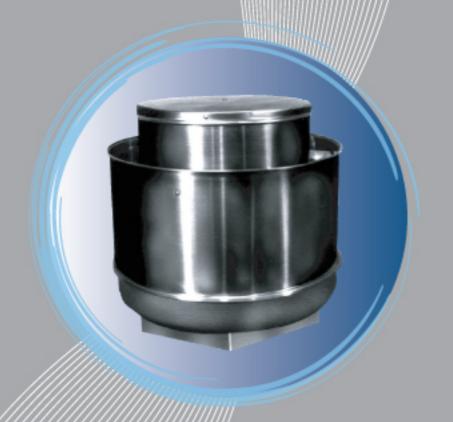
FCVS Roof Upblast Centrifugal Fan









FCVS 02-12 July, 2012











AMCA Sound & Air Performance Seal

MAICO GULF LLC Certifies that the Dynair model FCVS shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA 311 and comply with the requirements of the AMCA Certified Ratings Seal.

PRODUCT FEATURES

Noise

Balancing G2.5
Extended Fan life
Quiet and Low Noise

Centrifugal Impeller

Non sparking Construction
Centfrifugalize grease or liquid contaminatoin

Active cooling

Long lasting motor and bearing Fan away from polluted area Fresh air cooling driven chamber

Fan design

Enhance building appearences Silver white metalic lustre casing harmonious with building colors

Fan application

Upblast exhaust air high pressure
Wet and sticky air exhaust
Ideal for lub grease, kitchen, dust
All aluminium construction explosive resistant
exhaust

Low weight

Casing and Impeller: Aluminium alloy material Reduce of roof load reinforcement structure cost saved

UL Listings

Most models are standard as listed by Underwriters Laboratories under Standard 762 (YZHW).

Most models are available as listed by Underwriters Laboratories under Standard 705.(ZACT)







section 4

KITCHEN EXHUAST APPLICATION

The FCVS fans kitchen exhaust fans are designed and built to handle the exhaust of hot, greasy air from commercial kitchen hoods. The fan discharges contaminated air away from supply air intakes and building discharges contaminated air away from supply air intakes and building exteriors. These exhaust fans can be roof or wall mounted throught size (with HP limitations shown below). Sizes 30-48 are to be roof mounted only.

Product Features

UL listing under standard 705 as option on most models for normal Roof Upblast

UL listing under Standard 762 available as option on most models for Kitchen Exhaust

Motors are UL recognized with reputed Brand

Wiring is external to exhuast air

Safety disconnect utility box mounted switch and cover plate shipped loose for ease of field wiring(optional)

Motor Compartment

Motor compartment insulated for operating temperatures to 149°C

Vent tube provides postive motor cooling to maximize motor life

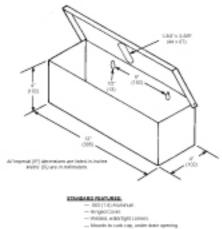
Easy removable lid and tube utilize durable fastener retainer

Fan Plate isolates motor compartment from contaminted exhaust air

Opening around shaft sized to allow optimum air passage to ensure proper motor compatment cooling



GREASE COLLECTOR BOX







GENERAL DESCRIPTION

Direct driven and Belt driven

FCVS Centrifugal roof exhaust fans are upblast configuration and suitable for roof mounted applications exhausting relatively polluted air. This model has both belt driven and direct driven. Explosion proof series available in direct driven model. Its used for kitchen fume application as centrifugal action flows down the grease in the collection box. Max Exhuast Temperature 60° C - 90° C for the continous operation.

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Housing

The fan housing and hood are made of heavy guage aluminium alloy. The wind band has a rigid internal support structure of water tight during heavy rain.

Impeller

The impeller is backward curved centrifugal type made of heavy guage aluminium alloy. The inlet venturi guide the air smoothly with low niose at inlet. The impeller is balanced statically and dynamically to level G2.5 as per ISO standard No.1940. LP - Low Pressure Impeller and HP - High Pressure Impeller series are available for different application of air contamination.

Shaft

The fan shaft shall be sized for a minimum of 150% of driven horsepower. Pulleys shall be of cast iron keyed and securely attached to the impeller and the motor shafts. Coical (QD) type bushings shall be equipped for easy removal of the pulley.

Bearings

The bearing shall be selected for a minimum (L-10) life in excess of 80,000 hourse at maximum catalogued operating speed. Bearing type shall be permanently sealed, re-lubricable pillow block metal ball bearings.

Drive support: Drive assemblies shall be supported by heavy guage powder coated steel. The belt tension shall be adjusted through motor support plate, the design shall make sure the fan shaft is always parallel.

Motor

The motot shall be carefully matched to the fan load and its IP 55, insulation class F. The motor bearings shall be ball type and need not lubrication. Motor chamber is cooled through a vent tube free from the contaminated air. Complete assembly including motor and impeller shall be mounted on vibration isolators.

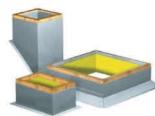




OPTIONAL ACCESSORIES







Gravity back-draft damper

Carefully designed back-draft damper with aluminum blades cross linked can stop the backflow or external air and it would not generate condensed water.

Service Switch

The service switch is to be installed inside the fan or on the roof close to the fan, the usuage is only to make sure the power supply can be reliablely shut off while repairing the fan, and it is not supposed to start/stop the fan for daily operation.

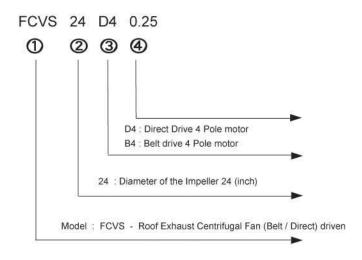
Curb Adapter

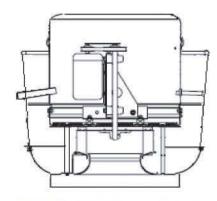
The curb adapter is to adapt ready-made roof curb to fit FCVS fans when size does not match. The adapter can convert from smaller range to bigger range and viceversa. Existing roof curb is required when ordering.

Discharge Tube

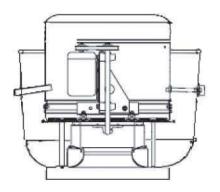
Discharge Tube allows for sing le point drainage of grease, water and other residues. Grease Box Aluminum trap designed to collect grease residue to avoid drainage onto roof surface.

REFERENCE CODE





FCVS - D (Direct - drive) (Explosive air exhaust optional)



FCVS - B (Belt - drive)





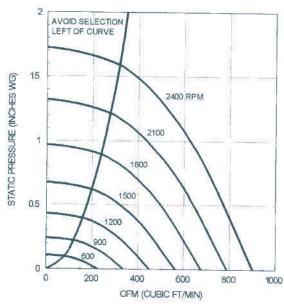
Performance Data Direct driven



Performance certified is for installation type A - free inlet, free outlet.Speed(RPM) is nominal.Performance is based on the actual speed of test.Base Unit as per Motor speed RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls.Performance ratings do not include the effects of a appurtenances(accessories)

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA standard 301. Values shown are for inlet L_{wi} sound | and Lwi A sound power levels for installation Type A; free inlet, free outlet. Values shown are for installation Type A, free inlet hemispherical sone levels. The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

Performance curve



Sound Data

				SOUN	D POW	ER RE	10 ⁻¹² W	ATTS		
					OCTA	VE BAI	VDS			
RPM	SP	1	2	3	4	5	6	7	8	LWA
	.000	50	57	51	52	48	49	43	39	55
1075	.125	54	56	52	51	48	47	43	38	54
	.375	61	63	56	58	53	50	45	39 38 41 50 50 49 50 51	59
	.000	65	65	66	62	59	57	55	50	65
	.250	66	66	65	62	59	57	54	50	65
	.375	66	67	65	62	59	56	54	49	65
1600	.500	68	69	67	63	61	58	54	50	66
	.625	71	71	69	65	63	59	56	51	68
	.750	73	74	71	67	65	61	57	52	70

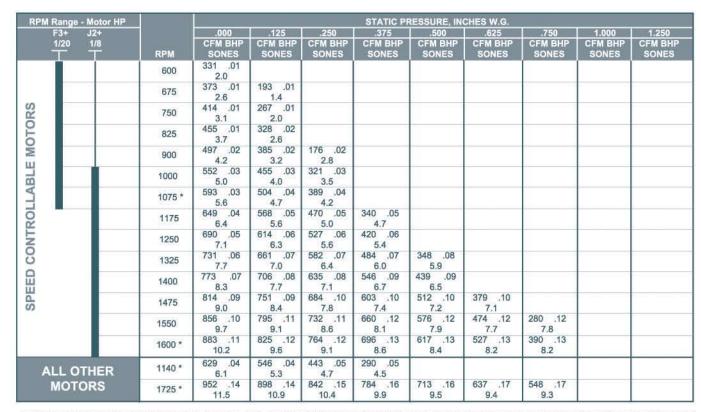
Values shown are for installation Type A, free inlet hemispherical fan sone levels. The sound ratings shown are loudness values in fan sones at 5 feet(1.5m) in a hemisperical free field calculated per AMCA Standard 301. Ratings do not include the effects of duct end correction.

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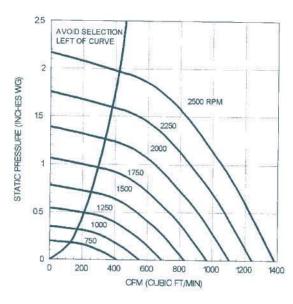
Performance Data Direct driven



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Performance curve



Sound Data

				SOUN	D POW	ER RE	10-12 M	ATTS		
					OCTA	VE BAI	NDS			
RPM	SP	1	2	3	4	5	6	7	8	LWA
	.000	56	68	57	54	50	50	52	53	60
1075	.125	57	64	54	53	49	49	49	49	58
	.375	58	60	53	53	51	51	47	53 49 43 61 58 57 56 55	57
	.000	74	73	74	66	61	59	60	61	70
	.250	74	71	71	64	61	58	58	58	68
4000	.375	74	71	70	63	60	58	57	57	67
1600	.500	73	71	69	63	60	58	57	56	67
	.625	72	70	69	63	61	60	58	55	67
	.750	72	70	68	63	61	60	58	54	68

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

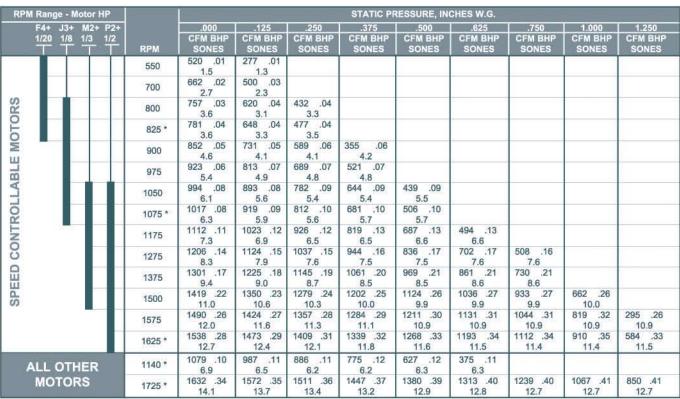
Ratings do not include the effects of duct end correction.

section 4





Performance Data Direct driven

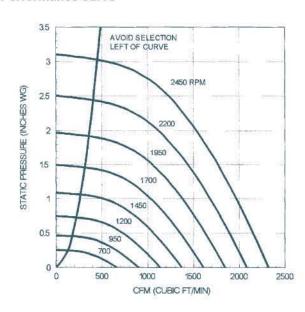


Performance certified is for installation type A - free inlet, free outlet. Speed(RPM) is nominal. Performance is based on the actual speed of test. Base Unit as per Motor speed RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls. Performance ratings do not include the effects

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Performance curve

appurtenances(accessories)



Sound Data

				SOUN	D POW	ER RE	10-12 W	ATTS		
					OCTA	VE BA	NDS			
RPM	SP	1	2	3	4	5	6	7	8	LWA
11.7	.000	54	60	55	52	52	52	44	37	57
825	.125	58	58	53	50	50	49	42	35	55
	.375	58	57	52	49	49	49	45	37 35 40 45 44 48 59 57	55
	.000	61	65	64	59	57	59	53	45	64
1075	.250	65	64	62	57	55	56	50	44	62
	.500	65	63	60	56	55	56	52	48	62
	.000	76	73	78	72	68	67	66	59	75
1625	.500	75	77	76	70	66	64	63	57	74
	1.000	72	77	75	69	65	64	64	59	73

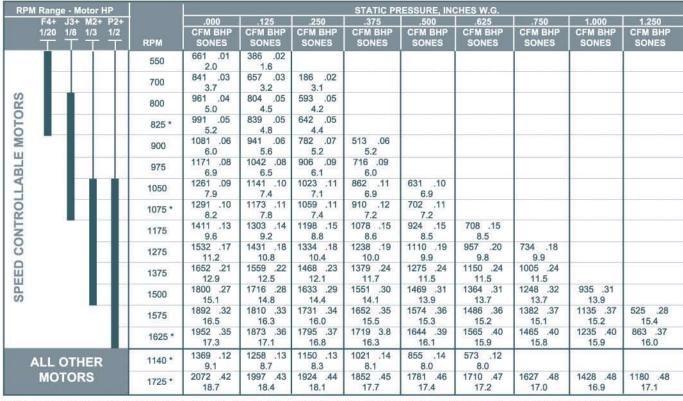
Values shown are for installation Type A, free inlet hemispherical fan sone levels. The sound ratings shown are loudness values in fan sones at 5 feet(1.5m) in a hemisperical free field calculated per AMCA Standard 301.

Ratings do not include the effects of duct end correction.





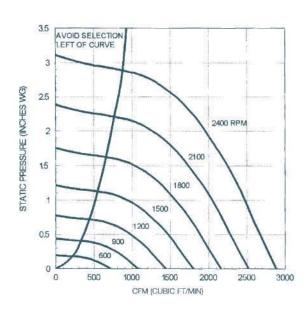
Performance Data Direct driven



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Performance curve



Sound Data

				SOUNE	POW	ER RE	1012 W	ATTS		
					OCTA	/E BAI	IDS			
RPM	SP	1	2	3	4	5	6	7	8	LWA
	.000	65	64	60	54	59	55	45	35	62
825	.125	65	63	59	53	57	51	45	38	60
	.375	67	61	59	51	52	51	46	42	58
	.000	68	72	69	63	63	62	55	45	69
1075	.250	68	72	68	62	60	59	53	47	67
	.500	63	71	68	61	58	57	54	48	66
	.000	72	85	82	77	70	74	69	60	80
1625	.500	71	85	81	76	68	72	66	60	79
	1.000	73	86	81	76	67	68	66	60	78

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

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section 4





Performance Data Direct driven

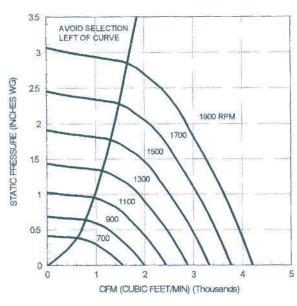
RPM R	ange - Motor HP					STATIC PE	RESSURE, IN	CHES W.G.			
K	(4+ M3+		.000	.125	.250	.375	.500	.625	.750	1.000	1.250
<u> </u>	1/6 <u>1/3</u>	RPM	CFM BHP SONES								
		450	993 .02 2.6	655 .03 2.9							
		500	1103 .03 3.3	815 .04 3.6							
RS		550	1214 .04 4.1	961 .05 4.3	441 .04 4.6						
5		600	1324 .06 5.0	1098 .06 5.1	796 .07 5.3						
Σ		650	1434 .07 5.9	1230 .08 6.0	973 .08 6.1						
BL		700	1545 .09 6.8	1359 .10 6.8	1132 .10 6.9	787 .10 7.2					
SPEED CONTROLLABLE MOTORS		750	1655 .11 7.7	1485 .12 7.7	1279 .13 7.8	1029 .12 8.0					
80		800	1765 .14 8.7	1606 .15 8.7	1422 .15 8.7	1206 .16 8.9	854 .15 9.1				
N N		825 *	1820 .15 9.2	1666 .16 9.2	1490 .17 9.2	1288 .17 9.3	1002 .17 9.5				
3		875	1931 .18 10.3	1785 .19 10.2	1623 .20 10.2	1439 .20 10.2	1221 .21 10.4	778 .18 10.5			
		925	2041 .21 11.4	1904 .22 11.2	1755 .23 11.2	1585 .24 11.2	1396 .24 11.4	1135 .24 11.6			
S		975	2151 .25 12.5	2021 .26 12.4	1884 .27 12.3	1729 .28 12.2	1555 .28 12.4	1353 .28 12.6	1002 .26 12.7		
		1025	2262 .29 13.6	2138 .30 13.5	2011 .31 13.4	1864 .32 13.3	1704 .32 13.4	1529 .33 13.6	1307 .33 13.8		
		1075 *	2372 .33 14.8	2254 .34 14.7	2135 .35 14.6	1997 .36 14.5	1850 .37 14.5	1693 .38 14.6	1507 .38 14.8		
ALL OT	THER MOTORS	1140 *	2525 .37 13.3	2410 .38 12.8	2292 .39 12.3	2155 .40 11.9	2006 .41 11.6	1842 .42 11.4	1666 .42 11.2	1084 .38 11.2	

section 4

Performance certified is for installation type A - free inlet, free outlet. Speed(RPM) is nominal. Performance is based on the actual speed of test. Base Unit as per Motor speed RPM range capable with solid state speed control. AMCA Seal for sound rating does not apply to units with speed controls. Performance ratings do not include the effects appurtenances(accessories)

The sound power level ratings shown are in decibels,refered to 10⁻¹² watts calculated per AMCA standard 301. Values shown are for inlet L_{wi} and Lwi A sound power levels for installation Type A: free inlet, free outlet. Values shown are for installation Type A, free inlet hemispherical sone levels. The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

Performance curve



Sound Data

				SOUN	D PON	/ER RE	1012 N	ATTS		
					OCTA	VE BA	NDS			
RPM	SP	1	2	3	4	5	6	7	8	LWA
	.000	74	76	73	68	63	60	54	46	70
	.125	73	76	73	68	64	60	54	47	70
825	.250	73	75	72	69	64	60	54	49	71
	.500	73	74	72	69	66	61	56	51	71
	.750	73	74	72	69	66	61	57	51	71
	.000	81	81	81	76	70	68	62	55	78
	.250	80	81	80	76	71	67	62	56	78
1075	.500	80	80	80	77	72	67	63	57	78
	.750	81	80	80	77	73	68	64	58	78
	1.000	81	79	79	77	73	69	64	59	79

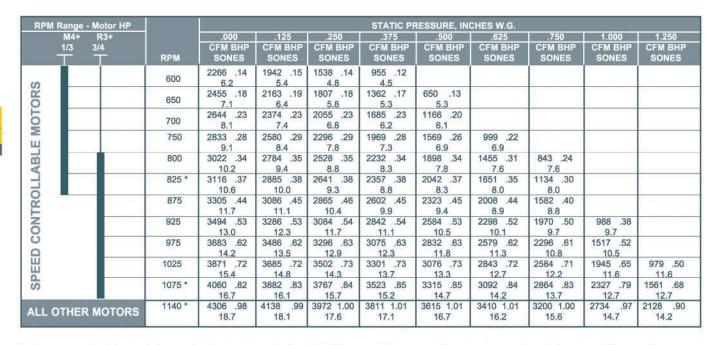
Values shown are for installation Type A, free inlet hemispherical fan sone levels. The sound ratings shown are loudness values in fan sones at 5 feet(1.5m) in a hemisperical free field calculated per AMCA Standard 301. Ratings do not include the effects of duct end correction.

Performance certified is for installation type A-free inlet, free outlet. Performance ratings (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemisperical free field calculated per AMCA standard





Performance Data Direct driven



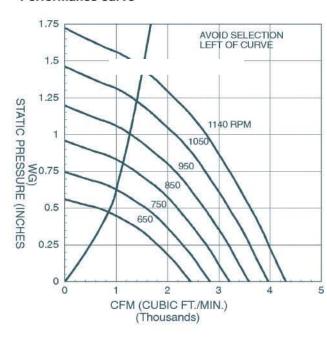
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Performance curve

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Sound Data

				SOUN	D POW	ER RE	1012 N	ATTS		
					OCTA	VE BA	NDS			
RPM	SP	1	2	3	4	5	6	7	8	LWA
	.000	75	77	71	68	68	65	60	54	73
	.125	74	77	70	67	67	64	58	53	71
825	.250	74	76	69	66	65	62	57	51	70
	.500	72	74	67	64	63	60	56	52	68
	.750	71	73	66	62	62	60	56	52	67
	.000	83	83	81	75	74	72	67	62	80
	.250	82	83	80	74	73	70	66	60	78
1075	.500	81	82	79	72	71	69	64	59	77
	.750	80	81	78	71	69	68	64	59	76
	1.000	79	79	77	70	68	66	63	59	75

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

Ratings do not include the effects of duct end correction.

Performance certified is for installation type A-free inlet, free outlet. Performance ratings (BHP) does not include transmission losses. Performance ratings do not include the effects of appurtenances (accessories). The sound ratings shown are loudness values in fan sones at 5 feet (1.5m) in a hemisperical free field calculated per AMCA standard 301.





Performance Data Belt driven

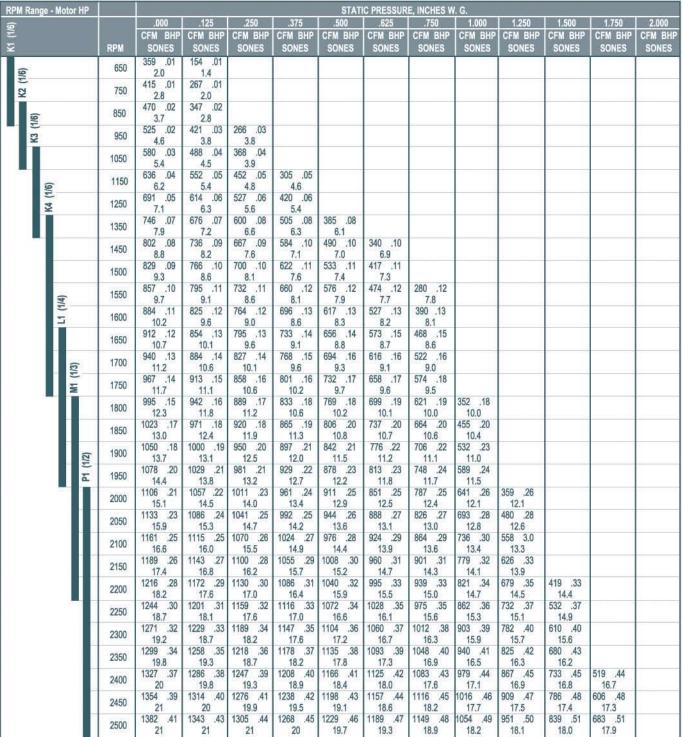
RPM Ra	nge - Mot	or HP						STAT	C PRESSUR	E, INCHES W	l. G.				
(1/6)	and a constant of			.000	.125	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000
E E			RPM	CFM BHP SONES	SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES						
(9			600	225 .01 .5											
K2 (1/6)			700	263 .01 1.0	119 .01 1.3										
	6		800	300 .01 1.6	193 .01 1.7										
23 (46)	2		900	338 .01 2.1	248 .02 2.1										
Пĩ			1000	376 .02 2.8	297 .02	179 .02 3.5									
8-6	(9		1100	413 .02 3.5	343 .03 3.3	253 .03 3.7									
	K4 (1/6)		1200	451 .03 4.1	387 .04 3.9	314 .04 4.0	194 .04 5.0								
			1300	488 .04 4.7	429 .04 4.6	365 .05 4.5	278 .05 5.3								
			1400	526 .05 5.4	471 .05 5.3	414 .06 5.2	343 .06 5.6	239 .06 6.5							
			1500	563 .06 6.1	513 .07 6.0	461 .07 5.9	400 .07	320 .08 6.8							
			1550	582 .07 6.5	533 .07 6.3	483 .08 6.2	426 .08 6.2	354 .08 7.0	252 .09 7.9						
	K5 (1/6)		1600	601 .07 6.8	553 .08 6.7	505 .08 6.6	451 .09 6.5	385 .09 7.2	300 .09 8.0						
			1650	620 .08 7.2	574 .09 7.1	527 .09 7.0	475 .10 6.9	416 .10 7.4	338 .10 8.2	218 .10 9.2					
		6	1700	639 .09 7.6	594 .09 7.5	548 .10 7.4	500 .10 7.3	446 .11 7.6	375 .11 8.4	278 .11 9.3					
		L1 (1/4)	1750	657 .10 8.0	614 .10 7.9	570 .11 7.8	524 .11 7.7	471 .12 7.8	407 .12 8.6	327 .12 9.5					
			1800	676 .10 8.4	634 .11 8.3	591 .12 8.1	548 .12 8.1	496 .13 8.0	438 .13 8.8	365 .13 9.7					
			1850	695 .11 8.8	654 .12 8.7	612 .13 8.6	570 .13 8.5	521 .14 8.4	468 .14 9.0	401 .14 9.9					
		3)	1900	714 .12 9.2	674 .13 9.1	633 .14 9.0	592 .14 8.9	546 .15 8.8	498 .15 9.3	435 .15 10.1					
		M1 (1/3)	1950	732 .13 9.6	693 .14 9.5	654 .15 9.4	614 .15 9.3	571 .16 9.2	523 .16 9.5	466 .17 10.3	308 .17 12.2				
		2 0	2000	751 .14 10.0	713 .15 9.9	675 .16 9.8	636 .16 9.8	595 .17 9.7	549 .18 9.8	497 .18 10.5	357 .18 12.4				
			2050	770 .15 10.5	733 .16 10.4	696 .17 10.3	658 .18 10.2	619 .18 10.1	574 .19 10.1	527 .19 10.8	400 .20				
			2100	789 .16 10.9	753 .17 10.9	716 .18 10.8	679 .19 10.7	642 .19 10.6	599 .20 10.5	555 .21 11.0	437 .21 12.8				
			2150	808 .18 11.4	772 .18 11.3	737 .19 11.2	701 .20 11.2	664 .21 11.1	623 .21 11.0	580 .22 11.3	474 .23 13.0	307 .23 15.0			
			2200	826 .19 12.0	792 .20 11.8	757 .21 11.7	722 .21 11.7	686 .22 11.6	648 .23 11.5	606 .23 11.5	506 .24 13.3	364 .24 15.2			
			2250	845 .20 12.4	811 .21 12.3	777 .22 12.2	743 .23 12.2	708 .23 12.1	672 .24 12.0	631 .25 11.9	537 .26 13.5	413 .26 15.3			
			2300	864 .22 12.8	831 .23 12.8	798 .23 12.7	764 .24 12.6	730 .25 12.6	696 .26 12.5	656 .26 12.4	568 .27 13.7	453 .28 15.5			
		35	2350	883 .23 13.3	850 .24 13.2	818 .25 13.1	785 .26 13.1	752 .26 13.0	719 .27 13.0	680 .28 12.9	598 .29 13.9	490 .30 15.7	330 .30 17.7		
			2400	901 .25	870 .25 13.6	838 .26 13.6	806 .27 13.5	774 .28 13.5	741 .29 13.4	704 .29 13.4	628 .31 14.1	527 .31 15.8	389 .32 17.8		
			2450	920 .26 14.1	889 .27 14.1	858 .28 14.0	827 .29 14.0	795 .30 13.9	763 .30 13.9	729 .31 13.9	654 .33 14.4	560 .33 16.0	438 .34 17.9		
			2500	939 .28 14.6	909 .29	878 .30 14.5	848 .31 14.5	816 .31 14.4	785 .32 14.4	753 .33 14.4	679 .34 14.7	591 .35 16.2	482 .36 18.0		
				11.55%	Warning Co.	7.750	7,775	1000000	/Europe	2000	27,595	(59352	11.000		

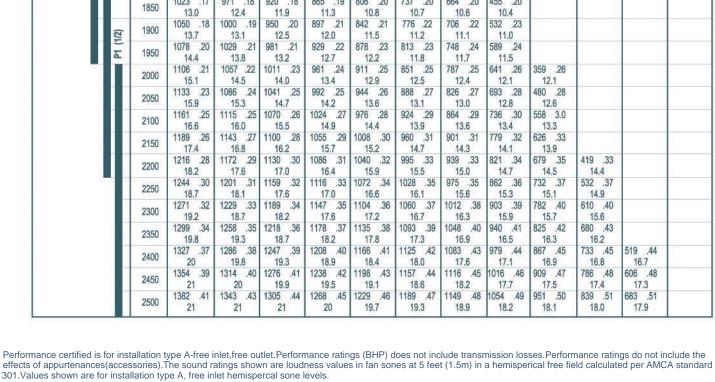
section 4





Performance Data Belt driven





301. Values shown are for installation type A, free inlet hemispercal sone levels.

section 4





Performance Data Belt driven

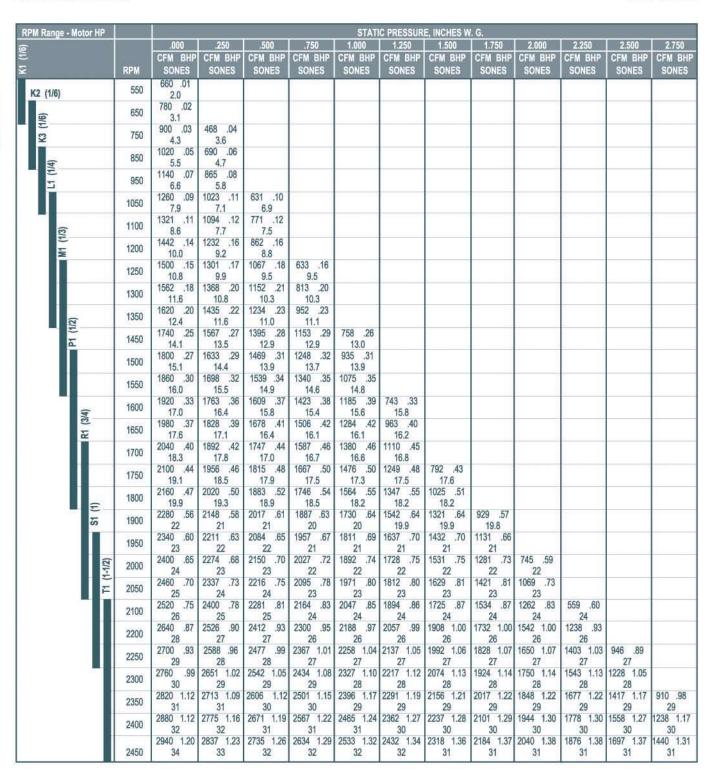
RPM Range - Motor HP						STATI	C PRESSUR	E, INCHES W	/. G.				
(1/6)		.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
<u> </u>	RPM	CFM BHP SONES	CFM BHP	CFM BHP SONES	CFM BHP SONES	SONES	CFM BHF SONES						
(9)	650	616 .02 2.4	0										
K2 (1/6)	750	711 .03 3.4	331 .03 3.2										
	850	805 .04 4.3	515 .05 4.0										
4	950	900 .06 5.5	657 .07 4.8										
L1 (1/4)	1050	995 .08 6.7	782 .09 5.9	439 .09 6.0									
	1150	1090 .10 7.0	897 .12 6.3	645 .12 6.3									
	1200	1136 .11 7.5	954 .13 6.7	725 .14 6.8									
	1250	1184 .13 8.0	1009 .15 7.3	800 .16 7.2	416 .15 7.3								
	1300	1230 .14 8.5	1064 .16 7.8	875 .18 7.7	576 .17 7.8								
	1350	1279 .16 9.0	1118 .18 8.3	937 .20 8.2	684 .20 8.3								
(4/3)	1400	1327 .18 9.6	1172 .20 8.9	1001 .22 8.7	775 .22 8.8								
P P	1450	1374 .20 10.2	1226 .22 9.5	1063 .24 9.2	858 .25 9.3	508 .23 9.4							
	1500	1421 .22 10.8	1279 .24 10.1	1124 .26 9.8	933 .27 9.8	662 .26 9.9							
	1550	1469 .24 11.5	1331 .27 10.8	1182 .29 10.3	1007 .30 10.4	773 .30 10.5							
	1600	1516 .27 12.2	1383 .29 11.5	1239 .31 11.0	1080 .33 11.0	865 .33 11.0	480 .30 11.1						
	1650	1563 .29 12.9	1435 .32 12.2	1296 .34 11.5	1144 .36 11.6	954 .36 11.6	667 .35 11.7						
(4)	1700	1611 .32 13.6	1486 .35 12.9	1352 .37 12.3	1207 .39 12.2	1030 .40 12.2	801 .39 12.3						
R1 (3/4)	1750	1658 .35 14.3	1536 .38 13.6	1407 .40 13.0	1270 .42 12.9	1105 .43 12.9	896 .43 12.9	514 .40 13.0					
	1800	1706 .38 15.1	1587 .41 14.3	1462 .43 13.8	1332 .45 13.6	1178 .47 13.5	13.5	710 .45 13.6					
	1850	1753 .42 15.8	1637 .44 15.1	1517 .47 14.5	1393 .49 14.3	1250 .51 14.2	1075 .51 14.2	845 .50 14.2					
81 (1)	1900	1800 .45 16.6	1688 .48 15.9	1571 .50 15.3	1450 .53 14.9	1314 .55 14.9		950 .55 14.8	596 .51 14.9				
	1950	1848 .49 17.4	1738 .52 16.7	1625 .54 16.1	1507 .57 15.7	1378 .59 15.6		1042 .60 15.5	783 .58 15.5				
(1-1/2)	2000	1895 .53 18.0	1788 .56 17.4	1679 .58 16.8	1564 .61 16.3	1440 .63 16.2		1132 .65 16.1	918 .63 16.1	446 .55 16.2			
5	2050							1213 .70 16.7					
	2100	1990 .61 19.4	1887 .64 18.8	1786 .67 18.2	1676 .70 17.7	1564 .72 17.5		1288 .75 17.3	1114 .74 17.3				
	2150	2037 .65	1937 .69 19.5	1839 .72 18.9		1625 .77 18.2		1363 .80 18.0		1013 .78 17.9	658 .74 18.0		
- 11	2200	2085 .70 21	1987 .73 20	1891 .77 19.6	1786 .79 19.1	1681 .82 18.9		1436 .86 18.6		1108 .86 18.5	857 .83 18.5		
1-2)-	2250	2132 .75 21	2036 .78	1943 .82 20	1841 .84 19.9	1738 .87 19.7		1510 .92 19.3	1364 .92 19.2		993 .89 19.1	601 .84 19.2	
	2350	2227 .85	2135 .89	2046 .92 22	1950 .95 21	1851 .98 21		1639 1.03 21	1513 1.05 21		1206 1.05 20	988 1.02	563 .93 21
-	2450	2321 .97 24		2148 1.04 23						1525 1.19			996 1.15 22

section 4





Performance Data Belt driven



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

section 4





Performance Data Belt driven

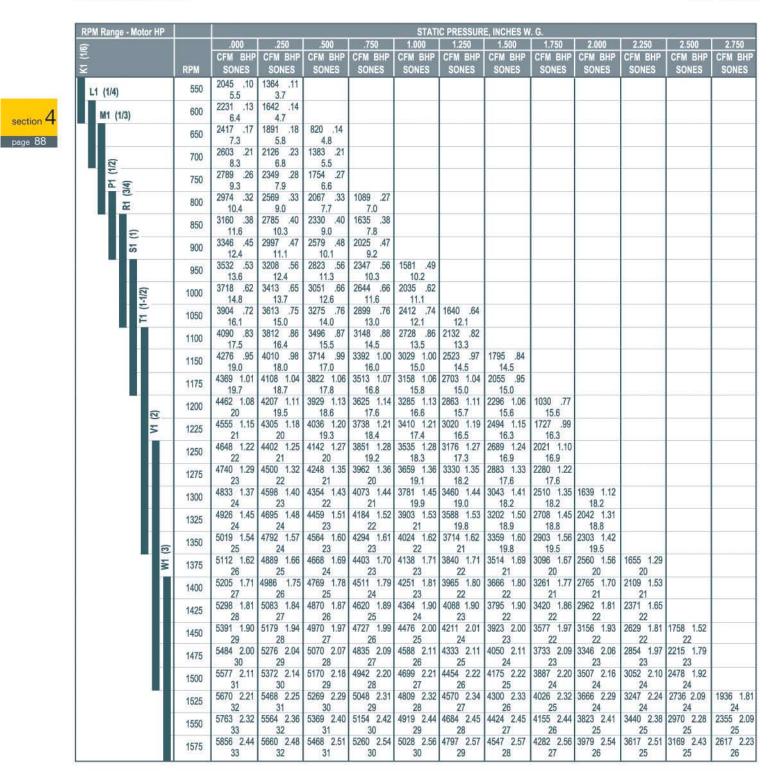
RPM Range - Motor HP		*				STATI	C PRESSUR	E, INCHES W	/. G.				
(1/6)	-	.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
K4 (1/	RPM	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES
(9/	550	1214 .04 4.1	441 .04 4.6										
K2 (1/6)	600	1324 .06 5.0	796 .07 5.3										
(414)	650	1434 .07 5.9	973 ,08 6.1										
	700	1545 .09 6.8	1132 .10 6.9										
M1 (1/3)	750	1655 .11 7.7	1279 .13 7.8										
	800	1765 .14 8.7	1422 .15 8.7	854 .15 9.1									
	850	1876 .16 9.8	1557 .18 9.7	1131 .19 10.0									
2)	900	1986 .19 10.8	1689 .21 10.7	1309 .22 10.9									
P1 (1/2)	950	2096 .23 11.9	1819 .25 11.7	1480 .26 11.9	713 ,22 12.1								
	1000	2207 .27 13.1	1948 .29 12.8	1630 .30 12.9	1170 .30 13.3								
4	1050	2317 .31 14.2	2074 .33	1778 .35 13.9	1418 .35 14.3								
R1 (3/4)	1100		2195 .38 15.2	1922 .40 15.1	1595 .41 15.3	882 .35 15.6							
	1150		2316 .43 16.6	2062 .45 16.4	1770 .47 16.5								
	1200	2648 .46 18.1	2436 ,49 17.9	2196 .51 17.7	1923 .53 17.8	1593 .53 18.0							
S1 (1)	1250	2758 .52 19.4	2555 .55 19.2	2329 .57 19.0	2072 .59	-	1215 .54 19.5						
	1300	2868 .58	2673 .61 21	2460 .64	2218 .66 20	1946 .67 20	1560 .66						
-112)	1400	3089 .73 24	2908 .76 23	2718 .79 23	2503 .82 23	2263 .83 23		1575 .81 23					
T4 (1-1/2)	1450	3199 .81 25	3024 .84 25	2846 .87 25	2637 .90 25		2164 .93 25	1851 .93 25	1067 .76 25				
	1500	3310 .90 27	3141 .93 26	2970 .96 26	2771 .99 26			2058 1.03 26					
	1550	3420 .99 28	3257 1.02 28					2236 1.14 28		1138 .93 28			
-	1600							2411 1.25 29					
V1 (2)	1650	1100000	3487 1.23 31	3332 1.27 31				2577 1.37 31			1322 1.16 31		
	1700							2728 1.49 32			1837 1.42 32		
	1725							2803 1.56 33				1118 1.22 33	
	1750							2877 1.62 34					
	1800							3024 1.76 35			2389 1.79 35	CONTRACTOR AND ADDRESS	985 1.31 36
	1850	THE RESERVE OF THE PARTY OF THE	3946 1.72 37	THE RESERVE OF THE PARTY OF THE	The State of the S		3346 1.87 37		2988 1.92 37			2270 1.91 37	1766 1.74 37
~	1900		4060 1.87 39	3925 1.91 39			3480 2.02 38			2959 2.10 38		2528 2.10 39	2157 2.02 39
-	1950	A 100 PM	4174 2.01 41	10.710743			3613 2.17 40			3111 2.26 40		2706 2.27 40	2434 2.25 40
2	1975							3526 2.29 41			3006 2.36 41		
				12	- 0			- 1	- 11		- 0	- 0	- 0







Performance Data Belt driven







Performance Data Belt driven

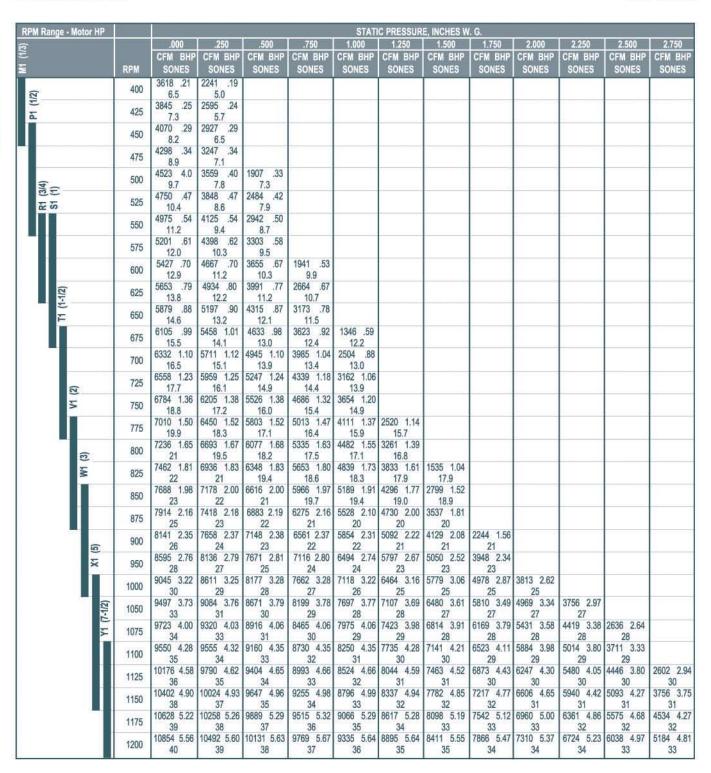
RPM Range - Moto	or HP						STATI	C PRESSUR	E, INCHES W	l. G.				
(1/4)	ė.		.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
5		RPM	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	SONES	CFM BHP SONES
(3)		400	2168 .08 4.2	728 .06 3.3										
M1 (1/3)		450	2439 .11 5.3	1443 .11										
		500	2709 .15 6.4	1883 .15										
P1 (1/2)		550	2980 .20	5.3	329 .10				-					
		600	7.6	2614 .27	6.1 1608 .25									
		650	8.8 3522 .34	7.4 2941 .35	7.1 2163 .34									
R1 (3/4) S1 (1)		700	10.0 3793 .42	8.6 3261 .43	8.2 2602 .42	1401 .35								
2 03		750	11.2 4064 .52	9.9 3575 .53	9,4 2992 .53	9.3								
[2]	i i	800	12.6 4335 .63	A-10-10-10-10-10-10-10-10-10-10-10-10-10-	10.7 3360 .65	10.5 2685 .63	1456 .50							
T1 (1-1/2)		850		12.8 4189 .77		11.8 3124 .75								
		875	15.6 4742 .82	14.4 4339 .84	13.4 3872 .85	13.2 3336 .84	13.1 2603 .80							
(-		900	16.4 4877 .89	15.2 4485 .92	14.1 4035 .93	13.9 3525 .92	13.8 2886 .89	13.7 1737 .73						
		925	17.2 5012 .97	16.0 4631 .99	14.9 4197 1.00	14.7 3713 1.00	14.5 3111 .97	14.4 2162 .87						
1 -		950	18.1 5148 1.05	16.9 4777 1.08	15.7 4358 1.09	15.4 3897 1.09	15.2 3333 1.06	15.1 2563 .99						
		3070	18.9 5283 1.13	17.7 4921 1.16	16.6 4517 1.17	16.1 4080 1.18	15.9 3551 1.13	15.8 2871 1.11	1690 .87					
	V1 (2)	975	19.8	18.6	17.5 4676 1.27	16.9	16.7	16.6	16.6					
	>	1000	21	19.5 5353 1.44	18.4	17.7	17.6	17.4	17.4 2930 1.36	1764 1.07				
	-18-	1050	22	21	20	19.4	19.2	19.1	19.0 3227 1.49	19.0				
	- 12-	1075	23	22	21	20	20	20	19.9 3513 1.62	19.8	657 78			
	4	1100	24	23	22	21	21	21	21 3740 1.74	21	21			
	W1 (3)	1125	25	24	23	22	22	22	22 3963 1.88	22	22			
	×	1150	26	25	24	23	23	23	23 4183 1.97	22	22	1146 1.18		
	19.6	1175	27	26	25	24	23	23	23	23	23	23		
	 3	1200	28	27	26	25	24	24	24 4615 2.27	24	24	24		
	32	1225	29	28	27	26	25	25	25 4813 2.46	25	25	25	2000 4 92	
	8	1250	30	29	27	27	26	26	26	26	26	26	26	
	<i>)</i> :	1275	30	29	28	28	27	27	5002 2.62 27	27	27	26	26	
		1300	31	30	29	28	28	27	5190 2.78 27	27	27	27	2926 2.53	27
		1325	32	31	30	29	29	28	5375 2.95 28	28	28	28	3330 2.62 28	28
		1350	33	7053 3.04	31	30	30	29	5560 3.12	29	29	29	3716 2.89	29
		1375	7451 3.17	7193 3,22	6938 3.26	6662 3.28 31	6364 3.29	30	5742 3.30 30	5387 3.28 30	4989 3.18	4555 3.18 30	4015 3.10	3256 2,88 30







Performance Data Belt driven



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

section 4





Performance Data Belt driven

PM Range - Motor HP						STAT	C PRESSUR	E, INCHES W	. G.				
7		.000	.250	.500	.750	1.000	1.250	1.500	1.750	2.000	2.250	2.500	2.750
	RPM	CFM BHP SONES	SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BH SONES
2)	275	4591 .14 4.7											
P2 (1/2)	300		1657 .14 3.4										
	325	5426 .23	2935 .24										
	350	6.4 5843 .28											
R1 (3/4)	375	7.3 6261 .35	16 SOURCE 808.67						-				
	400	8.3 6678 .43						-	-				
S1 (1)	425		6.9 5537 .57										
28	450	10.2 7513 .61	7.9 6085 .68	6.6 3817 .63									
(2	475		9.0 6590 .79										
11 (1-12)	500	12.2 8347 .83	10.1 7086 .92	7.9 5403 .90									-
E	6795355	13.3 8765 .96	11.2 7576 1.06	8.9 6078 1.06	3218 .82								
V1 (2)	525	14.4 9182 1.11	12.4 8059 1.21	10.1 6669 1.22	9.4 4635 1.14								
5	550	15.5 9600 1.26	13.6 8538 1.38	11.5 7244 1.40	10.3 5497 1.32			1					
8-8	575	16.7	14.8 9012 1.56	12.9	11.3	3313 1.15	-						
(£)	600	17.9	16.1 9476 1.75	14.3	12.6	12.4							
W1 (3)	625	19.1	17.4 9930 1.96	15.8	14.0	13.5		-	-				-
(2)	650	20	18.7 10382 2.19	17.3	15.6	14.6							
×	675	22	20 10831 2.43	18.7	17.1	15.7	15.7	1					
345	700	23	21 11277 2.68	20	18.6	17.2	16.9	3055 174					
	725	25	23 11722 2.96	22	20	18.6	18.0	18.0					
	750	26	24 12165 3.26	23	22	20	19.1	19.1					
Y1 (7-12)	775	27	26	24	23	22	20	20 7325 3.62	4700 0.00				
X	800	29	27	26	25	23	22	21	21				
4.4	825	30	28	27	26	25	23	8173 3.97 22	22				
	850	14191 4.08 32	30	28	27	26	25	24	23	23			
	875	33	31	30	29	27	26	9603 4.86 25	25	25			
	900	34	33	31	30	29	28	10279 5.33 27	26	26	26		
	925	36	34	33	31	30	29	10905 5.81 28	27	27	6527 4.80 27		
	950	38	36	34	33	32	31	11490 6.30 30	29	28	7914 5.53 28	28	
	975	39	38	36	14389 6.72 35	33	12929 6.80 32	31	30	29	8806 6.52 29	6878 5.63 2 9	
8	1000							12639 7.38 33				8265 6.42 30	5819 5. 30

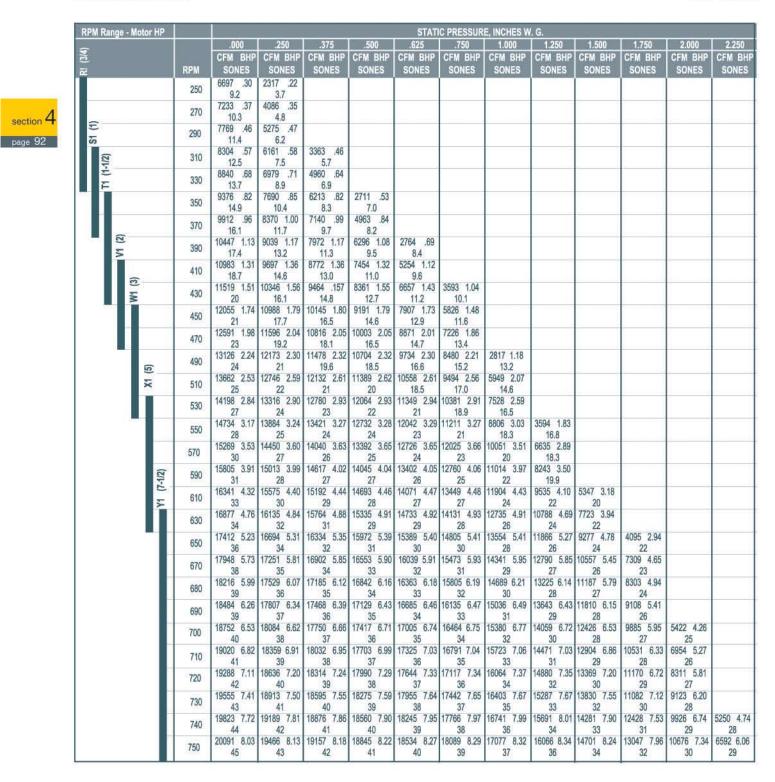
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Performance Data Belt driven







Performance Data Belt driven

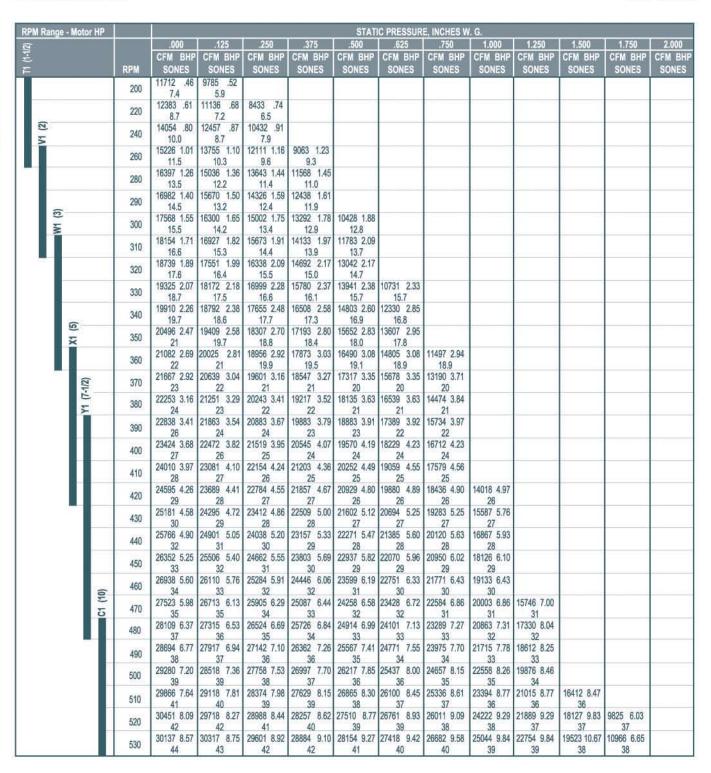
RPM Range - Mo	tor HP						STAT	C PRESSUR	E, INCHES W	l. G.				
			.000	.125	.250	.375	.500	.625	.750	1.000	1.250	1.500	1.750	2.000
		RPM	CFM BHP SONES	CFM BHP	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHP SONES	CFM BHF SONES
		215	8225 .36 6.5	6840 .39 5.1										
		230	8799 .44	7505 .47	4752 .41									
		245	7.4 9372 .53 8.3	6.1 8159 .57 7.1	4.4 7610 .55 5.3									
2)		260	9946 .64 9.1	8804 .67 8.0	7188 .68 6.4									
T1 (1-12)		275	10520 .76	9441 .79 8.8	8111 .81 7.4	5046 .68 6.1								
		290	11094 .89	10071 .93 9.7	9008 .96 8.5	6655 .87								
		305		10695 1.07 10.6	9715 1.11 9.5	7855 1.08 8.1								
(2)		320		11314 1.23 11.5			6182 1.10 8.1							
		335	1000	11929 1.41 12.4	ALCO ABOTH AND	and the same of th	7698 1.34 9.1							
		350		12541 1.61 13.5										
W1 (3)		365		13150 1.82 14.7				7650 1.66 10.5						
		380	1/20/	13755 2.05 15.9		12187 2.15 14.1		412.33						
		395	15111 2.24 18.2	14359 2.29 17.2	13609 2.35 16.3	12851 2.40 15.4	11838 2.41 14.1	10235 2.34 13.2	7887 2.06 12.4					
X1 (5)		410	15685 2.50 19.5	14960 2.56 18.5				11297 2.65 14.6	9400 2.46 13.8					
		425	16258 2.79 21	15559 2.85 19.8	14862 2.91 19.0	14160 2.96 18.3	13456 3.02 17.2	12226 2.98 16.1	10626 2.89 15.3					
		440	16832 3.09 22	16157 3.15 21	15483 3.22 20	14806 3.28 19.6	14126 3.34 18.9	13138 3.33 17.6	11761 3.25 16.8					
		455	17406 3.42 23	16753 3.48 23	16102 3.55 22	15448 3.61 21	14790 3.67 20	14034 3.71 19.2	12741 3.63 18.4	8994 3.18 17.0				
	1(2)	470	17980 3.77 25	17347 3.84 24	16717 3.90 23	16085 3.97 23	15448 4.03 22	14812 4.10 21	13664 4.04 19.9	10512 3.66 18.5				
	Y1 (7-1/2)	485	26	17940 4.21 26	25	24	23	15484 4.48 23	21	11828 4.25 20				
1		500	19128 4.54 28	18532 4.61 27	17940 4.68 26	17347 4.75 25	16750 4.82 25	16151 4.89 24	15466 4.93 23	12973 4.76 22	ID-MAN AND AL			
_		515	29	19123 5.03 28	27	27	26	16813 5.32 25	24	14064 5.24 23	10698 4.64 22			
		530	30	19714 5.48 29	28	28	27	27	26	14998 5.76 24	23			
		545	31	20303 5.95 30	30	29	28	28	27	15918 6.30 25	24			
	(0)	560	32	20891 6.46 32	31	30	30	29	29	27	26	24		
	C1 (10)	575	33	21479 6.98 33	32	32	31	30	30	28	15674 7.29 27	26		
		590	35	22065 7.54 34	33	33	32	32	31	18532 8.11 30	16610 7.93 28	27		
		605	36	22652 8.13 35	35	34	34	33	33	19207 8.71	17533 8.61	15329 8.36 29	12214 7.42	
		620	37	23237 8.74 37	36	36	35	35	35	19877 9.34 34	18443 9.32 32	16463 9.13 30	13731 8.36 29	
		635	39	23822 9.39	38	37	37	21956 9.74 37	36	20543 10.00 36	34	32	15136 9.46	30
		650	24866 9.97 41	24407 10.06 40	23951 10.15 40	23495 10.24 39	23039 10.33 39	22584 10.42 38	22125 10.51 38	21204 10.69 37	20233 10.85 36	18423 10.26 34	16292 10.33 33	13387 9.3 31

section 4





Performance Data Belt driven



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

section 4



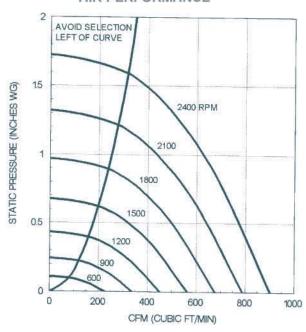


Belt driven

section 4

FCVS - 06

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses.

Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

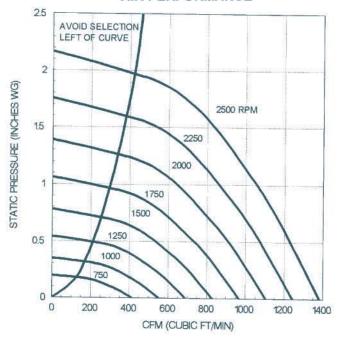
	SP		SC	DUND	PON	ER R	E 10	-12 W/	TTS	
	INCH				OCTA	VE E	AND	S		
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
600	.000	40	39	36	37	34	30	26	22	39
4000	.000	58	56	52	49	48	44	40	36	53
1000	.125	58	57	51	49	47	43	39	35	52
4.400	.000	65	62	61	58	55	55	51	46	62
1400	.500	68	68	64	62	59	56	52	47	65
	.000	71	67	70	65	63	60	59	54	69
1800	.375	71	69	70	65	62	59	57	53	68
	.750	74	74	73	68	66	62	59	54	71
	.000	78	70	76	69	67	63	63	58	73
2100	.500	76	73	75	69	67	63	62	57	73
	1.000	79	78	78	71	70	65	63	58	75
	.000	81	73	78	71	70	65	66	61	75
2300	.500	79	76	77	72	69	65	64	60	75
	1.000	79	79	79	73	71	66	64	60	76
	.000	82	76	80	74	72	68	67	63	78
0500	.500	81	78	79	74	71	67	66	62	77
2500	1.000	79	80	80	75	71	68	66	62	78
	1.500	83	84	84	78	75	71	68	64	81

The sound power level ratings shown are in decibels, referred to 10¹² watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

FCVS - 08

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

	SP		S	DUND	POV	VER F	RE 10	-12 W/	ATTS	
	INCH				OCTA	AVE E	BAND	S		
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
650	.000	52	57	42	41	39	40	38	37	47
1050	.000	69	68	66	54	52	50	50	48	61
1050	.250	68	70	62	53	51	48	46	41	60
1450	.000	69	71	70	63	58	57	58	59	67
1450	.500	69	68	65	60	58	57	55	53	65
	.000	80	74	79	70	65	61	62	63	74
1800	.500	79	73	74	66	63	60	60	59	71
	1.000	76	73	72	66	64	63	61	57	71
	.000	87	76	86	75	69	65	65	66	80
2100	.500	86	77	82	71	68	64	64	64	77
	1.000	83	77	80	70	68	65	64	62	75
	.000	90	79	88	78	72	67	67	68	82
2300	.750	88	80	84	74	70	66	65	65	79
	1.500	84	80	81	73	71	68	67	64	78
	.000	91	83	89	82	75	69	69	70	84
0500	.500	90	83	87	79	74	69	68	68	82
2500	1.000	89	83	85	77	73	68	67	67	81
	1.750	86	83	83	76	73	70	69	66	80

The sound power level ratings shown are in decibels, referred to 10 ^{rg} watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.





Belt driven

FCVS - 10

AIR PERFORMANCE

35 AVOID SELECTION LEFT OF CURVE 3 2450 RPM STATIC PRESSURE (INCHES WG) 2.5 2 1950 15 1700 450 1200 0.5 950 0 0 500 1500 2000 2500 CFM (CUBIC FT/MIN)

Performance certified is for installation type A - free inlet, free outlet.

Performance ratings (bhp) do not include transmission losses.

Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

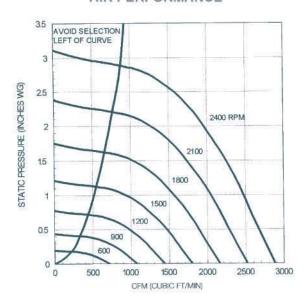
	SP		SC	DUND	PON	VER F	RE 10	-12 WA	ATTS	
	INCH				OCTA	VE E	BAND	S	0	(C)
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
650	.000	52	55	50	47	47	44	37	31	51
050	.000	64	65	64	58	55	54	49	43	62
950	.375	63	65	60	55	53	51	49	46	60
	.000	64	69	69	65	62	62	59	51	69
1300	.375	67	70	67	63	60	60	56	50	67
	.750	68	70	66	62	59	60	58	53	67
	.000	72	74	76	72	68	67	67	59	75
1650	.625	71	78	74	70	66	65	64	58	73
	1.250	72	78	73	69	65	64	64	60	73
	.000	78	78	82	78	73	71	73	65	81
2000	.500	76	82	81	77	72	69	70	64	80
2000	1.000	74	84	80	76	71	69	69	64	79
	2.000	76	84	80	75	70	68	69	65	78
	.000	81	84	85	83	78	75	76	71	85
	.500	79	86	86	82	77	74	74	69	84
2350	1.000	78	87	86	82	76	73	73	68	84
	2.000	75	87	85	80	75	72	73	70	83
	2.500	76	87	85	80	75	72	73	70	83

The sound power level ratings shown are in decibels, referred to 10^{-to} watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 30

FCVS - 12

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.

Performance ratings (bhp) do not include transmission losses.

Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

	SP		S	DUND	PON	VER F	RE 10	-12 WA	ATTS	1(
	INCH				OCTA	VE E	AND	S		1
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
550	.000	53	50	46	48	48	40	30	20	51
050	.000	67	68	64	59	61	59	50	40	65
950	.375	67	67	64	57	56	54	50	44	62
	.000	70	77	74	68	65	67	60	50	73
1250	.375	69	77	73	67	64	65	58	51	71
	.750	69	77	73	67	62	62	58	52	70
	.000	72	85	82	76	69	74	69	59	80
1600	.750	71	85	81	75	67	68	65	59	78
	1.250	74	86	80	75	66	67	65	60	78
	.000	75	87	88	83	76	77	75	66	85
4050	.750	75	87	87	82	74	74	72	65	84
1950	1.250	75	87	87	82	74	72	70	65	84
	1.750	77	88	87	82	73	71	70	66	83
	.000	78	88	92	88	80	79	79	71	89
	1.000	77	88	92	87	79	77	76	70	88
2250	1.500	77	88	92	87	79	75	74	70	88
	2.000	79	89	92	86	79	75	74	70	88
	2.500	80	90	92	86	78	74	74	70	88

The sound power level ratings shown are in decibels, referred to 10^{-th} watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 30

section 4

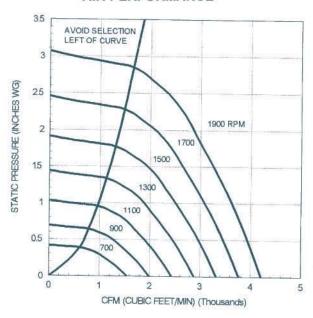




Belt driven

section 4

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

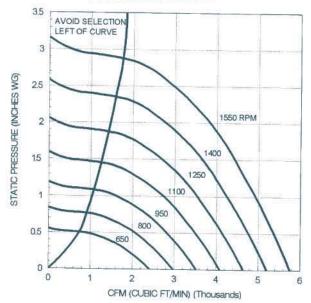
	SP		S	OUN	D PO		_	-	ATTS	3
	INCH				OCT	AVE	BANL	os		
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
550	.000	62	64	60	55	53	48	41	33	58
000	.000	73	75	72	67	63	59	53	45	70
800	.375	72	74	71	68	64	60	55	49	70
_	.000	80	81	81	76	70	67	61	54	77
1050	.375	79	80	79	76	71	67	62	56	77
	.750	81	79	79	76	72	68	63	58	78
	.000	84	87	87	82	76	72	68	61	84
1300	.750	83	86	86	82	78	73	68	63	84
	1.250	85	86	85	82	78	74	70	64	84
	.000	87	92	93	88	82	77	73	67	89
4550	.750	86	91	92	87	82	78	73	67	87
1550	1.250	87	91	91	87	83	78	74	68	89
	1.750	88	91	91	87	83	79	74	70	89
	.000	89	95	96	92	85	80	77	71	93
	1.000	88	94	95	91	86	81	76	71	92
1750	1.500	89	95	94	90	86	81	77	72	92
	2.000	89	95	94	90	86	82	78	73	92
	2.500	90	95	94	90	87	82	78	73	92

The sound power level ratings shown are in decibels, referred to 10¹² watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

correction.
The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

FCVS - 18

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

	SP		S		POV				ATTS	
	INCH				OCTA	-		-	0	
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
550	.000	67	66	59	59	58	53	46	39	62
750	.000	76	75	70	66	66	62	56	49	70
750	.500	72	70	64	59	58	56	52	46	64
	.000	78	81	76	72	71	69	64	58	76
950	.375	78	79	75	70	68	66	61	55	74
-1	.625	76	78	73	68	66	64	60	56	72
	.000	84	85	84	77	75	74	69	64	82
1150	1.000	82	82	80	72	70	69	65	61	77
	1.500	81	81	79	72	69	68	65	61	76
	.000	88	89	90	81	79	78	74	69	86
1050	1.000	87	87	87	78	75	74	71	66	83
1350	1.500	86	86	85	76	73	72	70	66	81
	2.000	86	85	85	76	73	72	69	66	81
	.000	91	91	94	84	81	81	77	72	89
	1.000	90	90	92	82	79	78	74	69	87
1500	1.500	89	89	90	80	77	76	73	69	86
	2.000	88	88	89	79	75	75	72	68	84
	2.500	89	88	89	79	75	75	72	68	84

The sound power level ratings shown are in decibels, referred to 10^{12} watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet. Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.





Belt driven

AIR PERFORMANCE

AVOID SELECTION LEFT OF CURVE 3 25 STATIC PRESSURE (INCHES WG) 2 1350 RPM 1.5 1200 1050 1 900 750 600 0.5 0 0 2 6 10 CFM (CUBIC FT/MIN) (Thousands)

Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories).

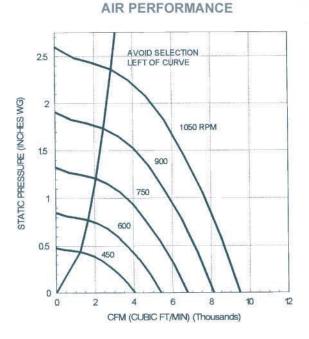
SOUND PERFORMANCE

	SP		S		POV	0.00	-	/E.I.E.E.	TTS	
RPM	INCH W.G.	1	2	3	OCTA 4	5	6	7	8	LWA
400	.000	59	59	57	57	55	50	43	37	59
-	.000	68	72	66	66	67	62	56	49	70
600	.500	70	71	61	60	62	60	53	46	66
	.000	77	77	75	72	72	69	64	57	76
775	.375	77	77	73	69	68	66	61	55	74
	.750	78	77	72	66	67	66	61	54	73
	.000	84	82	82	77	76	75	70	64	82
950	.500	84	82	80	74	73	72	67	61	79
	1.250	85	83	80	71	71	72	67	60	78
	.000	90	85	87	81	79	80	75	69	86
1405	1.000	89	87	86	77	75	77	72	66	83
1125	1.500	90	87	86	76	74	76	73	66	83
	2.000	90	87	86	76	74	76	73	68	83
	.000	93	90	91	85	83	83	79	73	90
	1.000	91	91	90	83	80	80	76	71	88
1300	1.500	92	91	90	82	78	79	76	70	87
	2.000	93	92	90	81	77	79	77	70	87
	2.750	93	92	90	80	77	79	77	70	87

The sound power level ratings shown are in decibels, referred to 10¹² watts calculated per AMCA Standard 301.Values shown are for inlet Lwi and Lwi A sound power levels fo installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

FCVS - 24



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories).

SOUND PERFORMANCE

	SP		SC	UND	POW	ER R	E 10	-12 WA	TTS	
	INCH				OCTA	VE B	AND	S		
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
400	.000	69	68	61	59	60	59	50	40	65
	.000	76	78	72	67	66	67	61	51	73
550	.375	75	75	68	64	64	62	57	50	69
	.625	74	75	67	62	63	62	56	50	68
	.000	82	84	80	73	71	72	70	60	79
700	.500	81	82	78	71	69	69	64	58	76
700	.750	82	81	77	69	68	69	64	57	75
	1.000	82	81	77	68	68	68	64	57	75
	.000	87	89	87	78	75	76	76	67	84
	.500	86	88	85	77	73	75	72	65	82
850	.750	86	87	85	76	72	75	70	64	82
	1.000	87	87	84	75	72	74	70	63	81
	1.500	87	86	84	73	71	73	70	63	81
	.000	90	93	92	84	79	80	81	73	89
	.500	90	92	91	83	78	79	78	71	87
1000	1.000	90	91	89	81	76	78	75	69	86
	1.500	90	91	89	80	76	77	75	68	85
	2.000	91	90	89	79	75	77	74	68	85

The sound power level ratings shown are in decibels, referred to 10⁻¹² watts calculated per AMCA Standard 301, Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

section 4

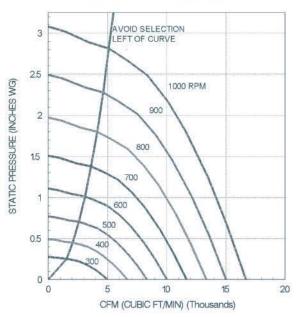




Belt driven

section 4

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories). The AMCA certified Ratings Seal does not apply to this model

SOUND PERFORMANCE

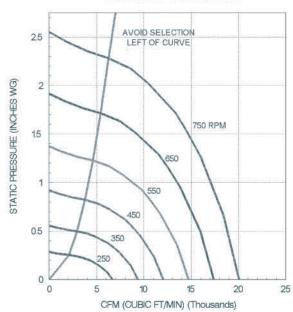
	SP		SC	UND	PON	ER R	E 10	-12 WA	TTS	
	INCH				OCTA	VE B	AND	S		
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
275	.000	64	61	60	60	56	49	43	37	61
275	.000	73	70	66	67	65	59	52	46	69
375	.375	70	64	58	58	57	52	48	43	61
	.000	78	78	73	72	71	66	60	53	75
475	.375	77	74	67	66	65	61	56	51	69
	.625	77	72	65	63	62	59	54	50	67
	.000	82	83	79	76	76	72	66	59	80
575	.500	81	81	74	71	70	67	62	57	75
	.750	82	79	71	67	67	64	60	55	72
	.000	85	88	84	80	80	77	71	64	84
	.500	85	87	81	76	76	73	68	62	81
675	1.000	86	85	77	71	70	69	64	60	77
	1.250	86	85	77	71	70	69	64	60	77
	.000	88	93	88	83	83	82	75	69	88
	.500	88	91	86	80	80	79	73	67	86
775	.750	88	91	85	78	79	77	71	66	84
	1.000	88	90	83	76	76	75	70	65	83
	1.500	89	90	81	74	74	73	68	64	81

The sound power level ratings shown are in decibels, referred to 10 ¹² watts calculated per AMCA Standard 301, Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet. Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

FCVS - 36

AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet.

Performance ratings (bhp) do not include transmission losses.

Performance rating do not include the effects of appurtenances(accessories).

The AMCA certified Ratings Seal does not apply to this model

SOUND PERFORMANCE

	SP		SC	DUND	PON	ER R	E 10	-12 WA	TTS	
	INCH				OCTA	VE B	AND	S		-
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
250	.000	71	67	63	61	59	60	61	61	67
225	.000	78	75	70	67	65	65	66	66	73
325	.375	73	68	63	61	59	56	51	47	64
	.000	83	82	76	72	70	69	70	71	78
400	.375	81	78	72	68	66	66	64	58	73
	.625	80	74	69	65	64	60	55	51	69
	.000	87	87	82	77	74	73	74	74	82
475	.500	86	84	78	72	71	70	70	64	78
	.750	86	81	75	70	69	67	64	59	75
	.000	91	92	86	80	78	76	77	78	86
550	.500	91	90	83	77	76	73	76	71	83
550	1.000	91	86	80	74	73	71	68	63	79
	1.250	91	85	78	72	72	69	63	59	78
	.000	93	94	89	83	80	78	79	79	88
	.500	92	93	87	80	78	76	78	74	86
600	.750	92	92	85	78	77	75	77	72	85
	1.000	93	90	84	77	76	74	73	68	83
	1.250	93	89	82	76	75	73	69	65	81

The sound power level ratings shown are in decibels, referred to 10^{-rd} watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.





Belt driven

AIR PERFORMANCE

AVOID SELECTION LEFT OF CURVE 2.5 2 STATIC PRESSURE (INCHES WG) 650 RPM 1.5 550 450 350 0.5 0 0 10 20 25 30 CFM (CUBIC FT/MIN) (Thousands)

Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories). The AMCA certified Ratings Seal does not apply to this model

SOUND PERFORMANCE

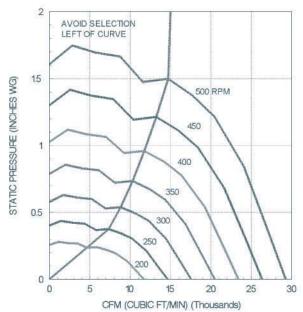
	SP		SC	OUND	POW	ER R	E 10	-12 WA	TTS	
	INCH				OCTA	VE B	AND	S		
RPM	W.G.	1	2	3	4	5	6	7	8	LWA
215	.000	68	67	63	60	58	59	51	42	64
275	.000	75	73	70	67	63	65	59	51	71
275	.375	72	68	63	61	58	54	48	42	64
	.000	82	79	76	72	69	69	66	57	76
335	.250	82	78	73	69	66	67	62	50	73
	.500	80	75	70	67	64	61	56	48	70
	.000	87	83	80	76	73	71	71	62	80
390	.375	87	82	77	72	70	69	67	55	77
	.750	86	78	74	70	68	64	59	52	73
	.000	91	87	84	80	76	73	75	67	83
445	.375	91	86	82	76	74	72	73	62	81
445	.750	91	84	79	74	72	69	67	58	79
	1.000	91	82	78	73	71	68	62	56	77
	.000	95	90	87	83	80	75	79	71	86
	.500	95	90	85	79	77	74	77	66	84
500	.750	95	89	84	78	76	73	75	64	83
	1.000	95	87	83	77	75	72	70	62	82
	1.250	96	86	81	76	74	71	66	60	80

The sound power level ratings shown are in decibels, referred to 10¹² watts calculated per AMCA Standard 301 Values shown are for inlet Lwi and Lwi A sound power levels for installation Type A: free inlet, free outlet.Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

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AIR PERFORMANCE



Performance certified is for installation type A - free inlet, free outlet. Performance ratings (bhp) do not include transmission losses. Performance rating do not include the effects of appurtenances(accessories). The AMCA certified Ratings Seal does not apply to this model

SOUND PERFORMANCE

	SP	SOUND POWER RE 10-12 WATTS OCTAVE BANDS									
RPM	INCH W.G.										
		1	2	3	4	5	6	7	8	LWA	
200	.000	77	69	65	63	59	59	52	44	66	
250	.000	83	77	72	69	65	64	59	52	72	
	.250	82	74	66	64	62	60	53	45	68	
300	.000	89	84	77	73	70	68	65	58	77	
	.250	89	82	73	69	68	66	62	52	74	
	.500	89	81	72	67	67	64	59	51	73	
350	.000	93	89	81	77	74	71	70	63	81	
	.375	94	87	78	72	71	69	66	57	78	
	.625	94	87	77	70	71	68	64	56	77	
	.000	97	94	85	80	78	74	74	67	85	
400	.250	98	93	83	77	76	73	73	64	83	
400	.500	98	92	82	74	75	72	71	62	82	
	.750	99	92	81	73	74	71	68	60	82	
450	.000	99	98	89	84	81	77	77	71	88	
	.250	100	97	88	81	79	76	76	69	87	
	.500	100	96	87	79	78	76	75	67	86	
	.750	101	96	86	78	77	75	73	65	86	
	1.000	101	96	86	77	77	74	71	64	85	

The sound power level ratings shown are in decibels, referred to 10^{-th} watts calculated per AMCA Standard 301. Values shown are for inlet Lwi and Lwi A sound power levels fer installation Type A: free inlet, free outlet. Ratings do not include the effects of duct end correction.

The A-weighted sound ratings shown have been calculated per AMCA International standard 301.

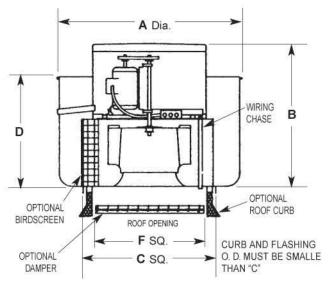
section 4





Belt driven

ASSEMBLY DIMENSIONS & DRAWING



STANDARD FEATURES

- Spun and shaped aluminum housing.
- Integral drain opening.
- Integral motor overload protection on all standard single phase motors.
- Disconnect switch on all motors except explosion proof.
- Adjustable motor sheave factory preset to requested RPM.
- Dual drive belts furnished on 5 HP and above.
- Ventilated motor compartment with motor out of airstream.
- Non-overloading, backwardly inclined wheel.
- Isolated, suspended motor wheel-drive assembly.
- Spark resistant construction through size 24.
- Polished CRS fan shaft with rust inhibitive coating.
- Pillow Block Bearing L₅₀ = 200,000 Hrs.

	Unit Diameter A	Unit Height B		Inside Curb	Outer Shroud	Roof Opening	Curb	Damper	Approx. Wt. Less
Unit Size		Standard Height	Extended Height	Cap C	Height D	Square F	O. D. Square	Size Square	Motor [Kgs.]
06	651	540	660	394	302	279	356	254	18
08	654	575	679	394	324	279	356	254	18
10	702	591	711	448	381	330	406	305	20
12	705	632	752	448	422	330	406	305	20
15	832	708	829	521	514	406	483	381	30
18	984	740	838	635	606	521	597	483	39
21	1118	851	953	714	606	597	673	559	55
24	1219	927	1029	791	670	673	749	660	68
30	1422	1060	1232	1019	879	902	978	864	100
36	1651	1133	1305	1172	902	1054	1130	1016	159
42	1854	1229	1400	1375	959	1257	1334	1219	241
48	2057	1286	1457	1476	987	1359	1435	1321	266

Unit Size	Motor Cover		MATERIAL AND THICKN Shroud		,		T I		Support
	Lid [Alum.]	Tube [Alum.]	Upper [Alum.]	Outer/ Lower [Alum.]	Curb Cap [Alum.]	Shaft Dia. [CRS]	Standard Wheel	Diffuser [Galv. Steel]	Frame [Steel Angle]
06	1.6	1.0	_	2.0	1.3	19	Alum.	22 ga.	_
08	1.6	1.0		2.0	1.3	19	Alum.	22 ga.	
10	1.6	1.0	_	2.0	1.6	19	Alum.	22 ga.	::
12	1.6	1.0		2.0	1.6	19	Alum.	22 ga.	-
15	1.6	1.0	-	2.0	1.6	19	Alum.	22 ga.	-
18	1.6	1.0	1.6	2.0	1.6	19	Alum.	18 ga.	-
21	1.6	1.0	1.6	2.0	1.6	25	Alum.	18 ga.	-
24	1.6	1.0	1.6	2.0	1.6	25	Alum.	18 ga.	
30	2.0	1.6	1.6	2.0	2.0	30	Steel	81=33	38x38x3
36	2.0	1.6	1.6	2.0	2.0	37	Steel	5 — 8	38x38x6
42	2.0	1.6	1.6	2.0	2.0	49	Steel	11—8	38x38x6
48	2.0	1.6	1.6	2.0	2.0	49	Steel	-	38x38x6

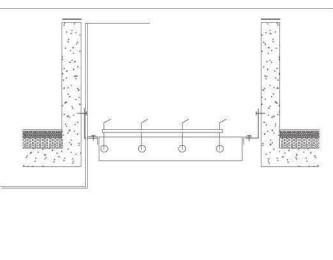




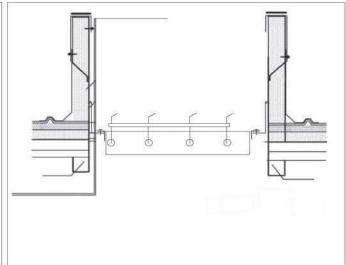


ROOF CURB FABRICATION DETAIL

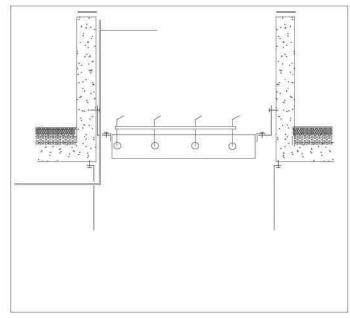
NON DUCTED



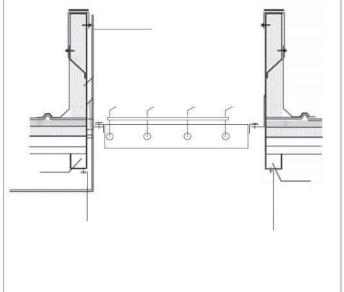
NON DUCTED



DUCTED



DUCTED



section 4





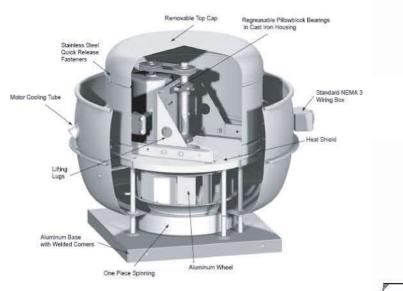
INSTALLATION INSTRUCTION

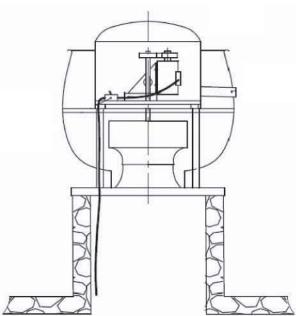
See attached drawing for fan size and Roof curb opening size. The roof opening size shall be provided to the contracter at early stage when the roof is under construction.

Roof curb fabrication

The contractor is the only party who is responsible for the fabrication and procedures to make a roof curb attached drawing is for reference only. The thickness of curb wall shall be different according to the material. concrete wall shall be between 70~80mm, steel structure shall be between 30~45mm.







Electric wire run through curb to fan

As to the metal where the fan contact the curb in the top, a linear rubber vibration isolation pad shall be applied, also acts as seal. The thickness of the pad shall be decided according to the fan weight, and the hardness shall make sure it still matain proper elasticity after fan is seated. The pad can be cut from typical carpet type isolation pads and are to be provided by contractors. It is prohibited to drill holes on any part of the fan body for wiring. Fan shall be furnished with conduit to lead the power supply wiring through the curb to the motor chamber.

Fan Mounting

Pull the fan curb cap on to the curb, and fix it at all four sides by self-tapping screw, as per attached drawing. The fan must be kept leveled.

Back-draft damper Mounting

Make sure the damper blades can be fully open to 90 degree when the fan starts, and shut down automatically by gravity after fan is stopped.