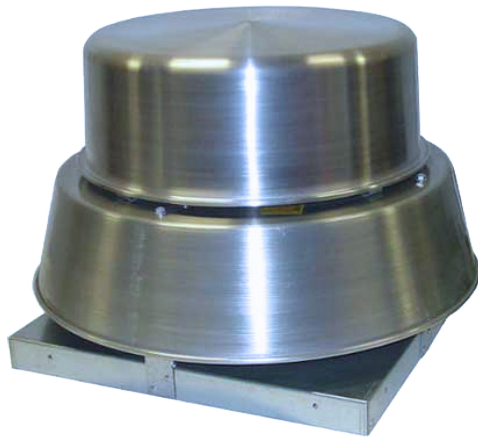
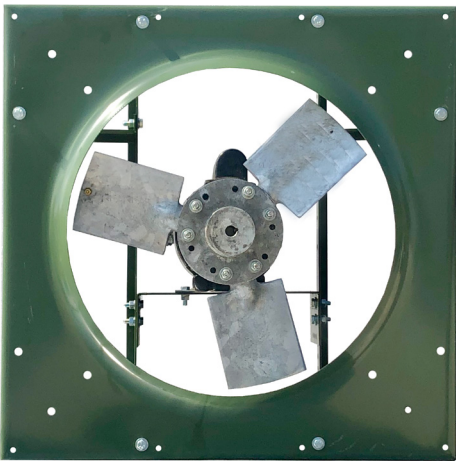


# DIRECT DRIVE ENERGY SAVER FANS



# ENERGYSAVER



## TABLE OF CONTENTS

Energy Saver Motor Overview.....	3
CRDA   Downblast Centrifugal PRV	
Features & Accessories.....	4
Dimensions & Performance Data.....	5
CUDA   Upblast Centrifugal PRV	
Features & Accessories.....	6
Dimensions & Performance Data.....	7
SQDA   In-Line Centrifugal Duct Fan	
Features & Accessories.....	8
Dimensions & Performance Data.....	9
CWDA   Centrifugal Wall Fan	
Features & Accessories.....	10
Dimensions & Performance Data.....	11
CDU   Wall Fan	
Features & Accessories.....	12
Dimensions & Performance Data.....	13
CDC   Wall Fan	
Features & Accessories.....	14
Dimensions & Performance Data.....	15
Speed Control Options & Limited Warranty.....	16

American Coolair is proud to introduce its line of electrically commutated EnergySaver motor powered fans. EnergySaver motors allow for precise control of air movement systems, while operating at a fraction of the cost of conventional permanent split capacitor (PSC) direct drive motors, and even belt-drive units.

In many cases, EnergySaver motors will pay for themselves within the first year of their operation!



904-389-3646

Sales 904-389-0371 | Fax 904-387-3449

info@coolair.com

www.AmericanCoolair.com



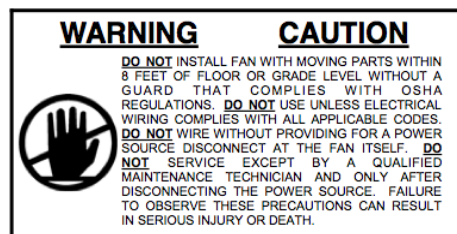
/AmericanCoolair



/AmericanCoolair



/Company/American-Coolair-Corp



# ENERGYSAVER



EnergySaver motors offer significant savings over both PSC Motor direct-drive fans and standard belt-drive fans. Not only do EnergySaver motors have a higher nameplate efficiency, they maintain that efficiency even as the motor load is reduced with slower fan speeds.

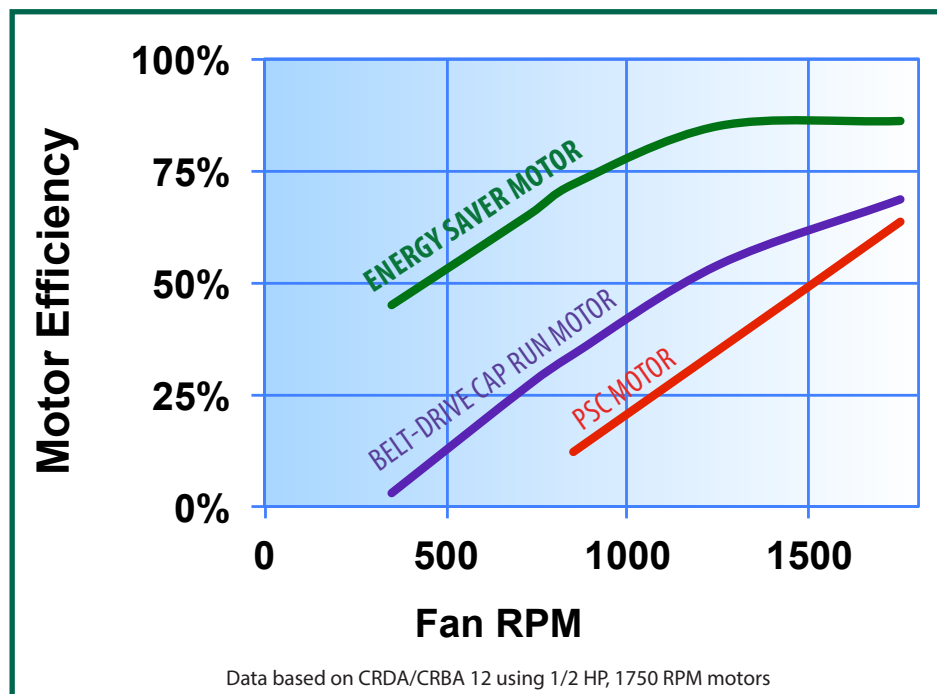
At 75% of motor nameplate speed, the EnergySaver motor provides for a 40% energy savings over a comparable belt-drive unit, and a 60% savings over a PSC motor. At 50% of full speed, a 60% savings over belt-drives, and an 80% savings over PSC motors is realized.

The electrically commutated EnergySaver motor is a super-efficient brushless DC motor. The internal electronics of the motor convert standard single-phase AC line power into DC power, without the need for any external inverter or VFD device. With ability to control the motor manually, and an option to automate control based on system performance, American Coolair's EnergySaver motors are a compliment to today's lean building design.

Centrifugal and axial units powered by EnergySaver motors provide the versatility and low maintenance requirements and impressive fan efficiencies.

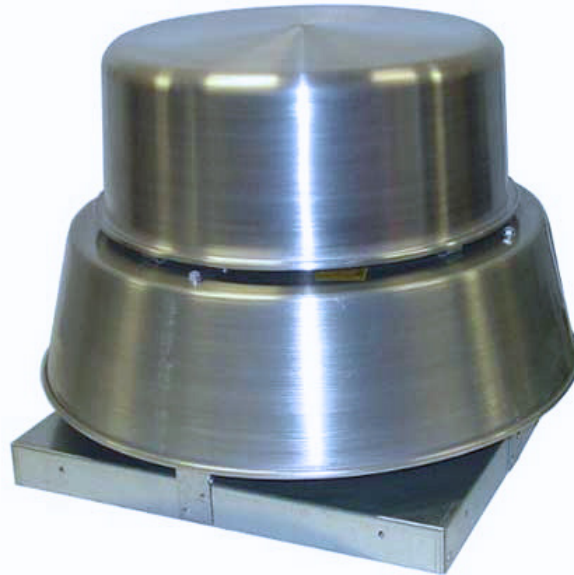
All EnergySaver motors can be controlled down to 20% of the nameplate speed. This means a 1750 RPM motor can operate at any speed between 350 and 1750 RPM. That's a 60% greater RPM range than what is capable for a PSC motor.

Engineered to exacting standards, EnergySaver motors will provide you with years of trouble-free, economical service. EnergySaver motors are currently available in 1/4 HP, 1/2 HP, and 1 HP, and will soon be available in additional sizes and voltages!



# CRDA

## DIRECT DRIVE DOMED CENTRIFUGAL POWER ROOF VENTILATORS



## STANDARD FEATURES

- Weather-resistant aluminum motor compartment cover removes easily for access to the motor
- Out-of-airstream motors are isolated for protection from exhaust airstream
- Aluminum centrifugal wheel is a non-overloading, backward inclined design with state-of-the-art computerized balancing
- Overlapping wheel and deep-spun venturi minimize noise and air turbulence, increasing efficiency
- Wheel balance weights are permanently affixed to ensure vibration-free operation
- Wheel backplate fins cool the motor compartment, extending motor life
- On board motor speed controller varies speed to 20% of nameplate
- Birdscreen is 1/2" galvanized mesh
- Safety Disconnect Device
- AMCA Licensed for Sound and Air Performance
- UL Listed for Standard 705

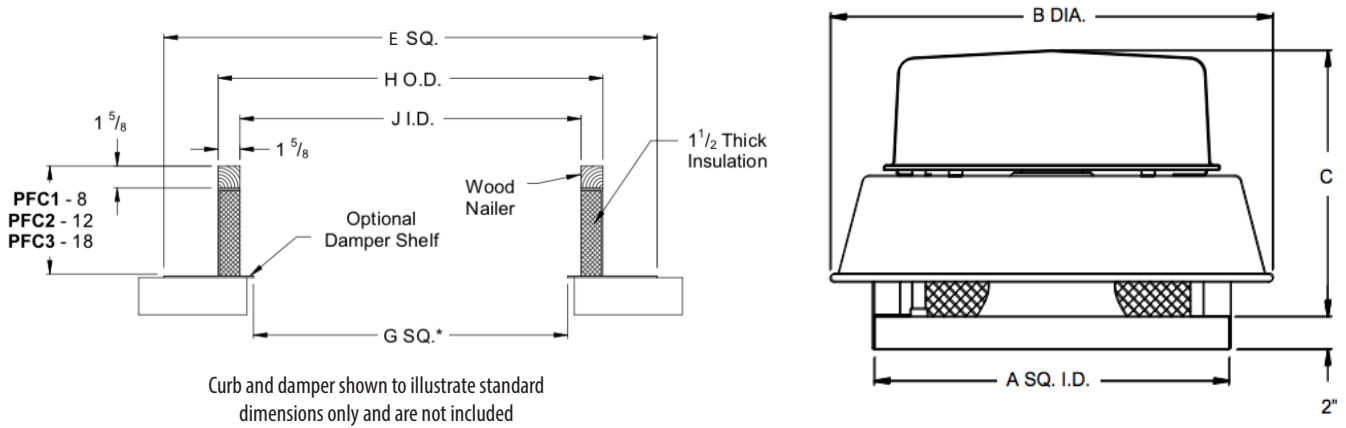
### MORE MOTOR SELECTIONS AVAILABLE SOON!

115v, 208v, 230v, 277v selectable  
motors in 1/4, 1/2 and 1 HP

## AVAILABLE ACCESSORIES

- Backdraft Damper
- Hinge Kit
- Remote Speed Controller
- Variable Pressure Control
- Variable Temperature Control

### DIMENSIONS



Unit Size	Dimensions in Inches							
	A	B	C	D	E	G	H	J
06, 10	18	23 1/8	12	24 1/2	12 3/4	11 1/4	16 1/2	13 1/4
12 - 15	23	28 5/8	16 1/2	29 1/2	17 3/4	16 1/4	21 1/2	18 1/4

### PERFORMANCE DATA

Fan Size	CFM at Static Pressure														Motor HP	RPM
	0"		1/8"		1/4"		1/2"		3/4"		1"		1.5"			
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones		
6	582		546		518		443								1/4	1750
	0.10	12.9	0.10	12.6	0.10	12.1	0.11	11.1								
8	759		724		695		618		527						1/4	1750
	0.09	11.9	0.10	11.8	0.11	11.6	0.12	11.3	0.13	11.1						
10	1006		957		910		811		689		452				1/4	1750
	0.13	12.4	0.13	12.6	0.14	12.1	0.16	11.4	0.16	10.6	0.15	9.8				
12	1983		1933		1881		1776		1671		1549		1239		1/2	1750
	0.40	18.1	0.42	17.8	0.43	17.5	0.47	17.1	0.49	16.9	0.52	16.8	0.52	16.3		
13	2651		2601		2547		2427		2301		2168		1873		1	1750
	0.62	22	0.65	22	0.67	22	0.72	21	0.74	21	0.78	20	0.81	18.8		
15	3216		3191		3160		3055		2937		2802		2576		1	1625
	0.93	24	0.95	23	0.97	23	1.02	22	1.06	22	1.11	22	1.20	21		



# CUDA

## DIRECT DRIVE UPBLAST CENTRIFUGAL POWER ROOF VENTILATORS



## STANDARD FEATURES

- Safety disconnect device
- Weather-resistant, spun aluminum motor compartment cover removes easily for access to motor and drive
- Out-of-airstream motors are isolated for protection from exhaust airstream
- Overlapping wheel and deep-spun venturi minimize noise and air turbulence, increasing efficiency
- Aluminum centrifugal wheel is a non-overloading, backward inclined design with state-of-the-art computerized balancing
- Permanently affixed wheel balance weights ensure vibration free operation
- On board motor speed controller varies speed to 20% of nameplate
- Wheel backplate fins cool the motor compartment, extending motor life
- AMCA Licensed for Sound and Air Performance
- UL Listed for Standard 705

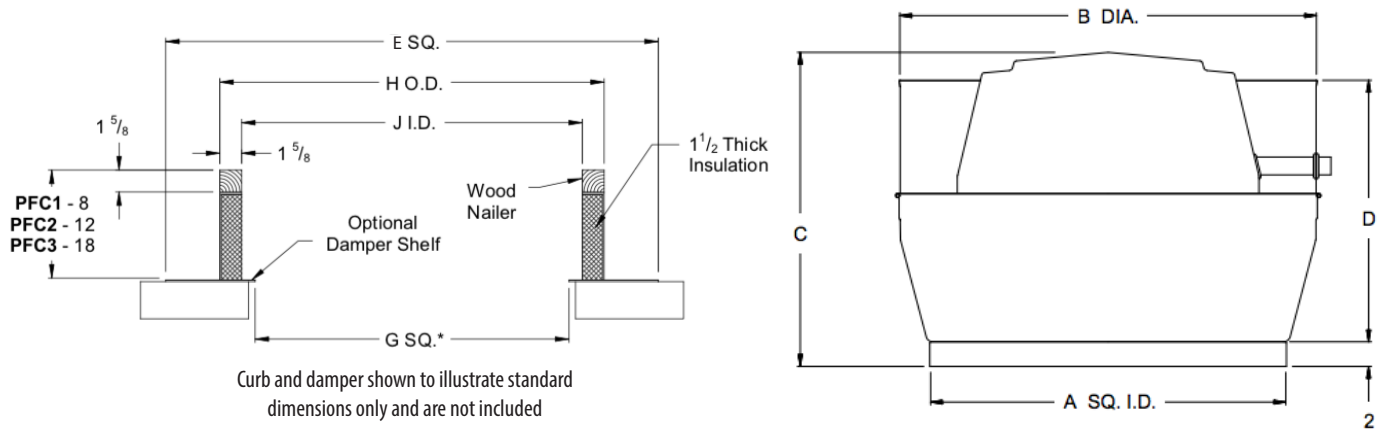
## AVAILABLE ACCESSORIES

- Backdraft Dampers
- Hinged base kits
- Speed Controller
- Variable Pressure Control
- Variable Temperature Control
- Bird Screen

**MORE MOTOR SELECTIONS  
AVAILABLE SOON!**

115v, 208v, 230v, 277v selectable  
motors in 1/4, 1/2 and 1 HP

## DIMENSIONS



Unit Size	Dimensions in Inches							
	A	B	C	D	E	G	H	J
06 - 10	18	23	14 1/8	11 1/8	12 1/2	11 1/4	16 1/2	13 1/4
12 - 15	26	29 1/4	19	22	32 1/2	19 1/4	24 1/2	21 1/4

## PERFORMANCE DATA

Fan Size	CFM at Static Pressure														Motor HP	RPM
	0"		1/8"		1/4"		1/2"		3/4"		1"		1.5"			
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones		
6	581		547		508		437								1/4	1750
	0.07	12.0	0.07	11.4	0.07	10.8	0.08	9.9								
8	741		705		671		591		469						1/4	1750
	0.08	11.2	0.08	10.8	0.09	10.2	0.09	10.3	0.10	10.0						
10	952		925		890		802		693		523				1/4	1750
	0.10	11.6	0.10	11.4	0.11	11.3	0.12	10.2	0.13	9.4	0.13	9.0				
12	1800		1751		1703		1606		1502		1383		1082		1/2	1750
	0.36	17.4	0.37	17.1	0.38	17.0	0.41	17.6	0.43	18.0	0.45	17.2	0.45	15.6		
13	2427		2363		2302		2182		2071		1958		1639		1	1750
	0.61	18	0.63	17	0.65	17	0.69	16	0.72	16	0.74	16	0.74	14.7		
15	3011		2953		2894		2774		2639		2476		2122		1	1625
	0.86	20	0.88	19	0.90	19	0.95	18	0.98	17	1.00	17	1.02	17		

# SQDA

DIRECT DRIVE CENTRIFUGAL  
IN-LINE DUCT FAN



## STANDARD FEATURES

- Direct drive assembly reduces maintenance and operating costs
- Out-of-airstream motors are isolated for protection from exhaust airstream
- Aluminum centrifugal wheel is a non-overloading, backward inclined design with state-of-the-art computerized balancing
- Galvanized outer skin with 3 removable panels for access
- Rigid internal cross-bracing
- On board motor speed controller varies speed to 20% of nameplate
- Factory wired disconnect device
- AMCA Licensed for Sound and Air Performance
- UL Listed for Standard 705

## AVAILABLE ACCESSORIES

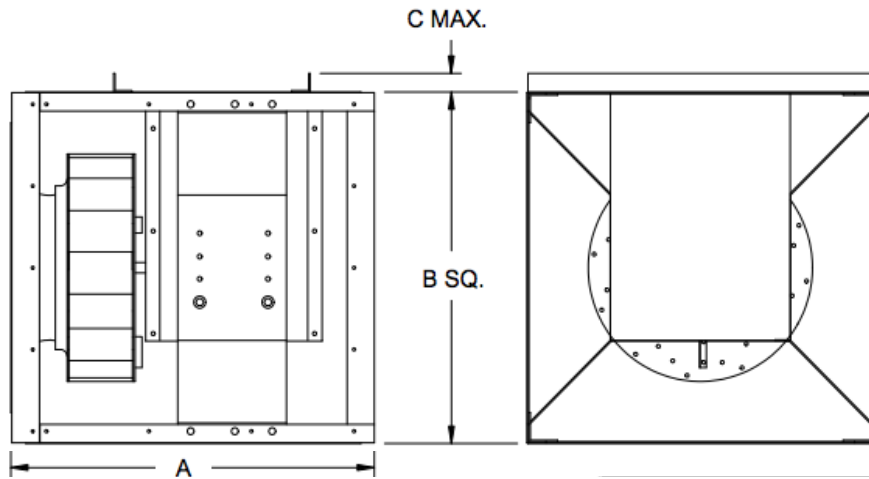
- Vibration Isolators
- Inlet & Outlet Flanges
- Inlet & Outlet Guards
- Backdraft Dampers
- Duct Connector
- Internal Insulation
- Remote Speed Controller
- Variable Pressure Control
- Variable Temperature Control

**MORE MOTOR SELECTIONS  
AVAILABLE SOON!**

115v, 208v, 230v, 277v selectable  
motors in 1/4, 1/2 and 1 HP



## DIMENSIONS



Unit Size	Dimensions in Inches		
	A	B	C
06 - 10	17	14	-
12	25 3/4	18	1 3/8
13	26 3/8	20	1 3/8
15	27 7/8	23	1 3/8

## PERFORMANCE DATA

Fan Size	CFM at Static Pressure														Motor HP	RPM
	0"		1/8"		1/4"		1/2"		3/4"		1"		1.5"			
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones		
6	474		450		409		327								1/4	1750
	0.08	9.9	0.08	9.6	0.09	9.4	0.09	8.6								
8	655		626		598		534								1/4	1750
	0.09	10.6	0.09	10.5	0.09	10.2	0.10	9.7								
10	802		766		726		639		581						1/4	1750
	0.10	11.2	0.10	11.3	0.11	11.2	0.12	11.2	0.13	10.5						
12	1746		1682		1630		1523		1400		1273				1/2	1750
	0.37	16.3	0.39	16.1	0.41	15.6	0.44	14.9	0.47	15.1	0.48	14.9				
13	2314		2260		2208		2106		2003		1884		1570		1	1750
	0.58	20	0.60	19	0.62	19	0.66	18	0.70	17	0.73	17	0.75	16.4		
15	3122		3046		2973		2836		2693		2526		2119		1	1625
	0.76	24	0.79	23	0.82	22	0.88	21	0.93	21	0.96	20	0.99	20		

# CWDA

## DIRECT DRIVE CENTRIFUGAL WALL FANS



pictured from bottom to show drain hole

## STANDARD FEATURES

- Weather-resistant aluminum motor compartment cover removes easily for access to motor
- Out-of-airstream motors are isolated for protection from exhaust airstream
- Aluminum centrifugal wheel is a non-overloading, backward inclined design with state-of-the-art computerized balancing
- Overlapping wheel and deep-spun venturi minimize noise and air turbulence, increasing efficiency
- On board motor speed controller varies speed to 20% of nameplate
- Permanently affixed wheel balance weights ensure vibration-free operation
- Wheel backplate fins cool the motor compartment, extending motor life
- Birdscreen is 1/2" x 1/2" galvanized wire mesh
- Safety disconnect device
- AMCA Licensed for Sound and Air Performance
- UL Listed for Standard 705

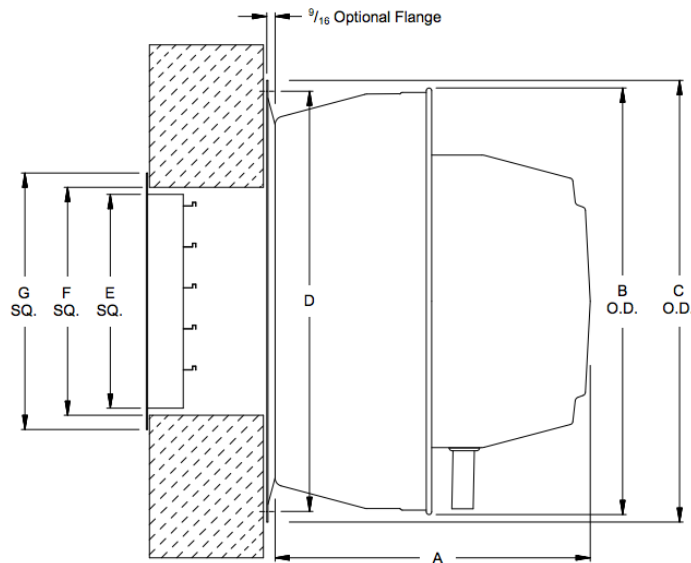
### MORE MOTOR SELECTIONS AVAILABLE SOON!

115v, 208v, 230v, 277v selectable  
motors in 1/4, 1/2 and 1 HP

## AVAILABLE ACCESSORIES

- Optional Wall Mounting Flange
- Remote Speed Controller
- Backdraft Damper
- Variable Pressure Control
- Variable Temperature Control

## DIMENSIONS



Unit Size	Dimensions in Inches						
	A	B	C	D	E	F	G
06 - 10	12 1/8	22 3/4	25 1/4	24 1/8	10 1/4	10 3/4	12 1/2
12 - 15	17 1/4	29 7/8	31	29 1/2	15 1/4	15 3/4	17 1/2

## PERFORMANCE DATA

Fan Size	CFM at Static Pressure												Motor HP	RPM		
	0"		1/8"		1/4"		1/2"		3/4"		1"				1.5"	
	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones	BHP	Sones			BHP	Sones
6	581		547		508		437								1/4	1750
	0.07	12.0	0.07	11.4	0.07	10.8	0.08	9.9								
8	741		705		671		591		469						1/4	1750
	0.08	11.2	0.08	10.8	0.09	10.2	0.09	10.3	0.10	10.0						
10	952		925		890		802		693		523				1/4	1750
	0.10	11.6	0.10	11.4	0.11	11.3	0.12	10.2	0.13	9.4	0.13	9.0				
12	1800		1751		1703		1606		1502		1383		1082		1/2	1750
	0.36	17.4	0.37	17.1	0.38	17.0	0.41	17.6	0.43	18.0	0.45	17.2	0.45	15.6		
13	2427		2363		2302		2182		2071		1958		1639		1	1750
	0.61	18	0.63	17	0.65	17	0.69	16	0.72	16	0.74	16	0.74	14.7		
15	3011		2953		2894		2774		2639		2476		2122		1	1625
	0.86	20	0.88	19	0.90	19	0.95	18	0.98	17	1.00	17	1.02	17		

# CDU

DIRECT DRIVE  
WALL FANS



## STANDARD FEATURES

- Ideal for quietly moving low to medium volumes of air
- 3 Formed Steel "Teardrop" Blades designed for ultra-quiet operation
- Steel panel with rugged angle frame construction
- Epoxy finish
- PVC coated steel wire motor side inlet guard
- Motors are 115v, single phase
- Available controller to adjust the speed to 20% of nameplate
- AMCA Licensed for Sound and Air Performance
- UL Listed for Standard 705

**MORE MOTOR SELECTIONS  
AVAILABLE SOON!**

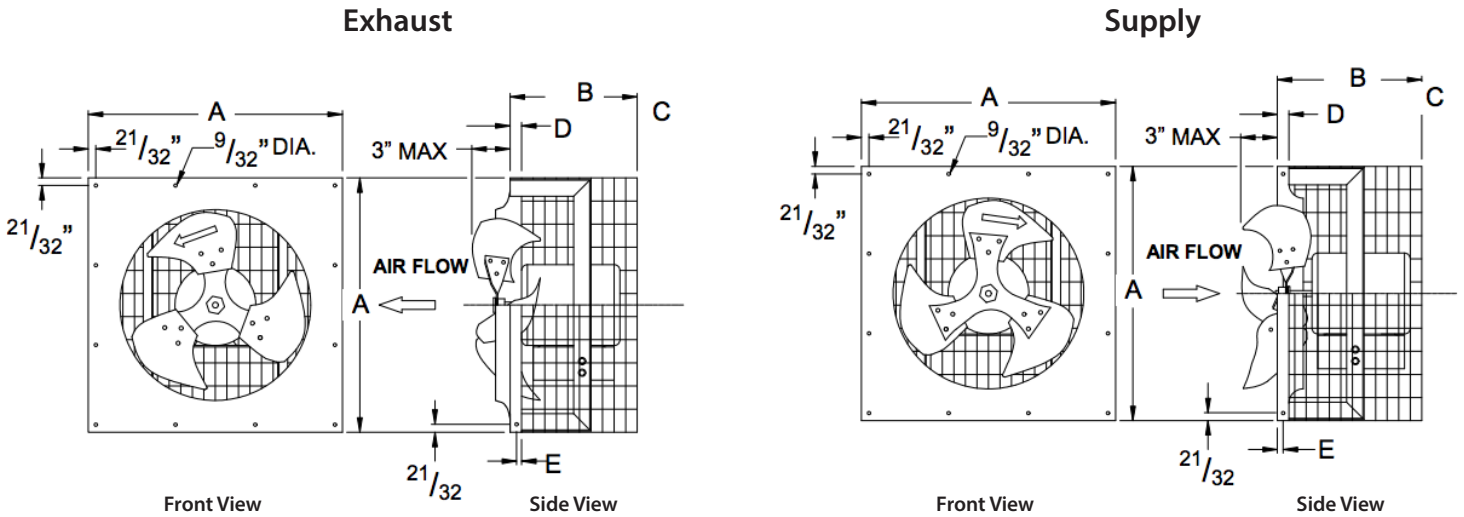
2 HP 208v or 230v

## AVAILABLE ACCESSORIES

- Remote Speed Controller
- Shutters
- Shutter Motor Kit
- Wall Housing
- Discharge Guards
- Discharge Hoods
- Intake Hoods



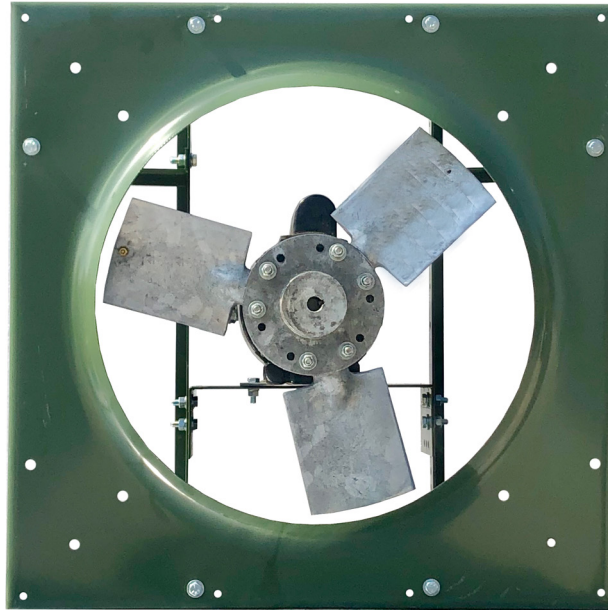
## DIMENSIONS



Unit Size	Dimensions in Inches			
	A	B	C	D
12	18	15	1/2	1/4
14	22	13	1	1/2
16	22	13	1	1/2
18	26	15	1	1/2
20	26	15	1	1/2

## PERFORMANCE DATA

Fan Model	Fan Size	Cubic Feet Per Minute (CFM) at Static Pressure						Motor HP	Fan RPM	Sone Rating	Max BHP	Blade Descr.	
		0"	1/8"	1/4"	3/8"	1/2"	5/8"					No.	Pitch
CDU12F17	12	1,500	1,380	1,210	—	—	—	1/4	1750	7.6	0.16	3	33°
CDU12H17	12	1,760	1,630	1,430	—	—	—	1/2	1750	9.8	0.23	3	41°
CDU14F17	14	2,035	1,920	1,795	—	—	—	1/4	1750	9.2	0.23	3	29°
CDU14H17	14	2,635	2,520	2,395	2,200	—	—	1/2	1750	13.8	0.38	3	41°
CDU16H17	16	2,970	2,845	2,690	2,515	2,285	—	1/2	1750	16.6	0.39	3	32°
CDU18H17	18	3,265	3,130	2,960	—	—	—	1/2	1750	14.7	0.40	3	21°
CDU18J17	18	3,760	3,660	3,510	3,355	3,150	—	1	1750	16.2	1.0	3	25°
CDU18K17	18	4,385	4,230	4,110	3,960	3,780	—	1	1750	17.5	0.76	3	32°
CDU20K17	20	4,940	4,815	4,670	4,520	4,340	—	1	1750	24	0.89	3	24°



## STANDARD FEATURES

- Ideal for quietly moving medium to high volumes of air
- Cast Aluminum adjustable pitch airfoil blades - blade pitch is set for optimum performance
- Cast aluminum hub
- Epoxy finish
- 1HP motors are 115v, single phase
- 2HP motors are 208-230v, single or three phase
- Available controller to adjust the speed to 20% of nameplate
- AMCA Licensed for Sound and Air Performance
- UL Listed for Standard 705

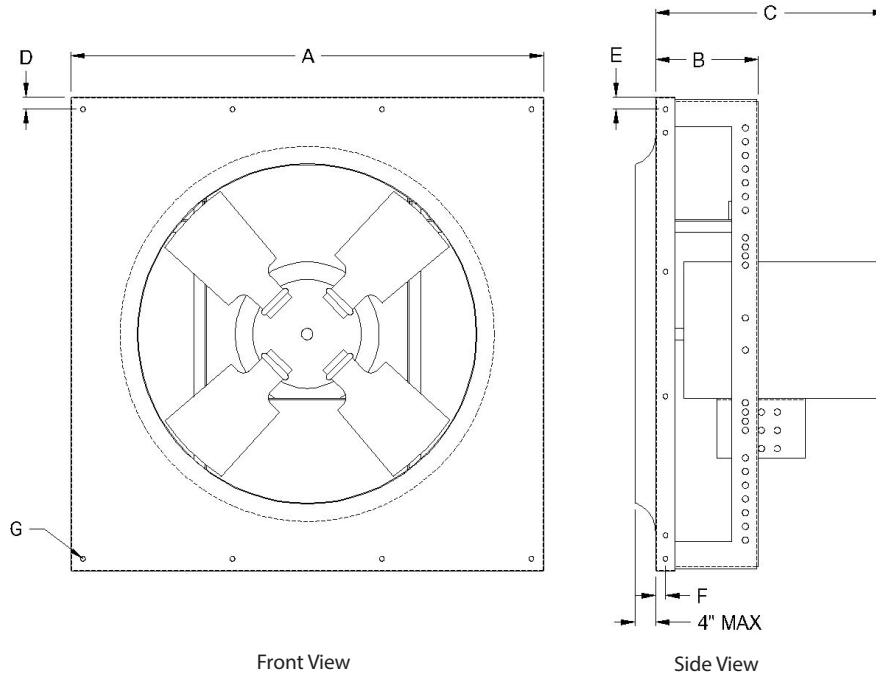
## AVAILABLE ACCESSORIES

- Available Speed Controller
- Wall Housing
- Shutters
- Discharge Guards
- Discharge Hoods
- Intake Hoods





## DIMENSIONS



Unit Size	Dimensions in Inches						
	A	B	C	D	E	F	G
18	26	5 5/8	13 3/8	11/16	11/16	9/16	17/64
24	32	5 1/8	12 1/2	6	5	7/8	3/8
30	38	5 1/8	13 7/8	6	5	7/8	3/8

## PERFORMANCE DATA

Fan Model	Fan Size	Cubic Feet Per Minute (CFM) at Static Pressure							Motor HP	Fan RPM	Sone Rating	Max BHP	Blade Descr.	
		0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"					No.	Pitch
CDC18K17	18	5,065	4,851	4,569	4,373	3,942	3,456	2,894	1	1750	23	0.85	4	29.5°
CDC24N17	24	11,646	11,235	10,739	10,221	9,651	9,052	8,445	2	1750	39	2.31	3	27°
CDC30N17	30	13,716	13,156	12,517	11,835	11,161	10,457	9,695	2	1750	47	2.24	3	12°

# SPEED CONTROL OPTIONS



## REMOTE MOUNT SPEED CONTROL

When frequent or occasional adjustment of the fan speed is necessary, Coolair offers a manual speed controller that can be located at the fan or up to 100' away. The controller can be specified pre-wired at the fan, or loose for remote field mounting, and can control the fan from nameplate speed down to 20% of nameplate.

## VARIABLE TEMPERATURE CONTROL

The Variable Temperature Control allows the EnergySaver motor to be controlled via a remotely mounted room thermostat. The thermostat is connected to a programmable control module which, in turn, varies the motor speed to maintain the desired room temperature automatically.

## VARIABLE PRESSURE CONTROL

The Variable Pressure Control features a remotely mounted pressure sensor which is connected to the motor controller. Motor speed is then automatically adjusted based on the system status as indicated by the pressure sensor. Once set and tuned for the system, the VPC allows for fully automated ventilation control.

# LIMITED WARRANTY

In the sale of its products, American Coolair Corporation agrees to correct, by repairs or replacement, any defects in workmanship or material that may develop under proper and normal use during the period of one year from the date of shipment from the factory. Any product or part proving, upon American Coolair's examination, to be defective during limited warranty period will be repaired or replaced, at American Coolair's option, f.o.b. factory, without charge.

Deterioration or wear caused by chemicals, abrasive action or excessive heat shall not constitute defects.

Motors are guaranteed only to the extent of the manufacturer's warranty.

American Coolair's limited warranty does not apply to any of its products or parts that have been subject to accidental damage, misuse by the user, unauthorized alterations, improper installation or electrical wiring, or lack of proper lubrication or other service requirements as established by American Coolair.

Repairs or replacements provided under the above terms shall constitute fulfillment of all American Coolair's obligations with respect to limited warranty.

THE LIMITED WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY OR IMPLIED, INCLUDING WITHOUT LIMITATION THAT OF MERCHANTABILITY AND FITNESS.

NO LIABILITY FOR RE-INSTALLATION COST OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE IS ASSUMED OR SHALL BE IMPOSED UPON AMERICAN COOLAIR.



904-389-3646  
Sales 904-389-0371 | Fax 904-387-3449  
info@coolair.com

www.AmericanCoolair.com  
 /AmericanCoolair  /AmericanCoolair  
 /Company/American-Coolair-Corp

