

## LJDL & LKDL WALL PROPELLER FANS

Models LJDL/LKDL are direct driven units. Direct drive units have the advantage of offering increased efficiency, less frequent maintenance and reduced operating costs.

### Models LJDL Exhaust and LKDL Supply

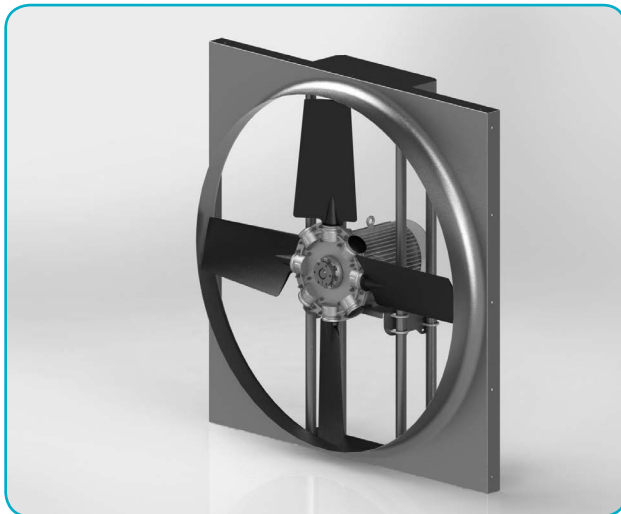
Available in sizes 10” through 54” with aluminum or glass reinforced polypropylene blades, these fans are manufactured for durability and economy. The all welded pipe frame motor support will accommodate a wide range of motor types. Capacities range from 300 to 39,000 CFM and up to 1.25” static pressure.

**Features:**

- One piece galvanized steel fan panel.
- Precision spun orifice.
- Aluminum or glass reinforced polypropylene blades.

**Options:**

- Wall Box
- Wall Collar
- OSHA Guard (Hinged or Flat)
- Motorside Guard
- Weather hood



*Size 24 - 54 with Glass Reinforced Polypropylene Blades Standard, Aluminum Option Available*



*Size 10 - 20 with Cast Aluminum Propeller Blades*

**AMCA LICENSED AIR and SOUND DATA**

Licensed to bear the AMCA Seal for air.

The Carnes Company certifies that the Models LJDL and LKDL shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program



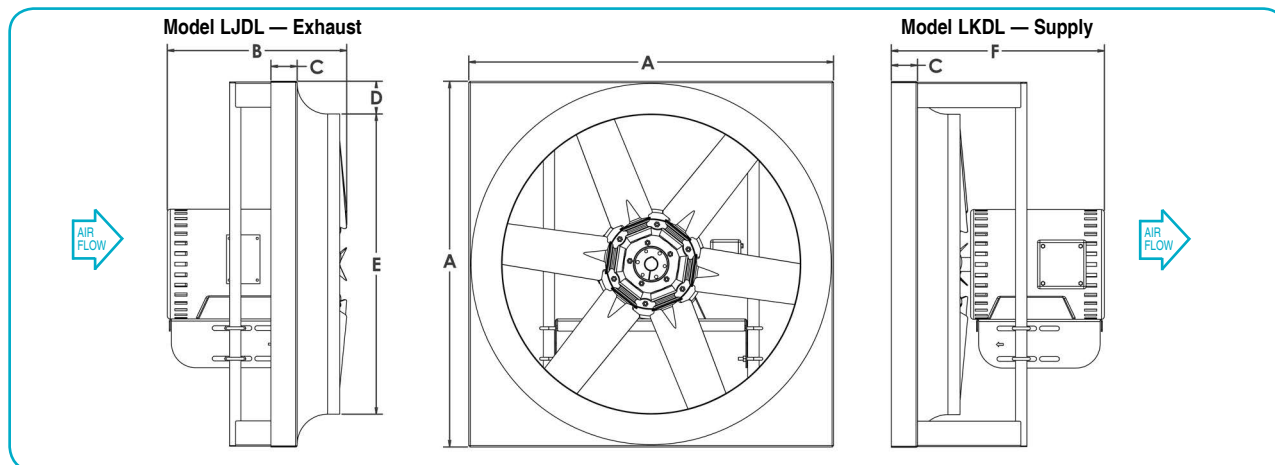
**UL OPTION**

Models LJDL and LKDL are listed to UL Standard 705 and to CSA Standard C22.2 No. 113-12. File Number E27827. UL listing may be optional and must be specified when required.



**POWER VENTILATOR**

**COMPUTERIZED FAN SELECTION:** Make the right choice with Carnes FAN-C-LECT™. The Model LJ/LKDL, as well as the comprehensive offering of CARNES powered ventilators, are included in CARNES user friendly fan selection program.



SIZE	DIMENSIONS LISTED IN INCHES						METAL GAUGE			
	A	MAX. B	C	D	E	MAX. F	MAIN PANEL	MOTOR MOUNT	BRACKETS	PIPE
10	16	12.5	1.50	2.875	10.25	15	16	12	14	3/4" SCH. 40
12	16	12.5	1.50	1.875	12.25	15	16	12	14	
16	20	15.0	1.50	1.875	16.25	17	16	12	14	
18	24	17.0	1.50	2.875	18.25	19	16	12	14	
20	24	17.0	1.50	1.875	20.25	19	16	12	14	
24	30	17.0	2.00	2.75	24.5	25	16	12	14	3/4" SCH. 40
30	36	17.0	2.00	2.5	31.0	25	16	12	14	1" SCH. 40
36	42	20.0	2.00	2.75	36.5	25	16	12	14	
42	48	20.0	2.00	2.75	42.5	25	16	12	14	1 1/4" SCH. 40
48	54	22.0	2.00	2.75	48.5	25	16	10	12	
54	60	22.0	2.75	2.25	55.0	25	16	10	12	

**Typical Specification**

Direct driven sidewall propeller fans shall be Carnes Company Model **LJDJL** for exhaust and **LKDL** for supply as shown on the plans and schedules. Fan panels shall be heavy gauge galvanized steel.

Motors shall be permanently lubricated, sealed bearing type carefully matched to fan load and furnished at the specified voltage, phase and enclosure. Motors shall be mounted on a welded pipe frame motor support.

Propellers shall be deep pitched aluminum or polypropylene and shall be statically and dynamically tested for balance, alignment and smooth operation.

# Model LJDL/LKDL Size 10 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

3 BLADES — 35 DEGREES																	
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.														
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
1	0.17 (K)	600	265	0.01													
		650	287	0.01													
		700	309	0.01													
		750	332	0.01													
		800	354	0.01													
		850	376	0.02													
		860	380	0.02													
2	0.17 (K)	900	398	0.02													
		950	420	0.02													
		1000	442	0.03	222	0.03	167	0.03									
		1050	483	0.03	270	0.03	213	0.03									
		1100	505	0.03	304	0.03	250	0.03									
		1150	528	0.03	337	0.03	285	0.03									
		1160	533	0.03	343	0.03	292	0.03									
3	0.17 (K)	1200	551	0.03	369	0.04	320	0.04									
		1250	574	0.04	400	0.04	353	0.04									
		1300	597	0.04	434	0.04	386	0.04									
		1350	602	0.04	464	0.04	392	0.04									
		1400	624	0.04	495	0.05	422	0.05	225	0.06							
		1450	646	0.05	525	0.05	482	0.05	255	0.06							
		1500	668	0.05	555	0.06	513	0.06	285	0.07							
		1550	691	0.06	585	0.06	544	0.06	313	0.07							
		1600	713	0.06	614	0.07	575	0.07	342	0.08							
		1650	742	0.06	638	0.07	602	0.07	363	0.08							
		1700	765	0.07	664	0.07	631	0.07	391	0.08	255	0.10					
		1725	776	0.07	677	0.08	646	0.08	405	0.08	270	0.10					
		1750	787	0.08	691	0.08	660	0.08	425	0.09	286	0.10					

Shaded area's indicate ECM motors.

Aluminum blades standard.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 12 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

3 BLADES — 36 DEGREES																	
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.														
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
1	0.17 (K)	600	474	0.01													
		650	514	0.01													
		700	553	0.01													
		750	593	0.01													
		800	632	0.01													
		850	672	0.02													
		860	680	0.02													
2	0.17 (K)	900	711	0.02	371	0.02	251	0.03									
		950	751	0.02	451	0.03	326	0.03									
		1000	790	0.03	529	0.03	404	0.03									
		1050	830	0.03	605	0.04	485	0.04									
		1100	869	0.03	678	0.04	564	0.04									
		1150	909	0.04	732	0.04	640	0.05									
		1160	917	0.04	742	0.05	655	0.05									
3	0.17 (K)	1200	948	0.04	782	0.05	714	0.05									
		1250	988	0.05	830	0.06	783	0.06									
		1300	1027	0.06	878	0.06	833	0.06									
		1350	1067	0.06	926	0.07	882	0.07	471	0.09							
		1400	1106	0.07	973	0.08	931	0.08	548	0.09							
		1450	1146	0.08	1020	0.09	979	0.09	630	0.10							
		1500	1185	0.09	1066	0.09	1026	0.10	710	0.11							
		1550	1225	0.10	1112	0.10	1074	0.10	789	0.12							
		1600	1264	0.10	1157	0.11	1120	0.11	866	0.13	497	0.15					
		1650	1317	0.11	1217	0.12	1181	0.12	906	0.13	579	0.15					
		1700	1357	0.12	1260	0.13	1228	0.13	980	0.14	652	0.16					
		1725	1377	0.12	1281	0.13	1251	0.13	1016	0.14	689	0.16					
1750	1397	0.13	1302	0.14	1274	0.14	1052	0.15	726	0.17							

Shaded area's indicate ECM motors.

Aluminum blades standard.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 16 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

**3 BLADES — 37 DEGREES**

DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																								
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
1	0.17 (K)	600	1138	0.03	517	0.036	269	0.040																			
		650	1233	0.04	681	0.04	505	0.05																			
		700	1328	0.04	834	0.05	676	0.06																			
		750	1423	0.06	980	0.06	833	0.07																			
		800	1518	0.07	1121	0.07	984	0.08																			
		850	1612	0.08	1266	0.09	1129	0.09																			
		860	1631	0.08	1297	0.09	1157	0.09																			
2	0.25 (L)	900	1707	0.10	1419	0.10	1270	0.11	647	0.12																	
		950	1802	0.11	1563	0.12	1414	0.12	821	0.14																	
		1000	1897	0.13	1683	0.14	1568	0.14	989	0.16																	
		1050	2030	0.14	1757	0.15	1685	0.15	1087	0.17																	
		1100	2127	0.16	1868	0.17	1799	0.17	1238	0.19	731	0.22															
		1150	2224	0.18	1978	0.19	1911	0.20	1384	0.21	900	0.24															
		1160	2243	0.18	2001	0.20	1934	0.20	1413	0.22	933	0.25															
3	1.00 (S)	1200	2320	0.20	2092	0.22	2023	0.22	1527	0.24	1063	0.26															
		1250	2417	0.23	2205	0.25	2133	0.25	1666	0.27	1221	0.29	766	0.33													
		1300	2514	0.26	2317	0.28	2244	0.28	1802	0.30	1375	0.32	946	0.35													
		1350	2660	0.29	2468	0.30	2417	0.31	2038	0.32	1546	0.34	1126	0.38	617	0.43											
		1400	2758	0.33	2574	0.34	2526	0.34	2215	0.36	1719	0.37	1291	0.42	825	0.46											
		1450	2857	0.37	2680	0.38	2634	0.38	2354	0.39	1874	0.41	1426	0.45	1027	0.49	553	0.54									
		1500	2956	0.40	2784	0.41	2740	0.42	2488	0.43	2026	0.45	1577	0.49	1223	0.53	765	0.58									
		1550	3054	0.45	2889	0.46	2846	0.46	2606	0.47	2175	0.49	1754	0.52	1401	0.57	970	0.62									
		1600	3153	0.49	2993	0.50	2951	0.50	2724	0.52	2321	0.54	1928	0.56	1537	0.61	1171	0.66	741	0.71							
		1650	3224	0.52	3116	0.54	3055	0.54	2796	0.55	2520	0.58	2068	0.61	1686	0.64	1341	0.69	992	0.74							
		1700	3322	0.57	3219	0.59	3168	0.59	2913	0.60	2647	0.63	2215	0.66	1854	0.69	1501	0.73	1172	0.79	749	0.86					
		1725	3371	0.59	3270	0.62	3224	0.62	2970	0.63	2710	0.65	2289	0.68	1937	0.72	1580	0.76	1260	0.81	917	0.88					
		1750	3420	0.62	3321	0.64	3280	0.64	3027	0.66	2773	0.68	2368	0.71	2019	0.74	1658	0.78	1343	0.83	1010	0.90					

Shaded area's indicate ECM motors.

Aluminum blades standard.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 18 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

**3 BLADES — 36 DEGREES**

DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																								
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
1	0.17 (K)	600	1618	0.04	850	0.05	645	0.05																			
		650	1753	0.05	1121	0.06	862	0.06																			
		700	1888	0.06	1350	0.07	1083	0.07																			
		750	2022	0.08	1506	0.09	1399	0.09																			
		800	2157	0.09	1689	0.10	1564	0.11																			
		850	2292	0.11	1908	0.12	1719	0.13	919	0.15																	
		860	2319	0.12	1951	0.13	1749	0.13	963	0.15																	
2	0.33 (M)	900	2427	0.13	2112	0.14	1913	0.15	1137	0.17																	
		950	2562	0.16	2262	0.16	2132	0.17	1349	0.19	700	0.22															
		1000	2696	0.18	2412	0.19	2346	0.20	1596	0.21	940	0.24															
		1050	2864	0.22	2571	0.22	2485	0.22	1868	0.24	1148	0.27															
		1100	3000	0.25	2729	0.25	2639	0.25	2124	0.27	1397	0.30															
		1150	3137	0.28	2886	0.29	2798	0.29	2323	0.31	1646	0.33	986	0.37													
		1160	3164	0.29	2918	0.29	2830	0.30	2362	0.32	1695	0.34	1051	0.38													
3	1.50 (T)	1200	3273	0.32	3042	0.33	2957	0.33	2517	0.35	1887	0.37	1263	0.41													
		1250	3409	0.36	3197	0.37	3115	0.37	2688	0.39	2122	0.41	1510	0.44	864	0.50											
		1300	3546	0.41	3350	0.41	3272	0.41	2859	0.43	2356	0.45	1763	0.49	1195	0.53											
		1350	3702	0.43	3473	0.44	3418	0.45	3081	0.47	2531	0.50	2018	0.51	1496	0.56	853	0.63									
		1400	3839	0.48	3623	0.50	3563	0.50	3248	0.53	2774	0.55	2204	0.57	1755	0.60	1166	0.67									
		1450	3977	0.53	3772	0.55	3708	0.55	3414	0.58	2964	0.61	2387	0.62	1996	0.65	1468	0.71									
		1500	4114	0.59	3920	0.61	3855	0.61	3588	0.64	3152	0.67	2619	0.69	2221	0.70	1757	0.76									
		1550	4251	0.65	4068	0.67	4005	0.67	3763	0.70	3364	0.73	2878	0.75	2408	0.77	2002	0.81									
		1600	4388	0.72	4215	0.74	4154	0.74	3917	0.76	3573	0.79	3124	0.82	2592	0.84	2242	0.87									
		1650	4500	0.77	4332	0.79	4279	0.80	4001	0.82	3726	0.85	3378	0.87	2790	0.90	2367	0.94	2045	0.99	1532	1.05					
		1700	4636	0.84	4472	0.87	4424	0.87	4168	0.89	3884	0.92	3570	0.95	3046	0.98	2530	1.01	2284	1.05	1844	1.11					
		1725	4704	0.88	4543	0.91	4497	0.91	4249	0.93	3963	0.96	3662	0.99	3172	1.02	2624	1.04	2368	1.09	1994	1.15					
		1750	4772	0.92	4613	0.95	4570	0.95	4324	0.97	4041	1.00	3754	1.03	3315	1.06	2756	1.09	2451	1.13	2117	1.18					

Shaded area's indicate ECM motors.

Aluminum blades standard.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 20 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

3 BLADES — 30 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1	0.17 (K)	600	2080	0.05	1230	0.06	874	0.06																		
		700	2426	0.07	1887	0.09	1596	0.09																		
		800	2773	0.11	2345	0.12	2189	0.13																		
		860	2981	0.13	2597	0.15	2466	0.16	1317	0.18																
2	0.50 (P)	900	3119	0.15	2758	0.17	2647	0.18	1606	0.20																
		1000	3466	0.21	3155	0.23	3059	0.24	2338	0.26	1250	0.29														
		1100	3731	0.29	3480	0.29	3399	0.30	2889	0.33	1927	0.35														
		1160	3935	0.33	3698	0.34	3633	0.34	3188	0.37	2345	0.40	1438	0.44												
3	1.50 (T)	1200	4071	0.37	3843	0.38	3781	0.38	3362	0.41	2642	0.44	1745	0.47												
		1300	4410	0.47	4203	0.48	4146	0.48	3779	0.52	3298	0.54	2423	0.57	1632	0.62	871	0.68								
		1400	4815	0.55	4587	0.58	4516	0.58	4212	0.61	3833	0.65	3200	0.67	2368	0.71	1579	0.77	923	0.85						
		1500	5159	0.68	4954	0.71	4888	0.72	4597	0.74	4294	0.78	3820	0.82	3126	0.84	2323	0.89	1626	0.96	1012	1.04				
		1600	5503	0.83	5318	0.87	5256	0.87	4974	0.89	4711	0.93	4349	0.97	3805	1.00	3105	1.03	2344	1.09	1715	1.16	1143	1.25		
		1700	5862	0.98	5662	1.03	5615	1.04	5390	1.07	5115	1.10	4767	1.14	4279	1.18	3684	1.21	2949	1.26	2250	1.32	1725	1.40	1224	1.48
		1750	6034	1.07	5839	1.12	5794	1.13	5571	1.17	5323	1.19	5010	1.23	4556	1.28	4048	1.30	3334	1.35	2620	1.41	2049	1.48	1539	1.56

3 BLADES — 38 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
4	0.25 (L)	600	2342	0.07	1535	0.08	1274	0.08																		
		700	2732	0.11	2091	0.12	1883	0.12																		
		800	3123	0.17	2612	0.18	2431	0.18	1370	0.21																
		860	3357	0.21	2922	0.22	2744	0.23	1876	0.24																
5	0.75 (R)	900	3513	0.24	3128	0.25	2949	0.26	2130	0.27																
		1000	3903	0.33	3610	0.34	3466	0.35	2720	0.36	1871	0.40														
		1100	4311	0.43	3977	0.44	3875	0.45	3300	0.47	2335	0.50	1364	0.55												
		1160	4547	0.50	4241	0.52	4137	0.52	3602	0.55	2741	0.57	1861	0.63	1059	0.68										
6	2.00 (V)	1200	4703	0.56	4415	0.57	4314	0.57	3805	0.61	3015	0.62	2181	0.68	1326	0.73										
		1300	5095	0.71	4847	0.73	4755	0.73	4319	0.76	3801	0.78	2900	0.82	2106	0.88	1357	0.94								
		1400	5540	0.88	5319	0.90	5271	0.90	4843	0.93	4326	0.96	3743	0.97	3107	1.03	2182	1.08	1416	1.16	742	1.26				
		1500	5936	1.08	5721	1.11	5683	1.11	5298	1.14	4909	1.15	4374	1.19	3688	1.20	3059	1.28	2271	1.34	1545	1.43	894	1.53		
		1600	6332	1.31	6123	1.35	6087	1.35	5755	1.37	5401	1.39	4897	1.44	4453	1.45	3792	1.49	3070	1.57	2403	1.62	1721	1.72	1075	1.83
		1700	6707	1.57	6562	1.60	6513	1.60	6185	1.62	5864	1.66	5378	1.68	4970	1.71	4460	1.75	3884	1.80	2971	1.87	2209	1.96	1769	2.05
1750	6904	1.71	6763	1.74	6723	1.74	6405	1.77	6093	1.80	5640	1.83	5235	1.86	4792	1.89	4232	1.94	3563	2.00	2506	2.08	2076	2.18		

Shaded area's indicate ECM motors.

Aluminum blades standard.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 24 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

6 BLADES — 27 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1	0.33 (M)	600	2807	0.07	2168	0.09	1947	0.09																		
		700	3275	0.11	2785	0.14	2600	0.14	1402	0.16																
		800	3743	0.17	3363	0.20	3222	0.21	2410	0.22	1308	0.24														
		860	4024	0.21	3669	0.24	3583	0.25	2832	0.28	1736	0.29	1029	0.31												
2	0.75 (R)	900	4211	0.24	3871	0.28	3788	0.28	3106	0.32	2100	0.32	1334	0.34												
		1000	4679	0.33	4371	0.37	4297	0.38	3737	0.42	3096	0.44	2053	0.45	1445	0.47										
		1100	5211	0.37	4900	0.40	4814	0.41	4350	0.46	3850	0.49	3067	0.50	2132	0.50	1607	0.53	1034	0.57						
3	2.00 (V)	1160	5495	0.43	5204	0.47	5122	0.48	4694	0.53	4219	0.56	3593	0.59	2745	0.59	1975	0.60	1558	0.63						
		1200	5685	0.48	5406	0.51	5327	0.52	4918	0.58	4461	0.62	3931	0.65	3141	0.66	2283	0.66	1809	0.68	1363	0.72				
		1300	6158	0.61	5908	0.64	5834	0.65	5461	0.72	5053	0.76	4630	0.80	4043	0.83	3298	0.83	2507	0.83	2040	0.86	1668	0.90		
		1400	6596	0.71	6370	0.77	6328	0.78	5974	0.84	5591	0.89	5207	0.95	4719	0.97	4227	1.00	3535	1.00	2882	1.00	2339	1.03	1902	1.07
		1500	7068	0.88	6848	0.94	6809	0.95	6508	1.01	6149	1.07	5791	1.13	5396	1.18	4937	1.20	4478	1.23	3813	1.23	3181	1.23	2674	1.25
		1600	7539	1.07	7325	1.13	7288	1.14	7035	1.21	6697	1.28	6362	1.34	6027	1.40	5622	1.44	5191	1.47	4761	1.50	4136	1.49	3507	1.49
3	2.00 (V)	1700	7986	1.32	7837	1.37	7793	1.39	7601	1.46	7257	1.53	6979	1.60	6685	1.67	6390	1.73	6096	1.78	5576	1.80	5016	1.82	4370	1.82
		1750	8221	1.44	8077	1.49	8035	1.51	7853	1.58	7517	1.66	7253	1.73	6967	1.80	6681	1.86	6395	1.92	6000	1.95	5456	1.97	4911	1.99

6 BLADES — 36 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
4	0.50 (P)	600	3752	0.11	3101	0.13	2815	0.13																		
		700	4378	0.18	3820	0.20	3680	0.20	2313	0.21																
		800	5003	0.27	4516	0.29	4393	0.29	3460	0.31	2103	0.34	1184	0.40												
		860	5378	0.33	4925	0.35	4811	0.36	4102	0.39	2866	0.40	1626	0.45	1089	0.52										
5	1.50 (T)	900	5629	0.38	5196	0.40	5087	0.41	4517	0.44	3342	0.45	2114	0.50	1361	0.57										
		1000	6254	0.52	5874	0.54	5767	0.55	5277	0.59	4457	0.61	3396	0.62	2280	0.68	1588	0.76	1165	0.84						
		1100	6854	0.69	6482	0.73	6389	0.74	5895	0.79	5382	0.82	4595	0.83	3110	0.83	2195	0.90	1656	1.01	1218	1.11				
6	3.00 (W)	1160	7227	0.81	6876	0.85	6787	0.86	6327	0.91	5853	0.95	5193	0.97	4292	0.97	2701	0.99	2127	1.09	1644	1.21	1251	1.31		
		1200	7477	0.90	7137	0.94	7051	0.95	6611	1.00	6143	1.05	5582	1.07	4833	1.08	3306	1.07	2473	1.16	1958	1.27	1506	1.39	1179	1.48
		1300	8100	1.14	7786	1.19	7707	1.20	7314	1.26	6877	1.31	6471	1.34	5836	1.36	5145	1.37	3648	1.37	2789	1.44	2286	1.56	1863	1.70
		1400	8704	1.41	8439	1.44	8365	1.44	7995	1.51	7623	1.58	7229	1.62	6683	1.65	6069	1.68	5108	1.65	3976	1.65	3060	1.74	2618	1.88
		1500	9326	1.73	9083	1.76	9014	1.77	8668	1.83	8324	1.91	7963	1.96	7580	2.00	7032	2.04	6421	2.07	5509	2.03	4461	2.02	3415	2.09
		1600	9948	2.10	9725	2.13	9659	2.14	9334	2.20	9012	2.28	8684	2.36	8339	2.40	7887	2.45	7420	2.49	6825	2.51	5973	2.47	5004	2.44
		1700	10643	2.53	10434	2.59	10373	2.61	10069	2.70	9749	2.78	9393	2.85	9100	2.89	8797	2.94	8448	2.98	7917	3.01	7327	3.06	6634	3.02
6	3.00 (W)	1725	10800	2.64	10595	2.71	10535	2.72	10235	2.81	9924	2.90	9569	2.97	9276	3.01	8988	3.06	8644	3.10	8165	3.14	7598	3.19	6942	3.18
		1750	10956	2.76	10755	2.82	10696	2.84	10401	2.93	10098	3.02	9748	3.09	9452	3.14	9168	3.19	8839	3.23	8412	3.27	7866	3.32	7246	3.33

Shaded area's indicate ECM motors.

Glass reinforced polypropylene blades standard. Cast aluminum blades optional.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.



# Model LJD/LKDL Size 30 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJD  
SUPPLY — LKDL

### 3 BLADES — 34 DEGREES

DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1	0.50 (P)	600	5483	0.14	3719	0.15	2835	0.14																		
		700	6397	0.22	5062	0.23	4584	0.23																		
		800	7311	0.32	6222	0.34	5867	0.34	3209	0.36																
		850	7768	0.39	6760	0.40	6453	0.41	4040	0.41																
		860	7859	0.40	6867	0.42	6569	0.42	4247	0.43																
2	1.50 (T)	900	8225	0.46	7290	0.48	7017	0.48	5058	0.49	2687	0.55														
		1000	9139	0.63	8331	0.65	8085	0.66	6628	0.68	4234	0.68	2463	0.79												
		1100	9885	0.75	9055	0.79	8823	0.79	7704	0.81	6083	0.81	3653	0.85	2338	0.98										
		1160	10424	0.88	9652	0.92	9426	0.93	8393	0.94	6996	0.95	4494	0.96	3250	1.08	1853	1.21								
3	3.00 (W)	1200	10784	0.97	10047	1.02	9824	1.03	8819	1.04	7588	1.06	5202	1.04	3732	1.14	2479	1.28								
		1300	11682	1.23	11027	1.28	10821	1.29	9864	1.32	8861	1.34	7482	1.34	5077	1.34	3915	1.47	2741	1.62	1521	1.79				
		1400	12542	1.57	11961	1.61	11843	1.62	10885	1.65	9967	1.69	8620	1.69	7270	1.69	5473	1.72	4023	1.85	2841	2.03	2005	2.23		
		1500	13438	1.93	12881	1.97	12771	1.99	11935	2.01	11049	2.07	9924	2.08	8762	2.08	7394	2.07	5687	2.12	4350	2.27	3247	2.46		
		1600	14334	2.35	13796	2.38	13693	2.40	12989	2.44	12109	2.50	11327	2.53	10096	2.52	8967	2.53	7555	2.51	6014	2.58	4746	2.73	3711	2.94
		1700	15293	2.69	14864	2.77	14731	2.78	13945	2.89	13236	2.92	12454	2.95	11658	2.97	10587	2.96	9374	2.96	7675	2.94	5907	3.05	4987	3.19
		1750	15743	2.94	15318	3.02	15203	3.03	14439	3.15	13757	3.18	13004	3.21	12232	3.23	11272	3.23	10178	3.22	8827	3.22	6697	3.25	5667	3.39

### 6 BLADES — 37 DEGREES

DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
4	1.00 (S)	600	6832	0.25	5906	0.28	5566	0.29																		
		700	7971	0.39	7235	0.44	6997	0.45	5098	0.47																
		800	9109	0.58	8485	0.64	8316	0.65	7032	0.70	4497	0.68	2799	0.76	1431	0.89										
		860	9793	0.73	9218	0.78	9062	0.80	8045	0.85	6296	0.86	3872	0.87	2542	0.99										
5	3.00 (W)	900	10248	0.83	9704	0.89	9555	0.91	8645	0.97	7079	1.00	4642	0.98	3222	1.07	2040	1.21								
		1000	11387	1.14	10907	1.20	10773	1.22	10029	1.31	8971	1.36	7406	1.36	5071	1.35	3764	1.44	2700	1.60	1516	1.77				
		1100	12519	1.49	11965	1.57	11839	1.59	11223	1.68	10463	1.73	9268	1.77	7711	1.74	5667	1.74	4195	1.85	3426	2.01	2624	2.18	1810	2.35
		1160	13202	1.74	12671	1.84	12552	1.85	11966	1.94	11296	2.02	10320	2.07	9078	2.07	7193	2.00	5383	2.07	4266	2.20	3537	2.38	2774	2.55

Shaded area's indicate ECM motors.

Glass reinforced polypropylene blades standard. Cast aluminum blades optional.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 36 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

6 BLADES — 27 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1	0.75 (R)	400	4317	0.05	2319	0.07	1552	0.06																		
		500	5396	0.10	3902	0.12	3463	0.13																		
		600	6475	0.17	5271	0.20	4957	0.21	2966	0.22																
		700	7554	0.26	6530	0.31	6266	0.32	4783	0.35	2829	0.34														
		800	8634	0.39	7743	0.45	7515	0.46	6308	0.51	4920	0.53	3105	0.51	1715	0.50										
		860	9281	0.49	8456	0.55	8244	0.56	7172	0.62	5901	0.65	4456	0.65	2785	0.62										
2	1.50 (T)	900	9713	0.56	8927	0.62	8724	0.64	7701	0.70	6533	0.74	5281	0.76	3580	0.73	2304	0.71								
		1000	10792	0.77	10090	0.84	9907	0.86	8990	0.93	8020	0.99	6926	1.02	5798	1.04	4225	1.01	2979	0.97	1951	0.98				
		1100	11588	1.04	10935	1.10	10769	1.12	10108	1.18	9154	1.26	8309	1.31	7395	1.34	6228	1.36	4773	1.32	3647	1.29	2564	1.29		
		1160	12220	1.22	11602	1.28	11443	1.30	10827	1.37	9991	1.45	9097	1.52	8301	1.55	7313	1.58	6056	1.58	4800	1.54	3737	1.51	2711	1.51

6 BLADES — 35 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
4	1.00 (S)	400	6147	0.10	3885	0.12	2985	0.12																		
		500	7684	0.19	6087	0.23	5540	0.23																		
		600	9220	0.33	7988	0.38	7582	0.39	5289	0.41																
		700	10757	0.52	9694	0.58	9434	0.59	7663	0.64	5398	0.65	2908	0.70												
		800	12294	0.77	11356	0.84	11129	0.86	9805	0.93	8057	0.97	5970	0.98	3753	1.03										
5	3.00 (W)	900	13831	1.10	12989	1.18	12788	1.20	11720	1.29	10408	1.34	8804	1.38	6852	1.39	4781	1.42	3100	1.55						
		1000	15367	1.51	14603	1.60	14422	1.62	13515	1.72	12394	1.81	11081	1.86	9712	1.89	7949	1.90	6002	1.92	4405	2.03	2954	2.20		
		1100	16758	2.04	16203	2.16	16058	2.19	15150	2.32	14086	2.42	13221	2.47	11923	2.51	10387	2.52	8189	2.55	6765	2.64	5541	2.74	4317	2.84
		1160	17673	2.39	17146	2.52	17012	2.55	16221	2.68	15187	2.80	14303	2.87	13323	2.93	11971	2.95	10386	2.96	8174	3.00	7014	3.11	5853	3.21

Shaded area's indicate ECM motors.

Glass reinforced polypropylene blades standard. Cast aluminum blades optional.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 42 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

3 BLADES — 34 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1	3.00 (W)	400	9145	0.17	6399	0.21	5510	0.21																		
		475	10860	0.28	8690	0.34	8043	0.35																		
		500	11431	0.32	9401	0.39	8815	0.40	4281	0.44																
		600	13718	0.56	12088	0.64	11638	0.66	9047	0.72	4788	0.78														
		700	16004	0.89	14650	0.99	14273	1.01	12256	1.10	9810	1.15	5794	1.22	3774	1.43										
		800	18290	1.32	17122	1.45	16813	1.48	15129	1.58	13210	1.67	11020	1.72	7163	1.80	5172	1.99	3537	2.25	2095	2.52				
2	5.00 (X)	900	20577	1.89	19555	2.04	19280	2.07	17832	2.19	16257	2.31	14490	2.38	12528	2.44	9421	2.52	6697	2.66	5238	2.96	3773	3.24	2479	3.55
		1000	22863	2.59	21960	2.76	21713	2.80	20446	2.95	19095	3.08	17630	3.20	15998	3.28	14244	3.34	11827	3.41	8562	3.55	6947	3.75	5661	4.10
		1100	24889	3.34	24023	3.51	23805	3.54	22694	3.76	21533	3.93	20206	4.07	18834	4.17	17423	4.27	15827	4.35	13938	4.43	10943	4.55	8657	4.71
		1160	26246	3.92	25426	4.10	25219	4.13	24172	4.35	23079	4.56	21877	4.71	20590	4.83	19290	4.94	17886	5.03	16352	5.12	14488	5.20	11564	5.33

3 BLADES — 28 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
4	5.00 (X)	400	10463	0.26	7438	0.30	6223	0.32																		
		500	13078	0.51	10977	0.56	10290	0.57	5597	0.67																
		600	15694	0.87	14081	0.96	13575	0.97	10404	1.05	6390	1.17	4057	1.42												
		700	18309	1.39	16993	1.49	16620	1.51	14308	1.58	11200	1.72	7649	1.85	5592	2.12	3548	2.39								
		800	20925	2.07	19791	2.20	19488	2.22	17666	2.31	15442	2.40	12445	2.57	9201	2.72	7269	2.96	5614	3.34	3750	3.62				
		860	22495	2.58	21451	2.71	21169	2.74	19554	2.84	17616	2.92	15198	3.08	11854	3.25	9469	3.43	7713	3.70	6173	4.11	4457	4.42		

Shaded area's indicate ECM motors.

Glass reinforced polypropylene blades standard. Cast aluminum blades optional.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 48 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

3 BLADES — 25 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
1	3.00 (W)	400	9829	0.17	6325	0.21	5208	0.22																		
		450	11058	0.24	8004	0.30	7168	0.30																		
		500	12287	0.33	9657	0.40	8847	0.41	4714	0.44																
		550	13516	0.44	11222	0.52	10504	0.54	6706	0.57																
		600	14744	0.57	12737	0.67	12086	0.68	8768	0.73	5238	0.76														
		650	15973	0.72	14170	0.83	13615	0.85	10603	0.91	7226	0.95	4124	1.01												
		700	17202	0.90	15554	1.01	15095	1.04	12278	1.13	9319	1.17	6376	1.21	3432	1.30										
		750	18430	1.11	16918	1.22	16490	1.26	13941	1.37	11342	1.42	8322	1.46	5620	1.50	3057	1.64								
		800	19659	1.35	18268	1.46	17866	1.50	15572	1.64	13120	1.70	10417	1.75	7824	1.79	5221	1.86	2893	2.02						
		860	21133	1.67	19870	1.79	19497	1.83	17447	2.00	15126	2.09	12857	2.14	10192	2.19	7927	2.23	5461	2.33	3286	2.50				

3 BLADES — 30 DEGREES																										
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																							
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250	
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
4	5.00 (X)	400	11894	0.26	8470	0.31	7269	0.32																		
		450	13380	0.37	10511	0.44	9588	0.45																		
		500	14867	0.50	12358	0.59	11634	0.60	6744	0.65																
		550	16354	0.67	14131	0.77	13489	0.79	9464	0.82	5427	0.93														
		600	17841	0.87	15847	0.98	15280	1.00	11996	1.07	7717	1.13	4588	1.30												
		650	19327	1.10	17531	1.23	17008	1.25	14132	1.34	10277	1.38	6974	1.49	4111	1.73										
		700	20814	1.38	19173	1.52	18704	1.55	16185	1.65	12958	1.70	9227	1.79	6522	1.95	3905	2.22								
		750	22301	1.69	20775	1.85	20376	1.88	18055	2.01	15350	2.08	11836	2.12	8864	2.24	6347	2.47	3912	2.78						
		800	23787	2.05	22363	2.22	21995	2.26	19882	2.40	17472	2.50	14537	2.54	11071	2.64	8725	2.76	6372	3.04	4092	3.38				
		860	25571	2.55	24254	2.73	23911	2.77	22009	2.94	19924	3.06	17464	3.14	14442	3.16	11417	3.31	9232	3.45	7041	3.75	4916	4.10		

Shaded area's indicate ECM motors.

Glass reinforced polypropylene blades standard. Cast aluminum blades optional.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

# Model LJDL/LKDL Size 54 - Direct Drive



**SIDEWALL PROPELLER FAN**  
EXHAUST — LJDL  
SUPPLY — LKDL

4 BLADES — 22 DEGREES																											
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																								
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
1	5.00 (X)	400	15056	0.41	12258	0.51	11384	0.52	6370	0.56																	
		450	16938	0.59	14507	0.69	13832	0.72	9714	0.79	5362	0.78															
		500	18820	0.81	16696	0.92	16081	0.95	12618	1.05	8456	1.10	4738	1.04													
		550	20702	1.08	18810	1.20	18277	1.24	15289	1.37	11823	1.44	8052	1.45	4604	1.38											
		600	22584	1.40	20871	1.54	20410	1.57	17840	1.74	14761	1.83	11301	1.89	8097	1.86	4875	1.78									
		650	24466	1.78	22906	1.93	22480	1.97	20181	2.15	17484	2.28	14590	2.37	11225	2.41	8425	2.36	5388	2.27							
		700	26348	2.22	24921	2.38	24525	2.42	22426	2.62	20086	2.79	17447	2.90	14598	2.98	11467	3.01	8973	2.95	6156	2.85	3844	2.81			
		750	28230	2.73	26897	2.91	26550	2.95	24634	3.16	22604	3.37	20160	3.50	17660	3.60	14866	3.68	12017	3.70	9695	3.63	7108	3.52	4803	3.47	
		800	30112	3.32	28861	3.50	28552	3.55	26807	3.78	24894	4.00	22769	4.17	20470	4.30	18098	4.41	15373	4.48	12739	4.48	10559	4.41	8208	4.31	
		860	32370	4.12	31204	4.32	30917	4.37	29341	4.62	27585	4.85	25803	5.09	23672	5.24	21518	5.37	19309	5.48	16758	5.56	14229	5.58	12146	5.52	

4 BLADES — 27 DEGREES																											
DRIVE RANGE	MAX MOTOR HP*	RPM	STATIC PRESSURE, INCHES W.G.																								
			0.000		0.100		0.125		0.250		0.375		0.500		0.625		0.750		0.875		1.000		1.125		1.250		
			CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
4	7.50 (Y)	400	18534	0.62	15826	0.74	14975	0.76	9261	0.79																	
		450	20851	0.88	18491	1.01	17845	1.04	13437	1.12	7824	1.11															
		500	23167	1.21	21082	1.35	20509	1.39	17065	1.52	12261	1.54	7489	1.52													
		550	25484	1.61	23593	1.77	23113	1.81	20250	1.98	16369	2.05	11575	2.05	7654	2.01	4351	2.08									
		600	27801	2.09	26072	2.26	25632	2.31	23176	2.52	20047	2.64	16076	2.67	11609	2.66	8184	2.61	5121	2.68							
		650	30118	2.66	28526	2.84	28120	2.89	25969	3.13	23388	3.31	20060	3.38	16214	3.39	12146	3.37	8995	3.32	6078	3.37	3630	3.56			
		700	32434	3.32	30957	3.51	30584	3.56	28630	3.83	26359	4.05	23644	4.19	20342	4.23	16726	4.24	12955	4.21	10026	4.16	7239	4.17	4896	4.35	
		750	34751	4.09	33371	4.28	33029	4.34	31248	4.63	29255	4.89	26973	5.09	24161	5.18	20946	5.20	17485	5.21	13982	5.18	11234	5.12	8605	5.11	
		800	37068	4.96	35772	5.16	35452	5.23	33810	5.53	32015	5.82	29950	6.06	27627	6.23	24870	6.30	21789	6.32	18521	6.32	15184	6.29	12586	6.23	
		860	39848	6.16	38640	6.37	38343	6.44	36823	6.77	35206	7.09	33435	7.38	31445	7.61	29143	7.76	26547	7.83	23689	7.85	20718	7.85	17354	7.84	

Shaded area's indicate ECM motors.

Glass reinforced polypropylene blades standard. Cast aluminum blades optional.

Performance certified is for wall ventilators for installation type A: Free inlet, Free outlet. Performance ratings (bhp) do not include transmission losses. Performance ratings do not include the effects of accessories.

**WEATHER HOOD**

**Attaches to either the wall box or mounting collar** and may be used with gravity or motorized dampers, but not with the damper guard. The weather hood shields the wall opening from rain and snow and is recommended for supply applications and for all applications where additional weather protection is desired. The mounting flanges are prepunched for easy installation. The optional heavy duty style flat guard may be substituted for the standard galvanized mesh birdscreen.



**SPECIFY THE WEATHER HOOD FOR ALL SUPPLY FAN INSTALLATIONS.**

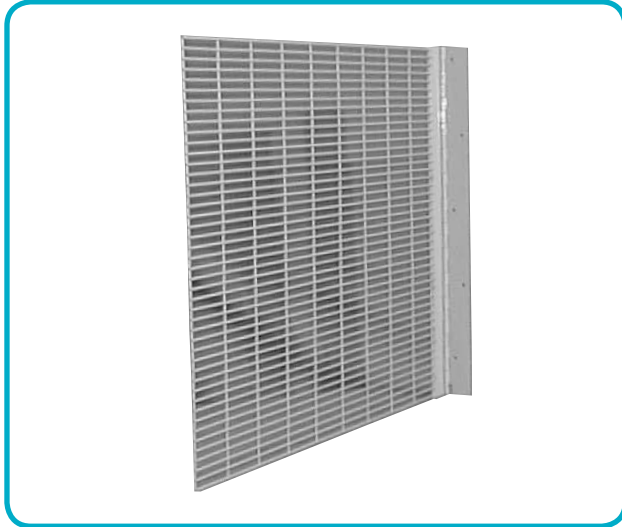
**EXTRUDED ALUMINUM OPERABLE LOUVER**

**Attaches to either the wall box or mounting collar.** The extruded aluminum louver/damper combination incorporates Carnes exclusive “S” design blade with every other blade fully adjustable from open to close. With the operable blades in the open position, the louver is provided with 2” blade spacing; when the operable blades are closed, the remaining fixed blades appear to be a 4” spaced louver. However the operable blades are closed off, serving as a damper. Damper blades feature full-length gaskets to assure quiet operation and maximum closure when the operable blades are shut. Mill finish aluminum construction is standard, and a variety of custom finishes are also available. Two position power open spring close (POSC) electric operators are available for 24, 115, 230 or 460 volts.

**SPECIAL PAINTS and COATINGS** — A wide selection of decorative paints and corrosion resistant coatings including enamel, epoxy and Heresite are available for factory application to the fan and accessories. Please contact Carnes or your local Carnes Representative for selection assistance and details.

**UL LISTING** — To further ensure electrical safety and reliability, specify the UL 705 listing and Canadian cUL listing. Please check with your local code authority and comply with all applicable codes.

Most sidewall propeller fan installations require one or more of the accessories shown. The factory designed wall box or mounting collar provide the most effective platform for mounting the fan and accessories. Ease of installation, safety, reliability, and weather protection are among the many reasons to specify and purchase these factory fabricated accessories. Please remember that all accessories ship loose and knocked down for field assembly unless specified and ordered to be factory assembled. For complete specifications and details - please refer to the Carnes Submittal Sheets.

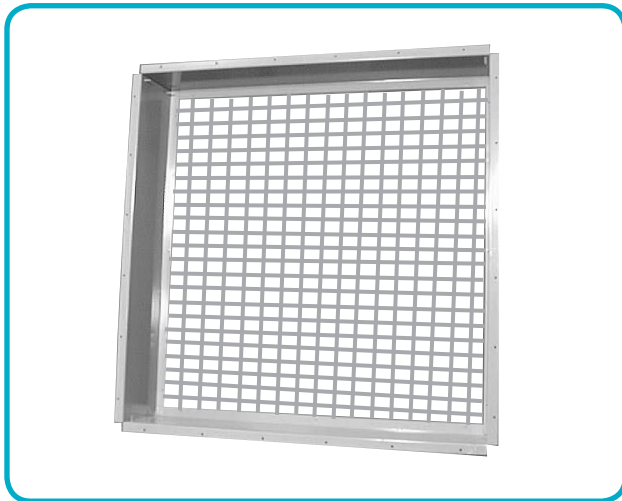
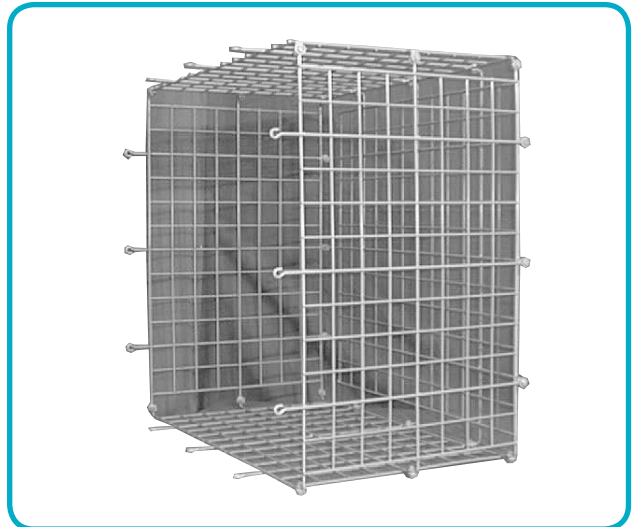


**HINGED MOTOR SIDE GUARD - OSHA STYLE**

**Attaches to the wall box** on the motor and drive side and may be used for exhaust or supply. This protective heavy duty guard is welded to a full length steel piano hinge which allows easy access to the fan, motor, bearings and drives for routine maintenance and service. The welded steel guard is coated with gray enamel paint then baked for a durable general service finish.

**MOTOR SIDE GUARD - BASKET STYLE**

**Attaches to the mounting collar** completely enclosing the motor and drives and may be used for exhaust or supply applications. The welded steel sections are bolted together allowing easy removal for access to the fan, motor, bearings and drives for routine maintenance and service. The standard finish is gray baked enamel paint.



**DAMPER GUARD**

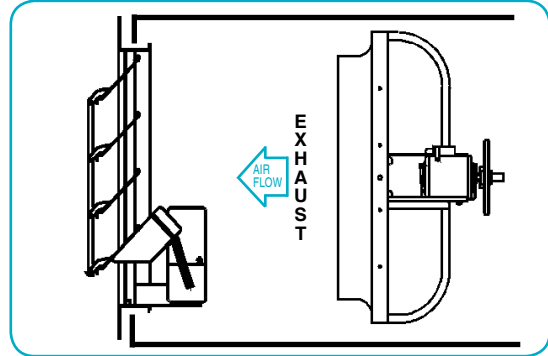
**Attaches to either the wall box or mounting collar** on the propeller side of the fan. The heavy duty steel guard meets OSHA requirements and completely encloses the damper and exterior wall opening. The prepunched mounting flanges simplify installation. The standard finish is gray baked enamel paint. The damper guard may not be used with the weather hood.



The aluminum backdraft dampers and wall shutters can significantly reduce the infiltration of outside air (or loss of inside conditioned air) when the fan is not operating. Dampers may be mounted on the optional wall box housing or wall mounting collar or may be used alone with provisions for adequate clearance from the fan blades. Motorized dampers provide better weather protection (especially for intake applications) and prevent blade chatter due to air velocity, wind or building pressure variations. **For complete information, please refer to the Carnes Submittal Sheets.**

**END PIVOT - EXHAUST** GRAVITY OR MOTORIZED — EXHAUST

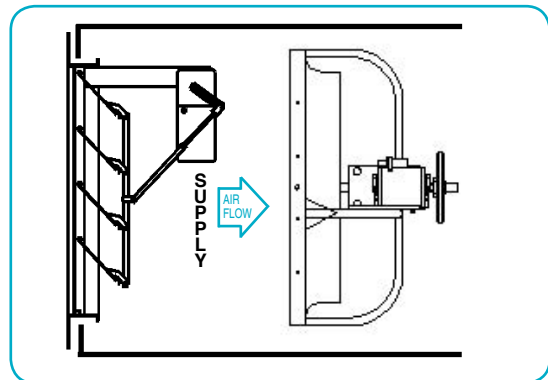
The Model LXVBA Gravity Operated Backdraft Shutter and Model LXVBM Motorized Shutter are constructed with all aluminum blades and frame. The pre-punched flanged frames recess the damper body and optional electric actuator into the wall opening for a neat and clean flush exterior appearance. Adequate clearance must be maintained between shutter and fan blades to prevent damage to the fan or shutter. When used in conjunction with the factory wall box or mounting collar, the proper clearance is guaranteed.



Damper shown with optional motor kit.

**END PIVOT - SUPPLY** GRAVITY OR MOTORIZED — SUPPLY

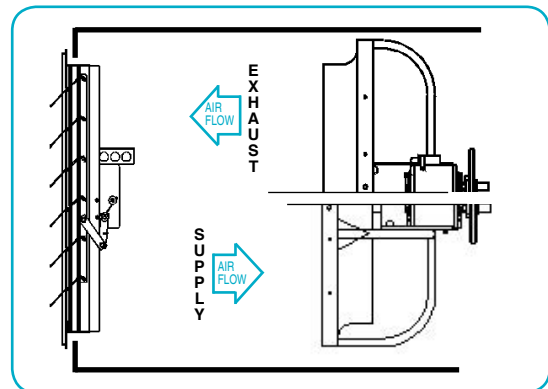
The Model LXXBA Gravity Operated Backdraft Shutter and Model LXXBM Motorized Shutter are constructed with all aluminum blades and frame. The pre-punched flanged frames recess the damper body and optional electric actuator into the wall opening for a neat and clean flush exterior appearance. Adequate clearance must be maintained between shutter and fan blades to prevent damage to the fan or shutter. When used in conjunction with the factory wall box or mounting collar, the proper clearance is guaranteed. The motorized option provides superior weather protection and is recommended for supply applications.



Damper shown with optional motor kit.

**CENTER PIVOT** MOTORIZED — EXHAUST and SUPPLY

The Model LXCMB Center Pivot Backdraft Damper is constructed with all aluminum blades and frame. The blade pivots in the center which eliminates binding and provides increased damper free area thereby reducing pressure drop. The flanged frame recesses the damper body into the wall opening for a flush exterior appearance. When used in conjunction with the factory wall box or mounting collar, the proper minimum clearance is maintained between the damper and the fan blades. Please note that center pivot backdraft dampers must be motorized and are not suitable for gravity operation.



**ACTUATORS** ELECTRIC DAMPER OPERATORS

The power open-spring close (POSC) damper motors are available in 24, 115, 230 or 460 volts. Transformers are also available for voltage reduction. The stall type motor draws a maximum 0.5 amps at 115/60/1 power supply. Typically, the electric actuator with complete hardware and linkage kit ships loose for field attachment to the damper. For the installers' convenience, a conduit J-box or Greenfield adapter is provided to simplify the power connection. In order to protect the damper blades from damage when the fan is first energized, a 'Delay-On' timer should be provided and installed by others (usually in the control circuit) which will permit the damper to open prior to allowing fan operation.

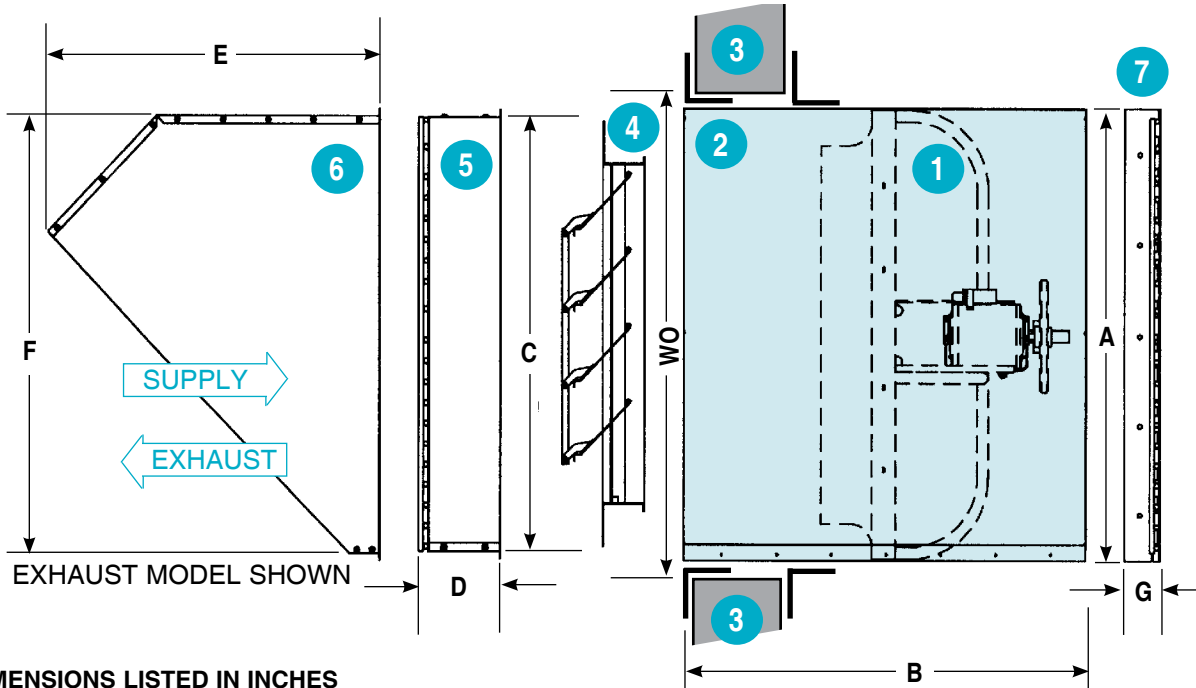


**SIDEWALL PROPELLER FANS TYPICAL INSTALLATIONS** \_\_\_\_\_ **WALL BOX**

The wall box (wall housing) provides a safe and sturdy platform for mounting the Models LJDL, LKDL Sidewall Propeller Fans and the complete selection of optional accessories shown here. The wall box allows for the exhaust or supply fan to be mounted in the wall opening and projects either into the building or outside the exterior wall. Normally, the fan and wall box are installed so that the motor and drive side of the fan are accessible from inside the building. When access is required from outside, the fan and wall box assembly may be reversed; in this case the standard exhaust Model LJDL, and LKDL would function as a supply fan when reverse mounted. The heavy gauge galvanized steel construction provides corrosion resistance. Heavy duty center pivot motorized backdraft dampers or end pivot backdraft shutters attach to the prepunched wall box flanges ensuring adequate clearance between the fan blades and damper. The heavy duty OSHA style damper guard completely encloses the exterior wall opening, protects the damper from damage, and prevents the entrance of birds and other unwanted animals. When additional weather protection is desired for either exhaust or supply installations, a rainhood should be installed in place of the damper guard. Rainhoods are strongly recommended for all supply applications. Rotating fan parts should always be adequately guarded. A hinged and lockable OSHA style motorside guard should be specified for safety and allows quick and easy access to the fan for routine inspection and maintenance. For supply applications, an airfoil 4-way adjustable industrial grille may be substituted for the motorside guard to efficiently direct the air flow in four directions.

*Please remember that all accessories ship loose and knocked down (KD) unless specified and ordered factory assembled.*

▼ **DIMENSIONAL DATA** \_\_\_\_\_ **WALL BOX and ACCESSORIES**



**DIMENSIONS LISTED IN INCHES**

1 FAN SIZE	2 WALL BOX		3 WALL OPENING WO	4 DAMPER		5 DAMPER GUARD D	6 WEATHER HOOD			7 OSHA GUARD	
	A	B		C	SIZE		E	F	WIDTH	A	G
10	16-1/4	24	17-1/2	15-1/4	10	7-1/4	14	14	15-1/2	14	2-1/4
12	16-1/4	24	17-1/2	15-1/4	10	7-1/4	14	14	15-1/2	14	2-1/4
16	20-1/4	24	21-1/2	19-1/4	16	7-1/4	18	18	19-1/2	18	2-1/4
18	24-1/4	24	25-1/2	23-1/4	18	7-1/4	20	22	23-1/2	22	2-1/4
20	24-1/4	24	25-1/2	23-1/4	18	7-1/4	20	22	23-1/2	22	2-1/4
24	30-1/4	37-1/2	31-1/2	28	24	7-1/4	25	30	30	28	2-1/4
30	36-1/4	39-1/2	38	34	30	7-1/4	29-1/8	36	36	34	2-1/4
36	42-1/4	43-1/4	44	40	36	7-1/4	33-3/8	42	42	40	2-1/4
42	48-1/4	45-1/2	50	46	42	7-1/4	37-5/8	48	48	46	2-1/4
48	54-1/4	47-3/4	56	52	48	7-1/4	42	54	54	52	2-1/4
54	60-1/4	47-3/4	62	58	54	7-1/4	47	58-1/2	58-1/2	58	2-1/4

*For more complete dimensional data, weights and material specifications - please refer to the Carnes Submittal Sheets.*

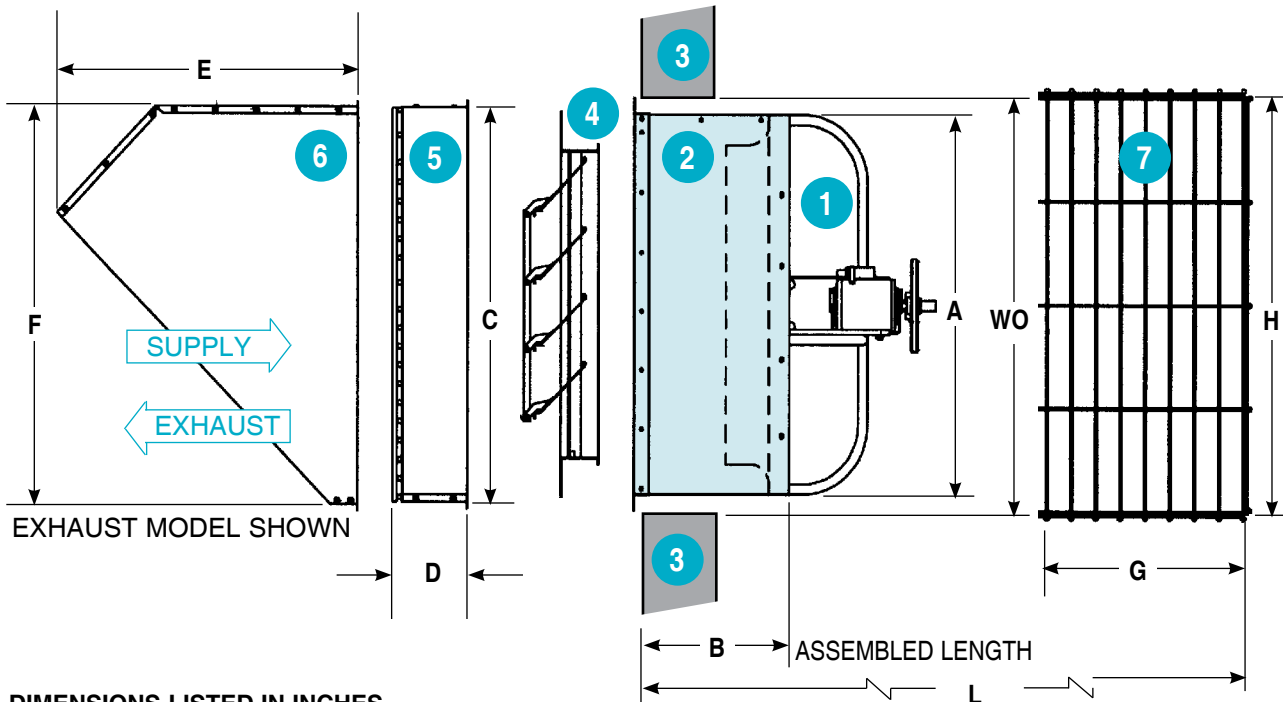
**SIDEWALL PROPELLER FANS  
TYPICAL INSTALLATIONS**

**MOUNTING COLLAR**

The wall mounting collar provides an alternate choice for mounting the Models LJDL, LKDL Sidewall Propeller Fans and the selection of accessories shown here. The mounting collar allows for the exhaust or supply fan to be mounted within the wall opening and must be flush with the exterior wall surface - extending entirely inside the building. The materials and construction are similar to the wall box. Rotating fan parts should always be adequately guarded. Factory designed fan guards provide protection while allowing easy access for routine inspection and maintenance of the fan, motor, bearings and drives. The basket style motorside guard attaches to the mounting collar and completely encloses the motor and drive side of the fan. For OSHA requirements, the wall box arrangement with guard must be specified and ordered. When factory supplied guards are not specified and ordered, proper fan guards must be provided by others and installed. Also, for supply applications where the adjustable 4-way airfoil grille is desired, the wall box must be used in lieu of the mounting collar. Backdraft dampers and damper guards or rainhoods can be mounted in a similar fashion as described for the wall box.

*Please remember that all accessories ship loose and knocked down (KD) unless specified and ordered factory assembled.*

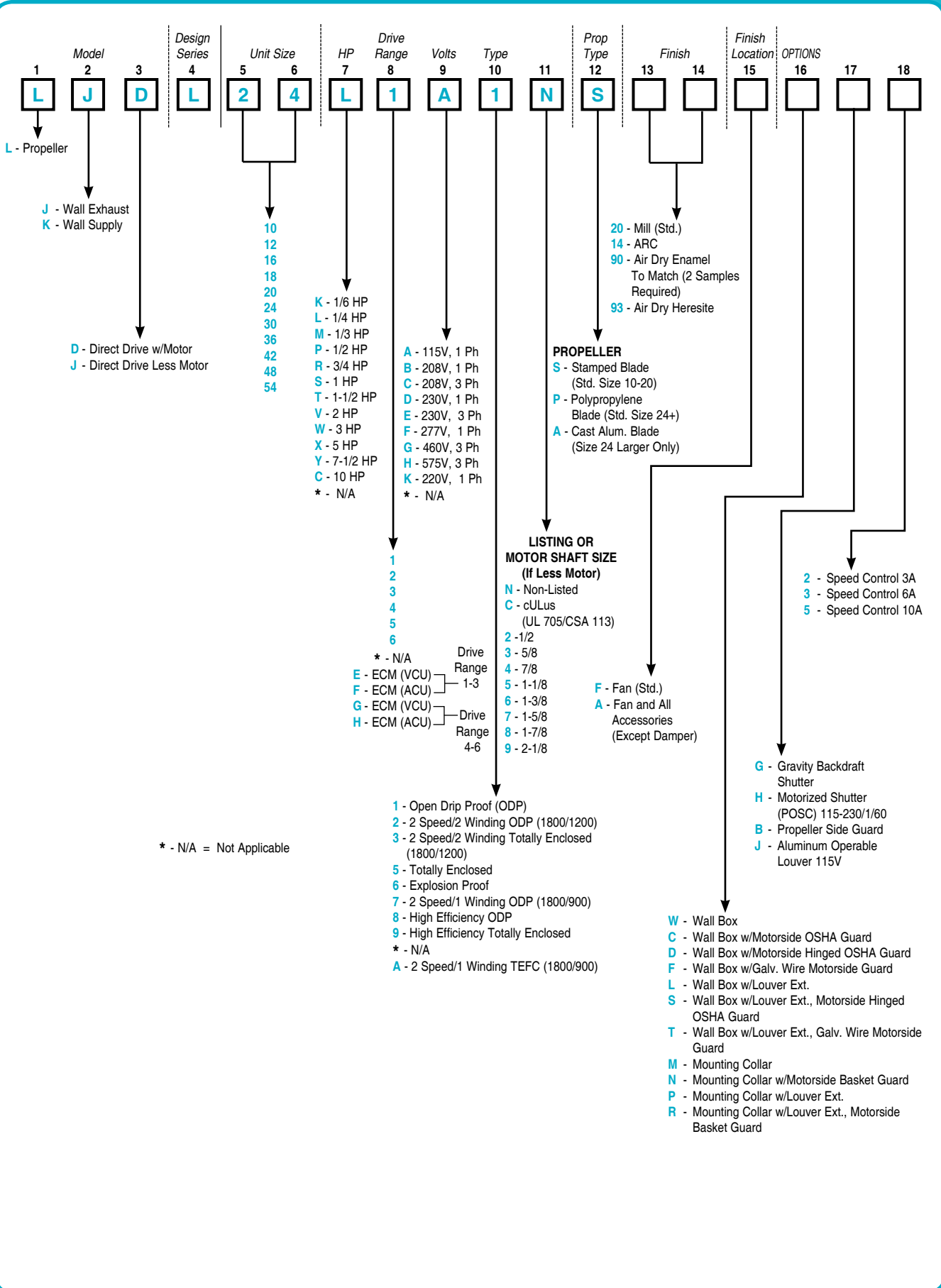
**▼ DIMENSIONAL DATA MOUNTING COLLAR and ACCESSORIES**



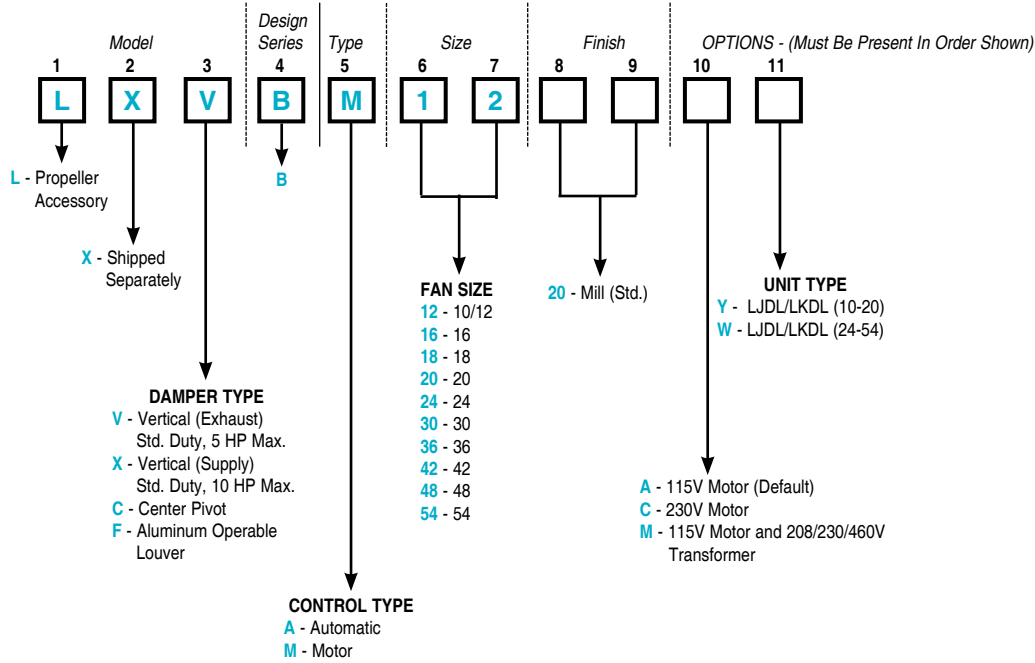
**DIMENSIONS LISTED IN INCHES**

1 FAN SIZE	2 WALL COLLAR		3 WALL OPENING WO	4 DAMPER SIZE		5 DAMPER GUARD D	6 WEATHER HOOD			7 MOTOR-SIDE GUARD		ASS'Y LENGTH L
	A	B		C			E	F	WIDTH	G	H	
10	16-1/4	16	17-1/2	15-1/4	10	7-1/4	14	14	15-1/2	18	17	34
12	16-1/4	16	17-1/2	15-1/4	10	7-1/4	14	14	15-1/2	18	17	34
16	20-1/4	16	21-1/2	19-1/4	16	7-1/4	18	18	19-1/2	18	21	34
18	24-1/4	16	25-1/2	23-1/4	18	7-1/4	20	22	23-1/2	20	25	36
20	24-1/4	16	25-1/2	23-1/4	18	7-1/4	20	22	23-1/2	20	25	36
24	30-1/4	17-1/2	31-1/2	28	24	7-1/4	25	30	30	22	31	39-1/2
30	36-1/4	17-1/2	38	34	30	7-1/4	29-1/8	36	36	25	37	42-1/2
36	42-1/4	18-1/2	44	40	36	7-1/4	33-3/8	42	42	27	43	45-1/2
42	48-1/4	20-3/4	50	46	42	7-1/4	37-5/8	48	48	27	49	47-3/4
48	54-1/4	22-3/4	56	52	48	7-1/4	42	54	54	27	55	49-3/4
54	60-1/4	47-3/4	62	58	54	7-1/4	47	58-1/2	58-1/2	—	—	—

*For more complete dimensional data, weights and material specifications - please refer to the Carnes Submittal Sheets.*



▼ Dampers



▼ Mounting Accessories

