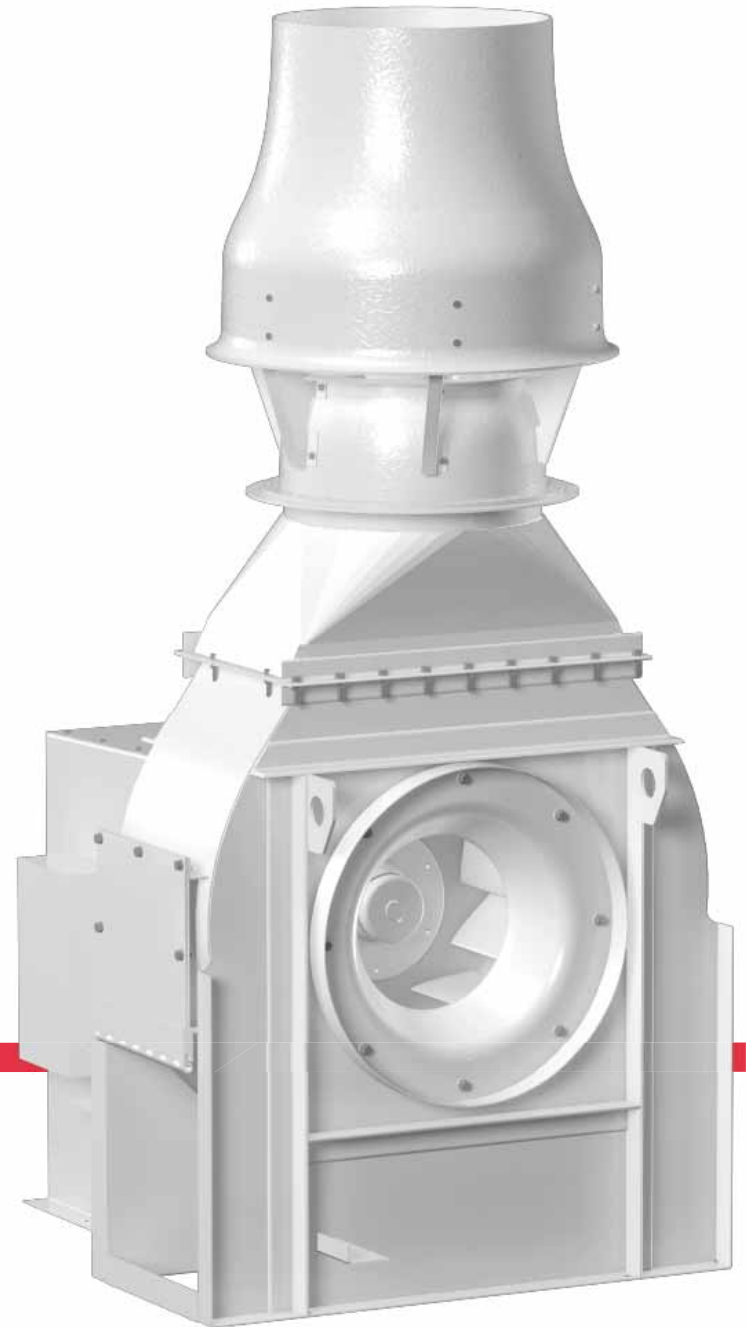




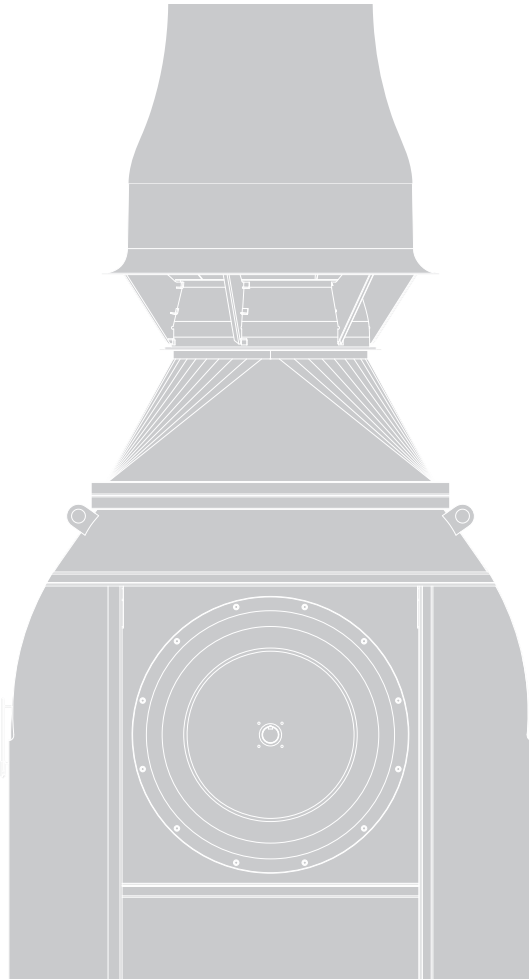
**Vari-Plume<sup>®</sup>  
Laboratory Exhaust**

CAVP Performance data



# CAVP

## Vari-Plume<sup>®</sup> Laboratory Exhaust Airfoil Centrifugal Fan Performance Data



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# CAVP Standard Features and Dimension Data

## Vari-Plume<sup>®</sup> Laboratory Exhaust Airfoil Centrifugal Belt Drive



### Standard Features

#### Fan Assembly

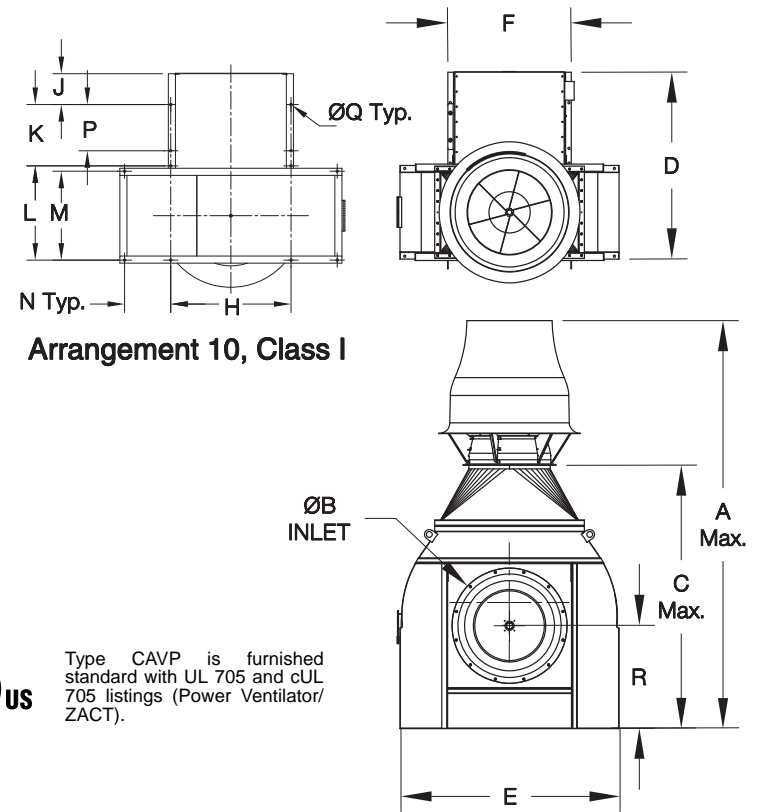
- Airfoil centrifugal wheel
- Minimum 12 gauge steel welded housing
- Concentric dilution nozzle
- Phenolic epoxy powder with UV protection (Light Gray)
- L50/200k regreasable bearings
- Hinged access door.
- Lifting lugs
- Fan drain
- Weather cover
- Stainless steel shaft
- Stainless steel hardware
- Stainless steel lube lines
- NEMA 3R disconnect mounted and pre-wired
- Minimum 1.5 Service Factor drives
- Designed to withstand 125 mph wind



Loren Cook Company certifies that the CAVP shown herein is 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.



Type CAVP is furnished standard with UL 705 and cUL 705 listings (Power Ventilator/ZACT).



Arrangement 10, Class I

### CAVP Dimension Data

Size	A	B	C	D	E	F	H	J	K	L	M	N	P	Q	R	Approx. Ship Wt.
120	71	16-1/8	43	32-13/16	26-11/16	21-1/2	19-1/2	6-1/2	11-7/8	13-13/32	-	-	-	11/16	22	358
135	73-11/16	17-5/8	45-11/16	34-5/16	29-13/16	21-1/2	19-1/2	6-1/2	12-1/4	14-17/32	-	-	-	11/16	22	376
150	78	19-1/8	46-3/4	35-7/16	32-7/8	21-1/2	19-1/2	6-1/2	12-1/4	15-21/32	-	-	-	11/16	22	419
165	82-1/16	21-3/16	50-13/16	37-5/8	36	26-1/8	24-1/8	7-1/2	12-1/4	16-27/32	-	-	-	11/16	24-1/4	485
180	84-1/16	22-11/16	52-13/16	42-1/8	39-1/16	26-1/8	24-1/8	8	15-1/8	17-31/32	-	-	-	11/16	24-1/4	618
195	96-3/4	24-3/16	54-1/4	43-5/16	42-3/16	27-1/2	25-1/2	8	15-1/8	19-3/16	17-3/16	6-11/32	-	11/16	24-1/4	790
210	99-1/4	25-15/16	56-3/4	44-15/16	45-1/4	28-1/8	26-1/8	8-1/2	15-1/8	20-5/16	18-5/16	7-9/16	-	13/16	24-1/4	849
225	106-11/16	27-7/16	59-3/16	46-1/16	48-5/16	29-5/8	27-5/8	8-1/2	15-1/8	21-7/16	19-7/16	8-11/32	-	13/16	24-1/4	913
245	112-1/4	29-7/16	64-3/4	49-7/8	52-7/16	31-5/8	29-5/8	9	16-7/8	23	21	9-13/32	-	13/16	27	1045
270	116-7/16	31-15/16	68-15/16	54-1/2	57-9/16	34-3/8	32-3/8	9-1/2	19-1/8	24-7/8	22-7/8	10-19/32	-	13/16	27	1213
300	122-7/16	34-15/16	74-15/16	57-5/16	63-3/4	37-3/8	35-3/8	10	19-1/8	27-3/16	25-3/16	12-3/16	-	13/16	30	1457
330	144-7/16	37-15/16	82-13/16	60-1/4	69-15/16	40-3/8	38-3/8	10-1/2	19-1/4	29-1/2	27-1/2	13-25/32	-	13/16	33	1808
365	153-13/16	41-7/16	92-3/16	66-7/8	77-5/16	44-7/8	42-7/8	11	22-3/4	32-1/8	30-1/8	15-7/32	18-1/4	13/16	36	2091
402	178-3/4	45-3/16	100-3/4	72-1/4	84-15/16	48-3/4	46-3/4	12-1/2	21-7/8	36-1/2	34-1/4	17-3/32	18-1/4	1-1/16	40	2937
445	190-7/8	49-7/16	112-7/8	80	93-11/16	52-3/4	50-3/4	13	25-7/8	39-3/4	37-1/2	19-15/32	18-1/4	1-1/16	44	3361
490	217-13/16	55	123-1/16	79-15/16	102-15/16	59-11/16	57-11/16	13-1/2	21-7/8	43-3/16	40-15/16	20-5/8	18-1/2	1-1/16	48	4242
540	231-5/16	60	136-9/16	88-1/4	113-3/16	64-11/16	62-11/16	14	25-7/8	47	44-3/4	23-1/4	18-1/2	1-1/16	53	4803
600	239-7/16	66	144-11/16	93-3/8	125-9/16	70-11/16	68-11/16	14-1/2	25-7/8	51-5/8	49-5/16	26-7/16	19-1/2	1-1/16	59	6077
660	270-1/4	72	160-1/4	102-1/2	137-15/16	76-11/16	74-11/16	15	29-7/8	56-1/4	53-15/16	29-5/8	19-1/2	1-1/16	65	7878
730	286-3/8	79	176-3/8	108-5/16	152-3/8	83-11/16	81-11/16	15-1/2	29-7/8	61-9/16	59-1/4	33-11/32	22-1/8	1-1/16	72	8792

ALL DIMENSIONS IN INCHES. WEIGHTS IN LBS., LESS MOTOR.

# CAVP Performance Data

## 120 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
120CAVP09H	1500	15.7	4673	2596	2463	2479	0.96	80/85	15.7	4673	2594	2462	3301	2.00	87/89	15.9	4673	2648	2513	4246	3.65	94/98	16.1	4673	2701	2563	5016	5.49	99/104
	1970	18.6	6137	3385	3212	3093	1.89	87/91	18.9	6137	3460	3283	3749	3.10	90/93	18.7	6137	3414	3240	4549	5.10	95/98							
	2440	21.7	7601	4194	3980	3735	3.33	91/97	22.0	7601	4275	4056	4276	4.76	93/98	21.8	7601	4238	4022	4951	6.97	97/100							
	2910	24.7	9065	5008	4752	4391	5.43	95/101	24.8	9065	5045	4787	4846	7.11	97/102														
	3380	27.8	10530	5824	5526	5055	8.30	99/105																					
120CAVP09L	1800	15.6	3777	2592	2459	2538	1.07	83/87	15.8	3777	2629	2495	3254	2.19	86/89	16.1	3777	2716	2578	4128	3.81	93/96	16.3	3777	2770	2628	4907	5.90	101/102
	2330	18.5	4889	3344	3173	3137	2.01	89/92	18.7	4889	3406	3232	3736	3.39	90/94	18.9	4889	3449	3272	4445	5.36	93/97							
	2860	21.4	6001	4125	3915	3758	3.43	93/97	21.6	6001	4170	3957	4282	5.08	94/99	21.5	6001	4156	3944	4866	7.52	96/101							
	3390	24.4	7113	4917	4666	4392	5.45	97/102	24.3	7113	4895	4645	4846	7.42	98/103														
	3920	27.3	8225	5711	5419	5032	8.18	101/106																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}$  and outlet  $L_{wO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

## 135 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
135CAVP09H	1500	16.1	4673	2637	2503	2106	0.88	80/84	16.3	4673	2705	2567	2856	1.96	89/91	16.2	4673	2676	2539	3627	3.54	97/98	16.4	4673	2739	2599	4289	5.20	102/104
	2120	20.3	6604	3767	3575	2767	2.05	87/92	20.2	6604	3755	3563	3352	3.38	92/95	20.5	6604	3824	3628	4038	5.54	98/101	20.7	6604	3875	3677	4621	7.76	103/106
	2740	24.4	8536	4873	4624	3459	4.07	93/99	24.2	8536	4810	4564	3948	5.76	95/100	24.4	8536	4876	4627	4513	8.11	100/104							
	3360	28.6	10467	5974	5668	4166	7.16	97/104	28.4	10467	5936	5633	4588	9.22	99/105														
	3980	32.7	12399	7075	6714	4884	11.6	102/109																					
135CAVP09L	1800	15.9	3777	2606	2473	2055	0.91	80/84	16.2	3777	2676	2539	2789	2.00	87/90	16.1	3777	2655	2520	3545	3.64	96/100	16.4	3777	2725	2586	4202	5.58	101/106
	2560	20.0	5371	3702	3513	2710	2.09	88/92	20.2	5371	3733	3542	3304	3.60	92/95	20.4	5371	3804	3610	3953	5.71	96/99	20.4	5371	3790	3597	4515	8.06	101/106
	3320	24.1	6966	4789	4544	3389	4.13	94/98	24.2	6966	4809	4563	3882	6.11	96/100	24.4	6966	4862	4614	4457	8.66	99/103							
	4080	28.2	8561	5877	5576	4085	7.26	99/104	28.3	8561	5903	5602	4513	9.67	101/105														
	4840	32.3	10155	6965	6609	4791	11.8	103/109																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}A$  and outlet  $L_{wO}A$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 150 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
150CAVP09H	1500	16.2	4673	2665	2529	1840	0.91	77/83	16.5	4673	2748	2607	2623	2.14	93/90	16.8	4673	2803	2660	3385	3.98	107/97	17.2	4673	2908	2760	4010	6.10	117/103	
	2190	20.7	6822	3858	3661	2423	2.21	84/90	20.6	6822	3838	3642	3053	3.88	92/94	21.2	6822	3999	3795	3746	6.32	104/100	21.3	6822	4029	3823	4319	8.87	113/105	
	2880	25.2	8972	5068	4809	3055	4.51	89/97	25.4	8972	5111	4849	3583	6.68	94/99	25.3	8972	5076	4817	4167	9.67	102/104								
	3570	29.8	11121	6285	5963	3708	8.15	94/103	29.9	11121	6323	5999	4147	10.8	97/104															
	4260	34.4	13271	7501	7117	4371	13.4	99/109																						
150CAVP09L	1800	16.2	3777	2655	2519	1695	0.82	76/82	16.8	3777	2820	2676	2501	2.14	88/88	17.0	3777	2869	2723	3276	4.00	111/97	17.7	3777	3042	2887	3912	6.21	125/103	
	2720	21.0	5707	3942	3740	2311	2.16	85/89	21.5	5707	4066	3858	2884	3.82	88/91	22.1	5707	4222	4006	3598	6.60	96/98	22.3	5707	4291	4072	4188	9.33	109/104	
	3640	25.8	7637	5229	4962	2972	4.62	91/96	26.4	7637	5367	5092	3415	6.74	93/97	26.7	7637	5460	5181	3975	9.87	96/101								
	4560	30.7	9568	6522	6188	3651	8.59	97/102	31.2	9568	6657	6317	4016	11.2	98/103															
	5480	35.6	11498	7821	7421	4341	14.4	102/107																						
150CAVP12H	2500	20.0	4202	2637	4659	2175	1.79	83/90	20.2	4202	2674	4726	2791	3.38	89/92	20.7	4202	2774	4902	3535	5.87	97/98	20.6	4202	2753	4864	4125	8.47	106/103	
	3240	23.8	5445	3386	5983	2703	3.46	89/97	24.1	5445	3433	6066	3193	5.39	92/98	24.3	5445	3475	6141	3812	8.39	96/100	24.7	5445	3564	6297	4392	11.6	102/105	
	3980	27.7	6689	4135	7307	3249	6.02	94/102	28.0	6689	4209	7437	3657	8.35	96/103	28.2	6689	4239	7491	4174	11.6	99/104								
	4720	31.5	7933	4886	8634	3804	9.68	98/107	32.0	7933	4984	8808	4155	12.4	100/108															
	5460	35.4	9176	5640	9966	4365	14.6	102/112																						
150CAVP12L	3200	19.7	3323	2582	4563	2266	2.02	87/90	19.9	3323	2608	4608	2776	3.72	90/91	20.2	3323	2685	4744	3407	6.28	94/96	20.5	3323	2743	4846	4000	9.32	98/102	
	4070	23.4	4226	3292	5818	2780	3.70	92/96	23.5	4226	3327	5879	3221	5.85	95/97	23.5	4226	3329	5883	3724	8.81	97/98	24.0	4226	3409	6025	4222	12.1	100/101	
	4940	27.1	5129	4024	7111	3307	6.21	97/101	27.0	5129	4012	7090	3697	8.81	99/102	27.1	5129	4034	7128	4129	12.3	101/103								
	5810	30.9	6033	4768	8425	3841	9.70	101/105	30.5	6033	4694	8295	4190	12.8	102/106															
	6680	34.7	6936	5513	9743	4380	14.4	105/109																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{WA}$  and outlet  $L_{WO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

## CAVP Performance Data

## 165 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
165CAVP09H	1500	16.5	4673	2650	2514	1644	0.96	78/83	16.8	4673	2730	2591	2344	2.22	88/91	17.0	4673	2774	2632	3024	4.10	95/97	17.0	4673	2771	2630	3570	6.31	100/102	
	2220	21.4	6916	3950	3748	2193	2.45	85/93	21.4	6916	3944	3743	2756	4.16	92/96	21.7	6916	4019	3814	3365	6.69	98/101	22.0	6916	4102	3893	3876	9.33	102/105	
	2940	26.2	9159	5238	4970	2770	5.08	90/99	26.1	9159	5194	4929	3246	7.37	96/102	26.2	9159	5229	4962	3772	10.4	101/105								
	3660	31.0	11402	6522	6189	3366	9.24	95/105	30.9	11402	6486	6154	3779	12.2	99/107															
	4380	35.8	13645	7805	7406	3972	15.3	99/110																						
165CAVP09L	1800	16.4	3777	2618	2484	1474	0.83	73/80	16.8	3777	2734	2594	2232	2.21	84/87	17.5	3777	2920	2771	2941	4.30	90/93	18.0	3777	3053	2897	3502	6.64	95/98	
	2870	22.2	6022	4167	3954	2048	2.41	83/89	22.6	6022	4262	4044	2613	4.39	88/91	23.0	6022	4370	4147	3264	7.30	93/97	22.9	6022	4354	4131	3785	10.4	97/101	
	3940	27.9	8267	5690	5399	2673	5.49	91/96	27.9	8267	5698	5407	3119	8.04	93/97	28.6	8267	5861	5562	3646	11.8	96/100								
	5010	33.6	10512	7205	6837	3322	10.6	96/102	33.8	10512	7259	6888	3687	13.8	98/103															
	6080	39.3	12757	8720	8275	3981	18.5	101/108																						
165CAVP12H	2400	20.1	4034	2581	4562	1781	1.56	79/88	20.0	4034	2565	4533	2422	3.28	89/92	20.3	4034	2631	4649	3091	5.72	94/96	20.8	4034	2725	4816	3626	8.40	99/100	
	3310	25.1	5563	3557	6286	2299	3.46	87/97	25.0	5563	3547	6268	2801	5.62	91/97	24.9	5563	3530	6238	3395	8.91	98/100	25.0	5563	3550	6274	3905	12.2	101/104	
	4220	29.9	7092	4509	7968	2841	6.60	93/102	30.0	7092	4515	7978	3250	9.26	94/103	30.1	7092	4548	8037	3758	13.2	99/105								
	5130	34.8	8622	5462	9651	3394	11.3	97/108	35.1	8622	5526	9765	3745	14.6	98/108															
	6040	39.7	10151	6415	11335	3954	18.0	101/113																						
165CAVP12L	3100	19.9	3219	2552	4509	1734	1.60	81/86	20.5	3219	2660	4701	2300	3.36	87/89	20.3	3219	2621	4631	2956	6.16	91/93	21.2	3219	2794	4937	3537	9.30	95/98	
	4320	25.0	4486	3546	6267	2267	3.60	90/94	25.4	4486	3617	6392	2709	5.94	93/95	25.8	4486	3711	6559	3235	9.30	95/97	25.5	4486	3638	6429	3713	13.0	97/100	
	5540	30.3	5752	4585	8103	2825	6.97	96/100	30.3	5752	4584	8100	3195	9.94	97/102	30.7	5752	4660	8234	3620	14.0	100/102								
	6760	35.7	7019	5636	9959	3394	12.1	100/106	35.2	7019	5550	9807	3707	15.7	101/107															
	7980	41.1	8286	6691	11823	3971	19.4	105/110																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}$  and outlet  $L_{wO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 180 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
180CAVP09H	1500	16.7	4673	2645	2509	1522	1.02	79/85	17.0	4673	2725	2586	2164	2.42	89/93	17.1	4673	2752	2612	2794	4.59	96/101	17.2	4673	2791	2648	3312	7.13	101/106
	2130	20.9	6636	3764	3571	1972	2.34	86/93	21.0	6636	3808	3613	2497	4.14	92/98	21.3	6636	3870	3672	3065	6.89	98/103							
	2760	25.1	8598	4880	4631	2445	4.58	91/99	25.0	8598	4875	4625	2883	6.82	95/101	25.4	8598	4961	4708	3394	10.1	100/105							
	3390	29.2	10561	5993	5687	2930	8.00	96/104	29.2	10561	5976	5670	3314	10.8	99/106														
	4020	33.4	12523	7104	6741	3423	12.9	100/109																					
180CAVP09L	1800	16.6	3777	2621	2487	1361	0.88	76/82	16.8	3777	2673	2537	2046	2.33	87/92	17.2	3777	2794	2651	2696	4.50	95/100	17.6	3777	2898	2750	3221	7.13	99/105
	2800	22.1	5875	4085	3876	1841	2.38	84/90	22.1	5875	4086	3878	2396	4.44	91/95	22.2	5875	4125	3914	2972	7.43	97/101	22.5	5875	4212	3997	3452	10.6	101/106
	3800	27.5	7973	5536	5253	2361	5.16	90/97	27.5	7973	5543	5259	2809	7.85	95/99	27.6	7973	5557	5273	3329	11.8	100/104							
	4800	33.0	10071	7006	6648	2897	9.66	95/102	33.1	10071	7016	6657	3281	13.2	99/104														
	5800	38.5	12170	8481	8047	3444	16.3	99/107																					
180CAVP12H	2300	19.8	3866	2501	4420	1596	1.49	80/89	20.0	3866	2533	4475	2223	3.30	89/94	20.5	3866	2631	4650	2842	6.01	95/100	21.2	3866	2764	4884	3365	9.29	100/104
	3170	24.7	5328	3459	6113	2037	3.24	85/97	24.7	5328	3446	6090	2561	5.64	92/99	24.9	5328	3500	6185	3115	8.99	98/103							
	4040	29.6	6790	4409	7791	2495	6.08	91/103	29.5	6790	4391	7760	2933	9.03	95/104	29.5	6790	4396	7767	3441	13.2	101/106							
	4910	34.4	8252	5357	9467	2962	10.3	95/107	34.4	8252	5343	9442	3343	13.9	98/108														
	5780	39.3	9714	6305	11142	3436	16.2	99/112																					
180CAVP12L	3000	20.3	3115	2589	4575	1491	1.41	80/87	20.3	3115	2590	4576	2088	3.30	87/91	20.2	3115	2585	4568	2728	6.24	101/99	20.5	3115	2640	4666	3242	9.51	113/106
	4230	25.9	4392	3692	6523	1961	3.23	87/94	25.8	4392	3667	6480	2382	5.53	91/95	25.7	4392	3652	6454	2950	9.28	96/99	25.9	4392	3699	6537	3437	13.4	104/105
	5460	31.6	5669	4808	8496	2448	6.30	94/100	31.1	5669	4705	8314	2787	9.17	95/100	31.3	5669	4752	8396	3223	13.4	97/102							
	6690	37.3	6946	5927	10474	2945	11.0	99/105	36.7	6946	5792	10236	3241	14.5	100/105														
	7920	43.1	8223	7045	12449	3449	17.7	103/110																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}$  and outlet  $L_{wO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.



# CAVP Performance Data

## 195 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
195CAVP09H	1500	16.5	4673	2572	2441	1357	1.00	78/83	17.2	4673	2758	2617	1957	2.50	88/91	17.9	4673	2948	2797	2525	4.85	96/100	18.8	4673	3176	3014	3001	7.64	102/107
	2150	20.5	6698	3626	3441	1761	2.31	85/92	20.9	6698	3750	3558	2254	4.23	92/96	21.7	6698	3944	3742	2779	7.19	99/104							
	2800	24.5	8723	4707	4466	2191	4.57	91/99	24.9	8723	4819	4573	2600	6.95	96/102	25.3	8723	4926	4674	3070	10.4	102/107							
	3450	28.6	10748	5801	5505	2635	8.06	96/105	28.9	10748	5869	5569	2984	10.9	100/107														
	4100	32.7	12773	6900	6547	3087	13.1	101/110																					
195CAVP09L	1800	16.6	3777	2592	2459	1222	0.89	77/80	17.1	3777	2732	2592	1854	2.40	87/89	17.2	3777	2750	2609	2443	4.75	95/98	17.6	3777	2864	2718	2915	7.47	101/105
	2810	22.2	5896	4087	3878	1641	2.39	83/89	22.3	5896	4109	3899	2162	4.47	90/94	22.6	5896	4193	3979	2693	7.65	97/102							
	3820	27.8	8015	5580	5295	2099	5.20	88/96	27.5	8015	5505	5224	2529	8.03	95/100	27.9	8015	5609	5322	3007	11.8	100/105							
	4830	33.4	10134	7078	6717	2578	9.78	94/103	33.1	10134	7007	6649	2943	13.4	100/106														
	5840	39.0	12253	8576	8137	3068	16.6	99/109																					
195CAVP12H	2400	20.4	4034	2590	4576	1462	1.64	80/89	20.3	4034	2566	4534	2021	3.51	89/93	20.6	4034	2627	4642	2577	6.29	96/100	20.9	4034	2685	4745	3031	9.45	102/105
	3280	25.1	5513	3513	6208	1849	3.51	86/97	25.0	5513	3494	6174	2323	5.99	93/99	25.0	5513	3501	6186	2823	9.42	99/104							
	4160	29.9	6992	4454	7871	2255	6.52	91/104	30.1	6992	4488	7931	2661	9.57	97/106	29.8	6992	4439	7844	3113	13.9	101/108							
	5040	34.8	8471	5406	9554	2673	11.0	95/110	34.9	8471	5432	9599	3026	14.7	101/111														
	5920	39.7	9950	6362	11243	3098	17.2	99/115																					
195CAVP12L	3000	20.2	3115	2562	4527	1277	1.36	77/83	20.1	3115	2526	4464	1869	3.42	86/90	20.9	3115	2694	4761	2469	6.40	95/99	21.1	3115	2730	4824	2927	9.68	100/105
	4440	26.7	4610	3830	6768	1706	3.36	84/92	26.6	4610	3797	6710	2159	6.07	90/95	26.4	4610	3775	6670	2678	10.3	97/101							
	5880	32.9	6105	5042	8910	2163	6.97	90/100	32.8	6105	5017	8866	2521	10.4	93/101	33.0	6105	5056	8935	2966	15.4	100/105							
	7320	39.1	7600	6251	11046	2634	12.7	97/106	39.4	7600	6304	11139	2935	16.9	99/107														
	8760	45.3	9096	7461	13185	3112	21.1	102/112																					
195CAVP15H	4200	24.4	3827	2574	6989	1479	2.27	83/87	24.5	3827	2588	7027	1964	4.68	86/90	25.2	3827	2708	7350	2525	8.57	94/99	25.5	3827	2744	7450	3006	12.6	102/106
	5590	29.6	5094	3400	9230	1862	4.58	88/93	29.9	5094	3444	9350	2256	7.63	91/96	30.1	5094	3473	9429	2719	12.1	95/100							
	6980	34.9	6360	4234	11494	2266	8.26	93/100	35.4	6360	4312	11705	2596	12.0	96/101	35.1	6360	4269	11590	2979	17.1	99/104							
	8370	40.2	7627	5070	13764	2677	13.6	99/105	40.6	7627	5131	13929	2950	18.0	100/106														
	9760	45.5	8894	5909	16040	3095	21.1	103/110																					
195CAVP15L	4900	24.9	3192	2648	7188	1507	2.47	85/89	24.3	3192	2563	6958	1951	5.07	86/91	24.7	3192	2623	7122	2477	9.02	92/98	24.3	3192	2555	6937	2938	13.6	97/103
	6500	30.4	4235	3516	9545	1892	4.90	90/94	29.6	4235	3395	9216	2263	8.27	92/97	29.8	4235	3432	9316	2691	13.0	95/101	30.3	4235	3504	9512	3093	18.2	98/105
	8100	35.8	5277	4370	11864	2293	8.70	96/101	35.5	5277	4327	11747	2622	12.9	98/103	34.7	5277	4196	11390	2971	18.5	100/105							
	9700	41.2	6319	5222	14177	2702	14.2	101/106	41.3	6319	5240	14225	2990	19.3	102/108														
	11300	46.6	7362	6076	16496	3117	21.8	105/110																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>WA</sub> and outlet L<sub>WOA</sub> sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 210 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
210CAVP12H	2500	20.5	4202	2566	4534	1396	1.96	81/90	20.7	4202	2618	4626	1916	4.24	91/94	21.1	4202	2681	4737	2437	7.82	99/100	21.3	4202	2727	4820	2861	11.7	105/105
	3390	25.0	5697	3454	6104	1759	4.11	88/98	25.2	5697	3498	6181	2196	7.03	95/101	25.6	5697	3559	6289	2670	11.3	102/105							
	4280	29.7	7193	4363	7710	2141	7.59	93/105	29.9	7193	4410	7792	2517	11.2	100/107	30.0	7193	4434	7835	2934	16.2	105/110							
	5170	34.4	8689	5280	9331	2535	12.7	99/111	34.5	8689	5300	9365	2859	17.0	104/112														
	6060	39.0	10185	6198	10952	2933	19.9	103/116																					
210CAVP12L	3100	20.7	3219	2617	4625	1187	1.53	75/83	20.7	3219	2617	4625	1757	3.92	87/91	21.5	3219	2774	4901	2309	7.60	96/107	21.4	3219	2753	4865	2746	11.7	102/120
	4670	27.2	4849	3891	6875	1590	3.89	83/92	27.3	4849	3891	6876	2039	7.22	89/95	27.4	4849	3928	6940	2531	12.1	97/103	28.0	4849	4041	7142	2940	17.3	103/112
	6240	33.8	6479	5175	9144	2025	8.22	89/100	34.3	6479	5271	9315	2385	12.4	92/101	34.0	6479	5220	9224	2812	18.6	99/105							
	7810	40.5	8109	6487	11463	2476	15.2	95/107	40.9	8109	6559	11591	2775	20.3	98/108														
	9380	47.3	9739	7806	13795	2935	25.4	101/112																					
210CAVP15H	4000	24.5	3645	2565	6962	1253	1.97	77/82	24.7	3645	2587	7023	1783	4.74	85/88	25.3	3645	2679	7272	2325	8.97	95/96	25.8	3645	2769	7516	2764	13.5	103/101
	5700	31.2	5194	3617	9818	1639	4.58	85/91	31.7	5194	3692	10023	2051	8.06	88/93	31.6	5194	3686	10007	2527	13.5	95/98	32.0	5194	3740	10152	2934	19.4	102/103
	7400	37.9	6743	4681	12706	2056	9.06	90/98	38.4	6743	4759	12920	2381	13.3	93/99	38.6	6743	4789	13001	2785	19.8	98/102							
	9100	44.7	8292	5748	15604	2485	16.0	96/105	45.1	8292	5807	15764	2744	21.1	98/105														
	10800	51.5	9841	6817	18506	2921	26.0	102/110																					
210CAVP15L	4800	24.6	3127	2570	6976	1269	2.18	80/84	24.4	3127	2551	6925	1740	4.95	84/87	25.2	3127	2663	7230	2279	9.56	92/95	25.5	3127	2710	7357	2725	14.6	98/101
	6800	31.2	4430	3611	9803	1669	5.02	88/92	31.6	4430	3683	9998	2027	8.60	89/94	31.2	4430	3613	9809	2462	14.0	93/97	32.0	4430	3743	10162	2868	20.5	99/102
	8800	37.8	5733	4661	12653	2089	9.81	93/99	38.2	5733	4725	12826	2386	14.4	95/101	38.5	5733	4769	12946	2733	20.8	98/103							
	10800	44.5	7036	5713	15508	2519	17.1	99/105	44.8	7036	5763	15644	2771	22.9	101/107														
	12800	51.2	8339	6766	18368	2956	27.7	105/111																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}$  and outlet  $L_{wO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 225 CAVP

Model	Fan Inlet CFM	1.00 SP							3.00 SP							5.00 SP							8.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
225CAVP12H	2400	20.8	4034	2583	4564	1268	1.91	81/89	20.8	4034	2597	4589	1615	3.46	88/92	20.9	4034	2599	4592	1889	5.14	93/95	20.8	4034	2580	4560	2237	7.97	98/100
	3010	24.2	5059	3256	5754	1504	3.28	86/95	24.1	5059	3239	5724	1803	5.09	91/97	24.2	5059	3258	5757	2059	7.11	95/99							
	3620	27.6	6084	3924	6934	1749	5.25	90/100	27.4	6084	3888	6870	2004	7.33	94/101	27.5	6084	3903	6898	2244	9.63	97/103							
	4230	31.0	7109	4583	8099	1997	7.91	93/105	30.9	7109	4554	8048	2223	10.3	97/106														
	4840	34.4	8134	5240	9260	2249	11.4	97/109																					
225CAVP12L	3100	20.9	3219	2599	4592	1092	1.56	75/83	20.9	3219	2611	4613	1481	3.22	85/88	21.1	3219	2641	4666	1774	4.99	97/93	21.0	3219	2634	4654	2137	7.95	116/101
	4250	25.6	4413	3535	6247	1353	3.12	80/90	26.0	4413	3600	6361	1680	5.30	87/93	25.7	4413	3554	6281	1949	7.54	94/96							
	5400	30.6	5607	4499	7951	1641	5.70	85/96	30.7	5607	4524	7994	1898	8.20	88/97	30.9	5607	4568	8072	2153	11.1	93/100							
	6550	35.5	6801	5461	9651	1935	9.48	89/102	35.4	6801	5447	9626	2150	12.4	91/102														
	7700	40.4	7995	6426	11355	2235	14.7	93/106																					
225CAVP15H	3900	24.4	3554	2506	6804	1122	1.88	76/82	24.7	3554	2550	6924	1478	3.69	82/87	24.6	3554	2550	6922	1784	5.75	86/93	24.6	3554	2536	6884	2147	9.06	91/99
	5210	29.9	4748	3385	9188	1395	3.70	82/88	30.0	4748	3386	9193	1671	5.87	85/90	30.1	4748	3409	9254	1930	8.35	88/94							
	6520	35.3	5941	4236	11498	1679	6.55	86/94	35.0	5941	4190	11374	1899	9.06	88/95	35.4	5941	4247	11530	2125	12.0	91/97							
	7830	40.6	7135	5072	13768	1969	10.7	90/99	40.6	7135	5062	13743	2162	13.6	92/100														
	9140	45.9	8329	5906	16033	2263	16.3	94/103																					
225CAVP15L	4800	25.0	3127	2610	7085	1141	2.11	78/83	24.8	3127	2568	6971	1451	3.96	82/86	24.7	3127	2557	6941	1732	6.17	87/90	26.2	3127	2797	7594	2123	9.89	91/95
	6300	29.9	4104	3384	9186	1394	3.95	84/88	30.3	4104	3448	9359	1655	6.23	86/90	29.9	4104	3379	9174	1886	8.73	88/92	29.6	4104	3338	9060	2208	13.0	92/97
	7800	34.9	5081	4166	11309	1660	6.72	88/94	35.4	5081	4253	11546	1893	9.55	89/95	35.5	5081	4265	11580	2087	12.4	91/96							
	9300	39.9	6059	4958	13461	1936	10.7	92/98	40.4	6059	5029	13653	2140	14.1	93/99														
	10800	45.0	7036	5754	15621	2216	16.0	96/103																					
225CAVP18H	5800	28.4	2720	2544	10021	1303	3.20	82/86	28.8	2720	2594	10217	1571	5.28	84/88	28.8	2720	2593	10216	1824	7.68	87/91	28.7	2720	2585	10184	2157	11.8	91/96
	7100	32.7	3330	3103	12224	1531	5.24	87/91	33.0	3330	3137	12357	1766	7.72	88/92	33.4	3330	3186	12552	1977	10.4	89/94							
	8400	37.0	3940	3659	14415	1767	8.09	90/95	37.3	3940	3694	14552	1978	11.0	91/96	37.5	3940	3728	14686	2161	14.0	92/98							
	9700	41.3	4550	4216	16607	2007	11.9	93/99	41.6	4550	4258	16772	2197	15.3	94/100														
	11000	45.5	5159	4772	18800	2250	16.8	96/103																					
225CAVP18L	7000	29.2	2931	2648	10432	1369	3.79	85/89	28.5	2931	2554	10061	1624	6.13	86/91	28.3	2931	2525	9945	1841	8.61	88/93	28.9	2931	2609	10276	2159	12.9	92/96
	8300	33.1	3475	3158	12440	1571	5.72	89/93	32.1	3475	3023	11907	1805	8.51	90/94	32.1	3475	3028	11928	2000	11.4	90/96	31.9	3475	2994	11793	2270	15.9	94/98
	9600	36.9	4019	3651	14382	1779	8.26	93/97	36.0	4019	3526	13889	1992	11.5	93/98	35.8	4019	3499	13784	2174	14.8	94/99							
	10900	40.7	4563	4139	16305	1990	11.5	95/100	40.2	4563	4075	16052	2185	15.3	97/101														
	12200	44.4	5108	4627	18226	2204	15.6	98/103																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wA}$  and outlet  $L_{wO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 245 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							4.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
245CAVP12H	2400	21.2	4034	2571	4544	1162	2.00	82/90	21.2	4034	2577	4554	1472	3.59	89/93	21.5	4034	2643	4670	1845	6.43	96/98	22.2	4034	2778	4910	2258	10.9	102/103	
	3140	25.2	5277	3357	5933	1422	3.79	88/97	25.4	5277	3394	5997	1693	5.77	93/99	25.2	5277	3361	5939	2012	9.03	98/101								
	3880	29.2	6521	4146	7327	1694	6.54	93/102	29.3	6521	4164	7358	1921	8.90	96/103	29.5	6521	4191	7407	2226	12.7	101/105								
	4620	33.3	7765	4939	8729	1972	10.4	97/107	33.3	7765	4944	8736	2172	13.3	100/108															
	5360	37.3	9008	5735	10133	2255	15.8	101/111																						
245CAVP12L	3000	21.0	3115	2535	4479	987	1.56	76/83	21.2	3115	2570	4542	1336	3.20	86/89	21.6	3115	2651	4685	1732	6.08	94/95	22.2	3115	2772	4899	2147	10.5	100/101	
	4430	27.1	4600	3734	6598	1278	3.67	83/92	27.2	4600	3747	6621	1571	6.01	90/94	27.4	4600	3788	6694	1918	9.64	96/99								
	5860	33.3	6085	4953	8752	1594	7.38	88/99	33.3	6085	4951	8749	1838	10.4	93/100	33.4	6085	4960	8766	2153	15.1	99/103								
	7290	39.7	7569	6200	10955	1924	13.2	92/105	39.5	7569	6147	10863	2132	16.9	97/106															
	8720	46.2	9054	7457	13177	2261	21.6	96/109																						
245CAVP15H	3900	25.0	3554	2532	6875	1015	1.96	74/83	25.1	3554	2546	6911	1361	3.93	88/88	25.7	3554	2650	7194	1755	7.18	112/94	26.5	3554	2766	7509	2163	12.0	129/100	
	5500	31.5	5012	3553	9647	1282	4.20	80/89	31.6	5012	3582	9723	1572	6.83	86/91	31.7	5012	3591	9748	1923	11.1	100/97								
	7100	38.0	6470	4585	12446	1573	7.94	86/95	38.1	6470	4606	12504	1813	11.3	89/97	38.2	6470	4623	12550	2129	16.5	95/100								
	8700	44.6	7928	5624	15267	1877	13.7	90/100	44.6	7928	5625	15271	2076	17.6	92/102															
	10300	51.2	9386	6664	18091	2188	21.8	94/105																						
245CAVP15L	4700	25.3	3062	2578	6999	965	1.90	73/81	25.3	3062	2574	6986	1310	4.02	82/87	25.7	3062	2646	7184	1713	7.58	91/94	26.7	3062	2795	7588	2132	12.8	99/101	
	6800	32.5	4430	3712	10078	1245	4.33	81/88	32.5	4430	3721	10101	1516	7.04	85/90	32.6	4430	3732	10132	1866	11.7	91/95	32.8	4430	3766	10223	2258	18.4	98/102	
	8900	39.6	5798	4831	13115	1552	8.54	87/94	39.9	5798	4889	13272	1765	11.8	89/95	39.9	5798	4886	13263	2067	17.5	93/98								
	11000	46.7	7166	5956	16168	1872	15.1	92/100	47.1	7166	6015	16330	2046	19.1	93/100															
	13100	53.8	8534	7083	19230	2197	24.5	96/105																						
245CAVP18H	6000	28.9	2814	2543	10017	1116	3.11	78/86	29.2	2814	2582	10173	1414	5.55	83/88	29.4	2814	2609	10278	1795	9.91	90/93	29.8	2814	2663	10490	2201	16.0	96/98	
	7900	35.1	3705	3358	13227	1384	6.09	85/91	35.3	3705	3378	13307	1620	9.02	87/92	35.3	3705	3385	13335	1942	14.1	91/96								
	9800	41.2	4597	4155	16366	1665	10.7	89/96	41.2	4597	4152	16354	1854	14.1	91/97	41.8	4597	4228	16657	2138	20.0	93/100								
	11700	47.3	5488	4951	19502	1954	17.4	93/101	47.5	5488	4969	19573	2114	21.4	95/102															
	13600	53.5	6379	5747	22639	2246	26.4	98/106																						
245CAVP18L	6800	28.8	2847	2533	9979	1098	3.06	79/86	28.8	2847	2526	9951	1367	5.46	83/88	28.9	2847	2539	10003	1724	9.71	88/92	28.9	2847	2542	10015	2151	16.6	95/99	
	9000	35.3	3768	3378	13306	1368	5.96	86/92	34.9	3768	3334	13132	1587	9.01	87/93	35.1	3768	3348	13187	1879	13.9	90/95	35.2	3768	3364	13253	2238	21.5	95/100	
	11200	41.7	4689	4219	16619	1652	10.4	91/97	41.3	4689	4165	16407	1834	14.2	92/98	41.2	4689	4150	16348	2085	20.0	94/100								
	13400	48.2	5610	5057	19920	1943	16.9	95/102	47.8	5610	5012	19743	2098	21.4	96/103															
	15600	54.6	6531	5893	23215	2237	25.7	99/106																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{w/A}$  and outlet  $L_{w/oA}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 270 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							4.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
270CAVP12H	2500	21.3	4202	2529	4469	1088	2.52	83/90	21.7	4202	2607	4606	1505	5.80	92/95	21.9	4202	2639	4663	1922	11.2	99/100	22.3	4202	2713	4795	2266	17.4	104/105	
	3370	25.8	5664	3398	6005	1361	5.08	89/98	25.9	5664	3425	6053	1711	9.16	96/100	26.5	5664	3539	6254	2092	15.3	101/104								
	4240	30.2	7126	4268	7542	1649	9.20	94/104	30.3	7126	4296	7591	1951	14.2	99/105															
	5110	34.6	8588	5137	9078	1944	15.3	99/109	34.8	8588	5169	9135	2210	21.2	103/110															
	5980	39.1	10050	6008	10616	2245	23.7	103/114																						
270CAVP12L	3000	21.3	3115	2521	4455	899	1.73	77/83	21.8	3115	2633	4652	1366	4.82	89/91	22.2	3115	2698	4767	1797	9.90	97/98	23.0	3115	2855	5045	2149	16.0	102/103	
	4670	28.4	4849	3913	6914	1209	4.54	85/93	28.5	4849	3943	6968	1586	8.84	93/96	29.1	4849	4047	7152	1981	15.2	99/102								
	6340	35.6	6583	5322	9404	1546	9.83	92/101	35.6	6583	5319	9400	1857	15.4	97/103	35.8	6583	5358	9467	2204	23.4	102/106								
	8010	42.8	8317	6725	11883	1897	18.5	98/107	42.6	8317	6701	11841	2160	25.3	101/108															
	9680	49.9	10051	8127	14360	2256	31.5	103/112																						
270CAVP15H	4000	25.5	3645	2553	6930	943	2.30	77/83	26.3	3645	2688	7296	1391	5.88	90/92	26.7	3645	2751	7469	1815	11.4	98/99	27.2	3645	2822	7660	2160	17.9	103/104	
	5900	33.1	5376	3753	10188	1229	5.49	83/91	33.2	5376	3778	10257	1603	10.3	93/96	34.3	5376	3943	10703	1991	17.5	100/102								
	7800	40.7	7108	4962	13471	1537	11.1	88/98	40.8	7108	4977	13511	1857	17.4	97/101	41.1	7108	5021	13631	2201	26.2	102/106								
	9700	48.6	8839	6199	16828	1859	19.8	92/103	48.5	8839	6190	16803	2134	27.8	100/106															
	11600	56.5	10570	7443	20205	2188	32.6	97/108																						
270CAVP15L	4600	25.4	2997	2543	6903	856	1.95	70/79	26.1	2997	2644	7178	1334	5.68	83/88	26.8	2997	2761	7495	1775	11.4	91/94	27.4	2997	2849	7735	2125	17.8	96/99	
	7400	35.1	4821	4064	11034	1170	5.45	80/88	35.0	4821	4062	11027	1542	10.7	87/91	35.9	4821	4195	11389	1950	18.7	93/98								
	10200	44.8	6645	5594	15187	1523	12.4	88/96	45.0	6645	5631	15287	1814	19.0	91/97	44.7	6645	5590	15175	2158	29.2	96/101								
	13000	54.5	8469	7132	19360	1891	24.0	93/102	54.6	8469	7150	19411	2125	32.0	95/103															
	15800	64.3	10293	8670	23538	2267	41.7	99/108																						
270CAVP18H	5900	29.1	2767	2524	9942	978	3.09	75/83	29.4	2767	2558	10077	1415	7.58	88/92	29.7	2767	2601	10245	1836	14.2	100/106	30.1	2767	2650	10438	2174	21.4	108/116	
	8400	37.2	3940	3581	14105	1264	7.09	83/92	37.1	3940	3567	14053	1616	12.9	89/93	37.6	3940	3639	14337	2005	21.6	98/102								
	10900	45.3	5113	4636	18262	1573	13.9	89/98	45.5	5113	4661	18362	1862	21.0	92/99	45.2	5113	4629	18237	2197	31.5	97/101								
	13400	53.4	6285	5695	22436	1895	24.6	94/104	53.6	6285	5726	22555	2131	32.8	96/105															
	15900	61.5	7458	6756	26613	2221	39.8	98/109																						
270CAVP18L	7000	29.3	2931	2552	10054	937	3.06	76/82	29.1	2931	2531	9971	1349	7.58	83/88	30.4	2931	2701	10641	1797	14.9	91/93	31.5	2931	2837	11175	2140	22.8	96/98	
	10200	38.4	4270	3739	14730	1244	7.33	85/92	38.7	4270	3783	14901	1555	13.1	88/93	38.2	4270	3716	14637	1924	22.2	93/96	38.3	4270	3721	14657	2257	32.6	97/100	
	13400	47.4	5610	4915	19362	1569	14.8	91/99	47.2	5610	4887	19253	1821	22.3	93/100	48.0	5610	4994	19674	2125	32.7	96/101								
	16600	56.4	6950	6090	23990	1905	26.5	96/105	56.2	6950	6064	23889	2116	35.8	98/105															
	19800	65.5	8289	7266	28622	2246	43.5	101/110																						
270CAVP21H	8000	32.7	3802	2620	13104	1065	4.48	80/86	32.3	3802	2570	12852	1436	9.46	86/89	32.3	3802	2573	12867	1857	17.6	94/100	32.8	3802	2626	13134	2197	26.4	99/107	
	10700	40.3	5086	3507	17537	1342	9.14	87/93	40.3	5086	3508	17544	1639	15.3	90/94	39.5	5086	3413	17067	1991	24.7	94/99								
	13400	48.1	6369	4413	22071	1632	16.5	92/99	48.0	6369	4402	22017	1880	24.1	94/100	47.7	6369	4366	21835	2179	34.9	97/101								
	16100	56.0	7652	5324	26625	1929	27.4	97/104	55.5	7652	5273	26372	2140	36.3	98/104															
	18800	63.8	8935	6235	31184	2231	42.5	101/108																						
270CAVP21L	9300	32.3	3387	2568	12843	1055	4.64	81/86	32.6	3387	2611	13058	1426	9.98	87/91	31.8	3387	2518	12594	1817	18.1	93/92	32.1	3387	2555	12779	2170	27.6	98/96	
	12400	39.9	4516	3454	17273	1335	9.39	89/94	39.9	4516	3458	17295	1628	16.1	91/96	39.9	4516	3457	17287	1969	25.8	94/99	39.5	4516	3409	17049	2263	36.4	99/100	
	15500	47.2	5645	4308	21544	1621	16.7	94/100	46.6	5645	4239	21199	1850	24.8	95/101	48.0	5645	4402	22015	2172	36.8	98/103								
	18600	54.5	6773	5158	25797	1914	27.5	98/105	54.3	6773	5136	25686	2111	37.2	100/105															
	21700	61.9	7902	6010	30055	2210	42.2	102/109																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>WA</sub> and outlet L<sub>WOA</sub> sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 300 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
300CAVP12H	2500	22.4	4202	2642	4668	991	3.05	84/91	22.8	4202	2716	4800	1374	7.30	94/97	23.6	4202	2878	5086	1757	14.2	101/102	23.9	4202	2932	5180	2062	22.4	105/106	
	3400	27.2	5714	3581	6327	1242	6.36	91/99	27.4	5714	3628	6411	1567	11.6	97/102	27.8	5714	3705	6547	1916	19.7	103/106								
	4300	31.9	7227	4508	7967	1508	11.5	96/105	32.1	7227	4551	8041	1794	17.7	101/107															
	5200	36.7	8739	5437	9607	1784	19.2	101/110	37.0	8739	5495	9710	2036	26.6	104/112															
	6100	41.4	10252	6366	11250	2065	29.9	105/115																						
300CAVP12L	3100	22.2	3219	2603	4599	823	2.11	79/84	22.9	3219	2734	4831	1246	6.10	90/93	23.0	3219	2771	4897	1641	12.7	98/102	24.0	3219	2951	5214	1961	20.6	102/106	
	4800	29.6	4984	4052	7159	1100	5.53	87/94	29.5	4984	4043	7144	1447	10.8	95/99	30.2	4984	4173	7374	1807	19.1	101/104								
	6500	37.1	6749	5516	9748	1408	11.9	94/102	36.7	6749	5433	9601	1689	18.5	99/105	36.8	6749	5464	9655	2006	28.5	104/108								
	8200	44.4	8514	6940	12264	1724	22.2	99/108	43.9	8514	6845	12096	1955	30.4	103/110															
	9900	51.6	10279	8358	14770	2046	37.4	104/113																						
300CAVP15H	4000	26.1	3645	2571	6981	839	2.56	79/83	27.0	3645	2719	7380	1254	6.84	91/93	27.0	3645	2714	7367	1648	14.0	99/99	27.8	3645	2840	7709	1964	22.3	104/103	
	6100	34.4	5559	3886	10549	1121	6.52	86/93	34.7	5559	3932	10675	1450	12.4	94/98	35.9	5559	4113	11165	1811	21.2	101/103								
	8200	43.0	7472	5234	14209	1424	13.8	92/100	43.2	7472	5266	14295	1703	21.5	98/103	43.3	7472	5283	14342	2005	32.3	103/107								
	10300	51.5	9386	6585	17877	1739	25.6	97/106	51.4	9386	6567	17828	1981	35.2	102/109															
	12400	60.1	11299	7937	21547	2060	43.0	102/111																						
300CAVP15L	4700	26.0	3062	2552	6929	760	2.20	73/80	26.3	3062	2609	7083	1189	6.64	90/92	27.7	3062	2829	7679	1590	13.8	99/101	28.1	3062	2889	7843	1912	22.1	104/107	
	7700	36.4	5016	4199	11399	1055	6.36	81/90	36.2	5016	4173	11328	1388	12.6	92/96	36.8	5016	4256	11555	1745	22.2	100/103	37.1	5016	4310	11700	2036	32.6	105/108	
	10700	46.4	6971	5782	15696	1372	14.5	88/98	46.9	6971	5848	15875	1639	22.6	94/101	46.6	6971	5803	15752	1950	34.6	101/106								
	13700	56.6	8925	7377	20026	1702	28.3	94/104	57.3	8925	7497	20351	1937	38.7	97/106															
	16700	66.7	10879	8976	24367	2040	49.2	98/109																						
300CAVP18H	5800	29.7	2720	2537	9995	845	3.16	75/83	30.6	2720	2659	10473	1252	8.22	90/93	31.0	2720	2711	10680	1631	16.1	99/102	31.8	2720	2808	11062	1945	25.2	105/107	
	8600	39.2	4034	3778	14881	1120	7.78	83/92	39.5	4034	3821	15052	1436	14.4	92/97	40.4	4034	3938	15512	1796	24.7	100/104	40.6	4034	3962	15609	2078	35.7	105/109	
	11400	48.8	5347	5022	19783	1414	16.0	90/100	48.5	5347	4987	19646	1670	24.3	94/101	49.4	5347	5108	20121	1980	36.9	101/106								
	14200	58.3	6660	6261	24665	1719	29.2	95/106	57.9	6660	6214	24478	1938	39.4	97/106															
	17000	67.7	7974	7499	29539	2029	48.4	99/110																						
300CAVP18L	7000	29.7	2931	2534	9984	791	2.97	73/81	30.2	2931	2600	10243	1191	8.21	89/91	31.5	2931	2772	10921	1596	16.7	103/103	32.0	2931	2836	11171	1912	26.0	112/110	
	10900	40.7	4563	3974	15655	1089	8.23	83/92	40.6	4563	3964	15614	1391	15.1	89/95	40.8	4563	3979	15676	1722	25.9	98/101	42.3	4563	4184	16481	2028	38.3	106/108	
	14800	51.5	6196	5382	21200	1413	18.3	91/100	51.3	6196	5360	21114	1636	26.6	93/101	51.5	6196	5379	21189	1932	40.1	98/103								
	18700	62.3	7829	6788	26740	1749	34.8	97/107	62.5	7829	6808	26819	1929	45.2	98/107															
	22600	73.1	9462	8194	32278	2089	59.6	102/112																						
300CAVP21H	6300	28.8	2994	2584	10180	769	2.59	72/76	28.9	2994	2587	10191	1189	7.48	86/87	29.8	2994	2721	10721	1588	15.3	90/105	29.8	2994	2729	10749	1909	24.1	94/119	
	10100	39.9	4800	4224	16639	1064	7.41	82/87	39.2	4800	4115	16211	1377	14.0	89/90	39.0	4800	4090	16114	1722	24.3	94/100	39.8	4800	4197	16534	2032	35.9	97/109	
	13900	50.7	6606	5819	22921	1393	17.0	90/95	49.9	6606	5700	22453	1630	25.2	93/95	49.6	6606	5646	22240	1925	38.0	97/98								
	17700	61.5	8413	7402	29160	1734	33.0	96/102	61.2	8413	7361	28996	1923	43.1	97/101															
	21500	72.2	10219	8985	35393	2080	57.2	101/107																						
300CAVP21L	7900	30.3	2877	2805	11050	789	3.06	75/78	29.9	2877	2736	10778	1171	8.23	85/87	28.4	2877	2526	9951	1566	16.7	96/93	29.9	2877	2743	10806	1896	26.4	102/97	
	12200	41.1	4443	4388	17287	1090	8.31	85/89	40.6	4443	4323	17030	1362	15.0	89/90	40.4	4443	4298	16929	1695	25.8	95/94	38.8	4443	4062	16001	1977	37.8	101/98	
	16500	51.9	6009	5987	23586	1413	18.1	93/97	51.1	6009	5865	23104	1624	26.8	94/96	51.0	6009	5851	23048	1887	39.4	96/98								
	20800	62.7	7575	7586	29884	1746	34.3	98/102	61.8	7575	7443	29320	1920	45.1	99/102															
	25100	73.5	9141	9181	36165	2083	58.2	103/107																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>WA</sub> and outlet L<sub>WO</sub>A sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 330 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
330CAVP15H	4100	26.7	3736	2556	6938	769	2.85	80/86	26.8	3736	2585	7018	1147	7.98	93/93	27.1	3736	2628	7134	1509	16.4	100/100	27.8	3736	2736	7428	1807	26.4	106/105	
	6200	34.9	5650	3863	10488	1023	7.05	88/93	34.8	5650	3848	10446	1327	13.9	96/97	35.1	5650	3892	10567	1653	24.4	102/102								
	8300	43.1	7563	5158	14002	1294	14.6	94/99	43.2	7563	5173	14044	1550	23.4	100/102	43.1	7563	5150	13980	1832	36.0	105/106								
	10400	51.4	9477	6457	17529	1576	26.9	99/105	51.6	9477	6488	17613	1799	37.7	104/107															
	12500	59.6	11391	7757	21058	1863	44.9	104/111																						
330CAVP15L	4800	26.5	3127	2533	6877	704	2.47	75/83	26.5	3127	2524	6852	1096	7.59	96/92	26.9	3127	2589	7028	1467	16.0	110/99								
	7900	36.6	5147	4129	11208	964	7.00	82/91	36.8	5147	4158	11289	1282	14.2	96/96	36.9	5147	4177	11338	1609	25.2	106/102	36.8	5147	4158	11288	1879	37.6	114/106	
	11000	47.0	7166	5770	15663	1252	15.9	90/97	47.1	7166	5777	15683	1519	25.6	97/101	47.1	7166	5786	15706	1801	39.3	106/106								
	14100	57.4	9186	7401	20091	1556	31.0	95/103	57.1	9186	7360	19981	1778	43.1	100/106															
	17200	67.7	11205	9031	24517	1867	54.0	100/109																						
330CAVP18H	5800	30.2	2720	2515	9909	775	3.46	77/86	30.4	2720	2540	10007	1143	9.15	91/92	30.4	2720	2542	10013	1502	18.5	99/99	31.0	2720	2622	10328	1790	29.2	105/105	
	8700	39.7	4081	3750	14773	1018	8.42	84/92	39.9	4081	3784	14906	1328	16.3	94/96	40.2	4081	3822	15056	1644	27.8	101/102								
	11600	49.4	5441	5015	19756	1287	17.5	91/99	49.5	5441	5031	19817	1551	27.7	97/101	49.6	5441	5054	19908	1827	41.9	103/105								
	14500	59.2	6801	6298	24808	1569	32.2	96/105	58.9	6801	6265	24680	1785	44.1	100/106															
	17400	69.0	8161	7581	29864	1856	53.7	101/111																						
330CAVP18L	7100	30.4	2972	2545	10027	718	3.19	74/84	31.3	2972	2658	10471	1106	9.25	92/91	31.6	2972	2699	10630	1470	18.8	109/101	32.1	2972	2766	10895	1758	29.9	118/108	
	11300	42.1	4731	4075	16054	976	8.74	82/92	41.7	4731	4019	15833	1280	17.1	91/95	43.2	4731	4212	16591	1615	30.1	100/100	43.1	4731	4203	16558	1877	43.8	110/107	
	15500	53.9	6489	5608	22090	1264	19.5	91/100	53.5	6489	5557	21890	1510	30.3	94/101	53.1	6489	5507	21694	1786	46.0	100/104								
	19700	65.6	8248	7132	28093	1566	37.7	96/107	65.2	8248	7085	27909	1764	50.6	98/107															
	23900	77.3	10006	8654	34092	1873	64.9	101/112																						
330CAVP21H	7800	33.3	3707	2558	12792	789	4.20	76/84	33.3	3707	2559	12799	1154	10.6	91/90	33.5	3707	2578	12894	1504	20.6	99/97	33.3	3707	2556	12784	1788	31.9	105/102	
	11400	43.7	5418	3761	18810	1032	9.96	84/92	43.3	5418	3720	18604	1327	18.6	92/95	43.5	5418	3736	18683	1649	31.4	99/100								
	15000	54.0	7129	4962	24814	1297	20.3	91/99	53.6	7129	4917	24591	1539	31.0	95/100	53.3	7129	4877	24389	1820	46.8	101/104								
	18600	64.3	8840	6158	30797	1572	36.6	96/105	63.9	8840	6111	30561	1774	49.2	99/106															
	22200	74.6	10551	7353	36773	1853	60.3	101/110																						
330CAVP21L	9200	33.5	3350	2575	12879	750	4.01	76/84	33.0	3350	2523	12618	1108	10.5	87/90	33.7	3350	2597	12990	1482	21.2	96/99	33.7	3350	2600	13004	1765	33.0	102/106	
	13800	45.3	5025	3954	19776	1009	10.2	85/93	44.7	5025	3878	19392	1285	18.8	91/94	44.1	5025	3808	19044	1593	32.0	97/99	44.1	5025	3808	19045	1869	47.1	102/106	
	18400	56.5	6701	5256	26286	1293	21.6	93/100	55.6	6701	5151	25759	1501	32.2	95/100	55.9	6701	5177	25891	1771	48.3	99/103								
	23000	67.7	8376	6555	32780	1585	40.0	98/106	67.8	8376	6562	32818	1750	52.6	99/106															
	27600	78.9	10051	7853	39275	1881	66.9	103/111																						
330CAVP24H	10900	38.3	3602	2562	18110	814	5.42	78/87	37.8	3602	2517	17789	1149	12.8	88/90	38.9	3602	2629	18581	1500	24.6	96/97	38.9	3602	2623	18541	1785	37.8	102/103	
	15400	49.2	5089	3629	25649	1067	12.4	87/93	48.6	5089	3571	25243	1317	21.6	91/95	48.4	5089	3555	25132	1624	36.1	97/99	48.6	5089	3569	25227	1878	51.8	102/104	
	19900	60.1	6576	4692	33168	1336	24.5	94/100	59.8	6576	4668	32998	1530	35.6	96/100	59.1	6576	4602	32528	1786	52.4	99/103								
	24400	70.9	8063	5754	40676	1612	43.1	98/105	70.8	8063	5745	40607	1769	56.2	100/106															
	28900	81.8	9551	6818	48195	1892	69.7	103/110																						
330CAVP24L	12300	38.8	3190	2614	18478	826	5.73	80/87	38.4	3190	2574	18192	1128	13.0	86/89	38.1	3190	2547	18002	1466	25.0	96/97	40.6	3190	2794	19750	1759	38.9	101/103	
	17200	49.4	4461	3648	25783	1078	12.7	88/94	48.8	4461	3591	25383	1305	22.0	91/95	48.9	4461	3597	25428	1589	36.3	95/98	47.9	4461	3502	24757	1841	52.4	101/103	
	22100	59.7	5731	4662	32951	1343	24.5	95/100	59.9	5731	4678	33067	1531	36.3	97/101	59.1	5731	4603	32540	1753	52.5	99/103								
	27000	70.1	7002	5676	40122	1614	42.4	100/106	70.8	7002	5747	40625	1773	56.7	101/107															
	31900	80.5	8273	6692	47300	1887	67.7	104/111																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{WA}$  and outlet  $L_{WO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 365 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
365CAVP15H	4000	27.4	3645	2552	6929	690	2.94	80/83	27.6	3645	2575	6991	1027	8.25	92/91	28.6	3645	2735	7426	1359	16.8	101/100	29.3	3645	2847	7729	1620	26.9	106/105	
	6100	35.5	5559	3826	10387	918	7.38	87/92	36.5	5559	3991	10833	1195	14.4	96/97	36.1	5559	3927	10660	1482	25.4	104/104	36.5	5559	3992	10836	1732	37.8	107/107	
	8200	43.9	7472	5146	13971	1166	15.5	94/100	44.3	7472	5222	14175	1402	24.8	101/104	45.3	7472	5382	14610	1652	37.5	106/107								
	10300	52.2	9386	6465	17552	1426	28.8	101/107	52.3	9386	6473	17573	1626	40.0	105/109															
	12400	60.6	11299	7784	21131	1692	48.3	105/112																						
365CAVP15L	4800	27.4	3127	2555	6936	640	2.59	76/81	27.9	3127	2627	7132	991	7.97	90/90	27.7	3127	2593	7038	1320	16.7	100/99	28.2	3127	2681	7278	1588	27.2	106/105	
	7900	37.6	5147	4156	11282	882	7.46	85/90	37.6	5147	4162	11299	1170	15.0	94/96	39.7	5147	4485	12176	1461	26.5	103/103	38.2	5147	4248	11531	1695	39.3	107/107	
	11000	48.0	7166	5802	15749	1149	17.1	92/99	48.4	7166	5860	15907	1384	27.0	99/102	48.0	7166	5807	15764	1644	41.3	105/107								
	14100	58.5	9186	7465	20266	1430	33.5	99/107	58.4	9186	7435	20185	1627	46.0	103/108															
	17200	69.1	11205	9128	24781	1718	58.6	103/112																						
365CAVP18H	5900	31.3	2767	2555	10064	708	3.69	79/84	31.6	2767	2596	10226	1035	9.74	91/92	33.0	2767	2787	10978	1354	19.4	100/101	34.2	2767	2934	11558	1609	30.2	105/106	
	8800	41.0	4128	3827	15077	936	9.16	87/91	40.6	4128	3772	14860	1204	17.1	95/97	41.1	4128	3836	15112	1486	29.4	103/104	42.2	4128	3977	15668	1728	43.2	106/108	
	11700	50.8	5488	5105	20111	1182	19.1	93/99	50.5	5488	5066	19955	1409	29.0	100/103	50.0	5488	5000	19696	1654	43.8	105/107								
	14600	60.6	6848	6386	25154	1437	34.8	98/106	60.3	6848	6335	24957	1630	47.0	103/108															
	17500	70.5	8208	7665	30196	1697	57.9	102/110																						
365CAVP18L	7100	31.3	2972	2559	10080	646	3.32	75/82	32.1	2972	2661	10483	1001	9.53	89/90	31.9	2972	2642	10407	1317	19.4	99/99	33.9	2972	2897	11412	1581	31.0	105/106	
	11600	44.4	4856	4264	16797	880	9.60	83/92	43.3	4856	4118	16221	1171	18.4	92/96	45.5	4856	4416	17394	1469	31.8	101/104	44.5	4856	4286	16885	1710	46.6	105/107	
	16100	57.4	6740	5964	23494	1151	22.2	90/101	56.3	6740	5819	22922	1380	34.0	96/103	55.5	6740	5720	22534	1642	50.4	102/107								
	20600	70.1	8624	7623	30028	1432	43.4	97/108	69.2	8624	7503	29557	1612	58.1	99/108															
	25100	82.8	10508	9277	36547	1720	75.8	101/113																						
365CAVP21H	8400	33.8	3992	2525	12630	731	5.07	78/85	34.2	3992	2569	12846	1066	12.1	90/93	34.6	3992	2612	13064	1373	23.3	100/101	34.9	3992	2650	13251	1620	35.7	106/106	
	12200	44.9	5798	3813	19068	961	12.2	85/94	44.0	5798	3702	18516	1236	21.6	93/98	44.2	5798	3726	18634	1520	35.5	102/105								
	16000	55.4	7605	5027	25142	1206	24.7	92/101	53.4	7605	4799	24000	1420	36.6	96/103	53.9	7605	4863	24323	1688	53.6	103/107								
	19800	65.6	9411	6224	31128	1459	44.2	97/108	64.3	9411	6070	30356	1636	58.8	100/108															
	23600	75.9	11217	7417	37094	1717	72.6	101/112																						
365CAVP21L	9400	34.2	3423	2573	12868	661	4.20	76/83	34.9	3423	2651	13259	1014	11.3	89/89	36.2	3423	2796	13984	1339	22.4	101/97	36.1	3423	2793	13966	1591	35.0	108/102	
	14700	48.0	5353	4172	20867	902	11.5	84/93	46.1	5353	3952	19762	1161	21.3	89/95	47.2	5353	4085	20430	1471	36.6	99/101	48.2	5353	4190	20956	1714	52.3	105/104	
	20000	60.7	7283	5645	28230	1169	25.6	92/101	59.5	7283	5505	27533	1375	38.3	95/102	58.3	7283	5366	26836	1616	56.8	99/104								
	25300	73.3	9213	7112	35569	1447	48.9	99/108	73.7	9213	7154	35780	1610	64.3	100/108															
	30600	85.9	11143	8580	42912	1729	83.9	103/113																						
365CAVP24H	11400	40.3	3767	2682	18961	722	5.89	78/85	39.6	3767	2612	18465	1038	14.0	86/90	39.5	3767	2603	18400	1359	26.2	95/98								
	16600	53.2	5486	3951	27925	955	14.4	86/94	52.1	5486	3840	27146	1197	25.0	90/95	51.2	5486	3751	26517	1476	41.0	98/101	54.1	5486	4032	28501	1736	58.6	102/105	
	21800	65.4	7204	5139	36323	1207	29.6	93/102	65.1	7204	5106	36089	1403	42.8	96/102	63.6	7204	4966	35102	1630	61.9	99/104								
	27000	77.6	8923	6329	44739	1467	53.5	99/108	78.8	8923	6444	45552	1625	69.3	101/108															
	32200	89.8	10641	7523	53179	1730	88.2	103/113																						
365CAVP24L	14000	41.7	3631	2820	19936	743	7.09	80/86	40.5	3631	2707	19131	1027	15.8	86/89	39.5	3631	2608	18435	1348	29.3	94/97	41.6	3631	2812	19875	1611	44.1	99/103	
	19800	53.7	5135	3991	28210	977	16.4	88/94	53.1	5135	3940	27851	1190	27.5	91/95	52.0	5135	3828	27057	1452	44.5	96/100	49.9	5135	3625	25624	1677	63.4	100/104	
	25600	65.3	6639	5133	36286	1224	32.5	95/101	65.4	6639	5134	36293	1394	46.4	97/102	64.8	6639	5085	35942	1608	66.1	100/103								
	31400	77.0	8143	6277	44372	1477	57.2	101/108	77.7	8143	6341	44824	1618	73.9	102/107															
	37200	88.7	9647	7421	52454	1733	92.6	105/112																						
365CAVP27H	15100	44.4	4154	2834	23809	810	9.14	82/89	43.4	4154	2741	23033	1077	18.3	87/91	40.9	4154	2523	21196	1372	32.8	93/96	43.8	4154	2783	23382	1650	48.9	98/101	
	20300	54.9	5585	3772	31695	1031	19.2	88/96	55.2	5585	3800	31930	1238	30.5	92/98	53.7	5585	3667	30808	1494	48.1	97/101	51.0	5585	3426	28789	1711	67.4	99/103	
	25500	65.4	7015	4711	39580	1261	35.4	95/102	66.5	7015	4808	40397	1431	49.3	97/104	65.2	7015	4699	39480	1644	69.3	100/105								
	30700	75.9	8446	5653	47503	1495	59.3	100/108	77.1	8446	5759	48388	1640	76.0	101/108															
	35900	86.4	9876	6597	55435	1733	92.6	104/112																						
365CAVP27L	19700	47.4	4053	3103	26071	876	12.5	85/92	48.0	4053	3159	26542	1114	23.2	89/94	46.5	4053	3023	25398	1383	39.2	94/99	43.0	4053	2704	22721	1611	57.3	103/102	
	25400	56.8	5225	3947	33164	1082	23.7	91/98	59.8	5225	4212	35391	1293	37.6	95/100	58.0	5225	4050	34030	1508	56.2	98/102	57.1	5225	3969	33346	1718	76.8	99/105	
	31100	66.6	6398	4817	40475	1298	40.9	97/104	69.2	6398	5049	42427	1476	57.8	100/106	69.5	6398	5081	42691	1673	80.1	101/106								
	36800	76.3	7570	5693	47834	1517	65.3	102/109	78.0	7570	5838	49054	1663	84.9																



# CAVP Performance Data

## 402 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
402CAVP18L	7000	31.7	2931	2521	9930	587	3.63	79/84	32.0	2931	2557	10073	908	10.8	87/91	32.8	2931	2663	10492	1211	22.5	89/99	32.8	2931	2668	10508	1450	36.6	91/107	
	11500	44.6	4815	4195	16525	810	10.5	87/93	44.2	4815	4149	16343	1068	20.6	102/97	44.3	4815	4167	16416	1332	35.8	100/104	44.8	4815	4222	16631	1556	53.2	103/109	
	16000	57.3	6698	5861	23090	1049	23.9	93/101	56.6	6698	5762	22699	1265	37.5	106/104	56.7	6698	5775	22750	1500	56.9	112/109								
	20500	69.7	8582	7480	29465	1300	46.3	98/108	69.5	8582	7442	29318	1490	64.3	108/110															
	25000	82.2	10466	9098	35840	1560	80.7	103/113																						
402CAVP21H	8100	34.7	3850	2550	12752	664	5.33	82/86	34.5	3850	2517	12589	963	13.5	93/92	34.7	3850	2549	12746	1255	26.7	101/101								
	11900	45.3	5656	3781	18907	874	12.9	89/94	44.8	5656	3715	18580	1119	23.8	97/98	44.6	5656	3697	18489	1379	40.2	104/104								
	15700	55.8	7462	5002	25015	1097	26.4	94/101	55.3	7462	4937	24689	1303	40.0	102/104	55.0	7462	4899	24502	1533	60.1	108/108								
	19500	66.3	9268	6220	31105	1326	47.3	99/107	65.9	9268	6171	30860	1506	64.3	107/109															
	23300	76.8	11074	7437	37194	1560	77.7	104/112																						
402CAVP21L	9300	34.6	3387	2534	12672	600	4.54	78/84	35.4	3387	2625	13130	920	12.9	93/92	34.7	3387	2544	12725	1217	26.2	104/101	35.1	3387	2597	12985	1457	41.7	112/109	
	14700	48.7	5353	4167	20842	818	12.5	85/93	46.9	5353	3967	19841	1074	24.2	93/96	48.3	5353	4123	20619	1342	41.9	104/103	48.4	5353	4133	20668	1559	60.5	111/109	
	20100	62.1	7320	5724	28628	1056	27.8	91/101	60.1	7320	5500	27506	1257	42.5	96/102	59.5	7320	5430	27157	1499	65.1	104/106								
	25500	75.1	9286	7245	36231	1304	53.1	97/107	74.2	9286	7135	35682	1473	71.5	100/108															
	30900	88.2	11253	8761	43817	1557	91.3	103/113																						
402CAVP24H	11400	40.3	3767	2619	18515	649	6.16	79/87	39.4	3767	2523	17836	951	15.5	92/93	40.4	3767	2630	18588	1243	30.2	104/103	40.1	3767	2592	18320	1475	46.3	113/111	
	16900	53.1	5585	3868	27340	862	15.4	85/95	53.2	5585	3882	27437	1102	28.0	91/96	51.8	5585	3737	26414	1366	46.8	103/105	52.5	5585	3808	26917	1581	67.3	110/111	
	22400	65.9	7403	5117	36167	1090	31.9	91/102	66.2	7403	5148	36389	1284	47.5	95/103	65.9	7403	5116	36161	1517	71.4	103/107								
	27900	78.7	9220	6368	45012	1325	58.1	97/108	79.0	9220	6397	45219	1490	77.2	100/109															
	33400	91.5	11038	7621	53870	1565	96.5	102/113																						
402CAVP24L	13300	41.5	3449	2735	19332	627	6.24	78/86	39.2	3449	2507	17724	925	16.1	86/90	41.3	3449	2716	19197	1225	31.5	95/97	42.2	3449	2800	19790	1456	48.3	103/103	
	20100	55.0	5213	4054	28658	842	16.2	85/94	54.4	5213	3997	28253	1080	29.5	90/96	52.8	5213	3837	27122	1331	49.3	97/100	53.3	5213	3890	27498	1557	71.6	103/105	
	26900	68.7	6976	5396	38141	1079	34.7	92/101	70.1	6976	5533	39110	1263	51.2	95/103	68.3	6976	5351	37821	1488	75.8	100/106								
	33700	82.6	8740	6750	47716	1325	64.7	99/108	83.6	8740	6845	48386	1469	84.1	100/109															
	40500	96.5	10503	8106	57297	1574	109	104/113																						
402CAVP27H	14100	43.3	3879	2675	22476	679	7.80	80/87	41.5	3879	2507	21064	965	18.3	90/90	41.9	3879	2543	21364	1251	34.1	108/98	42.7	3879	2615	21972	1484	52.3	120/104	
	20200	56.2	5557	3828	32164	888	18.4	86/94	54.6	5557	3687	30981	1115	31.9	91/96	53.6	5557	3590	30164	1370	52.6	101/101								
	26300	68.8	7235	4959	41664	1113	36.9	92/101	69.0	7235	4970	41758	1299	53.8	96/103	66.5	7235	4745	39872	1514	77.9	101/105								
	32400	81.5	8913	6090	51174	1344	65.7	99/108	82.3	8913	6160	51759	1497	85.7	101/108															
	38500	94.2	10591	7225	60707	1580	107	104/112																						
402CAVP27L	17300	45.1	3559	2829	23768	677	8.57	81/88	42.9	3559	2633	22122	945	19.6	86/90	42.6	3559	2611	21942	1234	37.3	94/98	43.2	3559	2663	22374	1470	57.1	101/104	
	24400	57.8	5020	3973	33387	890	19.8	88/95	57.3	5020	3925	32982	1088	33.5	91/96	54.9	5020	3709	31165	1336	55.3	97/100	53.0	5020	3543	29768	1547	78.8	102/105	
	31500	70.3	6480	5091	42778	1113	38.9	94/101	70.8	6480	5130	43103	1267	55.6	96/103	69.8	6480	5046	42402	1474	81.1	101/105								
	38600	82.8	7941	6211	52184	1341	68.2	100/107	84.0	7941	6318	53084	1472	88.8	102/108															
	45700	95.4	9401	7333	61612	1572	110	105/112																						
402CAVP30H	18500	48.0	4097	2585	28547	728	10.7	83/90	47.2	4097	2527	27908	982	22.5	87/91	48.3	4097	2613	28862	1258	40.7	101/100	49.2	4097	2680	29596	1495	61.9	111/108	
	24900	59.5	5515	3487	38513	926	22.5	88/96	59.5	5515	3491	38554	1123	36.9	92/98	58.7	5515	3423	37804	1364	59.1	98/101	59.5	5515	3484	38484	1570	82.8	107/107	
	31300	71.4	6932	4419	48803	1133	41.4	95/103	71.1	6932	4394	48531	1290	58.7	96/103	69.6	6932	4274	47208	1498	84.5	101/106								
	37700	83.4	8350	5359	59185	1345	69.5	100/108	82.2	8350	5266	58161	1477	89.8	102/109															
	44100	95.4	9767	6297	69552	1559	109	105/112																						
402CAVP30L	21100	47.9	3635	2581	28509	729	11.5	84/90	47.7	3635	2564	28313	969	23.4	87/92	47.6	3635	2556	28231	1237	42.1	99/101	48.1	3635	2598	28691	1464	63.3	108/109	
	28500	60.5	4910	3565	39370	935	24.3	90/97	58.1	4910	3380	37326	1114	39.0	92/98	59.3	4910	3470	38324	1347	61.9	97/101	59.2	4910	3461	38222	1552	86.8	105/107	
	35900	72.7	6185	4521	49931	1146	44.7	96/103	69.9	6185	4299	47476	1290	63.1	98/104	69.9	6185	4301	47498	1487	89.4	101/106								
	43300	84.8	7460	5470	60417	1362	75.0	101/108	82.8	7460	5313	58676	1488	97.7	103/109															
	50700	97.0	8735	6418	70887	1580	117	106/113																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet L<sub>WA</sub> and outlet L<sub>WO</sub> sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 445 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
445CAVP24H	11100	41.9	3668	2588	18295	562	6.37	78/84	41.4	3668	2541	17963	845	17.2	97/93	41.9	3668	2590	18309	1122	35.4	112/101	41.8	3668	2584	18268	1332	54.9	125/106
	17000	56.2	5618	3990	28202	759	16.6	86/94	55.2	5618	3890	27498	981	31.0	95/98	55.1	5618	3878	27414	1221	53.4	108/104	55.1	5618	3885	27460	1426	79.1	119/109
	22900	70.2	7568	5363	37909	972	35.5	93/102	70.1	7568	5347	37792	1146	54.4	98/104	68.7	7568	5215	36865	1359	81.1	105/108							
	28800	84.3	9518	6734	47600	1193	66.4	98/108	84.5	9518	6757	47764	1338	89.8	102/109														
	34700	98.3	11467	8106	57297	1418	112	103/114																					
445CAVP24L	13000	43.2	3371	2717	19202	545	6.36	77/84	41.6	3371	2558	18084	824	17.8	89/92	41.9	3371	2595	18340	1104	36.1	99/101	41.6	3371	2559	18091	1319	56.4	106/107
	20500	59.1	5316	4275	30219	743	17.3	84/94	58.3	5316	4199	29681	960	33.0	92/97	55.8	5316	3954	27946	1190	56.4	100/103	58.2	5316	4189	29610	1408	84.9	106/108
	28000	74.5	7261	5777	40838	961	38.6	92/102	75.5	7261	5881	41568	1139	58.8	96/104	74.0	7261	5726	40473	1335	88.1	102/107							
	35500	90.0	9206	7291	51535	1190	74.3	98/109	91.5	9206	7445	52629	1334	98.3	100/110														
	43000	106	11151	8809	62265	1422	128	103/114																					
445CAVP27H	14000	45.2	3851	2679	22511	594	7.97	79/88	43.9	3851	2562	21530	858	19.5	91/94	43.5	3851	2528	21239	1123	38.0	101/102							
	20500	58.8	5640	3898	32749	785	19.3	87/95	57.7	5640	3792	31858	991	34.6	93/98	57.1	5640	3739	31414	1224	57.7	101/104	57.4	5640	3770	31677	1426	83.6	107/109
	27000	72.4	7428	5107	42916	988	39.5	93/102	73.0	7428	5161	43365	1160	59.0	97/104	70.5	7428	4945	41553	1353	86.5	102/107							
	33500	85.9	9216	6322	53125	1199	71.5	98/108	86.8	9216	6403	53799	1345	95.0	101/109														
	40000	99.5	11004	7540	63354	1413	118	103/113																					
445CAVP27L	17000	46.7	3497	2812	23630	574	8.07	79/89	44.3	3497	2599	21834	830	20.4	88/92	44.9	3497	2645	22226	1102	40.0	98/100	45.9	3497	2739	23014	1316	62.7	104/106
	25200	60.4	5184	4039	33939	769	20.4	87/94	62.3	5184	4209	35364	970	36.3	92/98	59.3	5184	3940	33108	1192	61.3	98/102	57.0	5184	3733	31366	1387	88.2	104/107
	33400	74.7	6871	5317	44673	979	42.6	94/102	77.1	6871	5536	46516	1135	62.2	96/104	77.1	6871	5535	46504	1332	92.4	101/107							
	41600	89.1	8558	6610	55543	1196	78.2	99/108	90.6	8558	6745	56677	1322	102	101/109														
	49800	104	10245	7906	66432	1416	130	104/113																					
445CAVP30H	18000	50.8	3987	2666	29444	611	10.0	80/88	49.9	3987	2589	28592	858	23.3	89/92	49.2	3987	2536	28010	1120	44.7	98/101	49.5	3987	2559	28262	1331	68.6	104/107
	25600	64.5	5670	3731	41209	801	23.4	88/96	66.0	5670	3848	42502	997	40.2	92/99	63.9	5670	3686	40712	1216	66.5	98/102	62.3	5670	3566	39381	1406	95.8	104/108
	33200	78.5	7353	4826	53297	1003	46.5	94/104	80.0	7353	4949	54660	1157	67.1	97/104	80.2	7353	4962	54804	1352	97.7	101/107							
	40800	92.6	9037	5930	65490	1211	82.4	100/109	93.4	9037	5997	66236	1338	107	101/110														
	48400	107	10720	7034	77685	1422	134	104/114																					
445CAVP30L	22300	52.9	3842	2825	31200	638	12.3	83/90	54.3	3842	2936	32430	859	26.1	88/93	50.8	3842	2666	29441	1105	48.9	99/100	49.2	3842	2535	27999	1311	74.6	106/105
	30300	65.3	5221	3794	41908	818	26.2	89/97	67.7	5221	3982	43975	986	43.2	92/99	67.4	5221	3961	43748	1199	70.1	97/102	65.4	5221	3803	42004	1387	100	104/106
	38300	78.2	6599	4804	53057	1005	48.7	95/104	79.6	6599	4912	54250	1143	70.0	97/105	81.7	6599	5081	56116	1315	99.6	100/106							
	46300	91.3	7977	5831	64399	1197	82.3	100/109	91.6	7977	5851	64620	1314	108	102/110														
	54300	105	9356	6861	75779	1390	129	105/114																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{w_iA}$  and outlet  $L_{w_oA}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 490 CAVP

Model	Fan Inlet CFM	1.00 SP							3.00 SP							6.00 SP							10.00 SP						
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM			
490CAVP24H	11500	43.0	3800	2702	19097	531	7.52	81/88	42.9	3800	2685	18981	711	15.6	91/91	41.1	3800	2510	17744	912	29.9	102/98	43.2	3800	2718	19210	1140	53.6	109/105
	16200	54.5	5354	3819	26997	666	15.9	86/93	53.8	5354	3752	26518	818	26.2	93/96	54.1	5354	3783	26738	1004	43.9	101/101							
	20900	65.5	6907	4897	34618	811	29.8	91/99	65.8	6907	4924	34808	947	43.1	96/101	64.8	6907	4830	34140	1107	63.5	102/105							
	25600	76.7	8460	5988	42324	966	51.2	96/104	77.3	8460	6049	42760	1082	67.1	100/106														
	30300	87.8	10013	7080	50044	1124	81.4	100/109																					
490CAVP24L	12700	42.2	3294	2618	18507	483	6.24	76/88	41.2	3294	2525	17850	675	14.5	88/90	41.1	3294	2513	17761	883	28.7	96/98	42.6	3294	2654	18761	1107	51.5	104/105
	19100	56.2	4953	3987	28185	630	15.2	83/92	55.2	4953	3885	27462	781	25.3	89/94	54.7	4953	3838	27129	973	44.3	97/100							
	25500	69.0	6613	5235	37008	789	31.0	89/99	70.4	6613	5379	38019	915	44.1	93/101	68.8	6613	5215	36863	1080	65.7	99/104							
	31900	82.1	8273	6515	46055	955	56.3	94/105	83.7	8273	6679	47208	1064	72.6	97/106														
	38300	95.2	9933	7805	55171	1125	93.2	99/110																					
490CAVP27H	14100	45.4	3879	2692	22623	537	8.83	80/89	44.4	3879	2604	21877	716	17.9	89/91	44.7	3879	2628	22079	915	33.5	97/98	43.6	3879	2531	21264	1128	57.8	104/105
	19400	56.6	5337	3694	31043	673	18.2	85/93	55.5	5337	3593	30188	816	29.2	91/96	55.1	5337	3563	29940	1002	48.7	98/101							
	24700	67.6	6795	4676	39292	819	33.4	90/99	68.1	6795	4721	39666	937	47.0	94/101	67.0	6795	4628	38888	1104	69.8	100/104							
	30000	78.6	8253	5665	47604	969	56.1	95/105	79.4	8253	5735	48186	1071	72.3	98/106														
	35300	89.7	9711	6658	55941	1122	87.7	99/109																					
490CAVP27L	16100	45.6	3312	2712	22792	495	7.74	77/89	43.8	3312	2550	21427	675	16.6	86/90	43.6	3312	2531	21270	886	32.7	96/98	43.9	3312	2558	21493	1102	57.0	104/105
	23700	58.9	4876	3898	32753	638	17.8	83/93	59.8	4876	3977	33418	786	29.9	88/94	57.5	4876	3777	31738	965	49.3	96/100							
	31300	72.0	6439	5075	42643	796	35.7	89/100	73.9	6439	5247	44085	919	50.6	92/101	73.6	6439	5221	43873	1075	75.2	97/103							
	38900	85.4	8002	6271	52694	961	63.8	95/106	87.0	8002	6421	53954	1063	81.5	97/106														
	46500	98.8	9566	7475	62805	1131	105	99/111																					
490CAVP30H	17400	50.6	3854	2643	29192	532	9.53	79/90	48.9	3854	2516	27785	701	18.9	86/90	49.1	3854	2527	27913	909	35.7	95/96							
	24200	63.2	5360	3632	40120	671	20.3	85/95	63.8	5360	3679	40636	812	32.5	89/96	61.6	5360	3503	38687	986	52.3	96/99							
	31000	75.8	6866	4620	51026	820	38.2	91/101	76.9	6866	4704	51959	939	52.7	93/102	76.2	6866	4650	51356	1090	76.9	97/103							
	37800	88.5	8372	5610	61964	975	65.3	96/107	89.5	8372	5690	62849	1075	82.0	97/107														
	44600	101	9878	6604	72936	1133	104	100/111																					
490CAVP30L	20500	51.1	3532	2687	29678	511	9.75	78/89	51.2	3532	2696	29771	683	19.8	84/89	48.9	3532	2513	27755	887	37.5	93/95	48.8	3532	2505	27672	1101	65.1	100/102
	28500	63.8	4910	3674	40581	650	21.0	85/95	65.7	4910	3829	42290	784	33.3	88/96	64.6	4910	3741	41316	959	54.5	94/98							
	36500	76.5	6289	4673	51610	800	39.5	91/101	77.8	6289	4775	52741	902	53.9	92/102	79.8	6289	4930	54451	1060	79.7	96/103							
	44500	89.4	7667	5679	62720	955	67.6	96/106	90.4	7667	5757	63589	1038	84.5	97/107														
	52500	102	9045	6688	73867	1113	107	100/111																					
490CAVP36H	28600	62.9	4183	2596	46820	624	17.9	83/89	62.9	4183	2593	46754	756	29.1	87/91	61.4	4183	2510	45260	930	48.5	93/96	62.4	4183	2564	46230	1138	78.4	99/104
	35600	74.0	5207	3236	58362	746	30.9	89/95	74.1	5207	3245	58522	857	44.4	90/96	73.3	5207	3201	57716	1007	66.3	94/98							
	42600	85.2	6231	3888	70105	871	49.5	93/99	84.9	6231	3874	69852	967	65.5	94/100	84.9	6231	3872	69815	1098	90.4	97/101							
	49600	96.5	7255	4542	81904	1000	75.1	97/104	95.8	7255	4503	81199	1083	93.4	98/104														
	56600	108	8278	5198	93734	1130	109	100/107																					
490CAVP36L	33400	62.4	3743	2569	46321	622	18.7	85/90	63.1	3743	2609	47042	756	31.2	88/93	62.5	3743	2573	46393	920	50.9	93/94	61.3	3743	2504	45155	1115	81.3	99/97
	41400	73.3	4639	3197	57660	744	32.0	90/96	72.3	4639	3141	56650	846	46.3	92/96	74.4	4639	3263	58840	1005	70.5	95/100							
	49400	83.8	5536	3809	68687	868	50.6	94/100	83.1	5536	3767	67931	955	67.6	95/101	84.2	5536	3829	69044	1092	95.3	98/103							
	57400	94.3	6432	4418	79670	993	75.6	98/104	94.2	6432	4412	79567	1071	95.6	99/105														
	65400	105	7329	5027	90649	1121	109	102/108																					

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{w,i}A$  and outlet  $L_{w,o}A$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 540 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
540CAVP36H	28600	64.1	4183	2598	46846	533	17.3	80/85	62.6	4183	2512	45299	724	37.0	89/90	63.6	4183	2569	46324	932	67.8	94/93	64.9	4183	2648	47746	1103	102	98/100	
	37600	78.6	5499	3439	62015	662	34.1	87/92	77.5	5499	3374	60849	818	57.8	92/94	76.2	5499	3304	59577	996	93.9	97/96								
	46600	92.7	6816	4260	76824	797	60.1	93/98	91.3	6816	4178	75336	925	87.6	95/98	90.9	6816	4152	74866	1086	130	99/100								
	55600	107	8132	5079	91597	936	98.0	97/103	106	8132	5041	90911	1044	130	99/102															
	64600	121	9449	5899	106382	1076	149	101/107																						
540CAVP36L	36100	68.0	4045	2828	51001	563	21.6	84/89	67.5	4045	2799	50466	727	42.0	89/91	66.3	4045	2730	49224	919	75.1	96/95	63.0	4045	2536	45724	1081	112	102/99	
	46100	82.0	5166	3640	65632	689	39.7	91/95	80.8	5166	3570	64375	822	64.3	92/95	80.9	5166	3577	64503	988	102	96/97	79.9	5166	3518	63449	1138	145	102/101	
	56100	96.0	6286	4452	80292	820	67.0	96/100	94.5	6286	4361	78651	933	96.5	97/99	94.1	6286	4342	78294	1072	138	99/100								
	66100	110	7407	5264	94934	953	105	100/104	108	7407	5164	93130	1051	140	101/104															
	76100	124	8528	6075	109547	1087	156	104/108																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{WA}$  and outlet  $L_{WO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

## CAVP Performance Data

## 600 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
600CAVP36H	27900	63.7	4081	2538	45766	457	16.4	79/87	63.6	4081	2529	45608	651	39.1	90/93	63.8	4081	2544	45882	839	73.1	99/100	64.2	4081	2567	46294	994	112	106/105	
	39900	83.0	5836	3654	65898	594	38.0	88/96	82.4	5836	3622	65311	750	67.9	93/98	82.3	5836	3615	65192	924	112	100/103								
	51900	102	7591	4762	85877	742	75.7	94/102	101	7591	4719	85106	871	112	97/104	101	7591	4691	84599	1020	166	103/106								
	63900	121	9346	5868	105824	896	135	99/108	120	9346	5827	105085	1003	178	102/109															
	75900	140	11101	6973	125746	1052	220	104/113																						
600CAVP36L	33000	64.4	3698	2579	46504	435	15.8	78/88	63.6	3698	2532	45651	624	38.6	88/91	64.3	3698	2572	46386	825	75.5	97/101	64.6	3698	2586	46641	981	116	103/107	
	48000	85.7	5379	3813	68760	579	38.4	88/96	84.3	5379	3733	67312	723	67.5	92/97	83.7	5379	3695	66628	891	113	98/101	82.8	5379	3647	65771	1035	163	104/107	
	63000	106	7060	4989	89966	734	78.7	95/103	105	7060	4903	88411	844	114	97/103	105	7060	4913	88590	989	169	101/106								
	78000	126	8740	6163	111133	893	142	100/109	126	8740	6177	111397	981	184	102/109															
	93000	147	10421	7339	132336	1054	234	105/114																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{wI}$  and outlet  $L_{wO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

# CAVP Performance Data

## 660 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP							
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel
660CAVP36H	30100	65.0	4403	2535	45719	430	20.4	81/89	65.1	4403	2545	45887	608	45.1	92/95	65.7	4403	2580	46519	776	83.6	101/102	66.5	4403	2622	47277	910	126	106/106	
	41100	82.8	6011	3567	64330	544	42.9	88/96	80.8	6011	3455	62305	694	74.6	95/100	81.2	6011	3478	62722	849	121	102/105								
	52100	99.5	7620	4540	81863	665	79.9	94/103	96.0	7620	4334	78152	783	118	97/104	97.0	7620	4392	79206	932	174	103/108								
	63100	116	9229	5500	99187	788	135	99/108	113	9229	5347	96422	888	181	101/109															
	74100	133	10838	6459	116476	914	211	103/112																						
660CAVP36L	33700	65.7	3776	2581	46536	387	16.6	78/86	66.1	3776	2601	46905	574	41.8	90/92	68.3	3776	2729	49210	751	79.7	101/99	69.7	3776	2809	50656	892	123	107/103	
	49700	88.7	5569	3911	70528	512	40.9	88/96	85.3	5569	3714	66978	652	73.8	92/97	86.9	5569	3807	68644	820	125	100/102	88.8	5569	3915	70606	955	178	106/105	
	65700	110	7362	5142	92730	649	84.7	95/103	108	7362	5018	90486	762	126	97/104	106	7362	4889	88157	895	187	100/106								
	81700	131	9155	6370	114873	791	154	100/109	132	9155	6401	115427	882	204	101/110															
	97700	152	10948	7600	137055	935	256	105/114																						
660CAVP49H	55600	85.7	4644	2809	87346	492	40.0	86/93	84.4	4644	2750	85510	626	72.6	90/96	80.2	4644	2562	79650	778	124	96/100	81.6	4644	2626	81650	923	180	99/103	
	70600	102	5897	3539	110036	601	73.8	92/100	103	5897	3589	111589	710	113	95/101	101	5897	3468	107812	846	173	98/103								
	85600	119	7149	4272	132816	714	124	97/105	121	7149	4360	135556	806	171	99/106	119	7149	4279	133024	921	237	101/107								
	100600	135	8402	5007	155657	829	195	101/109	137	8402	5100	158557	909	250	102/110															
	115600	152	9655	5743	178547	944	289	105/113																						
660CAVP49L	72700	91.5	4541	3068	95377	534	55.0	89/96	94.9	4541	3217	100011	658	94.3	93/99	92.5	4541	3112	96766	793	150	96/102	87.9	4541	2905	90310	917	214	101/105	
	87700	105	5478	3678	114363	628	89.5	95/101	111	5478	3921	121891	740	137	97/103	108	5478	3789	117815	855	201	99/105								
	102700	119	6415	4299	133652	724	137	99/105	124	6415	4500	139908	822	193	101/107	125	6415	4543	141252	931	267	102/108								
	117700	133	7352	4922	153025	822	201	102/109	136	7352	5058	157256	905	264	103/110															
	132700	147	8289	5546	172434	920	282	105/112																						

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{WA}$  and outlet  $L_{WO}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.

## CAVP Performance Data

## 730 CAVP

Model	Fan Inlet CFM	1.00 SP							4.00 SP							8.00 SP							12.00 SP																	
		Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out	Eff Plume Ht	Nozzle Vel	Windband		Fan RPM	Fan BHP	LwA In/Out											
				Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM						Outlet Vel	Outlet CFM				Outlet Vel	Outlet CFM									
730CAVP36H	29100	66.5	4256	2547	45934	388	21.2	84/89	65.8	4256	2508	45236	547	50.0	94/94	66.5	4256	2546	45908	703	94.9	103/103																		
	40100	83.5	5865	3535	63747	491	45.2	90/96	82.5	5865	3473	62635	624	81.5	98/99	82.2	5865	3455	62305	766	136	105/105																		
	51100	100	7474	4515	81414	600	84.6	95/102	99.4	7474	4455	80333	714	129	102/105	98.8	7474	4422	79743	841	194	107/108																		
	62100	117	9083	5493	99052	711	143	100/108	117	9083	5446	98215	812	197	106/109																									
	73100	134	10692	6469	116654	823	223	104/112																																
730CAVP36L	33400	66.3	3743	2537	45746	349	17.9	79/86	67.5	3743	2603	46942	520	47.4	92/93	66.6	3743	2550	45982	680	92.6	104/102	66.5	3743	2549	45970	810	145	111/108											
	50400	91.1	5648	3971	71606	466	45.5	87/96	87.6	5648	3772	68012	602	85.0	94/98	89.8	5648	3900	70332	749	145	104/105	90.5	5648	3942	71079	868	208	110/109											
	67400	114	7553	5323	95991	592	96.2	94/104	111	7553	5122	92374	701	145	98/104	110	7553	5047	91018	833	221	104/107																		
	84400	137	9458	6649	119903	723	178	100/110	136	9458	6554	118183	816	239	102/110																									
	101400	160	11363	7973	143786	857	299	105/115																																
730CAVP49H	52200	84.2	4360	2683	83400	407	33.7	83/90	80.3	4360	2508	77979	552	70.2	90/93	80.7	4360	2528	78596	708	128	104/100	81.7	4360	2572	79977	833	190	115/104											
	70200	105	5863	3591	111645	512	69.6	89/97	102	5863	3493	108586	633	116	93/99	99.7	5863	3370	104767	768	186	101/103																		
	88200	125	7367	4493	139678	624	128	95/104	125	7367	4510	140212	725	184	98/105	121	7367	4313	134094	842	265	102/106																		
	106200	145	8870	5395	167738	739	214	100/109	147	8870	5457	169645	823	279	102/110																									
	124200	166	10373	6301	195888	855	333	104/113																																
730CAVP49L	63800	87.4	3985	2822	87745	407	36.8	84/91	85.0	3985	2719	84543	543	76.0	88/93	80.5	3985	2518	78270	693	137	96/99	83.6	3985	2655	82538	823	208	101/104											
	84800	108	5297	3725	115815	514	74.9	90/98	107	5297	3696	114907	617	122	93/99	104	5297	3560	110675	751	197	99/102	98.5	5297	3319	103191	864	276	102/106											
	105800	128	6608	4619	143608	625	135	96/104	129	6608	4662	144954	709	192	98/105	127	6608	4587	142604	820	276	101/106																		
	126800	148	7920	5514	171429	738	223	102/109	150	7920	5609	174378	811	291	103/109																									
	147800	168	9232	6410	199281	853	345	105/113																																

Performance certified is for installation Type C: ducted inlet, free outlet. Power rating (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). Performance ratings do not include the effects of cross winds. The A-weighted sound ratings shown have been calculated per AMCA Standard 301. Values shown are for inlet  $L_{WfA}$  and outlet  $L_{W0A}$  sound power levels for installation Type C: ducted inlet, free outlet. Inlet sound ratings do not include the effects of duct end correction. Effective Plume Height referenced from base of unit and calculated using Equation 7 from 2007 ASHRAE Application Handbook, Chapter 44, with a 10 MPH wind.



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