



VERT-I-PAK® Product Profile

Single Package Vertical Air Conditioners and Heat Pumps

VERT-I-PAK® A-SERIES

9,000 / 12,000 / 18,000 / 24,000 Btu/h

New smaller closet dimensions.

NEW!

Compact and lightweight—weighs as little as 125 lbs.

Unique free-floating chassis.

10" crimped and beaded duct-collar ready to attach flex-duct.

Easy to connect right, left or rear drain connection.

Optional seacoast protection for harsh coastal environments.

Easy to install front, left or right hand into closet.



VERT-I-PAK® B-SERIES

18,000 / 24,000 / 30,000 / 36,000
42,000 / 49,000 / 60,000 Btu/h

Indoor return air and outdoor air can be ducted to allow installation in an interior closet.

Comes shipped with a preformed discharge flange.

Cooling mode freeze protection.

Heat pump operation down to 0°F.

Easy service access from front of unit.



Standard Features

Completely self-contained unit.

Available in heat pump or electric heat.

No outside condensing unit, eliminating the need for external electrical wiring, landscaping and vandalism barriers.

Easy installation; unit is wired and charged at the factory.

No refrigerant lines running from floor to floor.

All units are shipped with return air filter installed.

An individual packaged unit can be used to heat or cool multiple rooms.

Cabinets are fully insulated for improved sound characteristics and unit performance.

Safety power disconnect.

Remote thermostat-ready 24-volt transformer.

Complete line of accessories.



CHASSIS SPECIFICATIONS

VERT-I-PAK® A-SERIES

VEA/VHA9K-24K								
	VEA09K	VEA12K	VEA18K	VEA24K	VHA09K	VHA12K	VHA18K	VHA24K
COOLING DATA								
Cooling Btu/h	9500/9300	11800/11500	18000/17800	24000	9500/9300	11800/11500	18000/17800	23500
Cooling Power (W)	880	1093	2070	2526	905	1124	2070	2474
EER	10.8	10.8	8.7	9.5	10.5	10.5	8.7	9.5
Sensible Heat Ratio	0.74	0.72	0.70	0.70	0.74	0.72	0.70	0.70
HEAT PUMP DATA								
Heating Btu/h	N/A	N/A	N/A	N/A	8500/8300	10600/10400	15700/15500	22500
COP @ 47°F	N/A	N/A	N/A	N/A	3.0	3.2	3.0	3
Heating Power (W)	N/A	N/A	N/A	N/A	830	971	1705	2200
Heating Current (A)	N/A	N/A	N/A	N/A	4.4/4.9	5.5/6.1	9.2/10.2	11.4
ELECTRICAL DATA								
Voltage (1 Phase, 60 Hz)	230/208	230/208	230/208	230/208	230/208	230/208	230/208	230/208
Volt Range	253-198	253-198	253-198	253-198	253-198	253-198	253-198	253-198
Cooling Current (A)	4.1/4.3	4.9/5.3	9.2/10.2	11.2/12.4	4.2/4.4	5.0/5.5	9.2/10.2	11.2/12.4
Amps L.R.	21	21	47	68	21	21	47	68
Amps F.L.	3.7	4.5	7.9	10.2	3.7	4.5	7.9	10.2
Indoor Motor (HP)	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Indoor Motor (A)	1.2	1.2	1.4	2	1.2	1.2	1.4	2
Outdoor Motor (HP)	N/A	N/A	N/A	1/4	N/A	N/A	N/A	1/4
Outdoor Motor (A)	N/A	N/A	N/A	2	N/A	N/A	N/A	2
AIR FLOW DATA								
Indoor CFM*	300	350	550	750	300	375	550	750
Vent CFM	60	60	60	80	60	60	60	80
Max. ESP	.3"	.3"	.3"	.3"	.3"	.3"	.3"	.3"
PHYSICAL DATA								
Dimensions (W x D x H)	23 x 23 x 32	23 x 23 x 32	23 x 23 x 32	23 x 23 x 47	23 x 23 x 32	23 x 23 x 32	23 x 23 x 32	23 x 23 x 47
Net Weight (Lbs)	114	124	144	167	114	125	144	167
Shipping Weight (Lbs)	125	135	155	180	125	135	155	180
R-22 Charge	25	29	42	68.5	23.5	27	42	63.5

* Normal Value Wet Coil @ .1" ESP.

ELECTRIC HEAT DATA

VEA/VHA09,12								
	VE/VHA09			VE/VHA12				
Heater Watts	2500/2050	3400/2780	5000/4090	2500/2050	3400/2780	5000/4090		
Voltage	230/208			230/208				
Heating Btu/h	8500/7000	11600/9500	17000/13900	8500/7000	11600/9500	17000/13900		
Heating Current (Amps)	10.6/9.3	14.5/12.5	20.9/18.2	10.6/9.3	14.5/12.5	20.9/18.2		
Minimum Circuit Ampacity	15	19.9	27.9	15	19.9	27.9		
Branch Circuit Fuse (Amps)	15	20	30	15	20	30		
Basic Heater Size	2.5 Kw	3.4 Kw	5.0 Kw	2.5 Kw	3.4 Kw	5.0 Kw		
VEA/VHA18,24								
	VE/VHA18			VE/VHA24				
Heater Watts	2500/2050	3400/2780	5000/4090	2500/2050	3400/2780	5000/4090	7500/6135	10000/8180
Voltage	230/208			230/208				
Heating Btu/h	8500/7000	11600/9500	17000/13900	8500/7000	11600/9500	17000/13900	25598/20939	34130/27918
Heating Current (Amps)	10.6/9.3	14.5/12.5	20.9/18.2	10.9/9.9	14.8/13.4	21.7/19.7	32.6/29.5	43.5/39.3
Minimum Circuit Ampacity	15	19.9	27.9	17.2/15.9	22.1/20.3	30.7/28.1	44.3/40.4	57.9/52.7
Branch Circuit Fuse (Amps)	15	20	30	25/25	25/25	35/30	45/45	60/60
Basic Heater Size	2.5 Kw	3.4 Kw	5.0 Kw	2.5 Kw	3.4 Kw	5.0 Kw	7.5 Kw	10.0 Kw

CHASSIS SPECIFICATIONS

VERT-I-PAK® A-SERIES

VEA - Extended Cooling Performance																
OUTDOOR DRY BULB TEMP. (DEGREES F AT 40% R.H.)																
		75			85			95			105			110		
INDOOR WET BULB TEMP. (DEGREES F AT 80 F D.B.)																
		72	67	62	72	67	62	72	67	62	72	67	62	72	67	62
VEA09	Btu/h	11172	10745	9947	10640	10032	9253	10222	9500	8408	9576	8503	7496	8522	7334	6479
	Watts	718	730	737	782	790	800	880	880	880	951	950	953	1038	1038	1042
	Amps	3.4	3.4	3.5	3.7	3.7	3.7	4.1	4.10	4.1	4.4	4.4	4.4	4.8	4.8	4.8
	SHR	0.51	0.69	0.93	0.52	0.71	0.95	0.52	0.74	0.95	0.53	0.78	0.96	0.56	0.83	0.95
VEA12	Btu/h	13877	13346	12355	13216	12461	11493	12697	11800	10443	11894	10561	9310	10585	9110	8048
	Watts	892	906	916	972	982	994	1093	1093	1093	1182	1180	1184	1289	1289	1294
	Amps	4.1	4.1	4.1	4.4	4.4	4.4	4.9	4.90	4.9	5.3	5.3	5.3	5.8	5.8	5.8
	SHR	0.49	0.67	0.9	0.5	0.7	0.92	0.51	0.72	0.92	0.52	0.76	0.93	0.54	0.81	0.92
VEA18	Btu/h	21168	20358	18846	20160	19008	17532	19368	18000	15930	18144	16110	14202	16146	13896	12276
	Watts	1689	1716	1735	1840	1859	1882	2070	2070	2070	2238	2236	2242	2441	2441	2451
	Amps	7.6	7.7	7.7	8.2	8.2	8.3	9.2	9.20	9.2	9.9	9.9	9.9	10.8	10.8	10.8
	SHR	0.48	0.65	0.88	0.49	0.68	0.89	0.49	0.70	0.9	0.5	0.74	0.9	0.53	0.79	0.9
VEA24	Btu/h	28224	27144	25128	26880	25344	23376	25824	24000	21240	24192	21480	18936	21528	18528	16368
	Watts	2061	2094	2117	2246	2268	2296	2526	2526	2526	2731	2728	2736	2978	2978	2991
	Amps	9.3	9.3	9.4	10	10	10.1	11.1	11.20	11.3	12.1	12.1	12.1	13.1	13.1	13.2
	SHR	0.48	0.65	0.88	0.49	0.68	0.89	0.49	0.70	0.9	0.5	0.74	0.9	0.53	0.79	0.9

* Operation above these listed temperatures may result in lowered performance or unit fatigue.

**RATING POINT
ARI 310/380**

VHA - Extended Cooling Performance																
OUTDOOR DRY BULB TEMP. (DEGREES F AT 40% R.H.)																
		75			85			95			105			110		
INDOOR WET BULB TEMP. (DEGREES F AT 80 F D.B.)																
		72	67	62	72	67	62	72	67	62	72	67	62	72	67	62
VHA09	Btu/h	11172	10745	9947	10640	10032	9253	10222	9500	8408	9576	8503	7496	8522	7334	6479
	Watts	738	750	758	805	813	823	905	905	905	978	977	980	1067	1067	1072
	Amps	3.5	3.5	3.5	3.7	3.8	3.8	4.2	4.20	4.2	4.5	4.5	4.5	4.9	4.9	4.9
	SHR	0.51	0.69	0.93	0.52	0.71	0.95	0.52	0.74	0.95	0.53	0.78	0.96	0.56	0.83	0.95
VHA12	Btu/h	13877	13346	12355	13216	12461	11493	12697	11800	10443	11894	10561	9310	10585	9110	8048
	Watts	917	932	942	999	1009	1022	1124	1124	1124	1215	1214	1217	1325	1325	1331
	Amps	4.1	4.2	4.2	4.5	4.5	4.5	5	5.00	5	5.4	5.4	5.4	5.9	5.9	5.9
	SHR	0.49	0.67	0.9	0.5	0.7	0.92	0.51	0.72	0.92	0.52	0.76	0.93	0.54	0.81	0.92
VHA18	Btu/h	21168	20358	18846	20160	19008	17532	19368	18000	15930	18144	16110	14202	16146	13896	12276
	Watts	1689	1716	1735	1840	1859	1882	2070	2070	2070	2238	2236	2242	2441	2441	2451
	Amps	7.6	7.7	7.7	8.2	8.2	8.3	9.2	9.20	9.2	9.9	9.9	9.9	10.8	10.8	10.8
	SHR	0.48	0.65	0.88	0.49	0.68	0.89	0.49	0.70	0.9	0.5	0.74	0.9	0.53	0.79	0.9
VHA24	Btu/h	27636	26579	24605	26320	24816	22889	25286	23500	20798	23688	21033	18542	21080	18142	16027
	Watts	2019	2051	2073	2199	2222	2249	2474	2474	2474	2674	2672	2679	2917	2917	2929
	Amps	9.3	9.3	9.4	10	10	10.1	11.1	11.2	11.3	12.1	12.1	12.1	13.1	13.1	13.2
	SHR	0.48	0.65	0.88	0.49	0.68	0.89	0.49	0.7	0.9	0.5	0.74	0.9	0.53	0.79	0.9

* Operation above these listed temperatures may result in lowered performance or unit fatigue.

**RATING POINT
ARI 310/380**

CHASSIS SPECIFICATIONS

VERT-I-PAK® B-SERIES

VEB18K-60K							
	VEB18K	VEB24K	VEB30K	VEB36K	VEB42K	VEB49K	VEB60K
C O O L I N G D A T A							
Cooling Btu/h	17000	22000	30000	35000	42000	48500	58000
SEER	10.0	10.0	10.0	10.0	9.8	9.8	9.9
Sensible Heat Ratio	0.78	0.75	0.70	0.70	0.72	0.69	0.72
E L E C T R I C A L D A T A							
Voltage (1 Phase, 60 Hz)	230/208	230/208	230/208	230/208	230/208	230/208	230/208
Volt Range	253-198	253-198	253-198	253-198	253-198	253-198	253-198
Compressor RLA	7.3	9.3	12.0	15.0	19.0	22.0	25.0
Compressor LRA	42.5	56	72.5	88	104	129	169
Indoor Motor (HP)	1/3	1/3	1/3	1/3	1/2	1/2	1/2
Indoor Motor (A)	1.0	1.0	1.8	2.5	3.0	3.0	3.1
Outdoor Motor (HP)	1/3	1/3	1/3	1/2	3/4	2 @ 1/3	2 @ 1/3
Outdoor Motor (A)	1.4	1.4	2.2	3.0	4.7	5.0	5.0
Min Ckt Amps*	14.0	16.7	22.8	27.9	33.0	40.5	49.0
Branch Ckt Fuse*	20	25	30	40	50	60	60
P H Y S I C A L D A T A							
Dimensions (W x D x H)	30 x 21 x 68	30 x 21 x 68	30 x 21 x 68	30 x 21 x 68	38 x 28 x 68	38 x 28 x 68	45 x 30½ x 77
Shipping Weight (Lbs)	320	320	330	340	440	460	540
R-22 Charge	104	72	72	92	120	152	144

VHB18K-60K							
	VHB18K	VHB24K	VHB30K	VHB36K	VHB42K	VHB49K	VHB60K
C O O L I N G D A T A							
Cooling Btu/h	17000	22000	30000	35000	42000	48500	55000
SEER	10.0	10.0	10.0	10.0	9.7	9.8	9.9
Sensible Heat Ratio	0.78	0.75	0.70	0.70	0.72	0.69	0.72
H E A T P U M P D A T A							
Heating Btu/h	17000	22000	26400	34000	40000	49000	59000
HSPF	7.0	7.2	7.2	6.8	6.7	6.7	6.6
COP @ 47F	3.0	3.2	3.0	3.0	2.8	2.9	2.9
Heating Power (W)	1650	2000	2600	3300	4000	4800	6180
Heating Current (A)	7.3	9.3	12.0	15.0	19.0	22.0	28.0
E L E C T R I C A L D A T A							
Voltage (1 Phase, 60 Hz)	230/208	230/208	230/208	230/208	230/208	230/208	230/208
Volt Range	253-198	253-198	253-198	253-198	253-198	253-198	253-198
Compressor RLA	7.3	9.3	12.0	15.0	19.0	22.0	29.0
Compressor LRA	42.5	56	72.5	88	104	129	169
Indoor Motor (HP)	1/3	1/3	1/3	1/3	1/2	1/2	1/2
Indoor Motor (A)	1.0	1.0	1.8	2.5	3.0	3.0	3.1
Outdoor Motor (HP)	1/3	1/3	1/3	1/2	3/4	2 @ 1/3	2 @ 1/3
Outdoor Motor (A)	1.4	1.4	2.2	3.0	4.7	5.0	5.0
Min Ckt Amps*	14.0	16.7	22.8	27.9	33.0	40.5	49.0
Branch Ckt Fuse*	20	25	30	40	50	60	60
P H Y S I C A L D A T A							
Dimensions (W x D x H)	30 x 21 x 68	30 x 21 x 68	30 x 21 x 68	30 x 21 x 68	38 x 28 x 68	38 x 28 x 68	45 x 30½ x 77
Shipping Weight (Lbs)	320	320	330	340	440	460	540
R-22 Charge	104	72	72	92	120	152	304

*MCA for cooling and heat pump circuit only.

CHASSIS SPECIFICATIONS

VERT-I-PAK® B-SERIES

VEB / VHB - Extended Cooling Performance																			
OUTDOOR DRY BULB TEMP. (DEGREES F AT 40% R.H.)																			
		75			85			95			105			110			115		
INDOOR WET BULB TEMP. (DEGREES F AT 80 F D.B.)																			
		72	67	62	72	67	62	72	67	62	72	67	62	72	67	62	72	67	62
VEB18 / VHB18	Btu/h	20420	19640	18160	18860	18140	16780	17680	17000	15730	16390	15760	14580	15700	15100	13960	14980	14410	13330
	Watts	1549	1574	1590	1781	1810	1829	1945	1977	1997	2116	2151	2172	2205	2240	2263	2295	2332	2355
	Amps	6.9	7.0	7.1	7.9	7.9	8.0	8.6	8.7	8.8	9.4	9.5	9.6	9.9	10.0	10.1	10.4	10.5	10.6
	SHR	0.54	0.75	0.89	0.58	0.79	0.95	0.59	0.81	0.97	0.60	0.82	0.98	0.60	0.82	0.98	0.59	0.81	0.97
VEB24 / VHB24	Btu/h	29130	28010	25910	25130	24160	22350	22880	22000	20350	20970	20160	18650	20140	19360	17910	19390	18640	17250
	Watts	2019	2052	2073	2249	2286	2309	2432	2472	2497	2639	2682	2709	2751	2796	2824	2869	2916	2945
	Amps	9.5	9.6	9.7	10.2	10.3	10.4	11.0	11.1	11.2	12.0	12.1	12.3	12.6	12.8	12.9	13.3	13.4	13.6
	SHR	0.54	0.73	0.88	0.55	0.75	0.90	0.55	0.75	0.91	0.55	0.76	0.91	0.55	0.76	0.91	0.55	0.76	0.91
VEB30 / VHB30	Btu/h	36020	34630	32040	33290	32010	29610	31200	30000	27750	28880	27770	25690	27640	26580	24590	26340	25330	23430
	Watts	2755	2800	2828	3027	3076	3107	3264	3317	3350	3545	3603	3639	3703	3763	3800	3871	3934	3973
	Amps	12.6	12.7	12.8	13.4	13.6	13.7	14.5	14.6	14.7	15.8	16.0	16.1	16.6	16.8	17.0	17.5	17.7	17.9
	SHR	0.48	0.65	0.79	0.47	0.65	0.78	0.48	0.66	0.79	0.49	0.68	0.81	0.50	0.69	0.83	0.52	0.71	0.85
VEB36 / VHB36	Btu/h	43610	41940	38790	39060	37560	34740	36400	35000	32380	34050	32740	30280	32980	31720	29340	32000	30770	28460
	Watts	3491	3548	3583	3693	3753	3791	3959	4023	4064	4330	4400	4444	4555	4629	4675	4806	4884	4933
	Amps	15.3	15.4	15.6	17.5	17.7	17.9	20.9	21.1	21.3	25.8	26.1	26.3	28.8	29.1	29.4	32.2	32.5	32.9
	SHR	0.47	0.64	0.77	0.49	0.67	0.80	0.50	0.69	0.83	0.52	0.71	0.85	0.52	0.72	0.86	0.53	0.73	0.87
VEB42 / VHB42	Btu/h	52220	50210	46450	47170	45360	41960	43680	42000	38850	40090	38550	35660	38260	36790	34030	36400	35000	32380
	Watts	4317	4387	4431	4647	4722	4770	4973	5054	5104	5384	5472	5527	5622	5713	5770	5880	5976	6036
	Amps	20.0	20.2	20.4	21.3	21.6	21.8	22.8	23.0	23.2	24.6	24.9	25.1	25.7	26.0	26.2	26.9	27.2	27.5
	SHR	0.50	0.69	0.83	0.53	0.72	0.86	0.54	0.74	0.89	0.55	0.76	0.91	0.56	0.77	0.92	0.57	0.78	0.94
VEB48 / VHB48	Btu/h	55180	53060	49080	52740	50710	46910	50440	48500	44860	47610	45780	42340	45990	44220	40900	44240	42530	39340
	Watts	4679	4755	4803	5053	5136	5187	5449	5538	5593	5963	6059	6120	6263	6365	6429	6593	6700	6767
	Amps	20.4	20.6	20.8	23.0	23.2	23.4	24.8	25.1	25.4	26.9	27.2	27.4	28.0	28.3	28.5	29.1	29.4	29.7
	SHR	0.50	0.68	0.82	0.51	0.70	0.84	0.51	0.70	0.85	0.52	0.71	0.85	0.51	0.71	0.85	0.51	0.70	0.84
VEB60	Btu/h	62810	60390	55860	62220	59830	55340	60320	58000	53650	57220	55020	50890	55220	53090	49110	52910	50880	47060
	Watts	5344	5431	5485	6002	6100	6161	6523	6630	6696	7111	7226	7299	7429	7550	7625	7764	7890	7969
	Amps	26.1	26.3	26.6	26.2	26.5	26.7	26.7	27.0	27.2	27.4	27.7	28.0	27.9	28.2	28.5	28.5	28.8	29.1
	SHR	0.48	0.65	0.78	0.51	0.69	0.83	0.52	0.71	0.85	0.52	0.71	0.86	0.52	0.71	0.86	0.52	0.71	0.85
VHB60	Btu/h	62310	59710	55000	60610	58280	53910	57200	55000	50880	53460	51410	47550	51470	49490	45780	49400	47500	43940
	Watts	5149	5232	5285	5788	5882	5941	6293	6395	6459	6859	6971	7041	7166	7282	7355	7488	7610	7686
	Amps	25.9	26.1	26.4	27.1	27.4	27.6	28.7	29.0	29.3	31.0	31.3	31.6	32.3	32.7	33.0	33.9	34.2	34.5
	SHR	0.47	0.65	0.78	0.51	0.70	0.84	0.53	0.72	0.86	0.53	0.73	0.87	0.53	0.72	0.87	0.52	0.72	0.86

RATING POINT
ARI 210/240

Indoor/Outdoor Blower Air Flow, SCFM								
	ESP	Rated	0.0"	0.1"	0.2"	0.3"	0.4"	0.5"
VEB18 / VHB18	Indoor	630	N/A	850	750	630	550	450
VEB18 / VHB18	Outdoor	1160	1160	1080	990	920	N/A	N/A
VEB24 / VHB24	Indoor	800	N/A	890	800	720	650	540
VEB24 / VHB24	Outdoor	1160	1160	1080	990	920	N/A	N/A
VEB30 / VHB30	Indoor	1000	N/A	1070	1000	940	830	720
VEB30 / VHB30	Outdoor	1300	1300	1227	1131	1026	N/A	N/A
VEB36 / VHB36	Indoor	1120	N/A	1220	1120	1050	990	860
VEB36 / VHB36	Outdoor	1600	1600	1550	1480	1420	N/A	N/A
VEB42 / VHB42	Indoor	1400	N/A	1610	1570	1510	1470	1400
VEB42 / VHB42	Outdoor	2100	2100	2000	1900	1800	N/A	N/A
VEB49 / VHB49	Indoor	1500	N/A	1610	1570	1510	1470	1400
VEB49 / VHB49	Outdoor	2400	2400	2300	2200	2100	N/A	N/A
VEB60 / VHB60	Indoor	1800	N/A	2040	1980	1900	1800	1750
VEB60 / VHB60	Outdoor	2600	2600	2550	2450	2350	N/A	N/A

Bold figures indicate the standard rated airflow. Indoor Airflow values were measured with wet coil. Outdoor airflow values were measured with dry coil.

ELECTRICAL DATA

VERT-I-PAK® B-SERIES

Air Conditioners																	
		Factory Circuit Breakers	Nom. Capacity	Voltage - Hz - Ph	Voltage Range	Multiple Circuits								Single Circuit			
						MCA		HACR / Max Breaker Size		Wire Size (field)		Ground Wire Size (field)		MCA	HACR / Max Breaker Size	Wire Size (field)	Ground Wire Size (field)
						Ckt 1	Ckt 2	Ckt 1	Ckt 2	Ckt 1	Ckt 2	Ckt 1	Ckt 2	Ckt 1	Ckt 1	Ckt 1	Ckt 1
VEB18K	00	1	0	230/208-60-1	198-253	14	N/A	20	N/A	12	N/A	12	N/A	14	20	10	12
	05	2	17000	230/208-60-1	198-253	14	27	20	30	12	10	12	10	27	30	10	10
	75	2	26000	230/208-60-1	198-253	14	39	20	40	12	8	12	10	40	40	6	10
	10	2	34000	230/208-60-1	198-253	14	53	20	60	12	6	12	10	53	60	6	10
VEB24K	00	1	0	230/208-60-1	198-253	16	N/A	20	N/A	10	N/A	10	N/A	16	20	10	10
	05	2	17000	230/208-60-1	198-253	16	27	20	30	10	10	10	10	27	30	10	10
	75	2	26000	230/208-60-1	198-253	16	39	20	40	10	8	10	10	40	45	6	10
	10	2	34000	230/208-60-1	198-253	16	53	20	60	10	6	10	10	53	60	6	10
VEB30K	00	1	0	230/208-60-1	198-253	23	N/A	30	N/A	8	N/A	10	N/A	23	30	8	10
	05	2	17000	230/208-60-1	198-253	23	27	30	30	8	10	10	10	27	30	8	10
	75	2	26000	230/208-60-1	198-253	23	39	30	40	8	8	10	10	40	45	6	10
	10	2	34000	230/208-60-1	198-253	23	53	30	60	8	6	10	10	53	60	6	10
	15	2	51000	230/208-60-1	198-253	27	53	30	60	8	8	10	10	80	90	4	8
VEB36K	00	1	0	230/208-60-1	198-253	28	N/A	40	N/A	8	N/A	10	N/A	28	40	8	10
	05	2	17000	230/208-60-1	198-253	28	27	40	30	8	10	10	10	28	40	8	10
	75	2	26000	230/208-60-1	198-253	28	39	40	40	8	8	10	10	40	45	6	10
	10	2	34000	230/208-60-1	198-253	28	53	40	60	8	6	10	10	53	60	6	10
	15	2	51000	230/208-60-1	198-253	28	53	40	60	8	8	10	10	81	90	4	8
VEB42K	00	1	0	230/208-60-1	198-253	34	N/A	50	N/A	6	N/A	10	N/A	34	50	6	10
	10	2	34000	230/208-60-1	198-253	34	53	50	60	6	6	10	10	55	60	6	10
	15	2	51000	230/208-60-1	198-253	34	53/27	50	60/30	6	6/8	10	10/10	82	90	4	8
VEB49K	00	1	0	230/208-60-1	198-253	36	N/A	50	N/A	6	N/A	10	N/A	41	60	6	10
	15	3	51000	230/208-60-1	198-253	36	53/27	50	60/30	6	6/8	10	10/10	82	90	4	8
	20	3	68000	230/208-60-1	198-253	36	53/53	50	60/60	6	6/6	10	10/10	108	110	2	4
VEB60K	00	1	0	230/208-60-1	198-253	48	N/A	70	N/A	4	N/A	8	N/A	48	70	4	8
	20	3	68000	230/208-60-1	198-253	48	53/53	70	60/60	4	6/6	8	10/10	108	110	2	4
	25	4	85000	230/208-60-1	198-253	48	53/53/27	70	60/60/30	4	6/6/8	10	10/10/10	N/A	N/A	N/A	N/A

Heat Pumps																	
		Factory Circuit Breakers	Nom. Capacity	Voltage / Hz / Ph	Voltage Range	Multiple Circuits								Single Circuit			
						MCA		HACR / Max Breaker Size		Wire Size (field)		Ground Wire Size (field)		MCA	HACR / Max Breaker Size	Wire Size (field)	Ground Wire Size (field)
						Ckt 1	Ckt 2	Ckt 1	Ckt 2	Ckt 1	Ckt 2	Ckt 1	Ckt 2	Ckt 1	Ckt 1	Ckt 1	Ckt 1
VHB18K	05	2	17000	230/208-60-1	198-253	14	26	20	30	12	10	12	10	39	40	8	10
	75	2	26000	230/208-60-1	198-253	14	39	20	40	12	8	12	10	52	60	6	10
	10	2	34000	230/208-60-1	198-253	14	52	20	60	12	6	12	10	65	70	4	8
VHB24K	05	2	17000	230/208-60-1	198-253	20	26	30	30	10	10	10	10	41	40	8	10
	75	2	26000	230/208-60-1	198-253	20	39	30	40	10	8	10	10	54	60	6	10
	10	2	34000	230/208-60-1	198-253	20	52	30	60	10	6	10	10	67	70	4	8
VHB30K	05	2	17000	230/208-60-1	198-253	23	26	40	30	8	10	10	10	51	60	6	10
	75	2	26000	230/208-60-1	198-253	23	39	40	40	8	8	10	10	64	70	4	8
	10	2	34000	230/208-60-1	198-253	23	52	40	60	8	6	10	10	77	80	4	8
	15*	2	51000	230/208-60-1	198-253	23	52	40	60	8	8	10	10	81	90	4	8
VHB36K	05	2	17000	230/208-60-1	198-253	28	26	40	30	8	10	10	10	54	60	6	10
	75	2	26000	230/208-60-1	198-253	28	39	40	40	8	8	10	10	67	70	4	8
	10	2	34000	230/208-60-1	198-253	28	52	40	60	8	6	10	10	80	80	4	8
	15*	2	51000	230/208-60-1	198-253	28	52	40	60	8	8	10	10	81	90	4	8
VHB42K	10	2	34000	230/208-60-1	198-253	34	53	50	60	6	6	10	10	86	90	4	8
	15	3	51000	230/208-60-1	198-253	34	53/27	50	60/30	6	6/8	10	10/10	112	120	2	4
VHB49K	15	3	51000	230/208-60-1	198-253	36	53/27	50	60/30	6	6/6	10	10/10	114	120	2	4
	20	3	68000	230/208-60-1	198-253	36	53/53	50	60/60	6	6/6	10	10/10	N/A	N/A	N/A	N/A
VHB60K	20	3	68000	230/208-60-1	198-253	48	53/53	70	60/60	4	6/6	8	10/10	N/A	N/A	N/A	N/A
	25	4	85000	230/208-60-1	198-253	48	53/53/27	70	60/60/30	4	6/6/8	8	10/10/10	N/A	N/A	N/A	N/A

* VHB30K15 and VHB36K15 models were configured to stage electric heat with the "D" suffix revision. Refer to unit nameplate for actual requirements.



VERT-I-PAK SINGLE PACKAGE AIR CONDITIONERS

Purchaser:	P.O. #	Date:
Project:	Location:	
Engineer:	Architect:	
Submitted By:	For Approval:	For Reference:

ITEM	PLAN DESIGNATION	QUANTITY	COOLING BTU/H	VOLTAGE	FRIEDRICH MODEL

A-SERIES

ACCESSORIES [Wall Plenum and Outdoor Louver are required.]

VPAWP1-8 Adjustable Wall Plenum (5-1/2"-8")	Qty	VPRG4 Return Air Grille/Access Panel	Qty
VPAWP1-14 Adjustable Wall Plenum (8"-14")	Qty	VPRG2 Return Air Grille (for wall or door)	Qty
VPAL2 Architectural Louver	Qty	RT2 Remote Digital Electric Wall Thermostat	Qty
VPSC2 Architectural Louver (color matched)	Qty	VPDP1 Drain Pan for all A Series 24,000 Btu/h	Qty

B-SERIES

ACCESSORIES [Wall Plenum and Outdoor Louver are required for through the wall applications.]

VPWP3-8/14* Wall Plenum for 18,000 and 24,000 Btu/h	Qty	VPAL3/VPSC3 Architectural Louver for VPWP3	Qty
VPWP4-8/14* Wall Plenum for 24,000, 30,000 and 36,000 Btu/h	Qty	VPAL4/VPSC4 Architectural Louver for VPWP4	Qty
VPWP5-8/14* Wall Plenum for 36,000, 42,000 and 49,000 Btu/h	Qty	VPAL5/VPSC5 Architectural Louver for VPWP5	Qty
VPWP6-8/14* Wall Plenum for 60,000 Btu/h	Qty	VPAL6/VPSC6 Architectural Louver for VPWP6	Qty
VPDPH5 Outdoor Coil Drain Pan/Line Heater for 18,000 – 36,000 Btu/h units	Qty	RT3 Remote Wall Thermostat for B series heat pumps	Qty
VPDPH6 Outdoor Coil Drain Pan/Line Heater for 42,000 – 60,000 Btu/h units	Qty	RT2 Remote Wall Thermostat for B series non-heat pumps	Qty
VPDB1 Distribution Block allows single point power connection on B-series models (100A Max)	Qty		

*-8 plenums are adjustable from 4 1/2" – 8", -14 plenums adjust from 8" – 14".

NOTES:

VERT-I-PAK® A-SERIES

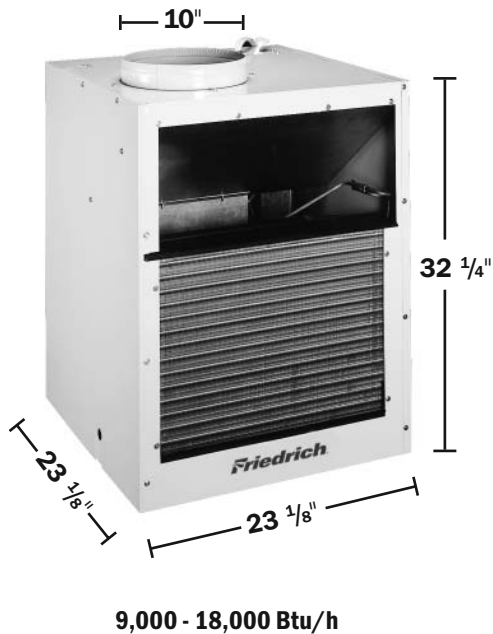
Application and Accessories

- Chassis is to be installed against an exterior wall. Wall cutout dimensions will be $24\frac{5}{8}$ " w x $30\frac{7}{8}$ " h.
- The use of a Friedrich wall plenum is required for installation. Plenum opening is $\frac{3}{4}$ " above the floor. (VPAWP1-8 / VPAWP1-14).
- Return air is accommodated with a return air filter attached to the unit or through the use of a return air filter grille. (VPRG4 / VPRG2).
- Exterior louvers are available in anodized aluminum (VPAL2) or in custom painted colors (VPSC2).
- Unit is controlled by a remote wall-mounted thermostat. Friedrich model RT2 digital thermostat is recommended.



Typical Closet Arrangement

Cutaway of a typical closet shown with Vert-I-Pak® chassis installed in the wall sleeve. The unit has the thermostat, field wiring, internal drain and flex duct attached. VPRG4 return air filter holder and access panel are shown to the right.



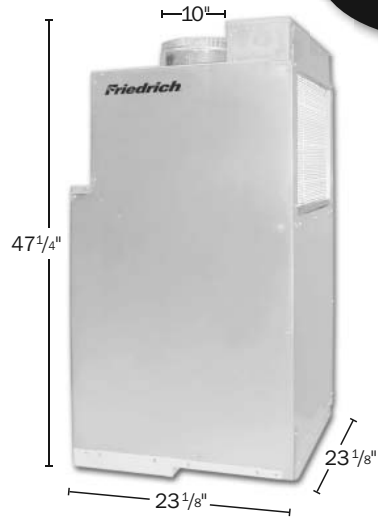
Installation Guidelines

- Closet should allow for a minimum of three inches on three sides of the unit for return air, drain connections and changeouts.
- Minimum recommended access door rough-in measurements 27" wide by $55\frac{3}{4}$ " high (for VPRG4).
- Friedrich recommends the use of a platform between 24" and 36" above the floor, for ease of installation and serviceability.
- Duct outlet designed for external static pressures up to .30" on 9,000 – 18,000 Btu/h models, and .40" on 24,000 Btu/h models.
- New wall plenum allows chassis to be inserted $2\frac{3}{8}$ " into plenum, thereby minimizing closet dimensions.

VERT-I-PAK® A-SERIES

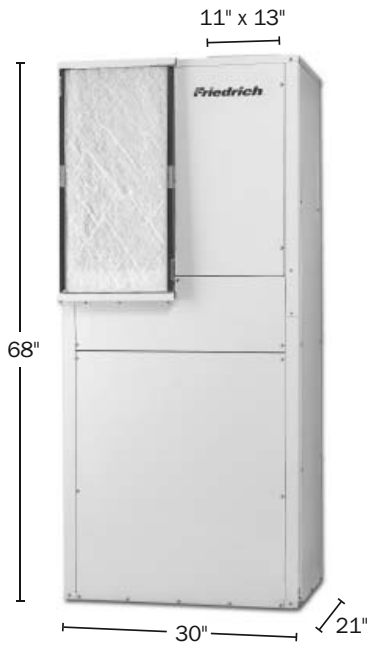
- New design utilizes drain pan (VPDP1) that can be installed prior to chassis for simplified installation and removal.
- Utilizes same wall plenum as other A Series units to give consistent exterior appearance. VEA/VHA24 plenum must be installed 1 1/2" off of chassis platform.

NEW 2-ton Models!



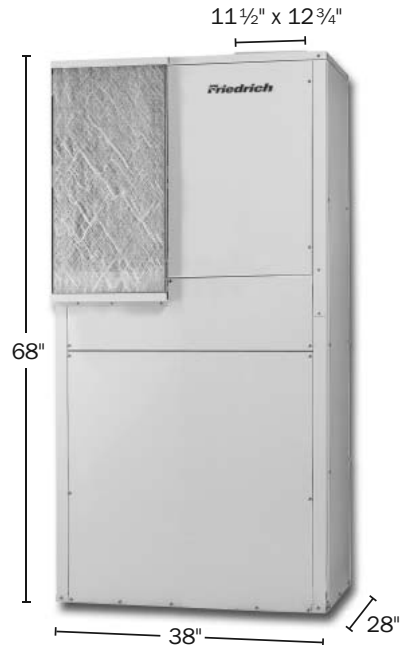
24,000 Btu/h

VERT-I-PAK® B-SERIES



18,000 - 36,000 Btu/h







Chassis may be installed against an exterior wall or an interior closet, allowing for flexible installation.





42,000 & 49,000 Btu/h
(60,000 Btu/h is 45" wide x 30 1/2" deep x 77" high)

As an option, the return air can be ducted or it can enter through the standard front-mount filter.

VERT-I-PAK® A-SERIES

MODEL	DESCRIPTION	PHOTO
VPAWP1-8	<p>WALL PLENUM Two-part sleeve that telescopes in and out from 5½" to 8" in depth. The wall plenum sits inside the exterior wall penetration. DIMENSIONS: 30³/₈" high x 24¹/₈" wide. CUTOUT DIMENSIONS: 30⁷/₈" high x 24⁵/₈" wide.</p>	
VPAWP1-14	<p>Same as VPAWP1-8, but telescopes 8" to 14" as required.</p>	
VPAL2	<p>ARCHITECTURAL LOUVER Extruded aluminum louver that attaches to the outdoor section of the wall plenum. DIMENSIONS: 31¹/₁₆" high x 25⁹/₁₆" wide.</p>	
VPSC2	<p>Same as VPAL2 but can be ordered in a special color to match the exterior wall.</p>	
RT2	<p>DIGITAL THERMOSTAT Digital electronic thermostat with "one touch" adjustment. Mounts to wall for control of unit.</p>	
VPRG4	<p>ACCESS PANEL / RETURN AIR GRILLE – Serves as an access panel to chassis and interior return air grille. A field-supplied (25" x 20") filter is mounted inside the hinged access door. DIMENSIONS: 58" high x 29" wide. CUTOUT DIMENSIONS: 55³/₄" high x 27" wide.</p>	
VPRG2	<p>RETURN AIR GRILLE – Interior return air grille that hinges to allow a field supplied (16" x 20") filter to slip inside. Must be used when an access door / panel already exists in closet. DIMENSIONS: 18⁷/₁₆" high x 22³/₈" wide.</p>	
VPDP1	<p>DRAIN PAN for VEA/VHA24 models. Drain pan may be installed prior to chassis for easy installation/removal.</p>	

VERT-I-PAK® B-SERIES

MODEL	DESCRIPTION	PHOTO
Telescoping wall plenums adjust to exact wall depth. Models with -8 suffixes adjust 4 1/2" - 8" deep; -14 models adjust 8" - 14".		
WALL PLENUM- Used when chassis is positioned against an exterior wall for outdoor air infiltration.		
VPBWP3-8 VPBWP3-14	Recommended for use with 18,000 and 24,000 Btu/h units. DIMENSIONS: 18 1/4" high x 28 1/4" wide. CUTOUT DIMENSIONS: 18 1/2" high x 28 1/2" wide.	 <p data-bbox="1211 785 1284 800">VPBWP3-8</p>
VPBWP4-8 VPBWP4-14	Recommended for use with 18,000, 24,000, 30,000 and 36,000 Btu/h units. DIMENSIONS: 24 1/4" high x 30" wide. CUTOUT DIMENSIONS: 24 1/2" high x 30 1/4" wide	
VPBWP5-8 VPBWP5-14	Recommended for use with 42,000 and 49,000 Btu/h units. DIMENSIONS: 24 1/4" high x 38" wide. CUTOUT DIMENSIONS: 24 1/2" high x 38 1/4" wide.	
VPBWP6-8 VPBWP6-14	Recommended for use with 60,000 Btu/h units. DIMENSIONS: 34 1/4" high x 40" wide. CUTOUT DIMENSIONS: 34 1/2" high x 40 1/4" wide.	
ARCHITECTURAL LOUVER- Extruded aluminum outdoor louver that attaches to wall sleeve or outside of building.		
VPAL3 VPSC3	Architectural louver for VPBWP3 plenums. Custom colored architectural louver for VPBWP3 plenums.	 <p data-bbox="1211 1339 1252 1354">VPAL4</p>
VPAL4 VPSC4	Architectural louver for VPBWP4 plenums. Custom colored architectural louver for VPBWP4 plenums.	
VPAL5 VPSC5	Architectural louver for VPBWP5 plenums. Custom colored architectural louver for VPBWP5 plenums.	
VPAL6 VPSC6	Architectural louver for VPBWP6 plenums. Custom colored architectural louver for VPBWP6 plenums.	
RT3	THERMOSTAT Digital two-stage, manual changeover thermostat for B Series heat pumps only. For nonheat pump models, use RT2.	
VPDB1	DISTRIBUTION BLOCK - Allows B Series Vert-I-Paks to be connected to a single-point power source. Block and wiring is entirely contained within the unit electrical control box. For use on circuits up to 100 amps max. Larger requirements must use multiple circuits. VHB49K15 is the largest Vert-I-Pak approved for use with the VPDB1. Distribution block is standard on RTD models 18000 - 36000 BTU/h.	
COLD CLIMATE KITS- The following kits are to be applied in climates where the outdoor design temperature is 15°F or below.		
VPDPH5 VPDPH6	Outdoor coil drain pan/line heater for 18,000 – 36,000 Btu/h units.* Outdoor coil drain pan heater for 42,000 – 60,000 Btu/h units.*	

* No additional electrical service is required for these kits.

+ RTD models do not require cold climate kits.

MODEL IDENTIFICATION GUIDE

MODEL NUMBER		V	E	A	09	K	50	RT	A	
SERIES V=Vertical Series		ENGINEERING CODE								
E=Cooling with or without electric heat H=Heat Pump										
DESIGN SERIES A = 32" /47" Cabinet B = 68" Cabinet		OPTIONS RT = Standard Remote Operation SP = Seacoast Protected								
NOMINAL CAPACITY										
A Series (Btu/h) 09 = 9,000 12 = 12,000 18 = 18,000 24 = 24,000		B Series (Btu/h) 18 = 18,000 24 = 24,000 30 = 30,000 36 = 36,000		42 = 42,000 49 = 49,000 60 = 60,000		ELECTRIC HEATER SIZE A Series 00 = No electric heat 25 = 2.5 KW 34 = 3.4 KW 50 = 5.0 KW 75 = 7.5 KW 10 = 10.0 KW				B Series 00 = No electric heat 05 = 5.0 KW 07 = 7.5 KW 10 = 10.0 KW 15 = 15.0 KW 20 = 20.0 KW 25 = 25.0 KW
VOLTAGE K = 208/230V-1Ph-60Hz		Refer to electrical data chart for heater/unit compatibility								



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Due to continuing research in new energy-saving technology, specifications are subject to change without notice.