

Model LIDA

DIRECT DRIVE TUBEAXIAL FANS

Application

Carnes Company tubeaxial fans offer one of the widest ranges of sizes, horsepower and performance in the industry. Models LIDA are high capacity tubeaxial fans rated from 945 to 43,000 CFM, with static pressure capability up to 1-1/4". They are used to exhaust air from or supply air to such typical commercial and industrial applications as general building ventilation, enclosed garages and other applications where air is moved through a duct system against moderate static pressure.

Direct drive Models LIDA are best used for exhausting or supplying relatively clean ambient temperature air. They are available in smaller sizes for areas with reduced air flow needs and require practically no maintenance.

Construction/Specification Checklist

Fan Housing

- Heavy-gauge rolled steel construction.
- Rolled steel flange reinforcement on each end.
- Continuous welded seams.

Propeller (Sizes 12 - 21)

- Die formed steel blades.
- Steel hub plate/bushing.
- Heavy-duty construction.
- Statically and dynamically balanced.
- Aluminum blades are optional.

Propeller (Sizes 24 - 48)

- Three, four or six wing airfoil aluminum or heavy gauge steel blades.
- Steel or aluminum hub plate with steel taper lock bushing.
- Blades are pitched for optimum efficiency.
- Statically and dynamically balanced.

Motors

- One year motor warranty.
- Brands are nationally recognized and locally serviced.
- Open drip-proof construction is standard.
- Premium-efficiency, explosion proof, totally enclosed fan cooled (TEFC) and corrosion duty motors can be specified.

Entire Fan Unit

- Factory assembled and tested prior to shipment for quality assurance.

Options/Accessories

Pedestal Base: Supports fan for vertical or horizontal mounting.

Ceiling Brackets: For suspending fan in ceiling mounted installations. Hanging vibration isolation is available.

Inlet/Outlet Guard: Prevents objects from entering the fan inlet or outlet.

Access Panel: Allows access to interior of fan housing for inspection. Location must be specified.

Companion Flanges: Inlet and/or outlet flanges are available for duct connection.

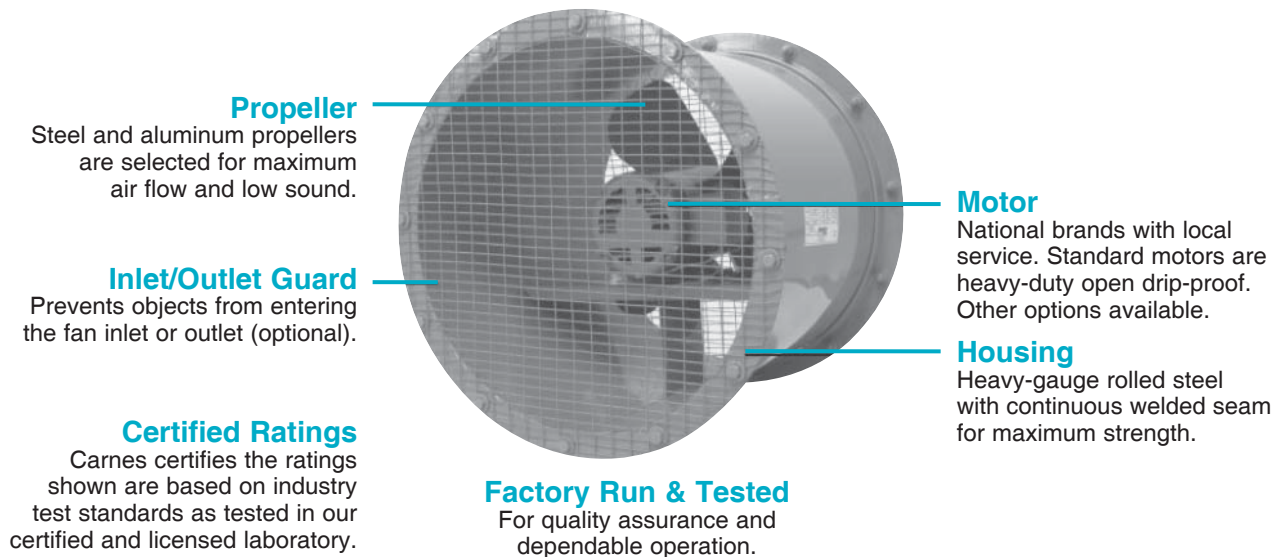
Disconnect Switch: Non-fused safety disconnect available for all motor sizes and enclosures. Specify prewired if desired. (Wiring not available on explosion proof motors.)

Spark-Resistant Construction: For use in hazardous locations. Includes explosion proof motor.

Epoxy Finish: For use in an alkaline type atmosphere (not for use in acetic and nitric acids). Epoxy forms an excellent hard heavy film barrier against chemical attack as well as physical damage from direct impact and abrasion.

Model LIDA

CONSTRUCTION FEATURES - Direct Drive



Propeller

Steel and aluminum propellers are selected for maximum air flow and low sound.

Inlet/Outlet Guard

Prevents objects from entering the fan inlet or outlet (optional).

Certified Ratings

Carnes certifies the ratings shown are based on industry test standards as tested in our certified and licensed laboratory.

Motor

National brands with local service. Standard motors are heavy-duty open drip-proof. Other options available.

Housing

Heavy-gauge rolled steel with continuous welded seam for maximum strength.

Factory Run & Tested

For quality assurance and dependable operation.

AVAILABLE ACCESSORIES

- ACCESS PANEL
- CEILING BRACKET
- PEDESTAL BASE
- GUARDS
- BASE/HANGING ISOLATION
- PAINT COATINGS
- DISCONNECT SWITCH
- SPARK RESISTANT CONSTRUCTION
- ALUMINUM CONSTRUCTION (24" - 48")
- CURB BASE
- MAN COOLER PACKAGE

Models LIBA / LIDA

BELT DRIVE / DIRECT DRIVE TUBEAXIAL DUCT FANS

Application

Carnes Company tubeaxial line offers the widest range of sizes, horsepower and performance in the industry. Models LIBA are high capacity tubeaxial fans rated from 1,320 to 58,253 CFM, with static pressure capability up to 1-1/4". Models LIDA are high capacity tubeaxial fans rated from 390 to 43,000 CFM, with static pressure capability up to 1-1/4". Both Models LIBA and LIDA are used to exhaust air from or supply air to such typical commercial and industrial applications as general building ventilation, enclosed garages, paint spray booths, heat and smoke ventilation systems and other applications where air is moved through a duct system against moderate static pressure.

Model LIBA - Belt drive Models LIBA are especially suited to handle fumes, vapors, steam, dust, smoke and contaminated or heated air to 200°F. They are available in larger, higher capacity sizes and offer ease in adjustment of fan performance by reducing the fan RPM with adjustable motor sheaves. (Optional on 5 HP and larger.)

Total access to the bearings and shaft is possible with the LIBA's unique removable cover. This cover can be removed for optimum performance when clean and untempered air is present.

Model LIDA - Direct drive Models LIDA are best used for exhausting or supplying relatively clean ambient temperature air. They are available in smaller sizes for areas with reduced air flow needs and require practically no maintenance.

Construction/Specification Checklist

Fan Housing

- Heavy-gauge rolled steel construction.
- Rolled steel flange reinforcement on each end.
- Continuous welded seams.
- Belt and bearing enclosure (LIBA only).
- Removable belt and bearing cover for ease of maintenance (LIBA only).

Propeller (Sizes 12 - 21)

- Die formed steel blades.
- Steel hub plate/bushing.
- Heavy-duty construction.
- Statically and dynamically balanced.
- Aluminum blades are optional.

Propeller (LIBA Sizes 24 - 54) (LIDA Sizes 24 - 48)

- Three, four or six wing airfoil aluminum or heavy gauge steel blades.
- Steel or aluminum hub plate with steel taper lock bushing.
- Blades are pitched for optimum efficiency.
- Statically and dynamically balanced (LIBA).
- Statically balanced (LIDA).

Drives

- Sized for minimum 150% of drive horsepower.

- Single belt adjustable pitch sheaves through 3 HP.
- Multiple belt fixed pitch sheaves through 15 HP.
- Adjustable pitch sheaves are optional above 3 HP.
- Adjustable tension rods for belt adjustment.
- Non-static oil resistant V-belts.
- Keyed, turned, ground and polished shafts with an anti-rust coating.

Bearings (LIBA)

- Bearings designed for min. 200,000 hour life (L50).
- Cast iron self-aligning pillow block ball bearings.
- Bearings are sealed and pre-lubricated.

Motors

- One year motor warranty.
- Open drip-proof construction is standard.
- Premium-efficiency, explosion proof, totally enclosed fan cooled (TEFC) and corrosion duty motors can be specified.

Entire Fan Unit

- Factory assembled and tested prior to shipment for quality assurance.

Options/Accessories

Pedestal Base: Supports fan for vertical or horizontal mounting.

Ceiling Brackets: For suspending fan in ceiling mounted installations. Hanging vibration isolation is available.

Inlet/Outlet Guard: Prevents objects from entering the fan inlet or outlet.

Access Panel: Allows access to interior of fan housing for inspection. Location must be specified.

Companion Flanges: Inlet and/or outlet flanges are available for duct connection.

Disconnect Switch: Non-fused safety disconnect available for all motor sizes and enclosures. Specify prewired if desired. (Wiring not available on explosion proof and two speed motors.)

Spark-Resistant Construction: For use in hazardous locations.

Belt Guard: Encloses belt and motor sheave on exterior of fan (LIBA only).

Motor Cover: Protects motor in outdoor applications (LIBA only).

Adjustable Sheave: Can be specified for 5 HP and larger units (standard through 3 HP) (LIBA only).

Shaft Seal: Protects bearings and belts when fan is handling dirty or contaminated air (LIBA only).

cULus Standard 705 (LIBA only): Available with all standard motors.

Epoxy Finish: For use in an alkaline type atmosphere (not for use in acetic and nitric acids). Epoxy forms an excellent hard heavy film barrier against chemical attack as well as physical damage from direct impact and abrasion.

Other Finishes: Heresite and polyester resin are also available when special coatings are required.



Model LIBA

TUBEAXIAL IN-LINE BELT DRIVE DUCT FAN

Model Features

- Rated up to 75,490 CFM in static pressure applications up to 1-1/2" w.g.
- 12 sizes ranging from 12 to 54" propeller diameters.
- Motor and drives are located outside of the airstream.
- Belt drives permit easy performance adjustments when needed.
- Continuously welded and epoxy painted steel housing.
- cULus Listed.

Model Overview

Carnes tubeaxial line offers the widest range of sizes, horsepower and performance in the industry. Models LIBA are high capacity belt drive tubeaxial fans rated from 900 to 58,253 CFM, with static pressure capability up to 1-1/2". They are used to exhaust air from or supply air to such typical commercial and industrial applications as general building ventilation, enclosed garages, paint spray booths, heat and smoke ventilation systems and other applications where air is moved through a duct system against moderate static pressure.

Belt drive Models LIBA are especially suited to handle fumes, vapors, steam, dust, smoke and contaminated or heated air to 200°F. They are available in larger, higher capacity sizes and offer ease in adjustment of fan performance by reducing the fan RPM with adjustable motor sheaves. (Optional on 7-1/2 HP and larger.)

Total access to the bearings and shaft is possible with the LIBA unique removable cover.

CONSTRUCTION FEATURES - Belt Drive

Drives
Sized for a minimum 150% of motor horsepower. Drives are variable pitch as standard through 5 HP.

Motor
National brands with local service. Standard motors are heavy-duty open drip-proof. Other options available.

Motor Base
Adjustable steel motor base is designed for strength and ease of belt tensioning.

Integral Inlet and Outlet Flanges
With mounting holes.

Propeller
Aluminum propellers are selected for maximum air flow and low sound.

Bearings
Heavy-duty, ball bearing cast pillow blocks are designed for minimum 200,000 hours of operation, L50.

Housing
Heavy-gauge rolled steel with continuous welded seam and epoxy coating for maximum strength.

Mounting Supports
Eight (8) mounting supports are welded to each fan to allow for universal mounting.

Factory Run & Tested
For quality assurance and dependable operation.

cULus 705 Listed
For electrical reliability.

2 year fan housing warranty, 1 year motor warranty

Model LIBA

TUBEAXIAL FANS

Construction/Specification

Fan Housing

- Heavy-gauge rolled steel construction.
- Integral inlet and outlet flanges with mounting holes.
- Continuous welded and epoxy coated.
- Belt and bearing tube.
- Removable bearing cover for ease of maintenance.
- Eight mounting supports welded to each fan.
- Adjustable motor base for belt tensioning.
- Extended lube lines.

Propeller

- Aluminum airfoil propeller.
- Blades are pitched for optimum efficiency.
- Statically balanced.

Drives

- Sized for minimum 150% of drive horsepower.
- Single belt adjustable pitch sheaves through 5 HP.
- Multiple belt fixed pitch sheaves 7-1/2 HP and above.
- Adjustable tension rods for belt adjustment.
- Nonstatic oil resistant V-belts.
- Keyed, turned, ground and polished shafts.

Bearings

- Bearings are designed for minimum 200,000 hour life (L50).
- Cast iron self-aligning pillow block ball bearings.
- Bearings are sealed and prelubricated.

Motors

- One year motor warranty.
- Brands are nationally recognized and locally serviced.
- NEMA base-mounted motors are standard.
- Open drip-proof construction is standard.
- Premium-efficiency, explosion proof, totally enclosed fan cooled (TEFC) and corrosion duty motors can be specified.

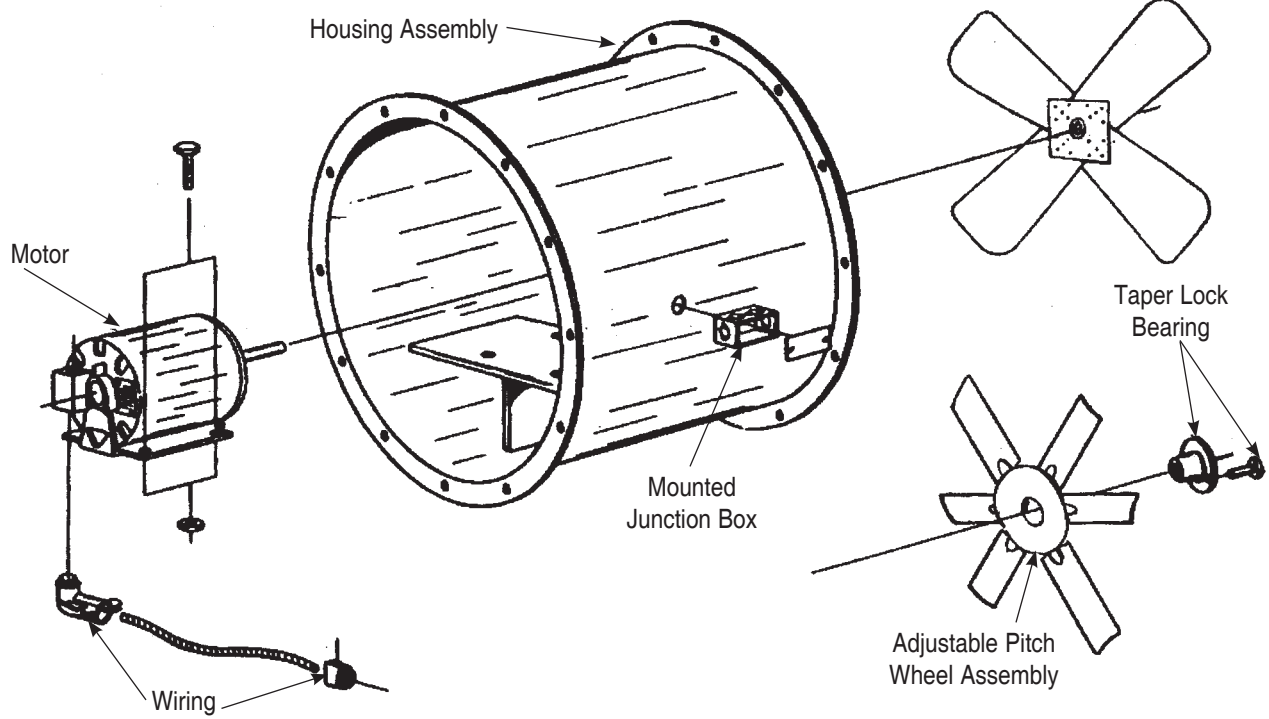
Certifications

- cULus 705 Listed.

Entire Fan Unit

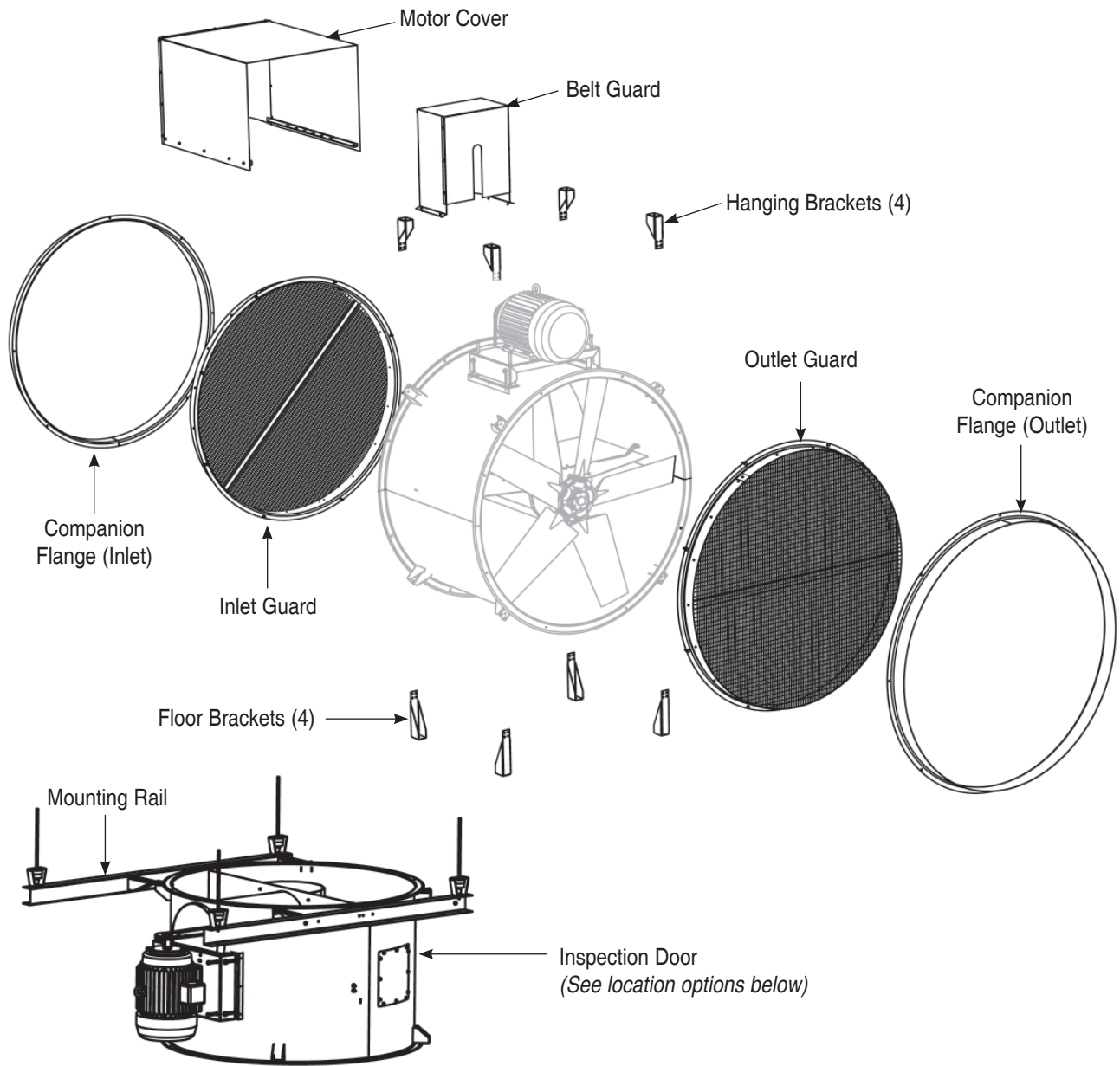
- Factory assembled and tested prior to shipment for quality assurance.

EXPLODED VIEWS
MODEL LIDA — Direct Drive



Tubeaxial Fans

OPTIONS/ACCESSORIES
MODEL LIBA — Belt Drive



Floor or Hanging Isolator Options



Rubber Isolator (Floor)



Spring Isolator (Floor)



Rubber Isolator (Hanging)



Spring Isolator (Hanging)

Model LIBA

TUBEAXIAL FANS

Options/Accessories

Hanging & Floor Brackets: For base or ceiling mounting. Neoprene and spring isolators are available.

Mounting Rails: Designed for vertical and horizontal mounting. Rail kits include mounting brackets.

Inlet/Outlet Guard: Prevents objects from entering the fan inlet or outlet. Includes companion flange.

Inspection Door: For inspection and blade service/cleaning. Bolted. Not available on sizes 12 and 16.

Companion Flanges: Inlet and/or outlet flanges are available for duct connection.

Belt Guard: Encloses belt and motor sheave on exterior of fan.

Motor Cover: Three sided guard that covers motor, sheave and belt. Motor may extend past cover on sizes 12, 16 and 18.

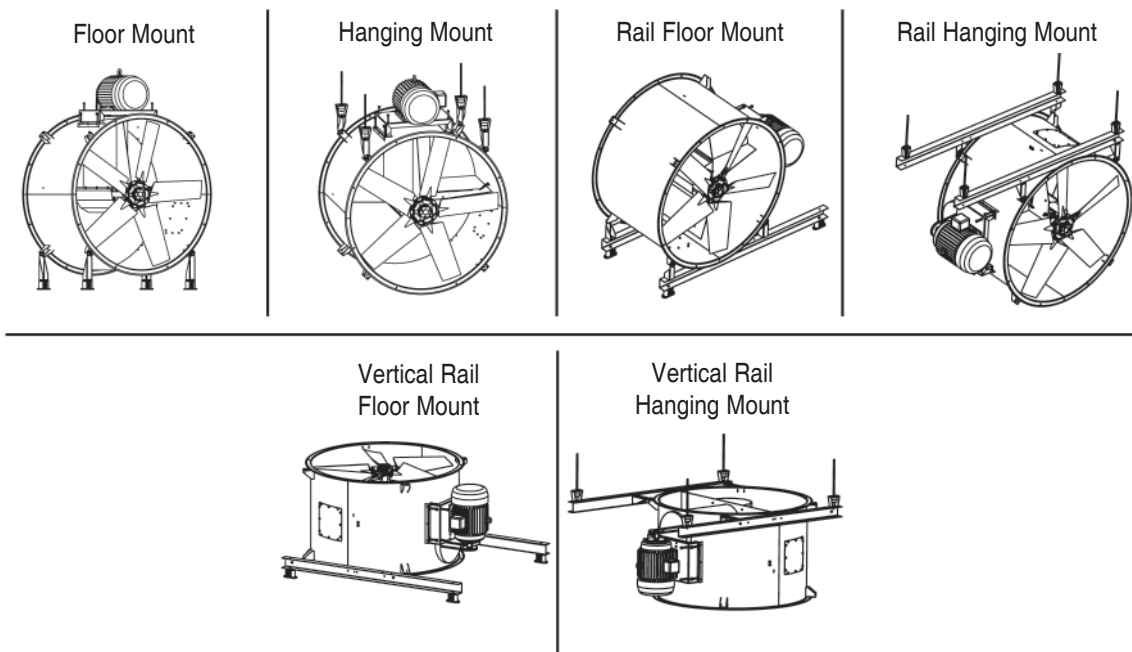
Adjustable Sheave: Can be specified for 7-1/2 HP and larger units (standard through 5 HP).

Shaft Seal: Protects bearings and belts when fan is handling dirty or contaminated air.

Disconnect Switch: Nonfused safety disconnect available for all motor sizes and enclosures. Specify prewired if desired. (Wiring not available on explosion proof and two speed motors.)

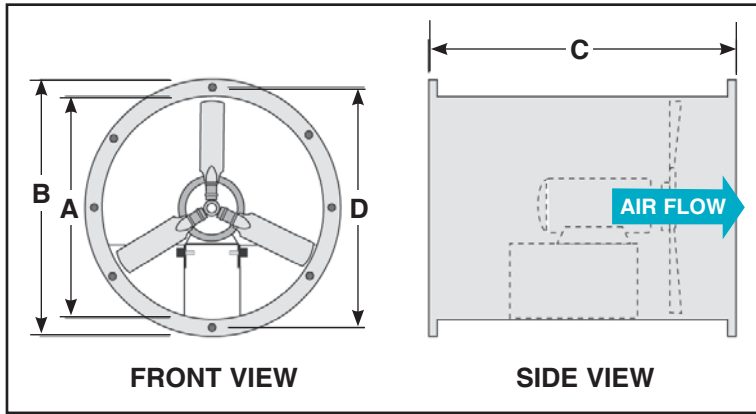
Special Coatings (Epoxy Coating is Standard): For protective and decorative purposes. Available coatings include: Synthetic Resin and Heresite (air-dried phenolic). Contact your representative or the factory for more information on available coatings and colors.

Mounting Configurations



PERFORMANCE DATA

Models LIDA - Sizes 12 - 24



Sizes	12	16	18	21	24
Max. Motor Frame	56	56	143T	145T	213T
Housing Gauge	14	14	14	14	12
Approx. Weight	60	65	75	90	130
Flange Holes:8				
Diameter Flange Holes:	1/2"				
Finish:	Galvanized				

Size	A	B	C	D*
12	13-1/32	16-3/16	15	15
16	17-1/32	20-3/16	19	19
18	19-1/32	22-3/16	19	20-3/4
21	22-1/32	25-3/16	19	23-3/4
24	25-1/8	29-1/8	30	27-1/8

A = ID B = OD C = Width
 D = Flange Hole Center

Model	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
LIDA 12											
L2	1/4	1140	945	670	390	-	-	-	-	-	-
L3	*1/4	1750	1295	1210	1115	820	668	573	466	-	-
P2	*1/2	3450	2340	2280	2245	2188	2141	2092	2039	1955	-

Model	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
LIDA 16											
L2	1/4	1140	2220	1840	1210	525	-	-	-	-	-
P3	*1/2	1725	2700	2484	2269	2050	1829	1683	1192	946	-

Model	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
LIDA 18											
M2	*1/3	1140	2895	2549	1788	1184	844	-	-	-	-
R2	*3/4	1725	4550	4235	3920	3693	3458	3228	2170	1758	-
S2	1	1725	4740	4423	4290	3884	3424	3007	2391	1018	-

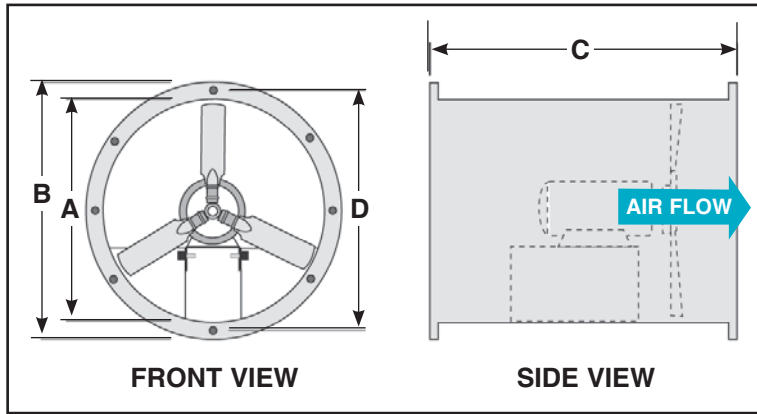
Model	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
LIDA 21											
P4	*1/2	1140	4681	4442	4174	3782	3265	2438	1998	1668	-
R2	*3/4	1725	4925	4694	4464	4236	4009	3808	3050	2678	2330
S2	1	1725	5998	5631	5331	5001	4634	4215	3835	-	-

Model	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
LIDA 24											
M4	1/3	1160	5644	5002	4177	2806	-	-	-	-	-
P5	1/2	1160	6952	6257	5403	4352	-	-	-	-	-
R3	3/4	1160	7943	7365	6453	5643	-	-	-	-	-
S3	1	1160	8236	7954	7262	6705	5200	-	-	-	-
R2	3/4	1725	7337	6968	5905	5344	4923	3500	-	-	-
S2	1	1725	8464	7993	6568	6252	5974	5105	4700	-	-
T2	1-1/2	1725	9365	8826	8356	7926	7486	6902	6456	-	-
V2	2	1725	10653	10104	9983	9583	9125	8623	8104	7326	5894
W2	3	1725	12804	11902	11505	11005	10457	10004	9703	7955	6108

Performance shown for Model LIDA is with inlet and outlet ducts.
 *Standard propeller for these models is aluminum construction.

PERFORMANCE DATA

Models LIDA - Sizes 30 and 36



Max. Motor Frame:.....215T
 Housing Gauge:.....12
 Approx. Weight:30" = 195 lbs.
36" = 250 lbs.
 Flange Holes:......8
 Diameter Flange Holes: 30"=1/2"
 36"=1/2"
 Finish:Galvanized

Size	A	B	C	D*
30	31-1/8	35-1/8	30	33-1/8
36	37-1/8	41-1/8	30	39-1/8

A = ID B = OD C = Width
 D = Flange Hole Center

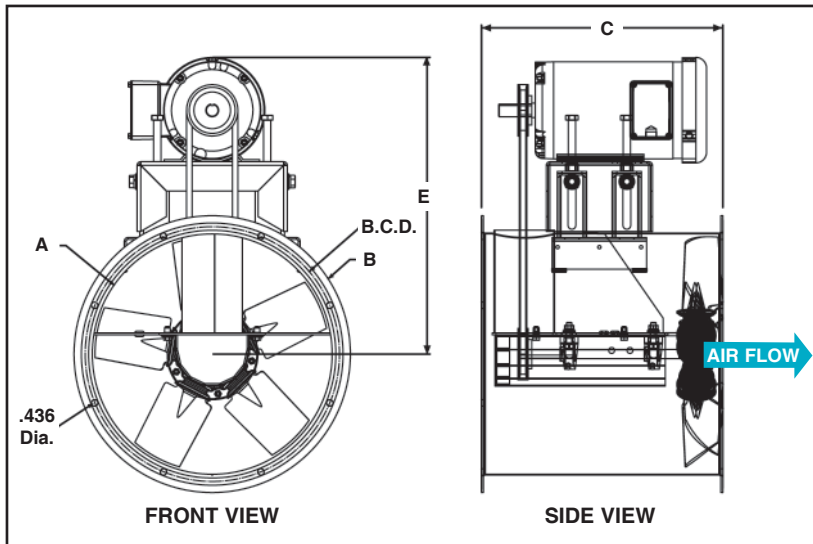
Model LIDA 30	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
S4	1	870	11698	10451	8895	6290	-	-	-	-	-
R3	3/4	1160	8995	8791	7498	5700	-	-	-	-	-
S3	1	1160	10591	10063	9897	9478	9005	7908	6549	-	-
T3	1-1/2	1160	12891	11895	10906	9841	9398	8749	7325	-	-
V3	2	1160	14462	13571	12467	11349	9841	8291	6744	-	-
V2	2	1725	13831	13293	12286	11395	10414	8612	-	-	-
W2	3	1725	16138	15641	14869	13590	12740	11450	10743	9355	-
X2	5	1725	20883	18493	17986	17487	16838	16147	15338	13547	8211

Model LIDA 36	HP	RPM	CFM @ Static Pressure								
			0	1/8	1/4	3/8	1/2	5/8	3/4	1	1-1/4
P6	1/2	870	10738	8839	6168	-	-	-	-	-	-
R4	3/4	870	12994	10930	8411	6809	-	-	-	-	-
S4	1	870	13941	11846	10276	8295	6834	-	-	-	-
T4	1-1/2	870	16383	14993	13267	11890	7984	-	-	-	-
V4	2	870	18653	16849	15671	12928	9603	-	-	-	-
W4	3	870	21196	19839	18186	15981	12980	9663	8633	-	-
R3	3/4	1160	11535	9994	8185	6289	-	-	-	-	-
S3	1	1160	13561	12281	10794	8891	6561	-	-	-	-
T3	1-1/2	1160	15998	14561	13814	11216	9271	-	-	-	-
V3	2	1160	17741	16630	14841	13411	11735	10218	8556	-	-
W3	3	1160	20876	19765	18693	17312	15971	14375	12630	9361	-
V2	2	1725	15314	14360	13890	11007	10517	9357	8563	-	-
W2	3	1725	18768	17665	16983	15612	13971	12571	11663	9147	-
X2	5	1725	23618	22276	21573	20213	19537	18657	17556	15616	12192

Performance shown for Model LIDA is with inlet and outlet ducts.
 *Standard propeller for these models is aluminum construction.

PERFORMANCE/DIMENSIONS

Model LIBA - Size 12



Max. Motor Frame:.....145T
 Shaft Size.....5/8"
 Housing Gauge:.....16
 Approx. Weight:.....90 lbs.
 Flange Holes:.....6
 Diameter Flange Holes:.....7/16"
 Finish: Epoxy Coated
 Galvanized

A	B	C	E	B.C.D.
12-3/8	14-1/2	12*	21	13-1/2

A = ID B = OD
 C = Length E = Max. Height
 *Motor may extend past unit

HP	RPM	Static Pressure (Inches W.G.)									
		0		0.125		0.25		0.375		0.5	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1/4	1550	1358	0.20	1189	0.20	-	-	-	-	-	-
	1600	1402	0.21	1240	0.23	914	0.22	-	-	-	-
	1650	1445	0.24	1291	0.25	1021	0.24	-	-	-	-
	1700	1489	0.26	1341	0.27	1104	0.27	-	-	-	-
1/3	1725	1511	0.27	1365	0.28	1141	0.28	-	-	-	-
	1775	1555	0.29	1414	0.31	1210	0.31	-	-	-	-
	1825	1599	0.32	1463	0.33	1274	0.34	-	-	-	-
	1875	1642	0.35	1511	0.36	1335	0.36	-	-	-	-
1/2	1925	1686	0.37	1559	0.39	1393	0.39	1001	0.38	-	-
	2000	1752	0.42	1630	0.43	1478	0.44	1211	0.43	-	-
	2075	1818	0.47	1700	0.48	1559	0.49	1341	0.49	-	-
	2150	1883	0.52	1771	0.54	1638	0.55	1450	0.55	-	-
3/4	2200	1927	0.56	1817	0.58	1690	0.59	1516	0.59	-	-
	2275	1993	0.62	1887	0.64	1767	0.65	1609	0.65	1324	0.63
	2350	2059	0.68	1956	0.70	1842	0.71	1698	0.72	1474	0.71
	2425	2124	0.75	2025	0.77	1916	0.78	1783	0.79	1593	0.78

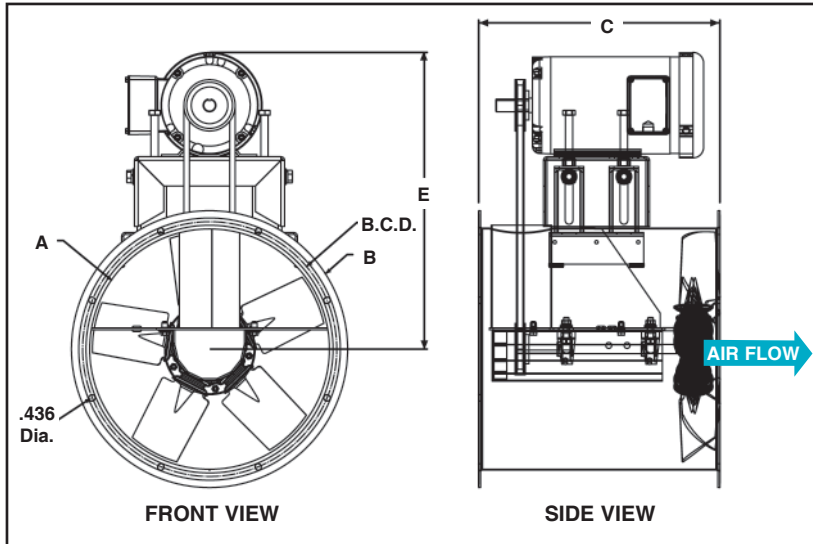
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (BHP) does not include transmission losses.



Tubaxial Fans

PERFORMANCE/DIMENSIONS

Model LIBA - Size 16



Max. Motor Frame:.....145T
 Shaft Size.....5/8"
 Housing Gauge:.....16
 Approx. Weight:.....110 lbs.
 Flange Holes:.....8
 Diameter Flange Holes:.....7/16"
 Finish:.....Epoxy Coated
Galvanized

A	B	C	E	B.C.D
16-3/8	18-1/2	17*	23	17-3/8

A = ID B = OD
 C = Length E = Max. Height
 *Motor may extend past unit

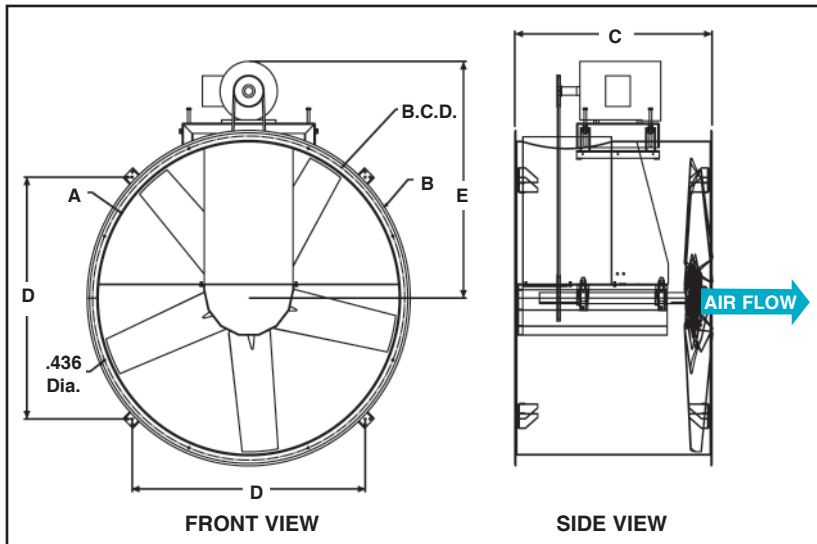
HP	RPM	Static Pressure (Inches W.G.)																			
		0		0.125		0.25		0.375		0.5		0.625		0.75		0.875		1		1.25	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1/4	1100	1888	0.13	1621	0.15	1270	0.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1175	2017	0.16	1771	0.18	1461	0.19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1225	2103	0.18	1869	0.20	1581	0.22	1205	0.23	-	-	-	-	-	-	-	-	-	-	-	-
	1275	2189	0.21	1965	0.22	1696	0.24	1355	0.25	-	-	-	-	-	-	-	-	-	-	-	-
1/3	1300	2232	0.22	2013	0.24	1753	0.25	1427	0.27	-	-	-	-	-	-	-	-	-	-	-	-
	1350	2318	0.25	2109	0.26	1863	0.28	1563	0.30	1182	0.30	-	-	-	-	-	-	-	-	-	-
	1375	2360	0.26	2156	0.28	1917	0.30	1628	0.31	1265	0.32	-	-	-	-	-	-	-	-	-	-
	1425	2446	0.29	2250	0.31	2023	0.33	1755	0.34	1424	0.36	-	-	-	-	-	-	-	-	-	-
1/2	1475	2532	0.32	2343	0.34	2128	0.36	1876	0.38	1573	0.39	1202	0.40	-	-	-	-	-	-	-	-
	1525	2618	0.35	2436	0.37	2230	0.39	1994	0.41	1713	0.43	1374	0.44	-	-	-	-	-	-	-	-
	1575	2704	0.39	2529	0.41	2332	0.43	2108	0.45	1847	0.47	1535	0.48	1170	0.48	-	-	-	-	-	-
	1625	2790	0.43	2621	0.45	2432	0.47	2219	0.49	1975	0.51	1688	0.53	1349	0.53	-	-	-	-	-	-
3/4	1675	2875	0.47	2712	0.49	2530	0.51	2328	0.53	2099	0.56	1832	0.57	1520	0.58	1168	0.58	-	-	-	-
	1750	3004	0.53	2849	0.56	2677	0.58	2488	0.60	2277	0.63	2037	0.65	1758	0.66	1439	0.66	-	-	-	-
	1825	3133	0.61	2985	0.63	2821	0.65	2644	0.68	2448	0.70	2229	0.72	1979	0.74	1693	0.75	1374	0.75	-	-
1	1875	3219	0.66	3075	0.68	2917	0.70	2746	0.73	2560	0.76	2352	0.78	2118	0.80	1852	0.81	1553	0.82	-	-
	1925	3305	0.71	3165	0.73	3012	0.76	2848	0.79	2669	0.81	2472	0.84	2252	0.86	2004	0.87	1724	0.88	-	-
	1975	3390	0.77	3255	0.79	3106	0.82	2948	0.85	2776	0.87	2589	0.90	2381	0.92	2149	0.94	1888	0.95	1296	0.96
	2025	3476	0.83	3344	0.85	3200	0.88	3047	0.91	2882	0.93	2703	0.96	2506	0.99	2288	1.01	2043	1.02	1480	1.03
	2075	3562	0.89	3433	0.92	3294	0.94	3145	0.97	2986	1.00	2815	1.03	2627	1.05	2421	1.08	2192	1.09	1661	1.11

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (BHP) does not include transmission losses.



PERFORMANCE/DIMENSIONS

Models LIBA - Size 48



Max. Motor Frame:.....284T
 Shaft Size..... 1-7/16"
 Housing Gauge:..... 10
 Approx. Weight:..... 600 lbs.
 Flange Holes:..... 8
 Diameter Flange Holes:..... 7/16"
 Finish: Epoxy Coated
 Galvanized

A	B	C	D	E	B.C.D
48-1/2	53	33	38-3/8	45	50-3/4

A = ID **B = OD**
C = Length **E = Max. Height**

HP	RPM	Static Pressure (Inches W.G.)																							
		0		0.125		0.25		0.375		0.5		0.625		0.75		0.875		1		1.125		1.25			
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		
1-1/2	460	17884	0.76	15363	0.93	11881	1.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	480	18662	0.87	16265	1.04	13143	1.16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	500	19439	0.98	17153	1.17	14304	1.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	520	20217	1.10	18030	1.30	15397	1.44	11234	1.51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	540	20995	1.23	18898	1.44	16441	1.59	12890	1.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	560	21772	1.38	19758	1.59	17448	1.76	14324	1.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	580	22550	1.53	20610	1.75	18427	1.93	15616	2.05	10970	2.10	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	600	23327	1.69	21457	1.93	19384	2.11	16813	2.25	12932	2.32	-	-	-	-	-	-	-	-	-	-	-	-	-	
	620	24105	1.87	22299	2.11	20322	2.31	17943	2.46	14611	2.55	-	-	-	-	-	-	-	-	-	-	-	-	-	
	640	24882	2.05	23135	2.31	21245	2.51	19024	2.68	16085	2.79	-	-	-	-	-	-	-	-	-	-	-	-	-	
	660	25660	2.25	23968	2.51	22156	2.73	20066	2.91	17420	3.04	13439	3.09	-	-	-	-	-	-	-	-	-	-	-	
5	680	26438	2.46	24797	2.73	23055	2.96	21078	3.15	18658	3.29	15263	3.37	10161	3.44	-	-	-	-	-	-	-	-	-	
	720	27993	2.92	26445	3.21	24826	3.46	23033	3.68	20944	3.85	18291	3.96	14426	4.02	-	-	-	-	-	-	-	-	-	
	760	29548	3.44	28083	3.75	26567	4.01	24920	4.25	23062	4.45	20845	4.60	17946	4.69	13734	4.74	-	-	-	-	-	-	-	
	780	30325	3.72	28898	4.03	27429	4.31	25844	4.56	24078	4.77	22017	4.94	19430	5.05	15811	5.10	-	-	-	-	-	-	-	
7-1/2	820	31881	4.32	30522	4.65	29137	4.95	27661	5.22	26049	5.45	24228	5.65	22069	5.80	19314	5.90	15488	5.94	11164	6.11	-	-	-	
	860	33436	4.98	32140	5.34	30828	5.65	29444	5.94	27954	6.20	26311	6.42	24436	6.60	22188	6.74	19294	6.82	15382	6.87	11358	7.08		
	880	34213	5.34	32946	5.70	31669	6.03	30325	6.32	28888	6.59	27318	6.83	25551	7.03	23482	7.18	20910	7.28	17486	7.33	13339	7.45		
	900	34991	5.71	33751	6.08	32506	6.42	31200	6.73	29812	7.00	28306	7.25	26633	7.47	24709	7.64	22388	7.76	19398	7.83	15502	7.89		
10	940	36546	6.51	35357	6.90	34171	7.25	32935	7.58	31632	7.88	30237	8.15	28716	8.39	27017	8.59	25055	8.76	22682	8.87	19643	8.93		
	960	37324	6.93	36159	7.33	34999	7.69	33795	8.03	32530	8.34	31183	8.62	29726	8.88	28116	9.10	26287	9.27	24127	9.41	21443	9.49		
	980	38101	7.37	36959	7.78	35826	8.15	34651	8.50	33421	8.82	32118	9.12	30718	9.38	29185	9.61	27468	9.81	25480	9.96	23078	10.07		
	1000	38879	7.83	37759	8.25	36650	8.63	35503	8.99	34307	9.32	33044	9.63	31695	9.90	30231	10.15	28608	10.36	26762	10.53	24583	10.66		

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings do not include the effects of appurtenances (accessories).
 Power rating (BHP) does not include transmission losses.



Tubaxial Fans

SOUND CHARACTERISTICS

Size 12

RPM	Sound Performance Sones / LwA (Inches W.G.)				
	0	0.125	0.25	0.375	0.5
1550	18.1 / 80	16.3 / 78	-	-	-
1600	18.9 / 80	17.1 / 79	15.7 / 78	-	-
1650	19.8 / 81	18.1 / 80	16.7 / 79	-	-
1700	21 / 82	19 / 81	17.6 / 80	-	-
1725	21 / 83	19.5 / 81	18.1 / 80	-	-
1775	22 / 83	20 / 82	19.1 / 82	-	-
1825	23 / 85	22 / 83	20 / 83	-	-
1875	24 / 86	23 / 85	21 / 84	-	-
1925	25 / 87	24 / 86	23 / 85	22 / 84	-
2000	28 / 88	26 / 87	25 / 86	24 / 85	-
2075	30 / 90	29 / 89	27 / 88	26 / 87	-
2150	33 / 91	32 / 90	30 / 89	29 / 89	-
2200	35 / 92	34 / 91	32 / 90	30 / 90	-
2275	39 / 94	37 / 93	35 / 92	33 / 91	32 / 90
2350	43 / 96	40 / 95	38 / 94	36 / 93	35 / 92
2425	47 / 97	44 / 96	42 / 95	40 / 94	38 / 93

Size 16

RPM	Sound Performance Sones / LwA (Inches W.G.)									
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.25
1100	13.7 / 75	12.3 / 73	10.8 / 72	-	-	-	-	-	-	-
1175	16.1 / 77	14.7 / 76	13.3 / 74	-	-	-	-	-	-	-
1225	17.8 / 79	16.4 / 78	15 / 76	13.7 / 75	-	-	-	-	-	-
1275	19.7 / 81	18.1 / 79	16.8 / 78	15 / 76	-	-	-	-	-	-
1300	21 / 82	19.1 / 80	17.7 / 79	15.8 / 77	-	-	-	-	-	-
1350	23 / 83	21 / 82	19.6 / 81	17.8 / 79	16.7 / 79	-	-	-	-	-
1375	24 / 84	22 / 83	21 / 82	18.7 / 80	17.4 / 79	-	-	-	-	-
1425	27 / 86	25 / 85	23 / 83	21 / 82	19 / 80	-	-	-	-	-
1475	29 / 88	27 / 86	26 / 85	23 / 84	21 / 82	19.8 / 81	-	-	-	-
1525	32 / 89	30 / 88	28 / 86	26 / 85	23 / 83	21 / 82	-	-	-	-
1575	33 / 90	31 / 88	29 / 87	27 / 86	25 / 84	23 / 83	22 / 83	-	-	-
1625	35 / 90	32 / 89	31 / 88	29 / 87	26 / 86	24 / 84	23 / 84	-	-	-
1675	36 / 91	34 / 90	32 / 89	30 / 88	28 / 87	26 / 85	24 / 85	23 / 85	-	-
1750	38 / 92	36 / 91	34 / 90	33 / 89	31 / 88	28 / 87	26 / 86	25 / 86	-	-
1825	41 / 93	39 / 92	37 / 91	35 / 90	33 / 90	31 / 88	29 / 87	27 / 87	27 / 87	-
1875	42 / 93	40 / 92	38 / 92	36 / 91	35 / 90	32 / 89	30 / 88	29 / 88	28 / 88	-
1925	43 / 94	41 / 93	39 / 92	37 / 92	36 / 91	34 / 90	32 / 89	30 / 88	29 / 89	-
1975	44 / 94	42 / 94	40 / 93	39 / 92	37 / 92	36 / 91	34 / 90	32 / 89	31 / 89	31 / 90
2025	45 / 95	43 / 94	41 / 94	40 / 93	39 / 93	37 / 92	35 / 91	33 / 90	32 / 90	32 / 91
2075	46 / 96	44 / 95	43 / 94	41 / 94	40 / 93	39 / 93	37 / 92	35 / 91	33 / 91	33 / 91

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS
Size 18

Tubaxial Fans

RPM	Sound Performance Sones / LwA (Inches W.G.)								
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1
1000	11.4 / 72	11 / 70	-	-	-	-	-	-	-
1050	12.3 / 73	11.9 / 72	12.1 / 72	-	-	-	-	-	-
1100	13.2 / 74	12.7 / 73	12.7 / 73	-	-	-	-	-	-
1125	13.7 / 75	13.2 / 74	13 / 73	-	-	-	-	-	-
1150	14.1 / 75	13.7 / 74	13.4 / 74	-	-	-	-	-	-
1200	15.1 / 77	14.6 / 75	14.2 / 74	15.2 / 77	-	-	-	-	-
1225	15.6 / 77	15.1 / 76	14.7 / 75	15.6 / 77	-	-	-	-	-
1275	16.7 / 78	16.2 / 77	15.8 / 76	16.3 / 78	-	-	-	-	-
1300	17.3 / 79	16.7 / 78	16.3 / 77	16.6 / 78	-	-	-	-	-
1350	18.4 / 80	17.9 / 79	17.3 / 78	17.4 / 78	-	-	-	-	-
1400	19.6 / 81	19.1 / 80	18.6 / 79	18.2 / 79	19 / 81	-	-	-	-
1450	21 / 82	20 / 81	19.9 / 80	19.5 / 80	19.7 / 81	-	-	-	-
1500	22 / 83	22 / 82	21 / 82	21 / 81	20 / 82	21 / 83	-	-	-
1550	23 / 84	23 / 83	22 / 82	22 / 82	21 / 82	22 / 84	-	-	-
1600	24 / 85	24 / 84	23 / 83	23 / 83	22 / 83	23 / 84	-	-	-
1650	25 / 85	25 / 85	24 / 84	24 / 83	23 / 83	23 / 84	25 / 86	-	-
1675	25 / 86	25 / 85	25 / 85	24 / 84	24 / 83	24 / 85	25 / 86	-	-
1725	26 / 87	26 / 86	26 / 85	25 / 85	25 / 84	24 / 85	26 / 87	-	-
1775	27 / 87	27 / 87	27 / 86	26 / 86	26 / 85	25 / 85	26 / 87	28 / 88	-
1825	28 / 88	28 / 88	28 / 87	27 / 86	27 / 86	26 / 86	27 / 87	29 / 89	-
1850	29 / 88	29 / 88	28 / 87	28 / 87	27 / 86	27 / 86	27 / 87	29 / 89	-
1925	31 / 90	30 / 89	30 / 89	29 / 88	29 / 88	29 / 87	28 / 88	30 / 89	31 / 90
2000	33 / 91	32 / 90	32 / 90	31 / 89	30 / 89	30 / 88	30 / 88	31 / 89	33 / 91
2075	35 / 92	35 / 91	34 / 91	33 / 91	32 / 90	32 / 90	32 / 89	32 / 90	34 / 91

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS

Size 21

RPM	Sound Performance Sones / LwA (Inches W.G.)									
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.125
1050	13.6 / 76	12.8 / 75	-	-	-	-	-	-	-	-
1100	14.9 / 77	14.2 / 77	-	-	-	-	-	-	-	-
1125	15.6 / 78	14.9 / 77	13.9 / 77	-	-	-	-	-	-	-
1150	16.2 / 79	15.6 / 78	14.7 / 77	-	-	-	-	-	-	-
1175	16.9 / 79	16.2 / 79	15.4 / 78	-	-	-	-	-	-	-
1225	18.2 / 81	17.6 / 80	16.9 / 79	-	-	-	-	-	-	-
1275	19.7 / 82	19 / 81	18.3 / 81	17.4 / 80	-	-	-	-	-	-
1300	20 / 82	19.8 / 82	19 / 81	18 / 81	-	-	-	-	-	-
1325	21 / 83	21 / 83	19.8 / 82	18.7 / 81	-	-	-	-	-	-
1375	23 / 84	22 / 84	21 / 83	20 / 83	19.9 / 83	-	-	-	-	-
1400	24 / 85	23 / 84	22 / 84	21 / 83	21 / 83	-	-	-	-	-
1450	25 / 86	25 / 85	24 / 85	23 / 84	22 / 84	-	-	-	-	-
1525	28 / 87	27 / 87	26 / 86	25 / 86	24 / 85	-	-	-	-	-
1575	29 / 88	28 / 88	27 / 87	27 / 87	26 / 86	25 / 86	-	-	-	-
1625	30 / 89	30 / 89	29 / 88	28 / 88	27 / 87	26 / 87	-	-	-	-
1675	32 / 90	31 / 90	30 / 89	29 / 89	28 / 88	27 / 88	27 / 88	-	-	-
1700	32 / 90	32 / 90	31 / 90	30 / 89	29 / 89	28 / 88	28 / 88	-	-	-
1775	34 / 91	34 / 91	33 / 91	32 / 90	31 / 90	30 / 90	29 / 89	30 / 90	-	-
1850	36 / 93	36 / 92	35 / 92	34 / 92	34 / 91	33 / 91	31 / 91	31 / 91	-	-
1925	39 / 94	38 / 94	37 / 93	37 / 93	36 / 93	35 / 92	34 / 92	33 / 92	34 / 92	-
1950	40 / 94	39 / 94	38 / 94	38 / 93	37 / 93	36 / 93	35 / 92	34 / 92	35 / 92	-
2000	42 / 95	41 / 95	40 / 94	40 / 94	39 / 94	38 / 94	37 / 93	36 / 93	36 / 93	-
2050	44 / 96	43 / 96	42 / 95	42 / 95	41 / 95	40 / 94	39 / 94	38 / 94	38 / 94	38 / 94
2075	45 / 96	44 / 96	43 / 96	43 / 95	42 / 95	41 / 95	40 / 95	39 / 94	38 / 94	39 / 94

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS

Size 24

RPM	Sound Performance Sones / LwA (Inches W.G.)								
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1
800	12.8 / 75	11.9 / 74	-	-	-	-	-	-	-
850	14.3 / 77	13.4 / 76	12.6 / 75	-	-	-	-	-	-
900	15.8 / 78	14.9 / 77	14 / 77	-	-	-	-	-	-
950	17.3 / 80	16.5 / 79	15.5 / 78	-	-	-	-	-	-
975	18.1 / 81	17.3 / 80	16.3 / 79	16.1 / 79	-	-	-	-	-
1025	19.6 / 82	18.8 / 81	18 / 81	17.6 / 80	-	-	-	-	-
1075	21 / 84	21 / 83	19.7 / 82	19.1 / 82	-	-	-	-	-
1125	23 / 85	22 / 84	22 / 84	21 / 83	21 / 83	-	-	-	-
1150	24 / 86	23 / 85	23 / 84	22 / 84	22 / 84	-	-	-	-
1200	26 / 87	25 / 86	25 / 86	24 / 85	23 / 85	-	-	-	-
1225	27 / 88	26 / 87	26 / 86	25 / 86	24 / 85	-	-	-	-
1250	28 / 88	28 / 88	27 / 87	26 / 86	25 / 86	25 / 86	-	-	-
1275	29 / 89	29 / 88	28 / 88	27 / 87	26 / 87	26 / 87	-	-	-
1325	32 / 90	31 / 90	30 / 89	29 / 88	28 / 88	28 / 88	-	-	-
1375	34 / 91	33 / 91	32 / 90	31 / 90	30 / 89	30 / 89	-	-	-
1425	36 / 92	35 / 92	34 / 91	33 / 91	32 / 90	31 / 90	31 / 90	-	-
1450	37 / 93	36 / 92	35 / 92	34 / 91	33 / 91	32 / 90	32 / 90	-	-
1500	39 / 94	38 / 93	37 / 93	36 / 92	35 / 92	34 / 91	34 / 91	34 / 91	-
1525	40 / 94	39 / 94	38 / 93	37 / 93	36 / 92	35 / 92	35 / 92	35 / 92	-
1550	41 / 94	41 / 94	40 / 94	38 / 93	37 / 93	36 / 92	36 / 92	36 / 92	-
1625	45 / 96	44 / 96	43 / 95	42 / 95	41 / 94	40 / 94	39 / 93	39 / 93	38 / 93
1675	47 / 97	47 / 97	46 / 96	44 / 96	43 / 95	42 / 95	41 / 94	41 / 94	41 / 94
1725	50 / 98	49 / 97	48 / 97	47 / 97	46 / 96	45 / 96	44 / 95	43 / 95	43 / 95
1775	52 / 98	52 / 98	51 / 98	50 / 98	49 / 97	48 / 97	46 / 96	45 / 96	45 / 96

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS

Size 30

RPM	Sound Performance Sones / LwA (Inches W.G.)									
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.25
600	11.8 / 73	10.1 / 71	-	-	-	-	-	-	-	-
650	13.5 / 75	12 / 74	-	-	-	-	-	-	-	-
700	15.2 / 77	13.9 / 76	12.8 / 75	-	-	-	-	-	-	-
750	16.9 / 79	15.9 / 78	14.8 / 77	-	-	-	-	-	-	-
775	17.8 / 80	16.9 / 79	15.8 / 78	-	-	-	-	-	-	-
800	18.6 / 81	17.8 / 80	16.8 / 79	-	-	-	-	-	-	-
825	19.6 / 82	18.8 / 81	17.8 / 80	-	-	-	-	-	-	-
850	21 / 83	19.7 / 82	18.8 / 81	18.1 / 80	-	-	-	-	-	-
875	22 / 84	21 / 83	19.8 / 82	19.1 / 81	-	-	-	-	-	-
900	23 / 85	22 / 84	21 / 83	20 / 82	-	-	-	-	-	-
925	24 / 86	23 / 85	22 / 84	21 / 83	-	-	-	-	-	-
950	25 / 87	24 / 86	23 / 85	22 / 84	22 / 83	-	-	-	-	-
975	27 / 87	26 / 87	24 / 85	23 / 84	23 / 84	-	-	-	-	-
1025	29 / 89	28 / 88	27 / 87	26 / 86	25 / 86	-	-	-	-	-
1075	32 / 90	31 / 90	29 / 89	28 / 88	27 / 87	-	-	-	-	-
1100	34 / 91	33 / 91	31 / 89	29 / 89	29 / 88	28 / 88	-	-	-	-
1125	35 / 92	34 / 91	32 / 90	31 / 89	30 / 89	29 / 88	-	-	-	-
1150	37 / 93	36 / 92	34 / 91	32 / 90	31 / 89	30 / 89	-	-	-	-
1175	38 / 93	37 / 93	35 / 92	34 / 91	32 / 90	31 / 90	-	-	-	-
1200	39 / 94	38 / 93	37 / 92	35 / 91	33 / 91	32 / 90	32 / 90	-	-	-
1225	41 / 94	40 / 94	38 / 93	36 / 92	35 / 91	34 / 91	33 / 91	-	-	-
1275	43 / 95	42 / 95	41 / 94	39 / 93	38 / 93	36 / 92	36 / 92	-	-	-
1325	46 / 96	45 / 96	44 / 95	42 / 95	41 / 94	39 / 93	38 / 93	38 / 93	-	-
1375	49 / 97	48 / 97	47 / 96	45 / 96	44 / 95	42 / 95	41 / 94	41 / 94	-	-
1400	50 / 98	50 / 98	48 / 97	47 / 96	45 / 96	44 / 95	43 / 95	42 / 96	-	-
1475	55 / 99	54 / 99	53 / 99	51 / 98	50 / 98	49 / 97	48 / 97	46 / 96	46 / 96	-
1550	59 / 101	59 / 101	58 / 100	57 / 100	55 / 99	54 / 99	53 / 98	52 / 98	51 / 97	-
1600	63 / 101	63 / 101	61 / 101	60 / 101	59 / 100	58 / 100	56 / 99	55 / 99	54 / 98	53 / 98

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS
Size 36

RPM	Sound Performance Sones / LwA (Inches W.G.)										
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.25	1.5
650	18.3 / 80	17.2 / 80	-	-	-	-	-	-	-	-	-
675	19.5 / 81	18.3 / 81	17.6 / 81	-	-	-	-	-	-	-	-
700	21 / 82	19.5 / 82	18.7 / 82	-	-	-	-	-	-	-	-
725	22 / 83	21 / 83	19.8 / 83	-	-	-	-	-	-	-	-
750	23 / 84	22 / 84	21 / 83	21 / 84	-	-	-	-	-	-	-
775	24 / 85	23 / 85	22 / 84	22 / 84	-	-	-	-	-	-	-
800	26 / 86	25 / 86	23 / 85	23 / 85	-	-	-	-	-	-	-
825	27 / 87	26 / 87	25 / 86	24 / 86	24 / 86	-	-	-	-	-	-
875	30 / 89	29 / 89	27 / 88	27 / 88	26 / 88	-	-	-	-	-	-
900	32 / 90	30 / 90	29 / 89	28 / 89	28 / 89	-	-	-	-	-	-
925	33 / 91	32 / 90	31 / 90	30 / 89	29 / 89	-	-	-	-	-	-
950	35 / 92	34 / 91	32 / 91	31 / 90	31 / 90	30 / 90	-	-	-	-	-
975	36 / 92	35 / 92	34 / 91	33 / 91	32 / 91	32 / 91	-	-	-	-	-
1000	38 / 93	37 / 93	36 / 92	35 / 92	34 / 92	33 / 92	-	-	-	-	-
1025	40 / 94	39 / 94	38 / 93	36 / 93	36 / 92	35 / 92	35 / 92	-	-	-	-
1050	42 / 95	41 / 94	40 / 94	38 / 93	37 / 93	36 / 93	36 / 93	36 / 93	-	-	-
1100	45 / 96	44 / 96	43 / 95	42 / 95	41 / 94	40 / 94	39 / 94	39 / 94	-	-	-
1125	47 / 97	46 / 96	45 / 96	44 / 95	42 / 95	41 / 95	41 / 95	40 / 95	-	-	-
1150	49 / 97	48 / 97	47 / 96	45 / 96	44 / 96	43 / 96	42 / 96	42 / 96	-	-	-
1175	51 / 98	50 / 98	49 / 97	47 / 97	46 / 96	45 / 96	44 / 96	44 / 96	43 / 96	-	-
1225	55 / 99	54 / 99	53 / 98	51 / 98	50 / 98	49 / 97	48 / 97	47 / 97	47 / 97	-	-
1275	59 / 100	58 / 100	57 / 100	55 / 99	54 / 99	52 / 99	52 / 98	51 / 98	50 / 98	51 / 99	-
1350	66 / 102	65 / 102	63 / 101	62 / 101	60 / 101	59 / 100	58 / 100	57 / 100	56 / 100	55 / 100	-
1400	70 / 103	70 / 103	68 / 102	66 / 102	65 / 102	63 / 101	62 / 101	61 / 101	60 / 101	59 / 101	-
1450	75 / 104	74 / 104	73 / 103	71 / 103	69 / 103	68 / 102	66 / 102	65 / 102	65 / 102	64 / 102	-
1500	80 / 105	79 / 105	78 / 104	76 / 104	74 / 104	73 / 104	71 / 103	70 / 103	69 / 103	68 / 103	67 / 103
1550	85 / 106	85 / 106	83 / 105	81 / 105	79 / 105	78 / 105	76 / 104	75 / 104	74 / 104	73 / 104	72 / 104
1600	90 / 107	90 / 107	88 / 106	87 / 106	85 / 106	83 / 106	81 / 105	80 / 105	78 / 105	77 / 105	76 / 105

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS

Size 42

RPM	Sound Performance Sones / LwA (Inches W.G.)										
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.25	1.5
480	17 / 80	16.5 / 79	-	-	-	-	-	-	-	-	-
520	19.4 / 82	18.9 / 82	17.2 / 80	-	-	-	-	-	-	-	-
560	22 / 84	21 / 84	21 / 83	-	-	-	-	-	-	-	-
600	24 / 86	24 / 86	23 / 85	-	-	-	-	-	-	-	-
640	27 / 88	27 / 88	26 / 87	24 / 86	-	-	-	-	-	-	-
660	29 / 89	28 / 89	28 / 88	26 / 87	-	-	-	-	-	-	-
680	30 / 90	30 / 89	29 / 89	28 / 88	-	-	-	-	-	-	-
700	32 / 91	31 / 90	31 / 90	30 / 89	-	-	-	-	-	-	-
720	33 / 91	33 / 91	32 / 91	31 / 90	29 / 88	-	-	-	-	-	-
740	35 / 92	34 / 92	34 / 92	33 / 91	31 / 90	-	-	-	-	-	-
760	37 / 93	36 / 93	35 / 92	35 / 92	33 / 91	-	-	-	-	-	-
800	40 / 94	40 / 94	39 / 94	38 / 93	37 / 93	-	-	-	-	-	-
820	42 / 95	42 / 95	41 / 95	40 / 94	39 / 94	37 / 92	-	-	-	-	-
840	44 / 96	44 / 96	43 / 95	42 / 95	41 / 95	39 / 94	-	-	-	-	-
860	46 / 96	46 / 96	45 / 96	44 / 96	43 / 95	42 / 95	-	-	-	-	-
900	49 / 98	49 / 97	49 / 97	48 / 97	47 / 97	46 / 96	44 / 95	-	-	-	-
940	53 / 99	53 / 99	52 / 98	51 / 98	50 / 98	50 / 98	48 / 97	46 / 96	-	-	-
980	57 / 100	57 / 100	56 / 100	55 / 99	54 / 99	54 / 99	53 / 99	50 / 98	-	-	-
1020	61 / 101	61 / 101	60 / 101	59 / 100	59 / 100	58 / 100	57 / 100	55 / 99	-	-	-
1060	65 / 102	65 / 102	65 / 102	64 / 102	63 / 101	62 / 101	61 / 101	61 / 101	58 / 100	-	-
1100	70 / 103	70 / 103	69 / 103	68 / 103	68 / 102	67 / 102	66 / 102	65 / 102	64 / 101	-	-
1140	75 / 104	75 / 104	74 / 104	73 / 104	73 / 103	72 / 103	71 / 103	70 / 103	69 / 103	-	-
1180	80 / 105	80 / 105	79 / 105	79 / 105	78 / 104	77 / 104	76 / 104	75 / 104	74 / 104	-	-
1200	82 / 105	82 / 105	82 / 105	81 / 105	80 / 105	80 / 105	79 / 105	78 / 104	77 / 104	74 / 103	-
1240	88 / 106	88 / 106	87 / 106	86 / 106	86 / 106	85 / 106	84 / 106	83 / 105	82 / 105	80 / 105	-
1260	90 / 107	90 / 107	90 / 107	89 / 106	88 / 106	88 / 106	87 / 106	86 / 106	85 / 106	83 / 105	-
1300	96 / 107	96 / 107	96 / 107	95 / 107	94 / 107	93 / 107	93 / 107	92 / 107	91 / 107	89 / 106	86 / 106

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS

Size 48

RPM	Sound Performance Sones / LwA (Inches W.G.)										
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.25	1.5
460	21 / 82	20 / 82	19.8 / 81	-	-	-	-	-	-	-	-
480	23 / 84	22 / 83	22 / 83	-	-	-	-	-	-	-	-
500	24 / 85	24 / 84	23 / 84	-	-	-	-	-	-	-	-
520	27 / 86	26 / 86	26 / 85	25 / 85	-	-	-	-	-	-	-
540	29 / 87	29 / 87	28 / 86	27 / 86	-	-	-	-	-	-	-
560	32 / 88	32 / 88	30 / 87	29 / 87	-	-	-	-	-	-	-
580	35 / 89	34 / 89	33 / 89	32 / 88	30 / 88	-	-	-	-	-	-
600	38 / 90	38 / 90	36 / 90	34 / 89	33 / 89	-	-	-	-	-	-
620	41 / 91	41 / 91	39 / 91	37 / 90	36 / 90	-	-	-	-	-	-
640	43 / 92	43 / 92	42 / 92	40 / 91	38 / 91	-	-	-	-	-	-
660	45 / 93	45 / 93	44 / 93	42 / 92	41 / 92	39 / 92	-	-	-	-	-
680	47 / 94	47 / 94	46 / 93	44 / 93	43 / 93	42 / 92	41 / 92	-	-	-	-
720	52 / 95	52 / 95	51 / 95	49 / 95	48 / 95	46 / 94	45 / 94	-	-	-	-
760	57 / 97	57 / 97	56 / 97	54 / 97	53 / 96	52 / 96	51 / 96	50 / 96	-	-	-
780	59 / 98	59 / 98	59 / 98	57 / 97	56 / 97	54 / 97	54 / 97	53 / 97	-	-	-
820	64 / 99	64 / 99	64 / 99	63 / 99	61 / 99	60 / 99	60 / 98	59 / 98	58 / 98	58 / 98	-
860	70 / 101	70 / 101	70 / 101	69 / 100	68 / 100	67 / 100	66 / 100	66 / 100	65 / 100	64 / 99	64 / 99
880	73 / 101	73 / 101	73 / 101	72 / 101	71 / 101	71 / 101	70 / 101	69 / 101	68 / 100	67 / 100	67 / 100
900	77 / 102	77 / 102	77 / 102	76 / 102	75 / 102	75 / 102	74 / 101	73 / 101	72 / 101	71 / 101	70 / 101
940	85 / 103	85 / 103	85 / 103	84 / 103	83 / 103	82 / 103	81 / 103	80 / 103	79 / 103	79 / 102	78 / 102
960	89 / 104	89 / 104	89 / 104	89 / 104	88 / 104	87 / 104	86 / 104	85 / 103	84 / 103	83 / 103	82 / 103
980	94 / 105	94 / 105	94 / 105	93 / 105	92 / 105	91 / 104	90 / 104	89 / 104	88 / 104	87 / 104	86 / 104
1000	99 / 105	99 / 105	99 / 105	98 / 105	97 / 105	96 / 105	94 / 105	93 / 105	92 / 105	91 / 104	90 / 104

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

SOUND CHARACTERISTICS

Size 54

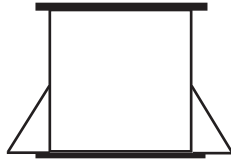
RPM	Sound Performance Sones / LwA (Inches W.G.)										
	0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.125	1.5
460	29 / 87	27 / 86	25 / 85	-	-	-	-	-	-	-	-
480	31 / 88	29 / 87	28 / 87	-	-	-	-	-	-	-	-
500	33 / 89	32 / 89	30 / 88	29 / 87	-	-	-	-	-	-	-
520	36 / 90	34 / 90	33 / 89	31 / 88	-	-	-	-	-	-	-
560	42 / 93	40 / 92	38 / 92	37 / 91	-	-	-	-	-	-	-
580	44 / 93	43 / 93	41 / 93	39 / 92	-	-	-	-	-	-	-
600	47 / 95	45 / 94	44 / 94	42 / 93	41 / 93	-	-	-	-	-	-
620	50 / 96	48 / 95	47 / 95	45 / 94	44 / 94	-	-	-	-	-	-
660	56 / 97	55 / 97	53 / 97	51 / 96	50 / 96	48 / 95	-	-	-	-	-
680	60 / 98	58 / 98	56 / 97	55 / 97	53 / 97	51 / 96	-	-	-	-	-
700	63 / 99	62 / 99	60 / 98	58 / 98	56 / 98	55 / 97	-	-	-	-	-
720	66 / 100	65 / 100	63 / 99	62 / 99	60 / 99	58 / 98	57 / 98	-	-	-	-
740	70 / 101	68 / 101	67 / 100	65 / 100	64 / 100	62 / 99	60 / 99	-	-	-	-
760	74 / 102	72 / 101	71 / 101	69 / 101	67 / 100	66 / 100	64 / 100	-	-	-	-
780	78 / 102	76 / 102	75 / 102	73 / 101	71 / 101	69 / 101	68 / 101	66 / 100	-	-	-
800	82 / 103	80 / 103	78 / 103	76 / 102	75 / 102	74 / 102	72 / 101	70 / 101	-	-	-
840	90 / 105	89 / 104	87 / 104	85 / 104	84 / 104	82 / 103	80 / 103	79 / 103	77 / 102	-	-
860	95 / 105	93 / 105	91 / 105	89 / 104	88 / 104	86 / 104	85 / 104	83 / 104	81 / 103	79 / 103	-
880	99 / 106	97 / 106	96 / 105	94 / 105	93 / 105	91 / 105	89 / 105	87 / 104	86 / 104	84 / 104	-
900	104 / 106	103 / 107	100 / 106	98 / 106	97 / 106	96 / 106	94 / 105	92 / 105	90 / 105	89 / 105	87 / 104

The sound ratings shown are loudness values in fan sones at 1.5 m (5 ft.) in hemispherical free field calculated per AMCA International Standard 301. Values shown are for: Installation Type A: free inlet hemispherical sone levels.

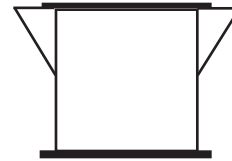
Tubaxial Fans

TUBEAXIAL ARRANGEMENTS

I. VERTICAL HANGING MOUNT

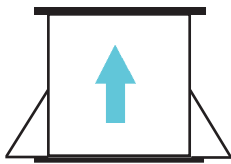


BASE

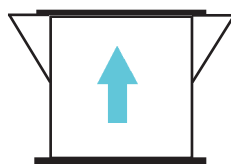


CEILING MOUNT

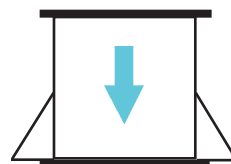
DIRECTIONS FOR ORDERING: *Vertical hanging mount must be ordered with isolation options unless field provided.*



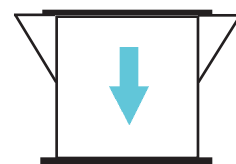
EXHAUST
BASE
MOUNT
(EBM)



EXHAUST
CEILING
MOUNT
(ECM)

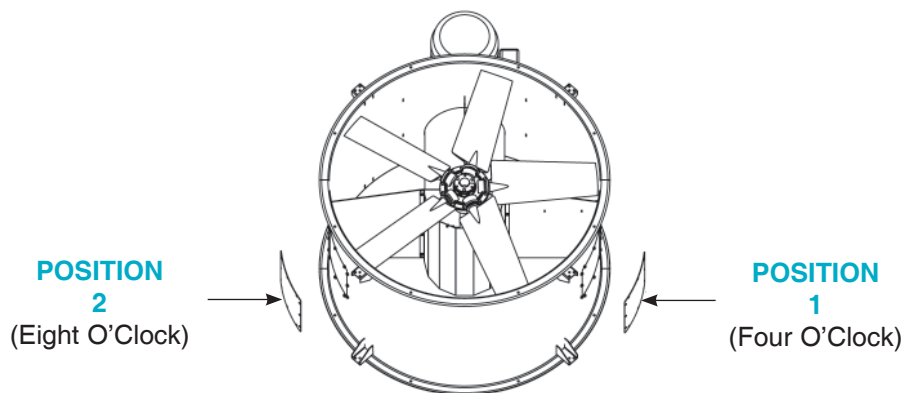


SUPPLY
BASE
MOUNT
(SBM)



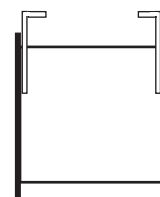
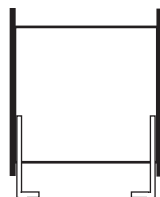
SUPPLY
CEILING
MOUNT
(SCM)

II. ACCESS DOOR POSITIONS: Facing Blade (Exhaust End)

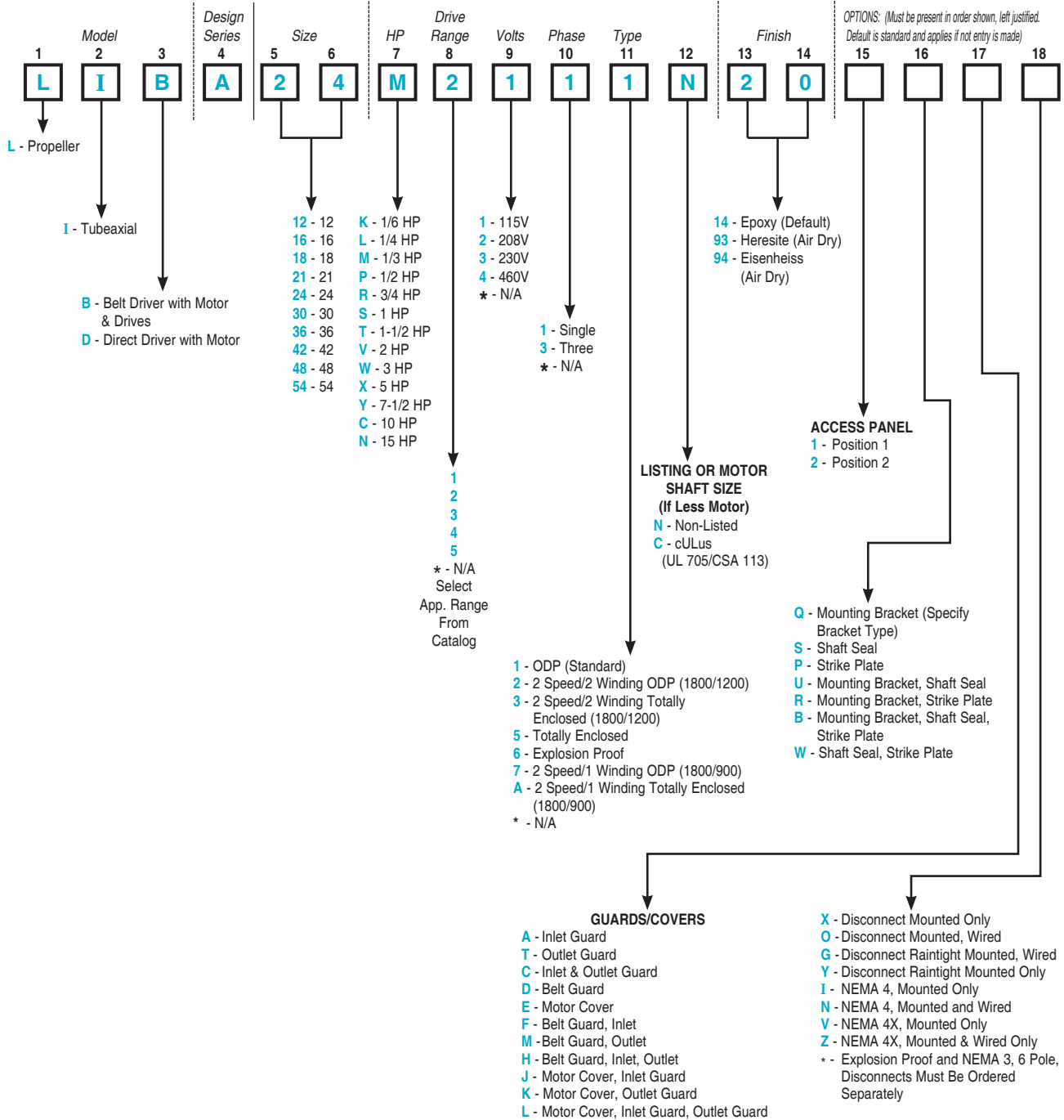


III. PEDESTAL MOUNT: For horizontal mounting floor or ceiling.

Note: Isolation hangers must be ordered w/pedestal base unless field supplied.

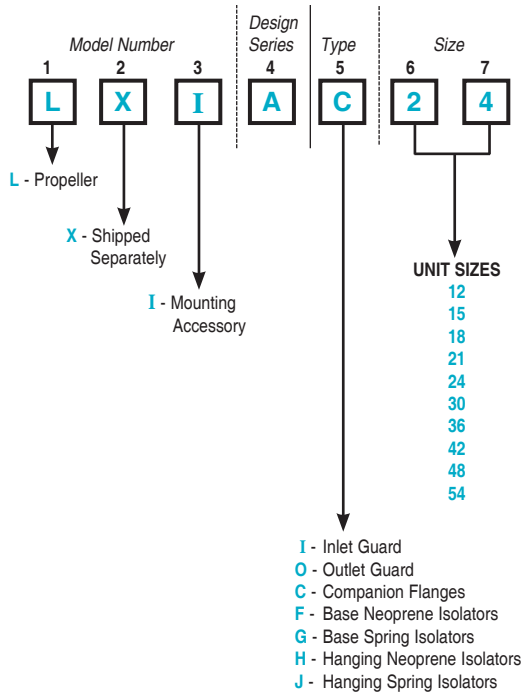


▼ Tubeaxial Fans



Tubeaxial Fans

▼ Accessories



▼ Electrical Accessories

