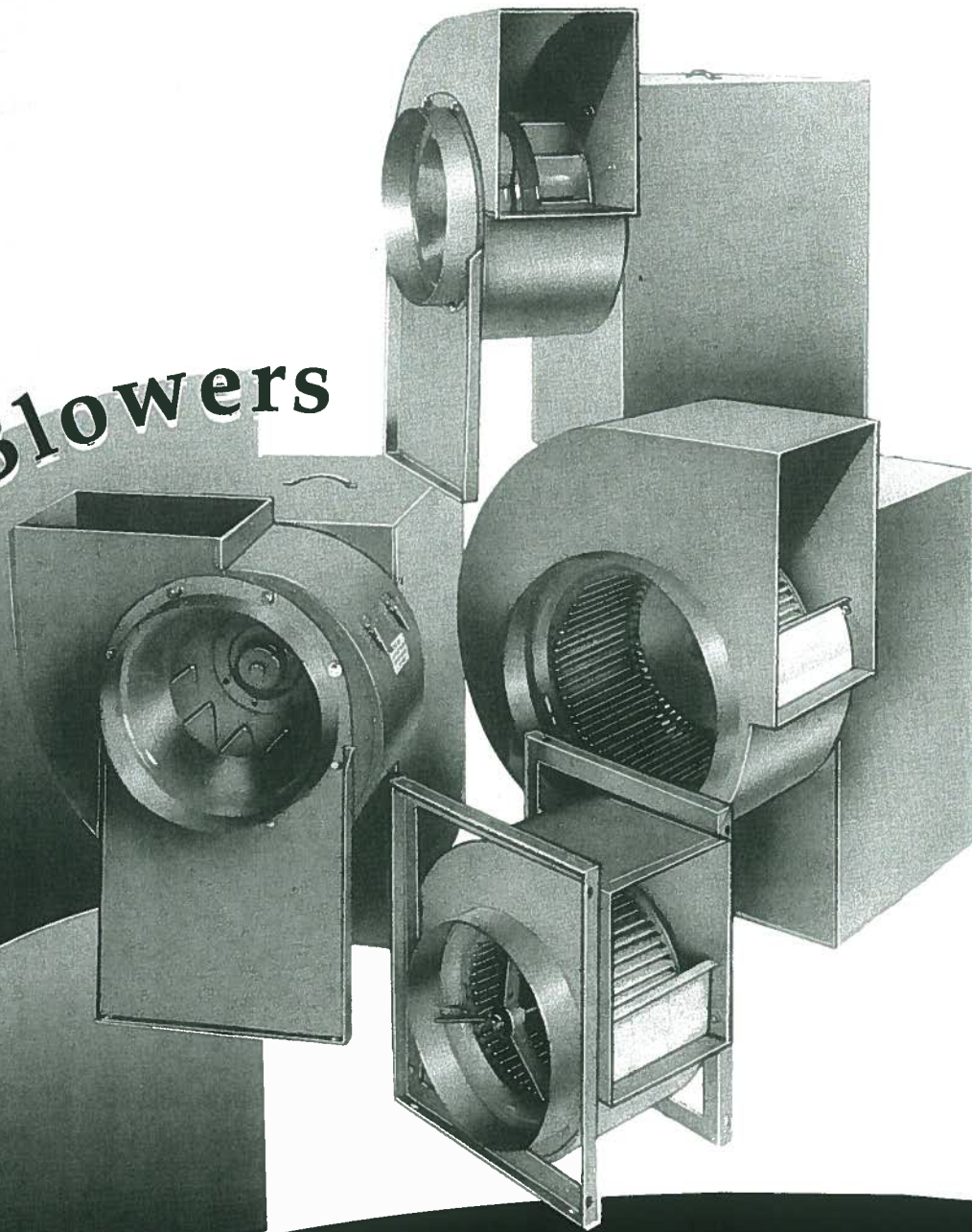


# Quietaire

C O R P O R A T I O N

## Utility Blowers



For Distributor Nearest You:

Phone: (713) 228-9421

Fax: (713) 228-9425

505 North Hutcheson

Houston, Texas 77003

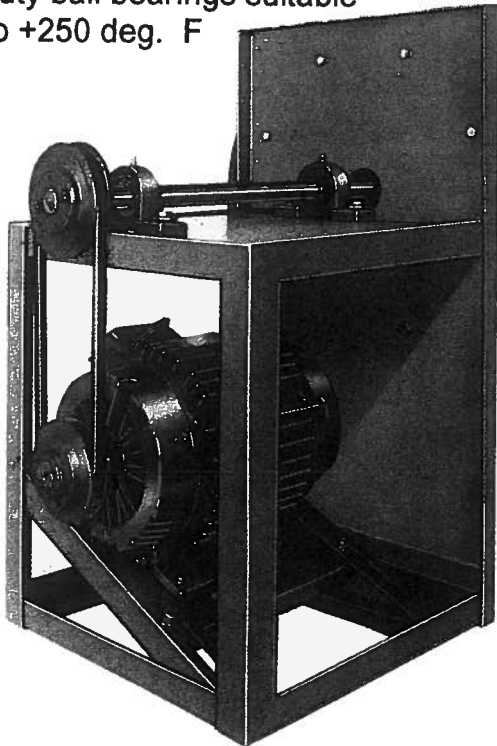
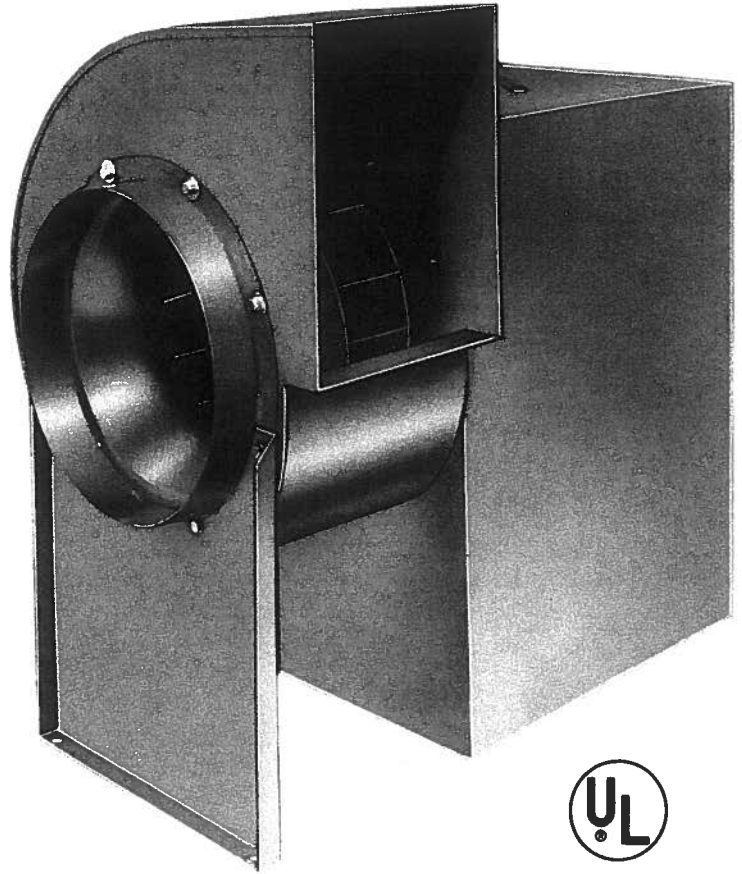
Web: [www.quietaire.com](http://www.quietaire.com)

E-mail: [info@quietaire.com](mailto:info@quietaire.com)

July 2000

# BI UTILITY BLOWER

- . Full AMCA CLASS I operation
- . **Listed UL 705 "Power Ventilators"**
- . Complete range of sizes to 27"
- . Optional aluminum wheel (AMCA type B classification for spark resistant construction)
- . Standard top horizontal discharge position can easily be field rotated to any of 8 positions
- . Vented motor and drive compartment cover, with handles, for safety and weather protection
- . 16 gauge or heavier blower housing
- . Available in ccw or cw rotation
- . High solids enamel corrosion resistant paint finish
- . Outlet flanges on models BI-24 and BI-27
- . Heavy duty ball bearings suitable for -65 to +250 deg. F



## MOTOR AND DRIVE COMPARTMENT WITH COVER REMOVED

Quietaire Corporation certifies that the BI Series Utility Blowers shown hereon are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



## OPTIONAL ACCESSORIES

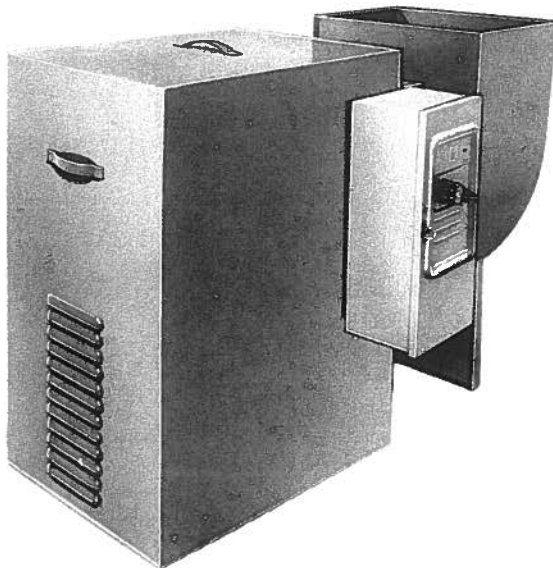
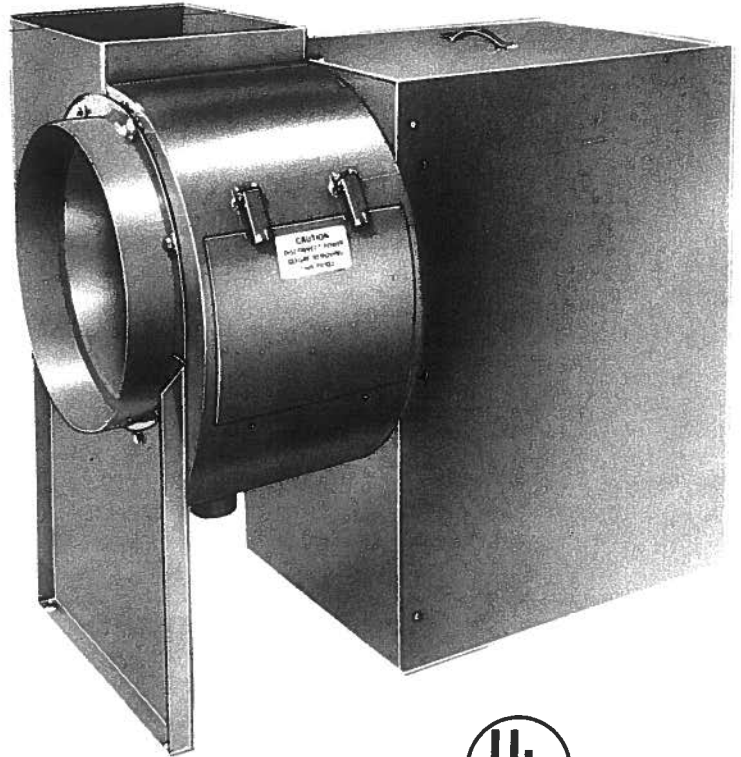
- . Back draft dampers
- . Inlet & outlet screens
- . Corrosion resistant finishes
- . Heat slinger
- . Shaft seal
- . Clean out door with latches
- . 2" Drain fitting
- . Vibration isolation
- . Motor disconnect switch mounting bracket

## INSTALLATION SIMPLICITY

- . Motor access from 3 sides
- . Sloped, motor base makes motor installation a simple task
- . Installation costs minimized
- . Multiple locations for mounting of electrical motor disconnect

# **BI-RM RESTAURANT MODEL**

- . **UL 762 LISTED for removal of cooking vapors**
- . **Meets NFPA 96 guidelines**
- . **Upblast discharge directs exhaust away from roof**
- . **Continuously welded 16 gauge or heavier blower housing**
- . **Cleanout door with latches for easy access without tools**
- . **2" drain fitting for easy removal of cleaning solutions**



## **VENTED MOTOR AND DRIVE COMPARTMENT COVER WITH HANDLES**

### **SAFETY FIRST!**

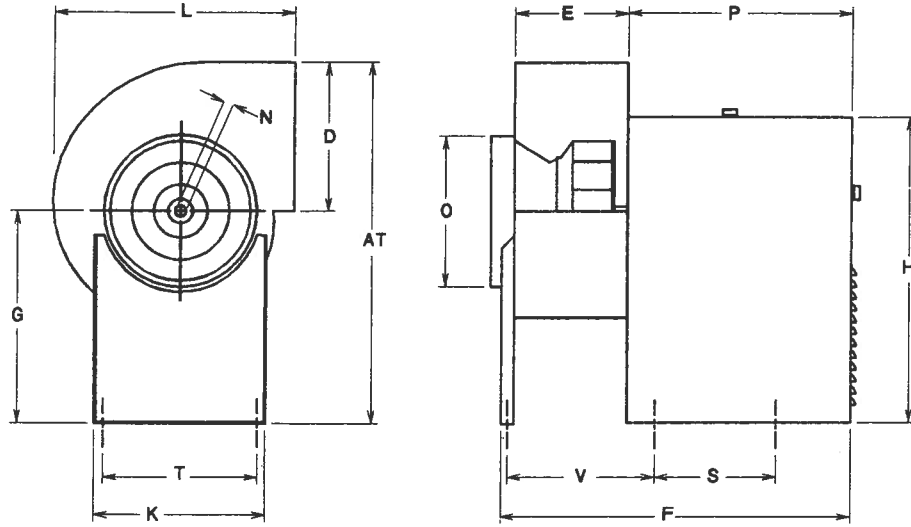
- . **Optional bracket for external mounting by customer of electrical motor disconnect switch**
- . **Integral handles for single person removal of motor and drive compartment cover**



Quietaire Corporation certifies that the BI-RM Series Utility Blower shown hereon is licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

# BI & BI-RM DIMENSIONS

## MODEL BI

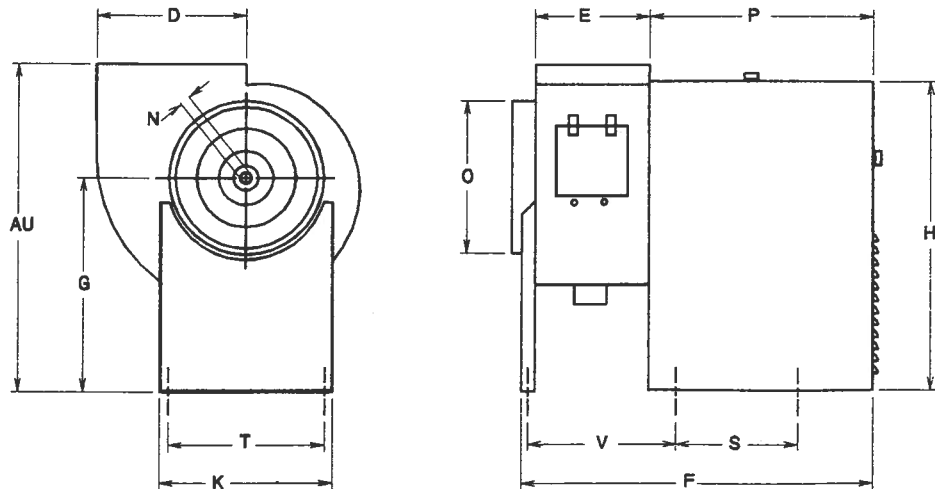


### DIMENSIONS (inches)

MODEL *	AT	AU	D	E	F	G	H	K	L	N	O	P	S	T	V	WT.(LBS.)
BI-10	26-3/4	23-5/8	11-5/16	8-1/4	27-3/4	15-1/4	21-5/16	13-3/16	17-3/8	3/4	11	17-1/4	11-3/4	11-7/16	--	90
BI-12	33-1/16	30-1/16	13	9-7/8	33-1/4	20-1/16	29-1/8	16-9/16	20-1/2	1	12-7/16	21-1/8	11-1/2	14-11/16	13-1/8	157
BI-13	34-5/16	30-13/16	14-3/8	10-3/4	34-1/8	20-1/16	29-1/8	16-9/16	22-1/2	1	14-3/8	21-1/8	11-1/2	14-11/16	14	170
BI-15	35-13/16	31-13/16	15-3/4	12	35-3/8	20-1/16	29-1/8	16-9/16	24-11/16	1	15-7/8	21-1/8	11-1/2	14-11/16	15-1/4	180
BI-16	39-3/8	34-11/16	17-5/8	13-1/8	36-1/2	22	31	16-9/16	26-7/8	1-3/16	17-3/8	21-1/8	11-1/2	14-11/16	16-3/8	210
BI-18	41-1/4	35-13/16	19-3/8	14-1/2	37-7/8	22	31	16-9/16	29-5/8	1-3/16	19-3/8	21-1/8	11-1/2	14-11/16	17-3/4	220
BI-20	49-1/8	42-15/16	21-1/4	15-3/4	46-7/16	28	40-7/8	25-1/4	32-1/4	1-3/16	21-1/4	27-11/16	14-5/8	22-3/4	19-3/4	357
BI-22	51-1/2	44-3/8	23-5/8	17-5/8	48-5/16	28	40-7/8	25-1/4	35-5/8	1-3/16	23-5/8	27-11/16	14-5/8	22-3/4	21-5/8	390
BI-24	57-7/8	49-13/16	26	19-3/8	51-5/16	32	46-1/2	28-15/16	39	1-7/16	26	28-15/16	18-5/16	25-1/2	23-3/8	499
BI-27	60-1/2	51-7/16	28-5/8	21-1/4	53-3/16	32	46-1/2	28-15/16	42-3/4	1-7/16	28-5/8	28-15/16	18-5/16	25-1/2	23-3/8	525

### \* BI and BI-RM series

## MODEL BI-RM



# "BI" SERIES PERFORMANCE DATA

<b>Model BI-10</b>		MINIMUM 1/3 HP MOTOR RECOMMENDED, 2 HP MAXIMUM 3/4" SHAFT										MAXIMUM 3800 RPM WHEEL DIA. = 10.50"					
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
300	477	1103	0.05	1528	0.12	1862	0.19	2146	0.28	2397	0.38	2626	0.49	3032	0.73	3392	0.99
500	796	1203	0.07	1583	0.16	1904	0.26	2177	0.36	2420	0.47	2643	0.59	3041	0.85	3394	1.14
700	1115	1382	0.12	1696	0.21	1972	0.32	2237	0.44	2476	0.58	2690	0.72	3076	1.01	3422	1.32
900	1433	1589	0.18	1869	0.29	2112	0.41	2332	0.53	2544	0.68	2754	0.84	3136	1.19	3472	1.54
1100	1752	1824	0.27	2064	0.40	2287	0.53	2488	0.67	2676	0.82	2855	0.98	3202	1.34	3535	1.74
1300	2071	2073	0.40	2278	0.54	2481	0.69	2669	0.84	2842	1.00	3008	1.18	3317	1.54	3612	1.95
1500	2389	2331	0.56	2512	0.72	2688	0.89	2863	1.06	3028	1.23	3182	1.41	3473	1.81	-	-
1700	2708	2593	0.76	2757	0.94	2914	1.13	3070	1.32	3224	1.51	3371	1.71	-	-	-	-
1900	3026	2859	1.01	3011	1.21	3152	1.41	3291	1.63	3431	1.85	-	-	-	-	-	-
2100	3345	3129	1.31	3268	1.53	3399	1.76	3526	1.98	-	-	-	-	-	-	-	-
2300	3664	3400	1.67	3530	1.92	-	-	-	-	-	-	-	-	-	-	-	-

<b>Model BI-12</b>		MINIMUM 1/2 HP MOTOR RECOMMENDED, 3 HP MAXIMUM 1" SHAFT										MAXIMUM 3300 RPM WHEEL DIA. = 12.25"					
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
400	448	950	0.06	1321	0.14	1606	0.22	1849	0.32	2065	0.43	2262	0.55	2612	0.81	2922	1.10
600	673	1003	0.08	1349	0.17	1634	0.28	1875	0.40	2084	0.52	2275	0.65	2617	0.94	2922	1.25
800	897	1102	0.11	1397	0.21	1664	0.34	1900	0.47	2113	0.62	2305	0.77	2642	1.09	2940	1.43
1000	1121	1223	0.16	1492	0.27	1720	0.40	1937	0.55	2142	0.71	2330	0.88	2671	1.24	2972	1.63
1200	1346	1365	0.22	1595	0.35	1816	0.49	2005	0.64	2185	0.81	2368	0.99	2698	1.39	2996	1.81
1400	1570	1519	0.30	1720	0.44	1917	0.60	2104	0.77	2269	0.94	2426	1.12	2737	1.54	3027	1.99
1600	1794	1681	0.40	1859	0.55	2033	0.72	2205	0.91	2369	1.10	2519	1.30	2795	1.71	3068	2.18
1800	2019	1848	0.54	2008	0.69	2165	0.87	2318	1.07	2471	1.28	2618	1.50	2885	1.94	3129	2.41
2000	2243	2017	0.69	2164	0.86	2307	1.05	2446	1.26	2583	1.48	2721	1.72	2985	2.20	3219	2.69
2200	2467	2187	0.87	2325	1.07	2456	1.27	2585	1.48	2711	1.71	2836	1.96	3085	2.48	-	-
2400	2692	2359	1.09	2491	1.32	2611	1.52	2730	1.74	2848	1.98	2963	2.23	3190	2.79	-	-
2600	2916	2533	1.34	2659	1.60	2771	1.81	2882	2.04	2991	2.29	3099	2.55	-	-	-	-
2800	3140	2708	1.63	2828	1.92	2935	2.15	3038	2.39	3140	2.65	3241	2.92	-	-	-	-

<b>Model BI-13</b>		MINIMUM 1/2 HP MOTOR RECOMMENDED, 5 HP MAXIMUM 1" SHAFT										MAXIMUM 3000 RPM WHEEL DIA. = 13.50"					
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	745	923	0.10	1220	0.21	1481	0.33	1701	0.46	1896	0.60	2073	0.76	2389	1.11	2671	1.50
1000	931	1000	0.14	1262	0.25	1497	0.39	1716	0.54	1910	0.70	2085	0.86	2398	1.22	2675	1.62
1200	1118	1096	0.18	1330	0.31	1538	0.45	1734	0.61	1924	0.79	2100	0.98	2411	1.36	2686	1.77
1400	1304	1205	0.24	1408	0.38	1604	0.53	1780	0.70	1948	0.88	2115	1.08	2426	1.51	2700	1.95
1600	1490	1321	0.31	1501	0.47	1678	0.63	1846	0.81	2001	1.00	2149	1.20	2441	1.66	2715	2.15
1800	1677	1441	0.39	1605	0.57	1763	0.75	1919	0.94	2068	1.14	2207	1.35	2470	1.80	2730	2.32
2000	1863	1565	0.49	1715	0.69	1859	0.89	2001	1.09	2141	1.30	2276	1.52	2524	1.99	2760	2.51
2200	2050	1690	0.61	1831	0.82	1963	1.04	2092	1.26	2221	1.49	2349	1.72	2590	2.21	2811	2.74
2400	2236	1818	0.75	1950	0.98	2073	1.21	2193	1.45	2311	1.70	2429	1.94	2660	2.46	2875	3.01
2600	2422	1947	0.91	2072	1.16	2187	1.41	2299	1.67	2409	1.93	2518	2.19	2735	2.74	2944	3.31
2800	2609	2077	1.10	2195	1.36	2305	1.63	2410	1.90	2513	2.18	2615	2.46	2817	3.04	-	-
3000	2795	2208	1.32	2320	1.59	2425	1.87	2524	2.16	2621	2.46	2717	2.76	2907	3.37	-	-
3200	2981	2340	1.56	2447	1.85	2547	2.14	2642	2.45	2734	2.77	2824	3.09	-	-	-	-
3400	3168	2472	1.83	2575	2.13	2670	2.45	2761	2.77	2849	3.11	2935	3.44	-	-	-	-
3600	3354	2606	2.14	2703	2.46	2795	2.78	2883	3.12	2967	3.47	-	-	-	-	-	-

Power rating (BHP) does not include drive losses.

Performance shown is for installation Type B - Free inlet, Ducted outlet.

Performance ratings do not include the effects of appurtenances in the airstream.

SI CONVERSION FACTOR

CFM x .472 = L/s      SP x .249 = kPa

# "BI" SERIES PERFORMANCE DATA

<b>Model BI-15</b>		MINIMUM 3/4 HP MOTOR RECOMMENDED, 5 HP MAXIMUM 1" SHAFT										MAXIMUM 2700 RPM WHEEL DIA. = 15.00"					
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1300	990	921	0.18	1151	0.32	1353	0.49	1548	0.69	1722	0.89	1880	1.10	2161	1.54	2409	2.04
1600	1219	1032	0.26	1229	0.42	1411	0.60	1577	0.80	1740	1.03	1896	1.27	2176	1.77	2423	2.29
1900	1447	1156	0.35	1324	0.54	1489	0.74	1643	0.95	1784	1.18	1922	1.43	2192	1.99	2439	2.58
2200	1676	1287	0.47	1435	0.69	1579	0.91	1721	1.15	1856	1.39	1981	1.65	2220	2.21	2456	2.85
2500	1904	1422	0.62	1556	0.87	1684	1.12	1810	1.37	1935	1.64	2056	1.91	2278	2.49	2488	3.13
2800	2133	1560	0.81	1684	1.08	1800	1.35	1913	1.63	2026	1.92	2138	2.22	2352	2.83	2548	3.49
3100	2361	1700	1.04	1815	1.32	1922	1.63	2026	1.94	2128	2.25	2230	2.57	2431	3.22	2622	3.91
3400	2590	1842	1.31	1950	1.62	2050	1.94	2146	2.28	2240	2.62	2333	2.96	2518	3.66	2700	4.39
3700	2819	1985	1.62	2086	1.95	2180	2.30	2270	2.67	2358	3.03	2444	3.40	2615	4.15	-	-
4000	3047	2129	1.99	2225	2.35	2314	2.72	2399	3.10	2481	3.50	2561	3.90	-	-	-	-
4300	3276	2275	2.41	2365	2.79	2449	3.19	2530	3.60	2608	4.02	2684	4.44	-	-	-	-
4600	3504	2421	2.90	2506	3.30	2587	3.72	2663	4.15	-	-	-	-	-	-	-	-

<b>Model BI-16</b>		MINIMUM 3/4 HP MOTOR RECOMMENDED, 7-1/2 HP MAXIMUM 1-3/16" SHAFT										MAXIMUM 2400 RPM WHEEL DIA. = 16.50"					
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
1600	995	844	0.22	1051	0.40	1233	0.60	1408	0.84	1567	1.09	1710	1.34	1965	1.88	2191	2.49
1900	1182	928	0.29	1110	0.49	1276	0.71	1429	0.95	1579	1.23	1722	1.52	1977	2.11	2201	2.73
2200	1369	1020	0.38	1178	0.60	1333	0.84	1475	1.10	1607	1.37	1738	1.67	1989	2.34	2213	3.02
2500	1556	1116	0.50	1258	0.73	1397	1.00	1532	1.28	1657	1.56	1774	1.87	2004	2.55	2225	3.31
2800	1742	1216	0.63	1346	0.89	1470	1.17	1594	1.47	1714	1.79	1826	2.11	2035	2.79	2241	3.57
3100	1929	1319	0.80	1439	1.07	1552	1.37	1664	1.69	1775	2.03	1884	2.38	2084	3.10	2271	3.87
3400	2116	1422	0.99	1535	1.29	1640	1.61	1742	1.94	1844	2.30	1946	2.67	2140	3.44	2319	4.24
3700	2303	1528	1.22	1633	1.54	1732	1.88	1827	2.23	1921	2.61	2014	3.00	2199	3.81	2374	4.66
4000	2489	1634	1.48	1734	1.83	1827	2.19	1916	2.56	2003	2.95	2090	3.36	2263	4.22	-	-
4300	2676	1741	1.78	1836	2.16	1924	2.54	2008	2.92	2090	3.33	2172	3.76	2333	4.66	-	-
4600	2863	1849	2.12	1939	2.52	2023	2.93	2103	3.34	2181	3.76	2257	4.20	-	-	-	-
4900	3050	1958	2.50	2044	2.93	2124	3.36	2201	3.80	2274	4.24	2347	4.70	-	-	-	-
5200	3236	2067	2.93	2149	3.39	2226	3.85	2299	4.30	2370	4.77	-	-	-	-	-	-
5500	3423	2177	3.41	2255	3.89	2329	4.38	2400	4.86	-	-	-	-	-	-	-	-

<b>Model BI-18</b>		MINIMUM 3/4 HP MOTOR RECOMMENDED, 7-1/2 HP MAXIMUM 1-3/16" SHAFT										MAXIMUM 2200 RPM WHEEL DIA. = 18.25"					
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
2000	1025	772	0.29	956	0.50	1118	0.75	1274	1.05	1418	1.36	1547	1.67	1778	2.34	1982	3.08
2300	1178	833	0.36	1000	0.60	1151	0.86	1290	1.15	1427	1.49	1556	1.84	1787	2.56	1990	3.32
2600	1332	901	0.45	1049	0.71	1192	0.99	1322	1.29	1444	1.63	1566	2.00	1795	2.80	1998	3.61
2900	1486	971	0.55	1106	0.84	1237	1.14	1362	1.46	1477	1.80	1587	2.17	1805	3.01	2007	3.90
3200	1640	1044	0.67	1168	0.99	1288	1.32	1406	1.66	1517	2.02	1621	2.39	1820	3.22	2016	4.17
3500	1793	1118	0.82	1233	1.16	1344	1.51	1453	1.87	1560	2.25	1661	2.64	1848	3.48	2030	4.43
3800	1947	1194	0.98	1302	1.35	1405	1.72	1506	2.11	1606	2.51	1704	2.93	1885	3.79	2054	4.74
4100	2101	1271	1.17	1373	1.56	1469	1.96	1563	2.38	1657	2.80	1750	3.23	1927	4.14	2089	5.10
4400	2255	1348	1.38	1446	1.80	1536	2.23	1625	2.67	1712	3.11	1799	3.57	1970	4.52	2129	5.52
4700	2409	1426	1.63	1519	2.06	1606	2.52	1689	2.99	1771	3.46	1853	3.94	2015	4.93	2171	5.97
5000	2562	1505	1.90	1594	2.36	1677	2.84	1756	3.33	1834	3.83	1911	4.34	2064	5.37	-	-
5300	2716	1584	2.21	1670	2.69	1749	3.19	1825	3.71	1899	4.24	1972	4.77	2116	5.85	-	-
5600	2870	1664	2.54	1746	3.05	1822	3.57	1895	4.12	1965	4.67	2035	5.23	2172	6.36	-	-
5900	3024	1744	2.92	1823	3.44	1897	3.99	1966	4.56	2034	5.14	2101	5.73	-	-	-	-
6200	3177	1825	3.33	1901	3.88	1972	4.45	2039	5.04	2104	5.65	2168	6.26	-	-	-	-
6500	3331	1906	3.78	1979	4.36	2047	4.95	2113	5.56	2175	6.19	-	-	-	-	-	-
6800	3485	1987	4.27	2057	4.87	2124	5.49	2187	6.12	-	-	-	-	-	-	-	-

Power rating (BHP) does not include drive losses.  
 Performance shown is for installation Type B - Free inlet, Ducted outlet.  
 Performance ratings do not include the effects of appurtenances in the airstream.

SI CONVERSION FACTOR  
 CFM x .472 = L/s      SP x .249 = kPa

# "BI" SERIES PERFORMANCE DATA

<b>Model BI-20</b>		MINIMUM 1 HP MOTOR RECOMMENDED, 7-1/2 HP MAXIMUM 1-3/16" SHAFT						MAXIMUM 1950 RPM TIP SPEED : 5.24 x RPM = FPM WHEEL DIA. = 20.00"				
CFM	OUTLET VELOCITY FPM	1/2" SP RPM BHP	1" SP RPM BHP	1-1/2" SP RPM BHP	2" SP RPM BHP	2-1/2" SP RPM BHP	3" SP RPM BHP	4" SP RPM BHP	5" SP RPM BHP			
2250	968	677 0.29	858 0.54	1020 0.83	1160 1.15	1289 1.49	1410 1.86	1628 2.63	1819 3.46			
2500	1075	713 0.34	877 0.61	1035 0.90	1172 1.23	1296 1.60	1413 1.98	1628 2.80	1821 3.66			
2750	1183	752 0.40	903 0.68	1050 0.99	1187 1.33	1308 1.70	1421 2.11	1629 2.96	1820 3.87			
3000	1290	793 0.46	933 0.76	1069 1.09	1202 1.44	1322 1.82	1432 2.23	1634 3.13	1821 4.08			
3250	1398	835 0.53	967 0.84	1093 1.19	1218 1.56	1338 1.95	1447 2.37	1644 3.29	1824 4.28			
3500	1505	879 0.62	1003 0.94	1121 1.31	1237 1.69	1353 2.10	1462 2.53	1656 3.46	1832 4.49			
3750	1613	924 0.71	1041 1.05	1153 1.43	1261 1.83	1370 2.26	1477 2.70	1670 3.65	1843 4.70			
4000	1721	969 0.81	1081 1.18	1187 1.56	1289 1.98	1391 2.43	1493 2.89	1685 3.85	1856 4.92			
4250	1828	1016 0.92	1122 1.31	1223 1.71	1321 2.14	1416 2.61	1512 3.08	1700 4.08	1871 5.16			
4500	1936	1063 1.05	1165 1.45	1261 1.87	1354 2.32	1445 2.79	1535 3.29	1716 4.32	1886 5.42			
4750	2043	1110 1.19	1208 1.61	1300 2.05	1390 2.51	1476 3.00	1562 3.51	1733 4.58	1901 5.70			
5000	2151	1157 1.34	1252 1.78	1341 2.24	1426 2.71	1510 3.21	1592 3.74	1754 4.85	1916 6.00			
5250	2258	1205 1.51	1297 1.96	1382 2.44	1464 2.93	1545 3.45	1623 3.98	1778 5.13	1934 6.32			
5500	2366	1254 1.69	1342 2.16	1425 2.66	1504 3.17	1581 3.70	1657 4.25	1806 5.42	- - - -			
5750	2473	1303 1.89	1388 2.37	1468 2.89	1544 3.42	1619 3.96	1692 4.53	1835 5.73	- - - -			
6000	2581	1352 2.10	1435 2.60	1512 3.14	1586 3.69	1658 4.25	1729 4.83	1867 6.05	- - - -			
6250	2689	1401 2.33	1481 2.85	1556 3.40	1628 3.97	1698 4.55	1766 5.15	1900 6.39	- - - -			
6500	2796	1450 2.58	1529 3.12	1601 3.68	1671 4.27	1738 4.87	1805 5.48	1934 6.76	- - - -			
6750	2904	1500 2.85	1576 3.40	1647 3.98	1714 4.59	1780 5.21	1844 5.84	- - - -	- - - -			
7000	3011	1550 3.13	1624 3.70	1693 4.30	1758 4.93	1822 5.57	1885 6.22	- - - -	- - - -			
7250	3119	1600 3.44	1671 4.03	1739 4.64	1803 5.29	1865 5.95	1926 6.61	- - - -	- - - -			
7500	3226	1651 3.76	1720 4.37	1786 5.01	1848 5.66	1908 6.34	- - - -	- - - -	- - - -			
7750	3334	1701 4.11	1768 4.74	1832 5.39	1894 6.06	- - - -	- - - -	- - - -	- - - -			
8000	3442	1752 4.47	1817 5.13	1880 5.79	1939 6.48	- - - -	- - - -	- - - -	- - - -			
8250	3549	1803 4.86	1865 5.54	1927 6.22	- - - -	- - - -	- - - -	- - - -	- - - -			
8500	3657	1854 5.27	1914 5.97	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -			

<b>Model BI-22</b>		MINIMUM 1 HP MOTOR RECOMMENDED, 10 HP MAXIMUM 1-3/16" SHAFT						MAXIMUM 1750 RPM TIP SPEED : 5.83 x RPM = FPM WHEEL DIA. = 22.25"				
CFM	OUTLET VELOCITY FPM	1/2" SP RPM BHP	1" SP RPM BHP	1-1/2" SP RPM BHP	2" SP RPM BHP	2-1/2" SP RPM BHP	3" SP RPM BHP	4" SP RPM BHP	5" SP RPM BHP			
2500	864	581 0.31	758 0.60	905 0.94	1036 1.33	1158 1.73	1268 2.16	1462 3.07	1629 4.05			
2800	968	610 0.36	772 0.67	917 1.03	1043 1.42	1159 1.86	1268 2.31	1465 3.27	1635 4.29			
3100	1072	641 0.42	788 0.75	931 1.12	1054 1.53	1165 1.98	1270 2.46	1464 3.46	1637 4.54			
3400	1175	675 0.49	811 0.84	944 1.22	1067 1.64	1175 2.11	1276 2.60	1465 3.66	1638 4.79			
3700	1279	711 0.57	837 0.93	960 1.34	1080 1.78	1188 2.25	1287 2.76	1468 3.86	1637 5.04			
4000	1383	748 0.65	867 1.04	980 1.47	1094 1.92	1201 2.40	1299 2.92	1476 4.06	1639 5.28			
4300	1487	786 0.75	898 1.16	1005 1.60	1110 2.08	1215 2.58	1312 3.11	1487 4.26	1645 5.53			
4600	1590	825 0.86	931 1.29	1032 1.75	1131 2.25	1229 2.77	1326 3.31	1499 4.49	1655 5.78			
4900	1694	865 0.98	966 1.43	1062 1.91	1155 2.42	1247 2.97	1339 3.53	1513 4.73	1666 6.04			
5200	1798	905 1.12	1001 1.59	1093 2.08	1181 2.61	1268 3.18	1356 3.77	1526 4.99	1679 6.33			
5500	1902	946 1.26	1038 1.76	1126 2.27	1210 2.82	1293 3.40	1375 4.01	1539 5.28	1692 6.63			
5800	2005	987 1.43	1076 1.94	1160 2.48	1241 3.04	1320 3.64	1398 4.27	1554 5.59	1705 6.96			
6100	2109	1028 1.61	1114 2.14	1195 2.70	1272 3.28	1348 3.90	1423 4.54	1571 5.90	1719 7.32			
6400	2213	1070 1.80	1153 2.35	1230 2.94	1305 3.54	1379 4.17	1450 4.83	1591 6.24	1733 7.70			
6700	2317	1112 2.01	1192 2.59	1267 3.19	1339 3.82	1410 4.47	1479 5.14	1614 6.58	1749 8.09			
7000	2420	1154 2.24	1232 2.84	1305 3.47	1374 4.11	1442 4.78	1509 5.47	1639 6.94	- - - -			
7300	2524	1197 2.49	1273 3.10	1343 3.76	1410 4.43	1476 5.11	1540 5.82	1666 7.32	- - - -			
7600	2628	1240 2.76	1313 3.39	1381 4.07	1446 4.76	1510 5.47	1573 6.19	1694 7.72	- - - -			
7900	2732	1283 3.05	1354 3.70	1420 4.39	1484 5.11	1545 5.84	1606 6.59	1724 8.15	- - - -			
8200	2835	1326 3.36	1395 4.03	1460 4.74	1521 5.48	1581 6.24	1640 7.01	- - - -	- - - -			
8500	2939	1370 3.69	1437 4.38	1500 5.12	1560 5.88	1618 6.66	1675 7.45	- - - -	- - - -			
8800	3043	1413 4.04	1478 4.76	1540 5.51	1598 6.29	1655 7.10	1710 7.91	- - - -	- - - -			
9100	3147	1457 4.41	1520 5.16	1580 5.93	1637 6.73	1692 7.56	1746 8.40	- - - -	- - - -			
9400	3250	1501 4.81	1562 5.58	1621 6.37	1677 7.20	1730 8.04	- - - -	- - - -	- - - -			
9700	3354	1545 5.24	1604 6.03	1662 6.84	1716 7.68	- - - -	- - - -	- - - -	- - - -			
10000	3458	1589 5.69	1647 6.50	1703 7.33	- - - -	- - - -	- - - -	- - - -	- - - -			

Power rating (BHP) does not include drive losses.

Performance shown is for installation Type B - Free inlet, Ducted outlet.

Performance ratings do not include the effects of appurtenances in the airstream.

SI CONVERSION FACTOR

CFM x .472 = L/s      SP x .249 = kPa

## "BI" SERIES PERFORMANCE DATA

<b>Model BI-24</b>		MINIMUM 1 HP MOTOR RECOMMENDED, 15 HP MAXIMUM 1-7/16" SHAFT						MAXIMUM 1600 RPM TIP SPEED : 6.41 x RPM = FPM WHEEL DIA. = 24.50"									
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
3000	857	526	0.37	688	0.72	822	1.14	941	1.60	1050	2.09	1151	2.60	1328	3.70	1483	4.89
3500	1000	562	0.46	705	0.84	836	1.27	950	1.76	1053	2.29	1151	2.85	1329	4.03	1486	5.29
4000	1143	603	0.56	729	0.98	853	1.44	965	1.94	1064	2.50	1157	3.10	1329	4.36	1486	5.70
4500	1286	647	0.69	761	1.13	872	1.63	981	2.16	1079	2.73	1169	3.35	1334	4.69	1486	6.12
5000	1429	693	0.84	799	1.31	899	1.84	999	2.41	1096	3.00	1185	3.63	1345	5.02	1491	6.53
5500	1572	742	1.01	839	1.52	932	2.08	1022	2.68	1113	3.31	1201	3.96	1359	5.38	1501	6.94
6000	1715	791	1.21	882	1.76	969	2.34	1052	2.97	1135	3.64	1218	4.33	1376	5.78	1515	7.38
6500	1858	841	1.45	927	2.03	1008	2.64	1087	3.30	1163	4.00	1240	4.73	1392	6.23	1531	7.86
7000	2000	893	1.71	974	2.33	1050	2.98	1124	3.66	1196	4.39	1267	5.15	1410	6.74	1548	8.40
7500	2143	944	2.01	1022	2.66	1094	3.35	1164	4.07	1232	4.81	1299	5.61	1432	7.27	1564	9.00
8000	2286	997	2.35	1071	3.04	1139	3.76	1206	4.51	1271	5.29	1334	6.10	1459	7.83	1583	9.64
8500	2429	1050	2.73	1120	3.45	1186	4.21	1249	5.00	1311	5.80	1371	6.64	1489	8.43	-	-
9000	2572	1103	3.15	1171	3.90	1234	4.70	1294	5.53	1353	6.37	1411	7.24	1523	9.07	-	-
9500	2715	1156	3.61	1222	4.40	1282	5.24	1340	6.10	1396	6.98	1452	7.88	1560	9.76	-	-
10000	2858	1210	4.13	1273	4.95	1331	5.82	1387	6.72	1441	7.64	1494	8.57	1598	10.50	-	-
10500	3001	1265	4.69	1325	5.55	1381	6.45	1435	7.39	1487	8.35	1538	9.32	-	-	-	-
11000	3144	1319	5.30	1377	6.20	1432	7.14	1484	8.11	1534	9.10	1583	10.10	-	-	-	-
11500	3287	1374	5.97	1429	6.91	1483	7.88	1533	8.88	1581	9.92	-	-	-	-	-	-
12000	3430	1429	6.70	1482	7.68	1534	8.68	1583	9.72	-	-	-	-	-	-	-	-
12500	3573	1485	7.48	1535	8.51	1585	9.54	-	-	-	-	-	-	-	-	-	-
13000	3716	1540	8.33	1589	9.39	-	-	-	-	-	-	-	-	-	-	-	-

<b>Model BI-27</b>		MINIMUM 1 HP MOTOR RECOMMENDED, 15 HP MAXIMUM 1-7/16" SHAFT						MAXIMUM 1450 RPM TIP SPEED : 7.07 x RPM = FPM WHEEL DIA. = 27.00"									
CFM	OUTLET VELOCITY FPM	1/2" SP		1" SP		1-1/2" SP		2" SP		2-1/2" SP		3" SP		4" SP		5" SP	
		RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
4000	946	482	0.51	615	0.96	732	1.47	834	2.06	928	2.68	1016	3.33	1173	4.72	1310	6.21
4500	1065	510	0.61	630	1.09	744	1.62	843	2.23	933	2.89	1017	3.58	1173	5.06	1312	6.62
5000	1183	541	0.73	650	1.23	756	1.80	855	2.42	942	3.10	1023	3.83	1174	5.39	1311	7.04
5500	1302	573	0.85	674	1.39	771	2.00	867	2.64	954	3.33	1033	4.08	1178	5.71	1312	7.45
6000	1420	607	0.99	701	1.57	790	2.20	879	2.89	965	3.60	1044	4.37	1185	6.05	1315	7.86
6500	1538	642	1.13	730	1.78	813	2.43	896	3.15	978	3.90	1056	4.68	1196	6.40	1322	8.27
7000	1657	677	1.30	760	2.02	839	2.68	916	3.43	992	4.23	1068	5.04	1207	6.78	1331	8.70
7500	1775	714	1.51	792	2.27	867	2.98	939	3.74	1010	4.57	1082	5.43	1219	7.20	1342	9.15
8000	1893	750	1.75	825	2.53	896	3.30	965	4.07	1032	4.93	1098	5.83	1231	7.68	1354	9.65
8500	2012	788	2.04	859	2.80	927	3.66	992	4.45	1056	5.31	1119	6.24	1244	8.19	1366	10.20
9000	2130	825	2.38	894	3.08	959	4.03	1021	4.87	1082	5.74	1141	6.69	1260	8.72	1378	10.80
9500	2248	863	2.77	930	3.40	991	4.41	1051	5.33	1109	6.22	1166	7.17	1279	9.26	1391	11.40
10000	2367	901	3.21	965	3.76	1025	4.81	1082	5.81	1138	6.74	1193	7.70	1300	9.83	1407	12.10
10500	2485	940	3.69	1002	4.17	1059	5.21	1114	6.31	1168	7.31	1220	8.29	1323	10.40	1425	12.80
11000	2604	979	4.22	1038	4.63	1094	5.65	1147	6.82	1198	7.90	1249	8.92	1348	11.10	1445	13.50
11500	2722	1018	4.78	1075	5.15	1129	6.12	1180	7.35	1230	8.52	1279	9.60	1375	11.80	-	-
12000	2840	1057	5.38	1113	5.74	1165	6.63	1214	7.89	1262	9.15	1310	10.30	1402	12.60	-	-
12500	2959	1096	6.02	1150	6.40	1201	7.21	1249	8.45	1295	9.80	1341	11.10	1431	13.40	-	-
13000	3077	1136	6.70	1188	7.13	1237	7.84	1284	9.06	1329	10.50	1373	11.80	-	-	-	-
13500	3195	1176	7.41	1226	7.94	1274	8.54	1319	9.71	1363	11.10	1406	12.60	-	-	-	-
14000	3314	1216	8.17	1264	8.82	1311	9.32	1355	10.40	1398	11.90	1440	13.40	-	-	-	-
14500	3432	1256	8.96	1303	9.76	1348	10.20	1391	11.20	1433	12.60	-	-	-	-	-	-
15000	3550	1296	9.81	1341	10.80	1386	11.10	1428	12.10	-	-	-	-	-	-	-	-
15500	3669	1336	10.70	1380	11.80	1423	12.20	-	-	-	-	-	-	-	-	-	-
16000	3787	1377	11.60	1419	12.90	-	-	-	-	-	-	-	-	-	-	-	-

Power rating (BHP) does not include drive losses.

Performance shown is for installation Type B - Free inlet, Ducted outlet.

Performance ratings do not include the effects of appurtenances in the airstream.

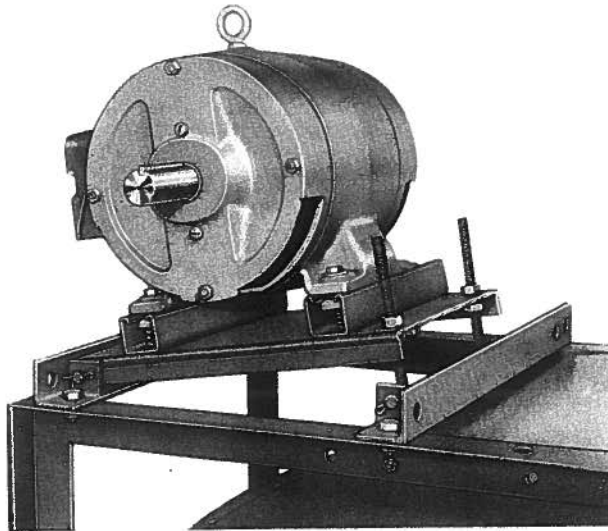
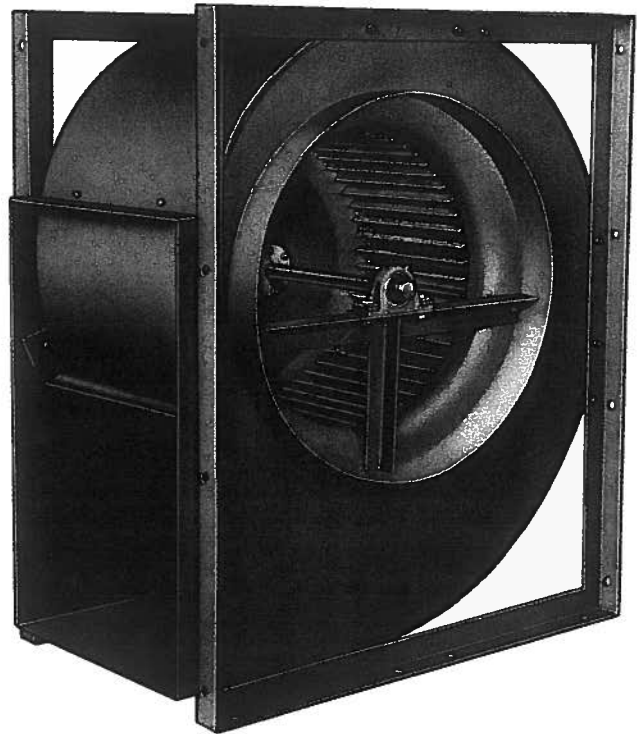
SI CONVERSION FACTOR

CFM x .472 = L/s      SP x .249 = kPa



# **400 SERIES FC EXHAUSTER**

- . Universal frame allows for choice of discharge position
- . Multiple choice for motor mounting location with each discharge position
- . Motor mounting bracket and hardware included with models 407 to 415
- . Motor mounting bracket/plate assembly and hardware are supplied with model 418
- . Heavy duty ball bearings suitable for -65 to +250 deg. F on all models
- . Spider bearing brackets on models 407 to 418
- . Pillow block bearings with T bar support, as illustrated, on models 420, 422 & 425
- . Shafts for 420, 422 & 425 models are keywayed for wheels and pulleys (415 & 418 models for pulleys only)

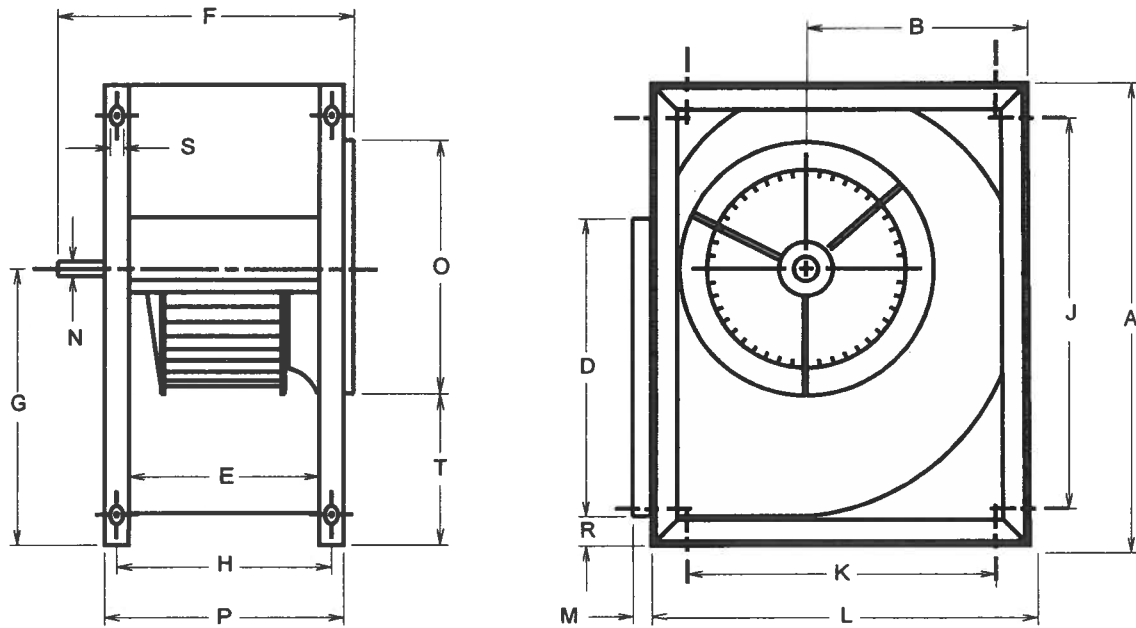


**OPTIONAL 1 to 15 HP  
MOTOR PLATFORM FOR  
MODELS 420, 422 & 425**

## **OPTIONAL ACCESSORIES**

- . Back draft dampers
- . Inlet & outlet screens
- . Corrosion resistant finishes
- . Vibration isolation
- . Belt guard

# 400 SERIES DIMENSIONS

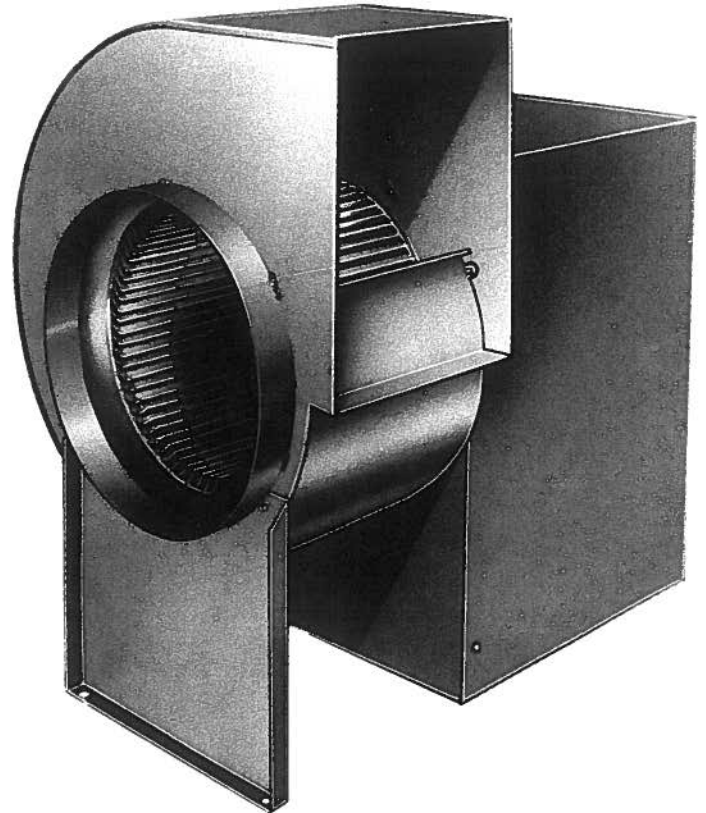


DIMENSIONS (inches)

MODEL	A	B	D	E	F	G	H	J	K	L	M	N	O	P	R	S	WHEEL DIA.	WHEEL WIDTH	WT. (LBS.)
407	14-1/4	6-1/2	8-3/8	6-7/8	11-5/8	8-5/8	8	11-11/16	8-7/8	11-3/4	3/4	3/4	9	9	1-1/2	7/16	8-1/16	4-15/16	18
409	17-1/4	7-15/16	10-1/4	9-3/16	13-15/16	10-1/8	10-5/16	14-5/8	11-3/4	14-1/2	3/4	3/4	10	11-5/16	1-1/2	7/16	9-13/16	7-3/16	25
410	19-1/8	9	11-3/8	9-3/16	13-15/16	11-1/4	10-5/16	16-1/4	13-1/2	16-1/4	3/4	3/4	12	11-5/16	1-1/2	7/16	11-1/8	7-3/16	28
412	22-1/4	10-9/16	13-1/2	9-3/16	13-15/16	13	10-5/16	19-5/8	16-1/4	19	3/4	3/4	14	11-5/16	1-1/2	7/16	12-7/8	7-3/16	33
415	29-3/4	14-3/4	17	12-1/2	17-3/8	18-1/8	13-3/4	27-1/4	22-5/8	25-1/4	3/4	1	17	14-3/4	1-1/2	7/16	15-1/2	9-9/16	61
418	30-3/4	14-15/16	18-7/8	14	20-3/8	17-3/4	15-5/8	28-1/2	24	26-1/2	3/4	1	18	17-1/4	1-1/2	7/16	18-1/2	10-13/16	95
420	38	18-5/16	24-3/4	15-3/4	24-1/4	22-9/16	17-1/4	32-7/16	25-7/16	31-1/4	1-1/2	1-3/16	21	19-3/4	2	5/8	20-7/16	10-1/4	204
422	41-1/2	20-1/16	27-1/4	17-1/8	25-5/8	24-5/8	18-5/8	35-31/32	28-15/32	34-1/4	1-1/2	1-3/16	22-1/2	21-1/8	2	5/8	22-1/8	11-1/4	230
425	46-3/4	22-5/8	31-1/4	19-5/8	28-1/8	27-3/4	21-1/8	41-7/32	32-17/32	38-3/8	1-1/2	1-3/16	26-3/4	23-5/8	2	5/8	25-1/4	13	270

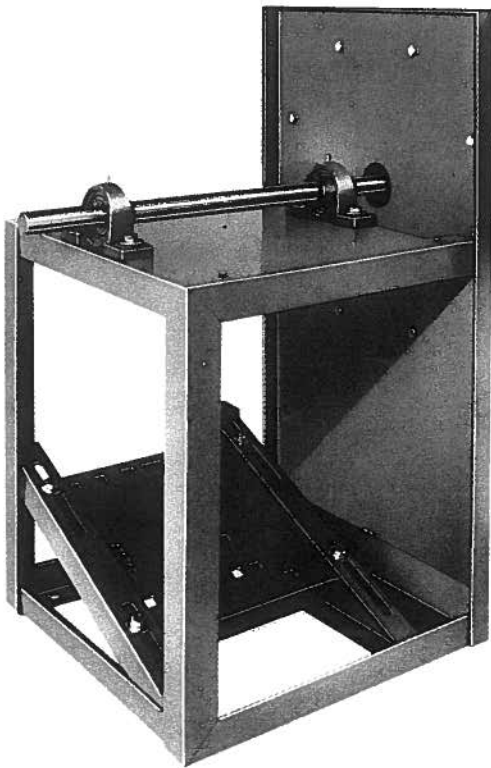
# 600 SERIES FC UTILITY BLOWER

- . Standard top horizontal discharge position can easily be field rotated to any of 8 positions
- . Outlet flanges on models 620, 622 & 625
- . Vented motor and drive compartment cover, with handles, for safety and weather protection
- . Available in cw or ccw rotation
- . Shafts for 620, 622 & 625 models are keywayed for wheels and pulleys (615 & 618 models for pulleys only)
- . Heavy duty ball bearings suitable for -65 to +250 deg. F



## OPTIONAL ACCESSORIES

- . Back draft dampers
- . Inlet & outlet screens
- . Corrosion resistant finishes
- . Clean out door with latches
- . 2" drain fitting
- . Heat slinger
- . Shaft seal
- . Vibration isolation
- . Optional bracket for external mounting by customer of electric motor disconnect switch

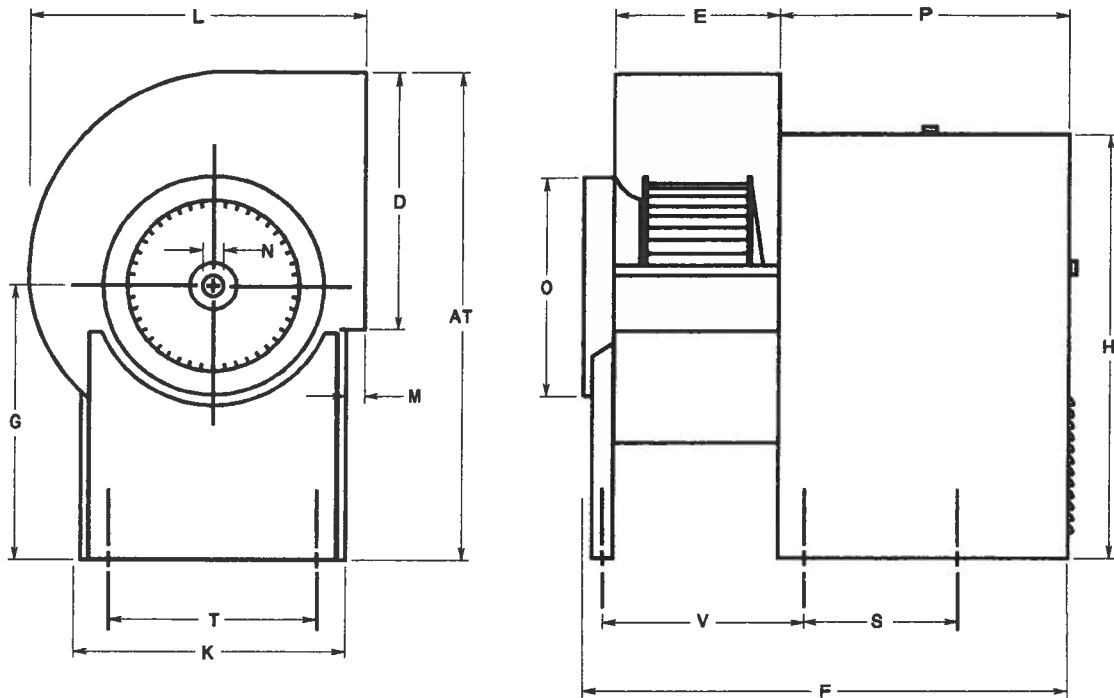


## **MOTOR AND DRIVE COMPARTMENT WITH COVER REMOVED SHOWING THREE SIDE MOTOR ACCESS**



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# 600 SERIES DIMENSIONS



DIMENSIONS (inches)

MODEL	AT	D	E	F	G	H	K	L	M	N	O	P	S	T	V	WHEEL DIA.	WHEEL WIDTH	WT. (LBS.)
610	24-13/16	11-3/8	9-3/16	28-9/16	15-1/16	21-5/16	13-3/16	18-3/4	1-3/8	3/4	12	17-1/4	11-3/4	11-7/16	—	11-1/8	7-3/16	70
612	28-9/16	13-7/16	9-3/16	28-9/16	15-1/16	21-5/16	13-3/16	19-1/2	2-1/2	3/4	14	17-1/4	11-3/4	11-7/16	—	12-7/8	7-3/16	75
616	36-3/4	17	12-1/2	35-7/8	20-1/16	29-1/8	16-9/16	25-15/16	3-1/8	1	17	21-1/8	11-1/2	14-11/16	15-5/8	15-1/2	9-9/16	146
618	36-5/16	18-7/8	14	37-3/8	20-1/16	29-1/8	16-9/16	27	4-1/8	1	18	21-1/8	11-1/2	14-11/16	17-1/8	18-1/2	10-13/16	166
620	48-9/16	24-3/4	15-3/4	46-7/16	28	40-7/8	25-1/4	32-7/16	1-11/16	1-3/16	21	27-11/16	14-5/8	22-1/2	18-7/8	20-7/16	10-1/4	354
622	50-9/16	27-1/4	17-1/8	47-13/16	28	40-7/8	25-1/4	35-1/2	2-15/16	1-3/16	22-1/2	27-11/16	14-5/8	22-1/2	20-1/4	22-1/8	11-1/4	375
625	53-11/16	31-1/4	19-5/8	50-5/16	28	40-7/8	25-1/4	39-5/8	4-1/2	1-3/16	26-3/4	27-11/16	14-5/8	22-1/2	22-3/4	25-1/4	13	415

# 400 & 600 SERIES PERFORMANCE DATA



Quietaire Corporation certifies that the **600 Series** Utility Blowers shown hereon are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

<b>Model 407</b>		1 HP MAXIMUM 3/4" SHAFT				TIP SPEED = 2.07 x RPM WHEEL DIA. = 8.06"				STANDARD DRIVE RANGE 824 - 1125 RPM							
CFM	OUTLET VELOCITY FPM	1/8" SP RPM	SP BHP	1/4" SP RPM	SP BHP	1/2" SP RPM	SP BHP	3/4" SP RPM	SP BHP	1" SP RPM	SP BHP	1-1/2" SP RPM	SP BHP	2" SP RPM	SP BHP	2-1/2" SP RPM	SP BHP
200	500	577	0.02	745	0.03	1007	0.08	1218	0.13	1399	0.20	1707	0.35	1969	0.54	2202	0.75
300	750	691	0.03	833	0.05	1066	0.10	1261	0.15	1432	0.22	1727	0.38	1982	0.57	2209	0.78
400	1000	825	0.06	947	0.08	1153	0.13	1331	0.19	1490	0.26	1770	0.42	2015	0.61	2234	0.83
500	1250	963	0.09	1078	0.12	1260	0.17	1422	0.24	1569	0.31	1833	0.48	2066	0.68	2277	0.90
600	1500	1104	0.15	1213	0.18	1382	0.24	1529	0.30	1665	0.38	1911	0.56	2132	0.76	-	-
700	1750	1245	0.24	1351	0.26	1515	0.33	1649	0.40	1774	0.47	2004	0.66	2213	0.87	-	-
800	2000	1386	0.35	1493	0.36	1650	0.44	1778	0.52	1894	0.60	2109	0.78	-	-	-	-
900	2250	1530	0.50	1633	0.51	1786	0.58	1914	0.67	2022	0.76	2223	0.95	-	-	-	-
1000	2500	1675	0.67	1774	0.70	1925	0.76	2048	0.85	2157	0.95	-	-	-	-	-	-

<b>Model 409</b>		2 HP MAXIMUM 3/4" SHAFT				TIP SPEED = 2.47 x RPM WHEEL DIA. = 9.81"				STANDARD DRIVE RANGE 688 - 929 RPM							
CFM	OUTLET VELOCITY FPM	1/8" SP RPM	SP BHP	1/4" SP RPM	SP BHP	1/2" SP RPM	SP BHP	3/4" SP RPM	SP BHP	1" SP RPM	SP BHP	1-1/2" SP RPM	SP BHP	2" SP RPM	SP BHP	2-1/2" SP RPM	SP BHP
300	458	437	0.01	603	0.03	834	0.06	1010	0.09	1158	0.13	1406	0.21	1614	0.30	1797	0.39
400	611	465	0.02	615	0.04	850	0.08	1027	0.12	1176	0.16	1424	0.26	1633	0.36	1817	0.46
500	764	520	0.04	633	0.05	863	0.09	1042	0.14	1192	0.20	1442	0.30	1652	0.42	1836	0.54
600	917	577	0.05	675	0.07	874	0.11	1055	0.17	1206	0.23	1458	0.35	1669	0.48	1854	0.62
700	1070	638	0.08	731	0.10	893	0.14	1066	0.20	1219	0.26	1473	0.40	1685	0.55	1870	0.70
800	1223	699	0.11	788	0.13	930	0.18	1082	0.24	1230	0.30	1486	0.45	1699	0.62	1886	0.78
900	1376	762	0.15	848	0.18	981	0.23	1106	0.28	1245	0.35	1498	0.51	1713	0.68	1901	0.86
1000	1529	827	0.20	908	0.23	1040	0.29	1149	0.34	1266	0.41	1508	0.56	1725	0.75	1914	0.95
1100	1682	892	0.25	969	0.29	1096	0.35	1201	0.42	1302	0.48	1524	0.64	1736	0.82	1927	1.03
1200	1834	958	0.32	1032	0.36	1155	0.43	1258	0.50	1349	0.57	1545	0.73	1748	0.91	1938	1.12
1300	1987	1025	0.40	1096	0.44	1215	0.52	1316	0.60	1403	0.67	1574	0.83	1766	1.02	1948	1.21
1400	2140	1093	0.49	1160	0.54	1275	0.63	1373	0.71	1462	0.79	1618	0.96	1787	1.15	1964	1.35
1500	2293	1161	0.59	1225	0.65	1337	0.75	1433	0.83	1519	0.92	1668	1.09	1818	1.28	1984	1.50
1600	2446	1230	0.71	1291	0.77	1399	0.88	1493	0.97	1576	1.07	1723	1.25	1861	1.44	2006	1.66
1700	2599	1299	0.84	1357	0.90	1461	1.02	1553	1.13	1635	1.23	1781	1.42	1909	1.62	2041	1.84
1800	2752	1369	0.99	1424	1.06	1525	1.19	1614	1.30	1695	1.41	1839	1.61	1963	1.82	-	-
1900	2905	1438	1.15	1492	1.23	1589	1.36	1676	1.49	1755	1.61	1896	1.83	-	-	-	-
2000	3058	1508	1.33	1559	1.41	1653	1.56	1738	1.70	1816	1.82	-	-	-	-	-	-

<b>Model 410 &amp; 610</b>		2 HP MAXIMUM 3/4" SHAFT				TIP SPEED = 2.83 x RPM WHEEL DIA. = 11.13"				STANDARD DRIVE RANGE 580 - 792 RPM							
CFM	OUTLET VELOCITY FPM	1/8" SP RPM	SP BHP	1/4" SP RPM	SP BHP	1/2" SP RPM	SP BHP	3/4" SP RPM	SP BHP	1" SP RPM	SP BHP	1-1/2" SP RPM	SP BHP	2" SP RPM	SP BHP	2-1/2" SP RPM	SP BHP
500	688	385	0.03	495	0.04	688	0.07	984	0.16	1207	0.25	1392	0.36	1553	0.48	1698	0.61
700	964	453	0.05	542	0.07	700	0.11	973	0.20	1199	0.32	1392	0.44	1558	0.56	1707	0.71
900	1240	532	0.10	608	0.12	742	0.17	978	0.26	1190	0.39	1380	0.54	1548	0.69	1702	0.84
1100	1515	618	0.16	683	0.19	802	0.25	1009	0.37	1198	0.48	1374	0.63	1538	0.80	1690	0.98
1300	1791	707	0.25	764	0.28	870	0.36	1056	0.50	1226	0.64	1386	0.77	1539	0.93	1682	1.12
1500	2066	799	0.37	849	0.41	944	0.49	1116	0.66	1270	0.82	1416	0.98	1555	1.13	1690	1.29
1700	2342	893	0.52	938	0.57	1023	0.66	1182	0.86	1324	1.04	1458	1.22	1587	1.40	1712	1.58
1900	2617	988	0.72	1028	0.77	1106	0.88	1252	1.09	1387	1.30	1511	1.50	1630	1.70	1746	1.91
2100	2893	1084	0.95	1121	1.01	1191	1.13	1327	1.37	1454	1.60	1571	1.83	-	-	-	-
2300	3169	1181	1.24	1214	1.30	1279	1.43	1405	1.69	1524	1.95	-	-	-	-	-	-
2500	3444	1278	1.58	1309	1.65	1369	1.79	-	-	-	-	-	-	-	-	-	-

Power rating (BHP) does not include drive losses.  
600 Series performance shown is for installation Type B - Free inlet, Ducted outlet.  
Performance ratings do not include the effects of appurtenances in the airstream.

SI CONVERSION FACTOR  
CFM x .472 = L/s      SP x .249 = kPa

# 400 & 600 SERIES PERFORMANCE DATA



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<b>Model 412 &amp; 612</b>		2 HP MAXIMUM 3/4" SHAFT				TIP SPEED = 3.37 x RPM WHEEL DIA. = 12.87"				STANDARD DRIVE RANGE 505 - 690 RPM			
CFM	OUTLET VELOCITY FPM	1/8" SP RPM BHP	1/4" SP RPM BHP	1/2" SP RPM BHP	1" SP RPM BHP	1-1/2" SP RPM BHP	2" SP RPM BHP	2-1/2" SP RPM BHP	3" SP RPM BHP				
750	870	340 0.04	428 0.05	602 0.09	854 0.17	1041 0.27	1196 0.36	1332 0.46	1454 0.56				
1000	1160	400 0.07	469 0.10	598 0.14	853 0.25	1047 0.35	1206 0.46	1345 0.59	1469 0.72				
1250	1451	460 0.13	525 0.16	633 0.21	840 0.32	1044 0.46	1209 0.60	1351 0.71	1478 0.87				
1500	1741	521 0.20	589 0.24	681 0.30	856 0.43	1031 0.57	1203 0.75	1350 0.91	1480 1.06				
1750	2031	584 0.30	647 0.35	738 0.43	892 0.58	1038 0.72	1189 0.89	1342 1.10	1477 1.30				
2000	2321	648 0.43	707 0.48	800 0.59	938 0.76	1070 0.93	1197 1.09	1326 1.27	1466 1.51				
2250	2612	712 0.60	770 0.65	862 0.78	991 0.98	1111 1.17	1227 1.36	1340 1.54	1449 1.71				
2500	2902	777 0.80	833 0.86	921 1.01	1049 1.24	1159 1.46	1266 1.67	1370 1.88	-- --				
2750	3192	843 1.05	896 1.12	981 1.28	1112 1.56	1212 1.79	-- --	-- --	-- --				
3000	3482	910 1.34	960 1.43	1043 1.59	1177 1.92	-- --	-- --	-- --	-- --				
3250	3773	977 1.69	1025 1.79	1106 1.95	-- --	-- --	-- --	-- --	-- --				

<b>Model 415 &amp; 615</b>		415 - 3 HP MAXIMUM 1" SHAFT				615 - 5 HP MAXIMUM TIP SPEED = 4.03 x RPM				WHEEL DIA. = 15.5" STANDARD DRIVE RANGE 401 - 548 RPM			
CFM	OUTLET VELOCITY FPM	1/8" SP RPM BHP	1/4" SP RPM BHP	1/2" SP RPM BHP	1" SP RPM BHP	1-1/2" SP RPM BHP	2" SP RPM BHP	2-1/2" SP RPM BHP	3" SP RPM BHP				
1000	677	249 0.04	343 0.08	472 0.18	654 0.39	794 0.63	911 0.89	1015 1.17	1108 1.47				
1500	1016	287 0.10	353 0.14	487 0.25	670 0.53	810 0.83	928 1.15	1032 1.49	1125 1.84				
2000	1355	342 0.19	393 0.24	498 0.36	686 0.67	826 1.03	944 1.42	1048 1.82	1142 2.24				
2500	1694	397 0.33	447 0.40	526 0.52	698 0.86	841 1.26	960 1.70	1064 2.17	1158 2.65				
3000	2032	455 0.53	502 0.62	573 0.77	707 1.08	854 1.54	975 2.00	1079 2.53	1174 3.08				
3500	2371	515 0.80	558 0.91	628 1.10	740 1.44	863 1.87	986 2.40	1094 2.91	1189 3.52				
4000	2710	576 1.15	615 1.28	684 1.52	786 1.91	885 2.32	996 2.85	1105 3.46	1202 4.04				
4500	3049	638 1.59	674 1.75	738 2.02	838 2.48	925 2.93	1013 3.39	1114 4.01	1212 4.70				
5000	3388	701 2.15	734 2.32	794 2.64	895 3.18	973 3.67	1051 4.17	1131 4.69	-- --				
5500	3727	764 2.82	795 3.01	852 3.37	950 4.01	1025 4.54	-- --	-- --	-- --				
6000	4065	828 3.61	857 3.83	910 4.23	1004 4.95	-- --	-- --	-- --	-- --				
6500	4404	892 4.55	919 4.79	-- --	-- --	-- --	-- --	-- --	-- --				

<b>Model 418 &amp; 618</b>		5 HP MAXIMUM 1" SHAFT				TIP SPEED = 4.80 x RPM WHEEL DIA. = 18.5"				STANDARD DRIVE RANGE 333 - 455 RPM			
CFM	OUTLET VELOCITY FPM	1/8" SP RPM BHP	1/4" SP RPM BHP	1/2" SP RPM BHP	1" SP RPM BHP	1-1/2" SP RPM BHP	2" SP RPM BHP	2-1/2" SP RPM BHP	3" SP RPM BHP				
2000	1089	275 0.17	329 0.23	409 0.33	565 0.60	722 0.98	844 1.34	941 1.69	1024 2.02				
2500	1362	316 0.29	364 0.36	444 0.51	561 0.75	691 1.13	821 1.58	936 2.06	1033 2.51				
3000	1634	359 0.47	403 0.55	477 0.73	591 1.05	687 1.35	796 1.80	898 2.27	1010 2.88				
3500	1907	404 0.70	444 0.81	512 1.01	625 1.42	710 1.75	793 2.11	888 2.62	978 3.16				
4000	2179	449 1.00	487 1.13	551 1.36	659 1.84	746 2.28	817 2.64	888 3.01	972 3.60				
4500	2452	496 1.38	531 1.54	591 1.80	692 2.33	780 2.86	853 3.33	916 3.74	975 4.11				
5000	2724	543 1.85	575 2.03	633 2.34	728 2.92	813 3.52	887 4.09	952 4.60	-- --				
5500	2997	591 2.43	621 2.62	675 2.98	767 3.62	847 4.26	921 4.92	-- --	-- --				
6000	3269	639 3.11	667 3.33	718 3.72	807 4.42	-- --	-- --	-- --	-- --				
6500	3542	688 3.91	714 4.15	763 4.59	-- --	-- --	-- --	-- --	-- --				

Power rating (BHP) does not include drive losses.  
600 Series performance shown is for installation Type B - Free inlet, Ducted outlet.  
Performance ratings do not include the effects of appurtenances in the airstream.

SI CONVERSION FACTOR  
CFM x .472 = L/s      SP x .249 = kPa

# 400 & 600 SERIES PERFORMANCE DATA



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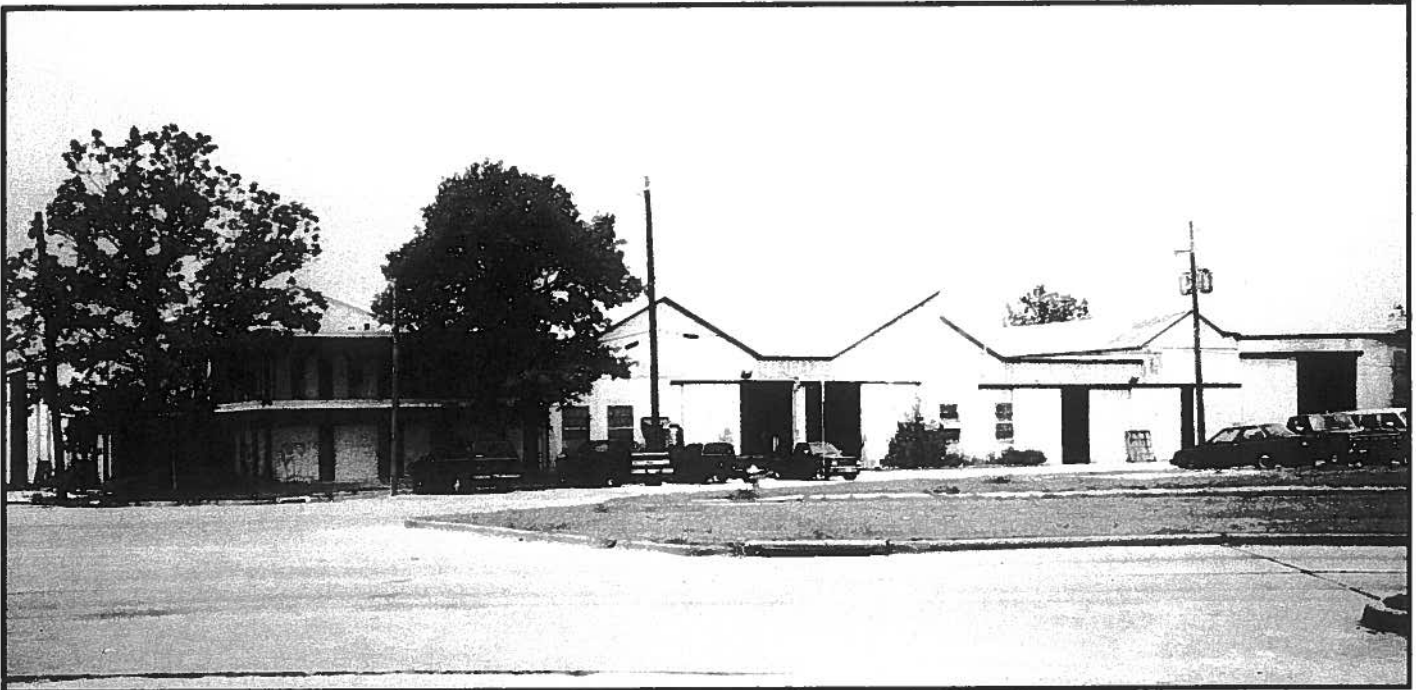
Model 420 & 620		420 - 7-1/2 HP MAXIMUM				620 - 10 HP MAXIMUM				WHEEL DIA. = 20.44"							
		1-3/16" SHAFT				TIP SPEED = 5.35 x RPM											
CFM	OUTLET VELOCITY FPM	1/8" SP RPM	SP BHP	1/2" SP RPM	SP BHP	1" SP RPM	SP BHP	1-1/2" SP RPM	SP BHP	2" SP RPM	SP BHP	2-1/2" SP RPM	SP BHP	3" SP RPM	SP BHP	4" SP RPM	SP BHP
2000	738	209	0.11	365	0.30	530	0.62	681	0.99	763	1.35	851	1.71	927	2.09	1058	2.95
2500	923	235	0.19	389	0.39	517	0.73	647	1.15	760	1.61	853	2.07	935	2.52	1076	3.42
3000	1108	263	0.29	381	0.52	517	0.90	633	1.32	741	1.79	844	2.37	932	2.92	1080	4.01
3500	1282	293	0.43	398	0.70	521	1.08	633	1.56	731	2.06	820	2.55	916	3.22	1075	4.53
4000	1477	325	0.61	419	0.91	532	1.33	635	1.82	731	2.38	817	2.94	897	3.51	1060	4.94
4500	1662	357	0.84	443	1.17	546	1.64	642	2.13	733	2.72	817	3.34	895	3.98	1036	5.25
5000	1847	391	1.13	469	1.50	564	2.01	654	2.54	738	3.08	819	3.77	895	4.47	1034	5.88
5500	2031	424	1.47	497	1.88	585	2.43	669	3.00	748	3.60	824	4.22	897	4.98	1033	6.52
6000	2216	458	1.88	525	2.34	609	2.91	687	3.54	761	4.17	833	4.82	902	5.52	1034	7.18
6500	2401	492	2.36	555	2.87	634	3.47	707	4.15	777	4.82	845	5.52	910	6.23	1037	7.88
7000	2585	527	2.92	586	3.46	660	4.13	729	4.83	796	5.56	860	6.29	923	7.05	1042	8.61
7500	2770	561	3.57	617	4.14	687	4.88	753	5.58	816	6.37	877	7.16	937	7.95	--	--
8000	2955	596	4.30	649	4.91	715	5.71	778	6.44	838	7.27	896	8.11	953	8.94	--	--
8500	3139	630	5.13	682	5.78	744	6.65	804	7.43	861	8.26	917	9.16	--	--	--	--
9000	3324	665	6.06	715	6.75	774	7.68	831	8.53	886	9.35	--	--	--	--	--	--
9500	3509	700	7.10	748	7.82	804	8.81	859	9.73	--	--	--	--	--	--	--	--
10000	3694	735	8.25	782	9.01	--	--	--	--	--	--	--	--	--	--	--	--

Model 422 & 622		422 - 7-1/2 HP MAXIMUM				622 - 10 HP MAXIMUM				WHEEL DIA. = 22.12"							
		1-3/16" SHAFT				TIP SPEED = 5.79 x RPM											
CFM	OUTLET VELOCITY FPM	1/8" SP RPM	SP BHP	1/2" SP RPM	SP BHP	1" SP RPM	SP BHP	1-1/2" SP RPM	SP BHP	2" SP RPM	SP BHP	2-1/2" SP RPM	SP BHP	3" SP RPM	SP BHP	4" SP RPM	SP BHP
3000	925	222	0.24	342	0.50	474	0.93	592	1.47	696	2.06	786	2.70	867	3.41	1007	4.87
3500	1080	244	0.34	354	0.64	471	1.08	583	1.65	683	2.27	774	2.95	856	3.69	1000	5.27
4000	1234	267	0.47	369	0.81	479	1.31	577	1.83	674	2.52	762	3.23	843	3.97	990	5.64
4500	1388	291	0.64	386	1.01	489	1.56	580	2.13	667	2.77	753	3.54	833	4.33	977	6.01
5000	1542	316	0.84	404	1.26	502	1.84	588	2.47	667	3.11	746	3.85	824	4.70	965	6.48
5500	1697	341	1.09	424	1.55	517	2.17	599	2.86	674	3.55	745	4.25	817	5.07	956	6.97
6000	1851	366	1.38	444	1.89	533	2.53	611	3.28	684	4.04	751	4.78	816	5.56	948	7.46
6500	2005	392	1.72	466	2.28	551	2.97	626	3.74	695	4.56	760	5.38	821	6.19	942	7.96
7000	2160	417	2.11	488	2.73	569	3.49	642	4.26	708	5.13	771	6.01	830	6.89	943	8.67
7500	2314	443	2.55	511	3.23	588	4.05	659	4.84	722	5.76	783	6.69	841	7.65	948	9.52
8000	2468	469	3.06	534	3.79	608	4.68	676	5.52	738	6.44	796	7.43	852	8.44	--	--
8500	2622	495	3.64	558	4.42	629	5.38	695	6.29	755	7.19	811	8.23	865	9.29	--	--
9000	2777	522	4.28	582	5.12	650	6.14	714	7.12	773	8.04	827	9.10	--	--	--	--
9500	2931	548	4.99	607	5.90	672	6.98	733	8.03	790	9.02	--	--	--	--	--	--
10000	3085	575	5.79	632	6.75	695	7.90	753	9.01	--	--	--	--	--	--	--	--
10500	3240	601	6.66	657	7.69	717	8.90	--	--	--	--	--	--	--	--	--	--
11000	3394	628	7.62	683	8.72	741	9.99	--	--	--	--	--	--	--	--	--	--
11500	3548	655	8.67	708	9.83	--	--	--	--	--	--	--	--	--	--	--	--
12000	3702	682	9.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Model 425 & 625		10 HP MAXIMUM				TIP SPEED = 6.61 x RPM				WHEEL DIA. = 25.25"							
		1-3/16" SHAFT															
CFM	OUTLET VELOCITY FPM	1/8" SP RPM	SP BHP	1/2" SP RPM	SP BHP	1" SP RPM	SP BHP	1-1/2" SP RPM	SP BHP	2" SP RPM	SP BHP	2-1/2" SP RPM	SP BHP	3" SP RPM	SP BHP	4" SP RPM	SP BHP
5000	1174	217	0.53	316	0.86	421	1.52	513	2.33	594	3.17	665	4.02	730	4.92	845	6.93
5500	1291	230	0.67	325	1.06	425	1.67	513	2.52	593	3.44	665	4.37	729	5.31	844	7.35
6000	1408	244	0.83	336	1.28	430	1.85	515	2.73	592	3.70	664	4.70	728	5.72	842	7.79
6500	1526	258	1.01	348	1.53	437	2.04	519	2.96	592	3.96	662	5.03	727	6.12	841	8.34
7000	1643	272	1.21	359	1.81	445	2.39	523	3.21	595	4.25	661	5.36	726	6.52	841	8.88
7500	1761	287	1.43	371	2.13	454	2.77	529	3.48	599	4.55	663	5.70	725	6.91	840	9.42
8000	1878	301	1.69	383	2.48	464	3.18	536	3.78	603	4.88	667	6.07	726	7.31	838	9.95
8500	1995	316	1.97	395	2.86	476	3.63	544	4.30	609	5.24	670	6.46	728	7.74	--	--
9000	2113	331	2.29	407	3.28	487	4.11	553	4.86	615	5.61	675	6.87	732	8.19	--	--
9500	2230	347	2.64	420	3.73	499	4.66	563	5.46	623	6.18	681	7.31	736	8.67	--	--
10000	2348	362	3.03	433	4.23	510	5.25	573	6.10	631	6.90	687	7.79	741	9.18	--	--
10500	2465	377	3.46	447	4.77	522	5.88	584	6.79	640	7.65	694	8.43	747	9.72	--	--
11000	2582	393	3.92	460	5.35	533	6.56	596	7.52	650	8.46	702	9.31	--	--	--	--
11500	2700	409	4.43	474	5.99	546	7.28	608	8.33	661	9.31	--	--	--	--	--	--
12000	2817	424	4.99	488	6.66	558	8.05	619	9.20	--	--	--	--	--	--	--	--
12500	2935	440	5.59	502	7.33	570	8.88	--	--	--	--	--	--	--	--	--	--
13000	3052	456	6.23	516	8.05	583	9.75	--	--	--	--	--	--	--	--	--	--
13500	3169	472	6.93	530	8.82	--	--	--	--	--	--	--	--	--	--	--	--
14000	3287	488	7.68	544	9.64	--	--	--	--	--	--	--	--	--	--	--	--
14500	3404	504	8.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15000	3522	520	9.34	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Power rating (BHP) does not include drive losses.  
600 Series performance shown is for installation Type B - Free Inlet, Ducted outlet.  
Performance ratings do not include the effects of appurtenances in the airstream.

SI CONVERSION FACTOR  
CFM x .472 = L/s     SP x .249 = kPa



*The Quietaire Corporation is located in the heart of Houston's industrial area. The plant is convenient to freeways, railroad and steamship facilities.*

Located in Houston, Texas, Quietaire is a manufacturer of quality ventilation equipment with 60 years of experience in ventilation and manufacturing. Quietaire knows the importance of quality performance and customer service. Manufacturing facilities are continually being improved as

modern technology and ingenuity demands. Modern computer assisted machinery and automated tooling assure close tolerances so that finished products operate as they are designed.

## Warranty

**Warranty and Disclaimer:** Quietaire Corporation extends this limited warranty to the original buyer and warrants that products manufactured by Quietaire shall be free from original defects in workmanship and materials for one year from date of shipment, provided same have been properly stored, installed service, maintained and operated. This warranty shall not apply to products which have been altered or repaired in any way so as to effect its performance, without Quietaire's express authorization, or altered or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. The Buyer assumes all risks and liability for results of; use of the products. Warranties on purchased parts, such as electric motor and controls are limited to the terms of warranty extended by our supplier.

**Limitation Of Remedy And Damages:** All claims under this warranty must be made in writing and delivered to Quietaire Corporation 505 North Hutcheson, Houston, Texas 77003 within 15 days after discovery of the defect and prior to the expiration of one year from the date of shipment by Quietaire of the product claimed defective, and Buyer shall be barred from any remedy if Buyer fails to make such claim within such period.

Within 30 days after receipt of a timely claim, Quietaire shall have the option either to inspect the product while in Buyer's possession or to request Buyer to return the product to Quietaire at Buyer's expense for inspection by Quietaire. Quietaire shall replace, or at its option repair, free of charge, any product it determines to be defective, and it shall ship the repaired or replacement product to Buyer F.O.B. point of shipment; provided, however, if circumstances are such as Quietaire judgment to prohibit repair or replacement to remedy the warranted defects, the buyer's sole and exclusive remedy shall be a refund to the buyer of any part of the invoice price, paid to Quietaire for the defective product or part.

Quietaire is not responsible for the cost of removal of the defective product or part, damages due to removal, or any expenses incurred in shipping the product or part to or from Quietaire plant, or the installation of the repaired or replaced product or part.

Implied warranties, when applicable, shall commence upon the same date as the express warranty provided above, and shall except for warranties of title, extend only for the duration of the express warranty provided above. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. The only remedy provided to you under an applicable implied warranty and the express warranty shall be the remedy provided under the express warranty, subject to the terms and conditions contained therein. Quietaire shall not be liable for incidental and consequential losses and damages under the express warranty, any applicable implied warranty, or claims for negligence, except to the extent that this limitation is found to be unenforceable under applicable state law. Some states do not allow exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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Quietaire assumes no obligation or liability on account of any recommendations, opinions, or advice as to the choice, installation or use of products. Any such recommendations, opinions or advice are given and shall be accepted at your own risk and shall not constitute any warranty or guarantee of such products or their performance.

**For Distributor Nearest You -**

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**CATALOG UB400**