

CENTRIFUGAL UPBLAST ROOF EXHAUSTERS

Direct and Belt Driven Models VUDK and VUBK

DESIGNED AND ENGINEERED TO MEET INDUSTRY NEEDS

The Carnes Company centrifugal upblast fan provides a vertical discharge of air to meet general and specific HVAC ventilation needs. Applications include chemical process, laboratory fume removal or any other situation where it is required that contaminated air be exhausted away from supply air intakes and building roof lines.

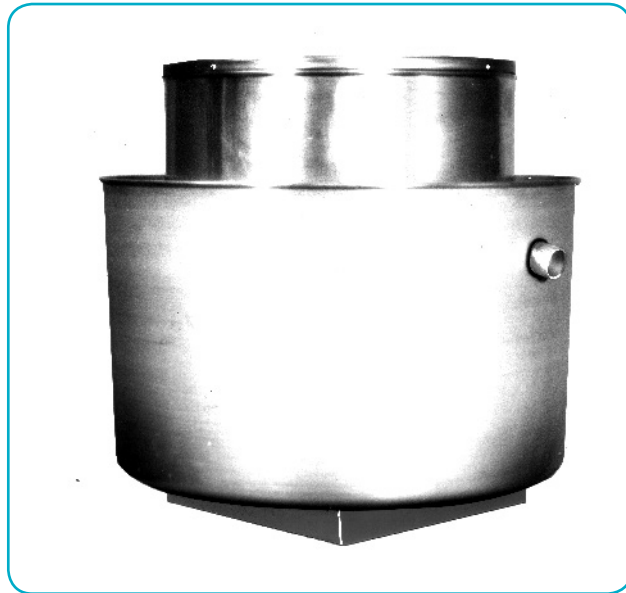
The unique diffuser/support structure combined with the backwardly inclined median airfoil wheel and deep spun venturi enable the Carnes VU series upblast fans to operate at high static pressures (up

to 3 inches w.g.) as standard.

The deep spun venturi is precision matched to the wheel inlet to ensure maximum air flow along with protection from entry of adverse weather elements.

The air flow design of these fans has been thoroughly tested at Carnes' accredited laboratory.

Testing has also been conducted to ensure trouble-free startup and to ensure product durability and dependability of operation.



Direct Driven Model VUDK - Sizes 06 through 18

Carnes direct drive centrifugal upblast fans are available in six sizes with capacities from 150 to 4100 CFM. Certain direct drive units can be supplied with an optional electronic speed control which increases the fan's air flow flexibility. Direct driven fans require minimal maintenance and the one piece spun aluminum outer shroud simplifies interior unit cleaning. Maximum exhaust temperature for continuous operation is 150°F.

Belt Driven Model VUBK - Sizes 06 through 48

The Carnes series VUBK belt driven upblast fans are ideal for low to high air flows covering a range of static pressures, up to 3 inches, water gauge. This series features twelve sizes with air performance capacities of 230 to 31,000 CFM. Structural integrity is enhanced on the sizes 06 through 24 by incorporating the diffuser support framework while sizes 30 through 48 gain rigidity by utilizing a circular welded steel support frame. Housing construction one or two piece spun and shaped aluminum housing for ease of accessibility to the unit interior. Maximum exhaust temperature for continuous operation is 200°F.



▼ TYPICAL SPECIFICATIONS

Upblast exhaust ventilators shall be of the centrifugal belt or direct driven type. The motor compartment shall be constructed of heavy-gauge aluminum mounted on an independent support structure. The outer shroud shall have a rolled bead for added strength. The wheel and spun inlet venturi shall be a centrifugal design of non-sparking construction. For maximum performance and quiet, efficient operation, the wheel shall overlap the inlet venturi and have backward inclined median airfoil blades. The wheel shall be dynamically balanced to assure smooth and vibration-free rotation under maximum loading. The complete drive assembly, including the motor and the wheel, shall be mounted on vibration isolators. The motor and drives shall be factory mounted and all fans will be test run prior to shipment.

VUBK BELT DRIVE SERIES

Motor and drives shall be isolated from the exhaust airstream. Air for cooling the motor shall be supplied to the internal motor compartment through a vent tube from a location free from discharge contaminants. Motors shall be of the heavy duty type with permanently lubricated, sealed ball bearings. Motors shall be readily accessible for maintenance. Wheel shaft shall be ground, polished, coated with a rust inhibitive finish and mounted in heavy duty, permanently sealed pillowblock ball bearings which are capable of 200,000 hours of life, average operation. Drives shall be sized at a minimum of 165% of driven horsepower. Drive belts shall be oil-resistant, non-static and be capable of 25,000 hours of life, average operation. Sheaves shall be fully machined cast iron or pressed steel, keyed and securely attached to the shafts. Variable pitch motor sheaves shall be standard.

VUDK DIRECT DRIVE SERIES

Motors shall be isolated from the exhaust airstream. Air for cooling the motor shall be supplied to the internal motor compartment through a vent tube from a location free from discharge contaminants. Motors shall be of the heavy duty type with permanently lubricated, sealed bearings. Motors shall be readily accessible for maintenance. Wheels to be furnished with integral fitting for wheel puller.

The motor shall be factory wired to the disconnect junction box and a disconnect switch shall be supplied. A conduit chase shall be provided for running electrical wiring through the curb cap into the motor compartment.

Horsepower and noise levels shall not exceed the published values and oversized motors will not be acceptable. Performance ratings shall be AMCA licensed for Air and Sound.

Centrifugal power upblast ventilators shall be Carnes Model VUBK, belt drive, sizes 06 through 48, or Model VUDK, drive drive, sizes 06 through 18, as manufactured at Carnes Company of Verona, Wisconsin.

AMCA LICENSED AIR and SOUND DATA

Licensed to bear the AMCA Seal for both air and sound.

The Carnes Company certifies that the Models VU 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.



UL OPTION

Models VUBK and VUDK are listed to UL Standard 705 and to CSA Standard C22.2 No. 113-12. File Number E27827. UL listing may be optional and must be specified when required.



POWER VENTILATOR

FAN HOUSING

- Constructed with heavy-gauge aluminum.
- Designed for maximum weather protection, outer shroud prevents the entrance of inclement weather.
- Outer shroud beaded for rigidity.
- Fan plate designed to prevent the entrance of contaminated air and airborne particles into the motor compartment.
- Two piece motor cover design (lid and motor tube) allows easy access to motor, drives and bearings for maintenance.
- Drain opening.

MOTOR/ELECTRICAL

- **UL** listing under Standard 705 available as option on most models.
- Motors are **UL** recognized components supplied by nationally recognized manufacturers.
- Safety disconnect utility box mounted, switch and cover plate shipped loose for ease of field wiring.
- Sealed conduit chase complies with **NEC**, allows passage of electrical wire through curb cap into motor compartment.
- Motor through 10 HP mounted as standard.

MOTOR SUPPORT ASSEMBLY

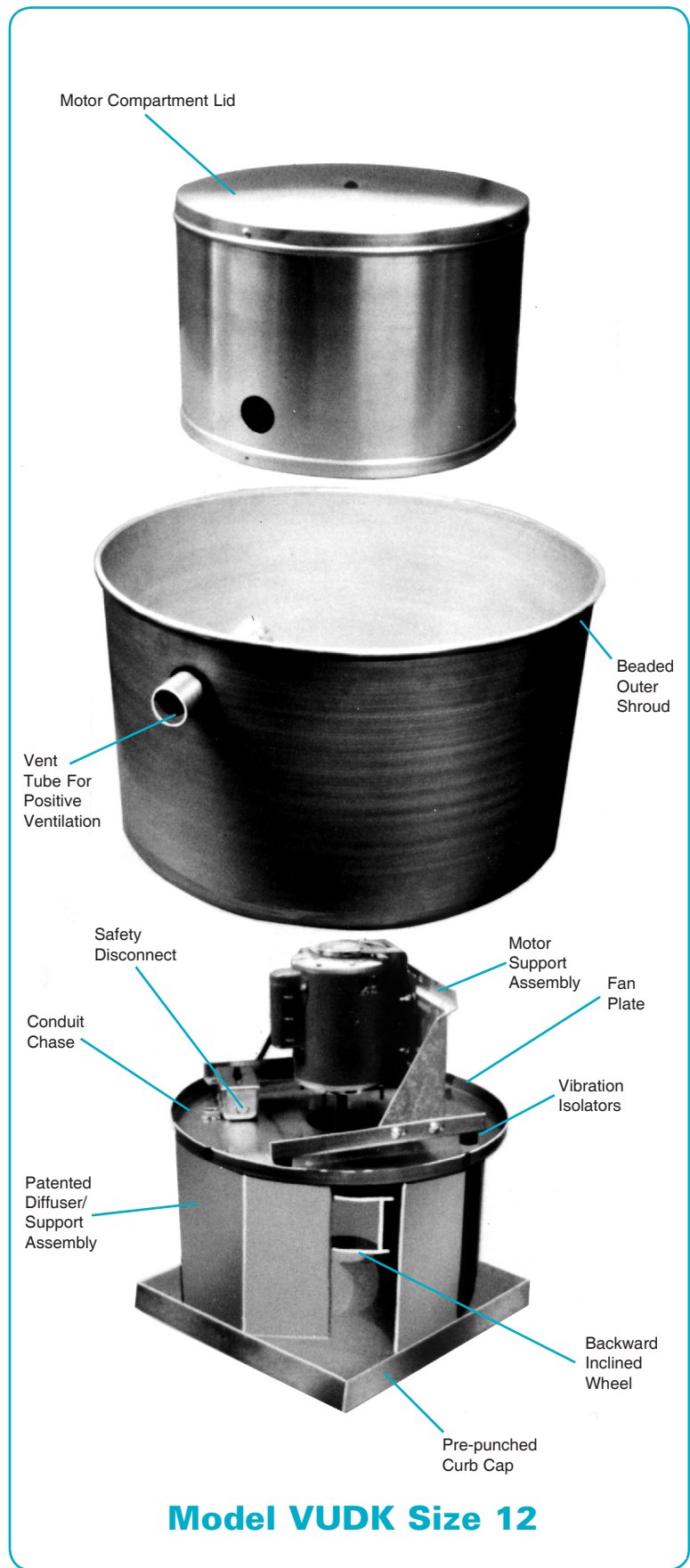
- Bolted, heavy-gauge material.
- Easily adjustable belt tension.
- Motor plate accommodates multiple motor frames.
- Isolated from fan plate to reduce vibration and noise transmission.
- Allows horizontal adjustment of wheel
- Electrically grounded to meet **NEC** and **UL** requirements.

MOTOR COMPARTMENT/TUBE

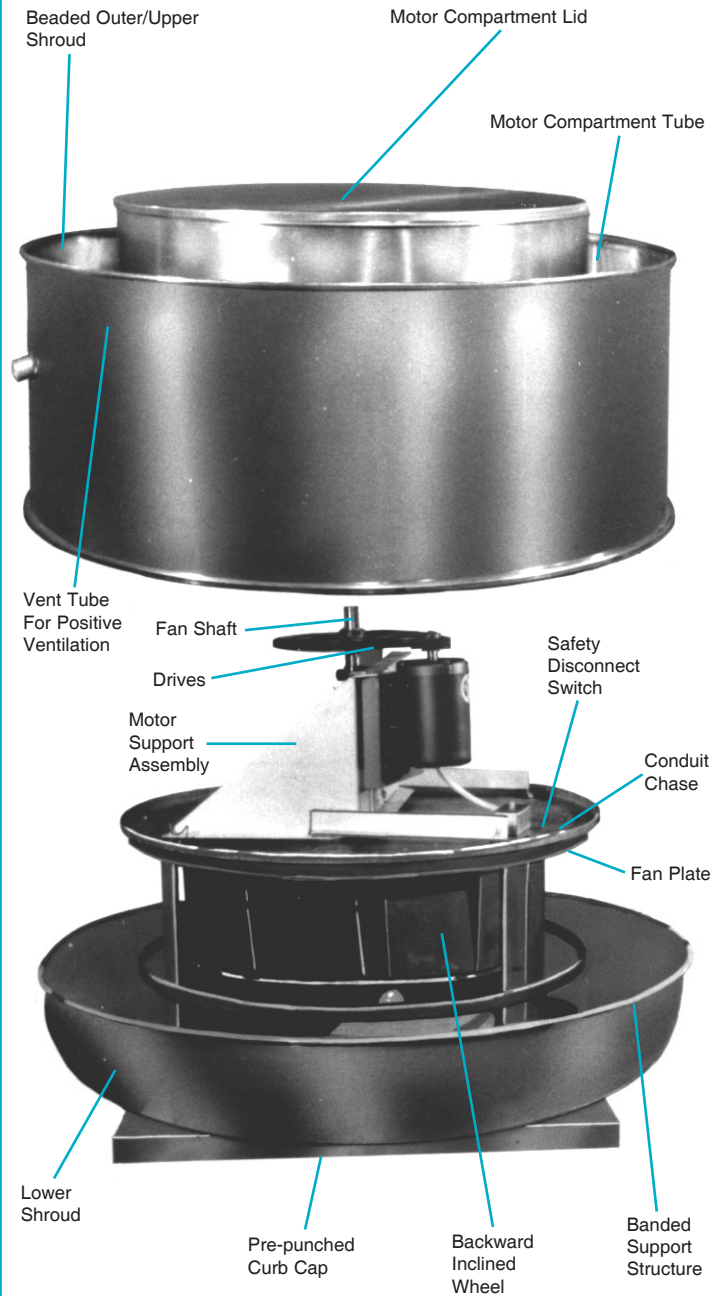
- Vent tube provides positive motor cooling to maximize motor life.
- Easily removable lid and tube utilize durable threaded fastener retainers.
- Fan plate isolates motor compartment from contaminated exhaust air.
- Opening around shaft sized to allow optimum air passage to ensure proper motor compartment cooling.

BIRDSCREEN

- 1/2" by 1/2" heavy-gauge welded galvanized birdscreen attached to unit with easily removable fasteners.
- Birdscreen has a minimal effect on air and sound performance.



Model VUDK Size 12



Model VUBK Size 30

BEARINGS/SHAFT

- Eccentric locking collar bearings standard on sizes 06-18.
- Dual bearings utilized to properly support the fan shaft.
- Prelubricated sealed, self-aligning.
- Rated at 200,000 hours average operation.
- Polished CRS fan shaft with rust inhibitive coating.

DRIVES

- Selected for 165% of the motor horsepower.
- Adjustable V-belt drives with oil resistant non-static conducting belts.
- Two belts standard on units 5 HP and larger.
- Factory preset fan RPM.
- Adjustable sheaves allow for final air system balancing.

WHEEL

- Backward inclined wheels constructed of non-corrosive or coated heavy-gauge material. Wheel sizes 6-24 are aluminum, above 24 are steel.
- Usage of cooling fins on fan wheel backplate draws cooling air down over the motor facilitating motor longevity while motor remains out of the airstream.
- Self-limiting power characteristics.
- Dynamically balanced and test run in each individual unit.

SUPPORT STRUCTURE

Sizes 06 - 24

- Galvanized or aluminum patented diffuser provides structural integrity and protection against weather penetration.
- Self-sealing diffuser fasteners prevent leakage.

Sizes 30 - 48

- Heavy-gauge coated steel circular bands welded together for structural strength and unit rigidity.

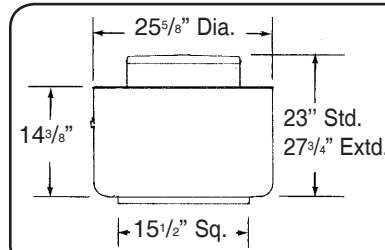
CURB CAP

- One piece construction with fastened/welded, overlapping corners to ensure strength.
- Pre-punched mounting holes for ease of installation.
- Support structure attached with self-sealing fasteners.
- The deep spun venturi is precision matched to the wheel inlet to ensure maximum air flow along with protection from entry of adverse weather elements.

VUDK 06

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 2.75 x RPM
 Unit Weight (less Motor) = 40 Lbs.
 Roof Opening = 11" Sq.
 Curb O. D. = 14" Sq.
 Damper Size = 10" Sq.

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W.G.								
F3+ 1/20	J2+ 1/8		.000	.125	.250	.375	.500	.625	.750	1.000	1.250
			CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
SPEED CONTROLLABLE MOTORS**		400	150 .01 .1								
		500	188 .01 .2								
		600	225 .01 .6								
		700	263 .01 1.1	119 .01 1.3							
		800	300 .01 1.7	193 .01 1.7							
		900	338 .01 2.3	248 .02 2.1							
		1000	376 .02 2.9	297 .02 2.7	179 .02 3.4						
		1075 *	404 .02 3.4	332 .03 3.2	237 .03 3.6						
		1100	413 .02 3.5	343 .03 3.3	253 .03 3.7						
		1200	451 .03 4.1	387 .04 4.0	314 .04 4.1	194 .04 5.0					
		1300	488 .04 4.8	429 .04 4.6	365 .05 4.5	278 .05 5.3					
		1400	526 .05 5.4	471 .05 5.3	414 .06 5.2	343 .06 5.7	239 .06 6.6				
	1500	563 .06 6.1	513 .07 6.0	461 .07 5.9	400 .07 6.1	320 .08 6.9					
	1600 *	601 .07 6.9	553 .08 6.8	505 .08 6.7	451 .09 6.6	385 .09 7.3	300 .09 8.2				
ALL OTHER MOTORS		1140 *	428 .03 3.7	361 .03 3.6	278 .03 3.8						
		1725 *	648 .09 7.8	604 .10 7.7	559 .10 7.6	512 .11 7.5	458 .11 7.8	391 .12 8.6	303 .12 9.5		

Performance certified is for installation type A - free inlet, free outlet.
 Speed (RPM) is nominal. Performance is based on actual speed of test.

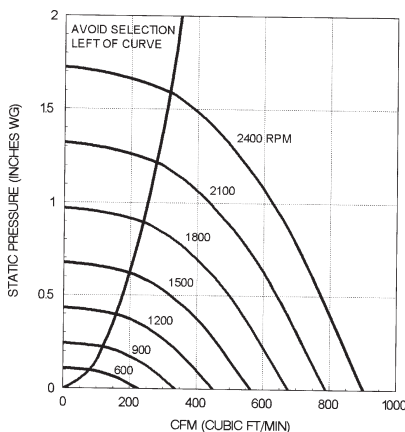
** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.

- * Base Unit - As run motor speeds.
 - + RPM range capable with solid state speed control.
- Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_W sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

VUDK 06 AIR PERFORMANCE



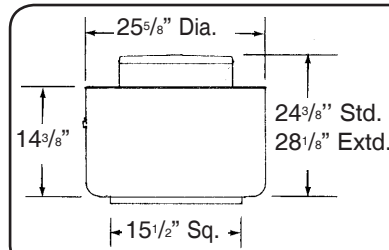
VUDK 06 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
1075	.000	50	57	51	52	48	49	43	39	55
	.125	54	56	52	51	48	47	43	38	54
	.375	61	63	56	58	53	50	45	41	59
1600	.000	65	65	66	62	59	57	55	50	65
	.250	66	66	65	62	59	57	54	50	65
	.375	66	67	65	62	59	56	54	49	65
	.500	68	69	67	63	61	58	54	50	66
	.625	71	71	69	65	63	59	56	51	68
	.750	73	74	71	67	65	61	57	52	70

VUDK 08

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 2.75 x RPM
 Unit Weight (less Motor) = 40 Lbs.
 Roof Opening = 11" Sq.
 Curb O. D. = 14" Sq.
 Damper Size = 10" Sq.

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W.G.								
F3+ 1/20	J2+ 1/8		.000 CFM BHP SONES	.125 CFM BHP SONES	.250 CFM BHP SONES	.375 CFM BHP SONES	.500 CFM BHP SONES	.625 CFM BHP SONES	.750 CFM BHP SONES	1.000 CFM BHP SONES	1.250 CFM BHP SONES
SPEED CONTROLLABLE MOTORS		600	331 .01 2.0								
		675	373 .01 2.6	193 .01 1.4							
		750	414 .01 3.1	267 .01 2.0							
		825	455 .01 3.7	328 .02 2.6							
		900	497 .02 4.2	385 .02 3.2	176 .02 2.8						
		1000	552 .03 5.0	455 .03 4.0	321 .03 3.5						
		1075 *	593 .03 5.6	504 .04 4.7	389 .04 4.2						
		1175	649 .04 6.4	568 .05 5.6	470 .05 5.0	340 .05 4.7					
		1250	690 .05 7.1	614 .06 6.3	527 .06 5.6	420 .06 5.4					
		1325	731 .06 7.7	661 .07 7.0	582 .07 6.4	484 .07 6.0	348 .08 5.9				
		1400	773 .07 8.3	706 .08 7.7	635 .08 7.1	546 .09 6.7	439 .09 6.5				
		1475	814 .09 9.0	751 .09 8.4	684 .10 7.8	603 .10 7.4	512 .10 7.2	379 .10 7.1			
		1550	856 .10 9.7	795 .11 9.1	732 .11 8.6	660 .12 8.1	576 .12 7.9	474 .12 7.7	280 .12 7.8		
		1600 *	883 .11 10.2	825 .12 9.6	764 .12 9.1	696 .13 8.6	617 .13 8.4	527 .13 8.2	390 .13 8.2		
ALL OTHER MOTORS		1140 *	629 .04 6.1	546 .04 5.3	443 .05 4.7	290 .05 4.5					
		1725 *	952 .14 11.5	898 .14 10.9	842 .15 10.4	784 .16 9.9	713 .16 9.5	637 .17 9.4	548 .17 9.3		

Performance certified is for installation type A - free inlet, free outlet. Speed (RPM) is nominal. Performance is based on actual speed of test.

** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.

* Base Unit - As run motor speeds.

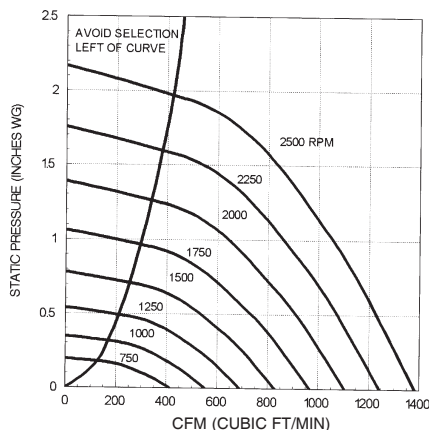
+ RPM range capable with solid state speed control.

Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wf} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

VUDK 08 AIR PERFORMANCE



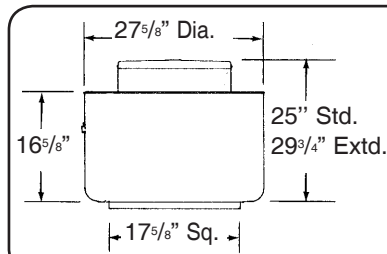
VUDK 08 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								LWA
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	
1075	.000	56	68	57	54	50	50	52	53	60
	.125	57	64	54	53	49	49	49	49	58
	.375	58	60	53	53	51	51	47	43	57
1600	.000	74	73	74	66	61	59	60	61	70
	.250	74	71	71	64	61	58	58	58	68
	.375	74	71	70	63	60	58	57	57	67
	.500	73	71	69	63	60	58	57	56	67
	.625	72	70	69	63	61	60	58	55	67
	.750	72	70	68	63	61	60	58	54	68

VUDK 10

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 3.27 x RPM
 Unit Weight (less Motor) = 45 Lbs.
 Roof Opening = 13" Sq.
 Curb O. D. = 16" Sq.
 Damper Size = 12" Sq.

RPM Range - Motor HP	RPM	STATIC PRESSURE, INCHES W.G.																	
		.000		.125		.250		.375		.500		.625		.750		1.000		1.250	
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
SPEED CONTROLLABLE MOTORS	550	520	.01	277	.01														
	700	662	.02	500	.03														
	800	757	.03	620	.04	432	.04												
	825 *	781	.04	648	.04	477	.04												
	900	852	.05	731	.05	589	.06	355	.06										
	975	923	.06	813	.07	689	.07	521	.07										
	1050	994	.08	893	.08	782	.09	644	.09	439	.09								
	1075 *	1017	.08	919	.09	812	.10	681	.10	506	.10								
	1175	1112	.11	1023	.12	926	.12	819	.13	687	.13	494	.13						
	1275	1206	.14	1124	.15	1037	.15	944	.16	836	.17	702	.17	508	.16				
	1375	1301	.17	1225	.18	1145	.19	1061	.20	969	.21	861	.21	730	.21				
	1500	1419	.22	1350	.23	1279	.24	1202	.25	1124	.26	1036	.27	933	.27	662	.26		
	1575	1490	.26	1424	.27	1357	.28	1284	.29	1211	.30	1131	.31	1044	.31	819	.32	295	.26
1625 *	1538	.28	1473	.29	1409	.31	1339	.32	1268	.33	1193	.34	1112	.34	910	.35	584	.33	
ALL OTHER MOTORS	1140 *	1079	.10	987	.11	886	.11	775	.12	627	.12	375	.11						
	1725 *	1632	.34	1572	.35	1511	.36	1447	.37	1380	.39	1313	.40	1239	.40	1067	.41	850	.41

Performance certified is for installation type A - free inlet, free outlet. Speed (RPM) is nominal. Performance is based on actual speed of test.

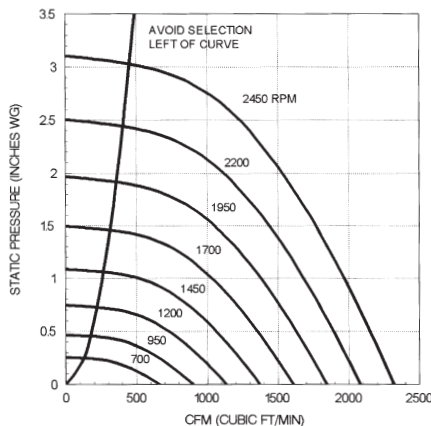
** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.

- * Base Unit - As run motor speeds.
 - + RPM range capable with solid state speed control.
- Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_W sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

VUDK 10 AIR PERFORMANCE



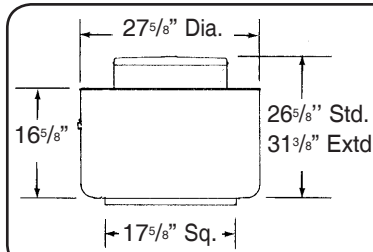
VUDK 10 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
825	.000	59	72	59	53	51	52	43	35	60
	.125	57	70	58	53	50	48	41	34	58
	.375	54	67	54	51	49	50	45	41	57
1075	.000	65	74	69	61	58	58	52	44	66
	.250	63	71	67	60	56	55	50	43	64
	.500	62	70	67	59	56	55	51	45	64
1625	.000	77	74	86	73	68	66	66	58	79
	.500	76	73	86	73	68	66	66	58	79
	1.000	74	75	84	72	67	65	63	56	77

VUDK 12

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 3.27 x RPM
 Unit Weight (less Motor) = 45 Lbs.
 Roof Opening = 13" Sq.
 Curb O. D. = 16" Sq.
 Damper Size = 12" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W.G.																
F4+ 1/20	J3+ 1/8	M2+ 1/3	P2+ 1/2	RPM	.000	.125	.250	.375	.500	.625	.750	1.000	1.250					
					CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES				
SPEED CONTROLLABLE MOTORS					550	661 .01 2.0	386 .02 1.6											
					700	841 .03 3.7	657 .03 3.2	186 .02 3.1										
					800	961 .04 5.0	804 .05 4.5	593 .05 4.2										
					825 *	991 .05 5.2	839 .05 4.8	642 .05 4.4										
					900	1081 .06 6.0	941 .06 5.6	782 .07 5.2	513 .06 5.2									
					975	1171 .08 6.9	1042 .08 6.5	906 .09 6.1	716 .09 6.0									
					1050	1261 .09 7.9	1141 .10 7.4	1023 .11 7.1	862 .11 6.9	631 .10 6.9								
					1075 *	1291 .10 8.2	1173 .11 7.8	1059 .11 7.4	910 .12 7.2	702 .11 7.2								
					1175	1411 .13 9.6	1303 .14 9.2	1198 .15 8.8	1078 .15 8.6	924 .15 8.5	708 .15 8.5							
					1275	1532 .17 11.2	1431 .18 10.8	1334 .18 10.4	1238 .19 10.0	1110 .19 9.9	957 .20 9.8	734 .18 9.9						
					1375	1652 .21 12.9	1559 .22 12.5	1468 .23 12.1	1379 .24 11.7	1275 .24 11.5	1150 .24 11.5	1005 .24 11.5						
					1500	1800 .27 15.1	1716 .28 14.8	1633 .29 14.4	1551 .30 14.1	1469 .31 13.9	1364 .31 13.7	1248 .32 13.7	935 .31 13.9					
					1575	1892 .32 16.5	1810 .33 16.3	1731 .34 16.0	1652 .35 15.5	1574 .36 15.3	1486 .36 15.2	1382 .37 15.1	1135 .37 15.2	525 .28 15.4				
					1625 *	1952 .35 17.3	1873 .36 17.1	1795 .37 16.8	1719 3.8 16.3	1644 .39 16.1	1565 .40 15.9	1465 .40 15.8	1235 .40 15.9	863 .37 16.0				
					ALL OTHER MOTORS					1140 *	1369 .12 9.1	1258 .13 8.7	1150 .13 8.3	1021 .14 8.1	855 .14 8.0	573 .12 8.0		
										1725 *	2072 .42 18.7	1997 .43 18.4	1924 .44 18.1	1852 .45 17.7	1781 .46 17.4	1710 .47 17.2	1627 .48 17.0	1428 .48 16.9

Performance certified is for installation type A - free inlet, free outlet. Speed (RPM) is nominal. Performance is based on actual speed of test.

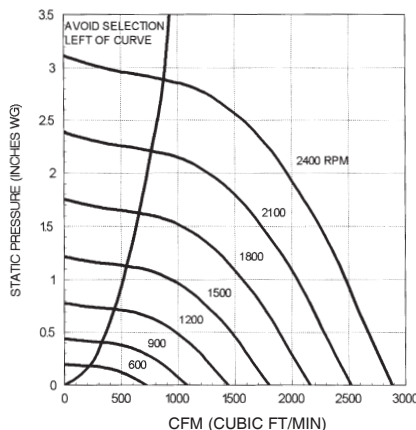
** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.

- * Base Unit - As run motor speeds.
 - + RPM range capable with solid state speed control.
- Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

VUDK 12 AIR PERFORMANCE



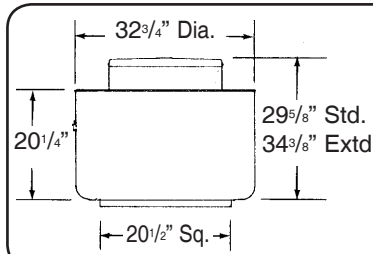
VUDK 12 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
825	.000	65	64	60	54	59	55	45	35	62
	.125	65	63	59	53	57	51	45	38	60
	.375	67	61	59	51	52	51	46	42	58
1075	.000	68	72	69	63	63	62	55	45	69
	.250	68	72	68	62	60	59	53	47	67
	.500	63	71	68	61	58	57	54	48	66
1625	.000	72	85	82	77	70	74	69	60	80
	.500	71	85	81	76	68	72	66	60	79
	1.000	73	86	81	76	67	68	66	60	78

VUDK 15

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 4.06 x RPM
 Unit Weight (less Motor) = 65 Lbs.
 Roof Opening = 16" Sq.
 Curb O. D. = 19" Sq.
 Damper Size = 15" Sq.

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W.G.								
K4+ 1/6	M3+ 1/3		.000	.125	.250	.375	.500	.625	.750	1.000	1.250
			CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
SPEED CONTROLLABLE MOTORS		450	993 .02 2.6	655 .03 2.9							
		500	1103 .03 3.3	815 .04 3.6							
		550	1214 .04 4.1	961 .05 4.3	441 .04 4.6						
		600	1324 .06 5.0	1098 .06 5.1	796 .07 5.3						
		650	1434 .07 5.9	1230 .08 6.0	973 .08 6.1						
		700	1545 .09 6.8	1359 .10 6.8	1132 .10 6.9	787 .10 7.2					
		750	1655 .11 7.7	1485 .12 7.7	1279 .13 7.8	1029 .12 8.0					
		800	1765 .14 8.7	1606 .15 8.7	1422 .15 8.7	1206 .16 8.9	854 .15 9.1				
		825 *	1820 .15 9.2	1666 .16 9.2	1490 .17 9.2	1288 .17 9.3	1002 .17 9.5				
		875	1931 .18 10.3	1785 .19 10.2	1623 .20 10.2	1439 .20 10.2	1221 .21 10.4	778 .18 10.5			
		925	2041 .21 11.4	1904 .22 11.2	1755 .23 11.2	1585 .24 11.2	1396 .24 11.4	1135 .24 11.6			
		975	2151 .25 12.5	2021 .26 12.4	1884 .27 12.3	1729 .28 12.2	1555 .28 12.4	1353 .28 12.6	1002 .26 12.7		
		1025	2262 .29 13.6	2138 .30 13.5	2011 .31 13.4	1864 .32 13.3	1704 .32 13.4	1529 .33 13.6	1307 .33 13.8		
	1075 *	2372 .33 14.8	2254 .34 14.7	2135 .35 14.6	1997 .36 14.5	1850 .37 14.5	1693 .38 14.6	1507 .38 14.8			
ALL OTHER MOTORS		1140 *	2525 .37 13.3	2410 .38 12.8	2292 .39	2155 .40 11.9	2006 .41 11.6	1842 .42 11.4	1666 .42 11.2	1084 .38 11.2	

Performance certified is for installation type A - free inlet, free outlet.
 Speed (RPM) is nominal. Performance is based on actual speed of test.

** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.

* Base Unit - As run motor speeds.

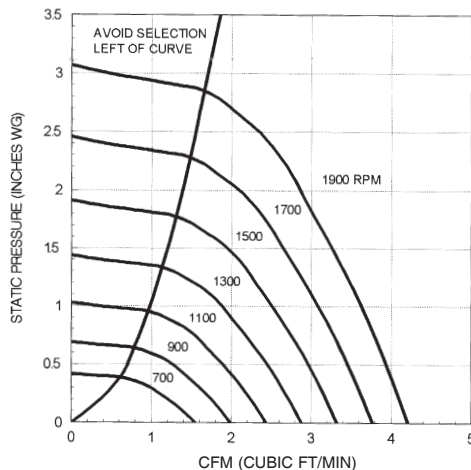
+ RPM range capable with solid state speed control.

Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wf} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

VUDK 15 AIR PERFORMANCE



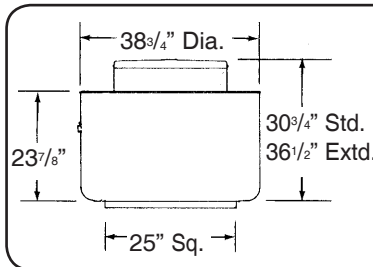
VUDK 15 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
825	.000	74	76	73	68	63	60	54	46	70
	.125	73	76	73	68	64	60	54	47	70
	.250	73	75	72	69	64	60	54	49	71
	.500	73	74	72	69	66	61	56	51	71
	.750	73	74	72	69	66	61	57	51	71
1075	.000	81	81	81	76	70	68	62	55	78
	.250	80	81	80	76	71	67	62	56	78
	.500	80	80	80	77	72	67	63	57	78
	.750	81	80	80	77	73	68	64	58	78
	1.000	81	79	79	77	73	69	64	59	79

VUDK 18

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 4.94 x RPM
 Unit Weight (less Motor) = 85 Lbs.
 Roof Opening = 20 1/2" Sq.
 Curb O. D. = 23 1/2" Sq.
 Damper Size = 19" Sq.

RPM Range - Motor HP	RPM	STATIC PRESSURE, INCHES W.G.																		
		.000		.125		.250		.375		.500		.625		.750		1.000		1.250		
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	
SPEED CONTROLLABLE MOTORS**	M4+ 1/3	600	2266	.14	1942	.15	1538	.14	955	.12										
		650	2455	.18	2163	.19	1807	.18	1362	.17	650	.13								
	R3+ 3/4	700	2644	.23	2374	.23	2055	.23	1685	.23	1166	.20								
		750	2833	.28	2580	.29	2296	.29	1969	.28	1569	.26	999	.22						
		800	3022	.34	2784	.35	2528	.35	2232	.34	1898	.34	1455	.31	843	.24				
		825*	3116	.37	2885	.38	2641	.38	2357	.38	2042	.37	1651	.35	1134	.30				
		875	3305	.44	3086	.45	2865	.46	2602	.45	2323	.45	2008	.44	1582	.40				
		925	3494	.53	3286	.53	3084	.54	2842	.54	2584	.53	2298	.52	1970	.50	988	.38		
		975	3683	.62	3486	.62	3296	.63	3075	.63	2832	.63	2579	.62	2296	.61	1517	.52		
		1025	3871	.72	3685	.72	3502	.73	3301	.73	3076	.73	2843	.72	2584	.71	1945	.65	979	.50
1075*	4060	.82	3882	.83	3767	.84	3523	.85	3315	.85	3092	.84	2864	.83	2327	.79	1561	.68		
ALL OTHER MOTORS	1140*	4306	.98	4138	.99	3972	1.00	3811	1.01	3615	1.01	3410	1.01	3200	1.00	2734	.97	2128	.90	

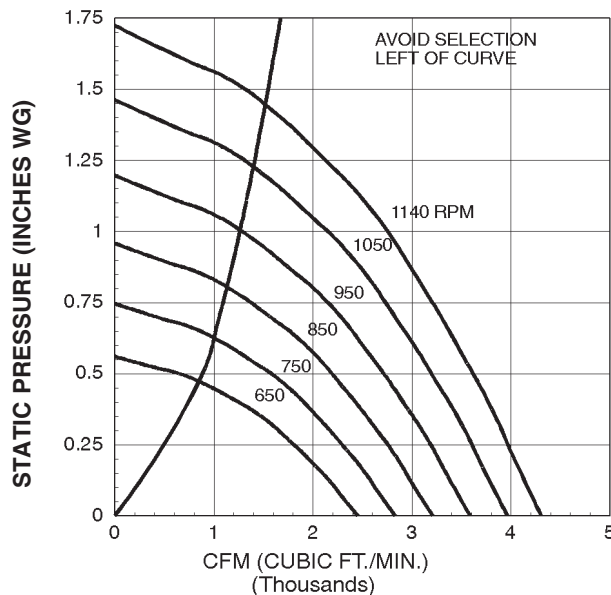
Performance certified is for installation type A - free inlet, free outlet.
 Speed (RPM) is nominal. Performance is based on actual speed of test.
**** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.**
 * Base Unit - As run motor speeds.
 + RPM range capable with solid state speed control.
 Performance ratings do not include the effects of accessories.

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{WA} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation Type A, free inlet hemispherical sone levels.

*NOTE: R3 motors are specifically designed to operate through the above performance range. The motor will not be damaged or harmed at the higher BHP values.

VUDK 18 AIR PERFORMANCE



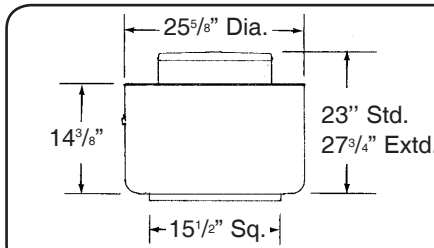
VUDK 18 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
825	.000	75	77	71	68	68	65	60	54	73
	.125	74	77	70	67	67	64	58	53	71
	.250	74	76	69	66	65	62	57	51	70
	.500	72	74	67	64	63	60	56	52	68
	.750	71	73	66	62	62	60	56	52	67
1075	.000	83	83	81	75	74	72	67	62	80
	.250	82	83	80	74	73	70	66	60	78
	.500	81	82	79	72	71	69	64	59	77
	.750	80	81	78	71	69	68	64	59	76
	1.000	79	79	77	70	68	66	63	59	75

VUBK 06

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = .023 x $\left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 2.75 x RPM
 Max. Motor Frame Size = 56
 Unit Weight (less motor) = 40 lbs.
 Roof Opening = 11" Sq.
 Curb O. D. = 14" Sq.
 Damper Size = 10" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
(1/6)	RPM	.000	.125	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000
K1		CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
		SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES
K2 (1/6)	600	225 .01											
		.5											
K3 (1/6)	700	263 .01	119 .01										
		1.0	1.3										
K4 (1/6)	800	300 .01	193 .01										
		1.6	1.7										
K5 (1/6)	900	338 .01	248 .02										
		2.1	2.1										
L1 (1/4)	1000	376 .02	297 .02	179 .02									
		2.8	2.7	3.5									
M1 (1/3)	1100	413 .02	343 .03	253 .03									
		3.5	3.3	3.7									
	1200	451 .03	387 .04	314 .04	194 .04								
		4.1	3.9	4.0	5.0								
	1300	488 .04	429 .04	365 .05	278 .05								
		4.7	4.6	4.5	5.3								
	1400	526 .05	471 .05	414 .06	343 .06	239 .06							
		5.4	5.3	5.2	5.6	6.5							
	1500	563 .06	513 .07	461 .07	400 .07	320 .08							
		6.1	6.0	5.9	6.0	6.8							
	1550	582 .07	533 .07	483 .08	426 .08	354 .08	252 .09						
		6.5	6.3	6.2	6.2	7.0	7.9						
	1600	601 .07	553 .08	505 .08	451 .09	385 .09	300 .09						
		6.8	6.7	6.6	6.5	7.2	8.0						
	1650	620 .08	574 .09	527 .09	475 .10	416 .10	338 .10	218 .10					
		7.2	7.1	7.0	6.9	7.4	8.2	9.2					
	1700	639 .09	594 .09	548 .10	500 .10	446 .11	375 .11	278 .11					
		7.6	7.5	7.4	7.3	7.6	8.4	9.3					
	1750	657 .10	614 .10	570 .11	524 .11	471 .12	407 .12	327 .12					
		8.0	7.9	7.8	7.7	7.8	8.6	9.5					
	1800	676 .10	634 .11	591 .12	548 .12	496 .13	438 .13	365 .13					
		8.4	8.3	8.1	8.1	8.0	8.8	9.7					
	1850	695 .11	654 .12	612 .13	570 .13	521 .14	468 .14	401 .14					
		8.8	8.7	8.6	8.5	8.4	9.0	9.9					
	1900	714 .12	674 .13	633 .14	592 .14	546 .15	498 .15	435 .15					
		9.2	9.1	9.0	8.9	8.8	9.3	10.1					
	1950	732 .13	693 .14	654 .15	614 .15	571 .16	523 .16	466 .17	308 .17				
		9.6	9.5	9.4	9.3	9.2	9.5	10.3	12.2				
	2000	751 .14	713 .15	675 .16	636 .16	595 .17	549 .18	497 .18	357 .18				
		10.0	9.9	9.8	9.8	9.7	9.8	10.5	12.4				
	2050	770 .15	733 .16	696 .17	658 .18	619 .18	574 .19	527 .19	400 .20				
		10.5	10.4	10.3	10.2	10.1	10.1	10.8	12.6				
	2100	789 .16	753 .17	716 .18	679 .19	642 .19	599 .20	555 .21	437 .21				
		10.9	10.9	10.8	10.7	10.6	10.5	11.0	12.8				
	2150	808 .18	772 .18	737 .19	701 .20	664 .21	623 .21	580 .22	474 .23	307 .23			
		11.4	11.3	11.2	11.1	11.1	11.0	11.3	13.0	15.0			
	2200	826 .19	792 .20	757 .21	722 .21	686 .22	648 .23	606 .23	506 .24	364 .24			
		12.0	11.8	11.7	11.7	11.6	11.5	11.5	13.3	15.2			
	2250	845 .20	811 .21	777 .22	743 .23	708 .23	672 .24	631 .25	537 .26	413 .26			
		12.4	12.3	12.2	12.2	12.1	12.0	11.9	13.5	15.3			
	2300	864 .22	831 .23	798 .23	764 .24	730 .25	696 .26	656 .26	568 .27	453 .28			
		12.8	12.8	12.7	12.6	12.6	12.5	12.4	13.7	15.5			
	2350	883 .23	850 .24	818 .25	785 .26	752 .26	719 .27	680 .28	598 .29	490 .30	330 .30		
		13.3	13.2	13.1	13.1	13.0	13.0	12.9	13.9	15.7	17.7		
	2400	901 .25	870 .25	838 .26	806 .27	774 .28	741 .29	704 .29	628 .31	527 .31	389 .32		
		13.7	13.6	13.6	13.5	13.5	13.4	13.4	14.1	15.8	17.8		
	2450	920 .26	889 .27	858 .28	827 .29	795 .30	763 .30	729 .31	654 .33	560 .33	438 .34		
		14.1	14.1	14.0	14.0	13.9	13.9	13.9	14.4	16.0	17.9		
	2500	939 .28	909 .29	878 .30	848 .31	816 .31	785 .32	753 .33	679 .34	591 .35	482 .36		
		14.6	14.5	14.5	14.5	14.4	14.4	14.4	14.7	16.2	18.0		

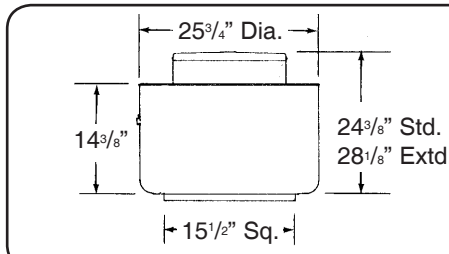
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

VUBK 08

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = .033 x $\left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 2.75 x RPM
 Max. Motor Frame Size = 56
 Unit Weight (less motor) = 40 lbs.
 Roof Opening = 11" Sq.
 Curb O. D. = 14" Sq.
 Damper Size = 10" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
(1/6)	RPM	.000	.125	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000
K1		CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP	CFM BHP
(1/6)		SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES
K2	650	359 .01 2.0	154 .01 1.4										
	750	415 .01 2.8	267 .01 2.0										
K3	850	470 .02 3.7	347 .02 2.8										
	950	525 .02 4.6	421 .03 3.8	266 .03 3.8									
K4	1050	580 .03 5.4	488 .04 4.5	368 .04 3.9									
	1150	636 .04 6.2	552 .05 5.4	452 .05 4.8	305 .05 4.6								
L1	1250	691 .05 7.1	614 .06 6.3	527 .06 5.6	420 .06 5.4								
	1350	746 .07 7.9	676 .07 7.2	600 .08 6.6	505 .08 6.3	385 .08 6.1							
M1	1450	802 .08 8.8	736 .09 8.2	667 .09 7.6	584 .10 7.1	490 .10 7.0	340 .10 6.9						
	1500	829 .09 9.3	766 .10 8.6	700 .10 8.1	622 .11 7.6	533 .11 7.4	417 .11 7.3						
P1	1550	857 .10 9.7	795 .11 9.1	732 .11 8.6	660 .12 8.1	576 .12 7.9	474 .12 7.8	280 .12 7.8					
	1600	884 .11 10.2	825 .12 9.6	764 .12 9.0	696 .13 8.6	617 .13 8.3	527 .13 8.2	390 .13 8.1					
P1	1650	912 .12 10.7	854 .13 10.1	795 .13 9.6	733 .14 9.1	656 .14 8.8	573 .15 8.7	468 .15 8.6					
	1700	940 .13 11.2	884 .14 10.6	827 .14 10.1	768 .15 9.6	694 .16 9.3	616 .16 9.1	522 .16 9.0					
P1	1750	967 .14 11.7	913 .15 11.1	858 .16 10.6	801 .16 10.2	732 .17 9.7	658 .17 9.6	574 .18 9.5					
	1800	995 .15 12.3	942 .16 11.8	889 .17 11.2	833 .18 10.6	769 .18 10.2	699 .19 10.1	621 .19 10.0	352 .18 10.0				
P1	1850	1023 .17 13.0	971 .18 12.4	920 .18 11.9	865 .19 11.3	806 .20 10.8	737 .20 10.7	664 .20 10.6	455 .20 10.4				
	1900	1050 .18 13.7	1000 .19 13.1	950 .20 12.5	897 .21 12.0	842 .21 11.5	776 .22 11.2	706 .22 11.1	532 .23 11.0				
P1	1950	1078 .20 14.4	1029 .21 13.8	981 .21 13.2	929 .22 12.7	878 .23 12.2	813 .23 11.8	748 .24 11.7	589 .24 11.5				
	2000	1106 .21 15.1	1057 .22 14.5	1011 .23 14.0	961 .24 13.4	911 .25 12.9	851 .25 12.5	787 .25 12.4	641 .26 12.1	359 .26 12.1			
P1	2050	1133 .23 15.9	1086 .24 15.3	1041 .25 14.7	992 .25 14.2	944 .26 13.6	888 .27 13.1	826 .27 13.0	693 .28 12.8	480 .28 12.6			
	2100	1161 .25 16.6	1115 .25 16.0	1070 .26 15.5	1024 .27 14.9	976 .28 14.4	924 .29 13.9	864 .29 13.6	736 .30 13.4	558 .30 13.3			
P1	2150	1189 .26 17.4	1143 .27 16.8	1100 .28 16.2	1055 .29 15.7	1008 .30 15.2	960 .31 14.7	901 .31 14.3	779 .32 14.1	626 .33 13.9			
	2200	1216 .28 18.2	1172 .29 17.6	1130 .30 17.0	1086 .31 16.4	1040 .32 15.9	995 .33 15.5	939 .33 15.0	821 .34 14.7	679 .35 14.5	419 .33 14.4		
P1	2250	1244 .30 18.7	1201 .31 18.1	1159 .32 17.6	1116 .33 17.0	1072 .34 16.6	1028 .35 16.1	975 .35 15.6	862 .36 15.3	732 .37 15.1	532 .37 14.9		
	2300	1271 .32 19.2	1229 .33 18.7	1189 .34 18.2	1147 .35 17.6	1104 .36 17.2	1060 .37 16.7	1012 .38 16.3	903 .39 15.9	782 .40 15.7	610 .40 15.6		
P1	2350	1299 .34 19.8	1258 .35 19.3	1218 .36 18.7	1178 .37 18.2	1135 .38 17.8	1093 .39 17.3	1048 .40 16.9	940 .41 16.5	825 .42 16.3	680 .43 16.2		
	2400	1327 .37 20	1286 .38 19.8	1247 .39 19.3	1208 .40 18.9	1166 .41 18.4	1125 .42 18.0	1083 .43 17.6	979 .44 17.1	867 .45 16.9	733 .45 16.8	519 .44 16.7	
P1	2450	1354 .39 21	1314 .40 20	1276 .41 19.9	1238 .42 19.5	1198 .43 19.1	1157 .44 18.6	1116 .45 18.2	1016 .46 17.7	909 .47 17.5	786 .48 17.4	606 .48 17.3	
	2500	1382 .41 21	1343 .43 21	1305 .44 21	1268 .45 20	1229 .46 19.7	1189 .47 19.3	1149 .48 18.9	1054 .49 18.2	951 .50 18.1	839 .51 18.0	683 .51 17.9	

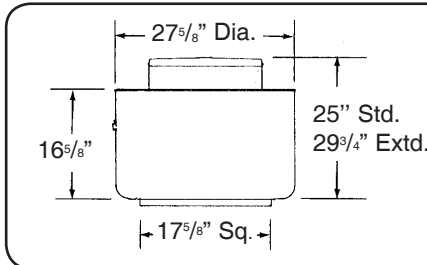
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

VUBK 10

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = $.082 \times \left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 3.27 x RPM
 Max. Motor Frame Size = 145T
 Unit Weight (less motor) = 45 lbs.
 Roof Opening = 13" Sq.
 Curb O. D. = 16" Sq.
 Damper Size = 12" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
K1 (1/6)	RPM	.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
		CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
K2 (1/6)	650	616 .02 2.8											
	750	711 .03 3.8	331 .03 3.7										
L1 (1/4)	850	805 .04 4.8	515 .05 4.5										
	950	900 .06 5.7	657 .07 5.2										
L1 (1/4)	1050	995 .08 6.7	782 .09 6.1	439 .09 6.6									
	1150	1090 .10 7.8	897 .12 7.3	645 .12 7.5									
L1 (1/4)	1200	1136 .11 8.4	954 .13 7.8	725 .14 8.0									
	1250	1184 .13 9.0	1009 .15 8.4	800 .16 8.6	416 .15 8.9								
L1 (1/4)	1300	1230 .14 9.6	1064 .16 9.0	875 .18 9.1	576 .17 9.4								
	1350	1279 .16 10.3	1118 .18 9.7	937 .20 9.7	684 .20 10.0								
M1 (1/3)	1400	1327 .18 10.9	1172 .20 10.3	1001 .22 10.3	775 .22 10.6								
	1450	1374 .20 11.7	1226 .22 11.0	1063 .24 10.9	858 .25 11.2	508 .23 11.5							
P1 (1/2)	1500	1421 .22 12.4	1279 .24 11.7	1124 .26 11.6	933 .27 11.9	662 .26 12.1							
	1550	1469 .24 13.1	1331 .27 12.4	1182 .29 12.3	1007 .30 12.5	773 .30 12.8							
P1 (1/2)	1600	1516 .27 13.9	1383 .29 13.1	1239 .31 13.1	1080 .33 13.2	865 .33 13.4	480 .30 13.7						
	1650	1563 .29 14.6	1435 .32 13.9	1296 .34 13.8	1144 .36 13.8	954 .36 14.1	667 .35 14.3						
R1 (3/4)	1700	1611 .32 15.2	1486 .35 14.5	1352 .37 14.3	1207 .39 14.4	1030 .40 14.6	801 .39 14.8						
	1750	1658 .35 15.8	1536 .38 15.1	1407 .40 14.9	1270 .42 14.9	1105 .43 15.1	896 .43 15.4	514 .40 15.6					
R1 (3/4)	1800	1706 .38 16.5	1587 .41 15.8	1462 .43 15.5	1332 .45 15.4	1178 .47 15.7	987 .47 15.9	710 .45 16.1					
	1850	1753 .42 17.2	1637 .44 16.4	1517 .47 16.1	1393 .49 16.0	1250 .51 16.2	1075 .51 16.5	845 .50 16.7					
S1 (1)	1900	1800 .45 17.8	1688 .48 17.1	1571 .50 16.7	1450 .53 16.6	1314 .55 16.8	1151 .55 17.0	950 .55 17.3	596 .51 17.5				
	1950	1848 .49 18.6	1738 .52 17.8	1625 .54 17.4	1507 .57 17.3	1378 .59 17.4	1225 .60 17.6	1042 .60 17.9	783 .58 18.1				
S1 (1)	2000	1895 .53 19.4	1788 .56 18.6	1679 .58 18.0	1564 .61 18.0	1440 .63 18.0	1299 .64 18.3	1132 .65 18.5	918 .63 18.8	446 .55 19.1			
	2050	1942 .57 20.2	1838 .60 19.4	1733 .63 18.9	1620 .65 18.8	1502 .67 18.8	1374 .69 19.0	1213 .70 19.3	1022 .69 19.5	716 .66 19.8			
T1 (1-1/2)	2100	1990 .61 21.0	1887 .64 20.3	1786 .67 19.7	1676 .70 19.6	1564 .72 19.6	1438 .74 19.8	1288 .75 20.0	1114 .74 20.3	878 .73 20.5			
	2150	2037 .65 21.9	1937 .69 21.1	1839 .72 20.5	1731 .74 20.4	1625 .77 20.4	1502 .79 20.5	1363 .80 20.8	1204 .80 21.0	1013 .78 21.2	658 .74 21.4		
T1 (1-1/2)	2200	2085 .70 21.8	1987 .73 22.0	1891 .77 21.3	1786 .79 21.2	1681 .82 21.2	1565 .84 21.3	1436 .86 21.5	1289 .86 21.7	1108 .86 22.0	857 .83 22.2		
	2250	2132 .75 23.7	2036 .78 22.9	1943 .82 22.2	1841 .84 22.1	1738 .87 22.1	1628 .89 22.1	1510 .92 22.3	1364 .92 22.5	1200 .92 22.8	993 .89 23.0	601 .84 23.2	
T1 (1-1/2)	2350	2227 .85 25.4	2135 .89 24.7	2046 .92 24.1	1950 .95 24.1	1851 .98 23.8	1751 .101 23.8	1639 .103 23.8	1513 .105 24.1	1375 .105 24.3	1206 .105 24.5	988 .102 24.7	563 .93 25.0
	2450	2321 .97 27.3	2233 .100 26.6	2148 .104 25.9	2057 .207 25.7	1963 .110 25.6	1868 .113 25.5	1765 .116 25.6	1657 .118 25.8	1525 .119 26.0	1387 .119 26.2	1221 .118 26.4	996 .115 26.6

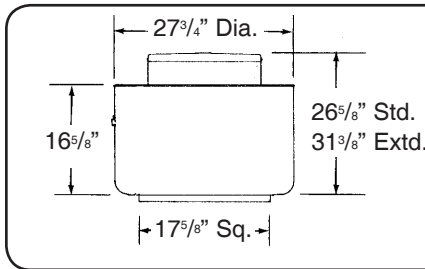
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

VUBK 12

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = .094 x $\left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 3.27 x RPM
 Max. Motor Frame Size = 145T
 Unit Weight (less motor) = 45 lbs.
 Roof Opening = 13" Sq.
 Curb O. D. = 16" Sq.
 Damper Size = 12" Sq.

RPM Range - Motor HP	RPM	STATIC PRESSURE, INCHES W. G.															
		.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750				
K1 (1/6)		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP
		SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES
K2 (1/6)	550	660	.01														
		2.0															
K3 (1/6)	650	780	.02														
		3.1															
L1 (1/4)	750	900	.03	468	.04												
		4.3	3.6														
	850	1020	.05	690	.06												
		5.5	4.7														
M1 (1/3)	950	1140	.07	865	.08												
		6.6	5.8														
	1050	1260	.09	1023	.11	631	.10										
		7.9	7.1	6.9													
	1100	1321	.11	1094	.12	771	.12										
		8.6	7.7	7.5													
	1200	1442	.14	1232	.16	862	.16										
		10.0	9.2	8.8													
	1250	1500	.15	1301	.17	1067	.18	633	.16								
		10.8	9.9	9.5													
	1300	1562	.18	1368	.20	1152	.21	813	.20								
		11.6	10.8	10.3	10.3												
	1350	1620	.20	1435	.22	1234	.23	952	.23								
		12.4	11.6	11.0	11.1												
	1450	1740	.25	1567	.27	1395	.28	1153	.29	758	.26						
		14.1	13.5	12.9	12.9	13.0											
	1500	1800	.27	1633	.29	1469	.31	1248	.32	935	.31						
		15.1	14.4	13.9	13.7	13.9											
	1550	1860	.30	1698	.32	1539	.34	1340	.35	1075	.35						
		16.0	15.5	14.9	14.6	14.8											
	1600	1920	.33	1763	.36	1609	.37	1423	.38	1185	.39	743	.33				
		17.0	16.4	15.8	15.4	15.6	15.8										
	1650	1980	.37	1828	.39	1678	.41	1506	.42	1284	.42	963	.40				
		17.6	17.1	16.4	16.1	16.1	16.2										
	1700	2040	.40	1892	.42	1747	.44	1587	.46	1380	.46	1110	.45				
		18.3	17.8	17.0	16.7	16.6	16.8										
	1750	2100	.44	1956	.46	1815	.48	1667	.50	1476	.50	1249	.48	792	.43		
		19.1	18.5	17.9	17.5	17.3	17.5										
	1800	2160	.47	2020	.50	1883	.52	1746	.54	1564	.55	1347	.55	1025	.51		
		19.9	19.3	18.9	18.5	18.2	18.2										
	1900	2280	.56	2148	.58	2017	.61	1887	.63	1730	.64	1542	.64	1321	.64	929	.57
		22	21	21	20	20	19.9	19.9	19.8								
	1950	2340	.60	2211	.63	2084	.65	1957	.67	1811	.69	1637	.70	1432	.70	1131	.66
		23	22	22	21	21	21	21	21								
	2000	2400	.65	2274	.68	2150	.70	2027	.72	1892	.74	1728	.75	1531	.75	1281	.73
		24	23	23	22	22	22	22	22								
	2050	2460	.70	2337	.73	2216	.75	2095	.78	1971	.80	1812	.80	1629	.81	1421	.81
		25	24	24	23	23	23	23	23								
	2100	2520	.75	2400	.78	2281	.81	2164	.83	2047	.85	1894	.86	1725	.87	1534	.87
		26	25	25	24	24	24	24	24								
	2200	2640	.87	2526	.90	2412	.93	2300	.95	2188	.97	2057	.99	1908	1.00	1732	1.00
		28	27	27	26	26	26	26	26								
	2250	2700	.93	2588	.96	2477	.99	2367	1.01	2258	1.04	2137	1.05	1992	1.06	1828	1.07
		29	28	28	27	27	27	27	27								
	2300	2760	.99	2651	1.02	2542	1.05	2434	1.08	2327	1.10	2217	1.12	2074	1.13	1924	1.14
		30	29	29	29	29	29	29	28								
	2350	2820	1.12	2713	1.09	2606	1.12	2501	1.15	2396	1.17	2291	1.19	2156	1.21	2017	1.22
		31	31	30	30	30	30	29	29								
	2400	2880	1.12	2775	1.16	2671	1.19	2567	1.22	2465	1.24	2362	1.27	2237	1.28	2101	1.29
		32	32	31	31	31	31	31	31								
	2450	2940	1.20	2837	1.23	2735	1.26	2634	1.29	2533	1.32	2432	1.34	2318	1.36	2184	1.37
		34	33	32	32	32	32	32	32								

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

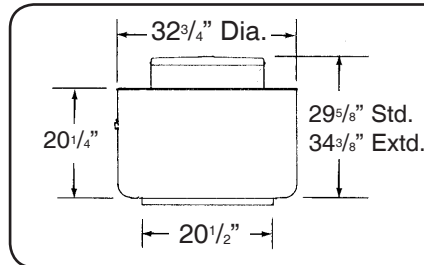
The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

Cent. Upblast Roof Vents

VUBK 15

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = .285 x $\left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 4.06 x RPM
 Max. Motor Frame Size = 182T
 Unit Weight (less motor) = 65 lbs.
 Roof Opening = 16" Sq.
 Curb O. D. = 19" Sq.
 Damper Size = 15" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
K1 (1/6)	RPM	.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
		CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
K2 (1/6)	550	1214 .04 4.1	441 .04 4.6										
	600	1324 .06 5.0	796 .07 5.3										
L1 (1/4)	650	1434 .07 5.9	973 .08 6.1										
	700	1545 .09 6.8	1132 .10 6.9										
M1 (1/3)	750	1655 .11 7.7	1279 .13 7.8										
	800	1765 .14 8.7	1422 .15 8.7	854 .15 9.1									
P1 (1/2)	850	1876 .16 9.8	1557 .18 9.7	1131 .19 10.0									
	900	1986 .19 10.8	1689 .21 10.7	1309 .22 10.9									
R1 (3/4)	950	2096 .23 11.9	1819 .25 11.7	1480 .26 11.9	713 .22 12.1								
	1000	2207 .27 13.1	1948 .29 12.8	1630 .30 12.9	1170 .30 13.3								
S1 (1)	1050	2317 .31 14.2	2074 .33 14.0	1778 .35 13.9	1418 .35 14.3								
	1100	2427 .35 15.5	2195 .38 15.2	1922 .40 15.1	1595 .41 15.3	882 .35 15.6							
T1 (1-1/2)	1150	2538 .40 16.8	2316 .43 16.6	2062 .45 16.4	1770 .47 16.5	1324 .45 16.8							
	1200	2648 .46 18.1	2436 .49 17.9	2196 .51 17.7	1923 .53 17.8	1593 .53 18.0							
V1 (2)	1250	2758 .52 19.4	2555 .55 19.2	2329 .57 19.0	2072 .59 19.1	1771 .60 19.3	1215 .54 19.5						
	1300	2868 .58 21	2673 .61 21	2460 .64 20	2218 .66 20	1946 .67 20	1560 .66 21						
	1400	3089 .73 24	2908 .76 23	2718 .79 23	2503 .82 23	2263 .83 23	1989 .84 23	1575 .81 23					
	1450	3199 .81 25	3024 .84 25	2846 .87 25	2637 .90 25	2412 .92 25	2164 .93 25	1851 .93 25	1067 .76 25				
	1500	3310 .90 27	3141 .93 26	2970 .96 26	2771 .99 26	2558 1.01 26	2333 1.03 26	2058 1.03 26	1627 .97 26				
	1550	3420 .99 28	3257 1.02 28	3091 1.06 28	2903 1.09 28	2702 1.11 28	2485 1.13 28	2236 1.14 28	1911 1.13 28	1138 .93 28			
	1600	3530 1.09 30	3372 1.12 30	3212 1.16 30	3033 1.19 29	2845 1.22 29	2634 1.24 29	2411 1.25 29	2152 1.26 29	1707 1.18 29			
	1650	3641 1.19 32	3487 1.23 31	3332 1.27 31	3163 1.30 31	2980 1.33 31	2781 1.35 31	2577 1.37 31	2330 1.38 31	2004 1.35 31	1322 1.16 31		
	1700	3751 1.31 33	3602 1.34 33	3452 1.38 33	3292 1.42 33	3114 1.45 33	2926 1.47 33	2728 1.49 33	2506 1.50 33	2263 1.51 33	1837 1.42 33		
	1725	3806 1.36 34	3660 1.40 34	3511 1.44 34	3356 1.48 34	3181 1.51 34	2998 1.54 34	2803 1.56 34	2593 1.57 34	2352 1.57 34	1986 1.52 34	1118 1.22 34	
	1750	3861 1.43 35	3717 1.46 34	3571 1.50 34	3419 1.54 34	3247 1.57 34	3070 1.60 34	2877 1.62 34	2681 1.64 34	2441 1.64 34	2125 1.61 34	1557 1.45 34	
	1800	3972 1.55 36	3831 1.59 36	3689 1.63 36	3546 1.67 36	3379 1.70 35	3211 1.73 35	3024 1.76 35	2837 1.78 35	2618 1.79 35	2389 1.79 35	1993 1.70 35	985 1.31 36
	1850	4082 1.68 38	3946 1.72 37	3807 1.77 37	3669 1.81 37	3509 1.84 37	3346 1.87 37	3170 1.90 37	2988 1.92 37	2793 1.94 37	2567 1.94 37	2270 1.91 37	1766 1.74 37
	1900	4192 1.82 39	4060 1.87 39	3925 1.91 39	3790 1.95 39	3639 1.99 38	3480 2.02 38	3314 2.05 38	3137 2.07 38	2959 2.10 38	2745 2.10 38	2528 2.10 39	2157 2.02 39
	1950	4303 1.97 41	4174 2.01 41	4042 2.06 41	3911 2.10 40	3767 2.14 40	3613 2.17 40	3458 2.21 40	3284 2.23 40	3111 2.26 40	2920 2.27 40	2706 2.27 40	2434 2.25 40
	1975	4358 2.05 42	4230 2.09 42	4101 2.14 42	3971 2.18 41	3832 2.22 41	3679 2.25 41	3526 2.29 41	3356 2.31 41	3186 2.34 41	3006 2.36 41	2795 2.36 41	2570 2.36 41

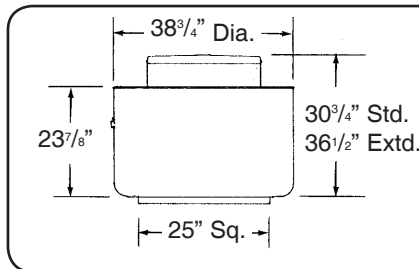
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

VUBK 18

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = .659 x $\left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 4.94 x RPM
 Max. Motor Frame Size = 184T
 Unit Weight (less motor) = 85 lbs.
 Roof Opening = 20-1/2" Sq.
 Curb O. D. = 23-1/2" Sq.
 Damper Size = 19" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
K1 (1/6)	RPM	.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
		CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
L1 (1/4)	550	2045 .10 5.5	1364 .11 3.7										
	M1 (1/3)	600	2231 .13 6.4	1642 .14 4.7									
P1 (1/2)		650	2417 .17 7.3	1891 .18 5.8	820 .14 4.8								
	R1 (3/4)	700	2603 .21 8.3	2126 .23 6.8	1383 .21 5.5								
S1 (1)		750	2789 .26 9.3	2349 .28 7.9	1754 .27 6.6								
	T1 (1-1/2)	800	2974 .32 10.4	2569 .33 9.0	2067 .33 7.7	1089 .27 7.0							
V1 (2)		850	3160 .38 11.6	2785 .40 10.3	2330 .40 9.0	1635 .38 7.8							
	W1 (3)	900	3346 .45 12.4	2997 .47 11.1	2579 .48 10.1	2025 .47 9.2							
T1 (1-1/2)		950	3532 .53 13.6	3208 .56 12.4	2823 .56 11.3	2347 .56 10.3	1581 .49 10.2						
	V1 (2)	1000	3718 .62 14.8	3413 .65 13.7	3051 .66 12.6	2644 .66 11.6	2035 .62 11.1						
W1 (3)		1050	3904 .72 16.1	3613 .75 15.0	3275 .76 14.0	2899 .76 13.0	2412 .74 12.1	1640 .64 12.1					
	V1 (2)	1100	4090 .83 17.5	3812 .86 16.4	3496 .87 15.5	3148 .88 14.5	2728 .86 13.5	2132 .82 13.3					
W1 (3)		1150	4276 .95 19.0	4010 .98 18.0	3714 .99 17.0	3392 1.00 16.0	3029 1.00 15.0	2523 .97 14.5	1795 .84 14.5				
	V1 (2)	1175	4369 1.01 19.7	4108 1.04 18.7	3822 1.06 17.8	3513 1.07 16.8	3158 1.06 15.8	2703 1.04 15.0	2055 .95 15.0				
W1 (3)		1200	4462 1.08 20	4207 1.11 19.5	3929 1.13 18.6	3625 1.14 17.6	3285 1.13 16.6	2863 1.11 15.7	2296 1.06 15.6	1030 .77 15.6			
	V1 (2)	1225	4555 1.15 21	4305 1.18 20	4036 1.20 19.3	3738 1.21 18.4	3410 1.21 17.4	3020 1.19 16.5	2494 1.15 16.3	1727 .99 16.3			
W1 (3)		1250	4648 1.22 22	4402 1.25 21	4142 1.27 20	3851 1.28 19.2	3535 1.28 18.3	3176 1.27 17.3	2689 1.24 16.9	2021 1.10 16.9			
	V1 (2)	1275	4740 1.29 23	4500 1.32 22	4248 1.35 21	3962 1.36 20	3659 1.36 19.1	3330 1.35 18.2	2883 1.33 17.6	2280 1.22 17.6			
W1 (3)		1300	4833 1.37 24	4598 1.40 23	4354 1.43 22	4073 1.44 21	3781 1.45 19.9	3460 1.44 19.0	3043 1.41 18.2	2510 1.35 18.2	1639 1.12 18.2		
	V1 (2)	1325	4926 1.45 24	4695 1.48 24	4459 1.51 23	4184 1.52 22	3903 1.53 21	3588 1.53 19.8	3202 1.50 18.9	2708 1.45 18.8	2042 1.31 18.8		
W1 (3)		1350	5019 1.54 25	4792 1.57 24	4564 1.60 23	4294 1.61 23	4024 1.62 22	3714 1.62 21	3359 1.60 19.8	2903 1.56 19.5	2303 1.42 19.5		
	V1 (2)	1375	5112 1.62 26	4889 1.66 25	4668 1.69 24	4403 1.70 23	4138 1.71 23	3840 1.71 22	3514 1.69 21	3096 1.67 20	2560 1.56 20	1655 1.29 20	
W1 (3)		1400	5205 1.71 27	4986 1.75 26	4769 1.78 25	4511 1.79 24	4251 1.81 23	3965 1.80 22	3666 1.80 22	3261 1.77 21	2765 1.70 21	2109 1.53 21	
	V1 (2)	1425	5298 1.81 28	5083 1.84 27	4870 1.87 26	4620 1.89 25	4364 1.90 24	4088 1.90 23	3795 1.90 22	3420 1.86 22	2962 1.81 22	2371 1.65 22	
W1 (3)		1450	5391 1.90 29	5179 1.94 28	4970 1.97 27	4727 1.99 26	4476 2.00 25	4211 2.01 24	3923 2.00 23	3577 1.97 22	3156 1.93 22	2629 1.81 22	1758 1.52 22
	V1 (2)	1475	5484 2.00 30	5276 2.04 29	5070 2.07 28	4835 2.09 27	4588 2.11 26	4333 2.11 25	4050 2.11 24	3733 2.09 23	3346 2.06 23	2854 1.97 23	2215 1.79 23
W1 (3)		1500	5577 2.11 31	5372 2.14 30	5170 2.18 29	4942 2.20 28	4699 2.21 27	4454 2.22 26	4175 2.22 25	3887 2.20 24	3507 2.16 24	3052 2.10 24	2478 1.92 24
	V1 (2)	1525	5670 2.21 32	5468 2.25 31	5269 2.29 30	5048 2.31 29	4809 2.32 28	4570 2.34 27	4300 2.33 26	4026 2.32 25	3666 2.29 24	3247 2.24 24	2736 2.09 24
W1 (3)		1550	5763 2.32 33	5564 2.36 32	5369 2.40 31	5154 2.42 30	4919 2.44 29	4684 2.45 28	4424 2.45 27	4155 2.44 26	3823 2.41 26	3440 2.38 25	2970 2.28 25
	V1 (2)	1575	5856 2.44 33	5660 2.48 32	5468 2.51 31	5260 2.54 30	5028 2.56 30	4797 2.57 29	4547 2.57 28	4282 2.56 27	3979 2.54 26	3617 2.51 25	3169 2.43 25

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

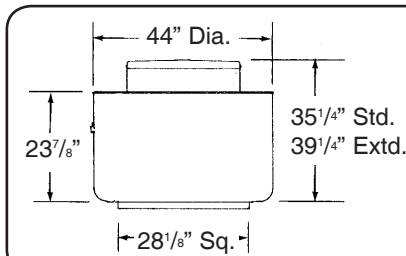
The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

Cent. Uplast Roof Vents

VUBK 21

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

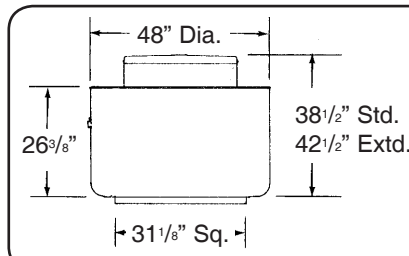
Max BHP = 1.28 x $\left[\frac{\text{RPM}}{1000} \right]^3$
 Tip Speed = 5.76 x RPM
 Max. Motor Frame Size = 184T
 Unit Weight (less motor) = 120 lbs.
 Roof Opening = 23-1/2" Sq.
 Curb O. D. = 26-1/2" Sq.
 Damper Size = 22" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.												
L1 (1/4)	RPM	.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750	
		CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES
M1 (1/3)	400	2168 4.2	.08 3.3	728 3.3	.06									
	450	2439 5.3	.11 4.2	1443 4.2	.11									
P1 (1/2)	500	2709 6.4	.15 5.3	1883 5.3	.15									
	550	2980 7.6	.20 6.4	2261 6.4	.21	329 6.1	.10							
R1 (3/4)	600	3251 8.8	.26 7.4	2614 7.4	.27	1608 7.1	.25							
	650	3522 10.0	.34 8.6	2941 8.6	.35	2163 8.2	.34							
S1 (1)	700	3793 11.2	.42 9.9	3261 9.9	.43	2602 9.4	.42	1401 9.3	.35					
	750	4064 12.6	.52 11.3	3575 11.3	.53	2992 10.7	.53	2162 10.5	.50					
T1 (1-1/2)	800	4335 14.0	.63 12.8	3884 12.8	.65	3360 12.0	.65	2685 11.8	.63	1456 11.7	.50			
	850	4606 15.6	.75 14.4	4189 14.4	.77	3707 13.4	.78	3124 13.2	.75	2297 13.1	.71			
V1 (2)	875	4742 16.4	.82 15.2	4339 15.2	.84	3872 14.1	.85	3336 13.9	.84	2603 13.8	.80	812 13.7	.48	
	900	4877 17.2	.89 16.0	4485 16.0	.92	4035 14.9	.93	3525 14.7	.92	2886 14.5	.89	1737 14.4	.73	
W1 (3)	925	5012 18.1	.97 16.9	4631 16.9	.99	4197 15.7	1.00	3713 15.4	1.00	3111 15.2	.97	2162 15.1	.87	
	950	5148 18.9	1.05 17.7	4777 17.7	1.08	4358 16.6	1.09	3897 16.1	1.09	3333 15.9	1.06	2563 15.8	.99	
V1 (2)	975	5283 19.8	1.13 18.6	4921 18.6	1.16	4517 17.5	1.17	4080 16.9	1.18	3551 16.7	1.13	2871 16.6	1.11	1690 16.6
	1000	5419 21	1.22 19.5	5066 19.5	1.25	4676 18.4	1.27	4261 17.7	1.27	3766 17.6	1.24	3164 17.4	1.15	2152 17.4
W1 (3)	1050	5690 22	1.41 21	5353 21	1.44	4989 20	1.46	4599 19.4	1.47	4152 19.2	1.46	3619 19.1	1.43	2930 19.0
	1075	5825 23	1.52 22	5497 22	1.55	5145 21	1.57	4764 20	1.58	4338 20	1.57	3839 19.9	1.51	3227 19.8
W1 (3)	1100	5961 24	1.62 23	5639 23	1.66	5300 22	1.68	4927 21	1.69	4523 21	1.69	4056 21	1.63	3513 21
	1125	6096 25	1.74 24	5782 24	1.77	5454 23	1.80	5089 22	1.81	4705 22	1.81	4270 22	1.76	3740 22
W1 (3)	1150	6232 26	1.86 25	5924 25	1.89	5607 24	1.93	5251 23	1.93	4886 23	1.93	4461 22	1.92	3963 22
	1175	6367 27	1.98 26	6066 26	2.02	5759 25	2.05	5411 24	2.06	5062 23	2.06	4650 23	2.05	4183 23
W1 (3)	1200	6503 28	2.11 27	6208 27	2.15	5911 26	2.18	5570 25	2.19	5228 24	2.20	4836 24	2.19	4400 24
	1225	6638 29	2.24 28	6349 28	2.28	6063 27	2.32	5728 26	2.33	5394 25	2.34	5021 25	2.33	4615 25
W1 (3)	1250	6774 30	2.38 29	6490 29	2.42	6210 27	2.46	5886 27	2.47	5558 26	2.48	5204 26	2.48	4813 26
	1275	6909 30	2.53 29	6631 29	2.57	6356 28	2.61	6042 28	2.62	5721 27	2.63	5385 27	2.63	5002 27
W1 (3)	1300	7045 31	2.68 30	6772 30	2.72	6502 29	2.76	6198 28	2.78	5883 28	2.79	5566 27	2.80	5190 27
	1325	7180 32	2.84 31	6912 31	2.88	6648 30	2.92	6353 29	2.94	6044 29	2.95	5735 28	2.96	5375 28
W1 (3)	1350	7316 33	3.00 32	7053 32	3.04	6793 31	3.08	6508 30	3.11	6204 30	3.12	5901 29	3.13	5560 29
	1375	7451 34	3.17 33	7193 33	3.22	6938 32	3.26	6662 31	3.28	6364 31	3.29	6066 30	3.30	5742 30
W1 (3)	1400	7587 35	3.34 34	7334 34	3.38	7078 33	3.42	6793 32	3.45	6486 32	3.46	6181 31	3.47	5836 31
	1425	7723 36	3.51 35	7475 35	3.56	7221 34	3.60	6936 33	3.63	6628 33	3.64	6311 32	3.65	5971 32
W1 (3)	1450	7860 37	3.68 36	7616 36	3.72	7364 35	3.76	7079 34	3.79	6771 34	3.80	6454 33	3.81	6114 33
	1475	8000 38	3.85 37	7757 37	3.86	7507 36	3.90	7221 35	3.93	6913 35	3.94	6597 34	3.95	6257 34
W1 (3)	1500	8140 39	4.02 38	7898 38	3.98	7650 37	3.98	7364 36	3.98	7054 36	3.98	6739 35	3.98	6400 35
	1525	8280 40	4.19 39	8039 39	4.02	7793 38	4.02	7507 37	4.02	7207 37	4.02	6881 36	4.02	6541 36
W1 (3)	1550	8420 41	4.36 40	8180 40	4.06	7936 39	4.06	7650 38	4.06	7350 38	4.06	7022 37	4.06	6682 37
	1575	8560 42	4.53 41	8321 41	4.10	8079 40	4.10	7793 39	4.10	7507 39	4.10	7164 38	4.10	6823 38
W1 (3)	1600	8700 43	4.70 42	8462 42	4.14	8222 41	4.14	7936 40	4.14	7650 40	4.14	7306 39	4.14	6964 39
	1625	8840 44	4.87 43	8603 43	4.18	8365 42	4.18	8079 41	4.18	7793 41	4.18	7448 40	4.18	7105 40
W1 (3)	1650	8980 45	5.04 44	8744 44	4.22	8508 43	4.22	8222 42	4.22	7936 42	4.22	7590 41	4.22	7246 41
	1675	9120 46	5.21 45	8885 45	4.26	8651 44	4.26	8365 43	4.26	8079 43	4.26	7732 42	4.26	7387 42
W1 (3)	1700	9260 47	5.38 46	9026 46	4.30	8794 45	4.30	8508 44	4.30	8222 44	4.30	7874 43	4.30	7528 43
	1725	9400 48	5.55 47	9167 47	4.34	8937 46	4.34	8651 45	4.34	8365 45	4.34	8016 44	4.34	7669 44
W1 (3)	1750	9540 49	5.72 48	9308 48	4.38	9080 47	4.38	8794 46	4.38	8508 46	4.38	8158 45	4.38	7810 45
	1775	9680 50	5.89 49	9449 49	4.42	9223 48	4.42	8937 47	4.42	8651 47	4.42	8300 46	4.42	7951 46
W1 (3)	1800	9820 51	6.06 50	9590 50	4.46	9366 49	4.46	9080 48	4.46	8800 48	4.46	8442 47	4.46	8092 47
	1825	9960 52	6.23 51	9731 51	4.50	9509 50	4.50	9223 49	4.50	8943 49	4.50	8584 48	4.50	8233 48
W1 (3)	1850	10100 53	6.40 52	9872 52	4.54	9652 51	4.54	9366 50	4.54	9080 50	4.54	8726 49	4.54	8374 49
	1875	10240 54	6.57 53	10013 53	4.58	9795 52	4.58	9509 51	4.58	9223 51	4.58	8868 50	4.58	8515 50
W1 (3)	1900	10380 55	6.74 54	10154 54	4.62	9938 53	4.62	9652 52	4.62	9366 52	4.62	9010 51	4.62	8656 51
	1925	10520 56	6.91 55	10295 55	4.66	10081 54	4.66	9795 53	4.66	9509 53	4.66	9152 52	4.66	8797 52
W1 (3)	1950	10660 57	7.08 56	10436 56	4.70	10224 55	4.70	9938 54	4.70	9652 54	4.70	9294 53	4.70	8938 53
	1975	10800 58	7.25 57	10577 57	4.74	10367 56	4.74	10081 55	4.74	9800 55	4.74	9436 54	4.74	9079 54
W1 (3)	2000	10940 59	7.42 58	10718 58	4.78	10510 57	4.78	10224 56	4.78	9943 56	4.78	9578 55	4.78	9220 55
	2025	11080 60	7.59 59	10859 59	4.82	10653 58	4.82	10367 57	4.82	10081 57	4.82	9720 56	4.82	9361 56
W1 (3)	2050	11220 61	7.76 60	11000 60	4.86	10796 59	4.86	10510 58	4.86	10224 58	4.86	9862 57	4.86	9502 57
	2075	11360 62	7.93 61	11141 61	4.90	10939 60	4.90	10653 59	4.90	10367 59	4.90	10004 58	4.90	9643 58
W1 (3)	2100	11500 63	8.10 62	11282 62	4.94	11082 61	4.94	10796 60	4.94	10510 60	4.94	10146 59	4.94	9784 59
	2125	11640 64	8.27 63	11423 63	4.98	11225 62	4.98	10939 61	4.98	10653 61	4.98	10288 60	4.98	9925 60
W1 (3)	2150	11780 65	8.44 64	11564 64	5.02	11368 63	5.02	11082 62	5.02	10796 62	5.02	10430 61	5.02	10066 61
	2175	11920 66	8.61 65	11705 65	5.06	11511 64	5.06	11225 63	5.06	10939 63	5.06	10572 62	5.06	10207 62
W1 (3)	2200	12060 67	8.78 66	11846 66	5.10	11654 65	5.10	11368 64	5.10	11082 64	5.10	10714 63	5.10	10348 63
	2225	12200 68	8.95 67	11987 67	5.14	11797 66	5.14	11511 65	5.14	11225 65	5.14			

VUBK 24

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = 3.26 x $\left[\frac{\text{RPM}}{1000} \right]^3$

Tip Speed = 6.68 x RPM
 Max. Motor Frame Size = 254T
 Unit Weight (less motor) = 150 lbs.
 Roof Opening = 26-1/2" Sq.
 Curb O. D. = 29-1/2" Sq.
 Damper Size = 26" Sq.

RPM Range - Motor HP	RPM	STATIC PRESSURE, INCHES W. G.																									
		.000		.250		.500		.750		1.000		1.250		1.500		1.750		2.000		2.250		2.500		2.750			
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP		
M1 (1/3)	P1 (1/2)	400	3618	.21	2241	.19																					
		425	3845	.25	2595	.24																					
		450	4070	.29	2927	.29																					
	R1 (3/4)	S1 (1)	475	4298	.34	3247	.34																				
			500	4523	.40	3559	.40	1907	.33																		
			525	4750	.47	3848	.47	2484	.42																		
	T1 (1-1/2)	V1 (2)	550	4975	.54	4125	.54	2942	.50																		
			575	5201	.61	4398	.62	3303	.58																		
			600	5427	.70	4667	.70	3655	.67	1941	.53																
	W1 (3)	X1 (5)	625	5653	.79	4934	.80	3991	.77	2664	.67																
			650	5879	.88	5197	.90	4315	.87	3173	.78																
			675	6105	.99	5458	1.01	4633	.98	3623	.92	1346	.59														
Y1 (7-1/2)		700	6332	1.10	5711	1.12	4945	1.10	3985	1.04	2504	.88															
		725	6558	1.23	5959	1.25	5247	1.24	4339	1.18	3162	1.06															
		750	6784	1.36	6205	1.38	5526	1.38	4686	1.32	3654	1.20															
		775	7010	1.50	6450	1.52	5803	1.52	5013	1.47	4111	1.37	2520	1.14													
		800	7236	1.65	6693	1.67	6077	1.68	5335	1.63	4482	1.55	3261	1.39													
		825	7462	1.81	6936	1.83	6348	1.83	5653	1.80	4839	1.73	3833	1.61	1535	1.04											
		850	7688	1.98	7178	2.00	6616	2.00	5966	1.97	5189	1.91	4296	1.77	2799	1.52											
		875	7914	2.16	7418	2.18	6883	2.19	6275	2.16	5528	2.10	4730	2.00	3537	1.81											
		900	8141	2.35	7658	2.37	7148	2.38	6561	2.37	5854	2.31	5092	2.22	4129	2.08	2244	1.56									
		950	8595	2.76	8136	2.79	7671	2.81	7116	2.80	6494	2.74	5797	2.67	5050	2.52	3948	2.34									
		1000	9045	3.22	8611	3.25	8177	3.28	7662	3.28	7118	3.22	6464	3.16	5779	3.06	4978	2.87	3813	2.62							
		1050	9497	3.73	9084	3.76	8671	3.79	8199	3.78	7697	3.77	7107	3.69	6480	3.61	5810	3.49	4969	3.34	3756	2.97					
		1075	9723	4.00	9320	4.03	8916	4.06	8465	4.06	7975	4.06	7423	3.98	6814	3.91	6169	3.79	5431	3.58	4419	3.38	2636	2.64			
		1100	9550	4.28	9555	4.32	9160	4.35	8730	4.35	8250	4.35	7735	4.28	7141	4.21	6523	4.11	5884	3.98	5014	3.80	3711	3.33			
		1125	10176	4.58	9790	4.62	9404	4.65	8993	4.66	8524	4.66	8044	4.59	7463	4.52	6873	4.43	6247	4.30	5480	4.05	4446	3.80	2602	2.94	
		1150	10402	4.90	10024	4.93	9647	4.96	9255	4.98	8796	4.99	8337	4.94	7782	4.85	7217	4.77	6606	4.65	5940	4.42	5093	4.27	3756	3.75	
		1175	10628	5.22	10258	5.26	9889	5.29	9515	5.32	9066	5.29	8617	5.28	8098	5.19	7542	5.12	6960	5.00	6361	4.86	5575	4.68	4534	4.27	
		1200	10854	5.56	10492	5.60	10131	5.63	9769	5.67	9335	5.64	8895	5.64	8411	5.55	7866	5.47	7310	5.37	6724	5.23	6038	4.97	5184	4.81	

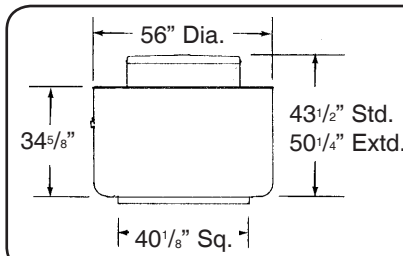
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

VUBK 30

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = 7.40 x $\left[\frac{\text{RPM}}{1000}\right]^3$
 Tip Speed = 8.25 x RPM
 Max. Motor Frame Size = 254T
 Unit Weight (less motor) = 220 lbs.
 Roof Opening = 35-1/2" Sq.
 Curb O. D. = 38-1/2" Sq.
 Damper Size = 34" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.												
P1 (1/2)	RPM	.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750	
		CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES	BHP SONES	CFM SONES
P2 (1/2)	275	4591 .14 4.7												
	300	5009 .18 5.5	1657 .14 3.4											
R1 (3/4)	325	5426 .23 6.4	2935 .24 4.0											
	350	5843 .28 7.3	3723 .31 4.8											
S1 (1)	375	6261 .35 8.3	4390 .39 5.8											
	400	6678 .43 9.3	4972 .47 6.9											
T1 (1-1/2)	425	7095 .51 10.2	5537 .57 7.9	2391 .41 6.6										
	450	7513 .61 11.2	6085 .68 9.0	3817 .63 7.3										
V1 (2)	475	7930 .71 12.2	6590 .79 10.1	4675 .76 7.9										
	500	8347 .83 13.3	7086 .92 11.2	5403 .90 8.9										
W1 (3)	525	8765 .96 14.4	7576 1.06 12.4	6078 1.06 10.1	3218 .82 9.4									
	550	9182 1.11 15.5	8059 1.21 13.6	6669 1.22 11.5	4635 1.14 10.3									
X1 (5)	575	9600 1.26 16.7	8538 1.38 14.8	7244 1.40 12.9	5497 1.32 11.3									
	600	10017 1.43 17.9	9012 1.56 16.1	7807 1.60 14.3	6276 1.55 12.6	3313 1.15 12.4								
Y1 (7-12)	625	10434 1.62 19.1	9476 1.75 17.4	8361 1.79 15.8	6961 1.77 14.0	4816 1.51 13.5								
	650	10852 1.82 20	9930 1.96 18.7	8882 2.03 17.3	7615 2.01 15.6	5871 1.93 14.6								
	675	11269 2.04 22	10382 2.19 20	9385 2.27 18.7	8200 2.26 17.1	6720 2.18 15.7	3975 1.70 15.7							
	700	11687 2.28 23	10831 2.43 21	9881 2.52 20	8776 2.53 18.6	7445 2.47 17.2	5453 2.13 16.9							
	725	12104 2.53 25	11277 2.68 23	10373 2.79 22	9341 2.82 20	8128 2.77 18.6	6504 2.68 18.0	3055 1.74 18.0						
	750	12521 2.80 26	11722 2.96 24	10860 3.07 23	9899 3.09 22	8780 3.09 20	7356 2.97 19.1	5033 2.50 19.1						
	775	12939 3.09 27	12165 3.26 26	11344 3.38 24	10449 3.42 23	9366 3.42 22	8113 3.35 20	6425 2.99 20						
	800	13356 3.40 29	12606 3.57 27	11823 3.71 26	10957 3.79 25	9944 3.77 23	8800 3.71 22	7325 3.62 21	4789 2.86 21					
	825	13773 3.73 30	13046 3.90 28	12299 4.06 27	11460 4.14 26	10513 4.15 25	9475 4.11 23	8173 3.97 22	6271 3.43 22					
	850	14191 4.08 32	13485 4.26 30	12772 4.43 28	11957 4.51 27	11074 4.55 26	10087 4.51 25	8916 4.41 24	7425 4.27 23	4781 3.31 23				
	875	14608 4.45 33	13922 4.63 31	13240 4.82 30	12451 4.91 29	11629 4.91 27	10670 4.93 26	9603 4.86 25	8284 4.78 25	6316 3.97 25				
	900	15026 4.84 34	14359 5.03 33	13695 5.22 31	12940 5.32 30	12717 5.41 29	11245 5.38 28	10279 5.33 27	9125 5.21 26	7635 5.01 26	4970 3.88 26			
	925	15443 5.26 36	14794 5.45 34	14148 5.65 33	13426 5.76 31	12677 5.85 30	11813 5.85 29	10905 5.81 28	9821 5.70 27	8500 5.60 27	6527 4.80 27			
	950	15860 5.70 38	15228 5.90 36	14599 6.10 34	13909 6.23 33	13180 6.32 32	12374 6.35 31	11490 6.30 30	10506 6.22 29	9349 6.05 28	7914 5.53 28	5324 4.61 28		
	975	16278 6.16 39	15662 6.36 38	15049 6.57 36	14389 6.72 35	13678 6.81 33	12929 6.80 32	12068 6.83 31	11180 6.78 30	10115 6.65 29	8806 6.52 29	6878 5.63 29		
	1000	16695 6.64 41	16094 6.85 39	15497 7.06 38	14865 7.23 36	14173 7.33 35	13479 7.34 34	12639 7.38 33	11800 7.34 32	10806 7.23 31	9659 7.00 30	8265 6.42 30	5819 5.49 30	

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

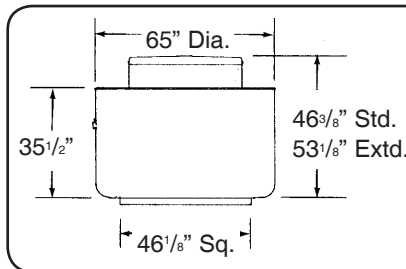
The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

Cent. Uphlast Roof Vents

VUBK 36

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

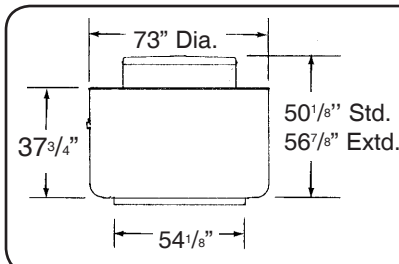
Max BHP = 19.71 x $\left[\frac{\text{RPM}}{1000}\right]^3$
 Tip Speed = 9.62 x RPM
 Max. Motor Frame Size = 254T
 Unit Weight (less motor) = 350 lbs.
 Roof Opening = 41-1/2" Sq.
 Curb O. D. = 44-1/2" Sq.
 Damper Size = 40" Sq.

RPM Range - Motor HP	RPM	STATIC PRESSURE, INCHES W. G.																																										
		.000		.250		.375		.500		.625		.750		1.000		1.250		1.500		1.750		2.000		2.250																				
		CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP	CFM	BHP																			
R1 (3/4)	S1 (1)	250	6697	.30	2317	.22																																						
			9.2	3.7																																								
		T1 (1-1/2)	V1 (2)	270	7233	.37	4086	.35																																				
					10.3	4.8																																						
				W1 (3)	X1 (5)	290	7769	.46	5275	.47																																		
							11.4	6.2																																				
						V1 (7-1/2)		310	8304	.57	6161	.58	3363	.46																														
									12.5	7.5	5.7																																	
										330	8840	.68	6979	.71	4960	.64																												
											13.7	8.9	6.9																															
												350	9376	.82	7690	.85	6213	.82	2711	.53																								
													14.9	10.4	8.3	7.0																												
														370	9912	.96	8370	1.00	7140	.99	4963	.84																						
															16.1	11.7	9.7	8.2																										
																390	10447	1.13	9039	1.17	7972	1.17	6296	1.08	2764	.69																		
																	17.4	13.2	11.3	9.5	8.4																							
																		410	10983	1.31	9697	1.36	8772	1.36	7454	1.32	5254	1.12																
																			18.7	14.6	13.0	11.0	9.6																					
																				430	11519	1.51	10346	1.56	9464	1.57	8361	1.55	6657	1.43	3593	1.04												
																					20	16.1	14.8	12.7	11.2	10.1																		
																				450	12055	1.74	10988	1.79	10145	1.80	9191	1.79	7907	1.73	5826	1.48												
																					21	17.7	16.5	14.6	12.9	11.6																		
																				470	12591	1.98	11596	2.04	10816	2.05	10003	2.05	8871	2.01	7226	1.86												
																					23	19.2	18.1	16.5	14.7	13.4																		
																				490	13126	2.24	12173	2.30	11478	2.32	10704	2.32	9734	2.30	8480	2.21	2817	1.18										
																					24	21	19.6	18.5	16.6	15.2	13.2																	
																				510	13662	2.53	12746	2.59	12132	2.61	11389	2.62	10558	2.61	9494	2.56	5949	2.07										
																					25	22	21	20	18.5	17.0	14.6																	
																				530	14198	2.84	13316	2.90	12780	2.93	12064	2.93	11349	2.94	10381	2.91	7528	2.59										
																					27	24	23	22	21	18.9	16.5																	
																				550	14734	3.17	13884	3.24	13421	3.27	12732	3.28	12042	3.29	11211	3.27	8806	3.03	3594	1.83								
																					28	25	24	24	23	21	18.3	16.8																
																				570	15269	3.53	14450	3.60	14040	3.63	13392	3.65	12726	3.65	12025	3.66	10051	3.51	6635	2.89								
																					30	27	26	25	24	23	20	18.3																
																				590	15805	3.91	15013	3.99	14617	4.02	14045	4.04	13402	4.05	12760	4.06	11014	3.97	8243	3.50								
																					31	28	27	27	26	25	22	19.9																
																				610	16341	4.32	15575	4.40	15192	4.44	14693	4.46	14071	4.47	13449	4.48	11904	4.43	9535	4.10	5347	3.18						
																					33	30	29	28	27	27	24	22	20															
																				630	16877	4.76	16135	4.84	15764	4.88	15335	4.91	14733	4.92	14131	4.93	12735	4.91	10788	4.69	7723	3.94						
																					34	32	31	29	29	28	26	24	22															
																				650	17412	5.23	16694	5.31	16334	5.35	15972	5.39	15389	5.40	14805	5.41	13554	5.41	11866	5.27	9277	4.78	4095	2.94				
																					36	34	32	31	30	30	28	26	24															
																				670	17948	5.73	17251	5.81	16902	5.85	16553	5.90	16039	5.91	15473	5.93	14341	5.95	12790	5.85	10557	5.45	7309	4.65				
																					38	35	34	33	32	31	29	27	26															
																				680	18216	5.99	17529	6.07	17185	6.12	16842	6.16	16363	6.18	15805	6.19	14689	6.21	13225	6.14	11187	5.79	8303	4.94				
																					39	36	35	34	33	33	30	28	27															
																				690	18484	6.26	17807	6.34	17468	6.39	17129	6.43	16685	6.46	16135	6.47	15036	6.49	13643	6.43	11810	6.15	9108	5.41				
																					39	37	36	35	34	34	31	29	28															
																				700	18752	6.53	18084	6.62	17750	6.66	17417	6.71	17005	6.74	16464	6.75	15380	6.77	14059	6.72	12426	6.53	9885	5.95	5422	4.26		
																					40	38	37	36	35	35	32	30	28															
																				710	19020	6.82	18359	6.91	18032	6.95	17703	6.99	17325	7.03	16791	7.04	15723	7.06	14471	7.03	12904	6.86	10531	6.33	6954	5.27		
																					41	39	38	37	36	36	33	31	29															
																				720	19288	7.11	18636	7.20	18314	7.24	17990	7.29	17644	7.33	17117	7.34	16064	7.37	14880	7.35	13369	7.20	11170	6.72	8311	5.81		
																					42	40	39	38	37	37	34	32	30															
																				730	19555	7.41	18913	7.50	18595	7.55	18275	7.59	17955	7.64	17442	7.65	16403	7.67	15287	7.67	13830	7.55	11082	7.12	9123	6.20		
																					43	41	40	39	38	38	35	33	31															
																				740	19823	7.72	19189	7.81	18876	7.86	18560	7.90	18245	7.95	17766	7.97	16741	7.99	15691	8.01	14281	7.90	12428	7.53	9926	6.74	5250	4.74
																					44	42	41	40	39	39	36	34	32															
																				750	20091	8.03	19466	8.13	19157	8.18	18845	8.22	18534	8.27	18089	8.29	17077											

VUBK 42

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = 39.60 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Tip Speed = 11.26 x RPM
 Max. Motor Frame Size = 254T
 Unit Weight (less motor) = 530 lbs.
 Roof Opening = 41-12" Sq.
 Curb O. D. = 52-1/2" Sq.
 Damper Size = 48" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
S1 (1)	RPM	.000	.125	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000
		CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
T1 (1-12)	215	8225 .36 6.5	6840 .39 5.1										
	230	8799 .44 7.4	7505 .47 6.1	4752 .41 4.4									
	245	9372 .53 8.3	8159 .57 7.1	7610 .55 5.3									
	260	9946 .64 9.1	8804 .67 8.0	7188 .68 6.4									
	275	10520 .76 9.9	9441 .79 8.8	8111 .81 7.4	5046 .68 6.1								
	290	11094 .89 10.8	10071 .93 9.7	9008 .96 8.5	6655 .87 7.0								
	305	11668 1.03 11.6	10695 1.07 10.6	9715 1.11 9.5	7855 1.08 8.1								
	320	12242 1.19 12.5	11314 1.23 11.5	10382 1.28 10.6	8902 1.26 9.2	6182 1.10 8.1							
	335	12815 1.37 13.5	11929 1.41 12.4	11040 1.46 11.5	9824 1.47 10.3	7698 1.34 9.1							
	350	13389 1.56 14.6	12541 1.61 13.5	11691 1.65 12.6	10725 1.69 11.5	8904 1.62 10.2							
	365	13963 1.77 15.7	13150 1.82 14.7	12335 1.87 13.7	11515 1.92 12.7	9997 1.87 11.4	7650 1.66 10.5						
	380	14537 1.99 17.0	13755 2.05 15.9	12974 2.10 15.0	12187 2.15 14.1	10927 2.13 12.7	9085 2.03 11.8						
395	15111 2.24 18.2	14359 2.29 17.2	13609 2.35 16.3	12851 2.40 15.4	11838 2.41 14.1	10235 2.34 13.2	7887 2.06 12.4						
410	15685 2.50 19.5	14960 2.56 18.5	14237 2.62 17.7	13508 2.67 16.8	12732 2.72 15.6	11297 2.65 14.6	9400 2.46 13.8						
425	16258 2.79 21	15559 2.85 19.8	14862 2.91 19.0	14160 2.96 18.3	13456 3.02 17.2	12226 2.98 16.1	10626 2.89 15.3						
440	16832 3.09 22	16157 3.15 21	15483 3.22 20	14806 3.28 19.6	14126 3.34 18.9	13138 3.33 17.6	11761 3.25 16.8						
455	17406 3.42 23	16753 3.48 23	16102 3.55 22	15448 3.61 21	14790 3.67 19.2	14034 3.71 19.2	12741 3.63 18.4	8994 3.18 17.0					
470	17980 3.77 25	17347 3.84 24	16717 3.90 23	16085 3.97 23	15448 4.03 22	14812 4.10 21	13664 4.04 19.9	10512 3.66 18.5					
485	18554 4.14 26	17940 4.21 26	17330 4.28 25	16719 4.35 24	16102 4.41 23	15484 4.48 23	14572 4.47 21	11828 4.25 20					
500	19128 4.54 28	18532 4.61 27	17940 4.68 26	17347 4.75 25	16750 4.82 25	16151 4.89 24	15466 4.93 23	12973 4.76 22					
515	19701 4.96 29	19123 5.03 28	18548 5.10 27	17973 5.17 27	17394 5.25 26	16813 5.32 25	16232 5.39 24	14064 5.24 23	10698 4.64 22				
530	20275 5.41 30	19714 5.48 29	19155 5.55 28	18596 5.63 28	18034 5.70 27	17469 5.77 27	16905 5.85 26	14998 5.76 24	12204 5.32 23				
545	20849 5.88 31	20303 5.95 30	19759 6.03 30	19215 6.11 29	18671 6.18 28	18121 6.26 28	17572 6.33 27	15918 6.30 25	13435 6.05 24				
560	21423 6.38 32	20891 6.46 32	20362 6.53 31	19833 6.61 30	19304 6.69 30	18769 6.77 29	18235 6.84 29	16825 6.88 27	14579 6.69 26	11296 5.89 24			
575	21997 6.90 33	21479 6.98 33	20963 7.06 32	20448 7.14 32	19933 7.22 31	19413 7.30 30	18893 7.38 30	17720 7.49 28	15674 7.29 27	12812 6.69 26			
590	22570 7.46 35	22065 7.54 34	21563 7.62 33	21061 7.70 33	20559 7.79 32	20054 7.87 32	19547 7.95 31	18532 8.11 30	16610 7.93 28	14176 7.61 27			
605	23144 8.04 36	22652 8.13 35	22162 8.21 35	21672 8.29 34	21183 8.38 34	20691 8.46 33	20196 8.54 33	19207 8.71 32	17533 8.61 30	15329 8.36 29	12214 7.42 28		
620	23718 8.65 37	23237 8.74 37	22759 8.83 36	22281 8.91 36	21804 9.00 35	21325 9.09 35	20842 9.17 35	19877 9.34 34	18443 9.32 32	16463 9.13 30	13731 8.36 29		
635	24292 9.30 39	23822 9.39 38	23356 9.47 38	22889 9.56 37	22423 9.65 37	21956 9.74 37	21485 9.83 36	20543 10.00 36	19343 10.06 34	17491 9.85 32	15136 9.46 31	11640 8.33 30	
650	24866 9.97 41	24407 10.06 40	23951 10.15 40	23495 10.24 39	23039 10.33 39	22584 10.42 38	22125 10.51 38	21204 10.69 37	20233 10.85 36	18423 10.26 34	16292 10.33 33	13387 9.30 31	

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

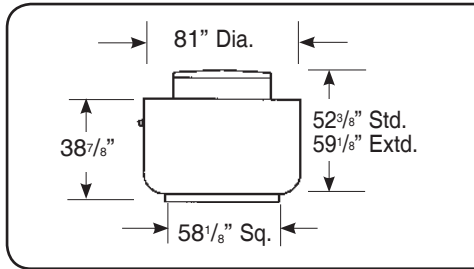
The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

Cent. Uphlast Roof Vents

VUBK 48

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = 66.04 × $\left[\frac{\text{RPM}}{1000}\right]^3$

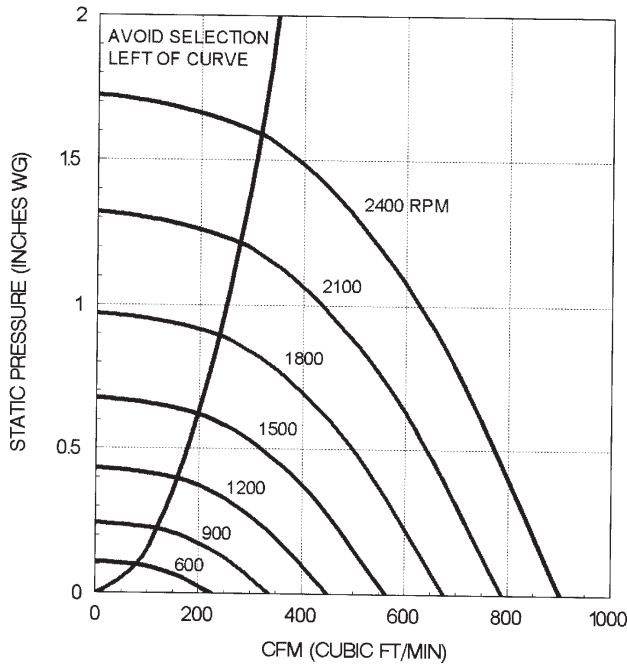
Tip Speed = 12.83 × RPM
 Max. Motor Frame Size = 254T
 Unit Weight (less motor) = 585 lbs.
 Roof Opening = 53-1/2" Sq.
 Curb O. D. = 56-1/2" Sq.

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
T1 (1-1/2)	RPM	.000	.125	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000
		CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
V1 (2)	200	11712 .46 7.4	9785 .52 5.9										
	220	12383 .61 8.7	11136 .68 7.2	8433 .74 6.5									
W1 (3)	240	14054 .80 10.0	12457 .87 8.7	10432 .91 7.9									
	260	15226 1.01 11.5	13755 1.10 10.3	12111 1.16 9.6	9063 1.23 9.3								
X1 (5)	280	16397 1.26 13.5	15036 1.36 12.2	13643 1.44 11.4	11568 1.45 11.0								
	290	16982 1.40 14.5	15670 1.50 13.2	14326 1.59 12.4	12438 1.61 11.9								
Y1 (7-1/2)	300	17568 1.55 15.5	16300 1.65 14.2	15002 1.75 13.4	14133 1.78 12.9	10428 1.88 12.8							
	310	18154 1.71 16.6	16927 1.82 15.3	15673 1.91 14.4	14133 1.97 13.9	11783 2.09 13.7							
C1 (10)	320	18739 1.89 17.6	17551 1.99 16.4	16338 2.09 15.5	14692 2.17 15.0	13042 2.17 14.7							
	330	19325 2.07 18.7	18172 2.18 17.5	16999 2.28 16.6	15780 2.37 16.1	13941 2.38 15.7	10731 2.33 15.7						
	340	19910 2.26 19.7	18792 2.38 18.6	17655 2.48 17.7	16508 2.58 17.3	14803 2.60 16.9	12330 2.85 16.8						
	350	20496 2.47 21	19409 2.58 19.7	18307 2.70 18.8	17193 2.80 18.4	15652 2.83 18.0	13607 2.95 17.8						
	360	21082 2.69 22	20025 2.81 21	18956 2.92 19.9	17873 3.03 19.5	16490 3.08 19.1	14805 3.08 18.9	11497 2.94 18.9					
	370	21667 2.92 23	20639 3.04 22	19601 3.16 21	18547 3.27 21	17317 3.35 20	15678 3.35 20	13190 3.71 20					
	380	22253 3.16 24	21251 3.29 23	20243 3.41 22	19217 3.52 22	18135 3.63 21	16539 3.63 21	14474 3.84 21					
	390	22838 3.41 26	21863 3.54 24	20883 3.67 24	19883 3.79 23	18883 3.91 23	17389 3.92 22	15734 3.97 22					
	400	23424 3.68 27	22472 3.82 26	21519 3.95 25	20545 4.07 24	19570 4.19 24	18229 4.23 24	16712 4.23 24					
	410	24010 3.97 28	23081 4.10 27	22154 4.24 26	21203 4.36 25	20252 4.49 25	19059 4.55 25	17579 4.56 25					
	420	24595 4.26 29	23689 4.41 28	22784 4.55 27	21857 4.67 27	20929 4.80 26	19880 4.89 26	18436 4.90 26	14018 4.97 26				
	430	25181 4.58 30	24295 4.72 29	23412 4.86 28	22509 5.00 28	21602 5.12 27	20694 5.25 27	19283 5.25 27	15587 5.76 27				
	440	25766 4.90 32	24901 5.05 31	24038 5.20 30	23157 5.33 29	22271 5.47 28	21385 5.60 28	20120 5.63 28	16867 5.93 28				
	450	26352 5.25 33	25506 5.40 32	24662 5.55 31	23803 5.69 30	22937 5.82 29	22070 5.96 29	20950 6.02 29	18126 6.10 29				
	460	26938 5.60 34	26110 5.76 33	25284 5.91 32	24446 6.06 32	23599 6.19 31	22751 6.33 30	21771 6.43 30	19133 6.43 30				
	470	27523 5.98 35	26713 6.13 35	25905 6.29 34	25087 6.44 33	24258 6.58 32	23428 6.72 32	22584 6.86 31	20003 6.86 31	15746 7.00 31			
	480	28109 6.37 37	27315 6.53 36	26524 6.69 35	25726 6.84 34	24914 6.99 33	24101 7.13 33	23289 7.27 33	20863 7.31 32	17330 8.04 32			
	490	28694 6.77 38	27917 6.94 37	27142 7.10 36	26362 7.26 36	25567 7.41 35	24771 7.55 34	23975 7.70 34	21715 7.78 33	18612 8.25 33			
	500	29280 7.20 39	28518 7.36 39	27758 7.53 38	26997 7.70 37	26217 7.85 36	25437 8.00 36	24657 8.15 35	22568 8.26 35	19876 8.46 34			
	510	29866 7.64 41	29118 7.81 40	28374 7.98 39	27629 8.15 39	26865 8.30 38	26100 8.45 37	25336 8.61 37	23394 8.77 36	21015 8.77 36	16412 8.47 36		
	520	30451 8.09 42	29718 8.27 42	28988 8.44 41	28257 8.62 40	27510 8.77 39	26761 8.93 39	26011 9.09 38	24222 9.29 38	21889 9.29 37	18127 9.83 37	9825 6.03 37	
	530	30137 8.57 44	30317 8.75 43	29601 8.92 42	28884 9.10 42	28154 9.27 41	27418 9.42 40	26682 9.58 40	25044 9.84 39	22754 9.84 39	19523 10.67 38	10966 6.65 38	

Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

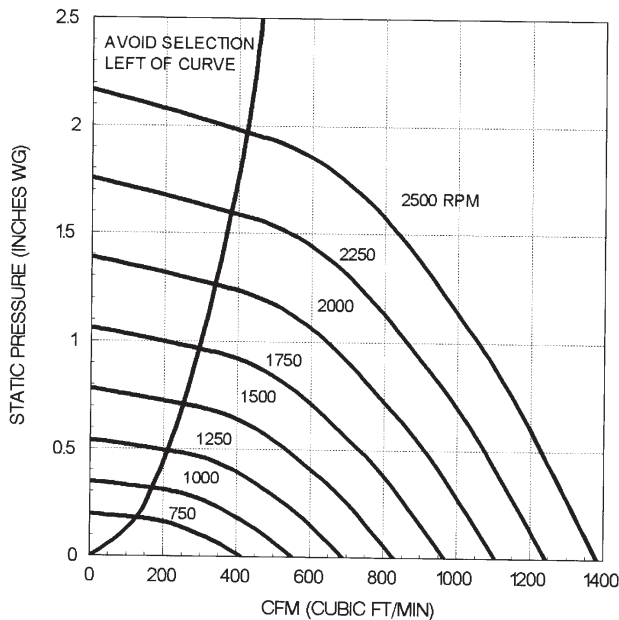
The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A, free inlet hemispherical sone levels.

VUBK 06 AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 08 AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 06 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
600	.000	40	39	36	37	34	30	26	22	39
	.125	58	57	51	49	47	43	39	35	52
1000	.000	58	56	52	49	48	44	40	36	53
	.125	58	57	51	49	47	43	39	35	52
1400	.000	65	62	61	58	55	55	51	46	62
	.500	68	68	64	62	59	56	52	47	65
1800	.000	71	67	70	65	63	60	59	54	69
	.375	71	69	70	65	62	59	57	53	68
	.750	74	74	73	68	66	62	59	54	71
2100	.000	78	70	76	69	67	63	63	58	73
	.500	76	73	75	69	67	63	62	57	73
2300	1.000	79	78	78	71	70	65	63	58	75
	.000	81	73	78	71	70	65	66	61	75
	.500	79	76	77	72	69	65	64	60	75
2500	1.000	79	79	79	73	71	66	64	60	76
	.000	82	76	80	74	72	68	67	63	78
	.500	81	78	79	74	71	67	66	62	77
	1.000	79	80	80	75	71	68	66	62	78
	1.500	83	84	84	78	75	71	68	64	81

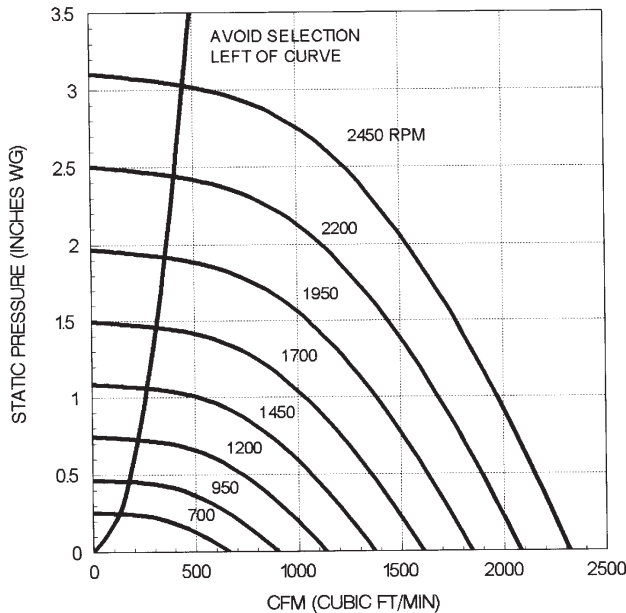
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 08 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
650	.000	52	57	42	41	39	40	38	37	47
1050	.000	69	68	66	54	52	50	50	48	61
	.250	68	70	62	53	51	48	46	41	60
1450	.000	69	71	70	63	58	57	58	59	67
	.500	69	68	65	60	58	57	55	53	65
1800	.000	80	74	79	70	65	61	62	63	74
	.500	79	73	74	66	63	60	60	59	71
	1.000	76	73	72	66	64	63	61	57	71
2100	.000	87	76	86	75	69	65	65	66	80
	.500	86	77	82	71	68	64	64	64	77
	1.000	83	77	80	70	68	65	64	62	75
2300	.000	90	79	88	78	72	67	67	68	82
	.750	88	80	84	74	70	66	65	65	79
2500	1.500	84	80	81	73	71	68	67	64	78
	.000	91	83	89	82	75	69	69	70	84
	.500	90	83	87	79	74	69	68	68	82
	1.000	89	83	85	77	73	68	67	67	81
	1.750	86	83	83	76	73	70	69	66	80

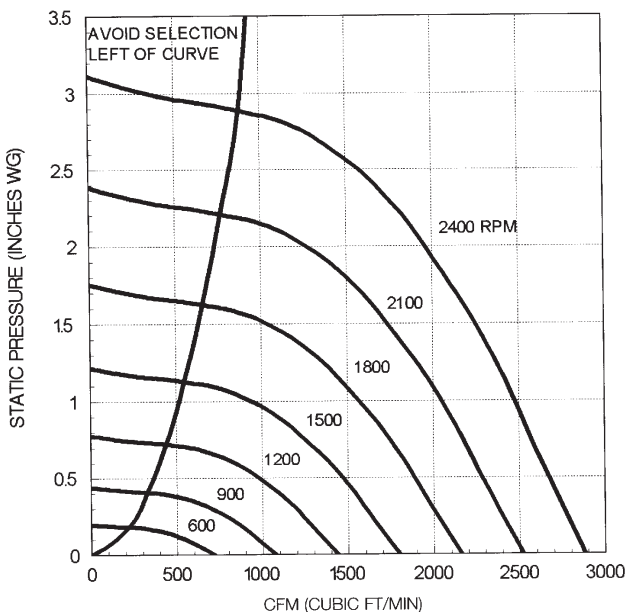
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 10
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 12
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 10
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
650	.000	52	55	50	47	47	44	37	31	51
950	.000	64	65	64	58	55	54	49	43	62
	.375	63	65	60	55	53	51	49	46	60
1300	.000	64	69	69	65	62	62	59	51	69
	.375	67	70	67	63	60	60	56	50	67
	.750	68	70	66	62	59	60	58	53	67
1650	.000	72	74	76	72	68	67	67	59	75
	.625	71	78	74	70	66	65	64	58	73
	1.250	72	78	73	69	65	64	64	60	73
2000	.000	78	78	82	78	73	71	73	65	81
	.500	76	82	81	77	72	69	70	64	80
	1.000	74	84	80	76	71	69	69	64	79
2350	2.000	76	84	80	75	70	68	69	65	78
	.000	81	84	85	83	78	75	76	71	85
	.500	79	86	86	82	77	74	74	69	84
2350	1.000	78	87	86	82	76	73	73	68	84
	2.000	75	87	85	80	75	72	73	70	83
	2.500	76	87	85	80	75	72	73	70	83

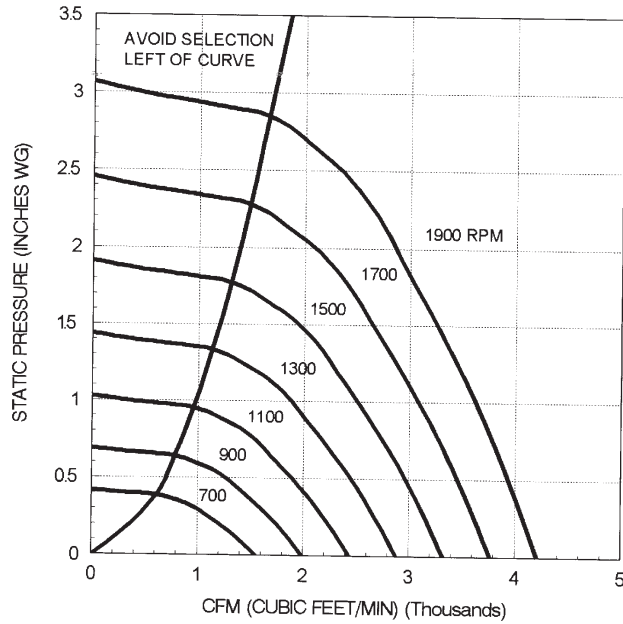
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 12
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
550	.000	53	50	46	48	48	40	30	20	51
950	.000	67	68	64	59	61	59	50	40	65
	.375	67	67	64	57	56	54	50	44	62
1250	.000	70	77	74	68	65	67	60	50	73
	.375	69	77	73	67	64	65	58	51	71
	.750	69	77	73	67	62	62	58	52	70
1600	.000	72	85	82	76	69	74	69	59	80
	.750	71	85	81	75	67	68	65	59	78
	1.250	74	86	80	75	66	67	65	60	78
1950	.000	75	87	88	83	76	77	75	66	85
	.750	75	87	87	82	74	74	72	65	84
	1.250	75	87	87	82	74	72	70	65	84
	1.750	77	88	87	82	73	71	70	66	83
2250	.000	78	88	92	88	80	79	79	71	89
	1.000	77	88	92	87	79	77	76	70	88
	1.500	77	88	92	87	79	75	74	70	88
	2.000	79	89	92	86	79	75	74	70	88
	2.500	80	90	92	86	78	74	74	70	88

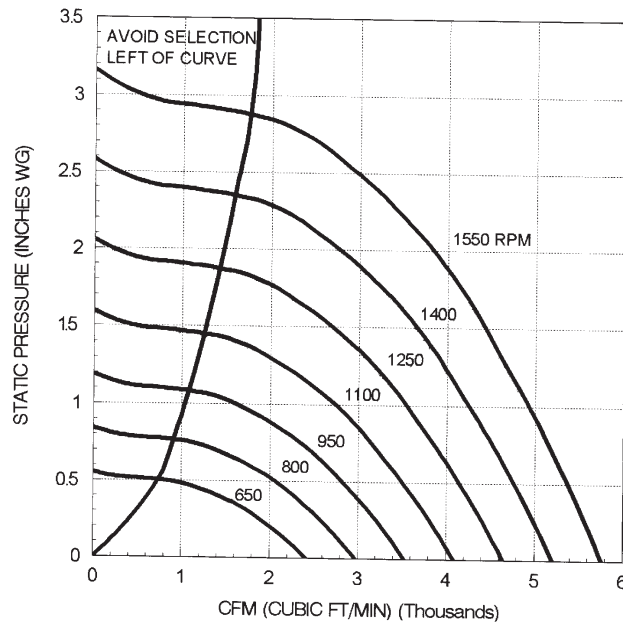
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 15 AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 18 AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 15 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
550	.000	62	64	60	55	53	48	41	33	58
	.375	72	74	71	68	64	60	55	49	70
800	.000	73	75	72	67	63	59	53	45	70
	.375	72	74	71	68	64	60	55	49	70
	.750	81	79	79	76	72	68	63	58	78
1050	.000	80	81	81	76	70	67	61	54	77
	.375	79	80	79	76	71	67	62	56	77
	.750	81	79	79	76	72	68	63	58	78
1300	.000	84	87	87	82	76	72	68	61	84
	.750	83	86	86	82	78	73	68	63	84
	1.250	85	86	85	82	78	74	70	64	84
1550	.000	87	92	93	88	82	77	73	67	89
	.750	86	91	92	87	82	78	73	67	87
	1.250	87	91	91	87	83	78	74	68	89
	1.750	88	91	91	87	83	79	74	70	89
1750	.000	89	95	96	92	85	80	77	71	93
	1.000	88	94	95	91	86	81	76	71	92
	1.500	89	95	94	90	86	81	77	72	92
	2.000	89	95	94	90	86	82	78	73	92
	2.500	90	95	94	90	87	82	78	73	92

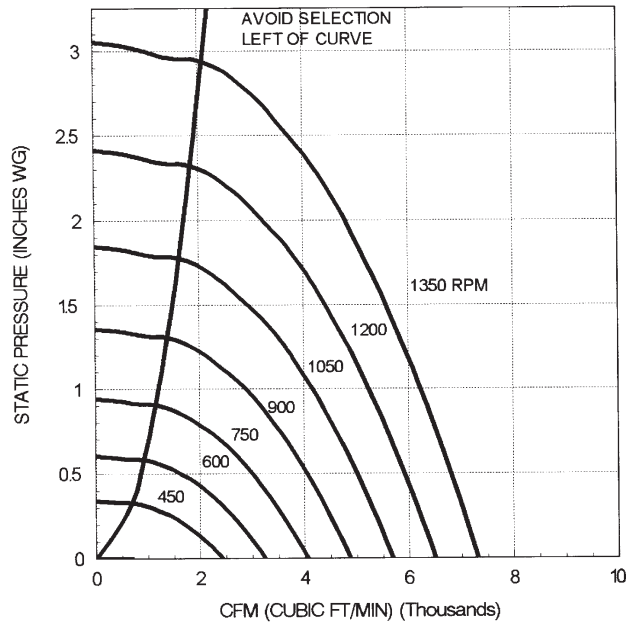
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 18 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
550	.000	67	66	59	59	58	53	46	39	62
	.375	76	75	70	66	66	62	56	49	70
750	.500	72	70	64	59	58	56	52	46	64
	.000	78	81	76	72	71	69	64	58	76
950	.375	78	79	75	70	68	66	61	55	74
	.625	76	78	73	68	66	64	60	56	72
	.000	84	85	84	77	75	74	69	64	82
1150	1.000	82	82	80	72	70	69	65	61	77
	1.500	81	81	79	72	69	68	65	61	76
	.000	88	89	90	81	79	78	74	69	86
1350	1.000	87	87	87	78	75	74	71	66	83
	1.500	86	86	85	76	73	72	70	66	81
	2.000	86	85	85	76	73	72	69	66	81
	.000	91	91	94	84	81	81	77	72	89
1500	1.000	90	90	92	82	79	78	74	69	87
	1.500	89	89	90	80	77	76	73	69	86
	2.000	88	88	89	79	75	75	72	68	84
	2.500	89	88	89	79	75	75	72	68	84
	.000	91	91	94	84	81	81	77	72	89

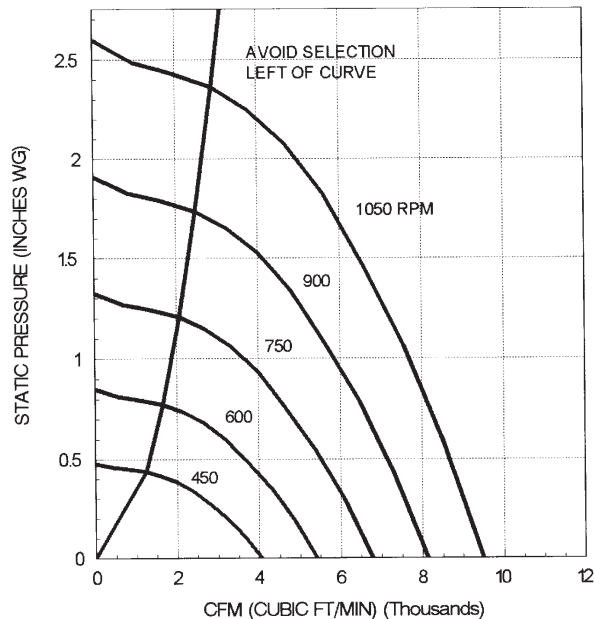
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 21
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 24
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 21
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
400	.000	59	59	57	57	55	50	43	37	59
	.500	70	71	61	60	62	60	53	46	66
600	.000	68	72	66	66	67	62	56	49	70
	.375	77	77	75	72	72	69	64	57	76
	.750	78	77	72	66	67	66	61	54	73
775	.000	84	82	82	77	76	75	70	64	82
	.500	84	82	80	74	73	72	67	61	79
	1.250	85	83	80	71	71	72	67	60	78
950	.000	90	85	87	81	79	80	75	69	86
	1.000	89	87	86	77	75	77	72	66	83
	1.500	90	87	86	76	74	76	73	66	83
	2.000	90	87	86	76	74	76	73	68	83
1125	.000	93	90	91	85	83	83	79	73	90
	1.000	91	91	90	83	80	80	76	71	88
	1.500	92	91	90	82	78	79	76	70	87
	2.000	93	92	90	81	77	79	77	70	87
	2.750	93	92	90	80	77	79	77	70	87

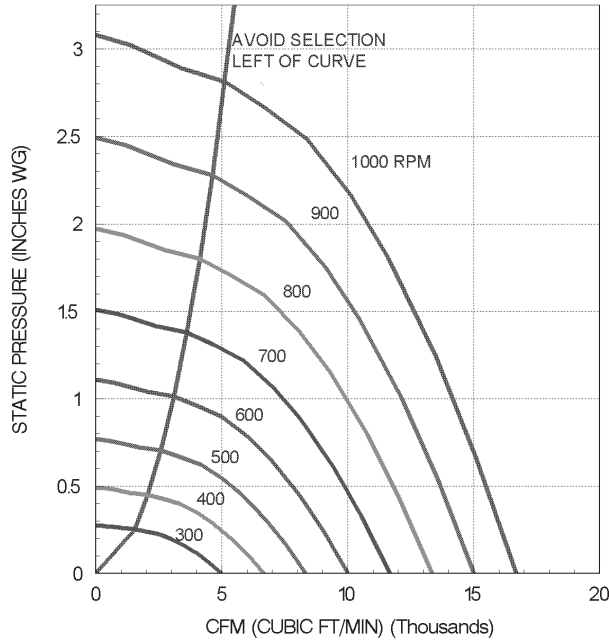
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 24
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
400	.000	69	68	61	59	60	59	50	40	65
	.500	76	78	72	67	66	67	61	51	73
550	.000	76	78	72	67	66	67	61	51	73
	.375	75	75	68	64	64	62	57	50	69
	.625	74	75	67	62	63	62	56	50	68
700	.000	82	84	80	73	71	72	70	60	79
	.500	81	82	78	71	69	69	64	58	76
	.750	82	81	77	69	68	69	64	57	75
	1.000	82	81	77	68	68	68	64	57	75
850	.000	87	89	87	78	75	76	76	67	84
	.500	86	88	85	77	73	75	72	65	82
	.750	86	87	85	76	72	75	70	64	82
	1.000	87	87	84	75	72	74	70	63	81
	1.500	87	86	84	73	71	73	70	63	81
1000	.000	90	93	92	84	79	80	81	73	89
	.500	90	92	91	83	78	79	78	71	87
	1.000	90	91	89	81	76	78	75	69	86
	1.500	90	91	89	80	76	77	75	68	85
	2.000	91	90	89	79	75	77	74	68	85

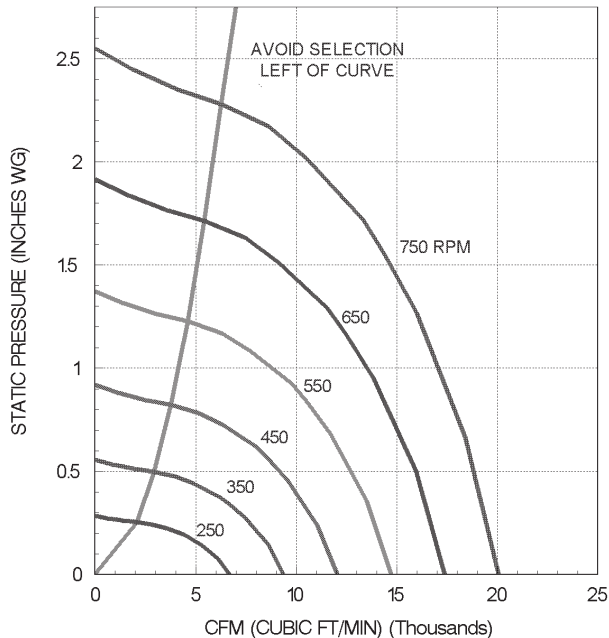
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 30
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 36
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 30
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
275	.000	64	61	60	60	56	49	43	37	61
375	.000	73	70	66	67	65	59	52	46	69
	.375	70	64	58	58	57	52	48	43	61
475	.000	78	78	73	72	71	66	60	53	75
	.375	77	74	67	66	65	61	56	51	69
	.625	77	72	65	63	62	59	54	50	67
575	.000	82	83	79	76	76	72	66	59	80
	.500	81	81	74	71	70	67	62	57	75
	.750	82	79	71	67	67	64	60	55	72
675	.000	85	88	84	80	80	77	71	64	84
	.500	85	87	81	76	76	73	68	62	81
	1.000	86	85	77	71	70	69	64	60	77
	1.250	86	85	77	71	70	69	64	60	77
775	.000	88	93	88	83	83	82	75	69	88
	.500	88	91	86	80	80	79	73	67	86
	.750	88	91	85	78	79	77	71	66	84
	1.000	88	90	83	76	76	75	70	65	83
	1.500	89	90	81	74	74	73	68	64	81

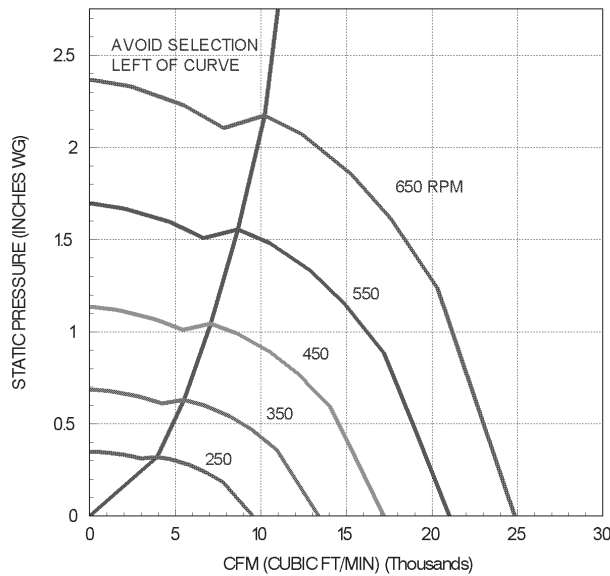
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 36
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
250	.000	71	67	63	61	59	60	61	61	67
325	.000	78	75	70	67	65	65	66	66	73
	.375	73	68	63	61	59	56	51	47	64
400	.000	83	82	76	72	70	69	70	71	78
	.375	81	78	72	68	66	66	64	58	73
	.625	80	74	69	65	64	60	55	51	69
475	.000	87	87	82	77	74	73	74	74	82
	.500	86	84	78	72	71	70	70	64	78
	.750	86	81	75	70	69	67	64	59	75
550	.000	91	92	86	80	78	76	77	78	86
	.500	91	90	83	77	76	73	76	71	83
	1.000	91	86	80	74	73	71	68	63	79
	1.250	91	85	78	72	72	69	63	59	78
600	.000	93	94	89	83	80	78	79	79	88
	.500	92	93	87	80	78	76	78	74	86
	.750	92	92	85	78	77	75	77	72	85
	1.000	93	90	84	77	76	74	73	68	83
	1.250	93	89	82	76	75	73	69	65	81

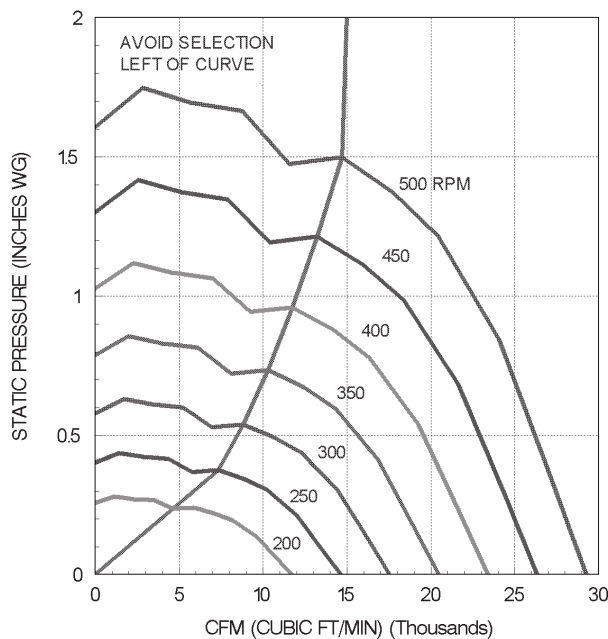
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

VUBK 42
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 48
AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VUBK 42
SOUND PERFORMANCE

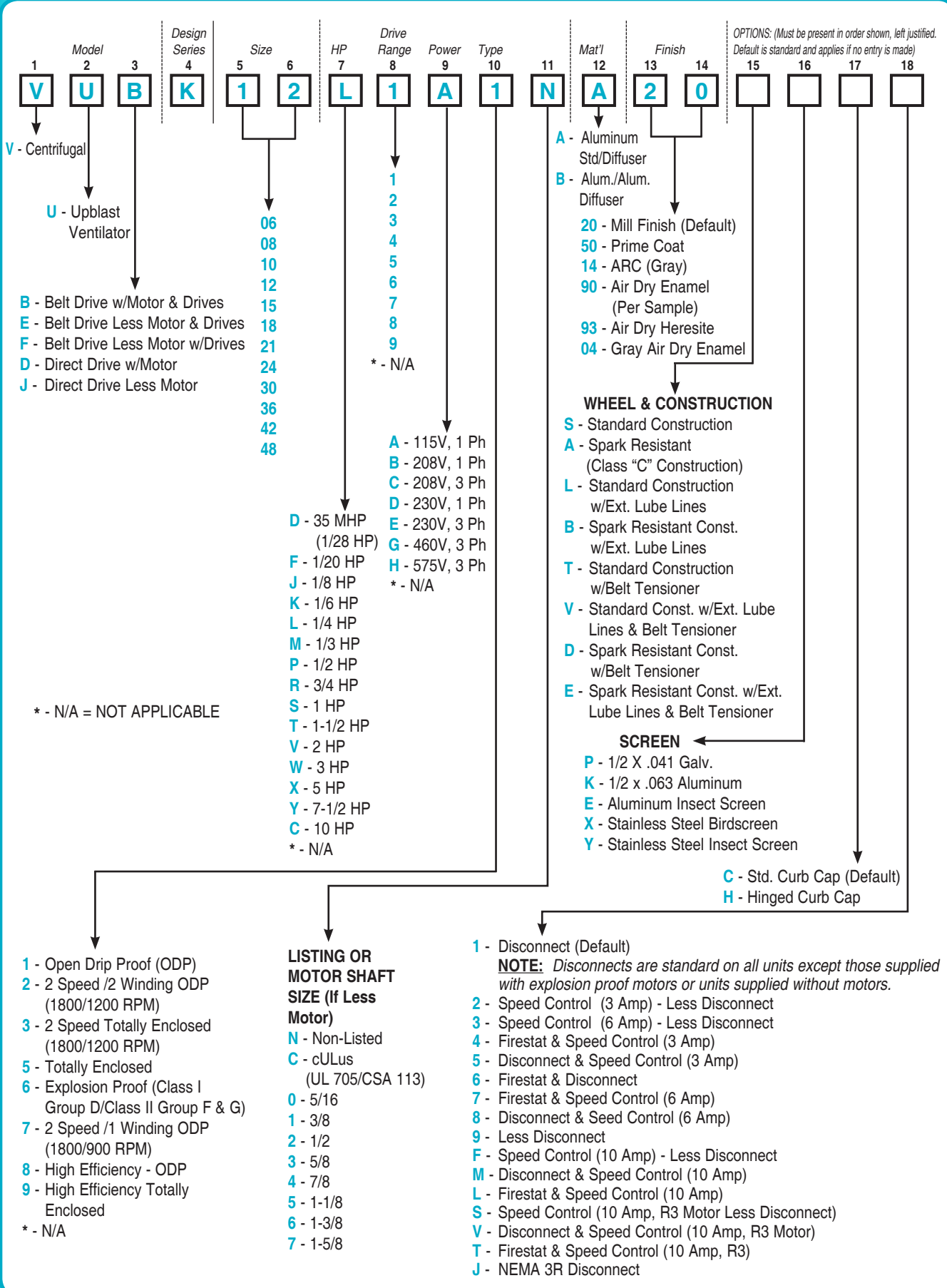
RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
215	.000	68	67	63	60	58	59	51	42	64
	.375	75	73	70	67	63	65	59	51	71
275	.000	82	79	76	72	69	69	66	57	76
	.250	82	78	73	69	66	67	62	50	73
	.500	80	75	70	67	64	61	56	48	70
335	.000	87	83	80	76	73	71	71	62	80
	.375	87	82	77	72	70	69	67	55	77
	.750	86	78	74	70	68	64	59	52	73
390	.000	91	87	84	80	76	73	75	67	83
	.375	91	86	82	76	74	72	73	62	81
	.750	91	84	79	74	72	69	67	58	79
445	1.000	91	82	78	73	71	68	62	56	77
	.000	95	90	87	83	80	75	79	71	86
	.500	95	90	85	79	77	74	77	66	84
500	.750	95	89	84	78	76	73	75	64	83
	1.000	95	87	83	77	75	72	70	62	82
	1.250	96	86	81	76	74	71	66	60	80

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.

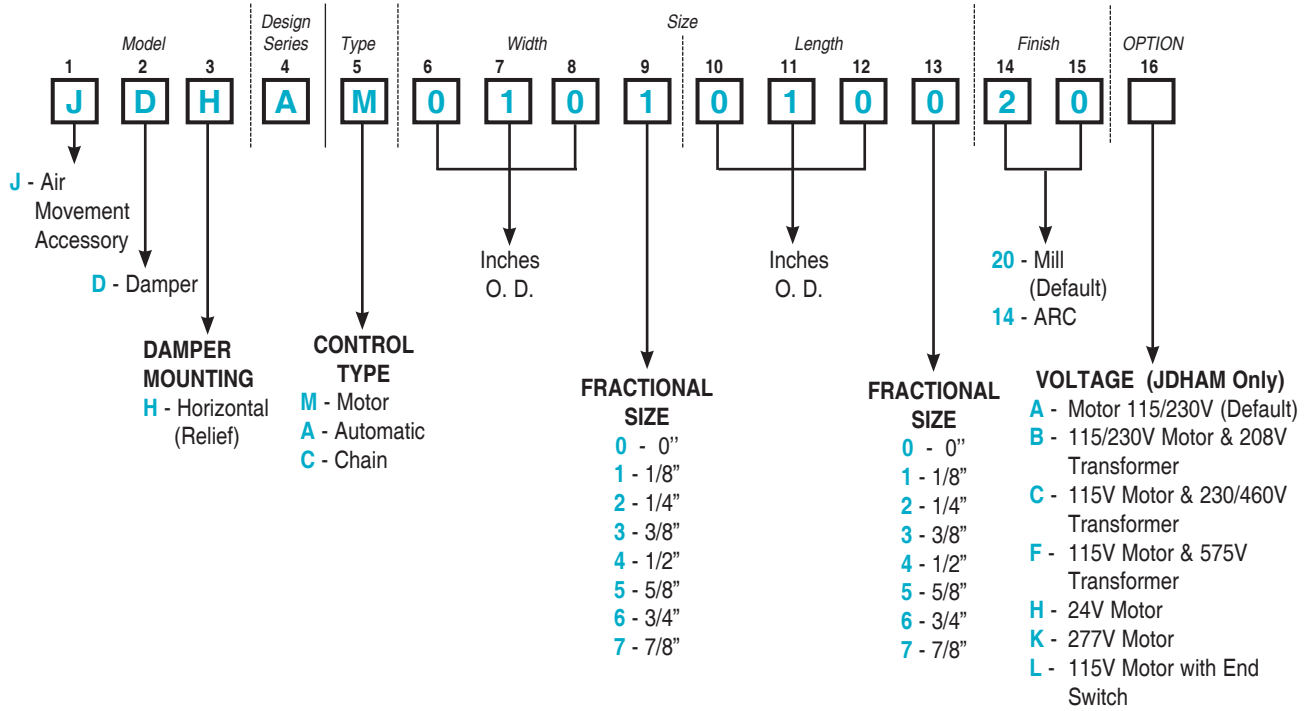
VUBK 48
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
200	.000	77	69	65	63	59	59	52	44	66
	.250	83	77	72	69	65	64	59	52	72
250	.000	82	74	66	64	62	60	53	45	68
	.250	89	84	77	73	70	68	65	58	77
	.500	89	82	73	69	68	66	62	52	74
300	.000	89	81	72	67	67	64	59	51	73
	.000	93	89	81	77	74	71	70	63	81
	.375	94	87	78	72	71	69	66	57	78
350	.625	94	87	77	70	71	68	64	56	77
	.000	97	94	85	80	78	74	74	67	85
	.250	98	93	83	77	76	73	73	64	83
400	.500	98	92	82	74	75	72	71	62	82
	.750	99	92	81	73	74	71	68	60	82
	.000	99	98	89	84	81	77	77	71	88
450	.250	100	97	88	81	79	76	76	69	87
	.500	100	96	87	79	78	76	75	67	86
	.750	101	96	86	78	77	75	73	65	86
	1.000	101	96	86	77	77	74	71	64	85

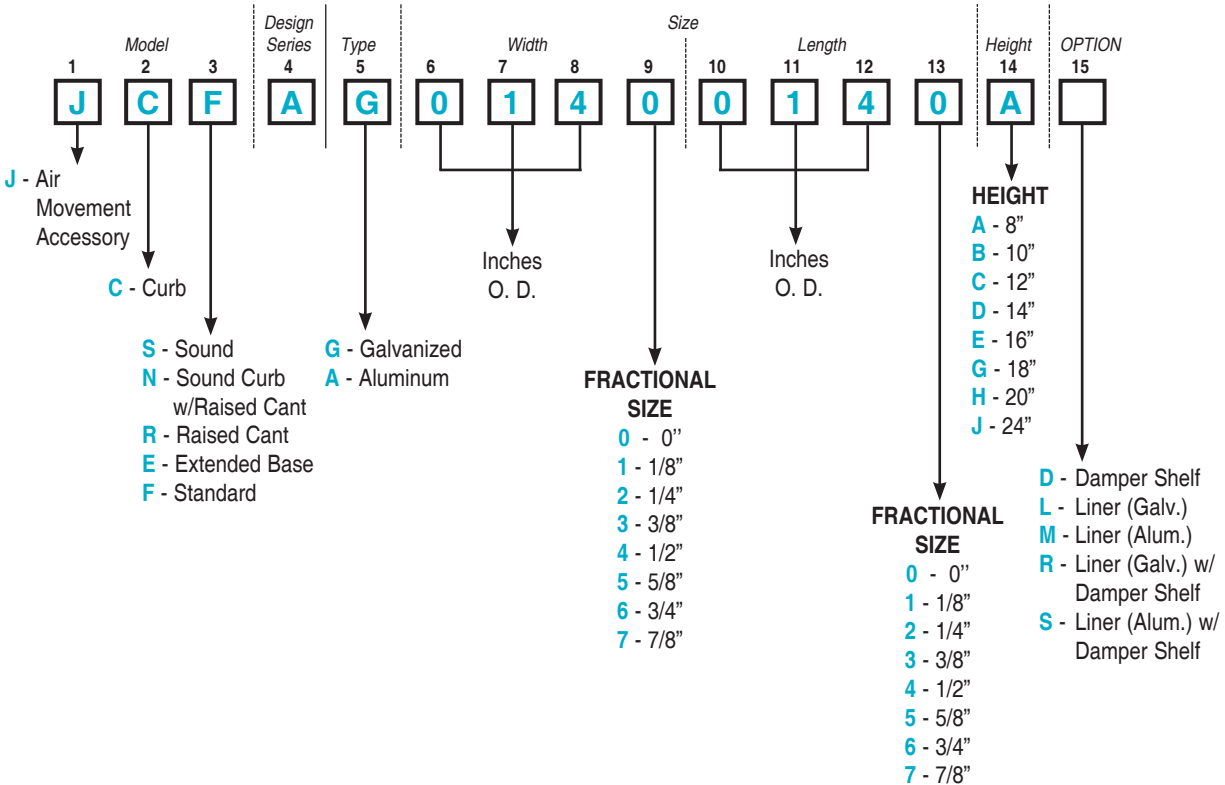
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wj} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction. The A-weighted sound ratings shown have been calculated per AMCA International Standard 301.



▼ **Dampers**

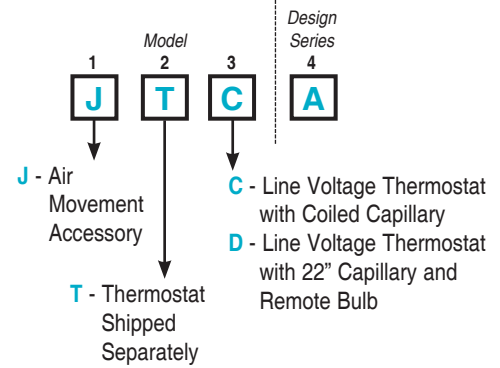
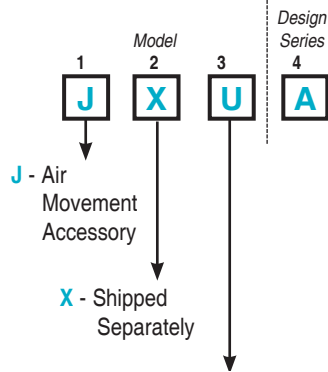


▼ **Curbs**



Cent. Upblast Roof Vents

▼ Electrical Accessories



- A - Firestat
 - J - 3 Pole, 3 Ph Explosion Proof
 - K - 2 Pole, 1 Ph Explosion Proof
 - L - 2 Pole, 1 Ph Safety Disconnect
 - M - 3 Pole 3 Ph Safety Disconnect
 - N - 3 Pole, 3 Ph NEMA 1
 - P - 2 Speed, 6 Pole NEMA 3R Non-Fusible
 - R - 1 or 3 Ph to 1 HP, for 2-Speed 2 Winding Motors
 - S - 1 Ph to 1/2 HP, for 2-Speed 2 Winding Motors
 - T - 3 Ph to 2 HP, for 2-Speed 2 Winding Motors
 - U - Solid State Speed Controller - 3A (115V/1 ϕ)
 - V - Solid State Speed Controller - 6A (115V/1 ϕ)
 - W - Solid State Speed Controller - 10A (115V/1 ϕ)
 - Y - Solid State Speed Controller - 10A R3 Motor (115V/1 ϕ)
- Disconnect Switches**: J, K, L, M, N, P
- Hi-Low-Off Switches**: R, S, T
- Speed Control**: U, V, W, Y

▼ Curb Cap Adapters

