

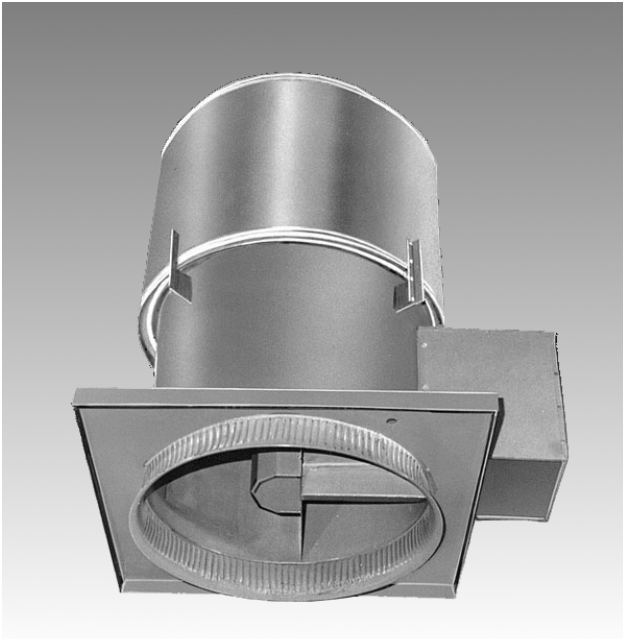
Type JTEBC Upblast Power Roof Ventilators



Type JTEBC

BELT DRIVE — 2,200 to 50,900 CFM

0" to 1-1/4" STATIC PRESSURE



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.

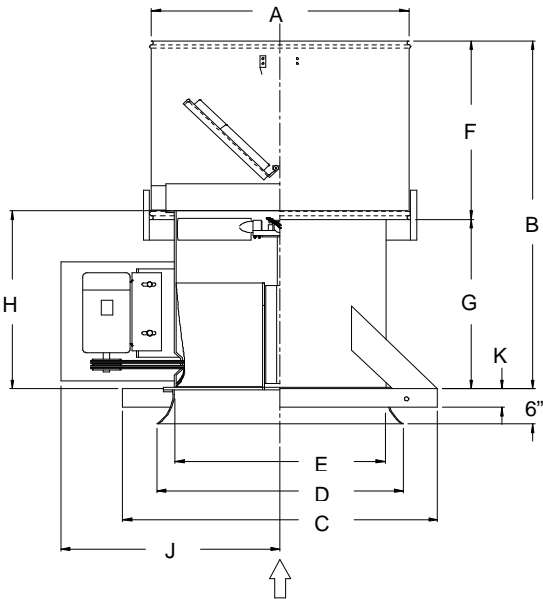
The steel fan shaft is supported by two pillow-block ball bearings that are mounted in an enclosed housing to provide years of service under harsh conditions. (Suitable for operation to 250°F. See Type HSE for higher temperatures.)

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.



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.

Fan Size	Dimensions in Inches										Metal Gauge		
	A	B	C	D	E	F	G	H	J	K	Fan Hsg.	Wind Shroud	Curb Cap
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	14	22	14
24	32	47 7/16	38	30 1/4	25 1/2	27 5/8	19 13/16	21 1/8	28	3	14	22	14
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	14	22	14
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	12	22	12
42	50	67 3/16	56	48 1/2	43 1/4	37 3/8	29 13/16	31 1/8	41	3	12	20	12
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	12	20	12
54	62	71 11/16	68	59 1/2	55 1/4	41 13/16	29 13/16	31 1/8	52	3	12	18	12
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	12	18	12

Performance Ratings



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.

Typical Specifications

Upblast 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. 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 ¹									Fan Model ²	Fan Size	Motor HP	Fan RPM	Sone Rating ³	Max BHP ⁴	Blade Descr.		Approx. Ship Wt.
	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	1"	1-1/4"							No.	Pitch	
1	2,479	2,184	---	---	---	---	---	---	---	JTEBC18H	18	1/3	1225	14.0	0.327	4	30°	195
2	2,833	2,587	2,290	---	---	---	---	---	---	JTEBC18J	18	1/2	1400	17.7	0.463	4	30°	195
3	3,363	3,178	2,926	2,654	2,327	---	---	---	---	JTEBC18K	18	3/4	1662	24	0.733	4	30°	200
4	3,719	3,561	3,332	3,123	2,839	2,527	---	---	---	JTEBC18L	18	1	1838	29	0.964	4	30°	205
5	4,338	4,211	4,033	3,833	3,658	3,421	3,186	2,307	---	JTEBC18M	18	1 1/2	2144	38	1.478	4	30°	210
6	7,009	6,411	5,762	5,093	---	---	---	---	---	JTEBC24L	24	1	1178	27	0.933	4	25°	325
7	8,210	7,703	7,169	6,609	6,040	5,242	---	---	---	JTEBC24M	24	1 1/2	1380	36	1.475	4	25°	325
8	9,008	8,546	8,071	7,559	7,056	6,519	5,771	---	---	JTEBC24N	24	2	1514	43	1.93	4	25°	335
9	10,210	9,802	9,391	8,957	8,502	8,059	7,601	6,219	---	JTEBC24P	24	3	1716	56	2.784	4	25°	350
10	11,200	10,440	9,653	8,544	7,403	---	---	---	---	JTEBC30M	30	1 1/2	1156	29	1.449	4	18°	395
11	12,411	11,758	11,033	10,105	9,190	8,087	---	---	---	JTEBC30N	30	2	1281	35	1.965	4	18°	400
12	14,233	13,698	13,012	12,430	11,537	10,740	9,889	---	---	JTEBC30P	30	3	1469	44	2.936	4	18°	415
13	16,655	16,221	15,655	15,095	14,603	13,905	13,121	11,748	9,741	JTEBC30Q	30	5	1719	58	4.668	4	18°	430
14	15,265	14,327	13,258	11,888	10,340	---	---	---	---	JTEBC36N	36	2	1,060	41	1.969	4	15°	575
15	17,396	16,583	15,698	14,665	13,412	12,065	10,466	---	---	JTEBC36P	36	3	1208	53	2.898	4	15°	590
16	20,593	19,913	19,195	18,426	17,556	16,540	15,439	12,993	9,328	JTEBC36Q	36	5	1430	76	4.779	4	15°	605
17	21,107	19,679	18,206	16,812	15,185	---	---	---	---	JTEBC42P	42	3	801	31	2.794	6	15°	750
18	25,007	23,812	22,565	21,342	20,172	18,898	17,345	---	---	JTEBC42Q	42	5	949	42	4.629	6	15°	765
19	28,933	27,907	26,845	25,759	24,709	23,701	22,656	20,117	16,051	JTEBC42R	42	7 1/2	1098	56	7.131	6	15°	805
20	31,885	30,956	30,001	29,020	28,039	27,098	26,185	24,233	21,764	JTEBC42S	42	10	1210	64	9.528	6	15°	820
21	24,946	23,028	21,052	18,897	---	---	---	---	---	JTEBC48P	48	3	734	36	2.764	6	10°	850
22	29,738	28,136	26,501	24,830	23,055	20,698	17,781	---	---	JTEBC48Q	48	5	875	49	4.687	6	10°	865
23	34,156	32,765	31,352	29,917	28,457	26,934	25,141	20,215	---	JTEBC48R	48	7 1/2	1005	64	7.047	6	10°	905
24	37,962	36,712	35,447	34,166	32,868	31,550	30,188	26,751	22,207	JTEBC48S	48	10	1117	77	9.678	6	10°	915
25	29,868	26,963	23,947	20,627	---	---	---	---	---	JTEBC54P	54	3	657	38	2.839	6	10°	980
26	35,142	32,675	30,186	27,546	24,719	21,606	---	---	---	JTEBC54Q	54	5	773	51	4.621	6	10°	1005
27	40,461	38,319	36,170	33,980	31,660	29,223	26,641	20,274	---	JTEBC54R	54	7 1/2	980	67	7.028	6	10°	1040
28	42,217	40,742	39,177	37,484	35,583	33,637	31,823	27,921	23,334	JTEBC54S	54	10	1059	92	9.359	6	5°	1050
29	36,122	31,942	26,938	---	---	---	---	---	---	JTEBC60P	60	3	533	36	2.832	6	10°	1135
30	41,815	38,061	34,384	29,973	25,644	---	---	---	---	JTEBC60Q	60	5	617	45	4.397	6	10°	1160
31	48,592	45,245	42,441	38,533	34,997	31,475	26,812	---	---	JTEBC60R	60	7 1/2	717	62	6.878	6	10°	1200
32	50,897	48,847	46,825	44,676	42,143	39,251	36,223	29,798	21,677	JTEBC60S	60	10	914	82	9.591	6	5°	1210

1 — Performance shown is for Installation Type A; free inlet, free outlet. Performance ratings do not include the effects of appurtenances in the airstream.
 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 fan sones at 5 ft. (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet fan sones levels. The sound ratings shown are at 0" static pressure.
 4 — Maximum brake horsepower (BHP) within the catalog performance range. Power Ratings (BHP) do not include drive 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

Accessories

SPARK RESISTANT CONSTRUCTION: For hazardous locations, any Type JTEBC can be ordered with an explosion-proof motor. Motors only qualify for Class I Group D and Glass II Groups F & G hazards.

PROTECTIVE COATINGS: For most applications the American Coolair powder coating system will provide the necessary surface protection for painted parts. This system includes a thermosetting epoxy powder coating to an average thickness of 3 mils and baked at 400° Fahrenheit for hardness, impact resistance, adhesion and chemical resistance.

The fan assembly and curb cap are heavy gauge steel using all welded construction throughout. The standard finish is thermosetting epoxy.

The wind shroud on all units is fabricated of galvanized steel. A finish coat of thermosetting 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 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-inch x 1-inch, 14-gauge galvanized wire mesh. The outlet guard mounts on the top edge of the wind shroud. These guards prevent entry of foreign objects that might damage units.

ELECTRICAL CONTROLS: Normally, the needed electrical controls are provided by those involved with the fan installation.

SAFETY DISCONNECT SWITCH: This switch is designed to mount on fan and serve as a safety disconnect from power supply.

To convert air performance (CFM and SP) and power (BHP) to metric units, multiply CFM x .000472 to obtain cubic meters per second (m³/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 m³/s
0.125 SP x 248.36 = 31.05 Pa
0.886 BHP x .7457 = .661 kW

REPRESENTED BY:

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 factory. Any product or part proving, upon American Coolair's examination, to be defective during limited warranty period will be repaired or replaced, at American Coolair's option, f.o.b. factory, without charge.

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

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

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

Repairs or replacement 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.



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