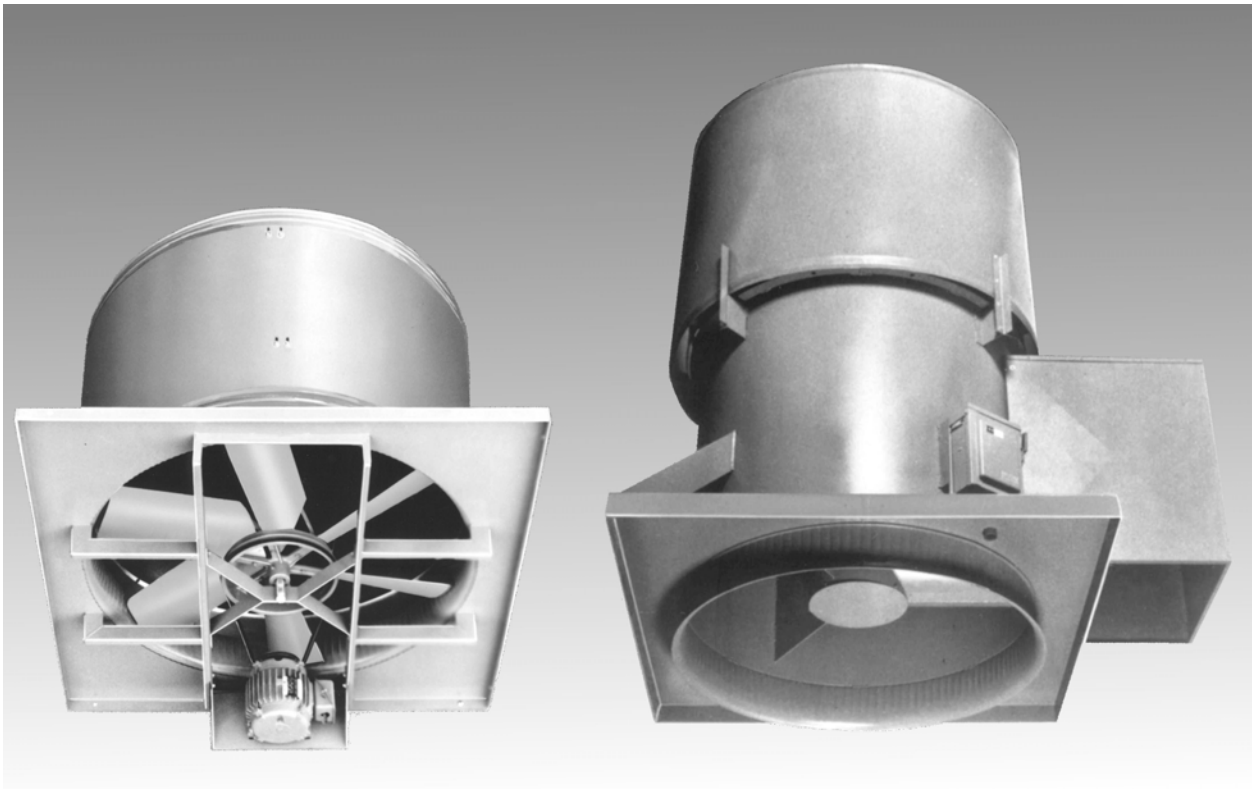


# UPBLAST ROOF EXHAUST FANS



# Upblast PRVs

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## APPLICATION

American Coolair upblast power roof ventilators are designed for long life, low maintenance and all-weather performance. The proven upblast design is the most cost effective roof exhauster built today and offers the best value of all PRV types.

### Type J PRVs

Types J, JTE, & JT PRVs are general ventilation power roof ventilators designed for efficiency and economy.

Type J PRVs are suggested for use in commercial and industrial applications including factories, warehouses, commercial buildings, machine rooms or any areas requiring the movement of air.

Types JTE & JT PRVs are suggested for use in industrial applications where it is necessary for the fan assembly to be located above the roof. Models JTEBC & JTBC PRVs are suggested where the motor, belts and bearings must be isolated from the airstream. The JTEBC provides an economical solution for most of these applications, while the JTBC is suggested where a heavier duty unit or greater performance capabilities are required.



UL705 – E39944

All Type J ventilators are listed by Underwriters Laboratory, Inc. to U.S. and Canadian safety standards.

Certified ratings licensed by AMCA (Air Movement and Control Association, Inc.), for both air and sound performance are available for all Type J and JTE PRVs. Certified ratings licensed by AMCA for air performance only are available for all Type JT PRVs. These, along with dimensional drawings are included in this form.

### Type H PRVs

The Type HSE and HS upblast power roof ventilators are designed and built to meet the increasing need for power venting the combustion by-products of a fire.

These units are designed to be installed in the roof systems of shopping centers, wholesale warehouses, hotel atriums and any other place where building codes require the removal of smoke and heat by power roof ventilators.

Type HSE models provide an economical solution for most heat & smoke removal applications. Type HS models are suggested where a heavier duty unit or greater performance capabilities are required.

Both HSE and HS models have been designed to exceed the high temperature capability requirements of UL's "Power Ventilators for Smoke Control Systems" (UL793), the IRI requirement to operate at 500°F for 2 hours minimum, and the SBCCI requirement to operate at 1,000° F for 15 minutes.



UL793 – MH18299

Type HSE & HS ventilators are listed by Underwriters Laboratory, Inc. to U.S. and Canadian safety standards

Certified ratings licensed by AMCA (Air Movement and Control Association, Inc.), for both air and sound performance are available for Type HSE PRVs. Certified ratings licensed by AMCA for air performance only are available for Type HS PRVs. These, along with dimensional drawings are included in this form.

## All-Weather Performance

American Coolair upblast power roof ventilators are designed to discharge vertically so that air velocity seals the opening against rain and snow while the unit is in operation. When the fan is switched off, counterbalanced dampers close by gravity to provide a weather-resistant closure. The fiberglass dampers close quietly and serve as a skylight when unit is not in operation. Motor covers are standard for the Type JT, JTE, HS, and HSE belt driven models.

## Construction

**MATERIALS:** The PRV assembly and curb cap are fabricated of heavy gauge steel and the dampers are constructed of durable fiberglass for years of quiet, maintenance-free operation. The wind shroud is made of galvanized steel; an exterior finish coat of epoxy can be specified. See individual fan types for information on blade material.

Painted parts are coated with a thermosetting epoxy to provide a protective coating rated excellent for hardness, impact resistance, adhesion and chemical resistance. For protective coating options see the Accessories section.

All blade assemblies are dynamically balanced.

Parts requiring painting are processed through the American Coolair five-stage pretreatment system prior to the application of any coatings to ensure 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.

## Drive Mechanism

**BELT DRIVE:** Available in sizes from 18 inch to 84 inch. Belt driven models are designed for quieter operation and lower initial cost. They use standardly available 1750 RPM motors. The motor, belt(s) and bearings are out of the airstream on type JTEBC, JTBC, HSE, and HS units.

**DIRECT DRIVE:** Available in sizes from 18 inch to 60 inch. Direct driven models require less maintenance, offer longer operating life, increased efficiency and reduced operating cost.

**VARIABLE PITCH PULLEYS:** Nearly all belt drive models are equipped with a variable pitch motor pulley which allows fan speed adjustment where desirable. Caution should be exercised in making a speed adjustment. If pulley is opened to reduce propeller speed, air velocity may be reduced below minimum essential for all-weather usage. A speed increase may overload the motor. Contact your American Coolair representative for information on fan performance and motor load before making any adjustment.

## Motors

All Type J and direct driven Type JT models feature American Coolair's air-over-motor design, which provides extra capacity and economy as it serves to dissipate heat and thus increase horsepower capability. Totally enclosed motors are standard. Several alternatives, such as explosion-proof motors, energy efficient motors and severe duty motors, are available to fit your specific needs.

Only nationally recognized brand motors with nationwide service facilities are used.

## Installation, Selection and Maintenance

**INSTALLATION:** Coolair Upblast PRVs are shipped either fully assembled (sizes 24 and below) or in two packages for quick assembly and installation on the roof curb. Mounting, installation and maintenance instructions are included. The base section containing curb cap, fan and motor should be securely attached to the roof curb. The wind shroud/damper assembly is then easily attached to the base. Although motor and fan bearings are suitable for all-angle usage, satisfactory operation of dampers requires unit to be mounted to a level horizontal curb.

Before connecting motor to power source, check motor nameplate to be sure of correct phase and voltage. Make sure propeller turns freely without striking fan frame or any foreign object which may interfere with its operation. Note direction arrow on orifice to make sure propeller rotation is correct when power is connected.

Models JTEBC, JTBC, HSE, and HS feature a conduit through the curb cap for convenience in connecting power supply. If a safety disconnect switch accessory is specified, it is mounted above curb cap and attached to the conduit for a rain-resistant connection and switch enclosure.

**SOUND:** When sound is a critical problem, ventilator selection should be made from accurate sound data. The only completely accurate sound ratings are octave band sound power levels. Your American Coolair representative can furnish these for each PRV model on request. With this data, the acoustical engineer can accurately predict on-the-job sound levels.

Published sound ratings are in Sones. Your American Coolair representative can also provide sound ratings in dBA. Both Sones and dBA are sound ratings which have been calculated from the octave band sound power ratings. They may be used as a guide in fan selection where sound is **NOT** a critical factor. Both Sones and dBA ratings reflect inlet sound levels.

**MAINTENANCE:** American Coolair's power roof ventilators are factory lubricated for extended service without re-lubrication. Fan bearings on Model JBH and JBHX units are permanently lubricated. Models JBC, JTEBC, JTBC, HSE, and HS use pillow-block ball bearings and should be lubricated annually or more frequently, depending upon conditions and operating cycle. Refer to maintenance instructions shipped with fan. External re-lubrication fan bearing fittings are standard on JTBC and HS models, and an optional accessory for JTEBC and HSE models. Instructions for motor lubrication are supplied by motor manufacturer. On belt drive units, re-check belt tension as part of maintenance routine to ensure maximum efficiency and belt life.

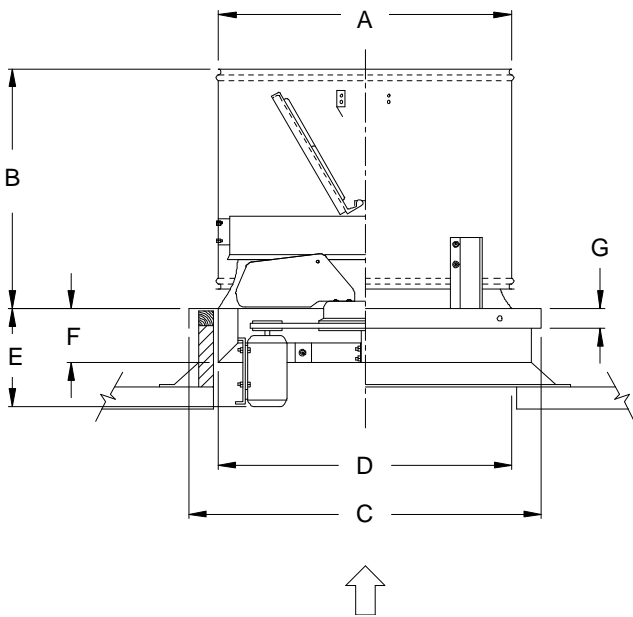
## Additional Information Available

American Coolair can provide installation instructions and maintenance information at your request, as well as information on any air movement need you may have. This information may also be found at [www.coolair.com](http://www.coolair.com) on the internet. For performance requirements not listed or alternate construction requirements, contact your American Coolair representative.

American Coolair has over 80 years of experience in air moving systems and offers you the very best equipment and knowledgeable personnel.

# Type JB (Models JBH, JBHX)

**BELT DRIVE — 5,600 to 57,000 CFM  
0" to 5/8" STATIC PRESSURE**



## Dimensions

Dimension A is the diameter of the circular wind shroud.

Dimension B is the overall height above the curb.

Dimension C is the I.D. of the curb cap flange.

Dimension D is the inside curb minimum.

Dimension E is the maximum projection of the motor below top of curb for constant speed, 3-phase TEFC motor of maximum frame size for PRV size and style indicated. This dimension will vary with the type and HP of the motor actually selected.

Dimension F is the depth of the fan angle structure.

NOTE: All JBH models use a single-groove belt drive.

All JBHX models use a dual-groove belt drive.

## Application

Type JBH and JBHX low profile upblast PRVs are noted for lower initial cost, proven reliability and efficient operation for commercial and industrial applications. They are designed for use in situations where it is practical for the motor and drive components to be recessed into the roof curb.

## Features

Both the JBH and JBHX PRVs utilize a cross-frame to support American Coolair's unique bearing and shaft assembly. This stationary shaft mounts on the cross-frame member and the power is applied directly to the cast aluminum hub. Drive belt power is applied to the fan/hub assembly in the same plane as the bearings. This reduces bearing load and dramatically increases fan bearing life. Bearings are permanently lubricated and sealed.

The six die-formed steel propeller blades are securely attached at three points on the hub to form a strong, rigid propeller assembly.

Most models are equipped with a variable pitch motor pulley that allows PRV speed adjustment where desirable. Caution should be exercised in making a speed adjustment. If pulley is opened to reduce propeller speed, air velocity may be reduced below minimum essential for all-weather usage. A speed increase may overload the motor. Contact your American Coolair representative for information on fan performance and motor load before making any adjustment.



Fan Size	Dimensions in Inches						
	A	B	C	D	E	F	G
24	32	28 3/4	38	32	11 7/8	5 1/8	2
30	38	33 5/8	44	38	16 3/4	5 1/8	2
36	44	33 5/8	50	44	17	5 1/8	2
42	50	38 1/2	56	50	17	5 1/8	2
H48	56	39 1/2	62	56	17	5 1/8	2
HX48					20 1/4	6 5/8	
H54	62	43 7/8	68	62	17	5 1/8	2
HX54					20 1/4	6 5/8	
60	68	46 7/8	77	69	21 1/4	7 5/8	3

# Performance Ratings Typical Specifications



American Coolair Corporation certifies that the Type JB PRVs 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.

Upblast power roof ventilators shall be American Coolair Type JBH or JBHX as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. Curb cap and structural angle supports shall be of welded steel construction, wind shroud shall be of galvanized steel. Dampers shall be of fiberglass for durability and quiet, maintenance-free operation. Die formed steel blades shall be firmly attached to cast aluminum hub, which also serves as driven sheave. Fan hub shall rotate on fixed shaft using oversized sealed ball bearings. Belt load shall be applied to hub in the same plane as bearings, eliminating overhung load on the bearings and increasing bearing life. Motor pulleys shall be variable pitch. PRVs shall be licensed to bear the AMCA Certified Ratings Seal for air performance and sound. (Specify for each PRV model in schedule the required CFM and static pressure; motor enclosure, phase and voltage; and accessories such as safety disconnect switch, magnetic latches, prefabricated curb and special protective coating, etc.)

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"	1/8"	1/4"	3/8"	1/2"	5/8"							
1	7,423	6,822	6,185	5,569	—	—	JBH24K		3/4	980	25	0.91	240
2	8,226	7,687	7,117	6,546	5,998	—	JBH24L*	24	1	1086	29	1.26	242
3	9,074	8,588	8,078	7,555	7,047	6,551	JBH24M*		1 1/2	1198	34	1.70	282
4	11,495	10,430	9,389	—	—	—	JBH30L		1	804	23	1.26	315
5	12,610	11,631	10,704	9,626	—	—	JBH30M	30	1 1/2	882	28	1.70	335
6	13,768	12,866	12,016	11,118	10,054	—	JBH30N		2	963	33	2.25	340
7	15,699	14,901	14,143	13,401	12,589	11,649	JBH30P*		3	1098	44	3.31	362
8	14,280	12,929	11,578	—	—	—	JBH36L		1	665	22	1.26	367
9	15,590	14,349	13,129	11,781	—	—	JBH36M		1 1/2	726	26	1.70	385
10	16,964	15,821	14,703	13,538	12,184	—	JBH36N	36	2	790	30	2.25	390
11	19,455	18,455	17,475	16,499	15,466	14,303	JBH36P		3	906	38	3.35	412
12	23,320	22,484	21,659	20,844	20,032	19,197	JBH36Q*		5	1086	53	5.58	427
13	19,926	18,033	15,959	—	—	—	JBH42M		1 1/2	554	21	1.70	470
14	21,616	19,879	18,028	15,862	—	—	JBH42N	42	2	601	23	2.25	475
15	24,673	23,161	21,585	19,884	17,913	—	JBH42P		3	686	29	3.35	500
16	29,313	28,047	26,745	25,401	23,976	22,398	JBH42Q		5	815	38	5.52	515
17	26,534	23,561	20,165	—	—	—	JBH48N		2	477	23	2.25	620
18	30,206	27,570	24,944	21,519	—	—	JBH48P		3	543	28	3.36	640
19	35,713	33,461	31,306	28,972	25,993	23,445	JBH48Q	48	5	642	38	5.61	655
20	38,598	37,102	35,472	33,667	31,639	29,382	JBHX48R*		7 1/2	745	52	7.99	810
21	42,328	40,973	39,521	37,948	36,224	34,322	JBHX48S*		10	817	62	10.35	850
22	29,979	26,628	22,550	—	—	—	JBH54N		2	460	28	2.25	785
23	34,084	31,091	28,153	23,909	—	—	JBH54P		3	523	34	3.36	805
24	40,706	37,473	34,758	31,981	28,671	—	JBHX54Q	54	5	544	35	5.54	847
25	47,066	44,190	41,739	39,437	37,006	34,231	JBHX54R		7 1/2	629	45	8.52	912
26	51,706	49,047	46,741	44,624	42,514	40,246	JBHX54S*		10	691	54	11.14	947
27	38,305	34,128	28,670	—	—	—	JBHX60P		3	413	24	3.35	982
28	45,075	41,590	37,705	32,431	—	—	JBHX60Q	60	5	486	33	5.51	992
29	52,217	49,241	46,056	42,450	37,691	—	JBHX60R		7 1/2	563	41	8.57	1067
30	57,040	54,328	51,467	48,386	44,673	40,236	JBHX60S		10	615	47	11.19	1097

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first three letters of the model number identify **fan type, drive configuration and style**. The next two numbers indicate **fan size**, the next letter identifies **motor horsepower**. Example: Model JBH24K is Type "J", belt drive, Style "H", 24" size, 3/4 H.P.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: 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. Bearing losses are included. 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. Because of the cooling the motor receives from moving air stream, motor loading beyond the nominal nameplate ratings on these American Coolair fans does not overheat the motor and is within NEMA recommended limits and motor service factor. It is not detrimental to the motor and is economically desirable.
- 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).

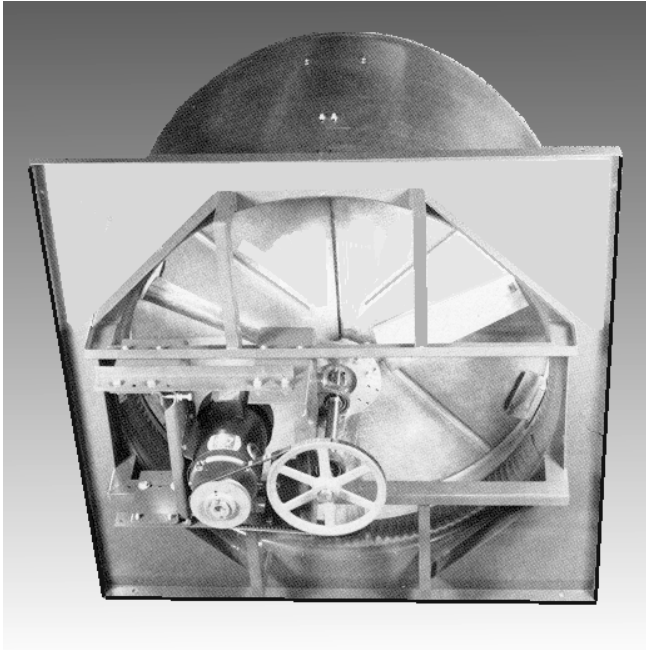
**Example:** 3904 CFM x .000472 = 1.8427 m<sup>3</sup>/s  
 0.125 SP x 248.36 = 31.05 Pa  
 0.886 BHP x .7457 = 0.661 kW

\*These models have fixed pitch motor pulleys.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Type JBC

**BELT DRIVE — 20,000 to 119,000 CFM  
0" to 3/4" STATIC PRESSURE**



## Application

The JBC low profile upblast PRVs are noted for lower initial cost, proven reliability and efficient operation for commercial and industrial applications. They are designed for use in situations where it is practical for the motor and drive components to be recessed into the roof curb.

## Features

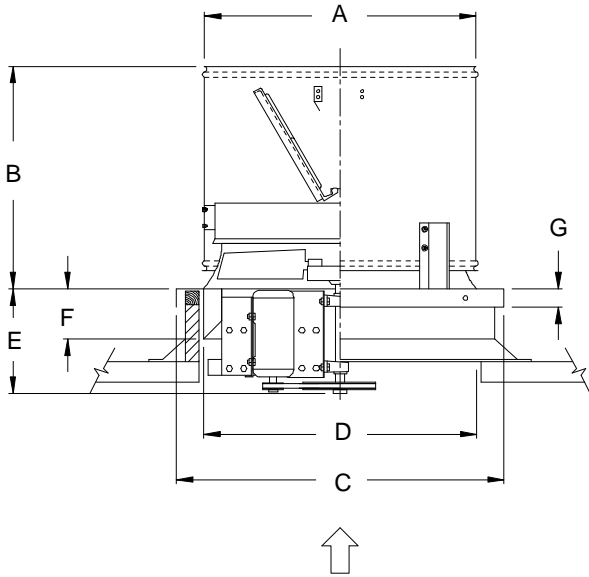
The JBC PRVs incorporate an all-welded curb cap and rugged angle frame design. The steel fan shaft is supported by two pillow-block ball bearings attached to this frame.

JBC PRVs have cast aluminum adjustable pitch airfoil blades that are securely attached to a heavy cast aluminum hub. Blade pitch is set for catalog performance.

The blade pitch should not be adjusted without first contacting your American Coolair representative.

JBC PRVs incorporate specifically engineered airfoil sections and hub sizes for optimum efficiency and strength.

Most models are equipped with a variable pitch motor pulley that allows PRV speed adjustment where desirable. Caution should be exercised in making a speed adjustment. If pulley is opened to reduce propeller speed, air velocity may be reduced below minimum essential for all-weather usage. A speed increase may overload the motor. Contact your American Coolair representative for information on fan performance and motor load before making any adjustment.



## Dimensions

Dimension A is the diameter of the circular wind shroud.

Dimension B is the overall height above the curb.

Dimension C is the I.D. of the curb cap flange.

Dimension D is the inside curb minimum.

Dimension E is the maximum projection of the motor below top of curb for constant speed, 3-phase TEFC motor of maximum frame size for PRV size and style indicated. This dimension will vary with the type and HP of the motor actually selected.

Dimension F is the depth of the fan angle structure.

Dimension G is the curb cap flange.

Fan Size	Dimensions in Inches						
	A	B	C	D	E	F	G
24	32	28 3/4	38	32	18 1/4	5 1/8	2
30	38	33 5/8	44	38	18 1/4	5 1/8	2
36	44	33 5/8	50	44	19 1/2	5 1/8	2
42	50	38 1/2	56	50	19 1/2	5 1/8	2
48	56	38 1/2	62	56	19 1/2	6 5/8	2
54	62	43 7/8	68	62	19 1/2	6 5/8	2
60	68	46 7/8	77	69	20 1/2	7 5/8	3
72	80	49 7/8	89	81	25 1/2	12 3/8	3
84	92	49 7/8	101	93	25 1/2	12 3/8	3

# Performance Ratings

# Typical Specifications



American Coolair Corporation certifies that the Type JBC PRVs 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.

Upblast power roof ventilators shall be American Coolair Type JBC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. Curb cap and structural angle supports shall be of welded steel construction, wind shroud shall be of galvanized steel. Dampers shall be of fiberglass for durability and quiet, maintenance-free operation. Fan blades shall be of high strength cast aluminum airfoil design securely attached to a heavy cast aluminum hub. Blade pitch shall be adjustable. Ball bearings shall be of the heavy duty pillow block type. Motor pulleys shall be variable pitch. PRVs shall be licensed to bear the AMCA Certified Ratings Seal for air performance and sound. (Specify for each PRV model in schedule the required CFM and static pressure; motor enclosure, phase and voltage; and accessories such as safety disconnect switch, magnetic latches, prefabricated curb and special protective coating, etc.)

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"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"							
1	7,317	6,489	5,611	—	—	—	—	JBC24J		1/2	1140	17.9	0.60	251
2	8,388	7,675	6,915	6,139	—	—	—	JBC24K		3/4	1307	23	0.91	256
3	9,306	8,668	7,991	7,300	6,578	—	—	JBC24L		1	1450	26	1.24	261
4	10,340	9,768	9,168	8,548	7,925	7,264	—	JBC24M	24	1 1/2	1611	30	1.70	267
5	11,315	10,795	10,254	9,692	9,122	8,552	7,941	JBC24N		2	1763	35	2.23	280
6	12,965	12,513	12,047	11,566	11,074	10,577	10,082	JBC24P		3	2020	45	3.35	298
7	15,448	15,071	14,685	14,291	13,888	13,478	13,062	JBC24Q		5	2407	65	5.65	310
8	11,413	9,895	8,382	—	—	—	—	JBC30K		3/4	964	19.0	0.91	308
9	12,679	11,316	9,956	8,445	—	—	—	JBC30L		1	1071	22	1.25	311
10	14,041	12,812	11,573	10,348	8,812	—	—	JBC30M	30	1 1/2	1186	26	1.70	318
11	15,414	14,296	13,165	12,055	10,885	9,410	—	JBC30N		2	1302	30	2.25	324
12	17,604	16,627	15,639	14,651	13,684	12,674	11,434	JBC30P		3	1487	38	3.35	348
13	20,931	20,110	19,283	18,450	17,619	16,799	15,987	JBC30Q		5	1768	51	5.63	361
14	14,978	12,871	10,777	—	—	—	—	JBC36L		1	868	23	1.26	400
15	16,514	14,587	12,729	10,690	—	—	—	JBC36M		1 1/2	957	27	1.69	406
16	18,153	16,387	14,709	12,947	10,983	—	—	JBC36N	36	2	1052	32	2.25	412
17	20,707	19,145	17,664	16,182	14,612	12,902	10,966	JBC36P		3	1200	39	3.34	444
18	24,624	23,299	22,029	20,794	19,551	18,260	16,900	JBC36Q		5	1427	52	5.62	456
19	28,421	27,266	26,148	25,064	23,996	22,923	21,822	JBC36R		7 1/2	1647	68	8.60	513
20	21,270	18,255	14,978	—	—	—	—	JBC42M		1 1/2	797	27	1.70	534
21	23,325	20,659	17,587	14,494	—	—	—	JBC42N		2	874	32	2.25	520
22	26,607	24,352	21,617	19,069	16,230	—	—	JBC42P	42	3	997	40	3.34	551
23	31,651	29,815	27,669	25,330	23,202	20,984	18,371	JBC42Q		5	1186	54	5.63	565
24	36,508	34,943	33,198	31,224	29,200	27,346	25,506	JBC42R		7 1/2	1368	70	8.61	622
25	39,871	38,449	36,897	35,173	33,305	31,487	29,804	JBC42S		10	1494	83	11.22	633
26	27,189	23,021	18,788	—	—	—	—	JBC48N		2	682	34	2.25	717
27	31,017	27,290	23,767	19,645	—	—	—	JBC48P		3	778	43	3.35	725
28	36,718	33,485	30,577	27,508	24,084	19,103	—	JBC48Q	48	5	921	58	5.55	740
29	41,940	39,062	36,468	33,912	31,180	28,230	24,467	JBC48R		7 1/2	1052	77	8.27	820
30	46,126	43,483	41,073	38,774	36,396	33,876	31,187	JBC48S		10	1157	92	11.01	860

(chart continues next page)

# Type JBC Performance Ratings (cont'd)

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"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"							
31	35,856	30,903	25,556	—	—	—	—	<b>JBC54P</b>		3	665	37	3.40	840
32	42,650	38,520	34,180	29,699	23,670	—	—	<b>JBC54Q</b>	54	5	791	51	5.76	875
33	48,527	44,914	41,188	37,156	33,362	28,244	—	<b>JBC54R</b>		7 1/2	900	65	8.52	940
34	53,164	49,874	46,500	43,004	39,225	35,848	30,950	<b>JBC54S</b>		10	986	76	11.20	975
35	49,547	44,999	38,811	32,840	25,776	—	—	<b>JBC60Q</b>		5	749	48	5.62	1025
36	56,559	52,717	47,801	42,037	37,086	31,091	—	<b>JBC60R</b>	60	7 1/2	855	61	8.36	1100
37	62,182	58,754	54,585	49,509	44,375	40,102	34,498	<b>JBC60S</b>		10	940	72	11.12	1130
38	51,821	45,695	38,302	—	—	—	—	<b>JBC72P</b>		3	358	26	3.45	1424
39	61,374	56,274	50,728	44,054	37,382	—	—	<b>JBC72Q</b>		5	424	34	5.73	1439
40	70,204	65,780	61,116	55,927	49,971	44,475	—	<b>JBC72R</b>	72	7 1/2	485	42	8.57	1478
41	77,441	73,447	69,286	64,873	59,817	54,461	49,532	<b>JBC72S*</b>		10	535	50	11.49	1505
42	88,587	85,108	81,530	77,821	73,907	69,539	64,743	<b>JBC72T*</b>		15	612	64	17.19	1633
43	96,838	93,661	90,414	87,073	83,619	79,960	75,907	<b>JBC72U*</b>		20	669	76	22.44	1657
44	75,290	67,574	58,702	48,956	—	—	—	<b>JBC84Q</b>		5	329	30	5.74	1716
45	86,274	79,607	72,437	63,858	55,576	—	—	<b>JBC84R</b>		7 1/2	377	38	8.60	1755
46	94,741	88,702	82,329	75,211	67,096	56,517	—	<b>JBC84S</b>	84	10	414	45	11.42	1782
47	108,701	103,465	98,031	92,316	85,944	78,778	72,342	<b>JBC84T</b>		15	475	56	17.23	1910
48	118,770	113,990	109,069	103,961	98,546	92,452	85,882	<b>JBC84U*</b>	20	519	65	22.45	1934	

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first three letters of the model number identify **fan type, drive configuration and style**. The next two numbers indicate **fan size**, the next letter identifies **motor horsepower**. Example: Model JBC48Q is Type "J", belt drive, Style "C", 48" size, 5 H.P.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: 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) do not include transmission losses. Bearing losses are included. 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. Because of the cooling the motor receives from moving air stream, motor loading beyond the nominal nameplate ratings on these American Coolair fans does not overheat the motor and is within NEMA recommended limits and motor service factor. It is not detrimental to the motor and is economically desirable.
- 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).

**Example:** 3904 CFM x .000472 = 1.8427 m<sup>3</sup>/s  
 0.125 SP x 248.36 = 31.05 Pa  
 0.886 BHP x .7457 = 0.661 kW

\*These models have fixed pitch motor pulleys.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



# Type JDC

**DIRECT DRIVE — 2,300 to 55,600 CFM  
0" to 3/4" STATIC PRESSURE**



## Application

The JDC low profile upblast PRVs are designed for minimal maintenance requirements and efficient, economical operation.

These fans are suggested for use in situations where the installed fan will be difficult to reach for periodic maintenance.

## Features

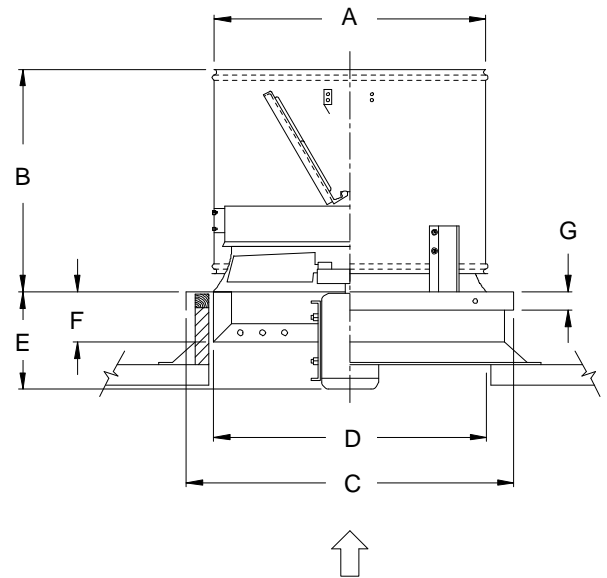
The JDC PRVs incorporate an all-welded curb cap and rugged angle frame design.

The propeller assembly is connected directly to the motor shaft. There are no bearings or belts to require maintenance. Many motors are permanently lubricated.

From 3 to 6 cast aluminum adjustable pitch airfoil blades are securely attached to a heavy cast aluminum hub. Blade pitch is set for catalog performance.

The blade pitch should not be adjusted without first contacting your American Coolair representative.

JDC PRVs incorporate specifically engineered airfoil sections and hub sizes for optimum efficiency and strength.



## Dimensions

Dimension A is the diameter of the circular wind shroud.

Dimension B is the overall height above the curb.

Dimension C is the I.D. of the curb cap flange.

Dimension D is the inside curb minimum.

Dimension E is the maximum projection of the motor below top of curb for constant speed, 3-phase TEFC motor of maximum frame size for PRV size and style indicated. This dimension will vary with the type and HP of the motor actually selected.

Dimension F is the depth of the fan angle structure.

Dimension G is the curb cap flange.

Fan Size	Dimensions in Inches						
	A	B	C	D	E	F	G
18	24 5/8	25 1/8	32	24	10 3/4	4 3/4	2
24	32	28 3/4	38	32	12 3/8	5 1/8	2
30	38	33 5/8	44	38	13 3/4	5 1/8	2
36	44	33 5/8	50	44	15 1/4	5 1/8	2
42	50	38 1/2	56	50	15 1/4	5 1/8	2
48	56	39 1/2	62	56	19 3/8	6 5/8	2
54	62	43 7/8	68	62	19 3/4	6 5/8	2
60	68	46 7/8	77	69	20 3/4	7 5/8	3

# Performance Ratings

# Typical Specifications



American Coolair Corporation certifies that the Type JDC PRVs 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.

Upblast power roof ventilators shall be American Coolair Type JDC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. Curb cap and structural angle supports shall be of welded steel construction, wind shroud shall be of galvanized steel. Dampers shall be of fiberglass for durability and quiet, maintenance-free operation. Fan blades shall be of high strength cast aluminum airfoil design securely attached to a heavy cast aluminum hub. Blade pitch shall be adjustable. Entire blade assembly shall be mounted directly to the motor shaft. PRVs shall be licensed to bear the AMCA Certified Ratings Seal for air performance and sound. (Specify for each PRV model in schedule the required CFM and static pressure; motor enclosure, phase and voltage; and accessories such as safety disconnect switch, magnetic latches, prefabricated curb and special protective coating, etc.)

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,7</sup>							Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM <sup>3</sup>	Sone Rating <sup>4</sup>	Max BHP <sup>5,7</sup>	Blade Descr <sup>6</sup>		Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"							No.	Pitch	
1	3,164	2,845	2,491	—	—	—	—	JDC18G11		1/4	1160	10.5	0.28	6	25.5°	130
2	3,651	3,302	2,877	—	—	—	—	JDC18H11		1/3	1160	11.8	0.37	6	32°	131
3	3,274	2,978	2,653	—	—	—	—	JDC18G17		1/4	1750	16.4	0.30	3	14.5°	112
4	3,658	3,347	3,006	—	—	—	—	JDC18H17	18	1/3	1750	17.1	0.37	3	18°	115
5	4,408	4,061	3,718	3,273	—	—	—	JDC18J17		1/2	1750	20	0.58	3	25.5°	118
6	4,912	4,631	4,309	3,959	3,588	3,240	—	JDC18K17		3/4	1750	23	0.86	4	29°	127
7	5,225	5,048	4,813	4,537	4,289	4,003	—	JDC18L17		1	1750	22	1.15	6	29.5°	136
8	6,118	5,475	—	—	—	—	—	JDC24J8		1/2	870	15.0	0.57	6	30.5°	280
9	6,411	5,781	5,109	—	—	—	—	JDC24J11		1/2	1160	23	0.61	3	24.5°	265
10	7,025	6,461	5,858	5,115	—	—	—	JDC24K11		3/4	1160	25	0.85	4	27°	280
11	7,533	7,106	6,602	6,024	5,215	—	—	JDC24L11		1	1160	23	1.13	6	27°	291
12	6,677	6,238	5,775	5,321	—	—	—	JDC24K17	24	3/4	1750	39	0.88	3	11.5°	265
13	7,425	7,108	6,749	6,261	5,784	5,264	—	JDC24L17		1	1750	39	1.18	3	14.5°	265
14	8,817	8,431	8,019	7,583	7,132	6,658	6,114	JDC24M17		1 1/2	1750	38	1.76	3	20°	291
15	10,021	9,601	9,166	8,722	8,268	7,790	7,259	JDC24N17		2	1750	46	2.31	3	27°	291
16	11,339	10,981	10,577	10,131	9,667	9,194	8,705	JDC24P17		3	1750	49	3.38	4	30.5°	318
17	9,980	8,842	7,702	—	—	—	—	JDC30K8		3/4	870	19.9	0.85	4	25°	380
18	10,693	9,913	9,057	7,900	—	—	—	JDC30L8		1	870	21	1.11	6	23°	407
19	10,920	9,979	9,071	7,998	—	—	—	JDC30L11		1	1160	26	1.14	3	19.5°	380
20	12,207	11,478	10,693	9,810	8,734	—	—	JDC30M11		1 1/2	1160	30	1.70	4	22°	407
21	13,787	12,920	12,010	11,127	10,133	8,726	—	JDC30N11	30	2	1160	32	2.27	4	27°	418
22	12,859	12,245	11,669	11,074	10,455	9,793	9,007	JDC30N17		2	1750	47	2.25	3	12°	380
23	15,292	14,693	14,157	13,565	12,920	12,250	11,535	JDC30P17		3	1750	49	3.39	3	17°	407
24	18,180	17,717	17,235	16,732	16,204	15,651	15,071	JDC30Q17		5	1750	60	5.64	4	21.5°	418
25	13,890	12,025	9,772	—	—	—	—	JDC36L8		1	870	24	1.15	3	20°	460
26	15,882	13,866	11,792	—	—	—	—	JDC36M8		1 1/2	870	26	1.64	3	27°	471
27	17,457	16,225	14,986	13,674	11,952	—	—	JDC36N8		2	870	29	2.27	6	22.5°	513
28	20,531	19,209	17,577	15,675	13,656	—	—	JDC36P8		3	870	35	3.41	6	29.5°	533
29	14,710	13,417	12,240	10,955	9,424	—	—	JDC36M11		1 1/2	1160	34	1.70	3	12.5°	460
30	17,206	15,838	14,419	12,900	11,617	9,570	—	JDC36N11	36	2	1160	36	2.30	3	17.5°	471
31	20,144	18,660	17,281	15,668	13,872	11,713	—	JDC36P11		3	1160	39	3.41	3	24°	513
32	23,661	22,636	21,494	20,126	18,584	16,846	12,359	JDC36Q11		5	1160	48	5.64	4	29.5°	533
33	16,092	15,342	14,585	13,805	12,982	12,122	11,267	JDC36P17		3	1750	78	3.34	3	5°	460
34	20,866	20,095	19,340	18,598	17,860	17,144	16,349	JDC36Q17		5	1750	81	5.77	3	11°	471
35	25,306	24,454	23,636	22,834	22,044	21,261	20,481	JDC36R17		7 1/2	1750	82	8.50	3	16.5°	513

(chart continues next page)

# Type JDC Performance Ratings (cont'd)

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,7</sup>							Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM <sup>3</sup>	Sone Rating <sup>4</sup>	Max BHP <sup>5,7</sup>	Blade No.	Desc. <sup>6</sup> Pitch	Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"									
36	19,086	16,404	13,841	—	—	—	—	JDC42M6	1 1/2	680	26	1.69	4	21.5°	572	
37	20,482	18,717	17,059	15,159	—	—	—	JDC42N6	2	680	29	2.27	6	21.5°	598	
38	18,560	16,365	14,163	—	—	—	—	JDC42M8	1 1/2	870	29	1.68	3	13°	532	
39	21,343	19,071	16,684	14,029	—	—	—	JDC42N8	2	870	32	2.29	3	17.5°	576	
40	24,963	22,724	20,030	16,880	—	—	—	JDC42P8	42	3	870	35	3.46	3	25°	596
41	18,747	17,292	15,735	14,137	—	—	—	JDC42N11		2	1160	44	2.28	3	6°	532
42	22,902	21,302	19,822	18,340	16,669	14,536	—	JDC42P11		3	1160	45	3.43	3	11°	574
43	28,864	27,122	25,399	23,616	21,740	19,738	17,553	JDC42Q11		5	1160	52	5.61	3	18°	596
44	29,506	28,522	27,584	26,642	25,625	24,563	23,452	JDC42R17	7 1/2	1750	91	8.50	3	7°	574	
45	33,847	32,800	31,798	30,836	29,895	28,955	27,994	JDC42S17	10	1750	93	11.33	3	10.5°	596	
46	24,930	22,159	18,788	—	—	—	—	JDC48N6	2	680	34	2.24	4	15°	730	
47	24,015	21,452	18,476	—	—	—	—	JDC48N8	2	870	41	2.27	3	8°	708	
48	29,693	27,015	23,678	20,494	16,972	—	—	JDC48P8	3	870	45	3.45	3	13.5°	725	
49	37,210	33,927	30,279	26,307	21,262	—	—	JDC48Q8	48	5	870	53	5.66	3	21.5°	768
50	42,383	39,285	35,673	32,247	29,001	24,103	20,744	JDC48R8		7 1/2	870	61	8.44	4	24.5°	797
51	32,665	30,812	28,769	26,581	24,259	21,944	19,762	JDC48Q11		5	1160	72	5.61	3	8.5°	728
52	40,304	38,335	36,226	33,681	31,174	28,738	26,300	JDC48R11		7 1/2	1160	79	8.47	3	14°	766
53	46,174	43,908	41,538	38,815	36,331	33,738	30,423	JDC48S11	10	1160	88	11.34	3	18.5°	795	
54	28,628	25,561	21,740	—	—	—	—	JDC54N6	2	680	39	2.22	4	8.5°	970	
55	33,199	30,361	26,814	23,286	—	—	—	JDC54P8	3	870	57	3.34	3	7.5°	962	
56	44,593	38,831	35,694	31,671	26,990	23,415	—	JDC54Q8	54	5	870	57	5.66	3	14.5°	1007
57	50,284	47,605	44,294	39,224	32,001	28,111	—	JDC54R8		7 1/2	870	63	8.62	3	22°	1037
58	45,984	43,942	41,683	38,661	36,209	33,910	31,077	JDC54R11		7 1/2	1160	97	8.66	3	8.5°	1003
59	53,417	50,142	47,357	45,114	41,881	38,264	35,935	JDC54S11		10	1160	97	11.36	3	12°	1033
60	32,589	27,259	—	—	—	—	—	JDC60N6	2	680	39	2.29	3	6°	1270	
61	38,850	33,201	28,385	—	—	—	—	JDC60P6	3	680	39	3.43	3	11°	1270	
62	44,157	39,513	35,878	32,398	27,063	—	—	JDC60Q8	60	5	870	62	5.55	3	7.5°	1311
63	53,423	49,485	44,863	40,800	36,029	28,551	—	JDC60R8		7 1/2	870	62	8.47	3	13.5°	1346
64	55,593	51,668	48,830	46,295	44,025	41,196	36,458	JDC60S11		10	1160	102	11.46	3	6°	1341

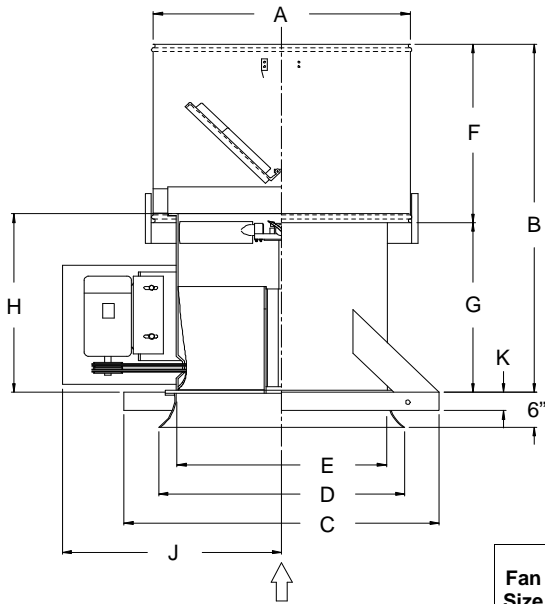
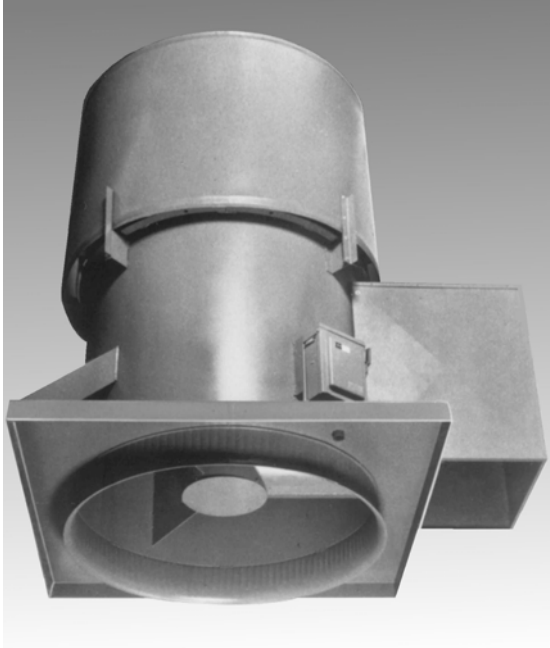
- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first three letters of the model number identify **fan type, drive configuration and style**. The next two numbers indicate **fan size**, the next letter identifies **motor horsepower**, the last number (or numbers) indicates **RPM** in hundreds. Example: Model JDC24J8 is Type "J", direct drive, Style "C", 24" size, 1/2 H.P., 870 RPM.
- 3 — Fan RPM is identical to motor speed.
- 4 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. The sound ratings shown are at 0" static pressure.
- 5 — Maximum brake horsepower (BHP) within the catalog performance range. 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. Because of the cooling the motor receives from moving air stream, motor loading beyond the nominal nameplate ratings on these American Coolair fans does not overheat the motor and is within NEMA recommended limits and motor service factor. It is not detrimental to the motor and is economically desirable.
- 6 — An adjustable pitch propeller with cast aluminum airfoil blades is standard. The number of blades and pitch angle for each model is indicated.
- 7 — 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).

**Example:** 3904 CFM x .000472 = 1.8427 m<sup>3</sup>/s  
0.125 SP x 248.36 = 31.05 Pa  
0.886 BHP x .7457 = 0.661 kW

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Type JTEBC

**BELT DRIVE — 2,200 to 50,900 CFM**  
**0" to 1" STATIC PRESSURE**



## Dimensions

- Dimension A is the diameter of the circular wind shroud.
- Dimension B is the overall height above the curb.
- Dimension C is the I.D. of the curb cap flange.
- Dimension D is the inside curb minimum. (Inlet orifice is not furnished with 18" size.)
- Dimension E is the inside diameter of the fan housing.
- Dimension F is the height of the wind shroud.
- Dimension G is the height of the unit from the curb to the wind shroud.
- Dimension H is the height of the unit above the curb less the wind shroud and damper assembly.
- Dimension J is the distance from the center of the PRV to the outside edge of the motor cover.
- Dimension K is the curb cap flange.

## Application

JTEBC upblast PRV's are built of heavy gauge steel for rugged industrial service where the fan assembly must be located above the roof.

JTEBC PRV's are designed to operate reliably in environments where elevated temperature or contaminated air is present. The motor, belt(s), and bearings are isolated from the air stream.

## Features

The JTEBC PRV's are constructed of heavy gauge steel, up to 1/4" plate. All ferrous materials are painted with thermosetting epoxy paint for corrosion protection.

The wind shroud is made of galvanized steel and the damper doors are made of fiberglass with ultraviolet inhibitors.

The steel fan shaft is supported by two pillow-block ball bearings that are mounted in an enclosed housing to provide years of service under harsh conditions. (Suitable for operation to 250°F. See Type HSE for higher temperatures.)

JTEBC PRV's use 4 or 6 high-strength, cast aluminum airfoil blades that are securely attached to a heavy cast aluminum hub. Blade pitch is set for catalog performance. The blade pitch should not be adjusted without first contacting your American Coolair representative.

The JTEBC PRV fan blades have specifically engineered airfoil sections and hub sizes for optimum efficiency and physical strength.

Most models are equipped with a variable pitch motor pulley that allow PRV speed adjustment where desirable. Caution should be exercised in making a speed adjustment. If the motor pulley is opened to reduce propeller speed, air velocity may be reduced below minimum essential for all-weather usage. A speed increase may overload the motor. Contact your American Coolair representative for recommendation before making any speed adjustment.

The motor is located out of the airstream. Standard TEFC motors are used on most models. A motor cover is standard with all models.

Fan Size	Dimensions in Inches									
	A	B	C	D	E	F	G	H	J	K
18	24 5/8	47 7/16	32	24	18	27 5/8	19 13/16	21 1/8	23 1/4	2 1/2
24	32	47 7/16	38	30 1/4	25 1/2	27 5/8	19 13/16	21 1/8	28	3
30	38	52 5/16	44	36 1/4	31 1/4	32 1/2	19 13/16	21 1/8	31 1/4	3
36	44	62 5/16	50	42 1/4	37 1/4	32 1/2	29 13/16	31 1/8	37 3/4	3
42	50	67 3/16	56	48 1/2	43 1/4	37 3/8	29 13/16	31 1/8	41	3
48	56	67 3/16	62	54 5/8	49 1/4	37 3/8	29 13/16	31 1/8	44 1/4	3
54	62	71 11/16	68	59 1/2	55 1/4	41 13/16	29 13/16	31 1/8	52	3
60	68	74 11/16	77	65 5/8	61 3/8	44 13/16	29 13/16	31 1/8	55 1/8	3

# Performance Ratings

# Typical Specifications



American Coolair Corporation certifies that the Type JTEBC PRVs 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.

Uplast power roof ventilators shall be American Coolair Type JTEBC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. PRV base and curb cap shall be of welded steel construction, wind shroud and motor cover shall be of galvanized steel. Dampers shall be of fiberglass for durability and quiet, maintenance-free operation. Motors shall be located outside airstream. Ball bearings shall be of the heavy duty pillow-block type. Fan blades shall be of high strength cast aluminum airfoil design securely attached to a heavy cast aluminum hub. Blade pitch shall be adjustable. PRV's shall be licensed to bear the AMCA Certified Ratings Seal for air and sound performance. (Specify for each PRV model in schedule the required CFM and static pressure; motor enclosure, phase and volts; and accessories such as safety disconnect switch, magnetic latches, pre-fabricated curb, and special protective coating.)

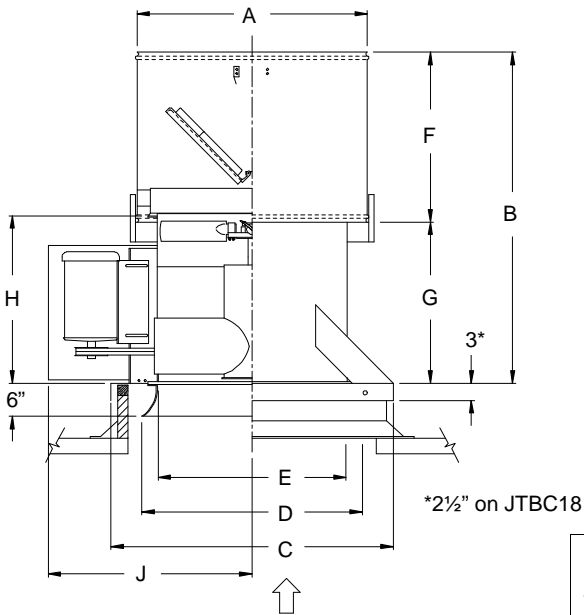
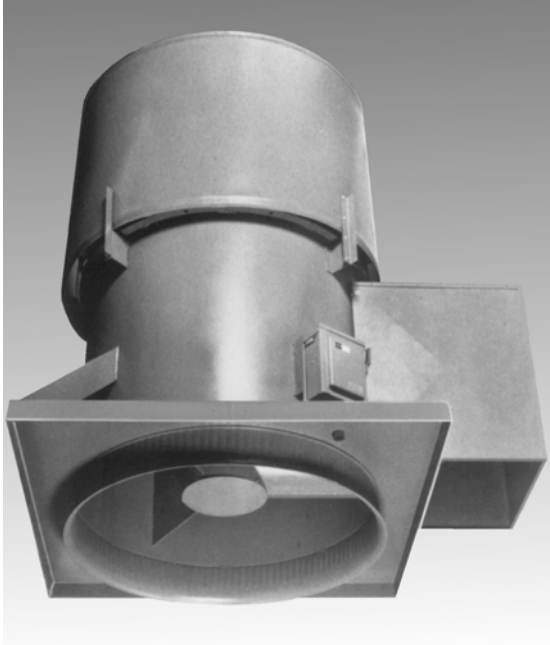
Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1</sup>								Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	Max BHP <sup>4</sup>	Blade No.	Desc. Pitch	Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"									
1	2,833	2,587	—	—	—	—	—	—	JTEBC18J	1/2	1400	17.7	0.463	4	30°	195	
2	3,363	3,178	2,926	2,654	—	—	—	—	JTEBC18K	3/4	1662	24	0.733	4	30°	200	
3	3,719	3,561	3,332	3,123	2,839	2,527	—	—	JTEBC18L	1	1838	29	0.964	4	30°	205	
4	4,338	4,211	4,033	3,833	3,658	3,421	3,186	—	JTEBC18M	1 1/2	2144	38	1.478	4	30°	210	
5	7,009	6,411	5,762	5,093	—	—	—	—	JTEBC24L	1	1178	27	0.933	4	25°	325	
6	8,210	7,703	7,169	6,609	6,040	5,242	—	—	JTEBC24M	24	1 1/2	1380	36	1.475	4	25°	325
7	9,008	8,546	8,071	7,559	7,056	6,519	5,771	—	JTEBC24N	2	1514	43	1.930	4	25°	335	
8	10,210	9,802	9,391	8,957	8,502	8,059	7,601	6,219	JTEBC24P	3	1716	56	2.784	4	25°	350	
9	11,200	10,440	9,653	8,544	7,403	—	—	—	JTEBC30M	1 1/2	1156	29	1.449	4	18°	395	
10	12,411	11,758	11,033	10,105	9,190	8,087	—	—	JTEBC30N	30	2	1281	35	1.965	4	18°	400
11	14,233	13,698	13,012	12,430	11,537	10,740	9,889	—	JTEBC30P	3	1469	44	2.936	4	18°	415	
12	16,655	16,221	15,655	15,095	14,603	13,905	13,121	11,748	JTEBC30Q	5	1719	58	4.668	4	18°	430	
13	15,265	14,327	13,258	11,888	10,340	—	—	—	JTEBC36N	2	1060	41	1.969	4	15°	575	
14	17,396	16,583	15,698	14,665	13,412	12,065	10,466	—	JTEBC36P	36	3	1208	53	2.898	4	15°	590
15	20,593	19,913	19,195	18,426	17,556	16,540	15,439	12,993	JTEBC36Q	5	1430	76	4.779	4	15°	605	
16	21,107	19,679	18,206	16,812	15,185	—	—	—	JTEBC42P	3	801	31	2.794	6	15°	750	
17	25,007	23,812	22,565	21,342	20,172	18,898	17,345	—	JTEBC42Q	42	5	949	42	4.629	6	15°	765
18	28,933	27,907	26,845	25,759	24,709	23,701	22,656	20,117	JTEBC42R	7 1/2	1098	56	7.131	6	15°	805	
19	31,885	30,956	30,001	29,020	28,039	27,098	26,185	24,233	JTEBC42S	10	1210	64	9.528	6	15°	820	
20	24,946	23,028	21,052	18,897	—	—	—	—	JTEBC48P	3	734	36	2.764	6	10°	850	
21	29,738	28,136	26,501	24,830	23,055	20,698	17,781	—	JTEBC48Q	48	5	875	49	4.687	6	10°	865
22	34,156	32,765	31,352	29,917	28,457	26,934	25,141	20,215	JTEBC48R	7 1/2	1005	64	7.047	6	10°	905	
23	37,962	36,712	35,447	34,166	32,868	31,550	30,188	26,751	JTEBC48S	10	1117	77	9.678	6	10°	915	
24	29,868	26,963	23,947	20,627	—	—	—	—	JTEBC54P	3	657	38	2.839	6	10°	980	
25	35,142	32,675	30,186	27,546	24,719	21,606	—	—	JTEBC54Q	54	5	773	51	4.621	6	10°	1005
26	40,461	38,319	36,170	33,980	31,660	29,223	26,641	20,274	JTEBC54R	7 1/2	980	67	7.028	6	10°	1040	
27	42,217	40,742	39,177	37,484	35,583	33,637	31,823	27,921	JTEBC54S	10	1059	92	9.359	6	5°	1050	
28	36,122	31,942	26,938	—	—	—	—	—	JTEBC60P	3	533	36	2.832	6	10°	1135	
29	41,815	38,061	34,384	29,973	25,644	—	—	—	JTEBC60Q	60	5	617	45	4.397	6	10°	1160
30	48,592	45,245	42,441	38,533	34,997	31,475	26,812	—	JTEBC60R	7 1/2	717	62	6.878	6	10°	1200	
31	50,897	48,847	46,825	44,676	42,143	39,251	36,223	29,798	JTEBC60S	10	914	82	9.591	6	5°	1210	

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first five letters of the model number identify **fan type, drive configuration and style**. The next two numbers indicate **fan size**, the next letter identifies **motor horsepower**. For example: Model JTEBC18H is Type "JTE", belt drive, Style "C", 18" size, 1/3 H.P.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: 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. Bearing losses are included. 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

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Type JTBC

**BELT DRIVE — 2,100 to 97,300 CFM  
0" to 1" STATIC PRESSURE**



## Dimensions

Dimension A is the diameter of the circular wind shroud.

Dimension B is the overall height above the curb.

Dimension C is the I.D. of the curb cap flange.

Dimension D is the inside curb minimum. (Inlet orifice is not furnished with 18" size.)

Dimension E is the inside diameter of the fan housing.

Dimension F is the height of the wind shroud.

Dimension G is the height of the unit from the curb to the wind shroud.

Dimension H is the height of the unit above the curb less the wind shroud and damper assembly.

Dimension J is the distance from the center of the PRV to the outside edge of the motor cover.

## Application

The JTBC upblast PRVs are built of heavy gauge steel for rugged industrial service where the fan assembly must be located above the roof.

They are designed to operate reliably in hostile environments where high temperatures or contaminated air are present. The motor, belts and bearings are isolated from the air stream.

These PRVs can be easily connected to duct work when exhausting from a ducted system. Simply specify the optional duct connector accessory.

## Features

The JTBC PRVs are constructed of extra heavy gauge steel, up to 1/4" plate.

The steel fan shaft is supported by two pillow-block ball bearings that are mounted in an enclosed tube to provide years of service under harsh conditions. (Suitable for operation to 250°F. See Type HS for higher temperatures.)

JTBC PRVs use from 3 to 8 cast aluminum adjustable pitch airfoil blades that are securely attached to a heavy cast aluminum hub. Blade pitch is set for catalog performance. The blade pitch should not be adjusted without first contacting your American Coolair representative.

JTBC PRVs incorporate specifically engineered airfoil sections and hub sizes for optimum efficiency and strength.

Most models are equipped with a variable pitch motor pulley that allows PRV speed adjustment where desirable. Caution should be exercised in making a speed adjustment. If pulley is opened to reduce propeller speed, air velocity may be reduced below minimum essential for all-weather usage. A speed increase may overload the motor. Contact your American Coolair representative for information on fan performance and motor load before making any adjustment.

External re-lubrication fan bearing fittings and motor cover are standard with all belt driven models.

Fan Size	Dimensions in Inches								
	A	B	C	D	E	F	G	H	J
18	24 5/8	45 1/4	32	—	18 1/8	27 5/8	17 5/8	20	23 3/4
24	32	53 1/4	38	30 1/4	25 1/2	27 5/8	25 5/8	28	30 5/8
30	38	58 1/8	44	36 1/4	31 1/4	32 1/2	25 5/8	28	34 1/2
36	44	66 1/8	50	42 1/4	37 1/4	32 1/2	33 5/8	36	41 5/8
42	50	71	56	48 1/2	43 1/4	37 3/8	33 5/8	36	45 5/8
48	56	71	62	54 5/8	49 1/4	37 3/8	33 5/8	36	49
54	62	75 7/16	68	59 1/2	55 1/4	41 13/16	33 5/8	36	52 3/8
60	68	78 7/16	77	65 5/8	61 3/8	44 13/16	33 5/8	36	55 7/8
72	80	93 7/16	89	77 5/8	73 3/8	47 13/16	45 5/8	48	62 1/8
84	92	93 7/16	101	89 5/8	85 3/8	47 13/16	45 5/8	48	68 1/2

# Performance Ratings Typical Specifications



American Coolair Corporation certifies that the Type JTBC PRVs 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 comply with the requirements of the AMCA Certified Ratings Program.

Upblast power roof ventilators shall be American Coolair Type JTBC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. PRV base and curb cap shall be of welded steel construction, wind shroud and motor cover shall be of galvanized steel. Dampers shall be of fiberglass for durability and quiet, maintenance-free operation. Motors shall be located outside airstream. Ball bearings shall be of the heavy duty pillow-block type with external lubrication fittings. Fan blades shall be of high strength cast aluminum airfoil design securely attached to a heavy cast aluminum hub. Blade pitch shall be adjustable. PRVs shall be licensed to bear the AMCA Certified Ratings Seal for air performance. (Specify for each PRV model in schedule the required CFM and static pressure; motor enclosure, phase and voltage; and accessories such as safety disconnect switch, magnetic latches, prefabricated curb and special protective coating, etc.)

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,6</sup>								Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	Max BHP <sup>4,6</sup>	Blade No.	Desc. <sup>5</sup> Pitch	Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"									
1	2,929	2,589	—	—	—	—	—	—	JTBC18H11	18	1/3	1160	11.5	0.31	6	32.5°	320
2	3,142	2,960	2,747	2,490	—	—	—	—	JTBC18J17	18	1/2	1750	19.3	0.47	4	20.5°	325
3	3,768	3,537	3,278	2,990	—	—	—	—	JTBC18K17	18	3/4	1750	22	0.70	4	28°	332
4	4,204	3,936	3,646	3,332	—	—	—	—	JTBC18L17	18	1	1750	24	0.94	4	34.5°	344
5	6,667	6,025	5,310	—	—	—	—	—	JTBC24K11	24	3/4	1160	22	0.71	3	26.5°	493
6	7,216	6,629	5,980	—	—	—	—	—	JTBC24L11	24	1	1160	25	0.94	4	28°	499
7	8,263	7,804	7,256	—	—	—	—	—	JTBC24M11	24	1 1/2	1160	22	1.41	6	29.5°	510
8	8,001	7,617	7,203	6,750	6,268	5,729	—	—	JTBC24M17	24	1 1/2	1750	36	1.37	3	17°	510
9	9,148	8,744	8,320	7,880	7,420	6,894	6,176	—	JTBC24N17	24	2	1750	38	1.89	3	22°	510
10	9,961	9,725	9,475	9,207	8,917	8,596	8,230	7,222	JTBC24P17	24	3	1750	39	2.89	6	20.5°	543
11	12,315	12,012	11,710	11,382	11,018	10,618	10,190	—	JTBC24Q17	24	5	1750	42	4.69	6	29°	556
12	10,491	9,358	8,065	—	—	—	—	—	JTBC30L8	30	1	870	19.0	0.92	4	26°	540
13	11,887	11,027	10,008	—	—	—	—	—	JTBC30M8	30	1 1/2	870	22	1.40	6	28°	589
14	13,166	12,350	11,519	10,613	9,514	—	—	—	JTBC30N11	30	2	1160	28	1.87	4	23°	589
15	14,791	14,223	13,595	12,909	12,061	11,113	—	—	JTBC30P11	30	3	1160	36	2.79	6	24.5°	620
16	17,363	16,848	16,358	15,846	15,300	14,722	14,118	12,855	JTBC30Q17	30	5	1750	53	4.69	4	17.5°	633
17	19,832	19,490	19,136	18,769	18,389	17,991	17,575	16,668	JTBC30R17	30	7 1/2	1750	60	7.37	6	20°	681
18	13,780	12,589	11,085	—	—	—	—	—	JTBC36M8	36	1 1/2	870	27	1.41	4	18°	965
19	15,106	14,127	13,018	11,656	9,190	—	—	—	JTBC36N8	36	2	870	27	1.88	6	18°	965
20	17,585	16,580	15,350	13,740	11,019	—	—	—	JTBC36P8	36	3	870	29	2.79	6	25.5°	965
21	20,427	19,721	18,959	18,119	17,204	16,180	14,886	—	JTBC36Q11	36	5	1160	47	4.60	6	18.5°	1010
22	23,921	23,116	22,232	21,255	20,188	19,024	17,691	—	JTBC36R11	36	7 1/2	1160	57	6.97	6	27°	1053
23	18,124	17,441	16,712	15,970	15,220	14,442	13,619	11,740	JTBC36Q17	36	5	1750	75	4.76	3	8°	1011
24	21,493	20,947	20,374	19,772	19,150	18,523	17,904	16,660	JTBC36R17	36	7 1/2	1750	89	7.44	4	10.5°	1053
25	22,832	22,372	21,944	21,507	21,064	20,614	20,158	19,219	JTBC36S17	36	10	1750	91	9.78	6	11°	1073
26	17,991	15,638	—	—	—	—	—	—	JTBC42M6	42	1 1/2	680	22	1.40	3	22.5°	1089
27	19,546	17,604	15,181	—	—	—	—	—	JTBC42N6	42	2	680	25	1.82	4	22.5°	1089
28	22,805	21,336	19,473	—	—	—	—	—	JTBC42P6	42	3	680	28	2.81	6	25°	1120
29	22,118	20,625	19,074	17,229	14,966	—	—	—	JTBC42P8	42	3	870	36	2.79	4	17°	1120
30	26,324	25,194	24,006	22,721	21,262	—	—	—	JTBC42Q8	42	5	870	41	4.72	6	20.5°	1132
31	25,529	24,466	23,338	22,168	20,926	19,537	17,931	—	JTBC42Q11	42	5	1160	51	4.79	4	12°	1120
32	28,566	27,765	26,926	26,015	25,090	24,095	23,043	20,758	JTBC42R11	42	7 1/2	1160	60	7.48	6	13.5°	1170
33	32,829	31,967	31,096	30,206	29,280	28,311	27,274	24,786	JTBC42S11	42	10	1160	67	9.71	6	18°	1230

(chart continues next page)

# Type JTBC Performance Ratings (cont'd)

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,6</sup>								Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	Max BHP <sup>4,6</sup>	Blade Desc. <sup>5</sup>		Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"							No.	Pitch	
34	22,696	19,631	—	—	—	—	—	—	JTBC48N6	2	680	29	1.76	3	16°	1286	
35	26,871	24,140	21,320	18,087	—	—	—	—	JTBC48P6	3	680	34	2.80	4	20°	1317	
36	25,892	23,807	21,532	18,882	—	—	—	—	JTBC48P8	3	870	41	2.77	3	11.5°	1317	
37	31,117	29,435	27,694	25,688	23,285	20,386	—	—	JTBC48Q8	48	5	870	49	4.68	4	16°	1329
38	36,076	34,094	32,194	30,292	28,217	—	—	—	JTBC48R8		7 1/2	870	57	7.11	4	24°	1378
39	29,961	28,338	26,662	24,947	23,061	20,885	18,300	—	JTBC48Q11	5	1160	64	4.67	3	7°	1329	
40	35,411	33,773	32,168	30,512	28,686	26,658	24,510	—	JTBC48R11	7 1/2	1160	72	7.00	3	12.5°	1378	
41	39,286	37,593	35,862	34,116	32,327	30,392	28,195	—	JTBC48S11	10	1160	78	9.27	3	17°	1392	
42	27,271	25,238	22,836	—	—	—	—	—	JTBC54P6	3	680	42	2.69	6	7°	1634	
43	34,784	32,958	30,708	28,018	24,936	—	—	—	JTBC54Q6	5	680	50	4.65	6	14.5°	1347	
44	40,347	37,952	35,446	32,840	—	—	—	—	JTBC54R6	54	7 1/2	680	49	7.05	6	22°	1695
45	37,748	36,209	34,581	32,872	30,932	28,636	26,032	—	JTBC54R8		7 1/2	870	68	6.77	6	9°	1695
46	43,926	42,515	40,905	39,093	37,103	34,994	32,684	25,120	JTBC54S8	10	870	80	9.45	6	14°	1718	
47	34,772	30,365	26,165	—	—	—	—	—	JTBC60P6	3	680	37	2.75	3	10°	1792	
48	40,197	37,149	34,453	30,885	25,733	—	—	—	JTBC60Q6	5	680	56	4.64	6	9°	1810	
49	47,043	44,274	41,748	38,559	32,372	27,533	—	—	JTBC60R6	60	7 1/2	680	56	6.93	6	14.5°	1858
50	53,245	50,332	46,769	43,024	38,881	29,665	—	—	JTBC60S6		10	680	58	9.37	6	19.5°	1881
51	52,790	50,130	47,168	43,941	40,286	36,343	28,592	—	JTBC60S8	10	870	74	9.43	4	13°	1881	
52	50,173	46,016	40,720	—	—	—	—	—	JTBC72Q	5	395	31	4.76	8	15°	2078	
53	57,413	53,844	49,736	44,264	36,935	—	—	—	JTBC72R	7 1/2	452	38	7.13	8	15°	2117	
54	63,128	59,910	56,354	52,073	46,349	39,274	—	—	JTBC72S*	72	10	497	44	9.47	8	15°	2144
55	72,968	69,247	65,098	60,174	53,431	42,433	—	—	JTBC72T*		15	500	55	14.21	8	22.5°	2272
56	79,321	76,935	74,452	71,847	69,095	66,173	63,054	56,000	JTBC72U*	20	697	95	19.15	8	10°	2296	
57	61,448	55,063	45,813	—	—	—	—	—	JTBC84Q	5	306	27	4.75	8	15°	2460	
58	70,284	64,846	58,127	48,249	—	—	—	—	JTBC84R	7 1/2	350	33	7.08	8	15°	2499	
59	78,125	72,599	66,254	57,587	—	—	—	—	JTBC84S	84	10	370	40	9.56	8	17.5°	2526
60	85,468	81,264	77,396	73,165	68,477	63,203	57,203	—	JTBC84T*		15	519	67	14.16	8	7.5°	2654
61	97,302	93,571	89,574	85,204	80,320	74,876	68,861	51,729	JTBC84U*	20	517	69	18.97	8	12°	2678	

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first four letters of the model number identify **fan type**, **drive configuration** and **style**. The next two numbers indicate **fan size**, the next letter identifies **motor horsepower**, the last number (or numbers) indicates **RPM** in hundreds. Example: Model JTBC18H11 is Type "JT", belt drive, Style "C", 18" size, 1/3 H.P., 1160 RPM.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: 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) do not include transmission losses. Bearing losses are included. 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. Because of the cooling the motor receives from moving air stream, motor loading beyond the nominal nameplate ratings on these American Coolair fans does not overheat the motor and is within NEMA recommended limits and motor service factor. It is not detrimental to the motor and is economically desirable.
- 5 — An adjustable pitch propeller with cast aluminum airfoil blades is standard. The number of blades and pitch angle for each model is indicated.
- 6 — 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).

**Example:** 3904 CFM x .000472 = 1.8427 m<sup>3</sup>/s  
 0.125 SP x 248.36 = 31.05 Pa  
 0.886 BHP x .7457 = 0.661 kW

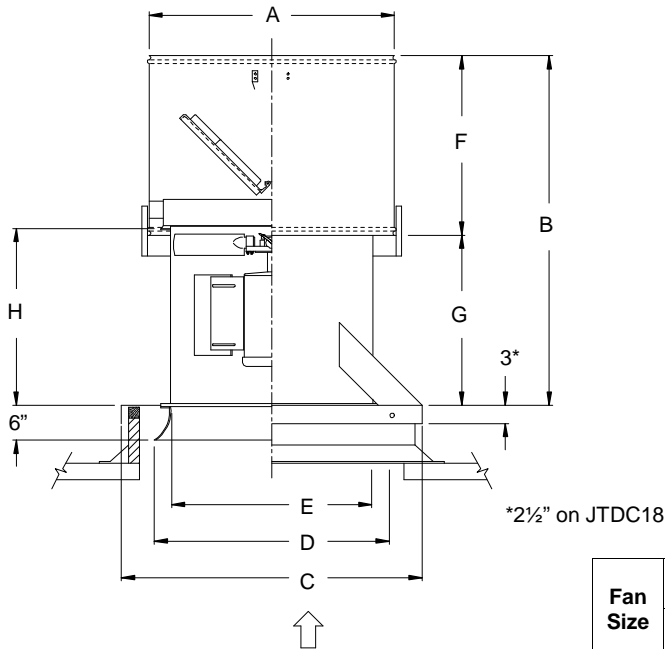
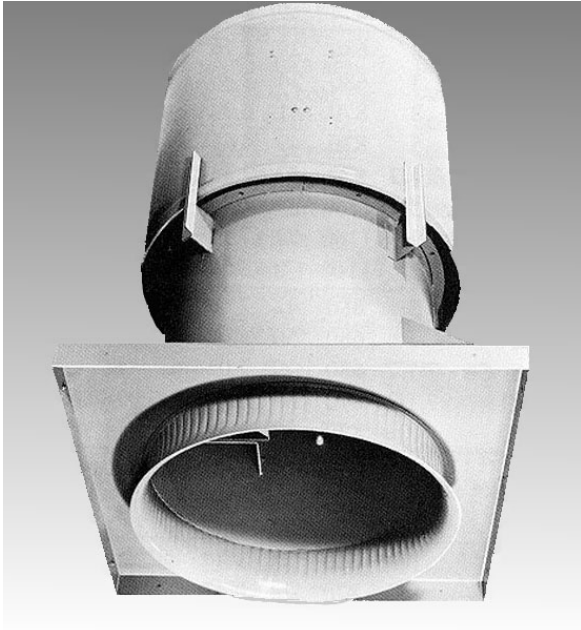
\*These models have fixed pitch motor pulleys.

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE



# Type JTDC

**DIRECT DRIVE — 2,500 to 55,800 CFM  
0" to 1" STATIC PRESSURE**



## Dimensions

Dimension A is the diameter of the circular wind shroud.

Dimension B is the overall height above the curb.

Dimension C is the I.D. of the curb cap flange.

Dimension D is the inside curb minimum. (Inlet orifice is not furnished with 18" size.)

Dimension E is the inside diameter of the fan housing.

Dimension F is the height of the wind shroud.

Dimension G is the height of the unit from the curb to the wind shroud.

Dimension H is the height of the unit above the curb less the wind shroud and damper assembly.

## Application

The JTDC upblast PRVs are designed for minimal maintenance requirements and efficient, economical operation for your specialized ventilation needs. They are constructed for rugged industrial service where the fan assembly must be located above the roof.

JTDC upblast PRVs can accommodate larger motors and thus provide higher air capacity and static pressure capability than direct driven Type J PRVs.

These PRVs can be easily connected to duct work when exhausting from a ducted system. Simply specify the optional duct connector accessory.

## Features

JTDC PRVs are constructed of extra heavy gauge steel, up to 1/4" plate.

The propeller assembly is connected directly to the motor shaft. There are no fan bearings or belts to require maintenance. Many motors are permanently lubricated.

JTDC PRVs use from 3 to 6 cast aluminum adjustable pitch airfoil blades that are securely attached to a heavy cast aluminum hub. Blade pitch is set for catalog performance. The blade pitch should not be adjusted without first contacting your American Coolair representative.

JTDC PRVs incorporate specifically engineered airfoil sections and hub sizes for optimum efficiency and strength.

Fan Size	Dimensions in Inches							
	A	B	C	D	E	F	G	H
18	24 5/8	45 1/4	32	—	18 1/8	27 5/8	17 5/8	20
24	32	53 1/4	38	30 1/4	25 1/2	27 5/8	25 5/8	28
30	38	58 1/8	44	36 1/4	31 1/4	32 1/2	25 5/8	28
36	44	66 1/8	50	42 1/4	37 1/4	32 1/2	33 5/8	36
42	50	71	56	48 1/2	43 1/4	37 3/8	33 5/8	36
48	56	71	62	54 5/8	49 1/4	37 3/8	33 5/8	36
54	62	75 7/16	68	59 1/2	55 1/4	41 13/16	33 5/8	36
60	68	78 7/16	77	65 5/8	61 3/8	44 13/16	33 5/8	36

# Performance Ratings

# Typical Specifications



American Coolair Corporation certifies that the Type JTDC PRVs 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 comply with the requirements of the AMCA Certified Ratings Program.

Upblast power roof ventilators shall be American Coolair Type JTDC as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. PRV base and curb cap shall be of welded steel construction, wind shroud shall be of galvanized steel. Dampers shall be of fiberglass for durability and quiet, maintenance-free operation. Fan blades shall be airfoil shaped cast aluminum securely attached to a heavy cast aluminum hub. Blade pitch shall be adjustable. Entire blade assembly shall be mounted directly to the motor shaft. PRV's shall be licensed to bear the AMCA Certified Ratings Seal for air performance. (Specify for each PRV model in schedule the required CFM and static pressure; motor enclosure, phase and voltage; and accessories such as safety disconnect switch, magnetic latches, prefabricated curb and special protective coating, etc.)

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,7</sup>								Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM <sup>3</sup>	Sone Rating <sup>4</sup>	Max BHP <sup>5,7</sup>	Blade Desc. <sup>6</sup>		Approx. Ship Wt.	
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"							No.	Pitch		
1	3,298	2,927	—	—	—	—	—	—	JTDC18H11		1/3	1160	12.1	0.35	6	35°	264	
2	3,646	3,438	3,192	2,902	2,553	—	—	—	JTDC18J17	18	1/2	1750	22	0.57	4	24°	253	
3	4,333	4,091	3,802	3,462	—	—	—	—	JTDC18K17		3/4	1750	23	0.84	4	32°	260	
4	4,817	4,587	4,351	4,077	—	—	—	—	JTDC18L17		1	1750	22	1.12	6	33.5°	272	
5	6,488	5,810	5,069	—	—	—	—	—	JTDC24J11		1/2	1160	20	0.56	3	22.5°	320	
6	7,553	6,865	6,128	—	—	—	—	—	JTDC24K11	24	3/4	1160	23	0.85	3	30°	331	
7	7,789	7,385	6,926	6,348	—	—	—	—	JTDC24L11		1	1160	21	1.12	6	25°	342	
8	9,317	8,897	8,449	7,981	7,503	6,973	6,261	—	JTDC24M17		1 1/2	1750	37	1.73	3	20.5°	342	
9	10,496	10,061	9,596	9,108	8,608	8,082	—	—	JTDC24N17		2	1750	41	2.28	3	25.5°	342	
10	11,850	11,422	11,005	10,561	10,084	9,584	9,076	—	JTDC24P17		3	1750	46	3.41	4	29°	369	
11	11,446	10,505	9,390	8,212	—	—	—	—	JTDC30L11		30	1	1160	24	1.11	3	18.5°	470
12	13,152	12,347	11,526	10,610	9,467	—	—	—	JTDC30M11	1 1/2		1160	28	1.73	4	21.5°	501	
13	13,601	13,066	12,483	11,839	11,112	10,258	—	—	JTDC30N11	2		1160	30	2.27	6	20.5°	514	
14	16,552	15,898	15,205	14,464	13,604	—	—	—	JTDC30P11	3		1160	41	3.39	6	28.5°	562	
15	16,315	15,702	15,081	14,426	13,741	13,021	12,251	10,450	JTDC30P17	3		1750	46	3.39	3	16.5°	501	
16	18,063	17,739	17,341	16,906	16,543	16,159	15,751	14,844	JTDC30Q17	5		1750	59	5.93	6	16.5°	514	
17	13,143	11,606	9,670	—	—	—	—	—	JTDC36L8	36		1	870	22	1.12	3	18.5°	740
18	15,365	14,109	12,588	9,871	—	—	—	—	JTDC36M8		1 1/2	870	28	1.73	4	22°	750	
19	16,775	15,805	14,708	13,226	11,012	—	—	—	JTDC36N8		2	870	28	2.30	6	21.5°	800	
20	19,434	18,318	16,678	14,870	13,106	—	—	—	JTDC36P8		3	870	34	3.38	6	30°	820	
21	14,579	13,436	12,188	11,072	9,113	—	—	—	JTDC36M11		1 1/2	1160	32	1.72	3	11°	750	
22	16,484	15,436	14,300	12,898	11,085	—	—	—	JTDC36N11		2	1160	33	2.28	3	15.5°	760	
23	18,876	17,969	17,022	15,962	14,648	12,729	—	—	JTDC36P11		3	1160	42	3.37	4	18°	800	
24	22,583	21,862	21,104	20,286	19,360	18,237	16,865	—	JTDC36Q11		5	1160	50	5.61	6	22°	820	
25	20,284	19,574	18,852	18,117	17,371	16,608	15,814	14,033	JTDC36Q17		5	1750	76	5.62	3	10°	761	
26	25,226	24,548	23,857	23,150	22,424	21,673	20,893	19,200	JTDC36R17		7 1/2	1750	77	8.74	3	16.5°	803	
27	25,204	24,786	24,366	23,942	23,493	22,953	22,393	21,320	JTDC36S17		10	1750	92	12.14	6	13°	823	
28	17,326	14,800	—	—	—	—	—	—	JTDC42L6		42	1	680	21	1.14	3	19°	860
29	19,488	17,512	15,052	—	—	—	—	—	JTDC42M6			1 1/2	680	25	1.68	4	21°	908
30	15,705	13,815	—	—	—	—	—	—	JTDC42L8			1	870	26	1.06	3	7.5°	848
31	18,996	17,188	15,145	—	—	—	—	—	JTDC42M8	1 1/2		870	27	1.65	3	13°	840	
32	21,602	19,697	17,740	15,349	—	—	—	—	JTDC42N8	2		870	30	2.27	3	18°	908	
33	24,724	23,228	21,553	19,625	17,247	—	—	—	JTDC42P8	3		870	38	3.44	4	20.5°	932	
34	29,458	28,307	27,076	25,663	23,834	—	—	—	JTDC42Q8	5		870	42	5.73	6	24.5°	979	
35	19,667	18,254	16,827	15,284	—	—	—	—	JTDC42N11	2		1160	41	2.29	3	6°	860	
36	23,439	22,107	20,748	19,238	17,500	15,707	—	—	JTDC42P11	3		1160	41	3.38	3	10.5°	908	
37	29,556	28,070	26,590	25,112	23,562	21,786	19,773	—	JTDC42Q11	5		1160	50	5.68	3	19°	932	
38	33,530	32,431	31,277	30,052	28,739	27,301	25,680	—	JTDC42R11	7 1/2		1160	61	8.61	4	21.5°	979	
39	30,307	29,406	28,452	27,489	26,525	25,557	24,564	22,391	JTDC42R17	7 1/2		1750	84	8.43	3	6.5°	908	

(chart continues next page)

# Type JTDC Performance Ratings (cont'd)

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1,7</sup>								Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM <sup>3</sup>	Sone Rating <sup>4</sup>	Max BHP <sup>5,7</sup>	Blade No.	Descr. <sup>6</sup> Pitch	Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"									
40	23,036	19,687	—	—	—	—	—	—	JTDC48M6	1 1/2	680	28	1.65	3	15°	1005	
41	24,930	22,657	20,112	—	—	—	—	—	JTDC48N6	2	680	32	2.24	4	16°	1028	
42	28,420	26,690	24,703	22,374	19,073	—	—	—	JTDC48P6	3	680	36	3.44	6	17.5°	1075	
43	21,631	19,409	16,971	—	—	—	—	—	JTDC48M8	1 1/2	870	37	1.67	3	5.5°	957	
44	24,254	22,105	19,672	16,950	—	—	—	—	JTDC48N8	48	2	870	39	2.23	3	8.5°	1005
45	27,847	26,061	24,269	22,217	19,845	—	—	—	JTDC48P8		3	870	47	3.44	4	11°	1028
46	35,009	32,843	30,604	28,377	25,972	23,261	—	—	JTDC48Q8	5	870	51	5.69	4	19.5°	1075	
47	38,875	37,533	36,216	34,833	33,223	31,107	28,402	—	JTDC48R8	7 1/2	870	59	8.45	6	20.5°	1005	
48	33,507	31,941	30,324	28,559	26,657	24,668	22,397	—	JTDC48Q11	5	1160	69	5.73	3	9.5°	1028	
49	39,587	37,764	35,769	33,831	31,988	30,045	27,794	—	JTDC48R11	7 1/2	1160	75	8.50	3	15.5°	1075	
50	27,939	24,201	—	—	—	—	—	—	JTDC54N6	2	680	34	2.26	3	12°	1352	
51	32,076	29,234	25,798	22,759	—	—	—	—	JTDC54P6	3	680	39	3.40	4	14.5°	1400	
52	37,817	35,656	33,466	30,983	27,907	—	—	—	JTDC54Q6	5	680	50	5.66	6	17.5°	1433	
53	31,156	28,635	25,952	22,575	—	—	—	—	JTDC54P8	3	870	54	3.39	3	7.5°	1352	
54	37,596	35,351	33,072	30,866	28,463	25,342	—	—	JTDC54Q8	54	5	870	63	5.65	4	11°	1400
55	43,342	41,291	39,095	36,546	33,738	30,798	26,503	—	JTDC54R8		7 1/2	870	63	8.52	4	17.5°	1433
56	47,279	45,720	44,159	42,518	40,688	38,586	36,190	—	JTDC54S8	10	870	82	11.14	6	16.5°	1493	
57	42,345	40,359	38,467	36,531	34,356	31,806	29,199	22,046	JTDC54R11	7 1/2	1160	89	8.39	3	8°	1400	
58	47,660	45,547	43,294	41,091	38,957	36,747	34,307	28,257	JTDC54S11	10	1160	89	11.22	3	12°	1433	
59	37,686	33,465	28,171	20,221	—	—	—	—	JTDC60P6	3	680	37	3.35	3	12.5°	1620	
60	44,205	41,437	38,179	34,650	30,360	23,048	—	—	JTDC60Q6	5	680	57	5.62	6	11.5°	1655	
61	51,944	48,824	45,302	42,086	38,012	29,584	—	—	JTDC60R6	7 1/2	680	57	8.29	6	17.5°	1715	
62	56,982	54,186	50,759	46,646	42,041	30,670	—	—	JTDC60S6	60	10	680	60	11.18	6	22.5°	1765
63	44,856	41,020	37,736	34,415	28,524	—	—	—	JTDC60Q8		5	870	59	5.53	3	9.5°	1620
64	51,426	48,768	45,843	42,277	38,587	35,265	28,399	—	JTDC60R8	7 1/2	870	70	8.46	4	11.5°	1655	
65	55,819	53,627	51,207	48,642	46,120	43,500	40,368	29,657	JTDC60S8	10	870	91	11.35	6	11°	1715	
66	55,301	52,853	50,566	48,258	45,634	42,352	38,634	29,968	JTDC60S11	10	1160	95	10.99	3	7.5°	1655	

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first four letters of the model number identify **fan type, drive configuration and style**. The next two numbers indicate **fan size**, the next letter identifies **motor horsepower**, the last number (or numbers) indicates **RPM** in hundreds. Example: Model JTDC18H11 is Type "JT", direct drive, Style "C", 18" size, 1/3 H.P., 1160 RPM.
- 3 — Fan RPM is identical to motor speed.
- 4 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. The sound ratings shown are at 0" static pressure.
- 5 — Maximum brake horsepower (BHP) within the catalog performance range. 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. Because of the cooling the motor receives from moving air stream, motor loading beyond the nominal nameplate ratings on these American Coolair fans does not overheat the motor and is within NEMA recommended limits and motor service factor. It is not detrimental to the motor and is economically desirable.
- 6 — An adjustable pitch propeller with cast aluminum airfoil blades is standard. The number of blades and pitch angle for each model is indicated.
- 7 — 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).

**Example:** 3904 CFM x .000472 = 1.8427 m<sup>3</sup>/s  
0.125 SP x 248.36 = 31.05 Pa  
0.886 BHP x .7457 = 0.661 kW

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Type HSE

**BELT DRIVE — 1,760 to 48,300 CFM**  
**0" to 5/8" STATIC PRESSURE**



## High-Temperature Endurance

American Coolair's HSE fans were tested under the auspices of Underwriters Laboratory Inc., and met the following time vs. temperature limits:

- 270 minutes at 500° F (260° C)**
- 90 minutes at 700° F (371° C)**
- 30 minutes at 1,000° F (538° C)**

This high temperature capability exceeds the UL requirements of "Power Ventilators for Smoke Control Systems" (UL793), the IRI requirement to operate at 500° F for 2 hours minimum, and the SBCCI requirement to operate at 1000° F for 15 minutes.

Fan Size	Dimensions in Inches									
	A	B	C	D	E	F	G	H	J	K
18	23	47 7/16	32	—	18 1/8	27 5/8	19 13/16	21 1/16	23 1/4	2 1/2
24	32	47 7/16	38	30 1/4	25 1/2	27 5/8	19 13/16	21 1/16	28	3
30	38	52 5/16	44	36 1/4	31 1/4	32 1/2	19 13/16	21 1/16	31 1/4	3
36	44	62 3/8	50	42 1/4	37 1/4	32 1/2	29 7/8	31 1/8	37 3/4	3
42	50	67 1/4	56	48 1/2	43 1/4	37 3/8	29 7/8	31 1/8	41	3
48	56	67 1/4	62	54 5/8	49 1/4	37 3/8	29 7/8	31 1/8	44 1/4	3
54	62	71 11/16	68	59 1/2	55 1/4	41 13/16	29 7/8	31 1/8	52	3
60	68	74 11/16	77	65 5/8	61 3/8	44 13/16	29 7/8	31 1/8	55 1/8	3

## Dimensions

- Dimension A is the diameter of the circular wind shroud.
- Dimension B is the overall height above the curb.
- Dimension C is the I.D. of the curb cap flange.
- Dimension D is the inside curb minimum. (Inlet orifice is not furnished with 18" size.)
- Dimension E is the inside diameter of the fan housing.
- Dimension F is the height of the wind shroud.
- Dimension G is the height of the unit from the curb to the wind shroud.
- Dimension H is the height of the unit above the curb less the wind shroud and damper assembly.
- Dimension J is the distance from the center of the PRV to the outside edge of the motor cover.

## Application

The HSE upblast power roof ventilators are designed and built to meet the increasing need for power venting the combustion by-products of a fire.

These units are designed to be installed in the roof systems of shopping centers, wholesale warehouses, hotel atriums and any other place where building codes require the removal of smoke and heat by power roof ventilators.

## Construction

All critical components required for the continuous and safe operation of the unit and exposed to the air stream are ferrous construction to withstand high temperature conditions. These heavy gauge materials prevent warping of the fan parts and malfunction at elevated temperatures. All ferrous materials are painted with thermosetting epoxy paint for corrosion protection.

The wind shroud is made of galvanized steel and the damper doors are made of fiberglass with ultraviolet inhibitors.

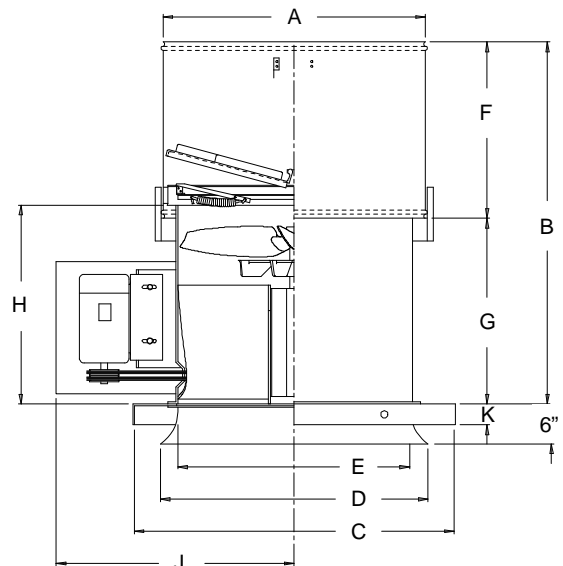
The belts and bearings are protected from the airstream, enclosed in a ventilated tube. A heat slinger/impeller mounted on the same shaft as the PRV's axial impeller isolates the fan bearings from the damaging heat and draws cooler outside air through the motor compartment and over the belts and bearings.

A spring loaded, fusible link activated device automatically opens the damper doors when the temperature at the doors exceeds 165° F. This enables the HSE fan to also function as a gravity ventilator prior to powered operation or in the event of a motor or electrical failure. The PRV's are designed for all weather operation. The steel wheel assemblies are statically and dynamically balanced for smooth operation. Each PRV features an inlet guard constructed of 1" x 1", galvanized wire mesh.

The belt driven units are available from 18" to 60" in diameter and most models come with variable pitch pulleys allowing for final system balance adjustment.

The steel fan shaft is supported by two (2) heavy-duty pillow-block bearings that are mounted in an enclosed tube to provide reliable and continuous service under harsh conditions.

The motor is located out of the airstream and is thus protected from the high temperatures of the airstream. Standard TEFC motors are used on most models to reduce cost and provide additional cooling and ensure prompt repair or replacement if required.



# Performance Ratings

# Typical Specifications



American Coolair Corporation certifies that the Type HSE PRVs 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.

Heat and smoke removal power roof ventilators shall be American Coolair Type HSE as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. PRVs shall be designed and tested to operate at 500° F for 270 minutes, 700° F for 90 minutes, and 1,000° F for 30 minutes. PRV shall be UL Listed as a "Power Ventilator for Smoke Control Systems." Motor shall be out of the airstream, with the belts and bearings enclosed in tubes to protect them from the high temperature airstream. Positive ventilation of the motor compartment and the belt and bearing tubes shall be provided. Optional features such as external lubrication lines, safety disconnect switch, roof curbs, etc. shall be as listed in the fan schedule or specification.

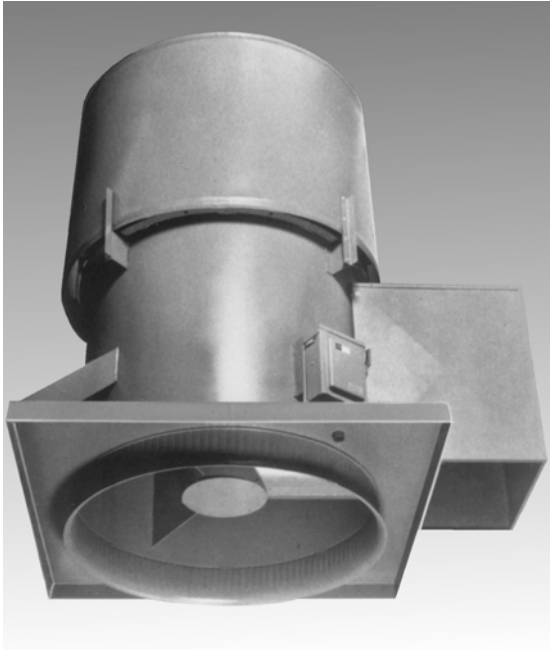
Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1</sup>						Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	Max BHP <sup>4</sup>	Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"							
1	2,830	2,653	2,384	—	—	—	HSE18K		3/4	1612	28	0.75	200
2	3,097	2,967	2,684	2,437	—	—	HSE18L		1	1764	32	1.00	205
3	3,544	3,447	3,191	3,010	2,762	—	HSE18M		1 1/2	2019	38	1.50	210
4	6,172	5,531	—	—	—	—	HSE24K		3/4	1062	23	0.75	325
5	6,678	6,092	5,450	—	—	—	HSE24L		1	1149	27	1.00	330
6	7,532	7,019	6,459	5,869	5,144	—	HSE24M	24	1 1/2	1296	33	1.50	330
7	8,287	7,825	7,325	6,807	6,237	5,529	HSE24N		2	1426	40	2.00	335
8	9,554	9,155	8,737	8,292	7,841	7,357	HSE24P		3	1644	49	3.00	350
9	9,523	8,519	7,420	—	—	—	HSE30L		1	815	25	1.00	390
10	10,785	9,908	8,974	7,892	—	—	HSE30M		1 1/2	923	32	1.50	395
11	11,778	10,979	10,135	9,235	8,042	—	HSE30N	30	2	1008	38	2.00	400
12	13,519	12,827	12,106	11,358	10,560	9,576	HSE30P		3	1157	51	3.00	415
13	16,417	15,850	15,270	14,670	14,057	13,427	HSE30Q		5	1405	70	5.00	430
14	12,940	11,582	9,808	—	—	—	HSE36M		1 1/2	829	24	1.50	575
15	14,345	13,179	11,613	9,316	—	—	HSE36N	36	2	919	29	2.00	580
16	16,343	15,359	14,053	12,674	10,193	—	HSE36P		3	1047	36	3.00	595
17	19,308	18,496	17,538	16,351	15,199	13,734	HSE36Q		5	1237	49	5.00	610
18	18,404	16,634	14,770	—	—	—	HSE42N		2	784	30	2.00	755
19	20,822	19,191	17,670	15,994	13,645	—	HSE42P	42	3	887	37	3.00	770
20	24,602	23,193	22,000	20,546	19,166	17,473	HSE42Q		5	1048	50	5.00	785
21	28,522	27,317	26,161	25,189	23,861	22,663	HSE42R		7 1/2	1215	65	7.50	825
22	24,776	22,472	19,938	17,002	—	—	HSE48P		3	689	26	3.00	850
23	29,415	27,494	25,451	23,266	20,848	16,367	HSE48Q	48	5	818	35	5.00	865
24	33,730	32,062	30,333	28,493	26,570	24,503	HSE48R		7 1/2	938	44	7.50	905
25	37,361	35,859	34,320	32,705	31,015	29,266	HSE48S		10	1039	54	10.00	915
26	26,708	23,811	20,507	—	—	—	HSE54P		3	562	32	3.00	980
27	31,698	28,969	27,123	23,649	18,847	—	HSE54Q	54	5	667	43	5.00	1005
28	36,213	33,623	32,042	30,002	26,730	22,680	HSE54R		7 1/2	762	54	7.50	1040
29	39,730	37,257	35,708	34,259	31,773	28,738	HSE54S		10	836	64	10.00	1050
30	32,239	27,705	22,119	—	—	—	HSE60P		3	467	28	3.00	1136
31	38,452	34,635	30,962	24,962	17,294	—	HSE60Q	60	5	557	38	5.00	1160
32	44,113	40,851	37,515	34,181	28,183	21,130	HSE60R		7 1/2	639	48	7.50	1200
33	48,324	45,390	42,240	39,387	35,825	29,255	HSE60S		10	700	58	10.00	1210

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first five letters of the model number identify fan type, drive configuration and style. The next two numbers indicate fan size, the next letter identifies motor horsepower. For example: Model HSE18J is Type "HSE", 18" size, 1/2 H.P.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: 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. Bearing losses are included. 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

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# Type HS

**BELT DRIVE — 2,230 to 98,650 CFM**  
**0" to 5/8" STATIC PRESSURE**

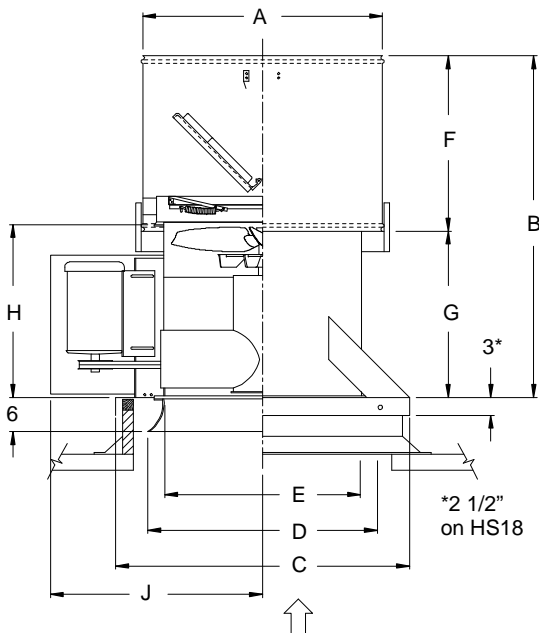


## High-Temperature Endurance

American Coolair's HSE fans were tested under the auspices of Underwriters Laboratory Inc., and met the following time vs. temperature limits:

- 270 minutes at 500° F (260° C)**
- 90 minutes at 700° F (371° C)**
- 30 minutes at 1,000° F (538° C)**

This high temperature capability exceeds the UL requirements of "Power Ventilators for Smoke Control Systems" (UL793), the IRI requirement to operate at 500° F for 2 hours minimum, and the SBCCI requirement to operate at 1000° F for 15 minutes.



## Application

The HS upblast power roof ventilators are designed and built to meet the increasing need for power venting the combustion by-products of a fire.

These units are designed to be installed in the roof systems of shopping centers, wholesale warehouses, hotel atriums and any other place where building codes require the removal of smoke and heat by power roof ventilators.

## Construction

All critical components required for the continuous and safe operation of the unit and exposed to the airstream are ferrous construction to withstand high temperature conditions. These heavy gauge materials prevent warping of the fan parts and malfunction at elevated temperatures. All ferrous materials are painted with thermosetting epoxy paint for corrosion protection.

The wind shroud is made of galvanized steel and the damper doors are made of fiberglass with ultraviolet inhibitors.

The belts and bearings are protected from the airstream, enclosed in a ventilated tube. A heat slinger/impeller mounted on the same shaft as the PRV's axial impeller, isolates the fan bearings from the damaging heat and draws cooler outside air through the motor compartment and over the belts and bearings. This is a vital factor for the successful operation of the HS unit.

A spring loaded, fusible link activated device automatically opens the damper doors when the temperature at the doors exceeds 165° F. This enables the HS fan to also function as a gravity ventilator prior to powered operation or in the event of a motor or electrical failure. The PRV's are designed for all weather operation. The steel wheel assemblies are statically and dynamically balanced for smooth operation.

The belt driven units are available from 18" to 84" in diameter, and most models come with variable pitch pulleys allowing for final system balance adjustment.

The steel fan shaft is supported by two (2) heavy-duty pillow-block bearings that are mounted in an enclosed tube to provide reliable and continuous service under harsh conditions.

The motor is located out of the airstream and is thus protected from the high temperatures of the airstream. Standard TEFC motors are used on most models to reduce cost and provide additional cooling and ensure prompt repair or replacement if required.

A safety disconnect switch is mounted to the PRV housing. This feature protects maintenance personnel from an accidental fan start when the unit is being serviced. Each PRV features an inlet guard constructed of 1" x 1", galvanized wire mesh.

Fan Size	Dimensions in Inches								
	A	B	C	D	E	F	G	H	J
18	23	45 1/4	32	24	18 1/8	27 5/8	17 5/8	20	23 3/4
24	32	53 1/4	38	30 1/4	25 1/2	27 5/8	25 5/8	28	30 5/8
30	38	58 1/8	44	36 1/4	31 1/4	32 1/2	25 5/8	28	34 1/2
36	44	66 1/8	50	42 1/4	37 1/4	32 1/2	33 5/8	36	41 5/8
42	50	71	56	48 1/2	43 1/4	37 3/8	33 5/8	36	45 5/8
48	56	71	62	54 5/8	49 1/4	37 3/8	33 5/8	36	49
54	62	75 7/16	68	59 1/2	55 1/4	41 13/16	33 5/8	36	52 3/8
60	68	78 7/16	77	65 5/8	61 3/8	44 13/16	33 5/8	36	55 7/8
72	80	93 7/16	89	77 5/8	73 3/8	47 13/16	45 5/8	48	62 1/8
84	92	93 7/16	101	89 5/8	85 3/8	47 13/16	45 5/8	48	68 1/2

# Performance Ratings Typical Specifications



American Coolair Corporation certifies that the Type HS PRVs 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 comply with the requirements of the AMCA Certified Ratings Program.

Heat and smoke removal power roof ventilators shall be American Coolair Type HS as manufactured by American Coolair Corporation, Jacksonville, Florida; specific models shall be as shown in the fan schedule. PRVs shall be designed and tested to operate at 500° F for 270 minutes, 700° F for 90 minutes, and 1,000° F for 30 minutes. PRV shall be UL Listed as a "Power Ventilator for Smoke Control Systems." Motor shall be out of the airstream, with the belts and bearings enclosed in tubes to protect them from the high temperature airstream. Positive ventilation of the motor compartment and the belt and bearing tubes shall be provided. PRV shall be equipped with fan bearing external grease fittings and lubrication lines isolated from the airstream. A safety disconnect switch mounted to the PRV housing and readily accessible from the roof top shall be furnished. Optional features such as emergency ventilation control center, roof curbs, etc. shall be as listed in the fan schedule or specification.

Item No.	Cubic Feet Per Minute (CFM) at Static Pressure <sup>1</sup>						Fan Model <sup>2</sup>	Fan Size	Motor HP	Fan RPM	Sone Rating <sup>3</sup>	Max BHP <sup>4</sup>	Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"							
1	2,750	2,310	—	—	—	—	HS18J	18	1/2	1553	13.5	0.50	337
2	3,250	2,860	2,590	—	—	—	HS18K		3/4	1840	17.5	0.75	344
3	6,000	5,410	4,790	—	—	—	HS24K	24	3/4	1062	24	0.75	500
4	6,650	6,110	5,570	4,970	—	—	HS24L		1	1178	28	1.00	502
5	7,740	7,280	6,810	6,330	5,810	—	HS24M		1 1/2	1369	36	1.50	506
6	9,700	8,660	7,590	—	—	—	HS30L	30	1	821	24	1.00	615
7	11,180	10,290	9,360	8,440	—	—	HS30M		1 1/2	947	29	1.50	625
8	12,730	11,210	—	—	—	—	HS36M	36	1 1/2	808	29	1.50	985
9	14,110	12,770	11,360	—	—	—	HS36N		2	896	33	2.00	985
10	16,440	15,350	14,080	12,870	—	—	HS36P		3	1044	43	3.00	1010
11	20,160	19,300	18,290	17,270	—	—	HS36Q		5	1280	62	5.00	1025
12	17,930	16,170	14,310	—	—	—	HS42N	42	2	766	32	2.00	1110
13	20,490	18,970	17,320	15,710	—	—	HS42P		3	875	40	3.00	1140
14	24,980	23,750	22,440	21,090	—	—	HS42Q		5	1067	59	5.00	1155
15	28,240	27,150	26,020	24,830	23,640	22,480	HS42R		7 1/2	1206	74	7.50	1194
16	24,270	21,760	19,250	—	—	—	HS48P	48	3	685	30	3.00	1315
17	29,340	27,230	25,200	—	—	—	HS48Q		5	828	41	5.00	1330
18	33,520	31,660	29,880	28,080	—	—	HS48R		7 1/2	946	52	7.50	1385
19	37,170	35,483	33,870	32,260	—	—	HS48S		10	1049	63	10.00	1412
20	27,990	25,220	21,980	—	—	—	HS54P	54	3	556	26	3.00	1715
21	33,580	31,320	28,830	25,950	—	—	HS54Q		5	667	33	5.00	1730
22	39,220	37,300	35,260	33,060	—	—	HS54R		7 1/2	779	42	7.50	1785
23	43,600	41,880	40,090	38,160	—	—	HS54S		10	866	50	10.00	1812
24	33,100	28,000	21,000	—	—	—	HS60P	60	3	477	27	3.00	1880
25	39,500	35,450	29,900	24,100	—	—	HS60Q		5	569	36	5.00	1895
26	45,400	41,950	37,800	32,250	—	—	HS60R		7 1/2	654	45	7.50	1950
27	49,700	46,550	43,050	38,500	—	—	HS60S		10	716	52	10.00	1990
28	49,900	44,500	38,500	—	—	—	HS72Q	72	5	340	42	5.00	2078
29	56,500	51,800	46,700	40,500	—	—	HS72R		7 1/2	385	52	7.50	2117
30	62,375	58,000	53,200	48,600	41,500	—	HS72S		10	425	63	10.00	2144
31	71,900	68,100	64,400	60,400	56,000	51,000	HS72T		15	490	83	15.00	2272
32	79,225	75,800	72,200	68,600	65,000	61,300	HS72U		20	540	101	20.00	2296
33	61,600	53,300	—	—	—	—	HS84Q	84	5	270	38	5.00	2460
34	70,725	63,100	55,900	—	—	—	HS84R		7 1/2	310	49	7.50	2499
35	78,000	71,300	64,500	57,000	—	—	HS84S		10	340	57	10.00	2526
36	89,500	83,600	77,600	72,200	64,300	52,000	HS84T		15	390	74	15.00	2654
37	98,650	92,700	87,100	81,500	76,400	69,000	HS84U		20	430	89	20.00	2678

- 1 — Performance certified is for Installation Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).
- 2 — The first two letters of the model number identify **fan type**. The next two numbers indicate **fan size**; the next letter identifies **motor horsepower**. Example: Model HS18J is Type "HS", 18" size, 1/2 H.P.
- 3 — The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels. The sound ratings shown are at 0" static pressure. The AMCA Certified Ratings Seal applies to air performance ratings only.
- 4 — Maximum brake horsepower (BHP) within the catalog performance range. Power ratings (BHP) 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.

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## ACCESSORIES

**SAFETY DISCONNECT SWITCH:** (Standard for HS units) Prevents accidental starting of PRV and is protected in a NEMA 3R enclosure. Mounting bracket and coupling for wiring through curb cap are provided with switch. (Type JT and HSE) Pre-wiring of switch to motor may also be specified.

**PRE-FABRICATED ROOF CURB:** You may specify surface mount or bulb T style 8-inch standard height curbs. Curbs are welded galvanized steel, insulated, with wood nailer. Construction to accommodate single or double pitch roof slope is also available.

**MAGNETIC LATCHES:** The addition of magnetic latches can minimize "damper flap" and accidental venting when unit is not in use.

**GALVANIZED DAMPER DOORS:** Damper doors made of heavy gauge galvanized steel are available in place of the standard fiberglass doors.

**AUTOMATIC HEAT AND SMOKE VENTING:** Spring operated arms open dampers when activated by excessive heat melting 165°F., U.L.-Listed fusible link. PRV thus becomes a gravity heat and smoke vent. (Standard on HS and HSE units.)

**SPARK RESISTANT CONSTRUCTION:** For hazardous locations, any PRV (except JBHX) can be ordered with a non-ferrous blade assembly (where not normally supplied) and explosion-proof motors. Motors only qualify for Class I Group D and Class II Groups F & G hazards.

**PROTECTIVE COATINGS:** The fan assembly and curb cap are heavy gauge steel using all welded construction throughout. The standard finish is epoxy, however, additional corrosion protection is available by specifying hot dip galvanizing.

The wind shroud on all units is fabricated of galvanized steel. A finish coat of epoxy can be specified on all galvanized components, if desirable.

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.

**INLET AND OUTLET GUARD:** Inlet and outlet guards are constructed of 1" x 1", galvanized wire mesh. The outlet guard mounts on the top edge of wind shroud. The inlet guard is available only for JT and JTE units, and comes standard on HS and HSE units. These guards prevent entry of foreign objects that might damage units.

**DUCT CONNECTOR:** For applications that require attachment of duct to Type JT, JTE, HSE, or HS PRVs, a flanged duct connector can be provided on the underside of curb cap.

**SAFETY CHAIN:** As an added safety factor, a steel chain may be specified for securing direct drive motor to fan housing (Type JTDC only).

### 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 the date of shipment from the 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 the 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 modifications, improper installation or electrical wiring, or lack of proper lubrication or other service requirements as 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:

