

# Models CUE, CUBE, USGF

Centrifugal Exhaust Fans

Roof Upblast and Sidewall



Building Value in Air.

## Model Comparison

Model	Location		Mounting			Airflow			Application					Drive Type	Impeller Type	Performance								
	Outdoor	Indoor	Roof Curb	Base/Floor	Hanging	Wall	Ceiling Mounted	Exhaust	Supply	Reversible	Recirculate	General/Clean Air	Contaminated Air	Spark Resistant	Grease (UL 705 Supplement SC) Smoke Control (UL 705 Supplement SD)	High Wind (150 mph)	High Temp (above 200°F)	Seismic Certification						
CUE	✓		✓			✓		✓				✓	✓	✓	✓	✓	✓	✓	Belt	Direct	Centrifugal		14,700	3
CUBE	✓		✓			✓		✓				✓	✓	✓	✓	✓	✓	✓			✓		30,000	5
USGF	✓		✓					✓				✓	✓	✓	✓	✓	✓	✓			✓		6,800	3.25

When you buy a Greenheck roof upblast or sidewall exhaust fan, you'll receive a fan with the industry's best performance and durability for general clean air, restaurant grease, smoke control, light contaminants, seismic, high wind, and hurricane applications. Both roof upblast and sidewall configurations are specifically designed to discharge air directly away from the mounting surface.

- Performance as cataloged is assured. All fan sizes are tested in our AMCA accredited laboratory and all models are licensed to bear the AMCA Sound, Air and FEI Performance seal.
- UL/cUL Listed for Power Ventilators, Restaurant Exhaust Appliances and Smoke Control Systems.
- Greenheck subjects these products to extensive life testing, ensuring the fans will provide many years of reliable performance.



### LEED information

Greenheck became one of the first manufacturers in the air movement and control industry to join the LEED/green movement when they joined the United States Green Building Council (USGBC) in 2005. Greenheck has been actively researching qualification requirements for our products to meet LEED credits and prerequisites.

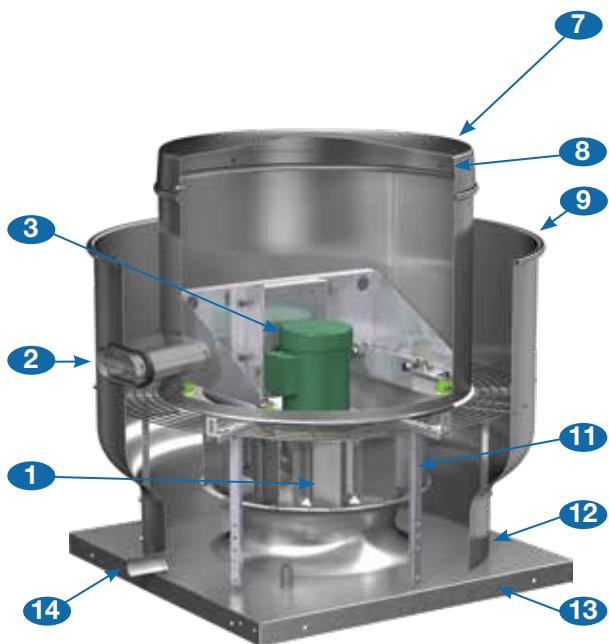
The Vari-Green® motor significantly helps qualification efforts for the Energy and Atmosphere credits and prerequisites, specifically credit one, Optimize Energy Performance and prerequisite two, Minimum Energy Performance.

# Standard Construction Features

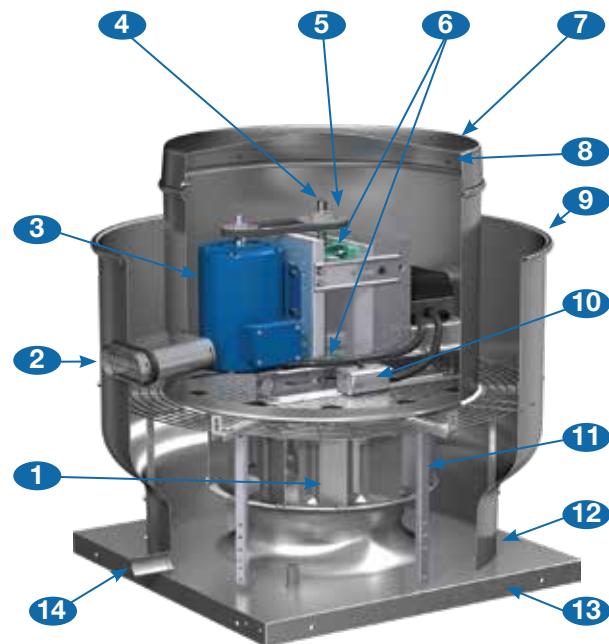


Standard Construction Features			CUE CUBE	USGF
1 Wheel	A backward-inclined, non-overloading centrifugal wheel is utilized to generate high efficiency and minimal sound. Wheel cones are carefully matched to the venturi for maximum efficiency. Each wheel is statically and dynamically balanced for long life and quiet operation.	✓	✓	*Non-Stick, Steel
2 Motor Cooling Tube	Cooling fins located on top of the fan wheel draw outside air through a large breather tube directly into the motor compartment. Positive motor cooling with fresh air results in maximum motor life.	✓	✓	
3 Motor	Carefully matched to the fan load and mounted out of the airstream.	✓	✓	
4 Fan Shaft	Precisely sized, ground and polished so the first critical speed is at least 25% over the maximum operating speed. Where the shaft makes contact with bearings, close tolerances result in longer bearing life.	✓	✓	
5 Drive Assembly	Belts, pulleys and keys are oversized 150% of driven horsepower. Machined-cast pulleys are adjustable for final system balancing. Belts are static-free and oil-resistant.	✓	✓	
6 Bearings	100% factory tested and designed specifically for air handling applications with a minimum L <sub>10</sub> life in excess of 100,000 hours (L <sub>50</sub> life in excess of 500,000 hours).	✓	✓	
7 Motor Cover	Constructed of aluminum. Attached with stainless steel fasteners for easy removal and access to the motor compartment and drive assembly.	✓	✓	*Steel
8 Stainless Steel Fasteners	Allow easy removal and access to the motor compartment and drive assembly.	✓	✓	
9 Windband	One-piece, heavy-gauge aluminum with a rolled bead for extra strength directs exhaust air away from the mounting surface.	✓	✓	*Steel
10 Disconnect Switch	NEMA-1 switch is factory-mounted and wiring is provided from the motor as standard (other switches are available). All wiring and electrical components comply with the National Electric Code (NEC) and are either UL/cUL Listed or Recognized.  NEMA-3R switch is factory-mounted and wired as standard. All wiring and electrical components comply with the National Electric Code (NEC) and are either UL/cUL Listed or Recognized.	✓		✓
11 Internal Supports	Heavy-gauge supports provide additional strength to withstand wind loads of 150 PSF and support motor and drives.	✓	✓	
12 Leakproof Construction	One-piece windband is continuously welded to the curb cap for leakproof protection on models CUE, CUBE, and USGF through size 240 and all sizes with UL/cUL 705 Supplement SC (restaurant exhaust).	✓	✓	
13 Curb Cap with Mounting Holes	One-piece for a weathertight fit. Constructed of aluminum with an integral deep spun venturi. Aluminum curb cap has prepunched mounting holes to ensure correct attachment to the roof.	✓	✓	*Steel
14 Drain/Grease Trough	Allows for one-point drainage of water, grease and other residues.	✓	✓	
Not Shown	Nameplate	Permanent embossed aluminum nameplate for exact model and serial number identification.	✓	✓
Not Shown	Internal Conduit Chase	For easy internal electrical wiring in applications. Not available on UL 705 Supplement SC (restaurant exhaust) rated fans per NFPA 96.	✓	
15 Dual Drives	Oversized 150%, adjustable, static-free and oil-resistant.		✓	
16 Permatector™ Coating	Typically used for applications that require corrosion resistance in indoor and outdoor environments.		✓	
17 Clean-Out Port	Allows for easy cleaning of the entire centrifugal wheel through a 4-inch diameter hole on the outside of the fan windband. Meets NFPA 96 standard.		✓	
18 Hinged Curb Base with Cables	Allows maintenance personnel to gain access to wheel and ductwork for regular inspection and cleaning by utilizing the factory assembled hinge.		✓	
19 Vibration Isolation	True vibration isolators consist of two independent studs separated by a neoprene (rubber) center. Reduces vibration and noise transfer between the drive system and fan housing. (No metal-to-metal contact. Factory-mounted ground wire used to ground system).		✓	✓
20 Lifting Points	Various lifting points located on the drive frame and bearing plate.		✓	✓

# Standard Construction Features



**Model CUE**



**Model CUBE**

**Model USGF**

# Model Number Code



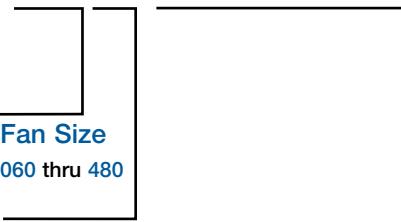
## Performance & Dimensions Quick Reference

Model Size	Page Index				Material Thickness		
	CUBE	CUE	CUBE Smoke Option	USGF		Windband	Motor Cover
060		19 •			0.051 (1.3)	0.051 (1.3)	0.051 (1.3)
070		20 •			0.051 (1.3)	0.051 (1.3)	0.064 (1.6)
080		21 •					
090		22 •					
095		23 •					
099		24 •					
100		25 •	x				
100HP		26 •	x				
120		27 •	x				
130		28 •	x				
140		29 •	x	x			
140HP		30 •	x	x			
160		31 •	x	x			
160HP		32 •	x	x			
160XP		33 •		x			
180		34 •	x	x			
180HP		35 •	x	x			
200		36 •	x	x			
200HP		37 •	x	x			
220	38 •		x				
220HP	39 •		x				
240	40 •		x				
240HP	41 •		x				
240XP	42 •						
300	43 •		x				
300HP	44 •						
300XP	45 •						
360	46 •		x				
360HP	47 •		x				
360XP	48 •						
420	49 •		x				
480	50 •		x		0.080 (2.0)	0.064 (1.6)	0.100 (2.5)

● Vari-Green option available

The Model number system is designed to completely identify the fan. The correct code letters must be specified to designate belt or direct drive. The remainder of the model number is determined by the size and performance.

## CUBE-240HP-A-5-VG/VGD-1-34-X



### Wheel Pressure Level

HP - High-Pressure  
XP - Extended High-Pressure

### Configuration

CUE - Direct Drive Roof or Wall Mounted

CUBE - Belt Drive Roof or Wall Mounted

USGF - Belt Drive Roof Mounted

### 60 Hz Motor RPM (Direct Drive Only)

A = 1725	D = 1550
B = 1140	E = 1050
C = 860	G = 1300

### 50 Hz Motor RPM (Direct Drive Only)

International (See CAPS for performance)  
K = 950 RPM    J = 1425 RPM  
L = 1290 RPM

### Motor HP

4 = 1/4	10 = 1	30 = 3
3 = 1/3	15 = 1½	50 = 5
5 = 1/2	20 = 2	75 = 7½
7 = 3/4		

VG = Vari-Green® Motor

VGD = Vari-Green® Drive

### Performance Revision

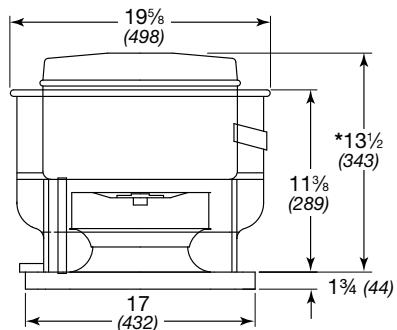
### Curb Cap Size (inches)

X = UL 705

F = UL 705 Supplement SD (Smoke)

G = UL 705 Supplement SC (Restaurant)

# Roof Upblast/Sidewall Exhaust Size-060: CUE



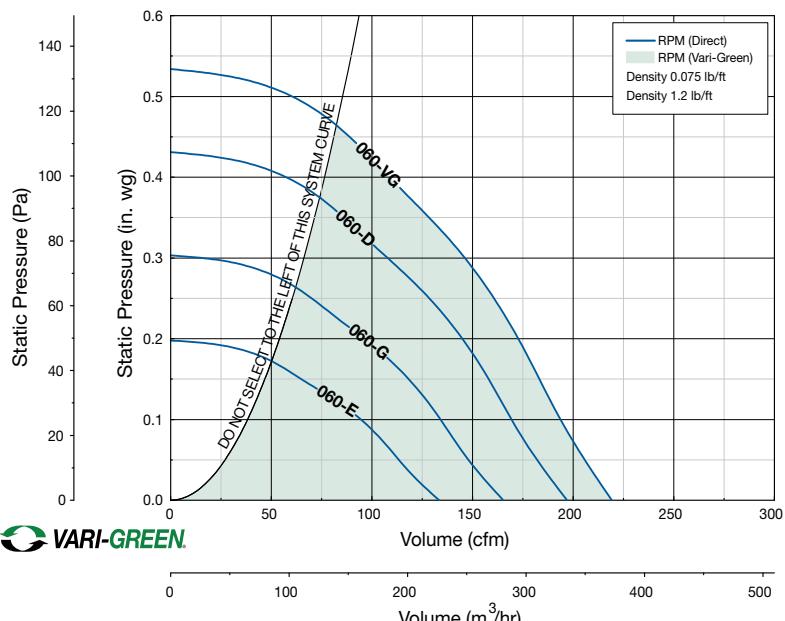
Direct Drive RPM
E-1050 RPM
G-1300 RPM
D-1550 RPM
VG-1725 RPM

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest cataloged open drip-proof motor.

CUE	
^Approximate Weight	29 (13)
Damper Size	8 x 8 (203 x 203)
Roof/Wall (without wall bracket) Opening	13 1/2 x 13 1/2 (343 x 343)
Wall Opening with Wall Bracket	13 x 13 (330 x 330)
Wall Opening with Curb Through Wall	17 x 17 (432 x 432)

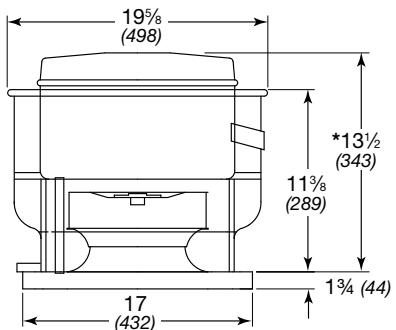


VARI-GREEN

Motor HP	Fan RPM	Static Pressure in Inches wg										
		0	0.05	0.1	0.125	0.15	0.2	0.25	0.3	0.35	0.375	
<b>060</b>												
<b>VARI-GREEN</b>	VG-1/10	E-1/200	CFM	133	113	94	81	65				
			BHP	0.01	0.01	0.01	0.01	0.01				
			Sones	1.7	1.7	1.7	1.7	1.7				
	G-1/100	1300	CFM	165	148	134	126	117	96	70		
			BHP	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
			Sones	2.9	2.6	2.5	2.5	2.5	2.5	2.5		
	D-1/60	1550	CFM	197	183	169	164	158	143	128	107	85
			BHP	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
			Sones	4.3	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.0
		1725	CFM	219	207	194	188	183	172	159	146	137
			BHP	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.029	0.029
			Sones	5.4	5	5.1	5.2	5.2	5.2	5.3	5.3	5.4

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-070: CUE



**Direct Drive RPM**

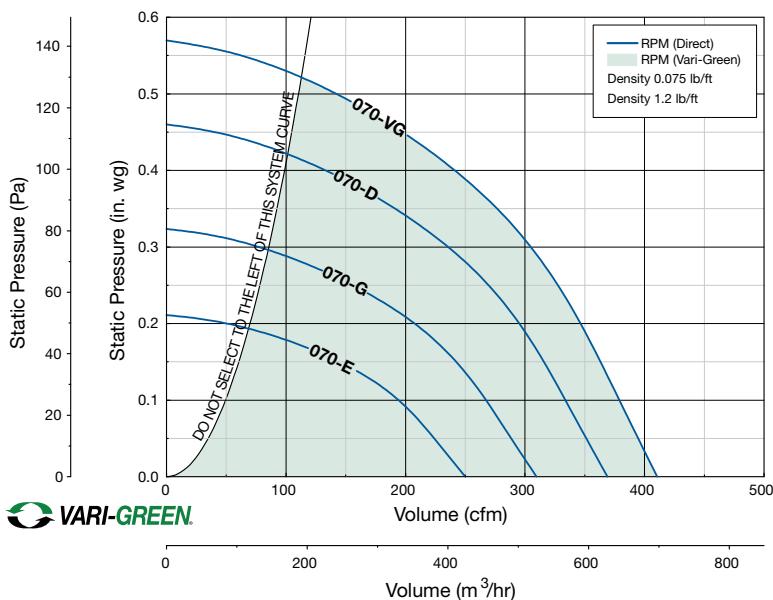
- E-1050 RPM
- G-1300 RPM
- D-1550 RPM
- VG-1725 RPM

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

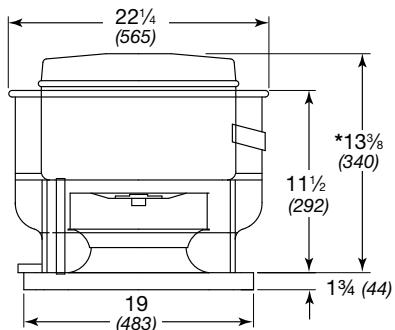
CUE	
<sup>^</sup> Approximate Weight	29 (13)
Damper Size	8 x 8 (203 x 203)
Roof/Wall (without wall bracket) Opening	13 1/2 x 13 1/2 (343 x 343)
Wall Opening with Wall Bracket	13 x 13 (330 x 330)
Wall Opening with a Curb Through Wall	17 x 17 (432 x 432)



Motor HP	Fan	Static Pressure in Inches wg												
		0	0.05	0.1	0.125	0.15	0.2	0.25	0.3	0.35	0.375			
<b>070</b>														
<b>VARI-GREEN</b>	VG-1/10	E-1/100	1050	CFM	250	224	193	171	143					
				BHP	0.01	0.01	0.01	0.01	0.01					
				Sones	2.7	2.1	1.7	1.4	1.1					
	G-1/60			CFM	309	288	267	255	241	205	152			
				BHP	0.01	0.01	0.02	0.02	0.02	0.02	0.01			
				Sones	4.1	3.8	3.4	3.3	3.2	2.8	2.5			
	D-1/30			CFM	369	351	333	325	316	293	269	234		
				BHP	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.02		
				Sones	5.6	5.4	5.2	5.2	5.1	4.9	4.7	4.1		
				CFM	411	395	379	371	363	346	326	305		
				BHP	0.032	0.032	0.033	0.034	0.035	0.036	0.036	0.035		
				Sones	6.8	6.7	6.7	6.6	6.6	6.5	6.4	6.1		

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-080: CUE



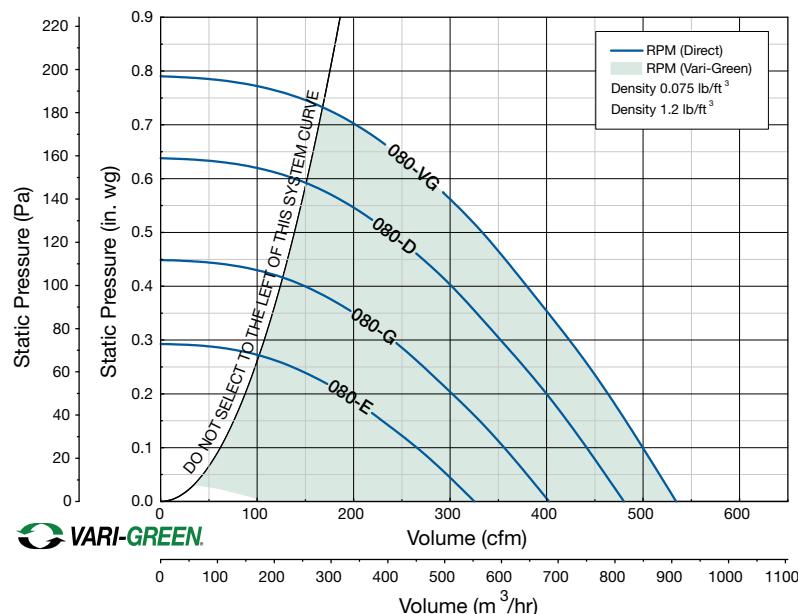
Direct Drive RPM
E-1050 RPM
G-1300 RPM
D-1550 RPM
VG-1725 RPM

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

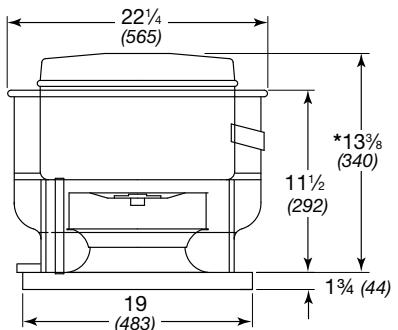
CUE	
<sup>^</sup> Approximate Weight	40 (18)
Damper Size	10 x 10 (254 x 254)
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)
Wall Opening with Wall Bracket	15 x 15 (381 x 381)
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)



Motor HP	Fan	Static Pressure in Inches wg													
		Direct	RPM	0	0.1	0.125	0.15	0.2	0.25	0.3	0.375	0.5	0.625		
<b>080</b>															
VARI-GREEN	VG-1/10	E-1/40	1050	CFM	325	265	247	230	189	133					
				BHP	0.01	0.01	0.02	0.02	0.02	0.02					
				Sones	3.8	3.7	3.6	3.7	3.9	4.2					
	G-1/30			CFM	403	356	343	330	302	272	239	173			
				BHP	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03			
				Sones	5.4	5.4	5.4	5.4	5.4	5.5	5.6	5.9			
	D-1/20			CFM	480	441	431	421	400	376	352	314	235		
				BHP	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05		
				Sones	7.3	7.3	7.3	7.3	7.3	7.2	7.2	7.3	7.5		
				CFM	534	500	491	481	463	444	423	390	333		
				BHP	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07		
				Sones	8.4	8.5	8.5	8.5	8.6	8.6	8.6	8.5	8.7		

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-090: CUE



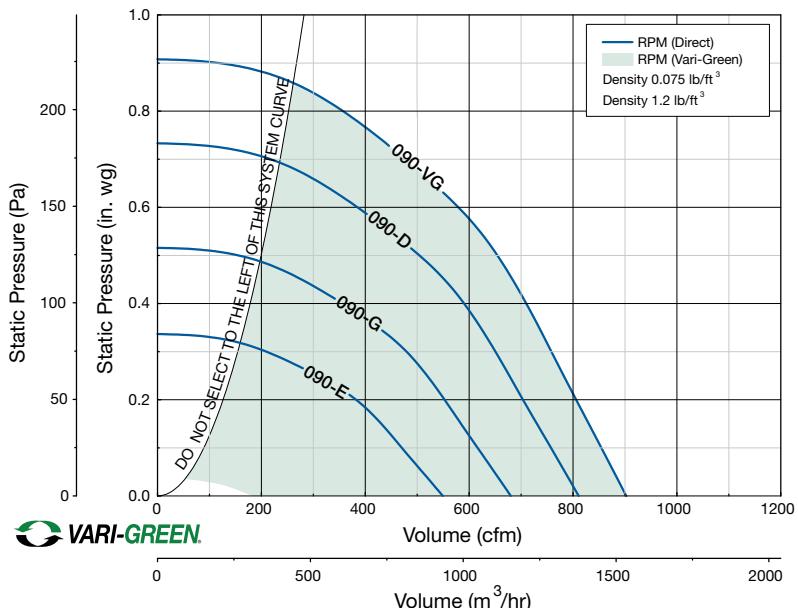
Direct Drive RPM			
E-1050 RPM			
G-1300 RPM			
D-1550 RPM			
VG-1725 RPM			

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

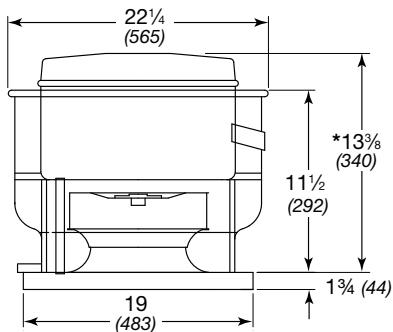
CUE	
<sup>^</sup> Approximate Weight	40 (18)
Damper Size	10 x 10 (254 x 254)
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)
Wall Opening with Wall Bracket	15 x 15 (381 x 381)
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)



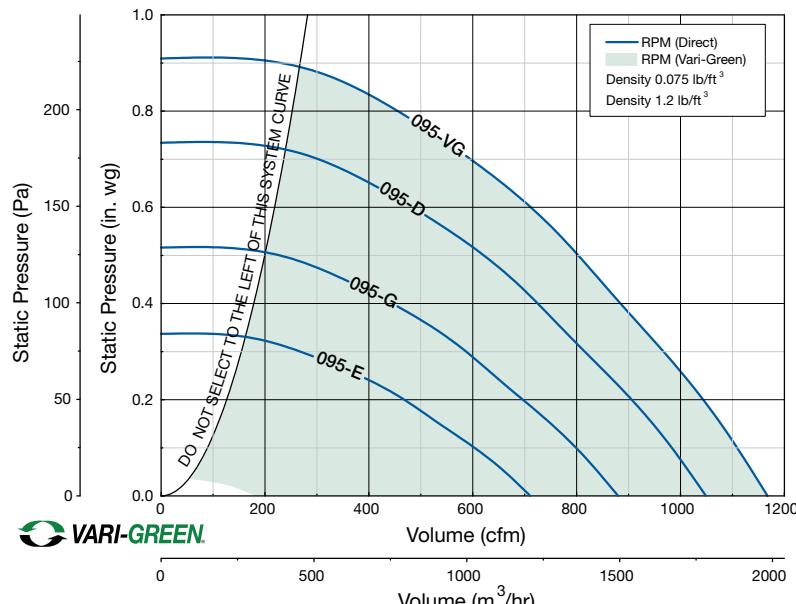
Motor HP	Fan RPM	Static Pressure in Inches wg									
		0	0.1	0.125	0.15	0.2	0.25	0.3	0.375	0.5	0.625
<b>090</b>											
<b>VARI-GREEN</b>	VG-1/10	E-1/40	CFM	549	470	451	429	381	306	204	
			BHP	0.02	0.02	0.02	0.03	0.03	0.03	0.03	
		G-1/30	Sones	4.0	3.9	3.9	4.0	4.1	4.2	4.5	
			CFM	680	616	600	584	553	517	479	391
			BHP	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
	D-1/20	1550	Sones	5.4	5.4	5.4	5.4	5.5	5.5	5.6	
			CFM	811	757	744	731	704	677	651	604
			BHP	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09
			Sones	7.6	7.5	7.5	7.5	7.5	7.4	7.4	7.4
		1725	CFM	903	854	842	830	806	782	758	722
			BHP	0.08	0.09	0.09	0.09	0.1	0.1	0.1	0.12
			Sones	8.8	8.8	8.8	8.8	8.8	8.7	8.7	8.8

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-095: CUE



Direct Drive RPM
E-1050 RPM
G-1300 RPM
D-1550 RPM
VG-1725 RPM



All dimensions in inches (millimeters), weight in pounds (kilograms).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

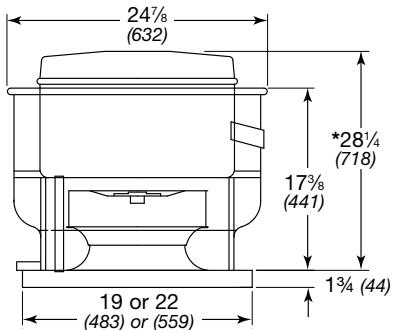
CUE	
<sup>^</sup> Approximate Weight	40 (18)
Damper Size	10 x 10 (254 x 254)
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)
Wall Opening with Wall Bracket	15 x 15 (381 x 381)
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)

Motor HP	Fan RPM	Static Pressure in Inches wg										
		0	0.1	0.125	0.15	0.2	0.25	0.3	0.375	0.5	0.625	
<b>095</b>												
<b>VARI-GREEN</b>	VG-1/6	E-1/30	1050	CFM	711	603	570	536	468	381	265	
				BHP	0.03	0.04	0.04	0.04	0.04	0.04	0.03	
				Sones	5.4	4.5	4.5	4.5	4.4	4.5	4.6	
	G-1/12	1300	CFM	880	797	774	750	696	641	587	484	199
			BHP	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.05
			Sones	7.6	6.9	6.7	6.6	6.5	6.4	6.4	6.4	6.8
	D-1/8	1550	CFM	1049	983	964	944	905	861	816	747	616
			BHP	0.1	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.11
			Sones	9.6	9.4	9.3	9.2	8.9	8.6	8.4	8.3	8.1
		1725	CFM	1167	1108	1093	1077	1041	1005	967	905	802
			BHP	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17
			Sones	11.3	11.1	11.0	11.0	10.8	10.5	10.2	9.9	9.8

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-099: CUBE • CUE



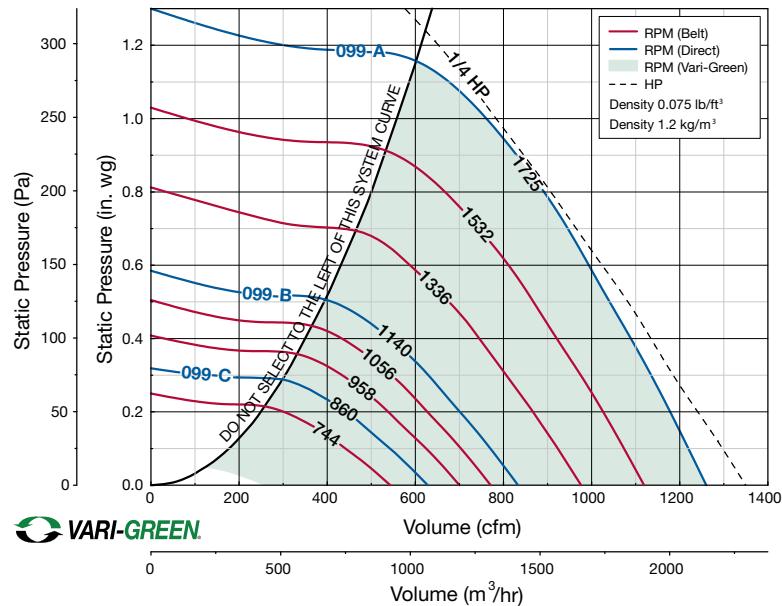
Direct Drive RPM			
C-860 RPM			
B-1140 RPM			
A-1725 RPM			
VG-1725 RPM			

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE
^Approximate Weight	66 (30)	64 (29)
Damper Size	12 x 12 (305 x 305)	
	16 x 16 (406 x 406)	
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)	
	18 1/2 x 18 1/2 (470 x 470)	
Wall Opening with Wall Bracket	15 x 15 (381 x 381)	
	18 x 18 (457 x 457)	
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)	
	22 x 22 (559 x 559)	



		Fan RPM	Static Pressure in Inches wg									
Belt	Direct		0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.125
<b>099</b>												
<b>1/4</b>	<b>VARI-GREEN</b>	VG-1/4	744	CFM	543	414						
				BHP	0.02	0.02						
				Sones	4.5	4.0						
		C-1/8	860	CFM	628	518	376					
				BHP	0.03	0.03	0.03					
				Sones	5.3	4.7	4.3					
		B-1/6	958	CFM	700	603	490					
				BHP	0.04	0.04	0.04					
				Sones	6.1	5.4	4.9					
		A-1/4	1056	CFM	771	685	588	464				
				BHP	0.05	0.06	0.06	0.06				
				Sones	7.1	6.2	5.7	5.3				
		1238	1140	CFM	833	754	665	565	408			
				BHP	0.06	0.07	0.07	0.07	0.07			
				Sones	7.8	7.0	6.3	5.9	5.5			
				CFM	904	832	752	668	559			
				BHP	0.08	0.09	0.09	0.09	0.09			
				Sones	8.8	8.1	7.2	6.7	6.4			
				CFM	976	909	837	760	674	564		
				BHP	0.10	0.11	0.11	0.12	0.12	0.11		
				Sones	9.9	9.4	8.5	7.6	7.3	6.9		
				CFM	1047	986	920	848	776	687	567	
				BHP	0.13	0.13	0.14	0.14	0.14	0.14	0.14	
				Sones	10.8	10.4	9.7	8.8	8.3	8.0	7.6	
				CFM	1119	1062	1001	935	868	794	705	583
				BHP	0.15	0.16	0.17	0.17	0.18	0.18	0.17	0.16
				Sones	11.9	11.4	10.9	10.0	9.4	9.1	8.8	8.4
				CFM	1191	1137	1080	1020	956	893	818	730
				BHP	0.19	0.19	0.20	0.21	0.21	0.21	0.21	0.20
				Sones	13.0	12.6	12.1	11.4	10.8	10.4	10.1	9.8
				CFM	1260	1209	1156	1100	1041	981	918	846
				BHP	0.22	0.23	0.23	0.24	0.25	0.25	0.25	0.23
				Sones	14.2	13.8	13.4	12.9	12.3	11.7	11.5	11.2

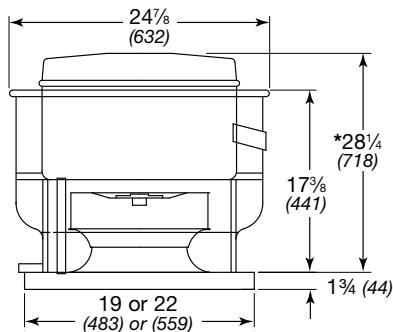
**MAXIMUM BHP AT A GIVEN RPM = (RPM/3099)<sup>3</sup>**  
**MAXIMUM RPM = 1725**  
**TIP SPEED (ft/min) = RPM x 2,846**  
**MAXIMUM MOTOR FRAME SIZE = 56**  
**AVERAGE DISCHARGE VELOCITY (FPM) = CFM/1.28**

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-100: CUBE • CUE

Previously Size-101



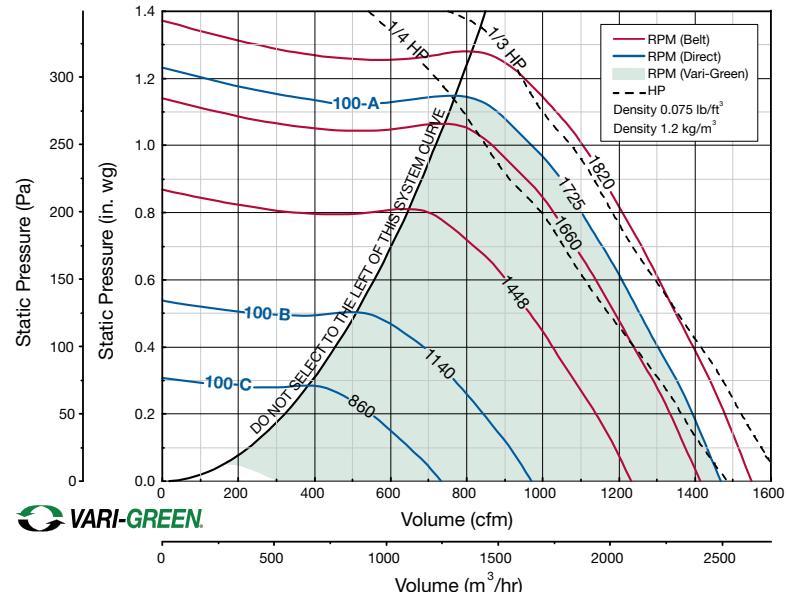
Direct Drive RPM
C-860 RPM
B-1140 RPM
A-1725 RPM
VG-1725 RPM

All dimensions in inches (millimeters), weight in pounds (kilograms).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE
<sup>^</sup> Approximate Weight	66 (30)	64 (29)
Damper Size	12 x 12 (305 x 305)	
	16 x 16 (406 x 406)	
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)	
	18 1/2 x 18 1/2 (470 x 470)	
Wall Opening with Wall Bracket	15 x 15 (381 x 381)	
	18 x 18 (457 x 457)	
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)	
	22 x 22 (559 x 559)	



		Fan RPM	Static Pressure in Inches wg										
Belt	Direct		0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.125	
<b>100</b>													
1/4	VARI-GREEN	C-1/8	CFM	732	625	481							
			BHP	0.03	0.035	0.036							
			Sones	4.6	2.1	1.3							
		953	CFM	811	717	603							
			BHP	0.041	0.047	0.05							
			Sones	5.5	4.2	3.1							
		1046	CFM	890	807	707	577						
			BHP	0.054	0.061	0.066	0.065						
			Sones	6.5	6.2	5.6	5.4						
		B-1/6	CFM	970	897	806	707	411					
			BHP	0.07	0.078	0.084	0.085	0.067					
			Sones	7.2	7	6.5	6	5.5					
		1252	CFM	1066	1000	920	834	732					
			BHP	0.092	0.1	0.11	0.11	0.11					
			Sones	8	8	7.6	6.9	6.5					
		1350	CFM	1149	1089	1016	940	856	745				
			BHP	0.12	0.13	0.13	0.14	0.14	0.14				
			Sones	8.9	8.9	8.6	8.1	7.5	7				
		1448	CFM	1233	1176	1112	1040	966	886	763			
			BHP	0.14	0.15	0.16	0.17	0.17	0.17	0.17			
			Sones	10.3	10.2	9.9	9.5	9	8.3	8			
		1546	CFM	1316	1264	1206	1139	1072	999	915	793		
			BHP	0.17	0.19	0.2	0.2	0.21	0.21	0.21	0.23		
			Sones	11.8	11.5	11.3	10.9	10.5	9.8	9.3	8.9		
		1660	CFM	1413	1365	1313	1251	1189	1125	1056	974	861	
			BHP	0.22	0.23	0.24	0.25	0.26	0.26	0.26	0.26	0.25	
			Sones	12.7	12.3	12	11.6	11.3	10.8	10.2	9.6	9.4	
		A-1/4	CFM	1468	1422	1373	1315	1255	1195	1129	1062	970	
			BHP	0.24	0.26	0.27	0.28	0.29	0.29	0.29	0.29	0.29	
			Sones	13.3	12.9	12.5	12	11.7	11.3	10.8	10.2	9.7	
		1820	CFM	1549	1505	1459	1406	1350	1293	1234	1171	1106	900
			BHP	0.28	0.3	0.31	0.32	0.33	0.34	0.35	0.35	0.35	0.33
			Sones	14.3	13.7	13.4	12.7	12.4	12	11.6	11.2	10.6	10.1

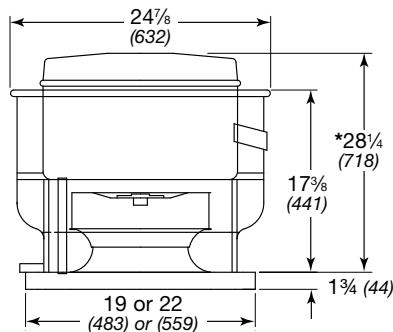
MAXIMUM BHP AT A  
 GIVEN RPM = (RPM/3099)<sup>3</sup>  
 MAXIMUM RPM = 1820  
 TIP SPEED (ft/min) = RPM x 2.846  
 MAXIMUM MOTOR FRAME SIZE = 56  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/1.28

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-100HP: CUBE • CUE

Previously Size-101HP

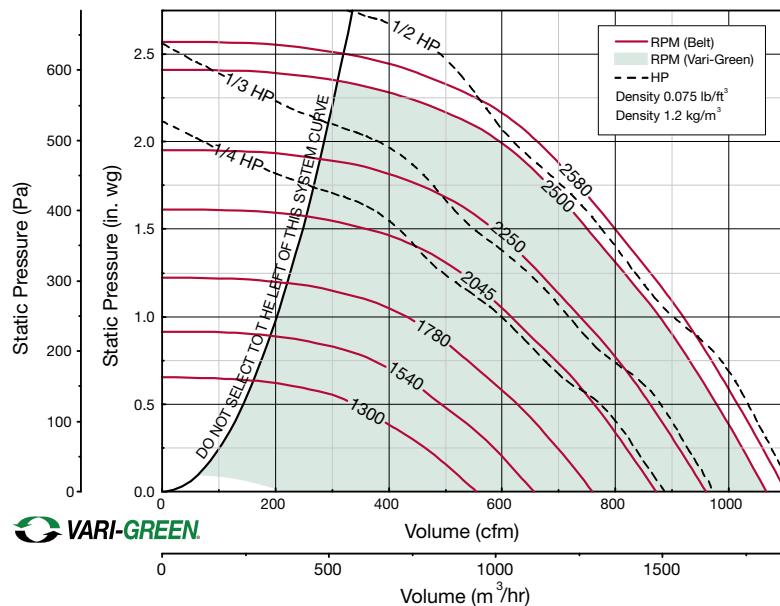


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE
^Approximate Weight	66 (30)	64 (29)
Damper Size	12 x 12 (305 x 305)	
	16 x 16 (406 x 406)	
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)	
	18 1/2 x 18 1/2 (470 x 470)	
Wall Opening with Wall Bracket	15 x 15 (381 x 381)	
	18 x 18 (457 x 457)	
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)	
	22 x 22 (559 x 559)	



Motor HP	Fan	Static Pressure in Inches wg											
		Belt	Direct	RPM	0.5	0.625	0.75	1	1.25	1.5	1.75	2	2.25
<b>100HP</b>													
1/4	VARI-GREEN 	VG-1/4	CFM	335	182								
			BHP	0.067	0.056								
			Sones	6	6.3								
		VG-1/2	CFM	419	350	191							
			BHP	0.088	0.088	0.073							
		1/3	Sones	6.8	6.6	6.9							
			CFM	491	438	371							
			BHP	0.11	0.11	0.11							
			Sones	7.8	7.5	7.3							
			CFM	560	512	461	262						
1/2	VARI-GREEN 	VG-1/2	BHP	0.14	0.14	0.14	0.12						
			Sones	8.9	8.6	8.4	8.3						
			CFM	627	583	538	430						
			BHP	0.17	0.17	0.17	0.17						
		2/3	Sones	10.3	9.9	9.6	9.1						
			CFM	688	651	610	520	382					
			BHP	0.2	0.21	0.21	0.21	0.19					
			Sones	12.1	11.4	11	10.5	10.2					
1/2	VARI-GREEN 	VG-1/2	CFM	761	729	693	615	522	346				
			BHP	0.24	0.26	0.26	0.26	0.26	0.23				
			Sones	13.9	13.5	12.7	12.1	11.5	11.4				
			CFM	812	782	752	678	600	500				
		2/3	BHP	0.28	0.29	0.3	0.3	0.3	0.3				
			Sones	14.1	14.1	13.5	12.5	12	11.5				
			CFM	860	832	804	737	665	579	456			
			BHP	0.32	0.33	0.34	0.35	0.35	0.35	0.32			
1/2	VARI-GREEN 	VG-1/2	Sones	14.4	14.4	14.2	13.2	12.5	11.9	11.6			
			CFM	977	954	929	878	815	750	677	595	414	
		2/3	BHP	0.44	0.44	0.45	0.48	0.48	0.48	0.48	0.48	0.42	
			Sones	15.9	15.6	15.3	15	14.4	13.6	12.9	12.5	12.2	
1/2	VARI-GREEN 	2580	CFM	1014	992	969	919	861	799	735	655	550	323
		2580	BHP	0.48	0.48	0.49	0.52	0.53	0.53	0.53	0.49	0.43	
		2580	Sones	16.8	16.4	16	15.7	15.1	14.4	13.7	13.2	12.9	12.5

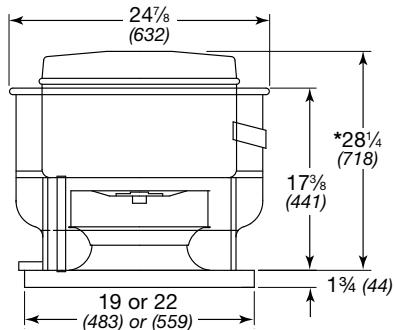
Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# **Roof Upblast/Sidewall Exhaust**

## **Size-120: CUBE • CUE**



## Previously Size-121



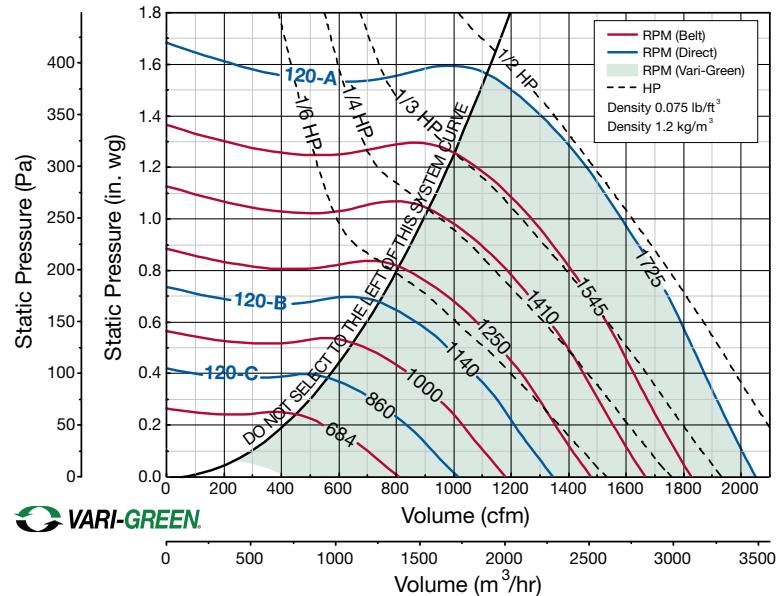
Direct Drive RPM
C-860 RPM
B-1140 RPM
A-1725 RPM
VG-1725 RPM

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

	<b>CUBE</b>	<b>CUE</b>
Approximate Weight	66 (30)	64 (29)
Damper Size	12 x 12 (305 x 305)	
	16 x 16 (406 x 406)	
Roof/Wall (without wall bracket) Opening	15½ x 15½ (394 x 394)	
	18½ x 18½ (470 x 470)	
Wall Opening with Wall Bracket	15 x 15 (381 x 381)	
	18 x 18 (457 x 457)	
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)	
	22 x 22 (559 x 559)	



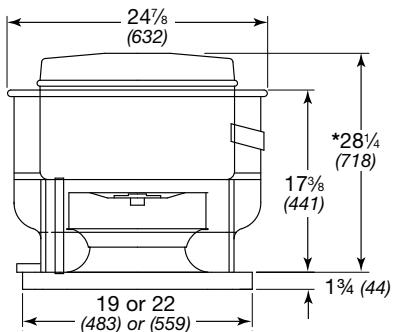
Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan zones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical zone levels.

# Roof Upblast/Sidewall Exhaust

## Size-130: CUBE • CUE



Previously Size-131



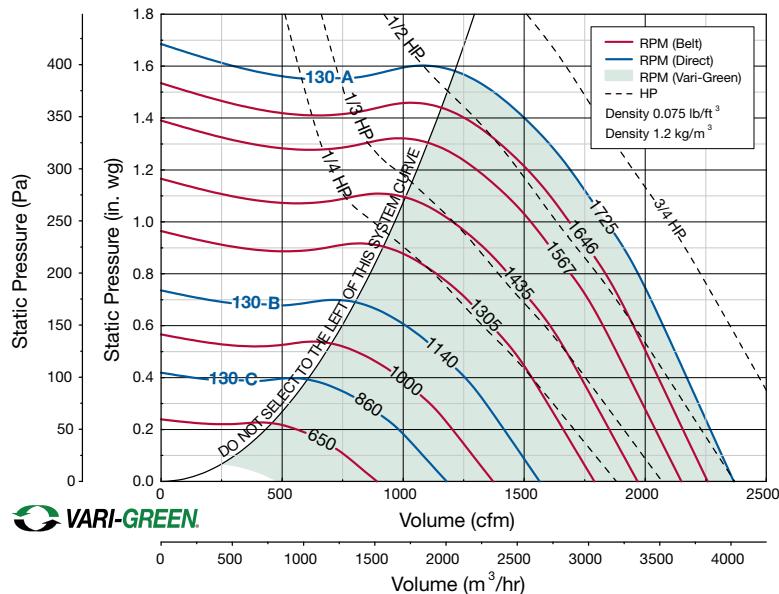
Direct Drive RPM			
C-860 RPM			
B-1140 RPM			
A-1725 RPM			
VG-1725 RPM			

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE
Approximate Weight	66 (30)	64 (29)
Damper Size	12 x 12 (305 x 305)	
	16 x 16 (406 x 406)	
Roof/Wall (without wall bracket) Opening	15 1/2 x 15 1/2 (394 x 394)	
	18 1/2 x 18 1/2 (470 x 470)	
Wall Opening with Wall Bracket	15 x 15 (381 x 381)	
	18 x 18 (457 x 457)	
Wall Opening with a Curb Through Wall	19 x 19 (483 x 483)	
	22 x 22 (559 x 559)	



		Fan RPM	Static Pressure in Inches wg									
Belt	Direct		0	0.125	0.25	0.375	0.5	0.625	0.75	1	1.25	1.5
<b>130</b>												
1/4	VARI-GREEN 	VG-1/4	CFM	892	724							
			BHP	0.03	0.03							
			Sones	6.2	6.0							
		C-1/8	CFM	1036	895	697						
			BHP	0.04	0.05	0.05						
	VG-1/2	B-1/6	Sones	7.2	7.0	6.3						
			CFM	1180	1057	914	675					
			BHP	0.06	0.07	0.07	0.07					
			Sones	8.5	8.3	7.7	6.9					
			CFM	1372	1267	1158	1016	801				
1/3	VG-3/4	A-1/2	BHP	0.10	0.11	0.11	0.12	0.11				
			Sones	10.7	10.5	10.0	9.2	8.3				
			CFM	1564	1471	1379	1280	1144	964			
			BHP	0.14	0.15	0.16	0.17	0.17	0.17			
			Sones	12.5	12.2	11.8	11.2	10.3	9.7			
	1/2	VG-3/4	CFM	1790	1709	1629	1547	1458	1340	1201		
			BHP	0.22	0.23	0.24	0.25	0.26	0.26	0.26		
			Sones	14.6	14.3	13.9	13.5	13.0	12.0	11.5		
		1488	CFM	1968	1895	1822	1749	1671	1586	1479	1198	
			BHP	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.33	
			Sones	15.7	15.5	15.1	14.8	14.3	13.8	13.1	11.9	
		1567	CFM	2041	1970	1900	1829	1756	1679	1580	1342	
			BHP	0.32	0.33	0.35	0.36	0.37	0.38	0.39	0.38	
			Sones	16.2	15.9	15.7	15.4	15.0	14.5	13.9	12.7	
		1646	CFM	2149	2082	2015	1948	1881	1808	1728	1527	1222
			BHP	0.37	0.39	0.40	0.41	0.43	0.44	0.45	0.45	0.42
			Sones	17.0	16.8	16.5	16.3	15.9	15.5	15.0	13.8	12.6
		1725	CFM	2258	2194	2130	2066	2002	1935	1865	1686	1458
			BHP	0.43	0.45	0.46	0.47	0.49	0.50	0.51	0.52	0.51
			Sones	17.9	17.6	17.4	17.2	16.9	16.5	16.1	15.1	14.0

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/2041)^3$   
 MAXIMUM RPM = 1725  
 TIP SPEED (ft/min) = RPM x 3,420  
 MAXIMUM MOTOR FRAME SIZE = 56  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/1.28

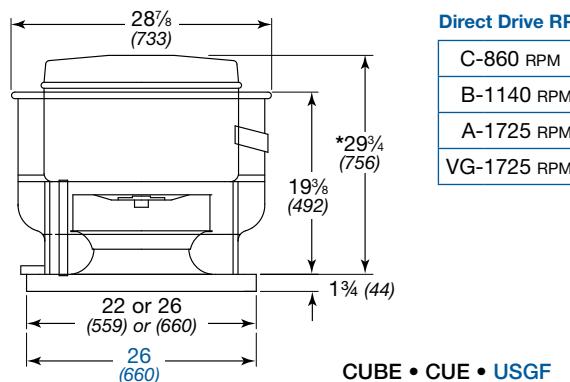
Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-140: CUBE • CUE • USGF



Previously Size-141

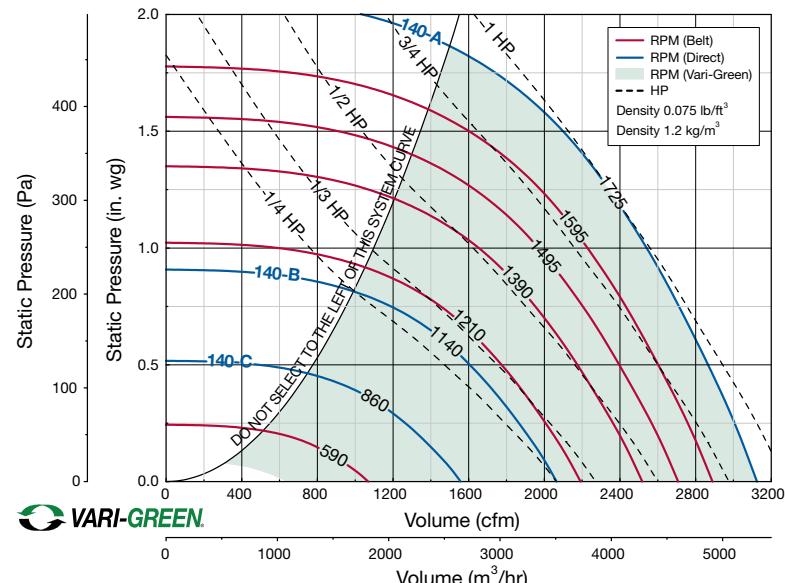


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE	USGF
<sup>^</sup> Approximate Weight	87 (39)	90 (41)	131 (59)
Damper Size	16 x 16 (406 x 406)		N/A
	18 x 18 (457 x 457)		
Roof/Wall (without wall bracket) Opening	18 1/2 x 18 1/2 (470 x 470)		
	22 1/2 x 22 1/2 (572 x 572)		N/A
Wall Opening with Wall Bracket	18 x 18 (457 x 457)		N/A
	22 x 22 (559 x 559)		N/A
Wall Opening with a Curb Through Wall	22 x 22 (559 x 559)		N/A
	26 x 26 (660 x 660)		N/A



Motor HP	Fan		Static Pressure in Inches wg										
	Belt	Direct	RPM	0	0.125	0.25	0.375	0.5	0.75	1	1.25	1.50	1.75
<b>140</b>													
1/4	VG-1/4	VARI-GREEN®	590	CFM	1069	851							
				BHP	0.04	0.04							
				Sones	5.0	4.5							
	C-1/8	860	725	CFM	1313	1151	917						
				BHP	0.06	0.07	0.07						
				Sones	5.1	5.0	4.4						
	VG-1/2	VARI-GREEN®	1105	CFM	1558	1427	1264	1034					
				BHP	0.11	0.12	0.12	0.12					
				Sones	7.3	7.5	7.1	6.5					
1/3	VG-1/2	VARI-GREEN®	B-1/4	CFM	2001	1906	1793	1667	1515	998			
				BHP	0.23	0.24	0.25	0.26	0.26	0.23			
				Sones	10.9	10.8	10.6	10.3	10.0	9.6			
			1210	CFM	2065	1973	1864	1745	1605	1167			
				BHP	0.25	0.26	0.27	0.28	0.29	0.27			
1/2	VG-3/4	VARI-GREEN®	1390	Sones	11.3	11.3	11.0	10.7	10.3	10.0			
				CFM	2192	2106	2006	1896	1773	1443			
				BHP	0.30	0.31	0.32	0.33	0.34	0.34			
			1495	Sones	12.2	12.2	11.7	11.6	11.2	10.9			
				CFM	2518	2445	2362	2271	2174	1949	1643		
3/4	VG-1	VARI-GREEN®	1550	BHP	0.45	0.47	0.48	0.50	0.51	0.52	0.51		
				Sones	14.9	14.7	14.2	13.2	12.9	12.1	11.0		
				CFM	2708	2640	2565	2483	2396	2202	1967	1617	
			1595	BHP	0.56	0.58	0.60	0.61	0.62	0.64	0.65	0.61	
				Sones	17.2	16.5	16.3	15.6	13.9	12.5	12.2	10.8	
1	VG-1	VARI-GREEN®	A-1	CFM	2808	2743	2671	2594	2509	2329	2110	1823	1349
				BHP	0.63	0.64	0.66	0.68	0.69	0.71	0.72	0.70	0.62
				Sones	18.7	17.8	17.5	17.7	14.9	12.9	12.5	11.6	10.2
			1725	CFM	2889	2826	2757	2683	2602	2430	2225	1968	1568
				BHP	0.69	0.70	0.72	0.74	0.75	0.77	0.79	0.78	0.71
				Sones	20.0	19.0	18.5	19.5	16.1	13.3	12.3	12.6	11.6

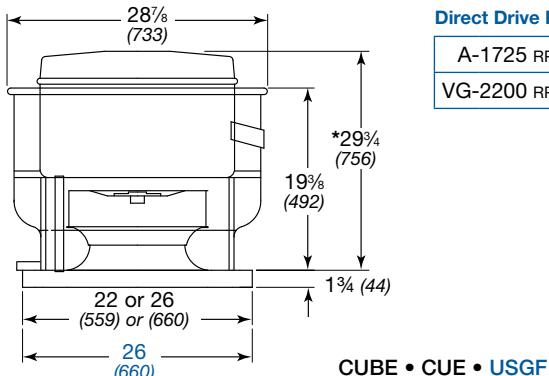
MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/1726)^3$   
 MAXIMUM RPM = 1725  
 TIP SPEED (ft/min) = RPM x 3.829  
 MAXIMUM MOTOR FRAME SIZE = 145T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/1.72

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# **Roof Upblast/Sidewall Exhaust Size-140HP: CUBE • CUE • USGF**



## Previously Size-141HP

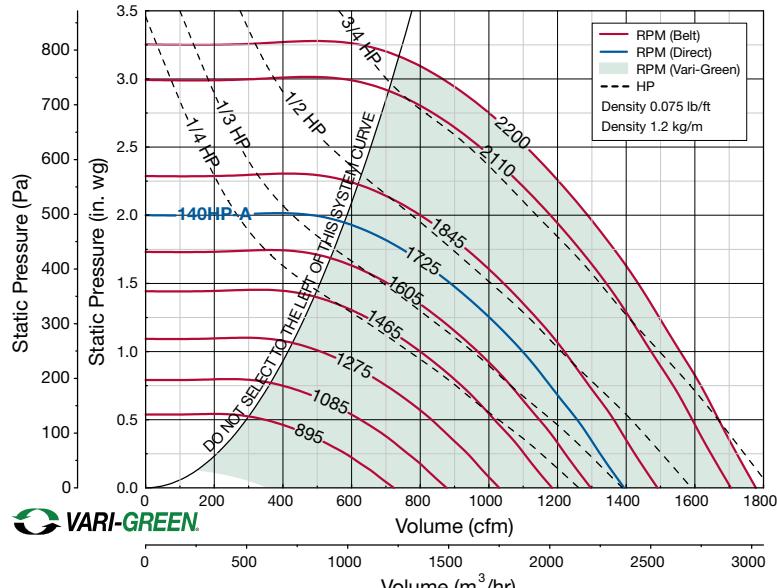


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*)

All dimensions in inches (millimeters).  
\* May be greater depending on motor.

<sup>1</sup>Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE	USGF
Approximate Weight	87 (39)	90 (41)	131 (59)
Damper Size	16 x 16 (406 x 406)	N/A	
	18 x 18 (457 x 457)		
Roof/Wall (without wall bracket) Opening	18½ x 18½ (470 x 470)		
	22½ x 22½ (572 x 572)	N/A	
Wall Opening with Wall Bracket	18 x 18 (457 x 457)	N/A	
	22 x 22 (559 x 559)	N/A	
Wall Opening with a Curb Through Wall	22 x 22 (559 x 559)	N/A	
	26 x 26 (660 x 660)	N/A	



Motor HP		Fan RPM	Static Pressure in Inches wg									
Belt	Direct		0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.50	2.75
<b>140HP</b>												
1/4	VARI-GREEN® 	VG-1/4	895	CFM	331							
				BHP	0.06							
				Sones	5.7							
			1085	CFM	625	377						
				BHP	0.11	0.10						
				Sones	7.5	9.5						
			1275	CFM	833	700	492					
				BHP	0.17	0.17	0.16					
				Sones	11.0	10.5	13.9					
			1465	CFM	1016	920	798	642				
				BHP	0.24	0.26	0.26	0.26				
				Sones	14.2	13.5	13.3	15.5				
1/3	VG-1/2	VG-1/2	1605	CFM	1146	1063	965	846	704			
				BHP	0.31	0.33	0.34	0.34	0.34			
				Sones	15.3	14.4	14.2	14.0	15.3			
1/2	A-1/2	A-1/2	1725	CFM	1256	1178	1098	999	879	747		
				BHP	0.38	0.40	0.42	0.43	0.43	0.42		
				Sones	16.2	15.4	15.0	14.9	14.7	15.7		
3/4	VG-3/4	1845	1845	CFM	1363	1292	1219	1137	1042	924	800	
				BHP	0.46	0.48	0.50	0.52	0.52	0.52	0.51	
				Sones	17.1	16.6	16.1	16.0	15.9	15.7	16.2	
		1960	1960	CFM	1463	1399	1330	1260	1176	1086	970	
				BHP	0.54	0.57	0.59	0.61	0.62	0.63	0.62	
				Sones	18.1	17.8	17.4	17.2	17.1	17.0	16.8	
		2035	2035	CFM	1528	1468	1402	1335	1261	1175	1077	
				BHP	0.60	0.63	0.66	0.68	0.69	0.70	0.70	
				Sones	19.0	18.6	18.3	18.1	18.0	17.9	17.7	
		2110	2110	CFM	1592	1536	1473	1409	1341	1262	1178	
				BHP	0.67	0.70	0.72	0.75	0.77	0.78	0.78	
				Sones	19.9	19.4	19.2	19.1	19.0	18.8	18.7	
		2200	2200	CFM	1669	1617	1557	1496	1434	1364	1284	
				BHP	0.75	0.78	0.81	0.84	0.86	0.87	0.88	
				Sones	21.0	21.0	20.0	20.0	20.0	19.9	19.7	

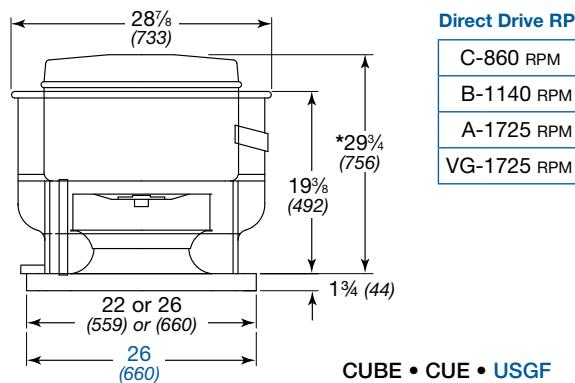
Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-160: CUBE • CUE • USGF



Previously Size-161

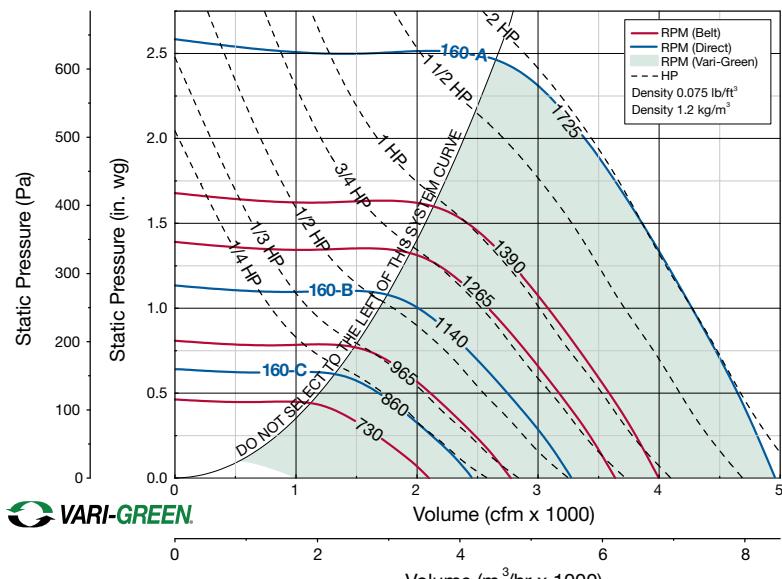


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

	<b>CUBE</b>	<b>CUE</b>	<b>USGF</b>
<sup>^</sup> Approximate Weight	87 (39)	90 (41)	131 (59)
Damper Size	16 x 16 (406 x 406)		N/A
	18 x 18 (457 x 457)		
Roof/Wall (without wall bracket) Opening	18 1/8 x 18 1/8 (470 x 470)		
	22 1/2 x 22 1/2 (572 x 572)		N/A
Wall Opening with Wall Bracket	18 x 18 (457 x 457)		N/A
	22 x 22 (559 x 559)		N/A
Wall Opening with a Curb Through Wall	22 x 22 (559 x 559)		N/A
	26 x 26 (660 x 660)		N/A

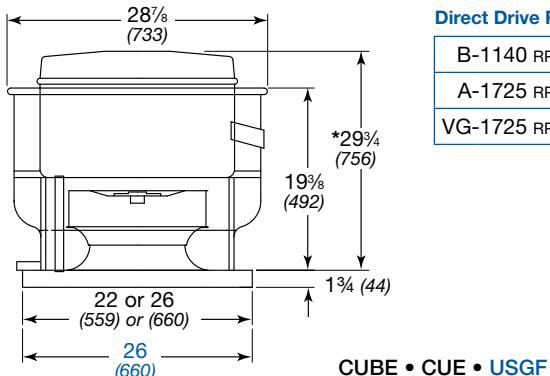


Motor HP	Fan RPM	Static Pressure in Inches wg									
		0	0.125	0.25	0.375	0.5	0.625	0.75	0.875	1	1.5
<b>160</b>											
1/4	VG-1/2 	730	CFM	2098	1905	1669	1389				
			BHP	0.13	0.15	0.15	0.15				
			Sones	8.1	8	7.8	7.8				
	C-1/4	860	CFM	2314	2143	1937	1708	1396			
			BHP	0.18	0.20	0.20	0.20	0.19			
			Sones	9.5	9.2	8.9	8.8	8.7			
	1/3	875	CFM	2472	2315	2126	1918	1680			
			BHP	0.22	0.24	0.25	0.25	0.24			
			Sones	10.7	10.2	9.9	9.7	9.5			
1/2	VG-3/4 	965	CFM	2515	2362	2177	1974	1744	1365		
			BHP	0.23	0.26	0.26	0.26	0.26	0.24		
			Sones	11	10.6	10.1	9.9	9.7	9.7		
			CFM	2774	2637	2477	2300	2109	1893	1584	
3/4	VG-1/2 	1110	BHP	0.31	0.34	0.35	0.35	0.35	0.34	0.33	
			Sones	12.4	12	11.5	11.2	10.8	10.6	10.6	
			CFM	3191	3072	2941	2796	2641	2475	2297	1770
1	VG-1 	1140	BHP	0.47	0.51	0.53	0.53	0.54	0.53	0.52	0.49
			Sones	15	14.6	14.2	13.8	13.5	13.1	12.9	12.5
			CFM	3277	3161	3035	2896	2745	2587	2421	1983
VG-2 	1265	B-1/2	BHP	0.51	0.55	0.57	0.57	0.58	0.57	0.55	
			Sones	15.7	15.2	14.8	14.4	14.1	13.8	13.5	13.2
			CFM	3636	3532	3426	3301	3172	3036	2894	2583
VG-2 	1300	A-2	BHP	0.70	0.74	0.77	0.78	0.79	0.79	0.78	0.75
			Sones	18.5	18.1	17.6	17.2	16.8	16.5	16.3	15.8
			CFM	3737	3636	3534	3413	3290	3157	3022	2729
VG-2 	1390	A-2	BHP	0.76	0.80	0.84	0.85	0.85	0.86	0.84	0.82
			Sones	19.1	18.7	18.3	17.9	17.5	17.2	17	16.5
			CFM	3996	3901	3806	3698	3584	3464	3340	3078
VG-2 	A-2	1725	BHP	0.93	0.97	1.01	1.03	1.04	1.04	1.04	1.03
			Sones	21	21	20	19.7	19.3	19	18.8	18.4
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.00
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 	A-2	1725	BHP	1.77	1.83	1.88	1.94	1.97	1.97	1.98	2.01
			Sones	30	29	29	29	28	28	27	27
			CFM	4959	4882	4806	4729	4646	4554	4463	4269
VG-2 <img alt="											

# **Roof Upblast/Sidewall Exhaust Size-160HP: CUBE • CUE • USGF**



# Previously Size-161HP

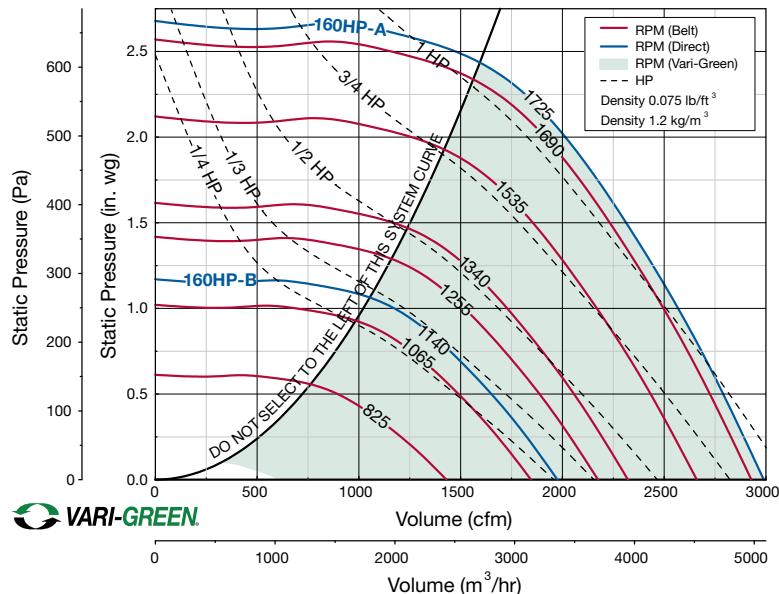


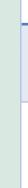
All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE	USGF
Approximate Weight	87 (39)	90 (41)	131 (59)
Damper Size	16 x 16 (406 x 406)		N/A
	18 x 18 (457 x 457)		
Roof/Wall (without wall bracket) Opening	18½ x 18½ (470 x 470)		
	22½ x 22½ (572 x 572)		
Wall Opening with Wall Bracket	18 x 18 (457 x 457)		N/A
	22 x 22 (559 x 559)		
Wall Opening with a Curb Through Wall	22 x 22 (559 x 559)		
	26 x 26 (660 x 660)		



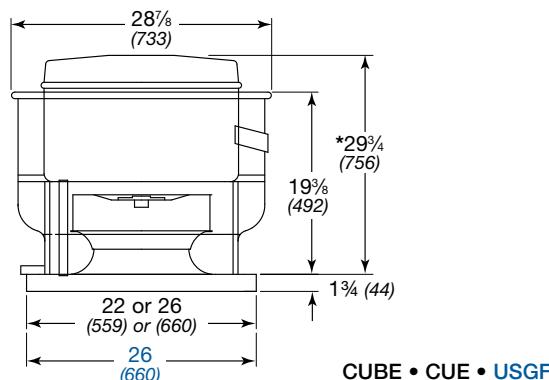
Motor HP		Fan RPM	Static Pressure in Inches wg									
Belt	Direct		0.5	0.625	0.75	0.875	1	1.25	1.5	1.75	2	2.25
<b>160HP</b>												
1/4		VG-1/2	825	CFM	889							
				BHP	0.12							
				Sones	6.1							
			945	CFM	1213	1062						
				BHP	0.18	0.18						
		B-1/3	1065	Sones	8.9	8.4						
				CFM	1487	1377	1252	1093				
				BHP	0.25	0.26	0.26	0.26				
			1140	Sones	11.1	10.7	10.3	9.7				
				CFM	1645	1552	1444	1322	1175			
1/3		VG-3/4	1165	BHP	0.31	0.32	0.32	0.32	0.32			
				Sones	12.7	12.5	12	11.6	11			
				CFM	1697	1608	1504	1395	1252			
		VG-1	1255	BHP	0.32	0.33	0.34	0.34	0.34			
				Sones	12.9	12.8	12.3	11.8	11.2			
1/2		VG-3/4	1340	CFM	1882	1799	1715	1617	1519	1218		
				BHP	0.40	0.41	0.42	0.43	0.43	0.42		
				Sones	13.1	12.8	12.5	12	11.5	10.6		
		VG-1	1535	CFM	2053	1975	1897	1816	1724	1513		
				BHP	0.48	0.49	0.50	0.51	0.52	0.52		
3/4		VG-1	1550	Sones	14.2	13.8	13.3	12.9	12.4	11.3		
				CFM	2433	2368	2301	2233	2165	2015	1855	1638
				BHP	0.70	0.72	0.73	0.74	0.76	0.78	0.79	0.78
		VG-1	1690	Sones	18.1	17.7	17.3	16.9	16.5	15.6	14.7	13.5
				CFM	2461	2398	2331	2264	2197	2051	1892	1683
1		VG-1	1550	BHP	0.72	0.74	0.75	0.76	0.78	0.80	0.81	0.77
				Sones	18.3	17.9	17.5	17.1	16.7	15.9	15	13.8
				CFM	2722	2671	2611	2550	2488	2365	2228	2082
		A-1 1/2	1690	BHP	0.92	0.94	0.95	0.97	0.98	1.01	1.03	1.05
				Sones	21	21	20	19.8	19.4	18.7	18	17.3
		A-1 1/2	1725	CFM	2787	2736	2680	2620	2560	2439	2310	2167
				BHP	0.97	0.99	1.01	1.03	1.04	1.07	1.10	1.11
				Sones	22	21	21	21	20	19.4	18.7	18

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-160XP: CUBE • CUE • USGF



Previously Size-161XP

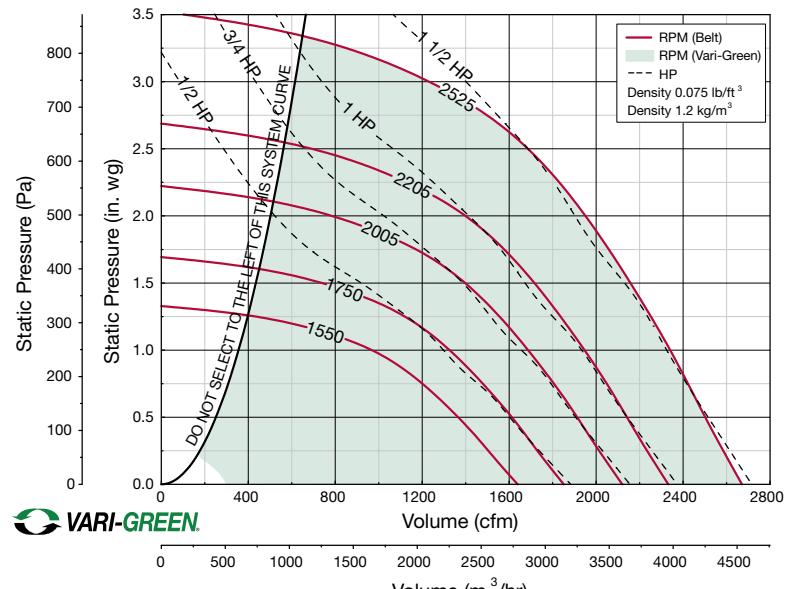


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

	<b>CUBE</b>	<b>CUE</b>	<b>USGF</b>
<sup>^</sup> Approximate Weight	87 (39)	90 (41)	131 (59)
Damper Size	16 x 16 (406 x 406)		N/A
	18 x 18 (457 x 457)		
Roof/Wall (without wall bracket) Opening	18 1/2 x 18 1/2 (470 x 470)		
	22 1/2 x 22 1/2 (572 x 572)		
Wall Opening with Wall Bracket	18 x 18 (457 x 457)		
	22 x 22 (559 x 559)		
Wall Opening with a Curb Through Wall	22 x 22 (559 x 559)		
	26 x 26 (660 x 660)		

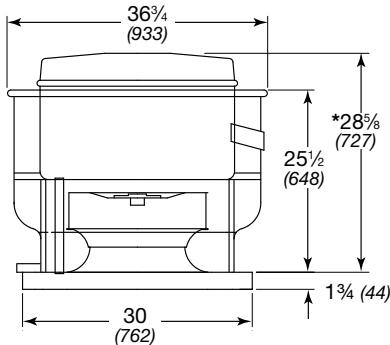


Motor HP	Fan	RPM	Static Pressure in Inches wg										
			1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25	
<b>160XP</b>													
1/2	<b>VARI-GREEN</b>	VG-1	CFM	968									
			BHP	0.34									
			Sones	10.0									
		VG-1	CFM	1157	854								
			BHP	0.42	0.39								
			Sones	11.1	10.1								
		VG-1	CFM	1322	1116	726							
			BHP	0.52	0.49	0.43							
			Sones	12.1	11.4	10.6							
3/4	<b>VARI-GREEN</b>	VG-1	CFM	1515	1359	1139	744						
			BHP	0.7	0.6	0.6	0.5						
			Sones	13.7	13.1	12.2	11.8						
		VG-1	CFM	1599	1456	1271	984						
			BHP	0.71	0.7	0.68	0.63						
			Sones	14.4	14	13.2	12.4						
		VG-1	CFM	1684	1552	1392	1161	777					
			BHP	0.77	0.78	0.76	0.72	0.63					
			Sones	15.0	14.8	14.1	13.4	13.2					
1	<b>VARI-GREEN</b>	VG-2	CFM	1861	1743	1611	1451	1226	869				
			BHP	0.9	1.0	0.9	0.9	0.9	0.8				
			Sones	16.6	16.4	15.9	15.4	14.8	14.8				
		VG-2	CFM	1946	1834	1713	1578	1395	1127	634			
			BHP	1.01	1.03	1.04	1.01	0.99	0.92	0.73			
			Sones	17.5	17.3	17	16.4	15.8	15.5	16.4			
1 1/2	<b>VARI-GREEN</b>	VG-2	CFM	2065	1974	1865	1741	1597	1415	1134	644		
			BHP	1.17	1.18	1.2	1.18	1.16	1.12	1.04	0.83		
			Sones	18.8	18.7	18.5	18.1	17.5	17	16.9	18.2		
		VG-2	CFM	2206	2132	2031	1926	1804	1660	1483	1225	826	
			BHP	1.36	1.36	1.38	1.4	1.38	1.35	1.31	1.23	1.07	
			Sones	21	20	20	20	19.6	19.1	18.7	18.7	19.8	
		VG-2	CFM	2310	2241	2155	2056	1946	1828	1676	1487	1221	810
			BHP	1.52	1.52	1.54	1.56	1.56	1.53	1.5	1.45	1.35	1.16
			Sones	22	22	22	22	21	21	20	20	20	22

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

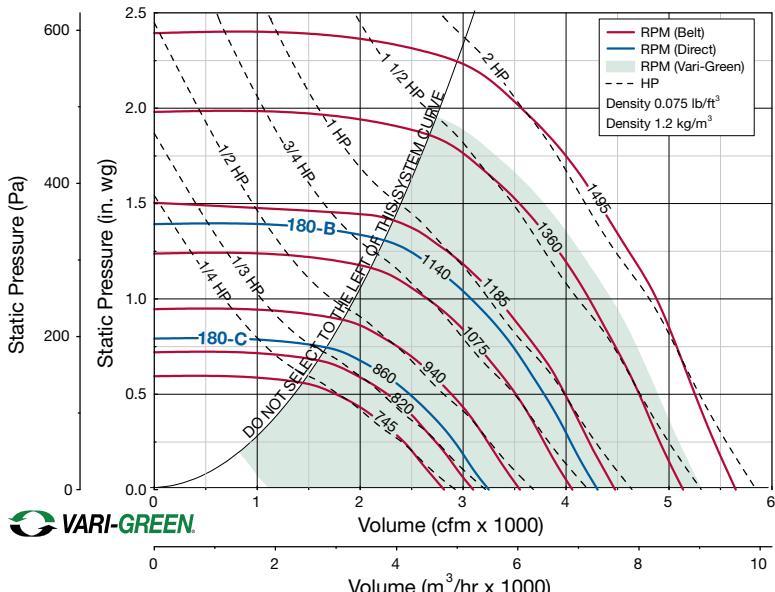
# Roof Upblast/Sidewall Exhaust

## Size-180: CUBE • CUE • USGF



### Direct Drive RPM

C-860 RPM
B-1140 RPM
VG-1000 RPM



All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest cataloged open drip-proof motor.

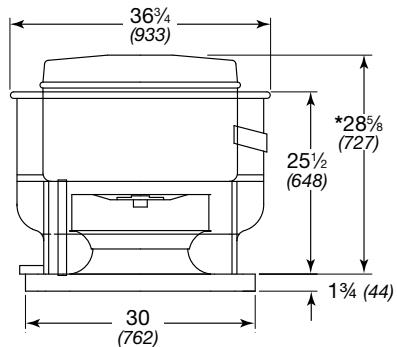
	CUBE	CUE	USGF
^Approximate Weight	126 (57)	142 (64)	190 (86)
Damper Size	24 x 24 (610 x 610)		N/A
Roof/Wall (without wall bracket) Opening	26 1/2 x 26 1/2 (673 x 673)		
Wall Opening with Wall Bracket	26 x 26 (660 x 660)		N/A
Wall Opening with a Curb Through Wall	30 x 30 (762 x 762)		N/A

Motor HP		Fan RPM	Static Pressure in Inches wg										
Belt	Direct		0	0.125	0.25	0.5	0.75	1	1.25	1.5	1.75	2	
<b>180</b>													
1/4	VG-3/4	C-1/2	CFM	2815	2617	2448	1763						
			BHP	0.22	0.24	0.26	0.25						
			Sones	9.2	8.6	8.1	7.1						
	VG-1	C-1/2	CFM	3098	2916	2759	2257						
			BHP	0.30	0.32	0.34	0.34						
			Sones	11.2	10.4	10	9						
1/3	VARI-GREEN	VG-1	CFM	3249	3074	2922	2474						
			BHP	0.34	0.37	0.39	0.40						
			Sones	12.3	11.7	11.1	10.2						
			CFM	3551	3389	3243	2879	2363					
			BHP	0.45	0.47	0.49	0.52	0.50					
			Sones	13.8	13.5	13.1	12.4	11.2					
1/2	VG-1	C-1/2	CFM	3778	3625	3486	3190	2738					
			BHP	0.54	0.57	0.59	0.63	0.62					
			Sones	15.1	14.9	14.7	14.3	13.3					
			CFM	4061	3919	3786	3554	3141	2652				
			BHP	0.67	0.70	0.73	0.78	0.78	0.75				
			Sones	16.5	16.2	15.8	15.5	14.7	13.3				
3/4	VG-1	B-1	CFM	4307	4173	4045	3822	3470	3072	2477			
			BHP	0.80	0.83	0.86	0.91	0.93	0.92	0.85			
			Sones	17.6	17.1	16.5	16.1	15.4	14.6	13.6			
			CFM	4477	4348	4224	4005	3703	3336	2841			
			BHP	0.90	0.93	0.96	1.01	1.04	1.04	0.99			
			Sones	18.5	17.9	17.1	16.5	16	15.2	14.4			
1	VG-2	B-1	CFM	4817	4697	4578	4369	4163	3799	3437	2930		
			BHP	1.12	1.15	1.19	1.24	1.30	1.30	1.28	1.22		
			Sones	21	20	19.5	18.7	18.2	17.5	16.7	15.9		
			CFM	5138	5026	4913	4710	4532	4232	3912	3537	3023	
			BHP	1.36	1.39	1.43	1.49	1.56	1.58	1.58	1.54	1.46	
			Sones	23	23	22	21	21	20	19.2	18.3	17.3	
1 1/2	VG-2	B-1	CFM	5648	5546	5443	5254	5082	4921	4598	4313	3983	3564
			BHP	1.80	1.84	1.89	1.96	2.02	2.10	2.10	2.10	2.06	1.99
			Sones	28	27	27	26	25	25	24	23	22	21

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/1167)^3$   
 MAXIMUM RPM = 1495  
 TIP SPEED (ft/min) = RPM x 4.843  
 MAXIMUM MOTOR FRAME SIZE = 184T  
 AVERAGE DISCHARGE VELOCITY (FPM) = CFM/2.92

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-180HP: CUBE • CUE • USGF



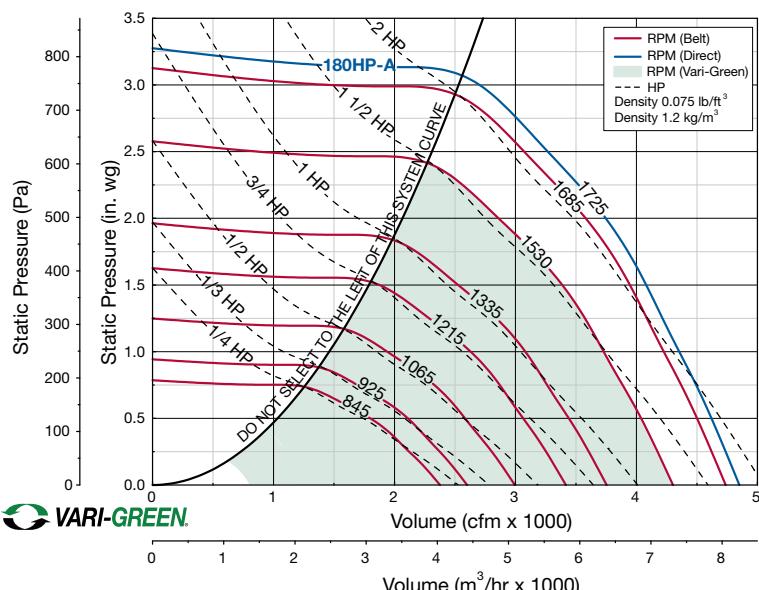
Direct Drive RPM  
A-1725 RPM

All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE	USGF
^Approximate Weight	126 (57)	142 (64)	190 (86)
Damper Size	24 x 24 (610 x 610)		N/A
Roof/Wall (without wall bracket) Opening		26 1/2 x 26 1/2 (673 x 673)	
Wall Opening with Wall Bracket		26 x 26 (660 x 660)	N/A
Wall Opening with a Curb Through Wall		30 x 30 (762 x 762)	N/A



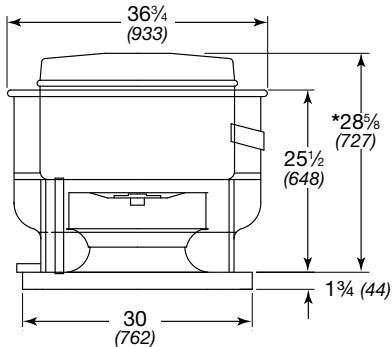
Motor HP	Fan RPM	Static Pressure in Inches wg									
		0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75
<b>180HP</b>											
1/4	VG-1 	CFM	1799								
		845	BHP	0.26							
			Sones	9.6							
1/3		CFM	2104	1688							
		925	BHP	0.34	0.35						
			Sones	10.8	9.9						
1/2		CFM	2581	2323	1933						
		1065	BHP	0.50	0.52	0.53					
			Sones	14.1	12.6	12.5					
3/4		CFM	3063	2868	2626	2286	1854				
	VG-2 	BHP	0.72	0.76	0.78	0.79	0.75				
		Sones	15.4	14.8	14.2	13.5	12.7				
1		CFM	3253	3066	2853	2566	2209				
		BHP	0.82	0.87	0.89	0.91	0.89				
		Sones	17	16.2	15.6	15.1	14.3				
		CFM	3441	3261	3075	2839	2523	2156			
		BHP	0.93	0.98	1.02	1.04	1.04	1.01			
		Sones	19	17.8	17.3	16.8	16.3	15.7			
		CFM	3735	3566	3401	3206	2964	2669	2320		
		BHP	1.13	1.19	1.23	1.26	1.27	1.28	1.24		
1 1/2		Sones	22	21	20	19.6	19.2	18.8	18.2		
	VG-3 	CFM	4035	3884	3728	3574	3376	3135	2859	2534	
		BHP	1.36	1.43	1.48	1.53	1.55	1.56	1.57	1.53	
		Sones	24	23	22	21	21	20	19.7	19.1	
2		CFM	4273	4136	3986	3840	3674	3485	3233	2965	2656
		BHP	1.58	1.64	1.70	1.76	1.79	1.81	1.82	1.82	1.557
		Sones	26	24	24	23	22	22	21	20	18.3
	A-2	CFM	4495	4369	4226	4085	3945	3768	3575	3325	3061
		BHP	1.79	1.86	1.93	1.99	2.04	2.07	2.08	2.09	2.04
		Sones	28	27	26	26	25	23	22	21	21
	A-2	CFM	4613	4493	4353	4215	4078	3917	3740	3509	3265
		BHP	1.92	1.99	2.06	2.12	2.18	2.21	2.23	2.24	2.21
		Sones	29	28	27	29	27	25	24	23	21

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/1315)^3$   
 MAXIMUM RPM = 1725  
 TIP SPEED (ft/min) = RPM x 4.843  
 MAXIMUM MOTOR FRAME SIZE = 184T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/2.92

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-200: CUBE • CUE • USGF

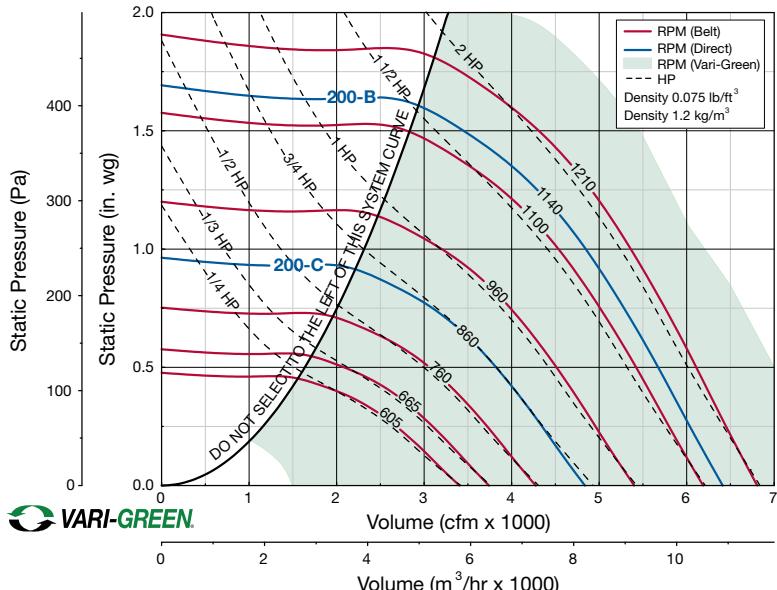


All dimensions in inches (millimeters), weight in pounds (kilograms).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE	USGF
Approximate Weight	142 (64)	170 (77)	213 (97)
Damper Size	24 x 24 (610 x 610)		N/A
Roof/Wall (without wall bracket) Opening	26 1/2 x 26 1/2 (673 x 673)		
Wall Opening with Wall Bracket	26 x 26 (660 x 660)		
Wall Opening with a Curb Through Wall	30 x 30 (762 x 762)		N/A

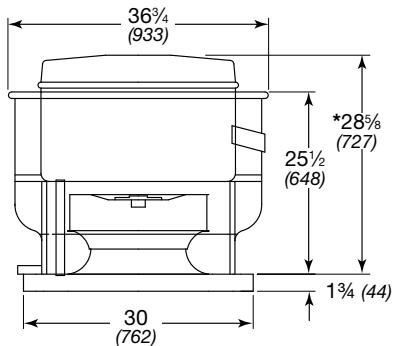


Motor HP	Fan RPM	Static Pressure in Inches wg									
		0	0.125	0.25	0.375	0.5	0.75	1	1.25	1.5	1.75
<b>200</b>											
1/4		CFM	3403	3054	2675	2144					
		BHP	0.25	0.26	0.26	0.25					
		Sones	8.2	7.6	6.8	6.2					
1/3	VG-1	CFM	3740	3422	3096	2699	2073				
		BHP	0.33	0.34	0.35	0.35	0.33				
		Sones	9.6	9	8.3	7.5	7.2				
1/2		CFM	4275	3994	3718	3413	3048				
		BHP	0.49	0.51	0.52	0.52	0.51				
		Sones	12.3	11.8	11.1	10.2	9.5				
3/4	VG-1	CFM	4612	4350	4098	3828	3523	2606			
		BHP	0.61	0.63	0.65	0.65	0.65	0.61			
		Sones	14.2	14.1	13.3	12.5	11.5	10.9			
	C-3/4	CFM	4837	4587	4346	4093	3815	3084			
		BHP	0.71	0.73	0.74	0.75	0.75	0.73			
		Sones	15.8	15.7	14.9	14.4	13	12			
		CFM	4922	4676	4439	4192	3922	3240			
		BHP	0.75	0.77	0.78	0.79	0.79	0.78			
		Sones	16.4	16.4	15.6	15.1	13.7	12.6			
1	VG-2	CFM	5400	5176	4958	4742	4508	3985	3169		
		BHP	0.98	1.01	1.03	1.04	1.04	1.04	1.00		
		Sones	18.9	18.6	18	17.4	16.7	15.2	14.7		
1 1/2		CFM	5793	5585	5380	5179	4968	4503	3917	2972	
		BHP	1.22	1.24	1.26	1.28	1.29	1.29	1.27	1.18	
		Sones	21	21	20	19.7	19.2	17.8	16.6	17.1	
		CFM	6187	5992	5798	5610	5421	5006	4529	3861	
		BHP	1.48	1.51	1.53	1.55	1.57	1.57	1.57	1.53	
		Sones	24	23	23	22	22	21	19.7	18.9	
2	B-2	CFM	6412	6224	6036	5855	5674	5283	4837	4276	3445
		BHP	1.65	1.67	1.7	1.72	1.74	1.74	1.74	1.73	1.63
		Sones	25	24	24	23	22	22	21	19.6	20
	VG-3	CFM	6806	6628	6451	6279	6108	5748	5350	4892	4289
		BHP	1.97	2	2.03	2.05	2.07	2.09	2.09	2.08	1.88
		Sones	24	24	23	23	23	22	21	20	21

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-200HP: CUBE • CUE • USGF

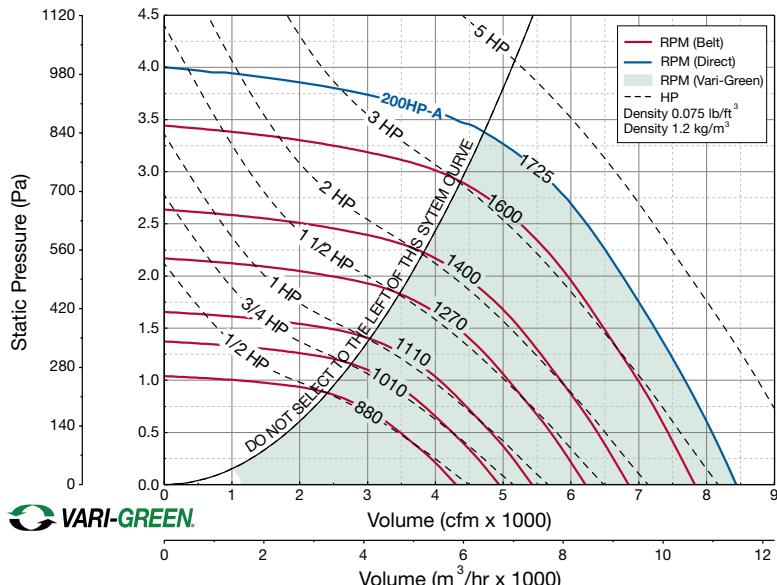


All dimensions in inches (millimeters), weight in pounds (kilograms).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE	USGF
<sup>^</sup> Approximate Weight	142 (64)	145 (66)	213 (97)
Damper Size	24 x 24 (610 x 610)		N/A
Roof/Wall (without wall bracket) Opening		26 1/2 x 26 1/2 (673 x 673)	
Wall Opening with Wall Bracket	26 x 26 (660 x 660)		N/A
Wall Opening with a Curb Through Wall	30 x 30 (762 x 762)		N/A

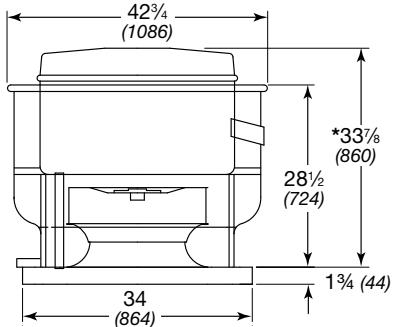


Motor HP	Fan RPM	Static Pressure in Inches wg										
		0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	
<b>200HP</b>												
1/2	VG-2	740	CFM 2024 BHP 0.31 Sones 8.2									
		880	CFM 2779 2317 BHP 0.51 0.52 Sones 10.7 9.6									
3/4	VARI-GREEN®	945	CFM 3094 2711 2092 BHP 0.62 0.64 0.62 Sones 12.3 11.7 10.8									
		1010	CFM 3397 3067 2637 BHP 0.75 0.78 0.79 Sones 14.7 14.1 13.5									
1	VARI-GREEN®	1110	CFM 3851 3561 3242 2806 BHP 0.98 1.02 1.04 1.04 Sones 17.1 16.5 16 15.8									
1 1/2	VARI-GREEN®	1190	CFM 4207 3944 3661 3321 2850 BHP 1.2 1.24 1.27 1.29 1.26 Sones 19.4 18.5 17.9 17.5 17.9									
		1270	CFM 4558 4312 4055 3789 3433 2944 BHP 1.44 1.49 1.53 1.56 1.56 1.53 Sones 22 21 21 20 19.3 20									
2	VG-3	1335	CFM 4837 4606 4369 4116 3826 3482 2946 BHP 1.67 1.71 1.76 1.79 1.82 1.82 1.75 Sones 23 23 22 21 21 21 22									
		1400	CFM 5110 4898 4674 4436 4195 3880 3515 2982 BHP 1.91 1.96 2.01 2.05 2.09 2.09 2.08 2.01 Sones 25 24 23 22 23 23 24									
3	VG-5	1600	CFM 5943 5775 5581 5385 5182 4971 4760 4476 4189 3760 BHP 2.81 2.88 2.93 2.99 3.03 3.08 3.13 3.13 3.13 3.06 Sones 29 27 28 28 28 26 26 28 30 31									
	A-5	1725	CFM 6457 6302 6135 5954 5772 5582 5386 5190 4948 4682 BHP 3.50 3.57 3.64 3.69 3.75 3.80 3.85 3.90 3.92 3.92 Sones 33 30 30 31 32 32 30 28 31 35									

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-220: CUBE

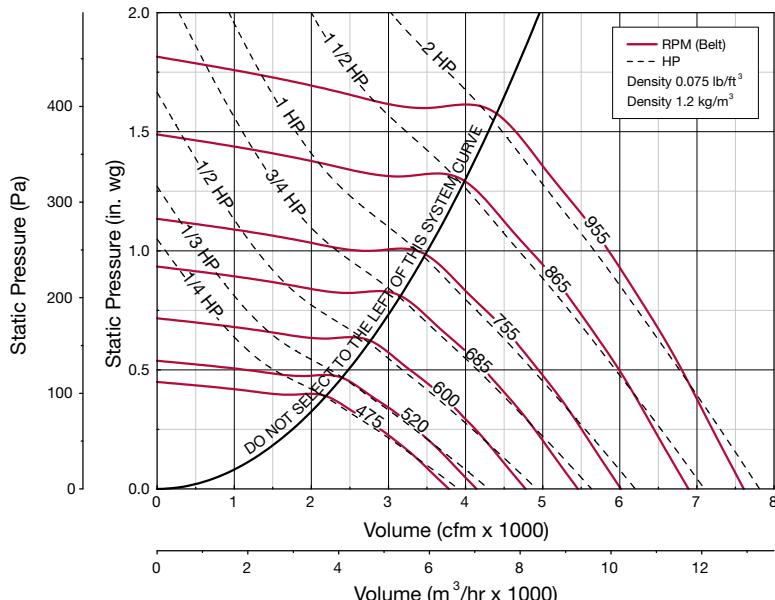


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

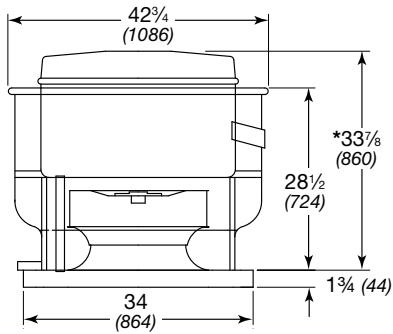
CUBE	
<sup>^</sup> Approximate Weight	174 (79)
Damper Size	24 x 24 (610 x 610)
Roof/Wall (without wall bracket) Opening	30 1/2 x 30 1/2 (775 x 775)
Wall Opening with Wall Bracket	30 x 30 (762 x 762)
Wall Opening with a Curb Through Wall	34 x 34 (864 x 864)



Motor HP	Fan RPM	Static Pressure in Inches wg									
		0	0.125	0.25	0.375	0.5	0.625	0.75	1	1.25	1.5
<b>220</b>											
1/4	450	CFM	3585	3155	2624						
		BHP	0.19	0.21	0.22						
		Sones	7.4	6.8	6.2						
	475	CFM	3784	3377	2896	2268					
		BHP	0.23	0.25	0.26	0.25					
		Sones	8	7.3	6.7	6.2					
1/3	520	CFM	4142	3771	3357	2845					
		BHP	0.3	0.32	0.34	0.34					
		Sones	9.3	8.5	7.7	7.2					
1/2	600	CFM	4779	4457	4124	3736	3279				
		BHP	0.46	0.48	0.51	0.52	0.52				
		Sones	12	11.1	10.2	9.5	8.9				
3/4	645	CFM	5138	4838	4539	4194	3811	3346			
		BHP	0.57	0.6	0.63	0.64	0.65	0.64			
		Sones	13.6	12.7	12	11.3	10.6	10			
	685	CFM	5457	5174	4893	4581	4234	3836	3383		
		BHP	0.68	0.71	0.74	0.76	0.78	0.78	0.77		
		Sones	15	14.2	13.7	13.2	12.3	11.7	11.2		
1	755	CFM	6014	5758	5502	5239	4944	4620	4258		
		BHP	0.91	0.94	0.98	1.01	1.03	1.04	1.04		
		Sones	17.7	17	16.6	16.3	15.8	14.9	14.4		
1 1/2	810	CFM	6452	6213	5975	5737	5470	5185	4883	4156	
		BHP	1.13	1.16	1.2	1.24	1.26	1.28	1.29	1.27	
		Sones	19	18.5	17.9	17.6	17.2	16.5	15.7	14.8	
	865	CFM	6890	6667	6443	6220	5987	5729	5453	4835	4111
		BHP	1.37	1.41	1.45	1.49	1.52	1.54	1.56	1.57	1.53
		Sones	21	20	19.6	19.2	18.7	18.1	17.4	16.5	16.1
2	910	CFM	7249	7036	6823	6612	6400	6158	5909	5365	4704
		BHP	1.6	1.64	1.68	1.72	1.76	1.78	1.81	1.83	1.81
	955	Sones	23	22	22	21	21	20	19.3	18.3	17.4
		CFM	7607	7405	7202	7000	6799	6580	6347	5844	5261
		BHP	1.85	1.89	1.93	1.97	2.02	2.05	2.07	2.11	2.07
		Sones	25	25	24	24	23	23	22	20	19.4

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-220HP: CUBE

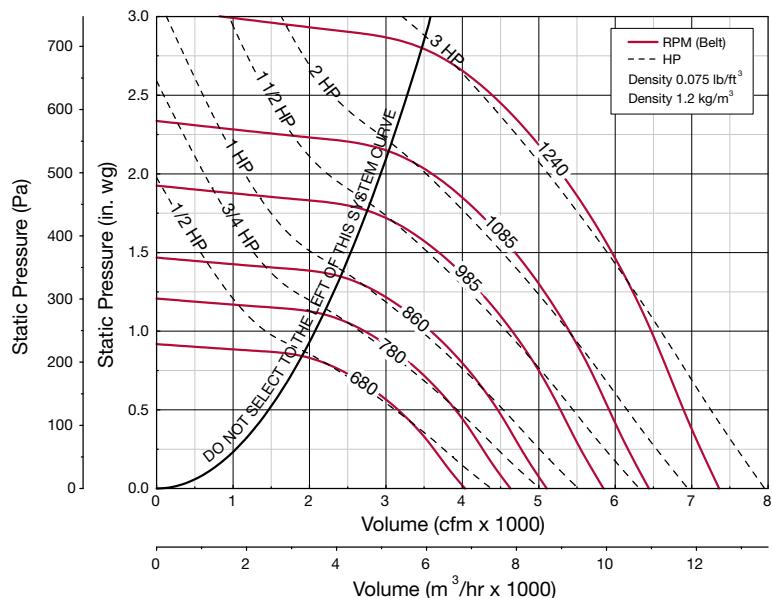


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

CUBE	
<sup>^</sup> Approximate Weight	174 (79)
Damper Size	24 x 24 (610 x 610)
Roof/Wall (without a wall bracket) Opening	30 1/2 x 30 1/2 (775 x 775)
Wall Opening with Wall Bracket	30 x 30 (762 x 762)
Wall Opening with a Curb Through Wall	34 x 34 (864 x 864)



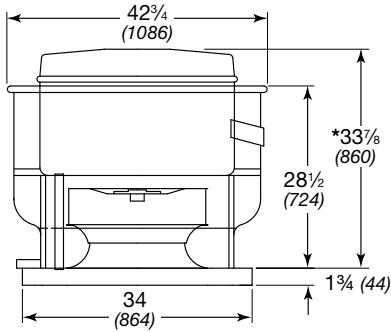
Motor HP	Fan RPM	Static Pressure in Inches wg									
		0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75
<b>220HP</b>											
1/2	650	CFM	2909	1940							
		BHP	0.45	0.42							
		Sones	8.7	7.7							
	680	CFM	3151	2405							
		BHP	0.51	0.51							
		Sones	9.7	8.7							
3/4	735	CFM	3582	3006							
		BHP	0.63	0.65							
		Sones	11.9	11							
	780	CFM	3902	3427	2716						
		BHP	0.74	0.78	0.77						
		Sones	13.4	12.5	12.1						
1	860	CFM	4459	4075	3578	2863					
		BHP	0.96	1.02	1.05	1.01					
		Sones	15	14.3	13.9	13.2					
1 1/2	985	CFM	5281	4988	4642	4220	3674	2825			
		BHP	1.39	1.48	1.54	1.57	1.56	1.46			
		Sones	19.1	17.9	17.4	17.1	16.5	14.9			
2	1035	CFM	5602	5335	5033	4659	4209	3630			
		BHP	1.6	1.69	1.77	1.81	1.82	1.79			
		Sones	21	19.8	18.9	18.7	18.3	17.3			
	1085	CFM	5920	5678	5390	5061	4679	4210	3573		
		BHP	1.82	1.92	2	2.06	2.1	2.09	2.03		
		Sones	23	22	20	20	20	19.6	18.1		
3	1135	CFM	6236	6006	5743	5456	5114	4708	4215	3518	
		BHP	2.06	2.17	2.26	2.34	2.39	2.4	2.38	2.28	
		Sones	24	23	22	22	21	21	21	19.5	
	1188	CFM	6570	6350	6111	5848	5540	5202	4792	4286	3563
		BHP	2.34	2.46	2.56	2.65	2.71	2.75	2.76	2.72	2.59
		Sones	25	25	24	24	23	23	22	22	22
	1240	CFM	6895	6684	6469	6217	5950	5637	5283	4885	4374
		BHP	2.64	2.76	2.88	2.97	3.05	3.1	3.13	3.13	3.08
		Sones	27	26	26	25	25	24	24	24	26

MAXIMUM BHP AT A GIVEN RPM =  $(RPM/847)^3$   
MAXIMUM RPM = 1240  
TIP SPEED (ft/min) = RPM x 6.413  
MAXIMUM MOTOR FRAME SIZE = 184T  
AVERAGE DISCHARGE VELOCITY (FPM) = CFM/3.76

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-240: CUBE • CUE

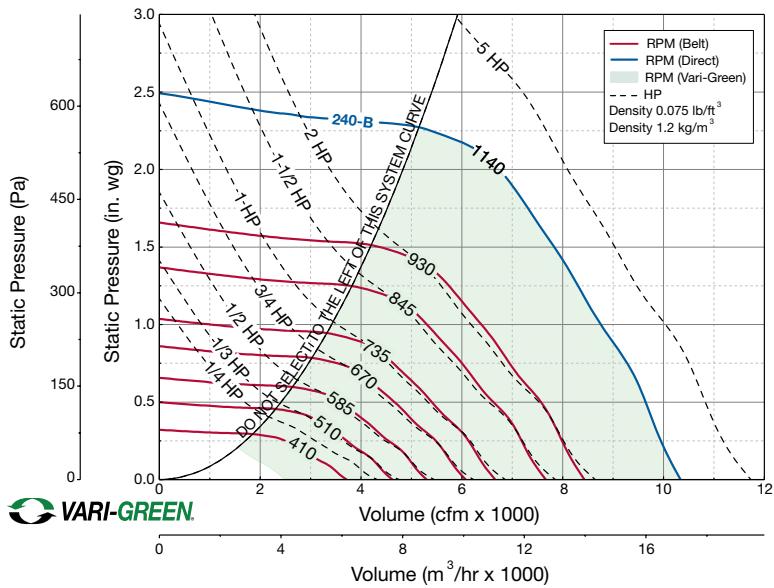


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

	CUBE	CUE
<sup>^</sup> Approximate Weight	142 (64)	226 (103)
Damper Size	24 x 24 (610 x 610)	
Roof/Wall (without wall bracket) Opening	30 1/2 x 30 1/2 (775 x 775)	
Wall Opening with Wall Bracket	30 x 30 (762 x 762)	N/A
Wall Opening with a Curb Through Wall	34 x 34 (864 x 864)	N/A

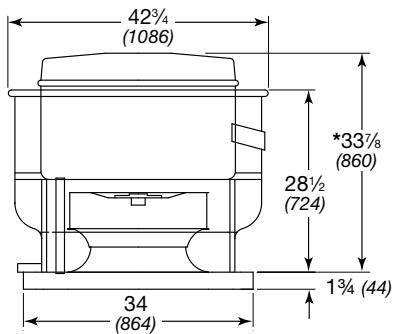


Motor HP		Fan RPM	Static Pressure in Inches wg										
Belt	Direct		0	0.125	0.25	0.375	0.5	0.625	0.75	1	1.25	1.5	
<b>240</b>													
1/4	VG-2 	410	CFM	3717	3170	2471							
			BHP	0.16	0.18	0.18							
			Sones	6.4	5.8	5.3							
1/3		510	CFM	4623	4243	3717	3134						
			BHP	0.31	0.33	0.34	0.34						
			Sones	8.9	8.1	7.3	6.9						
1/2		585	CFM	5303	4961	4540	4093	3565					
			BHP	0.46	0.49	0.51	0.52	0.51					
			Sones	11.5	10.5	9.5	8.8	8.4					
3/4		628	CFM	5693	5368	5010	4590	4141	3600				
			BHP	0.57	0.61	0.63	0.64	0.65	0.63				
			Sones	12.9	11.9	11.1	10.4	9.8	9.4				
		670	CFM	6074	5763	5461	5052	4659	4202	3524			
			BHP	0.69	0.74	0.76	0.78	0.79	0.78	0.73			
			Sones	14.3	13.4	12.8	12.2	11.5	11.0	10.6			
1		735	CFM	6663	6370	6133	5764	5409	5037	4618			
			BHP	0.92	0.97	0.99	1.01	1.03	1.04	1.03			
			Sones	16.6	15.9	15.5	15.1	14.6	13.9	13.4			
1 1/2		790	CFM	7162	6883	6661	6361	6011	5693	5332	4453		
			BHP	1.14	1.20	1.22	1.25	1.27	1.28	1.29	1.24		
			Sones	18.2	17.5	17.2	16.8	16.3	15.7	15.0	14.3		
		845	CFM	7660	7400	7184	6947	6615	6304	6002	5282		
			BHP	1.39	1.46	1.49	1.51	1.54	1.56	1.57	1.56		
			Sones	19.6	19.0	18.6	18.2	17.6	17.0	16.4	15.4		
2		C-2	CFM	7796	7540	7326	7106	6779	6468	6176	5483	4363	
			BHP	1.47	1.54	1.57	1.59	1.62	1.64	1.66	1.65	1.52	
		VG-3	CFM	8431	8194	7985	7798	7536	7233	6953	6375	5706	4324
			BHP	1.86	1.93	1.98	2.00	2.03	2.06	2.08	2.10	2.07	1.83
		VG-5	CFM	10335	10142	9948	9789	9637	9484	9240	8747	8306	7820
			BHP	3.42	3.51	3.60	3.64	3.67	3.70	3.74	3.81	3.85	3.87
			Sones	40	40	40	41	40	39	37	33	30	29

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-240HP: CUBE • CUE

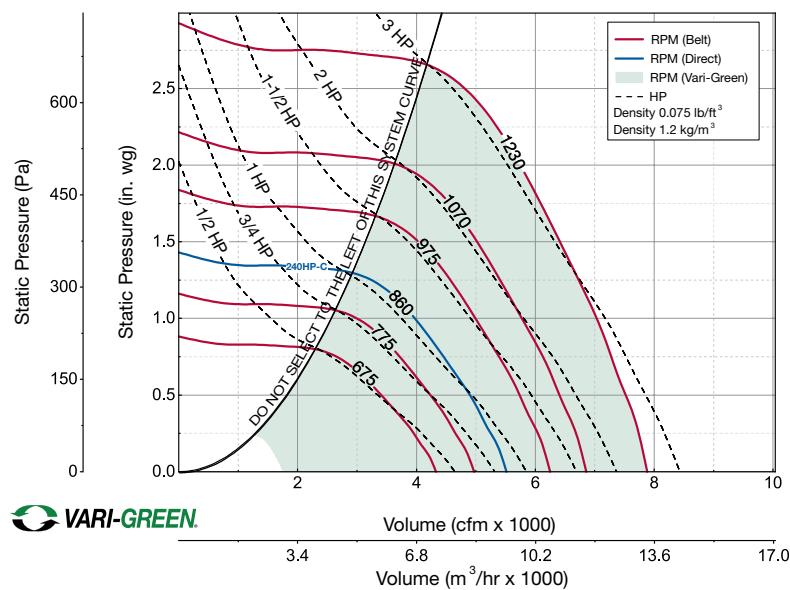


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE
<sup>^</sup> Approximate Weight	175 (79)	209 (95)
Damper Size	24 x 24 (610 x 610)	
Roof/Wall (without wall bracket) Opening	30 1/2 x 30 1/2 (775 x 775)	
Wall Opening with Wall Bracket	30 x 30 (762 x 762)	N/A
Wall Opening with a Curb Through Wall	34 x 34 (864 x 864)	N/A

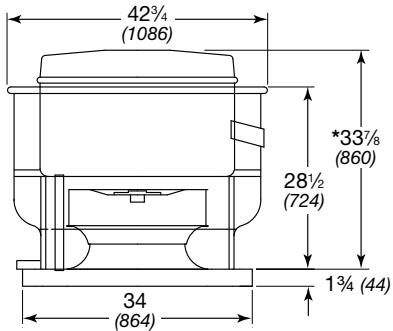


Motor HP		Fan RPM	Static Pressure in Inches wg										
Belt	Direct		0.5	0.625	0.75	1	1.25	1.5	1.75	2	2.25	2.5	
<b>240HP</b>													
1/2	VARI-GREEN®	VG-1	CFM	3046	2673								
			BHP	0.43	0.43								
			Sones	8.1	7.4								
		C-1	CFM	3405	3070	2607							
			BHP	0.51	0.52	0.51							
			Sones	9.4	8.8	8.4							
3/4	VARI-GREEN®	VG-1	CFM	3824	3547	3222							
			BHP	0.62	0.64	0.65							
			Sones	11.3	10.7	10.3							
		C-1	CFM	4233	3979	3704	2940						
			BHP	0.75	0.77	0.78	0.77						
			Sones	13.1	12.5	12.1	11.8						
1	VARI-GREEN®	C-1	CFM	4888	4680	4451	3943	3185					
			BHP	0.99	1.02	1.05	1.07	1.05					
			Sones	15.0	14.5	14.3	13.9	13.2					
1 1/2	VARI-GREEN®	VG-3	CFM	5286	5094	4890	4448	3932					
			BHP	1.16	1.20	1.23	1.28	1.29					
			Sones	16.4	15.8	15.4	15.2	14.7					
		B-3	CFM	5737	5567	5387	4988	4539	4006				
			BHP	1.39	1.43	1.48	1.53	1.56	1.56				
			Sones	18.4	17.9	17.3	16.9	16.6	15.9				
2	VARI-GREEN®	VG-3	CFM	6075	5927	5756	5389	4995	4533	3854			
			BHP	1.59	1.63	1.68	1.75	1.80	1.81	1.77			
			Sones	20	19.6	19.0	18.3	18.1	17.7	16.4			
		B-3	CFM	6404	6272	6112	5775	5407	4990	4550	3625		
			BHP	1.80	1.84	1.89	1.98	2.04	2.07	2.08	1.95		
			Sones	22	22	21	19.7	19.7	19.4	18.8	16.6		
3	VARI-GREEN®	C-1	CFM	6891	6766	6637	6329	5994	5649	5239	4825	4052	
			BHP	2.16	2.20	2.25	2.35	2.42	2.49	2.50	2.52	2.41	
		B-3	Sones	24	24	23	22	22	21	21	19.8		
3	VARI-GREEN®	C-1	CFM	7513	7395	7280	7016	6730	6410	6090	5709	5326	4722
			BHP	2.68	2.73	2.77	2.88	2.98	3.05	3.13	3.14	3.16	3.09
		B-3	Sones	26	25	25	25	25	24	24	23	23	25

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/837)^3$   
 MAXIMUM RPM = 1230  
 TIP SPEED (ft/min) = RPM x 6.413  
 MAXIMUM MOTOR FRAME SIZE = 184T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/3.76

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust Size-240XP: CUBE

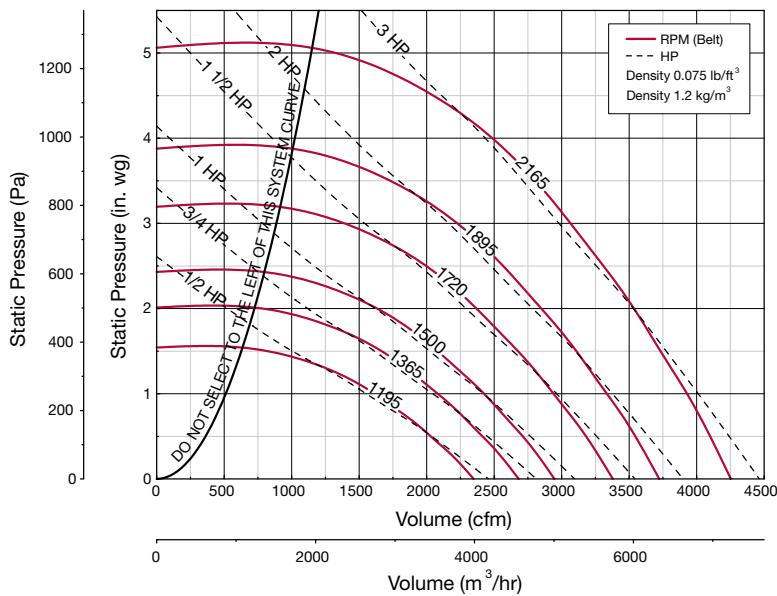


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

CUBE	
<sup>^</sup> Approximate Weight	175 (79)
Damper Size	24 x 24 (610 x 610)
Roof/Wall (without wall bracket) Opening	30 1/2 x 30 1/2 (775 x 775)
Wall Opening with Wall Bracket	30 x 30 (762 x 762)
Wall Opening with a Curb Through Wall	34 x 34 (864 x 864)



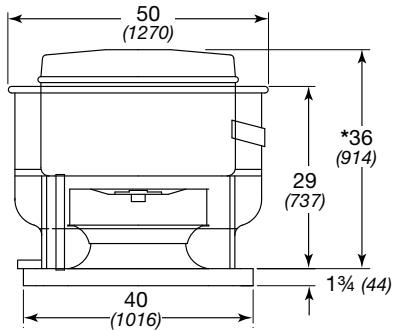
Motor HP	Fan RPM	Static Pressure in Inches wg									
		1	1.25	1.5	2	2.5	3	3.5	4	4.5	5
<b>240XP</b>											
1/2	1100	CFM	1292	789							
		BHP	0.40	0.34							
		Sones	10.9	11.9							
	1195	CFM	1613	1321	792						
		BHP	0.53	0.51	0.43						
		Sones	11.6	12.1	13.4						
3/4	1365	CFM	2079	1886	1645						
		BHP	0.77	0.78	0.77						
		Sones	13.6	13.4	13.7						
	1421	CFM	2223	2042	1837	1209					
		BHP	0.86	0.88	0.88	0.79					
		Sones	14.4	14.2	14.2	15.3					
1	1500	CFM	2424	2256	2079	1630					
		BHP	1.00	1.03	1.04	1.01					
		Sones	15.9	15.3	15.1	15.5					
	1635	CFM	2743	2604	2450	2101	1631				
		BHP	1.28	1.31	1.33	1.34	1.28				
		Sones	18.6	18.0	17.5	17.0	17.7				
1 1/2	1720	CFM	2939	2815	2671	2366	1975	1336			
		BHP	1.48	1.51	1.53	1.57	1.53	1.35			
		Sones	21	19.8	19.2	18.4	18.4	20			
	1895	CFM	3333	3222	3109	2847	2566	2202	1706		
		BHP	1.94	1.98	2.01	2.07	2.10	2.05	1.92		
		Sones	24	23	22	21	21	21	22		
3	1956	CFM	3469	3361	3252	3006	2739	2414	2032	1326	
		BHP	2.13	2.16	2.20	2.26	2.30	2.28	2.21	1.89	
		Sones	25	24	23	22	22	21	22	25	
	2030	CFM	3632	3529	3423	3197	2945	2667	2319	1852	
		BHP	2.37	2.40	2.44	2.51	2.56	2.58	2.51	2.38	
		Sones	26	25	25	24	23	23	23	25	
	2165	CFM	3927	3830	3733	3535	3305	3063	2787	2461	2048
		BHP	2.85	2.89	2.93	3.01	3.07	3.12	3.11	3.05	2.93
		Sones	29	28	28	27	26	25	25	27	31

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/1476)^3$   
 MAXIMUM RPM = 2165  
 TIP SPEED (ft/min) = RPM x 4.778  
 MAXIMUM MOTOR FRAME SIZE = 184T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/3.76

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.  
 Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-300: CUBE • CUE

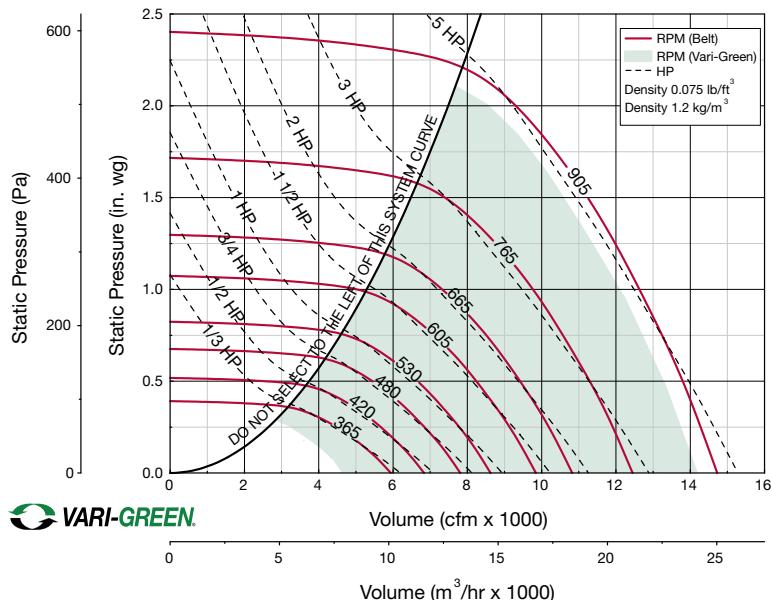


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE
<sup>^</sup> Approximate Weight	313 (142)	380 (172)
Damper Size	34 x 34 (864 x 864)	
Roof/Wall (without wall bracket) Opening	36 1/2 x 36 1/2 (927 x 927)	
Wall Opening with Wall Bracket	36 x 36 (914 x 914)	
Wall Opening with a Curb Through Wall	40 x 40 (1016 x 1016)	N/A



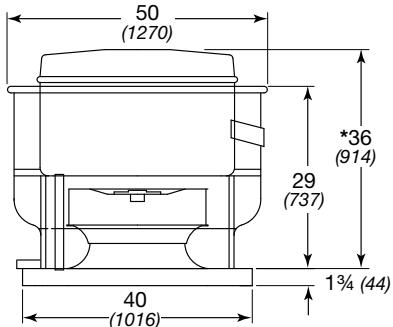
Motor HP		Fan RPM	Static Pressure in Inches wg										
Belt	Direct		0	0.125	0.25	0.5	0.75	1	1.25	1.5	1.75	2	
<b>300</b>													
1/3	VG-5	355	CFM	5777	5132	4227							
			BHP	0.27	0.30	0.31							
			Sones	6.9	6.3	5.3							
		365	CFM	5940	5316	4464							
			BHP	0.29	0.33	0.34							
			Sones	7.2	6.5	5.7							
1/2	VARI-GREEN.	420	CFM	6835	6314	5660							
			BHP	0.45	0.49	0.52							
			Sones	9.0	8.2	7.5							
3/4		480	CFM	7811	7377	6844	5440						
			BHP	0.67	0.72	0.76	0.77						
			Sones	11.0	10.5	9.9	8.5						
1		530	CFM	8625	8231	7772	6636						
			BHP	0.90	0.95	1.00	1.05						
			Sones	13.3	12.7	12.2	11.2						
1 1/2		605	CFM	9845	9501	9127	8226	7084					
			BHP	1.34	1.40	1.46	1.54	1.55					
			Sones	17.0	16.4	15.7	14.8	13.5					
2		665	CFM	10822	10508	10193	9411	8495	7271				
			BHP	1.77	1.85	1.92	2.02	2.07	2.04				
			Sones	20	19.7	18.6	17.5	16.7	15.1				
3		765	CFM	12449	12176	11904	11273	10554	9743	8756	7352		
			BHP	2.70	2.78	2.86	3.00	3.09	3.15	3.14	2.98		
			Sones	24	24	23	22	21	20	18.7	17		
5	C-5	795	CFM	12937	12675	12413	11818	11145	10404	9479	8302		
			BHP	3.03	3.12	3.20	3.35	3.46	3.53	3.53	3.43		
			Sones	26	25	24	23	22	22	21	18.5		
		860	CFM	13995	13753	13510	12987	12392	11721	11002	10124	9007	
			BHP	3.84	3.93	4.02	4.19	4.33	4.41	4.47	4.46	4.34	
			Sones	30	30	29	27	26	26	24	23	21	
		905	CFM	14727	14497	14266	13788	13223	12614	11963	11191	10357	9178
			BHP	4.47	4.57	4.67	4.85	5.00	5.11	5.19	5.21	5.20	5.01
			Sones	32	32	32	29	28	28	27	26	24	22

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/522)^3$   
 MAXIMUM RPM = 905  
 TIP SPEED (ft/min) = RPM x 7.983  
 MAXIMUM MOTOR FRAME SIZE = 213T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/5.50

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

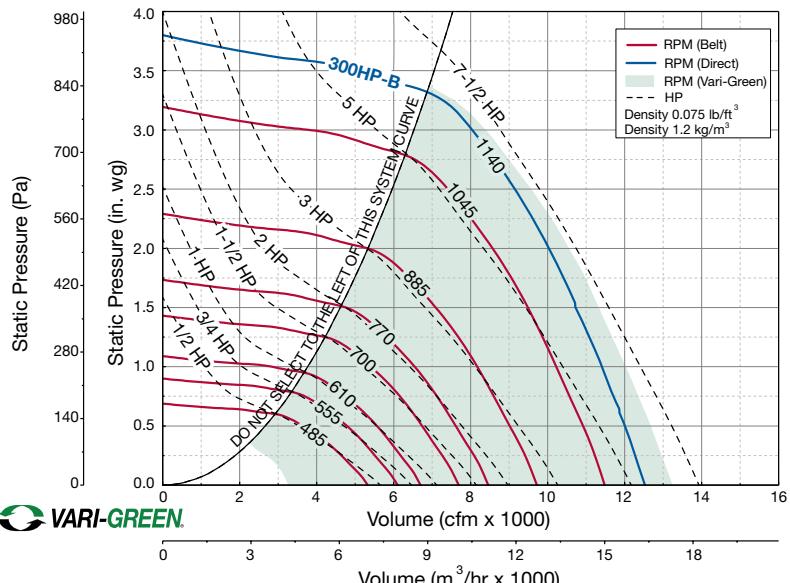
## Size-300HP: CUBE • CUE



\* May be greater depending on motor.

^Weight shown is largest catalogued open drip-proof motor.

	CUBE	CUE
^Approximate Weight	313 (142)	434 (197)
Damper Size	34 x 34 (864 x 864)	
Roof/Wall (without wall bracket) Opening	36½ x 36½ (927 x 927)	
Wall Opening with Wall Bracket	36 x 36 (914 x 914)	
Wall Opening with a Curb Through Wall	40 x 40 (1016 x 1016)	N/A



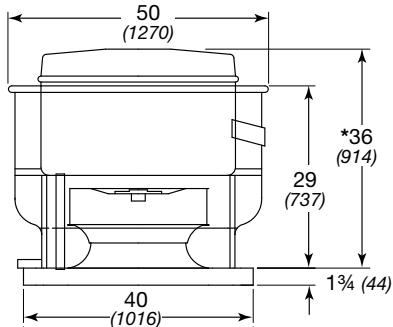
Motor HP		Fan RPM	Static Pressure in Inches wg										
Belt	Direct		0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75	
<b>300HP</b>													
1/2	VARI-GREEN	VG-3	CFM	3125									
			BHP	0.44									
			Sones	7.3									
		VG-3	CFM	3639									
			BHP	0.52									
			Sones	7.9									
3/4		VG-3	CFM	4788	3651								
			BHP	0.77	0.76								
			Sones	10.4	9.9								
1		VG-3	CFM	5549	4731								
			BHP	1.00	1.03								
			Sones	12.4	11.3								
1½	C-3	VG-3	CFM	6741	6149	5390							
			BHP	1.47	1.53	1.57							
			Sones	16.0	15.2	14.0							
2		VG-3	CFM	7613	7107	6535	5814	4684					
			BHP	1.91	2.00	2.06	2.09	1.99					
			Sones	18.6	18.1	17.4	16.2	16.0					
3		C-3	CFM	8712	8289	7812	7292	6647	5834				
			BHP	2.61	2.72	2.80	2.87	2.90	2.85				
			Sones	22	22	22	21	20	19.9				
5	VG-7 1/2	VG-7 1/2	CFM	9014	8603	8150	7678	7062	6353				
			BHP	2.83	2.94	3.03	3.12	3.15	3.14				
			Sones	23	23	23	22	21	21				
		VG-7 1/2	CFM	10275	9913	9546	9133	8711	8201	7641	6946		
			BHP	3.90	4.03	4.16	4.26	4.35	4.41	4.44	4.39		
			Sones	30	29	29	28	28	27	26	25		
	VG-7 1/2	VG-7 1/2	CFM	10909	10570	10222	9855	9455	9054	8533	8002	7330	6463
			BHP	4.54	4.68	4.82	4.94	5.04	5.13	5.17	5.21	5.15	4.99
			Sones	35	34	34	33	32	31	31	30	28	27
	VG-7 1/2	B-7½	CFM	12016	11713	11394	11075	10733	10366	9999	9562	9075	8586
		B-7½	BHP	5.83	6.00	6.14	6.29	6.42	6.52	6.63	6.70	6.74	6.77
		B-7½	Sones	46	47	46	44	42	40	40	40	40	38

MAXIMUM BHP AT A GIVEN RPM = (RPM/602)<sup>3</sup>  
MAXIMUM RPM = 1140  
TIP SPEED (ft/min) = RPM x 7.983  
MAXIMUM MOTOR FRAME SIZE = 213T  
AVERAGE DISCHARGE VELOCITY (FPM) = CFM/5.50

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast/Sidewall Exhaust

## Size-300XP: CUBE

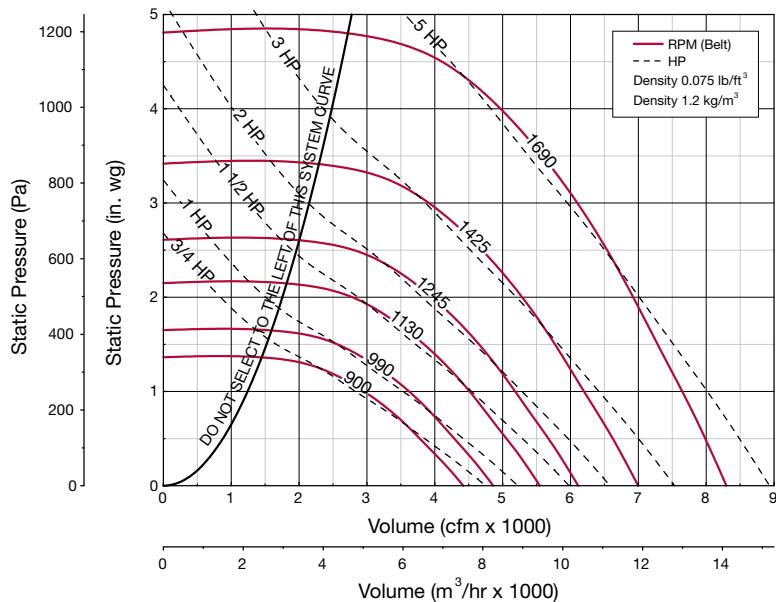


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

^Weight shown is largest cataloged open drip-proof motor.

CUBE	
^Approximate Weight	313 (142)
Damper Size	34 x 34 (864 x 864)
Roof/Wall (without wall bracket) Opening	36½ x 36½ (927 x 927)
Wall Opening with Wall Bracket	36 x 36 (914 x 914)
Wall Opening with a Curb Through Wall	40 x 40 (1016 x 1016)

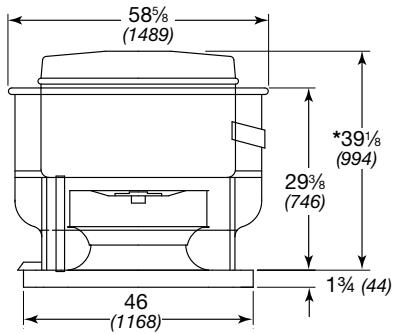


Motor HP	Fan RPM	Static Pressure in Inches wg									
		1	1.25	1.5	2	2.5	3	3.5	4	4.5	4.75
<b>300XP</b>											
3/4	790	CFM	1776								
		BHP	0.48								
		Sones	9.4								
	900	CFM	2958	2273							
		BHP	0.79	0.75							
		Sones	12.2	11.3							
1	990	CFM	3619	3167	2538						
		BHP	1.04	1.05	1.00						
		Sones	14.6	13.4	12.8						
1 1/2	1060	CFM	4073	3708	3255						
		BHP	1.25	1.28	1.28						
	1130	Sones	16.5	15.3	14.4						
		CFM	4511	4201	3833	2773					
		BHP	1.48	1.53	1.56	1.46					
		Sones	18.9	17.8	16.8	15.6					
2	1245	CFM	5182	4930	4648	3943	2705				
		BHP	1.92	1.99	2.04	2.08	1.86				
		Sones	22	21	20	18.6	17.9				
3	1335	CFM	5695	5465	5220	4648	3905				
		BHP	2.32	2.40	2.47	2.56	2.53				
	1425	Sones	24	24	23	21	19.4				
		CFM	6199	5983	5768	5286	4695	3886			
		BHP	2.78	2.86	2.95	3.07	3.14	3.03			
		Sones	27	26	25	24	22	21			
5	1493	CFM	6574	6369	6164	5722	5200	4550	3646		
		BHP	3.16	3.25	3.34	3.49	3.58	3.57	3.37		
		Sones	29	28	28	26	24	23	22		
	1560	CFM	6941	6746	6549	6143	5684	5134	4441	3049	
		BHP	3.57	3.67	3.76	3.93	4.05	4.12	4.02	3.50	
		Sones	31	30	30	28	27	25	24	24	
	1690	CFM	7643	7464	7284	6920	6528	6091	5587	4951	4100
		BHP	4.47	4.57	4.68	4.87	5.04	5.16	5.24	5.14	4.88
		Sones	36	35	34	33	31	30	29	28	28

MAXIMUM BHP AT A  
GIVEN RPM = (RPM/972)<sup>3</sup>  
MAXIMUM RPM = 1690  
TIP SPEED (ft/min) = RPM x 5.825  
MAXIMUM MOTOR FRAME SIZE = 213T  
AVERAGE DISCHARGE VELOCITY  
(FPM) = CFM/5.50

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast Exhaust Size-360: CUBE

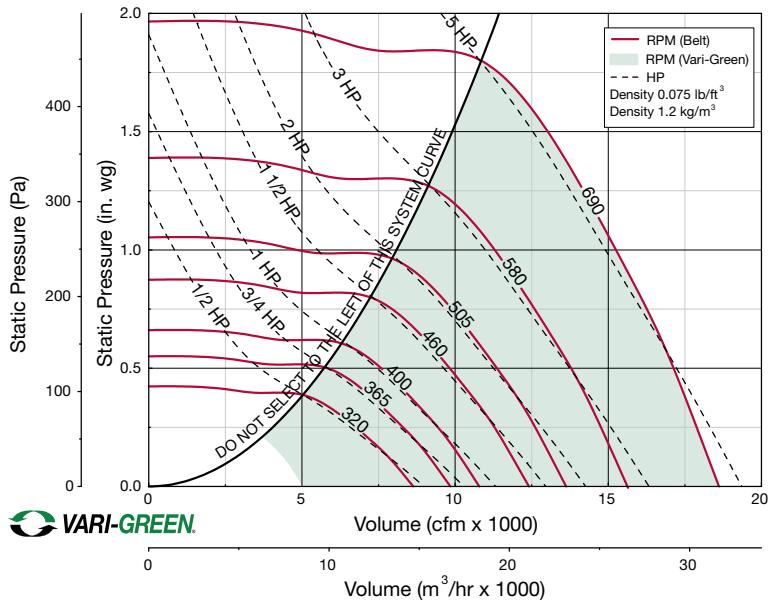


All dimensions in inches (millimeters), weight in pounds (kilograms).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

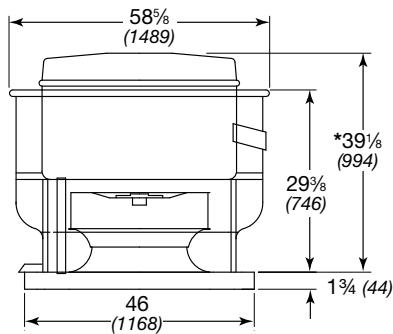
CUBE	
<sup>^</sup> Approximate Weight	440 (200)
Damper Size	40 x 40 (1016 x 1016)
Roof Opening	42 1/2 x 42 1/2 (1080 x 1080)



Motor HP		Fan RPM	Static Pressure in Inches wg																			
			0	0.125	0.25	0.375	0.5	0.75	1	1.25	1.5	1.75										
<b>360</b>																						
1/2	VARI-GREEN®	VG-1	CFM	8092	7206	6023																
			BHP	0.37	0.42	0.43																
			Sones	6.9	5.9	5.4																
		VG-2	CFM	8631	7820	6755	5256															
			BHP	0.44	0.50	0.52	0.51															
			Sones	7.7	6.8	6.0	6.6															
		VG-3	CFM	9845	9142	8299	7286	5767														
			BHP	0.66	0.72	0.77	0.78	0.74														
			Sones	10.2	9.4	8.5	8.0	8.3														
3/4	VARI-GREEN®	VG-1	CFM	10789	10153	9426	8556	7575														
			BHP	0.87	0.94	0.99	1.02	1.02														
			Sones	12.7	11.9	11.1	10.3	9.9														
		VG-2	CFM	12408	11862	11281	10587	9814	7809													
			BHP	1.32	1.40	1.48	1.53	1.55	1.52													
			Sones	16.8	16.5	15.8	15.1	14.5	13.5													
		VG-3	CFM	13621	13125	12602	12022	11359	9878													
			BHP	1.74	1.83	1.92	1.99	2.04	2.06													
			Sones	20	20	19.8	19.0	18.6	17.9													
1	VARI-GREEN®	VG-1	CFM	14646	14184	13705	13209	12606	11302	9606												
			BHP	2.17	2.26	2.36	2.45	2.50	2.56	2.52												
			Sones	22	22	21	21	20	19.3	18.2												
		VG-2	CFM	15644	15212	14769	14306	13783	12597	11287	9381											
			BHP	2.64	2.74	2.84	2.94	3.02	3.10	3.13	3.02											
			Sones	23	23	23	22	22	21	20	18.4											
		VG-3	CFM	16642	16236	15826	15391	14942	13862	12684	11227											
			BHP	3.18	3.29	3.40	3.50	3.60	3.71	3.76	3.73											
			Sones	25	25	25	24	24	23	22	21											
1 1/2	VARI-GREEN®	VG-1	CFM	17640	17257	16873	16466	16056	15084	14000	12831	11217										
			BHP	3.78	3.90	4.02	4.13	4.24	4.39	4.46	4.48	4.38										
			Sones	27	27	27	26	26	25	23	22	21										
		VG-2	CFM	18611	18248	17884	17504	17115	16236	15243	14187	12985	11290									
			BHP	4.44	4.57	4.69	4.81	4.93	5.11	5.21	5.26	5.25	5.09									
			Sones	30	29	28	28	28	27	25	24	23	22									
2	VARI-GREEN®	VG-1	CFM	19638	19255	18871	18464	18054	17236	16284	15217	14187	12985	11290								
			BHP	5.12	5.34	5.56	5.77	5.98	6.18	6.38	6.57	6.76	6.59									
			Sones	32	32	31	30	29	28	27	26	25	24									
		VG-2	CFM	20636	20253	19870	19463	19053	18236	17284	16217	15217	14187	12985	11290							
			BHP	5.78	6.00	6.22	6.43	6.64	6.84	7.04	7.24	7.43	7.26									
			Sones	34	34	33	32	31	30	29	28	27	26									
		VG-3	CFM	21634	21251	20868	20461	20051	19234	18284	17217	16217	15217	14187	12985	11290						
			BHP	6.44	6.66	6.87	7.08	7.29	7.49	7.69	7.88	8.07	7.89									
			Sones	36	36	35	34	33	32	31	30	29	28									
3	VARI-GREEN®	VG-1	CFM	22632	22249	21866	21459	21059	20232	19284	18217	17217	16217	15217	14187	12985	11290					
			BHP	7.12	7.34	7.55	7.76	7.97	8.17	8.37	8.56	8.75	8.57									
			Sones	38	38	37	36	35	34	33	32	31	30	29								
		VG-2	CFM	23630	23247	22864	22457	22057	21230	20284	19217	18217	17217	16217	15217	14187	12985	11290				
			BHP	7.78	8.00	8.21	8.42	8.63	8.83	9.03	9.22	9.41	9.21									
			Sones	40	40	39	38	37	36	35	34	33	32	31	30							
		VG-3	CFM	24628	24245	23862	23455	23055	22238	21284	20217	19217	18217	17217	16217	15217	14187	12985	11290			
			BHP	8.44	8.66	8.87	9.08	9.29	9.49	9.68	9.87	10.06	9.86									
			Sones	42	42	41	40	39	38	37	36	35	34	33	32	31	30					
5	VARI-GREEN®	VG-1	CFM	25626	25243	24860	24453	24053	23236	22284	21217	20217	19217	18217	17217	16217	15217	14187	12985	11290		
			BHP	9.12	9.34	9.55	9.76	9.97	10.17	10.36	10.56	10.75	10.55									
			Sones	44	44	43	42	41	40	39	38	37	36	35	34	33	32	31				
		VG-2	CFM	26624	26241	25858	25451	25051	24234	23284	22217	21217	20217	19217	18217	17217	16217	15217	14187	12985	11290	
			BHP	9.78	10.00	10.21	10.42	10.63	10.83	11.03	11.22	11.41	11.21									
			Sones	46	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32			
		VG-3	CFM	27622	27239	26856	26449	26049	25232	24284	23217	22217	21217	20217	19217	18217	17217	16217	15217	14187	12985	11290
			BHP	10.44	10.66	10.87	11.08	11.29	11.49	11.68	11.87	12.06	11.86									
			Sones	48	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33		

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast Exhaust Size-360HP: CUBE

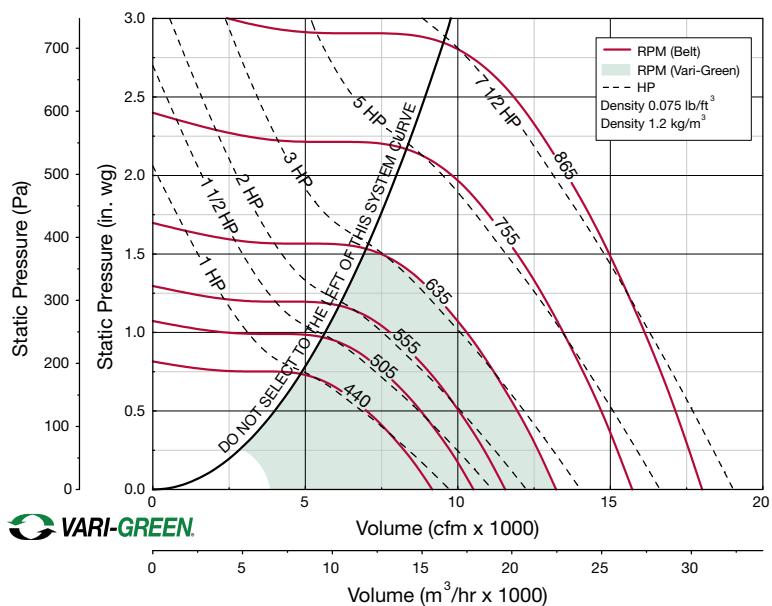


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

CUBE	
<sup>^</sup> Approximate Weight	440 (200)
Damper Size	40 x 40 (1016 x 1016)
Roof Opening	42 1/2 x 42 1/2 (1080 x 1080)

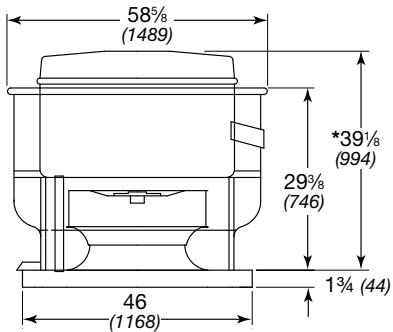


Motor HP	Fan RPM	Static Pressure in Inches wg											
		0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5	2.75		
<b>360HP</b>													
1	VG-1	CFM	6407										
		BHP	0.90										
		Sones	9.6										
	VG-2	CFM	7003										
		BHP	1.03										
		Sones	10.8										
1 1/2	VG-1	CFM	8765	7539									
		BHP	1.52	1.57									
		Sones	15.3	14.3									
	VG-2	CFM	10029	9046	7766								
		BHP	1.97	2.06	2.08								
		Sones	17.2	16.2	15.4								
2	VG-3	CFM	10996	10129	9094	7488							
		BHP	2.40	2.50	2.57	2.49							
		Sones	18.9	17.7	16.8	16.1							
	VG-3	CFM	11934	11157	10276	9171	7329						
		BHP	2.87	3.00	3.09	3.12	2.95						
		Sones	21	19.5	18.2	17.8	17.3						
3	VG-1	CFM	13321	12662	11902	11053	10026	8393					
		BHP	3.70	3.86	3.98	4.07	4.09	3.92					
		Sones	24	23	22	20	20	19.6					
	VG-2	CFM	14688	14086	13434	12734	11922	10973	9593				
		BHP	4.68	4.86	5.01	5.14	5.23	5.24	5.10				
		Sones	28	27	26	25	24	23	22				
5	VG-3	CFM	15275	14693	14086	13410	12681	11831	10852	9149			
		BHP	5.15	5.34	5.51	5.64	5.75	5.81	5.79	5.51			
		Sones	30	29	28	27	27	26	24	23			
	VG-3	CFM	16232	15689	15137	14511	13869	13127	12290	11354	9683		
		BHP	6.00	6.20	6.40	6.54	6.69	6.78	6.82	6.79	6.48		
		Sones	31	29	27	28	29	28	26	25	24		
7 1/2	VG-1	CFM	17129	16631	16105	15544	14933	14315	13565	12738	11789	10197	
		BHP	6.89	7.11	7.32	7.50	7.64	7.79	7.87	7.89	7.83	7.50	
		Sones	33	32	30	29	29	29	28	27	25	23	

MAXIMUM BHP AT A GIVEN RPM =  $(RPM/434)^3$   
 MAXIMUM RPM = 865  
 TIP SPEED (ft/min) = RPM x 9.425  
 MAXIMUM MOTOR FRAME SIZE = 213T  
 AVERAGE DISCHARGE VELOCITY (FPM) = CFM/7.25

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast Exhaust Size-360XP: CUBE

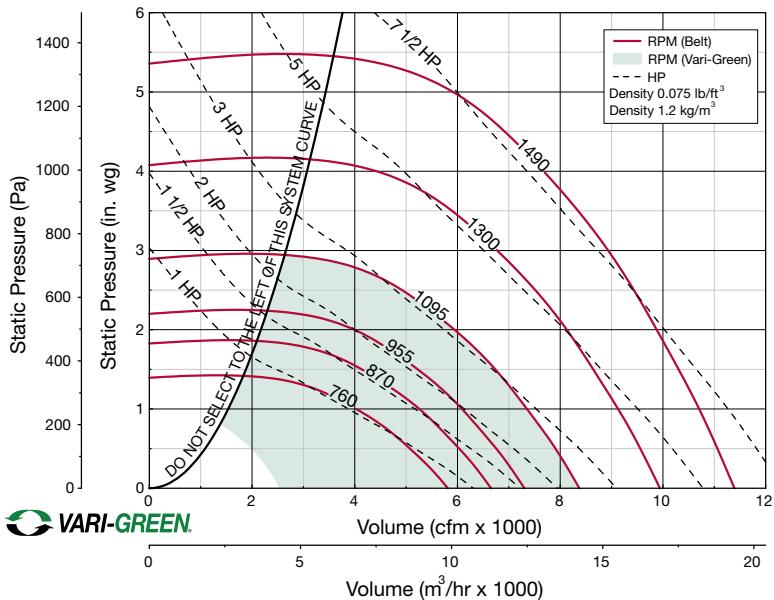


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

CUBE	
<sup>^</sup> Approximate Weight	440 (200)
Damper Size	40 x 40 (1016 x 1016)
Roof Opening	42 1/2 x 42 1/2 (1080 x 1080)

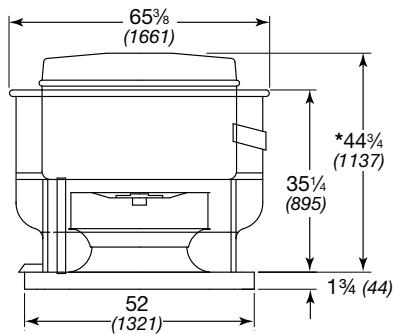


Motor HP	Fan RPM	Static Pressure in Inches wg										
		1	1.25	1.5	2	2.5	3	3.5	4	4.5	5	
<b>360XP</b>												
1	VG-1 	CFM	3210									
		BHP	0.81									
		Sones	10.5									
	VG-2 	CFM	4020	3225								
		BHP	1.05	1.01								
		Sones	11.1	11.1								
1 1/2	VG-2 	CFM	5243	4740	4112							
		BHP	1.53	1.57	1.55							
		Sones	13.6	12.7	12.3							
	VG-3 	CFM	6081	5679	5216	3949						
		BHP	1.97	2.04	2.08	1.98						
		Sones	15.4	15.4	14.2	13.0						
2	VG-3 	CFM	6722	6396	6001	5035	3264					
		BHP	2.38	2.47	2.54	2.55	2.18					
		Sones	17.1	16.5	16.2	14.5	13.4					
	VG-3 	CFM	7351	7050	6724	5930	4905					
		BHP	2.85	2.95	3.03	3.13	3.07					
		Sones	19.2	18.4	17.8	16.4	15.4					
3		CFM	7945	7669	7386	6712	5867	4700				
		BHP	3.36	3.47	3.57	3.73	3.75	3.54				
		Sones	21	21	19.9	18.6	17.3	16.5				
		CFM	8528	8278	8011	7422	6711	5824	4551			
		BHP	3.91	4.05	4.15	4.35	4.45	4.40	4.04			
		Sones	23	23	22	21	19.4	18.5	18.0			
5	VG-3 	CFM	9113	8881	8635	8125	7502	6764	5867	4286		
		BHP	4.54	4.69	4.82	5.04	5.21	5.24	5.15	4.52		
		Sones	26	25	24	23	22	21	20	20		
	VG-3 	CFM	9910	9693	9477	9009	8490	7905	7193	6348	5143	
		BHP	5.50	5.67	5.83	6.08	6.30	6.48	6.48	6.37	5.87	
		Sones	29	28	27	26	25	24	23	23	23	
7 1/2		CFM	10699	10496	10294	9871	9429	8907	8340	7673	6881	5830
		BHP	6.61	6.78	6.96	7.27	7.52	7.73	7.89	7.90	7.78	7.34
		Sones	33	32	31	30	29	27	26	26	26	27

MAXIMUM BHP AT A  
 GIVEN RPM =  $(RPM/748)^3$   
 MAXIMUM RPM = 1490  
 TIP SPEED (ft/min) = RPM x 7.069  
 MAXIMUM MOTOR FRAME SIZE = 213T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/7.25

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast Exhaust Size-420: CUBE

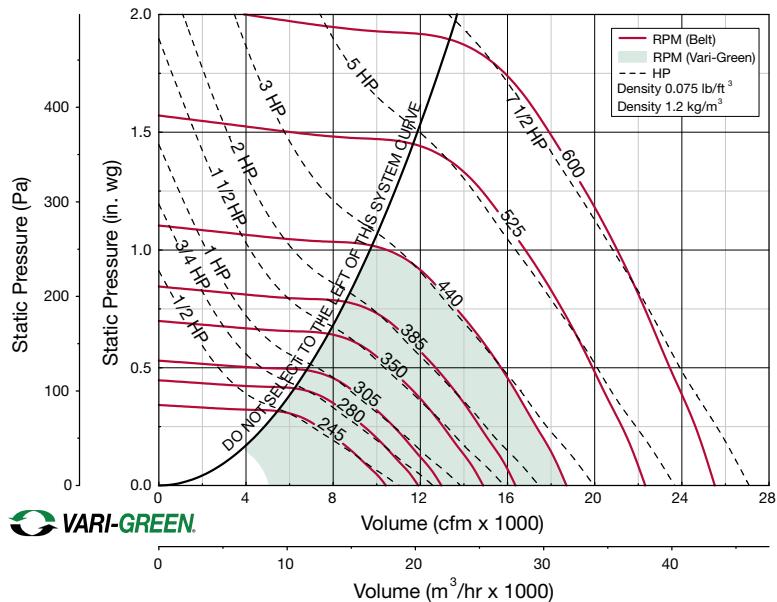


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest catalogued open drip-proof motor.

CUBE	
<sup>^</sup> Approximate Weight	578 (262)
Damper Size	46 x 46 (1168 x 1168)
Roof Opening	48 1/2 x 48 1/2 (1232 x 1232)

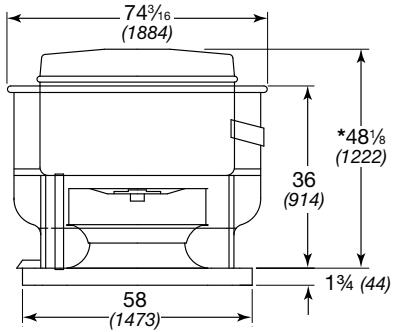


Motor HP	Fan RPM	Static Pressure in Inches wg									
		0	0.125	0.25	0.375	0.5	0.75	1	1.25	1.5	1.75
<b>420</b>											
1/2	VG-1	CFM	9353	7846	5075						
		BHP	0.31	0.37	0.35						
		Sones	6.5	6.0	5.5						
	VG-2	CFM	10416	9104	7304						
		BHP	0.43	0.50	0.53						
		Sones	7.2	6.7	6.1						
3/4	VG-1	CFM	11904	10785	9418	7419					
		BHP	0.64	0.73	0.78	0.77					
		Sones	8.3	7.7	7.1	6.6					
	VG-2	CFM	12966	11959	10781	9272					
		BHP	0.82	0.94	1.00	1.02					
		Sones	9.4	8.8	8.0	7.3					
1	VG-1	CFM	14879	14037	13050	11925	10562				
		BHP	1.24	1.38	1.46	1.52	1.54				
		Sones	11.9	11.2	10.1	9.4	8.6				
	VG-2	CFM	16367	15629	14731	13791	12701	9246			
		BHP	1.65	1.81	1.91	1.99	2.05	1.92			
		Sones	14.4	13.5	12.4	11.7	10.7	8.5			
1 1/2	VG-3	CFM	17643	16982	16148	15303	14363	12028			
		BHP	2.07	2.24	2.37	2.45	2.53	2.56			
		Sones	17.2	16.1	14.9	13.8	13.0	10.9			
	VG-3	CFM	18706	18103	17316	16532	15691	13652	10151		
		BHP	2.47	2.65	2.81	2.89	2.98	3.07	2.82		
		Sones	17.7	17.1	16.0	14.7	14.6	12.8	10.6		
2	VG-1	CFM	22319	21817	21220	20560	19904	18497	16795	14802	
		BHP	4.19	4.41	4.61	4.78	4.88	5.10	5.20	5.16	
		Sones	23	22	22	21	20	19.1	18.1	17.6	
	VG-2	CFM	24020	23553	23030	22417	21806	20544	19112	17437	15398
		BHP	5.23	5.46	5.68	5.88	6.02	6.25	6.43	6.50	6.38
		Sones	26	25	25	25	24	23	21	21	21
3	VG-3	CFM	25508	25069	24604	24027	23451	22295	21023	19561	17884
		BHP	6.26	6.51	6.75	6.96	7.15	7.38	7.63	7.75	7.77
		Sones	29	29	29	28	28	27	25	24	26
	VG-2	CFM	25508	25069	24604	24027	23451	22295	21023	19561	17884
		BHP	6.26	6.51	6.75	6.96	7.15	7.38	7.63	7.75	7.77
		Sones	29	29	29	28	28	27	25	24	26
5	VG-1	CFM	22319	21817	21220	20560	19904	18497	16795	14802	
		BHP	4.19	4.41	4.61	4.78	4.88	5.10	5.20	5.16	
		Sones	23	22	22	21	20	19.1	18.1	17.6	
	VG-2	CFM	24020	23553	23030	22417	21806	20544	19112	17437	15398
		BHP	5.23	5.46	5.68	5.88	6.02	6.25	6.43	6.50	6.38
		Sones	26	25	25	25	24	23	21	21	21
7 1/2	VG-3	CFM	25508	25069	24604	24027	23451	22295	21023	19561	17884
		BHP	6.26	6.51	6.75	6.96	7.15	7.38	7.63	7.75	7.77
		Sones	29	29	29	28	28	27	25	24	26
	VG-2	CFM	25508	25069	24604	24027	23451	22295	21023	19561	17884
		BHP	6.26	6.51	6.75	6.96	7.15	7.38	7.63	7.75	7.77
		Sones	29	29	29	28	28	27	25	24	26

MAXIMUM BHP AT A  
 GIVEN RPM = (RPM/303)<sup>3</sup>  
 MAXIMUM RPM = 600  
 TIP SPEED (ft/min) = RPM x 11.06  
 MAXIMUM MOTOR FRAME SIZE = 213T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/8.99

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for installation type A: Free inlet hemispherical sone levels.

# Roof Upblast Exhaust Size-480: CUBE

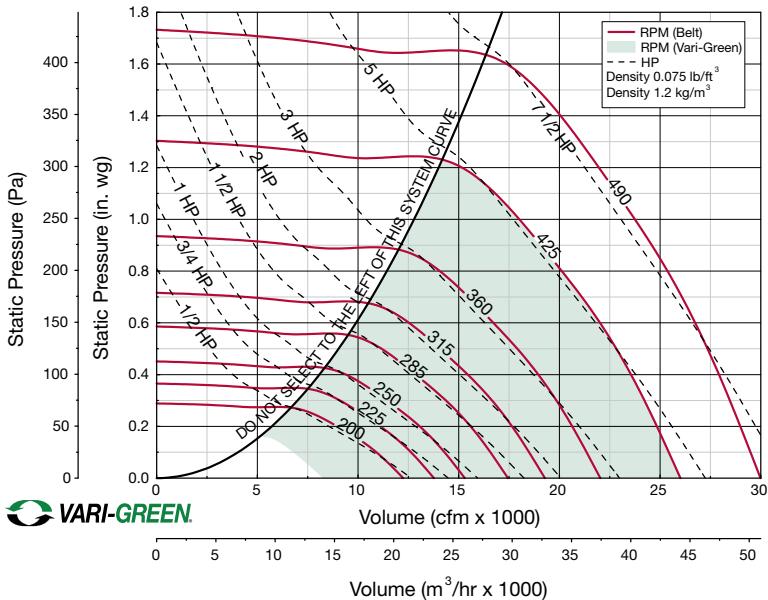


All dimensions in inches (*millimeters*), weight in pounds (*kilograms*).

\* May be greater depending on motor.

<sup>^</sup>Weight shown is largest cataloged open drip-proof motor.

CUBE	
<sup>^</sup> Approximate Weight	675 (306)
Damper Size	52 x 52 (1321 x 1321)
Roof Opening	54 1/2 x 54 1/2 (1385 x 1385)



Motor HP		Fan RPM	Static Pressure in Inches wg												
			0	0.125	0.25	0.375	0.5	0.625	0.75	1	1.25	1.5			
<b>480</b>															
1/2	VARI-GREEN	VG-1	CFM	11016	8924										
			BHP	0.33	0.39										
			Sones	5.5	4.9										
		VG-2	CFM	12240	10490	7688									
			BHP	0.45	0.53	0.52									
			Sones	6.3	5.8	5.3									
3/4		VG-3	CFM	13770	12261	10132									
			BHP	0.65	0.73	0.76									
			Sones	7.5	7.0	6.6									
1		VG-4	CFM	15300	13988	12248	9988								
			BHP	0.89	0.98	1.04	1.03								
			Sones	9.0	8.5	8.2	7.9								
1 1/2		VG-5	CFM	17442	16332	14991	13240	11154							
			BHP	1.31	1.43	1.52	1.55	1.52							
			Sones	11.1	10.6	10.0	9.6	9.2							
2		VG-6	CFM	19278	18274	17116	15719	14033	11996						
			BHP	1.77	1.90	2.01	2.08	2.09	2.03						
			Sones	12.9	12.5	11.8	11.3	10.4	10.2						
3		VG-7	CFM	22032	21153	20222	19142	17848	16410	14749					
			BHP	2.64	2.79	2.93	3.05	3.10	3.12	3.08					
			Sones	16.8	16.5	16.1	15.3	14.7	13.7	12.7					
5		VG-8	CFM	24174	23373	22572	21605	20621	19343	18035	14722				
			BHP	3.49	3.65	3.81	3.94	4.07	4.11	4.13	3.97				
			Sones	21	20	20	19.2	18.5	17.6	16.6	14.9				
7 1/2		VG-9	CFM	26010	25266	24521	23679	22764	21766	20556	17922				
			BHP	4.35	4.52	4.69	4.85	4.98	5.09	5.12	5.09				
			Sones	22	21	21	20	19.4	18.7	17.7	15.6				
460		VG-10	CFM	28152	27464	26776	26064	25219	24373	23399	21163	18582			
			BHP	5.51	5.70	5.89	6.07	6.22	6.37	6.46	6.52	6.42			
			Sones	25	24	24	23	22	22	21	18.5	18.7			
490			CFM	29988	29342	28697	28051	27291	26497	25704	23674	21437	18846		
			BHP	6.66	6.86	7.06	7.26	7.43	7.59	7.75	7.85	7.84	7.67		
			Sones	28	27	27	26	25	25	24	22	20	24		

MAXIMUM BHP AT A  
 GIVEN RPM = (RPM/246)<sup>3</sup>  
 MAXIMUM RPM = 490  
 TIP SPEED (ft/min) = RPM x 12.63  
 MAXIMUM MOTOR FRAME SIZE = 213T  
 AVERAGE DISCHARGE VELOCITY  
 (FPM) = CFM/11.72

Performance certified is for installation type A: Free inlet, Free outlet. Power rating (Bhp) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 ft. (1.5 m) in a hemispherical free field calculated per AMCA Standard 301.  
 Values shown are for installation type A: Free inlet hemispherical sone levels.