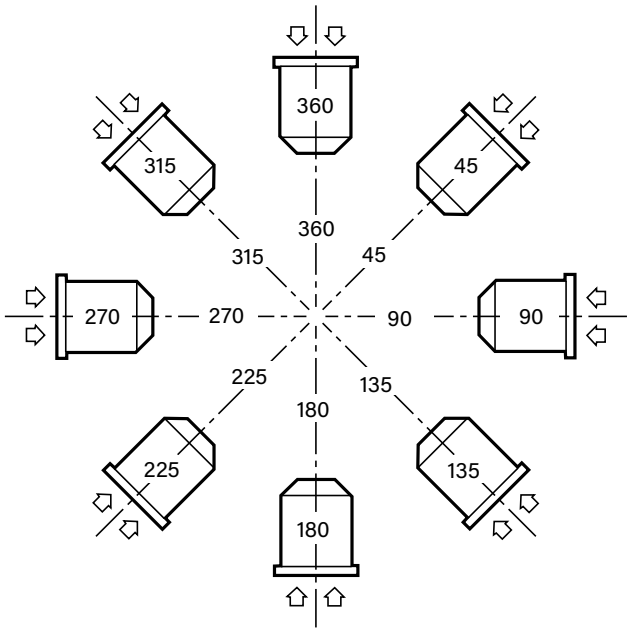
INLET BOX POSITIONS AND DESCRIPTIONS
45 — Angular Down Intake
90 — Horizontal Right Intake
135 — Angular Up Intake
180 — Bottom Up Intake
225 — Angular Up Intake
270 — Horizontal Left Intake
315 — Angular Down Intake
360 — Top Down Intake

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

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

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

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



AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Maximum RPM, Impeller Weights & WR^2 (moment of inertia in lb-ft^2)

SWSI

SIZE	SW ALUMINUM											
	CLASS I			CLASS II			CLASS III			CLASS IV		
	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)
122	3990	9.4	0.97	5206	9.4	0.97	NA	NA	NA	NA	NA	NA
135	3265	10.1	1.4	4260	10.1	1.4						
150	3260	13.7	2.12	4253	13.6	2.12						
165	2673	15.7	3.23	3487	16.8	4.04						
182	2207	17	6.1	2879	18	6.1	3628	21	6.2			
200	2014	21	6.4	2627	21	7.4	3310	24	9.3			
222	1814	30	12	2367	30	12	2982	34	15			
245	1647	35	21	2149	35	21	2708	38	22			
270	1474	40	29	1923	40	29	2423	47	32			
300	1327	49	46	1731	54	51	2181	58	52			
330	1206	62	70	1573	67	76	1982	72	77			
365	1080	73	103	1409	79	112	1775	84	114			
402	979	85	151	1278	93	165	1610	98	166			
445	886	126	233	1156	135	253	1456	142	256			
490	804	164	391	1050	164	391	1322	174	535			
542	727	227	632	948	227	632	1194	239	673			
600	657	255	931	857	255	931	1080	270	991			
660	597	346	1377	779	346	1377	982	371	1478			
730	540	412	2049	705	499	2671	888	550	2985			
807	488	499	3008	637	574	3474	NA	NA	NA			
890	443	774	5652	578	884	6438						
982	401	904	8248	523	1041	9443						

SIZE	SW STEEL											
	CLASS I			CLASS II			CLASS III			CLASS IV		
	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)
122	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
135												
150												
165												
182												
200												
222												
245												
270	1474	99	70	1923	99	70	2423	121	82	2756	135	91
300	1327	124	106	1731	124	106	2181	148	123	2480	160	137
330	1206	151	162	1573	150	162	1982	185	183	2255	199	203
365	1080	218	276	1409	216	276	1775	251	293	2040	251	306
402	979	252	401	1278	251	401	1610	289	451	1850	288	444
445	886	340	620	1156	339	620	1456	437	815	1673	464	848
490	804	392	895	1050	390	895	1322	533	1257	1520	563	1308
542	727	567	1423	948	608	1543	1194	738	2068	1373	810	2262
600	657	696	2246	857	698	2246	1080	856	2986	1241	942	3356
660	597	942	3413	779	953	3415	982	1132	4494	1128	1235	5040
730	540	1092	5274	705	1103	5276	888	1390	7222	1020	1507	7812
807	488	1288	7766	637	1397	8451	802	1617	10610	922	1758	11505
890	443	1935	14129	578	1940	14130	728	2353	18160	837	2498	19429
982	401	2245	20481	523	2258	20483	654	2971	29160	756	---	---

Maximum RPM, Impeller Weights & WR^2 (moment of inertia in lb-ft^2)

DWDI

SIZE	DW ALUMINUM											
	CLASS I			CLASS II			CLASS III			CLASS IV		
	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)
122	3957	14	1.1	5158	14.6	1.1	NA	NA	NA	NA	NA	NA
135	3374	14.8	1.56	4398	17.5	1.6						
150	3232	21.8	2.4	4213	23.8	2.43						
165	2761	25	3.75	3599	27.7	4.55						
182	2248	29	10.4	2930	29	9.9	3695	33	9.8			
200	2051	36	10.9	2674	40	14	3372	39	15.2			
222	1837	45	18	2395	53	21	3020	54	24			
245	1668	53	32	2175	62	37	2742	60	35			
270	1541	62	45	2009	69	50	2533	75	51			
300	1387	80	75	1808	86	81	2280	89	80			
330	1261	108	122	1644	114	129	2072	104	111			
365	1114	109	154	1452	123	174	1831	119	162			
402	1010	133	236	1317	144	256	1661	141	239			
445	914	191	353	1191	222	416	1502	219	395			
490	830	245	584	1082	260	619	1364	262	806			
542	750	339	945	977	337	939	1232	360	1014			
600	678	380	1388	883	376	1372	1114	401	1470			
660	616	495	1972	803	499	1987	1013	537	2141			
730	557	593	2949	726	716	3832	916	826	4484			
807	504	727	4382	656	819	4955	NA	NA	NA			
890	457	1131	8259	596	1295	9429						
982	414	1340	12230	539	1541	13979						

SIZE	DW STEEL											
	CLASS I			CLASS II			CLASS III			CLASS IV		
	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)	MAX. RPM	IMPELLER WEIGHT (LB)	WR^2 (LB-FT^2)
122	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
135												
150												
165												
182												
200												
222												
245												
270	1541	152	116	2009	170	117	2533	195	130	2756	212	142
300	1387	201	176	1808	197	176	2280	227	196	2480	261	216
330	1261	263	272	1644	254	272	2072	268	290	2255	304	316
365	1114	326	439	1452	335	440	1831	356	444	2040	362	472
402	1010	395	640	1317	390	640	1661	417	700	1850	434	689
445	914	516	981	1191	557	984	1502	674	1317	1673	720	1383
490	830	585	1427	1082	618	1430	1364	803	2049	1520	830	2066
542	750	739	2128	977	771	2247	1232	963	3163	1373	991	3295
600	678	906	3338	883	897	3338	1114	1121	4614	1241	1180	4975
660	616	1349	5213	803	1375	5217	1013	1640	7099	1128	1788	7674
730	557	1571	8239	726	1582	8243	916	2088	11718	1020	2139	12086
807	504	1876	12195	656	1992	12933	828	2450	17251	922	2533	17816
890	457	2827	21881	596	2842	21887	751	3300	27962	837	3377	28592
982	414	3329	31933	539	3343	31941	---	---	---	---	---	---

SWSI Class I

SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
			ARR 1 & 9		ARR 3				
	SIDES	SCROLL	SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE	ARR 1	ARR 3	ARR 9
122	14	14	1	B	1	B	122	104	129
135	14	14	1	B	1	B	141	125	148
150	14	14	1	B	1	B	169	149	178
165	14	14	1	B	1	B	199	200	209
182	14	14	1 3/16	B	1 3/16	B	238	202	251
200	14	14	1 7/16	B	1 7/16	B	288	229	304
222	12	14	1 7/16	B	1 7/16	B	363	250	384
245	12	14	1 7/16	B	1 7/16	B	440	306	464
270	12	14	1 11/16	B	1 7/16	B	596	446	625
300	10	12	1 15/16	B	1 11/16	B	721	665	756
330	10	12	1 15/16	B	1 11/16	B	872	935	915
365	10	12	1 15/16	B	1 15/16	B	1094	1031	1146
402	10	12	2 3/16	B	1 15/16	B	1431	1297	1501
445	10	12	2 7/16	B	1 15/16	B	1673	1628	1755
490	10	12	2 11/16	B	2 3/16	R	1951	1807	2046
542	10	12	2 15/16	B	2 7/16	R	2863	2402	3000
600	10	12	2 15/16	B	2 15/16	B	3375	3267	3538
660	10	12	3 7/16	R	2 15/16	R	4277	4114	4486
730	10	10	3 7/16	R	3 7/16	R	5221	4813	5479
807	10	10	3 15/16	R	3 15/16	R	5255	5498	5515
890	7	10	3 15/16	R	3 15/16	R	7220	6668	7576
982	7	7	4 15/16	SR	4 15/16	SR	9425	7847	9888

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

SWSI Class II

SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
			ARR 1 & 9		ARR 3				
	SIDES	SCROLL	SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE	ARR 1	ARR 3	ARR 9
122	14	14	1	B	1	B	128	114	134
135	14	14	1	B	1	B	147	137	154
150	14	14	1 3/16	B	1 3/16	B	180	163	189
165	14	14	1 3/16	B	1 3/16	B	211	219	221
182	14	14	1 7/16	B	1 7/16	B	250	220	264
200	14	14	1 7/16	B	1 7/16	B	295	250	311
222	12	14	1 7/16	B	1 7/16	B	373	279	394
245	12	14	1 11/16	B	1 11/16	B	463	342	489
270	12	14	1 11/16	B	1 11/16	B	610	489	640
300	10	12	1 15/16	B	1 15/16	B	726	718	762
330	10	12	2 3/16	B	2 3/16	B	879	997	924
365	10	12	2 7/16	B	2 7/16	B	1133	1095	1189
402	10	12	2 7/16	R	2 7/16	B	1459	1392	1531
445	10	12	2 11/16	R	2 11/16	R	1680	1724	1765
490	10	12	2 15/16	R	2 11/16	R	1957	1907	2057
542	10	12	3 7/16	R	2 15/16	R	2943	2576	3087
600	10	12	3 7/16	R	3 7/16	R	3429	3518	3598
660	10	12	3 15/16	R	3 15/16	R	4445	4476	4663
730	10	10	3 15/16	R	3 15/16	R	5415	5304	5682
807	10	10	4 7/16	SR	4 7/16	R	5503	6062	5776
890	7	10	4 15/16	SR	4 15/16	R	7621	7344	7995
982	7	7	5 7/16	SR	5 7/16	SR	9645	8595	10120

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

SWSI Class III

SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
			ARR 1 & 9		ARR 3				
	SIDES	SCROLL	SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE	ARR 1	ARR 3	ARR 9
122	NA								
135									
150									
165									
182	10	10	1 11/16	B	1 11/16	B	272	377	287
200	10	10	1 15/16	B	1 11/16	B	316	410	334
222	10	10	1 15/16	B	1 15/16	R	408	444	431
245	7	7	2 3/16	B	1 15/16	R	572	488	604
270	7	7	2 3/16	B	1 15/16	R	763	658	801
300	7	7	2 7/16	R	2 3/16	R	987	1069	1036
330	7	7	2 11/16	R	2 7/16	R	1202	1087	1262
365	7	7	2 11/16	R	2 7/16	R	1429	1492	1501
402	7	7	2 15/16	R	2 11/16	R	1778	1867	1867
445	7	7	3 7/16	R	2 15/16	R	2225	2355	2335
490	7	7	3 7/16	R	2 15/16	R	2636	2704	2765
542	7	7	3 15/16	R	3 7/16	R	3782	3508	3965
600	7	7	4 7/16	SR	3 15/16	R	4741	4748	4971
660	7	7	4 7/16	SR	3 15/16	R	5623	6287	5897
730	7	7	4 15/16	SR	4 7/16	SR	6796	7374	7127
807	7	7	4 15/16	SR	4 15/16	SR	6735	8409	7066
890	7	7	5 7/16	SR	5 7/16	SR	8114	10043	8513

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

SWSI Class IV

SIZE	HOUSING		SHAFT DIAMETER & BEARINGS				BARE FAN WEIGHT (LB)		
			ARR 1 & 9		ARR 3				
	SIDES	SCROLL	SHAFT DIA.	BEARING TYPE	SHAFT DIA.	BEARING TYPE	ARR 1	ARR 3	ARR 9
122	NA								
135									
150									
165									
182									
200									
222									
245									
270	7	7	2 7/16	R	2 3/16	R	883	731	927
300	7	7	2 11/16	R	2 7/16	R	1112	1180	1169
330	0.25	0.25	2 15/16	R	2 11/16	R	1527	1614	1604
365	0.25	0.25	3 7/16	R	2 15/16	R	1978	1673	2077
402	0.25	0.25	3 7/16	R	2 15/16	R	2425	2077	2547
445	0.25	0.25	3 15/16	R	3 7/16	R	3100	2643	3252
490	0.25	0.25	3 15/16	R	3 7/16	R	3567	2994	3742
542	0.25	0.25	4 7/16	SR	3 15/16	R	4699	3883	4927
600	0.25	0.25	4 15/16	SR	4 7/16	SR	5604	5218	5880
660	0.25	0.25	4 15/16	SR	4 7/16	SR	6766	6962	7099
730	0.25	0.25	5 7/16	SR	4 15/16	SR	8295	8104	8705
807	0.25	0.25	5 7/16	SR	5 7/16	SR	8060	9224	8463
890	0.25	0.25	5 15/16	SR	5 15/16	SR	9581	11012	10059

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

DWDI Class I & II

SIZE	HOUSING		SHAFT DIAMETER & BEARINGS						BARE FAN WEIGHT (LB) ARR 3	
			CLASS I			CLASS II				
	SIDES	SCROLL	SHAFT DIAMETER @ BRG.	SHAFT DIAMETER @ IMPELLER	BEARING TYPE	SHAFT DIAMETER @ BRG.	SHAFT DIAMETER @ IMPELLER	BEARING TYPE	CLASS I	CLASS II
122	14	14	1 3/16	1 3/16	B	1 7/16	1 7/16	B	145	159
135	14	14	1 3/16	1 3/16	B	1 11/16	1 11/16	B	165	181
150	14	14	1 7/16	1 7/16	B	1 11/16	1 11/16	B	201	220
165	14	14	1 7/16	1 7/16	B	1 15/16	1 15/16	B	231	254
182	12	14	1 11/16	1 11/16	B	1 15/16	1 15/16	B	279	302
200	12	14	1 11/16	1 11/16	B	2 3/16	2 3/16	B	327	350
222	12	14	1 15/16	1 15/16	B	2 7/16	2 7/16	B	422	472
245	12	14	2 3/16	2 3/16	B	2 7/16	2 7/16	B	463	527
270	12	14	2 3/16	2 3/16	B	2 11/16	2 11/16	R	686	756
300	10	12	2 7/16	2 7/16	B	2 7/16	2 15/16	R	971	1024
330	10	12	2 7/16	2 7/16	B	2 7/16	3 7/16	R	1107	1155
365	10	12	2 11/16	2 11/16	B	2 11/16	3 7/16	R	1467	1556
402	10	12	2 7/16	2 15/16	R	2 11/16	3 7/16	R	1844	1940
445	10	12	2 7/16	3 7/16	R	2 15/16	3 15/16	R	2227	2366
490	10	12	2 11/16	3 7/16	R	3 7/16	3 15/16	R	2446	2573
542	10	12	2 15/16	3 15/16	R	3 7/16	4 7/16	R	3107	3343
600	10	12	3 7/16	4 7/16	R	3 15/16	4 15/16	R	4365	4707
660	10	12	3 7/16	4 7/16	R	3 15/16	4 15/16	R	5732	6217
730	10	10	3 15/16	4 15/16	R	3 15/16	5 15/16	R	6427	7059
807	10	10	3 15/16	5 7/16	R	4 7/16	6 7/16	SR	7883	8660
890	7	10	3 15/16	5 15/16	R	4 7/16	6 15/16	SR	9395	10446
982	7	7	4 15/16	6 7/16	SR	5 7/16	7 1/2	SR	11585	12762

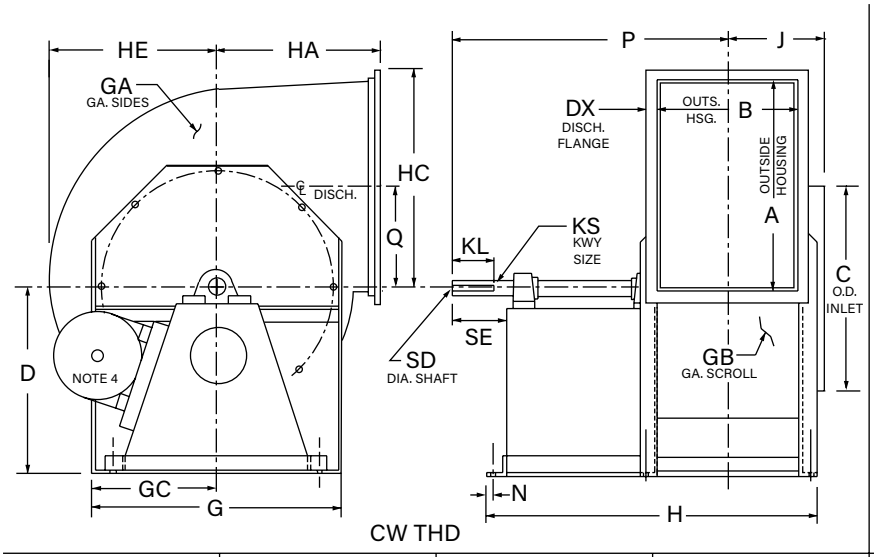
Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Spherical Roller Bearings with Split Pillow Block Housings

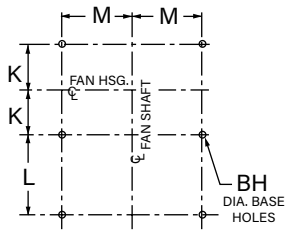
DWDI Class III & IV

SIZE	HOUSING				SHAFT DIAMETER & BEARINGS						BARE FAN WEIGHT (LB) ARR 3	
	CLASS III		CLASS IV		CLASS III			CLASS IV				
	SIDES	SCROLL	SIDES	SCROLL	SHAFT DIAMETER @ BRG.	SHAFT DIAMETER @ IMPELLER	BEARING TYPE	SHAFT DIAMETER @ BRG.	SHAFT DIAMETER @ IMPELLER	BEARING TYPE	CLASS III	CLASS IV
122	CONSULT FACTORY		CONSULT FACTORY		CONSULT FACTORY			CONSULT FACTORY			NA	NA
135											NA	NA
150											NA	NA
165											NA	NA
182	10	10	7	7	2 3/16	2 3/16	R	NA			435	NA
200	10	10	7	7	2 7/16	2 7/16	R				590	NA
222	10	10	7	7	2 7/16	2 7/16	R				751	NA
245	7	7	7	7	2 7/16	2 15/16	R				812	NA
270	7	7	7	7	2 11/16	3 7/16	R	2 15/16	3 15/16	R	1122	1229
300	7	7	7	7	2 11/16	3 7/16	R	2 15/16	4 7/16	R	1529	1669
330	7	7	0.25	0.25	2 15/16	3 7/16	R	3 7/16	4 15/16	R	1668	1848
365	7	7	0.25	0.25	2 15/16	3 15/16	R	3 7/16	4 15/16	R	2075	2327
402	7	7	0.25	0.25	3 7/16	3 15/16	R	3 15/16	5 7/16	R	2619	2902
445	7	7	0.25	0.25	3 7/16	4 7/16	R	3 15/16	5 7/16	R	3359	3755
490	7	7	0.25	0.25	3 15/16	4 15/16	R	4 7/16	5 7/16	SR	3705	4066
542	7	7	0.25	0.25	3 15/16	5 7/16	R	4 7/16	5 15/16	SR	4629	5097
600	7	7	0.25	0.25	4 7/16	5 7/16	SR	4 15/16	6 7/16	SR	6479	7064
660	7	7	0.25	0.25	4 15/16	5 15/16	SR	5 7/16	6 7/16	SR	8614	9574
730	7	7	0.25	0.25	4 15/16	6 15/16	SR	5 15/16	7 1/2	SR	9999	10881
807	7	7	0.25	0.25	—	—	SR	—	—	SR	12223	12300
890	7	7	0.25	0.25	—	—	SR	—	—	SR	14547	15731
982	7	7	0.25	0.25	—	—	—	—	—	—	NA	NA

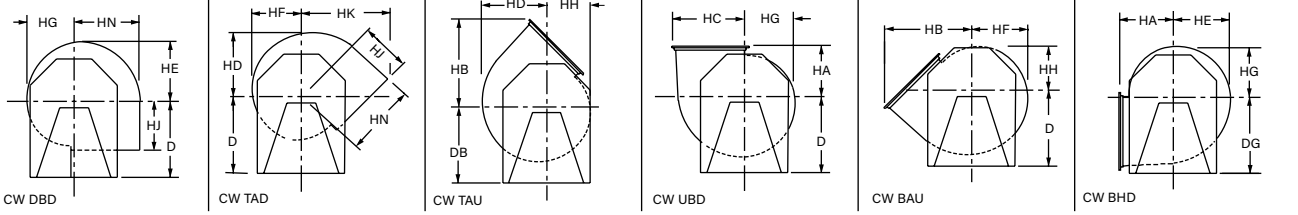
Bearing Types: B = Ball Bearing R = Unit Roller Bearings SR = Spherical Roller Bearings with Split Pillow Block Housings

Arrangement 9, SWSI, Rotatable, Class I & II





FOUNDATION PLAN



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.

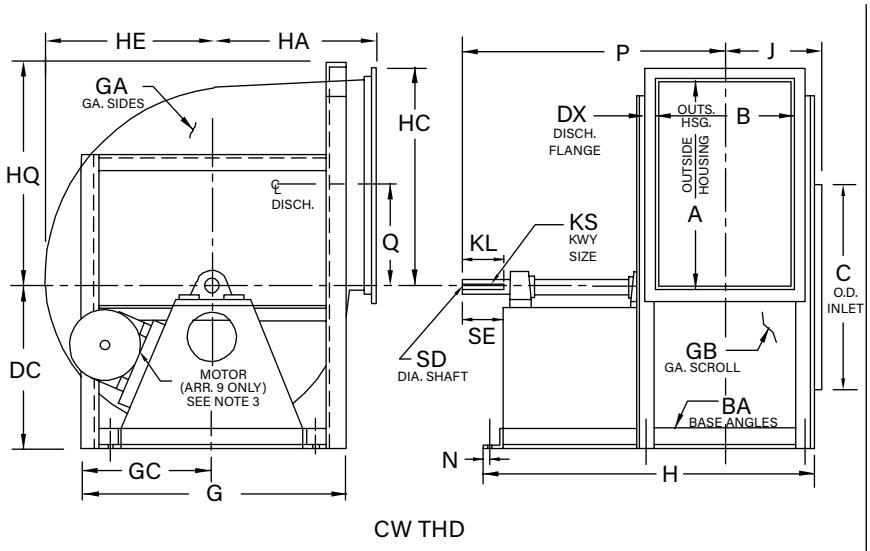
SIZE	A	B	BH	C	D	DX	FR	G	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG
122	13.00	9.75	0.44	13.25	14.50	1.00	145T	16.00	14	14	8.00	27.00	9.75	16.75	13.94	11.19	10.56	9.94	9.31
135	14.31	10.81	0.44	14.56	15.75	1.00	184T	17.50	14	14	8.75	30.63	10.75	18.38	15.25	12.31	11.63	10.94	10.25
150	15.88	11.94	0.44	16.19	17.75	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	0.25x0.13	0.25x0.13	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	0.25x0.13	0.25x0.13	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	0.25x0.13	0.25x0.13	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	0.25x0.13	0.25x0.13	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	0.25x0.13	0.38x0.19	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	0.38x0.19	0.38x0.19	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	0.38x0.19	0.38x0.19	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	0.38x0.19	0.38x0.19	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	0.38x0.19	0.38x0.19	26.38	14.13	0.88	42.31	14.25	1.687	1.687	5.25

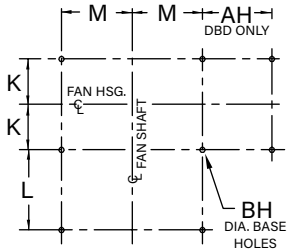
R-1001999A

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

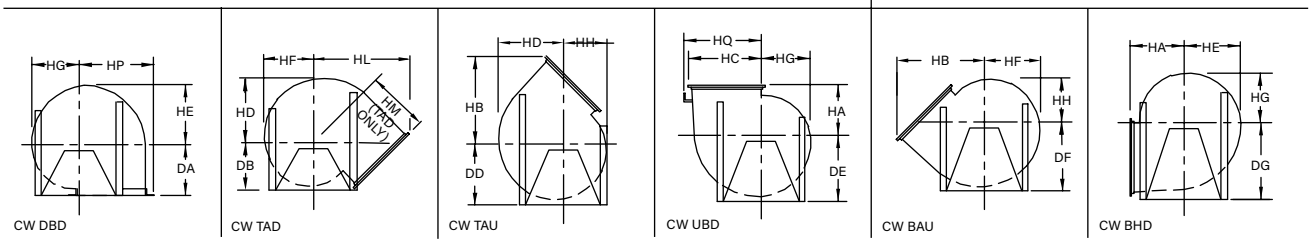
Arrangement 1 & 9, SWSI, Non-Rotatable, Class I & II



CW THD



FOUNDATION PLAN



CW DBD | CW TAD | CW TAU | CW UBD | CW BAU | CW BHD

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.

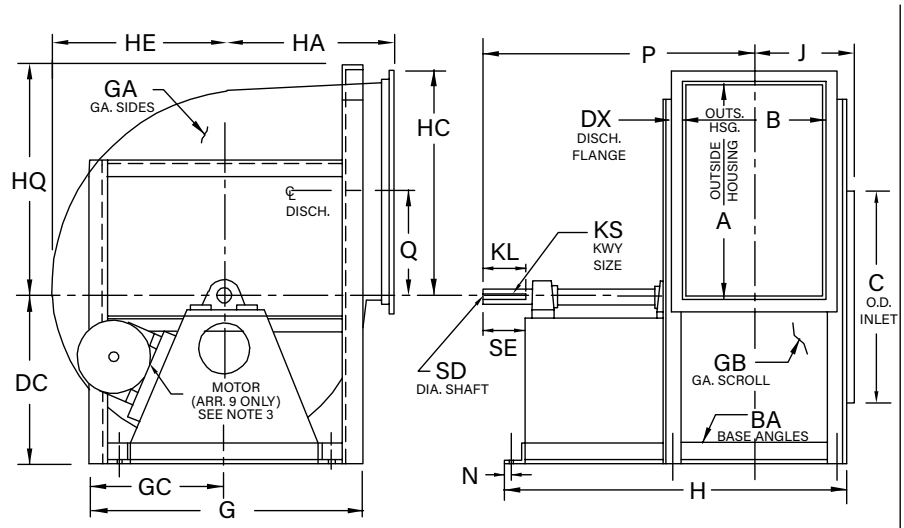
SIZE	A	AH	B	BA	BH	C	DA (Note 4)	DB (Note 4)	DC (Note 4)	DD (Note 4)	DE (Note 4)	DF	DG	DX	FR ARR. 9	G
300	31.81	17.25	23.81	2.5x2.5	0.56	31.63	26.75	26.75	26.75	26.75	28.50	30.00	35.50	1.50	286T	41.00
330	35.13	19.06	26.06	2.5x2.5	0.56	34.75	30.00	30.00	30.00	30.00	31.00	32.75	39.00	1.50	324T	44.00
365	38.69	21.13	28.88	2.5x2.5	0.56	38.50	29.00	30.50	29.50	31.50	33.50	35.50	41.00	1.50	324T	48.00
402	42.63	23.31	31.81	3.0x3.0	0.81	42.44	32.00	32.50	33.00	35.25	37.00	39.50	45.50	1.50	326T	52.50
445	47.13	25.81	35.19	3.0x3.0	0.81	46.88	35.38	36.25	35.50	38.50	40.00	43.25	50.00	1.50	364T	56.50
490	51.94	28.13	38.63	3.0x3.0	0.81	51.63	39.00	38.75	39.00	42.25	44.00	47.50	54.75	2.00	364T	61.50
542	57.38	31.81	42.88	3.0x4.0	0.81	57.13	43.06	42.25	43.50	46.50	49.00	52.25	60.25	2.00	404T	67.00
600	63.50	34.94	47.31	3.0x4.0	0.81	63.13	47.69	45.00	48.00	51.25	54.00	57.50	66.25	2.00	404T	73.00
660	69.69	39.13	52.19	3.5x5.0	0.81	69.38	52.44	49.50	52.50	55.75	59.00	63.00	73.25	2.50	405T	80.00
730	77.25	42.63	57.56	3.5x5.0	0.81	76.75	58.00	54.25	57.00	61.75	64.50	69.50	80.75	2.50	405T	88.00

SIZE	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
300	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	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	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	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	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	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	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	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	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	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

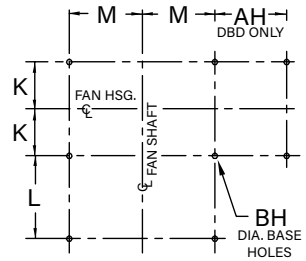
R-1001998A

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

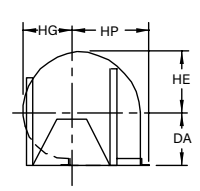
Arrangement 1 & 9, SWSI, Non-Rotatable, Class I & II (cont'd.)



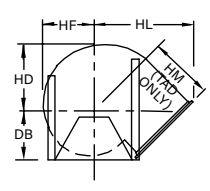
CW THD



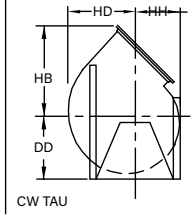
FOUNDATION PLAN



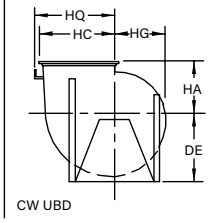
CW DBD



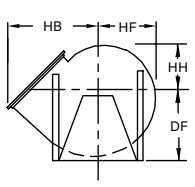
CW TAD



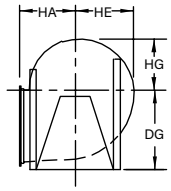
CW TAU



CW UBD



CW BAU



CW BHD

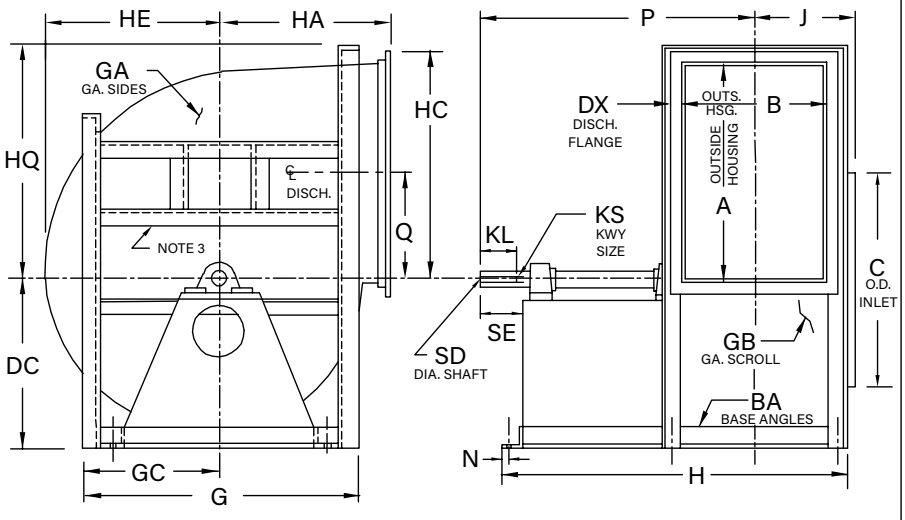
Notes:
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. Standard Arr. 9 motor location is on the left for "CW rotation units and on the right for "CCW" rotation. Dimension "FR" equals max. motor frame.
4. For fans with inlet box 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	0.50x0.25	0.50x0.25	26.88	15.88	1.13	44.56	15.81	1.937	1.937	5.75
330	16.63	14.44	5.00	0.50x0.25	0.50x0.25	29.50	17.38	1.13	48.31	17.50	1.937	2.187	5.75
365	18.00	15.81	5.00	0.50x0.25	0.63x0.31	29.50	18.88	1.13	49.69	19.25	1.937	2.437	5.75
402	20.00	17.56	5.00	0.50x0.25	0.63x0.31	30.00	20.88	1.38	51.69	21.25	2.187	2.437	5.75
445	21.69	19.25	5.50	0.63x0.31	0.63x0.31	31.63	22.88	1.38	55.50	23.50	2.437	2.687	6.25
490	23.38	20.94	5.50	0.63x0.31	0.75x0.38	32.00	25.38	1.38	57.56	25.88	2.687	2.937	6.25
542	26.50	23.56	6.00	0.75x0.38	0.88x0.44	36.63	27.63	1.88	64.81	28.63	2.937	3.437	6.75
600	28.75	25.81	6.00	0.75x0.38	0.88x0.44	36.38	30.63	1.88	66.81	31.69	2.937	3.437	6.75
660	32.19	28.75	7.00	0.88x0.44	1.0x0.50	39.00	33.13	2.38	72.88	34.75	3.437	3.937	7.75
730	34.94	31.44	7.50	0.88x0.44	1.0x0.50	42.00	37.13	2.38	79.06	38.50	3.437	3.937	8.25

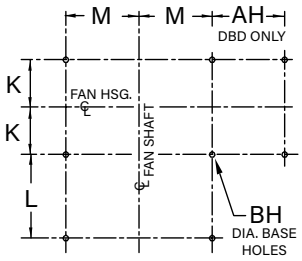
R-1001998A

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

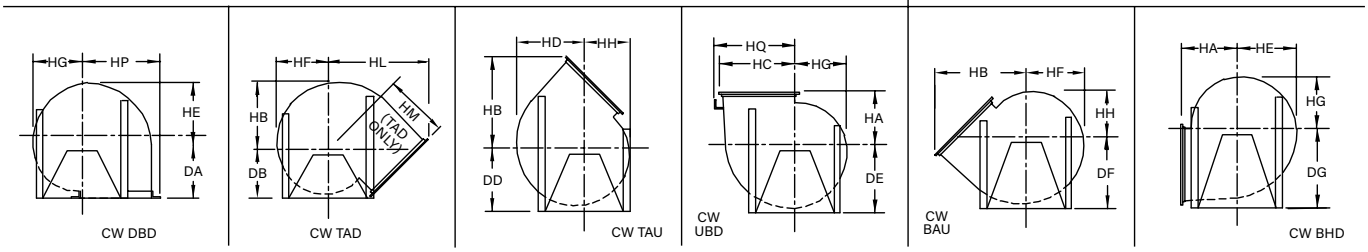
Arrangement 1, SWSI, Non-Rotatable, Class I & II



CW THD



FOUNDATION PLAN



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

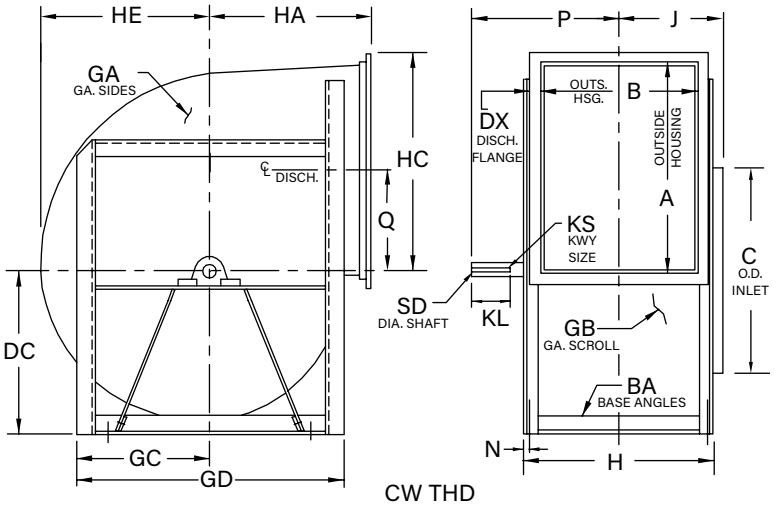
SIZE	GA	GB	GC	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
807	10	10	47.75	118.63	64.19	107.50	87.81	74.00	69.50	65.38	61.25	57.13	113.69	73.00	90.31	87.75
890	7	10	53.25	128.13	70.00	117.75	96.50	81.56	76.63	72.06	67.50	62.94	125.38	80.75	99.00	96.50
982	7	7	61.00	140.63	77.75	130.13	106.31	90.06	84.63	79.56	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	1.00x0.50	1.00x0.50	45.00	40.88	2.38	85.81	42.63	3.937	4.437	9.00
890	41.06	37.69	8.00	1.00x0.50	1.25x0.63	48.00	46.38	2.38	92.06	46.94	3.937	4.937	9.00
982	45.75	41.88	8.00	1.25x0.63	1.25x0.63	51.13	53.13	2.88	98.88	51.81	4.937	5.437	9.00

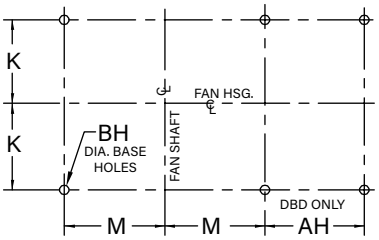
R-1002013A

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

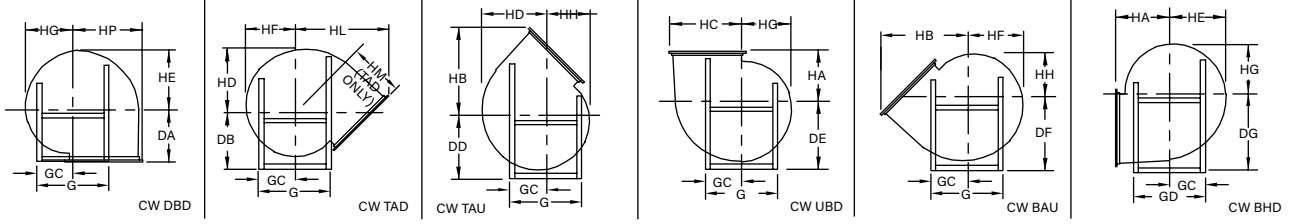
Arrangement 3, SWSI, Non-Rotatable, Class I & II



CW THD



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. Bearing bar supports may extend beyond base angles. See Dwg. R-1000851 for dimensions if space limitations are required for mounting fan.

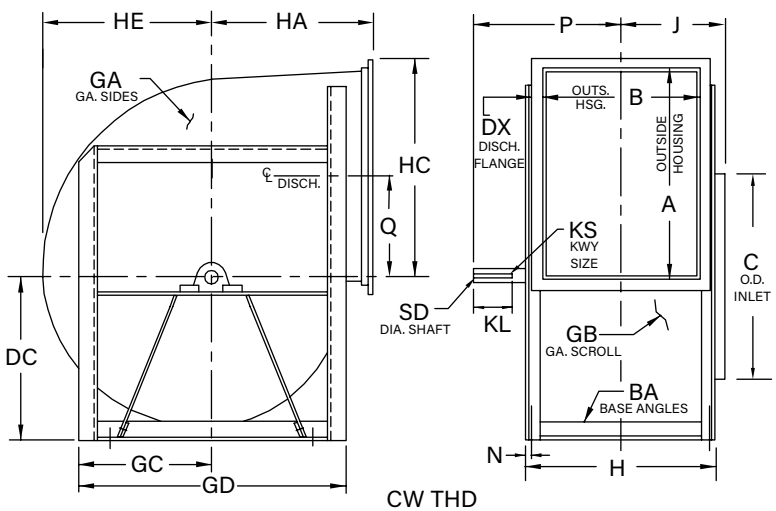
SIZE	A	AH	B	BA	BH	C	DA	DB	DC	DD	DE	DF	DG	DX	G
122	13.00	7.06	9.75	1.50 x 1.50	0.44	13.25	9.75	15.25	10.25	11.00	11.50	12.25	15.00	1.00	19.75
135	14.31	7.75	10.81	1.50 x 1.50	0.44	14.56	10.75	16.00	11.25	12.00	12.75	13.25	16.25	1.00	21.00
150	15.88	8.44	11.94	1.50 x 1.50	0.44	16.19	11.94	16.75	12.25	13.25	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

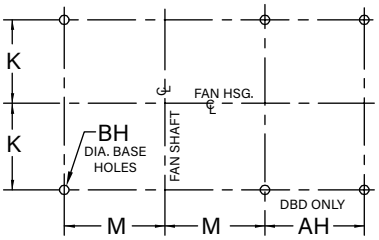
R-1001997A

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

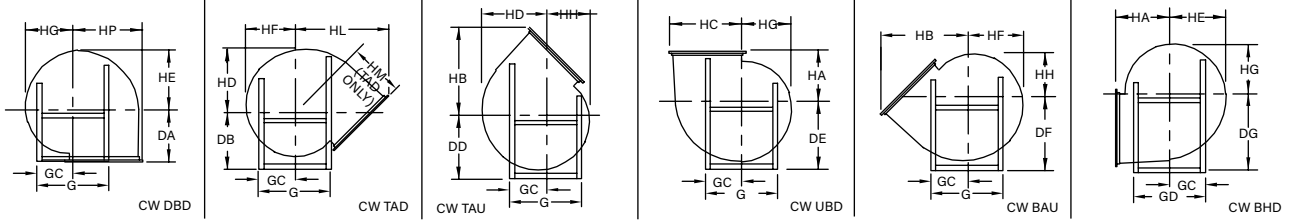
Arrangement 3, SWSI, Non-Rotatable, Class I & II (cont'd.)



CW THD



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. Bearing bar supports may extend beyond base angles. See Dwg. R-1000851 for dimensions if space limitations are required for mounting fan.

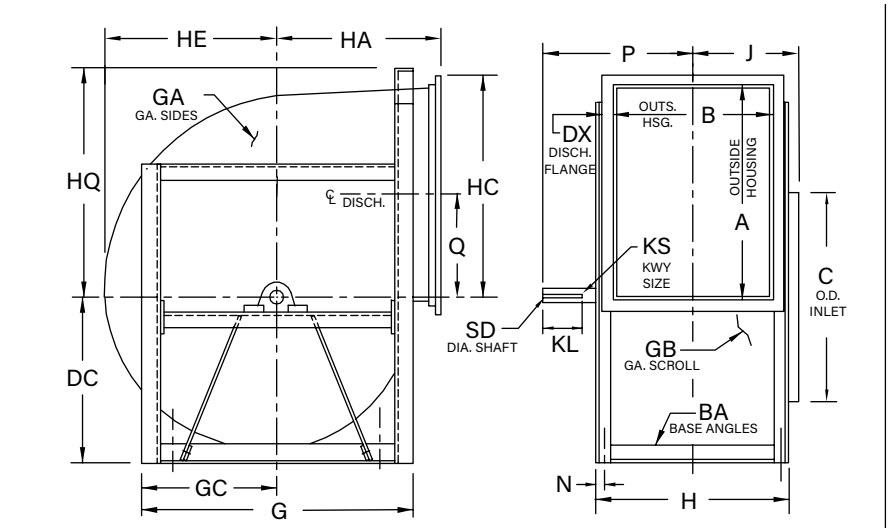
SIZE	J	K	KL	KS		M	N	P		Q	SD	
				CL I	CL II			CL I	CL II		CL I	CL II
122	7.44	5.75	2.50	0.25 x 0.13	0.25 x 0.13	6.75	0.63	10.00	10.00	6.44	1.000	1.000
135	8.00	6.31	2.50	0.25 x 0.13	0.25 x 0.13	7.38	0.63	10.56	10.56	7.13	1.000	1.000
150	9.06	6.88	3.00	0.25 x 0.13	0.25 x 0.13	8.25	0.63	11.63	12.00	7.88	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

R-1001997A

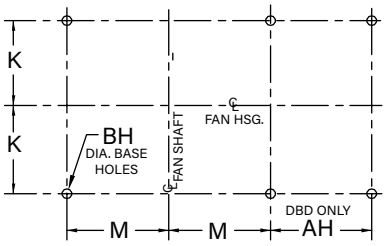
DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

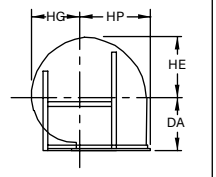
Arrangement 3, SWSI, Non-Rotatable, Class I & II



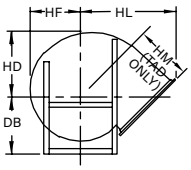
CW THD



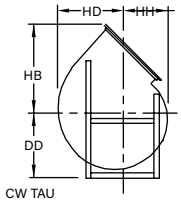
FOUNDATION PLAN



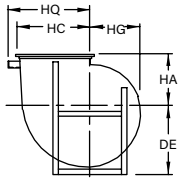
CW DBD



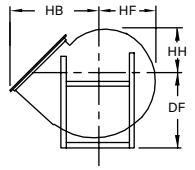
CW TAD



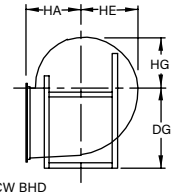
CW TAU



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. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See Dwg. R-1000851 for dimensions if space limitations are required for mounting fan.

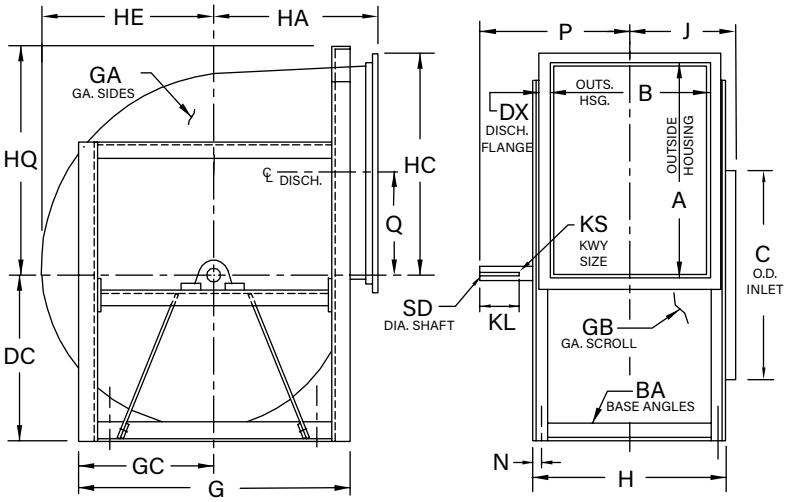
SIZE	A	AH	B	BA	BH	C	DA	DB	DC	DD	DE	DF	DG	DX	G
300	31.81	17.25	23.81	2.50 x 2.50	0.56	31.63	23.81	26.00	24.50	26.00	28.50	29.50	34.25	1.50	41.00
330	35.13	19.06	26.06	2.50 x 2.50	0.56	34.75	26.25	27.75	27.00	28.50	31.00	32.25	37.25	1.50	44.00
365	38.69	21.13	28.88	2.50 x 2.50	0.56	38.50	29.00	30.50	29.50	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

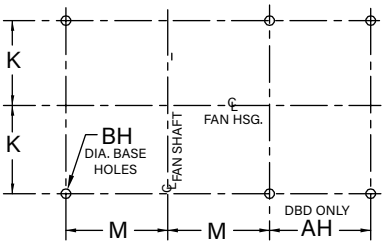
R-1002001A

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

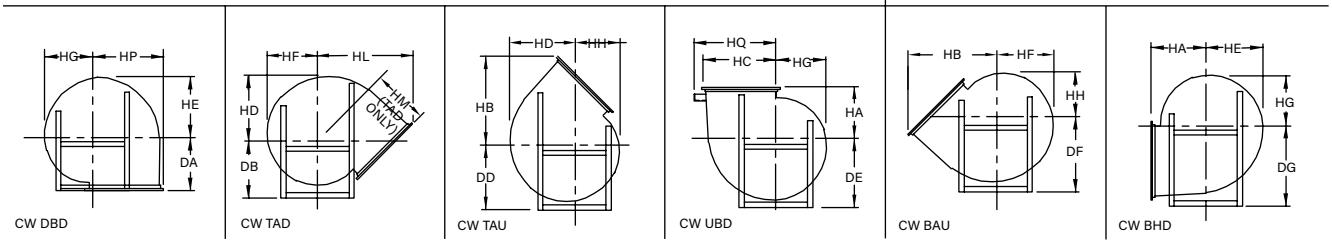
Arrangement 3, SWSI, Non-Rotatable, Class I & II (cont'd.)



CW THD



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. Frame supports vary in construction by size and by discharge position.
5. Bearing bar supports may extend beyond base angles. See Dwg. R-1000851 for dimensions if space limitations are required for mounting fan.

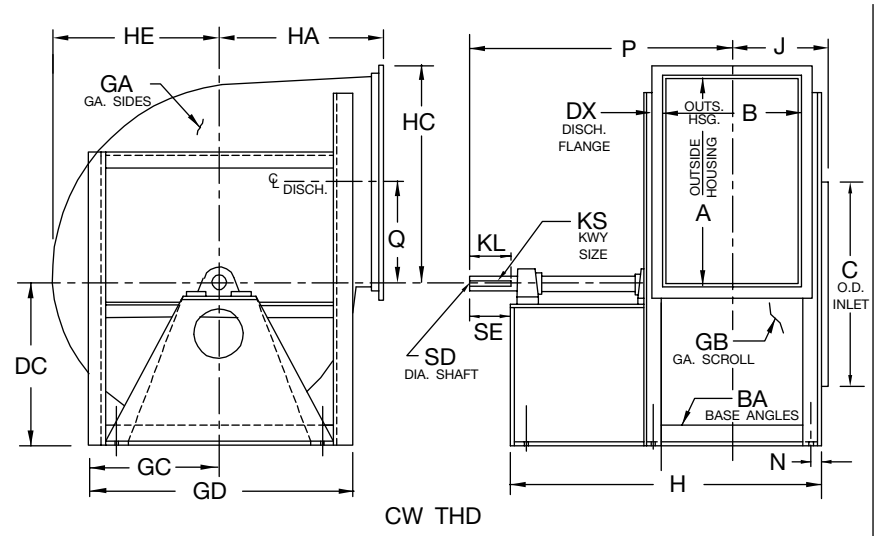
SIZE	J	K	KL	KS		M	N	P		Q	SD	
				CL I	CL II			CL I	CL II		CL I	CL II
300	16.00	13.31	5.00	0.38 x 0.19	0.50 x 0.25	15.88	1.13	21.13	21.25	15.81	1.687	1.937
330	17.13	14.44	5.00	0.38 x 0.19	0.50 x 0.25	17.38	1.13	22.25	22.88	17.50	1.687	2.187
365	19.06	15.81	5.00	0.50 x 0.25	0.63 x 0.31	18.88	1.13	23.75	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

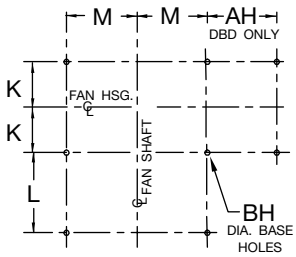
R-1002001A

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

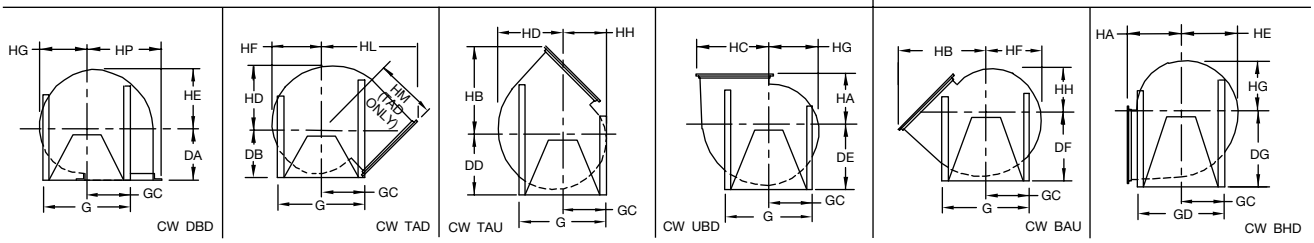
AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Arrangement 1, SWSI, Non-Rotatable, Class III





FOUNDATION PLAN



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.

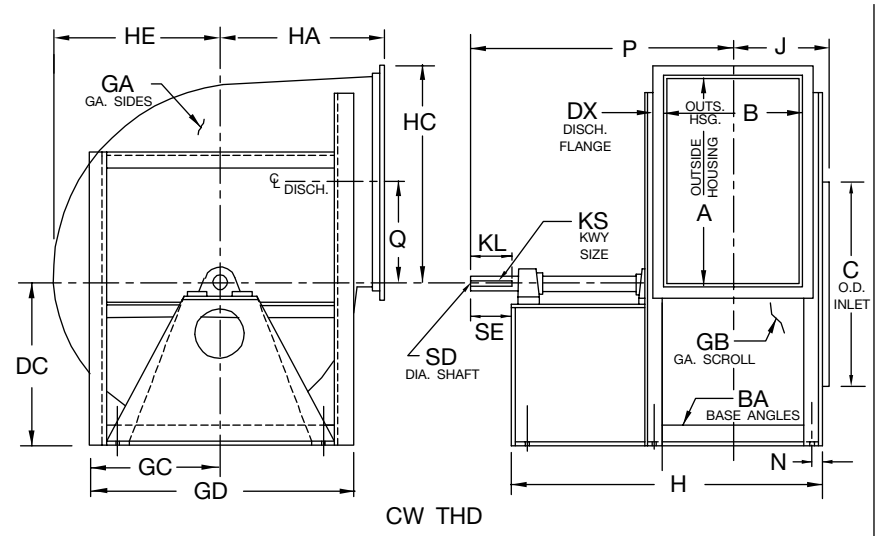
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	G
122	13.13	7.63	9.88	1.50 x 2.00	0.44	13.25	9.75	15.25	10.25	11.00	11.50	12.25	15.50	1.25	19.75
135	14.44	8.31	10.94	1.50 x 2.00	0.44	14.56	10.75	16.00	11.25	12.00	12.75	13.25	16.75	1.25	21.00
150	16.00	9.00	12.06	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

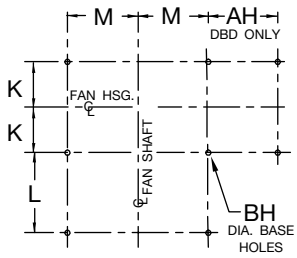
SIZE	GA	GB	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP
122	10	10	9.88	18.63	22.38	9.75	17.00	14.25	11.25	10.63	10.00	9.38	8.75	22.94	18.19	15.00
135	10	10	10.50	19.88	24.00	10.75	18.63	15.56	12.38	11.69	11.00	10.31	9.63	24.50	19.06	16.31
150	10	10	11.38	21.63	26.63	11.94	20.56	17.13	13.81	12.94	12.19	11.44	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

R-1002004B

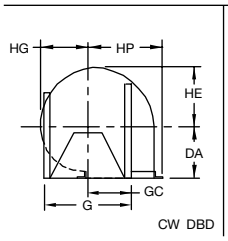
DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

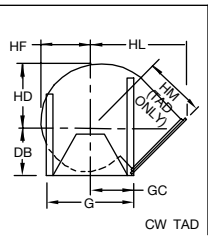
Arrangement 1, SWSI, Non-Rotatable, Class III (cont'd.)

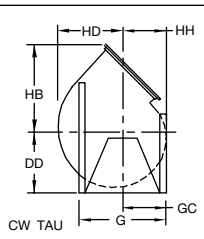


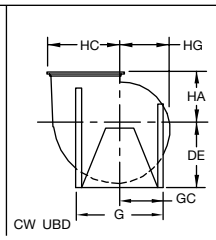


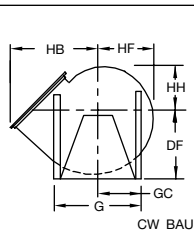
FOUNDATION PLAN

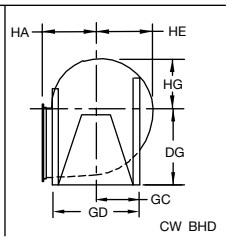












Notes:
1. Discharge angles are included on all discharges.
2. "CW" rotation is shown. "CCW" rotation is similar but opposite.
3. For fans size 182-330 (except TAD 182-200) with inlet box at 90 degrees or 270 degrees, use “BAU” discharge dimension “DF” for centerline height.

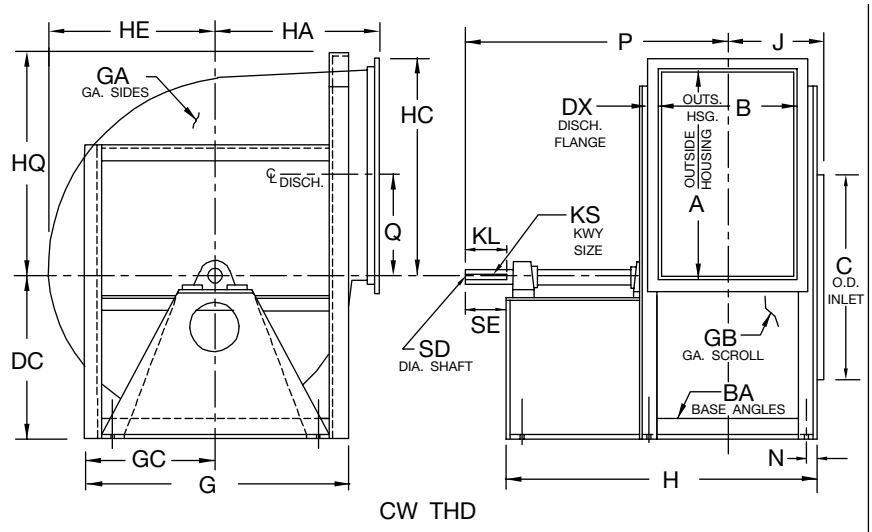
SIZE	J	K	KL	KS	L	M	N	P	Q	SD	SE
122	7.94	6.06	3.00	0.38 x 0.19	7.50	6.50	0.88	18.94	6.44	1.437	3.50
135	8.50	6.63	3.00	0.38 x 0.19	8.00	7.13	0.88	20.00	7.13	1.437	3.50
150	9.06	7.19	3.50	0.38 x 0.19	9.50	8.00	0.88	22.56	7.88	1.687	4.00
165	9.69	7.81	3.50	0.38 x 0.19	9.50	8.75	0.88	23.19	8.69	1.687	4.00
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

R-1002004B

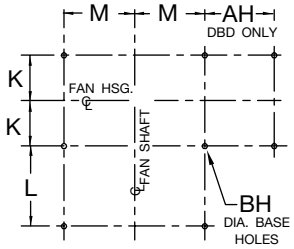
DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

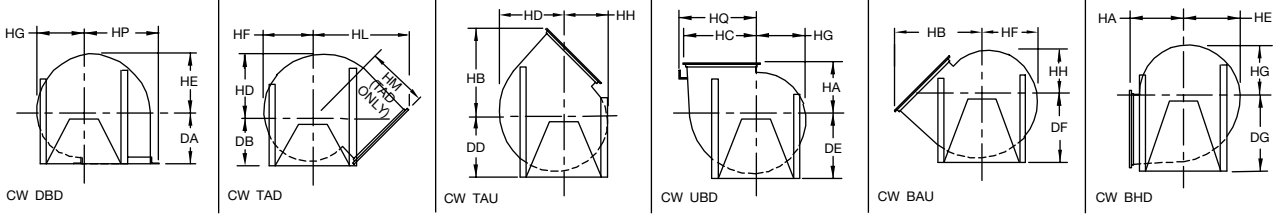
Arrangement 1, SWSI, Non-Rotatable, Class III



CW THD



FOUNDATION PLAN



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.

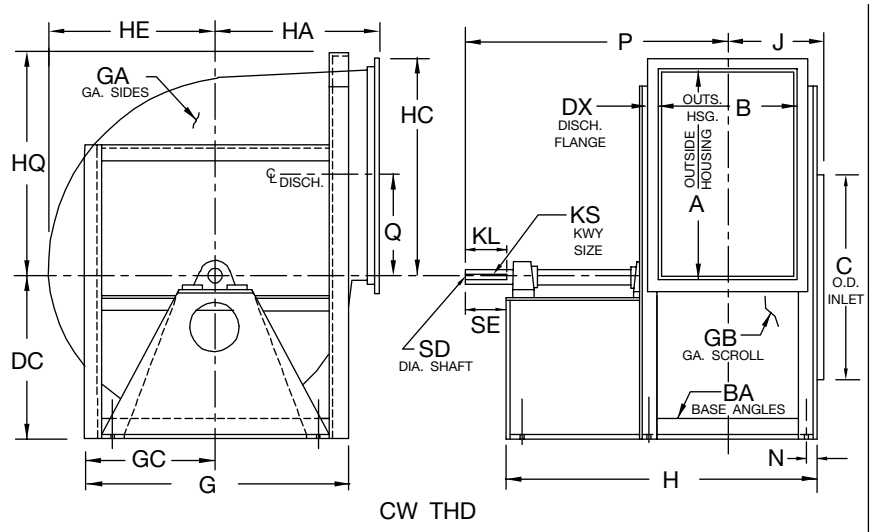
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX
365	38.88	21.69	29.00	3.00 x 3.00	0.81	38.50	29.00	29.25	29.50	31.50	33.50	35.50	41.50	1.50 x 1.50
402	42.81	24.38	31.94	3.00 x 4.00	0.81	42.44	32.00	31.75	33.00	35.25	37.00	39.50	45.50	2.00 x 2.00
445	47.31	26.88	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

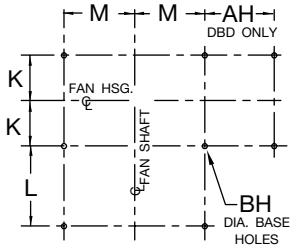
R-1002005A

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

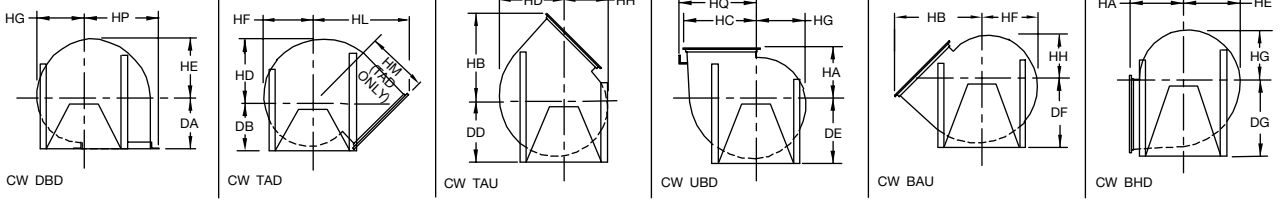
Arrangement 1, SWSI, Non-Rotatable, Class III (cont'd.)



CW THD



FOUNDATION PLAN



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.

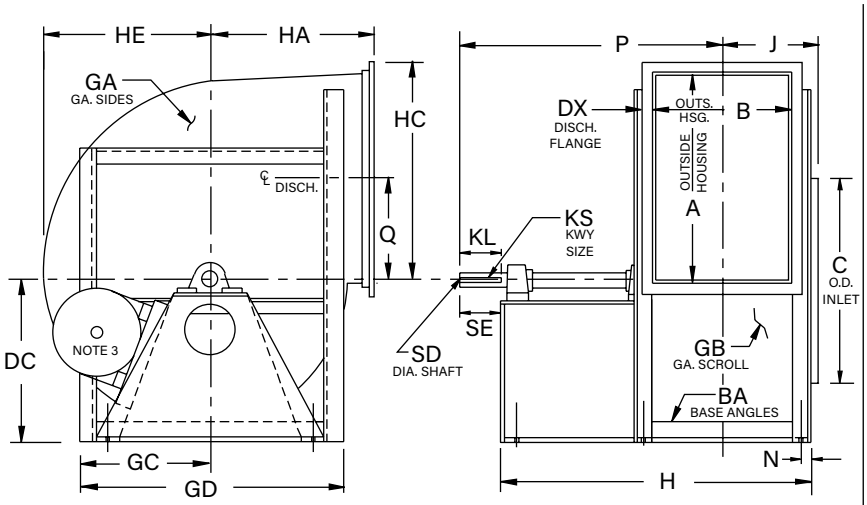
SIZE	HQ	J	K	KL	KS	L	M	N	P	Q	SD	SE
365	–	18.50	16.13	7.00	0.63 x 0.31	22.50	18.63	1.38	48.25	19.25	2.687	7.75
402	–	21.00	18.13	8.00	0.75 x 0.38	24.00	20.38	1.88	52.75	21.25	2.937	8.75
445	–	22.69	19.81	8.00	0.88 x 0.44	27.00	22.38	1.88	57.69	23.50	3.437	9.00
490	–	24.38	21.50	9.00	0.88 x 0.44	29.00	24.88	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

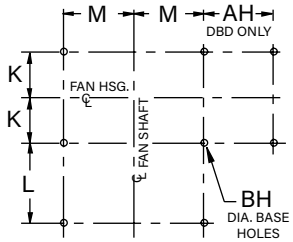
R-1002005A

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

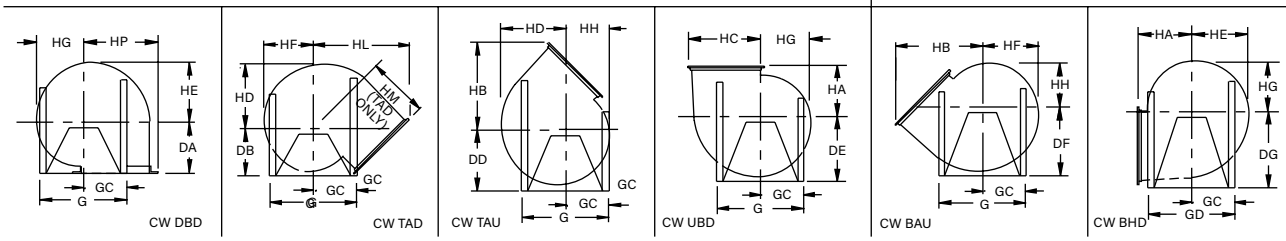
AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Arrangement 9, SWSI, Non-Rotatable, Class III





FOUNDATION PLAN



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.

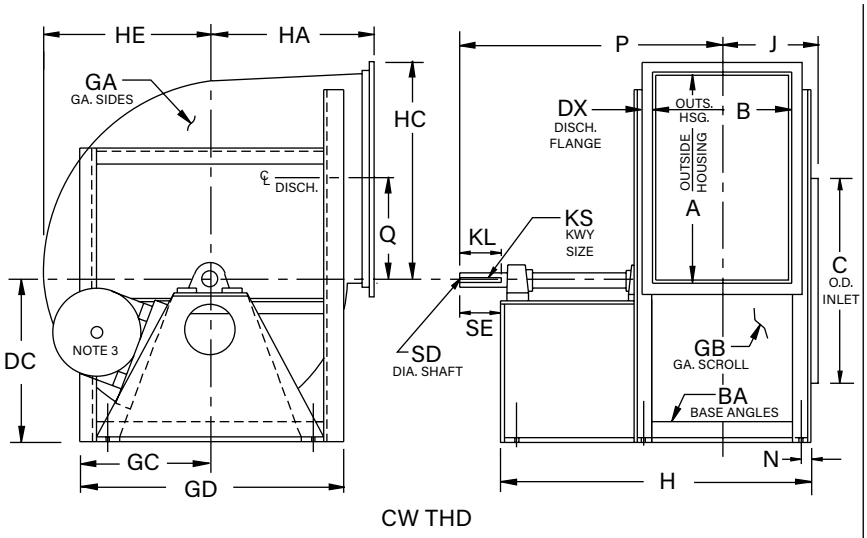
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	FR
122	13.13	7.63	9.88	1.50 x 2.00	0.44	13.25	20.75	20.75	20.75	20.75	20.75	20.75	20.75	1.25	215T
135	14.44	8.31	10.94	1.50 x 2.00	0.44	14.56	23.50	23.50	23.50	23.50	23.50	23.50	23.50	1.25	256T
150	16.00	9.00	12.06	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

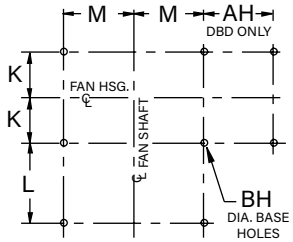
R-1001989B

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

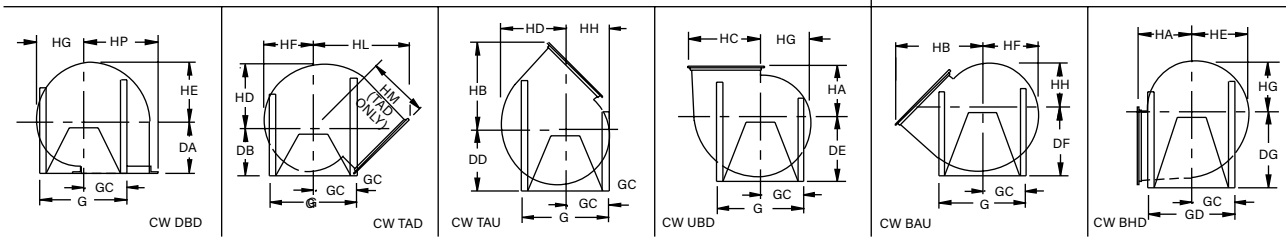
Arrangement 9, SWSI, Non-Rotatable, Class III (cont'd.)



CW THD



FOUNDATION PLAN



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.

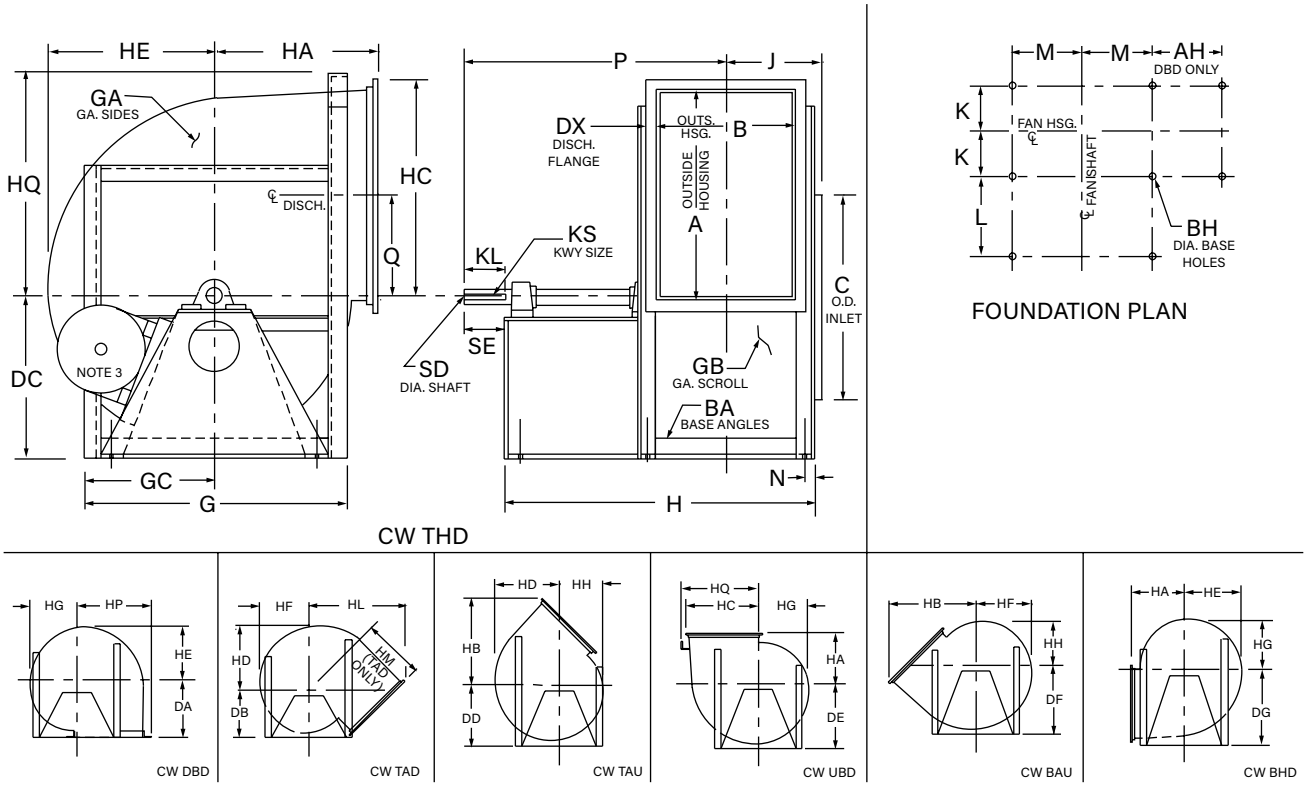
SIZE	HP	J	K	KL	KS	L	M	N	P	Q	SD	SE
122	15.00	7.94	6.06	3.50	0.38 x 0.19	17.38	6.50	0.88	29.31	6.44	1.4375	4.00
135	16.31	8.50	6.63	4.25	0.38 x 0.19	22.75	7.13	0.88	36.00	7.13	1.4375	4.75
150	17.88	9.06	7.19	4.25	0.38 x 0.19	22.75	8.00	0.88	36.56	7.88	1.6875	4.75
165	19.44	9.69	7.81	4.25	0.38 x 0.19	22.75	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

R-1001989B

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

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

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.

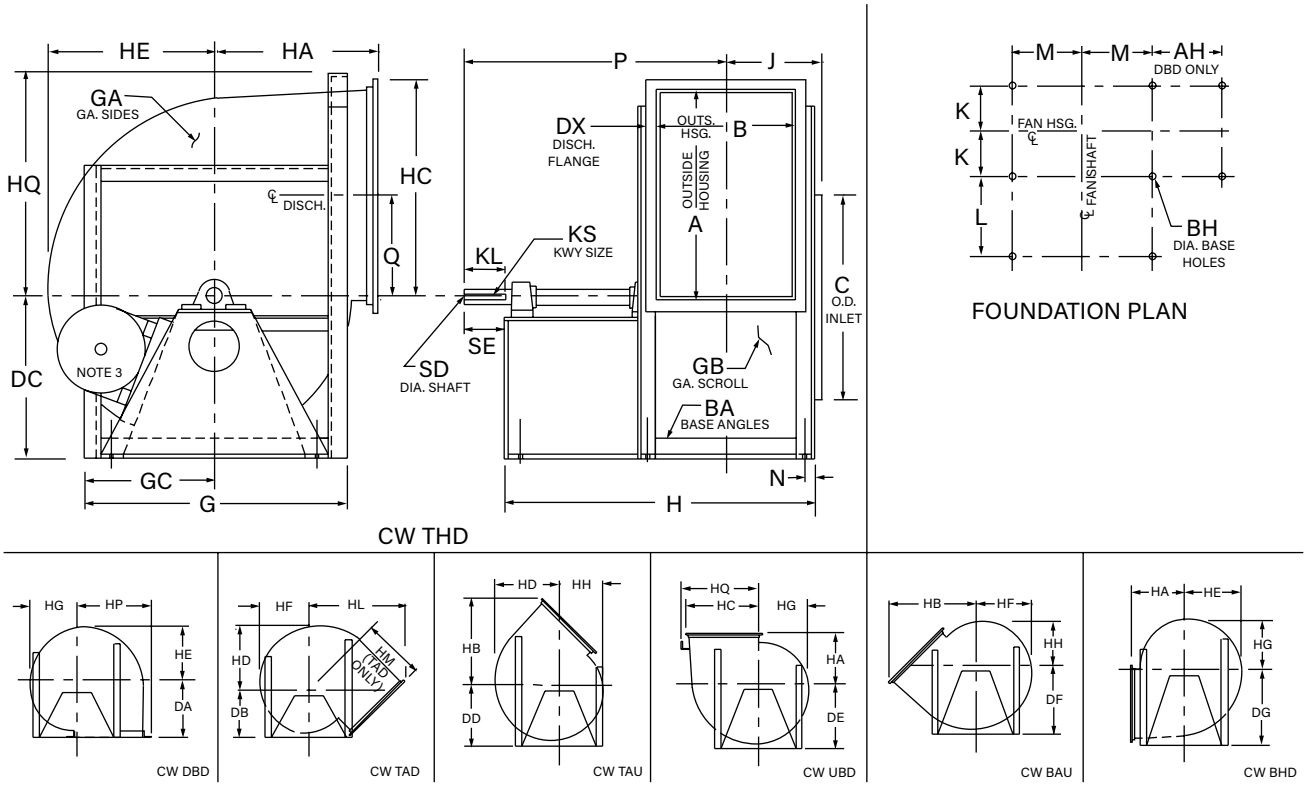
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	FR
365	38.88	21.69	29.00	3.00 x 3.00	0.81	38.50	37.50	37.50	37.50	37.50	37.50	37.50	41.50	1.50	405T
402	42.81	24.38	31.94	3.00 x 4.00	0.81	42.44	40.25	40.25	40.25	40.25	40.25	40.25	45.50	2.00	405T
445	47.31	26.88	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

R-1001990A

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.

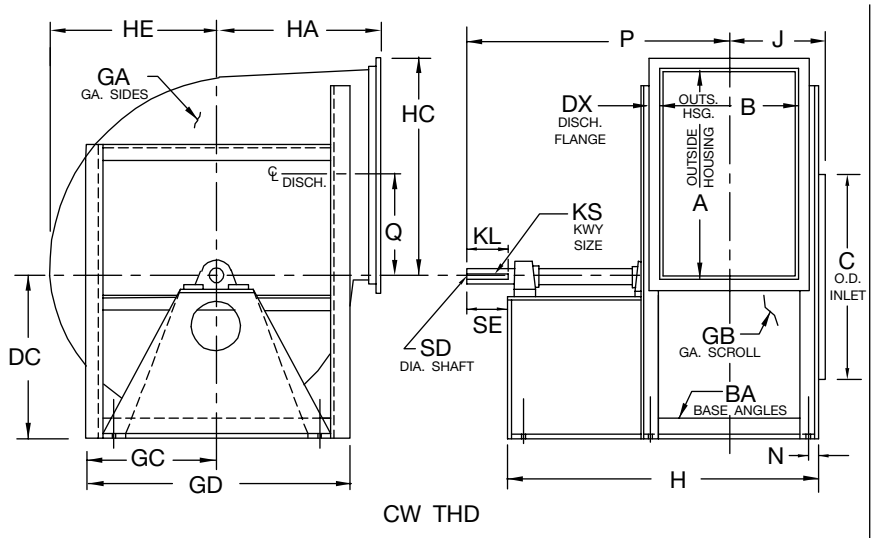
SIZE	HQ	J	K	KL	KS	L	M	N	P	Q	SD	SE
365	–	18.50	16.13	8.00	0.63 x 0.31	34.88	18.63	1.38	61.88	19.25	2.687	9.00
402	–	21.00	18.13	8.75	0.75 x 0.38	41.13	20.38	1.88	71.13	21.25	2.937	10.00
445	–	22.69	19.81	8.75	0.88 x 0.44	41.13	22.38	1.88	72.81	23.50	3.437	10.00
490	–	24.38	21.50	8.75	0.88 x 0.44	41.13	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

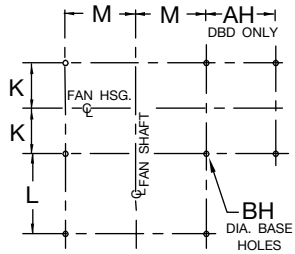
R-1001990A

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

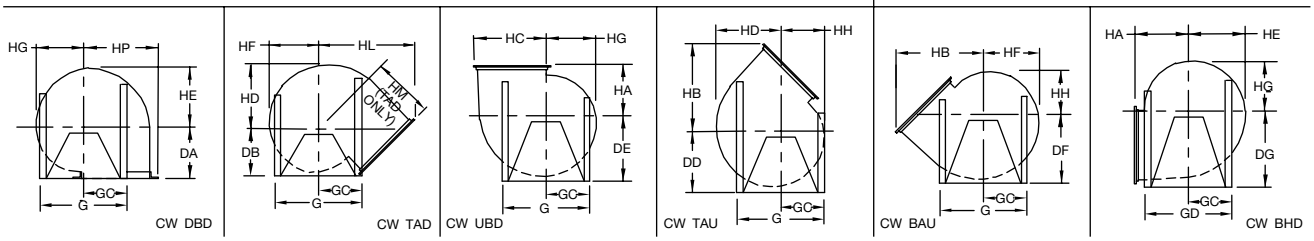
AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

Arrangement 1, SWSI, Non-Rotatable, Class IV





FOUNDATION PLAN



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.

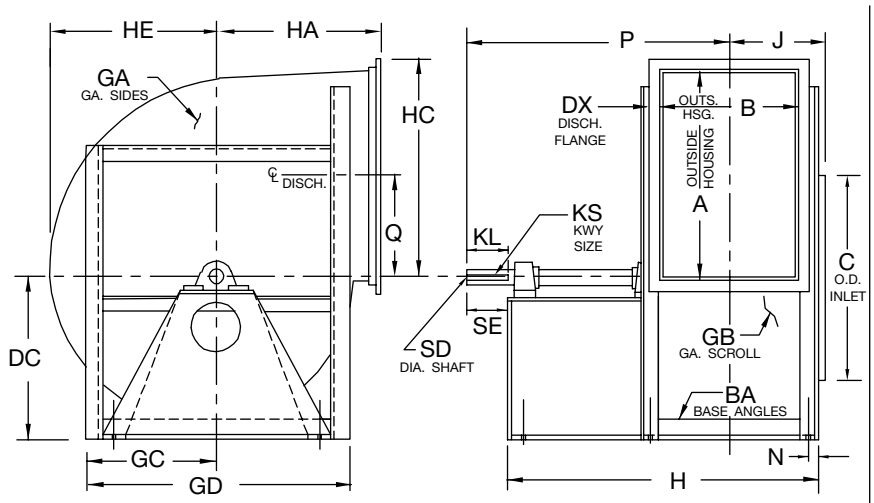
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	G
122	13.25	8.19	10.00	2.50 x 2.50	0.44	13.25	9.75	15.25	10.25	11.00	11.50	12.25	15.50	1.25	19.75
135	14.56	8.88	11.06	2.50 x 2.50	0.44	14.56	10.75	16.00	11.25	12.00	12.75	13.25	16.75	1.25	21.00
150	16.13	9.56	12.19	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

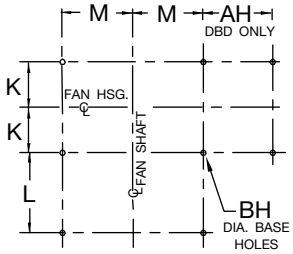
R-1002008B

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

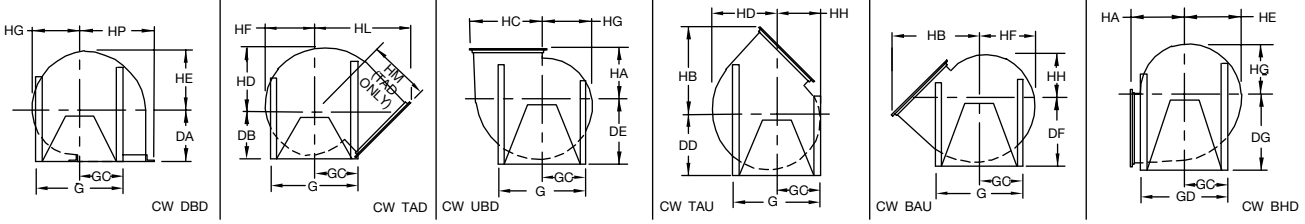
Arrangement 1, SWSI, Non-Rotatable, Class IV (cont'd.)



CW THD



FOUNDATION PLAN



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.

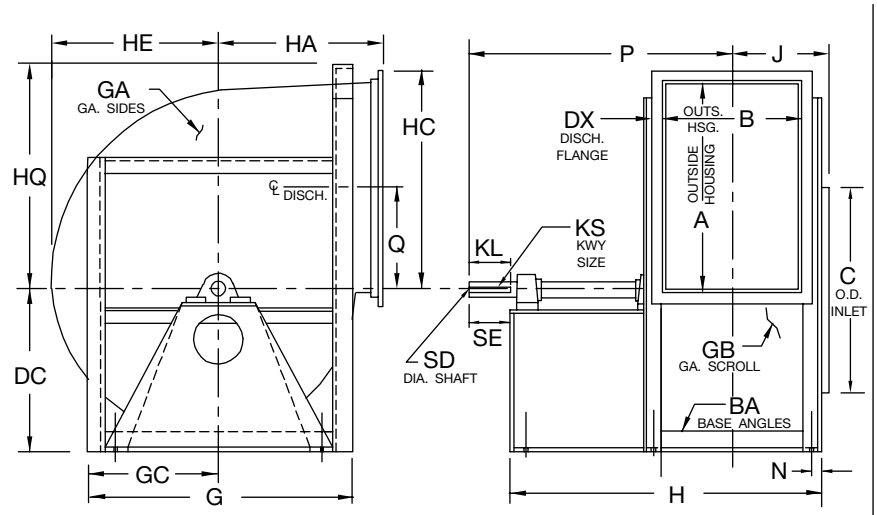
SIZE	J	K	KL	KS	L	M	N	P	Q	SD	SE
122	8.50	6.38	4.50	0.38 x 0.19	7.75	6.25	1.13	21.00	6.44	1.687	5.00
135	9.06	6.94	5.00	0.38 x 0.19	8.25	6.88	1.13	22.56	7.13	1.687	5.50
150	9.63	7.50	5.00	0.38 x 0.19	9.75	7.75	1.13	24.63	7.88	1.687	5.50
165	10.25	8.13	5.00	0.50 x 0.25	9.75	8.50	1.13	25.25	8.69	1.937	5.50
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 x0.38	21.50	16.63	1.88	48.44	17.50	2.937	9.75

R-1002008B

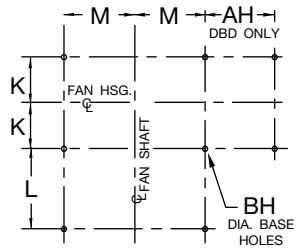
DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

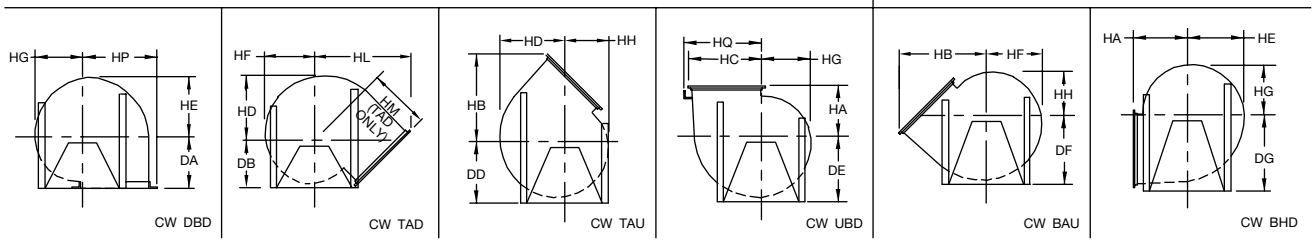
Arrangement 1, SWSI, Non-Rotatable, Class IV



CW THD



FOUNDATION PLAN



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.

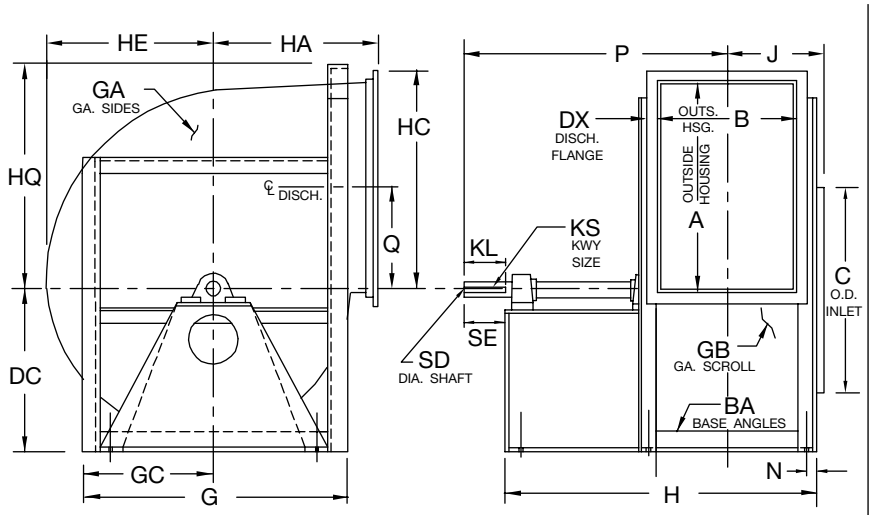
SIZE	A	AH	B	BA	BH	C	DA (Note 3)	DB (Note 3)	DC (Note 3)	DD (Note 3)	DE (Note 3)	DF	DG	DX	G
365	39.00	22.25	29.13	3.00 x 4.00	0.81	38.50	29.00	29.25	29.50	31.50	33.50	35.50	41.50	2.00	49.00
402	42.94	25.44	32.06	3.50 x 5.00	0.81	42.44	32.00	31.75	33.00	35.25	37.00	39.50	46.00	2.00	52.50
445	47.44	28.94	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

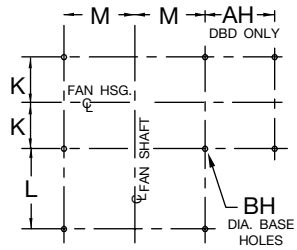
R-1002009A

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

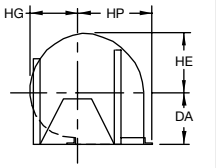
Arrangement 1, SWSI, Non-Rotatable, Class IV (cont'd.)



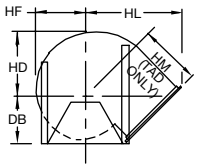
CW THD



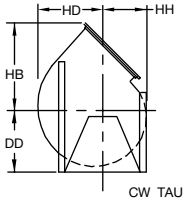
FOUNDATION PLAN



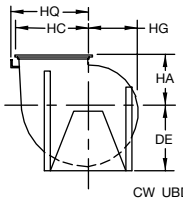
CW DBD



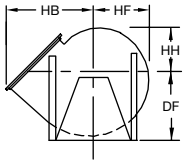
CW TAD



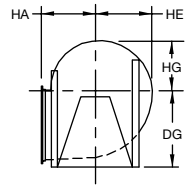
CW TAU



CW UBD



CW BAU



CW BHD

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.

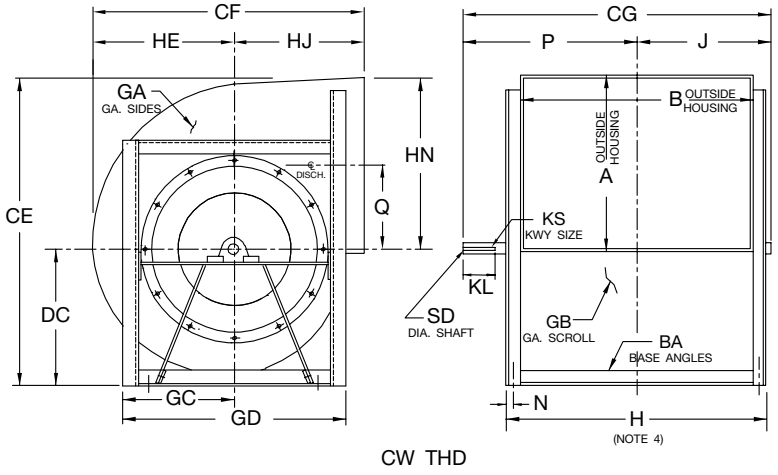
SIZE	J	K	KL	KS	L	M	N	P	Q	SD	SE
365	19.56	16.69	9.00	0.88 x 0.44	23.00	18.63	1.88	51.56	19.25	3.437	10.00
402	22.06	18.69	10.00	0.88 x 0.44	24.50	19.88	2.38	56.06	21.25	3.437	11.00
445	24.75	20.88	10.00	1.00 x 0.50	28.00	21.38	2.88	61.75	23.50	3.937	11.00
490	26.44	22.56	11.00	1.00 x 0.50	30.00	23.88	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

R-1002009A

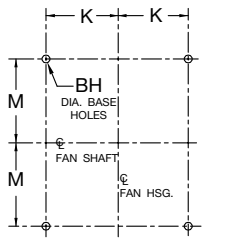
DIMENSIONS NOT TO BE USED FOR CONSTRUCTION. CERTIFIED DRAWINGS AVAILABLE UPON REQUEST.

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

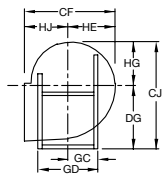
Arrangement 3, DWDI, Non-Rotatable, Class I & II



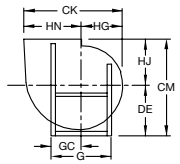
CW THD



FOUNDATION PLAN



CW BHD



CW UBD

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. R-1002030.
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	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

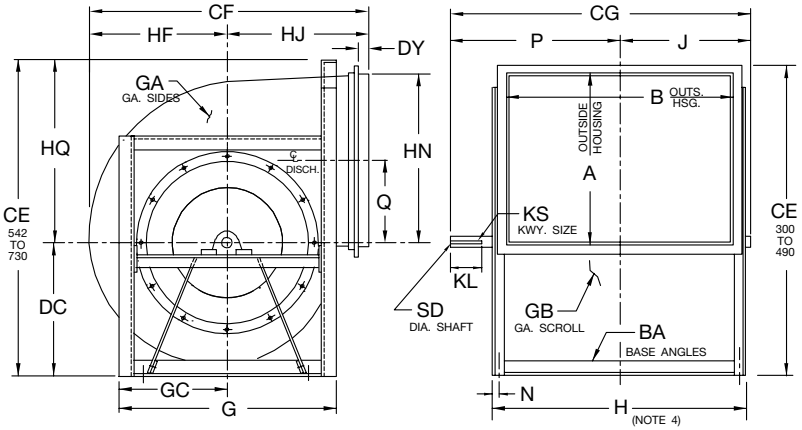
SIZE	G	GA	GB	GC	GD	H	HE	HG	HJ	HN	J		K	KL
											CL I	CL II		
122	19.75	14	14	9.88	18.50	20.50	10.56	9.31	9.25	12.94	11.44	12.38	9.63	3.00
135	21.00	14	14	10.50	19.75	22.50	11.63	10.25	10.25	14.25	12.44	13.38	10.63	3.00
150	22.75	14	14	11.38	21.50	24.50	12.88	11.38	11.44	15.81	14.38	14.38	11.63	3.50
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

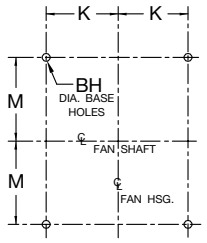
R-1002034B

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

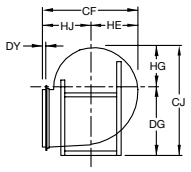
Arrangement 3, DWDI, Non-Rotatable, Class I & II



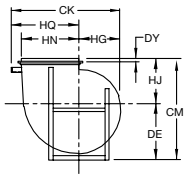
CW THD



FOUNDATION PLAN



CW BHD



CW UBD

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. R-1002035.
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

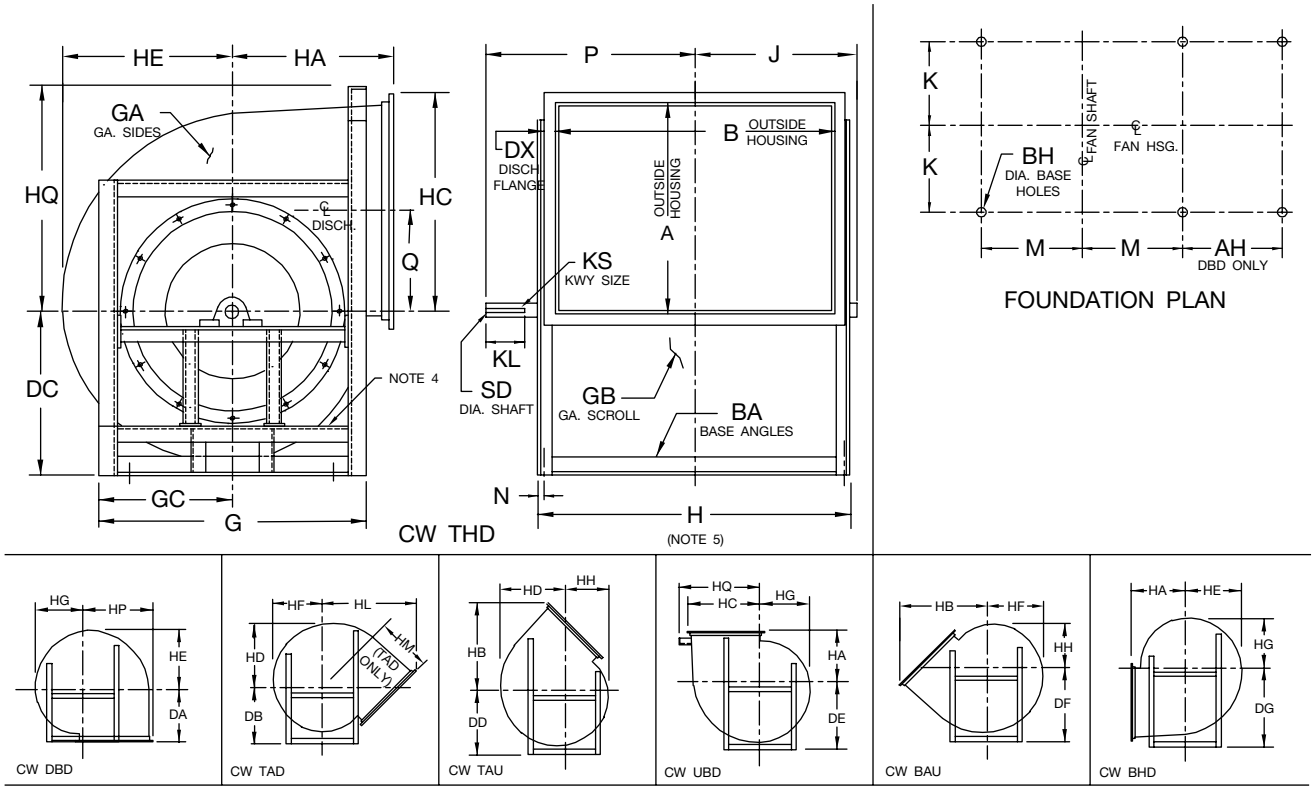
SIZE	CM	DC	DE	DG	DY	G	GA	GB	GC	H	HE	HG	HJ	HN	HQ
300	51.81	24.50	28.50	34.25	1.25	41.00	10	12	20.50	47.75	25.75	22.75	23.31	31.75	–
330	56.75	27.00	31.00	37.25	1.50	44.00	10	12	22.00	51.75	28.38	25.00	25.75	35.06	–
365	62.00	29.50	33.50	41.00	1.50	48.00	10	12	24.00	56.88	31.50	27.75	28.50	38.63	–
402	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	6z6.25	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

R-1002031A

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. R-1002044.
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	GB
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	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	10
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	7

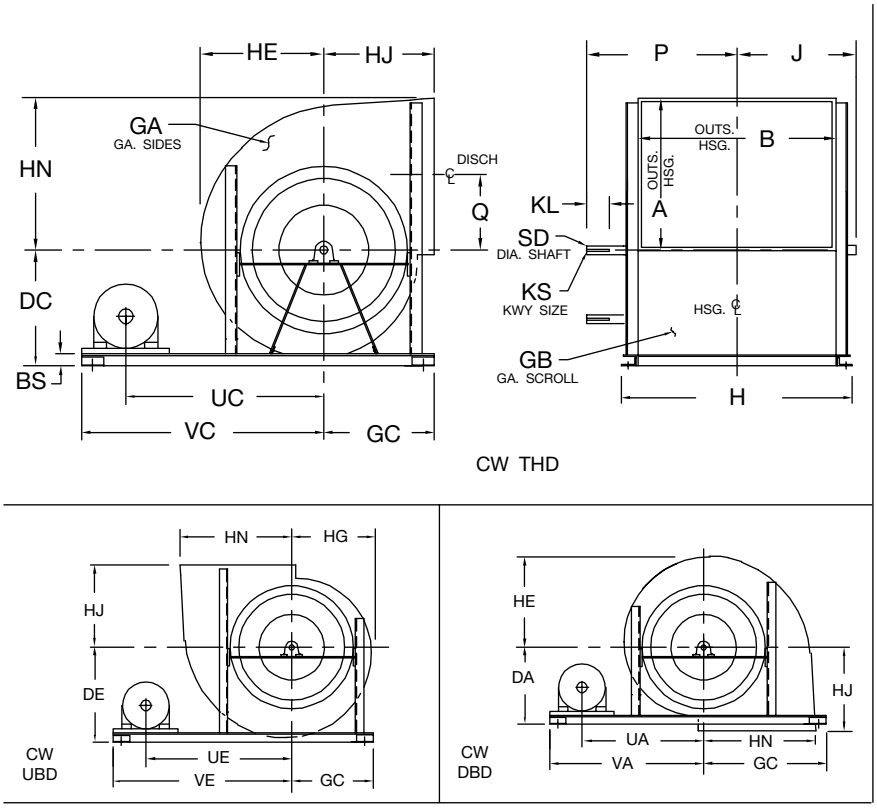
SIZE	GC	GD	H	HA	HB	HC	HD	HE	HF	HG	HH	HL	HM	HP	HQ
807	47.75	95.50	124.38	64.19	107.50	87.81	74.00	69.50	65.38	61.25	57.13	113.69	73.00	90.31	87.75
890	53.25	106.50	136.13	70.00	117.75	96.50	81.56	76.63	72.06	67.50	62.94	125.38	80.75	99.00	96.50
982	61.00	122.00	151.25	77.75	130.13	106.31	90.06	84.63	79.56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

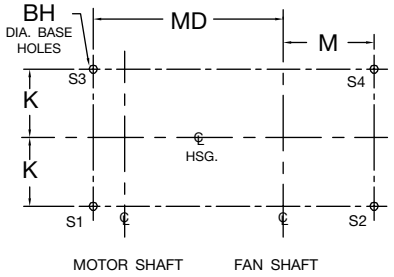
SIZE	J		K	KL	KS	M	N	P		Q	SD	
	CL I	CL II						CL I	CL II		CL I	CL II
807	64.31	65.56	59.81	9.0	1.00 x 0.50	40.88	2.38	74.69	75.44	42.63	3.937	4.437
890	70.19	71.50	65.69	9.0	1.00 x 0.50	46.38	2.38	80.56	82.00	46.94	3.937	4.437
982	77.81	78.44	72.75	9.0	1.25 x 0.63	53.13	2.88	88.31	88.88	51.81	4.937	5.437

R-1002012A

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

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





FOUNDATION PLAN

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. R-1002057.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

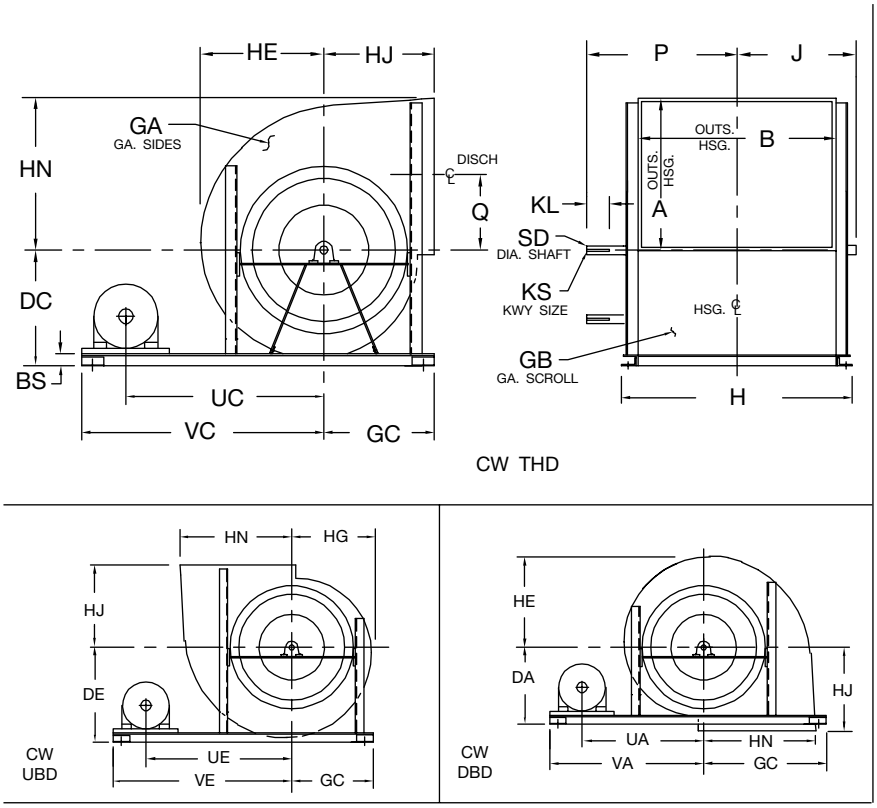
SIZE	A	B	BH	BS	DA	DC	DE	FR	GA	GB	GC			H		HE
											DBD	THD	UBD	DBD	THD/ UBD	
122	13.00	17.44	0.69	4.00	12.38	12.38	12.38	184T	14	14	16.00	9.13	11.38	28.00	24.00	10.56
135	14.31	19.44	0.69	4.00	13.00	13.00	13.00	184T	14	14	17.25	9.75	12.00	30.00	26.00	11.63
150	15.88	21.44	0.69	4.00	13.88	13.88	13.88	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

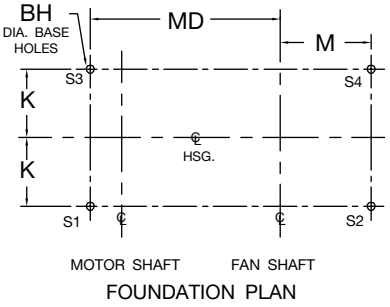
SIZE	HG	HJ		HN	J	K		KL	KS	M			MD		
		DBD	THD/ UBD			DBD	THD/ UBD			DBD	THD	UBD	DBD	THD	UBD
122	9.31	13.88	9.25	12.94	11.44	12.75	10.63	3.00	0.25 x 0.13	13.00	6.13	8.38	23.00	24.25	26.13
135	10.25	14.50	10.25	14.25	12.44	13.75	11.63	3.00	0.25 x 0.13	14.25	6.75	9.00	23.88	25.25	27.38
150	11.38	15.38	11.44	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

R-1002045B

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. R-1002057.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

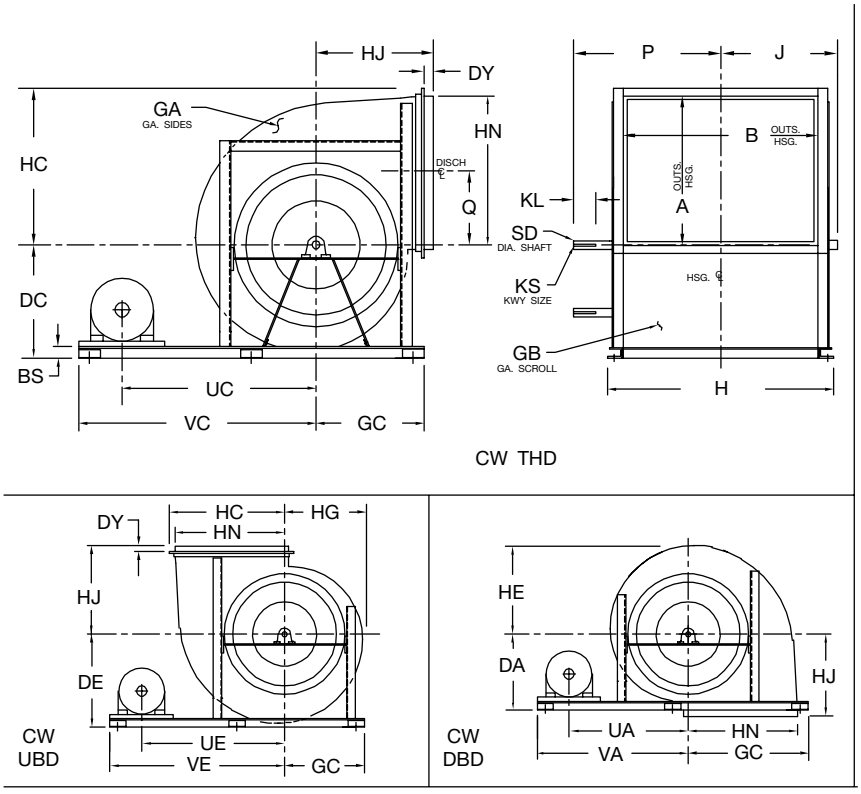
SIZE	P	Q	SD	UA	UC	UE	VA	VC	VE
122	15.25	6.44	1.187	19.63	20.88	22.75	26.00	27.25	29.13
135	16.25	7.13	1.187	20.50	21.88	24.00	26.88	28.25	30.38
150	18.75	7.88	1.437	23.63	25.13	27.50	31.13	32.63	35.00
165	19.81	8.69	1.437	24.75	26.38	28.63	32.25	33.88	36.13
182	21.50	9.63	1.687	28.38	30.13	33.13	37.25	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

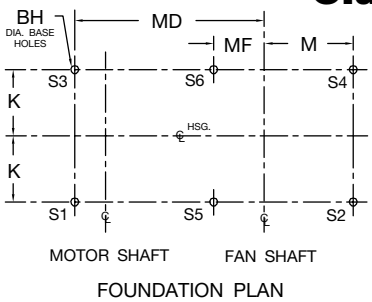
R-1002045B

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

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

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





FOUNDATION PLAN

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. R-1002058.
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. R-1002047 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

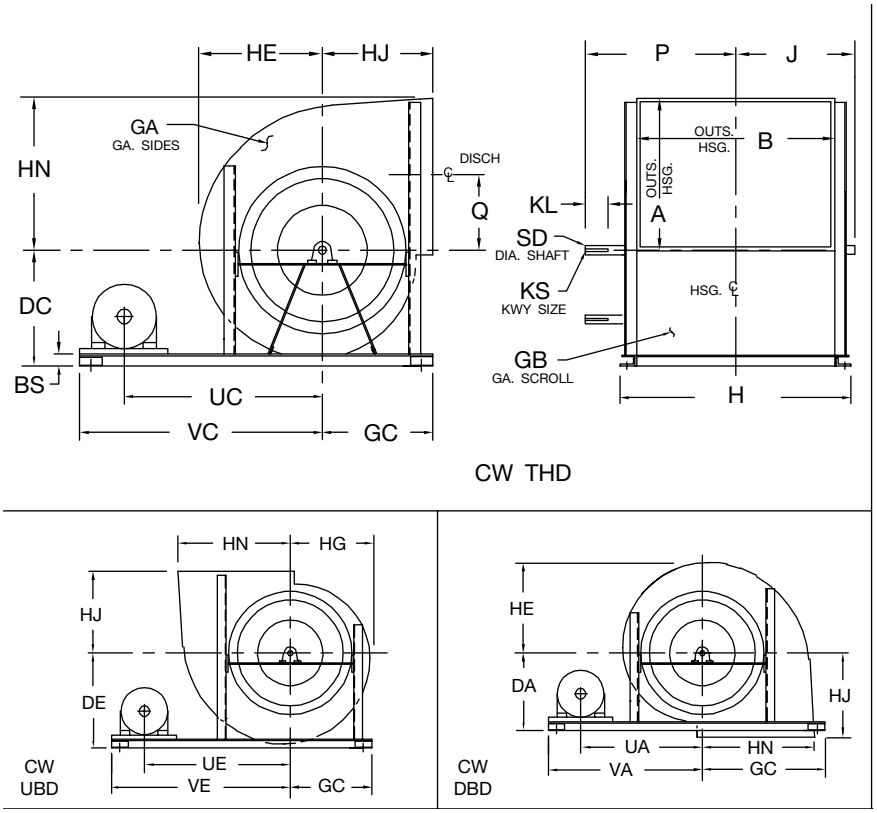
SIZE	HE	HG	HJ		HN	J	K		KL	KS	M		MD		
			DBD	THD/UBD			DBD	THD/UBD			DBD	THD/UBD	DBD	THD	UBD
300	25.75	22.75	24.50	23.31	31.75	26.25	25.50	23.88	5.50	0.63 x 0.31	32.25	18.50	45.63	48.63	53.00
330	28.38	25.00	26.00	25.75	35.06	28.25	27.50	25.88	5.50	0.63 x 0.31	35.63	20.00	47.75	51.00	55.63
365	31.50	27.75	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

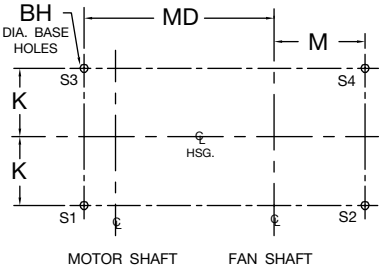
SIZE	MF		P	Q	SD	UA	UC	UE	VA	VC	VE
	DBD	UBD									
300	—	—	32.88	15.81	2.437	38.75	41.75	46.13	48.63	51.63	56.00
330	—	—	34.88	17.50	2.437	40.88	44.13	48.75	50.75	54.00	58.63
365	—	—	37.75	19.25	2.687	45.75	49.50	54.75	57.13	60.88	66.13
402	—	—	40.63	21.25	2.437	48.38	52.25	57.88	59.75	63.63	69.25
445	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

R-1002046B

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

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





FOUNDATION PLAN

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. R-1002063.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

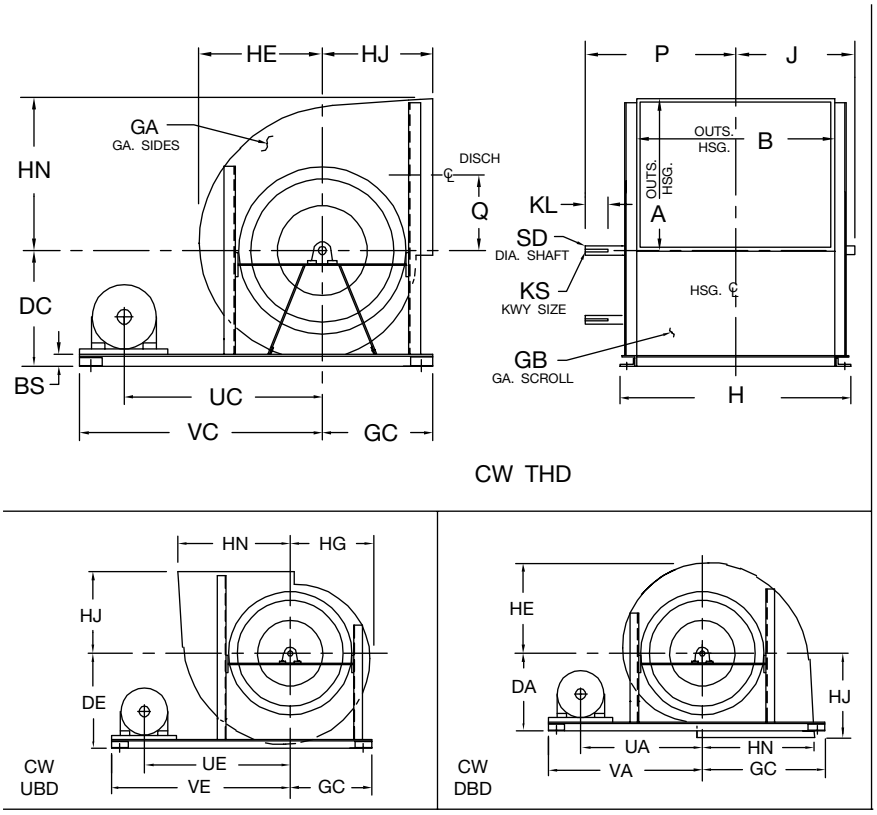
SIZE	A	B	BH	BS	DA	DC	DE	FR	GA	GB	GC			H		HE
											DBD	THD	UBD	DBD	THD/UBD	
122	13.00	17.44	0.69	4.00	12.38	12.38	12.38	215T	14	14	16.00	9.13	11.38	28.00	24.00	10.56
135	14.31	19.44	0.69	4.00	13.00	13.00	13.00	254T	14	14	17.25	9.75	12.00	30.00	26.00	11.63
150	15.88	21.44	0.69	4.00	13.88	13.88	13.88	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

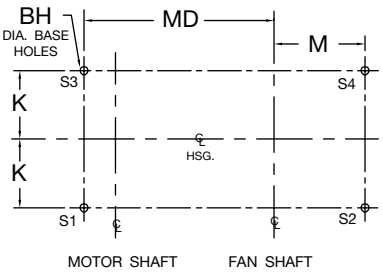
SIZE	HG	HJ		HN	J	K		KL	KS	M			MD		
		DBD	THD/UBD			DBD	THD/UBD			DBD	THD	UBD	DBD	THD	UBD
122	9.31	13.88	9.25	12.94	12.38	12.75	10.63	3.00	0.38 x 0.19	13.00	6.13	8.38	26.13	27.38	29.25
135	10.25	14.50	10.25	14.25	13.38	13.75	11.63	3.00	0.38 x 0.19	14.25	6.75	9.00	30.63	32.00	34.13
150	11.38	15.38	11.44	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

R-1002051B

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

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





FOUNDATION PLAN

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. R-1002063.
4. See ES4-98 for point loads at location "S1," "S2," etc.
5. Contact factory for BHD and other UBD orientations.

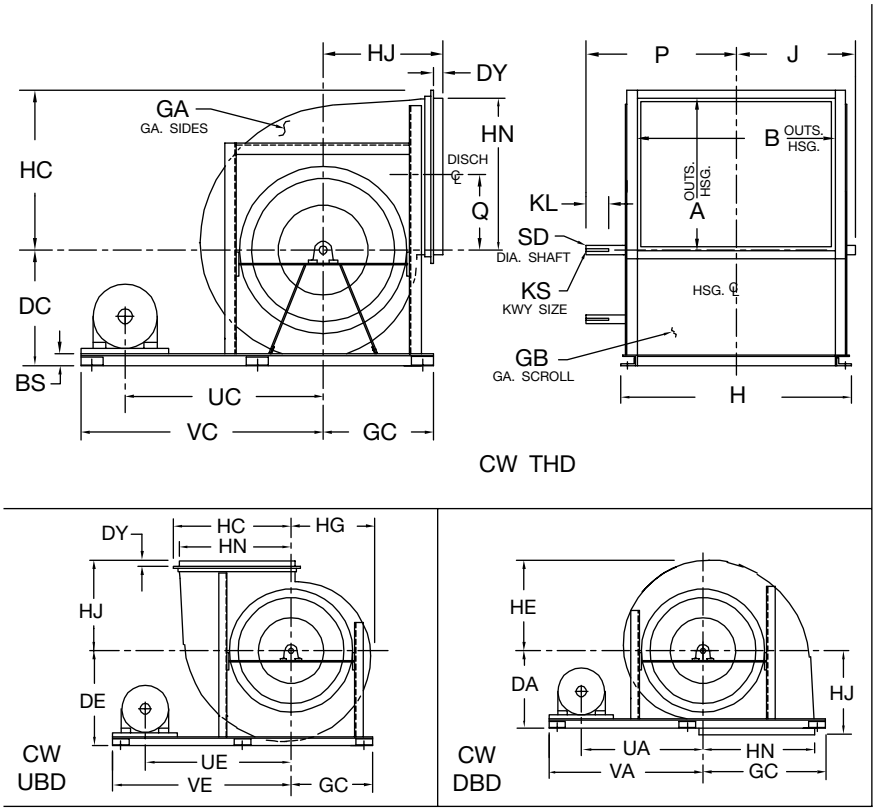
SIZE	P	Q	SD	UA	UC	UE	VA	VC	VE
122	16.25	6.44	1.437	21.63	22.88	24.75	29.13	30.38	32.25
135	17.25	7.13	1.687	24.75	26.13	28.25	33.63	35.00	37.13
150	18.75	7.88	1.687	25.88	27.38	29.75	34.75	36.25	38.63
165	20.06	8.69	1.937	27.00	28.63	30.88	35.88	37.50	39.75
182	21.75	9.63	1.937	29.88	31.63	34.63	39.75	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

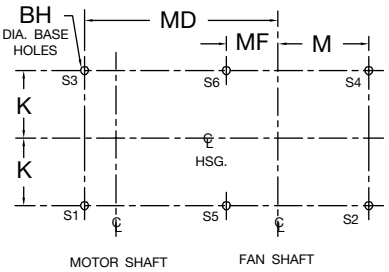
R-1002051B

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

AEROVENT
INDUSTRIAL VENTILATION SYSTEMS

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





FOUNDATION PLAN

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. R-1002064.
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. R-1002053 for sizes 542–660. Contact factory for BHD and other UBD orientations.

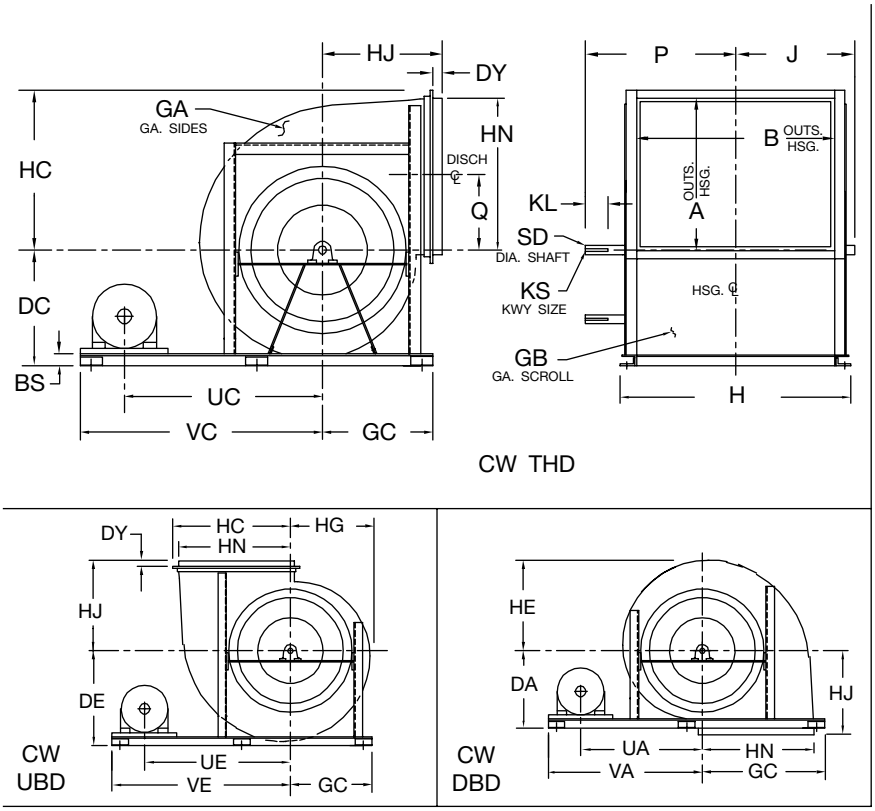
SIZE	A	B	BH	BS	DA	DC	DE	DY	FR	GA	GB	GC		H		HC
												DBD	THD/UBD	DBD	THD/UBD	
300	31.81	42.69	0.69	5.00	23.00	23.75	26.75	1.25	364T	10	12	35.25	21.50	53.50	51.50	33.25
330	35.13	46.69	0.69	5.00	24.50	26.00	29.38	1.50	365T	10	12	38.63	23.00	57.50	55.50	36.56
365	38.69	51.81	0.81	6.00	27.50	28.75	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

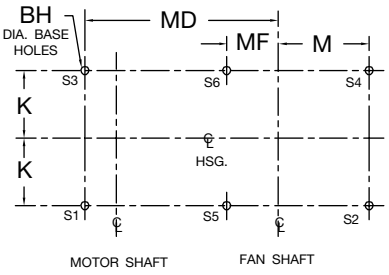
SIZE	HE	HG	HJ		HN	J	K		KL	KS	M		MD		
			DBD	THD/UBD			DBD	THD/UBD			DBD	THD/UBD	DBD	THD	UBD
300	25.75	22.75	24.50	23.31	31.75	26.25	25.50	23.88	5.50	0.63 x 0.31	32.25	18.50	53.50	56.50	61.25
330	28.38	25.00	26.00	25.75	35.06	28.25	27.50	25.88	5.50	0.63 x 0.31	35.63	20.00	55.75	59.13	64.13
365	31.50	27.75	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

R-1002052B

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

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





FOUNDATION PLAN

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. R-1002064.
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. R-1002053 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

R-1002052B

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

Model

CAE-SW

Fans shall be Model CAE-SW Airfoil, as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA 210 and AMCA 300 test codes for air moving devices and shall be licensed to bear the AMCA certified ratings seal for both sound and air.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the efficiency peak 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 99-2408-69.

HOUSING — CAE-SW 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 shrouds providing stable flow and high rigidity.

Class I and II sizes 270 and smaller, excluding Arrangement 3, shall be of the rotatable design, convertible to 8 standard discharge configurations.

IMPELLER — Impellers shall be of the non-overloading type. Impellers shall have a precision spun, flat inlet cone to allow higher efficiencies over the performance range of the fan. Sizes 165 and smaller shall have airfoil-shaped, extruded aluminum blades. Sizes 182 and larger shall have die-formed airfoil steel blades with the option of extruded aluminum blades. All impellers shall be statically and dynamically balanced on precision electronic balancers to a Balance Quality Grade G6.3 per ANSI/AMCA 204 or better.

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 properly washed and pretreated before application of a rust-preventative primer, if called out on the order. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly, if called out on the order. 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, 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 impeller diameters $16^{1}/_{2}$" 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 RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each impeller 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, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

Model
CAE-DW

Fans shall be Model CAE-DW Airfoil, as manufactured by Aerovent, Minneapolis, Minnesota.

PERFORMANCE — Fans shall be tested in accordance with AMCA 210 and AMCA 300 test codes for air moving devices and shall be licensed to bear the AMCA certified ratings seal for both sound and air.

Fans shall have a sharply rising pressure characteristic extending through the operating range and continuing to rise beyond the efficiency peak 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 99-2408-69.

HOUSING — CAE-DW 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 impellers.

IMPELLER — Impellers shall have a precision spun, flat inlet cone to allow higher efficiencies over the performance range of the fan. Sizes 165 and smaller shall have airfoil-shaped, extruded aluminum blades. Sizes 182 and larger shall have die-formed airfoil steel blades with the option of extruded aluminum blades. All impellers shall be statically and dynamically balanced on precision electronic balancers to a Balance Quality Grade G6.3 per ANSI/AMCA 204 or better.

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 properly washed and pretreated before application of a rust-preventative primer, if called out on the order. After the fan is completely assembled, a finish coat of paint shall be applied to the entire assembly, if called out on the order. 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, 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 impeller diameters $16^{1}/_{2}$" 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 RUN TEST — All fans prior to shipment shall be completely assembled and test run as a unit at the specified operating speed or maximum RPM allowed for the particular construction type. Each impeller 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, Balance Quality Grade G6.3. Balance readings shall be taken by electronic type equipment in the axial, vertical and horizontal directions on each of the bearings. Records shall be maintained and a written copy shall be available upon request.

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