



## BMA DIRECT FIRED SERIES PERFORMANCE SPECIFICATIONS

APPLICABLE TO NATURAL AND PROPANE FIRED UNITS

DESIGN AIR FLOW	MODEL NUMBER	BLOWER SIZE	DISCHARGE VELOCITY	**EXTERNAL STATIC PRESSURE (BURNER AND BLOWER ALREADY INCLUDED)						TEMPERATURE RISE							GAS CONNECTION				
				CFM	INCHES	FPM	BRAKE HORSEPOWER						MBH CAPACITY							INCHES	
							0.25"WC	0.50"WC	0.75"WC	1.00"WC	1.50"WC	2.00"WC	60DegF	70DegF	80DegF	90DegF		100DegF	110DegF		120DegF
1600	BMA109	12-9	1400	0.62	0.75	0.89*	0.97*	1.17*	1.38*	114	133	152	171	190	209	228	1/2				
1800	BMA109	12-9	1575	0.70	0.83	0.97	1.18*	1.37*	1.59*	128	150	171	192	214	235	257					
2000	BMA109	12-9	1750	0.78	0.93	1.08	1.23	1.63*	1.87*	143	166	190	214	238	261	285					
2500	BMA109	12-9	2187	1.06	1.20	1.37	1.56	1.94	2.31	178	208	238	267	297	327	356	3/4				
	BMA112	12-12	1715	0.88	1.03	1.19	1.36	1.69	2.09	178	208	238	267	297	327	356					
3000	BMA112	12-12	2057	1.16	1.32	1.49	1.67	2.04	2.44	214	249	285	321	356	392	428	1				
	BMA115	15-15	1492	0.80	1.32*	1.49*	1.67*	2.04*	2.44*	214	249	285	321	356	392	428					
3500	BMA112	12-12	2400	1.48	1.68	1.88	2.07	2.46	2.87	249	291	333	374	416	457	499					
	BMA115	15-15	1741	1.00	1.19	1.88*	2.07*	2.46*	2.87*	249	291	333	374	416	457	499					
4000	BMA112	12-12	2743	1.90	2.11	2.32	2.55	3.00	3.42	285	333	380	428	475	523	570					
	BMA115	15-15	1990	1.22	1.43	1.64	1.87	3.00*	3.42*	285	333	380	428	475	523	570					
4500	BMA115	15-15	2238	1.50	1.73	1.96	2.19	2.69	3.78*	321	374	428	481	535	588	642					
	BMA118	18-18	1567	1.33	1.59	1.96*	2.19*	2.69*	3.73*	321	374	428	481	535	588	642					
5000	BMA115	15-15	2487	1.83	2.07	2.32	2.57	3.10	3.66	356	416	475	535	594	653	713					
	BMA118	18-18	1742	1.56	1.85	2.14	2.45	3.10*	3.66*	356	416	475	535	594	653	713					
5500	BMA115	15-15	2736	2.22	2.48	2.75	3.02	3.58	4.16	392	457	523	588	653	719	784					
	BMA118	18-18	1916	1.82	2.13	2.44	2.76	3.58*	4.16*	392	457	523	588	653	719	784					
6000	BMA115	15-15	2985	2.69	2.96	3.25	3.54	4.14	4.76	428	499	570	642	713	784	855					
	BMA118	18-18	2090	2.11	2.45	2.78	3.13	3.83	4.76*	428	499	570	642	713	784	855					
	BMA120	20-20	1428	1.66	2.38*	2.72*	3.06*	3.76*	4.58*	428	499	570	642	713	784	855					
6500	BMA115	15-15	3233	3.32	3.51	3.81	4.12	4.76	5.42	463	541	618	695	772	849	927					
	BMA118	18-18	2264	2.45	2.80	3.16	3.53	4.28	5.05	463	541	618	695	772	849	927					
	BMA120	20-20	1547	1.86	2.24	3.09*	3.45*	4.20*	4.97*	463	541	618	695	772	849	927					
7000	BMA115	15-15	3482	4.14	4.19	4.43	4.75	5.43	6.12	499	582	665	748	832	915	998					
	BMA118	18-18	2439	2.83	3.21	3.59	3.98	4.78	5.59	499	582	665	748	832	915	998					
	BMA120	20-20	1666	2.08	2.47	3.48*	3.87*	4.66*	5.48*	499	582	665	748	832	915	998					
8000	BMA118	18-18	2787	3.68	4.11	4.55	4.98	5.87	6.77	570	665	760	855	950	1045	1140					
	BMA120	20-20	1904	2.58	3.00	3.44	3.90	5.71*	6.61*	570	665	760	855	950	1045	1140					
	BMA215	2-15-15	1990	2.40	2.81	3.23	4.55*	5.39*	6.24*	570	665	760	855	950	1045	1140					
9000	BMA118	18-18	3135	4.89	5.20	5.68	6.16	7.15	8.14	642	748	855	962	1069	1176	1283					
	BMA120	20-20	2142	3.19	3.64	4.10	4.59	5.61	7.92*	642	748	855	962	1069	1176	1283					
	BMA215	2-15-15	2238	2.95	3.40	3.86	4.33	6.56*	7.50*	642	748	855	962	1069	1176	1283					
10000	BMA118	18-18	3484	6.71	6.81	6.96	7.50	8.57	9.67	713	832	950	1069	1188	1307	1426					
	BMA120	20-20	2380	3.94	4.41	4.91	5.42	6.49	7.64	713	832	950	1069	1188	1307	1426					
	BMA215	2-15-15	2487	3.61	4.10	4.60	5.11	6.16	8.98*	713	832	950	1069	1188	1307	1426					
	BMA218	2-18-18	1742	3.13	3.70	4.54*	5.05*	6.09*	8.91*	713	832	950	1069	1188	1307	1426					
12000	BMA120	20-20	2857	5.99	6.32	6.88	7.45	8.63	9.88	855	998	1140	1283	1426	1568	1711					
	BMA122	22-22	2352	4.67	5.25	5.86	6.48	7.81	9.23	855	998	1140	1283	1426	1568	1711					
	BMA215	2-15-15	2985	5.29	5.83	6.40	6.98	8.18	9.41	855	998	1140	1283	1426	1568	1711					
	BMA218	2-18-18	2090	4.23	4.89	5.57	6.26	8.06*	9.29*	855	998	1140	1283	1426	1568	1711					
14000	BMA120	20-20	3333	9.23	9.35	9.50	10.14	11.45	12.81	998	1164	1331	1497	1663	1830	1996					
	BMA122	22-22	2745	6.65	7.20	7.88	8.56	10.00	11.51	998	1164	1331	1497	1663	1830	1996					
	BMA125	25-25	2086	4.39	5.09	5.83	6.61	9.85*	11.35*	998	1164	1331	1497	1663	1830	1996					
	BMA215	2-15-15	3482	8.29	8.48	8.85	9.50	10.85	12.24	998	1164	1331	1497	1663	1830	1996					
	BMA218	2-18-18	2439	5.65	6.42	7.19	7.97	9.55	11.96*	998	1164	1331	1497	1663	1830	1996					
17000	BMA122	22-22	3333	11.91	12.03	12.13	12.29	14.24	15.92	1212	1414	1616	1818	2020	2222	2424					
	BMA125	25-25	2533	6.37	7.16	7.97	8.82	10.61	12.52	1212	1414	1616	1818	2020	2222	2424					
	BMA218	2-18-18	2961	8.32	9.23	10.14	11.06	12.93	14.83	1212	1414	1616	1818	2020	2222	2424					
19000	BMA122	22-22	3725	16.59	16.98	17.34	17.70	18.06	19.88	1354	1580	1806	2031	2257	2483	2709					
20000	BMA125	25-25	2980	9.30	9.84	10.75	11.69	13.63	15.67	1426	1663	1901	2138	2376	2614	2851					
	BMA127	27-27	2478	6.91	7.74	8.59	9.49	11.44	15.46*	1426	1663	1901	2138	2376	2614	2851					
	BMA218	2-18-18	3484	13.42	13.67	13.93	14.99	17.15	19.33	1426	1663	1901	2138	2376	2614	2851					
	BMA220	2-20-20	2380	8.25	9.22	10.22	11.26	13.44	15.75	1426	1663	1901	2138	2376	2614	2851					



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DESIGN AIR FLOW CFM	MODEL NUMBER	BLOWER SIZE INCHES	DISCHARGE VELOCITY FPM	**EXTERNAL STATIC PRESSURE (BURNER AND BLOWER ALREADY INCLUDED)						TEMPERATURE RISE								GAS CONNECTION INCHES
				BRAKE HORSEPOWER						MBH CAPACITY								
				0.25"WC	0.50"WC	0.75"WC	1.00"WC	1.50"WC	2.00"WC	60DegF	70DegF	80DegF	90DegF	100DegF	110DegF	120DegF		
22000	BMA125	25-25	3278	12.36	12.76	13.16	14.17	16.23	18.39	1568	1830	2091	2352	2614	2875	3136	2 1/2	
	BMA127	27-27	2726	8.58	9.48	10.40	11.34	13.34	15.53	1568	1830	2091	2352	2614	2875	3136		
	BMA220	2-20-20	2619	9.90	10.93	11.99	13.08	15.36	17.76	1568	1830	2091	2352	2614	2875	3136		
	BMA222	2-22-22	2156	9.17	10.27	11.40	12.56	15.02	17.67*	1568	1830	2091	2352	2614	2875	3136		
25000	BMA125	25-25	3725	17.86	18.09	18.36	18.72	21.00	23.35	1782	2079	2376	2673	2970	3267	3564	3	
	BMA127	27-27	3097	12.30	12.51	13.53	14.56	16.86	18.94	1782	2079	2376	2673	2970	3267	3564		
	BMA130	30-30	2688	9.17	10.27	11.40	12.56	15.02	17.67	1782	2079	2376	2673	2970	3267	3564		
	BMA222	2-22-22	2450	11.09	12.32	13.59	14.90	17.67	20.63	1782	2079	2376	2673	2970	3267	3564		
28000	BMA127	27-27	3469	16.90	17.54	18.23	18.69	21.00	23.39	1996	2328	2661	2994	3326	3659	3992	3	
	BMA130	30-30	3010	11.88	12.90	14.13	15.38	17.98	20.73	1996	2328	2661	2994	3326	3659	3992		
	BMA133	33-33	2323	9.91	11.12	12.36	13.65	16.40	20.62*	1996	2328	2661	2994	3326	3659	3992		
	BMA222	2-22-22	2740	13.88	15.21	16.57	17.97	20.88	23.96	1996	2328	2661	2994	3326	3659	3992		
30000	BMA130	30-30	3225	14.64	15.01	16.31	17.63	20.34	23.19	2138	2495	2851	3208	3564	3920	4277	3	
	BMA133	33-33	2489	11.49	12.78	14.09	15.43	18.25	21.28	2138	2495	2851	3208	3564	3920	4277		
	BMA136	36-36	2343	10.53	11.78	13.06	14.38	17.22	21.16*	2138	2495	2851	3208	3564	3920	4277		
	BMA225	2-25-25	2235	9.92	11.37	12.89	14.48	17.88	25.23*	2138	2495	2851	3208	3564	3920	4277		
	BMA227	2-27-27	1858	8.21	9.69	12.89*	14.48*	17.88*	25.23*	2138	2495	2851	3208	3564	3920	4277		
32000	BMA130	30-30	3440	17.74	18.29	18.84	20.24	23.08	26.04	2281	2661	3041	3421	3802	4182	4562	3	
	BMA133	33-33	2655	13.30	14.67	16.05	17.46	20.37	23.48	2281	2661	3041	3421	3802	4182	4562		
	BMA136	36-36	2499	12.12	13.44	14.78	16.16	19.06	22.21	2281	2661	3041	3421	3802	4182	4562		
	BMA225	2-25-25	2384	11.46	12.99	14.57	16.22	19.73	29.38*	2281	2661	3041	3421	3802	4182	4562		
	BMA227	2-27-27	1982	9.24	10.73	14.38*	16.02*	19.51*	23.24*	2281	2661	3041	3421	3802	4182	4562		
35000	BMA130	30-30	3763	23.18	23.78	24.39	25.00	27.88	31.03	2495	2911	3326	3742	4158	4574	4990	3	
	BMA133	33-33	2904	17.24	17.90	19.41	20.92	24.01	27.24	2495	2911	3326	3742	4158	4574	4990		
	BMA136	36-36	2734	15.21	16.26	17.71	19.18	22.21	25.44	2495	2911	3326	3742	4158	4574	4990		
	BMA225	2-25-25	2608	14.57	16.22	17.92	19.68	23.38	27.32	2495	2911	3326	3742	4158	4574	4990		
	BMA227	2-27-27	2168	10.99	12.53	14.19	15.98	22.24*	26.11*	2495	2911	3326	3742	4158	4574	4990		
40000	BMA133	33-33	3319	25.70	26.39	27.08	27.09	31.36	34.87	2851	3326	3802	4277	4752	5227	5702	3	
	BMA136	36-36	3124	22.66	23.32	23.98	25.17	28.51	31.96	2851	3326	3802	4277	4752	5227	5702		
	BMA225	2-25-25	2980	18.95	20.77	22.62	24.52	28.46	32.61	2851	3326	3802	4277	4752	5227	5702		
	BMA227	2-27-27	2478	14.27	15.94	17.68	19.50	23.46	31.51*	2851	3326	3802	4277	4752	5227	5702		
45000	BMA136	36-36	3515	32.31	33.05	33.80	34.54	36.18	39.94	3208	3742	4277	4811	5346	5881	6415	3	
	BMA227	2-27-27	2788	18.35	20.20	22.06	23.98	28.04	32.47	3208	3742	4277	4811	5346	5881	6415		
	BMA230	2-30-30	2419	14.95	16.98	19.10	21.33	26.09	31.55	3208	3742	4277	4811	5346	5881	6415		
50000	BMA136	36-36	3906	44.29	45.12	45.95	46.78	47.61	49.43	3564	4158	4752	5346	5940	6534	7128	3	
	BMA227	2-27-27	3097	24.03	25.42	27.47	29.54	33.80	38.34	3564	4158	4752	5346	5940	6534	7128		
	BMA230	2-30-30	2688	18.78	20.98	23.25	25.60	30.56	35.90	3540	4130	4720	5310	5900	6490	7080		
55000	BMA227	2-27-27	3407	31.99	32.90	33.80	36.05	40.61	45.34	3920	4574	5227	5881	6534	7187	7841	3	
	BMA230	2-30-30	2956	23.27	25.66	28.09	30.58	35.78	41.31	3920	4574	5227	5881	6534	7187	7841		
60000	BMA230	2-30-30	3225	29.29	31.05	33.67	36.32	41.80	47.56	4277	4990	5702	6415	7128	7841	8554	3	
	BMA233	2-33-33	2489	22.77	25.35	27.96	30.64	36.26	45.80*	4277	4990	5702	6415	7128	7841	8554		
70000	BMA230	2-30-30	3763	46.36	47.57	48.78	49.63	55.76	62.05	4990	5821	6653	7484	8316	9148	9979	3	
	BMA233	2-33-33	2904	34.48	35.69	37.61	40.63	46.77	53.17	4990	5821	6653	7484	8316	9148	9979		
	BMA236	2-36-36	2734	30.43	31.94	34.83	37.76	43.80	50.21	4990	5821	6653	7484	8316	9148	9979		
75000	BMA233	2-33-33	3112	42.40	43.69	44.59	47.82	54.33	61.03	5346	6237	7128	8019	8910	9801	10692	3	
	BMA236	2-36-36	2929	37.39	38.63	40.62	43.73	50.07	56.70	5346	6237	7128	8019	8910	9801	10692		
80000	BMA233	2-33-33	3319	51.40	52.78	54.16	55.81	62.71	69.75	5702	6653	7603	8554	9504	10454	11405	3	
	BMA236	2-36-36	3124	45.33	46.64	47.97	50.35	57.03	63.92	5702	6653	7603	8554	9504	10454	11405		
90000	BMA236	2-36-36	3515	64.61	66.10	67.60	69.08	73.11	80.63	6415	7484	8554	9623	10692	11761	12830	3	
105000	BMA330	3-30-30	3763	69.62	71.76	73.38	75.06	80.78	86.18	7484	8732	9979	11227	12474	13721	14969	3	
140000	BMA336	3-36-36	3645	100.80	103.59	106.05	111.78	115.84	130.05	9979	11642	13306	14969	16632	18295	19958	3	

NOTES:

- THE AIR VOLUME CAPACITIES ARE BASED ON A 75 DEG. ROOM TEMPERATURE AT SEA LEVEL.
- THE INPUT CAPACITIES WERE BASED ON:
- MBH = (CFM X C X (LAT - EAT))/1000
- MBH - BTUH/1000
- CFM - MAXIMUM AIR CAPACITY (CUBIC FEET/MINUTE)
- C - 1.188 BASED ON AN AIR DENSITY AT 75 DEG. F
- EAT - ENTERING DRY BULB TEMPERATURE (DEG F)
- LAT - LEAVING DRY BULB TEMPERATURE (DEG F)
- BRAKE HORSEPOWER DATA IS BASED ON FORWARD CURVED DWDI FANS AND INCLUDES DRIVE LOSSES.
- \* INDICATES THAT SMALLER BLOWER(S) IS/ARE REQUIRED TO ACHIEVE THE BRAKE HORSEPOWER LISTED.
- \*\*ADD FOR ACCESSORY STATIC PRESSURE DROPS FOUND ON PAGE 6 AS REQUIRED.
- CONSULT THE FACTORY FOR:
- HIGHER AIR CAPACITIES OR SPECIAL APPLICATIONS.
- PERFORMANCE DATA AT HIGHER STATIC PRESSURES THAN LISTED.
- PERFORMANCE DATA AT ELEVATIONS OTHER THAN SEA LEVEL.