

# Type VA Vanax Fans Models VA, VAD, & VAB



## Type VA — Direct Drive

### Model VA

Sizes 6 through 10  
207 to 1,811 CFM  
Static Pressure to 1-1/2"



#### Construction

Model VA fans feature a spun aluminum casing and a sturdy cast aluminum vane section. The vane section also serves as the motor mount for the fan, and the cast aluminum rotor is mounted directly to the motor shaft. This direct drive arrangement provides years of maintenance-free service.

### Model VAD

Sizes 12 through 48  
955 to 36,396 CFM  
Static Pressure to 2-1/2"



#### Construction

Model VAD fans feature a rolled steel casing with a formed steel vane section. Both the steel casing and vane section are coated with a protective epoxy paint finish. The vane section for the VAD also serves as the motor mount for the fan, and the cast aluminum rotor is mounted directly to the motor shaft. This direct drive arrangement provides years of maintenance-free service.

VAD fans come standard with heavy-gauge welded fan brackets for ease of handling and mounting the fan.

## Type VAB — Belt Drive

### Model VAB

Sizes 12 through 48  
1,004 to 47,176 CFM  
Static Pressure to 3"



#### Construction

Model VAB fans feature a rolled steel casing with a formed steel vane section. Both the steel casing and vane section are coated with a protective epoxy paint finish.

Motors for the VAB are mounted such that they are isolated from the airstream. Most models utilize variable pitch motor pulleys, which provide a wide adjustment of fan speed. This allows the performance of a VAB unit to be precisely matched to the system in which it operates.

VAB fans come standard with heavy-gauge welded fan brackets for ease of handling and mounting the fan.

## Application

American Coolair *Vanax* fans are true vane axial fans designed for a wide range of commercial and industrial applications. High pressure efficiency permits the fans to be installed anywhere in the system — in any position. The fans can be used for either supply or exhaust by simply turning the entire unit to move air in the desired direction.

*Vanax* fans are extremely compact and well suited to locations where space is limited, and can often be easily mounted directly to the ductwork. As a result of very close tolerances and carefully matched vanes and rotors, *Vanax* fans offer exceptional performance across their size ranges.

## Motors

Totally enclosed motors are standard. Several alternatives, such as explosion proof or two-speed motors, are available to fit your specific needs. Only nationally recognized brand motors with nationwide service facilities are used.

Motor availability is limited on certain fan models.

Contact your American Coolair representative for more information. Totally enclosed, single phase motors have built-in overload protection.

## Finish

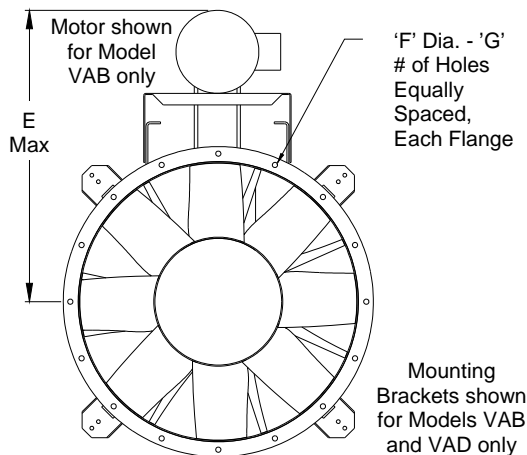
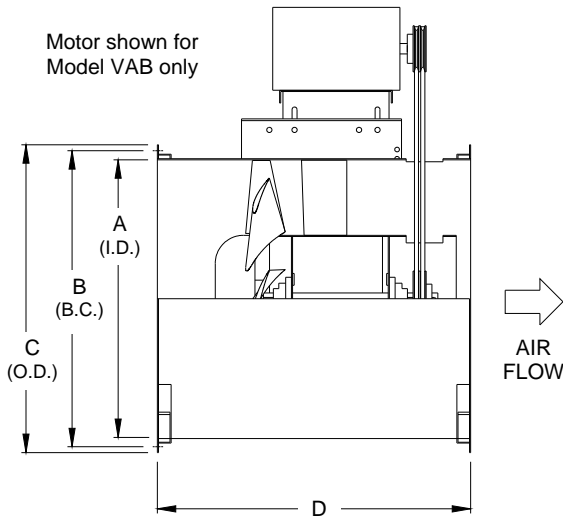
Parts requiring painting are processed through the advanced American Coolair multi-stage pretreatment system prior to the application of any coatings to ensure maximum finish adhesion. These parts are then powder coated with epoxy to provide a protective coating rated excellent for hardness, impact resistance, adhesion and chemical resistance.

## Listings



Type VA, VAD, and VAB ventilators are listed by Underwriters Laboratory, Inc. to U.S. and Canadian safety standards.

Certified ratings licensed by AMCA (Air Movement and Control Association International, Inc.), for both air and sound performance, are available for all *Vanax* fans.



## Vanax Fan Dimensions

Fan Size	A	B	C	D		E	F	G	Outlet Area, ft <sup>2</sup>
				VA/VAD	VAB				
6	6	7	7 1/2	6 3/4	—	—	7/32	8	0.20
7	7	8	8 1/2	6 3/4	—	—	7/32	8	0.27
8	8	9	9 1/2	10 1/4	—	—	7/32	8	0.35
85	8 1/2	9 1/2	10	10 1/4	—	—	7/32	8	0.39
9	9	10	10 1/2	10 1/4	—	—	7/32	8	0.44
95	9 1/2	10 1/2	11	10 1/4	—	—	7/32	8	0.49
10	10	11	11 1/2	10 1/4	—	—	7/32	8	0.54
12	12 1/8	13 1/8	14 13/16	15	17	17	3/8	8	0.80
14	14 1/8	15 3/8	16 13/16	15	17	19 1/2	3/8	8	1.09
16	16 1/8	17 3/8	18 13/16	15	17	20	3/8	8	1.42
18	18 1/8	19 1/2	20 13/16	15	17	21	3/8	8	1.79
24	24 1/8	25 7/8	28	23	30	32	9/16	12	3.19
30	30 1/8	32 1/8	34 1/4	26	34	38	9/16	16	4.95
36	36 1/8	38 1/8	40 1/2	36	36	42	9/16	16	7.12
42	42 1/8	44 3/16	46 3/4	36	36	47	9/16	24	9.68
48	48 1/8	50 1/2	53	36	36	50	9/16	24	12.63

# Performance Ratings



American Coolair Corporation certifies that the Type VA, VAD, and VAB fan models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

# Typical Specifications

Vane axial fans shall be American Coolair Type VA, VAD, or VAB as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. Fan housing shall be made of aluminum with cast aluminum vane section (VA) or epoxy paint coated steel with formed steel vane section (VAD & VAB). Fan rotor shall be cast aluminum. All motors shall be totally-enclosed. Fans shall be licensed to bear the AMCA Certified Ratings Seal for Sound and Air Performance. (Specify for each fan model in schedule the required CFM and static pressure; motor enclosure, phase and voltage. List accessories — as described on Pages 6 & 7 — as required.)

## VA and VAD — Direct Drive

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,5</sup>									Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	MAX BHP <sup>4,5</sup>	Approx. Ship Wt.
	0"	1/4"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"							
1	292	249	207	---	---	---	---	---	---	VA6D34	6	1/12	3400	7.6	0.04	9
2	511	456	391	---	---	---	---	---	---	VA7D32	7	1/12	3225	8.6	0.07	12
3	758	711	659	603	540	---	---	---	---	VA8H35	8	1/3	3550	14.8	0.21	21
4	994	948	895	834	757	674	---	---	---	VA85H35	85	1/3	3525	15.6	0.27	22
5	1,291	1,235	1,171	1,096	1,001	891	---	---	---	VA9H35	9	1/3	3500	17.1	0.33	23
6	1,502	1,434	1,357	1,268	1,164	1,049	918	---	---	VA95H34	95	1/3	3475	18.1	0.39	24
7	1,811	1,730	1,644	1,551	1,439	1,289	1,142	---	---	VA10H34	10	1/3	3450	21.0	0.50	25
8	1,095	955	---	---	---	---	---	---	---	VAD12H17	12	1/3	1790	11.5	0.10	56
9	2,156	2,085	2,014	1,943	1,872	1,796	1,708	---	---	VAD12K35	12	3/4	3525	30	0.77	58
10	1,822	1,608	---	---	---	---	---	---	---	VAD14H17	14	1/3	1780	12.1	0.18	61
11	3,608	3,507	3,401	3,290	3,174	3,049	2,906	2,542	2,149	VAD14M35	14	1 1/2	3525	31	1.43	73
12	2,648	2,368	1,958	---	---	---	---	---	---	VAD16H17	16	1/3	1770	17.8	0.30	65
13	5,274	5,153	5,021	4,875	4,710	4,520	4,311	3,885	3,470	VAD16N35	16	2	3525	37	2.41	79
14	3,634	3,276	2,800	---	---	---	---	---	---	VAD18H17	18	1/3	1760	19.2	0.42	69
15	7,278	7,119	6,948	6,764	6,563	6,342	6,103	5,613	5,090	VAD18P35	18	3	3525	54	3.37	85
16	6,115	5,712	5,236	4,640	---	---	---	---	---	VAD24L11	24	1	1160	18.8	1.12	365
17	9,252	8,996	8,724	8,433	8,118	7,773	---	---	---	VAD24P17	24	3	1755	35	3.40	399
18	9,305	9,050	8,780	8,491	8,179	7,837	7,459	6,537	---	VAD24Q17	24	5	1765	35	3.84	415
19	12,549	11,891	11,147	---	---	---	---	---	---	VAD30N11	30	2	1175	25	2.14	422
20	12,602	11,947	11,208	10,348	9,317	8,122	---	---	---	VAD30P11	30	3	1180	25	2.76	439
21	18,903	18,479	18,035	17,568	17,072	16,544	15,977	14,697	---	VAD30R17	30	7 1/2	1770	47	8.52	451
22	12,267	11,517	10,583	9,382	---	---	---	---	---	VAD36N8	36	2	870	21	2.00	685
23	16,497	15,961	15,370	14,700	13,919	13,026	12,039	---	---	VAD36Q11	36	5	1170	32	5.03	709
24	24,886	24,540	24,181	23,805	23,412	22,998	22,559	21,590	20,485	VAD36T17	36	15	1765	62	15.60	935
25	17,356	16,269	14,999	13,435	11,475	---	---	---	---	VAD42P8	42	3	870	23	3.32	863
26	23,541	22,763	21,927	21,016	20,008	18,873	17,578	14,471	---	VAD42R11	42	7 1/2	1180	36	8.28	878
27	27,028	25,698	24,129	22,175	19,730	16,795	13,636	---	---	VAD48Q8	48	5	880	29	5.75	1045
28	36,088	35,124	34,078	32,928	31,638	30,168	28,497	---	---	VAD48S11	48	10	1175	45	11.50	1061
29	36,396	35,439	34,405	33,270	31,999	30,557	28,918	25,003	20,501	VAD48T11	48	15	1185	46	13.91	1228

## VAB — Belt Drive

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,5</sup>									Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	MAX BHP <sup>4,5</sup>	Approx. Ship Wt.
	0"	1/4"	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"							
1	1,244	1,133	1,004	---	---	---	---	---	---	VAB12G	12	1/4	2186	12.9	0.25	73
2	1,369	1,270	1,159	1,014	---	---	---	---	---	VAB12H	12	1/3	2406	15.2	0.33	73
3	1,571	1,485	1,392	1,289	1,155	---	---	---	---	VAB12J	12	1/2	2760	19.0	0.50	79
4	1,797	1,722	1,644	1,560	1,468	---	---	---	---	VAB12K	12	3/4	3157	23	0.75	88
5	1,790	1,583	1,319	---	---	---	---	---	---	VAB14G	14	1/4	1869	13.4	0.25	77
6	1,968	1,785	1,551	---	---	---	---	---	---	VAB14H	14	1/3	2054	15.4	0.33	77
7	2,262	2,108	1,918	1,707	---	---	---	---	---	VAB14J	14	1/2	2361	19.0	0.50	84
8	2,586	2,454	2,301	2,121	1,937	---	---	---	---	VAB14K	14	3/4	2699	23	0.75	87
9	2,844	2,726	2,593	2,439	2,271	---	---	---	---	VAB14L	14	1	2969	27	1.00	90
10	2,590	2,338	---	---	---	---	---	---	---	VAB16H	16	1/3	1814	15.7	0.33	84
11	2,963	2,751	2,476	---	---	---	---	---	---	VAB16J	16	1/2	2075	19.4	0.50	90
12	3,390	3,209	2,993	2,721	---	---	---	---	---	VAB16K	16	3/4	2374	24	0.75	94
13	3,731	3,569	3,383	3,160	2,891	---	---	---	---	VAB16L	16	1	2613	28	1.00	100
14	4,275	4,136	3,982	3,809	3,608	3,111	---	---	---	VAB16M <sup>6</sup>	16	1 1/2	2994	34	1.50	94
15	4,701	4,575	4,439	4,290	4,123	3,722	3,226	---	---	VAB16N <sup>6</sup>	16	2	3292	41	2.00	97

# VAB Performance Ratings Continued

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,5</sup>									Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	MAX BHP <sup>4,5</sup>	Approx. Ship Wt.
	0"	1/4"	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"							
16	4,503	4,226	3,930	3,606	3,235	---	---	---	---	VAB18L	18	1	2290	27	1.00	105
17	5,149	4,907	4,654	4,387	4,098	3,424	---	---	---	VAB18M <sup>6</sup>		1 1/2	2618	33	1.50	98
18	5,666	5,447	5,221	4,984	4,735	4,172	3,509	---	---	VAB18N <sup>6</sup>		2	2881	39	2.00	101
19	6,486	6,296	6,100	5,899	5,691	5,246	4,739	4,171	---	VAB18P <sup>6</sup>		3	3298	49	3.00	123
20	4,133	3,470	--	--	--	--	--	--	--	VAB24H	24	1/3	784	9.8	0.33	351
21	4,734	4,184	3,400	--	--	--	--	--	--	VAB24J		1/2	898	12.2	0.50	358
22	5,367	4,896	4,300	3,418	--	--	--	--	--	VAB24K		3/4	1018	15.0	0.75	360
23	5,883	5,462	4,955	4,297	--	--	--	--	--	VAB24L		1	1116	17.5	0.96	365
24	6,843	6,488	6,086	5,615	5,037	--	--	--	--	VAB24M		1 1/2	1298	22	1.50	378
25	7,428	7,104	6,745	6,339	5,866	4,544	--	--	--	VAB24N		2	1409	25	2.00	385
26	8,493	8,212	7,911	7,582	7,218	6,336	5,101	--	--	VAB24P		3	1611	31	3.00	406
27	10,053	9,819	9,572	9,311	9,034	8,413	7,672	6,704	--	VAB24Q		5	1907	40	4.97	429
28	8,191	7,091	5,502	--	--	--	--	--	--	VAB30K	30	3/4	767	12.9	0.75	399
29	9,217	8,272	7,024	--	--	--	--	--	--	VAB30L		1	863	15.3	1.00	405
30	10,370	9,552	8,551	7,262	--	--	--	--	--	VAB30M		1 1/2	971	18.0	1.50	417
31	11,331	10,593	9,728	8,663	7,366	--	--	--	--	VAB30N		2	1061	21	2.00	422
32	13,339	12,724	12,041	11,264	10,355	--	--	--	--	VAB30P		3	1249	27	3.00	439
33	15,357	14,830	14,261	13,640	12,951	11,300	9,141	--	--	VAB30Q		5	1438	35	5.00	451
34	17,568	17,111	16,627	16,113	15,561	14,311	12,806	11,034	--	VAB30R		7 1/2	1645	42	7.50	518
35	19,341	18,927	18,495	18,040	17,561	16,507	15,289	13,873	12,262	VAB30S		10	1811	49	10.00	532
36	10,857	9,985	8,805	7,248	--	--	--	--	--	VAB36M	36	1 1/2	770	18.0	1.50	659
37	11,830	11,046	10,047	8,756	6,995	--	--	--	--	VAB36N		2	839	20	2.00	665
38	14,001	13,359	12,610	11,695	10,602	--	--	--	--	VAB36P		3	993	25	3.00	685
39	16,454	15,917	15,324	14,651	13,866	11,976	--	--	--	VAB36Q		5	1167	32	5.00	709
40	18,386	17,910	17,396	16,833	16,203	14,694	12,894	10,202	--	VAB36R		7 1/2	1304	37	7.50	761
41	20,233	19,803	19,346	18,855	18,322	17,084	15,604	13,906	11,434	VAB36S		10	1435	44	10.00	787
42	23,857	23,495	23,118	22,723	22,306	21,393	20,339	19,131	17,798	VAB36T		15	1692	58	15.00	944
43	25,915	25,583	25,240	24,882	24,510	23,709	22,813	21,797	20,665	VAB36U		20	1838	68	19.99	959
44	14,883	13,580	11,928	9,688	--	--	--	--	--	VAB42N	42	2	746	18.1	2.00	760
45	16,977	15,862	14,547	12,905	10,830	--	--	--	--	VAB42P		3	851	22	3.00	786
46	19,950	19,020	17,982	16,794	15,387	11,679	--	--	--	VAB42Q		5	1000	28	5.00	797
47	22,803	21,998	21,128	20,172	19,104	16,488	12,996	--	--	VAB42R		7 1/2	1143	34	7.49	863
48	25,077	24,350	23,576	22,744	21,838	19,727	17,094	13,602	--	VAB42S		10	1257	40	10.00	886
49	28,907	28,281	27,626	26,937	26,208	24,596	22,712	20,477	17,864	VAB42T		15	1449	50	15.00	1022
50	31,581	31,010	30,417	29,800	29,153	27,758	26,186	24,380	22,299	VAB42U		20	1583	59	19.98	1043
51	34,573	34,053	33,517	32,963	32,388	31,168	29,832	28,348	26,677	VAB42V <sup>7</sup>		25	1733	69	25.00	1158
52	37,565	37,088	36,598	36,095	35,576	34,488	33,319	32,050	30,661	VAB42W <sup>7</sup>	30	1883	80	29.98	1193	
53	22,359	20,692	18,484	15,429	--	--	--	--	--	VAB48P	48	3	728	22	3.00	953
54	26,721	25,373	23,775	21,772	19,256	--	--	--	--	VAB48Q		5	870	29	4.99	965
55	29,946	28,761	27,419	25,835	23,924	18,988	--	--	--	VAB48R		7 1/2	975	34	7.50	1020
56	32,618	31,540	30,347	28,993	27,412	23,414	18,454	--	--	VAB48S		10	1062	39	10.00	1045
57	37,471	36,543	35,545	34,459	33,255	30,368	26,733	22,426	--	VAB48T		15	1220	49	14.98	1184
58	41,310	40,474	39,587	38,641	37,618	35,267	32,403	28,959	25,031	VAB48U		20	1345	58	20.00	1215
59	44,105	43,325	42,504	41,637	40,711	38,637	36,171	33,251	29,845	VAB48V <sup>7</sup>		25	1436	65	24.98	1330
60	47,176	46,449	45,689	44,892	44,053	42,209	40,076	37,592	34,725	VAB48W <sup>7</sup>		30	1536	73	29.96	1365

- 1 — Performance certified is for Installation Type B: free inlet, ducted outlet. Performance includes the effects of an inlet bell.
- 2 — The first two or three letters of the model number identify **fan type**. The next two numbers indicate **fan size**, the next letter identifies motor **horsepower**. For direct drive fans, the last two numbers indicate fan speed. Example: Model VAD14M35 is Type "VAD" (direct drive) 14" size, 1-1/2 H.P., 3525 RPM.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5m (5 ft.) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type B: free inlet hemispherical sone levels. The sound ratings shown are at 0" static pressure.
- 4 — Maximum brake horsepower (BHP) within the catalog performance range. Power rating (BHP) does not include transmission losses. BHP at most static pressures listed is less than that shown, in some cases substantially less. For specific BHP values at individual static pressure points, contact your American Coolair representative.
- 5 — To convert air performance (CFM and SP) and power (BHP) to metric units, multiply CFM x .000472 to obtain cubic meters per second (m<sup>3</sup>/s). Multiply SP x 248.36 to obtain pascals (Pa). Multiply BHP x .7457 to obtain kilowatts (kW).
- 6 — These models use a 3450 RPM motor with a maximum 145T frame size.
- 7 — These models use fixed pitch pulleys.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Options and Accessories

## **Inlet Bell**

For a Vanax fan that is not duct connected at the inlet, an inlet bell is recommended for efficient performance.

## **Inlet/Outlet Guard**

Guards prevent the entry of foreign material into the fan. Punched sheet metal guards with OSHA compliant openings are used on Vanax fans up through Size 18. For sizes 24 and up, the guard consists of 1" x 1" wire mesh. Guards can be mounted on either the fan inlet or outlet.

## **Belt Tube (VAB 24-48 Only)**

The painted steel belt tube isolates the drive components from the airstream. A belt tube is standard on VAB sizes 12-18, and is an option for sizes 24-48. Due to positive pressures on the motor shaft side of the VAB fan, either a belt tube or drive guard accessory (see below) is recommended to minimize air leakage.

## **Motor Cover (VAB Only)**

The painted steel housing encloses motor and drives on belt drive models. The cover is open on the motor pulley end to allow for ventilation of motor.

## **Drive Guard (VAB Only)**

This guard keeps personnel and foreign objects away from the rotating motor sheave and belts. For Size 24-48 units without a belt tube, a drive guard is recommended to minimize air leakage.

## **Companion Flange (VAB and VAD only)**

The companion flange — a flange identical to the fan flange — is designed to be attached to the adjoining duct to simplify fan installation.

## **Duct Connector**

A duct connector is available for ease in mating the Vanax fan to ductwork. The duct connector is tapered for sizes 10 and below, and is straight for sizes 12 and above.

## **Access Panel (VAB and VAD only)**

This removable panel allows limited access to fan for inspection and cleaning of fan interior, and lubrication of direct drive motors.

## **Protective Coatings**

Ventilator units are not recommended for exhausting air of a corrosive nature. However, special protective coatings are available where units may be exposed to corrosive exterior conditions. Parts requiring painting are processed through the American Coolair multi-stage pretreatment system prior to the application of any coatings to insure maximum finish adhesion. These parts use a thermosetting epoxy powder paint with an average thickness of 3 mils and baked at 400°F to a smooth, hard continuous finish.

For applications that require more specialized surface protection, American Coolair offers alternatives: 6 mil epoxy or hot dip galvanizing, and others. For more information about special protective coatings, contact your American Coolair representative.

## **Pre-Wired Motor**

For convenience in connecting direct drive units to the power supply, the motor may be pre-wired to a conduit box mounted on the exterior of the fan housing.

## **Safety Disconnect Switch**

This switch is designed to mount near the fan and serve as a safety disconnect from the power supply.

## **Mounting Feet**

When necessary to support fan weight from floor or ceiling, mounting feet should be specified. Applications which involve wall mounting should be referred to your American Coolair representative for recommended fan mounts. Type of support to which fan will be mounted and location relative to motor (or access panel) should be clearly stated.

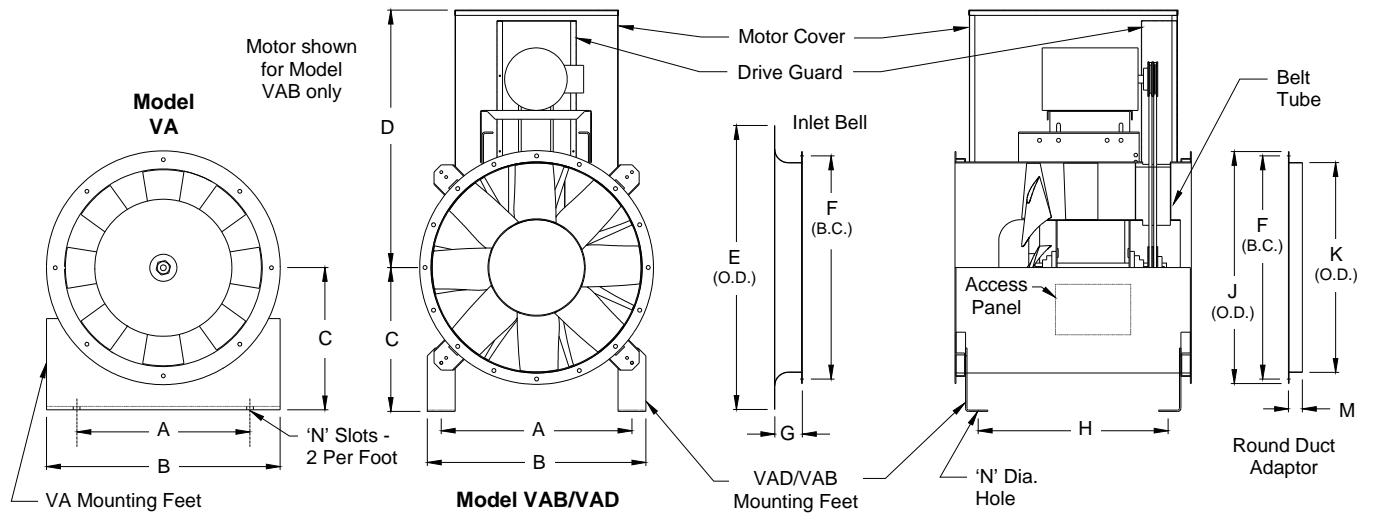
## **PRV Kit (VAB and VAD only)**

The VAB or VAD fan can be ordered with a PRV kit, which permanently converts the unit to an Upblast Power Roof Ventilator. The kit includes a curb cap for roof mounting, and an exhaust shroud suitable for all-weather operation.

## **Special Motors**

Two-speed, energy efficient and explosion-proof motors for hazardous locations may be available for many models. Motor enclosure may affect UL listing.

# Accessory Dimensions



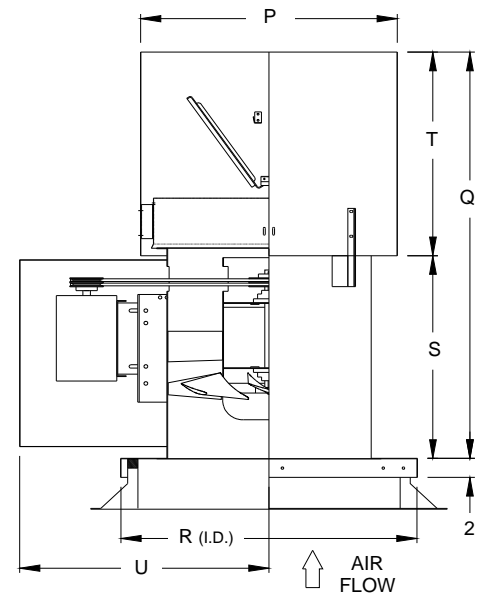
Fan Size	A	B	C	D	E	F	G	H		J	K*	M*	N	Access Panel
								VA-VAD	VAB					
6	4 1/2	7	4 5/8	—	8 1/4	7	1	5 9/16	—	7 1/2	6	2	9/32 x 1 1/4	—
7	5 1/2	8	5 1/8	—	9 1/4	8	1	5 9/16	—	8 1/2	7	2	9/32 x 1 1/4	—
8	6 1/2	9	5 5/8	—	10 1/4	9	1	9	—	9 1/2	8	2	9/32 x 1 1/4	—
85	7	9 1/2	5 7/8	—	10 3/4	9 1/2	1	9	—	10	8 1/2	2	9/32 x 1 1/4	—
9	7 1/2	10	6 1/8	—	11 1/4	10	1	9	—	10 1/2	9	2	9/32 x 1 1/4	—
95	8	10 1/2	6 3/8	—	11 3/4	10 1/2	1	9	—	11	9 1/2	2	9/32 x 1 1/4	—
10	8 1/2	11	6 5/8	—	12 1/4	11	1	9	—	11 1/2	10	2	9/32 x 1 1/4	—
12	13 1/8	14 5/8	10 3/16	19 1/8	18	13 1/8	2 1/16	11 7/16	13 7/16	14	12 1/4	1 1/4	13/32	4 x 6 3/8
14	14 1/2	16	10 7/8	20 11/16	20	15 3/8	2 1/16	11 7/16	13 7/16	16 1/8	14 1/4	1 1/4	13/32	4 x 6 3/8
16	15 7/8	17 3/8	11 5/8	22 3/8	22	17 3/8	2 1/16	11 7/16	13 7/16	18 1/4	16 1/4	1 3/8	13/32	5 x 7
18	17 3/8	18 7/8	12 5/16	23 3/4	24	19 1/2	2 1/16	11 7/16	13 7/16	20 3/8	18 1/4	1 1/4	13/32	5 x 7
24	21 11/16	23 3/16	14 1/2	32 3/4	34 7/8	25 3/4	4	19 3/8	26 3/8	28	24 1/4	1 1/2	13/32	7 x 10 1/2
30	27 1/2	31 1/2	20 3/4	37 1/16	40 7/8	32 1/8	4	19 5/8	27 5/8	34 1/4	30 1/4	1 1/2	9/16	8 x 13 1/8
36	31 3/4	35 3/4	22 7/8	42 1/8	46 7/8	38 1/8	4	29 5/8	29 5/8	40 1/2	36 1/4	1 1/2	9/16	10 x 15 3/4
42	35 13/16	39 15/16	25	46 1/16	52 7/8	44 3/16	4	29 5/8	29 5/8	46 3/4	42 1/4	1 1/2	9/16	12 x 18 3/8
48	40 3/16	44 3/16	27 1/8	49 11/16	58 7/8	50 1/2	4	29 5/8	29 5/8	53	48 1/4	1 1/2	9/16	12 x 21

# PRV Kit Dimensions

Fan Size	P	Q		R*	S		T	U
		VAD	VAB		VAD	VAB		
12	16	26 1/2	28 1/2	26	14	16	12 1/2	19 1/8
14	18	27 1/2	29 1/2	28	14	16	13 1/2	20 11/16
16	20	28 1/2	30 1/2	30	14	16	14 1/2	22 3/8
18	22	30	32	32	14	16	16	23 3/4
24	32	49 3/8	56 3/8	38	21 3/4	28 3/4	27 5/8	33
30	38	57 1/4	65 1/4	44	24 3/4	32 3/4	32 1/2	37
36	44	67 1/4	67 1/4	50	34 3/4	34 3/4	32 1/2	42 1/4
42	50	72 1/8	72 1/8	56	34 3/4	34 3/4	37 3/8	46 1/8
48	56	72 1/8	72 1/8	62	34 3/4	34 3/4	37 3/8	49 3/4

\* - Recommended curb O.D. is 'R' - 2".

All Dimensions in Inches



# Installation, Selection, and Maintenance

**INSTALLATION:** American Coolair's Vanax fans may be mounted in any position. For convenience in wiring and service, the motor should be readily accessible. On direct drive units, access through adjacent duct work is recommended. On belt drive units, the motor position must be considered with regard to service and adjacent objects such as wall or ceiling.

The duct fan has flanged ends on the steel housing for convenient mounting directly to the duct system. Flexible connections or transition pieces may be utilized to reduce noise transmission, simplify duct attachment, and provide access to the fan interior.

If the fan cannot be adequately supported by duct work or otherwise, optional mounting feet should be utilized. Type of support (floor or ceiling) and location relative to motor or access panel will determine proper type and location of mounts needed.

Always check blade clearance and direction of rotation before operating.

**SOUND:** Sound ratings may also be a factor in fan selection. Sound ratings provided in the performance tables on Pages 4 & 5 are shown in Sones. Individual octave band sound data can be provided upon request; contact your American Coolair representative.

**MAINTENANCE:** Vanax fans should be cleaned as necessary to remove accumulated dust, dirt and other foreign matter which may collect on the blades or interior surfaces. If belt drive, belt(s) should be inspected and tension adjusted. Check belt(s) for proper alignment.

External relubrication fan bearing fittings are standard with belt drive models. Pillow-block ball bearings should be lubricated annually or more frequently, depending upon conditions and operating cycle. Refer to the maintenance instructions supplied with the fan. For lubrication of the electric motor, consult the instructions provided by the motor manufacturer.

## Limited Warranty

In the sale of its products, American Coolair Corporation agrees to correct, by repairs or replacement, any defects in workmanship or material that may develop under proper and normal use during the period of one year from date of shipment from factory. Any product or part proving, upon American Coolair's examination, to be defective during limited warranty period will be repaired or replaced, at American Coolair's option, f.o.b. factory, without charge.

Deterioration or wear caused by chemicals, abrasive action or excessive heat shall not constitute defects.

Motors are guaranteed only to the extent of manufacturer's warranty.

American Coolair's limited warranty does not apply to any of its products or parts that have been subject to accidental damage, misuse by the user, unauthorized alterations, improper installation or electrical wiring, or lack of proper lubrication or other service requirements established by American Coolair.

Repairs or replacements provided under the above terms shall constitute fulfillment of all American Coolair's obligations with respect to limited warranty.

THE LIMITED WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY AND FITNESS.

NO LIABILITY FOR REINSTALLATION COST OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE IS ASSUMED OR SHALL BE IMPOSED UPON AMERICAN COOLAIR.

## WARNING    CAUTION



**DO NOT** INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF FLOOR OR GRADE LEVEL WITHOUT A GUARD THAT COMPLIES WITH OSHA REGULATIONS. **DO NOT** USE UNLESS ELECTRICAL WIRING COMPLIES WITH ALL APPLICABLE CODES. **DO NOT** WIRE WITHOUT PROVIDING FOR A POWER SOURCE DISCONNECT AT THE FAN ITSELF. **DO NOT** SERVICE EXCEPT BY A QUALIFIED MAINTENANCE TECHNICIAN AND ONLY AFTER DISCONNECTING THE POWER SOURCE. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.



REPRESENTED BY:

VANE AXIAL FANS ~ TUBE AXIAL FANS ~ PROPELLER FANS ~ POWER ROOF VENTILATORS ~ CENTRIFUGAL VENTILATORS  
MEMBER OF AMCA

Form No. 420-15-10 (September, 2017)