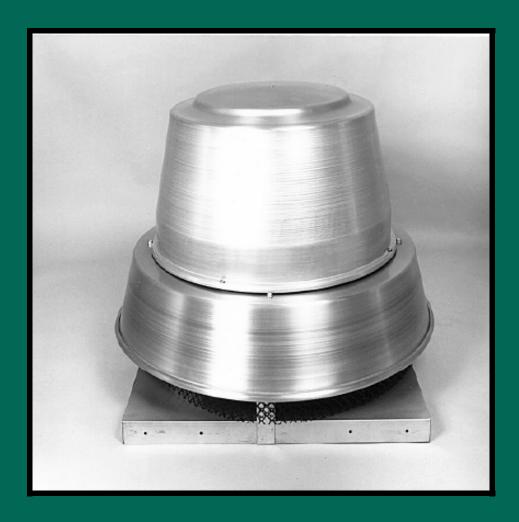


AMERICAN COOLAIR CORPORATION



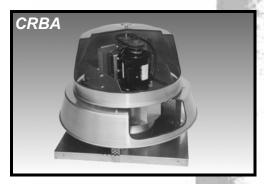
Centrifugal Power Roof Ventilators

TYPE CRBCA - BELT DRIVE TYPE CRBA - BELT DRIVE TYPE CRDA - DIRECT DRIVE

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CRBCA

Sizes 06 to 24
Flow rates from
185 to 10,3280 CFM
and 2" Static Pressure



Sizes 06 to 52 Flow rates from 185 to 43,962 CFM and 2" Static Pressure

BELT DRIVE FANS

CRBCA and CRBA

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CRDA

Sizes 06 to 20 Flow rates from 162 to 5,730 CFM and 1" Static Pressure

DIRECT DRIVE FANS

CRDA

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STANDARD FEATURES

CRBCA, CRBA and CRDA Units

Weather-resistant aluminum motor compartment cover removes easily for access to motor and drives.

Out-of-airstream
open motors are
isolated for protection
from exhaust
airstream.

Aluminum
centrifugal wheel is
non-overloading,
backward inclined
design with state-ofthe-art computerized
balance.

Overlapping wheel and deep-spun venturi minimize noise and air turbulence, increasing efficiency.

Wheel balance weights are permanently affixed to assure vibration-free operation.

Wheel backplate fins cool the motor compartment, extending motor life.

Birdscreen is 1/2" galvanized mesh

AMCA Seal assures certified rating of air and sound performance.

UL Listed for Standard 705.

CRBCA and CRBA

Factory-wired disconnect switch is an available option.

Belt drive with adjustable motor pulley for flexibility to match operating requirements.

Hinged motor bracket with tensioning bolt(s) facilitates maintenance of belt tension.





CRDA

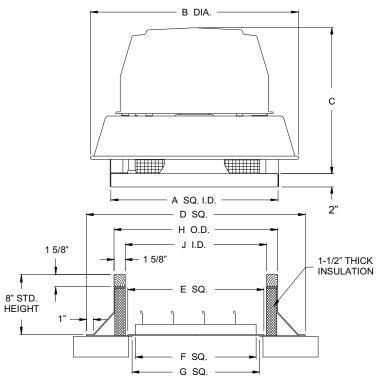
Factory-wired disconnect device for standard motors.

Direct-drive assembly reduces maintenance and operating costs.

Variable speed control available on some models.



CRBCA, CRBA and CRDA Ventilator, Roof Curb and Damper Dimensions



1114	Ventila	ator Dime	ensions	ı	Roof Curl	and Da	amper Di	mensions	3
Unit	Α	В	С	D	E	F	G	Н	J
CRBA & CRBCA 06, 08, 10	18	23 1/8	20 1/2	24 1/2	12 1/2	10	11 1/4	16 1/2	13 1/4
CRDA 06, 08, 10	18	23 1/8	12	24 1/2	12 1/2	10	11 1/4	16 1/2	13 1/4
CRBA & CRBCA 12, 13, 15 CRDA 12J17, 13K17 & 15L17	23	28 5/8	22 1/2	29 1/2	17 1/2	15	16 1/4	21 1/2	18 1/4
CRDA 12E10, 12J16, 13F11, 13J15, 15H10 & 15K15	23	28 5/8	16 1/2	29 1/2	17 1/2	15	16 1/4	21 1/2	18 1/4
CRBA, CRBCA & CRDA 16, 18, 20	30	35 1/2	24 5/8	36 1/2	24 1/2	22	23 1/4	28 1/2	25 1/4
CRBA & CRBCA 24	34	42 3/4	32 1/2	40 1/2	28 1/2	26	27 1/4	32 1/2	29 1/4
CRBA 30	40	50 1/4	36 3/4	46 1/2	34 1/2	32	33 1/4	38 1/2	35 1/4
CRBA 36	46	61 3/4	44 1/4	52 1/2	40 1/2	38	39 1/4	44 1/2	41 1/4
CRBA 44	56	71 1/4	49	62 1/2	50 1/2	48	49 1/4	54 1/2	51 1/4
CRBA 52	65	83 3/4	55 1/2	71 1/2	59 1/2	57	58 1/4	63 1/2	60 1/4

Dimensions in inches

CRBCA Belt Drive Centrifugal Power Roof Ventilators

Applications

The CRBCA units are quiet, dependable power roof ventilators recommended for a wide range of general exhaust applications where low and medium ranges of air volume and pressure are specified. Applications include virtually all types of light manufacturing, commercial and institutional buildings such as shopping centers, hospitals, schools, hotels, office and apartment buildings, warehouses, airports, bus terminals and many others.

CRBCA units are specified where a roof-mounted location is desired to eliminate interference with other equipment or activities in the building. They permit the direct upward venting of air. CRBCA units may be used with or without ducts.

The advantages of a CRBCA belt-drive over a direct-drive roof ventilator include quieter operation and adjustable performance to meet operating needs.

Construction

CRBCA models feature a housing of durable spun aluminum for optimum weather protection. The overlapping deep-spun venturi minimizes air turbulence and increases efficiency.

The aluminum centrifugal wheel is a non-overloading, backward-inclined type, selected for low noise levels. Backplate fins draw cool air through the motor compartment. The wheel is secured to the machined aluminum "C-Drive" disc, and computer balanced on state-of-the-art equipment.

Neoprene vibration isolators to reduce noise and wear, and 1/2" galvanized mesh birdscreen are both standard.

Drive Mechanism

The belt driven CRBCA utilizes a unique bearing/shaft arrangement that has been designated the "C-Drive". This "C-Drive" is patterned after American Coolair's unique static shaft drive design that has been in existence for over eighty years, serving the general ventilation markets with reliable propeller products. This type of drive uses a captured bearing arrangement inside a cast aluminum disc assembly locked to a short, large diameter shaft. The shaft is held stationary and the centrifugal wheel/disc assembly rotates on the shaft instead of the entire assembly rotating.

As a result of reduction of radial loading of the bearings, the calculated L10 bearing life exceeds 1,000,000 hours or an average bearing life of 5,000,000 hours. Most other manufacturers' turning shaft drive designs result in cataloged average bearing life of 150,000-200,000 hours. Additionally, the machined surface of the "C-Drive" provides a rigid backplate for the centrifugal wheel. Electrical connections on the end of the motor face upwards making field connections rapid and simple. This compact drive assembly provides more room in the motor compartment area and the single bolt, V-belt adjustment makes for a very serviceable unit.

Motors

The standard motor for CRBCA models is open drip-proof construction, and located out of the airstream. Totally enclosed, energy efficient, two-speed and explosion-proof motors may also be available. All motor brands are recognized and serviced nationwide. Motor enclosure may affect UL Listing.



Type CRBCA ventilators are Listed by Underwriters Laboratory Inc. to US and Canadian safety standards.

UL705 - E39944



American Coolair Corporation, ILG Industries certifies that the Type CRBCA PRVs shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Guide Specifications

Power Roof Ventilators shall be of the CRBCA centrifugal type as manufactured by ILG Industries of American Coolair Corporation (individual models to be listed in fan schedule). Units shall meet UL Standard 705 and shall bear the AMCA Certified Ratings Seal for air and sound performance. Base and venturi inlet shall be one piece heavy gauge spun aluminum or galvanized steel, with wheel and venturi overlapping for efficient operation. Motor compartment cover shall be heavy gauge aluminum construction and easily removable for access to motor and drive.

Drive construction shall be of the ILG "C-Drive" design consisting of static shaft/bearing arrangement mounted in a machined cast aluminum disc assembly. The disc assembly shall be mounted onto the backplate of the centrifugal wheel. The centrifugal wheel shall be heavy gauge aluminum with backward-inclined, non-overloading blades and be computer balanced.

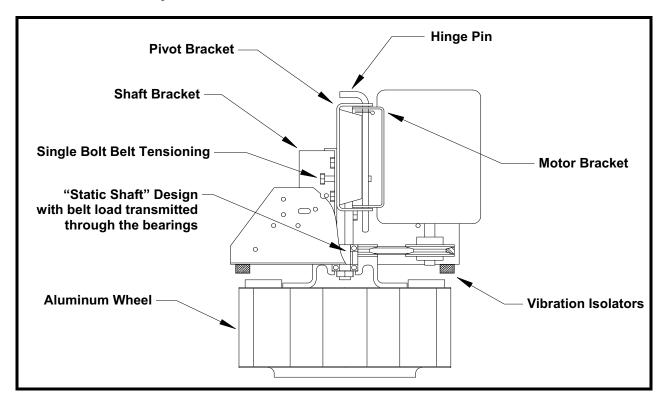
Bearings shall have a calculated L10 bearing life in excess of 1,000,000 hours.

Motor shall be open drip-proof construction, NEMA design B with minimum service factor of 1.15. Adjustable motor pulley shall be provided to allow for field adjustment and system balance. Motor shall be mounted on a hinged steel mounting bracket, utilizing a belt tensioning bolt. Motor shall be mounted with the shaft down to allow easy access to the electrical wiring terminal board/circuit box.

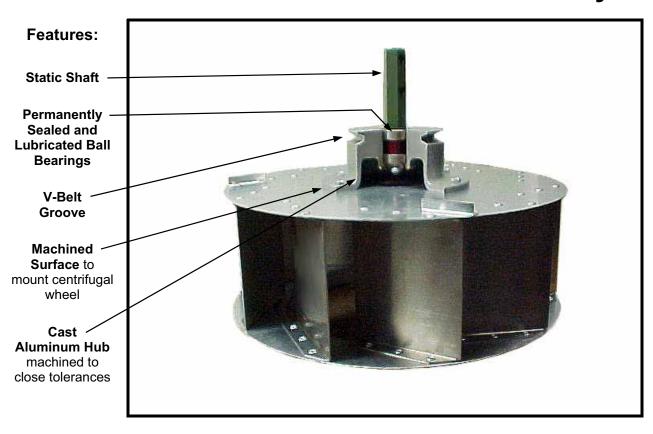
(Mounted and wired disconnect switch, backdraft damper, epoxy coating, roof curb and other accessories shall be listed in the fan schedule.)

ILG's "C-Drive"

Available Exclusively on CRBCA Units Sizes 06 - 24



ILG's "C-Drive" Wheel Assembly



CRBA Belt Drive Centrifugal Power Roof Ventilators

Applications

The CRBA units are quiet, dependable power roof ventilators recommended for a wide range of general exhaust applications where low, medium and high ranges of air volume and pressure are specified. Applications include virtually all types of light manufacturing, commercial and institutional buildings such as shopping centers, hospitals, schools, hotels, office and apartment buildings, warehouses, airports, bus terminals and many others.

CRBA units are specified where a roof-mounted location is desired to eliminate interference with other equipment or activities in the building. They permit the direct upward venting of air. CRBA units may be used with or without ducts.

The advantages of a CRBA belt-drive over a direct-drive roof ventilator include quieter operation and adjustable performance to suit operating needs and availability of larger volume units.

Construction

CRBA models feature a housing of durable spun aluminum for optimum weather protection. The overlapping deep-spun venturi minimizes air turbulence and increases efficiency.

The aluminum centrifugal wheel is a non-overloading, backward-inclined type, selected for low noise levels. Backplate fins draw cool air through the motor compartment. The wheel is secured to the machined aluminum hub, and computer balanced on state-of-the-art equipment.

Neoprene vibration isolators to reduce noise and wear, and 1/2" galvanized mesh birdscreen are both standard.

Drive Mechanism

The belt driven CRBA utilizes a standard V-belt drive design with variable pitch cast iron pulley for adjusting fan speed. Drive shaft is turned, ground and polished. Motor support is adjustable for proper tensioning.

Bearings

Heavy duty pillow-block ball bearings with cast iron housing are self-aligning and relubricable.

Motors

The standard motor for CRBA models is open drip-proof construction, located out of the airstream. Totally enclosed, energy efficient, two-speed and explosion-proof motors may also be available. All motor brands are recognized and serviced nationwide. Motor enclosure may affect UL Listing.



UI 705 - F39944

Type CRBA ventilators are Listed by Underwriters Laboratory Inc. to US and Canadian safety standards.



American Coolair Corporation, ILG Industries certifies that the Type CRBA PRVs shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Guide Specifications

Power Roof Ventilators shall be of the CRBA centrifugal type as manufactured by ILG Industries of American Coolair Corporation (individual models to be listed in fan schedule). Units shall meet UL Standard 705 and shall bear the AMCA Certified Ratings Seal for air and sound performance. Base and venturi inlet shall be one piece heavy gauge spun aluminum or galvanized steel, with wheel and venturi overlapping for efficient operation. Motor compartment cover shall be heavy gauge aluminum construction and easily removable for access to motor and drive.

Drive mechanism shall incorporate a V-belt drive with cast iron motor pulley. Drive shaft shall be turned, ground and polished. The centrifugal wheel shall be heavy gauge aluminum with backward-inclined, non-overloading blades and be computer balanced.

Bearings shall be self-aligning and have fittings for relubrication.

Motor shall be open drip-proof construction, NEMA design B with minimum service factor of 1.15. Adjustable motor pulley shall be provided to allow for field adjustment and system balance. Motor shall be mounted on a hinged steel mounting bracket, utilizing belt tensioning bolt(s).

(Mounted and wired disconnect switch, backdraft damper, epoxy coating, roof curb and other accessories shall be listed in the fan schedule.)

CRBCA / CRBA 06-10 Performance Data

CR	BC	406	/ C	RBA	406				CF	Ма	t St	atic	Pre	essi	ure					F	RPM	Rang	ge	
0.	00	.1	25	.2	50	.3	75	.50	00	.6	25	.7	50	1.0	00	1.	25	1	.50	1	Moto	r HF)	RPM
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1/5	1/4 L	1/4 M	1/4 H											
2	79	20	06																	,				846
0.01	1.5	0.01	0.8																	NLY				040
34	43	28	39	21	16															0				1041
0.02	2.9	0.02	2.5	0.02	1.9															SC.				1041
37	74	32	25	26	63	18	35													CRB				1135
0.03	3.7	0.03	3.2	0.03	2.8	0.03	2.3													0				1133
44	48	40	06	36	62	30	8	24	10															1360
0.04	5.6	0.05	5.1	0.05	4.8	0.05	4.3	0.05	4.0															1300
54	42	50	05	47	75	43	35	39	91	34	12													1646
0.08	8.6	0.08	8.2	0.09	7.8	0.09	7.6	0.09	7.0	0.09	6.6													1040
58	89	5	55	52	26	49	95	45	55	4	14	36	66											1789
0.10	10.4	0.11	10.0	0.11	9.5	0.11	9.5	0.11	9.2	0.12	8.4	0.11	8.1											1709
68	84	6	53	62	28	60)3	57	75	54	1 1	50)6	42	29									2076
0.16	14.4	0.16	14.0	0.17	13.6	0.17	13.3	0.18	13.4	0.18	13.0	0.18	12.2	0.18	11.5									2076
73	31	70	02	67	77	65	55	63	31	60)2	56	69	50	03	4	19							2219
0.20	16.0	0.20	15.6	0.20	15.3	0.21	14.9	0.21	15.0	0.22	14.8	0.22	14.7	0.22	13.4	0.21	12.9							2219

CR	BC	408	/ C	RBA	80				CF	Ма	t St	atic	Pre	essi	ıre					F	RPM	Rang	је	
0.	00	.1:	25	.2	50	.3	75	.50	00	.6	25	.7	50	1.0	00	1.3	25	1.	50		Moto	r HF)	RPM
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1/5	1/4 L	1/4 M	1/4 H	
36	67	29	90																	,				846
0.01	1.6	0.01	1.3																	Ĭ.				040
45	51	39	93	32	21															ō				1041
0.02	3.2	0.02	2.9	0.03	2.8															Ğ.				1041
49	92	43	39	37	76	28	30													CRB				1135
0.03	4.0	0.03	3.7	0.03	3.7	0.03	3.4																	1133
59	90	54	45	49	99	44	l 4	37	73															1360
0.04	6.1	0.05	5.8	0.05	5.7	0.06	5.6	0.06	5.4															1300
71	14	67	76	64	10	60)1	55	55	50	08	43	39											1646
0.08	9.4	0.08	9.3	0.09	8.6	0.10	8.7	0.10	8.6	0.10	8.5	0.10	8.4											1040
77	76	74	41	70	8(67	7 4	63	34	59	92	54	17											1789
0.10	11.4	0.11	11.3	0.12	10.5	0.12	10.6	0.13	10.4	0.13	10.4	0.13	10.3											1709
90	00	87	70	84	11	81	3	78	33	7	50	7′	14	63	38	51	15						_	2076
0.16	15.6	0.16	15.2	0.17	15.3	0.18	14.4	0.19	14.6	0.19	14.5	0.20	14.3	0.21	14.4	0.20	14.1							2070
96	52	93	34	90)7	88	30	85	53	82	24	79	92	72	23	64	15	48	85					2219
0.19	17.8	0.20	17.3	0.21	17.7	0.22	16.5	0.23	16.4	0.23	16.5	0.24	16.3	0.25	16.4	0.26	16.2	0.23	15.9					2219

CR	BC	410	/ C	RBA	10				CF	Ма	t St	atic	Pre	essi	ure					F	RPM	Rang	je	
0.0	00	.13	25	.2	50	.3	75	.5	00	.6	25	.7	50	1.	00	1.	25	1.	50		Moto	r HP	•	RPM
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1/5	1/4 L	1/4 M	1/4 H	
48	37	38	34																	Υ				846
0.01	2.1	0.02	1.6																	ĽŹ_				040
59	9	51	19	42	22															0				1041
0.03	3.7	0.03	3.3	0.03	3.0															SCA				1041
65	i 3	57	79	49	97	38	33													CRB				1135
0.03	4.5	0.04	4.1	0.04	4.0	0.04	3.1)				1133
78	3	72	20	66	60	58	36	49	94															1360
0.06	6.5	0.07	6.2	0.07	6.0	0.08	5.8	80.0	4.8															1300
94	18	89	95	84	15	79	95	73	34	60	67	5	36											1646
0.10	9.6	0.11	9.5	0.12	9.1	0.13	9.0	0.13	8.9	0.14	8.3	0.14	7.1											1040
1,0	30	98	32	93	35	89	90	83	89	78	82	7	19	54	40									1789
0.13	11.5	0.14	11.4	0.15	11.0	0.16	10.8	0.17	10.7	0.17	10.5	0.18	9.8	0.17	8.1									1709
1,1	95	1,1	53	1,1	12	1,0	73	1,0	35	99	92	94	4 3	83	39	70	03							2076
0.21	15.6	0.22	15.6	0.23	15.4	0.24	14.9	0.25	14.8	0.26	14.7	0.27	14.6	0.27	13.7	0.27	11.5							2076
1,2	78	1,2	238	1,2	00	1,1	162	1,1	26	1,0	90	1,0	47	9	55	84	1 7	7(03					2219
0.26	17.8	0.27	17.4	0.28	17.3	0.29	16.8	0.30	16.8	0.31	16.7	0.32	16.7	0.33	16.4	0.34	14.7	0.33	12.8					2219

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

CRBCA12 / CRBA12 Performance Data

U		. . —	, •			. •							~	
			CFM	at Stat	ic Pres	sure					RPN	И Ra	ange	
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00		Мс	otor	HP	RPI
BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	1/4 L				3/4
1,002	900	791	643											_
0.05 4.9	0.06 4.0	0.07 3.8	0.07 3.5										1	886
1,054	958	858	730											_
	-												l	932
0.06 5.3	0.07 4.6	0.08 4.4	0.08 4.0	007							H		-	+
1,107	1,016	923	808	637									l	979
0.07 5.8	0.08 5.2	0.09 4.9	0.09 4.6	0.09 4.3									\vdash	-
1,161	1,073	986	880	749									l	102
0.08 6.4	0.09 5.8	0.10 5.5	0.11 5.2	0.11 5.0										
1,213	1,129	1,045	949	836									l	107
0.09 6.9	0.10 6.4	0.11 6.0	0.12 5.9	0.12 5.7									l	107
1,266	1,186	1,105	1,018	914										
0.10 7.4	0.12 7.1	0.13 6.6	0.13 6.7	0.14 6.3									l	111
1,319	1,243	1,164	1,085	988	666									
0.12 8.1	0.13 7.9	0.14 7.3	0.15 7.4	0.16 7.0	0.14 6.6								l	116
1,371	1,298	1,222	1,148	1,057	816									+
0.13 8.8	0.14 8.6	0.16 8.0	0.16 8.0	0.17 7.7	0.17 7.4								l	121
	l l		.		1								\vdash	+
1,424	1,354	1,281	1,210	1,127	922								1	125
0.15 9.6	0.16 9.4	0.17 8.8	0.18 8.6	0.19 8.6	0.19 8.1								\vdash	$+\!\!-\!\!\!-$
1,476	1,409	1,338	1,270	1,194	1,010								l	130
0.16 10.4	0.18 10.2	0.19 9.7	0.20 9.3	0.21 9.5	0.22 9.0								\vdash	
1,529	1,464	1,396	1,330	1,260	1,090	793							l	135
0.18 11.3	0.20 11.1	0.21 10.7	0.22 10.1	0.23 10.4	0.24 9.8	0.22 9.5								
1,582	1,520	1,454	1,390	1,325	1,165	940								120
0.20 12.2	0.22 12.0	0.23 11.7	0.24 10.9	0.25 11.2	0.27 10.8	0.26 10.4								139
1,634	1,574	1,510	1,447	1,386	1,236	1,047								
0.22 13.1	0.24 12.8	0.25 12.8	0.27 11.8	0.28 11.9	0.29 11.5	0.29 11.3								144
1,688	1,629	1,568	1,506	1,447	1,306	1,139					Т			
0.25 14.1	0.26 13.8	0.28 13.9		0.30 12.6	0.32 12.3									149
1,741	1,684	1,625	1,565	1,508	1,376	1,222	981							+
				0.33 13.2			<u> </u>							153
				1,566	 						 			_
1,793	1,738	1,680	1,622		1,443	1,297	1,103							158
				0.36 13.9							<u> </u>			
1,846	1,793	1,737	1,680	1,625	1,510	1,371	1,204							163
0.32 16.1	0.34 15.8	0.36 15.9	0.37 15.3	0.39 14.5	0.41 15.1	0.43 14.5	0.42 14.3							
1,898	1,846	1,792	1,737	1,683	1,574	1,441	1,291	1,050						167
0.35 16.7	0.37 16.5	0.39 16.5	0.40 16.1	0.42 15.3	0.44 15.6	0.46 15.0	0.46 15.1	0.43 15.0						
1,951	1,901	1,849	1,795	1,742	1,638	1,512	1,373	1,181						172
0.38 17.4	0.40 17.1	0.42 17.2	0.43 16.9	0.45 16.0	0.47 16.2	0.50 15.8	0.51 15.9	0.49 15.8						1/2
2,004	1,955	1,905	1,853	1,801	1,700	1,582	1,450	1,287						4
0.41 18.0	0.43 17.7	0.45 17.8	0.47 17.6	0.49 16.8	0.51 16.8	0.53 16.7	0.55 16.8	0.54 16.7						177
2,056	2,009	1,959	1,909	1,858	1,760	1,649	1,522	1,378						
0.45 18.6	0.46 18.4		· ·	0.52 17.6	0.55 17.5		0.59 17.6							181
2,109	2,063	2,015	1,966	1,916	1,821	1,717	1,594	1,462			\vdash			
0.48 19.4	0.50 19.1	0.52 19.1	-	0.56 18.4	0.59 18.3	1	-	· ·						186
					l l					-	\vdash			
2,162	2,116	2,069	2,022	1,973	1,880	1,781	1,664	1,540						191
0.52 20	0.54 19.8	0.56 19.9		0.60 19.3	0.63 19.0	0.65 19.5	†	0.69 19.2		<u> </u>	<u> </u>			
2,215	2,170	2,125	2,078	2,031	1,939	1,846	1,734	1,615						195
0.56 21	0.58 21	0.60 21	0.62 21	0.64 20	0.67 19.7	0.69 20	0.72 19.8	0.74 20			<u> </u>			
2,268	2,225	2,180	2,135	2,089	1,999	1,909	1,803	1,688	1,395					200
0.60 22	0.62 22	0.64 22	0.66 22	0.68 21	0.72 20	0.74 21	0.77 21	0.79 21	0.77 21					

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels.

CRBCA13 / CRBA13 Performance Data

			CFM	at Stat	ic Pres	sure				R	PM I	Rang	е	
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00			or HP		RPM
BHP Sone		1	BHP Sone	1/4	1/3	1/2	3/4							
1,342	1,232	1,102	959	773			l							
0.08 5.9	0.09 5.1	0.10 4.6	0.11 4.3	0.10 4.1										886
1,412	1,308	1,185	1,056	898										
0.09 6.5	0.11 5.7	0.12 5.1	0.12 4.8	0.12 4.6										932
1,483	1,385	1,269	1,149	1,010										070
0.11 7.1	0.12 6.4	0.13 5.7	0.14 5.5	0.14 5.3										979
1,554	1,462	1,353	1,240	1,114										4000
0.13 7.7	0.14 7.0	0.15 6.4	0.16 6.2	0.16 5.9										1026
1,624	1,536	1,433	1,325	1,211	907									4070
0.14 8.3	0.16 7.7	0.17 7.2	0.18 7.0	0.19 6.7	0.18 6.3									1072
1,695	1,612	1,515	1,411	1,305	1,042									4440
0.16 8.9	0.18 8.7	0.19 8.1	0.20 7.8	0.21 7.6	0.21 7.1									1119
1,766	1,687	1,595	1,496	1,396	1,159									1166
0.18 9.7	0.20 9.7	0.21 8.9	0.22 8.6	0.24 8.5	0.24 8.1									1166
1,836	1,760	1,673	1,578	1,482	1,266									4040
0.21 10.7	0.22 10.7	0.24 9.9	0.25 9.6	0.26 9.5	0.27 9.1									1212
1,907	1,834	1,752	1,661	1,569	1,369	1,111								4250
0.23 11.8	0.25 11.8	0.27 11.0	0.28 10.7	0.29 10.5	0.30 10.0	0.30 9.6								1259
1,977	1,907	1,828	1,741	1,653	1,466	1,236								4205
0.26 12.9	0.28 13.0	0.29 12.1	0.31 11.7	0.32 11.5	0.34 11.1	0.33 10.8								1305
2,048	1,981	1,906	1,823	1,737	1,562	1,352								4250
0.29 14.2	0.31 14.3	0.33 13.4	0.34 12.9	0.35 12.7	0.37 12.3	0.37 11.9								1352
2,119	2,054	1,983	1,904	1,821	1,654	1,461	1,217							4200
0.32 15.0	0.34 15.2	0.36 14.4	0.37 13.8	0.38 13.5	0.41 13.3	0.41 12.8	0.40 12.4							1399
2,189	2,126	2,058	1,982	1,902	1,742	1,562	1,346							4445
0.35 15.7	0.37 15.9	0.39 15.2	0.41 14.5	0.42 14.2	0.45 14.1	0.46 13.5	0.45 13.2							1445
2,260	2,200	2,134	2,062	1,985	1,830	1,662	1,465							4400
0.39 16.4	0.41 16.7	0.43 16.0	0.45 15.3	0.46 15.0	0.49 14.8	0.50 14.2	0.50 13.9							1492
2,331	2,273	2,210	2,141	2,067	1,916	1,759	1,576	1,352						4500
0.42 17.2	0.45 17.5	0.47 16.8	0.49 16.1	0.50 15.7	0.53 15.5	0.55 15.0	0.55 14.7	0.54 14.3						1539
2,401	2,344	2,283	2,217	2,146	2,000	1,850	1,680	1,480						1585
0.46 17.9	0.49 18.2	0.51 17.7	0.53 16.9	0.54 16.4	0.57 16.1	0.60 15.8	0.60 15.4	0.60 15.1						1565
2,472	2,417	2,358	2,295	2,227	2,085	1,941	1,782	1,599						1622
0.51 18.6	0.53 19.0	0.55 18.5	0.57 17.7	0.59 17.2	0.62 16.8	0.65 16.6	0.66 16.1	0.65 15.9						1632
2,541	2,488	2,432	2,371	2,305	2,167	2,029	1,879	1,708						1670
0.55 19.4	0.57 19.8	0.60 19.3	0.62 18.5	0.64 18.0	0.66 17.5	0.70 17.4	0.71 16.8	0.71 16.7						1678
2,613	2,561	2,506	2,447	2,385	2,251	2,117	1,975	1,815						1705
0.60 20	0.62 21	0.65 20	0.67 19.4	0.69 18.8	0.72 18.3	0.75 18.2	0.77 17.6	0.78 17.6						1725
2,684	2,634	2,581	2,524	2,463	2,334	2,204	2,068	1,918	1,546					1770
0.65 21	0.67 21	0.70 21	0.72 20	0.74 19.6	0.77 19.0	0.81 18.9	0.83 18.7	0.84 18.3	0.82 18.1					1772

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

CRBCA15 / CRBA15 Performance Data

						C	FM	at S	Stat	ic P	res	sur	е							F	RPN	1 Ra	ange	•	
0.0	Ō	.12	5	.2	50	.3	75	.50	00	.7	50	1.0	00	1.	25	1.	50	2.	00		Мо	tor	ΗP		RPM
ВНР	Sone	BHP S	Sone	BHP	Sone	BHP	Sone	1/4	1/3	1/2	3/4	1													
1,75	54	1,68	37	1,5	78	1,4	59	1,3	28																000
0.15	8.1	0.16	7.6	0.17	6.9	0.19	6.6	0.20	6.1																886
1,84	45	1,78	35	1,6	82	1,5	62	1,4	71																000
0.18	8.8	0.19	8.3	0.20	7.6	0.21	7.2	0.23	6.8																932
1,93	38	1,88	34	1,7	87	1,6	75	1,5	86																979
0.20	9.5	0.22	9.0	0.23	8.3	0.24	8.0	0.26	7.7																9/9
2,03	31	1,98	32	1,8	91	1,7	93	1,6	91	1,3	99														1026
0.23	10.2	0.25	9.7	0.26	9.1	0.28	8.8	0.29	8.4	0.31	7.5														1026
2,12	22	2,07	7	1,9	92	1,9	02	1,7	94	1,5	088														1072
0.27	11.0	0.28	10.5	0.30	9.9	0.31	9.4	0.33	9.1	0.35	8.2														1072
2,21	15	2,17	'3	2,0	95	2,0	09	1,9	06	1,7	37														4440
0.30	11.7	0.32	11.3	0.34	10.7	0.35	10.1	0.37	10.0	0.40	8.9														1119
2,30	08	2,26	9	2,1	97	2,1	15	2,0	24	1,8	64	1,5	26												1166
0.34	12.5	0.36	12.1	0.38	11.6	0.39	11.0	0.41	11.0	0.44	10.0	0.45	9.0												1100
2,39	99	2,36	52	2,2	97	2,2	17	2,1	35	1,9	71	1,7	28												1212
0.39	13.3	0.40	12.9	0.42	12.5	0.44	12.0	0.45	11.7	0.49	11.1	0.51	9.9												1212
2,49	92	2,45	57	2,3	99	2,3	21	2,2	45	2,0	76	1,8	99												1259
0.43	14.1	0.45	13.8	0.47	13.4	0.49	13.0	0.50	12.5	0.54	12.2	0.57	10.8												1239
2,58	33	2,55	50	2,4	197	2,4	22	2,3	49	2,1	79	2,0	44	1,7	713										1305
0.48	15.0	0.50	14.7	0.52	14.4	0.54	14.0	0.55	13.4	0.59	13.0	0.63	11.8	0.64	11.1										1303
2,67	76	2,64	15	2,5	597	2,5	25	2,4	55	2,2	289	2,1	66	1,9	920										1352
0.54	15.9	0.55	15.6	0.57	15.4	0.59	15.1	0.61	14.5	0.65	14.1	0.69	13.2	0.71	12.2										1332
2,76	69	2,73	39	2,6	95	2,6	28	2,5	59	2,4	106	2,2	75	2,0	93										1399
0.59	16.8	0.61	16.6	0.63	16.4	0.65	16.2	0.67	15.7	0.71	15.3	0.75	14.8	0.78	13.2										1333
2,86	60	2,83	31	2,7	'91	2,7	28	2,6	61	2,5	20	2,3	78	2,2	244	1,9	51								1445
0.65	17.8	0.67	17.5	0.69	17.4	0.72	17.2	0.73	16.8	0.77	16.4	0.81	15.9	0.85	14.4	0.87	13.7								1443
2,95	53	2,92	25	2,8	888	2,8	30	2,7	64	2,6	33	2,4	83	2,3	373	2,1	46								1492
0.72	18.8	0.73	18.6	0.75	18.4	0.78	18.2	0.80	17.9	0.84	17.3	0.89	16.8	0.93	15.8	0.96	14.9								1432
3,04	46	3,01	9	2,9	85	2,9	32	2,8	68	2,7	42	2,5	90	2,4	187	2,3	15								1539
0.79	19.8	0.81	19.6	0.83	19.4	0.85	19.3	0.88	19.0	0.92	18.2	0.96	17.8	1.00	17.4	1.04	16.0								1009
3,13	37	3,11	1	3,0	79	3,0	30	2,9	68	2,8	347	2,7	02	2,5	590	2,4	64								1585
0.86	21	0.88	21	0.90	20	0.93	20	0.95	20	0.99	19.2	1.04	19.0	1.08	18.8	1.13	17.2								1303
3,23	30	3,20)5	3,1	74	3,1	30	3,0	71	2,9	53	2,8	19	2,6	695	2,5	94								1632
0.94	22	0.96	22	0.98	22	1.01	21	1.04	21	1.07	20	1.12	20	1.17	19.8	1.21	18.6								1002

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

CRBCA16 / CRBA16 Performance Data

			CFM	at Stat	ic Pres	sure					RF	M	Rar	nge	,	
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00	1			or H	_		RPM
BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone				1/4				_	1 1/2	
2,170	2,034	1,862	1,683	1,427	·	,			,							70.4
0.15 7.3	0.17 6.4	0.19 5.9	0.20 5.4	0.20 4.8												734
2,279	2,152	1,992	1,823	1,620												771
0.18 7.8	0.20 7.0	0.21 6.6	0.23 6.1	0.23 5.6												// 1
2,385	2,265	2,116	1,954	1,780												807
0.20 8.5	0.22 7.8	0.24 7.3	0.26 6.8	0.27 6.4												
2,495	2,381	2,242	2,086	1,930												844
0.23 9.2	0.26 8.6	0.28 8.1	0.29 7.7	0.30 7.2												
2,604	2,496	2,367	2,217	2,070	1,634											881
0.26 10.0	0.29 9.5	0.31 8.9	0.33 8.5	0.34 8.1	0.33 7.0											
2,713	2,610	2,489	2,347	2,206	1,853											918
0.30 10.8	0.32 10.4	0.35 9.7	0.37 9.5	0.38 8.9	0.39 7.9											
2,820	2,721	2,607	2,473	2,336	2,029											954
0.34 11.8	0.36 11.3	0.39 10.6	0.41 10.4	0.42 9.8	0.44 9.0											
2,929	2,834	2,727	2,601	2,467	2,191	1,659										991
0.38 12.7	0.40 12.3	0.43 11.6	0.45 11.3	0.47 10.9	0.49 10.1	0.45 9.0									Ш	
3,039	2,947	2,845	2,727	2,598	2,341	1,958										1028
0.42 13.6	0.45 13.4	0.47 12.5	0.50 12.2	L	0.54 11.1	0.54 10.0										
3,145	3,057	2,960	2,848	2,725	2,480	2,161										1064
0.47 14.7	0.50 14.5	0.52 13.6	0.55 13.2		0.60 12.1	0.61 11.1									Ш	
3,254	3,170	3,077	2,972	2,854	2,617	2,340										1101
0.52 15.7	0.55 15.6	0.58 14.8	0.60 14.2	0.62 14.1	0.66 13.1	0.68 12.4									Ш	
3,364	3,282	3,193	3,093	2,982	2,751	2,503	2,114									1138
0.57 16.8	0.60 16.7	0.63 16.0	0.66 15.3	I	0.72 14.2	0.75 13.7									Ш	
3,470	3,391	3,306	3,211	3,105	2,880	2,651	2,333									1174
0.63 17.9	0.66 17.9	l l	0.72 16.3			l	0.81 13.7								Ш	
3,579	3,503	3,421	3,331	3,230	3,012	2,796	2,522									1211
0.69 18.9	0.72 19.0	0.75 18.3	L	0.81 17.2	0.85 16.4	0.89 15.8	1									
3,689	3,615	3,536	3,449	3,354	3,143	2,936	2,693	2,325								1248
0.75 19.7	0.79 19.8	0.82 19.2	0.85 18.3	0.88 17.9	0.93 17.4	0.96 16.5		0.95 14.8							Н	
3,798	3,727	3,650	3,567	3,476	3,273	3,072	2,852	2,550								1285
0.82 21	0.86 21		L				1.07 17.0	- I								
3,905	3,835	3,761	3,681	3,595	3,399	3,202	2,998	2,736								1321
0.89 21	0.93 21	0.96 21	1.00 20		-		1.16 17.8	- I								
4,073	4,007	3,936	3,861	3,780	3,597	3,406	3,218	2,998								1378
1.01 23	1.05 23	1.09 22	1.12 22	1.16 21	1.22 21	1.26 19.6		1.33 18.5	0.404							
4,182	4,118	4,050	3,977	3,899	3,725	3,537	3,355	3,154	2,484	-						1415
1.10 23	1.14 24	1.17 23	1.21 23	1.24 22	1.31 21	1.36 21	.	1.43 19.5								
4,292	4,229	4,163	4,093	4,018	3,851	3,668	3,490	3,303	2,757	-						1452
1.19 24	1.23 24	1.26 24	1.30 23	1.34 23	1.40 22	1.46 22	1.50 21	1.54 21	1.51 18.6							
4,401	4,340	4,276	4,208	4,136	3,975	3,798	3,623	3,447	2,973	-						1489
1.28 25	1.32 25	1.36 25	1.40 24	1.43 24	1.50 23	1.56 23	1.61 22	1.65 21	1.66 19.6	<u> </u>	<u> </u>		<u> </u>			

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

CRBCA18 / CRBA18 Performance Data

	Sone	2.00 BHP Sone	1/3	٨	PM /lote	or	HF	5		RPM
BHP Sone BH	1	1	1/3		_	1	_	- 1		RPM
2,754 2,627 2,440 2,247 1,974 0.22 8.9 0.24 7.9 0.26 7.3 0.28 6.8 0.29 6.0 2,893 2,778 2,598 2,422 2,190	Sone	BHP Sone	1/3	1/2	3/4	1			_	
0.22 8.9 0.24 7.9 0.26 7.3 0.28 6.8 0.29 6.0 2,893 2,778 2,598 2,422 2,190							' '	1/2	2	
2,893 2,778 2,598 2,422 2,190										724
										734
0.25 9.6 0.28 8.7 0.30 8.1 0.32 7.6 0.33 7.1										774
										771
3,028 2,923 2,749 2,586 2,389 1,758										807
0.29 10.5 0.31 9.6 0.34 8.9 0.36 8.5 0.37 8.1 0.36 6.7										007
3,167 3,070 2,904 2,750 2,577 2,061										844
0.33 11.4 0.36 10.6 0.39 9.8 0.41 9.5 0.42 9.0 0.43 7.5										044
3,305 3,216 3,058 2,911 2,753 2,308										881
0.38 12.3 0.40 11.7 0.43 10.8 0.46 10.5 0.48 9.9 0.50 8.5										001
3,444 3,360 3,213 3,070 2,923 2,531 1,886										918
0.43 13.2 0.45 12.7 0.49 11.8 0.51 11.5 0.53 10.9 0.56 9.9 0.52 8.7										910
3,579 3,500 3,364 3,222 3,085 2,738 2,223										954
0.48 14.2 0.51 13.8 0.54 12.9 0.57 12.5 0.59 12.1 0.62 11.3 0.62 9.6										934
3,718 3,643 3,519 3,378 3,247 2,940 2,494										004
0.54 15.2 0.57 15.0 0.60 14.1 0.63 13.5 0.66 13.2 0.69 12.5 0.70 10.7										991
3,857 3,785 3,673 3,533 3,408 3,128 2,731 2,128										1028
0.60 16.2 0.63 16.1 0.66 15.4 0.70 14.7 0.72 14.5 0.76 13.6 0.79 12.0 0.74 11.1										1020
3,992 3,923 3,822 3,683 3,562 3,301 2,945 2,464										1064
0.66 17.2 0.69 17.3 0.73 16.6 0.77 15.8 0.79 15.6 0.84 14.6 0.87 13.6 0.85 12.2										1004
4,131 4,065 3,972 3,837 3,718 3,474 3,158 2,741										1101
0.73 18.3 0.77 18.6 0.80 18.0 0.84 17.0 0.87 16.8 0.92 15.8 0.96 15.3 0.96 13.4										1101
4,270 4,207 4,121 3,992 3,874 3,642 3,362 2,984 2,4	454									1138
0.81 19.4 0.85 19.8 0.88 19.3 0.92 18.2 0.96 17.8 1.01 17.0 1.05 16.6 1.07 14.5 1.02	13.8									1130
4,405 4,344 4,264 4,143 4,025 3,803 3,547 3,202 2,7	766									1174
0.89 20 0.93 21 0.96 20 1.00 19.2 1.04 18.7 1.10 18.0 1.14 17.4 1.17 15.8 1.15	14.6									11/4
4,611 4,554 4,481 4,374 4,254 4,044 3,814 3,520 3,7	157									1229
1.02 22 1.06 22 1.10 22 1.14 21 1.18 20 1.25 19.6 1.29 18.5 1.33 18.1 1.35	16.0									1229
4,750 4,694 4,626 4,528 4,409 4,204 3,987 3,725 3,3	388									1266
1.12 22 1.15 23 1.19 23 1.24 22 1.28 21 1.35 21 1.40 19.4 1.44 19.3 1.47	17.2									1200
4,889 4,835 4,770 4,680 4,563 4,362 4,155 3,918 3,6	607	2,720								1303
1.22 23 1.26 24 1.30 24 1.34 23 1.39 22 1.46 22 1.52 21 1.56 20 1.60	18.8	1.51 16.6								1303
5,028 4,976 4,914 4,831 4,719 4,519 4,322 4,101 3,8	820	3,068								1340
1.32 25 1.36 25 1.41 25 1.45 24 1.50 23 1.58 22 1.64 22 1.69 21 1.73	20	1.70 17.5								1340
5,170 5,120 5,061 4,984 4,878 4,679 4,490 4,283 4,0	032	3,363					Γ	1		1378
1.44 26 1.48 26 1.52 26 1.57 25 1.62 24 1.70 23 1.77 23 1.82 22 1.86	22	1.88 18.6								13/0
5,309 5,260 5,204 5,132 5,033 4,834 4,651 4,455 4,2	228	3,618						T		1415
1.56 27 1.60 27 1.64 27 1.69 26 1.74 25 1.83 24 1.90 24 1.96 23 2.00	23	2.06 19.7	L							1413
5,448 5,401 5,346 5,279 5,187 4,988 4,812 4,624 4,4	415	3,852						\exists		1452
1.68 28 1.73 28 1.77 28 1.82 27 1.87 27 1.96 25 2.04 25 2.11 24 2.15	24	2.22 21								1432

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

CRBCA20 / CRBA20 Performance Data

			CFM	at Stat	ic Pres	sure				ı	RPN	/I Ra	ang	е	
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00	1	Мс	tor	ΗP		RPM
BHP Sone	1/2	3/4	1	1 1/2	2										
3,626	3,445	3,247	3,050	2,821	2,080										
0.37 11.8	0.40 9.6	0.42 9.2	0.43 8.8	0.45 7.9	0.43 6.7										734
3,808	3,638	3,449	3,263	3,060	2,500										
0.43 12.8	0.46 10.5	0.49 10.1	0.50 9.7	0.52 9.0	0.52 7.8										771
3,986	3,825	3,644	3,467	3,282	2,810										807
0.49 13.8	0.52 11.4	0.55 11.1	0.57 10.6	0.58 10.2	0.60 8.8										807
4,169	4,015	3,844	3,673	3,501	3,082										844
0.56 14.8	0.59 12.4	0.63 12.3	0.64 11.9	0.66 11.4	0.69 10.0										044
4,352	4,205	4,042	3,878	3,715	3,336	2,794									881
0.64 15.8	0.67 13.5	0.71 13.5	0.73 13.0	0.74 12.4	0.78 11.3	0.76 10.1									001
4,534	4,395	4,240	4,081	3,925	3,580	3,134									918
0.72 17.0	0.75 14.6	0.80 14.6	0.82 14.1	0.83 13.5	0.88 12.6	0.88 11.4									910
4,712	4,578	4,431	4,277	4,127	3,809	3,411	2,769								954
0.81 18.2	0.84 15.8	0.89 15.6	0.92 15.2	0.93 14.9	0.98 14.0	0.99 12.7	0.95 11.6								904
4,895	4,766	4,626	4,477	4,332	4,036	3,673	3,185								991
0.91 19.4	0.94 17.1	0.99 16.7	1.03 16.5	1.04 16.4	1.08 15.4	1.11 14.0	1.09 12.9								991
5,152	5,030	4,898	4,758	4,619	4,343	4,023	3,637	3,007							1043
1.06 21	1.09 18.8	1.14 18.2	1.19 18.5	1.21 18.2	1.24 17.2	1.29 16.1	1.29 15.0	1.23 14.0							1045
5,335	5,217	5,091	4,956	4,821	4,556	4,262	3,910	3,432							1080
1.17 23	1.21 20	1.26 19.4	1.31 19.9	1.34 19.3	1.37 18.4	1.42 17.8	1.44 16.5	1.41 15.4							1000
5,517	5,404	5,283	5,154	5,022	4,766	4,494	4,168	3,778							1117
1.30 24	1.33 21	1.38 21	1.44 21	1.47 21	1.51 19.5	1.56 19.2	1.59 17.7	1.58 16.7							1117
5,700	5,591	5,475	5,350	5,223	4,974	4,718	4,418	4,071							1154
1.43 25	1.47 23	1.52 22	1.57 22	1.62 22	1.65 21	1.70 20	1.75 19.0	1.75 18.0							1104
5,883	5,777	5,665	5,546	5,422	5,180	4,937	4,660	4,340							1191
1.57 26	1.61 24	1.66 22	1.72 23	1.77 23	1.81 22	1.86 21	1.91 21	1.93 19.1							1191
6,071	5,969	5,860	5,746	5,626	5,391	5,157	4,901	4,603	3,768						1229
1.73 27	1.77 25	1.82 24	1.87 24	1.93 24	1.99 24	2.02 22	2.09 22	2.12 20	2.06 18.5						1223
6,253	6,154	6,050	5,940	5,824	5,594	5,368	5,129	4,852	4,150						1266
1.89 28	1.93 26	1.98 25	2.04 24	2.10 25	2.17 25	2.20 23	2.26 23	2.31 22	2.29 19.7						1200

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

CRBCA24 / CRBA24 Performance Data

<u> </u>		747	<u>, </u>		_	. •		IIIa		_	_	_	_	_			
			CFM	at Stat	ic Pres	sure					R	PΜ	R	anç	де		
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00		ſ	Mot	or	HF)		RPM
BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	BHP Sone	1/3	1/2	3/4	1	1 ½	2	3	
4,504	3,960	3,411	2,373														540
0.25 5.8	0.26 5.2	0.27 4.6	0.26 4.3										ii.				512
4,698	4,178	3,654	2,874														534
0.28 6.3	0.29 5.7	0.31 5.1	0.30 4.7														334
4,891	4,395	3,890	3,256										ì				556
0.31 7.0	0.33 6.2	0.34 5.6	0.35 5.2														330
5,094	4,621	4,130	3,588										ì				579
0.36 7.8	0.37 6.8	0.39 6.1	0.39 5.8														
5,287	4,835	4,357	3,870	2,986									ii.				601
0.40 8.7	0.41 7.3	0.43 6.7	0.44 6.3	0.42 6.0													
5,481	5,048	4,582	4,131	3,439													623
0.44 9.7	0.46 7.9	0.48 7.2	0.49 6.8	0.48 6.5													
5,674	5,260	4,806	4,377	3,806													645
0.49 10.3	0.51 8.4	0.53 7.8	0.54 7.4	0.54 7.0												Ш	
5,877	5,480	5,039	4,626	4,136													668
0.55 10.9	0.56 9.0	0.58 8.4	0.60 7.9	0.60 7.5							\sqsubseteq						
6,264	5,898	5,480	5,088	4,684													712
0.66 12.1	0.68 10.2	-	0.72 9.0	0.73 8.6							H			L		\vdash	
6,466	6,114	5,709	5,325	4,946	3,631												735
0.73 12.7		0.77 10.2		<u> </u>	0.77 8.7												
6,756	6,423	6,036	5,663	5,306	4,302												768
0.83 13.6		0.87 11.3			0.91 9.7												
7,152	6,841	6,478	6,119	5,780	4,995												813
-				L		2.045					\vdash			<u>—</u>	Н	\vdash	
7,346	7,044	6,693	6,341	6,008 1.16 12.3	5,287	3,845 1.11 11.2							ii.				835
7,548	7,256	6,916	6,572	6,245	5,571	4,404					H	\vdash	1		H	H	
1.16 16.4	1.18 15.2			1.25 13.1	ļ								ii.				858
7,944	7,668	7,351		6,704	6,089						H					\vdash	
			7,020	1.45 14.9		5,239							ii.				903
8,146	7,878	7,572	7,248	6,937	6,341	5,588	4,083				Н					H	
•			-	1.56 15.8	-		,						ii.				926
8,340	8,079	7,782	7,465	7,159	6,577	5,893	4,667				H						
1.56 20	1.58 18.8		1.64 17.2	 		1.72 15.2							ii.				948
8,542	8,288	8,001	7,692	7,390	6,821	6,191	5,170				H						
1.68 21	1.70 19.9			1.78 17.5									ii.				971
8,745	8,497	8,219	7,917	7,621	7,062	6,472	5,598										
1.80 22	1.82 21	-	1.88 19.0			1.98 16.7							ii.				994
8,938	8,697	8,426	8,132	7,841	7,290	6,730	5,959	4,521			Г						
1.92 24	1.95 22	1.97 21	2.01 20	2.03 19.2	2.08 18.2	2.12 17.4	2.11 17.3	1.99 16.9					ii.				1016
9,140	8,905	8,643	8,356	8,070	7,527	6,990	6,301	5,125									
2.05 25	2.08 23	2.11 22	2.14 21	2.17 20	2.22 19.2	2.26 18.3	2.27 18.1	2.19 17.7					ii.				1039
9,334	9,104	8,849	8,569	8,288	7,752	7,232	6,604	5,609									
2.19 26	2.21 24	2.24 23	2.27 22	2.31 21	2.36 20	2.40 19.2	2.42 18.8	2.36 18.6					1				1061
9,730	9,510	9,268	9,004	8,732	8,211	7,716	7,172	6,417				П					4400
2.48 29	2.51 27	2.54 25	2.57 24	2.60 23	2.66 22	2.71 21	2.73 20	2.72 20					1				1106
10,135	9,924	9,695	9,445	9,183	8,676	8,198	7,707	7,095				П					4450
2.80 33	2.83 30	2.86 28	2.89 26	2.93 25	2.99 24	3.04 23	3.08 22	3.09 22					1				1152
10,328	10,122	9,898	9,654	9,398	8,898	8,426	7,952	7,388	5,244		Г	П					1174
2.96 35	2.99 31	3.02 29	3.06 28	3.09 26	3.16 25	3.21 24	3.25 23	3.27 23	3.07 22		L		_				1174
Dorformanco	•	•						•		•							1

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels.

CRBA30 Performance Data

			CFM	at Stat	ic Pres	sure					RF	PM	Ra	ng	je	
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00		Ν	Лot	or ŀ	ΗP	,	RPM
BHP Sone	BHP Sone	BHP Sone	1/2	3/4	1 1	1/2	2	3 5	1							
6,380	5,549	4,719												T		400
0.33 6.0	0.34 5.3	0.35 4.8														400
7,034	6,283	5,505	4,588											T		
0.44 7.1	0.46 6.5	0.47 5.9	0.47 5.7													441
7,528	6,828	6,097	5,413	3,187										T		470
0.54 8.1	0.56 7.4	0.57 6.9	0.58 6.6	0.50 6.5												472
8,325	7,693	7,042	6,398	5,696						П						
0.73 10.0	0.75 9.2	0.76 8.7	0.78 8.4	0.78 8.2						ш						522
8,868	8,274	7,671	7,046	6,480							╗					
0.88 11.5	0.90 10.7	0.92 10.1	0.93 9.7	0.95 9.5												556
9,474	8,918	8,358	7,771	7,221							ヿ					
1.08 13.3	1.10 12.4	1.12 11.8	1.13 11.4	1.15 11.1												594
9,888	9,356	8,821	8,263	7,716	6,348						ヿ					
1.22 14.5	1.25 13.7	1.27 13.1	1.28 12.6	1.30 12.3	1.30 12.0											620
10,335	9,825	9,315	8,787	8,251	7,203						T					
1.40 15.6	1.42 14.8	1.44 14.1	1.46 13.6	1.48 13.3	1.50 13.0											648
10,734	10,243	9,752	9,249	8,727	7,771						T			T		
1.57 16.6	1.59 15.8	1.61 15.1	1.63 14.6	1.65 14.2	1.68 13.9											673
11,244	10,776	10,307	9,831	9,335	8,412	6,811					T	Т		T		
1.80 17.9	1.82 17.0	1.85 16.4	1.87 15.8	1.88 15.5	1.93 15.0	1.87 14.9										705
11,802	11,356	10,910	10,460	9,993	9,082	8,104										740
2.08 19.3	2.11 18.4	2.13 17.8	2.16 17.2	2.17 16.8	2.22 16.3	2.23 16.1										740
12,281	11,852	11,423	10,992	10,549	9,654	8,822	6,474						T			
2.35 21	2.37 19.8	2.40 19.0	2.43 18.4	2.44 18.0	2.49 17.4	2.52 17.2	2.33 17.1									770
12,807	12,396	11,985	11,572	11,152	10,284	9,497	8,296				T			T		
2.66 22	2.68 21	2.72 21	2.75 19.8	2.76 19.3	2.81 18.7	2.86 18.4	2.82 18.3									803
13,238	12,840	12,442	12,044	11,640	10,798	10,020	9,132				T			T		
2.94 23	2.96 22	2.99 22	3.03 21	3.05 21	3.09 19.8	3.15 19.4	3.15 19.3									830
13,668	13,283	12,898	12,512	12,123	11,311	10,534	9,777	7,950			T			T		
3.23 25	3.26 24	3.29 23	3.33 22	3.35 22	3.39 21	3.45 21	3.48 20	3.33 20								857
14,354	13,987	13,620	13,254	12,885	12,120	11,355	10,662	9,751					T	T		
3.75 27	3.77 26	3.81 25	3.84 24	3.87 24	3.91 23	3.97 22	4.02 22	4.01 22								900
14,992	14,641	14,290	13,939	13,586	12,863	12,118	11,432	10,738			T	T	T	T		0.40
4.27 29	4.29 28	4.33 27	4.37 26	4.40 26	4.44 25	4.49 24	4.56 24	4.59 24								940
15,710	15,374	15,039	14,704	14,369	13,686	12,974	12,289	11,662	8,885		T	T	T	T		225
4.91 31	4.94 30	4.97 30	5.01 29	5.05 28	5.10 27	5.14 27	5.22 26	5.27 26	5.00 26							985
16,156	15,830	15,504	15,179	14,853	14,192	13,503	12,824	12,204	10,388		T	寸	T	T		1015
5.34 33	5.37 32	5.40 31	5.45 31	5.49 30	5.54 29	5.58 28	5.65 28	5.72 27	5.65 27							1013

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

CRBA36 Performance Data

			CFM	at Stat	ic Pres	sure						RPI	ЛR	ang	je		
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50	2.00			М	otor	HP			RPM
BHP Sone	BHP Sone	BHP Sone	3/4	1	1 1/2	2	3	5	7 1/2								
8,128	6,712	4,084															276
0.30 4.7	0.32 3.9	0.31 3.4															276
8,982	7,727	6,042															305
0.41 5.8	0.43 4.9	0.44 4.4															303
9,747	8,601	7,241															331
0.52 7.0	0.54 6.0	0.56 5.5															331
10,601	9,547	8,379	6,621														360
0.67 8.5	0.69 7.5	0.71 7.0	0.71 6.5														000
11,514	10,539	9,517	8,249														391
0.86 10.4	0.88 9.2	0.91 8.7	0.92 8.2														001
12,692	11,802	10,917	9,885	8,527													431
1.15 13.1	1.17 11.9	1.20 11.3	1.22 10.9	1.23 10.3											L		
13,546	12,709	11,894	10,971	9,898													460
1.40 14.8	1.42 13.6	1.46 13.0	1.48 12.6	1.50 12.1											L		
14,518	13,733	12,979	12,159	11,234	8,282												493
1.72 16.6	1.75 15.4	1.78 14.7	1.81 14.3	1.83 14.0	1.81 12.9										L	Ш	
15,313	14,567	13,852	13,101	12,256	10,012												520
2.02 18.1	2.05 16.9	2.08 16.2	l		2.16 14.3										╙	Ш	
16,108	15,397	14,716	14,019	13,244	11,393												547
2.35 19.8	2.38 18.6	2.42 17.7	2.46 17.2		2.52 16.0										⊢	Ш	
16,932	16,255	15,604	14,952	14,242	12,612	9,967											575
2.73 22	2.76 20	2.80 19.4	2.84 18.9		l ' '										L	Н	
17,816	17,171	16,549	15,935	15,284	13,805	11,815											605
3.18 23	3.21 22	3.25 21	3.29 21	3.33 20	3.39 19.7											Н	
18,464	17,841	17,238	16,647	16,032	14,642	12,937	9,976										627
3.54 25	3.57 24	3.61 23	3.66 22	3.70 22	3.76 21	3.80 20	3.70 19.2										
19,288 4.03 27	18,691 4.07 26	18,112	17,546	16,969	15,678	14,189	11,945 4.29 21										655
	4.07 26 19,600	4.11 25 19,044	4.16 24 18,502	4.20 23	4.27 23	4.33 22 15,410	13,668	10,780								Н	
20,172 4.61 29	4.65 28	4.69 27	4.74 26	17,957 4.79 26	16,761 4.87 25	4.93 24	4.95 23	4.81 22									685
21,055	20,506	19,972	19,451	18,932	17,820	16,568	15,111	12,924									
	-	· · · · ·	· ·	5.43 28				<u> </u>									715
21,821	21,291	20,774	20,269	19,770	18,720	17,540	16,227	14,472						\vdash	F		
5.84 34		5.92 31	5.97 30		6.12 29			6.26 26									741
22,822	22,315	21,819	21,334	20,856	19,875	18,781	17,588	16,177						1	 		
6.68 37	6.72 35		6.81 33		6.98 32			7.18 29									775
23,853	23,367	22,891	22,425	21,967	21,041	20,029	18,923	17,704	13,874					1	+		
7.63 40	7.67 38	7.71 37	7.76 36	7.82 36	7.94 35		8.10 33	8.18 33	-								810
	33		0 33	02 00		3.00 04	3.10 33	3.10 33	3.00 01					1	Щ		<u> </u>

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

Power rating (BHP) does not include transmission losses. Bearing losses are included.
The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

CRBA44 Performance Data

			CFM at	Static P	ressure	<u> </u>				F	RPM	l Ra	and	ie	\exists	
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50			Mot		_		l,	RPM
BHP Sone	1	BHP Sone	1	1 ½		3	_	7 1/2								
13,235	11,029	7,783	l		l e	·									十	
0.55 5.1	0.58 4.4	0.55 4.0														245
14,316	12,256	9,792														005
0.70 6.1	0.74 5.3	0.73 5.0														265
15,396	13,476	11,479														285
0.87 7.2	0.91 6.3	0.92 6.1														203
16,315	14,511	12,726	9,751													302
1.04 8.2	1.08 7.3	1.10 7.0	1.04 6.6													302
17,827	16,201	14,568	12,481													330
1.35 10.2	1.40 9.0	1.43 8.6	1.41 8.4													330
18,800	17,274	15,691	13,977	11,179												348
1.59 11.5	1.64 10.3	1.67 9.9	1.67 9.7	1.59 9.1												340
19,718	18,277	16,735	15,243	12,934												365
1.83 12.9	1.88 11.6	1.92 11.1	1.94 11.0	1.88 10.5												303
20,474	19,097	17,590	16,210	14,230												379
2.05 14.2	2.10 12.8	2.15 12.2	2.17 12.0	2.14 11.7												313
21,501	20,199	18,749	17,451	15,835												398
2.37 15.9	2.43 14.5	2.48 13.7	2.51 13.5	2.50 13.3												000
22,689	21,465	20,090	18,833	17,496	12,971											420
2.79 17.4	2.85 16.0	2.90 15.1	2.94 14.8	2.95 14.7	2.77 13.4											720
23,986	22,837	21,546	20,311	19,141	15,546											444
3.30 19.0	3.36 17.6	3.42 16.7	3.46 16.3	3.49 16.1	3.38 15.3											
25,499	24,424	23,230	22,020	20,937	18,113	13,278										472
3.96 21	4.03 19.5	4.09 18.5	4.15 18.0	4.18 17.8	4.14 17.6	3.82 16.3										7.2
26,741	25,722	24,599	23,424	22,367	19,987	16,125										495
4.57 23	4.64 21	4.71 20	4.77 19.7	4.81 19.5	4.82 19.5	4.60 18.3										700
27,821	26,845	25,778	24,642	23,595	21,472	18,177										515
5.14 24	5.22 23	5.29 22	5.35 21	5.41 21	5.45 21	5.29 20										313
29,010	28,077	27,066	25,978	24,938	22,993	20,214	16,102									537
5.83 27	5.91 25	5.98 24	6.05 23	6.11 23	6.18 23	6.08 22	5.74 21									307
30,252	29,361	28,401	27,366	26,341	24,497	22,165	18,733									560
6.61 29	6.70 28	6.77 26	6.85 26	6.91 25	7.00 25	6.96 25	6.71 23									-
31,333	30,473	29,555	28,566	27,561	25,764	23,720	20,727	16,538								580
7.35 31	7.43 30	7.51 29	7.59 28	7.66 27	7.76 27	7.77 27	7.58 26	7.12 24								
32,575	31,750	30,874	29,935	28,961	27,193	25,381	22,831	19,390								603
8.26 34	8.35 32	8.43 31	8.51 30	8.59 30	8.70 29	8.75 29	8.62 28	8.30 27								
33,764	32,970	32,130	31,234	30,295	28,546	26,878	24,692	21,699								625
9.20 37	9.29 35		9.46 33	9.54 32	9.67 32	9.74 31	9.67 31	9.42 29.5						Ш		
34,952	34,187	33,380	32,525	31,622	29,891	28,310	26,411	23,792								647
10.20 40	10.30 38	10.39 37	10.47 36	10.56 35	10.70 34	10.79 34	10.78 34	10.58 33								J-1,
35,709	34,960	34,173	33,341	32,462	30,744	29,200	27,442	25,050								661
10.88 42	10.97 40	11.07 39	11.16 38	11.24 37	11.39 36	11.50 35	11.51 35	11.35 34								301

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

CRBA52 Performance Data

			CFM at	Static P	ressure	•				RF	PM	Ran	ige		
0.00	.125	.250	.375	.500	.750	1.00	1.25	1.50		Ν	/loto	or H	Р		RPM
BHP Sone	BHP Sone	BHP Sone	1 1/2	2	3	5	7 1/2	10							
17,671	14,598	9,727													205
0.71 4.9	0.75 4.2	0.69 3.9													205
19,395	16,562	13,111													225
0.93 5.9	0.98 5.3	0.97 4.8													223
21,119	18,509	15,810	10,531												245
1.21 7.2	1.26 6.4	1.27 6.1	1.15 5.8												243
22,843	20,449	18,093	14,425												265
1.53 8.6	1.59 7.7	1.62 7.3	1.56 7.0												203
24,567	22,371	20,154	17,404	12,676					ш						285
1.90 10.2	1.96 9.1	2.01 8.7	1.99 8.5	1.83 8.0											203
26,032	23,984	21,839	19,601	15,994											302
2.26 11.7	2.33 10.6	2.38 10.1	2.39 9.9	2.29 9.3											302
28,446	26,602	24,570	22,735	20,222											330
2.95 14.5	3.02 13.1	3.09 12.5	3.12 12.3	3.09 12.1											330
29,997	28,264	26,323	24,578	22,545	15,272										348
3.46 16.3	3.54 15.0	3.61 14.2	3.65 14.0	3.65 13.9	3.31 12.6										040
31,463	29,820	27,974	26,267	24,519	18,742										365
3.99 18.2	4.07 16.8	4.15 16.0	4.21 15.7	4.23 15.6	4.01 14.4										
32,669	31,096	29,328	27,641	26,036	21,078										379
4.47 19.8	4.55 18.4	4.63 17.5	4.70 17.1	4.73 17.0	4.58 16.1										
34,307	32,816	31,154	29,492	27,994	23,907	16,647									398
5.17 22	5.26 21	5.35 19.7	5.42 19.1	5.47 19.0	5.39 18.4	4.86 17.0									
36,204	34,799	33,248	31,633	30,187	26,844	21,377									420
6.08 25	6.18 23	6.27 22	6.35 21	6.41 21	6.41 20	6.09 19.0									
38,272	36,949	35,507	33,967	32,538	29,691	25,323	18,344								444
7.18 27	7.28 25	7.38 24	7.47 23	7.54 23	7.61 22	7.40 21	6.72 20								
40,686	39,448	38,112	36,673	35,265	32,707	29,316	24,335	15,163							472
8.63 30	8.74 28	8.84 27	8.94 26	9.03 25	9.14 25	9.05 24	8.68 23	7.26 22							L <u>.</u>
42,669	41,492	40,233	38,877	37,503	35,045	32,229	28,097	22,273							495
9.95 32	10.07 30	10.18 29	10.28 28	10.38 28	10.51 27	10.52 27	10.25 26	9.60 24	\sqcup						
43,962	42,821	41,607	40,304	38,961	36,537	33,982	30,319	25,373							510
10.89 34	11.00 32	11.12 31	11.23 30	11.33 29	11.48 28	11.52 28	11.32 28	10.84 26							

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). Power rating (BHP) does not include transmission losses. Bearing losses are included.

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels.

CRDA Belt Drive Centrifugal Power Roof Ventilators

Applications

The CRDA units are quiet, dependable power roof ventilators recommended for a wide range of general exhaust applications where low and medium ranges of air volume and pressure are specified. Applications include virtually all types of light manufacturing, commercial and institutional buildings such as shopping centers, hospitals, schools, hotels, office and apartment buildings, warehouses, airports, bus terminals and many others.

CRDA units are specified where a roof-mounted location is desired to eliminate interference with other equipment or activities in the building. They permit the direct upward venting of air. CRDA units may be used with or without ducts.

The advantages of a CRDA direct-drive over a belt-drive roof ventilator include lower maintenance requirements, reduced risk of lower performance levels as a result of loosened belts, and lower operating costs.

Construction

CRDA models feature a housing of durable spun aluminum for optimum weather protection. The overlapping deep-spun venturi minimizes air turbulence and increases efficiency.

The aluminum centrifugal wheel is a non-overloading, backward-inclined type, selected for low noise levels. Backplate fins draw cool air through the motor compartment.

The wheel is secured to the machined aluminum hub, and computer balanced on state-of-the-art equipment. The hub features a line bore, which eliminates the need for bushings. Neoprene vibration isolators to reduce noise and wear, 1/2" galvanized mesh birdscreen and factory wired disconnect device are all standard features.

Drive Mechanism

CRDA models have all the advantages of a direct drive assembly. There are no belts, bearings or pulleys to consume power or require maintenance.

Motors

The standard motor for most CRDA models is open dripproof construction and located out of the airstream. Totally enclosed, energy efficient, two-speed and explosion-proof motors may also be available. All motor brands are recognized and serviced nationwide. Motor enclosure may affect UL Listing.



UL705 - E39944

Type CRDA ventilators are Listed by Underwriters Laboratory Inc. to US and Canadian safety standards.



American Coolair Corporation, ILG Industries certifies that the Type CRDA PRVs shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Guide Specifications

Power Roof Ventilators shall be of the CRDA centrifugal type as manufactured by ILG Industries of American Coolair Corporation (individual models to be listed in fan schedule). Units shall meet UL Standard 705 and shall bear the AMCA Certified Ratings Seal for air and sound performance. Base and venturi inlet shall be one piece heavy gauge spun galvanized steel, with wheel and venturi overlapping for efficient operation. Motor compartment cover shall be heavy gauge spun aluminum construction and easily removable for access to motor and drive.

rive mechanism shall be of the direct-drive design. The line bore hub shall be mounted onto the backplate of the centrifugal wheel. The centrifugal wheel shall be heavy gauge aluminum with backward-inclined, non-overloading blades and be computer balanced.

Motor shall be open construction, NEMA design B. Optional variable speed control on some models allows for field adjustment and system balance. Motor shall be mounted with the shaft down to allow easy access to the electrical terminal board/circuit box.

Backdraft damper, epoxy coating, roof curb and other accessories shall be listed in the fan schedule.)

CRDA06 - CRDA10 Performance Data

CR	DA	06				(CFM	at	Stat	tic F	res	sur	е			RPM RANG	E OF SELECTI	ED MODELS	
0.0	00	.1:	25	.2	50	.3	75	.5	00	.6	25	.7	50	1.	00	CRDA06A11	CRDA06C16	CRDA06E16	RPM
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1/25 HP	1/13 HP	1/10 HP	
18	33																		550
0.01	0.5																		550
26	66	18	37																800
0.01	1.5	0.01	1.1																000
31	16	2	54	16	62														950
0.02	2.9	0.02	2.4	0.02	2.1														330
36	66	3′	15	25	50	16	63												1100
0.02	4.4	0.03	4.0	0.03	3.7	0.02	3.3												1100
41	16	37	71	31	18	2	52	17	74										1250
0.03	6.3	0.04	5.8	0.04	5.4	0.04	5.1	0.03	4.8										1230
46	3 5	42	24	38	33	33	31	20	62										1400
0.05	8.1	0.05	7.6	0.05	7.2	0.06	7.0	0.05	6.6										1400
53	32	49	94	46	52	42	20	37	75	3	16								1600
0.07	10.8	0.08	10.3	0.08	9.8	80.0	9.4	0.08	9.1	0.08	8.7								1000
54	18	5	12	48	31	44	12	39	98	3	48	28	33						1650
0.08	11.5	0.08	11.1	0.09	10.5	0.09	10.0	0.09	9.8	0.09	9.4	0.09	9.0						1030

CR	DA	8				(FM	at	Stat	ic F	res	sur	е			RPM RANG	E OF SELECTE	ED MODELS	
0.	00	.1:	25	.2	50	.3	75	.5	00	.6	25	.7	50	1.	00	CRDA08A11	CRDA08C15	CRDA08E16	RPM
BHP	Sone	BHP	Sone	1/25 HP	1/13 HP	1/10 HP													
2	39																		550
0.01	0.5																		550
34	47	20	67																800
0.01	1.4	0.01	1.2																800
4	12	34	19	25	56														950
0.02	2.7	0.02	2.4	0.02	2.3														950
4	77	42	26	36	60	22	24												1100
0.02	4.2	0.03	3.9	0.03	3.8	0.03	3.7												1100
54	12	49	97	44	14	38	31	2	05										1250
0.03	5.9	0.04	5.6	0.04	5.6	0.05	5.4	0.04	5.2										1230
6	07	56	66	52	24	47	71	4	09	2	37								1400
0.05	7.6	0.05	7.3	0.06	7.2	0.06	7.1	0.06	7.0	0.05	6.8								1400
6	72	63	34	59	99	55	54	5	05	4	46	30)3						1550
0.07	9.4	0.07	9.1	0.08	8.9	80.0	8.9	0.09	8.8	0.09	8.6	0.07	8.4						1330
69	94	6	57	62	24	58	31	5	34	48	82	39	93						1600
0.07	10.0	0.08	9.8	0.08	9.6	0.09	9.5	0.09	9.4	0.10	9.3	0.09	9.1						1000

CRI	DA1	10				(FM	at	Stat	ic P	res	sur	е			RPM RANG	E OF SELECTE	ED MODELS	
0.0	00	.12	25	.25	50	.3	75	.50	00	.62	25	.7	50	1.	00	CRDA10A11	CRDA10C15	CRDA10E15	RPM
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1/25 HP	1/13 HP	1/10 HP	
31	16																		550
0.01	0.2																		550
46	60	35	0																800
0.01	1.9	0.02	1.3																000
54	16	45	9	34	12														950
0.02	3.2	0.02	2.8	0.03	2.3														950
63	33	55	7	47	' 1	34	12												1100
0.03	4.8	0.04	4.4	0.04	3.9	0.04	3.5												1100
71	19	65	i1	58	32	49	98	35	57										1250
0.05	6.6	0.05	6.3	0.06	5.9	0.06	5.4	0.06	5.0										1230
80)5	74	4	68	37	61	17	53	37	40)5								1400
0.06	8.0	0.07	7.8	0.08	7.5	0.08	7.1	80.0	6.7	0.08	6.3								1400
86	3	80	5	75	52	69	91	62	21	53	88	22	26						1500
0.08	9.2	0.09	9.0	0.09	8.7	0.10	8.3	0.10	7.9	0.10	7.5	0.06	7.2						1300
89	91	83	6	78	34	72	27	66	61	58	36	47	74			·			1550
0.09	9.8	0.10	9.6	0.10	9.3	0.11	8.9	0.11	8.5	0.11	8.1	0.11	7.7						1990

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301. Values shown are for Installation Type A: free inlet hemispherical sone levels.

AMCA Certified Ratings apply to the CRDA Roof Ventilator constant speed fans and not variable speed fans.

CRDA12 - CRDA13 Performance Data

CR	DA1	12					FM	at	Stat	ic F	res	sur	е			RPM RANG	E OF SELECTE	D MODELS	
0.	00	.13	25	.2	50	.3	75	.5	00	.6	25	.7	50	1.	00	CRDA12E10	CRDA12J16	CRDA12J17*	RPM
ВНР	Sone	ВНР	Sone	ВНР	Sone	ВНР	Sone	BHP	Sone	ВНР	Sone	ВНР	Sone	BHP	Sone	1/8 HP	1/2 HP	1/2 HP	
62	23	44	12																550
0.01	1.3	0.02	0.7																330
73	36	59	93																650
0.02	2.3	0.03	1.7																030
8	50	72	29	57	77														750
0.03	3.3	0.04	2.7	0.04	2.5														7.50
90	63	85	56	73	37	5	57												850
0.05	4.4	0.05	3.8	0.06	3.6	0.06	3.4												000
1,0	76	98	31	88	32	76	52	5	30										950
0.06	5.4	0.07	5.0	0.08	4.8	0.08	4.7	0.07	4.5										300
1,1	61	1,0	74	98	34	87	79	7-	47										1025
80.0	6.4	0.09	6.0	0.10	5.8	0.10	5.7	0.10	5.5										.020
1,3	303	1,2	25	1,1	145	1,0	62	9	64	8-	43	50	66						1150
0.11	8.1	0.12		0.14	7.4	0.14	7.4	0.15	7.3	0.15	7.1	0.12	7.0						1100
1,4	173	1,4	05	1,3	334	1,2	264	1,1	186	1,1	100	1,0	02						1300
0.16	10.5	0.18	10.1	0.19	9.8	0.20	9.7	0.21	9.6	0.22	9.6	0.22	9.5						1000
1,6	643	1,5	82	1,5	519	1,4	55		392		322		244	1,0)57				1450
0.23	13.1	0.24	12.8	0.26	12.5	0.27	12.3	0.28	12.2	0.29	12.2	0.30	12.1	0.30	11.9				
1,8		1,7			701	,	43		586		529		64		322				1600
0.30	15.5	0.32	15.2	0.34	14.9	0.35	14.7	0.37	14.5	0.38	14.4	0.39	14.3	0.40	14.2				
	15	1,8		1,8			'55		700		647	1,5			160				1690
	17.1			0.39	l				16.1		16.0		15.9		15.7				
	955	1,9		1,8			98		744		92		37		512				1725
0.38	17.7	0.40	17.4	0.42	17.1	0.43	16.9	0.45	16.7	0.46	16.6	0.47	16.5	0.50	16.3				

CR	DA1	13				(FM	at	Stat	ic F	res	sur	е			RPM RANG	E OF SELECTE	D MODELS	
0.0	00	.12	25	.2	50	.3	75	.5	00	.6	25	.7	50	1.	00	CRDA13F11	CRDA13J15	CRDA13K17*	RPM
BHP	Sone	ВНР	Sone	ВНР	Sone	ВНР	Sone	BHP	Sone	BHP	Sone	BHP	Sone	ВНР	Sone	1/5 HP	1/2 HP	3/4 HP	
83	33	63	35																550
0.02	2.0	0.03	1.3																330
1,0	23	86	69	67	74														675
0.04	3.6	0.04	2.8	0.05	2.3														0/3
1,2	12	1,0	87	94	41	75	59												800
0.06	5.0	0.07	4.4	0.08	3.9	0.08	3.6												000
1,3	63	1,2	255	1,1	30	99	91	8	12										900
0.08	6.2	0.10	5.9	0.11	5.4	0.11	5.0	0.11	4.7										300
1,5	15	1,4	20	1,3	310	1,1	92	1,0	58	89	90								1000
0.12	7.7	0.13	7.4	0.14	7.0	0.15	6.6	0.15	6.2	0.15	6.0								1000
1,7	04	1,6	22	1,5	527	1,4	26	1,3	19	1,1	199	1,0)57						1125
0.17	9.8	0.18	9.5	0.19	9.2	0.20	8.8	0.21	8.4	0.22	8.1	0.21	7.8						1120
1,8	94	1,8	21	1,7	737	1,6	49	1,5	556	1,4	159	1,3	352	1,0	082				1250
0.23	12.2	0.25	12.0	0.26	11.7	0.27	11.4	0.28	11.0	0.29	10.6	0.30	10.3	0.29	9.7				1230
2,0	45	1,9	78	1,9	903	1,8	22	1,7	' 39	1,6	551	1,5	560	1,3	348				1350
0.29	14.3	0.31	14.1	0.32	13.9	0.34	13.5	0.35	13.2	0.36	12.9	0.37	12.5	0.37	11.9				1550
2,2	235	2,1	74	2,1	107	2,0	34	1,9	60	1,8	382	1,8	301	1,6	329				1475
0.37	16.6	0.39	16.4	0.42	16.2	0.43	15.9	0.44	15.6	0.46	15.3	0.47	15.0	0.48	14.5				1473
2,3	86	2,3	30	2,2	268	2,2	01	2,1	32	2,0)61	1,9	987	1,8	334				1575
0.45	18.3	0.48	18.2	0.50	18.1	0.52	17.8	0.53	17.5	0.54	17.1	0.56	16.8	0.59	16.3				13/3
2,6	551	2,6	01	2,5	547	2,4	88	2,4	27	2,3	365	2,3	301	2,1	168				1750
0.62	22	0.65	22	0.67	22	0.70	22	0.72	21	0.73	21	0.74	21	0.78	20				1730

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

* - These models are not compatible with variable speed control.

AMCA Certified Ratings apply to the CRDA Roof Ventilator constant speed fans and not variable speed fans.

CRDA15 - CRDA 20 Performance Data

CR	DA1	15				CF	Ма	t St	atic	Pre	essi	ıre				RPM RANG	SE OF SELECTE	D MODELS	
0.0	00	.13	25	.2	50	.3	75	.5	00	.6	25	.7	50	1.	00	CRDA15H11	CRDA15K15	CRDA15L17*	RPM
ВНР	Sone	1/3 HP	3/4 HP	1 HP															
1,0	89	93	30																550
0.04	2.4	0.04	1.9																330
1,2	86	1,1	69	1,0	15														650
0.06	3.9	0.07	3.2	0.08	3.1														030
1,4	84	1,3	91	1,2	250	1,0	88												750
0.09	5.2	0.10	4.5	0.11	4.3	0.12	4.3												750
1,6	82	1,6	09	1,4	193	1,3	78	1,1	194										850
0.13	6.8	0.15	6.2	0.16	5.9	0.17	5.8	0.18	5.7										030
1,8	80	1,8	24	1,7	22	1,6	04	1,5	517	1,3	34								950
0.19	8.6	0.20	8.0	0.21	7.6	0.23	7.5	0.24	7.3	0.25	7.2								950
2,1	77	2,1	34	2,0	53	1,9	66	1,8	360	1,7	785	1,6	577						1100
0.29	11.9	0.30	11.4	0.32	10.9	0.33	10.7	0.35	10.5	0.36	10.4	0.38	10.2						1100
2,2	76	2,2	237	2,1	163	2,0	79	1,9	984	1,8	397	1,8	324						1150
0.33	13.1	0.34	12.6	0.36	12.2	0.38	11.9	0.39	11.7	0.41	11.6	0.43	11.4						1130
2,4	74	2,4	39	2,3	379	2,3	01	2,2	224	2,1	28	2,0)56	1,8	868				1250
0.42	15.6	0.44	15.1	0.46	14.7	0.48	14.4	0.49	14.2	0.51	14.1	0.53	13.9	0.56	13.5				1230
2,6	72	2,6	41	2,5	93	2,5	21	2,4	150	2,3	375	2,2	284	2,1	161				1350
0.53	17.8	0.55	17.4	0.57	17.0	0.59	16.8	0.61	16.5	0.63	16.4	0.65	16.2	0.68	15.8				1330
2,8	20	2,7	91	2,7	750	2,6	85	2,6	317	2,5	49	2,4	71	2,3	333				1425
0.63	20	0.64	19.2	0.66	18.9	0.69	18.6	0.71	18.4	0.72	18.1	0.75	17.7	0.79	17.2				1423
2,9	69	2,9	41	2,9	04	2,8	47	2,7	782	2,7	18	2,6	52	2,5	501				1550
0.73	21	0.75	21	0.77	20	0.79	20	0.82	20	0.83	20	0.85	19.3	0.90	18.8				1550
3,4	14	3,3	91	3,3	363	3,3	25	3,2	273	3,2	216	3,1	60	3,0	046				1725
1.11	26	1.13	26	1.15	25	1.18	25	1.21	24	1.24	24	1.25	24	1.30	24				1/25

CR	CRDA16 CFM at Static Pressure														RPM C					
0.00		.125		.250		.375		.500		.625		.750		1.00		CRDA16J8*	CRDA16L11*	CRDA16N17*	RPM	
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP Sone		BHP	Sone	BHP	Sone	1/2 HP	1 HP	2 HP		
24	2439		2321		2178		2018		1854		1621								005	
0.22	8.3	0.24	7.6	0.26	7.2	0.27	6.9	0.28	6.2	0.28	5.9								825	
34	129	3349		3262		3165		3057		2942		2830		2595					1160	
0.60	16.8	0.64	15.8	0.67	15.2	0.69	14.9	0.72	14.4	0.74	14.1	0.76	14.0	0.79	12.2				1160	
5173		5121		5067		5012		4954		4894		4830		4693					4750	
2.08	31	2.12	30	2.17	29	2.22	29	2.26	28	2.31	28	2.35	28	2.43	27				1750	

CR	CRDA18 CFM at Static Pressure															RPM OF SELE	CTED MODELS		
0.00		.125		.250		.375		.500		.625		.750		1.00		CRDA18J8*	CRDA18L11*	RPM	
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1/2 HP	1 HP		
3,095		2,995		2,824		2,666		2,482		2,233		1,915						005	
0.31	11.7	0.33	10.8	0.36	10.5	0.38	9.7	0.40	9.6	0.41	8.9	0.40	8.5					825	
4,3	52	4,291		4,208		4,084		3,966		3,856		3,740		3,476				4400	
0.86	23	0.89	22	0.93	21	0.97	21	1.01	21	1.04	21	1.06	19.3	1.10	19.9			1160	

CR	CRDA20 CFM at Static Pressure															RPM OF SELECTED MODEL	
0.00		.125		.250		.375		.500		.625		.750		1.00		CRDA20M11*	RPM
BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	BHP	Sone	1-1/2 HP	
5,7	730	5,621		5,506		5,3	82	5,255		5,130		5,007		4,754			1160
1.45	34	1.49	28	1.54	25	1.59	24	1.64	24	1.67	24	1.68	23	1.73	22		1160

Performance shown is for Type A: free inlet, free outlet. Performance ratings do not include the effects of appurtenances (accessories).

The sound ratings shown are loudness values in hemispherical sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA Standard 301.

AMCA Certified Ratings apply to the CRDA Roof Ventilator constant speed fans and not variable speed fans.

Values shown are for Installation Type A: free inlet hemispherical sone levels.

^{* -} These models are not compatible with variable speed control.

Installation

Most models are shipped fully assembled and ready for installation. Always inspect equipment for transit damage before accepting delivery to assure a valid claim. Special handling and storage procedures are required if unit is to remain idle for a long time prior to installation.

Placement

All belt-driven units must be accessibly installed for maintenance and servicing of belts, bearings, motors and pulleys. Horizontal operation only is recommended to assure satisfactory damper operation.

Mounting

Satisfactory operation of roof ventilators requires mounting on adequately designed and constructed roof curbs. Prefabricated curbs for convenience in installation are available from ILG. Install with base of unit horizontal. Provide adequate caulking, flashing or other weatherproofing means.

Inspection

Check centrifugal wheel for free rotation.

Check belt for proper tension (CRBCA & CRBA).

Check bearings for proper and secure locking to drive shaft (CRBA).

Check motor and fan sheave faces for proper alignment (CRBCA & CRBA).

Check circuit phase, voltage and wiring connection against that shown on motor nameplate.

Check direction of fan rotation for proper air flow.

After one week of operation, check belt for proper tension (CRBCA & CRBA).

Maintenance

Units should be checked monthly for the first two or three months and periodically thereafter. Units should be cleaned periodically and checked for eroded parts which should be replaced to avoid structural damage and possible failure. Proper lubrication is the most important maintenance requirement. CRBA units should be lubricated as necessary based on usage and operating conditions. "C-Drive" bearings on all CRBCA units are permanently sealed and require **no** lubrication. Motor bearings should be lubricated according to the motor manufacturer's instructions.

Adjustment of Variable Pitch Pulley and Belt (CRBCA & CRBA)

Variable pitch pulley may be adjusted within catalog RPM range to alter performance without motor overload. Pulley alignment and belt tension should be adjusted if necessary. Inspection every 6 to 12 months is recommended.

Options & Accessories

Prefabricated Roof Curbs

Insulated roof curbs with weather-resistant continuous welded construction are available for convenience in installation for both insulated and non-insulated roof decks.

Special Motors

Two-speed, totally enclosed, energy efficient and explosionproof motors for hazardous locations may be available for many models. Motor requirements may affect UL Listing.

Backdraft Dampers

Gravity or motor operated backdraft dampers are available. They are aluminum construction and designed for installation in prefabricated roof curbs.

Safety Disconnects

Safety disconnects cut power to motor for servicing of unit. A disconnect device is standard on all CRDA units and an option for CRBA and CRBCA units. It may be shipped loose for field installation or factory mounted and wired.

Protective Coatings

Fan units are not recommended for exhausting air of a corrosive nature. However, special protective coatings are available where units may be exposed to corrosive exterior conditions. Parts requiring painting are processed through the American Coolair five-stage pretreatment system prior to the application of any coatings to insure maximum finish adhesion. These parts use a thermosetting epoxy powder paint with an average thickness of 3 mils and baked at 400°F to a smooth, hard continuous finish. Consult your ILG Industries representative for available coatings.

Roof Handle

Aluminum handle facilitates removal of roof.

WARNING

CAUTION



DO NOT INSTALL FAN WITH MOVING PARTS WITHIN 8 FEET OF FLOOR OR GRADE LEVEL WITHOUT A GUARD THAT COMPLIES WITH OSHA REGULATIONS. DO NOT USE UNLESS ELECTRICAL WIRING COMPLIES WITH ALL APPLICABLE CODES. DO NOT WIRE WITHOUT PROVIDING FOR A POWER SOURCE DISCONNECT AT THE FAN ITSELF. DO NOT SERVICE EXCEPT BY A QUALIFIED MAINTENANCE TECHNICIAN AND ONLY AFTER DISCONNECTING THE POWER SOURCE. FAILURE TO OBSERVE THESE PRECAUTIONS CAN RESULT IN SERIOUS INJURY OR DEATH.

To convert air performance (CFM and SP) and power (BHP) to metric units, multiply CFM x .000472 to obtain cubic meters per second (m₃/s). Multiply SP x 248.36 to obtain pascals (Pa). Multiply BHP x .7457 to obtain kilowatts (kW).

Example: 3904 CFM x .000472 = 1.8427 m³/s 0.125 SP x 24.36 = 31.05 Pa 0.886 BHP x .7457 = 0.661 kW

CRBCA Specification Checklist

General exhaust units for low to medium air volumes in commercial, institutional and light manufacturing buildings. Centrifugal design with advantages of compact, attractive appearance, quiet operation and performance against higher static pressures. Variable pitch belt drive allows for speed adjustment. Hinged motor bracket with a belt tensioning bolt. Weatherproof heavy duty aluminum housing and motor compartment cover resist corrosion and maintain appearance. Deep-spun, overlapping, one-piece venturi minimizes noise, reduces air turbulence and improves efficiency. "C-Drive" design provides a calculated L10 bearing life in excess of 1,000,000 hours with its unique radial loading elimination design. Aluminum centrifugal wheel is quiet, non-overloading, backward-inclined design and is computer balanced. Standard open drip-proof motor is out of the airstream for protection. The motor's electrical connection terminal board is up for easy and convenient electrical connection and servicing. Positively cooled motor compartment with forced air ventilation system extends motor life. UL Label (UL 705) for general ventilation. Conduit raceway for ease in connecting to power supply. AMCA Seal assures certified rating of air and sound performance. Birdscreen prevents entry of birds or other potentially damaging objects. Heavy duty neoprene isolators eliminate metal-to-metal contact, reducing vibration and sound.

CRBA Specification Checklist

Units provide general exhaust of low, medium and high air volumes in commercial, institutional and light manufacturing buildings. Centrifugal design has advantages of compact, attractive appearance, quiet operation and performance against higher static pressures. Variable pitch belt drive allows for speed adjustment. Hinged motor bracket with belt tensioning bolt(s). Weatherproof heavy duty aluminum housing and motor compartment cover resist corrosion and maintain appearance. Deepspun, overlapping, one-piece venturi minimizes noise, reduces air turbulence and improves efficiency. Centrifugal wheel is quiet, non-overloading, backward-inclined design and is computer balanced. Standard open drip-proof motor is out of the airstream for protection. The motor is mounted with the shaft up for convenient access to the variable pitch cast iron motor pulley. Motor compartment is cooled by a forced air ventilation system, extending motor life. UL Label (UL 705) for general ventilation. Conduit raceway allows for ease in connecting to power supply. AMCA Seal assures certified rating of air and sound performance. Birdscreen prevents entry of birds or other potentially damaging objects. Heavy duty neoprene isolators eliminate metal-to-metal contact, reducing vibration and sound. Heavy duty pillow-block bearings with cast iron housing are self-aligning and relubricable.

CRDA Specification Checklist

General exhaust units for low to medium air volumes in commercial, institutional and light manufacturing buildings. Centrifugal design with advantages of compact, attractive appearance, quiet operation and performance against higher static pressures. Spun aluminum housing for durable weather protection and attractive appearance. Direct-drive advantages of minimal maintenance and operating costs. Deep-spun, overlapping, one piece venturi minimizes noise, reduces air turbulence and improves efficiency. Aluminum centrifugal wheel is quiet, non-overloading, backward-inclined design and is computer balanced. Standard open motor is out of the airstream for protection. The motor's electrical connection terminal board is up for easy and convenient electrical connection and servicing. Positively cooled motor compartment with forced air ventilation system extends motor life. UL Label (UL 705) for general ventilation. Safety disconnect device enables cut-off of power to unit for servicing. Birdscreen prevents entry of birds or other potentially damaging objects. Factory run and tested prior to shipment for dependable operation. AMCA Seal assures certified rating of air and sound performance.

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 REINSTALLATION COST OR FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE IS ASSUMED OR SHALL BE IMPOSED UPON AMERICAN COOLAIR.



