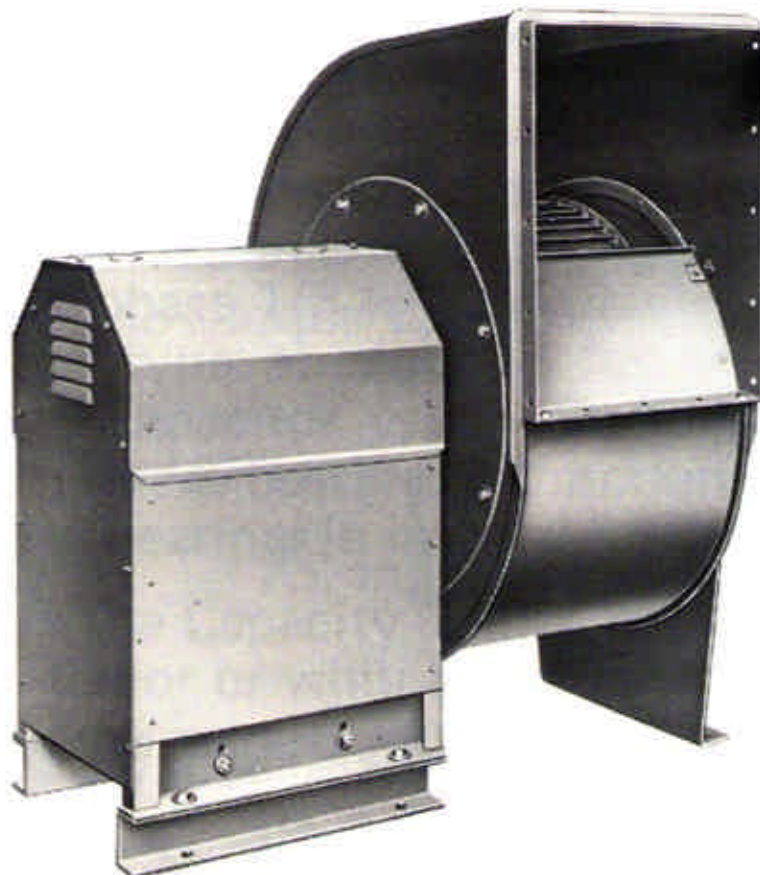




DF Fan Services, Inc.
495 Wegner Drive
West Chicago, IL 60185-2675
Phone: 630-876-1495
Fax: 630-876-1497
www.dffan.com

BELT-DRIVE READY UNIT FANS

**READY TO RUN FAN ASSEMBLIES
FOR COMMERCIAL, INDUSTRIAL, HIGH-TEMPERATURE,
and/or CORROSIVE APPLICATIONS**



DF FAN - LS READY UNITS

APPLICATION

These easy to install fans, featuring universal discharge and integrally mounted motors, are unusually versatile. They are ideally suited for supply or exhaust jobs, both indoors and outdoors. The standard fan is for clean air up to 300°F. However, with modifications the air-stream temperatures can reach 1200°F, and move almost any type of corrosive or toxic fumes.

- For volumes up to 17,000 CFM
- For static pressures through 10"W.G.

DF Fan LS Ready Units answer the exacting quiet operating requirements of commercial and public buildings, the heavy-duty demands of industrial service, and the strict requirements of the OEM.

TYPICAL USES INCLUDE:

- Industrial high temperature applications such as: Dryers, Paint/Powder Coat Systems, Washers, or Bake-Off Ovens
- Oven re-circulation
- Oven exhaust
- Exhausting Fumes and gases
- Ventilation in buildings of all types, including: schools, hospitals, restaurants, and offices.
- Ventilation or exhaust in industrial plants.
- Spot cooling
- Supply process air

OUTSTANDING FEATURES

- Class II, Heavy-duty construction for added years of service.
- Mill galvanized steel fan wheel with cast iron hub.
- Dynamically balanced fan wheels.
- Fully welded fan housings.
- Heavy steel shaft and cast iron pillowblock bearings.
- Welded angle iron frames.
- Ready-to-Run complete assemblies.
- Vented weather cover.
- High grade paint treatment, after complete sandblast.
- Possible to change discharge direction in the field.
- Centrifugal forward curved fan wheel for quiet performance.
- Guaranteed performance.
- 8 fan sizes.



GENERAL INFORMATION

MINIMUM SPACE REQUIRED

The highly compact Ready Units can be installed in practically any location – on the floor, on the roof, on a platform. They can also be modified for inverted or side-wall mounting.

OTHER BELT DRIVE ADVANTAGES

A Belt Drive Ready Unit can be chosen to operate at the necessary speed for the air volume and static resistance desired. Adjustable V-belt drive allows limited changes to be made in fan speed after installation should more or less air be required. For greater speed changes a new drive can be obtained.

(CAUTION: Check with the Capacity Table before increasing the speed. Since fan brake horsepower changes with the cube of the speed ratio, even a small increase in speed may overload the motor selected.)

LOWER INSTALLATION COST

Since each unit is furnished complete with motor and drive integrated in one assembly, no expense is required for a separate motor foundation or alignment of components.

ADAPTABILITY ON THE JOB

Air discharge direction can be changed in the field to any of the eight AMCA standard positions of the same rotation. This is readily accomplished by removing the side plate-to-housing bolts, rotating the housing, and replacing the bolts. If a rotation change is necessary, an opposite rotation wheel is obtainable.

Motors can be changed in the field within the limits of NEMA frames and overall length shown on the Dimension Tables. Pre-punched motor bases simplify the change.

FUME HOOD FAN ASSEMBLIES*

For exhausting fumes from industrial and institutional laboratory hoods or other corrosive fume exhaust system. Cast iron housing and v-V-Belt-Drive. Incorporating SWSI centrifugal forward curved bladed wheels. Complete packaged, ready-to-run in four basic sizes with capacities from 250 to 6,300 CFM at static pressures to 5" W.G.

* **ASK FOR BULLETIN 26002**



Fume Hood

TYPE UNI-COMBUSTION FANS**

Direct-Drive Uni-Combustion fans assemblies and fan parts, incorporating SWSI centrifugal forward curved bladed wheels in 15 diameters from 6-1/2" through 32-1/2", are designed for industrial use. Available in arrangement 4. Complete assemblies and/or parts for your OEM application. Capacities from 200 to 24,000 CFM at static pressures to 10" W.G.

** **ASK FOR BULLETIN 18001**



Arrangement
4-Pancake



Arrangement
4U Assembly



Arrangement
4E Assembly

STANDARD CONSTRUCTION

As is typical of all DF Fan equipment, LS Ready Units are Class II, extra-rugged to provide added strength and rigidity. This more durable construction is reflected in added years of service and minimum maintenance along the way.

FAN WHEEL

LS Ready Units have Centrifugal, forward curved fan wheels. These are the same construction as Type DF Multi-blade wheels, which have been serving the air conditioning unit business for over 60 years. Standard fan wheels are manufactured from mill galvanized steel construction with cast iron hubs. Every Ready Unit fan wheel is balanced both statically and dynamically.



Standard Wheel

Reinforcing Rings
and Stop-Off Band

Fan Wheel size 1/2 through 1-1/4 – 48 die formed blades, with integral tenons on blade ends. Tenons project through slots in rims and centerplate and are staked in place.

Fan Wheel sizes 1-3/8 through 2-1/2 – 60 die formed bladed (48 blades, sizes 1-3/8 and 1-1/2). Blades have flanged ends which are riveted to centerplate and rims.

Standard Hubs are cast iron, “Huck Bolted” to backplate. Available in all English and Metric bores, with or without keyway.

MOTORS

NEMA standard single speed, ODP motors are standard on all units – (3-60-230/460). Standard motors are EPAct compliant.

FAN HOUSING

Housings are constructed of heavy-gauge steel with each side sheet fully welded to the scroll. Inlets are cast iron or fabricated steel for a smooth airflow to the wheel.



Standard Steel Housing

SHAFT, BEARINGS & DRIVE

Standard shafts are of 1045 steel, turned, and ground to exact size. All bearings are Cast Iron Pillowblock type. Drive is V-belt type with one variable pitch pulley for ease with system installation air balance.

FRAMES

The frames, which support the housing and all moving parts, are constructed from heavy steel angle iron. The frame is fully welded to assure permanent alignment and hold any vibration to an absolute minimum.

WEATHER COVER

All units are furnished with vented outdoor weather cover, providing complete enclosure of moving parts to meet safety codes. These covers are easily removed for convenient access to motor, v-belt drive, shaft and bearings.

COATINGS

Standard LS Ready Unit is sandblasted and coated with air-dried enamel paint.

OPTIONAL FEATURES AVAILABLE

VIBRATION ISOLATION

Rubber in-shear isolators, as found on the dimensional page 14, effectively prevent transmission of any vibration. Spring Isolators are also available.

VORTEX INLET DAMPER CONTROL

A superior DF Fan capacity regulating device, consisting of 8 simultaneously adjustable blades at the fan inlet. This permits accurate control and saves considerable power input as compared to outlet dampering devices.



Vortex Control

SPECIAL MOTORS

Enclosed, Explosion-Proof, Two-Speed, Hostile Environment, Single Phase, 50 Hz, or other special motors can be furnished upon request.

CLEANOUT DOORS

Bolted type housing access doors are available.

FINISHES AND SPECIAL METAL CONSTRUCTION

Standard Construction – mill galvanized steel (zinc-grip) construction with cast iron hub.

Maximum air-stream temperature 500°F.

High-Temperature Construction – Steel construction with cast iron hub, coated with one coat of black silicone based paint. Maximum air-stream temperature 750°F.

Spark Resistant Construction – Ferrous and non-ferrous metal combinations, using aluminum and monel, to meet AMCA “A”, “B”, and “C” construction requirements.

Aluminum Construction – Available for wheels and housings for spark-resistant applications with either cast iron or aluminum wheel hubs.

HOUSING DRAIN

A drain plug fitted at the housing low point.

OUTLET LOUVERS

Mounted on the outlet for prevention of back-draft or for weather protection.

SPECIAL COATINGS

Special coatings are available for corrosive, harsh, or other special applications. These coatings include but are not limited to: “Heresite”, Epoxy, Teflon, Cold Galvanizing Compound, etc.

INLET/OUTLET SCREENS

For protection from birds, debris, and/or people.

SPARK RESISTANT CONSTRUCTION

Special construction and materials used to meet AMCA standards for Type A, Type B, or Type C.

COOLING WHEELS - HEAT SLINGERS

Shaft cooling wheels are available for high temperature applications to dissipate heat from the shaft and protect the bearings.

Stainless Steel Type 304/316 – Available for wheels and housings for corrosive and/or high-temperature applications. Maximum air-stream temperature 1200°F.

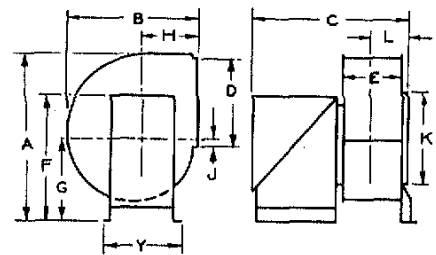
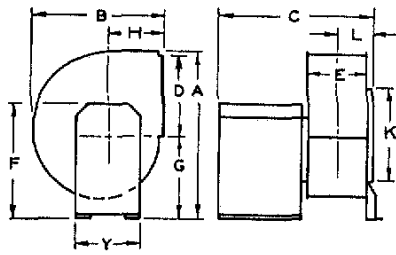
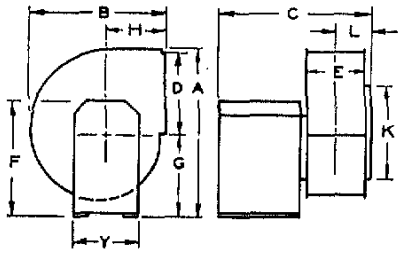
Monel (Nickel-400) – Wheels and housings available for spark-resistant applications where pressure or temperature precludes use of aluminum.

27 LS Ready Unit Size 1

Outlet		1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/2"	3"	3 1/2"	4"	4 1/2"	5"	5 1/2"	6"	
CFM	Velocity FPM	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP	RPM	SP BHP
600	695	416	0.04																
700	811	430	0.05	510	0.07														
800	927	454	0.07	519	0.09	589	0.11												
900	1043	473	0.09	538	0.11	598	0.13	718	0.19										
1000	1159	502	0.11	562	0.13	617	0.16	722	0.22										
1100	1275	526	0.13	581	0.16	636	0.19	736	0.24	831	0.31								
1200	1390	551	0.16	606	0.19	656	0.22	751	0.28	841	0.35	931	0.42						
1300	1506	580	0.19	635	0.23	680	0.26	770	0.32	850	0.39	935	0.46	1020	0.55				
1400	1622	609	0.23	659	0.26	704	0.30	789	0.37	869	0.44	944	0.51	1024	0.60	1099	0.68		
1500	1738	638	0.27	688	0.31	733	0.35	813	0.42	888	0.49	958	0.57	1033	0.65	1103	0.74	1178	0.84
1600	1854	667	0.31	712	0.35	757	0.40	837	0.48	907	0.55	977	0.63	1047	0.72	1112	0.81	1182	0.91
1700	1970	696	0.36	741	0.41	786	0.46	861	0.54	931	0.62	996	0.70	1061	0.79	1126	0.89	1186	0.98
1800	2086	726	0.42	771	0.47	811	0.52	886	0.61	956	0.70	1021	0.79	1081	0.88	1141	0.97	1201	1.07
1900	2202	755	0.48	800	0.53	840	0.59	915	0.69	980	0.78	1040	0.87	1100	0.96	1160	1.06	1215	1.16
2000	2317	784	0.54	829	0.60	869	0.66	939	0.76	1004	0.87	1064	0.96	1124	1.06	1179	1.16	1234	1.26
2100	2433	813	0.61	858	0.68	898	0.74	968	0.86	1028	0.96	1088	1.06	1148	1.17	1198	1.27	1253	1.37
2200	2549	852	0.70	887	0.76	927	0.83	992	0.94	1057	1.06	1117	1.18	1172	1.28	1222	1.39	1272	1.49
2300	2665	891	0.81	916	0.85	956	0.92	1021	1.05	1081	1.16	1141	1.29	1196	1.40	1246	1.51	1296	1.62
2400	2781	926	0.91	946	0.95	986	1.02	1051	1.16	1111	1.29	1166	1.41	1221	1.53	1271	1.65	1316	1.76
2500	2897	965	1.03	980	1.06	1015	1.13	1080	1.28	1135	1.40	1190	1.53	1245	1.66	1295	1.79	1340	1.90
2600	3013	1004	1.16	1009	1.17	1044	1.25	1109	1.40	1164	1.54	1219	1.67	1269	1.80	1319	1.94	1364	2.06
2700	3129			1043	1.30	1073	1.37	1133	1.52	1193	1.68	1248	1.83	1298	1.97	1343	2.09	1388	2.22
2800	3244			1082	1.45	1102	1.50	1162	1.66	1222	1.83	1272	1.97	1322	2.12	1367	2.26	1417	2.41
2900	3360			1121	1.61	1131	1.63	1196	1.82	1251	1.99	1301	2.14	1351	2.30	1396	2.44	1441	2.59
3000	3476					1161	1.78	1221	1.96	1276	2.14	1326	2.30	1376	2.47	1421	2.62	1466	2.78
3100	3592					1200	1.94	1255	2.15	1305	2.31	1355	2.49	1405	2.66	1450	2.82	1490	2.97
3200	3708					1239	1.97	1284	2.32	1334	2.50	1384	2.68	1429	2.85	1474	3.02	1519	3.20
3300	3824					1278	2.17	1313	2.50	1363	2.69	1413	2.88	1458	3.06	1503	3.24	1543	3.41
3400	3940					1317	2.38	1342	2.70	1392	2.89	1442	3.10	1487	3.28	1532	3.48	1572	3.65
3500	4056					1351	2.60	1371	2.90	1426	3.13	1471	3.32	1516	3.52	1556	3.70	1566	3.89
3600	4171					1391	2.82	1401	3.11	1451	3.33	1501	3.56	1546	3.76	1586	3.95	1626	4.14
3700	4287					1430	3.07	1435	3.36	1485	3.59	1530	3.80	1570	3.99	1615	4.22	1655	4.42
3800	4403					1469	3.62	1514	3.83	1559	4.05	1599	4.26	1644	4.49	1684	4.70	1759	5.10
3900	4519					1508	3.91	1543	4.09	1588	4.32	1628	4.53	1673	4.78	1708	4.97	1783	5.40
4000	4635					1547	4.22	1572	4.35	1617	4.60	1657	4.82	1697	5.05	1737	5.28	1812	5.71
4100	4751					1586	4.55	1601	4.63	1646	4.88	1691	5.15	1726	5.35	1766	5.59	1841	6.05
4200	4867					1621	4.87	1631	4.92	1676	5.19	1716	5.43	1756	5.68	1796	5.93	1866	6.38
4300	4983					1660	5.23	1665	5.26	1705	5.50	1750	5.78	1785	6.01	1825	6.27	1895	6.74
4400	5098							1699	5.6	1739	5.86	1779	6.12	1814	6.35	1854	6.63	1924	7.12
4500	5214							1738	5.99	1768	6.19	1808	6.47	1843	6.71	1883	6.99	1953	7.50
4600	5330							1777	6.41	1797	6.65	1837	6.83	1872	7.08	1912	7.38		
4700	5446							1816	6.84	1826	6.91	1866	7.20	1906	7.50				
4800	5562									1856	7.29								
Notes:		Bold selections will require reinforcing rings and high speed Balancing Performance shown is for fan with free inlet and ducted outlet. Standard air density 0.075 lb/cu.ft. Power ratings (BHP) does not include drive losses. Performance ratings do not include the effects of appurtenances in the airstream.																	

READY UNIT DIMENSIONS

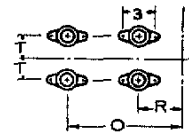
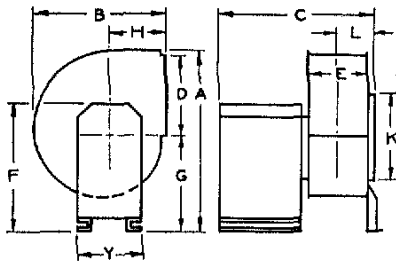
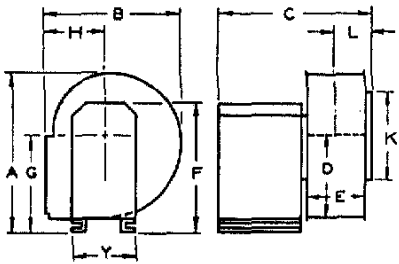
Ready Units are available in either Clockwise (shown) or Counter-Clockwise Rotation
 SIZES 18 THROUGH 33 SIZE 36 1/2 SIZES 49 THROUGH 73



SIZE 33 BHD ONLY

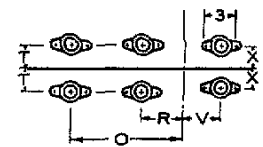
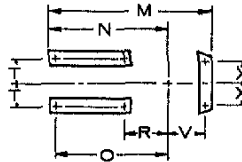
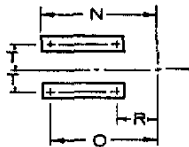
SIZES 40 AND 44 1/2

VIBRATION ISOLATOR FOUNDATIONS
 ISOLATORS 1 1/8 HIGH



FOUNDATIONS

SIZES 18 THROUGH 33



SIZES 18 THROUGH 33

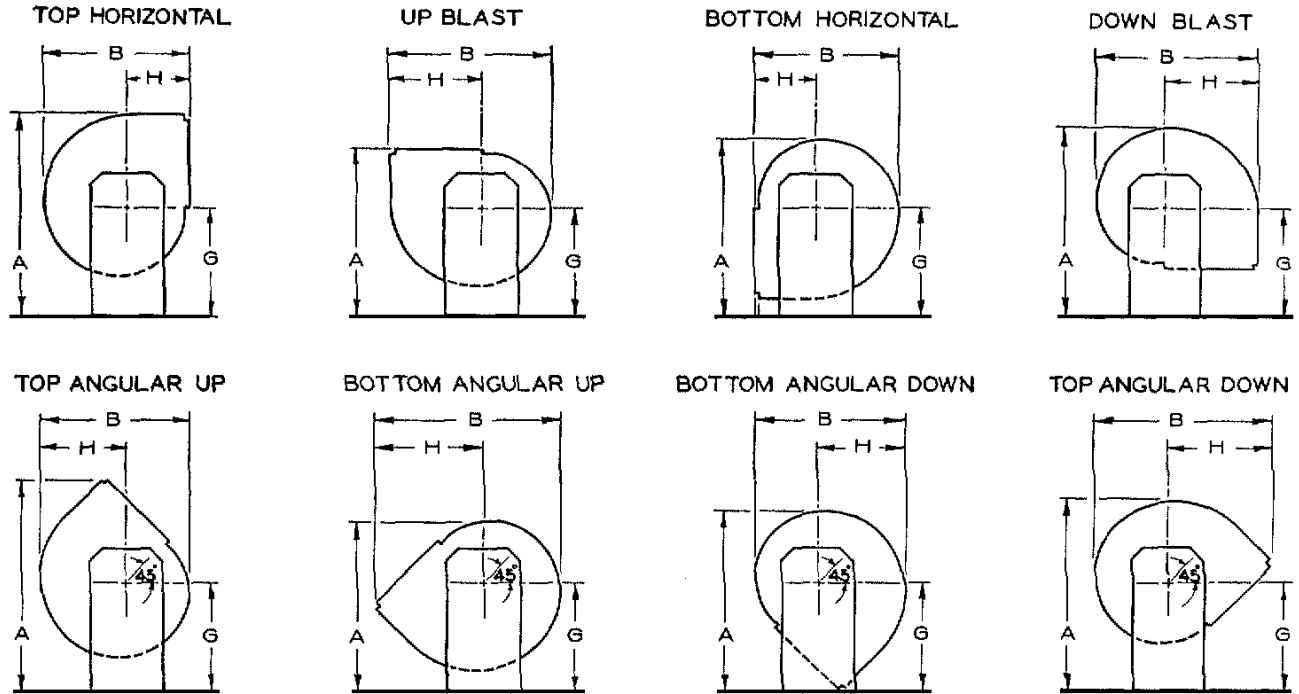
SIZES 36 1/2 THROUGH 73

SIZES 36 1/2 THROUGH 73

UNIT SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	O	R	T	V	X	Y	Shaft Dia.	KEYWAY IN DRIVE HUB	
																					W	D
18-LS	25 1/16	17	28 3/4	9 3/4	7 1/2	22 1/8	14 7/8	8 3/8	0	9 3/4	5 1/4	—	23 5/16	20 1/8	8 3/8	8 3/8	—	—	17 3/8	1	1/4	1/8
24 1/2-LS & MS	28 1/2	22 1/4	31 3/8	12 5/16	10	22 1/8	14 7/8	10 3/16	0	15 3/8	7 1/2	—	24 9/16	21 3/8	9 3/8	8 3/8	—	—	17 3/8	1	1/4	1/8
27-LS & MS	32 3/8	24	34 3/8	14 3/16	11	25 1/8	17 1/2	10 7/8	0	16 3/4	8	—	27 1/16	23 7/8	9 7/8	8 3/8	—	—	17 3/8	1 3/16	1/4	1/8
30-LS & MS	34	26 3/16	36	15 13/16	12	25 1/8	17 1/2	11 11/16	0	18 1/4	8 9/16	—	27 3/8	24 7/16	10 7/16	8 3/8	—	—	17 3/8	1 3/16	1/4	1/8
33-LS & MS	35 1/2	28 1/16	37 3/8	17 5/16	13 3/8	25 1/8	17 1/2	12 1/16	0	19 3/4	9 1/4	—	28 1/8	25 1/8	11 1/8	8 3/8	—	—	17 3/8	1 3/16	1/4	1/8
36 1/2-LS & MS	40 7/16	30 7/8	38 3/4	19 3/16	14 3/4	29 1/2	20 1/2	13 1/2	0	22	9 15/16	40 9/16	29	25 13/16	11 13/16	8 3/8	9 15/16	6 1/4	17 3/8	1 7/16	3/8	3/16
40-LS & MS	45 5/16	33 3/16	40 3/8	21 1/16	16 3/8	29 1/2	23 1/2	14 3/8	0	24	10 3/8	42 1/16	29 11/16	26 1/2	12 1/2	8 3/8	11	7 5/16	17 3/8	1 7/16	3/8	3/16
44 1/2-LS & MS	49 5/16	37	41 7/8	23 7/16	17 3/8	29 1/2	25	16	0	27	11 1/2	43 13/16	30 3/16	27 3/8	13 3/8	8 3/8	11 7/8	7 7/8	17 3/8	1 7/16	3/8	3/16
49-LS & MS	53 7/16	40 1/16	50 1/16	25 11/16	19 3/4	40 1/16	27	17 3/8	0	29	12 7/16	51 3/4	37 3/16	35 9/16	15 1/16	13 3/8	12 13/16	8 3/8	17 3/8	1 11/16	3/8	3/16
54-AF & MS	59 3/16	46 15/16	51 1/4	29 7/16	20 3/8	43 1/16	30	19 11/16	7/8	32	13 1/16	53 3/16	38 3/8	36 1/8	15 3/8	13 3/8	14 1/16	9 7/16	28 1/2	1 11/16	3/8	3/16
60-AF & MS	65 7/8	51 3/8	53 1/2	32 11/16	23 3/8	46 1/16	33	21 1/16	1 1/2	35	14 3/16	56 3/16	39 1/4	37 3/4	16 3/4	13 3/8	15 3/16	10 1/2	28 1/2	1 11/16	3/8	3/16
66-AF & MS	71 3/8	56 3/8	56 3/8	35 3/8	25 1/2	49 1/16	36	23 3/4	1 1/8	38	15 3/8	58 9/16	40 7/16	38 7/16	17 13/16	13 3/8	16 3/8	11 3/8	28 1/2	2 3/16	1/2	1/4
73-AF & MS	79 3/8	62 9/16	59 3/4	39 9/16	28 1/4	53 1/16	40	26	1 1/2	42	17 1/4	61 13/16	41 13/16	39 13/16	19 9/16	13 3/8	17 3/8	12 3/4	28 1/2	2 3/16	1/2	1/4

*Size 33 BHD only: *A=32 3/4, *G=19 1/2 & F=27 1/4
 †Outlet dimensions are outside.
 ‡Outside diameter.
 All dimensions are in inches.

READY UNIT DIMENSIONS In 8 Clockwise Discharges



For more complete information, when specifying Rotation and Discharge, see page 4. Care must be exercised in making layouts requiring COUNTER-CLOCKWISE rotation units, since such units have motor and drive on opposite side of fan housing from that shown in drawings on preceding page.

FAN SIZE	THD				UBD				BHD				DBD			
	A	B	H	G	A	B	H	G	A	B	H	G	A	B	H	G
18-LS	25 ⁵ / ₁₆	17	8 ¹ / ₈	14 ⁷ / ₈	23	18 ⁵ / ₁₆	10 ⁷ / ₁₆	14 ⁷ / ₈	22 ³ / ₄	17	8 ¹ / ₈	14 ⁷ / ₈	23 ³ / ₄	18 ⁵ / ₁₆	10 ⁷ / ₁₆	14 ⁷ / ₈
24 ¹ / ₂ -LS & MS	28 ¹ / ₂	22 ¹ / ₄	10 ⁵ / ₁₆	14 ⁷ / ₈	25 ⁵ / ₁₆	24 ¹ / ₈	13 ³ / ₈	14 ⁷ / ₈	25 ⁵ / ₁₆	22 ¹ / ₄	10 ⁵ / ₁₆	14 ⁷ / ₈	26 ¹ / ₁₆	24 ¹ / ₈	13 ³ / ₈	14 ⁷ / ₈
27-LS & MS	32 ³ / ₈	24	10 ⁷ / ₈	17 ¹ / ₂	28 ³ / ₈	26 ¹ / ₄	14 ⁷ / ₈	17 ¹ / ₂	28 ⁷ / ₈	24	10 ⁷ / ₈	17 ¹ / ₂	30 ³ / ₈	26 ¹ / ₄	14 ⁷ / ₈	17 ¹ / ₂
30-LS & MS	34	26 ⁵ / ₁₆	11 ¹¹ / ₁₆	17 ¹ / ₂	29 ³ / ₁₆	28 ¹ / ₁₆	16 ¹ / ₂	17 ¹ / ₂	29 ⁵ / ₁₆	26 ⁵ / ₁₆	11 ¹¹ / ₁₆	17 ¹ / ₂	32	28 ¹ / ₁₆	16 ¹ / ₂	17 ¹ / ₂
33-LS & MS	35 ¹ / ₂	28 ¹ / ₁₆	12 ⁵ / ₁₆	17 ¹ / ₂	29 ¹ / ₁₆	31 ³ / ₈	18	17 ¹ / ₂	32 ⁷ / ₈	28 ¹ / ₁₆	12 ⁵ / ₁₆	19 ¹ / ₂	33 ³ / ₄	31 ³ / ₈	18	17 ¹ / ₂
36 ¹ / ₂ -LS & MS	40 ⁷ / ₁₆	30 ⁷ / ₈	13 ¹ / ₂	20 ¹ / ₂	34	34 ³ / ₄	19 ¹ / ₁₆	20 ¹ / ₂	35 ⁵ / ₁₆	30 ⁷ / ₈	13 ¹ / ₂	20 ¹ / ₂	37 ⁷ / ₈	34 ³ / ₄	19 ¹ / ₁₆	20 ¹ / ₂
40-LS & MS	45 ⁵ / ₁₆	33 ³ / ₁₆	14 ⁵ / ₈	23 ¹ / ₂	38 ¹ / ₈	37 ⁵ / ₁₆	21 ¹ / ₁₆	23 ¹ / ₂	39 ⁵ / ₁₆	33 ³ / ₁₆	14 ⁵ / ₈	23 ¹ / ₂	42 ¹ / ₁₆	37 ⁵ / ₁₆	21 ¹ / ₁₆	23 ¹ / ₂
44 ¹ / ₂ -LS & MS	49 ¹ / ₁₆	37	16	25	41	42 ¹ / ₁₆	24 ¹ / ₁₆	25	42 ⁷ / ₈	37	16	25	46	42 ¹ / ₁₆	24 ¹ / ₁₆	25
49-LS & MS	53 ¹ / ₁₆	40 ⁷ / ₁₆	17 ³ / ₈	27	44 ³ / ₈	46	26 ¹ / ₁₆	27	46 ¹ / ₁₆	40 ⁷ / ₁₆	17 ³ / ₈	27	50 ¹ / ₁₆	46	26 ¹ / ₁₆	27
54-AF & MS	59 ¹ / ₁₆	46 ¹ / ₁₆	19 ¹¹ / ₁₆	30	49 ¹¹ / ₁₆	52 ³ / ₄	29 ¹¹ / ₁₆	30	52 ¹ / ₁₆	46 ¹ / ₁₆	19 ¹¹ / ₁₆	30	57 ¹ / ₄	52 ³ / ₄	29 ¹¹ / ₁₆	30
60-AF & MS	65 ⁷ / ₈	51 ⁵ / ₈	21 ¹ / ₁₆	33	54 ⁷ / ₁₆	58 ¹ / ₈	32 ⁷ / ₈	33	58 ¹ / ₄	51 ⁵ / ₈	21 ¹ / ₁₆	33	63 ¹ / ₁₆	58 ¹ / ₈	32 ⁷ / ₈	33
66-AF & MS	71 ⁷ / ₈	56 ³ / ₄	23 ³ / ₄	36	59 ³ / ₄	63 ⁵ / ₈	35 ⁷ / ₈	36	63 ³ / ₄	56 ³ / ₄	23 ³ / ₄	36	69	63 ⁵ / ₈	35 ⁷ / ₈	36
73-AF & MS	79 ⁷ / ₈	62 ¹ / ₁₆	26	40	66	70 ¹ / ₁₆	39 ⁷ / ₈	40	70 ¹¹ / ₁₆	62 ¹ / ₁₆	26	40	76 ¹ / ₁₆	70 ¹ / ₁₆	39 ⁷ / ₈	40

FAN SIZE	TAUD				BAUD				BADD				TADD			
	A	B	H	G	A	B	H	G	A	B	H	G	A	B	H	G
18-LS	27 ¹ / ₂	16 ³ / ₄	9 ³ / ₈	14 ⁷ / ₈	22 ¹ / ₄	21	12 ⁵ / ₈	14 ⁷ / ₈	23 ¹ / ₄	16 ³ / ₄	9 ³ / ₈	14 ⁷ / ₈	24 ¹ / ₄	21	12 ⁵ / ₈	14 ⁷ / ₈
24 ¹ / ₂ -LS & MS	31 ¹ / ₁₆	22 ¹ / ₁₆	12 ¹ / ₁₆	14 ⁷ / ₈	24 ⁵ / ₈	27 ¹ / ₁₆	16 ¹ / ₁₆	14 ⁷ / ₈	26 ¹ / ₈	22 ¹ / ₁₆	12 ¹ / ₁₆	14 ⁷ / ₈	27 ¹¹ / ₁₆	27 ¹ / ₁₆	16 ¹ / ₁₆	14 ⁷ / ₈
27-LS & MS	35 ¹ / ₄	24 ⁵ / ₈	14	17 ¹ / ₂	28 ¹ / ₈	30	17 ³ / ₄	17 ¹ / ₂	29 ³ / ₄	24 ⁵ / ₈	14	17 ¹ / ₂	31 ¹ / ₂	30	17 ³ / ₄	17 ¹ / ₂
30-LS & MS	37	26 ¹ / ₁₆	15 ¹ / ₂	17 ¹ / ₂	28 ¹ / ₁₆	32 ¹ / ₁₆	19 ¹ / ₂	17 ¹ / ₂	30 ¹ / ₁₆	26 ¹ / ₁₆	15 ¹ / ₂	17 ¹ / ₂	33	32 ¹ / ₁₆	19 ¹ / ₂	17 ¹ / ₂
33-LS & MS	38 ¹ / ₂	29 ³ / ₁₆	16 ¹ / ₁₆	17 ¹ / ₂	29 ³ / ₄	35 ¹ / ₁₆	21	17 ¹ / ₂	32 ¹ / ₁₆	29 ³ / ₁₆	16 ¹ / ₁₆	17 ¹ / ₂	34 ⁷ / ₁₆	35 ¹ / ₁₆	21	17 ¹ / ₂
36 ¹ / ₂ -LS & MS	43 ⁵ / ₈	32 ¹ / ₄	18 ¹¹ / ₁₆	20 ¹ / ₂	34 ¹ / ₁₆	39 ¹ / ₁₆	23 ¹ / ₈	20 ¹ / ₂	36 ¹ / ₁₆	32 ¹ / ₄	18 ¹¹ / ₁₆	20 ¹ / ₂	39 ¹ / ₁₆	39 ¹ / ₁₆	23 ¹ / ₈	20 ¹ / ₂
40-LS & MS	48 ³ / ₄	35 ¹ / ₈	20 ³ / ₈	23 ¹ / ₂	38 ¹ / ₄	42 ¹ / ₁₆	25 ¹ / ₄	23 ¹ / ₂	41 ¹ / ₁₆	35 ¹ / ₈	20 ³ / ₈	23 ¹ / ₂	43 ⁷ / ₈	42 ¹ / ₁₆	25 ¹ / ₄	23 ¹ / ₂
44 ¹ / ₂ -LS & MS	52 ¹ / ₁₆	38 ¹ / ₁₆	22 ⁵ / ₈	25	41 ¹ / ₁₆	47 ³ / ₈	27 ¹ / ₁₆	25	44 ¹ / ₁₆	38 ¹ / ₁₆	22 ⁵ / ₈	25	47 ⁵ / ₈	47 ³ / ₈	27 ¹ / ₁₆	25
49-LS & MS	57 ¹ / ₂	42 ¹ / ₁₆	24 ¹ / ₁₆	27	44 ⁷ / ₈	51 ¹ / ₁₆	30 ¹ / ₂	27	48 ¹ / ₁₆	42 ¹ / ₁₆	24 ¹ / ₁₆	27	51 ¹ / ₁₆	51 ¹ / ₁₆	30 ¹ / ₂	27
54-AF & MS	64 ¹ / ₈	49 ¹ / ₁₆	28 ¹ / ₂	30	50 ¹ / ₁₆	59 ¹ / ₁₆	34 ¹ / ₈	30	55 ¹ / ₁₆	49 ¹ / ₁₆	28 ¹ / ₂	30	58 ¹ / ₂	59 ¹ / ₁₆	34 ¹ / ₈	30
60-AF & MS	70 ³ / ₈	54 ³ / ₁₆	31 ¹ / ₂	33	55 ¹¹ / ₁₆	65 ¹ / ₁₆	37 ³ / ₈	33	60 ¹ / ₁₆	54 ³ / ₁₆	31 ¹ / ₂	33	64 ¹ / ₂	65 ¹ / ₁₆	37 ³ / ₈	33
66-AF & MS	77 ¹ / ₄	59 ¹ / ₁₆	34 ⁷ / ₁₆	36	61	71 ¹ / ₁₆	41 ¹ / ₄	36	66 ¹ / ₁₆	59 ¹ / ₁₆	34 ⁷ / ₁₆	36	70 ¹ / ₁₆	71 ¹ / ₁₆	41 ¹ / ₄	36
73-AF & MS	85 ¹ / ₁₆	65 ¹ / ₁₆	38 ¹ / ₄	40	67 ¹ / ₁₆	79 ¹ / ₁₆	45 ¹ / ₁₆	40	74	65 ¹ / ₁₆	38 ¹ / ₄	40	78 ¹ / ₄	79 ¹ / ₁₆	45 ¹ / ₁₆	40

All dimensions in inches.