



INSTALL CONFIDENCE.



Centrifugal Roof Exhausters

EVD-Series

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BY JOHNSON CONTROLS

*Belt Drive
EVD*



*Direct Drive
EVD*



INTRODUCTION

Downblast Roof Exhauster

The EVD-Series of fans are ideal for general purpose exhaust applications including: bathrooms, garages, general kitchen areas, offices, churches, dormitories, factories, large warehouses and other relatively clean air applications.

They feature a weather-resistant, seamless spun aluminum housing which works in conjunction with a patented wheel design and deeply spun inlets to provide smooth quiet air flow through the ventilator. The centrifugal wheels are aluminum, nonoverloading, backward inclined, robotically welded, and dynamically balanced. The optional high wind construction makes the EVD-Series of fans are particularly suited for high wind hurricane zones.

Direct Drive Units

Model: EVD (V/S/R/Q/Q1/Q2)

- Static pressure up to 1.25" wg.
- Flow capacity up to 4,561 CFM.
- High wind construction (-HW) option available.

Standard Duty Belt Drive Units

Model: EVD (B)

- Static pressure up to 1.5" wg.
- Flow capacity up to 19,442 CFM
- High wind construction (-HW) option available.

High Capacity Belt Drive Units

Model: EVDK, EVDJ, EVDM

- Static pressure up to 1.5" wg.
- Flow capacity up to 39,169 CFM

CERTIFICATIONS & LISTINGS



AMCA Certification

YORK® by Johnson Controls certifies that the EVD-Series of models shown herein are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and AMCA publication 311 and comply with the requirements of the AMCA Certified Ratings Program.



YORK® by Johnson Controls certifies that the EVD-Series of high capacity models shown on pages 25 - 27 are licensed to bear the AMCA seal. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 and comply with the requirements of the AMCA Certified Ratings Program.



UL and cUL Certification

EVD-Series fans carry the UL label, UL705 (ZACT/ZACT7), ML file #E477250.

FEATURES & BENEFITS

Motor Selection

Both direct drive and belt drive models are available with a wide range of voltages and enclosures (see Motor Selection for a complete listing). Standard belt drive Open Drip Proof (ODP) ball bearing motors are selected using a conservative portion of the NEMA service factor. Standard direct drive ODP motors have Class B insulation and internal thermal overload protection. Each size is carefully engineered to match the motor to the wheel capacity.

Internal Wiring

All direct drive models with ODP motors feature a polarized disconnect plug between the motor and junction box. This provides a positive method of electric shut-off. Belt drive units with ODP motors are factory-wired between the motor and junction box. For either direct drive or belt drive models, an electric disconnect is available.

Sound Performance

Units deliver outstanding air performance with minimal noise.

Curb Caps (Base)

Curb caps for direct drive and standard duty belt drive models are available in galvanized steel (standard) or aluminum (optional). Curb caps for high capacity belt drive models are available only in aluminum. All curb caps have fully welded corners and are pre-punched to ensure both a leak-tight and easy installation.

Forced Motor Cooling

Breather slots between the motor dome and discharge apron enable fresh air to be drawn into the motor housing during fan operation. This positive cooling promotes longer life for motor and drive components.

Easy Maintenance Access

By removing the fasteners, the motor dome lifts off for complete access to all the drive train components.

Structural Integrity

Durable housings of spun aluminum have a high strength-to-weight ratio and incorporate a rolled bead for additional strength. There are no welds to break or seams to leak. The heavy-gauge motor mounting platform provides positive rigidity between all components of the power train assembly.

Solid Steel Shafts

Sized so the first critical speed is a minimum of 200% of maximum cataloged operating speed, shafts are precision ground and polished.

Internal Bracing

Tri-Strut™ supports transfer the weight of the motor mounting platform directly to the curb mounting surface. The aluminum spun housing, therefore, is not used to support any weight.

Self-Aligning Bearings

Heavy-duty bearings are sized for a minimum L50 life in excess of 200,000 hours of operation. 100% factory tested, they are designed for air handling applications.

Drives and Belts

Pulleys are pre-set to the specified RPM. Cast iron variable pitch pulleys are adjustable, allowing for field balancing based on actual field conditions. All pulleys are sized for at least 150% of the driven horsepower.

Vibration Isolators

Multidirectional, rubber-in-shear vibration isolators are used to mitigate residual vibration transmission from the motor and bearing support to the building.

Conduit

Both direct and belt drive units include a large 1" nominal conduit chase for easy installation of wiring from the motor dome to below the curb cap.

Reverse Venturi

Reverse venturi reduces turbulence and improves distribution of the air as it enters the wheel inlet and is "captured" by the blades.



Aluminum Wheels

EVD fans offer patented wheel designs. Carefully matched highly-tooled venturis enhance the performance of these backward inclined and non-overloading centrifugal wheels. Made of advanced alloys, the various wheel components provide superior strength and durability.



Silent Wheel (Direct Drive)

- Blades' highly curved leading edge provide unsurpassed low sound numbers with excellent air performance.
- Back plate and inlet are stamped for consistency, plus dynamic balancing assure smooth, vibration-free operation.
- Riveted and/or welded construction ensure superior dependability over other wheel designs.

Standard Duty, All Welded Wheel

(Standard Duty Belt Drive)

- Blades are curved for improved air performance while increasing their strength and rigidity.
- Back plate and inlet are punched for consistency. They include a perimeter rim which enhances strength and improves balancing.
- Wheel assembly is robotically welded to provide extremely durable and consistent performance.
- Wheel is dynamically balanced. Balancing weights are mechanically attached to the inside of the rims of both the back plate and wheel inlet. This allows a precise placement of the weights anywhere within a full 360° range on two separate planes, without the possibility of detachment.

OPTIONS & ACCESSORIES

Finishes

Coatings such as Polyester Powder Coat, Epoxy Powder Coat, Phenolic Epoxy Powder Coat, and others are available. See the coatings brochure for details.

Mounting Pedestal

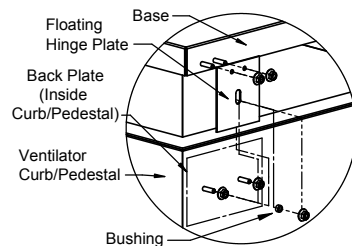
The 12" high mounting pedestal, available in aluminum or galvanized steel, incorporates a removable access panel for easy inspection and service of motor operated backdraft dampers. It provides solid ventilator support and a weather resistant seal that does not injure or disturb flashing.

Hinged Sub-Base

Hinged sub-bases provide access to the curb well for damper service or to clean out. Constructed with a rust proof hinge arrangement and low height (3 1/2") the assembly is easily manipulated and reduces the impact on overall installation height. This accessory is available for use with most all models for either factory built or existing roof curbs.

Floating Hinge Kit

A floating hinge kit is available for field installation. This assembly connects the exhauster directly to the roof curb and provides the same level of access as the hinged sub-base.



Aluminum Bird and Insect Screen

Bird screens are available for all direct and belt drive models. An aluminum insect screen with a smaller mesh than the standard bird screen is also available.

Backdraft Dampers

Backdraft dampers are available for either gravity or motorized operation (motor kit optional). Dampers feature square galvanized steel frame, multi-leaf, roll formed aluminum blades with nylon bearings.

Safety Disconnect Switch

Safety disconnect switches are available to allow positive electrical shut-off and safety. NEMA 1 switches are factory mounted when factory wiring is requested, others will be shipped loose. Wiring is only run from the motor to the junction box. (Factory wiring of explosion proof applications is not available.) A wide range of NEMA rated enclosures with disconnect switches are available for indoor, outdoor, and explosion proof installations. Disconnects are to be field wired by a licensed electrician.



Firestat Switch

Firestat switch automatically disconnects the unit when the temperature of the air being exhausted exceeds a preset rating.

Time-Delay Switch

(Selected direct drive models only.) The Airminder Model AM12 switch is a UL recognized and CSA certified time-delay relay that operates both the fan and room light to ventilate an area even after the occupants depart. In the "On" position, the Airminder turns the light and fan on immediately. In the "Off" position, the light goes off immediately and the fan is in operation for a period of time as preset from 1 to 60 minutes. Suitable only for 1/3 HP maximum at 120/1/60.



Speed Controllers

The Lektrol™ controller allows adjustment in speed to a maximum of 50% reduction, which results in a very cost effective means for system balancing. The device can be located under the fan dome to prevent unauthorized tampering or on the wall for ease of operation by the building occupants. (Available on direct drive units with ODP motors and some select TE motors. See reference table under Motor Availability)



Automatic Belt Tensioner

The factory mounted Automatic Belt Tensioner accessory eliminates the need for re-tensioning the belt after start-up. It is constructed from 10 gage galvanized steel and incorporates five torsion springs to automatically position the motor and maintain proper belt tension. Additional benefits include reduced belt and pulley wear and simplified belt replacement without tools. The Automatic Belt Tensioner is available for EVD models EVD11B, EVD12B, and EVD14B with 1/4, 1/2, 3/4 and 1 HP ODP motors. It can also be used with 1.5 HP, 3-phase ODP motors.



Internal Wiring

NEMA 3R wiring is available for both direct and belt drive models.

Spark Resistant Construction

AMCA 'B' construction is available on belt drive and is optional on direct drive units with a special quote. If required, an explosion proof motor and disconnect may be selected as options.

Prefabricated Curb

A variety of sizes of prefabricated roof curbs are available. Galvanized steel unibeam curbs are the most popular. For a complete listing of all curb types and sizes available, please consult the Roof Curb brochure.

OPTIONS & ACCESSORIES

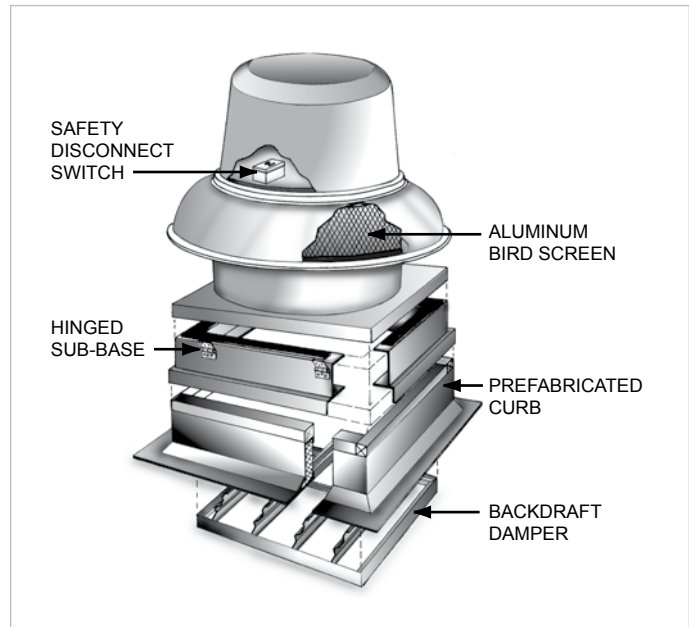
High Wind Construction

High wind construction units are specifically designed for high velocity hurricane zones (HVHZ). They are designed to withstand 150 MPH winds in accordance with Miami-Dade and Florida Building Code standards. The units are tested and certified through a 3rd party Professional Engineer (P.E.) to meet these strict standards. Installation details are provided and since there are no tie downs or external braces required for attaching the unit to the roof or curb this makes installation simple and easy. A wide range is offered to meet all of your ventilation needs which includes all belt and direct drive sizes 36 and under.

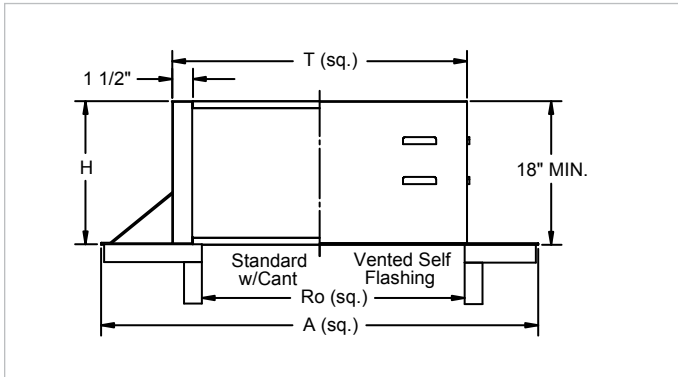
Product Certifications:

- Miami-Dade NOA # 14-0311.03
- Florida Product Approval #12339
- Texas Department of Insurance #RV-48

EVD Exploded View



EVD Curb Dimensions



All dimensions in inches.

(1) Standard heights "H" are 8", 12", and 18" including wood nailer.

(2) "T" dimension of curb is 1 1/2" less than the dimension of inside base of fan ("E").

(3) "Ro" refers to Roof Opening.

(4) "E" dimension is inside base of fan.

Model	E ⁽⁴⁾ SQ	T ⁽²⁾ SQ	A SQ	Ro ⁽³⁾ SQ	Damper Size SQ	Galv. Steel Gauge
EVD06R	18.5	17	25	9	8.75	18
EVD08V/S/R/Q	18.5	17	25	9	8.75	18
EVD10V/S/R/Q	18.5	17	25	11.5	11.25	18
EVD11V/S/R/Q	18.5	17	25	11.5	11.25	18
EVD13V/S/R/Q	18.5	17	25	11.5	11.25	18
EVD16V/S/R/Q1/Q2	20.5	19	27	16	15.75	18
EVD18V	28.5	27	35	20	19.75	18
EVD06B/EVD08B	18.5	17	25	11.5	11.25	18
EVD11B	20.5	19	27	16	15.75	18
EVD12B/EVD14B	24.75	23.25	31.25	16	15.75	18
EVD16B/EVD18B	28.5	27	35	20	19.75	18
EVD24B	33.5	32	40	25	24.75	18
EVD27B/EVD30B	36.5	35	43	28	27.75	18
EVD36B	44.5	43	51	36	35.5	18
EVDK420	52.5	51	59	44	43.5	18
EVDJ48	59	57.5	65.5	50	49.5	18
EVDM542	63.5	62	70	55	54.5	18

MOTOR AVAILABILITY

Fixed Speed Motor Control

Two-speed motors, used in conjunction with external switches or sensors (gas concentration, odor, temperature), are used to quickly adjust the airflow through the ventilator by changing from one fixed speed to another. Normally, 2-speed motors operate at 1800 and 1200 RPM (2-speed, 2-windings). However, 1800/900 RPM (2-speed, 1 winding) motors are available for 3-phase power only. A single operating voltage must be specified because dual-voltage versions are not available in a 2-speed motor.

Variable Speed Motor Control

YORK® by Johnson Controls offers Lek-Trol™ solid state controllers to reduce the high speed of most direct drive motors by as much as 50%. If variable speed is required, check the Lek-Trol™ availability table below to verify that controllers exist for the fan model selected. Remember, Lek-Trol™ controllers are currently only available for direct drive motors including all standard Open Drip Proof (ODP) 60 Hz motors. Not all totally enclosed motors are currently available with variable speed control. Inverter rated motors suitable for use with variable frequency drives can be supplied for belt drive models. Contact your local representative for availability.

Available Lek-Trol™ Speed Controls

Model	60 Hz					50 Hz		
	ODP	Totally Enclosed				Totally Enclosed		
	115V	115V	200V	208V	230V	110V	220V	240V
EVD06R	LT25	-	-	-	-	-	-	-
EVD08V/S/Q	-	-	-	-	-	-	-	-
EVD08R	LT25	-	-	-	-	-	-	-
EVD10V/S/Q	-	-	-	-	-	-	-	-
EVD10R	LT30	LT30	LT35	LT35	LT35	LT30	LT35	LT35
EVD11V	-	-	-	-	-	-	-	-
EVD11S	-	-	-	-	-	-	-	-
EVD11R	LT30	-	-	-	-	-	-	-
EVD11Q	LT50	-	-	-	-	-	-	-
EVD13V	LT55	-	-	-	-	-	-	-
EVD13S	LT30	-	-	-	-	-	-	-
EVD13R	LT30	LT30	LT35	LT35	LT35	LT50	LT35	LT35
EVD13Q	LT45	LT50	LT35	LT35	LT35	LT50	LT35	LT35
EVD16V	LT55	-	-	-	-	-	-	-
EVD16S	LT50	-	-	-	-	-	-	-
EVD16R	LT50	-	-	-	-	-	-	-
EVD16Q1	LT40	-	-	-	-	-	-	-
EVD16Q2	LT75	-	-	-	-	-	-	-
EVD18V	LT60	-	-	-	-	-	-	-

Direct Drive
Cutaway



Belt Drive
Cutaway



MOTOR AVAILABILITY



Green Plus Electronically Commutated Motor

The Green Plus (GP) option utilizes EC motors to provide significantly greater efficiency, flexibility, and controllability over standard direct drive permanent split capacitor (PSC) motors. Using the included potentiometer, the Green Plus motors can be turned down to as low as 80% the max operating speed while maintaining 90% efficiency through the operating range. Additionally, the Green Plus can accept 0-10V input to tie to building management systems, allowing for savings in not only direct fan energy consumption but reducing the exhaust of conditioned air during off peak hours as well. All Green Plus motors come in open enclosure or totally enclosed for usage with 115V-208V/230V or 460V, single phase, 50/60 Hz applications.

Model	Size	Tap	ECM HP
EVD	8	V	1/6
	8	S	1/6
	8	R	1/6
	8	Q	1/6
	10	V	1/6
	10	S	1/6
	10	R	1/6
	10	Q	1/6
	11	V	1/6
	11	S	1/6
	11	R	1/6
	11	Q	1/4
	13	V	1/6
	13	S	1/6
	13	R	1/6
	13	Q	1/4
	16	V	1/6
	16	S	1/3
	16	R	1/3
	16	Q1	1/2
16	Q2	3/4	
18	V	3/4	

Belt Drive Motor Availability

The chart below lists horsepower, voltages, and enclosure types. After selecting a model and horsepower that meets performance requirements, an engineer should verify that the desired voltage and enclosure are the same (or smaller) as the maximum NEMA motor frame shown for each model.

HP	1 Phase					200V, 230V, 460V OR 575V 3 Phase				
	ODP		Totally Enclosed	Explosion Proof	2 Speed 2 Winding	ODP	Totally Enclosed	Explosion Proof	2 Speed 2 Winding	2 Speed 2 Winding
	115V	230V	115V/230V							
1/4	48	48	48	48/56	48	48	48	48	56	-
1/3	48/56	48/56	56	56	56	56	56	56	56	-
1/2	48/56	48/56	56	56	56	56	56	56	143T	56
3/4	56	56	56	56	56	56	56	56	143T	56
1	56	56	56	56	56	145T	145T	145T	143T	145T
1 1/2	56	56	145T	184T	-	145T	145T	145T	145T	182T
2	145T	145T	182T	182T	-	145T	145T	145T	145T	182T
3	184T	184T	184T	215T	-	145T	182T	182T	184T	184T
5	-	-	-	-	-	184T	184T	184T	184T	215T
7 1/2	-	-	-	-	-	213T	213T	213T	-	215T
10	-	-	-	-	-	215T	215T	215T	-	256T
15	-	-	-	-	-	254T	254T	254T	-	284T

On horsepowers less than 1 1/2, motor frame sizes may change due to variations in voltage, special features and motor manufacturer. Motors shown are ball bearing, continuous duty and 1750 RPM or 1750/1140 RPM for two speed - two winding motors.

MOTOR AVAILABILITY

Direct Drive Motor Availability

The following chart lists the various motor options available for each of the direct drive fan models. Once a fan model is selected, this chart can be used to determine if a suitable motor is available. (If not, another selection may have to be made from the fan performance charts). Look under the nominal RPM heading to determine which fans have 2-speed and 3-speed motors.

Model	Nominal RPM				1 Phase								
	1050 V	1300 S	1550 R	1725 Q	115 Volts			200 - 240 Volts					460 Volts
					Open Drip Proof	Totally Enclosed	Explosion Proof	Open Drip Proof	Totally Enclosed	50 Hz	50 C Ambient	Explosion Proof (4)	Totally Enclosed
EVD06R	-	-	x	-	yes	-	-	Use TE Motors	-	-	-	-	-
EVD08V	x	-	-	-	-	yes(7)	-		yes(7)	yes(7)	-	-	yes(7)
EVD08S/R	-	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-	-
EVD08Q	-	-	-	x	-	yes(7)	-		yes(7)	yes(7)	-	-	yes(7)
EVD10V	x	-	-	-	-	yes(7)	-		yes(7)	yes(7)	-	-	yes(7)
EVD10S/R	-	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-	-
EVD10Q	-	-	-	x	-	yes(7)	-		yes(7)	yes(7)	-	-	yes(7)
EVD11V/S/R	x	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-	-
EVD11Q	-	-	-	x	yes	yes	yes		yes	yes	-	yes (5)	yes (5)
EVD13V/S/R	x	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	-	-	-
EVD13Q	-	-	-	x	yes	yes	yes		yes	yes	yes	yes (5)	yes (5)
EVD16V/S/R	x	x	x	-	yes	yes (1)	-		yes (1)	yes (1)	yes (1)	-	-
EVD16Q1	-	-	-	x (3)	yes	-	-		-	-	-	-	-
EVD16Q2	-	-	-	x	yes	yes	yes		yes	yes	yes	yes (5)	yes (5)
EVD18V	x	-	-	-	yes	-	-	-	-	-	-	-	

Model	Nominal RPM				3 Phase	
	1050 V	1300 S	1550 R	1725 Q	200 - 460 Volts (2)	
					Explosion Proof (4)	
EVD06R	-	-	x	-	-	
EVD08V	-	-	-	-	-	
EVD08S/R	-	x	x	-	-	
EVD08Q	-	-	-	-	-	
EVD10V	-	-	-	-	-	
EVD10S/R	-	x	x	-	-	
EVD10Q	-	-	-	-	-	
EVD11V/S/R	x	x	x	-	-	
EVD11Q	-	-	-	x	yes (6)	
EVD13V/S/R	x	x	x	-	-	
EVD13Q	-	-	-	x	yes (6)	
EVD16V/S/R	x	x	x	-	-	
EVD16Q1	-	-	-	x (3)	-	
EVD16Q2	-	-	-	x	yes (6)	
EVD18V	x	-	-	-	-	

(1) High speed only.

(2) 200V - 240V, 380V, 415V, 460V.

(3) Nominal 1650 RPM.

(4) Cls. I, Grp. D, Div. I / Cls. II, Grp. F & G, Div. I., Not available with 50 Hz.

(5) 208V-230V only. Not available in 200V.

(6) 230V and 460V only.

(7) Available on EC Motor only.

EVD06, EVD08, EVD10, & EVD11 | DIRECT DRIVE

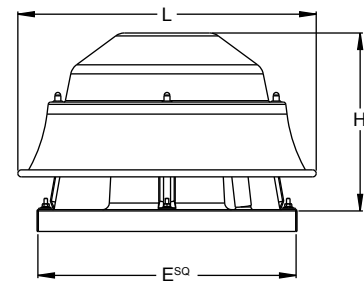
Performance Data Overview

Direct drive models are available with single and multi-speed motors. Multi-speed motors are designated V (1050 RPM), S (1300 RPM), and R (1550 RPM). EVD06R and EVD18V are exceptions, being single speed motors. Q, Q1, Q2 (1725/1760 RPM) are single speed motors. A single EVD fan may be suitable for several requirements by a simple wiring change. This feature provides flexibility for a variety of reasons, including energy savings, off-hours requirements, future expansion, or unexpected field variations. Direct drive models are available in seven sizes (6, 8, 10, 11, 13, 16 and 18); capacities range from below 150 CFM to above 4500 CFM, with static pressures beyond 1 1/4".

By using Lek-Trol™ variable speed controllers, the high speed flow rate of most models can be reduced by as much as 50%. Do not use Lek-Trol™ on medium or low speed for multispeed models, unless a specific Lek-trol™ is shown to be available (see Lek-Trol™ Speed Controller Availability). When compared to belt drive models, direct drive fans require less maintenance, have a simpler construction, cost less, and are lighter in weight. Performances in 50 Hz applications will be less than shown below; consult with local representative.

Model	Material Gages			Dimensions				Est. Ship Wt.
	Alum. Base	Galv. Base	Hood/Apron	L (Dia.)	H	E*	Ro	
EVD06R	0.064"	16 ga.	0.050"	18 7/8"	12 5/8"	18 1/2" x 18 1/2"	9 x 9	22 lbs
EVD08S/R	0.064"	16 ga.	0.064"	20 7/8"	13 5/8"	18 1/2" x 18 1/2"	9 x 9	26 lbs
EVD10S/R	0.064"	16 ga.	0.064"	20 7/8"	13 5/8"	18 1/2" x 18 1/2"	11 1/2" x 11 1/2"	29 lbs
EVD11V/S/R	0.064"	16 ga.	0.064"	20 7/8"	13 5/8"	18 1/2" x 18 1/2"	11 1/2" x 11 1/2"	38 lbs
EVD11Q	0.064"	16 ga.	0.064"	20 7/8"	13 5/8"	18 1/2" x 18 1/2"	11 1/2" x 11 1/2"	40 lbs

All dimensions are in inches. *Outside dimension of curb should be 1 1/2" less than "E" dimension.



Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		1.250" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
	EVD06R	1/100	52		1550	2841	14	4.3	100	3.6	69	3.4	-	-	-	-	-	-	-	-	-	-	-	-
EVD08S	1/100(4)	-(4)	1050	1649	191	0.3	111	0.8	54	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EVD08R	1/50	44	1300	3361	237	1.5	161	2.2	114	3.0	69	3.8	-	-	-	-	-	-	-	-	-	-	-	-
EVD10S	1/30	55	1550	4007	285	2.4	199	2.8	142	3.5	95	4.1	58	4.9	-	-	-	-	-	-	-	-	-	-
EVD10R	1/20(4)	-(4)	1725	4460	317	3.3	237	3.4	180	4.0	134	4.0	95	4.0	63	4.0	26	4.0	-	-	-	-	-	-
EVD10V	1/30(4)	-(4)	1050	2715	311	2.0	230	2.3	166	2.9	118	2.9	61	2.9	-	-	-	-	-	-	-	-	-	-
EVD10S	1/25	82	1300	3361	385	3.9	316	3.5	257	4.8	207	5.1	168	5.2	129	5.6	82	6.1	-	-	-	-	-	-
EVD10R	1/12(1)	121	1550	4007	559	6.1	501	5.9	446	6.1	394	6.5	338	6.8	267	7.0	187	7.2	100	7.4	-	-	-	-
EVD10Q	1/6(4)	-(4)	1725	4460	622	7.5	569	7.4	521	7.6	472	7.8	425	8.3	373	8.5	312	8.5	239	8.5	166	8.5	-	-
EVD11V	1/25	111	1050	2715	388	1.8	-	2.2	148	3.1	112	3.7	80	4.5	49	5.3	-	-	-	-	-	-	-	-
EVD11S	1/11	142	1300	3786	503	3.4	397	3.6	320	4.3	262	5.0	201	5.5	149	6.0	104	6.5	-	-	-	-	-	-
EVD11R	1/6(2)	201	1550	4514	736	6.7	659	6.4	577	6.6	502	6.9	432	7.6	356	7.9	274	7.9	188	7.9	100	7.9	-	-
EVD11Q	1/5(3)	288	1725	5024	997	9.7	921	9.7	850	9.5	768	9.5	685	9.4	598	9.2	511	9.0	409	8.7	294	8.9	100	8.0

- (1) TE motor is 1/6 Hp.
- (2) TE motor is 1/7 Hp.
- (3) EXP motor is 1/4 Hp.
- (4) Available on EC Motor only.

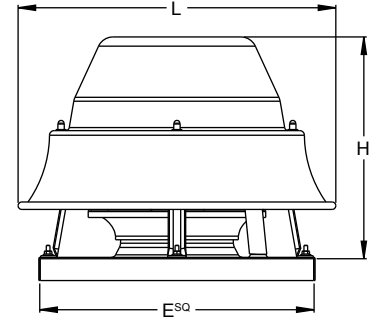
Performance certified for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances (accessories).

EVD fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

EVD13 | DIRECT DRIVE

Model	Material Gages			Dimensions				Est. Ship Wt.
	Alum. Base	Galv. Base	Hood/Apron	L (Dia.)	H	E*	Ro	
EVD13V/S/R	0.064"	16 ga.	0.064"	21 7/16	14 ¾	18 ½ x 18 ½	11 ½ x 11 ½	36 lbs
EVD13Q	0.064"	16 ga.	0.064"	21 7/16	14 ¾	18 ½ x 18 ½	11 ½ x 11 ½	43 lbs

All dimensions are in inches. *Outside dimension of curb should be 1 ½" less than "E" dimension.



Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		1.250" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
EVD13V	1/20	92	1050	3221	661	4.4	479	3.1	341	2.8	262	3.6	207	4.3	161	5.1	115	5.9	79	6.6	44	7.4	-	-
EVD13S	1/12	120	1300	3988	869	8	749	6.4	632	5.3	510	5.4	418	6	349	6.4	290	6.7	226	7	158	7.4	-	-
EVD13R	1/6	201	1550	4755	1054	10.5	988	9.9	917	9.2	839	8.9	736	8.5	651	8.2	579	7.9	510	7.9	428	8	191	8.5
EVD13Q	1/4	314	1725	5292	1280	16	1226	15.3	1170	14.6	1112	14	1053	13.4	995	13	936	12.5	868	12	796	11.5	630	11

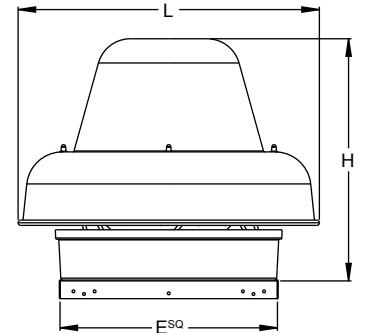
Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the air stream.

EVD fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

EVD16 & EVD18 | DIRECT DRIVE

Model	Material Gages			Dimensions				Est. Ship Wt.
	Alum. Base	Galv. Base	Hood/Apron	L (Dia.)	H	E*	Ro	
EVD16V/S/R, Q1 & Q2	0.064"	16 ga.	0.064"	28 ½	22 ½	20 ½ x 20 ½	16 x 16	56 lbs
EVD18V	0.080"	14 ga.	0.064"	39	31	28 ½	20	78 lbs

All dimensions are in inches. *Outside dimension of curb should be 1 ½" less than "E" dimension.



Model	Nominal			Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		1.250" SP	
	HP	Max Watts	RPM		CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones	CFM	Sones
EVD16V	1/6	453	1050	3788	1738	9.9	1489	8	1256	6.6	1032	6.1	884	6.6	772	7.1	682	7.9	598	9.9	529	10.1	392	10.2
EVD16S	1/3	510	1300	4690	2021	12	1822	10.6	1637	9.5	1428	8.7	1256	8.4	1094	8.5	943	9.3	850	10.2	775	11	606	12.3
EVD16R	1/3 (1)	574	1550	5592	2346	13.8	2176	12.8	2014	12	1853	11.3	1685	10.7	1532	10.4	1384	10.1	1247	10	1115	10.4	881	12.4
EVD16Q1	1/2	688	1650	5953	2701	16.9	2576	16.4	2465	15.9	2352	15.5	2228	15	2096	14.4	1966	14	1839	13.6	1700	13.5	1401	13.5
EVD16Q2	3/4	866	1725	6223	3016	17.7	2921	17.1	2829	16.7	2747	16.3	2665	15.9	2575	15.5	2484	15	2371	14.6	2256	14.2	2005	13.3
EVD18V	3/4	964	1075	6029	4561	21	4395	19.8	4230	19.1	4053	18.5	3865	17.9	3671	16.9	3454	16.4	3237	16.4	2995	16.4	2405	16.4

(1) TE motor is 1/2 Hp.

Performance shown is for installation Type A: Free Inlet, Free Outlet. Speed (RPM) shown is nominal. Performance is based on actual speed of test. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the air stream.

EVD fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

DIRECT DRIVE PERFORMANCE DATA

EVD Fan Curves

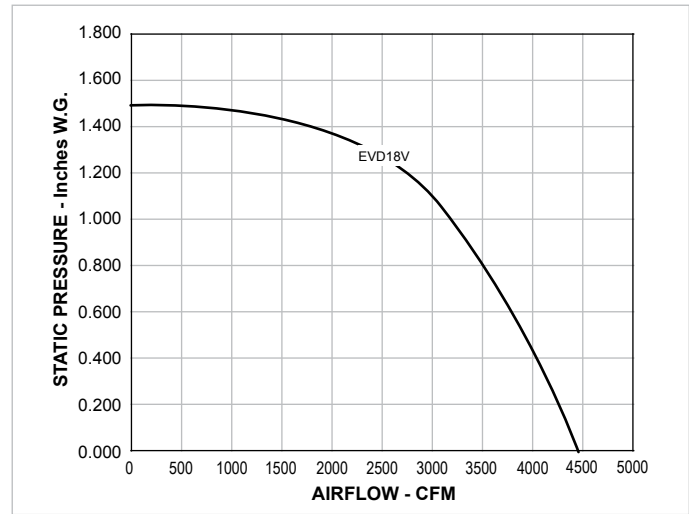
The fan curves illustrated here show the range of capacities available for direct drive units. Each graph shows the performance of several models at one particular nominal speed. Fan curves provide a quick method for selecting a fan unit based on design point requirements.

The direct drive performance chart on the previous page provides the tabular data (CFM and static pressure) used to plot the fan curves. In addition, the horsepower, tip speed and sones are tabulated. Since sound is normally an important factor in the selection of a fan, an engineer will usually want to select the "slowest" unit which meets CFM and SP requirements.

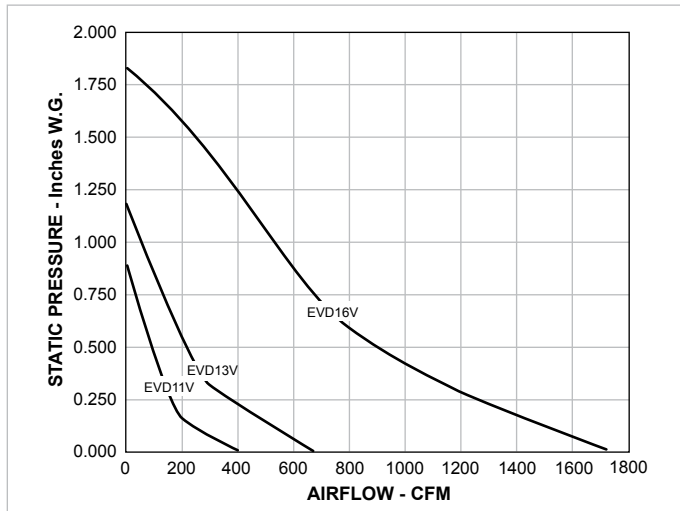
Please refer to the Motor Selection section to make sure the motor you select meets your electrical requirements.

EVD fans are only one component of a total system. As such, fan performance is directly affected by the system. It is critical that system designers determine the actual system loss to ensure that the actual flow is specified in the system design.

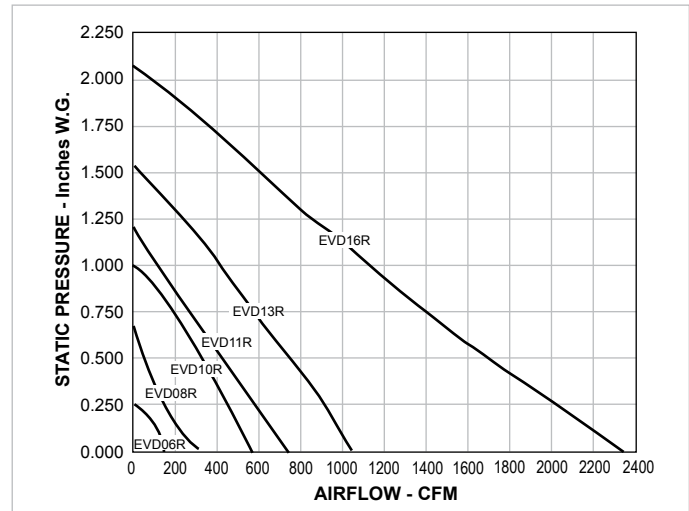
Nominal 1075 RPM



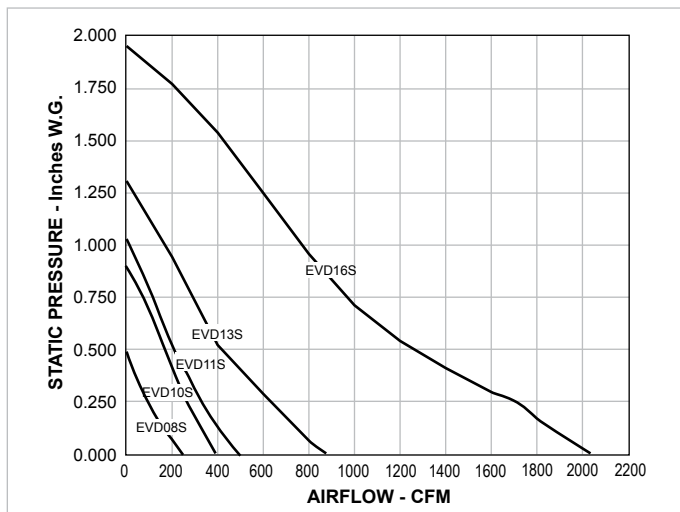
Nominal 1050 RPM



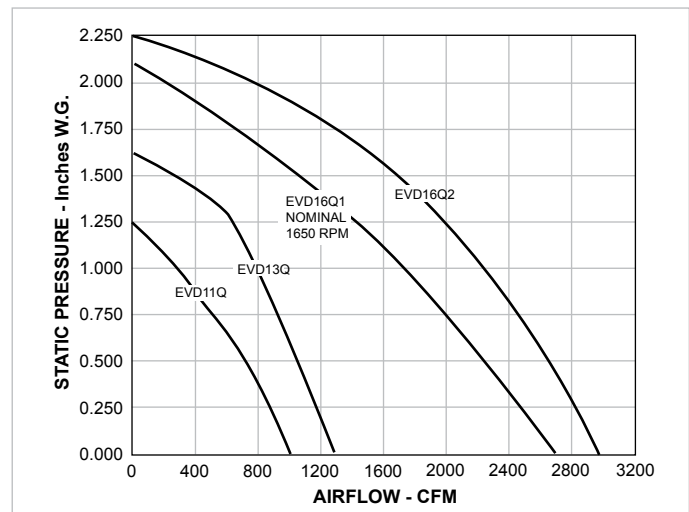
Nominal 1550 RPM



Nominal 1300 RPM



Nominal 1725 RPM



BELT DRIVE PERFORMANCE DATA

Performance Data

The belt drive models shown on the following pages have sizes and capacities ranging from below 300 CFM to above 39,000 CFM, with static pressures from 0" to above 1 ½". All models are available with a wide range of horsepower sizes and RPM's. Two-speed motors are commonly used to enhance this flexibility.

The data provided for each belt drive model includes:

- Elevation Drawing Showing Overall Dimensions
- Fan Curve Graph
- Performance Chart

Each curve graphically displays the range of capacities available for each model, in most cases beyond the specifics shown in the tabular data. The maximum performance afforded by each horsepower is indicated by dashed lines and the RPM is indicated by solid lines.

Some models have graphs that show both shaded and unshaded areas. Selection should be made from the unshaded area only. Shaded areas reflect unstable performance ("surge"), a characteristic typical of backward inclined wheels, and should be avoided. These unstable regions are not shown in the tabular data.

The highest RPM shown for a specific horsepower in the tabular data is the maximum speed that for any point along the performance curve, the BHP will not exceed the available horsepower.

It is important to note that while it is common industry-wide practice to exceed a "nominal" horsepower by using a motor's service factor, YORK® by Johnson Controls uses a conservative portion of the service factor, allowing half to remain a true "safety" factor.

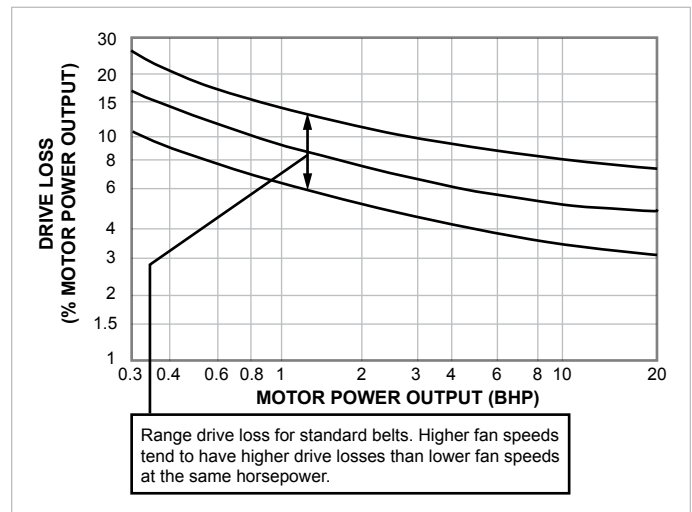
Use the Motor Availability chart (see Motor Selection) to select motor enclosures and voltages which can be installed in the fans.

Note: EVD fans are only one component of a total system. As such, performance is directly affected by the system. It is critical that system designers determine actual system losses to ensure that the actual flow is specified in the system range.

Belt Drive Losses

The AMCA Review Committee has developed the chart shown below for the purpose of estimating belt drive losses. To calculate total BHP (including drive losses): Find the BHP of your operating point on the x-axis on the graph below. Follow the vertical line to the curves indicating the range of drive losses. Look at the y-axis on the left and find the drive loss percentage. Calculate the total BHP by adding the drive loss to the operating point BHP. For BHP's below 0.3, use 30%.

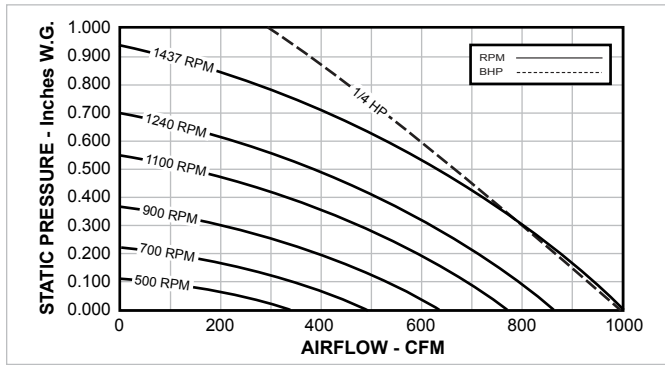
Drive Loss Reference Chart



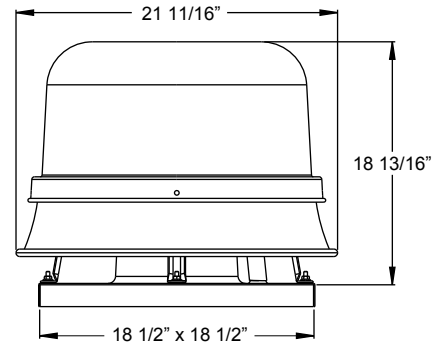
For totally enclosed, explosion proof, multi-speed and all 1.0 Service Factor motors, fan BHP plus drive losses should not exceed motor rated HP.

Graph reprinted from AMCA publication 203, with the express written permission from the Air Movement and Control Association, Inc., 30 West University Drive, Arlington Heights, IL 60004-1983.

EVD06B | BELT DRIVE



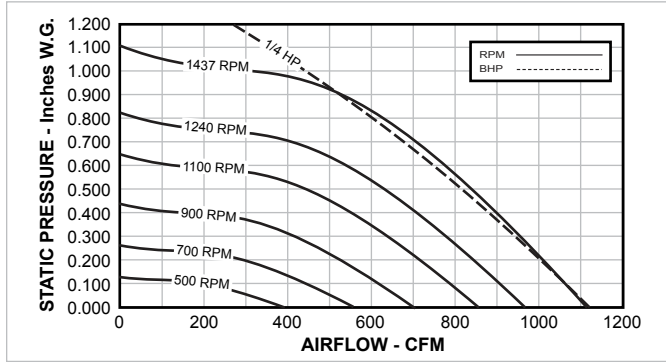
- Galv. Steel Base = 16 Gage
- Aluminum Base = 0.064"
- Discharge Apron = 0.05"
- Hood = 0.064"
- Roof Opening = 11 1/2" SQ.
- Damper Size = 11 1/4" SQ.
- Max. Motor Frame Size = 42
- Peak BHP = (RPM/2232)³
- Max. RPM = 1437 (1/4 HP)
- Est. Ship Weight = 35 lbs.



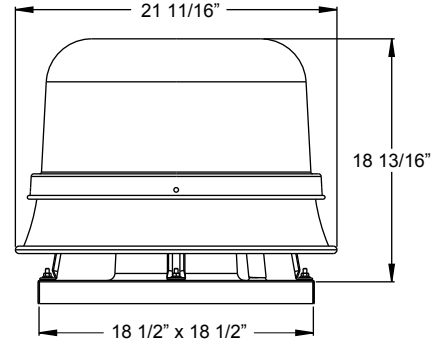
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	375	1092	264		-		-		-		-		-	
			1.6	0.01	-		-		-		-		-	
	430	1252	302		-		-		-		-		-	
			1.8	0.01	-		-		-		-		-	
	475	1383	334		-		-		-		-		-	
			2.1	0.01	-		-		-		-		-	
	520	1515	366		-		-		-		-		-	
			2.2	0.01	-		-		-		-		-	
	565	1646	397		-		-		-		-		-	
			2.4	0.02	-		-		-		-		-	
	610	1777	429		179		-		-		-		-	
			2.9	0.02	2.5	0.02	-		-		-		-	
	655	1908	461		244		-		-		-		-	
			3.1	0.02	2.6	0.02	-		-		-		-	
	700	2039	492		298		-		-		-		-	
			3.4	0.03	2.9	0.03	-		-		-		-	
	745	2170	524		347		-		-		-		-	
			3.7	0.04	3.2	0.03	-		-		-		-	
	790	2301	556		394		114		-		-		-	
			4.0	0.04	3.5	0.04	3.1	0.04	-		-		-	
835	2432	587		438		209		-		-		-		
		4.4	0.05	3.8	0.05	3.5	0.04	-		-		-		
880	2563	619		480		279		-		-		-		
		4.8	0.06	4.3	0.06	3.7	0.05	-		-		-		
925	2694	651		519		344		-		-		-		
		5.2	0.07	4.7	0.07	4.1	0.06	-		-		-		
970	2825	683		558		398		146		-		-		
		5.9	0.08	5.3	0.08	4.6	0.07	4.4	0.05	-		-		
1015	2956	714		597		450		243		-		-		
		6.4	0.09	5.8	0.09	5.2	0.08	4.8	0.07	-		-		
1060	3087	746		635		498		315		-		-		
		6.5	0.11	6.0	0.10	5.3	0.10	4.9	0.08	-		-		
1105	3218	778		674		544		382		131		-		
		6.8	0.12	6.3	0.12	5.7	0.11	5.1	0.10	4.9	0.07	-		
1150	3349	809		712		590		442		241		-		
		7.2	0.13	6.7	0.13	6.1	0.13	5.5	0.12	5.1	0.10	-		
1195	3480	841		749		634		496		318		-		
		7.7	0.15	7.2	0.15	6.5	0.14	5.9	0.13	5.4	0.12	-		
1240	3612	873		783		675		547		389		158		
		8.2	0.17	7.6	0.17	6.9	0.16	6.4	0.15	5.8	0.14	5.3	0.11	
1280	3728	901		814		710		590		447		256		
		8.4	0.19	7.9	0.18	7.3	0.18	6.7	0.17	6.3	0.16	5.9	0.13	
1320	3845	929		845		745		633		501		330		
		8.8	0.20	8.2	0.20	7.6	0.20	7.1	0.19	6.7	0.18	6.4	0.15	
1350	3932	950		868		771		664		537		378		
		9.1	0.22	8.5	0.22	8.0	0.21	7.4	0.20	7.0	0.19	6.8	0.17	
1390	4048	978		898		805		704		585		440		
		9.5	0.24	9.1	0.24	8.4	0.23	7.9	0.22	7.5	0.21	7.3	0.19	
1420	4136	999		921		830		734		619		484		
		9.9	0.25	9.4	0.25	8.8	0.25	8.3	0.24	7.8	0.23	7.8	0.21	
1437	4185	1011		933		845		750		638		509		
		10.1	0.26	9.5	0.26	9.1	0.25	8.5	0.25	8.0	0.24	7.9	0.22	

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD08B | BELT DRIVE



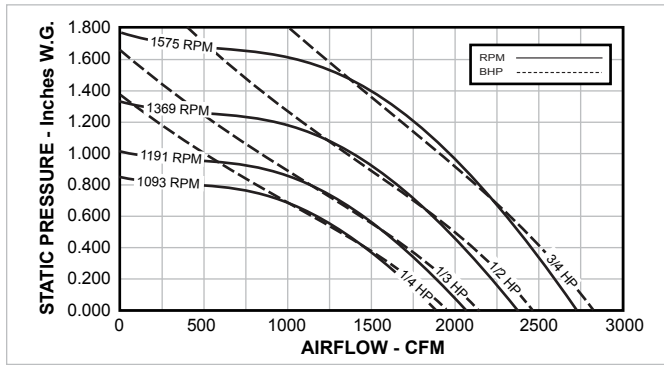
- Galv. Steel Base = 16 Gage
- Aluminum Base = 0.064"
- Discharge Apron = 0.064"
- Hood = 0.064"
- Roof Opening = 11 1/2" SQ.
- Damper Size = 11 1/4" SQ.
- Max. Motor Frame Size = 42
- Peak BHP = (RPM/2232)³
- Max. RPM = 1437 (1/4 HP)
- Est. Ship Weight = 35 lbs.



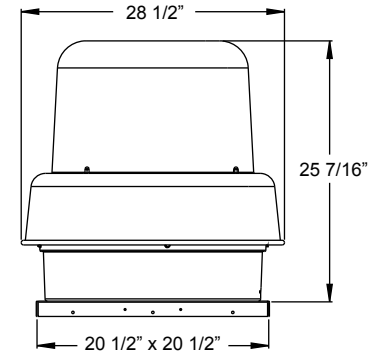
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	375	1150	289	-	-	-	-	-	-	-	-	-	-	-	-	-
			1.4	0.01	-	-	-	-	-	-	-	-	-	-	-	-
	430	1319	331	-	-	-	-	-	-	-	-	-	-	-	-	-
			1.7	0.01	-	-	-	-	-	-	-	-	-	-	-	-
	475	1457	366	-	-	-	-	-	-	-	-	-	-	-	-	-
			2.0	0.01	-	-	-	-	-	-	-	-	-	-	-	-
	520	1595	401	-	155	-	-	-	-	-	-	-	-	-	-	-
			2.2	0.01	1.7	0.01	-	-	-	-	-	-	-	-	-	-
	565	1733	435	-	242	-	-	-	-	-	-	-	-	-	-	-
			2.5	0.02	1.9	0.02	-	-	-	-	-	-	-	-	-	-
	610	1871	470	-	301	-	-	-	-	-	-	-	-	-	-	-
			3.1	0.02	2.4	0.02	-	-	-	-	-	-	-	-	-	-
	655	2009	505	-	351	-	-	-	-	-	-	-	-	-	-	-
			3.4	0.02	2.7	0.02	-	-	-	-	-	-	-	-	-	-
	700	2147	540	-	399	-	-	-	-	-	-	-	-	-	-	-
			3.8	0.03	3.1	0.03	-	-	-	-	-	-	-	-	-	-
	745	2285	574	-	444	247	-	-	-	-	-	-	-	-	-	-
			4.3	0.03	3.5	0.04	3.0	0.03	-	-	-	-	-	-	-	-
	790	2424	609	-	487	330	-	-	-	-	-	-	-	-	-	-
			4.6	0.04	3.9	0.04	3.3	0.04	-	-	-	-	-	-	-	-
835	2562	644	-	530	393	-	-	-	-	-	-	-	-	-	-	
		5.0	0.05	4.2	0.05	3.6	0.05	-	-	-	-	-	-	-	-	
880	2700	678	-	571	446	207	-	-	-	-	-	-	-	-	-	
		5.5	0.06	4.7	0.06	4.0	0.06	3.6	0.05	-	-	-	-	-	-	
925	2838	713	-	611	496	329	-	-	-	-	-	-	-	-	-	
		6.0	0.07	5.2	0.07	4.5	0.07	4.0	0.07	-	-	-	-	-	-	
970	2976	748	-	651	543	408	-	-	-	-	-	-	-	-	-	
		6.7	0.08	5.9	0.08	5.2	0.08	4.5	0.08	-	-	-	-	-	-	
1015	3114	783	-	691	590	471	236	-	-	-	-	-	-	-	-	
		7.2	0.09	6.5	0.09	5.8	0.09	5.1	0.09	4.8	0.08	-	-	-	-	
1060	3252	817	-	730	635	526	364	-	-	-	-	-	-	-	-	
		7.5	0.10	6.8	0.10	6.2	0.11	5.6	0.11	5.2	0.10	-	-	-	-	
1105	3390	852	-	769	678	577	449	-	-	-	-	-	-	-	-	
		8.0	0.11	7.2	0.12	6.6	0.12	6.0	0.12	5.5	0.12	-	-	-	-	
1150	3258	887	-	808	720	626	514	309	-	-	-	-	-	-	-	
		8.8	0.13	7.9	0.13	7.3	0.13	6.7	0.13	6.2	0.13	5.8	0.12	-	-	
1195	3666	921	-	846	762	673	575	426	-	-	-	-	-	-	-	
		9.8	0.14	8.8	0.15	8.1	0.15	7.6	0.15	7.1	0.15	6.7	0.14	-	-	
1240	3804	956	-	885	803	719	626	509	279	-	-	-	-	-	-	
		10.4	0.16	9.4	0.16	8.6	0.17	8.1	0.17	7.7	0.17	7.4	0.16	6.8	0.14	
1280	3927	687	-	918	840	760	670	566	398	-	-	-	-	-	-	
		10.5	0.17	9.6	0.18	8.9	0.18	8.3	0.19	7.9	0.19	7.6	0.18	7.3	0.17	
1320	4049	1018	-	952	875	798	714	622	488	-	-	-	-	-	-	
		10.8	0.19	10.0	0.20	9.3	0.20	8.7	0.20	8.3	0.20	8.0	0.20	7.9	0.19	
1350	4141	1041	-	977	902	827	746	658	544	-	-	-	-	-	-	
		11.1	0.21	10.4	0.21	9.7	0.21	9.0	0.22	8.7	0.22	8.5	0.22	8.3	0.21	
1390	4264	1072	-	1010	937	865	787	704	603	-	-	-	-	-	-	
		11.7	0.22	11.1	0.23	10.3	0.23	9.7	0.23	9.1	0.24	9.1	0.24	9.0	0.23	
1420	4356	1095	-	1035	964	893	818	737	645	-	-	-	-	-	-	
		12.3	0.24	11.6	0.24	10.9	0.25	10.3	0.25	9.6	0.25	9.6	0.25	9.6	0.25	
1437	4408	1108	-	1049	979	909	836	756	669	-	-	-	-	-	-	
		12.5	0.25	11.8	0.25	11.1	0.26	10.5	0.26	9.9	0.26	9.8	0.26	9.8	0.26	

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD11B | BELT DRIVE



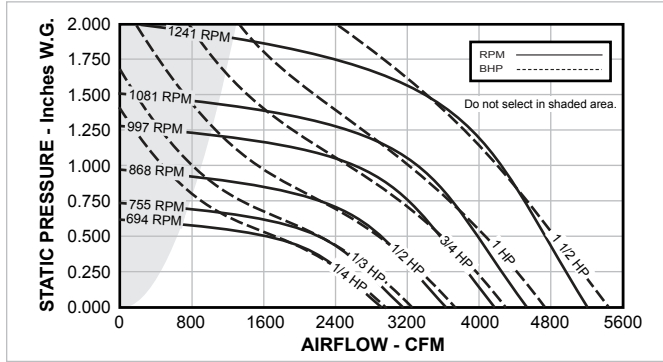
Galv. Steel Base = 16 Gage
Aluminum Base = 0.064"
Hood / Apron = 0.08"
Roof Opening = 16" SQ.
Damper Size = 15 3/4" SQ.
Max. Motor Frame Size = 56
Peak BHP = (RPM/1700) ³
Max. RPM = 1575 (3/4 HP)
Est. Ship Weight = 55 lbs.



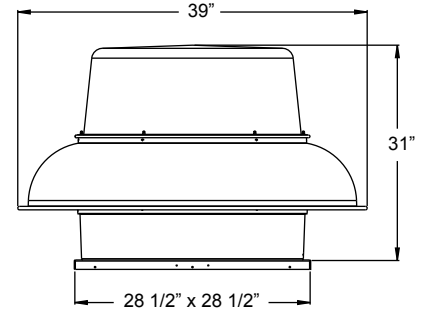
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		0.875" SP		1.000" SP		1.125" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	650	2345	1120	905	535	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	675	2435	1164	959	638	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			4.9 0.05	4.3 0.06	3.6 0.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	700	2526	1207	1011	737	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			5.1 0.06	4.6 0.07	3.9 0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	725	2616	1250	1062	813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			5.5 0.07	4.9 0.07	4.3 0.08	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	750	2706	1293	1113	880	252	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			5.8 0.07	5.3 0.08	4.7 0.09	4.1 0.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	800	2886	1379	1213	1007	672	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			6.6 0.09	6.1 0.10	5.5 0.10	5.0 0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	825	2976	1422	1263	1067	775	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			6.8 0.10	6.3 0.10	5.7 0.11	5.2 0.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	850	3067	1465	1312	1126	874	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7.0 0.11			6.5 0.11	5.9 0.12	5.4 0.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
900	3247	1552	1407	1238	1028	665	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		7.8 0.13	7.2 0.13	6.5 0.14	6.0 0.15	5.7 0.13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
950	3427	1638	1502	1347	1159	884	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		8.5 0.15	7.9 0.16	7.3 0.16	6.7 0.17	6.3 0.17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1000	3608	1724	1596	1451	1282	1080	706	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		9.2 0.17	8.7 0.18	8.0 0.19	7.3 0.20	7.0 0.20	6.8 0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1050	3788	1810	1689	1553	1400	1217	939	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		9.7 0.20	9.2 0.21	8.5 0.22	7.8 0.23	7.4 0.23	7.1 0.22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1075	3878	1853	1735	1603	1456	1284	1040	647	-	-	-	-	-	-	-	-	-	-	-	-	-	
		10.0 0.21	9.4 0.23	8.8 0.23	8.1 0.24	7.7 0.25	7.4 0.25	7.5 0.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1093	3943	1884	1768	1639	1496	1329	1111	758	-	-	-	-	-	-	-	-	-	-	-	-	-	
		10.2 0.23	9.6 0.24	9.1 0.24	8.3 0.26	7.9 0.26	7.7 0.26	7.7 0.23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/3	1125	4059	1940	1827	1703	1566	1408	1227	924	-	-	-	-	-	-	-	-	-	-	-	-	
			10.6 0.25	10.0 0.26	9.5 0.27	8.8 0.27	8.2 0.29	8.0 0.29	8.1 0.27	-	-	-	-	-	-	-	-	-	-	-	-	-
			1983	1873	1753	1621	1469	1296	1028	489	-	-	-	-	-	-	-	-	-	-	-	-
1150	4149	11.0 0.26	10.4 0.27	9.8 0.28	9.1 0.29	8.5 0.31	8.3 0.31	8.3 0.29	8.4 0.21	-	-	-	-	-	-	-	-	-	-	-	-	
		2053	1948	1834	1708	1568	1406	1193	883	-	-	-	-	-	-	-	-	-	-	-	-	
1191	4297	11.5 0.29	11.0 0.30	10.5 0.31	9.8 0.32	9.0 0.34	8.8 0.34	8.6 0.34	8.6 0.31	-	-	-	-	-	-	-	-	-	-	-	-	
		2103	2001	1889	1767	1634	1481	1306	1019	-	-	-	-	-	-	-	-	-	-	-	-	
1/2	1220	4402	11.9 0.31	11.4 0.33	10.9 0.34	10.2 0.34	9.6 0.36	9.2 0.37	9.0 0.37	8.9 0.34	-	-	-	-	-	-	-	-	-	-	-	
			2155	2056	1947	1829	1700	1555	1393	1142	801	-	-	-	-	-	-	-	-	-	-	-
	1250	4510	12.4 0.34	11.9 0.35	11.4 0.36	10.8 0.37	10.0 0.38	9.6 0.39	9.4 0.39	9.3 0.38	9.3 0.33	-	-	-	-	-	-	-	-	-	-	
			2241	2147	2042	1930	1811	1677	1528	1342	1071	-	-	-	-	-	-	-	-	-	-	-
	1300	4690	13.0 0.38	12.6 0.39	12.2 0.40	11.6 0.41	10.9 0.42	10.2 0.44	10.1 0.44	9.9 0.44	9.9 0.42	-	-	-	-	-	-	-	-	-	-	-
2360			2271	2172	2069	1959	1838	1703	1556	1352	1095	-	-	-	-	-	-	-	-	-	-	
1369	4939	14.0 0.44	13.6 0.46	13.2 0.47	12.8 0.48	12.1 0.49	11.4 0.51	11.0 0.52	10.8 0.52	10.9 0.51	10.9 0.48	-	-	-	-	-	-	-	-	-	-	
		2379	2290	2193	2091	1982	1862	1730	1585	1396	1141	-	-	-	-	-	-	-	-	-	-	
3/4	1380	4979	14.1 0.45	13.8 0.47	13.4 0.48	13.0 0.49	12.3 0.50	11.6 0.52	11.1 0.53	10.9 0.53	11.0 0.52	11.1 0.50	-	-	-	-	-	-	-	-	-	
			2431	2344	2249	2150	2044	1929	1803	1666	1513	1265	-	-	-	-	-	-	-	-	-	-
	1410	5087	14.6 0.48	14.2 0.50	13.8 0.51	13.5 0.52	12.8 0.53	12.1 0.55	11.5 0.56	11.4 0.56	11.4 0.57	11.5 0.54	-	-	-	-	-	-	-	-	-	
			2535	2451	2361	2268	2166	2061	1946	1818	1681	1505	-	-	-	-	-	-	-	-	-	-
	1470	5304	15.6 0.55	15.2 0.56	14.8 0.58	14.5 0.58	13.9 0.60	13.2 0.61	12.6 0.64	12.3 0.64	12.2 0.64	12.3 0.63	-	-	-	-	-	-	-	-	-	-
2586			2504	2416	2325	2227	2126	2014	1892	1761	1620	-	-	-	-	-	-	-	-	-	-	
1500	5412	16.1 0.58	15.8 0.60	15.4 0.61	15.1 0.62	14.5 0.63	13.9 0.64	13.2 0.67	12.8 0.68	12.7 0.68	12.8 0.68	-	-	-	-	-	-	-	-	-	-	
		2716	2638	2555	2468	2377	2282	2180	2073	1952	1825	-	-	-	-	-	-	-	-	-	-	
1575	5682	17.4 0.67	17.2 0.69	16.9 0.71	16.6 0.72	16.3 0.73	15.6 0.74	15.0 0.76	14.4 0.78	14.3 0.79	14.3 0.79	-	-	-	-	-	-	-	-	-	-	
		2716	2638	2555	2468	2377	2282	2180	2073	1952	1825	-	-	-	-	-	-	-	-	-	-	-

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD16B | BELT DRIVE



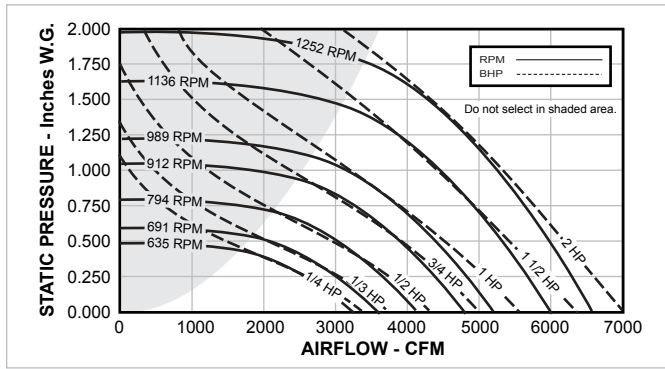
Galv. Steel Base = 14 Gage
Aluminum Base = 0.08"
Discharge Apron = 0.064"
Hood = 0.08"
Roof Opening = 20" SQ.
Damper Size = 19 3/4" SQ.
Max. Motor Frame Size = 145T
Peak BHP = (RPM/1078) ³
Max. RPM = 1631
Est. Ship Weight = 131 lbs.



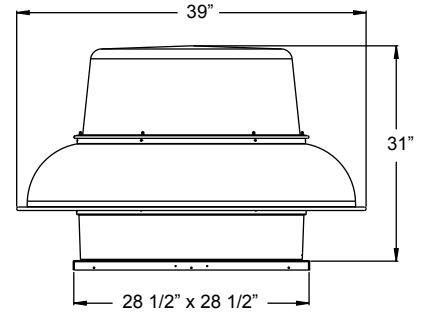
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	300	1468	1248		-		-		-		-		-		-		-		-		-	
			3.1	0.02	-		-		-		-		-		-		-		-		-	
	450	2202	1873		1531		511		-		-		-		-		-		-		-	
			5.2	0.06	4.5	0.07	4.4	0.05	-		-		-		-		-		-		-	
	600	2936	2497		2250		1980		1465		-		-		-		-		-		-	
			8.8	0.15	8.3	0.16	7.9	0.17	7.4	0.16	-		-		-		-		-		-	
650	3180	2705		2478		2233		1935		1029		-		-		-		-		-		
		9.7	0.19	9.1	0.20	8.8	0.21	8.5	0.22	7.8	0.17	-		-		-		-		-		
694	3395	2889		2677		2450		2212		1707		-		-		-		-		-		
		10.4	0.23	10.0	0.24	9.7	0.26	9.3	0.27	8.8	0.25	-		-		-		-		-		
1/3	715	3498	2976		2772		2552		2323		1948		907		-		-		-		-	
			10.9	0.25	10.5	0.27	10.1	0.28	9.8	0.29	9.2	0.29	8.9	0.20	-		-		-		-	
	735	3596	3059		2861		2648		2426		2120		1302		-		-		-		-	
11.5			0.27	11.0	0.29	10.6	0.30	10.2	0.31	9.7	0.32	9.2	0.26	-		-		-		-		
1/2	755	3694	3142		2950		2744		2528		2266		1620		-		-		-		-	
			11.9	0.30	11.6	0.31	11.1	0.33	10.7	0.34	10.3	0.34	9.7	0.31	-		-		-		-	
	775	3792	3226		3039		2839		2629		2397		1897		766		-		-		-	
			12.3	0.32	11.9	0.34	11.6	0.35	11.2	0.36	10.7	0.37	10.1	0.35	9.9	0.22	-		-		-	
	800	3914	3330		3150		2957		2755		2546		2183		1334		-		-		-	
			12.8	0.35	12.4	0.37	12.0	0.38	11.7	0.40	11.3	0.41	10.6	0.40	10.3	0.40	-		-		-	
825	4036	3434		3259		3073		2878		2679		2396		1744		-		-		-		
		13.3	0.39	12.9	0.40	12.5	0.42	12.2	0.43	11.8	0.45	11.2	0.45	10.7	0.40	-		-		-		
850	4159	3538		3368		3188		2901		2808		2575		2091		-		-		-		
		13.8	0.42	13.5	0.44	13.1	0.46	12.7	0.47	12.3	0.49	11.9	0.49	11.2	0.46	-		-		-		
3/4	868	4247	3613		3447		3271		3088		2900		2690		2314		-		-		-	
			14.3	0.45	13.9	0.47	13.5	0.49	13.2	0.50	12.8	0.51	12.3	0.52	11.6	0.51	-		-		-	
	895	4379	3725		3564		3395		3218		3037		2850		2556		887		-		-	
			15.0	0.49	14.6	0.51	14.2	0.53	13.9	0.55	13.5	0.56	13.0	0.57	12.4	0.57	11.9	0.35	-		-	
	925	4526	3850		3694		3531		3362		3187		3009		2778		1563		-		-	
			15.8	0.54	15.4	0.56	15.0	0.58	14.7	0.60	14.3	0.62	13.9	0.63	13.3	0.63	12.5	0.50	-		-	
950	4648	3954		3803		3644		3481		3311		3138		2941		1974		-		-		
		16.5	0.59	16.1	0.61	15.8	0.63	15.4	0.65	15.0	0.66	15.0	0.68	14.2	0.69	13.1	0.60	-		-		
975	4770	4058		3911		3757		3599		3433		3266		3090		2331		-		-		
		17.1	0.64	16.7	0.66	16.4	0.68	16.0	0.70	15.7	0.71	15.3	0.73	14.8	0.74	13.6	0.69	-		-		
997	4878	4150		4005		3856		3701		3540		3377		3212		2608		-		-		
		17.4	0.68	17.1	0.70	16.7	0.72	16.4	0.74	16.0	0.76	15.7	0.78	15.2	0.79	13.9	0.77	-		-		
1	1025	5015	4266		4126		3982		3831		3676		3518		3357		2880		1573		-	
			17.9	0.74	17.6	0.76	17.2	0.78	16.9	0.80	16.5	0.82	16.2	0.84	15.8	0.85	14.6	0.86	14.1	0.65	-	
	1055	5162	4391		4255		4116		3969		3820		3667		3511		3115		2100		-	
			18.5	0.81	18.1	0.83	17.8	0.85	17.4	0.87	17.1	0.89	16.7	0.91	16.3	0.93	15.4	0.94	14.4	0.81	-	
1081	5289	4500		4366		4231		4088		3943		3794		3643		3299		2484		-		
		18.9	0.87	18.6	0.89	18.3	0.92	17.9	0.94	17.6	0.96	17.2	0.97	16.8	0.99	15.9	1.01	14.7	0.93	-		
1 1/2	1115	5455	4641		4512		4382		4244		4104		3960		3814		3504		2920		1562	
			19.8	0.95	19.4	0.98	19.1	1.00	18.7	1.02	18.4	1.04	18.1	1.06	17.6	1.08	16.7	1.11	15.3	1.08	15.1	0.80
	1150	5626	4787		4662		4536		4403		4268		4129		3989		3703		3256		2209	
			21.0	1.04	20.0	1.07	20.0	1.10	19.7	1.12	19.3	1.14	19.0	1.16	18.6	1.18	17.7	1.21	16.5	1.21	15.6	1.03
	1180	5773	4912		4790		4668		4538		4407		4273		4136		3858		3486		2664	
			22.0	1.13	21.0	1.16	21.0	1.18	21.0	1.21	20.0	1.23	19.8	1.25	19.4	1.27	18.6	1.30	17.5	1.32	16.2	1.19
1210	5920	5037		4918		4798		4673		4546		4416		4282		4012		3698		3056		
		22.0	1.22	22.0	1.24	22.0	1.27	21.0	1.30	21.0	1.32	21.0	1.34	20.0	1.36	19.3	1.40	18.4	1.42	16.8	1.36	
1241	6072	5166		5050		4933		4812		4688		4563		4432		4170		3884		3398		
		23.0	1.31	23.0	1.34	22.0	1.37	22.0	1.39	22.0	1.42	21.0	1.44	21.0	1.46	20.0	1.50	19.1	1.53	17.8	1.51	

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD18B | BELT DRIVE



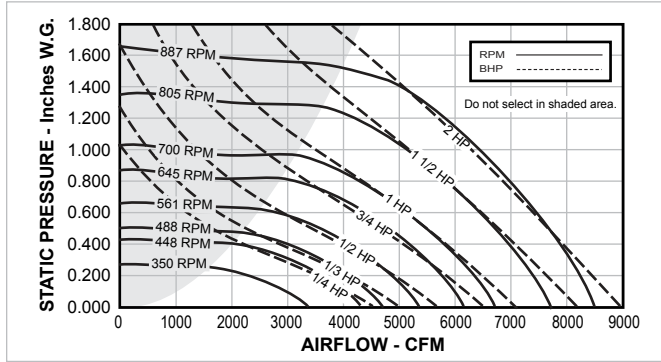
Galv. Steel Base = 14 Gage
Aluminum Base = 0.08"
Discharge Apron = 0.064"
Hood = 0.08"
Roof Opening = 20" SQ.
Damper Size = 19 3/4" SQ.
Max. Motor Frame Size = 145T
Peak BHP = (RPM/986) ³
Max. RPM = 1326 (2 HP)
Est. Ship Weight = 132 lbs.



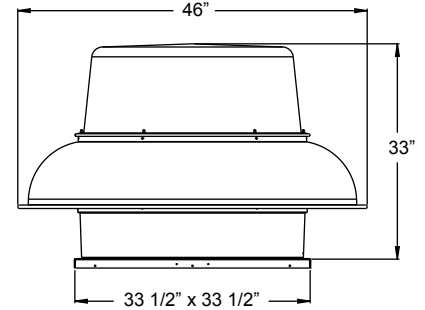
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP					
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP				
1/4	375	1988	1975		1402		-		-		-		-		-		-		-		-		-			
			3.9	0.04	3.6	0.05	-		-		-		-		-		-		-		-		-		-	
	549	2910	2892		2531		2138		-		-		-		-		-		-		-		-			
			8.0	0.14	7.7	0.16	7.1	0.17	-		-		-		-		-		-		-		-		-	
590	3128	3108		2774		2417		1746		-		-		-		-		-		-		-		-		
		8.9	0.18	8.5	0.20	7.9	0.21	7.4	0.20	-		-		-		-		-		-		-		-		
		3345		3037		2711		2291		-		-		-		-		-		-		-		-		
635	3366	10.1	0.22	9.7	0.24	9.1	0.26	8.3	0.26	-		-		-		-		-		-		-		-		
		3450		3153		2838		2478		1493		-		-		-		-		-		-		-		
		10.4	0.24	10.0	0.26	9.4	0.28	8.7	0.29	8.2	0.24	-		-		-		-		-		-		-		
655	3472	3555		3268		2963		2638		1913		-		-		-		-		-		-		-		
		10.7	0.26	10.3	0.29	9.8	0.31	9.1	0.32	8.4	0.30	-		-		-		-		-		-		-		
		691		3663		3640		3360		3062		2751		2162		-		-		-		-		-		
1/3	3791	10.9	0.28	10.5	0.31	10.1	0.33	9.3	0.34	8.5	0.34	-		-		-		-		-		-		-		
		3766		3497		3209		2911		2456		-		-		-		-		-		-		-		
		11.4	0.31	11.0	0.34	10.5	0.36	9.8	0.38	9.0	0.37	-		-		-		-		-		-		-		
		3898		3639		3361		3075		2712		1852		-		-		-		-		-		-		
740	3923	12.1	0.35	11.7	0.37	11.2	0.39	10.4	0.41	9.7	0.42	9.1	0.37	-		-		-		-		-		-		
		4056		3808		3542		3271		2974		2383		-		-		-		-		-		-		
		13.1	0.39	12.7	0.42	12.2	0.44	11.5	0.46	10.6	0.48	9.7	0.46	-		-		-		-		-		-		
770	4082	4182		3943		3685		3424		3150		2684		1604		-		-		-		-		-		
		14.2	0.43	13.7	0.46	13.2	0.48	12.5	0.50	11.6	0.52	10.6	0.51	10.3	0.41	-		-		-		-		-		
		825		4374		4345		4115		3868		3618		3357		3010		2313		-		-		-		
3/4	4533	15.2	0.48	14.8	0.51	14.2	0.53	13.7	0.56	12.6	0.58	11.6	0.58	10.8	0.54	-		-		-		-		-		
		4503		4281		4045		3804		3555		3278		2763		-		-		-		-		-		
		15.5	0.53	15.1	0.57	14.6	0.59	14.1	0.62	13.2	0.64	12.2	0.65	11.2	0.64	-		-		-		-		-		
		4662		4447		4220		3987		3750		3504		3107		-		-		-		-		-		
885	4692	16.3	0.59	15.9	0.63	15.4	0.65	14.9	0.68	14.1	0.70	13.3	0.72	12.3	0.71	-		-		-		-		-		
		4804		4595		4376		4151		3923		3684		3376		1675		-		-		-		-		
		17.1	0.65	16.8	0.68	16.3	0.71	15.8	0.74	15.1	0.76	14.3	0.78	13.4	0.78	12.3	0.59	-		-		-		-		
912	4835	4899		4694		4480		4259		4036		3803		3536		2206		-		-		-		-		
		17.8	0.69	17.4	0.72	17.0	0.75	16.5	0.78	15.9	0.81	15.0	0.83	14.1	0.84	12.8	0.72	-		-		-		-		
		5083		4886		4682		4469		4255		4034		3806		2875		-		-		-		-		
930	4930	18.9	0.77	18.7	0.81	18.3	0.84	17.8	0.86	17.3	0.89	16.5	0.92	15.7	0.94	13.8	0.90	-		-		-		-		
		5209		5017		4819		4612		4403		4190		3969		3213		-		-		-		-		
		19.9	0.82	19.6	0.87	19.2	0.90	18.7	0.92	18.2	0.95	17.5	0.98	16.7	1.00	14.9	0.99	-		-		-		-		
1	5460	5425		5241		5053		4853		4653		4451		4240		3671		2215		-		-		-		
		21.0	0.93	21.0	0.97	20.0	1.01	19.9	1.04	19.5	1.07	18.9	1.10	18.0	1.12	16.5	1.12	15.5	0.92	-		-		-		
		5610		5431		5251		5058		4865		4671		4470		4006		2984		-		-		-		
		22.0	1.03	21.0	1.07	21.0	1.12	21.0	1.14	20.0	1.17	19.5	1.20	18.7	1.23	17.3	1.25	15.9	1.17	-		-		-		
1065	5646	5794		5621		5448		5262		5075		4887		4697		4291		3517		-		-		-		
		22.0	1.13	22.0	1.18	22.0	1.23	21.0	1.25	21.0	1.28	20.0	1.31	19.5	1.34	18.1	1.39	16.5	1.36	-		-		-		
		5984		5816		5649		5470		5289		5108		4925		4543		3945		2625		-		-		-
1100	5832	23.0	1.25	23.0	1.30	22.0	1.34	22.0	1.34	22.0	1.37	21.0	1.44	21.0	1.47	19.2	1.52	17.7	1.49	16.8	1.29	-		-		-
		6189		6027		5865		5694		5520		5345		5169		4802		4336		3414		-		-		-
		24.0	1.38	24.0	1.43	24.0	1.48	23.0	1.51	23.0	1.54	22.0	1.57	22.0	1.61	20.0	1.67	19.1	1.67	17.6	1.60	-		-		-
		6321		6162		6004		5838		5667		5495		5323		4967		4560		3786		-		-		-
1175	6229	25.0	1.47	25.0	1.52	24.0	1.57	24.0	1.61	23.0	1.64	23.0	1.67	23.0	1.71	21.0	1.77	20.0	1.80	18.3	1.77	-		-		-
		6453		6297		6142		5980		5813		5645		5477		5153		4763		4100		-		-		-
		25.0	1.57	25.0	1.62	25.0	1.67	25.0	1.71	24.0	1.74	24.0	1.77	23.0	1.81	22.0	1.87	21.0	1.93	19.6	1.88	-		-		-
1200	6362	6595		6443		6291		6134		5970		5806		5641		5307		4958		4399		-		-		-
		26.0	1.67	26.0	1.73	26.0	1.78	26.0	1.82	25.0	1.85	25.0	1.88	24.0	1.92	23.0	1.99	22.0	2.05	21.0	2.00	-		-		-

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD24B | BELT DRIVE



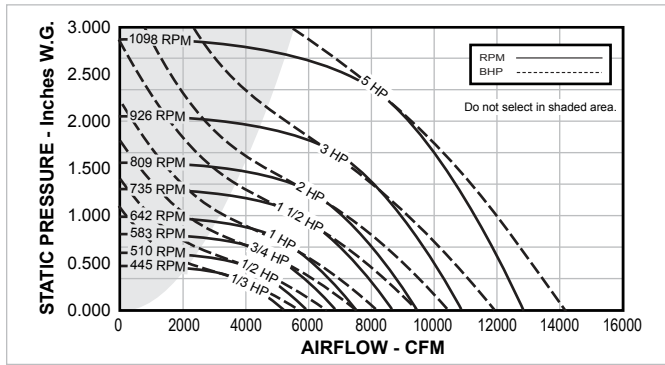
- Galv. Steel Base = 14 Gage
- Aluminum Base = 0.08"
- Discharge Apron = 0.064"
- Hood = 0.08"
- Roof Opening = 25" SQ.
- Damper Size = 24 3/4" SQ.
- Max. Motor Frame Size = 184T
- Peak BHP = (RPM/700)³
- Max. RPM = 1275 (5 HP)
- Est. Ship Weight = 183 lbs.



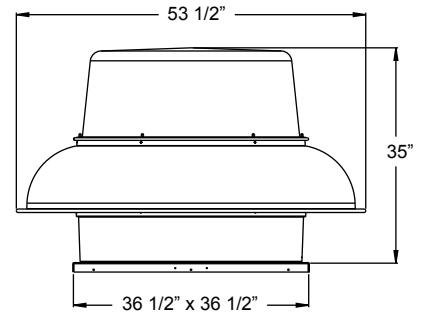
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP			
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/4	265	1719	2547		1450		-		-		-		-		-		-		-		-		-	
			3.1	0.05	1.4	0.05	-		-		-		-		-		-		-		-		-	
	399	2589	3835		3315		2531		-		-		-		-		-		-		-		-	
			7.6	0.15	7.0	0.18	5.5	0.18	-		-		-		-		-		-		-		-	
1/3	430	2790	4133		3675		2998		-		-		-		-		-		-		-		-	
			8.2	0.19	7.6	0.22	6.9	0.23	-		-		-		-		-		-		-		-	
	448	2906	4306		3873		3251		2278		-		-		-		-		-		-		-	
			8.6	0.22	7.9	0.25	7.3	0.26	4.7	0.24	-		-		-		-		-		-		-	
1/2	460	2984	4421		4003		3407		2534		-		-		-		-		-		-		-	
			8.9	0.24	8.2	0.27	7.6	0.28	5.2	0.27	-		-		-		-		-		-		-	
	475	3082	4565		4164		3600		2837		-		-		-		-		-		-		-	
			9.3	0.26	8.7	0.29	8.0	0.31	6.1	0.30	-		-		-		-		-		-		-	
3/4	488	3166	4690		4303		3766		3087		-		-		-		-		-		-		-	
			9.7	0.28	9.1	0.32	8.4	0.34	6.9	0.33	-		-		-		-		-		-		-	
	520	3374	4998		4643		4163		3575		2688		-		-		-		-		-		-	
			10.6	0.34	10.0	0.38	9.3	0.40	8.4	0.41	5.9	0.38	-		-		-		-		-		-	
1	530	3438	5094		4749		4283		3721		2901		-		-		-		-		-		-	
			10.8	0.36	10.2	0.40	9.5	0.42	8.8	0.43	6.5	0.41	-		-		-		-		-		-	
	540	3503	5190		4854		4402		3865		3107		-		-		-		-		-		-	
			11.0	0.38	10.5	0.42	9.7	0.45	9.0	0.46	7.0	0.43	-		-		-		-		-		-	
1 1/2	561	3640	5392		5075		4650		4142		3517		-		-		-		-		-		-	
			11.6	0.43	11.0	0.47	10.4	0.49	9.6	0.51	8.2	0.50	-		-		-		-		-		-	
	600	3893	5767		5473		5104		4642		4122		3399		-		-		-		-		-	
			13.1	0.52	12.6	0.57	11.9	0.59	11.2	0.62	10.3	0.62	8.2	0.59	-		-		-		-		-	
2	625	4055	6007		5726		5384		4955		4484		3890		2988		-		-		-		-	
			14.3	0.59	13.7	0.64	13.0	0.67	12.3	0.70	11.6	0.71	9.9	0.69	8.2	0.64	-		-		-		-	
	645	4185	6200		5926		5601		5196		4747		4226		3466		-		-		-		-	
			14.5	0.65	14.0	0.71	13.4	0.73	12.6	0.76	11.9	0.78	10.8	0.76	8.8	0.73	-		-		-		-	
3	663	4301	6373		6107		5795		5411		4980		4493		3838		-		-		-		-	
			14.7	0.71	14.2	0.76	13.7	0.79	13.0	0.82	12.3	0.85	11.4	0.84	9.7	0.80	-		-		-		-	
	675	4379	6488		6227		5924		5553		5134		4669		4075		-		-		-		-	
			15.0	0.75	14.5	0.80	13.9	0.84	13.1	0.86	12.6	0.89	11.8	0.89	10.3	0.86	-		-		-		-	
4	685	4444	6584		6327		6031		5671		5261		4815		4268		-		-		-		-	
			15.2	0.78	14.7	0.84	14.1	0.87	13.5	0.90	12.8	0.93	12.1	0.93	10.8	0.90	-		-		-		-	
	700	4541	6728		6477		6191		5847		5450		5031		4531		-		-		-		-	
			15.5	0.83	15.0	0.89	14.5	0.93	13.9	0.96	13.3	0.99	12.6	1.00	11.5	0.97	-		-		-		-	
5	750	4866	7209		6974		6721		6425		6063		5680		5269		4113		-		-		-	
			17.0	1.02	16.6	1.09	16.1	1.14	15.5	1.16	14.9	1.20	14.3	1.22	13.7	1.22	11.1	1.15	-		-		-	
	775	5028	7449		7222		6984		6697		6360		5998		5619		4619		-		-		-	
			17.9	1.13	17.5	1.19	17.1	1.25	16.5	1.27	16.0	1.31	15.4	1.34	14.8	1.36	12.4	1.30	-		-		-	
6	790	5125	7593		7370		7141		6860		6537		6186		5815		4910		-		-		-	
			18.6	1.20	18.2	1.26	17.7	1.32	17.2	1.34	16.6	1.38	16.0	1.42	15.5	1.43	13.4	1.39	-		-		-	
	805	5223	7738		7519		7298		7022		6713		6374		6009		5182		3788		-		-	
			19.1	1.27	18.6	1.33	18.1	1.40	17.6	1.42	17.0	1.45	16.5	1.50	15.9	1.51	14.1	1.48	12.0	1.35	-		-	
7	820	5320	7882		7667		7452		7183		6888		6556		6202		5407		4203		-		-	
			19.2	1.34	18.8	1.41	18.3	1.48	17.8	1.50	17.3	1.53	16.7	1.58	16.1	1.60	14.6	1.57	12.3	1.48	-		-	
	850	5515	8170		7963		7756		7505		7235		6915		6583		5851		4836		-		-	
			19.6	1.49	19.2	1.56	18.8	1.63	18.3	1.66	17.8	1.69	17.2	1.74	16.7	1.77	15.5	1.77	13.5	1.69	-		-	
870	5644	8362		8160		7957		7718		7462		7152		6834		6142		5234		-		-		
		20.0	1.60	20.0	1.67	19.5	1.74	19.0	1.78	18.5	1.80	17.9	1.85	17.4	1.89	16.3	1.91	14.3	1.84	-		-		
887	5755	8526		8327		8129		7898		7648		7352		7046		6384		5561		4317		-		
		21.0	1.69	21.0	1.77	20.0	1.84	19.7	1.89	19.2	1.91	18.6	1.95	18.1	2.00	17.0	2.04	15.3	1.97	13.9	1.83	-		

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD27B | BELT DRIVE



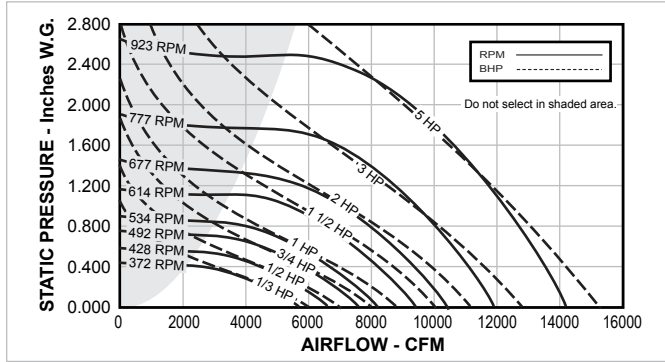
- Galv. Steel Base = 14 Gage
- Aluminum Base = 0.102"
- Discharge Apron = 0.08"
- Hood = 0.08"
- Roof Opening = 28" SQ.
- Damper Size = 27 1/4" SQ.
- Max. Motor Frame Size = 184T
- Peak BHP = (RPM/642)³
- Max. RPM = 1210
- Est. Ship Weight = 210 lbs.



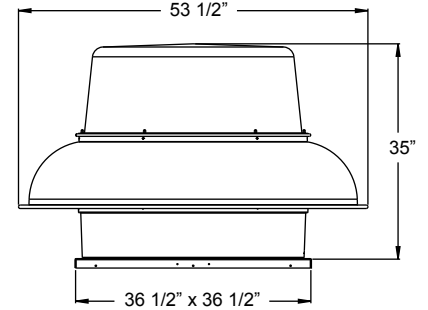
HP	RPM	Tip Speed FPM	0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		2.000" SP	
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP
1/3	445	3234	4748		4165		3314		-		-		-		-		-		-	
			8.1	0.29	7.3	0.32	6.8	0.33	-	-	-	-	-	-	-	-	-	-	-	-
1/2	475	3451	5124		4604		3947		-		-		-		-		-		-	
			9.2	0.34	8.4	0.38	7.7	0.40	-	-	-	-	-	-	-	-	-	-	-	-
1/2	510	3703	5557		5102		4545		3731		-		-		-		-		-	
			10.3	0.42	9.5	0.46	8.8	0.46	8.4	0.50	-	-	-	-	-	-	-	-	-	-
3/4	530	3850	5808		5386		4866		4180		-		-		-		-		-	
			10.9	0.47	10.2	0.51	9.5	0.54	9.0	0.56	-	-	-	-	-	-	-	-	-	-
3/4	560	4068	6178		5801		5321		4773		-		-		-		-		-	
			12.1	0.55	11.4	0.59	10.6	0.63	10.0	0.66	-	-	-	-	-	-	-	-	-	-
3/4	583	4239	6466		6121		5664		5166		-		-		-		-		-	
			13.3	0.62	12.5	0.66	11.6	0.70	10.9	0.73	-	-	-	-	-	-	-	-	-	-
1	600	4359	6670		6345		5915		5430		3890		-		-		-		-	
			13.8	0.67	13.1	0.71	12.2	0.76	11.4	0.79	10.8	0.79	-	-	-	-	-	-	-	-
1	620	4504	6912		6593		6188		5744		4473		-		-		-		-	
			14.4	0.73	13.9	0.78	13.0	0.83	12.1	0.87	11.3	0.90	-	-	-	-	-	-	-	-
1	642	4666	7182		6875		6501		6079		4967		-		-		-		-	
			15.0	0.81	14.5	0.86	13.8	0.91	12.9	0.95	11.9	1.00	-	-	-	-	-	-	-	-
1 1/2	660	4795	7398		7099		6748		6340		5356		-		-		-		-	
			15.4	0.87	15.0	0.93	14.3	0.98	13.5	1.02	12.4	1.09	-	-	-	-	-	-	-	-
1 1/2	685	4976	7701		7412		7093		6702		5830		4186		-		-		-	
			16.2	0.97	15.9	1.03	15.3	1.08	14.5	1.13	13.1	1.20	13.1	1.15	-	-	-	-	-	-
1 1/2	710	5158	8003		7724		7434		7061		6253		5029		-		-		-	
			17.2	1.08	16.9	1.14	16.4	1.19	15.7	1.24	14.2	1.33	13.7	1.21	-	-	-	-	-	-
1 1/2	735	5341	8306		8036		7775		7417		6654		5594		-		-		-	
			18.3	1.19	18.1	1.25	17.7	1.31	17.0	1.37	15.6	1.46	14.7	1.50	-	-	-	-	-	-
2	750	5449	8484		8220		7975		7624		6888		5921		-		-		-	
			18.9	1.26	18.7	1.33	18.4	1.38	17.7	1.44	16.3	1.54	15.2	1.64	-	-	-	-	-	-
2	770	5594	8724		8467		8210		7901		7201		6339		4824		-		-	
			19.7	1.36	19.5	1.43	19.0	1.49	18.5	1.55	17.2	1.65	15.9	1.72	15.8	1.65	-	-	-	-
2	790	5739	8964		8713		8463		8177		7497		6714		5514		-		-	
			20.0	1.47	20.0	1.54	19.9	1.60	19.4	1.66	18.0	1.77	16.7	1.85	16.3	1.99	-	-	-	-
2	809	5877	9192		8947		8702		8437		7775		7046		5967		-		-	
			21.0	1.57	21.0	1.64	20.0	1.71	20.0	1.77	18.7	1.88	17.4	1.97	16.9	1.99	-	-	-	-
3	840	6102	9562		9326		9091		8856		8224		7543		6652		5163		-	
			22.0	1.75	22.0	1.83	22.0	1.90	21.0	1.96	20.0	2.08	18.9	2.18	17.9	2.24	18.1	2.13	-	-
3	870	6320	9920		9692		9465		9238		8654		8016		7259		6171		-	
			24.0	1.94	23.0	2.02	23.0	2.09	23.0	2.16	22.0	2.29	21.0	2.40	19.0	2.47	19.0	2.49	-	-
3	900	6538	10278		10057		9838		9618		9078		8476		7805		6843		-	
			25.0	2.15	25.0	2.23	25.0	2.30	24.0	2.37	24.0	2.51	22.0	2.63	21.0	2.72	20.0	2.75	-	-
3	926	6727	10587		10373		10159		9946		9441		8858		8224		7414		-	
			27.0	2.33	27.0	2.42	26.0	2.49	26.0	2.56	25.0	2.71	24.0	2.84	23.0	2.93	21.0	2.99	-	-
5	960	6974	10992		10785		10579		10373		9910		9353		8763		8082		5611	
			29.0	2.59	29.0	2.68	28.0	2.76	28.0	2.84	27.0	2.98	26.0	3.12	25.0	3.24	23.0	3.27	23.0	3.14
5	1000	7265	11467		11268		11078		10872		10458		9927		9385		8778		7000	
			31.0	2.92	30.0	3.02	30.0	3.10	30.0	3.18	29.0	3.33	28.0	3.48	27.0	3.62	25.0	3.71	24.0	3.75
5	1040	7555	11941		11750		11559		11369		10889		10493		9973		9416		7919	
			32.0	3.28	31.0	3.38	31.0	3.47	31.0	3.55	30.0	3.71	29.0	3.87	28.0	4.01	27.0	4.13	25.0	4.24
5	1098	7977	12627		12447		12266		12086		11726		11299		10812		10318		9135	
			34.0	3.84	34.0	3.95	34.0	4.05	33.0	4.14	33.0	4.61	32.0	4.48	31.0	4.63	30.0	4.78	27.0	4.98

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD30B | BELT DRIVE



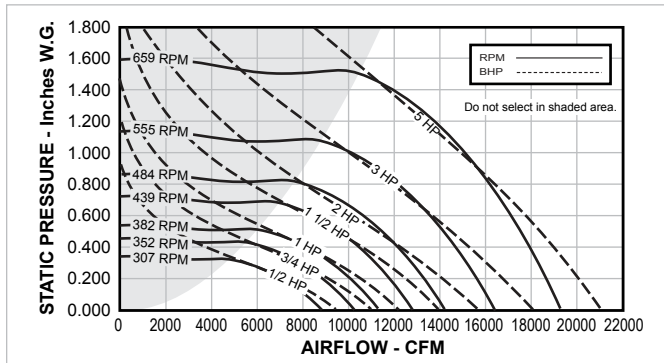
Galv. Steel Base = 14 Gage
Aluminum Base = 0.102"
Discharge Apron = 0.08"
Hood = 0.08"
Roof Opening = 28" SQ.
Damper Size = 27 3/4" SQ.
Max. Motor Frame Size = 184T
Peak BHP = (RPM/534) ³
Max. RPM = 999 (5 HP)
Est. Ship Weight = 210 lbs.



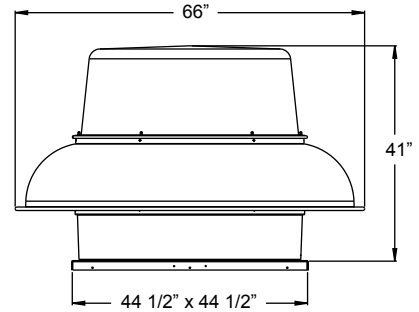
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones
1/3	225	1804	3480	2165	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	300	2405	4640	3849	2423	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			5753	5164	4386	3184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/2	405	3247	6264	5732	5073	4186	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	428	3432	6619	6120	5514	4747	3627	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			10.4	0.41	9.7	0.45	9.0	0.49	8.3	0.51	7.4	0.49	-	-	-	-	-	-	-	-	-	-	-
3/4	460	3688	7114	6653	6114	5468	4618	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	480	3848	7424	6985	6478	5897	5147	4103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			12.6	0.57	11.5	0.62	10.5	0.66	9.9	0.71	9.0	0.72	8.4	0.70	-	-	-	-	-	-	-	-	-
1	520	4169	8042	7642	7195	6674	6071	5324	4225	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	534	4281	8259	7871	7443	6939	6375	5691	4760	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			14.7	0.79	13.9	0.85	13.2	0.89	12.4	0.94	11.6	0.98	10.6	1.00	9.5	0.97	-	-	-	-	-	-	-
1 1/2	560	4490	8661	8295	7890	7427	6927	6303	5559	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	580	4650	8971	8617	8229	7792	7315	6757	6115	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			16.1	1.01	15.5	1.08	14.9	1.13	14.2	1.17	13.5	1.23	12.7	1.26	11.7	1.28	-	-	-	-	-	-	-
2	600	4811	9280	8938	8566	8153	7698	7192	6590	4847	-	-	-	-	-	-	-	-	-	-	-	-	-
	614	4923	9496	9162	8801	8405	7964	7493	6917	5412	-	-	-	-	-	-	-	-	-	-	-	-	-
			17.4	1.20	16.9	1.27	16.2	1.32	15.6	1.37	14.9	1.43	14.2	1.49	13.2	1.50	10.9	1.47	-	-	-	-	-
3	640	5131	9899	9578	9234	8868	8452	8015	7504	6230	-	-	-	-	-	-	-	-	-	-	-	-	-
	660	5292	10208	9897	9567	9222	8820	8400	7937	6798	4544	-	-	-	-	-	-	-	-	-	-	-	-
			19.1	1.49	18.6	1.57	18.1	1.63	17.6	1.68	17.0	1.73	16.2	1.80	15.4	1.85	13.4	1.88	11.5	1.62	-	-	-
4	677	5428	10471	10168	9848	9513	9129	8724	8302	7235	5744	-	-	-	-	-	-	-	-	-	-	-	-
	710	5693	10981	10692	10392	10073	9723	9346	8952	8011	6801	-	-	-	-	-	-	-	-	-	-	-	-
			20.0	1.86	19.9	1.94	19.5	2.01	19.1	2.06	18.7	2.12	18.1	2.18	17.3	2.26	15.6	2.32	14.0	2.30	-	-	-
5	735	5893	11368	11089	10802	10494	10169	9808	9431	8577	7519	5947	-	-	-	-	-	-	-	-	-	-	-
	760	6093	11755	11485	11210	10912	10611	10263	9905	9120	8163	6886	-	-	-	-	-	-	-	-	-	-	-
			22.0	2.28	22.0	2.37	21.0	2.45	21.0	2.51	21.0	2.56	20.0	2.63	19.4	2.70	17.9	2.83	16.3	2.87	14.8	2.79	-
6	777	6230	12018	11754	11488	11196	10905	10569	10224	9485	8564	7426	-	-	-	-	-	-	-	-	-	-	-
	815	6534	12605	12354	12102	11827	11549	11249	10924	10244	9441	8513	-	-	-	-	-	-	-	-	-	-	-
			24.0	2.81	24.0	2.91	23.0	3.00	23.0	3.06	23.0	3.12	23.0	3.19	22.0	3.25	21.0	3.42	18.8	3.50	17.2	3.55	-
7	845	6775	13069	12827	12584	12323	12055	11781	11467	10819	10095	9237	-	-	-	-	-	-	-	-	-	-	-
	875	7015	13533	13299	13065	12817	12558	12299	12006	11389	10739	9937	-	-	-	-	-	-	-	-	-	-	-
			26.0	3.48	26.0	3.58	26.0	3.68	26.0	3.76	26.0	3.83	26.0	3.89	26.0	3.96	24.0	4.12	23.0	4.30	20.0	4.34	-
8	905	7256	13997	13771	13544	13308	13058	12808	12540	11952	11333	10610	-	-	-	-	-	-	-	-	-	-	-
	923	7400	14276	14054	13831	13603	13357	13112	12859	12284	11680	11001	-	-	-	-	-	-	-	-	-	-	-
			28.0	3.85	28.0	3.96	28.0	4.06	27.0	4.15	27.0	4.22	27.0	4.28	27.0	4.35	26.0	4.50	24.0	4.70	22.0	4.79	-
9	923	7400	14276	14054	13831	13603	13357	13112	12859	12284	11680	11001	-	-	-	-	-	-	-	-	-	-	-
			29.0	4.09	29.0	4.19	29.0	4.30	28.0	4.39	28.0	4.46	28.0	4.53	28.0	4.60	27.0	4.75	25.0	4.95	23.0	5.07	-

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 50' (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVD36B | BELT DRIVE



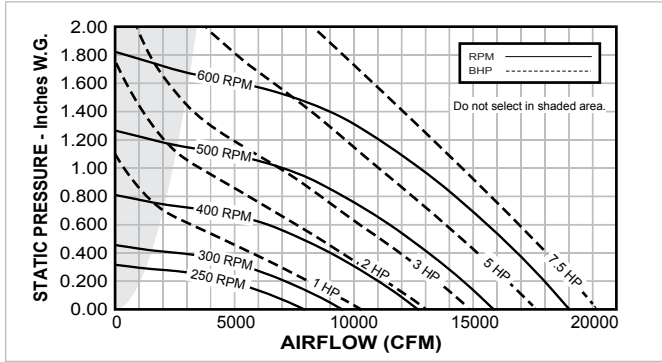
Galv. Steel Base = 12 Gage
Aluminum Base = 0.102"
Discharge Apron = 0.08"
Hood = 0.08"
Roof Opening = 36" SQ.
Damper Size = 35 1/2" SQ.
Max. Motor Frame Size = 213T
Peak BHP = (RPM/381) ³
Max. RPM = 810 (7 1/2 HP)
Est. Ship Weight = 420 lbs.



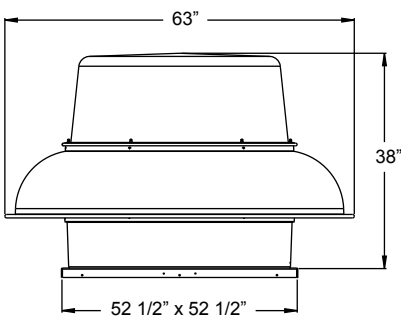
HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP				
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	
1/2	215	2093	6343		4855		-		-		-		-		-		-		-		-		-		
			3.9	0.13	3.7	0.18	-		-		-		-		-		-		-		-		-		-
	261	2541	7700		6555		4707		-		-		-		-		-		-		-		-		
3/4	307	2989	9057		8105		6994		-		-		-		-		-		-		-		-		
			8.0	0.39	7.7	0.46	7.6	0.51	-		-		-		-		-		-		-		-		-
	325	3164	9588		8714		7701		6101		-		-		-		-		-		-		-		
1	375	3651	11063		10362		9469		8523		7027		-		-		-		-		-		-		
			12.0	0.71	11.6	0.78	10.8	0.88	10.1	0.94	9.6	0.93	-		-		-		-		-		-		-
	382	3719	11270		10589		9705		8809		7438		-		-		-		-		-		-		
1 1/2	400	3894	11801		11169		10314		9503		8351		-		-		-		-		-		-		
			13.5	0.86	13.3	0.93	12.5	1.04	11.7	1.11	10.9	1.16	-		-		-		-		-		-		-
	415	4040	12243		11643		10821		10050		9052		7592		-		-		-		-		-		
2	455	4430	14243		13643		12671		11959		11271		10386		9229		-		-		-		-		
			17.0	1.26	17.0	1.36	16.5	1.46	15.7	1.57	15.0	1.65	14.3	1.71	13.2	1.66	-		-		-		-		-
	470	4576	13866		13364		12671		11959		11271		10386		9229		-		-		-		-		-
3	505	4916	14279		13798		13139		12432		11778		10998		9945		-		-		-		-		
			18.8	1.52	18.8	1.63	18.6	1.71	18.0	1.85	17.2	1.95	16.5	2.02	15.8	2.06	-		-		-		-		-
	525	5111	14899		14449		13830		13143		12523		11839		10942		-		-		-		-		-
5	575	5598	21.0	1.72	21.0	1.85	21.0	1.92	20.0	2.07	19.4	2.18	18.6	2.26	17.9	2.34	-		-		-		-		
			15489		15061		14481		13814		13212		12584		11822		9607		-		-		-		-
	595	5793	22.0	1.94	22.0	2.07	22.0	2.14	21.0	2.29	20.0	2.42	19.6	2.51	19.0	2.58	17.1	2.55	-		-		-		-
5	615	5987	15931		15515		14968		14319		13718		13128		12449		10507		-		-		-		
			22.0	2.11	22.0	2.24	22.0	2.32	22.0	2.46	21.0	2.60	20.0	2.71	19.6	2.78	18.0	2.81	-		-		-		-
	630	6133	16374		15969		15452		14826		14223		13662		13039		11292		-		-		-		
	23.0	2.29	23.0	2.43	23.0	2.50	22.0	2.65	22.0	2.80	21.0	2.91	20.0	3.00	18.9	3.09	-		-		-		-		
	645	6279	16964		16573		16091		15498		14902		14364		13781		12252		9844		-		-		-
	24.0	2.55	24.0	2.69	24.0	2.77	23.0	2.90	23.0	3.07	22.0	3.20	21.0	3.30	20.0	3.45	18.5	3.30	-		-		-		-
659	6416	17554		17177		16721		16166		15575		15043		14505		13160		11240		-		-		-	
25.0	2.82	25.0	2.97	25.0	3.06	25.0	3.17	24.0	3.36	24.0	3.36	24.0	3.36	24.0	3.62	22.0	3.79	19.8	3.74	-		-		-	
27.0	3.12	27.0	3.27	27.0	3.37	26.0	3.48	26.0	3.66	25.0	3.82	25.0	3.95	23.0	4.13	22.0	4.19	-		-		-		-	
28.0	3.35	28.0	3.51	28.0	3.62	28.0	3.72	27.0	3.90	27.0	4.07	26.0	4.21	24.0	4.41	23.0	4.53	21.0	4.34	-		-		-	
29.0	3.59	29.0	3.75	29.0	3.87	28.0	3.97	28.0	4.14	27.0	4.32	27.0	4.48	25.0	4.69	24.0	4.87	22.0	4.74	-		-		-	
29.0	3.83	29.0	4.00	29.0	4.13	29.0	4.22	28.0	4.38	28.0	4.57	27.0	4.74	26.0	4.97	24.0	5.17	23.0	5.10	-		-		-	

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVDK420 | BELT DRIVE



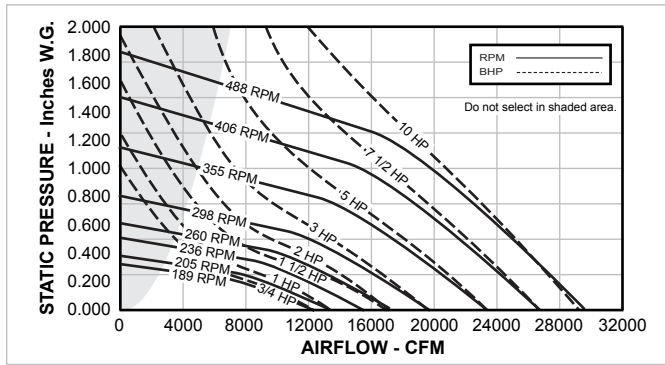
Galv. Steel Base = N/A
Aluminum Base = 0.125"
Discharge Apron = 0.09"
Hood = 0.08"
Roof Opening = 44" SQ.
Damper Size = 43 1/2" SQ.
Max. Motor Frame Size = 213T
Peak BHP = (RPM/315) ³
Max. RPM = 600 (7 1/2 HP)
Est. Ship Weight = 600 lbs.



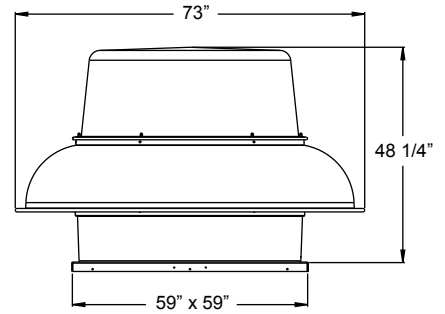
HP	RPM	Tip Speed FPM	0.000"		0.125"		0.250"		0.375"		0.500"		0.625"		0.750"		1.000"		1.250"		1.500"		
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	
3/4	240	2748	6.4	0.40	6.3	0.40	6.0	0.30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	260	2977	8.2	0.51	7.1	0.52	6.9	0.46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			8.9	0.66	8.0	0.67	7.8	0.63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	295	3377	9.3	0.75	8.5	0.75	8.2	0.72	7.8	0.56	-	-	-	-	-	-	-	-	-	-	-	-	-
10.2			1.19	10.0	1.20	9.6	1.20	8.9	1.14	8.8	0.94	-	-	-	-	-	-	-	-	-	-	-	-
1	300	3435	8.8	0.78	8.6	0.79	8.3	0.77	8.0	0.63	-	-	-	-	-	-	-	-	-	-	-	-	-
	308	3526	9.1	0.85	8.9	0.86	8.6	0.83	8.3	0.72	-	-	-	-	-	-	-	-	-	-	-	-	-
			9.8	1.04	9.6	1.05	9.2	1.04	8.8	0.97	8.6	0.64	-	-	-	-	-	-	-	-	-	-	-
1 1/2	345	3950	10.2	1.19	10.0	1.20	9.6	1.20	8.9	1.14	8.8	0.94	-	-	-	-	-	-	-	-	-	-	-
	354	4053	10.4	1.29	10.2	1.30	9.7	1.30	9.0	1.24	8.8	1.09	-	-	-	-	-	-	-	-	-	-	-
			10.8	1.41	10.4	1.42	10.0	1.43	9.2	1.38	8.9	1.26	-	-	-	-	-	-	-	-	-	-	-
2	380	4350	11.4	1.59	11.1	1.60	10.7	1.61	10.0	1.57	9.4	1.48	9.4	1.19	-	-	-	-	-	-	-	-	-
	390	4465	11.9	1.72	11.5	1.73	11.1	1.74	10.5	1.71	9.7	1.62	9.7	1.40	-	-	-	-	-	-	-	-	-
3	420	4808	13.2	2.15	12.9	2.16	12.4	2.18	11.9	2.16	11.2	2.09	10.8	1.97	10.8	1.67	-	-	-	-	-	-	-
			13.6	2.31	13.3	2.32	12.8	2.33	12.3	2.33	11.7	2.26	11.2	2.16	11.2	1.91	-	-	-	-	-	-	-
	430	4923	13.7	2.31	13.3	2.32	12.8	2.33	12.3	2.33	11.7	2.26	11.2	2.16	11.2	1.91	-	-	-	-	-	-	-
			14.1	2.47	13.7	2.49	13.3	2.50	12.8	2.50	12.2	2.44	11.5	2.34	11.5	2.14	-	-	-	-	-	-	-
	440	5037	14.1	2.47	13.7	2.49	13.3	2.50	12.8	2.50	12.2	2.44	11.5	2.34	11.5	2.14	-	-	-	-	-	-	-
447	5117	14.4	2.59	14.0	2.61	13.5	2.62	13.0	2.62	12.6	2.57	11.8	2.48	11.8	2.31	-	-	-	-	-	-	-	
460	5266	15.0	2.82	14.6	2.84	14.1	2.85	13.5	2.86	13.1	2.81	12.5	2.73	12.2	2.59	-	-	-	-	-	-	-	
5	480	5495	15.7	3.21	15.3	3.23	14.7	3.24	14.1	3.25	13.8	3.22	13.3	3.15	12.8	3.03	12.8	2.39	-	-	-	-	-
			15.8	3.63	15.0	3.68	14.4	3.71	13.8	3.71	13.3	3.66	12.8	3.59	12.8	3.03	12.8	2.39	-	-	-	-	-
	500	5724	16.5	3.63	16.0	3.64	15.4	3.66	14.8	3.67	14.3	3.66	14.0	3.59	13.5	3.50	13.3	3.05	-	-	-	-	-
			17.3	4.08	16.7	4.10	16.1	4.11	15.3	4.13	14.7	4.13	14.5	4.07	14.2	3.99	13.8	3.66	13.8	2.44	-	-	-
	520	5953	16.8	4.08	16.7	4.10	16.1	4.11	15.3	4.13	14.7	4.13	14.5	4.07	14.2	3.99	13.8	3.66	13.8	2.44	-	-	-
532	6091	17.7	4.37	17.1	4.39	16.4	4.40	15.7	4.42	14.9	4.42	14.7	4.38	14.4	4.30	14.1	4.01	14.1	3.12	-	-	-	
555	6354	18.5	4.96	17.8	4.98	17.1	5.00	16.2	5.01	15.2	5.02	14.9	5.00	14.8	4.93	14.5	4.69	14.5	4.11	-	-	-	
7 1/2	570	6526	18.9	5.37	18.2	5.39	17.4	5.41	16.5	5.43	15.4	5.44	14.9	5.43	14.8	5.36	14.7	5.15	14.7	4.69	14.7	3.23	-
			18.5	5.37	18.2	5.39	17.4	5.41	16.5	5.43	15.4	5.44	14.9	5.43	14.8	5.36	14.7	5.15	14.7	4.69	14.7	3.23	-
	585	6697	19.6	5.81	18.9	5.83	18.1	5.85	17.1	5.87	16.1	5.88	15.2	5.87	15.2	5.82	15.2	5.63	15.2	5.25	15.2	4.23	-
599	6858	19.0	6.23	18.3	6.26	17.6	6.28	16.9	6.29	16.1	6.31	15.9	6.31	15.9	6.27	15.9	6.09	15.9	5.76	15.9	4.96	-	-
		18.5	6.23	17.8	6.26	17.1	6.28	16.5	6.29	15.7	6.31	15.7	6.31	15.7	6.27	15.7	6.09	15.7	5.76	15.7	4.96	-	-

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

EVDJ48 | BELT DRIVE



Galv. Steel Base = N/A
Aluminum Base = 0.125"
Discharge Apron = 0.102"
Hood = 0.08"
Roof Opening = 50" SQ.
Damper Size = 49 1/2" SQ.
Max. Motor Frame Size = 215T
Peak BHP = (RPM/206) ³
Max. RPM = 449 (10 HP)
Est. Ship Weight = 775 lbs.



HP	RPM	Tip Speed FPM	0.000" SP		0.125" SP		0.250" SP		0.375" SP		0.500" SP		0.625" SP		0.750" SP		1.000" SP		1.250" SP		1.500" SP			
			Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP		
3/4	160	2105	11842		7937		-		-		-		-		-		-		-		-			
			4.6	0.47	4.4	0.42	-		-		-		-		-		-		-		-			
	175	2302	12953		9473		-		-		-		-		-		-		-		-		-	
5.4			0.62	5.2	0.57	-		-		-		-		-		-		-		-		-		
1	189	2486	13989		10828		5936		-		-		-		-		-		-		-		-	
			6.0	0.78	5.7	0.73	5.7	0.55	-		-		-		-		-		-		-		-	
	195	2565	14433		11397		7183		-		-		-		-		-		-		-		-	
6.3			0.85	6.0	0.81	5.9	0.66	-		-		-		-		-		-		-		-		
1 1/2	200	2631	14803		11865		8089		-		-		-		-		-		-		-		-	
			6.5	0.92	6.2	0.88	6.0	0.75	-		-		-		-		-		-		-		-	
	205	2697	15173		12308		8799		-		-		-		-		-		-		-		-	
6.8			0.99	6.4	0.95	6.2	0.83	-		-		-		-		-		-		-		-		
2	215	2828	15913		13183		9999		-		-		-		-		-		-		-		-	
			7.2	1.14	6.8	1.10	6.6	0.99	-		-		-		-		-		-		-		-	
	225	2960	16654		14046		11088		5724		-		-		-		-		-		-		-	
7.6			1.31	7.2	1.26	6.9	1.16	6.8	0.80	-		-		-		-		-		-		-		
3	236	3105	17468		14983		12267		8231		-		-		-		-		-		-		-	
			8.1	1.51	7.7	1.47	7.3	1.37	7.1	1.14	-		-		-		-		-		-		-	
	245	3223	18134		15742		13155		9914		-		-		-		-		-		-		-	
8.5			1.69	8.0	1.65	7.7	1.56	7.3	1.38	-		-		-		-		-		-		-		
4	255	3355	18874		16577		14131		11319		5416		-		-		-		-		-		-	
			8.9	1.90	8.4	1.86	8.0	1.78	7.6	1.63	7.6	1.01	-		-		-		-		-		-	
	260	3420	19244		16992		14615		11878		6656		-		-		-		-		-		-	
9.1			2.02	8.6	1.98	8.2	1.89	7.8	1.74	7.7	1.24	-		-		-		-		-		-		
5	270	3552	19984		17817		15572		12978		8983		-		-		-		-		-		-	
			9.5	2.26	9.0	2.22	8.6	2.14	8.1	1.99	7.9	1.66	-		-		-		-		-		-	
	280	3684	20725		18637		16515		14055		11032		4757		-		-		-		-		-	
9.9			2.52	9.5	2.48	9.0	2.40	8.5	2.26	8.1	2.04	8.1	1.10	-		-		-		-		-		
7 1/2	290	3815	21465		19457		17414		15124		12455		7271		-		-		-		-		-	
			10.5	2.80	10.0	2.77	9.6	2.68	9.2	2.55	8.6	2.36	8.6	1.70	-		-		-		-		-	
	298	3920	22057		20091		18116		15911		13468		9191		-		-		-		-		-	
11.0			3.04	10.4	3.00	9.9	2.92	9.5	2.79	9.0	2.61	8.9	2.13	-		-		-		-		-		
10	315	4144	23315		21458		19589		17568		15336		12614		7315		-		-		-		-	
			11.8	3.59	11.3	3.55	10.8	3.47	10.2	3.36	9.8	3.18	9.5	2.93	9.5	2.06	-		-		-		-	
	330	4341	24425		22655		20871		19007		16935		14702		10848		-		-		-		-	
12.6			4.13	12.0	4.09	11.4	4.00	10.9	3.90	10.5	3.73	10.1	3.53	10.0	3.00	-		-		-		-		
10	345	4539	25536		23842		22138		20420		18461		16365		13809		-		-		-		-	
			13.4	4.72	12.7	4.68	12.1	4.59	11.6	4.49	11.1	4.33	10.8	4.13	10.6	3.84	-		-		-		-	
	355	4670	26276		24629		22975		21312		19437		17450		15230		6228		-		-		-	
13.9			5.14	13.3	5.10	12.6	5.01	12.0	4.91	11.4	4.78	11.2	4.57	11.0	4.32	11.0	2.31	-		-		-		
10	370	4868	27386		25805		24222		22626		20891		19045		17054		9969		-		-		-	
			14.7	5.82	14.0	5.77	13.3	5.70	12.7	5.59	12.0	5.46	11.7	5.26	11.6	5.04	11.5	3.71	-		-		-	
	385	5065	28496		26976		25458		23923		22322		20569		18696		13361		-		-		-	
15.3			6.56	14.7	6.51	14.0	6.44	13.4	6.33	12.7	6.20	12.2	6.01	12.1	5.80	11.9	4.94	-		-		-		
10	395	5196	29237		27756		26276		24781		23263		21544		19772		15418		6502		-		-	
			15.8	7.08	15.1	7.03	14.5	6.96	13.8	6.85	13.1	6.73	12.5	6.57	12.4	6.34	12.3	5.70	12.3	3.00	-		-	
	406	5341	30051		28611		27181		25718		24263		22617		20941		17033		9283		-		-	
16.3			7.69	15.6	7.64	14.9	7.59	14.3	7.46	13.6	7.34	12.9	7.18	12.8	6.95	12.6	6.39	12.6	4.36	-		-		
10	425	5591	31457		30084		28700		27320		25931		24440		22849		19444		13785		-		-	
			17.3	8.82	16.5	8.76	15.8	8.71	15.1	8.59	14.4	8.47	13.8	8.32	13.3	8.12	13.2	7.61	13.2	6.37	-		-	
	448	5894	33160		31860		30548		29239		27920		26602		25090		21961		18201		10947		-	
18.5			10.33	17.8	10.27	17.2	10.22	16.7	10.10	16.1	9.98	15.6	9.85	15.1	9.67	14.9	9.17	14.9	8.47	14.9	6.18	-		

Performance shown is for installation type A: Free Inlet, Free Outlet. Power rating (BHP) does not include transmission losses. For further information on estimating belt drive losses and motor service factors see page 13. The sound ratings shown are for loudness values in fan sones at 5'0" (1.5m) in a hemispherical free field per AMCA Standard 301. Values shown are for installation Type A: free inlet hemispherical sone levels. Performance ratings do not include the effects of appurtenances in the airstream.

ENGINEERING SPECIFICATIONS

Model

EVD = Downblast Roof Exhauster

Unit Size

06, 08, 10, 11, 12, 14, 16, 18,
24, 27, 30, 36, 420, 48, 542

Drive Type

D = Direct Drive
B = Belt Drive

Motor Tap

Q = 1725 RPM
R = 1550 RPM
S = 1300 RPM
V = 1050 RPM
Q1 = 1650 RPM
Q2 = 1725 RPM

ECM

0 = None
G = ECM

Motor Speed

1 = Single Speed
2 = 2S2W Single & Three Phase
3 = 2S1W Three Phase

Horse Power

See selection software.

Enclosure

O = Open Drip Proof
T = Totally Enclosed
E = Explosion Proof
X = Special

Voltage

See selection software.

Phase

1 = Single
3 = Three

Cycle

5 = 50 Hz
6 = 60 Hz

Efficiency

S = Standard
P = Premium

Paint / Coating

0 = None
F = Epoxy Powder Coat*
G = Epoxy Powder Coat with UV*
H = Hi-Temp Powder Coat*
J = Non-stick Powder Coat*
K = Phenolic Powder Coat*
L = Phenolic Powder Coat with UV*
N = Polyester Powder Coat
X = Special

* Not available with choice of color.

Color

0 = None
50 = Chrome Green
55 = Pale Green
56 = Dove Gray
61 = White
63 = Oxford Beige
65 = Dover White
66 = Desert Tan
70 = Black
73 = Smoke Gray
77 = Brick Red
79 = Peppercorn
81 = Pale Brown
83 = Chocolate Brown
85 = Timeless Bronze
94 = Charcoal
X = Special

AMCA Spark Rating

0 = None
C = Standard
B = Optional

Damper

0 = None
BDD = Gravity Backdraft Damper
MD1 = Gravity Backdraft Damper 115V
MD2 = Gravity Backdraft Damper 230V
MD4 = Gravity Backdraft Damper 460V
ED1 = Explosion Proof Motor
Operated Damper 115V

Screen

0 = None
B = Bird Screen (Standard)
S = Insect/Bird Screen

Roof Curb

See selection software.

Slope

0 = None
S = Single
D = Double

Metal Liner

0 = None
L = Metal Liner

Damper Holding Plate

0 = None
P = Damper Holding Plate

Neoprene Gasket

0 = None
G = Gasket

Wooden Nailer

0 = None
W = Wooden Nailer

Curb Paint/Coating

0 = None
B = Air Dried Epoxy
Q = Enamel

Hinged Sub-base

0 = None
H = Hinged Sub-base

Mounting Pedestal

0 = None
P = Mounting Pedestal

Aluminum Base

0 = None
A = Aluminum Base

Thermal Overload Protection

0 = None
P = Thermal Overload Protection

Disconnect Switch

0 = None
1 = NEMA 1 Disconnect Switch
3R = NEMA 3R Disconnect Switch
4 = NEMA 4 Disconnect Switch
7 = NEMA 7 Disconnect Switch
9 = NEMA 9 Disconnect Switch

Internal Wiring

0 = None
1 = NEMA 1 Internal Wiring
3R = NEMA 3R Internal Wiring

Transformer

0 = None
T = Transformer

Speed Controller

0 = None
L = Loose
M = Mounted

Firestat Switch

0 = None
F = Firestat Switch

High Wind Construction

0 = None
M = Miami Dade Approved

ENGINEERING SPECIFICATIONS

EVD-Series - Belt Drive Units

Belt driven centrifugal roof exhaust fans shall be model EVD, EVDK, EVDJ, EVDM, manufactured by YORK® by Johnson Controls.

The housing shall be weatherproof, utilize heavy gauge spun aluminum construction with a large rolled bead for strength, with galvanized (aluminum optional) base, and with rigid galvanized steel internal support structures. Housing shall not provide any of the internal structural support. Units shall be equipped with an oversized electrical conduit chase through the curb cap and into the motor compartment for ease of wiring (except Explosion Proof). Units shall be pre-wired to a junction box mounted in the motor compartment and equipped with an electrical disconnect device (except Explosion Proof).

Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, ball bearing design, permanently lubricated, mounted out of the main airstream, and furnished at the specified voltage, phase, and enclosure.

Shafts shall be turned, ground, polished, and rust protected. Heavy duty ball bearings are rated for a minimum L50 life exceeding 200,000 hours. Pulleys shall be adjustable, cast iron, machined, keyed, securely attached, and sized for 150% of the horsepower at its rated maximum speed.

Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance (EVD) or for Air performance (EVDK, EVDJ, EVDM) and shall be UL listed.

EVD-Series - Direct Drive Units

Direct drive centrifugal roof exhaust fans shall be model EVD, manufactured by YORK® by Johnson Controls.

The housing shall be weatherproof, utilize heavy-gauge spun aluminum construction with a large rolled bead for strength, with galvanized (aluminum optional) base, and with rigid galvanized steel internal support structures. Housing shall not provide any of the internal structural support. Units shall be equipped with an oversized electrical conduit chase through the curb cap and into the motor compartment for ease of wiring (except Explosion Proof). Units shall be pre-wired to a junction box mounted in the motor compartment and equipped with an electrical disconnect device (except Explosion Proof).

Statically and dynamically balanced backward inclined, centrifugal wheels shall be aluminum, spark-resistant, non-overloading, and matched to deeply spun venturis. Motors shall be continuous duty, permanently lubricated, multi-speed (for applicable models), have thermal overload protection, mounted out of the main airstream, be easily accessible for service, and furnished at the specified voltage, phase.

Each fan shall bear the AMCA Licensed Ratings Seal for Air and Sound Performance and shall be UL listed.

NOTES



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