

Centrifugal Roof Exhaust Fan

Belt Drive - Direct Drive

Type : **DV-DVW**

Vertical outlet



Saudi Fan[®]
I n d u s t r i e s

2nd Industrial City
T e l . 8 1 2 1 8 6 6
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Saudi Fan Industries

Management Commitment To Quality

We are continuously striving to provide higher quality products and services to achieve total customer satisfaction by understanding their requirements and anticipating their future expectations or needs.

We are committed to development and strengthening of partnership with our external and internal customers and suppliers.

We are dedicated to the continual improvement of all products and services through involvement of all employees.

We value all people by understanding and drawing upon their strengths i.e. abilities and knowledge and make efforts for their training and development.

President

Ali Saleh Al-Khalaf

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Company Profile

Saudi Fan Industries was established In 1999 as another manufacturing division of steadily growing organization “**Refrigeration House group** “in order to fulfill requirements of local market for air movement and control equipment’s.

As a member of Refrigeration House Group , that has market research for ventilation equipment’s spread over 25 years ,Saudi Fan industries now has grown into a full swing manufacturing unit to satisfy the demanding needs of air movement and control equipment’s for modern residential ,commercial and industrial zones .

Since its establishment, Saudi Fan Industries has acquired modern manufacturing technology in order to achieve “**Total Customer Satisfaction**”. Not only still it has been investing significant resources in latest technology but also has created a medium where everyone in the organization can contribute. We have a stringent policy of research, development and making awareness of technology throughout the organization .**Saudi Fan Industries has been implemented Quality Assurance Management System as per EN ISO 9001:2015 Standard.** As a result, Saudi Fan Industries products are manufactured precisely and consistently through all production stages under strict quality control procedures.

Saudi Fan Industries strictly acting on the policy of “**The high quality product should be delivered to our valued customer’s right from the beginning**”.

Now Saudi Fan Industries is not only the leading supplier of air movement and control equipment in Kingdom but also a famous name in entire gulf. It offers wide range of fans and ventilator products for residential, commercial, institutional and industrial buildings in applications from comfort ventilation to manufacturing processes.

Products are available for exhaust, supply, re-circulate, filtered, process and gravity applications. Fans are available in either direct drive or belt drive.

Saudi Fan Industries has significant production capacity in order to fulfill markets demand. It also has a pool of qualified staff, who are fully dedicated to give best advice to our valued customer’s inquires.



General Technical Information

Fan Laws

Speed Variation at constant fan size and constant density :

The volume flow changes proportionately to the speed .

$$\frac{V_1}{V_2} = \frac{n_1}{n_2}$$

All pressures (static, dynamic and total) change proportionately to the square of speed .

$$\frac{P_{st1}}{P_{st2}} = \left(\frac{n_1}{n_2}\right)^2 = \left(\frac{V_1}{V_2}\right)^2$$

The Power requirement changes proportionately to the third power of speed

$$\frac{P_1}{P_2} = \left(\frac{n_1}{n_2}\right)^3 = \left(\frac{V_1}{V_2}\right)^3$$

In the case of changes in the wheel diameter of geometrically similar wheels at constant speed :

The volume flow change proportionately to the third power of the wheel diameter .

$$\frac{V_1}{V_2} = \left(\frac{D_1}{D_2}\right)^3$$

All pressures (static, dynamic and total) change proportionately to the square of wheel diameter .

$$\frac{P_{st1}}{P_{st2}} = \left(\frac{D_1}{D_2}\right)^2$$

The Power requirement change proportionately to the fifth power of wheel diameter .

$$\frac{P_1}{P_2} = \left(\frac{D_1}{D_2}\right)^5$$

Changes in the density at constant speed or change of Kelvin temperature at a constant flow medium :

The volume flow is not affected.

V = Constant

All pressures (static, dynamic and total) changes proportionately to the density .

$$\frac{P_{st1}}{P_{st2}} = \frac{\rho_1}{\rho_2} = \frac{T_2}{T_1}$$

The Power requirement changes proportionately to the density

$$\frac{P_1}{P_2} = \frac{\rho_1}{\rho_2} = \frac{T_2}{T_1}$$

Pressure Units

Convert from	Convert to										
	Pa (N/m ²)	bar	atmosphere	mm Hg	mm H ₂ O	m H ₂ O	kg/cm ²	lb/ ft ²	lb/ in ² (psi)	inches Hg	inches H ₂ O
Pa (N/m ²)	1	10 ⁻⁵	9.87 10 ⁻⁶	0.0075	0.1	10 ⁻⁴	1.02 10 ⁻⁵	0.021	1.45 10 ⁻⁴	2.96 10 ⁻⁴	4.02 10 ⁻³
bar	105	1	0.987	750	1.019 10 ⁴	10.197	1.0197	2090	14.5	29.61	402
atmosphere	1.01 10 ⁵	1.013	1	759.9	10332	10.332	1.03	2117.5	14.69	29.92	407
mm Hg = 1Torr	133.3	1.33 10 ⁻³	1.32 10 ⁻³	1	13.3	0.013	1.36 10 ⁻³	2.79	0.019	0.039	0.54
mm H ₂ O	10	0.000097	9.87 10 ⁻⁵	0.075	1	0.001	1.02 10 ⁻⁴	0.209	1.45 10 ⁻³	2.96 10 ⁻³	0.04
m H ₂ O	104	0.097	9.87 10 ⁻²	75	1000	1	0.102	209	1.45	2.96	40.2
kg/cm ²	9.8 10 ⁴	0.98	0.97	735	10000	10	1	2049	14.21	29.03	394
lb/ ft ²	47.8	4.78 10 ⁻⁴	4.72 10 ⁻⁴	0.36	4.78	4.78 10 ⁻³	4.88 10 ⁻⁴	1	0.0069	0.014	0.19
lb/ in ² (psi)	6894.76	0.069	0.068	51.7	689.7	0.69	0.07	144	1	2.04	27.7
inches Hg	3377	0.0338	0.033	25.4	337.7	0.337	0.034	70.8	0.49	1	13.57
inches H ₂ O	248.8	2.49 10 ⁻³	2.46 10 ⁻³	1.87	25.4	0.0254	0.0025	5.2	0.036	0.074	1

Volume Flow Units

Convert from	Convert to										
	m ³ /s	m ³ /min	m ³ /h	liter/sec	liter/min	liter/h	cfm	US gpd	US gpm	IMP gpd	IMP gpm
m ³ /s	1	60	3600	1000	60000	3600000	2119	22800000	15852	19000000	13200
m ³ /min	0.0167	1	60	16.67	1000	60000	35.32	380000	264.2	316667	220
m ³ /h	0.000278	0.0167	1	0.278	16.67	1000	0.589	6333.3	4.403	5277.8	3.67
liter/sec	0.001	0.06	3.6	1	60	3600	2.119	22800	15.852	19000	13.2
liter/min	1.67 10 ⁻⁵	0.001	0.06	0.0167	1	60	0.0353	380	0.2642	316.7	0.22
liter/h	2.7 10 ⁻⁷	0.000017	0.001	0.00028	0.0167	1	0.00059	6.33	0.0044	5.28	0.0037
cfm	0.00047	0.028	1.699	0.472	28.32	1698.99	1	10760.3	7.48	8966.9	6.23
US gpd	4.39 10 ⁻⁸	2.6 10 ⁻⁶	0.000158	0.000044	0.0026	0.158	0.000093	1	0.000695	0.833	0.000579
US gpm	0.000063	0.00379	0.227	0.063	3.785	227.1	0.1337	1438.3	1	1198.6	0.833
IMP gpd UK	5.26 10 ⁻⁸	3.2 10 ⁻⁶	0.000189	5.26 10 ⁻⁵	0.00316	0.1895	0.00011	1.2	0.00083	1	0.00069
IMPgpm UK	0.000076	0.0046	0.272	0.076	4.55	272.7	0.161	1727.3	1.2	1439.4	1



Fan Introduction

- Saudi fan industries provide Industry's best performance centrifugal roof fans for general clean air and kitchen applications.
- Performance Capabilities range up to 20000CFM and 3.00 In. Wg(747 Pa) of Static Pressure
- Each fan shall bear a metal name plate containing model number.

Advantages

- Built in motor protection through thermal overload as standard.
- Performance as cataloged is assured. All fan sizes are tested in AMCA Accredited Laboratory,
- A range of useful accessories available for different application.

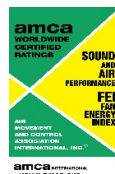
Application

- Roof units are used for
 - 1.Clean air application.
 - 2.Kitchen and Restaurant application (Completed with grease trap and cooling tube.)
 - 3.Hazardous area application.

Reference Code	D	V	W	310	0.25	D B	EX K*
D Roof fan	_____	_____	_____	_____	_____	_____	_____
V Vertical	_____	_____	_____	_____	_____	_____	_____
W Impeller with improved efficiency	_____	_____	_____	_____	_____	_____	_____
Impeller diameter	_____	_____	_____	_____	_____	_____	_____
Motor Kw	_____	_____	_____	_____	_____	_____	_____
B / D Belt / Direct	_____	_____	_____	_____	_____	_____	_____
K Kitchen	_____	_____	_____	_____	_____	_____	_____
* Fan completed with Grease trap and cooling tube.							
EX							
DEX Direct drive explosion proof							
BEX Belt drive explosion proof							

Certification

1. AMCA



Saudi Fan Industries Certifies Models shown herein are Licenced to bear the AMCA Sound and Air Performance seals. The ratings shown are based on tests and procedures performed in accordance with AMCA publication 211 , AMCA publication 311 and comply with requirements of the AMCA Certified Ratings Programme.

2. UL



DV / DVW fans carry the UL label for Power Ventilators, UL705 (ZACT / ZACT7), File No. E494511.

DV / DVW fans with the Restaurant Exhaust option carry the UL label for Restaurant Exhaust Appliances, UL762 (YZHW / YZHW7), File No. MH65536, suitable for continuous operation up to 300°F (149°C).

DV / DVW fans with the Heat and Smoke Removal option carry the UL label for Smoke Control Systems, UL793 (ZAXH / ZAXH7), File No. MH63994, certified for smoke extraction duty at 300°C for 2 hours and 400°C for 2 hours.

Standard Construction Features

- Base, Motor Plate

Fan Base made from heavy gauge aluminum for model 310 up to 500 and from model 560 up to 1000 is galvanized steel sheet.

Motor plate is made from Galvanized steel sheet

- Impellers

Backward curved impellers made from sea water resistant aluminum, mounted onto the drive shaft. The impellers with shaft are statically and dynamically balanced according to quality level G 2,5 DIN/ISO 1940.

- Vibration Isolation

Vibration isolators consist of two independent studs separated by a rubber center. Reduces vibration and noise transfer between drive system and fan housing.

- Motors

TEFC -Total Enclosed fan cooled motors with protection against humidity IP 55, Class- F, 50° C Ambient. Available at Single and Three phase Supply.

XPFC - Explosion Proof –The Explosion proof motor shall be suitable for hazardous duty and shall bear UL listed label suitable for Group 1, class C & D

- Shafts

Precisely sized, ground and polished so the first critical speed is at least 25% over the maximum operating speed. Where the shaft makes contact with bearings, close tolerances result in longer bearing life.

- Bearings

Cast iron frame pre-lubricated self-aligning ball bearing. The low noise precision ball bearings are designed for a theoretical life of at least 200,000 working hours.

- Drive Assembly

Belts, pulleys and keys are oversized 150% of driven horsepower. Belts are static-free and oil-resistant

- Motor Cover

Constructed of aluminum. Attached with stainless steel fasteners for easy removal and access to the motor compartment and drive assembly.

- Windband

One-piece, heavy-gauge aluminum with a rolled bead for extra strength directs exhaust air away from the mounting surface.

- Internal Supports

Heavy-gauge supports provide additional strength to withstand winds and supports motor and drives.

- Curb Cap with Mounting Holes

One-piece for a weather-tight fit. Constructed of aluminum with an integral deep spun venturi. Aluminum curb cap has pre-punched mounting holes to ensure correct attachment to the roof.

- Drain

Allows for one-point drainage of water, grease and other residues.

- Galvanized Birdscreen

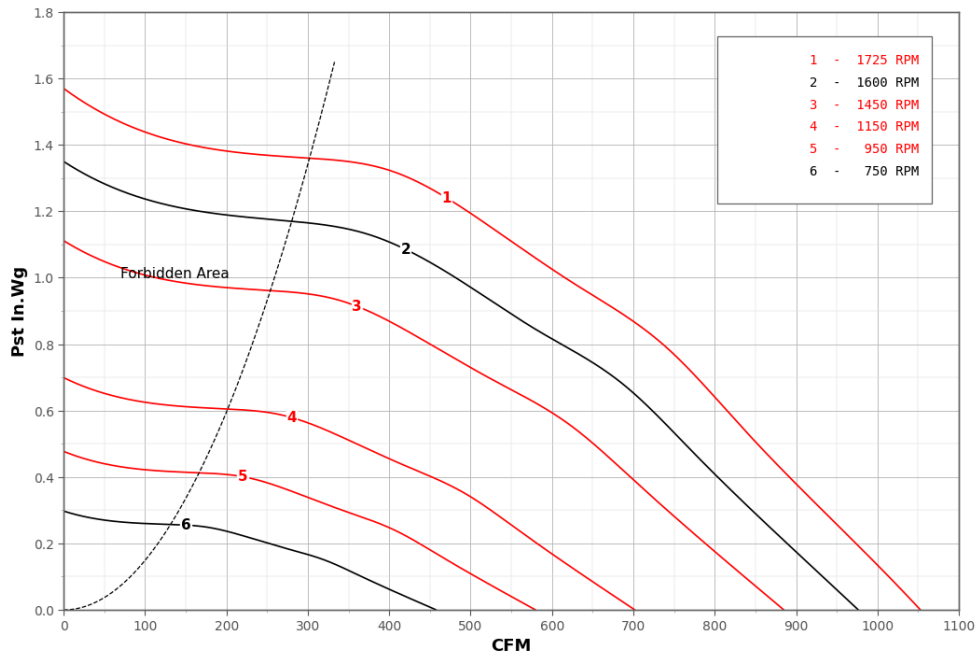
Rigid wire protects the fan discharge from birds and small objects. Standard on all sidewall fan models.

Anti –Spark Construction:

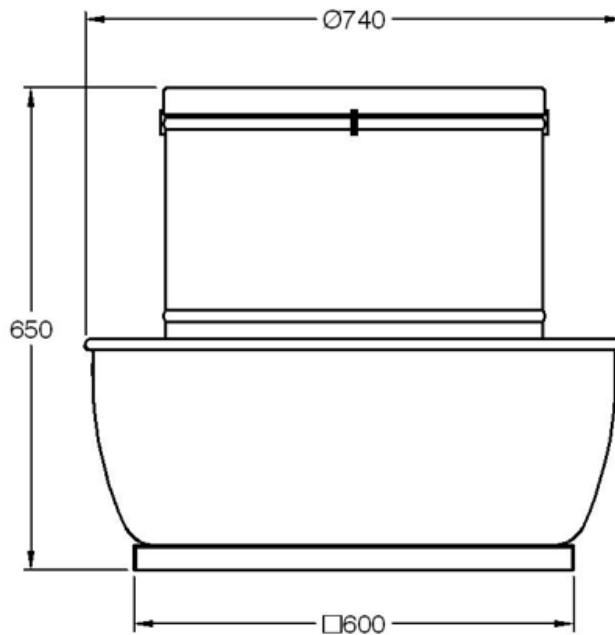
Fan is fitted with an Aluminium Wheel and an Aluminium Curb cap to realize minimum level of protection “SPARK RESISTANT” Construction as per AMCA “C” requirements.

Fan is Centrifugal exhaust type, with aluminium backward inclined centrifugal wheel. The fan inlet venturi has round curved section to smoothly transit the air to the wheel cone. The wheel is statically and dynamically balanced to Level G2.5 as per ISO standard No.1940.

The fan housing Wheel and curb cap are constructed of heavy gauge aluminium alloy.



Direct Drive RPM: 1-1725 RPM, 3-1450 RPM, 4-1150RPM,5-950RPM



Damper Size = 286x286
 Roof Opening = 450x450
 *Approximate Unit Weight (kg) = 33 + Wm
 (All dimensions in millimeters)
 * Wm Motor Weight (see table)

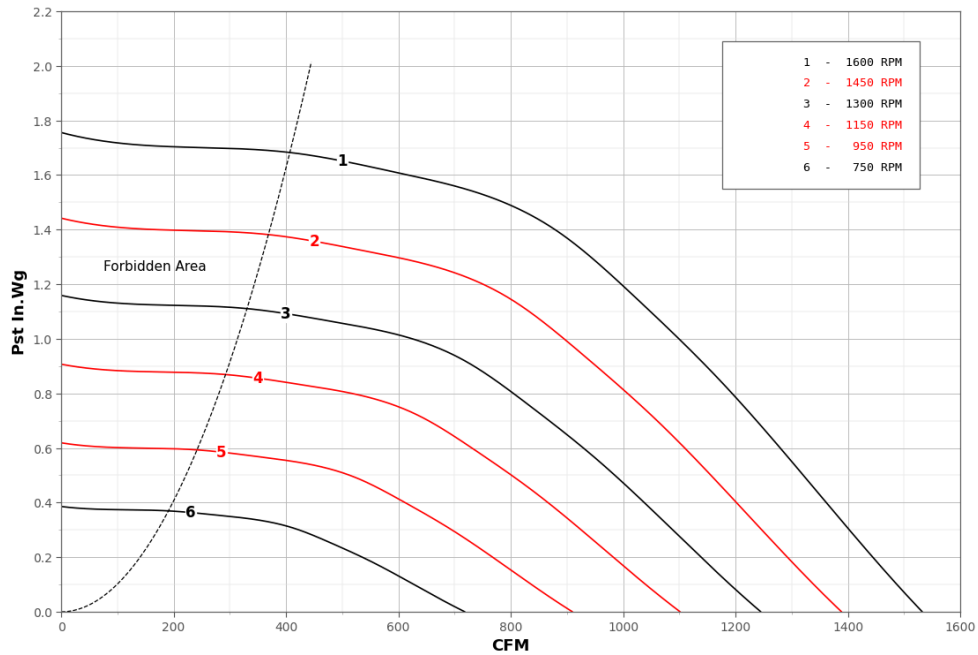


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

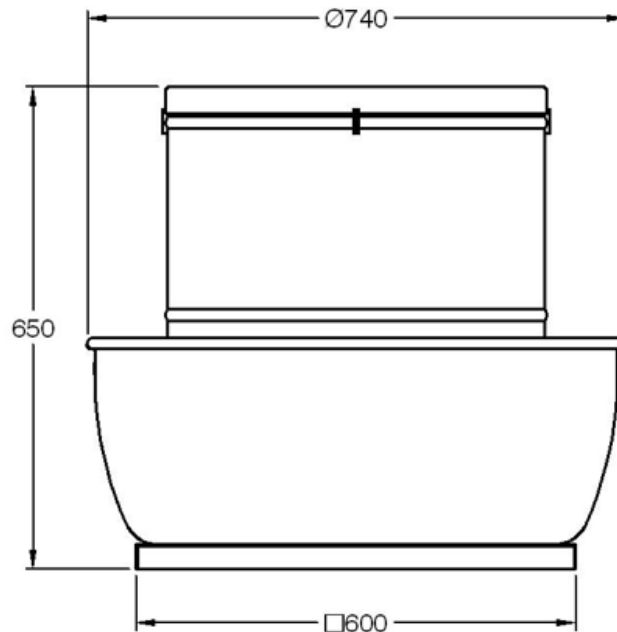
Motor kW	Fan RPM		Static Pressure in Inches wg						
			0	0.125	0.25	0.5	0.75	1	1.25
310									
0.18	750	CFM	458	344	171				
		BKW	0.02	0.02	0.02				
		SONES	5.8	5.8	6.0				
		FEI	1.62	1.67	1.54				
	950	CFM	580	489	396				
		BKW	0.04	0.05	0.05				
		SONES	8.4	8.5	8.6				
		FEI	1.32	1.40	1.43				
	1028	CFM	627	543	461	90			
		BKW	0.05	0.06	0.06	0.05			
		SONES	9.6	9.6	9.7	9.8			
		FEI	1.18	1.28	1.32	1.08			
	1150	CFM	702	626	553	360			
		BKW	0.08	0.08	0.08	0.09			
		SONES	11.4	11.5	11.6	11.6			
		FEI	0.99	1.10	1.17	1.17			
	1245	CFM	760	690	622	461	88		
		BKW	0.10	0.10	0.10	0.11	0.09		
		SONES	13.0	13.0	13.2	13.2	13.2		
		FEI	0.87	0.98	1.05	1.10	0.87		
0.25	1450	CFM	885	825	765	649	486	122	
		BKW	0.15	0.16	0.16	0.17	0.17	0.15	
		SONES	16.6	16.7	16.8	16.9	16.9	16.9	
		FEI	0.67	0.76	0.84	0.94	0.96	0.74	
	1515	CFM	925	867	810	699	555	369	
		BKW	0.17	0.18	0.18	0.19	0.20	0.19	
		SONES	17.7	17.8	17.9	18.1	18.0	18.1	
		FEI	0.61	0.71	0.78	0.89	0.92	0.90	
0.37	1600	CFM	976	922	867	763	641	479	102
		BKW	0.20	0.21	0.21	0.22	0.23	0.23	0.19
		SONES	19.3	19.4	19.5	19.7	19.7	19.7	19.8
		FEI	0.55	0.64	0.72	0.82	0.88	0.88	0.66
	1725	CFM	1053	1002	951	854	755	615	453
		BKW	0.26	0.26	0.27	0.28	0.29	0.29	0.28
		SONES	21.5	21.6	21.8	22.0	22.0	22.0	22.0
		FEI	0.48	0.56	0.63	0.74	0.81	0.83	0.82



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Direct Drive RPM: 2-1450 RPM, 4-1150 RPM, 5-950RPM



Damper Size = 438x438
 Roof Opening = 450x450
 *Approximate Unit Weight (kg) = 37+W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

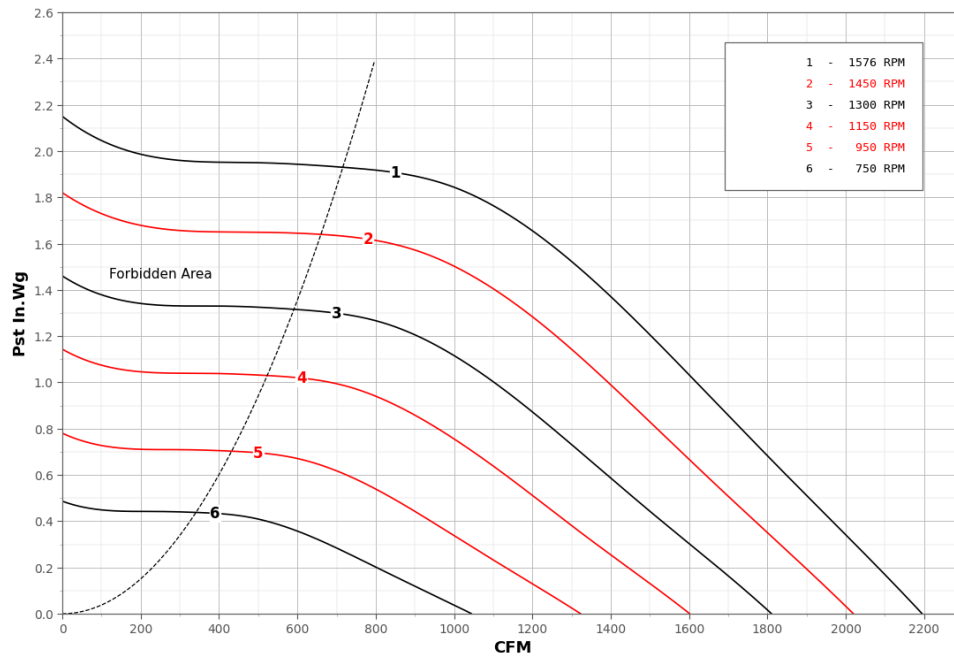


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

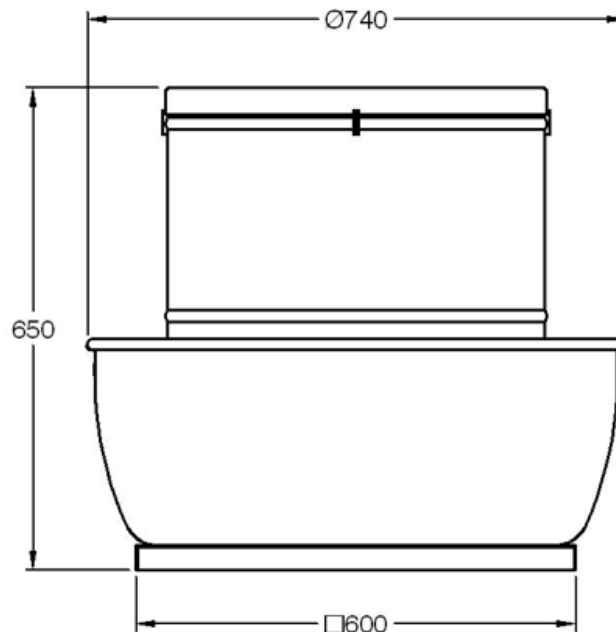
Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.125	0.25	0.5	0.75	1	1.25	1.5
355										
0.18	750	CFM	718	605	482					
		BKW	0.02	0.03	0.03					
		SONES	9.4	9.1	9.0					
		FEI	1.95	2.07	2.03					
	825	CFM	790	687	581					
		BKW	0.03	0.03	0.04					
		SONES	10.6	10.4	10.3					
		FEI	1.85	1.99	1.98					
	950	CFM	910	820	731	508				
		BKW	0.05	0.05	0.05	0.06				
		SONES	13.1	13.0	12.9	12.7				
		FEI	1.57	1.74	1.91	1.79				
	1028	CFM	985	901	819	635				
		BKW	0.06	0.06	0.07	0.08				
		SONES	14.9	14.8	14.7	14.4				
		FEI	1.42	1.63	1.69	1.67				
	1150	CFM	1101	1027	953	800	589			
		BKW	0.08	0.09	0.09	0.10	0.11			
		SONES	17.8	17.7	17.6	17.3	17.2			
		FEI	1.20	1.36	1.50	1.61	1.53			
	1220	CFM	1168	1098	1029	889	719			
		BKW	0.10	0.10	0.10	0.12	0.13			
		SONES	19.5	19.4	19.3	19.0	18.8			
		FEI	1.10	1.28	1.45	1.50	1.50			
	1265	CFM	1212	1144	1077	943	786	488		
		BKW	0.11	0.11	0.12	0.13	0.15	0.14		
		SONES	20.8	20.7	20.5	20.3	20.1	20.1		
		FEI	1.03	1.22	1.30	1.43	1.43	1.37		
0.25	1300	CFM	1245	1179	1114	984	837	611		
		BKW	0.12	0.13	0.13	0.14	0.16	0.15		
		SONES	21.7	21.6	21.5	21.2	21.0	21.0		
		FEI	0.98	1.13	1.26	1.40	1.40	1.43		
	1361	CFM	1303	1241	1178	1054	918	757		
		BKW	0.14	0.14	0.15	0.16	0.18	0.19		
		SONES	23.4	23.3	23.1	22.9	22.6	22.4		
		FEI	0.91	1.06	1.17	1.33	1.37	1.38		
0.37	1450	CFM	1389	1329	1271	1154	1033	892	675	
		BKW	0.17	0.17	0.18	0.19	0.21	0.22	0.21	
		SONES	26.2	26.0	25.8	25.5	25.2	24.9	25.0	
		FEI	0.82	0.96	1.07	1.23	1.31	1.31	1.32	
	1551	CFM	1485	1430	1375	1266	1157	1032	892	605
		BKW	0.20	0.21	0.22	0.23	0.25	0.27	0.27	0.24
		SONES	29.0	28.9	28.7	28.4	28.1	27.8	27.6	27.8
		FEI	0.72	0.85	0.96	1.13	1.23	1.25	1.29	1.25
	1600	CFM	1532.37	1479	1426	1319	1214	1097	966	768
		BKW	0.22	0.23	0.24	0.25	0.27	0.29	0.30	0.29
		SONES	30.2	30.1	29.9	29.6	29.4	29.1	28.8	28.8
		FEI	0.68	0.81	0.92	1.08	1.19	1.23	1.25	1.25



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Direct Drive RPM: 2-1450 RPM, 4-1150 RPM, 5-950RPM



Damper Size = 438x438
 Roof Opening = 450x450
 *Approximate Unit Weight (kg) = 43 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

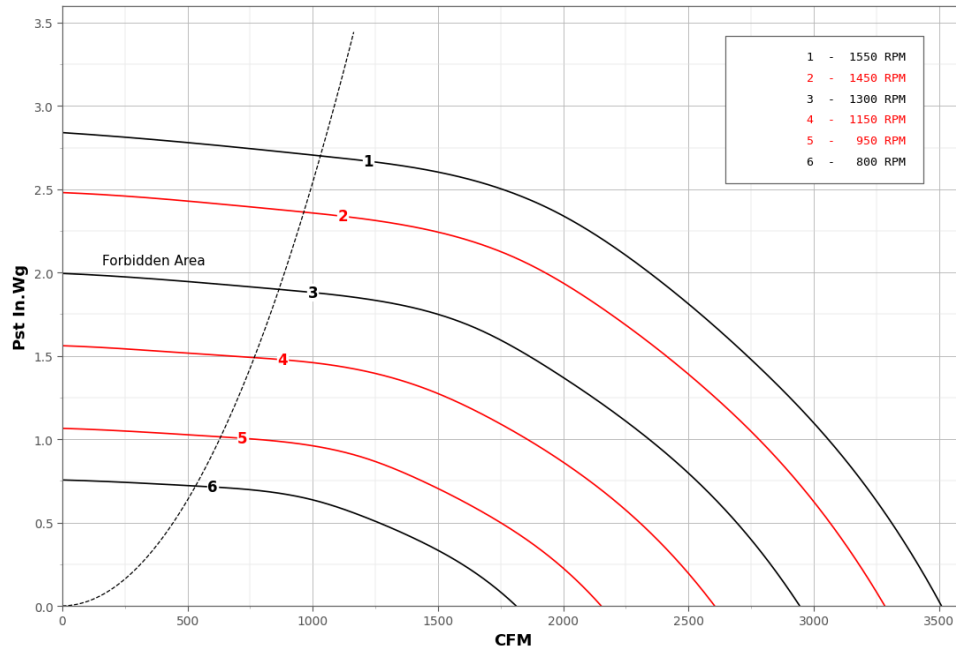


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

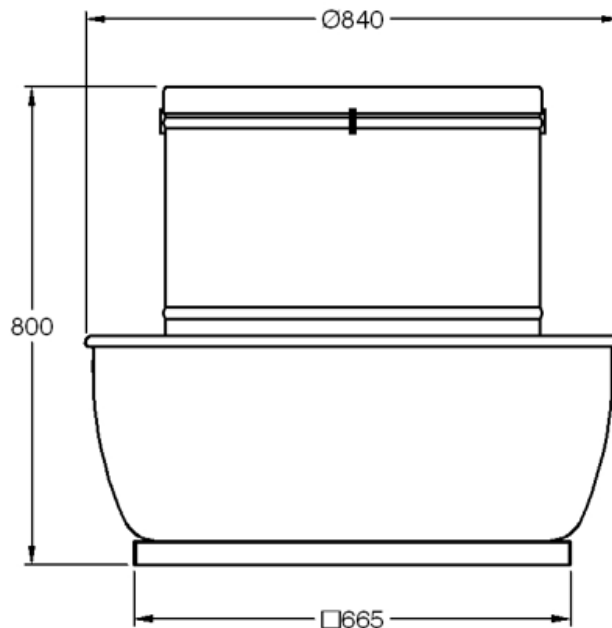
Motor kW	Fan RPM		Static Pressure in Inches wg								
			0	0.125	0.25	0.5	0.75	1	1.25	1.5	2
400											
0.37	750	CFM	1045	893	742						
		BKW	0.05	0.06	0.06						
		SONES	8.9	8.6	8.5						
		FEI	1.56	1.63	1.72						
	950	CFM	1323	1204	1083	839	70				
		BKW	1.17	1.20	1.26	1.36	0.85				
		SONES	12.6	12.4	12.3	12.2	12.3				
		FEI	1.90	1.96	2.16	0.80	0.36				
	1000	CFM	1393	1280	1165	935	598				
		BKW	0.13	0.14	0.15	0.16	0.15				
		SONES	13.5	13.4	13.3	13.3	13.3				
		FEI	1.00	1.11	1.18	1.24	1.21				
	1093	CFM	1522	1419	1314	1107	873	66			
		BKW	0.17	0.18	0.19	0.20	0.21	0.14			
		SONES	15.5	15.3	15.3	15.3	15.3	15.4			
		FEI	0.86	0.97	1.05	1.14	1.17	0.69			
	1150	CFM	1601	1504	1404	1207	1001	652			
		BKW	0.20	0.21	0.22	0.23	0.24	0.23			
		SONES	16.8	16.7	16.6	16.5	16.5	16.6			
		FEI	0.79	0.90	0.98	1.08	1.12	1.06			
	1245	CFM	1734	1644	1552	1369	1184	964	160		
		BKW	0.25	0.26	0.27	0.29	0.30	0.31	0.23		
		SONES	18.9	18.8	18.7	18.7	18.6	18.7	18.9		
		FEI	0.68	0.79	0.87	0.98	1.04	1.06	0.64		
0.55	1333	CFM	1857	1772	1687	1515	1346	1166	920	60	
		BKW	0.30	0.32	0.33	0.35	0.37	0.38	0.37	0.25	
		SONES	21.0	21.0	20.9	20.9	20.8	20.8	20.9	21.1	
		FEI	0.60	0.70	0.78	0.90	0.97	1.01	1.01	0.53	
	1421	CFM	1979	1900	1821	1659	1500	1336	1154	900	
		BKW	0.37	0.38	0.39	0.42	0.44	0.45	0.46	0.44	
		SONES	23.2	23.2	23.2	23.1	23.1	23.1	23.0	23.2	
		FEI	0.53	0.63	0.71	0.82	0.90	0.97	0.98	0.97	
0.75	1498	CFM	2086.43	2011	1936	1783	1631	1480	1319	1109	
		BKW	0.43	0.44	0.46	0.49	0.51	0.53	0.54	0.53	
		SONES	25.2	25.2	25.2	25.2	25.2	25.1	25.1	25.1	
		FEI	0.49	0.58	0.65	0.77	0.85	0.91	0.95	0.96	
	1576	CFM	2195	2124	2052	1907	1762	1619	1469	1314	207
		BKW	0.50	0.52	0.53	0.56	0.58	0.61	0.62	0.63	0.47
		SONES	27.1	27.1	27.1	27.1	27.1	27.1	27.0	27.0	27.1
		FEI	0.44	0.53	0.60	0.71	0.80	0.86	0.91	0.93	0.52



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Direct Drive RPM: 2-1450 RPM, 4-1150 RPM, 5-950RPM



Damper Size = 438x438
 Roof Opening = 550x550
 *Approximate Unit Weight (kg) = 59 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

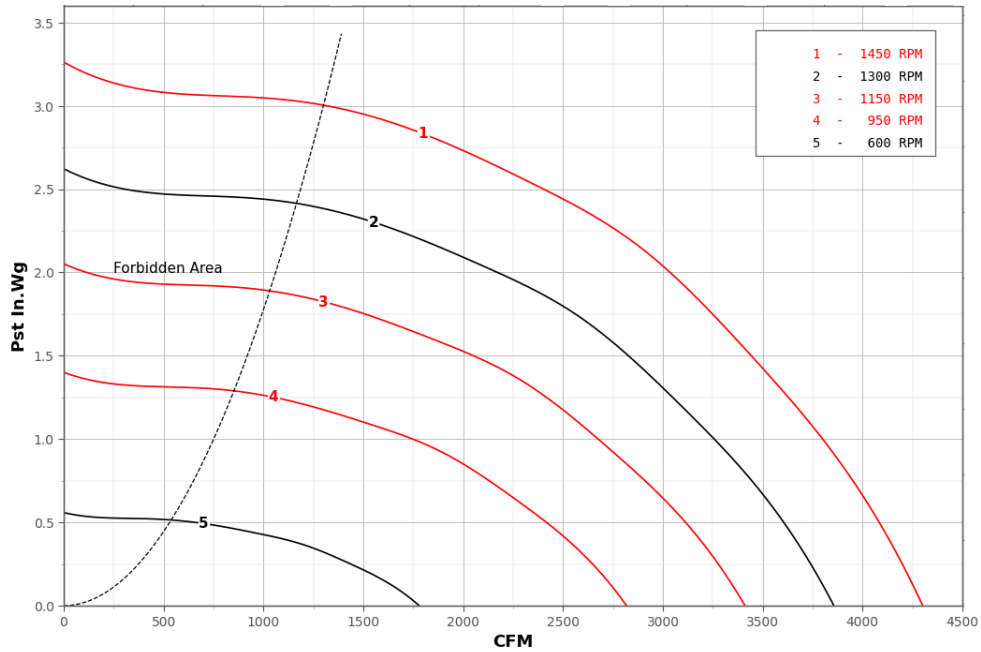


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

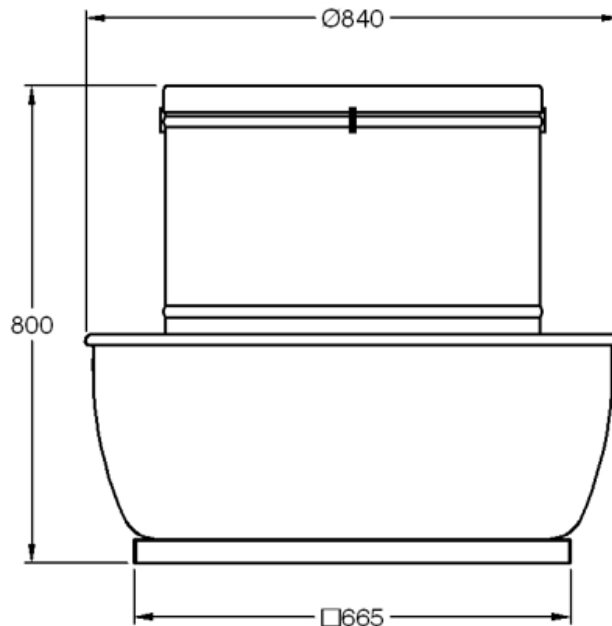
Motor kW	Fan RPM		Static Pressure in Inches wg								
			0	0.125	0.25	0.5	0.75	1	1.25	1.5	2
450											
0.55	800	CFM	1812	1708	1589	1259					
		BKW	0.13	0.14	0.15	0.16					
		SONES	10.0	9.9	9.8	9.5					
		FEI	1.16	1.32	1.43	1.50					
	884	CFM	2002	1908	1815	1543	1155				
		BKW	0.18	0.19	0.20	0.21	0.21				
		SONES	11.7	11.6	11.5	11.3	11.0				
		FEI	0.98	1.13	1.26	1.38	1.40				
	950	CFM	2151	2064	1977	1742	1434				
		BKW	0.22	0.23	0.24	0.26	0.27				
		SONES	13.1	13.0	12.9	12.7	12.4				
		FEI	0.88	1.02	1.14	1.28	1.33				
	1007	CFM	2280	2198	2116	1904	1635	1274			
		BKW	0.27	0.28	0.28	0.30	0.32	0.31			
		SONES	14.3	14.2	14.1	13.9	13.6	13.3			
		FEI	0.78	0.92	1.06	1.21	1.27	1.28			
	1078	CFM	2441	2364	2288	2102	1874	1577			
		BKW	0.33	0.34	0.35	0.37	0.39	0.39			
		SONES	16.0	15.9	15.8	15.6	15.3	15.0			
		FEI	0.69	0.82	0.93	1.10	1.19	1.23			
0.75	1150	CFM	2604	2532	2460	2298	2095	1844	1529		
		BKW	0.40	0.41	0.42	0.44	0.46	0.48	0.47		
		SONES	17.7	17.6	17.5	17.4	17.2	16.8	16.5		
		FEI	0.61	0.73	0.84	1.01	1.12	1.17	1.19		
	1212	CFM	2745	2676	2608	2465	2272	2055	1792		
		BKW	0.47	0.48	0.49	0.51	0.54	0.55	0.56		
		SONES	19.3	19.1	19.0	18.8	18.6	18.3	18.0		
		FEI	0.56	0.67	0.77	0.94	1.05	1.13	1.16		
1.10	1275	CFM	2887	2822	2758	2628	2449	2263	2025	1741	
		BKW	0.54	0.56	0.57	0.59	0.62	0.64	0.65	0.64	
		SONES	20.8	20.7	20.6	20.4	20.2	20.0	19.6	19.3	
		FEI	0.51	0.61	0.71	0.88	0.98	1.07	1.12	1.14	
	1300	CFM	2944	2880	2817	2689	2518	2338	2189	1847	
		BKW	0.58	0.58	0.60	0.63	0.65	0.68	0.69	0.68	
		SONES	21.5	21.4	21.3	21.1	20.9	20.7	20.3	20.0	
		FEI	0.49	0.60	0.69	0.85	0.97	1.05	1.12	1.12	
1.50	1450	CFM	3284	3227	3170	3055	2927	2766	2604	2401	1915
		BKW	0.80	0.81	0.83	0.86	0.88	0.91	0.94	0.95	0.94
		SONES	25.5	25.4	25.3	25.1	24.9	24.7	24.5	24.2	23.6
		FEI	0.40	0.48	0.56	0.70	0.82	0.90	0.97	1.02	1.06
	1550	CFM	3510	3457	3403	3297	3190	3042	2892	2734	2336
		BKW	0.97	0.99	1.00	1.03	1.07	1.10	1.12	1.15	1.16
		SONES	28.3	28.2	28.1	27.9	27.7	27.5	27.3	27.1	26.6
		FEI	0.35	0.42	0.50	0.63	0.74	0.83	0.90	0.95	1.03



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Direct Drive RPM: 1-1450 RPM, 3-1150 RPM, 4-950RPM

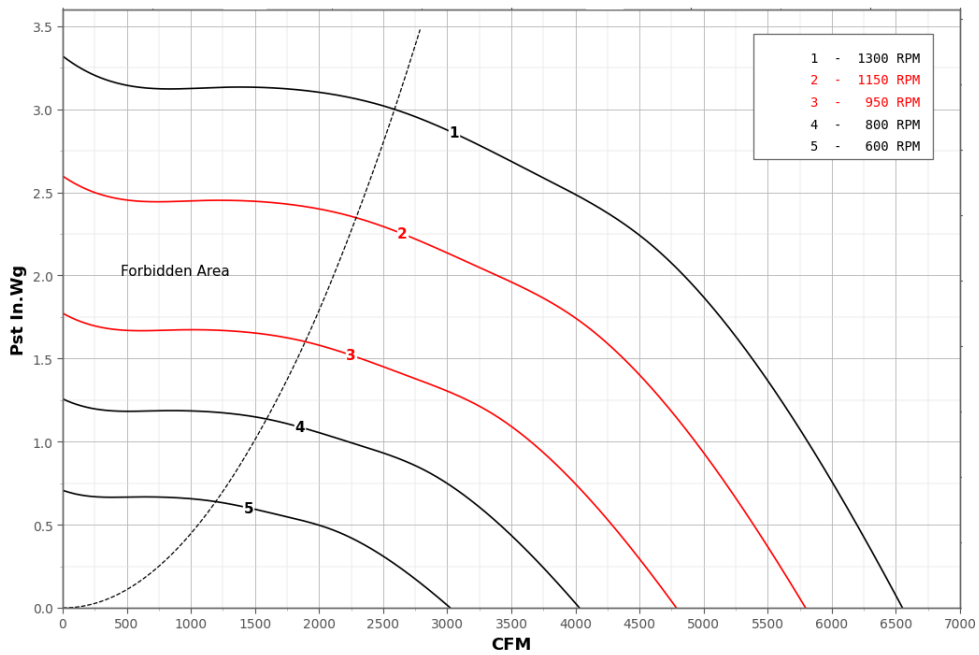


Damper Size = 438x438
 Roof Opening = 550x550
 *Approximate Unit Weight (kg) = 60 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

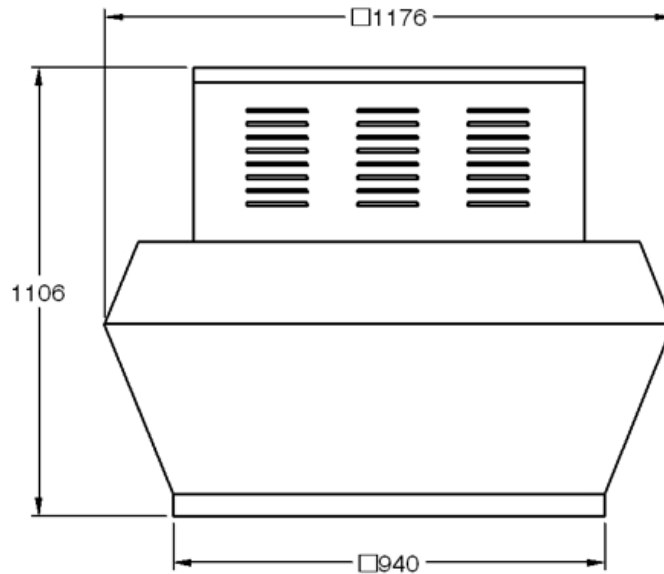


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.25	0.5	0.75	1	1.25	1.5	2
500										
0.75	600	CFM	1780	1437	644					
		BKW	0.10	0.12	0.10					
		SONES	8.6	8.4	8.3					
		FEI	1.43	1.62	1.46					
	730	CFM	2165	1910	1531	724				
		BKW	0.18	0.20	0.21	0.17				
		SONES	11.7	11.4	11.1	11.1				
		FEI	1.04	1.29	1.39	1.23				
	832	CFM	2468	2264	1964	1552	607			
		BKW	0.27	0.29	0.31	0.30	0.23			
		SONES	14.2	13.9	13.6	13.4	13.5			
		FEI	0.83	1.08	1.21	1.27	1.02			
	950	CFM	2818	2639	2407	2117	1725	1036		
		BKW	0.40	0.42	0.45	0.46	0.45	0.38		
		SONES	17.7	17.3	17.0	16.7	16.5	16.5		
		FEI	0.65	0.88	1.03	1.13	1.17	1.06		
	1050	CFM	3115	2953	2764	2530	2242	1851	1257	
		BKW	0.54	0.57	0.59	0.62	0.62	0.61	0.54	
		SONES	21.0	20.6	20.3	20.0	19.8	19.6	19.5	
		FEI	0.55	0.75	0.91	1.01	1.09	1.11	1.04	
1.10	1150	CFM	3411	3263	3112	2899	2668	2402	2027	
		BKW	0.70	0.74	0.77	0.80	0.82	0.82	0.79	
		SONES	24.5	24.2	23.9	23.6	23.3	23.1	22.9	
		FEI	0.46	0.64	0.78	0.89	0.97	1.03	1.05	
	1197	CFM	3551	3409	3267	3068	2862	2607	2321	1249
		BKW	0.79	0.83	0.86	0.89	0.92	0.92	0.91	0.76
		SONES	26.2	25.9	25.6	25.3	25.1	24.8	24.6	24.6
		FEI	0.42	0.59	0.74	0.84	0.92	0.99	1.03	0.93
1.50	1262	CFM	3744	3609	3474	3300	3106	2883	2641	1869
		BKW	0.93	0.97	1.00	1.03	1.07	1.08	1.08	1.00
		SONES	28.3	28.0	27.7	27.4	27.1	26.9	26.6	26.3
		FEI	0.38	0.54	0.67	0.78	0.86	0.93	0.98	0.98
	1300	CFM	3856	3725	3595	3434	3245	3042	2807	2161
		BKW	1.02	1.05	1.09	1.13	1.16	1.18	1.18	1.13
		SONES	29.5	29.2	28.9	28.7	28.4	28.1	27.8	27.5
		FEI	0.36	0.51	0.64	0.75	0.83	0.89	0.95	0.98
2.20	1375	CFM	4079	3955	3831	3696	3517	3339	3127	2636
		BKW	1.20	1.24	1.28	1.32	1.35	1.39	1.40	1.38
		SONES	32.1	31.8	31.5	31.2	30.9	30.7	30.4	29.9
		FEI	0.32	0.46	0.58	0.68	0.77	0.83	0.89	0.96
	1450	CFM	4301	4184	4067	3949	3785	3616	3439	3018
		BKW	1.41	1.45	1.49	1.53	1.57	1.61	1.64	1.64
		SONES	34.8	34.4	34.1	33.8	33.6	33.3	33.0	32.4
		FEI	0.29	0.42	0.53	0.63	0.71	0.78	0.83	0.92



Direct Drive RPM: 2-1150 RPM, 3-950RPM



Damper Size = 605x605
 Roof Opening = 715x715
 *Approximate Unit Weight (kg) = 118 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

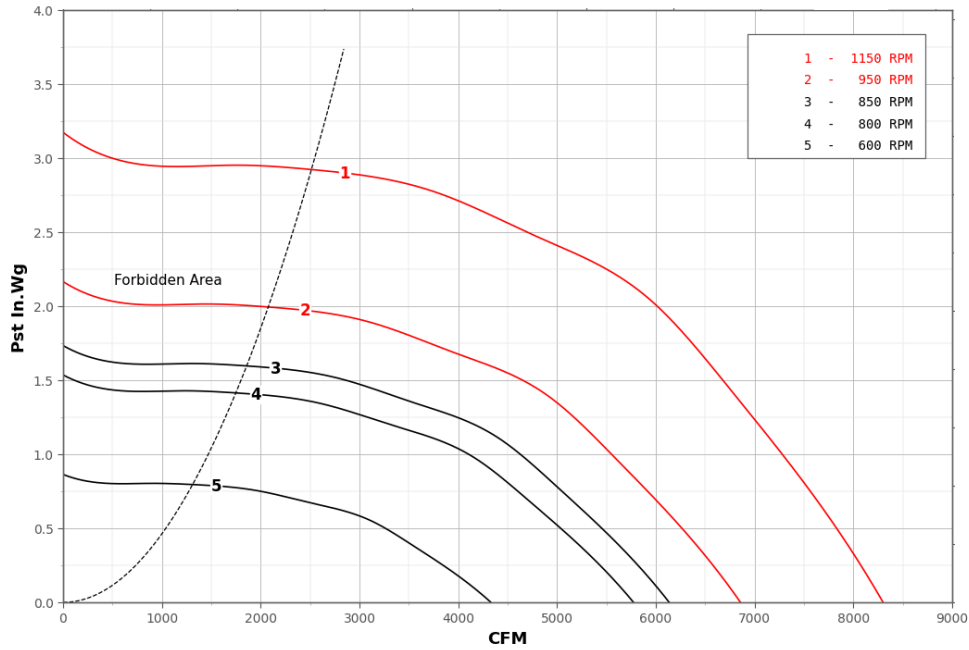


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

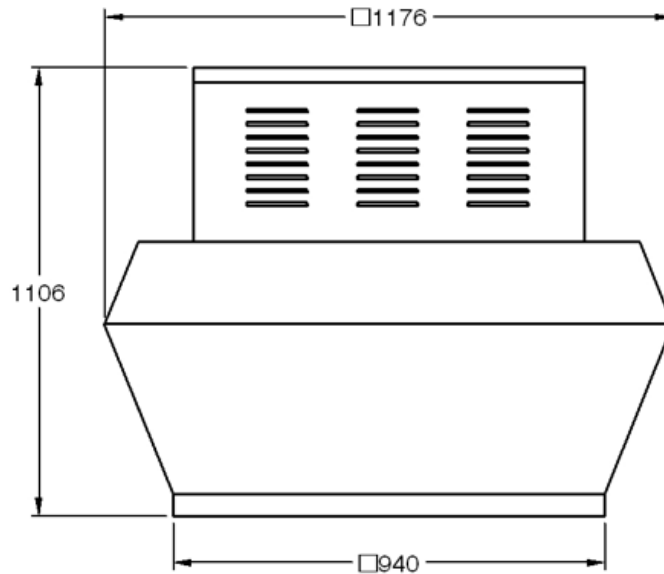
Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.25	0.5	0.75	1	1.25	1.5	2
560										
1.10	600	CFM	3024	2607	1962					
		BKW	0.21	0.24	0.25					
		SONES	13.5	10.6	8.6					
		FEI	1.19	1.42	1.45					
	687	CFM	3462	3110	2670	1838				
		BKW	0.31	0.34	0.37	0.36				
		SONES	15.8	13.4	11.3	10.0				
		FEI	0.95	1.22	1.33	1.26				
	735	CFM	3704	3382	3007	2404				
		BKW	0.38	0.41	0.45	0.45				
		SONES	17.2	14.9	12.9	11.3				
		FEI	0.85	1.11	1.24	1.28				
	784	CFM	3951	3651	3304	2855	1988			
		BKW	0.46	0.50	0.54	0.56	0.52			
		SONES	18.7	16.5	14.6	12.9	12.1			
		FEI	0.76	1.00	1.15	1.22	1.16			
	800	CFM	4032	3737	3400	2972	2218			
		BKW	0.49	0.53	0.57	0.59	0.57			
		SONES	19.3	17.1	15.2	13.4	12.4			
		FEI	0.73	0.97	1.12	1.21	1.17			
	869	CFM	4379	4185	3807	3465	2996	2113		
		BKW	0.63	0.67	0.71	0.75	0.76	0.70		
		SONES	21.5	19.5	17.6	16.0	14.5	13.9		
		FEI	0.63	0.87	1.00	1.10	1.14	1.07		
1.50	950	CFM	4789	4540	4276	3985	3622	3116	2286	
		BKW	0.82	0.86	0.91	0.96	0.99	0.98	0.91	
		SONES	25.3	23.2	21.2	19.5	17.8	16.7	16.3	
		FEI	0.53	0.73	0.88	0.98	1.05	1.09	1.02	
	968	CFM	4878	4635	4378	4093	3751	3311	2547	
		BKW	0.87	0.91	0.96	1.00	1.04	1.05	0.99	
		SONES	26.3	24.1	22.2	20.4	18.8	17.3	16.8	
		FEI	0.51	0.71	0.86	0.97	1.04	1.07	1.03	
2.20	1042	CFM	5251	5025	4797	4532	4268	3904	3428	
		BKW	1.08	1.13	1.18	1.23	1.29	1.30	1.30	
		SONES	30.7	28.4	26.2	24.3	22.6	20.9	19.7	
		FEI	0.44	0.62	0.76	0.87	0.95	1.01	1.03	
	1095	CFM	5518	5303	5088	4842	4590	4284	3936	2611
		BKW	1.25	1.30	1.35	1.41	1.47	1.50	1.52	1.40
		SONES	34.3	31.8	29.5	27.4	25.5	23.7	22.2	20.9
		FEI	0.40	0.57	0.71	0.82	0.90	0.96	1.01	0.95
	1150	CFM	5795	5590	5386	5159	4919	4670	4339	3370
		BKW	1.45	1.50	1.56	1.62	1.68	1.73	1.75	1.70
		SONES	38.3	35.6	33.2	30.9	28.9	27.0	25.2	23.0
		FEI	0.36	0.52	0.65	0.76	0.84	0.91	0.96	0.98
3.00	1245	CFM	6274	6085	5896	5700	5478	5256	5013	4401
		BKW	1.84	1.90	1.96	2.02	2.08	2.15	2.20	2.24
		SONES	44.2	41.4	38.9	36.5	34.4	32.4	30.6	27.2
		FEI	0.31	0.45	0.57	0.67	0.76	0.82	0.88	0.96
	1300	CFM	6551	6370	6189	6008	5797	5584	5372	4807
		BKW	2.10	2.16	2.22	2.28	2.35	2.42	2.48	2.53
		SONES	46.6	43.9	41.5	39.2	37.1	35.2	33.3	30.0
		FEI	0.29	0.42	0.53	0.63	0.71	0.78	0.84	0.93



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Direct Drive RPM: 1-1150 RPM, 2-950RPM



Damper Size = 674X674
 Roof Opening = 750x750
 *Approximate Unit Weight (kg) = 135 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

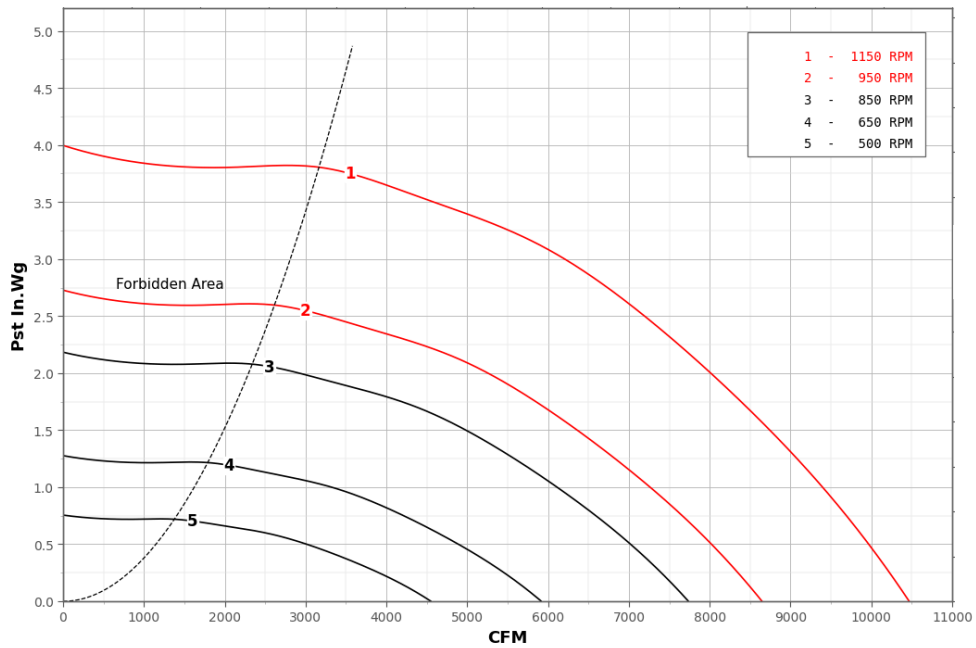


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

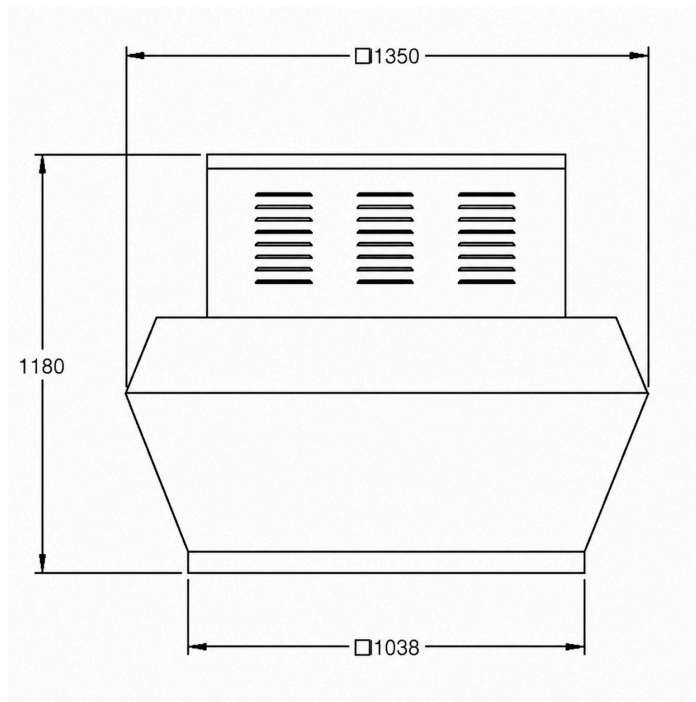
Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.25	0.5	0.75	1	1.25	1.5	2
630										
1.1	600	CFM	4331	3843	3246	1992				
		BKW	0.31	0.36	0.39	0.35				
		SONES	11.6	10.8	10.2	9.4				
		FEI	1.14	1.38	1.49	1.37				
	659	CFM	4757	4327	3806	3035				
		BKW	0.41	0.46	0.5	0.51				
		SONES	13.4	12.6	11.9	11.2				
		FEI	0.97	1.24	1.38	1.39				
	695	CFM	5017	4612	4131	3572	2343			
		BKW	0.48	0.54	0.58	0.61	0.55			
		SONES	14.6	13.7	12.9	12.3	11.9			
		FEI	0.89	1.14	1.3	1.37	1.26			
	731	CFM	5277	4891	4444	3938	3038			
		BKW	0.56	0.62	0.67	0.7	0.67			
		SONES	15.8	14.8	14.1	13.3	12.9			
		FEI	0.81	1.06	1.22	1.3	1.31			
	800	CFM	5775	5423	5030	4595	4088	3067		
		BKW	0.73	0.8	0.86	0.9	0.92	0.86		
		SONES	18.3	17.3	16.4	15.7	15	14.8		
		FEI	0.68	0.91	1.07	1.18	1.25	1.21		
1.5	831	CFM	5998	5660	5290	4882	4420	3615	2121	
		BKW	0.82	0.89	0.95	1.01	1.03	1	0.84	
		SONES	19.4	18.4	17.5	16.8	16.1	15.7	16	
		FEI	0.63	0.86	1.02	1.12	1.21	1.21	1.03	
	850	CFM	6136	5804	5447	5049	4605	3906	2846	
		BKW	0.87	0.95	1.01	1.07	1.1	1.08	0.99	
		SONES	20.2	19.2	18.2	17.4	16.7	16.3	16.1	
		FEI	0.61	0.82	0.99	1.09	1.09	1.18	1.2	
	876	CFM	6323	6002	5662	5276	4854	4298	3353	
		BKW	0.96	1.02	1.1	1.16	1.2	1.2	1.13	
		SONES	21.2	20.2	19.3	18.4	17.6	17.1	16.9	
		FEI	0.57	0.79	0.94	1.05	1.14	1.19	1.15	
2.2	921	CFM	6648	6342	6030	5663	5279	4863	4125	
		BKW	1.11	1.19	1.27	1.33	1.38	1.41	1.37	
		SONES	22.9	22	21.2	20.3	19.5	18.7	18.2	
		FEI	0.52	0.72	0.87	0.99	1.07	1.14	1.15	
	950	CFM	6857	6561	6265	5910	5549	5145	4564	1913
		BKW	1.22	1.3	1.38	1.45	1.51	1.54	1.53	1.15
		SONES	24	23.2	22.4	21.6	20.8	20.1	19.4	20.1
		FEI	0.49	0.69	0.83	0.95	1.03	1.1	1.14	0.88
3	1047	CFM	7558	7289	7020	6721	6398	6064	5697	4509
		BKW	1.63	1.72	1.81	1.89	1.96	2.02	2.05	2
		SONES	28	27.2	26.5	25.8	25.1	24.5	23.8	22.7
		FEI	0.41	0.58	0.72	0.83	0.92	0.99	1.06	1.09
	1150	CFM	8301	8056	7811	7564	7270	6976	6671	6003
		BKW	2.16	2.26	2.36	2.45	2.53	2.61	2.68	2.75
		SONES	32.5	31.9	31.2	30.5	29.9	29.3	28.8	27.7
		FEI	0.34	0.49	0.61	0.72	0.81	0.88	0.95	1.05



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Direct Drive RPM: 1-1150 RPM, 2-950RPM



Damper Size = 605X605
 Roof Opening = 715x715
 *Approximate Unit Weight (kg) = 119 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

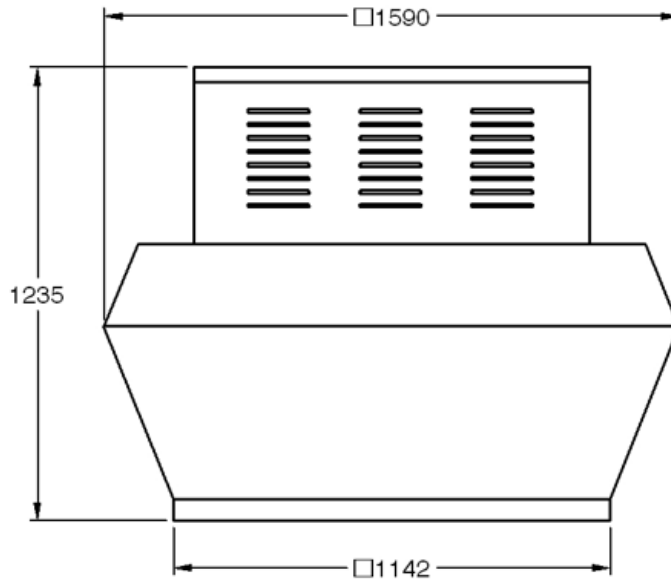
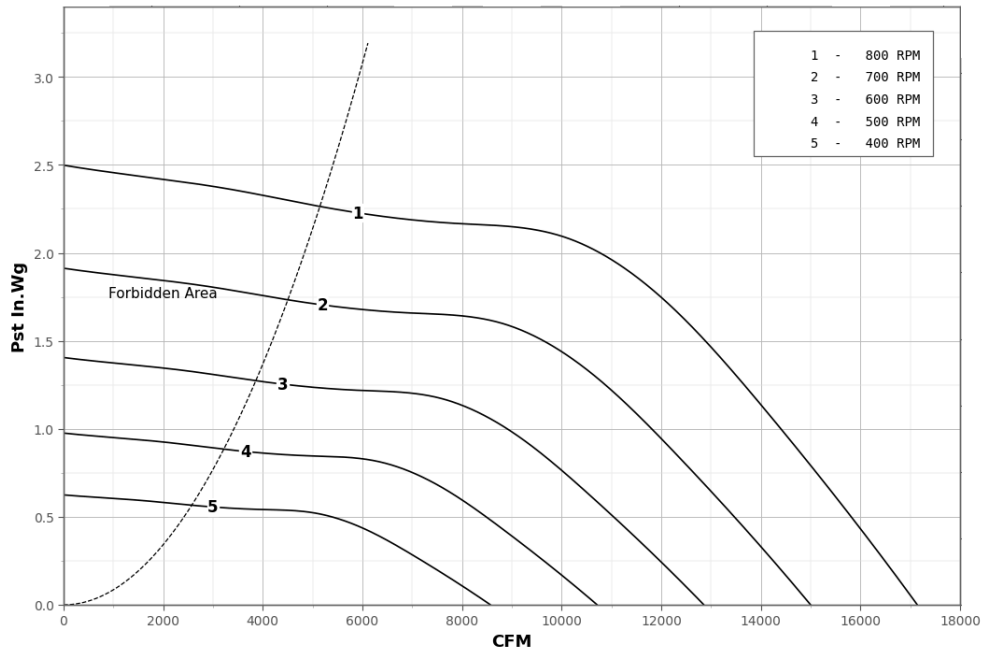


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.25	0.5	0.75	1	1.25	1.5	2
710										
1.1	500	CFM	4551	3894	2989	78				
		BKW	0.27	0.31	0.33	0.14				
		SONES	12.9	11.7	11.1	10.6				
		FEI	1.33	1.58	1.61	0.62				
	600	CFM	5462	4950	4303	3471	1981			
		BKW	0.47	0.52	0.56	0.57	0.5			
		SONES	17.5	16.3	15.2	14.7	14.2			
		FEI	0.97	1.25	1.39	1.42	1.19			
	659	CFM	5999	5541	4982	4326	3477	1200		
		BKW	0.62	0.68	0.73	0.76	0.76	0.52		
		SONES	20.3	19.2	18.1	17.4	16.8	16.4		
		FEI	0.83	1.08	1.23	1.31	1.3	0.91		
	695	CFM	6326	5893	5376	4780	4042	2921		
		BKW	0.73	0.79	0.84	0.88	0.89	0.84		
		SONES	22.1	21	19.9	19.1	18.5	18.1		
		FEI	0.74	0.99	1.15	1.25	1.28	1.19		
1.5	731	CFM	6654	6242	5764	5223	4588	3795	2296	
		BKW	0.85	0.91	0.97	1.01	1.04	1.03	0.88	
		SONES	23.9	22.8	21.7	20.9	20.3	19.7	19.3	
		FEI	0.67	0.91	1.07	1.19	1.23	1.23	1.06	
2.2	781	CFM	7109	6723	6295	5812	5249	4580	3688	
		BKW	1.03	1.1	1.16	1.22	1.26	1.27	1.23	
		SONES	26.6	25.5	24.5	23.5	22.8	22.2	21.7	
		FEI	0.59	0.82	0.98	1.09	1.16	1.19	1.16	
	800	CFM	7282	6905	6495	6023	5488	4869	4145	
		BKW	1.11	1.18	1.24	1.3	1.34	1.36	1.35	
		SONES	27.7	26.6	25.5	24.5	23.8	23.2	22.6	
		FEI	0.57	0.78	0.95	1.07	1.14	1.18	1.17	
	831	CFM	7564	7201	6818	6364	5871	5331	4636	1027
		BKW	1.24	1.31	1.38	1.44	1.5	1.53	1.52	0.92
		SONES	29.4	28.3	27.3	26.3	25.5	24.9	24.3	23.6
		FEI	0.53	0.74	0.9	1.02	1.09	1.15	1.16	0.67
	850	CFM	7737	7383	7015	6571	6103	5575	4931	2851
		BKW	1.33	1.4	1.47	1.54	1.59	1.63	1.63	1.42
		SONES	30.5	29.4	28.3	27.3	26.5	25.9	25.3	24.6
		FEI	0.5	0.71	0.87	0.98	1.07	1.12	1.15	1.01
	876	CFM	7974	7630	7283	6853	6417	5904	5329	3617
		BKW	1.46	1.53	1.6	1.67	1.73	1.77	1.79	1.68
		SONES	32	30.9	29.9	28.9	27.9	27.3	26.7	25.9
		FEI	0.47	0.67	0.83	0.95	1.04	1.1	1.13	1.06
3	921	CFM	8384	8056	7729	7334	6924	6465	5977	4725
		BKW	1.69	1.77	1.85	1.92	1.99	2.04	2.08	2.06
		SONES	34.9	33.8	32.7	31.6	30.6	29.8	29.2	28.3
		FEI	0.43	0.62	0.76	0.88	0.97	1.04	1.09	1.11
	950	CFM	8648	8330	8013	7641	7244	6820	6347	5204
		BKW	1.86	1.94	2.02	2.09	2.16	2.22	2.27	2.27
		SONES	36.8	35.7	34.6	33.5	32.5	31.6	31.1	30.1
		FEI	0.41	0.58	0.73	0.85	0.94	1.01	1.06	1.1
4	1047	CFM	9531	9243	8955	8653	8293	7933	7547	6685
		BKW	2.49	2.58	2.66	2.75	2.83	2.91	2.97	3.07
		SONES	43.3	42.2	41.1	40	39	38.1	37.3	36.3
		FEI	0.34	0.49	0.62	0.73	0.82	0.9	0.96	1.07
5.5	1150	CFM	10468	10206	9944	9682	9380	9052	8724	7992
		BKW	3.3	3.39	3.49	3.59	3.68	3.76	3.85	3.98
		SONES	50.9	49.7	48.6	47.6	46.6	45.6	44.6	43.1
		FEI	0.28	0.41	0.53	0.63	0.72	0.8	0.86	0.96



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Damper Size = 875X875
 Roof Opening = 930x930
 *Approximate Unit Weight (kg) = 258 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)

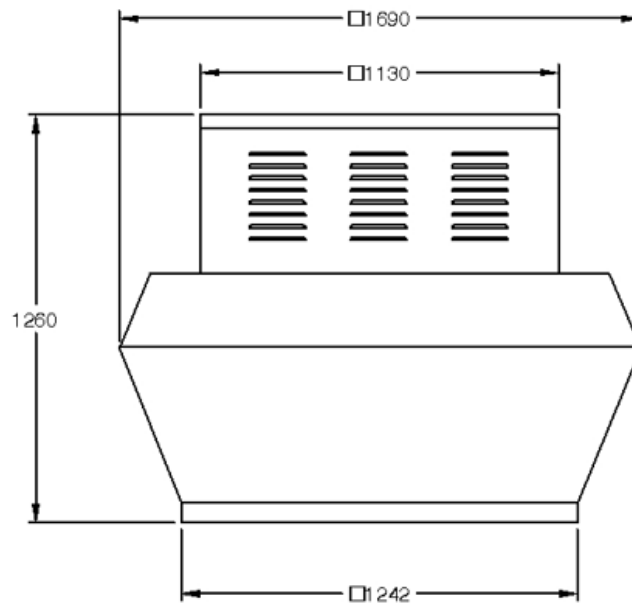
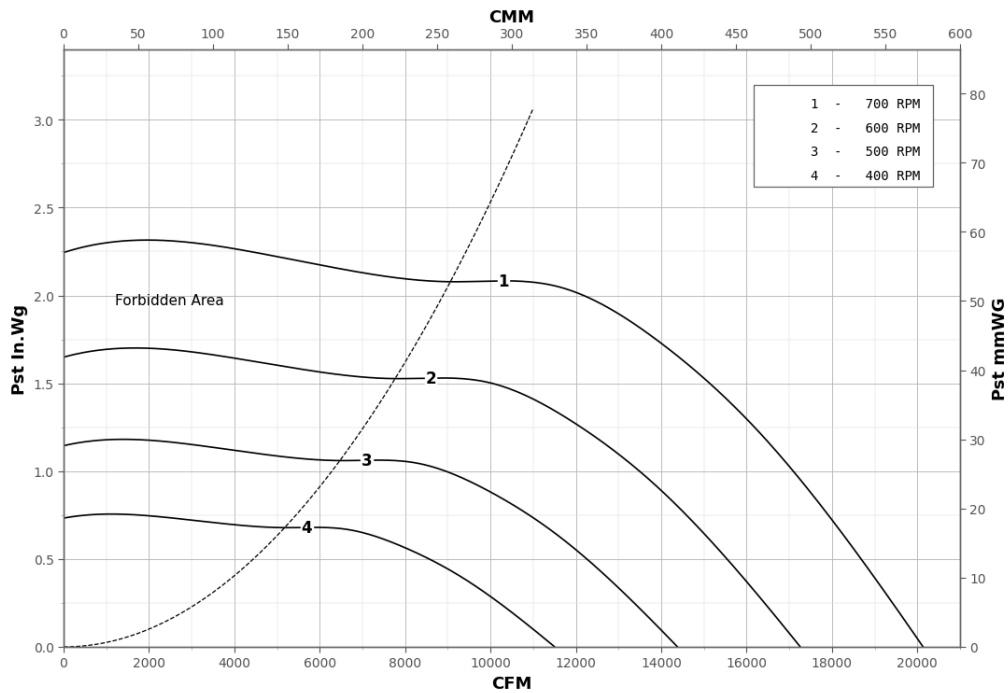


Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.25	0.5	0.75	1	1.25	1.5	2
900										
1.5	363	CFM	7778	6238	775					
		BKW	0.48	0.51	0.22					
		SONES	12.6	11.2	11.2					
		FEI	1.29	1.55	0.85					
	403	CFM	8636	7273	5397					
		BKW	0.65	0.70	0.69					
		SONES	15.0	13.7	12.4					
		FEI	1.08	1.33	1.39					
	439	CFM	9407	8166	6757	103				
		BKW	0.85	0.89	0.91	0.30				
		SONES	17.4	16.0	14.9	15.7				
		FEI	1.12	1.17	1.19	0.45				
	483	CFM	10350	9233	7995	6183				
		BKW	1.13	1.18	1.21	1.17				
		SONES	20.3	19.1	18.0	16.9				
		FEI	0.76	1.01	1.17	1.20				
2.2	507	CFM	10864	9806	8650	7145	133			
		BKW	1.30	1.35	1.40	1.38	0.47			
		SONES	21.9	20.8	19.7	18.7	19.6			
		FEI	0.69	0.94	1.10	1.17	0.29			
	531	CFM	11378	10374	9294	8078	3346			
		BKW	1.50	1.55	1.61	1.62	1.05			
		SONES	23.7	22.5	21.5	20.4	20.3			
		FEI	0.63	0.87	1.03	1.13	0.93			
3.0	576	CFM	12343	11417	10438	9360	7876	1534		
		BKW	1.91	1.97	2.03	2.06	2.01	0.95		
		SONES	27.0	25.9	24.9	23.9	22.9	23.6		
		FEI	0.54	0.76	0.92	1.03	1.08	0.63		
	585	CFM	12535	11624	10662	9610	8233	2773		
		BKW	2.00	2.06	2.13	2.16	2.12	1.24		
		SONES	27.7	26.6	25.7	24.6	23.6	23.9		
		FEI	0.53	0.74	0.90	1.01	1.07	0.79		
4.0	639	CFM	13693	12859	11992	11080	10074	8606	2831	
		BKW	2.61	2.67	2.74	2.81	2.82	2.74	1.57	
		SONES	31.9	30.9	30.0	29.1	28.1	27.0	27.8	
		FEI	0.44	0.64	0.79	0.90	0.99	1.02	0.74	
	643	CFM	13778	12949	12089	11187	10188	8766	3281	
		BKW	2.66	2.72	2.79	2.86	2.87	2.80	1.70	
		SONES	32.2	31.3	30.4	29.5	28.4	27.4	27.9	
		FEI	0.44	0.63	0.78	0.89	0.98	1.02	0.77	
5.5	704	CFM	15085	14328	13558	12747	11880	10967	9588	
		BKW	3.49	3.56	3.63	3.71	3.76	3.77	3.67	
		SONES	37.7	36.8	36.0	35.1	34.1	32.9	31.8	
		FEI	0.37	0.54	0.68	0.79	0.88	0.95	0.98	
7.5	782	CFM	16757	16075	15394	14672	13942	13143	12321	9722
		BKW	4.78	4.86	4.94	5.02	5.12	5.15	5.16	4.90
		SONES	45.0	44.0	43.2	42.3	41.5	40.4	39.3	37.2
		FEI	0.30	0.44	0.57	0.67	0.76	0.83	0.90	0.94
	800	CFM	17142	16476	15810	15109	14396	13633	12829	10553
		BKW	5.12	5.20	5.28	5.37	5.46	5.51	5.52	5.34
		SONES	46.8	45.8	44.9	44.1	43.3	42.3	41.1	38.9
		FEI	0.29	0.42	0.55	0.65	0.73	0.81	0.87	0.94



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208



Damper Size = 900x900
 Roof Opening = 1030x1030
 *Approximate Unit Weight (kg) = 305 + W_m
 (All dimensions in millimeters)
 * W_m Motor Weight (see table)



Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCAInternational Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

Motor kW	Fan RPM		Static Pressure in Inches wg							
			0	0.25	0.5	0.75	1	1.25	1.5	2
1000										
2.20	377	CFM	10844	9429	7542					
		BKW	0.86	0.91	0.94					
		SONES	14.1	13.1	12.1					
		FEI	1.01	1.31	1.40					
	400	CFM	11506	10190	8506	1331				
		BKW	1.02	1.07	1.12	0.48				
		SONES	15.5	14.5	13.5	13.3				
		FEI	0.91	1.21	1.33	0.77				
	456	CFM	13117	11992	10708	8950				
		BKW	1.51	1.57	1.65	1.66				
		SONES	19.2	18.3	17.3	16.3				
		FEI	0.71	0.98	1.14	1.21				
3.00	475	CFM	13663	12583	11366	9798	4113			
		BKW	1.71	1.77	1.85	1.88	1.21			
		SONES	20.4	19.6	18.7	17.7	17.2			
		FEI	0.66	0.92	1.09	1.17	0.98			
	502	CFM	14440	13418	12288	10915	8886			
		BKW	2.02	2.08	2.16	2.22	2.13			
		SONES	22.3	21.4	20.5	19.7	18.6			
		FEI	0.59	0.84	1.01	1.11	1.15			
	527	CFM	15159	14185	13129	11925	10361	4019		
		BKW	2.34	2.40	2.48	2.56	2.56	1.53		
		SONES	24.1	23.2	22.4	21.5	20.5	20.4		
		FEI	0.54	0.77	0.94	1.05	1.11	0.89		
4.00	552	CFM	15878	14949	13960	12888	11461	9376		
		BKW	2.69	2.75	2.83	2.93	2.95	2.78		
		SONES	25.8	25.0	24.2	23.5	22.5	21.5		
		FEI	0.49	0.71	0.88	0.99	1.07	1.09		
	580	CFM	16684	15799	14880	13860	12618	11046	4788	
		BKW	3.12	3.19	3.27	3.37	3.42	3.37	2.14	
		SONES	28.0	27.2	26.4	25.6	24.7	23.7	23.6	
		FEI	0.45	0.65	0.81	0.93	1.01	1.06	0.87	
5.50	607	CFM	17460	16615	15759	14784	13708	12387	10411	
		BKW	3.57	3.65	3.72	3.83	3.91	3.92	3.72	
		SONES	30.1	29.3	28.5	27.8	27.0	25.9	25.0	
		FEI	0.41	0.60	0.76	0.88	0.97	1.02	1.05	
	645	CFM	18553	17758	16962	16065	15148	13966	12664	
		BKW	4.29	4.37	4.44	4.55	4.67	4.70	4.69	
		SONES	33.1	32.3	31.5	30.8	30.2	29.2	28.2	
		FEI	0.36	0.54	0.69	0.80	0.90	0.96	1.01	
7.50	668	CFM	19215	18447	17679	16831	15945	14899	13699	5283
		BKW	4.76	4.84	4.92	5.03	5.15	5.21	5.23	3.19
		SONES	35.1	34.3	33.5	32.8	32.1	31.2	30.2	29.5
		FEI	0.34	0.50	0.65	0.76	0.86	0.93	0.98	0.81
	700	CFM	20136	19402	18669	17886	17040	16175	15029	11967
		BKW	5.48	5.56	5.65	5.75	5.88	5.99	6.01	5.69
		SONES	38.0	37.2	36.4	35.7	34.9	34.2	33.2	31.2
		FEI	0.31	0.46	0.60	0.71	0.80	0.88	0.93	0.99



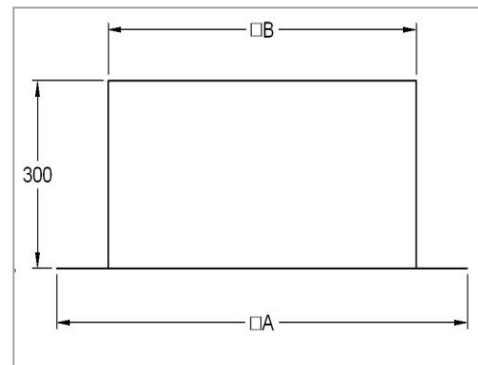
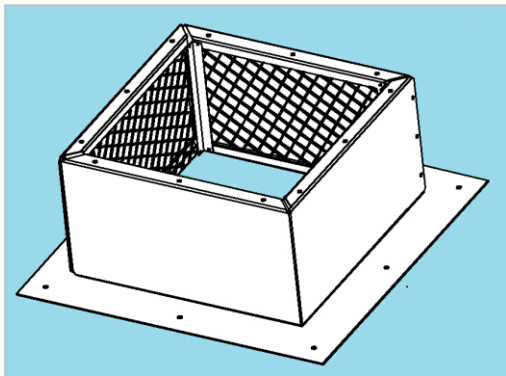
Performance certified is for installation type A - Free inlet ,Free outlet per AMCA Standard 210. Power rating (BKW) does not include transmission losses. The Sound ratings shown are loudness values in fan sones at 1.5 m (5 ft) in a hemispherical free field calculated per AMCA International Standard 301 . Values shown are for : Installation Type A: free outlet hemispherical sone levels. FEI calculation is based on default motor calculation in accordance with ANSI/AMCA Standard 208

Options & Accessories

Roof Curbs

Pre-fabricated roof curbs are made of galvanized steel sheet. All roof curbs are insulated with fiber glass / rock wool.

A wide variety of roof curbs are available, including flange and sound absorbing wool.



Size	B	A
DV 310	598	800
DV 355		
DV 400		
DV/W 450	663	865
DVW 500		
DVW 560	938	1180
DVW 630		
DVW 800	1137	1740
DVW 900		
DVW 1000	1237	1840

Dampers :

Dampers are designed to prevent outside air from entering back into the building when fan is off,

Damper sizes are shown on each performance data page.



Disconnecting Switches

A wide range selection of NEMA rated Switches are available for positive electrical shutoff and safety, including dust tight, rainproof, corrosion resistant.

Switches may be internally or externally mounted.



Options & Accessories

Speed Controllers :

VFD : Variable frequency Drive is a type of motor controller that drives an electric motor by varying the frequency and voltage supplied to the electric motor.



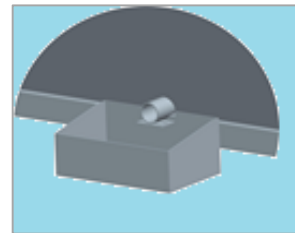
Motor Starters:

The function of a motor Starter is to protect the motor from damage that can occur from overheating and high starting current .



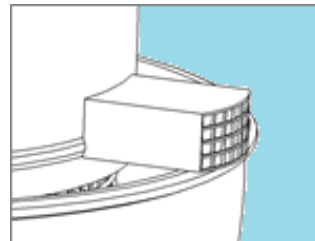
Grease Trap (Kitchen Fan):

Steel trap designed to collect grease residues to avoid drainage onto roof surfaces



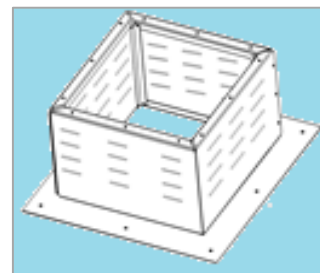
Cooling Tube (Kitchen Fan):

Cooling fins located on top of fan wheel draw outside air through a large breather tube directly into the motor compartment. Positive motor cooling with fresh air results in maximum motor life.



Vented Curb (Kitchen Fan):

Mounts between roof and roof mounted fan , Provided vents on side walls



Motor Weight :

The following Table Showing Weight for Standard 4 pole Motors.

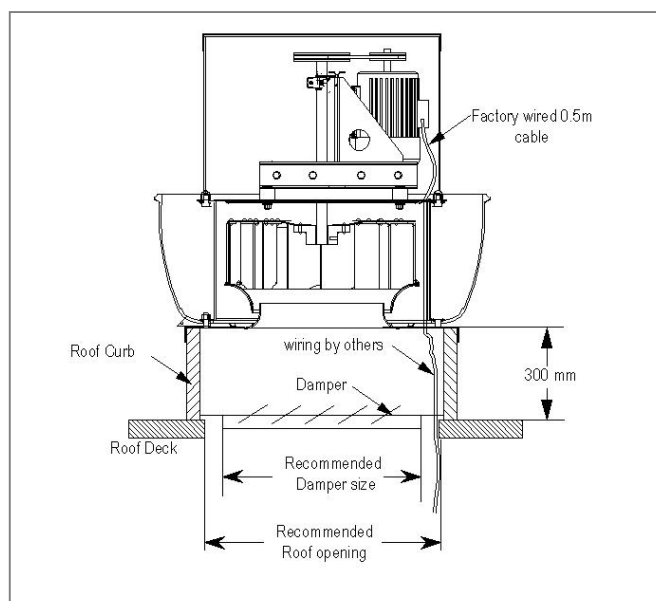
Motor (KW)	0.18	0.25	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5	7.5
Weight (Kg)	4.6	5	6.9	9.6	10.9	13.8	16.7	23	34	46	55	64

Typical Installation by Application

General Clean Air

All exhaust fans are designed for clean air applications. A typical installation is shown in fig.

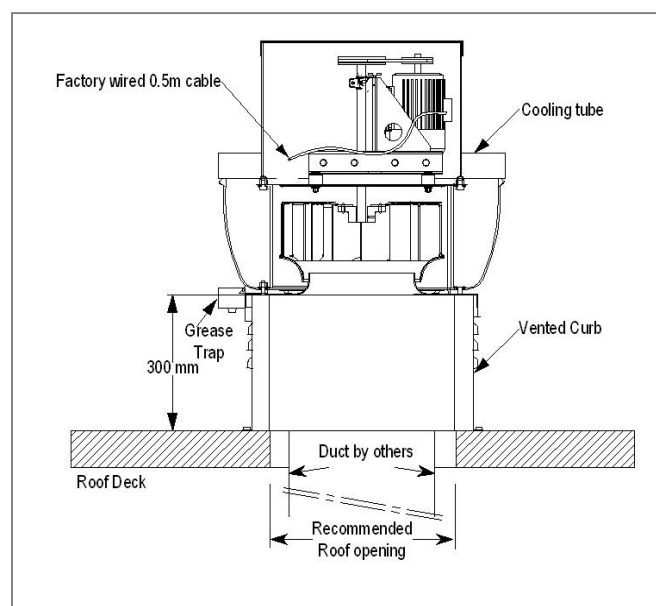
- For recommended Damper size and roof opening dimensions, refer to the performance data pages.
- Installation must include a means for inspecting, cleaning and servicing the exhaust fan.



Commercial Kitchen (Grease)

All models are designed to meet restaurant and food service application with additional grease collector and cooling tube ,

- Exhaust fans used in kitchen ventilation applications must have external wiring.(Wiring must not be installed in the airstream).
- No dampers are to be installed in the system.



Fan - Pre Start Check list

Fan Type: _____

(Refer to fan name plate)

After the fan installation, all the items below should be checked by the maintenance personnel before start running the fan.

Check the items if Yes / No or Not Applicable (N/A) .Check the appropriate box.

1. Ensure the fan and ductwork are clean and no tools and other object left.
Yes ☐ No ☐
2. Inspect the tightness of fasteners ,bolts and screws ,such as motor mounting bolts, bushing screws, bearing bolts, fan shaft screws ,impeller fasten bolts, installation bolts, vibration insulators,... etc. .(fan should not damage during shipment).
Yes ☐ No ☐
3. Impeller must rotate freely and not rub on the inlet venturi .
Yes ☐ No ☐
4. Proper pulley alignment (pulley might be misaligned during fan shipment) .
Yes ☐ No ☐ N/A ☐
5. Proper belt tension.
Yes ☐ No ☐ N/A ☐
6. The fan and motor should be electricity grounding.
Yes ☐ No ☐
7. Ensure the power supply, wiring and Amperage are in accordance with the motor name plate. Actual Testing ampere : _____ Rated ampere (motor name plate) : _____
Yes ☐ No ☐
8. Wiring connection should confirm the correct impeller rotation.
Clock-Wise (CW) ☐ Counter Clock-Wise ☐
9. The power supply should have motor overload protector .Ensure that thermal protection of the motor should be connected.
Yes ☐ No ☐
10. Ensure the motor insulation is accordance with the electrifying requirements.
Yes ☐ No ☐

Checked By: _____

Date: _____

Name & Signature

Note:

- The fan can be start up and run if all the above items are checked.
- This check list should be submitted to the manufacturer together with the customer complaint, warranty/maintenance claim (if any) .



Warranty

Saudi Fan Industries warrants this equipment to be free from defects in material and workmanship for a period of One year from the Delivery date.

Limitation & Exclusions:

- This warranty will cover for defective parts only excluding labor.
- The warranty does not cover the following
 - a. Defects or malfunction resulting from mishandling , improper operation
 - b. Damage caused by abuse, accident, fire, flood.....etc. :and
 - c. Defects due to absence of magnetic starters sized to correct overload rating
- Any units or parts, which proved defective during the warranty period will be replaced at our option when returned to our factory.

Saudi Fan Industries

For contacts & inquiry

Refrigeration House Group
P. O. Box 1823 - Al-Khobar 31952
SAUDI ARABIA

■ Head Office (Sales & Marketing)

Tel. : (03) 882 1713 - 882 3515 Fax : (03) 882 3066
E-mail : sales@refhouse.com / rhadmin@refhouse.com

■ Manufacturing Divisions

Dammam 2nd Industrial City

National Factory Tel. : (03) 812 1282 Fax : (03) 812 1280

Saudi Fan Industries Tel. : (03) 812 1866 Fax : (03) 812 1894

■ Contracting Divisions

Klimatechnik Tel. : (03) 882 3534 Fax : (03) 882 2807

Riyadh Tel. : (01) 465 6198 Fax : (01) 462 8347

■ Trading Divisions

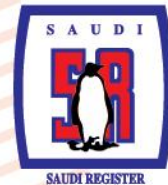
Refrigeration House

Al-Khobar Tel. : (03) 869 1043 Fax : (03) 898 4161

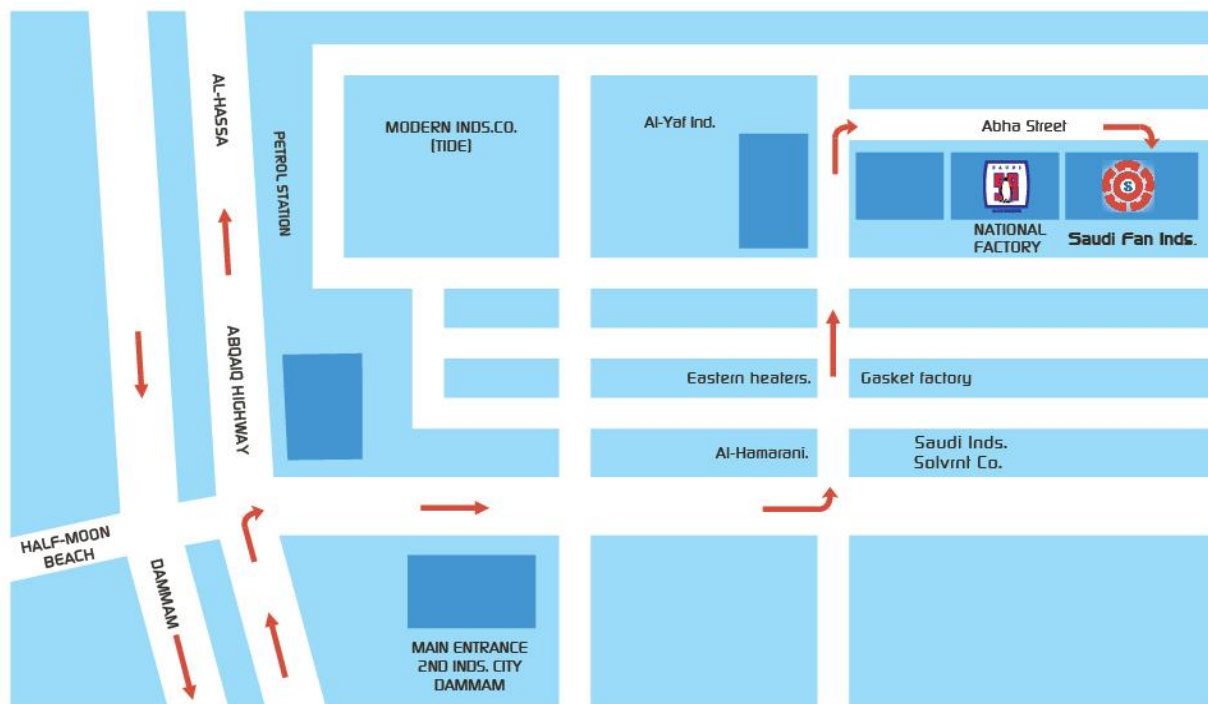
Riyadh Tel. : (01) 476 9720 Fax : (01) 477 5430

Jeddah Tel. : (02) 665 2276 Fax : (02) 661 2265

www.refhouse.com



Klimatechnik



OUR LOCATION



Saudi Fan Industries



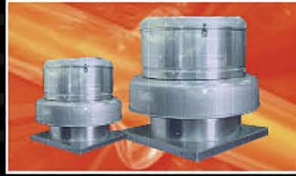
Saudi Fan®
Industries

Second Manufacturing Division of

Refrigeration House Group



Centrifugal Roof Fan
Direct Drive DH / DV



Centrifugal Roof Fan
Belt & Direct Driven / RTC



Centrifugal Radial Fan
Direct Drive ERAE-ERAD / DRAE-DRAD



Centrifugal Radial Fan
Belt Driven HRE-TRE / HRZ-TRZ



Square Inline Fans
Belt & Direct Driven / ISG



Fresh Air Musfan
Belt & Direct Driven MU



Air Box Fresh Air Fan
Belt & Direct Driven AirBox



Centrifugal Twin Fan
Belt & Direct Driven TW



Axial Low Pressure Fan
Direct Drive EQ / DQ



Axial High Pressure Fan
Direct Drive AND



Inline Centrifugal Duct Fan
Direct Drive EKAE / EKAD



Inline Centrifugal Tube Fan
Direct Drive R / RS



Centrifugal Silent Fan
Direct Drive SSF



Axial Circulation Fan
Direct Drive SACF 30" - 36"



Axial Agricultural Fan
Direct Drive SAAF 125"



Axial Portable Tunnel Fan
Direct Drive SPTF 8" - 12"

Head Office Tel:(03) 882 1713 - 882 3515 Fax: (03)882 3066
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May 2026

