

# **Belt Drive Centrifugal Roof Exhauster**

**CENTRIMASTER® MODEL PV**



ACME ENGINEERING & MANUFACTURING CORPORATION / MUSKOGEE, OKLAHOMA

# Quality and Service that will Blow you Away!

## Industry Leadership

Founded in 1938, Acme Engineering and Manufacturing Corporation is known worldwide as a leader in the manufacture of fans, blowers, and ventilation equipment. Acme's growth over the past half century is a tribute to superior quality, customer loyalty, and dedicated employees and sales representatives.

Today, from its headquarters in Muskogee, Oklahoma, Acme serves customers worldwide with high quality air movement and control products.

## Manufacturing

With approximately 350,000 square feet of manufacturing space, Acme produces one of the broadest lines of air moving equipment in the industry. State-of-the-art manufacturing equipment and a well trained, experienced workforce is the key to Acme's timely delivery of quality air moving products.

## Research and Testing

The Acme Research and Development Center operates both air and sound laboratories. The Center houses four wind tunnels with a data acquisition system, a reverberant sound room with the latest sound analyzer equipment, and a structural laboratory for stress and vibration analysis. Solid modeling, and finite element analysis support product research and development. The Center also houses a fully equipped prototype facility enabling Acme to develop and introduce new products to the market in the shortest time possible.

## Sales & Service

A factory trained, knowledgeable sales organization addresses the needs of many diverse and distinct markets. Customers around the world are serviced by a complete system of sales representatives, equipment distributors and local dealers supported by nationwide distribution centers and backed by a staff of sales and marketing professionals.

## Quality

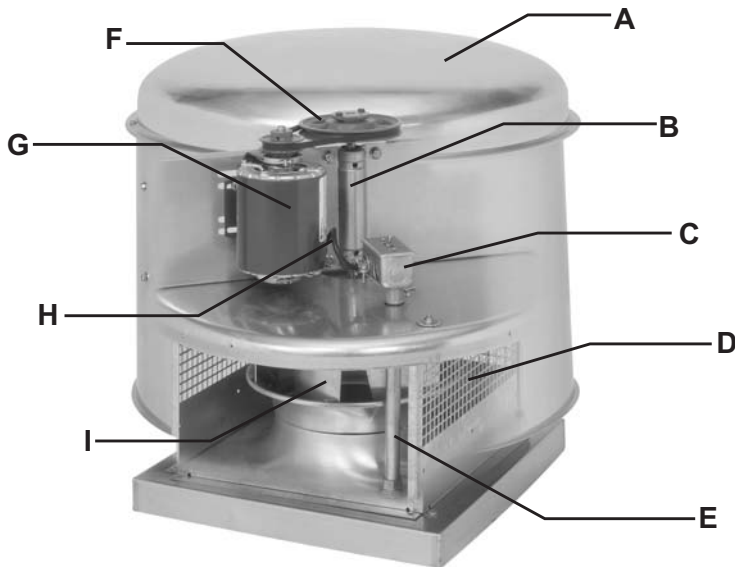
A highly trained production staff sets the standard for dependable, quality air moving products. By using the latest computer techniques for research and design, and rigorous quality control standards Acme can offer one of the best warranty programs in the industry. Our exclusive 2/5 year limited warranty provides our customers with confidence...Year After Year.



**SYMBOL  
OF QUALITY**

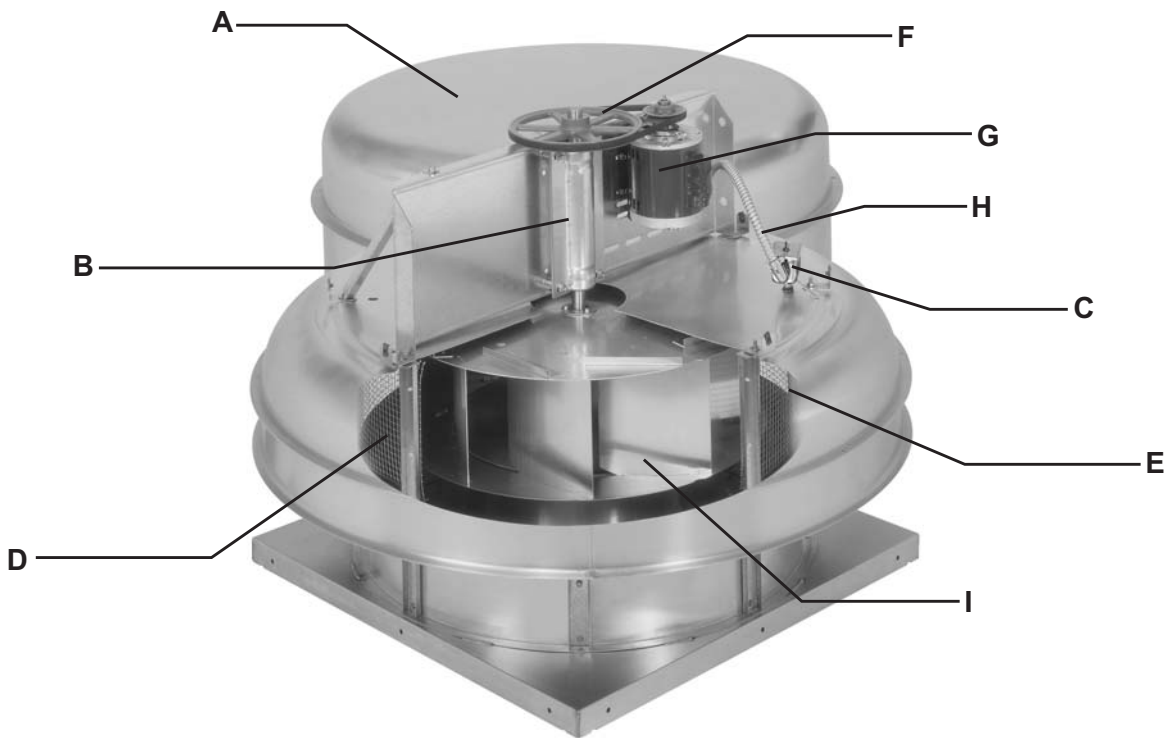
# CONSTRUCTION FEATURES

## PV75 through PV240



PARTS LEGEND	
A	Aluminum Housing
B	Bearings
C	Disconnect Switch
D	Birdscreen
E	Wiring Post
F	Drive Assembly
G	Motor
H	Factory Wired
I	Centrifugal Wheel

## PV260 through PV543



Acme Engineering & Manufacturing Corporation certifies that the Centri Master® Exhausters 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.



Acme Centri Master® fans are available with the U.L. listing mark; consult the Acme representative for availability.



Most Acme Centri Master® fans are listed by the Canadian Standards Association Testing Laboratory as approved.



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## CONSTRUCTION FEATURES

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Model PV centrifugal power roof ventilators are energy efficient, quiet and reliable fans designed to exhaust clean air from the building through the roof. The aerodynamical design of the air flow passage through the fan yields a signature flow passage characterized by the precise shapes of the venturi impeller inlet, deep formed impeller shroud, three dimensional shape of the impeller blades, and deep formed discharge hood. This unique design yields high energy efficiency of the fan, thus ensuring high air performance and low sound levels.

### CENTRIFUGAL WHEEL

PV exhausters have non-overloading aluminum impellers with backward curved blades. Steel impeller hub is securely fastened to the impeller backplate. The impeller is optimally matched with a special inlet orifice that results in a high performance centrifugal fan operating with a minimum of air noise and a maximum efficiency.



### ALUMINUM HOUSING

Housing is constructed of heavy gauge aluminum. The wheel and drive assembly is supported by a rugged steel frame. All steel components are galvanized.

### CORROSION RESISTANT CONSTRUCTION

Steel fasteners are zinc dichromate plated. Steel fan shaft and hub have a corrosion resistant coating.

### DRIVE ASSEMBLY

Motor and drive assembly are located out of exhaust air stream. Drive assembly and motor support are constructed of a rugged galvanized steel frame that provides easy and precise motor adjustments. Belts are static free, oil and heat resistant, and designed for a 1.5 service factor.

### VIBRATION ISOLATION

Neoprene vibration isolators are installed to isolate motor and drive base from fan housing.

### MOTORS

Motors are continuous duty and have double sealed ball bearings. Standard motors available include single and two speed open dripproof and totally enclosed motors, and single speed explosion resistant motors. Motor is mounted on heavy galvanized steel frame to maintain correct belt drive alignment. Wiring post from motor compartment to exhauster base protects power cable and facilitates wiring from junction box. Wiring post not furnished with explosion resistant motors.

### FACTORY WIRED

Factory wiring provides savings in installation time and costs. All motors, except explosion resistant and motors shipped separately, are factory wired to junction box at top of wiring post. Standard wiring complies with National Electric Code and materials used are U.L. listed.

### BIRDSCREEN

Aluminum birdscreen is standard on sizes 075-240. Heavy gauge galvanized steel birdscreen is standard on sizes 260-543. Aluminum is available as an option on sizes 260-543.

### DISCONNECT SWITCH

Factory installed disconnect switch is standard (except with explosion resistant motors).

### BEARINGS

Permanently lubricated bearings are used in duplex split pillow block housing. The bearings remain in perfect alignment after shipment, installation, and subsequent operation. Bearings are resiliently mounted in neoprene rings, providing extra protection and vibration isolation. The bearing assembly is rated at an L-50 life of 200,000 hours and features Acme's **5 year** limited warranty.



### MOTOR COOLING FINS

Fins on the top of the impeller creates a negative pressure in the motor compartment which continuously draws outside air to insure proper motor cooling. PV exhausters are suitable for continuous duty and will provide years of extended service.

## OPTIONAL ACCESSORIES

### BACKDRAFT DAMPERS

All aluminum multiple blade construction. Precision balanced full opening blades. Wide damper frame for installing flush to ceiling opening or to mounting frame in roof opening. Mounts inside Acme prefabricated curb. Available as automatic or motor operated.



### DAMPER BOX

For easy mounting of damper inside field constructed roof curb. Required for Acme sound curbs, but not required when Acme prefabricated curbs are used.

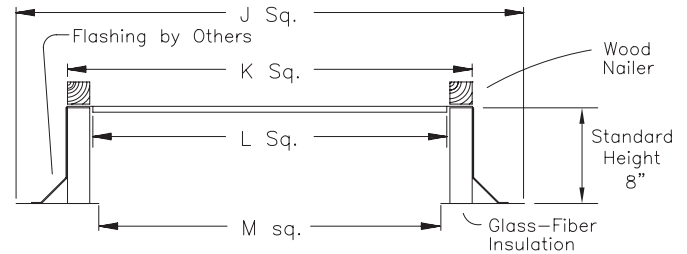


### CHOKE ORIFICE

When a performance is required below the air flow for the selected fan speed a special orifice can be provided.

### SOUND ATTENUATING CURB

For use on applications where exceptional quietness is necessary or where the specifications require sound attenuating curbs. The SONEMASTER sound curb provides a straight-through streamlined air passage that has an air flow interference of only 2 to 4% for most applications.



### PREFABRICATED CURBS

Heavy gauge galvanized steel curb for easy installation of exhauster over roof opening. Curbs are thermally insulated with 1½" thickness of fire resistant, sound absorbing glass fiber to reduce condensation and noise.

**Type SF** - Self-flashing type (Type SF) features wide base flange for easy flashing to roof. This eliminates need for extending roofing material up over top of curb. Includes foam rubber gasket.

**Type RF** - Roofed-over type (Type RF) features built-in cant strip to accommodate roofing materials for flashing up over top of curb. Wood nailer is standard.

### VIBRATION ISOLATORS

Impeller, motor and drive assembly completely supported and cushioned by multi-directional neoprene vibration isolators.

Prefabricated Curb Type RF and SF (inches)

FAN MODEL	DAMPER O.D. (SQUARE)	J	K	L	M	Damper Model	Curb Model
PV075	16	27 ½	19 ½	16 ½	13 ½	AR16	C19.5
PV085	16	27 ½	19 ½	16 ½	13 ½	AR16	C19.5
PV100	16	27 ½	19 ½	16 ½	13 ½	AR16	C19.5
PV120	16	27 ½	19 ½	16 ½	13 ½	AR16	C19.5
PV135	16	27 ½	19 ½	16 ½	13 ½	AR16	C19.5
PV150	18	30 ½	22 ½	19 ½	16 ½	AR18	C22.5
PV165	18	30 ½	22 ½	19 ½	16 ½	AR18	C22.5
PV180	22	34 ½	26 ½	23 ½	20 ½	AR22	C26.5
PV200	22	34 ½	26 ½	23 ½	20 ½	AR22	C26.5
PV220	28	40 ½	32 ½	29 ½	26 ½	AR28	C32.5
PV240	28	40 ½	32 ½	29 ½	26 ½	AR28	C32.5
PV260	34	46 ½	38 ½	35 ½	32 ½	AR34	C38.5
PV300	34	46 ½	38 ½	35 ½	32 ½	ARH34	C38.5
PV365	40	52 ½	44 ½	41 ½	38 ½	ARH40	C44.5
PV425	54	66 ½	58 ½	55 ½	52 ½	ARH54	C58.5
PV490	54	66 ½	58 ½	55 ½	52 ½	ARH54	C58.5
PV543	54	66 ½	58 ½	55 ½	52 ½	ARH54	C58.5

## OPTIONAL COATINGS

### PAINTED FINISHES

Aluminum and galvanized components remain unpainted as a standard finish, but when required are processed through the finishing system to apply decorative or special coatings. A high turbulence oven is used to produce a baked on finish for most special coatings. Decorative coatings are not baked on.

### DECORATIVE COATING

Acme offers 16 popular colors for decorative finishes utilizing an industrial grade enamel applied to the exterior of the hood, housing and curbcap base. Special

colors are available upon request. See your Acme Representative for complete color selections.

### SPECIAL COATINGS

Products receiving special coatings have components painted before assembly. Fasteners are not painted.

### ACRYLIC EPOXY

This product provides a more durable surface.

### HERESITE (Air Dry)

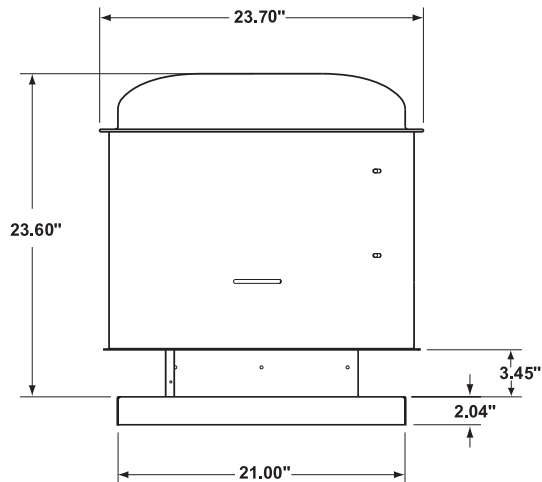
A phenolic coating with greater resistance to most organic and inorganic acids.

### INSULMASTIC

A black asphalt based mastic that provides some condensation control, sound deadening and corrosion resistance.

Note: For any coating selected the user assumes the responsibility for the corrosive agent, its concentration, temperature, moisture content and the ultimate effect on the coating and the equipment.

# PV075 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV075E1	1/4	294-437	81	86
PV075E2	1/4	420-621	77	82
PV075E3	1/4	581-833	78	83
PV075E4	1/4	707-1039	78	83
PV075E5	1/4	911-1228	78	83
PV075E6	1/4	977-1468	77	82
PV075E7	1/4	1247-1681	78	83
PV075E8	1/4	1421-1915	77	82

## MOTOR INFORMATION

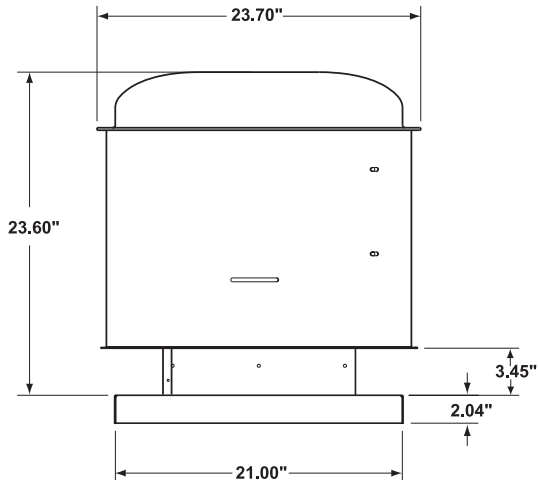
Maximum Motor Frame Size: 56  
Maximum Length ("C" Dimension): 11.00"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	
294	145																					
	0.01	.1																				
420	207																					
	0.01	.7																				
437	216																					
	0.01	.7																				
581	287																					
	0.01	1.4																				
621	306	118																				
	0.00	1.6	0.01	1.5																		
707	349	216																				
	0.01	2.2	0.01	1.9																		
833	411	306	52																			
	0.01	2.9	0.01	2.7	0.01	2.5																
911	450	358	213																			
	0.02	3.5	0.02	3.2	0.02	2.9																
977	482	398	288																			
	0.02	4.1	0.02	3.7	0.02	3.5																
1039	513	435	335	114																		
	0.02	4.5	0.03	4.2	0.03	3.9	0.02	3.6														
1228	606	543	466	377	203																	
	0.04	5.6	0.04	5.4	0.04	5.2	0.04	4.9	0.04	4.7												
1247	615	554	479	391	247																	
	0.04	5.9	0.04	5.6	0.05	5.3	0.05	5.0	0.04	4.9												
1421	701	647	586	515	438	312																
	0.06	7.1	0.06	6.8	0.07	6.6	0.07	6.3	0.07	6.1	0.07	6.1										
1468	724	672	614	547	472	371	157															
	0.06	7.5	0.07	7.3	0.07	7.1	0.08	6.7	0.08	6.6	0.08	6.7	0.06	6.2								
1681	830	784	737	683	622	557	486	368	144													
	0.10	9.5	0.10	8.9	0.11	8.7	0.11	8.4	0.11	8.2	0.11	8.3	0.11	7.9	0.11	8.0	0.08	8.2				
1750	864	820	776	724	668	606	543	454	319													
	0.11	9.9	0.12	9.7	0.12	9.1	0.13	8.9	0.13	8.9	0.13	9.3	0.13	8.5	0.13	8.3	0.12	8.4				
1915	945	905	865	820	773	719	662	605	533	254												
	0.14	11.5	0.15	11.2	0.16	10.5	0.16	10.4	0.16	10.3	0.17	11.0	0.17	10.2	0.17	9.7	0.17	10.1	0.14	10.7		

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV085 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV085E1	1/4	707-1039	82	83
PV085E2	1/4	911-1228	82	83
PV085E3	1/4	977-1468	81	82
PV085E4	1/4	1247-1681	82	83
PV085E5	1/4	1421-1915	81	82

## MOTOR INFORMATION

Maximum Motor Frame Size: 56

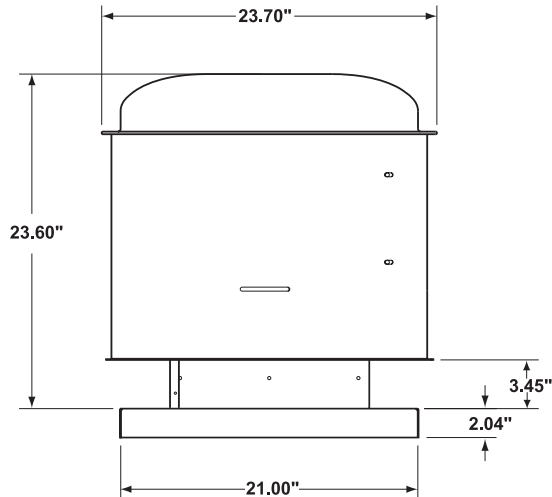
Maximum Length ("C" Dimension): 11.00"

PERFORMANCE DATA																						
CFM vs. Static Pressure (in. wg.)																						
RPM	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
707	504		322																			
	0.01	2.7	0.01	2.5																		
911	650		528		331																	
	0.02	4.3	0.03	4.0	0.03	4.0																
977	697		584		429																	
	0.03	4.9	0.03	4.7	0.03	4.3																
1039	741		635		502		255															
	0.03	5.4	0.04	5.1	0.04	4.8	0.03	4.7														
1228	876		786		693		562		358													
	0.06	7.1	0.06	6.8	0.06	6.3	0.06	6.1	0.06	5.8												
1247	890		801		712		585		395													
	0.06	7.2	0.06	6.9	0.07	6.5	0.07	6.3	0.06	6.1												
1369	977		896		815		717		591		392											
	0.08	8.3	0.08	7.7	0.09	7.8	0.09	7.4	0.09	7.2	0.08	6.9										
1421	1014		936		858		769		653		493		203									
	0.09	8.8	0.09	8.4	0.10	8.3	0.10	7.8	0.10	7.6	0.09	7.4	0.07	7.4								
1468	1047		972		897		815		708		567		356									
	0.10	9.4	0.10	9.0	0.10	8.5	0.11	8.3	0.11	8.1	0.11	7.8	0.10	7.7								
1575	1124		1054		983		913		823		714		569		352							
	0.12	10.3	0.12	10.3	0.13	9.6	0.13	9.4	0.13	9.2	0.13	8.8	0.13	8.9	0.11	8.5						
1681	1199		1134		1068		1002		927		837		729		583		367					
	0.14	11.7	0.15	11.5	0.15	10.7	0.16	10.4	0.16	10.3	0.16	10.0	0.16	9.9	0.16	9.6	0.14	9.6				
1750	1249		1185		1122		1059		993		909		811		692		532					
	0.16	12.5	0.17	11.9	0.17	12.0	0.18	11.4	0.18	10.9	0.18	10.7	0.18	10.5	0.18	10.4	0.17	10.4				
1840	1313		1253		1193		1132		1072		998		915		816		691		281			
	0.19	13.6	0.19	13.5	0.20	12.5	0.21	12.5	0.21	12.2	0.21	11.9	0.21	11.9	0.21	11.0	0.21	11.2	0.16	11.0		
1915	1366		1309		1251		1193		1135		1071		994		905		807		513			
	0.21	14.6	0.22	14.1	0.23	14.1	0.23	13.8	0.23	13.3	0.24	12.6	0.24	12.7	0.24	12.4	0.24	12.4	0.22	12.1		

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV100 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV100E1	1/4	707-1039	77	84
PV100E2	1/4	911-1228	77	84
PV100E3	1/4	977-1468	76	83
PV100E4	1/4	1247-1681	77	84
PV100E5	1/4	1421-1915	76	83
PV100F	1/3	1369-2054	78	85

## MOTOR INFORMATION

Maximum Motor Frame Size: 56  
Maximum Length ("C" Dimension): 11.00"

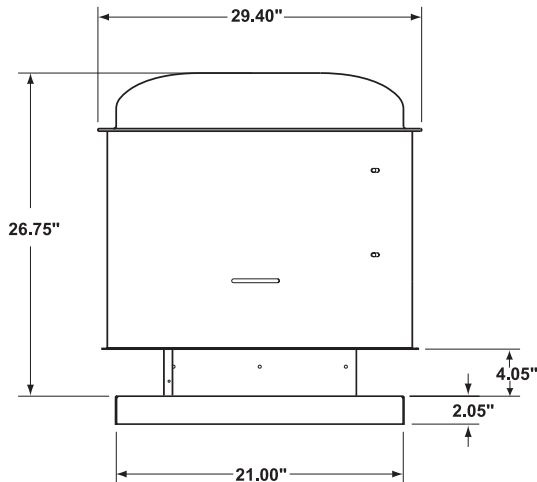
RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
707	533		356																			
	0.01	2.3	0.01	2.1																		
911	686		570		370																	
	0.03	3.9	0.03	3.5	0.03	3.4																
977	736		629		472																	
	0.03	4.3	0.04	4.1	0.04	3.9																
1039	783		683		556		315															
	0.04	4.9	0.04	4.5	0.05	4.4	0.04	4.1														
1228	925		843		752		622		416													
	0.06	6.5	0.07	6.1	0.07	6.0	0.07	5.7	0.07	5.5												
1247	940		858		769		648		450													
	0.06	6.9	0.07	6.5	0.08	6.1	0.08	6.1	0.07	5.9												
1369	1032		958		879		792		649		458											
	0.09	7.7	0.09	7.2	0.10	7.1	0.10	6.7	0.10	6.5	0.09	6.3										
1421	1071		999		924		844		722		551											
	0.10	8.1	0.10	7.6	0.11	7.3	0.11	7.2	0.12	6.7	0.11	6.7										
1468	1106		1037		965		888		785		631		443									
	0.11	8.4	0.11	8.1	0.12	7.7	0.12	7.6	0.13	7.4	0.12	7.1	0.11	7.1								
1681	1267		1206		1146		1080		1012		924		802		652		486					
	0.16	9.4	0.17	9.2	0.17	8.9	0.18	8.5	0.19	8.2	0.19	8.0	0.19	7.5	0.18	7.6	0.17	7.5				
1915	1443		1390		1337		1283		1224		1164		1096		1004		889		609			
	0.24	12.0	0.24	11.5	0.25	10.7	0.26	10.4	0.27	10.4	0.28	10.2	0.28	9.8	0.28	9.8	0.28	9.6	0.25	9.6		
2054	1548		1498		1449		1400		1346		1291		1235		1168		1083		855		586	
	0.29	13.2	0.30	12.9	0.31	12.5	0.32	12.2	0.32	12.1	0.33	11.2	0.34	11.0	0.35	10.9	0.35	10.7	0.34	10.7	0.30	10.7

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.



# PV120 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV120E1	1/4	513-770	81	89
PV120E2	1/4	617-907	79	87
PV120E3	1/4	734-1080	79	87
PV120E4	1/4	887-1304	79	87
PV120E5	1/4	1149-1489	79	87
PV120E6	1/4	1301-1584	78	86
PV120F	1/3	1264-1753	79	87

## MOTOR INFORMATION

Maximum Motor Frame Size: 56

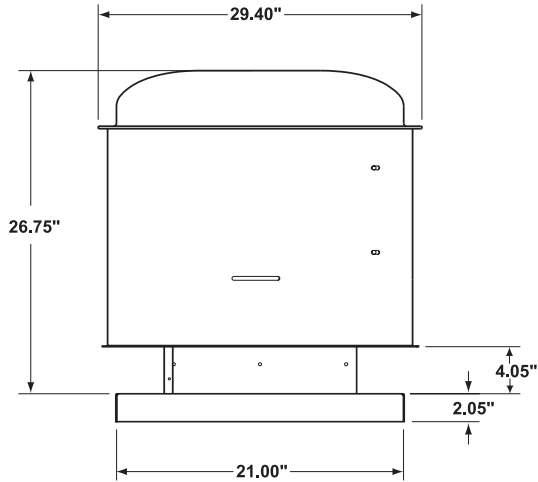
Maximum Length ("C" Dimension): 11.00"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
513	568		240																			
	0.01	1.5	0.01	1.6																		
617	683		471																			
	0.01	2.3	0.02	2.4																		
734	812		648		365																	
	0.02	3.2	0.03	3.3	0.03	2.9																
770	852		698		460																	
	0.02	3.7	0.03	3.4	0.03	3.2																
887	982		852		689		410															
	0.03	4.7	0.04	4.6	0.05	4.2	0.05	3.9														
907	1004		878		720		471															
	0.04	4.9	0.04	4.8	0.05	4.4	0.05	4.0														
1080	1195		1093		975		834		631		227											
	0.06	6.4	0.07	6.3	0.08	5.9	0.08	5.5	0.09	5.5	0.06	5.3										
1149	1272		1176		1067		940		780		541											
	0.07	7.1	0.08	6.7	0.09	6.6	0.10	6.1	0.10	6.0	0.10	5.9										
1264	1399		1312		1218		1112		989		830		609		195							
	0.10	8.2	0.11	7.8	0.12	7.5	0.13	7.1	0.13	7.0	0.14	6.9	0.14	6.5	0.09	6.2						
1301	1440		1355		1265		1164		1046		904		721		390							
	0.11	8.6	0.12	8.4	0.13	8.0	0.14	7.4	0.15	7.3	0.15	7.3	0.15	6.8	0.13	6.6						
1304	1443		1359		1269		1168		1051		910		730		406							
	0.11	8.5	0.12	8.4	0.13	7.8	0.14	7.6	0.15	7.2	0.15	7.4	0.15	6.9	0.13	6.6						
1489	1648		1574		1500		1415		1326		1223		1111		968		793					
	0.16	10.9	0.17	10.3	0.19	10.1	0.20	9.4	0.21	9.1	0.22	9.2	0.22	8.6	0.23	8.5	0.22	8.4				
1584	1753		1683		1614		1538		1455		1365		1267		1155		1017		607			
	0.19	12.0	0.21	11.6	0.22	10.9	0.24	10.6	0.25	10.4	0.26	10.3	0.26	9.8	0.27	9.4	0.27	9.2	0.25	8.9		
1670	1848		1782		1716		1647		1569		1490		1398		1305		1190		902		336	
	0.23	13.2	0.24	12.3	0.26	12.1	0.27	11.9	0.28	11.7	0.29	11.4	0.30	10.9	0.31	10.4	0.32	10.4	0.32	9.7	0.23	9.7
1753	1940		1877		1814		1752		1677		1602		1522		1433		1345		1098		747	
	0.26	14.2	0.28	13.8	0.30	13.4	0.31	12.9	0.32	12.8	0.33	12.8	0.34	11.7	0.35	11.5	0.36	11.4	0.37	10.8	0.35	10.3

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV135 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV135E1	1/4	513-770	81	95
PV135E2	1/4	617-907	79	93
PV135E3	1/4	734-1080	79	93
PV135E4	1/4	887-1304	79	93
PV135E5	1/4	1149-1489	79	93
PV135F	1/3	1260-1633	81	95
PV135G	1/2	1382-1875	83	97

## MOTOR INFORMATION

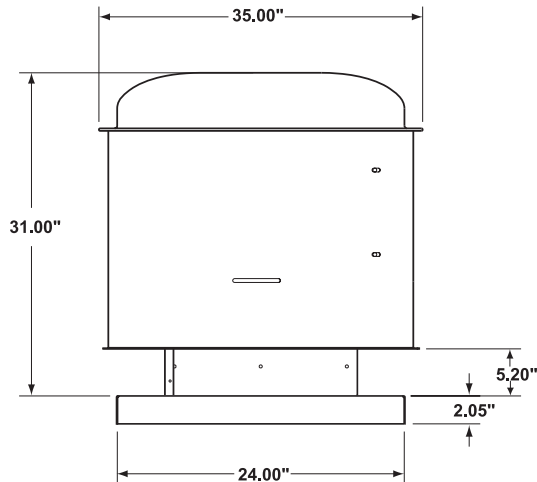
Maximum Motor Frame Size: 56  
Maximum Length ("C" Dimension): 11.00"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
513	692		302																			
	0.01	1.6	0.01	1.4																		
617	832		580																			
	0.02	2.3	0.02	2.3																		
734	990		790		458																	
	0.03	3.4	0.03	3.4	0.03	3.3																
770	1038		848		574																	
	0.03	4.0	0.04	3.7	0.04	3.5																
887	1196		1032		849		517															
	0.05	4.8	0.05	4.9	0.06	4.7	0.06	4.5														
907	1223		1063		886		589															
	0.05	5.0	0.06	5.0	0.06	5.0	0.06	4.6														
1080	1456		1323		1185		1028		786		389											
	0.08	7.0	0.09	7.0	0.10	6.8	0.11	6.7	0.11	6.4	0.08	6.0										
1149	1549		1424		1295		1154		970		682											
	0.10	7.9	0.11	7.9	0.12	7.8	0.13	7.4	0.13	7.2	0.12	6.8										
1260	1699		1584		1468		1349		1211		1028		752									
	0.13	9.1	0.14	9.1	0.15	9.0	0.16	8.8	0.17	8.6	0.17	8.2	0.16	7.8								
1304	1758		1648		1535		1421		1291		1129		906		579							
	0.15	9.8	0.16	9.8	0.17	9.5	0.18	9.3	0.19	9.1	0.19	8.5	0.19	8.4	0.16	8.2						
1382	1863		1759		1654		1546		1430		1303		1130		888		564					
	0.17	10.9	0.19	10.9	0.20	10.3	0.21	10.2	0.22	9.9	0.22	9.6	0.22	9.3	0.22	8.8	0.19	8.6				
1489	2008		1911		1814		1714		1614		1499		1372		1212		991					
	0.22	12.3	0.23	12.3	0.24	11.7	0.25	11.8	0.26	11.1	0.27	10.8	0.28	10.5	0.28	10.2	0.27	9.7				
1633	2202		2113		2025		1935		1844		1752		1646		1536		1391		994			
	0.29	14.0	0.30	14.0	0.32	14.0	0.33	13.5	0.34	13.5	0.35	12.8	0.36	12.2	0.37	11.8	0.37	11.8	0.35	11.6		
1875	2528		2451		2374		2297		2219		2139		2060		1974		1882		1666		1374	
	0.44	18.6	0.45	18.6	0.47	18.2	0.48	17.9	0.50	17.5	0.51	16.5	0.52	16.3	0.54	15.7	0.55	14.9	0.56	14.9	0.56	14.8

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV150 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV150E1	1/4	575-863	104	109
PV150E2	1/4	679-998	104	109
PV150E3	1/4	725-1088	104	109
PV150F	1/3	907-1187	106	111
PV150G	1/2	993-1363	108	113
PV150H	3/4	1191-1557	114	119

## MOTOR INFORMATION

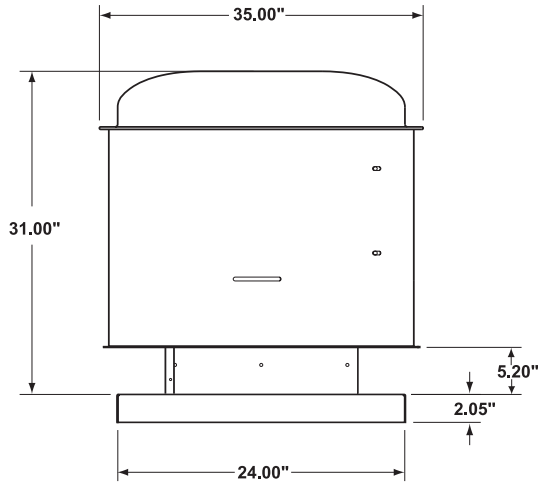
Maximum Motor Frame Size: 145T  
Maximum Length ("C" Dimension): 14.18"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
575	1208		920		470																	
	0.03	3.5	0.04	3.5	0.04	3.3																
679	1426		1194		906		342															
	0.05	4.7	0.06	4.7	0.07	4.4	0.05	4.4														
725	1523		1307		1050		697															
	0.06	5.3	0.07	5.3	0.08	5.0	0.08	4.9														
863	1812		1638		1437		1208		925		303											
	0.10	7.0	0.11	7.0	0.12	6.7	0.13	6.5	0.13	6.3	0.09	6.3										
907	1905		1740		1554		1344		1095		725											
	0.12	7.4	0.13	7.4	0.14	7.2	0.15	7.3	0.16	7.0	0.14	6.8										
993	2085		1935		1769		1586		1384		1144		789									
	0.15	8.7	0.17	8.7	0.18	8.3	0.19	8.3	0.20	8.1	0.20	7.9	0.19	7.7								
998	2096		1946		1782		1600		1400		1163		833		117							
	0.15	8.8	0.17	8.8	0.18	8.4	0.20	8.5	0.20	8.2	0.21	8.0	0.20	7.7	0.11	7.5						
1088	2285		2147		2001		1843		1668		1478		1254		969		346					
	0.20	10.3	0.22	10.3	0.23	10.0	0.25	9.7	0.26	9.3	0.27	9.3	0.27	9.2	0.26	8.8	0.17	8.7				
1187	2493		2367		2237		2095		1942		1782		1604		1399		1152					
	0.26	12.0	0.28	12.0	0.30	11.7	0.31	11.5	0.33	11.2	0.34	11.0	0.35	10.8	0.35	10.5	0.34	10.1				
1191	2501		2375		2247		2105		1953		1793		1616		1414		1172		120			
	0.26	12.1	0.28	12.0	0.30	11.8	0.32	11.6	0.33	11.3	0.34	11.1	0.35	10.8	0.35	10.6	0.35	10.2	0.18	9.9		
1363	2862		2753		2643		2524		2400		2268		2129		1984		1828		1457		735	
	0.39	15.4	0.41	15.3	0.44	15.0	0.46	14.2	0.48	14.1	0.49	13.9	0.51	13.7	0.52	13.4	0.53	13.5	0.53	12.1	0.41	12.9
1460	3066		2964		2861		2755		2639		2523		2396		2265		2130		1828		1441	
	0.48	17.0	0.50	16.8	0.53	16.3	0.55	16.1	0.57	15.9	0.59	15.7	0.61	15.5	0.62	14.9	0.64	15.1	0.65	13.8	0.64	13.8
1557	3270		3174		3078		2981		2874		2765		2656		2533		2411		2148		1843	
	0.58	18.9	0.61	18.8	0.63	18.2	0.66	17.6	0.68	17.6	0.70	17.6	0.73	17.1	0.74	16.6	0.76	16.6	0.78	15.5	0.79	15.3

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV165 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV165E1	1/4	575-863	105	112
PV165E2	1/4	679-998	105	112
PV165F	1/3	725-1088	107	114
PV165G	1/2	882-1250	109	116
PV165H	3/4	936-1428	115	122
PV165J	1	1301-1584	123	130

## MOTOR INFORMATION

Maximum Motor Frame Size: 145T  
Maximum Length ("C" Dimension): 14.18"

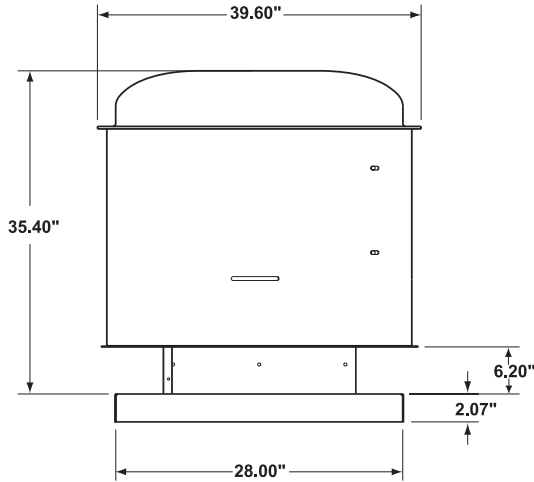
RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
575	1519		1187		625																	
	0.04	3.4	0.05	3.3	0.05	3.2																
679	1794		1523		1158		580															
	0.07	4.8	0.08	4.5	0.08	4.5	0.07	4.3														
725	1915		1664		1364		887															
	0.09	5.3	0.10	5.2	0.10	5.1	0.10	4.8														
863	2280		2073		1851		1560		1170													
	0.14	7.5	0.16	7.5	0.17	6.8	0.17	6.7	0.17	6.6												
882	2330		2128		1911		1645		1265		791											
	0.15	7.8	0.17	7.6	0.18	7.4	0.19	7.0	0.18	6.7	0.16	6.5										
936	2473		2282		2080		1845		1527		1146											
	0.18	8.7	0.20	8.6	0.21	8.1	0.22	8.1	0.22	7.8	0.21	7.2										
998	2637		2458		2270		2063		1809		1473		1096									
	0.22	10.4	0.24	10.2	0.25	9.7	0.26	9.0	0.27	8.8	0.27	8.3	0.25	8.2								
1088	2874		2710		2541		2365		2156		1897		1588		1242							
	0.29	12.7	0.30	11.9	0.32	12.0	0.33	11.3	0.34	11.2	0.35	10.1	0.34	9.8	0.32	8.9						
1250	3302		3159		3017		2864		2711		2529		2338		2074		1803		1139			
	0.44	17.2	0.45	16.2	0.47	16.1	0.49	15.2	0.51	15.0	0.52	14.0	0.53	13.8	0.53	12.7	0.52	11.6	0.45	11.1		
1301	3437		3300		3162		3018		2870		2708		2527		2306		2052		1488			
	0.49	17.9	0.51	16.7	0.53	17.2	0.55	15.8	0.56	15.7	0.58	14.8	0.59	14.5	0.60	13.2	0.59	13.2	0.55	12.1		
1428	3773		3647		3522		3396		3261		3126		2976		2812		2631		2165		1647	
	0.65	20	0.67	19.0	0.69	19.1	0.71	18.0	0.73	17.8	0.75	16.8	0.77	16.3	0.78	15.3	0.79	14.9	0.78	14.3	0.73	13.7
1584	4185		4072		3959		3846		3729		3608		3486		3358		3210		2886		2467	
	0.89	22	0.91	22	0.93	21	0.96	20	0.98	20	1.00	19.7	1.02	19.4	1.04	18.1	1.05	17.5	1.08	16.4	1.07	16.2

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.



# PV180 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV180E	1/4	456-657	176	202
PV180F	1/3	561-728	180	206
PV180G	1/2	588-830	180	206
PV180H	3/4	650-951	184	210
PV180J	1	734-1050	193	219
PV180K	1 1/2	847-1185	201	227
PV180L	2	941-1316	200	226

## MOTOR INFORMATION

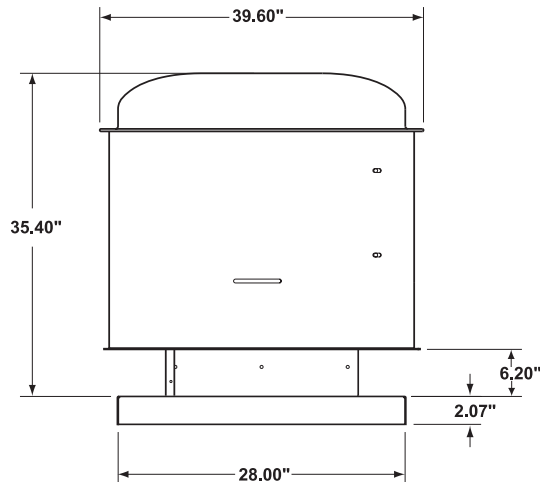
**Maximum Motor Frame Size: 145T**  
**Maximum Length ("C" Dimension): 14.50"**

PERFORMANCE DATA																						
CFM vs. Static Pressure (in. wg.)																						
RPM	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
456	2384		1852		755																	
	0.08	4.2	0.09	4.2	0.07	3.9																
561	2933		2524		1954		974															
	0.15	5.8	0.16	5.8	0.16	5.4	0.13	5.8														
588	3075		2686		2184		1380															
	0.17	6.4	0.18	6.5	0.19	6.2	0.17	6.2														
650	3399		3051		2658		2054		1167													
	0.24	7.6	0.25	7.7	0.25	7.3	0.24	7.2	0.20	7.0												
657	3435		3091		2710		2119		1303													
	0.24	7.7	0.25	7.8	0.26	7.5	0.25	7.3	0.22	7.1												
717	3749		3434		3100		2650		2025		1115											
	0.32	9.1	0.33	8.9	0.34	8.6	0.34	8.7	0.32	8.5	0.25	8.4										
728	3807		3496		3169		2736		2142		1330											
	0.33	9.2	0.34	9.3	0.35	8.9	0.35	8.9	0.34	8.9	0.28	8.7										
830	4340		4067		3790		3495		3076		2565		1933		1027							
	0.49	12.4	0.50	12.6	0.52	11.7	0.53	11.6	0.52	11.2	0.51	11.3	0.46	10.9	0.35	10.8						
847	4429		4162		3891		3602		3209		2724		2136		1293							
	0.52	12.7	0.53	12.9	0.55	12.5	0.56	12.4	0.56	12.3	0.54	12.2	0.51	11.1	0.41	11.7						
941	4920		4680		4440		4185		3920		3541		3106		2598		2021					
	0.71	16.0	0.73	15.9	0.75	15.6	0.76	15.7	0.77	15.7	0.76	15.4	0.75	14.1	0.72	14.6	0.66	14.8				
951	4973		4735		4497		4246		3988		3619		3197		2705		2143					
	0.74	15.9	0.75	16.6	0.77	15.6	0.78	16.0	0.79	15.7	0.79	15.6	0.77	14.4	0.75	15.0	0.69	14.6				
1050	5490		5275		5059		4841		4608		4367		4028		3660		3246		2235			
	0.99	19.3	1.01	19.5	1.03	19.7	1.04	19.6	1.06	19.1	1.07	19.4	1.06	17.7	1.05	18.4	1.03	18.3	0.91	16.5		
1125	5882		5681		5480		5279		5066		4848		4597		4280		3935		3108		2006	
	1.22	21	1.24	22	1.26	21	1.28	21	1.29	20	1.31	20	1.31	20	1.30	19.7	1.29	20	1.23	17.5	1.03	16.9
1185	6196		6005		5814		5624		5426		5220		5013		4739		4438		3733		2868	
	1.43	23	1.44	23	1.47	22	1.49	22	1.50	22	1.52	23	1.53	21	1.53	22	1.52	21	1.48	19.2	1.37	17.6
1250	6536		6355		6174		5993		5812		5616		5420		5224		4939		4329		3594	
	1.67	24	1.69	25	1.72	24	1.74	24	1.76	24	1.77	24	1.79	22	1.80	23	1.79	24	1.76	20	1.70	19.5
1316	6881		6709		6537		6366		6194		6014		5828		5642		5434		4893		4256	
	1.95	27	1.97	28	2.00	27	2.02	27	2.04	26	2.06	26	2.08	26	2.09	25	2.10	26	2.08	22	2.04	21

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV200 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV200E1	1/4	374-550	178	204
PV200E	1/4	469-632	177	203
PV200F	1/3	459-689	178	204
PV200G	1/2	527-805	181	207
PV200H	3/4	594-907	186	212
PV200J	1	710-1006	195	221
PV200K	1 1/2	805-1140	202	228
PV200L	2	886-1255	200	226

## MOTOR INFORMATION

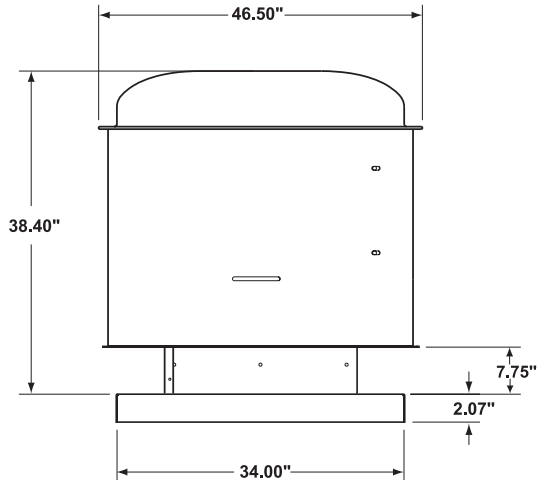
Maximum Motor Frame Size: 145T  
Maximum Length ("C" Dimension): 14.50"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
374	2116		1226																			
	0.05	3.6	0.05	3.5																		
459	2596		1993		961																	
	0.10	5.1	0.10	5.0	0.08	4.6																
469	2653		2078		1093																	
	0.10	5.5	0.11	5.0	0.09	4.7																
527	2981		2500		1714																	
	0.14	6.7	0.16	6.1	0.14	5.5																
550	3111		2659		1934		1006															
	0.16	6.8	0.18	6.6	0.17	6.2	0.13	5.5														
594	3360		2958		2337		1559															
	0.21	7.8	0.22	7.5	0.22	7.0	0.19	6.2														
632	3575		3209		2671		1962		1117													
	0.25	8.8	0.26	8.1	0.27	7.6	0.25	6.8	0.19	6.8												
689	3898		3561		3139		2512		1834		979											
	0.32	10.0	0.34	9.2	0.35	8.8	0.34	8.1	0.30	7.7	0.22	7.3										
710	4016		3690		3288		2705		2061		1298											
	0.35	10.4	0.37	10.0	0.38	9.2	0.37	8.3	0.34	8.2	0.27	7.9										
805	4554		4266		3947		3537		2988		2421		1804									
	0.51	12.8	0.53	11.8	0.55	11.2	0.56	10.2	0.54	10.2	0.50	9.8	0.45	9.0								
886	5012		4751		4489		4143		3710		3211		2695		2142		1469					
	0.69	15.9	0.71	14.5	0.73	13.4	0.74	12.9	0.74	11.9	0.71	11.3	0.67	10.8	0.61	9.8	0.50	9.7				
907	5131		4875		4620		4290		3891		3404		2910		2377		1768					
	0.74	16.2	0.76	14.7	0.78	14.4	0.79	13.3	0.79	12.7	0.77	12.1	0.73	11.2	0.68	10.7	0.59	10.0				
1006	5691		5461		5230		4970		4663		4282		3843		3402		2934		1863			
	1.00	19.1	1.03	17.8	1.05	16.8	1.07	16.2	1.09	15.0	1.08	14.4	1.06	13.8	1.02	12.5	0.97	12.4	0.78	12.0		
1140	6449		6246		6042		5839		5592		5322		5015		4628		4240		3440		2572	
	1.46	24	1.49	22	1.51	21	1.54	19.7	1.56	18.8	1.58	17.8	1.58	17.2	1.56	15.7	1.53	15.8	1.42	15.6	1.27	15.8
1255	7099		6915		6730		6546		6361		6119		5873		5616		5264		4560		3832	
	1.95	28	1.98	26	2.01	24	2.04	23	2.07	22	2.09	21	2.10	19.9	2.12	18.9	2.10	17.9	2.03	17.7	1.91	17.8

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV220 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV220E	1/4	358-514	219	248
PV220F	1/3	398-573	220	249
PV220G	1/2	465-669	220	249
PV220H	3/4	532-773	226	255
PV220J	1	595-855	234	262
PV220K	1 1/2	672-966	241	270
PV220L	2	734-1050	239	268

## MOTOR INFORMATION

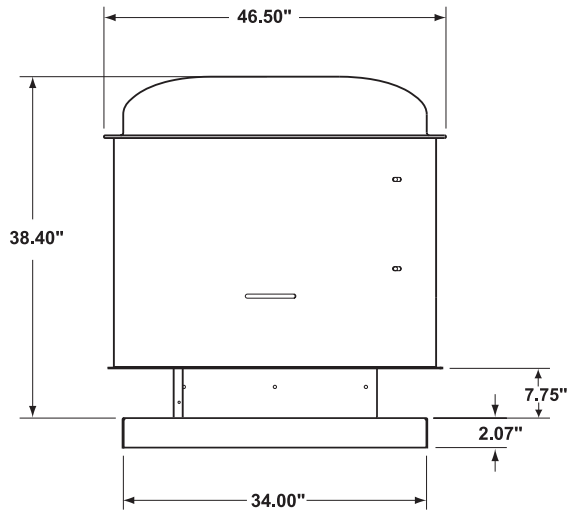
Maximum Motor Frame Size: 145T  
Maximum Length ("C" Dimension): 14.50"

PERFORMANCE DATA																						
RPM	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
358	2833		2061																			
	0.06	3.0	0.08	3.1																		
398	3150		2502		1361																	
	0.08	4.0	0.10	3.9	0.10	3.9																
465	3680		3138		2399		1048															
	0.13	5.3	0.16	5.3	0.17	5.1	0.13	5.0														
514	4068		3586		3001		2120															
	0.18	6.3	0.21	6.4	0.23	6.4	0.23	6.0														
532	4210		3747		3202		2391		966													
	0.20	6.8	0.23	6.7	0.25	6.6	0.26	6.4	0.18	6.2												
573	4534		4105		3640		2988		2107													
	0.25	7.6	0.28	7.5	0.31	7.3	0.32	7.3	0.31	7.1												
595	4709		4295		3851		3282		2471		1090											
	0.28	8.1	0.31	8.2	0.34	8.2	0.36	7.6	0.36	7.7	0.25	7.3										
669	5294		4926		4543		4113		3554		2820		1882									
	0.39	10.2	0.43	10.0	0.46	10.0	0.50	9.3	0.52	9.3	0.51	9.0	0.44	8.7								
672	5318		4952		4571		4145		3597		2865		1975									
	0.40	9.8	0.43	10.0	0.47	9.9	0.50	9.6	0.52	9.5	0.52	9.2	0.45	9.1								
734	5809		5473		5135		4766		4324		3775		3106		2354							
	0.52	11.8	0.56	11.6	0.60	11.5	0.63	11.4	0.66	11.2	0.68	10.9	0.68	10.7	0.61	9.9						
773	6117		5799		5481		5134		4754		4294		3686		3053		2188					
	0.61	13.1	0.65	12.8	0.69	12.9	0.73	12.6	0.76	12.5	0.79	12.0	0.80	11.3	0.78	11.1	0.68	10.9				
855	6766		6478		6191		5891		5575		5214		4798		4273		3699		2157			
	0.82	15.7	0.87	15.8	0.91	15.7	0.96	15.4	1.00	15.3	1.04	14.2	1.07	14.2	1.08	13.0	1.07	12.8	0.87	12.6		
966	7645		7390		7135		6880		6608		6328		6033		5664		5295		4287		3173	
	1.18	19.8	1.23	19.7	1.29	19.3	1.34	18.9	1.39	18.6	1.44	17.7	1.48	17.8	1.51	16.3	1.55	16.3	1.55	15.7	1.41	14.6
1050	8309		8075		7841		7606		7369		7112		6854		6587		6248		5510		4573	
	1.52	23	1.57	23	1.63	23	1.69	22	1.75	22	1.80	20	1.85	20	1.90	19.0	1.94	19.0	2.00	18.1	1.99	17.3

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV240 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV240E	1/4	371-526	223	253
PV240F	1/3	375-572	224	254
PV240G	1/2	434-663	224	254
PV240H	3/4	497-759	230	260
PV240J	1	537-820	238	268
PV240K	1 1/2	614-938	250	280
PV240L	2	729-1033	244	274

## MOTOR INFORMATION

Maximum Motor Frame Size: 145T  
Maximum Length ("C" Dimension): 14.50"

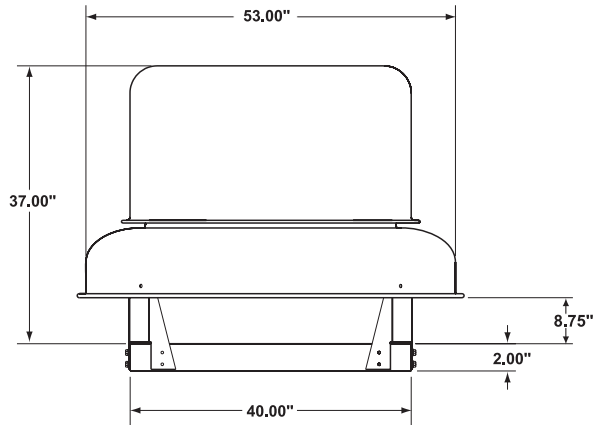
RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
371	3145		2386		637																	
	0.08	4.0	0.10	3.7	0.06	3.7																
375	3179		2434		802																	
	0.08	4.2	0.10	3.8	0.07	3.7																
434	3679		3078		2118																	
	0.12	5.4	0.15	4.9	0.15	4.9																
497	4213		3723		3037		1966															
	0.18	6.9	0.21	6.4	0.23	6.2	0.22	6.0														
526	4459		4010		3390		2496		961													
	0.22	7.6	0.24	7.0	0.27	7.0	0.27	6.6	0.18	6.7												
537	4553		4112		3521		2686		1387													
	0.23	7.9	0.26	7.3	0.29	7.1	0.29	6.9	0.22	7.1												
572	4849		4436		3912		3239		2233													
	0.28	8.9	0.31	8.4	0.34	7.9	0.36	7.7	0.33	7.8												
614	5205		4820		4356		3785		3000		1982											
	0.34	9.8	0.38	9.6	0.41	9.3	0.44	9.0	0.44	8.7	0.37	8.6										
663	5621		5264		4861		4376		3779		2934		1873									
	0.43	11.3	0.47	10.7	0.51	10.8	0.54	10.4	0.56	10.3	0.54	9.6	0.44	9.5								
729	6180		5856		5526		5094		4615		4035		3263		2396							
	0.57	13.7	0.61	13.3	0.66	12.4	0.70	12.2	0.73	12.2	0.74	11.7	0.72	11.6	0.63	10.5						
759	6435		6123		5811		5408		4975		4469		3791		3000		1947					
	0.65	15.0	0.69	14.4	0.73	14.0	0.78	13.5	0.82	13.5	0.84	12.1	0.83	12.6	0.78	11.2	0.63	11.6				
820	6952		6663		6375		6035		5651		5219		4751		4098		3371					
	0.82	17.2	0.86	16.9	0.91	15.5	0.95	15.0	1.00	15.3	1.04	14.2	1.06	14.5	1.05	12.7	1.00	13.5				
938	7952		7700		7448		7196		6879		6543		6193		5783		5351		4156		2661	
	1.22	21	1.27	21	1.33	19.7	1.38	19.1	1.43	19.7	1.49	17.8	1.54	18.3	1.56	16.9	1.59	16.7	1.52	16.2	1.25	15.9
1033	8757		8529		8300		8071		7835		7530		7225		6920		6551		5738		4652	
	1.63	26	1.69	26	1.75	24	1.81	23	1.86	23	1.92	21	1.98	22	2.04	20	2.07	20	2.11	18.8	2.04	18.5

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.



# PV260 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV260E	1/4	286-419	294	323
PV260F	1/3	317-456	295	324
PV260G	1/2	356-526	296	325
PV260H	3/4	462-607	304	332
PV260J	1	482-646	311	340
PV260K	1 1/2	518-738	319	348
PV260L	2	570-821	315	344

## MOTOR INFORMATION

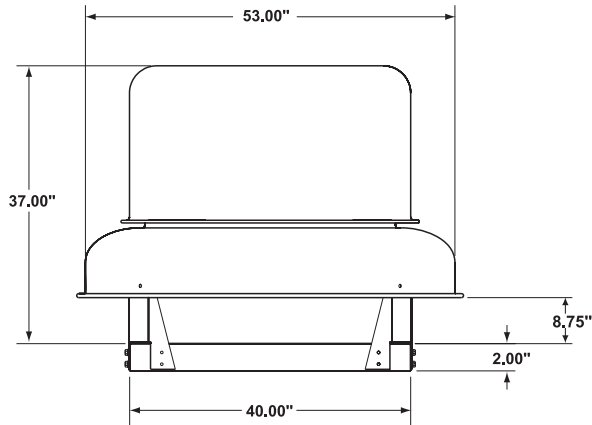
Maximum Motor Frame Size: 215T  
Maximum Length ("C" Dimension): 16.72"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
286	3380		2389																			
	0.06	7.3	0.09	6.6																		
317	3747		2866		1512																	
	0.08	7.7	0.11	7.1	0.11	7.1																
356	4208		3427		2469																	
	0.11	8.3	0.15	7.7	0.17	7.6																
419	4953		4263		3605		2649															
	0.18	5.3	0.23	5.2	0.27	5.2	0.28	5.0														
456	5390		4740		4169		3417		2355													
	0.24	6.3	0.28	5.9	0.33	6.0	0.36	6.1	0.34	6.0												
462	5461		4817		4259		3530		2522													
	0.24	6.5	0.29	6.2	0.34	6.3	0.37	6.3	0.36	6.2												
482	5697		5071		4554		3899		3018													
	0.28	7.0	0.33	6.6	0.38	6.6	0.41	6.7	0.42	6.7												
518	6123		5530		5043		4490		3784		2860											
	0.34	7.7	0.40	7.5	0.45	7.6	0.50	7.6	0.53	7.7	0.51	7.2										
526	6217		5634		5150		4614		3936		3080											
	0.36	8.2	0.42	7.8	0.47	7.9	0.52	7.7	0.55	7.7	0.55	7.5										
570	6737		6199		5734		5278		4746		4056		3204									
	0.46	9.3	0.52	8.8	0.58	8.9	0.63	8.9	0.68	9.2	0.70	8.7	0.69	8.5								
607	7175		6669		6216		5805		5322		4754		4066		3221							
	0.55	10.4	0.62	10.0	0.68	10.5	0.74	10.5	0.80	10.7	0.83	10.2	0.85	9.9	0.82	9.5						
646	7636		7160		6718		6332		5913		5443		4854		4179		3362					
	0.67	12.1	0.74	11.5	0.80	12.0	0.87	11.8	0.93	11.7	0.99	11.6	1.01	11.4	1.02	10.9	0.98	10.7				
690	8156		7711		7277		6916		6554		6123		5666		5096		4454		2596			
	0.81	13.9	0.89	13.5	0.96	13.8	1.03	13.7	1.10	13.5	1.16	13.2	1.21	13.2	1.24	12.1	1.24	12.2	1.06	11.4		
738	8723		8307		7891		7543		7205		6845		6434		5988		5455		4195			
	1.00	15.8	1.07	15.5	1.15	15.5	1.23	16.0	1.30	15.8	1.37	14.9	1.44	14.6	1.49	14.0	1.52	14.0	1.50	13.4		
780	9220		8826		8432		8084		7765		7445		7074		6685		6237		5170		3803	
	1.18	17.1	1.26	17.0	1.34	17.0	1.42	17.5	1.50	17.6	1.58	17.1	1.65	16.4	1.72	15.6	1.76	15.3	1.80	14.9	1.69	14.9
821	9704		9330		8956		8607		8304		8000		7684		7315		6946		6021		4914	
	1.37	18.9	1.46	18.6	1.55	18.7	1.63	19.4	1.72	19.4	1.80	19.2	1.88	18.3	1.95	17.0	2.02	16.8	2.09	16.5	2.08	16.4

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV300 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV300F	1/3	295-442	293	346
PV300G	1/2	329-493	300	354
PV300H	3/4	394-559	307	360
PV300J	1	427-605	311	364
PV300K	1 1/2	533-690	326	379
PV300L	2	587-759	323	376
PV300M	3	682-833	365	418

## MOTOR INFORMATION

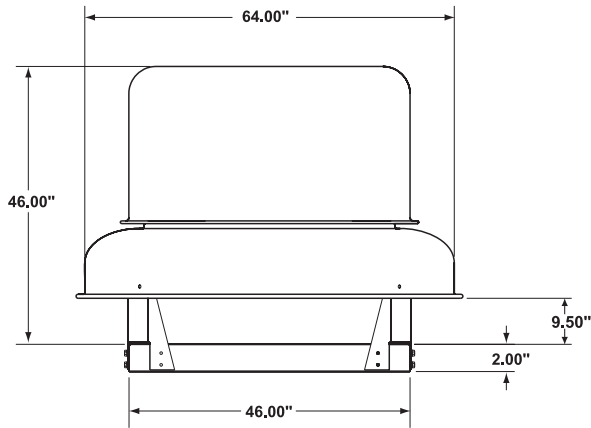
Maximum Motor Frame Size: 215T  
Maximum Length ("C" Dimension): 16.72"

RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
295	4243		3260																			
	0.08	6.4	0.11	5.3																		
329	4732		3863		2770																	
	0.11	7.5	0.15	6.9	0.17	5.4																
394	5666		4940		4187		3165															
	0.20	9.7	0.23	8.8	0.27	7.8	0.29	7.0														
427	6141		5469		4787		3975		2331													
	0.25	10.8	0.29	10.1	0.33	9.2	0.37	8.2	0.33	7.4												
442	6357		5707		5054		4295		3231													
	0.28	11.4	0.32	10.6	0.36	9.8	0.40	8.8	0.41	8.0												
493	7090		6505		5934		5320		4588		3547											
	0.38	13.3	0.43	12.6	0.48	12.4	0.53	10.9	0.56	10.1	0.56	9.3										
533	7665		7124		6593		6042		5434		4701		3494									
	0.48	14.7	0.54	14.4	0.59	13.8	0.64	12.7	0.69	11.7	0.72	10.9	0.69	10.3								
559	8039		7523		7016		6501		5954		5298		4523		2657							
	0.56	15.7	0.62	15.3	0.67	14.8	0.72	13.9	0.78	12.9	0.82	11.9	0.83	11.4	0.69	11.0						
587	8442		7950		7466		6986		6466		5890		5228		4400							
	0.65	16.7	0.71	16.1	0.76	15.8	0.82	15.1	0.88	14.2	0.92	13.1	0.96	12.7	0.96	12.0						
605	8701		8224		7753		7287		6790		6263		5645		4916		3378					
	0.71	17.4	0.77	16.8	0.83	16.3	0.88	15.8	0.94	14.9	1.00	13.8	1.04	13.5	1.06	12.8	0.94	12.3				
682	9808		9385		8963		8550		8137		7692		7244		6706		6140		4169			
	1.01	20	1.08	19.8	1.15	19.3	1.22	19.1	1.28	18.4	1.35	19.2	1.41	18.8	1.46	18.0	1.50	15.6	1.41	14.9		
690	9923		9505		9087		8679		8271		7834		7391		6874		6333		4617			
	1.05	21	1.12	20	1.19	19.6	1.26	19.5	1.32	18.8	1.39	17.6	1.45	17.2	1.51	16.4	1.55	16.0	1.51	15.2		
759	10916		10535		10155		9781		9410		9039		8638		8235		7792		6778		5232	
	1.40	24	1.47	23	1.55	23	1.63	22	1.70	22	1.77	20	1.84	20	1.92	19.4	1.98	19.0	2.07	17.8	2.02	16.9
833	11980		11633		11287		10942		10604		10266		9928		9563		9196		8389		7464	
	1.84	27	1.93	26	2.02	26	2.10	26	2.18	25	2.26	24	2.33	24	2.41	23	2.50	22	2.64	21	2.74	20

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses.  
The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV365 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV365G	1/2	230-345	387	408
PV365H	3/4	282-399	394	414
PV365J	1	302-428	401	422
PV365K	1 1/2	376-487	428	449
PV365L	2	419-542	424	444
PV365M	3	493-616	455	476
PV365N	5	601-732	466	487

## MOTOR INFORMATION

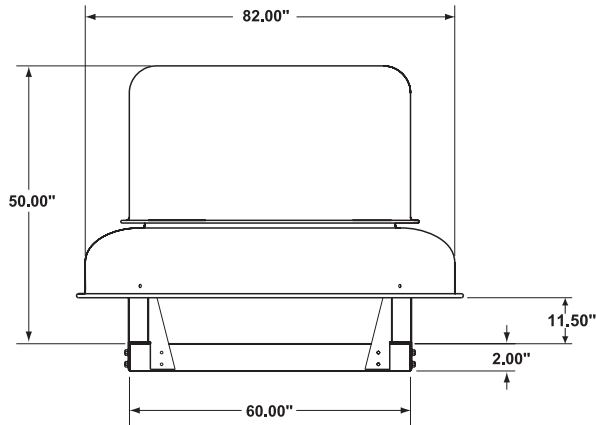
Maximum Motor Frame Size: 215T  
Maximum Length ("C" Dimension): 18.61"

	PERFORMANCE DATA																							
RPM	CFM vs. Static Pressure (in. wg.)																							
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500		2.000	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
230	5984		4470																					
	0.12	5.5	0.16	4.6																				
282	7336		6127		4771																			
	0.22	7.5	0.26	6.9	0.30	5.8																		
302	7857		6733		5531		1685																	
	0.27	8.2	0.32	7.6	0.36	7.1	0.23	6.0																
345	8975		8003		6974		5829																	
	0.40	10.0	0.46	9.1	0.51	8.8	0.56	7.8																
376	9782		8894		7962		6985		5769															
	0.52	11.2	0.58	10.5	0.64	10.0	0.70	9.8	0.73	8.4														
399	10380		9544		8671		7764		6755		4517													
	0.62	12.2	0.68	11.6	0.75	11.1	0.81	10.7	0.86	9.6	0.78	7.4												
419	10900		10104		9278		8426		7526		6349													
	0.71	13.1	0.78	12.6	0.85	12.2	0.92	11.6	0.98	10.7	1.00	10.0												
428	11135		10355		9549		8719		7853		6836		2699											
	0.76	13.5	0.83	13.0	0.90	12.6	0.98	12.0	1.04	11.2	1.07	10.4	0.70	9.9										
487	12670		11984		11291		10569		9833		9072		8207		6863									
	1.12	16.1	1.20	16.5	1.28	15.2	1.37	14.6	1.45	14.3	1.51	13.4	1.56	12.7	1.55	12.6								
493	12826		12149		11466		10752		10029		9277		8442		7308		2695							
	1.16	16.3	1.24	16.7	1.32	15.4	1.41	14.9	1.49	14.5	1.56	13.9	1.62	13.1	1.63	13.2	0.99	12.7						
542	14100		13485		12869		12227		11578		10913		10229		9486		8672							
	1.54	18.5	1.63	18.5	1.72	17.4	1.82	17.3	1.91	16.7	2.00	16.0	2.07	15.9	2.13	15.1	2.18	14.3						
601	15635		15080		14525		13961		13376		12790		12192		11575		10958		9496					
	2.10	21	2.20	21	2.30	20	2.40	20	2.51	19.6	2.61	19.1	2.71	18.9	2.79	18.4	2.88	17.7	2.98	17.2				
616	16026		15484		14942		14396		13825		13254		12678		12077		11475		10095		6720			
	2.26	22	2.36	22	2.47	21	2.57	21	2.68	20	2.79	19.8	2.89	19.6	2.98	19.1	3.06	18.6	3.18	17.8	2.84	16.5		
732	19043		18587		18132		17676		17220		16740		16260		15779		15298		14292		13274		10056	
	3.80	28	3.92	28	4.04	28	4.16	27	4.28	26	4.41	25	4.54	25	4.67	25	4.79	25	5.01	23	5.21	23	5.24	21

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

# PV425 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV425G	1/2	177-265	747	844
PV425H	3/4	212-301	734	831
PV425J	1	248-336	744	841
PV425K	1 1/2	291-384	751	848
PV425L	2	326-422	765	862
PV425M	3	383-479	799	896
PV425N	5	464-575	824	921

## MOTOR INFORMATION

Maximum Motor Frame Size: 215T  
Maximum Length ("C" Dimension): 20.00"

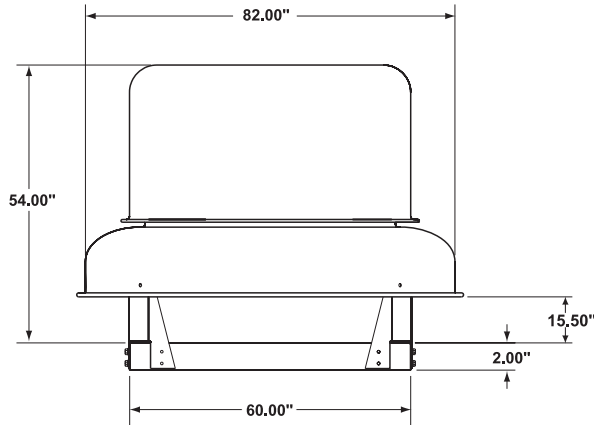
RPM	PERFORMANCE DATA																					
	CFM vs. Static Pressure (in. wg.)																					
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
177	7269		4926																			
	0.12	5.3	0.16	3.8																		
212	8707		6814																			
	0.20	6.9	0.25	5.6																		
248	10185		8587		6825																	
	0.32	8.7	0.38	7.6	0.44	6.0																
265	10883		9395		7805																	
	0.39	9.5	0.46	8.4	0.52	7.1																
291	11951		10606		9181		7573															
	0.51	10.9	0.59	9.9	0.66	9.1	0.72	8.5														
301	12362		11066		9697		8192															
	0.57	11.4	0.64	11.0	0.73	9.7	0.79	8.4														
326	13389		12197		10946		9637		8114													
	0.72	12.8	0.80	12.3	0.89	11.3	0.97	9.6	1.02	9.04												
336	13799		12643		11433		10172		8744													
	0.79	13.3	0.87	12.9	0.97	11.9	1.05	10.3	1.10	9.8												
383	15730		14715		13673		12603		11480		10232		8115									
	1.16	16.0	1.26	15.0	1.37	14.3	1.47	13.8	1.56	12.2	1.63	12.2	1.60	12.2								
384	15771		14759		13720		12653		11534		10294		8234									
	1.17	16.0	1.27	15.1	1.38	14.4	1.48	13.9	1.57	12.3	1.64	12.2	1.62	12.2								
422	17331		16411		15481		14510		13525		12502		11359		9745							
	1.56	18.1	1.67	18.5	1.78	16.8	1.90	16.2	2.01	15.1	2.10	14.4	2.17	14.1	2.18	14.1						
464	19056		18219		17382		16508		15625		14718		13788		12771		11663					
	2.07	21	2.19	21	2.31	19.3	2.44	18.4	2.57	18.1	2.68	16.8	2.79	15.7	2.87	15.6	2.93	15.6				
479	19672		18861		18050		17210		16354		15490		14589		13677		12604		6906			
	2.28	21	2.40	22	2.53	20	2.66	19.4	2.79	19.0	2.92	17.7	3.02	16.9	3.13	16.5	3.19	16.4	2.57	16.4		
575	23615		22939		22264		21588		20889		20177		19464		18749		17998		16496		14708	
	3.94	27	4.09	28	4.24	26	4.39	26	4.55	25	4.71	24	4.86	24	5.02	23	5.15	22	5.41	22	5.55	22

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.



# PV490 PERFORMANCE DATA AND DIMENSIONS



Typical drawings are for dimensional purposes only and are correct within limits suitable for normal installation requirements. They do not necessarily show actual construction.

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV490H	3/4	168-257	820	927
PV490J	1	207-276	828	935
PV490K	1 ½	239-310	817	924
PV490L	2	249-345	830	937
PV490M	3	288-398	874	981
PV490N	5	371-474	870	977
PV490P	7 ½	441-537	881	988

## MOTOR INFORMATION

Maximum Motor Frame Size: 215T  
Maximum Length ("C" Dimension): 21.00"

PERFORMANCE DATA																								
RPM	CFM vs. Static Pressure (in. wg.)																							
	.000		.125		.250		.375		.500		.625		.750		.875		1.000		1.250		1.500		2.000	
	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone
168	10400		7253																					
	0.18	6.3	0.25	5.5																				
207	12815		10363		7283																			
	0.33	8.5	0.42	8.0	0.48	7.4																		
239	14796		12676		10385		7203																	
	0.51	10.5	0.62	9.8	0.71	9.1	0.72	8.4																
249	15415		13377		11277		8443																	
	0.57	11.1	0.69	10.5	0.79	9.8	0.83	9.4																
257	15910		13933		11937		9283																	
	0.63	11.6	0.75	11.0	0.86	10.4	0.91	10.0																
276	17086		15239		13398		11189		8321															
	0.78	12.8	0.90	12.3	1.03	11.8	1.11	11.4	1.11	10.4														
288	17829		16055		14302		12292		9800															
	0.88	13.6	1.01	12.6	1.15	13.2	1.25	12.1	1.28	11.6														
310	19191		17537		15926		14248		12077		9494													
	1.10	15.1	1.24	15.1	1.40	14.2	1.52	13.5	1.59	13.4	1.58	12.7												
345	21358		19871		18418		16936		15314		13341		11120		7571									
	1.52	17.3	1.67	17.3	1.84	16.5	2.00	16.0	2.12	15.4	2.19	14.9	2.20	14.4	1.95	14.3								
371	22967		21585		20226		18870		17468		15796		13908		11794		8639							
	1.89	19.1	2.05	19.1	2.23	18.2	2.41	17.9	2.56	17.3	2.67	16.8	2.73	16.7	2.72	16.2	2.49	15.7						
398	24639		23350		22075		20824		19528		18209		16533		14742		12791							
	2.33	21	2.50	21	2.69	20	2.90	19.9	3.06	19.3	3.22	18.8	3.32	18.6	3.37	18.0	3.37	17.4						
441	27301		26138		24974		23845		22713		21533		20353		18874		17341		13773					
	3.17	24	3.36	24	3.56	23	3.79	23	4.01	23	4.18	21	4.36	22	4.47	21	4.57	21	4.56	21				
474	29344		28261		27179		26119		25069		23996		22899		21801		20408		17444		13866			
	3.94	26	4.14	26	4.35	26	4.59	25	4.83	25	5.05	24	5.24	24	5.42	23	5.54	24	5.69	23	5.60	23		
537	33244		32288		31333		30379		29452		28525		27590		26621		25652		23453		20924		14603	
	5.73	31	5.96	31	6.19	31	6.43	31	6.71	30	6.99	29	7.26	29	7.47	29	7.68	29	8.03	28	8.26	28	8.04	27

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

The brake horsepower capability of an exhaustor motor is dependent on the degree of cooling the motor receives from the air moving through the motor. The motor loading beyond the motor nameplate rating does not overheat the motor and is in accordance with the motor manufacturer's recommendations. It is therefore not detrimental to the motor and is economically desirable.

Technical drawing of a rectangular box with the following dimensions:

- Width: 82.00"
- Height: 57.00"
- Base Width: 60.00"
- Depth: 16.50"

Fan Model	HP	RPM Range	Est. Unit Wt.	Est. Ship Wt.
			lbs.	lbs.
PV543J	1	166-221	873	978
PV543K	1 ½	168-257	865	970
PV543L	2	214-283	892	997
PV543M	3	230-326	886	991
PV543N	5	297-380	942	1058
PV543P	7 ½	366-437	949	1066
PV543R	10	400-483	961	1079

**Maximum Motor Frame Size: 215T**  
**Maximum Length (“C” Dimension): 21.00”**

Performance certified is for Installation Type A: Free Inlet, Free Outlet. Performance ratings do not include the effects of appurtenances (accessories). Power ratings (BHP) do not include transmission losses. The sound ratings shown are loudness values in fan Sones at 5 feet (1.524 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for: Installation Type A: Free Inlet fan Sone levels.

Acme Engineering and Manufacturing Corporation

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## TYPICAL SPECIFICATIONS

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Roof exhauster fans shall be centrifugal belt drive type.

Fan impeller shall have centrifugal backwardly curved blades constructed of aluminum which are die-formed. Steel impeller hub shall be securely fastened to the impeller backplate. The impeller shall be optimally matched with the inlet orifice, and statically and dynamically balanced.

The fan housing shall be constructed of heavy gauge aluminum and include a full perimeter stormband to aid in protection of the orifice from blowing rain and snow.

The structural steel frame shall transmit the weight of the motor and impeller directly to the curb cap to prevent orifice distortion.

Permanently lubricated ball bearings shall be used in a duplex split pillow block housing for accurate alignment and rated at an L-50 life of 200,000 hours. Bearings shall be resilient mounted in neoprene rings providing protection and vibration isolation.

Pulleys shall be cast iron. Motor pulleys shall be variable pitch. V belts shall be oil and heat resistant and non static conducting and designed for 1.5 service factor. Fan shaft shall have a protective coating for resistance against corrosion.

Fans shall be covered by a 2 year limited warranty with 5 year limited warranty on duplex split pillow block bearing and shaft.

Sealed ball bearing motors shall be mounted out of the airstream. The motor compartment shall be ventilated with outside air by a "forced air" cooling system.

A birdscreen shall be provided and attached on all sides.

A conduit post shall be provided through the fan base to the motor compartment for ease of electrical wiring.

A disconnect device/switch shall be factory installed to the junction box on the internal wiring posts (except fans with explosion resistant motors).

Standard wiring shall comply with National Electric Code and materials used shall be U.L. Listed.

Fans shall bear the AMCA Certified Ratings Seal for sound and air performance.

Each fan shall have a permanently affixed manufacturer's nameplate containing the model number and serial number.

Thermal overload protection shall be standard for explosion resistant motors.

Fans shall be Model PV as manufactured by Acme Engineering and Manufacturing Corporation of Muskogee, Oklahoma.

### CENTRIFUGAL EXHAUSTERS



### CEILING AND CABINET EXHAUSTERS



### IN-LINE CENTRIFUGAL FANS



### IN-LINE AXIAL FANS



### PROPELLER ROOF FANS



### PROPELLER WALL FANS



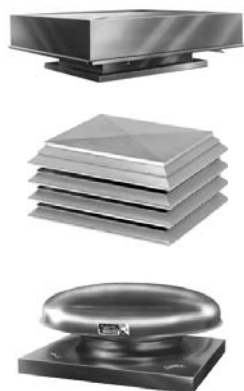
### UTILITY BLOWERS



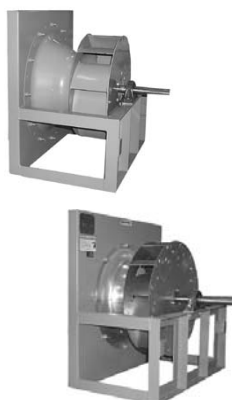
### SUPPLY AIR FANS



### ROOF VENTS



### PLENUM FANS



### BACKWARD INCLINED/AIRFOIL CENTRIFUGAL FANS



### CENTRIFUGAL INDUSTRIAL EXHAUSTERS



**LIMITED WARRANTY** Acme Engineering and Manufacturing Corporation extends this limited warranty to the original purchaser and warrants that products described herein shall be free from original defects in workmanship and materials for two years from date of shipment (except for Acme's exclusive duplex split pillow block bearings and shaft 5 years from shipment, belts one year from shipment, and polyethylene tubing at 90 days from shipping), provided same have been properly handled, stored, installed, serviced, maintained and operated. Refer to Form MS149 for complete limited warranty terms and conditions. This form is available to anyone at [www.acmefan.com](http://www.acmefan.com). The Company's warranty is in lieu of all other warranties, express or implied, arising by law or otherwise, including without limitation the implied warranties of merchantability and fitness for a particular purpose, which are hereby expressly disclaimed claimed and waived.

Acme products are designed and manufactured to provide reliable performance but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by the Purchaser and End User. If these products are used in a life support ventilation system where failure could result in loss or injury, the Purchaser and End User should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury.

**WARNING** DO NOT use in HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments. Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA). Guards

must be installed when fan is within reach of personnel or within seven (7) feet (2.134 m) of working level or when deemed advisable for safety.

**DISCLAIMER** The Company has made a diligent effort to illustrate and describe the products in this literature accurately; however, such illustrations and descriptions are for the sole purpose of identification, and do not express or imply a warranty that the products are merchantable, or fit for a particular purpose.

**INDEMNITY** Purchaser acknowledges various warnings by the Company regarding the products and its installation and use. If the Company incurs any claims, lawsuits, settlements, or expenses (including attorney fees) for any loss, injury, death or property damage including, but not limited to, claims arising out of the Purchaser's or any end user's installation or use of the products, the Purchaser shall indemnify and hold the Company harmless.



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