

IN-LINE CENTRIFUGAL DUCT FANS

Direct and Belt Driven Models VIDK and VIBK

DESIGNED AND ENGINEERED TO MEET INDUSTRY NEEDS

The Carnes Company Centrifugal In-line Duct fans have been developed to efficiently handle the wide range of air flows and installations that are required in today's HVAC applications.

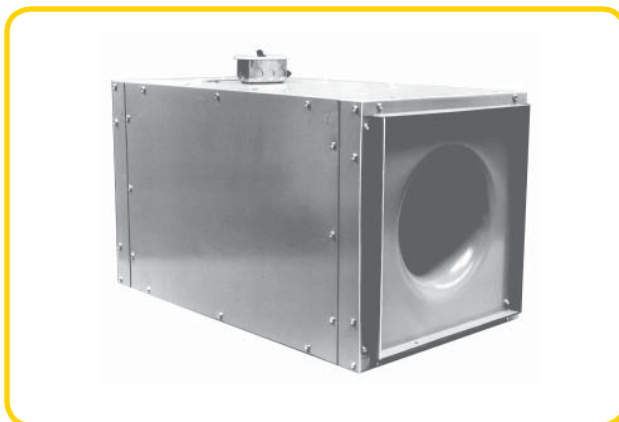
The compact square design of the VI-Series fan provides maximum air moving capacity from a minimum possible space-unit that can be tucked away in unused areas. The K-Series in-line fans feature universal mounting capabilities allowing the units to be installed horizontally, vertically or at an angle.

The K-Series in-line duct fans have been designed for easy and uncomplicated access to the fan's interior by using the removable access panels. All moving parts - motor, drives, wheel, shaft and bearings can be removed without disturbing the inlet

or outlet duct connections. Duct connections are simplified and less costly without the need for round to square transitions.

Superior aerodynamic performance is provided by the deep spun inlet combined with the backward inclined wheel. Housing sizes and internal baffling are selected for optimum performance levels. The air flow design of these centrifugal fans has been thoroughly tested at Carnes' accredited laboratories. Testing has also been conducted to ensure trouble-free start-up and to ensure product durability and dependability of operation.

In-line duct fans are designed for general indoor air handling needs and should not be used in an application requiring a leak-proof ventilator.



Model VIDK

Direct Driven - Sizes 06 through 18

Carnes direct drive in-line fans are available in six sizes with capacities from 150 to 4200 CFM. The internal compartment isolates the motor from the airstream, protecting it from contaminants that may be present. Direct drive reduces fan maintenance, and when used with the optional electronic speed control, balancing time may be decreased.

Maximum exhaust temperature for continuous operation is 150°F.

Model VIBK

Belt Driven - Sizes 06 through 42

Air flow performance is from 100 to over 25,000 CFM with the VIBK belt drive in-line duct fans. Ten sizes are available ranging from 06 to 42. The motor is located externally from the galvanized housing and the bearings and belt are in an enclosure for out of the airstream operation. Belt driven fans feature a wide range of performance and readily available motor selections.

Maximum exhaust temperature for continuous operation is 200°F.



▼ TYPICAL SPECIFICATIONS

Centrifugal in-line duct fans shall be of the centrifugal belt or direct driven type. The wheel and spun 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 wheels 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. Motor and drives shall be factory mounted. All fans shall be test run prior to shipment.

VIBK BELT DRIVE SERIES

Motors shall be isolated from the exhaust airstream. Motor shall be mounted external to the cabinet and 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 keyed and securely attached to the shafts. Variable pitch motor sheaves shall be standard.

VIDK 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 an air tube from a location free from discharge contaminants. Motors shall be of the heavy duty type with permanently lubricated, sealed bearings. Wheels to be furnished with integral fitting for wheel puller. Electrical wiring shall be routed to the motor compartment through the air tube.

The motor shall be factory wired to the disconnect junction box and a disconnect switch shall be supplied. Wheel, shaft, bearings, motor and drive components shall be readily accessible for inspection, repair or replacement without disturbing inlet or outlet duct work.

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 in-line duct fans shall be Carnes Company Model VIBK, belt drive, sizes 06 through 42, or Model VIDK, direct 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 VIDK and VIBK 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

Most models are available as listed by Underwriters Laboratories under Standard 705.



Underwriters Laboratories Inc. ®

CONSTRUCTION

FAN HOUSING

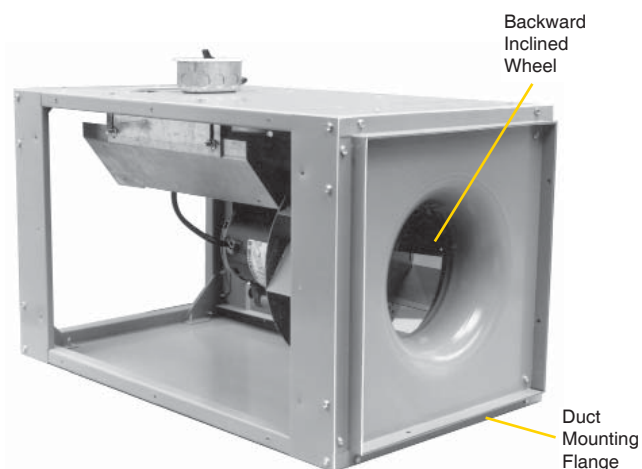
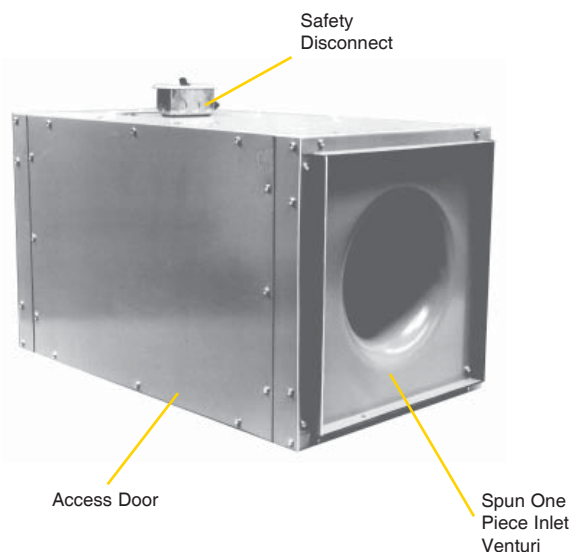
- Compact square design maximizes performance levels, minimizes installation space required.
- Constructed of heavy gauge, coated corrosion resistant steel.
- Dual side panels for access to unit interior.
- Integral duct connections at fan inlet and discharge for ease of installation.

MOTOR/ELECTRICAL

- **UL** listing under Standard 705 available as option on most models.
- Motors are UL recognized components supplied by nationally recognized manufacturers.
- Electrical boxes mounted on belt drive, but shipped loose on direct drive.
- All motors mounted to units for ease of fan installation.

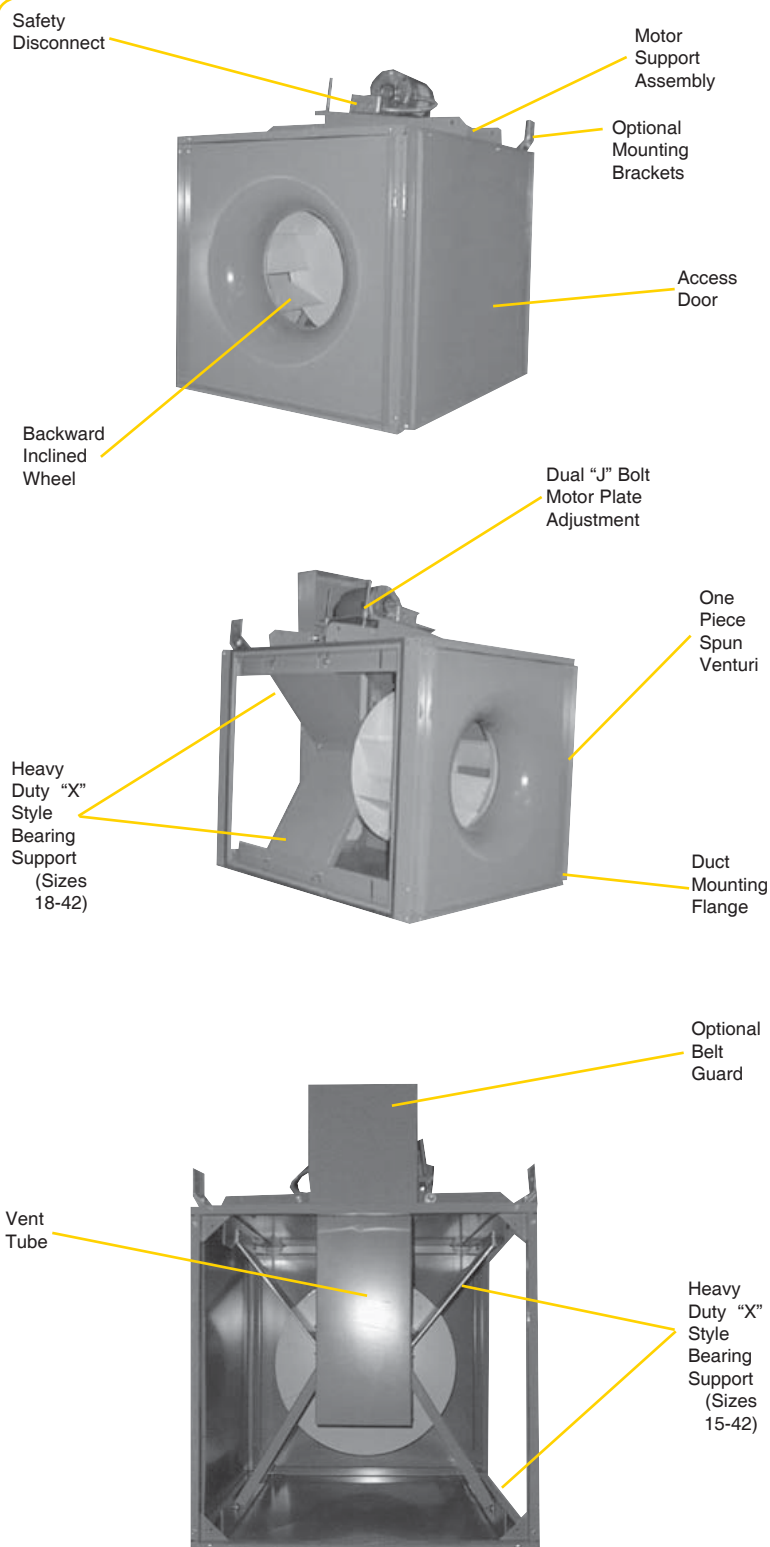
MOTOR SUPPORT ASSEMBLY

- Bolted, heavy gauge material.
- Motor plate accommodates multiple motor frames.
- Allows horizontal and vertical adjustment of wheel.
- Electrically grounded to meet NEC and UL requirements.



Model VIDK

FEATURES



Model VIBK

BEARINGS/SHAFT

- 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.
- Heavy duty "X" style bearing support braces (sizes 15-42).

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

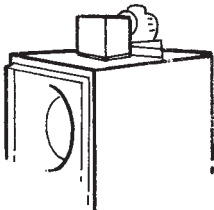
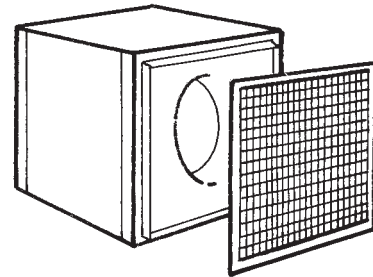
- Backward inclined wheels constructed of non-corrosive or coated heavy gauge material (size 42 is aluminum).
- Usage of cooling fins (06-18) on fan wheel backplate circulates cooling air over the motor facilitating longevity while motor remains out of the airstream.
- Self-limiting power characteristics.
- Dynamically balanced and test run in each individual unit.

FAN INLET

- Baffle reduces fan inlet swirl to promote optimum air performance.
- The deep spun venturi is precision matched to the wheel inlet to ensure maximum air flow.
- Inlet venturi spun from heavy gauge noncorrosive material - sizes 06 through 15 formed using galvanized steel and sizes 18 through 42 are produced from aluminum.

INLET OR OUTLET GUARD

When units are installed with inlets or outlets exposed, screen guards are available to prevent people or objects from having accidental contact with the interior. Guards consist of 1/2" galvanized wire.

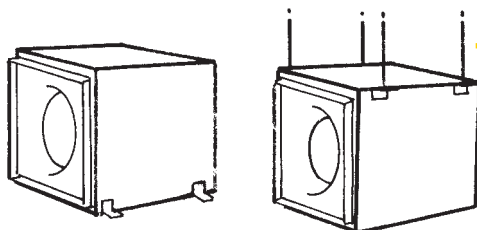
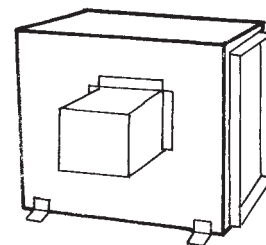


BELT GUARD

When units are installed in exposed areas, belt guards are available to prevent contact with the moving belt or sheave.

WEATHER PROTECTION PACKAGE

Units may be mounted outside and exposed to the weather when the accessory weather package is installed. Package consists of gasketed access panels and weather cover for motor and drive. Unit must be installed with the motor at the side. Additional field caulking of cabinet seams will provide a watertight unit. Optional cabinet insulation is also recommended for outdoor locations.

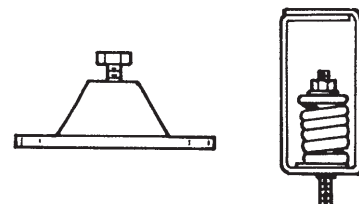


MOUNTING BRACKETS

Accessory mounting brackets are available for floor mounted, side wall mounted or ceiling hung units. Units may be hung in a vertical or horizontal position.

VIBRATION ISOLATORS

Suspension mounting isolators are available in rubber-in-shear (Sizes 06-18) and spring (Sizes 21-42). Floor mounting isolators are the rubber-in-shear type for all sizes.



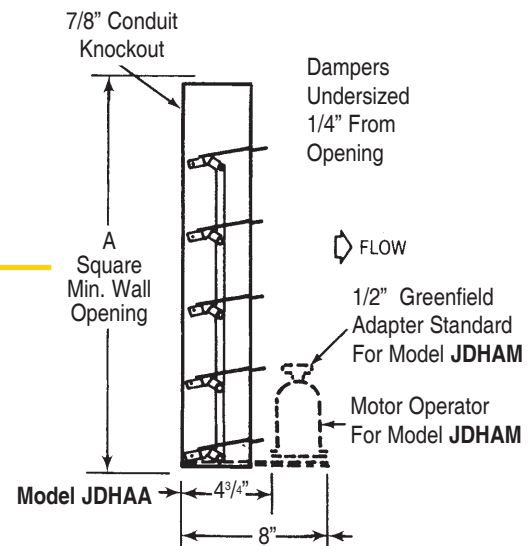
INSULATED HOUSING

Unit casings may be insulated with 1" fiberglass insulation to prevent condensation and/or reduce noise. The 1" 3 lb. density fiberglass has a heavy density exposed surface to prevent erosion. The insulation is attached with pin spot/stakes and adhesive for a permanent bond.

BACKDRAFT DAMPERS

Carnes Model JDHAA automatic dampers are available to prevent backflow when units are shut down. Damper frames are heavy duty box type. Blades are aluminum with felt edges and are linked together for quiet operation. A counterbalance spring is adjustable for tension to provide minimum resistance to air flow.

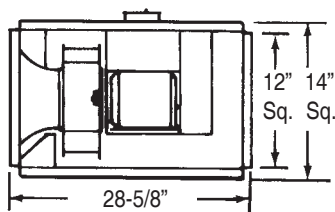
Motorized operation (JDHAM) may be provided by adding the motor pack available for 115/208/230 volt operation. Transformers are available for 460 or 560 volt operation.



VIDK 06

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 2.75 x RPM

Unit Weight = 60 Lbs.

Outlet Velocity (FPM) = 1.000 x CFM

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**			400	152 .01 .0								
			500	189 .01 .2								
			600	227 .01 1.1								
			700	265 .01 1.7								
			800	303 .01 2.3	163 .01 1.7							
			900	341 .02 2.9	226 .02 2.4							
			1000	379 .03 3.6	280 .03 3.0							
			1075 *	407 .03 4.1	316 .03 3.6	190 .03 3.6						
			1100	417 .03 4.3	328 .04 3.7	208 .04 3.8						
			1200	455 .05 5.0	373 .05 4.4	275 .05 4.4						
			1300	492 .06 5.8	418 .06 5.2	334 .06 5.1	217 .06 5.2					
			1400	530 .07 6.5	462 .07 6.0	388 .08 5.8	291 .08 5.9					
			1500	568 .09 7.3	504 .09 6.8	437 .09 6.5	357 .09 6.6	249 .09 6.6				
			1600 *	606 .11 8.2	547 .11 7.7	485 .11 7.3	413 .11 7.3	326 .11 7.4	179 .11 7.4			
ALL OTHER MOTORS			1140 *	432 .04 4.6	347 .04 4.0	237 .04 4.0						
			1725 *	653 .14 9.2	599 .14 8.8	541 .14 8.4	481 .14 8.3	407 .14 8.4	319 .14 8.4			

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.**

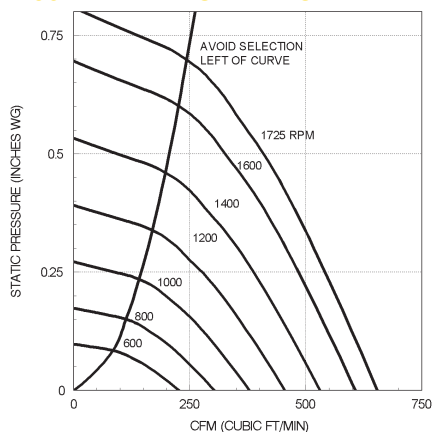
* Base Unit - As run motor speeds.

+ RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls.
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.

VIDK 06 AIR PERFORMANCE



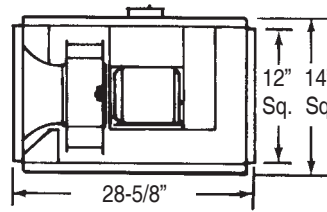
VIDK 06 SOUND PERFORMANCE

		SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
RPM	SP	1	2	3	4	5	6	7	8	LWA
1075	.000	55	55	53	54	51	52	49	45	58
	.125	55	55	51	53	50	50	45	40	56
1600	.000	67	67	65	64	62	60	59	56	68
	.250	69	66	64	62	61	59	56	51	66
	.375	70	67	65	62	61	59	56	51	66
	.500	70	68	65	62	61	59	56	50	66
	.625	70	68	65	62	61	59	56	50	66

VIDK 08

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 2.75 x RPM

Unit Weight = 60 Lbs.

Outlet Velocity (FPM) = 1.000 x CFM

RPM Range - Motor HP			RPM	STATIC PRESSURE, INCHES W.G.								
				.000	.125	.250	.375	.500	.625	.750	1.000	1.250
F3+ 1/20	J2+ 1/8			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**			600	293 .01 1.3								
			675	329 .01 1.7								
			750	366 .01 2.2	183 .01 1.6							
			825	403 .02 2.7	248 .02 2.2							
			900	439 .02 3.2	302 .03 2.7							
			1000	488 .03 3.8	366 .03 3.5	193 .03 3.2						
			1075 *	525 .04 4.4	412 .04 4.1	271 .04 3.8						
			1175	573 .05 5.1	472 .05 4.8	358 .06 4.5	126 .05 4.4					
			1250	610 .06 5.7	515 .07 5.4	411 .07 5.1	266 .06 4.9					
			1325	647 .07 6.3	557 .08 6.0	462 .08 5.8	340 .08 5.5					
			1400	683 .09 6.9	598 .09 6.6	509 .09 6.4	406 .09 6.1	254 .09 5.9				
			1475	720 .10 7.5	638 .11 7.2	556 .11 7.0	466 .11 6.7	342 .11 6.5				
		1550	756 .12 8.1	678 .12 7.9	601 .13 7.7	517 .13 7.4	410 .13 7.2	253 .12 7.0				
		1600 *	781 .13 8.5	705 .13 8.3	631 .14 8.1	550 .14 7.8	455 .14 7.6	327 .14 7.4				
ALL OTHER MOTORS			1140 *	556 .05 4.8	451 .05 4.6	329 .05 4.2						
			1725 *	842 .16 9.6	771 .17 9.4	705 .17 9.2	630 .18 9.0	553 .18 8.8	452 .17 8.6	326 .17 8.4		

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.

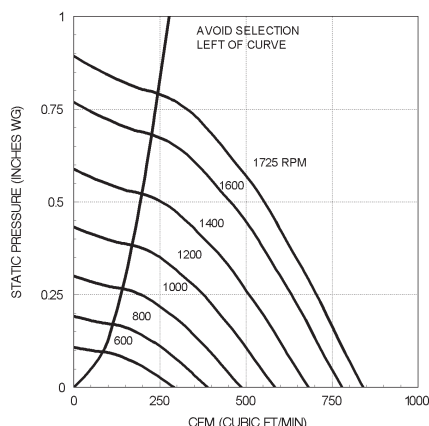
+ RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls.

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_{W1} 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.

VIDK 08 AIR PERFORMANCE



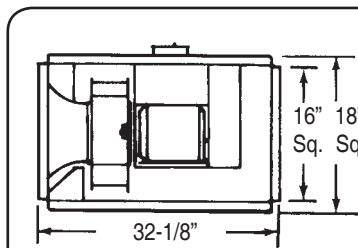
VIDK 08 SOUND PERFORMANCE

		SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
RPM	SP	1	2	3	4	5	6	7	8	LWA
1075	.000	55	56	55	56	51	51	49	47	58
	.125	55	57	54	54	50	50	58	45	57
1600	.000	68	67	67	66	63	60	59	57	69
	.250	67	68	67	64	62	59	58	56	68
	.375	66	68	67	64	62	59	58	55	67
	.500	66	67	66	63	61	59	57	53	67
	.625	65	67	66	63	61	59	57	51	67

VIDK 10

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 3.27 x RPM

Unit Weight = 75 Lbs.

Outlet Velocity (FPM) = .562 x CFM

RPM Range - Motor HP					RPM	STATIC PRESSURE, INCHES W.G.									
F4+	J3+	M2+	P2+	.000		.125	.250	.375	.500	.625	.750	1.000	1.250		
1/20	1/8	1/3	1/2	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	514 .01 1.8	226 .01 1.0								
					700	655 .03 3.2	466 .03 2.1								
					800	748 .04 4.2	583 .05 3.0	369 .05 2.8							
					825 *	771 .05 4.5	611 .05 3.3	417 .05 3.1							
					900	842 .06 5.3	694 .07 4.1	544 .07 3.7							
					975	912 .08 6.1	776 .08 4.9	640 .09 4.4	442 .09 4.4						
					1050	982 .10 6.9	856 .10 5.8	732 .11 5.0	580 .11 5.0	247 .09 5.0					
					1075 *	1005 .11 7.1	882 .11 6.1	761 .12 5.3	621 .12 5.2	385 .11 5.2					
					1175	1099 .14 8.3	986 .14 7.3	874 .15 6.5	760 .15 6.1	606 .15 6.1	285 .13 6.1				
					1275	1192 .18 9.5	1088 .18 8.5	984 .19 7.7	884 .19 7.1	773 .20 7.0	603 .19 7.0				
					1375	1286 .22 10.8	1189 .23 9.8	1093 .23 9.0	998 .24 8.2	901 .25 8.0	781 .25 7.9	618 .24 7.9			
					1500	1403 .29 12.5	1314 .30 11.6	1226 .30 10.7	1138 .31 10.0	1053 .32 9.3	960 .32 9.2	845 .32 9.2	450 .29 9.3		
				1575	1473 .34 13.6	1389 .34 12.6	1305 .35 11.8	1219 .35 11.0	1138 .36 10.3	1054 .37 10.0	964 .37 10.0	688 .36 10.1			
				1625 *	1519 .37 14.4	1438 .38 13.4	1357 .38 12.6	1276 .39 11.8	1195 .40 11.0	1115 .40 10.6	1029 .41 10.6	786 .40 10.7			
ALL OTHER MOTORS					1140 *	1066 .13 7.9	950 .13 6.9	835 .14 6.1	716 .14 5.8	538 .14 5.8					
					1725 *	1613 .44 15.9	1536 .45 14.9	1460 .45 14.1	1383 .46 13.2	1306 .47 12.6	1232 .48 11.9	1154 .48 11.7	964 .49 11.7	677 .46 11.8	

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.

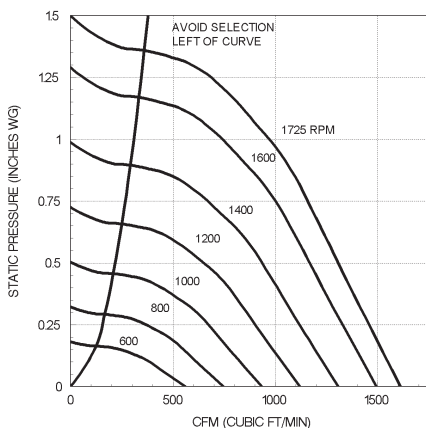
+ RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls.

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_{W1} 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.

VIDK 10 AIR PERFORMANCE

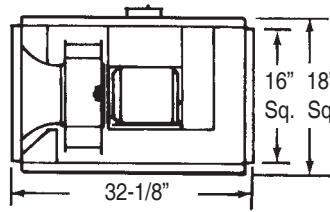


VIDK 10 SOUND PERFORMANCE

		SOUND POWER RE 10 ⁻¹² WATTS									
		OCTAVE BANDS									
RPM	SP	1	2	3	4	5	6	7	8	LWA	
875	.000	51	58	57	55	61	56	45	34	63	
	.125	52	57	55	52	55	51	43	36	58	
1075	.000	56	62	64	58	66	63	53	42	69	
	.250	58	61	62	56	57	56	49	43	62	
	.500	61	62	60	55	55	55	49	42	61	
1625	.000	73	69	75	72	70	74	68	57	78	
	.500	73	70	74	70	66	67	63	56	73	
	1.000	73	72	75	69	64	65	62	55	72	

VIDK 12 DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 3.27 x RPM
Unit Weight = 75 Lbs.
Outlet Velocity (FPM) = .562 x CFM

RPM Range - Motor HP					RPM	STATIC PRESSURE, INCHES W.G.							
						.000	.125	.250	.375	.500	.625	.750	1.000
F4+ 1/20	J3+ 1/8	M2+ 1/3	P2+ 1/2	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	636 .01 2.3	300 .01 1.1						
					700	809 .03 3.6	601 .03 2.5						
					800	925 .04 4.7	748 .05 3.6	484 .05 3.1					
					825 *	953 .05 5.0	784 .05 3.9	547 .05 3.3					
					900	1040 .06 6.0	888 .07 4.9	700 .07 4.2	273 .05 3.8				
					975	1127 .08 7.2	990 .09 5.9	826 .09 5.1	580 .08 4.6				
					1050	1213 .10 8.2	1090 .11 7.0	939 .11 6.0	762 .11 5.5	383 .09 5.2			
					1075 *	1242 .11 8.5	1123 .11 7.3	976 .12 6.3	810 .12 5.8	503 .11 5.4			
					1175	1358 .14 9.7	1251 .15 8.6	1121 .15 7.6	980 .16 7.0	793 .15 6.6	434 .13 6.3		
					1275	1473 .18 11.0	1375 .19 9.9	1259 .19 9.0	1134 .20 8.3	994 .20 7.8	792 .19 7.5	402 .15 7.3	
					1375	1589 .22 12.2	1498 .23 11.3	1395 .24 10.5	1280 .25 9.7	1162 .25 9.1	1024 .25 8.8	810 .24 8.5	
					1500	1733 .29 13.9	1649 .30 13.0	1562 .31 12.2	1456 .32 11.5	1350 .32 10.8	1237 .33 10.4	1112 .33 10.0	621 .27 9.5
				1575	1820 .33 15.3	1740 .35 14.3	1663 .36 13.5	1560 .37 12.7	1459 .37 12.0	1358 .38 11.5	1240 .38 11.2	902 .35 10.9	
				1625 *	1878 .37 16.2	1800 .38 15.3	1724 .39 14.4	1629 .40 13.6	1531 .41 12.9	1433 .41 12.3	1325 .42 11.9	1034 .40 11.7	
ALL OTHER MOTORS					1140 *	1317 .13 9.3	1209 .14 8.1	1070 .14 7.2	921 .14 6.6	708 .14 6.2			
					1725 *	1993 .44 18.2	1920 .45 17.3	1848 .47 16.4	1764 .48 15.6	1672 .48 14.8	1580 .49 14.0	1487 .50 13.6	1268 .49 12.9

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

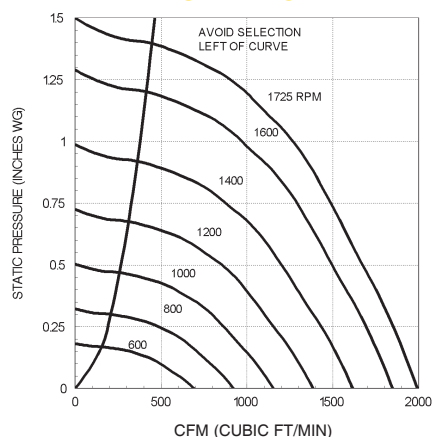
** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.

* Base Unit - As run motor speeds.

+ RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls.

Performance ratings do not include the effects of accessories.

VIDK 12 AIR PERFORMANCE



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_{W1} 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.

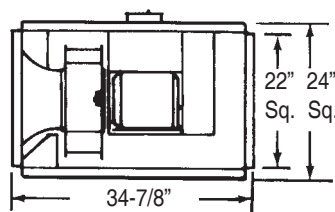
VIDK 12 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
825	.000	55	60	58	55	59	58	44	31	63
	.125	55	58	55	52	55	52	42	32	58
1075	.000	62	65	66	61	63	67	55	42	70
	.250	62	62	63	58	60	60	51	42	65
	.500	64	64	62	56	56	55	49	44	61
1625	.000	78	75	79	75	71	74	72	59	79
	.500	77	74	76	72	68	69	67	57	76
	1.000	76	75	76	70	66	66	63	56	74

VIDK 15

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 4.06 x RPM

Unit Weight = 90 Lbs.

Outlet Velocity (FPM) = .298 x CFM

RPM Range - Motor HP			RPM	STATIC PRESSURE, INCHES W.G.								
K4+ 1/6	M3+ 1/3	.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**			450	975 .02 2.0	567 .02 1.1							
			500	1084 .03 2.5	752 .03 1.7							
			550	1192 .04 3.1	906 .05 2.3							
			600	1300 .05 3.7	1050 .06 3.0	621 .06 2.5						
			650	1409 .06 4.4	1180 .07 3.7	859 .07 3.1						
			700	1517 .08 5.1	1308 .09 4.4	1039 .09 3.8						
			750	1625 .10 5.8	1433 .11 5.1	1198 .12 4.6	853 .11 4.0					
			800	1734 .12 6.5	1556 .13 5.9	1347 .14 5.3	1067 .14 4.8					
			825 *	1788 .13 6.9	1617 .14 6.3	1420 .15 5.7	1157 .15 5.2	680 .13 4.9				
			875	1896 .16 7.7	1735 .17 7.0	1554 .18 6.5	1333 .18 6.0	1025 .18 5.4				
			925	2005 .18 8.4	1852 .20 7.8	1684 .21 7.3	1486 .22 6.7	1236 .22 6.2	819 .19 6.0			
			975	2113 .22 9.2	1968 .23 8.6	1811 .24 8.1	1635 .25 7.5	1416 .25 7.0	1131 .25 6.6			
		1025	2221 .25 10.0	2084 .27 9.4	1937 .28 8.9	1781 .29 8.4	1585 .30 7.8	1349 .29 7.4	978 .27 7.2			
		1075 *	2330 .29 10.8	2198 .30 10.2	2062 .32 9.7	1912 .33 9.2	1737 .34 8.7	1530 .34 8.2	1270 .33 7.8			
ALL OTHER MOTORS			1140 *	2471 .34 11.9	2347 .36 11.4	2222 .38 10.8	2080 .39 10.4	1930 .40 9.9	1753 .41 9.4	1540 .40 9.0		

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

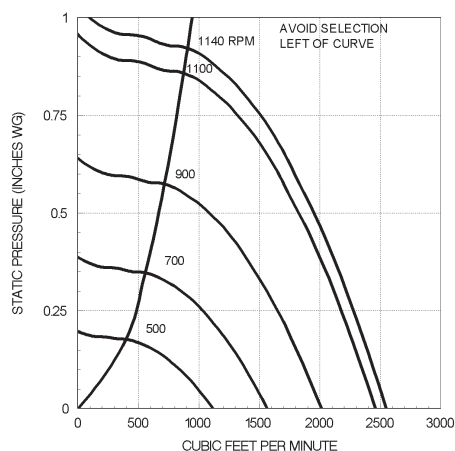
**** To be Speed Controllable, motor must have 115/1 ODP. Other voltages and enclosures are non-speed controllable.**

* Base Unit - As run motor speeds.

+ RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls.

Performance ratings do not include the effects of accessories.

VIDK 15 AIR PERFORMANCE



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 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.

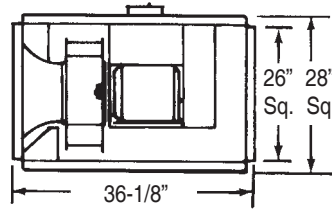
VIDK 15 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
825	.000	66	64	64	64	64	57	50	43	67
	.125	65	65	64	63	61	55	49	42	65
	.250	65	65	63	60	59	53	47	41	63
	.500	64	63	60	56	56	52	47	42	60
1075	.000	75	72	71	71	70	65	58	51	74
	.250	74	72	71	69	68	63	57	50	72
	.500	73	72	70	67	65	61	55	49	70
	.750	73	71	70	64	62	59	55	49	67

VIDK 18

DIRECT DRIVE

PERFORMANCE DATA



DESIGN DATA

Tip Speed = 4.94 x RPM
Unit Weight = 140 Lbs.
Outlet Velocity (FPM) = .213 x CFM

RPM Range - Motor HP			RPM	STATIC PRESSURE, INCHES W.G.								
M4+ 1/3	*R3+ 3/4	.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	2216 .16 8.4	1907 .17 5.7	1478 .16 4.8	673 .13 4.4					
			650	2400 .20 9.5	2120 .21 7.0	1766 .21 5.8	1238 .19 5.4					
			700	2585 .25 10.8	2330 .26 8.3	2017 .27 7.1	1598 .25 6.6	888 .21 6.2				
			750	2770 .31 12.3	2536 .32 10.0	2261 .33 8.7	1899 .32 8.2	1425 .29 7.7	380 .19 7.2			
			800	2954 .37 13.8	2736 .39 11.9	2486 .40 10.8	2183 .39 10.1	1789 .37 9.5	1221 .34 8.9			
			825*	3047 .41 14.5	2835 .43 13.0	2595 .43 11.9	2309 .43 11.1	1949 .42 10.5	1474 .39 9.9	473 .27 9.3		
			875	3231 .49 16.1	3031 .51 14.5	2810 .52 13.4	2558 .52 12.6	2246 .51 12.0	1866 .49 11.3	1322 .44 10.8		
			925	3416 .58 17.9	3227 .60 16.0	3022 .61 14.9	2800 .61 13.9	2527 .61 13.3	2195 .60 12.7	1801 .55 12.2		
			975	3601 .68 19.8	3421 .70 17.6	3232 .71 16.3	3023 .72 15.3	2779 .72 14.7	2491 .71 14.1	2158 .66 13.6	1024 .55 12.5	
			1025	3785 .79 22	3614 .81 19.5	3440 .82 17.9	3241 .83 16.8	3025 .84 16.1	2778 .83 15.5	2475 .81 15.0	1694 .72 13.9	
			1075 *	3970 .91 24	3807 .93 22	3645 .95 19.5	3456 .96 18.4	3266 .97 17.4	3031 .96 16.9	2770 .95 16.4	2137 .89 15.4	778 .63 14.4
	ALL OTHER MOTORS			1140 *	4210 1.08 27	4056 1.11 24	3904 1.13 22	3732 1.14 21	3553 1.15 19.7	3353 1.15 19.1	3131 1.14 18.6	2588 1.07 17.5

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. AMCA Seal for sound rating does not apply to units with speed controls.

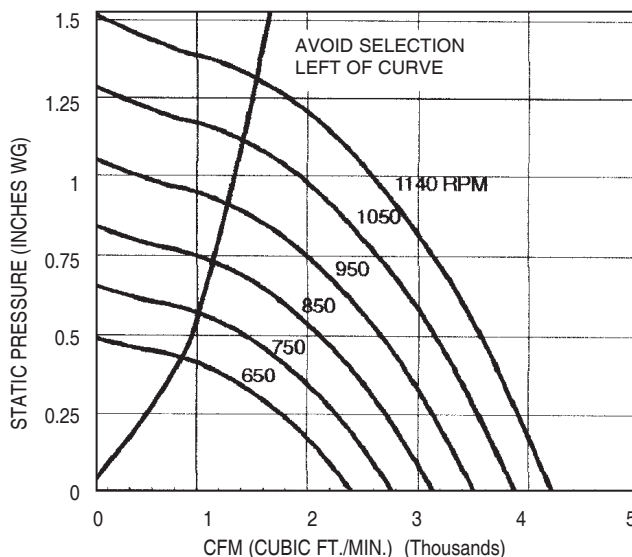
Performance ratings do not include the effects of accessories.

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_{W1} 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.

VIDK 18 AIR PERFORMANCE



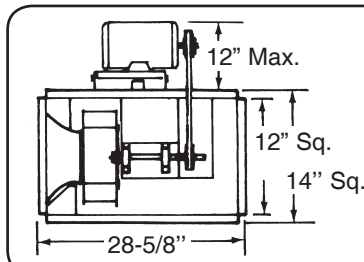
VIDK 18 SOUND PERFORMANCE

RPM	SP	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								
		1	2	3	4	5	6	7	8	LWA
825	.000	81	83	80	76	72	69	57	49	78
	.125	81	83	76	72	68	66	56	49	75
	.250	82	83	72	69	65	62	54	48	72
	.500	80	81	69	66	62	59	53	47	70
	.750	77	79	69	66	60	57	53	47	69
1075	.000	89	88	86	87	75	81	66	58	87
	.250	90	88	82	82	72	75	64	57	82
	.500	90	88	77	76	70	70	61	55	79
	.750	90	87	76	74	69	68	61	55	77
	1.000	88	85	76	74	68	66	61	55	76

VIBK 06

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = .028 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 65 Lbs.

Outlet Velocity (FPM) = 1.000 x CFM

Tip Speed = 2.75 x RPM

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W. G.																	
K1 (1/6)	K2 (1/6)		K3 (1/6)	K4 (1/6)	K5 (1/6)	L1 (1/4)	M1 (1/3)	P1 (1/2)	.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
K1 (1/6)	K2 (1/6)	K3 (1/6)	K4 (1/6)	K5 (1/6)	L1 (1/4)	M1 (1/3)	P1 (1/2)	600	211 .01 1.1											
								700	246 .01 1.7											
	K3 (1/6)	K4 (1/6)	K5 (1/6)	L1 (1/4)	M1 (1/3)	P1 (1/2)	800	282 .01 2.3	145 .02 1.7											
							900	317 .02 2.9	203 .02 2.4											
	K4 (1/6)	K5 (1/6)	L1 (1/4)	M1 (1/3)	P1 (1/2)	1000	352 .03 3.6	254 .03 3.0												
						1100	387 .04 4.3	300 .04 3.7	183 .04 3.7											
	K5 (1/6)	L1 (1/4)	M1 (1/3)	P1 (1/2)	1200	422 .05 5.0	344 .05 4.4	248 .05 4.4												
					1300	457 .06 5.8	386 .06 5.2	302 .07 5.1	189 .06 5.2											
	L1 (1/4)	M1 (1/3)	P1 (1/2)	1400	493 .08 6.5	428 .08 6.0	353 .08 5.8	260 .08 5.8												
				1500	528 .10 7.3	469 .10 6.8	399 .10 6.5	321 .10 6.5	217 .10 6.6											
	M1 (1/3)	P1 (1/2)	1550	545 .11 7.7	489 .11 7.2	422 .11 6.9	348 .11 6.9	255 .11 7.0												
			1600	563 .12 8.1	509 .12 7.7	444 .12 7.3	374 .12 7.3	290 .12 7.4	149 .11 7.4											
	P1 (1/2)	1650	581 .13 8.6	529 .13 8.1	466 .13 7.7	400 .13 7.7	322 .13 7.7	214 .13 7.8												
		1700	598 .14 9.0	547 .14 8.6	488 .15 8.1	425 .15 8.1	352 .15 8.1	260 .14 8.2												
	M1 (1/3)	P1 (1/2)	1750	616 .16 9.4	567 .16 9.0	509 .16 8.6	449 .16 8.5	380 .16 8.6	298 .16 8.6	158 .15 8.7										
			1800	633 .17 9.9	586 .17 9.4	530 .17 9.1	472 .17 8.9	407 .17 9.0	331 .17 9.1	226 .17 9.1										
	P1 (1/2)	1850	651 .18 10.3	605 .18 9.9	551 .19 9.5	495 .19 9.3	433 .19 9.4	363 .19 9.5	276 .19 9.5											
		1900	669 .20 10.8	623 .20 10.4	572 .20 10.0	517 .20 9.7	459 .21 9.8	394 .20 9.9	314 .20 10.0											
	M1 (1/3)	P1 (1/2)	1950	686 .22 11.2	642 .22 10.9	593 .22 10.5	540 .22 10.2	485 .22 10.3	421 .22 10.4	349 .22 10.5										
			2000	704 .23 11.8	661 .23 11.4	614 .23 11.0	562 .24 10.7	508 .24 10.7	448 .24 10.8	381 .24 10.9										
P1 (1/2)	2050	721 .25 12.2	680 .25 11.9	634 .25 11.5	584 .25 11.2	532 .26 11.2	475 .26 11.2	412 .26 11.3	227 .24 11.5											
	2100	739 .27 12.7	698 .27 12.4	654 .27 12.1	605 .27 11.8	555 .28 11.7	501 .28 11.7	442 .28 11.8	285 .27 12.0											
M1 (1/3)	P1 (1/2)	2150	757 .29 13.2	717 .29 12.9	675 .29 12.6	626 .29 12.3	577 .30 12.2	527 .30 12.3	469 .30 12.4	329 .29 12.5										
		2200	774 .31 13.7	736 .31 13.4	695 .31 13.1	648 .31 12.8	600 .32 12.6	551 .32 12.7	496 .32 12.8	367 .32 13.0										
P1 (1/2)	2250	792 .33 14.2	754 .33 13.9	715 .33 13.6	669 .33 13.4	622 .34 13.1	575 .34 13.2	522 .34 13.3	402 .34 13.5	186 .31 13.7										
	2300	809 .35 14.6	773 .35 14.4	734 .35 14.1	690 .36 13.9	645 .36 13.6	598 .36 13.7	549 .36 13.8	434 .36 14.0	264 .35 14.1										
M1 (1/3)	P1 (1/2)	2350	827 .38 15.1	791 .38 14.8	753 .38 14.6	710 .38 14.4	666 .38 14.1	621 .39 14.1	575 .39 14.2	465 .39 14.5	322 .38 14.6									
		2400	845 .40 15.6	810 .40 15.3	773 .40 15.1	731 .40 14.8	688 .41 14.6	644 .41 14.6	599 .41 14.7	496 .41 14.9	365 .41 15.1									
P1 (1/2)	2450	862 .43 16.2	828 .43 15.9	792 .43 15.6	752 .43 15.4	709 .43 15.1	666 .44 15.0	623 .44 15.1	524 .44 15.4	403 .44 15.6										
	2500	880 .45 16.7	846 .45 16.4	811 .45 16.1	772 .46 15.9	731 .46 15.7	689 .46 15.5	646 .47 15.6	551 .47 15.8	440 .47 16.0	266 .44 16.2									

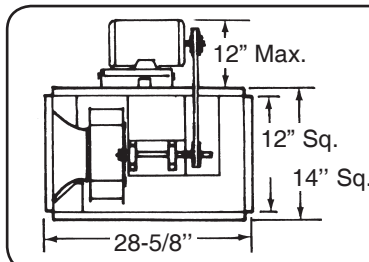
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 08

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = .035 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 65 Lbs.

Outlet Velocity (FPM) = 1.000 x CFM

Tip Speed = 2.75 x RPM

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W. G.											
K1 (1/6)	.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	
K2 (1/6)	650	317 .01 1.6												
	750	366 .01 2.2	183 .01 1.6											
K3 (1/6)	850	415 .02 2.8	268 .02 2.4											
	950	464 .03 3.5	335 .03 3.1											
K4 (1/6)	1050	512 .04 4.2	397 .04 3.9	248 .04 3.5										
	1150	561 .05 4.9	457 .05 4.7	337 .05 4.3										
	1250	610 .06 5.7	515 .07 5.4	411 .07 5.1	266 .06 4.9									
	1350	659 .08 6.5	571 .08 6.2	478 .08 6.0	363 .08 5.7									
	1450	708 .10 7.3	625 .10 7.0	540 .10 6.8	447 .11 6.5	315 .10 6.3								
	1500	732 .11 7.7	652 .11 7.4	571 .11 7.2	483 .12 6.9	365 .11 6.7								
L1 (1/4)	1550	756 .12 8.1	678 .12 7.9	601 .13 7.6	517 .13 7.4	410 .13 7.2	253 .12 7.0							
	1600	781 .13 8.5	705 .13 8.3	631 .14 8.1	550 .14 7.8	455 .14 7.6	327 .14 7.4							
	1650	805 .14 8.9	731 .15 8.7	661 .15 8.5	583 .15 8.3	497 .16 8.0	383 .15 7.8							
	1700	830 .16 9.3	758 .16 9.1	690 .16 9.0	614 .17 8.8	535 .17 8.5	429 .17 8.3	281 1.6 8.2						
M1 (1/3)	1750	854 .17 9.8	784 .18 9.6	719 .18 9.4	645 .18 9.2	570 .18 9.0	475 .18 8.8	355 .18 8.6						
	1800	878 .19 10.3	810 .19 10.1	747 .19 9.9	676 .20 9.7	604 .20 9.4	518 .20 9.3	413 .19 9.1						
	1850	903 .20 10.7	836 .21 10.5	774 .21 10.4	707 .21 10.2	637 .22 9.9	560 .22 9.7	459 .21 9.6						
	1900	927 .22 11.1	862 .22 11.0	802 .23 10.8	737 .23 10.7	670 .24 10.4	598 .24 10.2	504 .23 10.1						
P1 (1/2)	1950	952 .24 11.6	888 .24 11.4	829 .25 11.3	767 .25 11.1	701 .25 10.9	632 .26 10.7	549 .25 10.6	298 .23 10.4					
	2000	976 .25 12.1	914 .26 11.9	856 .27 11.7	797 .27 11.6	732 .27 11.4	666 .28 11.2	591 .28 11.1	386 .26 10.8					
	2050	1000 .27 12.6	940 .28 12.4	883 .29 12.3	827 .29 12.1	764 .29 11.9	700 .30 11.7	632 .30 11.6	444 .29 11.3					
	2100	1025 .29 13.1	966 .30 13.0	910 .31 12.8	856 .31 12.6	794 .31 12.4	733 .32 12.2	668 .32 12.1	497 .31 11.9					
	2150	1049 .32 13.6	991 .32 13.4	937 .33 13.3	884 .33 13.1	825 .34 13.0	766 .34 12.8	702 .34 12.6	542 .34 12.4	246 .30 12.4				
	2200	1074 .34 14.1	1017 .35 13.9	964 .35 13.8	912 .36 13.6	855 .36 13.5	796 .36 13.4	736 .37 13.2	588 .36 13.0	374 .34 12.8				
	2250	1098 .36 14.6	1042 .37 14.4	990 .38 14.3	940 .38 14.1	885 .38 14.0	828 .39 13.8	770 .39 13.7	632 .39 13.5	448 .38 13.3				
	2300	1122 .39 15.1	1068 .39 14.9	1017 .40 14.8	967 .40 14.6	915 .41 14.5	859 .41 14.4	803 .42 14.2	674 .42 14.0	506 .41 13.8				
	2350	1147 .41 15.6	1093 .42 15.4	1043 .43 15.3	995 .43 15.1	944 .44 15.0	889 .44 14.9	836 .44 14.7	716 .45 14.5	557 .44 14.3	251 .39 14.3			
	2400	1171 .44 16.1	1119 .45 16.0	1069 .45 15.8	1022 .46 15.7	974 .46 15.5	920 .47 15.4	866 .47 15.2	754 .48 14.9	603 .47 14.8	389 .44 14.7			
	2450	1196 .47 16.7	1144 .48 16.5	1095 .48 16.4	1049 .49 16.2	1003 .49 16.0	950 .50 15.9	897 .50 15.8	789 .51 15.6	648 .50 15.4	474 .48 15.1			
	2500	1220 .50 17.2	1170 .50 17.1	1121 .51 16.9	1076 .52 16.8	1031 .52 16.6	980 .53 16.5	928 .53 16.3	823 .54 16.0	694 .53 15.8	532 .52 15.6			

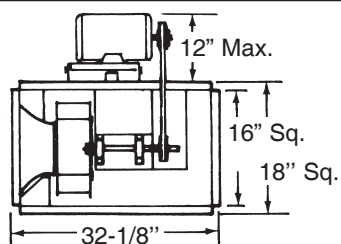
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 10

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = .095 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 80 Lbs.
 Outlet Velocity (FPM) = .562 x CFM
 Tip Speed = 3.27 x RPM

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	608 .02 3.1											
	750	701 .04 3.8	225 .04 2.5										
L1 (1/4)	850	795 .05 4.7	461 .06 3.3										
	950	888 .07 5.9	609 .08 4.3										
M1 (1/3)	1050	982 .10 7.3	732 .11 5.2	247 .09 5.1									
	1150	1075 .13 8.8	846 .14 6.3	558 .14 6.1									
P1 (1/2)	1250	1169 .17 9.2	957 .18 7.3	732 .19 6.8									
	1350	1262 .21 10.4	1067 .22 8.6	869 .23 7.7	562 .22 7.6								
R1 (3/4)	1400	1309 .24 11.1	1120 .25 9.3	932 .26 8.2	667 .25 8.1								
	1450	1356 .26 11.7	1173 .27 9.9	993 .29 8.7	760 .29 8.6								
S1 (1)	1500	1403 .29 12.4	1226 .30 10.6	1053 .32 9.2	845 .32 9.1	450 .29 9.0							
	1550	1449 .32 13.2	1279 .33 11.4	1110 .35 9.9	927 .35 9.6	625 .33 9.6							
T1 (1-1/2)	1600	1496 .35 13.9	1331 .36 12.1	1167 .38 10.6	997 .39 10.1	738 .38 10.1							
	1650	1543 .39 14.6	1382 .40 12.8	1223 .41 11.3	1060 .43 10.7	835 .42 10.7							
	1700	1590 .42 15.4	1434 .44 13.6	1278 .45 12.1	1123 .46 11.3	922 .47 11.2	610 .43 11.3						
	1750	1636 .46 16.1	1485 .47 14.3	1333 .49 12.8	1185 .51 11.9	1005 .51 11.9	744 .49 11.9						
	1800	1683 .50 16.9	1536 .52 15.2	1388 .53 13.6	1246 .55 12.5	1088 .56 12.5	847 .54 12.5						
	1850	1730 .54 17.7	1587 .56 16.0	1442 .57 14.4	1304 .59 13.2	1154 .60 13.1	943 .59 13.2	617 .54 13.2					
	1900	1777 .59 18.5	1637 .60 16.8	1498 .62 15.2	1361 .64 14.0	1218 .65 13.8	1029 .65 13.7	770 .62 13.8					
	1950	1823 .64 19.3	1688 .65 17.6	1552 .67 16.1	1418 .69 14.8	1281 .70 14.4	1113 .70 14.4	885 .69 14.4					
	2000	1870 .69 20	1738 .70 18.4	1606 .72 17.0	1474 .74 15.7	1343 .75 15.1	1196 .76 15.1	982 .74 15.0	675 .68 15.1				
	2050	1917 .74 21	1788 .76 19.3	1659 .77 17.8	1530 .79 16.6	1404 .81 15.7	1267 .82 15.7	1074 .81 15.7	825 .77 15.7				
	2100	1964 .80 22	1837 .81 20	1712 .83 18.6	1585 .85 17.4	1464 .87 16.4	1331 .88 16.3	1159 .88 16.3	943 .85 16.3	494 .74 16.4			
	2150	2010 .85 22	1887 .87 21	1764 .89 19.4	1640 .90 18.2	1522 .93 17.1	1394 .94 16.9	1242 .94 16.9	1041 .92 16.9	770 .88 16.9			
	2200	2057 .91 23	1937 .93 22	1817 .95 20	1695 .96 19.0	1579 .99 17.9	1456 1.01 17.6	1325 1.01 17.5	1137 1.00 17.5	905 .96 17.5			
	2250	2104 .98 24	1986 1.00 22	1869 1.01 21	1749 1.03 19.8	1636 1.05 18.7	1518 1.07 18.2	1393 1.08 18.2	1221 1.08 18.1	1018 1.05 18.2	674 .97 18.2		
	2300	2151 1.05 25	2035 1.06 23	1921 1.08 22	1806 1.09 21	1692 1.12 19.6	1580 1.14 18.9	1457 1.15 18.8	1305 1.15 18.8	1116 1.13 18.8	870 1.08 18.8		
	2350	2197 1.12 26	2085 1.13 24	1972 1.15 23	1860 1.17 22	1748 1.19 20	1639 1.22 19.5	1520 1.23 19.5	1388 1.23 19.4	1212 1.22 19.4	1004 1.18 19.4	570 1.05 19.5	
	2400	2244 1.19 26	2134 1.21 25	2024 1.23 24	1914 1.24 22	1803 1.26 21	1697 1.29 20	1583 1.31 20	1466 1.32 20	1296 1.31 20	1106 1.28 20	851 1.22 20	
	2450	2291 1.26 27	2183 1.28 26	2075 1.30 25	1967 1.32 23	1858 1.34 22	1754 1.37 21	1645 1.39 21	1530 1.40 21	1380 1.39 21	1204 1.37 21	986 1.32 21	

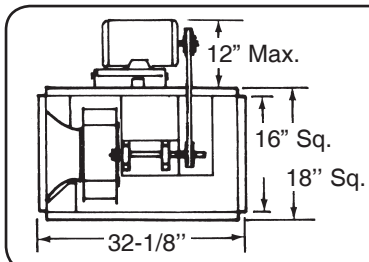
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

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.

VIBK 12

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = .095 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 80 Lbs.

Outlet Velocity (FPM) = .562 x CFM

Tip Speed = 3.27 x RPM

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W. G.											
K1 (1/6)	.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)	600	651 .02 3.4												
	700	759 .03 4.6												
K3 (1/6)	800	867 .05 5.6	523 .05 3.2											
	900	976 .07 6.7	717 .08 4.5											
L1 (1/4)	1000	1084 .09 8.3	871 .11 6.0											
	1100	1193 .12 10.1	1005 .14 7.7	650 .13 6.3										
M1 (1/3)	1200	1301 .16 12.1	1134 .18 9.6	889 .18 7.6										
	1300	1410 .20 11.2	1260 .22 9.3	1056 .23 8.1	633 .21 7.5									
P1 (1/2)	1400	1518 .25 12.5	1384 .27 10.8	1210 .29 9.4	941 .29 8.7									
	1450	1572 .28 13.2	1444 .30 11.5	1281 .32 10.1	1047 .32 9.3									
	1500	1627 .31 13.9	1503 .33 12.2	1348 .35 10.8	1148 .36 10.0	726 .32 9.5								
	1550	1681 .34 14.6	1561 .37 13.0	1413 .39 11.5	1228 .40 10.7	903 .38 10.1								
R1 (3/4)	1600	1735 .37 15.6	1619 .40 13.8	1479 .42 12.3	1306 .44 11.4	1047 .43 10.8								
	1650	1789 .41 16.6	1677 .44 14.8	1543 .46 13.2	1383 .48 12.2	1158 .47 11.5	674 .40 11.3							
	1700	1843 .45 17.5	1734 .48 15.8	1607 .50 14.1	1460 .52 13.1	1263 .52 12.3	908 .48 11.9							
	1750	1898 .49 18.6	1792 .52 16.8	1671 .54 15.2	1534 .57 13.9	1354 .57 13.2	1059 .55 12.5							
S1 (1)	1800	1952 .53 19.6	1849 .56 17.8	1734 .59 16.2	1601 .61 14.8	1434 .62 14.0	1198 .61 13.4	678 .50 13.3						
	1850	2006 .58 21	1906 .61 18.9	1796 .64 17.2	1667 .66 15.7	1512 .67 14.9	1306 .67 14.2	944 .61 13.9						
T1 (1-1/2)	1900	2060 .63 22	1963 .66 20	1859 .69 18.3	1733 .71 16.8	1589 .73 15.8	1411 .73 15.1	1111 .69 14.6						
	1950	2114 .68 23	2019 .71 21	1921 .74 19.4	1798 .76 17.8	1666 .79 16.8	1503 .79 16.0	1255 .77 15.3	779 .65 15.3					
	2000	2169 .73 24	2076 .76 22	1982 .80 20	1863 .82 18.9	1742 .85 17.8	1583 .85 17.0	1373 .84 16.2	1027 .77 15.9					
	2050	2223 .79 25	2132 .82 23	2042 .85 22	1927 .88 19.9	1811 .91 18.6	1662 .92 17.9	1480 .91 17.1	1194 .87 16.6					
	2100	2277 .85 26	2189 .88 24	2100 .92 22	1991 .94 21	1878 .97 19.5	1740 .98 18.7	1584 .99 18.0	1338 .96 17.4	938 .85 17.4				
	2150	2331 .91 27	2245 .94 25	2159 .98 23	2055 1.01 22	1944 1.03 20	1817 1.05 19.6	1669 1.06 18.9	1462 1.04 18.2	1147 .97 18.0				
	2200	2386 .97 28	2301 1.01 26	2217 1.05 24	2118 1.08 23	2009 1.10 21	1893 1.13 20	1749 1.14 19.8	1568 1.13 19.1	1301 1.08 18.7	795 .90 18.9			
	2250	2440 1.04 29	2357 1.08 27	2275 1.11 25	2180 1.15 24	2074 1.18 22	1968 1.20 21	1827 1.21 20	1673 1.22 20	1444 1.18 19.5	1090 1.07 19.4			
2300	2494 1.11 30	2413 1.15 28	2333 1.19 26	2243 1.22 25	2139 1.25 23	2035 1.28 22	1905 1.29 22	1767 1.30 21	1566 1.28 20	1282 1.21 20				
	2350	2548 1.19 31	2469 1.23 29	2390 1.26 27	2305 1.30 26	2204 1.33 24	2102 1.36 23	1982 1.38 22	1847 1.39 22	1672 1.37 21	1427 1.32 21	1057 1.19 21		
2400	2602 1.26 31	2525 1.30 30	2448 1.34 28	2367 1.38 27	2268 1.41 25	2168 1.44 24	2058 1.46 23	1926 1.47 23	1778 1.48 22	1570 1.44 22	1267 1.35 22			
	2450	2657 1.35 32	2581 1.38 31	2505 1.42 29	2429 1.46 28	2331 1.49 26	2234 1.53 25	2134 1.55 24	2004 1.57 24	1875 1.58 23	1683 1.55 22	1426 1.48 22	1021 1.31 22	

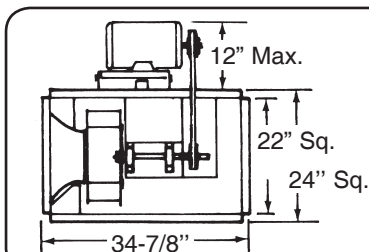
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 15

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = .263 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 95 Lbs.

Outlet Velocity (FPM) = 2.98 x CFM

Tip Speed = 4.06 x RPM

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	1192 .04 3.1											
	600	1300 .05 3.7	621 .06 2.5										
L1 (1/4) M1 (1/3)	650	1409 .06 4.4	859 .07 3.1										
	700	1517 .08 5.1	1039 .09 3.8										
P1 (1/2)	750	1625 .10 5.8	1198 .12 4.6										
	800	1734 .12 6.5	1347 .14 5.3										
R1 (3/4)	850	1842 .14 7.3	1488 .17 6.1	888 .16 5.2									
	900	1950 .17 8.0	1619 .19 6.9	1135 .20 5.8									
S1 (1)	950	2059 .20 8.8	1748 .22 7.7	1327 .23 6.6									
	1000	2167 .23 9.6	1875 .26 8.5	1504 .27 7.4	587 .20 6.9								
T1 (1-1/2)	1050	2276 .27 10.3	2000 .30 9.3	1661 .32 8.3	1148 .30 7.5								
	1100	2384 .31 11.2	2124 .34 10.1	1812 .36 9.1	1380 .36 8.2								
V1 (2)	1150	2492 .35 12.1	2246 .39 11.0	1959 .41 10.0	1577 .41 9.1	569 .28 8.8							
	1200	2601 .40 12.9	2366 .44 11.9	2099 .46 11.0	1756 .47 10.1	1241 .44 9.5							
	1250	2709 .45 13.8	2484 .49 12.9	2230 .52 11.9	1924 .54 11.0	1505 .52 10.3							
	1300	2817 .51 14.7	2601 .55 13.8	2360 .58 12.9	2077 .60 12.0	1719 .60 11.3	969 .48 11.0						
	1350	2926 .57 15.7	2717 .61 14.8	2488 .64 14.0	2227 .67 13.1	1900 .67 12.3	1444 .64 11.7						
	1400	3034 .64 16.8	2833 .68 15.8	2615 .71 15.0	2375 .74 14.2	2078 .75 13.4	1693 .73 12.6						
	1450	3142 .71 17.9	2948 .75 16.9	2741 .79 16.0	2520 .82 15.3	2242 .84 14.5	1909 .83 13.7	1386 .76 13.5					
	1500	3251 .78 19.0	3062 .83 18.0	2866 .87 17.1	2651 .90 16.4	2395 .92 15.6	2091 .92 14.9	1705 .89 14.3					
	1550	3359 .86 20	3177 .91 19.2	2989 .95 18.3	2781 .99 17.5	2545 1.01 16.7	2269 1.02 16.0	1927 1.00 15.3	1386 .90 15.2				
	1600	3467 .95 21	3291 1.00 20	3112 1.04 19.5	2911 1.08 18.7	2693 1.11 18.0	2442 1.12 17.2	2134 1.12 16.4	1727 1.06 16.0				
	1650	3576 1.04 22	3404 1.09 22	3234 1.14 21	3039 1.18 20	2840 1.21 19.2	2595 1.23 18.4	2315 1.23 17.7	1975 1.20 17.0	1360 1.05 17.1			
	1700	3684 1.14 24	3518 1.19 23	3353 1.24 22	3166 1.28 21	2976 1.32 20	2747 1.34 19.5	2493 1.35 18.8	2194 1.33 18.1	1776 1.26 17.9			
	1750	3793 1.24 25	3631 1.30 24	3471 1.35 23	3292 1.39 22	3108 1.43 21	2897 1.46 21	2666 1.47 19.9	2384 1.46 19.3	2049 1.43 18.8	1440 1.25 19.0		
	1800	3901 1.35 26	3743 1.41 25	3588 1.46 24	3417 1.50 23	3238 1.55 22	3044 1.58 22	2820 1.60 21	2564 1.60 20	2270 1.58 20	1862 1.49 19.8		
	1850	4009 1.47 27	3856 1.52 26	3705 1.58 25	3542 1.63 24	3367 1.67 24	3190 1.71 23	2972 1.73 22	2741 1.74 22	2473 1.72 21	2146 1.68 21	1639 1.53 21	
	1900	4118 1.59 28	3968 1.65 27	3821 1.70 26	3665 1.75 26	3496 1.80 25	3322 1.84 24	3122 1.86 23	2910 1.88 23	2654 1.87 22	2367 1.85 22	1981 1.76 22	780 1.18 22
	1950	4226 1.72 29	4080 1.78 28	3937 1.84 28	3788 1.89 27	3623 1.94 26	3457 1.98 25	3271 2.01 25	3064 2.03 24	2833 2.03 23	2578 2.02 23	2262 1.97 23	1786 1.81 23
	1975	4280 1.79 30	4136 1.85 29	3995 1.90 28	3850 1.96 27	3686 2.01 27	3523 2.05 26	3344 2.09 25	3140 2.10 25	2921 2.11 24	2669 2.10 24	2373 2.06 23	1957 1.94 23

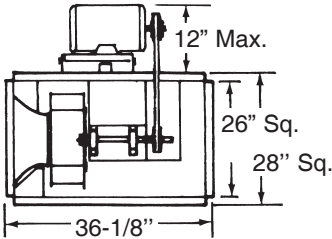
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 18

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = $.690 \times \left[\frac{\text{RPM}}{1000} \right]^3$

Average Weight = 145 Lbs.

Outlet Velocity (FPM) = $.213 \times \text{CFM}$

Tip Speed = $4.94 \times \text{RPM}$

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.												
K1 (1/6)	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 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
K1 (1/6)	M1 (1/3)	550	2043 .10	1316 .12										
		600	2229 .13	1596 .15										
		650	2414 .17	1850 .20										
		700	2600 .21	2090 .24										
	P1 (1/2)	750	2786 .26	2320 .30	1680 .30									
		800	2972 .32	2536 .36	1988 .37									
		850	3157 .38	2749 .42	2266 .44	1474 .40								
		900	3343 .45	2958 .50	2522 .52	1915 .51								
	R1 (3/4)	950	3529 .53	3165 .58	2766 .61	2264 .61	1269 .48							
		1000	3714 .62	3370 .67	3004 .71	2548 .72	1903 .68							
		1050	3900 .72	3573 .77	3235 .82	2824 .83	2294 .81	1183 .63						
		1100	4086 .82	3775 .89	3452 .93	3078 .95	2632 .95	1933 .87						
L1 (1/4)	S1 (1)	1150	4272 .94	3975 1.01	3666 1.05	3322 1.08	2916 1.09	2380 1.05	1292 .83					
		1175	4364 1.00	4075 1.07	3773 1.12	3442 1.15	3055 1.16	2573 1.13	1770 1.01					
		1200	4457 1.07	4173 1.14	3878 1.19	3562 1.23	3193 1.24	2764 1.22	2060 1.11					
		1225	4550 1.14	4272 1.21	3984 1.26	3680 1.30	3329 1.32	2915 1.31	2333 1.25					
	T1 (1-1/2)	1250	4643 1.21	4370 1.28	4088 1.34	3798 1.38	3455 1.40	3058 1.40	2531 1.33	1548 1.11				
		1275	4736 1.28	4468 1.36	4193 1.41	3914 1.46	3578 1.48	3200 1.48	2725 1.44	1980 1.30				
		1300	4829 1.36	4566 1.44	4297 1.49	4023 1.54	3701 1.57	3340 1.57	2917 1.55	2269 1.43				
		1325	4922 1.44	4664 1.52	4400 1.58	4132 1.63	3822 1.66	3478 1.67	3095 1.66	2535 1.58	1419 1.24			
	V1 (2)	1350	5014 1.52	4762 1.60	4503 1.67	4240 1.72	3942 1.75	3615 1.77	3240 1.76	2732 1.68	1920 1.43			
		1375	5107 1.61	4859 1.69	4606 1.76	4347 1.81	4062 1.85	3750 1.87	3382 1.86	2927 1.80	2256 1.64			
		1400	5200 1.70	4956 1.78	4708 1.85	4454 1.90	4181 1.95	3875 1.97	3524 1.96	3119 1.93	2543 1.81	1329 1.44		
		1425	5293 1.79	5053 1.87	4810 1.95	4561 2.00	4299 2.05	3998 2.07	3663 2.07	3309 2.05	2777 1.97	1903 1.62		
W1 (3)	S1 (1)	1450	5386 1.88	5150 1.97	4912 2.05	4667 2.10	4416 2.15	4121 2.18	3802 2.19	3452 2.18	2974 2.09	2295 1.90		
		1475	5479 1.98	5247 2.07	5013 2.15	4772 2.21	4532 2.26	4242 2.29	3939 2.30	3596 2.29	3168 2.23	2584 2.09	1377 1.67	
		1500	5572 2.09	5343 2.18	5114 2.26	4878 2.32	4641 2.37	4363 2.40	4075 2.42	3737 2.42	3360 2.37	2855 2.29	1996 1.87	
		1525	5664 2.19	5440 2.28	5215 2.37	4982 2.43	4750 2.49	4483 2.52	4202 2.54	3878 2.54	3545 2.53	3053 2.41	2379 2.23	
	T1 (1-1/2)	1550	5757 2.30	5536 2.40	5316 2.48	5087 2.54	4858 2.60	4602 2.64	4326 2.67	4017 2.67	3690 2.66	3248 2.57	2669 2.41	1543 1.99
		1575	5850 2.41	5633 2.51	5416 2.60	5191 2.66	4965 2.72	4721 2.77	4448 2.79	4155 2.80	3833 2.79	3442 2.73	2954 2.61	2097 2.19
			47	44	42	40	38	37	36	35	34	33	32	31
	V1 (2)													

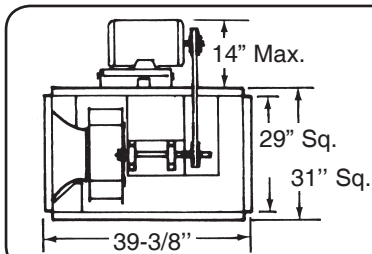
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 21

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = 1.29 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 200 Lbs.

Outlet Velocity (FPM) = .171 x CFM

Tip Speed = 5.76 x RPM

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 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
M1 (1/3)	400	2184 .08 3.7											
	450	2457 .11 4.7	1213 .11 4.3										
P1 (1/2)	500	2730 .15 5.7	1750 .17 5.5										
	550	3003 .21 6.8	2182 .23 6.6										
R1 (3/4)	600	3276 .27 7.8	2558 .29 7.4	1117 .24 7.1									
	650	3548 .34 8.8	2907 .37 8.4	1876 .35 8.2									
S1 (1)	700	3821 .42 9.9	3235 .46 9.4	2408 .46 9.3									
	750	4094 .52 11.0	3556 .56 10.6	2868 .57 10.6	1665 .49 10.2								
T1 (1-1/2)	800	4367 .63 12.3	3872 .68 11.9	3255 .70 11.9	2341 .65 11.6								
	850	4640 .76 13.6	4183 .81 13.2	3629 .84 13.2	2881 .82 13.0	1612 .68 12.6							
V1 (2)	875	4777 .83 14.2	4333 .88 13.9	3813 .91 13.8	3115 .90 13.4	2058 .80 13.4							
	900	4913 .90 14.8	4481 .95 14.6	3983 .99 14.5	3344 .98 14.6	2427 .91 14.2							
W1 (3)	925	5050 .98 15.5	4630 1.03 15.3	4150 1.07 15.2	3565 1.08 15.3	2717 1.01 14.9	995 .69 14.5						
	950	5186 1.06 16.2	4777 1.12 16.0	4314 1.16 15.9	3759 1.17 16.1	2995 1.12 15.8	1795 .94 15.3						
	975	5223 1.15 17.0	4924 1.20 16.8	4478 1.25 16.7	3950 1.26 16.8	3265 1.23 16.6	2251 1.09 16.1						
	1000	5459 1.24 17.7	5071 1.30 17.5	4640 1.34 17.4	4139 1.36 17.5	3500 1.34 17.4	2622 1.23 17.0						
	1050	5732 1.43 19.2	5362 1.49 19.0	4962 1.54 18.8	4511 1.58 18.9	3960 1.57 19.0	3214 1.49 18.7	2168 1.32 18.3					
	1075	5869 1.54 19.9	5507 1.60 19.7	5121 1.65 19.4	4694 1.69 19.6	4170 1.69 19.7	3489 1.63 19.4	2570 1.48 19.1					
	1100	6005 1.65 21	5652 1.71 20	5279 1.77 20	4863 1.81 20	4364 1.81 20	3744 1.77 20	2939 1.65 20	1454 1.27 20				
	1125	6142 1.76 21	5796 1.83 21	5436 1.89 21	5030 1.93 21	4555 1.94 21	3978 1.91 21	3240 1.81 21	2144 1.57 20				
	1150	6278 1.88 22	5940 1.95 22	5593 2.01 21	5195 2.05 21	4744 2.07 21	4209 2.05 21	3519 1.96 21	2609 1.78 21				
	1175	6415 2.01 23	6084 2.08 22	5748 2.14 22	5360 2.19 22	4931 2.21 22	4437 2.20 22	3793 2.13 22	2982 1.98 22	1507 1.53 22			
	1200	6551 2.14 23	6227 2.21 23	5903 2.28 23	5523 2.32 23	5117 2.35 23	4648 2.35 23	4054 2.29 23	3328 2.17 22	2234 1.89 22			
	1225	6688 2.27 24	6370 2.35 24	6053 2.42 23	5685 2.46 23	5301 2.50 23	4841 2.50 23	4289 2.46 23	3610 2.35 23	2723 2.14 23			
	1250	6824 2.42 25	6513 2.49 24	6202 2.56 24	5846 2.61 24	5480 2.66 24	5033 2.66 24	4521 2.62 24	3887 2.53 24	3097 2.36 24	1762 1.92 24		
	1275	6961 2.56 26	6656 2.64 25	6351 2.71 25	6006 2.77 25	5648 2.81 25	5223 2.82 25	4750 2.80 25	4161 2.73 25	3464 2.59 24	2418 2.28 24		
	1300	7097 2.72 26	6798 2.79 26	6499 2.87 26	6166 2.93 25	5814 2.97 25	5411 2.99 25	4976 2.98 25	4415 2.79 25	3752 2.79 25	2899 2.56 25		
	1325	7233 2.88 27	6940 2.96 27	6647 3.03 26	6325 3.09 26	5980 3.14 26	5597 3.17 26	5173 3.16 26	4650 3.11 26	4031 3.00 26	3272 2.81 26	2101 2.40 26	
	1350	7370 3.04 28	7082 3.12 27	6794 3.20 27	6483 3.27 27	6144 3.32 27	5782 3.35 27	5366 3.34 27	4882 3.31 27	4306 3.22 27	3640 3.06 27	2679 2.75 26	

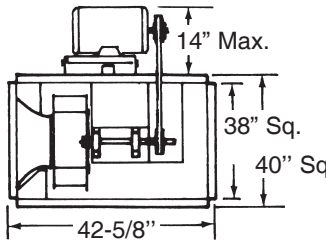
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 24

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

Max BHP = $3.22 \times \left[\frac{\text{RPM}}{1000} \right]^3$

Average Weight = 250 Lbs.

Outlet Velocity (FPM) = $.099 \times \text{CFM}$

Tip Speed = $6.68 \times \text{RPM}$

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
M1 (1/3)	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
P1 (1/2)	400	3752 .19 7.2	2208 .19 4.8										
R1 (3/4)	450	4220 .27 9.0	2980 .29 6.2										
S1 (1)	500	4689 .38 10.6	3633 .40 7.6										
T1 (1-1/2)	550	5185 .50 12.4	4248 .54 9.2	2842 .50 8.2									
	575	5393 .57 13.4	4533 .61 10.2	3286 .58 9.0									
	600	5627 .65 14.4	4806 .69 11.3	3709 .69 9.8									
V1 (2)	625	5862 .74 15.4	5077 .78 12.3	4058 .78 10.7	2259 .63 9.9								
	650	6096 .83 16.4	5345 .87 13.3	4399 .88 11.6	2951 .79 10.8								
	675	6331 .93 17.5	5610 .97 14.5	4732 .99 12.5	3506 .93 11.7								
W1 (3)	700	6565 1.03 18.6	5874 1.08 15.7	5049 1.11 13.5	3950 1.05 12.7								
	725	6800 1.15 19.8	6135 1.20 16.8	5361 1.23 14.5	4384 1.19 13.7	2703 .99 12.9							
	750	7034 1.27 21	6395 1.32 18.0	5669 1.36 15.7	4755 1.34 14.7	3395 1.22 13.9							
X1 (5)	775	7269 1.40 22	6654 1.46 19.3	5973 1.50 16.9	5101 1.49 15.7	3958 1.36 14.9							
	800	7503 1.54 23	6911 1.60 21	6265 1.65 18.2	5441 1.65 16.8	4415 1.55 16.0	2177 1.14 15.3						
	825	7737 1.69 25	7165 1.75 22	6540 1.80 19.4	5773 1.81 17.9	4853 1.74 17.1	3431 1.55 16.3						
Y1 (7-1/2)	850	7972 1.85 26	7417 1.91 23	6813 1.96 21	6091 1.98 19.0	5267 1.95 18.2	4056 1.80 17.4						
	875	8206 2.02 28	7667 2.11 25	7084 2.14 22	6405 2.16 20	5616 2.14 19.3	4590 2.03 18.6	2215 1.34 17.9					
	900	8441 2.20 29	7916 2.26 26	7353 2.32 23	6715 2.35 21	5960 2.34 20	5035 2.22 19.6	3653 1.99 18.9					
	925	8675 2.39 30	8165 2.45 27	7620 2.51 24	7022 2.55 22	6299 2.55 21	5471 2.46 21	4304 2.30 19.9					
	950	8910 2.59 31	8412 1.65 28	7886 2.71 26	7326 2.76 24	6633 2.77 22	5884 2.22 22	4866 2.51 20	3155 2.15 20				
	975	9144 2.79 33	8659 2.86 29	8150 2.93 27	7620 2.99 25	6951 2.99 23	6233 2.96 23	5322 2.80 22	4027 2.55 21				
	1000	9379 3.02 34	8906 3.09 31	8412 3.15 28	7896 3.21 26	7266 3.23 24	6578 3.20 24	5762 3.08 23	4669 2.91 22				
	1025	9613 3.25 35	9152 3.32 32	8674 3.39 29	8170 3.45 27	7578 3.47 25	6918 3.46 25	6195 3.37 24	5231 3.15 23	3815 2.80 23			
	1050	9848 3.49 37	9397 3.57 34	8934 3.64 31	8442 3.70 28	7887 3.73 27	7255 3.73 26	6576 3.68 25	5693 3.49 24	4520 3.26 24			
	1075	10082 3.75 38	9642 3.82 35	9193 3.90 32	8712 3.96 30	8193 4.01 28	7580 4.01 27	6924 3.97 26	6134 3.82 26	5126 3.64 25	3206 2.92 24		
	1100	10317 4.01 40	9886 4.09 36	9451 4.17 34	8981 4.23 31	8496 4.29 29	7897 4.29 28	7268 4.27 27	6568 4.15 27	5684 4.01 26	4410 3.60 25		
	1125	10551 4.29 41	10130 4.37 38	9708 4.45 35	9248 4.52 33	8789 4.59 31	8211 4.59 29	7608 4.58 28	6975 4.52 28	6131 4.30 27	5092 4.10 27	2508 2.67 26	
	1150	10786 4.59 43	10374 4.67 40	9964 4.75 37	9515 4.82 34	9065 4.89 32	8522 4.91 30	7944 4.91 30	7325 4.85 29	6571 4.67 28	5658 4.38 28	4379 4.01 27	
	1175	11020 4.89 44	10617 4.98 41	10217 5.06 38	9779 5.13 36	9340 5.20 34	8831 5.23 32	8270 5.24 31	7670 5.19 30	7006 5.06 30	6177 4.91 29	5083 4.57 29	2249 2.84 28
	1200	11255 5.21 46	10860 5.30 43	10468 5.38 40	10043 5.45 37	9612 5.53 35	9137 5.57 33	8588 5.58 32	8012 5.55 31	7419 5.49 31	6623 5.24 30	5689 5.05 30	4418 4.47 29

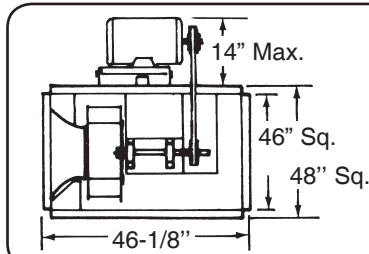
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 30

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = 8.10 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 335 Lbs.

Outlet Velocity (FPM) = .068 x CFM

Tip Speed = 8.12 x RPM

RPM Range - Motor HP		RPM	STATIC PRESSURE, INCHES W. G.																							
P1 (1/2)	.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	
			SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	SONES	
R1 (3/4)	S1 (1)	275	4436 .13 5.8																							
		300	4840 .17 6.9																							
		325	5243 .22 8.2	2794 .26 6.1																						
		350	5646 .27 9.6	3571 .34 6.4																						
T1 (1-1/2)	V1 (2)	375	6050 .34 11.1	4248 .42 7.2																						
		400	6453 .41 11.9	4824 .50 8.3																						
		425	6856 .49 12.7	5377 .60 9.4																						
		450	7259 .58 13.6	5902 .70 10.4	3622 .68 9.9																					
W1 (3)	X1 (5)	475	7663 .68 14.4	6386 .81 11.5	4467 .84 10.4																					
		500	8066 .80 15.3	6863 .93 12.5	5189 .99 11.0																					
		525	8469 .92 16.4	7333 1.07 13.6	5866 1.15 11.8	3112 .97 12.6																				
		550	8873 1.06 17.9	7797 1.22 15.2	6468 1.32 13.1	4397 1.29 13.2																				
Y1 (7-12) C1 (10)		575	9276 1.21 19.5	8257 1.38 16.7	7031 1.49 14.4	5247 1.53 13.9																				
		600	9679 1.38 21	8712 1.55 18.3	7582 1.68 15.9	6013 1.77 14.7																				
		625	10083 1.56 23	9156 1.74 20	8123 1.88 17.4	6700 2.01 15.7	4620 1.76 16.3																			
		650	10486 1.75 25	9596 1.94 22	8611 2.09 19.2	7371 2.27 17.2	5588 2.09 17.0																			
		675	10889 1.96 27	10034 2.16 24	9094 2.32 21	7954 2.53 18.7	6425 2.41 17.8	3808 1.94 18.4																		
		700	11292 2.19 29	10468 2.39 26	9571 2.56 23	8516 2.79 20	7142 2.71 18.7	5223 2.49 19.3																		
		725	11696 2.43 32	10901 2.64 28	10043 2.83 25	9070 3.08 22	7826 3.02 20	6189 2.90 20																		
		750	12099 2.69 34	11332 2.91 30	10511 3.10 27	9616 3.39 24	8496 3.36 22	7029 3.29 21	4923 2.89 22																	
		775	12502 2.97 35	11761 3.19 32	10975 3.40 29	10136 3.71 26	9083 3.69 24	7773 3.67 22	6106 3.47 23																	
		800	12906 3.27 37	12189 3.50 33	11436 3.72 30	10623 4.04 27	9648 4.03 25	8462 4.06 23	6977 3.92 23	4606 3.27 25																
		825	13309 3.58 38	12615 3.82 34	11893 4.06 31	11105 4.40 29	10205 4.39 27	9138 4.47 25	7813 4.39 24	6027 4.04 25																
		850	13712 3.92 39	13040 4.16 36	12348 4.41 33	11582 4.77 30	10755 4.77 28	9779 4.89 26	8544 4.84 25	7056 4.64 26																
		875	14116 4.28 40	13463 4.53 37	12792 4.78 34	12056 5.17 32	11297 5.17 30	10349 5.30 28	9233 5.31 27	7903 5.17 26	6113 4.72 28															
		900	14519 4.65 41	13886 4.91 38	13233 5.18 36	12526 5.59 33	11804 5.59 31	10912 5.73 29	9910 5.80 28	8722 5.73 27	7245 5.47 28															
		925	14922 5.05 42	14307 5.32 40	13672 5.59 37	12993 6.04 35	12290 6.02 33	11468 6.18 31	10571 6.31 29	9420 6.25 28	8098 6.06 29	6338 5.53 31														
		950	15325 5.47 44	14728 5.74 41	14109 6.02 39	13457 6.50 36	12772 6.47 34	12017 6.66 32	11144 6.79 31	10106 6.80 30	8935 6.69 30	7516 6.40 31														
		975	15729 5.92 45	15148 6.19 43	14545 6.48 40	13918 7.00 38	13251 6.95 36	12560 7.16 34	11709 7.30 32	10782 7.37 31	9685 7.30 31	8383 7.06 31	6679 6.47 33													
		1000	16132 6.38 47	15567 6.67 44	14979 6.96 42	14376 7.51 39	13725 7.46 37	13075 7.68 35	12268 7.83 34	11438 7.97 33	10377 7.91 32	9223 7.76 32	7858 7.43 33	5559 6.26 35												

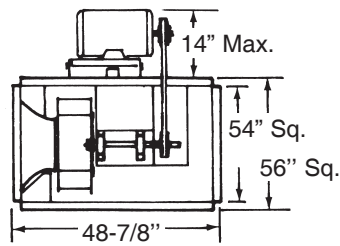
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

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.

VIBK 36

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = 21.3 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 450 Lbs.
 Outlet Velocity (FPM) = .049 x CFM
 Tip Speed = 9.62 x RPM

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
R1 (3/4)	RPM	.000 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	1.500 CFM BHP SONES	1.750 CFM BHP SONES	2.000 CFM BHP SONES	2.250 CFM BHP SONES
S1 (1)	250	7141 .30 8.3	1999 .22 3.1										
	270	7713 .37 9.3	4261 .39 4.2										
	290	8284 .46 10.3	5629 .50 5.4										
	310	8855 .57 11.3	6615 .63 6.6	2755 .46 5.0									
T1 (1-1/2)	330	9426 .68 12.4	7552 .77 8.0	5141 .71 6.1									
	350	9998 .82 13.5	8287 .91 9.3	6633 .88 7.3									
	370	10569 .96 14.6	9006 1.07 10.7	7630 1.06 8.5	4637 .93 7.1								
	390	11140 1.13 15.8	9685 1.24 12.0	8597 1.26 9.9	6933 1.20 8.4	2731 .75 7.1							
V1 (2)	410	11712 1.31 16.9	10355 1.43 13.4	9466 1.47 11.4	7955 1.42 9.7	4725 1.22 8.4							
	430	12283 1.51 18.1	11010 1.64 14.8	10199 1.69 12.9	8946 1.66 11.1	7088 1.58 9.7	3218 1.06 8.4						
	450	12854 1.73 19.3	11653 1.87 16.2	10920 1.92 14.5	9911 1.93 12.7	8469 1.87 11.2	5285 1.63 9.9						
	470	13426 1.97 20	12290 2.12 17.6	11603 2.17 16.0	10803 2.22 14.3	9473 2.16 12.7	7647 2.06 11.5						
W1 (3)	490	13997 2.24 22	12922 2.39 18.9	12277 2.45 17.5	11539 2.50 15.9	10451 2.48 14.3	9127 2.40 13.0	3183 1.38 10.5					
	510	14568 2.52 23	13548 2.69 20	12943 2.74 18.9	12264 2.80 17.4	11408 2.82 15.9	10136 2.75 14.6	4885 2.16 12.2					
	530	15139 2.83 24	14158 3.00 22	13593 3.06 20	12966 3.13 18.9	12246 3.18 17.5	11121 3.12 16.0	7375 2.86 13.7					
	550	15711 3.16 26	14765 3.34 23	14235 3.41 22	13645 3.47 20	12980 3.53 18.9	12085 3.53 17.6	9651 3.36 15.2	3736 2.03 13.1				
X1 (5)	570	16282 3.52 27	15370 3.70 24	14873 3.78 23	14316 3.85 22	13704 3.91 20	13022 3.96 19.1	10753 3.79 16.7	5436 3.01 14.7				
	590	16853 3.91 28	15972 4.09 26	15507 4.18 24	14982 4.25 23	14409 4.32 22	13762 4.37 21	11759 4.26 17.8	7949 3.92 16.2	2232 1.74 14.3			
	610	17425 4.32 30	16572 4.51 27	16137 4.60 26	15632 4.67 25	15089 4.75 23	14492 4.81 22	12744 4.75 19.6	10238 4.53 17.7	4705 3.11 15.9			
	630	17996 4.76 31	17170 4.96 29	16757 5.06 27	16275 5.13 26	15762 5.20 25	15214 5.28 24	13711 5.29 21	11651 5.10 19.2	6667 4.26 17.5			
Y1 (7-1/2)	650	18567 5.22 32	17767 5.43 30	17367 5.53 29	16914 5.61 28	16431 5.69 27	15911 5.77 25	14661 5.86 23	12665 5.66 21	9135 5.29 19.1	4358 3.32 17.4		
	670	19139 5.72 34	18362 5.93 31	17974 6.04 30	17549 6.13 29	17089 6.20 28	16589 6.29 27	15475 6.41 25	13660 6.27 22	11415 6.03 21	5977 4.69 19.1		
	680	19424 5.98 34	18659 6.20 32	18277 6.30 31	17866 6.40 30	17412 6.48 29	16927 6.56 28	15844 6.69 25	14150 6.58 23	12242 6.38 21	7141 5.33 19.9	2323 2.54 18.3	
	690	19710 6.25 35	18956 6.47 33	18579 6.58 32	18181 6.68 31	17735 6.75 30	17263 6.84 28	16210 6.98 26	14637 6.91 24	12757 6.70 22	8400 5.97 21	4257 3.69 19.1	
C1 (10)	700	19996 6.52 36	19252 6.75 34	18881 6.86 33	18496 6.96 32	18056 7.04 30	17597 7.12 29	16575 7.27 27	15120 7.24 25	13266 7.03 23	9626 6.58 22	5078 4.44 20	
	710	20281 6.81 37	19549 7.03 35	19182 7.15 33	18811 7.26 32	18376 7.33 31	17931 7.42 30	16938 7.58 28	15599 7.58 26	13771 7.38 24	10777 7.00 22	5888 5.23 21	
	720	20567 7.10 37	19844 7.33 35	19483 7.44 34	19122 7.56 33	18696 7.64 32	18263 7.72 31	17229 7.89 29	16074 7.94 27	14272 7.73 25	11914 7.43 23	6749 6.02 22	
	730	20852 7.40 38	20140 7.63 36	19784 7.75 35	19427 7.86 34	19015 7.95 33	18592 8.03 32	17658 8.21 30	16546 8.31 27	14768 8.09 25	12791 7.87 24	8020 6.73 22	4202 4.18 21
	740	21138 7.71 39	20435 7.94 37	20084 8.06 36	19732 8.18 35	19333 8.27 34	18916 8.35 33	18011 8.53 30	16966 8.66 28	15261 8.46 26	13507 8.24 25	9275 7.47 23	5185 5.09 22
	750	21424 8.02 40	20730 8.26 38	20383 8.38 37	20037 8.50 36	19650 8.60 35	19239 8.68 33	18353 8.86 31	17336 9.00 29	15750 8.85 27	14020 8.63 25	10484 8.13 23	5997 5.96 22

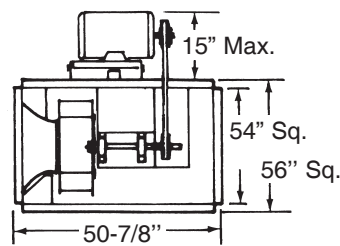
Performance certified is for installation type A - free inlet, free outlet.
 Performance ratings (bhp) do not include transmission losses.
 Performance ratings do not include the effects of accessories.

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.

VIBK 42

BELT DRIVE

PERFORMANCE DATA



DESIGN DATA

$$\text{Max BHP} = 40.0 \times \left[\frac{\text{RPM}}{1000} \right]^3$$

Average Weight = 450 Lbs.

Outlet Velocity (FPM) = .049 x CFM

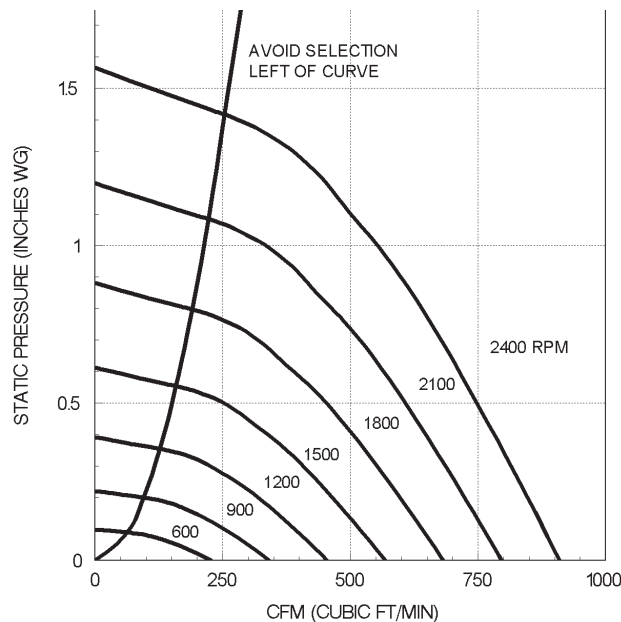
Tip Speed = 11.26 x RPM

RPM Range - Motor HP		STATIC PRESSURE, INCHES W. G.											
S1 (1)	RPM	.000	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000	2.250
		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	CFM BHP SONES	CFM BHP SONES
T1 (1-1/2)	215	8935 0.38 6.4	1838 0.20 4.3										
	230	9559 0.46 7.1	4800 0.43 5.3										
	245	10182 0.56 7.9	6216 0.56 6.2										
	260	10806 0.67 8.6	7385 0.70 7.1										
	275	11429 0.79 9.3	8428 0.84 8.0	4989 0.68 7.0									
V1 (2)	290	12052 0.92 10.2	9425 1.00 8.9	6696 0.90 8.0									
	305	12676 1.07 11.0	10301 1.17 9.9	8003 1.09 9.0	2754 0.58 8.1								
	320	13299 1.24 12.0	11074 1.34 10.9	9164 1.30 10.1	6133 1.11 9.2								
	335	13923 1.42 13.2	11835 1.53 12.0	10200 1.51 11.1	7745 1.38 10.2	2092 0.64 9.4							
	350	14546 1.62 14.5	12586 1.75 13.3	11203 1.75 12.3	9069 1.65 11.4	5350 1.26 10.5							
W1 (3)	365	15169 1.84 15.8	13328 1.97 14.6	12170 2.00 13.6	10237 1.92 12.6	7722 1.73 11.7							
	380	15793 2.08 17.2	14062 2.22 16.1	12950 2.25 15.0	11315 2.20 14.0	9188 2.05 13.0	4417 1.31 12.1						
	395	16416 2.33 18.6	14769 2.49 17.6	13720 2.52 16.5	12328 2.50 15.4	10430 2.38 14.4	7975 2.15 13.4						
	410	17040 2.61 19.8	15453 2.77 18.7	14480 2.81 17.8	13321 2.82 16.7	11592 2.72 15.7	9458 2.53 14.8						
	425	17663 2.91 21	16132 3.07 19.8	15232 3.13 19.0	14238 3.16 18.0	12660 3.08 17.1	10818 2.93 16.1						
X1 (5)	440	18286 3.22 22	16808 3.40 21	15977 3.46 20	15016 3.50 19.3	13675 3.45 18.4	11995 3.32 17.4	5295 2.07 15.6					
	455	18910 3.57 23	17480 3.74 22	16715 3.82 22	15786 3.86 21	14671 3.85 19.7	13143 3.75 18.8	9043 3.26 17.0					
	470	19533 3.93 24	18149 4.11 23	17446 4.20 23	16547 4.24 22	15648 4.28 21	14171 4.17 20	10587 3.78 18.4					
	485	20157 4.32 25	18815 4.51 24	18145 4.60 24	17301 4.65 23	16430 4.69 22	15181 4.63 22	12033 4.32 19.9					
	500	20780 4.73 26	19479 4.93 26	18828 5.03 25	18049 5.09 25	17204 5.13 24	16174 5.11 23	13221 4.83 21	8791 4.03 19.6				
Y1 (7-1/2)	515	21403 5.17 27	20140 5.37 27	19509 5.47 27	18790 5.55 26	17970 5.59 25	17149 5.63 24	14386 5.37 23	10803 4.83 21				
	530	22027 5.64 29	20799 5.84 28	20186 5.95 29	19526 6.04 27	18729 6.08 26	17931 6.12 26	15494 5.94 24	12278 5.48 23				
	545	22650 6.13 30	21457 6.34 29	20860 6.45 29	20257 6.55 29	19481 6.60 28	18706 6.64 27	16518 6.51 26	13673 6.15 24	9214 5.11 22			
	560	23274 6.65 31	22112 6.87 31	21531 6.98 30	20950 7.09 30	20228 7.14 30	19473 7.19 29	17527 7.12 27	14859 6.79 26	11420 6.15 24			
	575	23897 7.20 32	22766 7.42 32	22200 7.53 32	21634 7.65 32	20969 7.72 31	20234 7.77 30	18522 7.77 29	16023 7.47 27	12904 6.91 26	5867 4.18 24		
C1 (10)	590	24520 7.77 33	23418 8.01 33	22866 8.12 33	22315 8.24 33	21706 8.33 33	20989 8.38 32	19503 8.45 31	17146 8.18 30	14359 7.71 27	10156 6.55 26		
	605	25144 8.38 35	24069 8.62 35	23531 8.74 35	22993 8.86 35	22437 8.97 35	21739 9.02 34	20342 9.11 32	18174 8.89 31	15612 8.49 29	12348 7.76 27		
	620	25767 9.02 36	24718 9.26 36	24193 9.39 36	23669 9.51 37	23144 9.63 36	22483 9.69 36	21120 9.79 34	19188 9.64 33	16788 9.28 32	13833 8.64 29	7126 5.63 27	
	635	26391 9.69 38	25366 9.94 38	24854 10.07 38	24342 10.19 38	23829 10.31 38	23223 10.39 38	21892 10.50 36	20188 10.43 35	17946 10.11 33	15291 9.57 31	11508 8.40 29	
	650	27014 10.39 40	26013 10.65 40	25513 10.78 39	25012 10.90 40	24512 11.03 40	23958 11.13 40	22657 11.24 39	21176 11.26 37	19037 10.96 35	16588 10.49 33	13522 9.69 31	6330 5.87 29

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.

VIBK 06 AIR PERFORMANCE



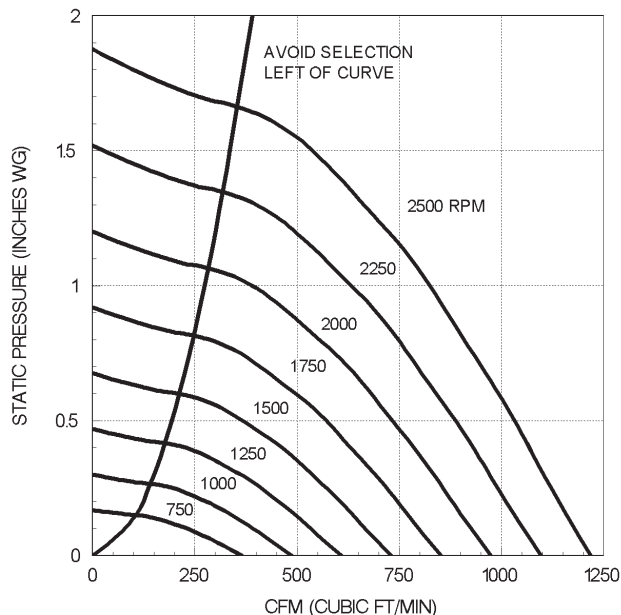
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VIBK 06 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
600	.000	36	36	39	38	39	36	33	30	43
1000	.000	50	52	51	52	50	50	47	43	56
	.125	51	52	50	51	48	48	43	37	54
1400	.000	59	62	61	61	58	58	56	52	64
	.375	64	64	60	59	57	56	52	46	63
1800	.000	65	70	68	66	65	63	62	59	71
	.375	69	70	68	65	64	61	60	55	69
	.750	73	71	69	65	64	62	60	54	69
2100	.000	70	75	73	70	70	66	66	63	75
	.500	74	74	73	69	68	65	64	59	73
	1.000	78	76	74	69	68	65	64	58	74
2300	.000	72	77	76	72	72	68	69	65	77
	.500	75	77	76	71	71	67	67	62	76
	1.000	79	79	77	71	71	67	67	61	76
2500	.000	73	79	78	75	74	70	70	68	79
	.500	76	80	78	74	73	69	69	65	78
	1.000	79	81	79	74	73	69	69	64	78
	1.500	82	82	80	74	73	69	69	64	78

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.

VIBK 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.

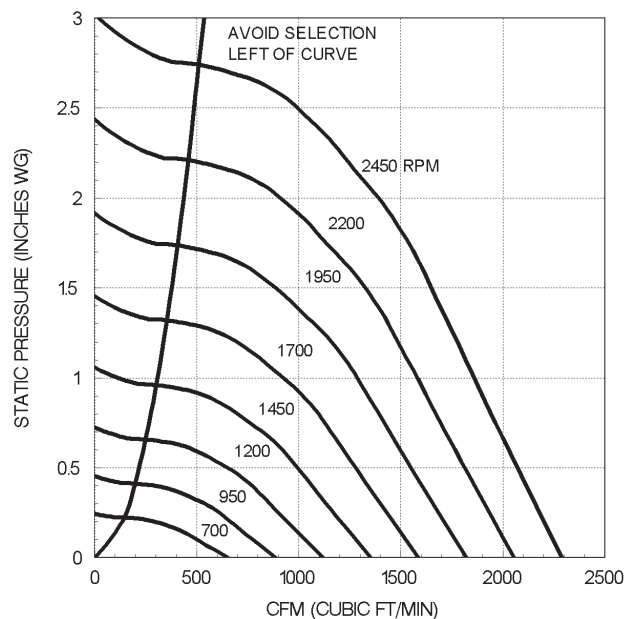
VIBK 08 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
650	.000	39	41	43	40	40	39	37	34	46
1050	.000	50	55	54	55	50	51	48	46	58
	.250	53	56	52	53	50	49	45	40	56
1450	.000	59	64	64	63	60	58	57	54	66
	.500	60	65	62	61	58	57	54	49	64
1800	.000	66	70	70	68	66	62	62	60	72
	.500	64	71	70	67	65	62	61	57	70
	.750	65	70	70	66	65	62	60	55	70
2100	.000	70	74	75	72	71	66	66	64	76
	.500	68	75	75	71	70	65	65	62	75
	1.000	69	74	76	70	69	65	65	60	74
2300	.000	72	76	77	75	74	68	68	66	78
	.750	70	77	78	73	72	67	67	64	77
	1.250	71	76	78	72	71	67	67	62	77
2500	.000	73	78	80	77	76	71	70	68	81
	.500	72	79	80	76	75	70	70	67	80
	1.000	71	79	81	76	74	70	69	66	79
	1.500	72	78	81	75	73	70	69	64	79

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.

VIBK 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.

VIBK 10

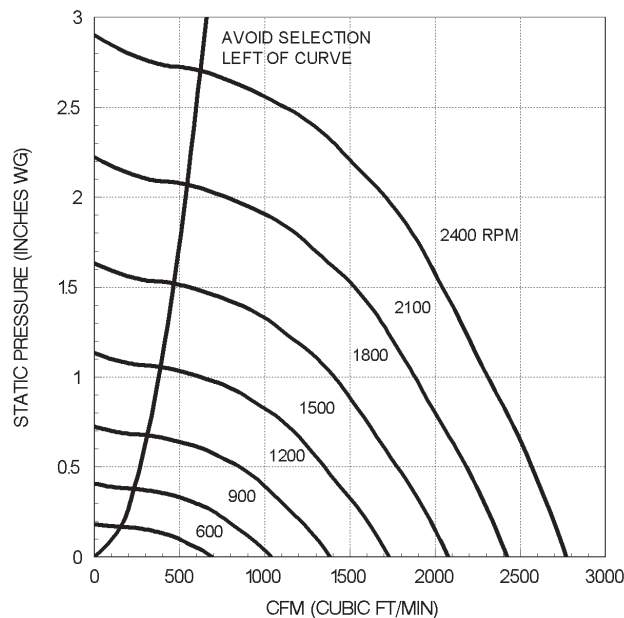
SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
650	.000	49	49	51	46	56	44	35	25	57
	.000	64	63	63	61	60	63	52	42	67
1050	.500	69	65	59	57	53	53	49	42	60
	.000	62	67	70	67	68	70	63	52	74
1400	.375	65	67	69	65	63	63	58	51	69
	.750	67	69	68	64	61	61	57	51	68
1750	.000	71	71	76	74	71	76	71	60	80
	.625	72	72	75	72	67	68	65	58	75
2100	1.250	74	75	75	71	66	66	64	58	74
	.000	77	75	80	80	73	81	77	67	85
2450	.500	77	76	80	79	72	76	74	65	82
	1.000	78	77	79	78	71	72	70	64	80
2450	2.000	80	80	80	77	70	70	70	63	79
	.000	79	81	83	84	78	82	81	73	88
2450	.500	79	82	83	83	77	79	79	71	86
	1.000	80	82	83	83	76	76	76	69	84
2450	2.000	79	84	84	82	75	74	73	68	83
	2.500	80	85	84	82	75	73	73	68	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_{Wi} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

VIBK 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.

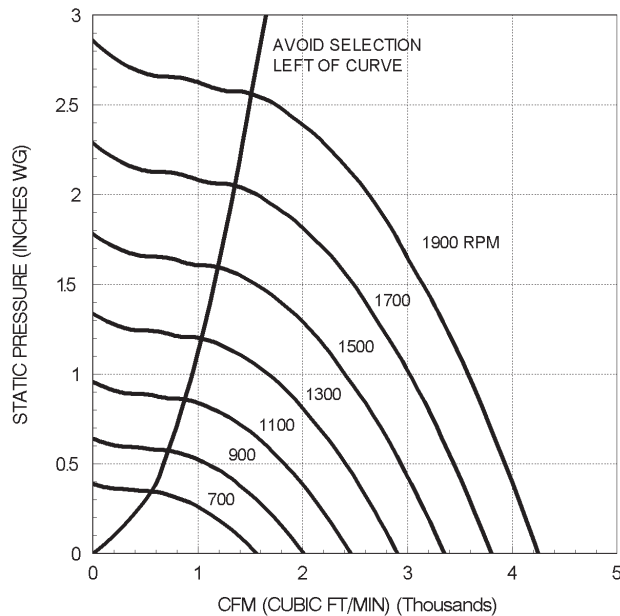
VIBK 12

SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
600	.000	51	53	52	49	57	43	37	30	58
	.000	67	67	67	64	63	64	53	46	69
1000	.375	70	65	62	58	54	52	47	42	61
	.000	68	72	73	70	68	71	66	53	76
1400	.375	67	70	70	67	65	66	61	51	72
	.750	69	71	70	65	63	62	58	51	69
1750	.000	75	77	79	77	72	75	75	62	81
	.750	74	76	76	74	69	70	68	59	77
2100	1.250	76	78	77	72	67	67	64	58	75
	.000	81	81	84	83	76	78	82	69	86
2100	.500	80	81	82	81	74	76	78	67	84
	1.000	79	81	81	80	73	74	74	65	82
2450	2.000	82	83	82	78	71	71	69	64	80
	.000	83	86	87	87	81	81	84	76	90
2450	.500	82	86	86	86	80	79	82	74	88
	1.000	81	86	86	85	79	78	79	72	87
2450	2.000	81	87	86	83	77	75	75	69	85
	2.750	84	88	87	83	76	74	73	68	84

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.

VIBK 15 AIR PERFORMANCE



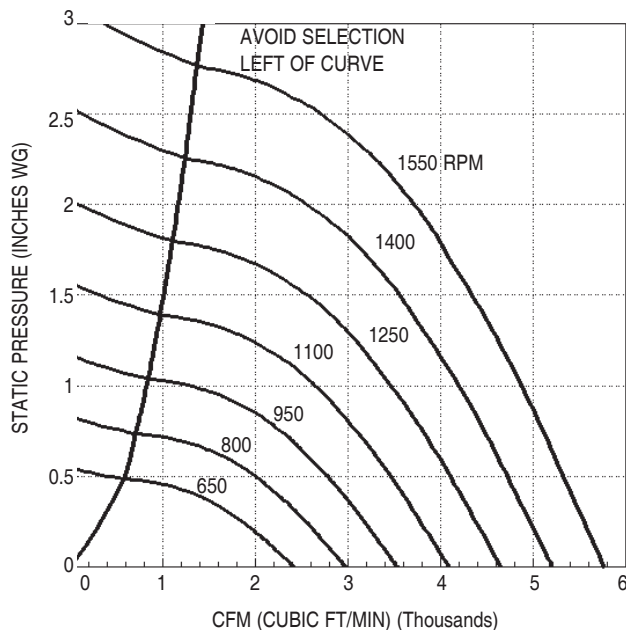
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VIBK 15 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	53	55	55	51	44	37	30	56
850	.000	67	65	65	65	65	58	51	44	68
	.500	65	63	61	56	56	53	48	42	61
1150	.000	77	74	73	72	72	67	60	53	76
	.500	76	74	73	70	67	63	57	52	72
	.750	75	73	71	67	64	62	57	51	70
1450	.000	85	81	79	78	77	75	68	61	82
	1.000	83	81	79	75	71	69	64	58	78
	1.500	83	80	77	73	68	67	63	58	76
1750	.000	91	87	84	82	81	81	74	67	87
	1.000	89	87	85	82	78	76	70	64	84
	1.500	89	87	84	80	75	74	70	64	83
	2.000	89	86	82	79	73	72	69	64	81
1950	.000	93	91	87	85	84	83	77	70	89
	1.000	91	90	88	85	82	80	74	68	88
	2.000	91	90	87	83	78	76	72	67	85
	2.500	91	90	86	82	76	75	72	67	84
	2.750	91	90	86	82	76	75	72	67	84

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.

VIBK 18 AIR PERFORMANCE



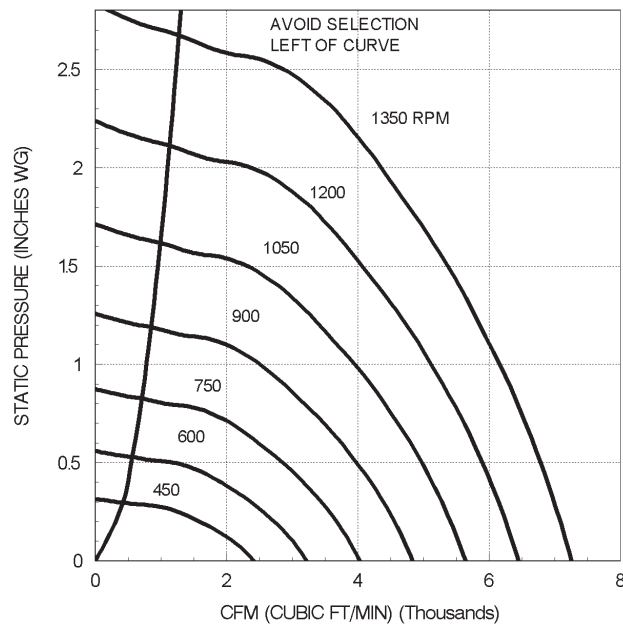
Performance certified is for installation type A - free inlet, free outlet.
Performance ratings (bhp) do not include transmission losses.
Performance ratings do not include the effects of accessories.

VIBK 18 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	64	60	60	57	64	58	47	36	66
750	.000	69	74	68	66	67	68	59	48	72
	.625	67	70	65	63	61	60	54	46	66
950	.000	73	81	74	72	70	75	67	57	79
	.500	73	78	72	71	67	68	63	55	74
	1.000	72	77	71	69	65	66	62	54	73
1150	.000	75	84	80	78	73	80	74	64	83
	.750	76	82	78	76	71	72	69	61	79
	1.250	76	80	77	75	70	71	68	60	78
1350	.000	77	87	87	82	78	81	79	70	87
	1.000	79	85	85	80	76	75	73	67	83
	1.500	79	84	84	79	75	74	72	66	82
	2.000	78	84	84	79	75	74	72	66	82
1500	.000	79	89	92	84	81	82	83	74	90
	1.000	80	88	90	83	80	78	77	70	87
	1.750	80	87	88	82	78	76	75	69	86
	2.000	80	86	88	81	78	76	75	69	85
	2.500	80	86	88	81	78	76	75	69	85

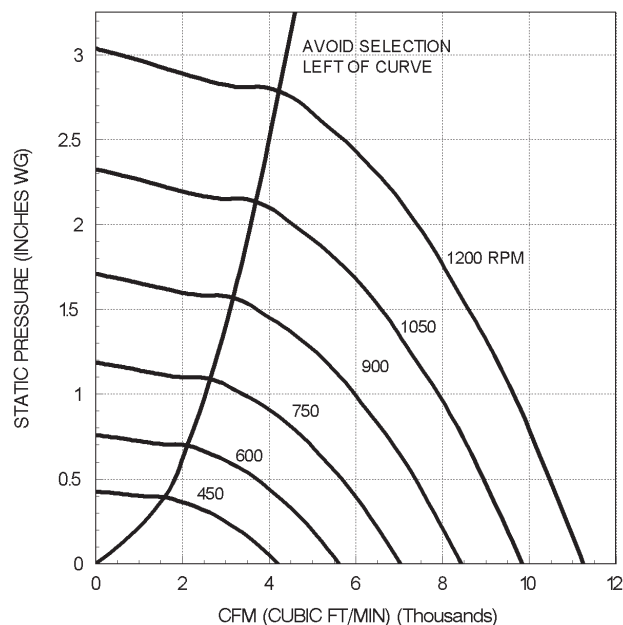
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{Wi} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

VIBK 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.

VIBK 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.

VIBK 21 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
400	.000	62	60	55	53	53	49	41	33	58
600	.000	70	71	67	62	62	61	54	46	68
	.500	73	70	65	62	62	57	50	43	67
750	.000	74	76	73	68	66	67	62	54	73
	.375	75	76	72	68	67	66	59	50	73
	.750	78	76	72	68	67	64	57	50	73
900	.000	78	79	78	73	70	71	68	60	78
	.500	78	80	77	73	70	72	65	57	78
	1.000	81	81	77	72	70	70	64	56	77
1075	.000	81	83	83	78	73	75	73	65	82
	.500	81	84	82	78	73	76	72	63	82
	1.000	81	85	82	78	73	77	71	63	82
	1.500	85	85	82	77	74	75	69	62	82
1250	.000	84	86	87	83	78	78	77	71	86
	.750	84	87	86	82	78	79	76	68	86
	1.250	84	88	86	82	77	80	75	68	86
	1.750	86	88	86	81	78	79	74	67	86
	2.250	90	89	86	82	78	78	73	66	86

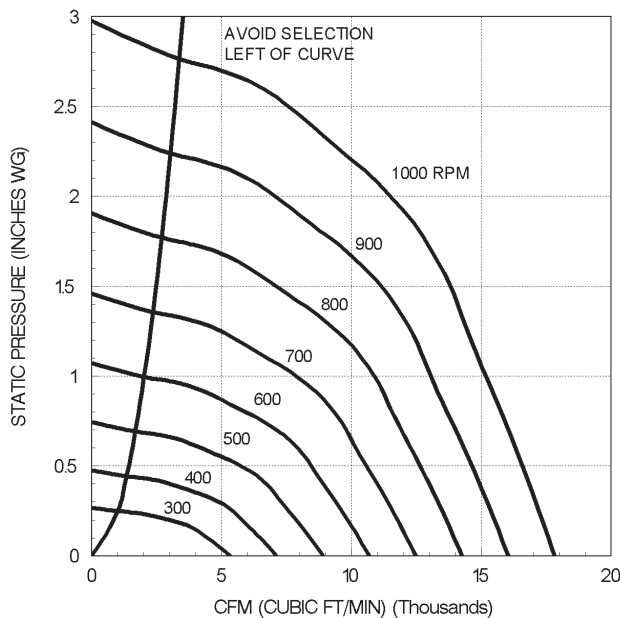
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

VIBK 24 SOUND PERFORMANCE

RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
400	.000	66	63	59	60	67	62	47	32	69
550	.000	75	73	68	66	72	73	61	46	76
	.500	73	71	66	64	64	61	55	49	68
675	.000	80	79	75	70	74	78	70	55	81
	.250	80	79	74	70	71	73	66	54	77
	.500	79	79	74	70	69	69	62	54	75
	.750	79	77	72	68	68	67	62	55	74
800	.000	85	84	80	74	75	82	77	62	86
	.375	84	85	80	74	74	77	72	61	82
	.625	83	85	80	73	73	74	68	60	80
	1.000	84	82	78	72	72	72	67	60	78
	1.250	84	81	78	71	72	71	67	61	78
925	.000	88	89	85	78	77	86	83	69	89
	.375	87	89	85	78	76	82	78	67	86
	.625	87	89	84	77	76	80	75	66	85
	1.000	87	88	84	77	75	77	72	65	83
	1.250	87	87	83	76	75	76	72	65	82
	1.500	88	86	83	75	75	75	71	65	82

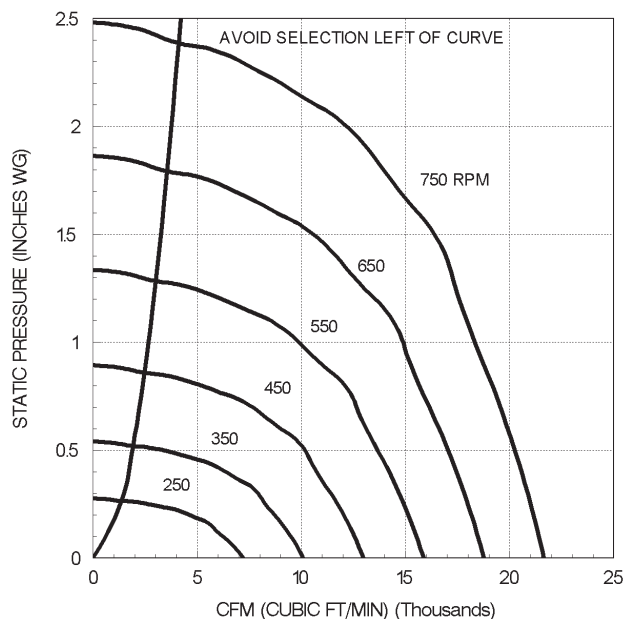
The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301. Values shown are for inlet L_{wi} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

VIBK 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.

VIBK 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.

VIBK 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	59	58	58	63	63	52	46	41	65
375	.000	67	67	64	65	76	62	56	50	76
	.375	66	65	60	60	56	54	57	59	64
475	.000	73	73	71	70	77	72	63	57	79
	.375	73	71	67	66	69	64	60	58	72
	.500	75	71	67	66	65	62	60	61	70
550	.000	77	77	75	73	78	78	67	61	82
	.375	75	75	72	70	73	72	64	60	77
	.750	82	75	72	68	67	64	63	65	73
625	.000	81	81	78	76	79	83	71	65	86
	.375	79	79	76	73	76	78	68	64	82
	.625	81	79	76	72	74	74	67	64	79
	1.000	88	79	76	71	70	67	66	68	76
700	.000	84	84	81	78	80	88	75	69	90
	.375	82	83	80	76	77	84	72	67	86
	.625	81	82	79	75	76	81	70	66	84
	1.000	88	82	79	74	74	75	69	69	80
	1.250	93	82	79	74	73	70	68	70	79

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.

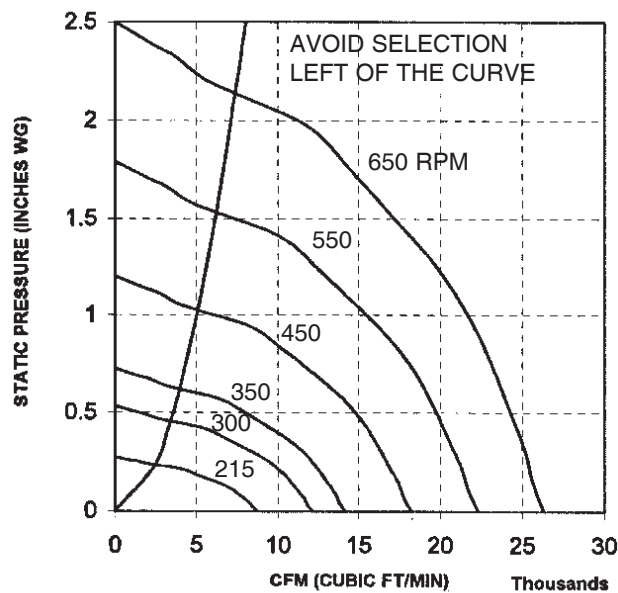
VIBK 36 SOUND PERFORMANCE

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	68	61	57	53	61	60	59	66
330	.000	77	75	69	64	60	64	66	65	71
	.375	72	68	65	61	56	52	47	41	63
450	.000	83	84	79	73	69	67	73	72	78
	.250	81	82	78	72	68	65	70	68	77
	.500	80	80	75	71	67	63	63	59	73
530	.000	86	88	84	77	73	69	76	76	82
	.375	84	86	82	76	72	68	73	71	81
	.750	83	84	80	75	71	67	66	62	77
610	.000	88	90	88	82	77	73	78	79	87
	.375	87	89	87	81	76	72	76	76	85
	.750	86	88	85	80	76	71	72	70	82
	1.000	86	87	84	79	75	71	69	66	81
710	.000	91	93	92	87	81	77	79	83	90
	.500	90	92	91	86	81	77	78	80	89
	.750	89	91	90	85	80	76	77	78	88
	1.250	89	90	88	84	79	75	73	71	86
	1.750	91	89	85	82	78	73	69	64	84

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.

VIBK 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.

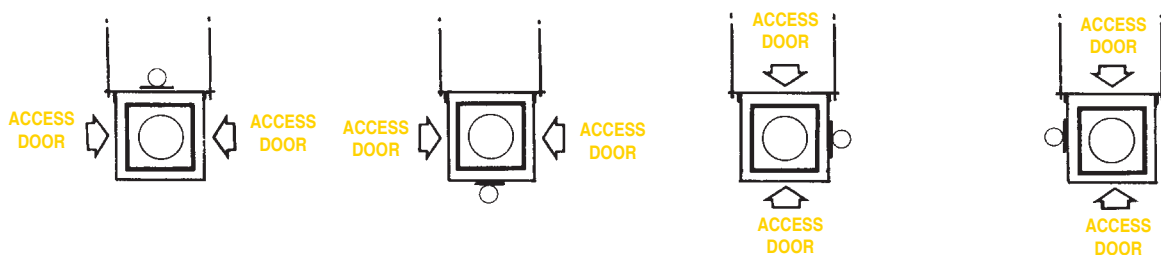
VIBK 42

SOUND PERFORMANCE

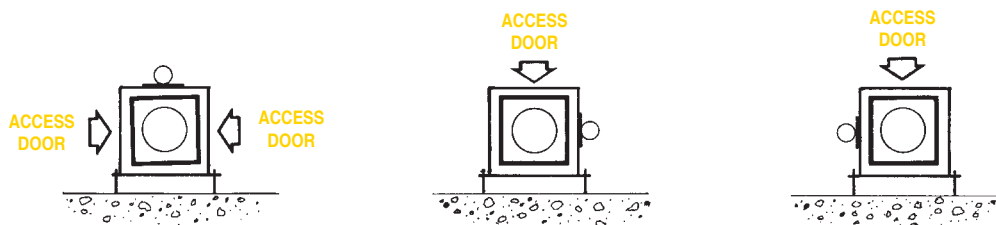
RPM	SP INCH W.G.	SOUND POWER RE 10 ⁻¹² WATTS								
		OCTAVE BANDS								LWA
		1	2	3	4	5	6	7	8	
215	.000	70	68	64	60	57	60	46	30	64
	.000	77	74	71	67	63	64	57	41	71
275	.375	74	71	68	64	60	54	48	42	66
	.000	82	79	76	72	68	67	66	50	75
335	.250	82	77	74	71	67	66	63	51	74
	.500	79	76	73	70	65	61	54	48	72
395	.000	87	83	81	77	73	70	74	58	81
	.375	87	81	78	75	71	69	70	57	79
	.75	84	81	77	75	70	66	59	53	76
470	.000	92	88	85	82	77	74	77	65	85
	.375	93	87	84	81	77	74	75	65	84
	.750	91	85	81	79	76	73	72	63	82
	1.000	88	85	81	79	75	71	64	58	81
590	.000	98	94	91	88	84	80	80	76	91
	.500	100	94	90	87	83	80	79	74	90
	.750	99	93	88	85	82	79	78	73	88
	1.250	98	92	87	85	82	79	77	72	88
	1.750	94	91	88	85	81	77	72	65	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_{wi} sound power levels for installation Type A free inlet, free outlet. Ratings do not include the effects of duct end correction.

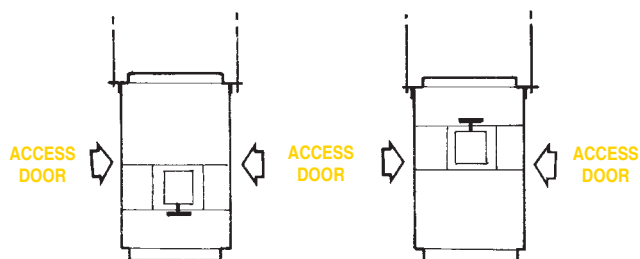
HORIZONTAL CEILING SUSPENDED



FLOOR MOUNTED

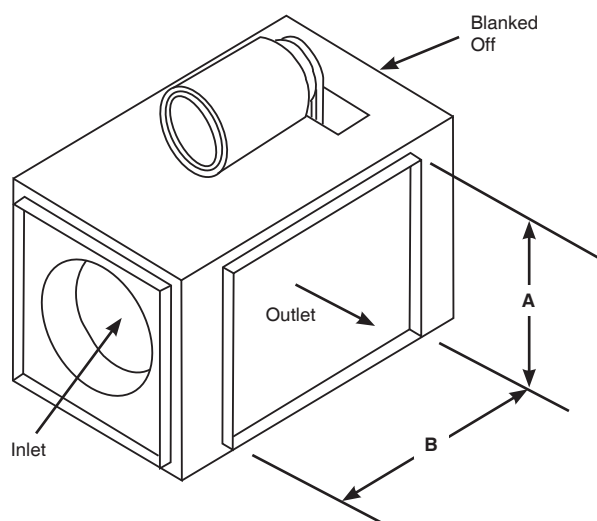


VERTICAL CEILING SUSPENDED

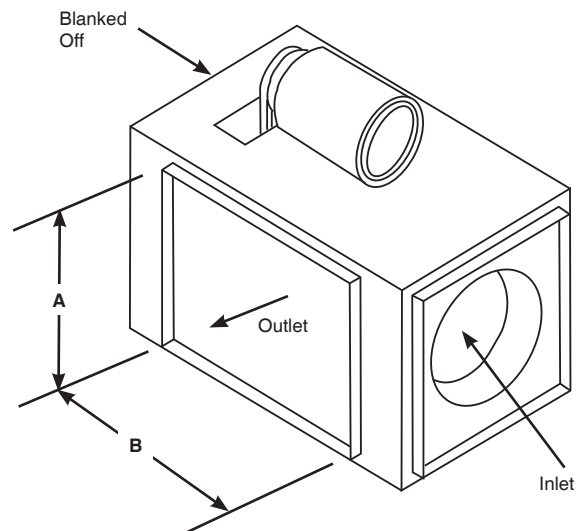


WALL MOUNTED





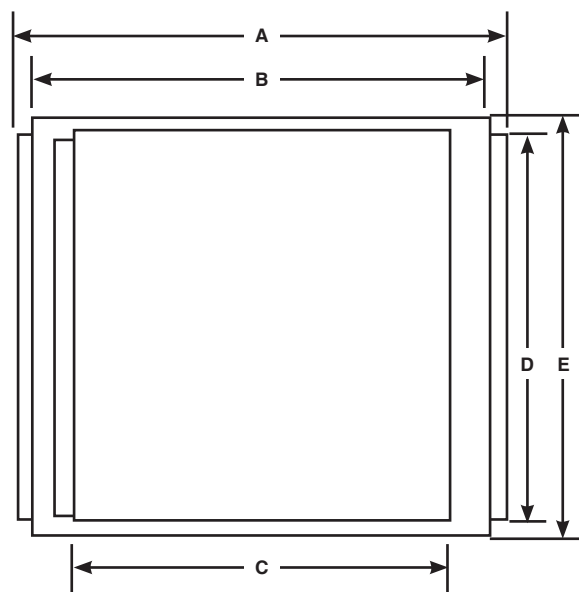
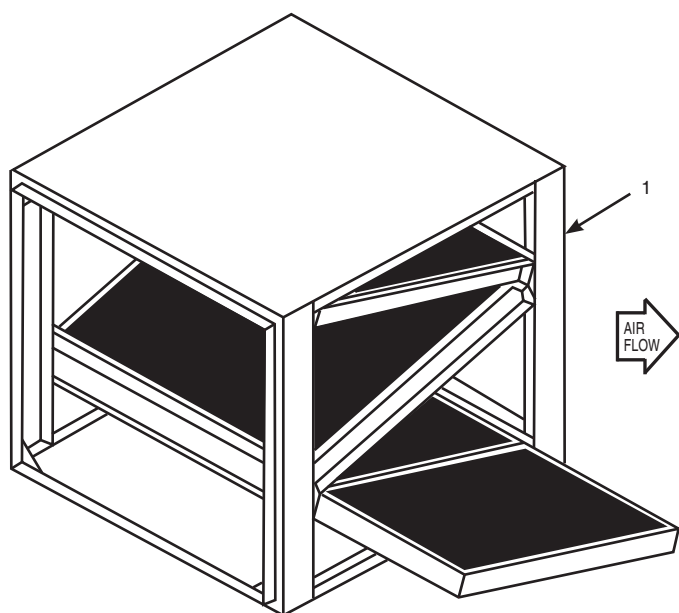
RH Discharge



LH Discharge

NOTE: Consult factory for side discharge.

Unit Size	A	B
06-08	12	21-5/8
10-12	16	25-1/8
15	22	27-7/8
18	26	29-1/8
21	29	26-3/8
24	38	29-5/8
30	46	33-1/8
36-42	54	33-5/8



Unit Size	Max. CFM	Filter Size	Filter Qty.	Filter Area	Max. Filter Face Vel.
6	900	12 x 24	1	2.00	450
8	1170	12 x 24	2	2.00	585
10	2200	16 x 25	2	5.56	396
12	2750	16 x 25	2	5.56	495
15	4150	24 x 24	2	8.00	519
18	5650	24 x 24	3	12.00	471
21	7150	12 x 24	3	15.00	477
		18 x 24	3		
24	10900	20 x 20	8	22.22	491
30	17200	16 x 25	12	33.33	518
36	21000	20 x 25	12	58.33	360
		16 x 25	6		
42	27000	20 x 25	12	58.33	463
		16 x 25	6		

DIMENSIONS LISTED IN INCHES (In Millimeters)					
Size	A	B	C	D	E
06/08	30-3/4	28-3/4	14	12	14
10/12	32-7/8	30-7/8	18	16	18
15	31-1/8	29-1/8	24	22	25-1/4
18	31-1/8	28-3/4	28	26	25-3/4
21	37-1/2	35-1/2	31	29	25-1/2
24	33-3/8	31-3/8	40	38	21-3/8
30	38	36	48	46	26
36/42	38-3/4	36-3/4	56	54	26-3/4

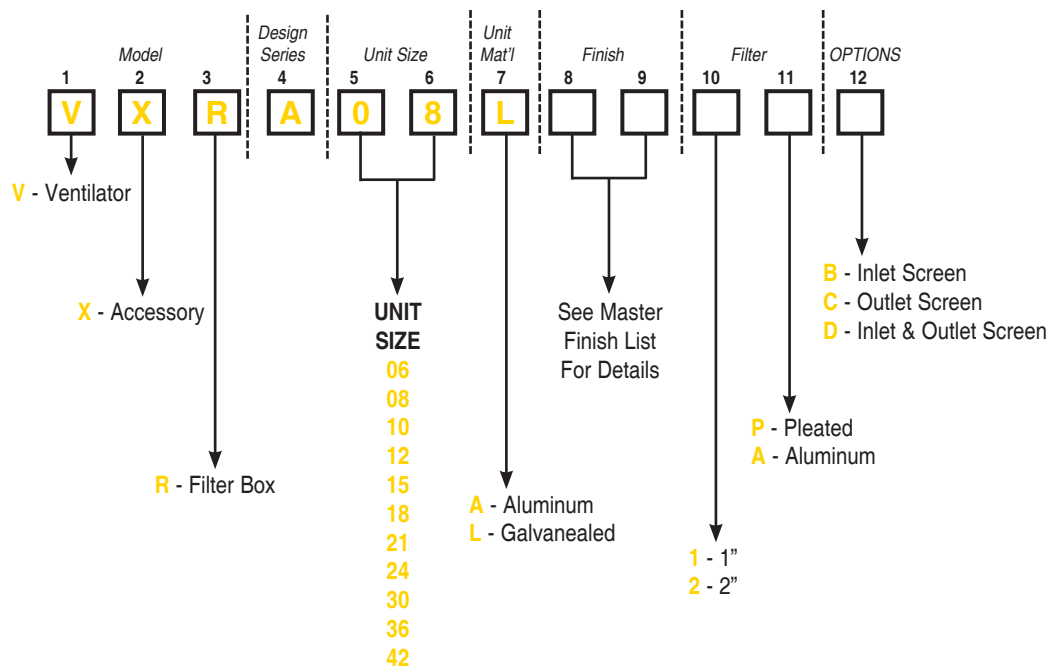
STANDARD FEATURES

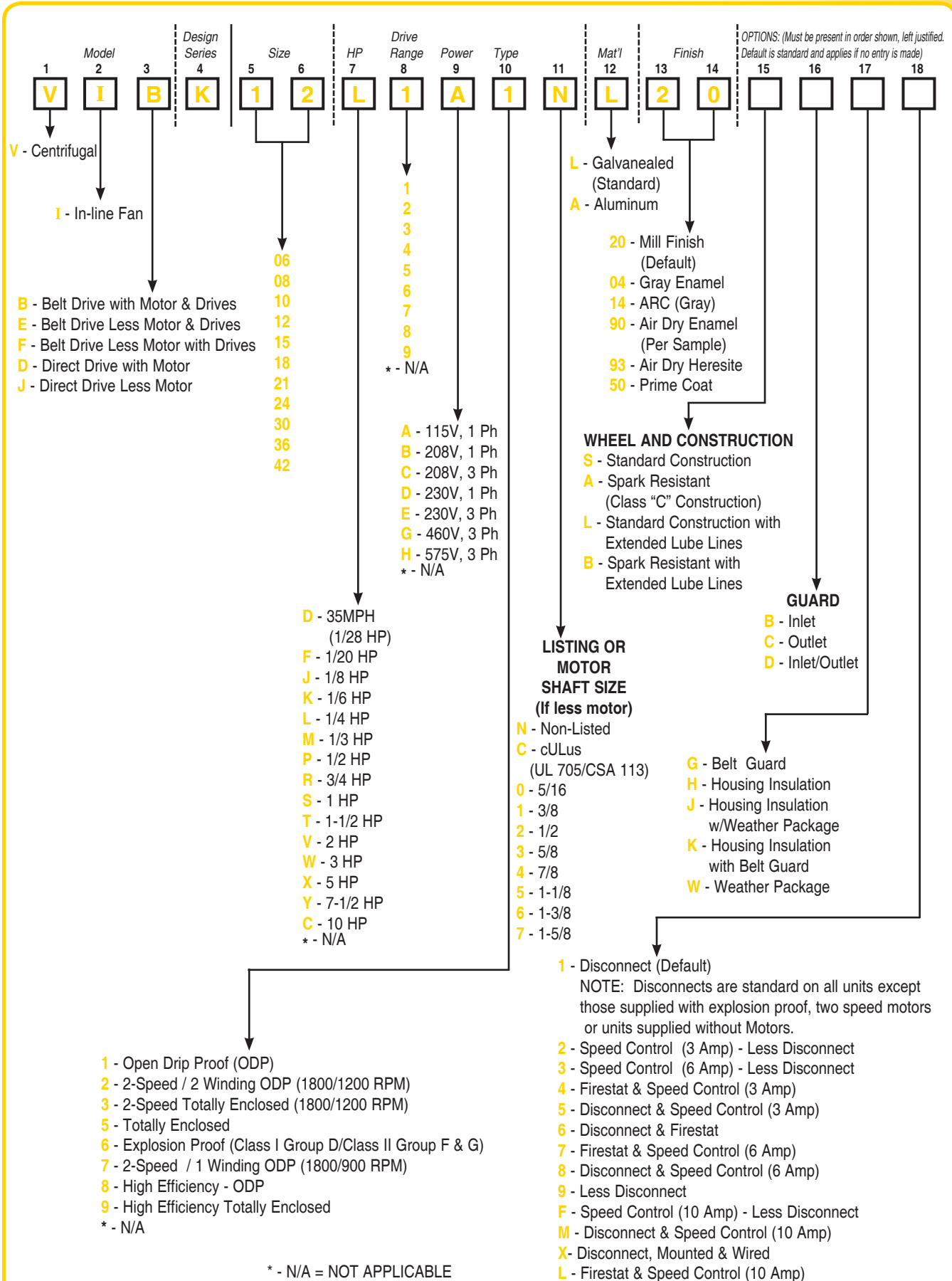
- Galvanealed construction (aluminum optional).
- Hinged dual access doors with 1/4 turn fasteners.
- Joining strips for attachment to VIBK/VIDK.

FILTERS

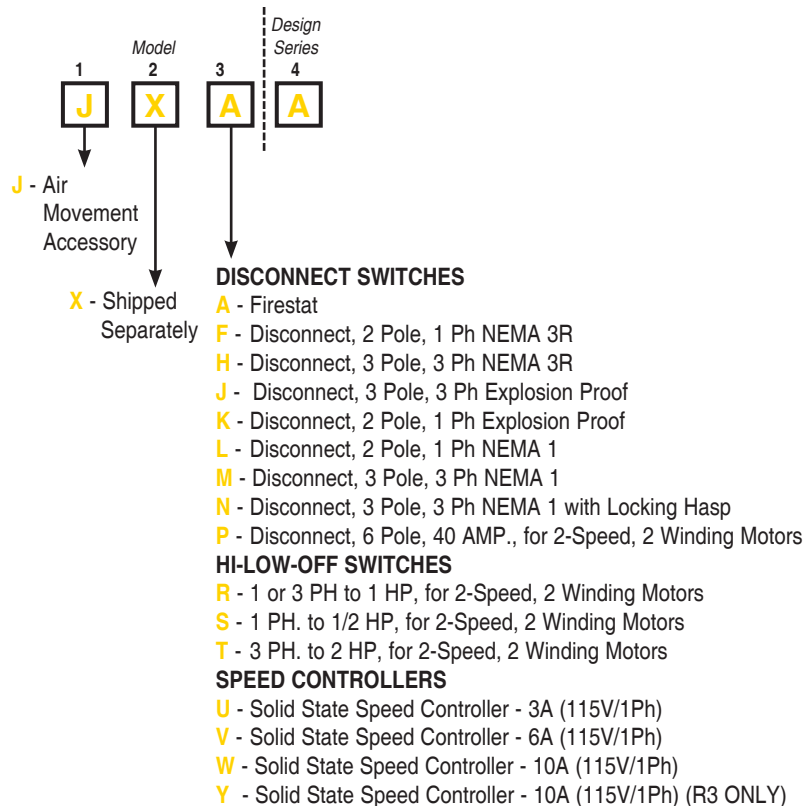
1. Aluminum 2"
2. Pleated 2"
3. No filter

▼ Filter Box



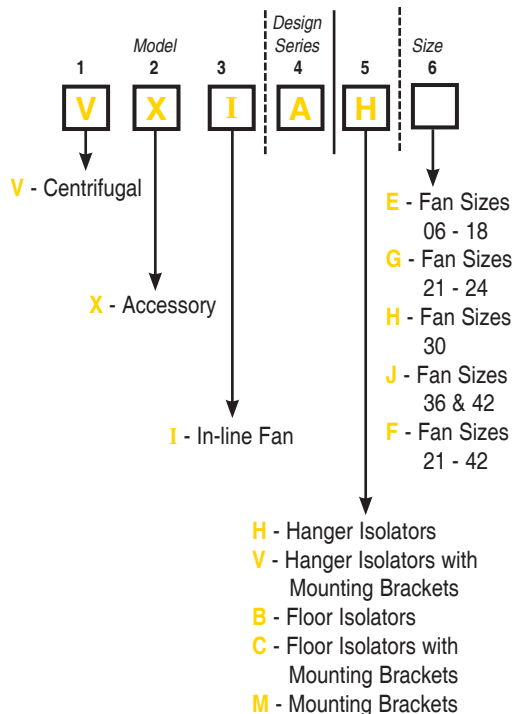


▼ Electrical Accessories



NOTE: Disconnect switch (NEMA 1 - Mounted) is standard on all units except those with explosion proof motors, or units without motor. Units with two speed motors are fitted with two separate standard disconnects unless ordered otherwise.

▼ Mounting Accessories



▼ Dampers

