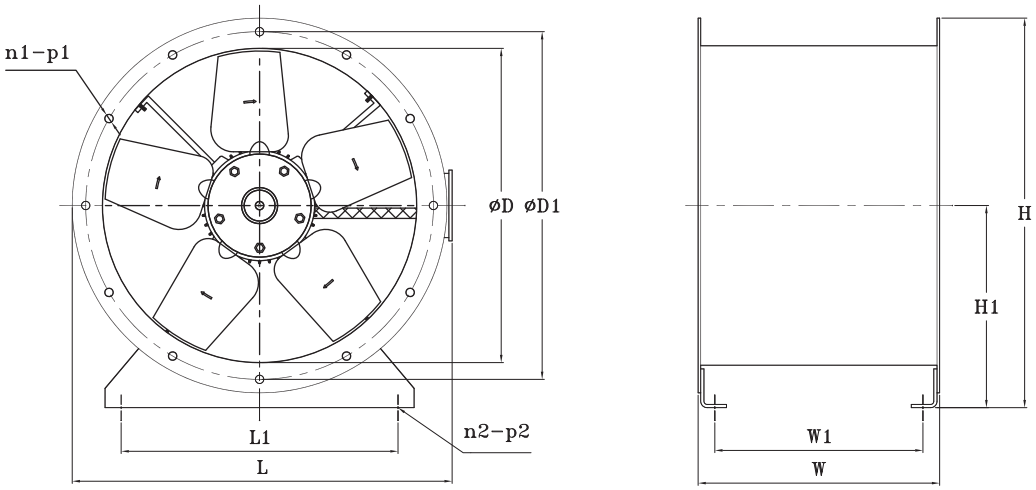
AXB 系列簡易軸流風機

- 備有 305, 380, 480, 610, 760mm 五款尺寸。
- 自製馬達IP44，E級絕緣，能效級數IE2。
- 筒身選用優質鐵板制造，所有前後佛蘭整體翻邊成型。筒身經過噴粉處理。
- 所有榮通葉片均為鋁材壓鑄成品葉片角度可調校，扇葉做動靜平衡，確保扇葉不會在運作期間產生震動。
- 建議使用溫度：室溫40℃。
- 建議使用濕度範圍：少於95%。

安裝尺寸（mm）



Model	øD	øD1	L	L1	W	W1	H	H1	n1−p1	n2−p2
AXB305	312	355	408	260	290	237	408	210	8−ø10	4−ø10
AXB380	385	432	482	340	335	280	485	246	8−ø10	4−ø13
AXB480	488	540	593	430	375	313	605	316	12−ø14	4−ø13
AXB610	614	665	730	560	430	372	733	374	12−ø14	4−ø13
AXB760	768	830	910	--	550	--	875	473	12−ø14	--

Appendix to the License Agreement To Use The AMCA Certified Ratings Program Seal

Appendix No. : 10

In accordance with the License Agreement issued on November 14, 2013 by Air Movement and Control Association International, Inc., Wing Ton Fan Industry Ltd. is hereby authorized to use the AMCA Certified Ratings Seal on the specific air movement and control devices listed below. Such use shall in all respects be governed by and subject to the provisions of said License Agreement.

Axial Fans

Product Line	***Catalog ID***
"AXB" Series Axial Flow Fans AXB305	CATA-AMCA-AXB,September 2016

Size	***Model No***
12.4	AXB305-125-6

* License to Bear The AMCA Seal For Sound and Air Performance.

Please verify current certification status in the AMCA International Directory of Licensed Products located at www.amca.org.
Granted This 9/15/2016

Unit of Measure: mm

Nazme Mohsina

Revised :

Nazme Mohsina

Technical Director

AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.

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Appendix to the License Agreement To Use The AMCA Certified Ratings Program Seal

Appendix No. : 9

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Axial Fans

Product Line	***Catalog ID***
"AXB" Series Axial Flow Fans	CATA-AMCA-AXB,September 2016

Size	***Model No***	***Size***	***Model No***	***Size***	***Model No***
480	**AXB480-200-5***	**378**	**AXB380-120-5***	**610**	**AXB610-200-5***
630	**AXB630-200-5***	**760**	**AXB760-250-6***	**800**	**AXB800-250-6***

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Only models shown in bold and indicated with * are licensed for FEG.

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Unit of Measure: mm

Nazme Mohsina

Revised :

Technical Director

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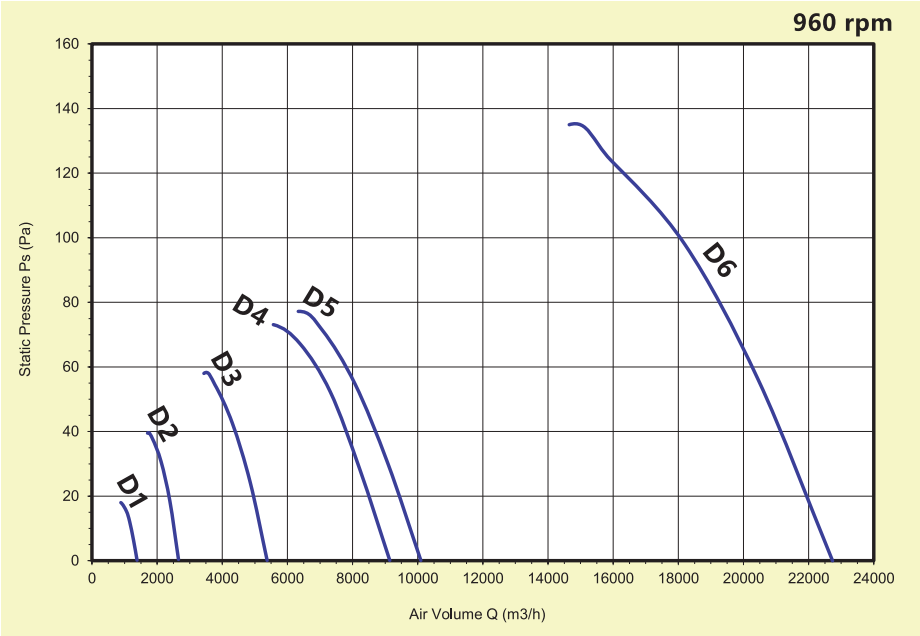
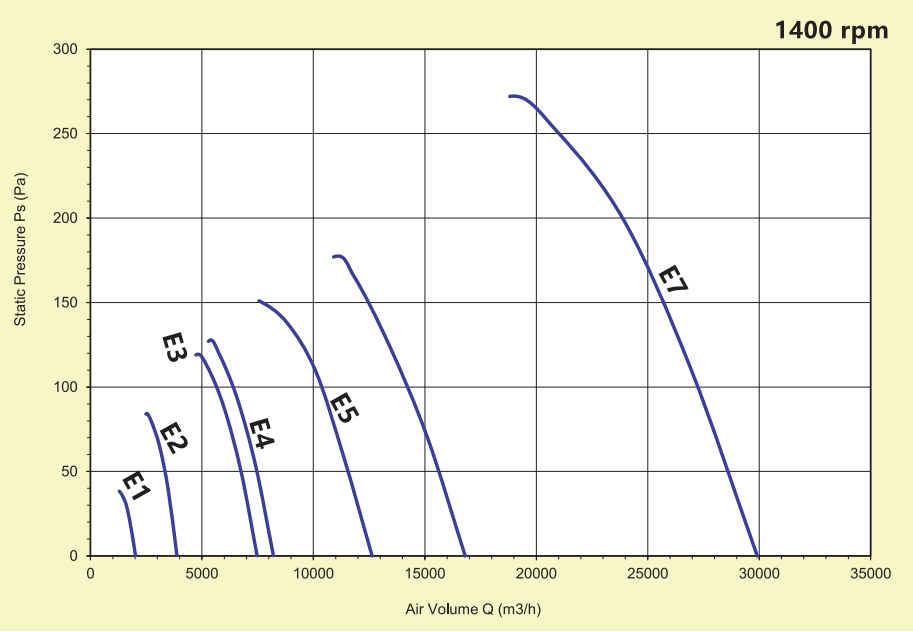
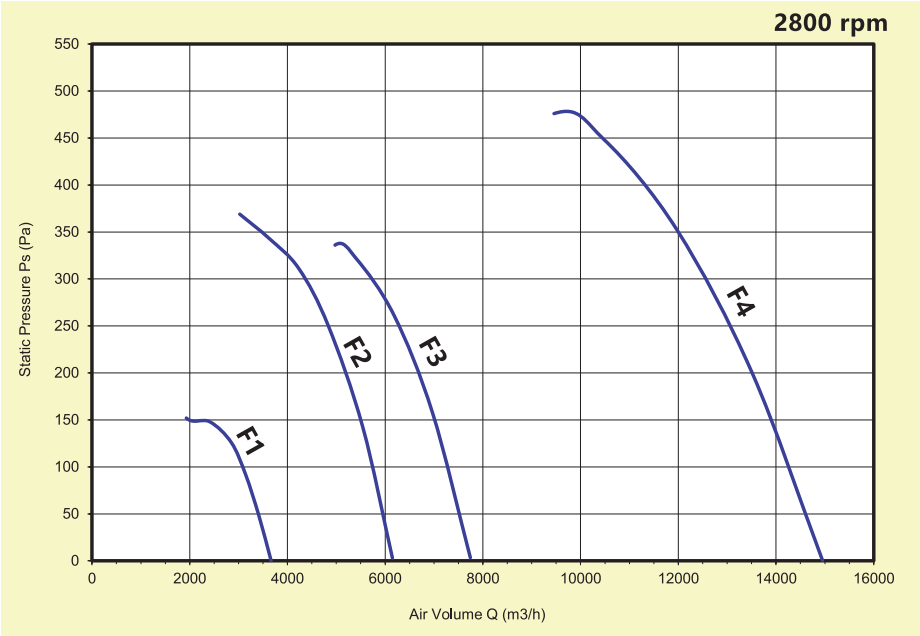
AXB系列常規產品風量圖



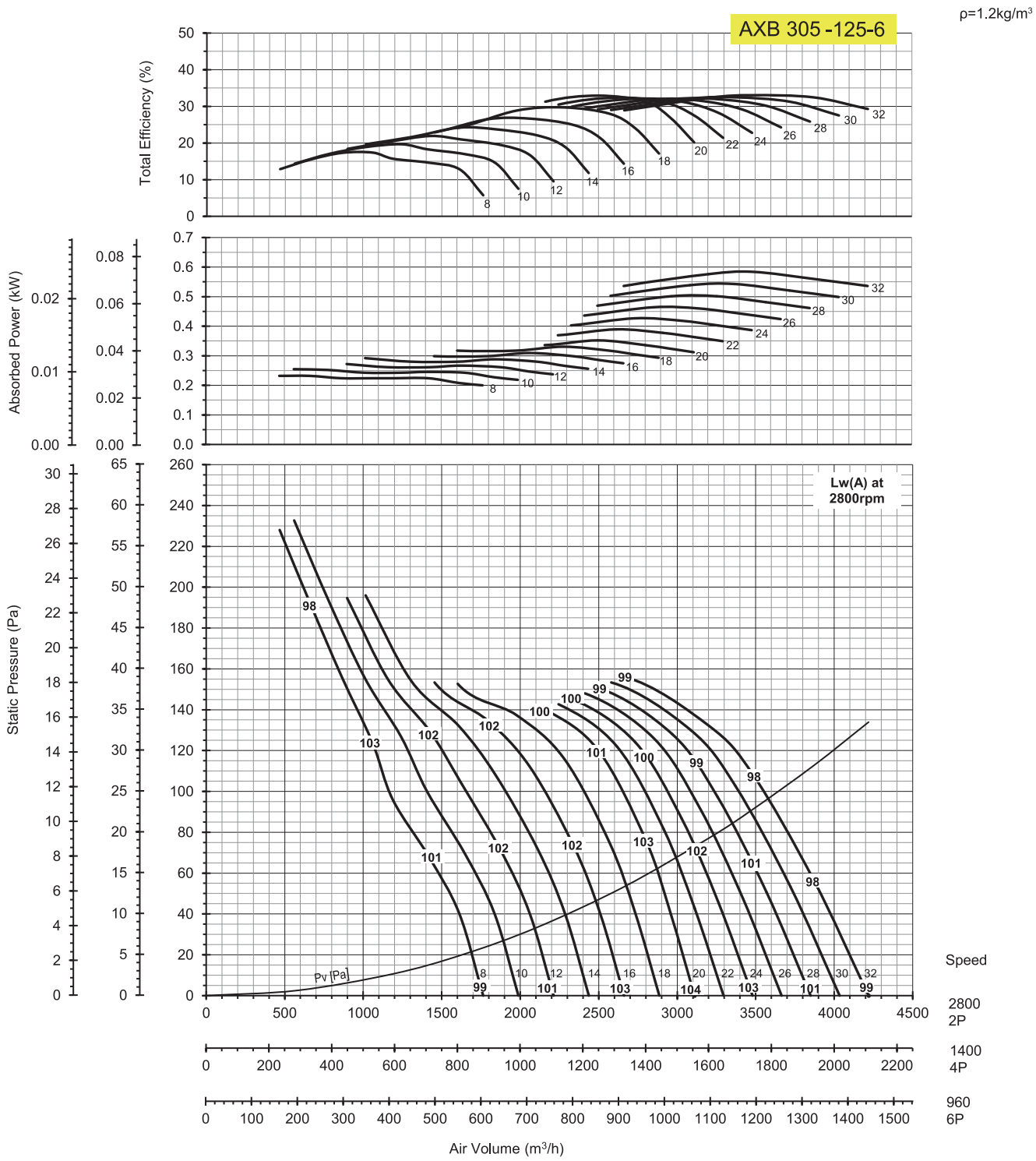




AXB系列常規產品性能參數表

風量曲線	型號（香港規格）	扇葉直徑 Inch/mm	額定電壓 V/Ph/Hz	電機功率 KW	啟動電流 A	最高轉速 RPM	風量 m^3/h	靜壓（Pa）	最高噪音 dB（A）
D1	**AXB305CFV**	12″ /305	220-240/1/50	0.06	1.2	960	1000	15	48
E1	**AXB305BFV**			0.10	1.4	1400	1500	35	60
F1	**AXB305AFV**			0.38	4.2	2800	2750	130	78
D1	**AXB305GFV**		380-415/3/50	0.07	1.0	960	1000	15	48
E1	**AXB305FFV**			0.135	1.2	1400	1500	35	60
F1	**AXB305EFV**			0.44	3.6	2800	2750	130	78
D2	**AXB380CFV**	15″ /380	220-240/1/50	0.10	1.4	960	2000	35	54
E2	**AXB380BFV**			0.23	3.4	1400	2900	74	63
F2	**AXB380AFV**			0.70	7.5	2800	4800	260	84
D2	**AXB380GFV**		380-415/3/50	0.09	0.9	960	2000	35	54
E2	**AXB380FFV**			0.27	2.2	1400	2900	74	63
F3	**AXB380EFV**			1.25	7.5	2800	6400	230	85
D3	**AXB480CFV**	19″ /480	220-240/1/50	0.18	2.5	960	4000	50	57
E3	**AXB480BFV**			0.55	6.5	1400	5500	90	65
D3	**AXB480GFV**		380-415/3/50	0.18	1.5	960	4000	50	57
E4	**AXB480FFV**			0.55	4.5	1400	5750	95	66
F4	**AXB480EFV**			3.0	15.0	2800	12000	350	83
D5	**AXB610CFV**	24″ /610	220-240/1/50	0.5	6.0	960	8400	48	61
E5	**AXB610BFV**			0.8	9.0	1400	10000	101	68
D4	**AXB610GFV**		380-415/3/50	0.25	2.0	960	7000	57	60
E6	**AXB610FFV**			1.65	11.0	1400	13000	140	72
D6	**AXB760GFV**	30″ /760	380-415/3/50	2.2	14.0	960	17000	112	65
E7	**AXB760FFV**			4.0	22.0	1400	23000	212	71

AXB SERIES AXIAL FLOW FAN

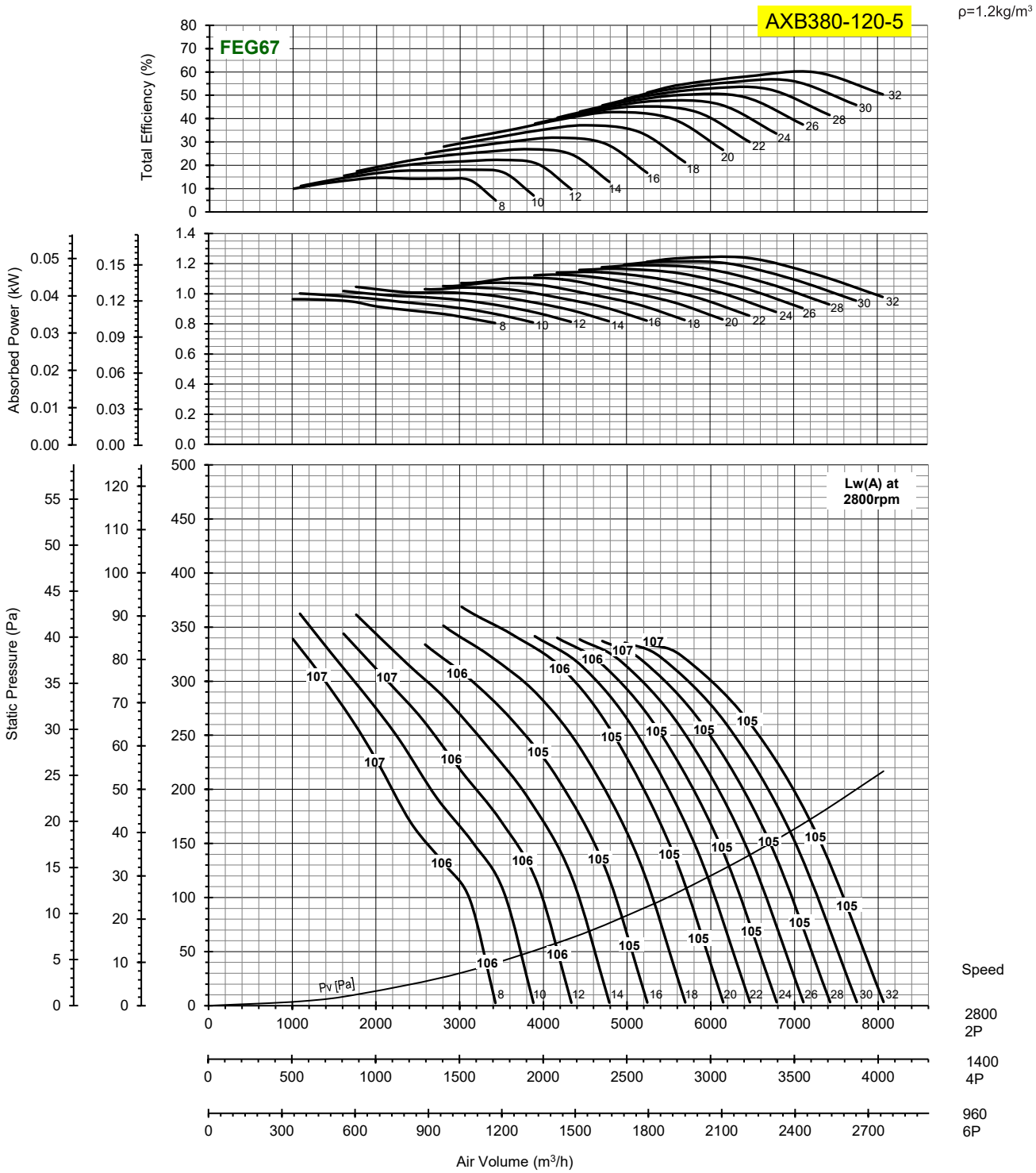


Model No	At 960 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB305GFV	8	0.18	0.008
	10		0.008
	12		0.009
	14		0.01
	16		0.01
	18		0.011
	20		0.012
	22		0.013
	24		0.014
	26		0.015
	28		0.017
	30		0.018
	32		0.019
LwA dB(A)	-30		

Model No	At 1400 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB305FFV	8	0.18	0.029
	10		0.032
	12		0.034
	14		0.037
	16		0.039
	18		0.042
	20		0.044
	22		0.049
	24		0.053
	26		0.058
	28		0.063
	30		0.068
	32		0.073
LwA dB(A)	-18		

Model No	At 2800 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB305EFV-0.37	8	0.37	0.232
	10		0.256
	12		0.272
	14		0.292
	16		0.309
	18		0.336
	20		0.352
AXB305EFV-0.55	22	0.55	0.389
	24		0.427
	26		0.464
	28		0.501
	30		0.543
AXB305EFV-0.75	32	0.75	0.584
LwA dB(A)	0		

AXB SERIES AXIAL FLOW FAN

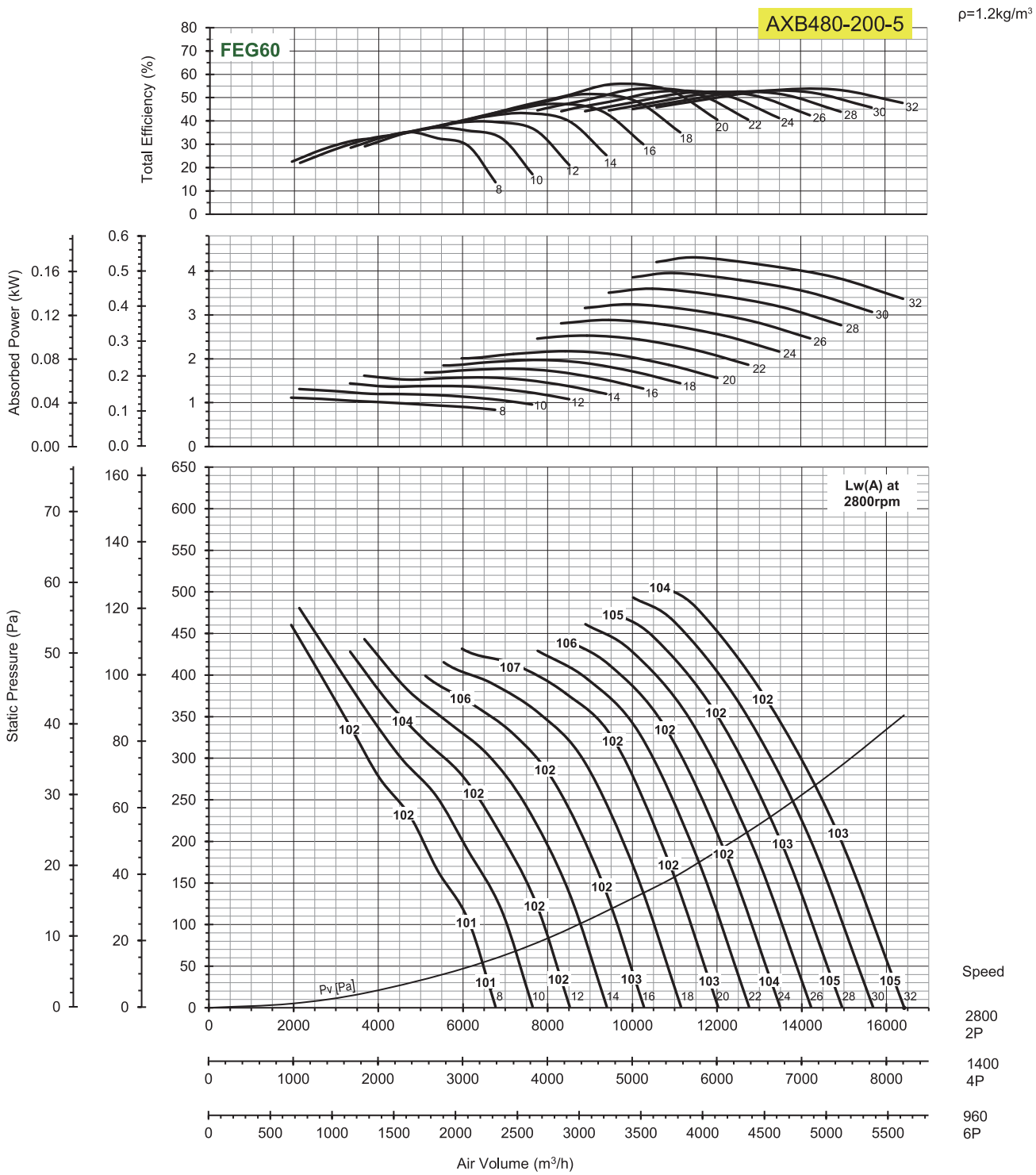


Model No	At 960 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB380GFV	8	0.18	0.039
	10		0.04
	12		0.041
	14		0.042
	16		0.042
	18		0.043
	20		0.044
	22		0.045
	24		0.046
	26		0.047
	28		0.048
	30		0.049
	32		0.05
LwA dB(A)	-31		

Model No	At 1400 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB380FFV	8	0.18	0.121
	10		0.125
	12		0.127
	14		0.131
	16		0.131
	18		0.134
	20		0.138
	22		0.14
	24		0.143
	26		0.146
	28		0.149
	30		0.152
	32		0.155
LwA dB(A)	-21		

Model No	At 2800 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB380EFV-1.1	8	1.1	0.984
	10		1.002
	12		1.018
	14		1.046
	16		1.048
	18		1.073
AXB380EFV-1.5	20	1.5	1.104
	22		1.122
	24		1.142
	26		1.166
	28		1.189
	30		1.212
	32		1.236
LwA dB(A)	0		

AXB SERIES AXIAL FLOW FAN

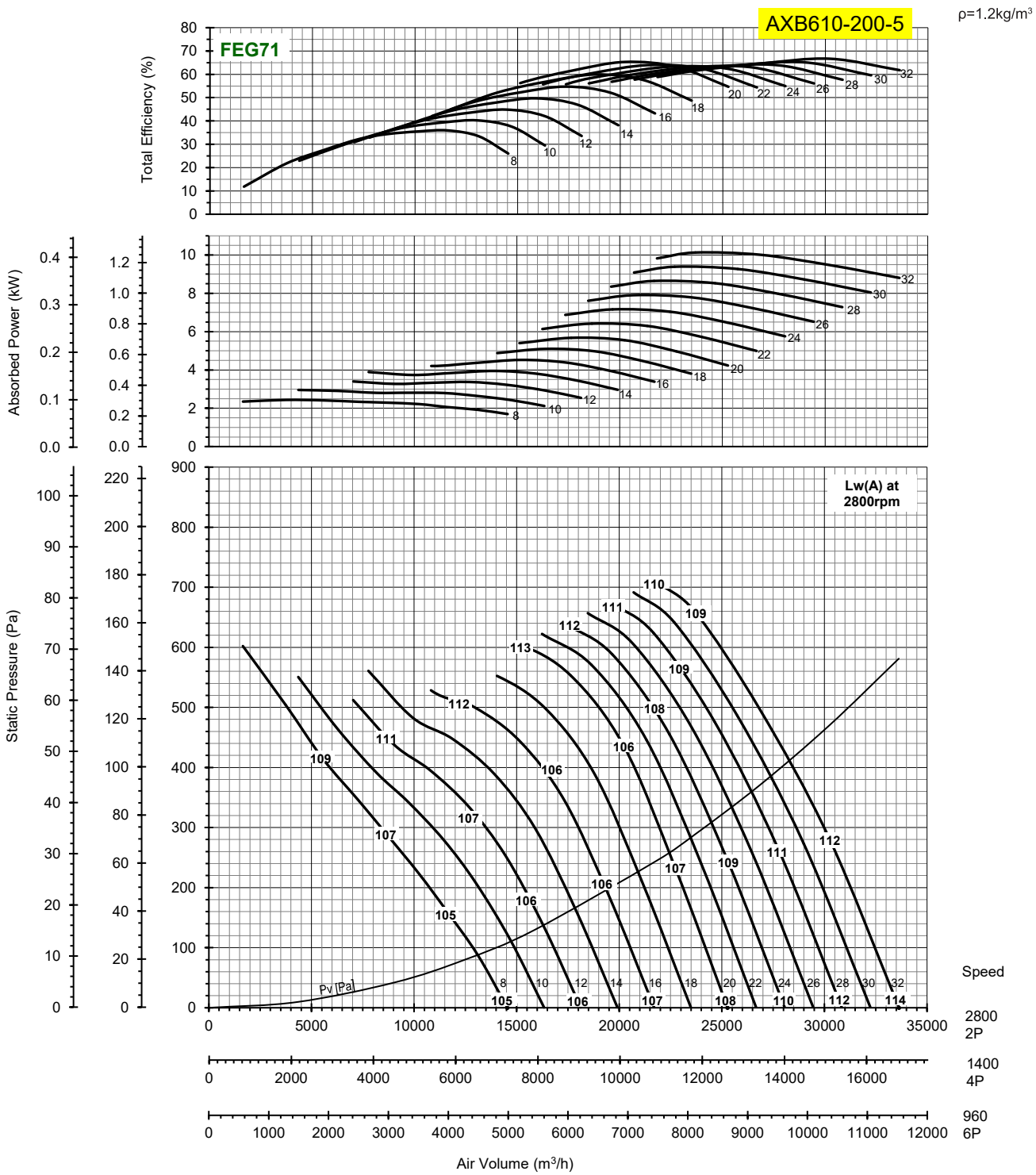


Model No	At 960 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB480GFV	8	0.18	0.045
	10		0.053
	12		0.058
	14		0.065
	16		0.071
	18		0.079
	20		0.087
	22		0.102
	24		0.116
	26		0.131
	28		0.145
	30		0.159
	32		0.174
LwA dB(A)	-27		

Model No	At 1400 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB480FFV-0.18	8	0.18	0.139
	10		0.164
AXB480FFV-0.37	12	0.37	0.18
	14		0.202
	16		0.222
	18		0.247
	20		0.271
	22		0.316
	24		0.36
AXB480FFV-0.55	26	0.55	0.405
	28		0.45
	30		0.494
	32		0.539
LwA dB(A)	-17		

Model No	At 2800 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB480EFV-1.5	8	1.5	1.114
	10		1.309
	12		1.438
AXB480EFV-2.2	14	2.2	1.614
	16		1.772
	18		1.972
	20		2.171
AXB480EFV-3	22	3	2.527
	24		2.883
AXB480EFV-4	26	4	3.24
	28		3.596
	30		3.952
AXB480EFV-5.5	32	5.5	4.308
LwA dB(A)	0		

AXB SERIES AXIAL FLOW FAN

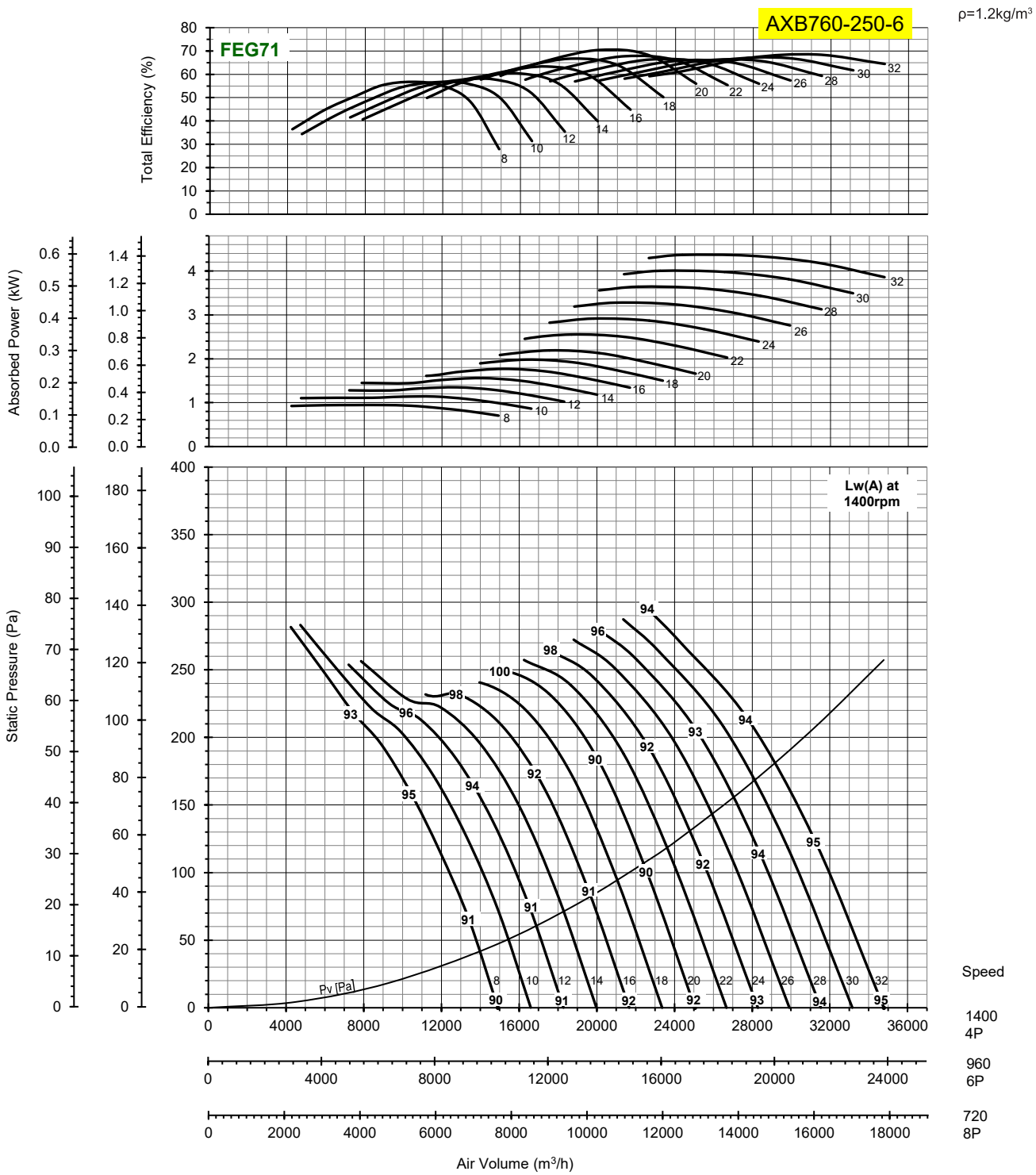


Model No	At 960 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB610GFV-0.18	8	0.18	0.098
	10		0.119
	12		0.137
	14		0.159
AXB610GFV-0.37	16	0.37	0.182
	18		0.206
	20		0.229
	22		0.259
	24		0.289
	26		0.318
	28		0.348
AXB610GFV-0.55	30	0.55	0.378
	32		0.408
LwA dB(A)	-28		

Model No	At 1400 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB610FFV-0.37	8	0.37	0.304
AXB610FFV-0.55	10	0.55	0.369
	12		0.425
	14		0.493
AXB610FFV-0.75	16	0.75	0.565
	18		0.637
	20		0.709
AXB610FFV-1.1	22	1.1	0.802
	24		0.895
	26		0.988
	28		1.081
AXB610FFV-1.5	30	1.5	1.173
	32		1.266
LwA dB(A)	-18		

Model No	At 2800 RPM Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB610EFV-3	8	3	2.434
	10		2.955
AXB610EFV-4	12	4	3.398
	14		3.946
AXB610EFV-5.5	16	5.5	4.523
	18		5.099
AXB610EFV-7.5	20	7.5	5.675
	22		6.417
	24		7.16
AXB610EFV-11	26	11	7.902
	28		8.644
	30		9.387
	32		10.129
LwA dB(A)	0		

AXB SERIES AXIAL FLOW FAN



Model No	At 960 RPM		
	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB760GFV-0.37	8	0.37	0.305
	10		0.367
AXB760GFV-0.55	12	0.55	0.435
	14		0.503
AXB760GFV-0.75	16	0.75	0.571
	18		0.638
	20		0.706
AXB760GFV-1.1	22	1.1	0.823
	24		0.94
	26		1.057
AXB760GFV-1.5	28	1.5	1.174
	30		1.291
	32		1.407
LwA dB(A)	-9		

Model No	At 1400 RPM		
	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AXB760FFV-1.1	8	1.1	0.946
AXB760FFV-1.5	10	1.5	1.139
	12		1.349
AXB760FFV-2.2	14	2.2	1.56
	16		1.77
	18		1.98
	20		2.19
AXB760FFV-3	22	3	2.553
	24		2.915
AXB760FFV-4	26	4	3.278
	28		3.64
AXB760FFV-5.5	30	5.5	4.003
	32		4.365
LwA dB(A)	0		

dB(A) Information

Noise Levels - Calculation and use of the dB(A)

The human ear is more sensitive to some frequencies than others. In particular low frequency noises sound quieter than high frequency noises.

The ‘A’ frequency weighting or more commonly dB(A) is based on how loud various tones played at different frequencies sound compared to a tone of 40 dB, at 1000 Hz and it has become popular and is now used for many different noise sources at different levels.

In fact, most legislation regarding noise is written using dB(A)s, in addition nearly all manufacturers of fans and other noise generating machines quote their noise levels in dB(A)s at 1, 1.5, or 3 metres assuming spherical distribution. It is therefore important that we understand the ‘A’ frequency weighting and how dB(A)s are calculated.

Information on Fan Noise Test Standards

Where noted in the product data pages within this catalogue fan noise levels are tested to AMCA International Standard 301..

This test standard describes methods that may be applied to calculate the sound power level of fans. That is, the In-Duct method, the Reverberant Room method and the Free Field method. The sound pressure level of a product is measured using one of these test methods. A calculation is then used to convert the measured sound pressure levels to sound power levels.

A Cautious Word on the use of dB(A) Levels

The dB(A) sound pressure level is used almost universally to describe the noise level of many items of noise emitting machinery. However, published dB(A) sound pressure levels should be used for comparative purposes only, they are not designed to reflect actual installed noise levels. The assumptions that are used to calculate the dB(A) are rarely replicated in real life situations and, therefore, published dB(A) values will not necessarily represent the actual noise levels that may be experienced on site.

In order to determine the actual dB(A) sound pressure level that may be expected from an installation, an acoustic analysis of the system, using sound power levels and taking into account the surrounding acoustic environment, should be performed.

Calculating dB(A) Noise Levels

Published dB(A), or ‘A’ frequency weighted, sound pressure levels are theoretical values. These are, in fact, calculated from the sound power level data and are quoted at a specified distance i.e. 1, 1.5, or 3 metres.

Converting Sound Power to Sound Pressure

To convert this 'A' weighted sound "power" level to an 'A' weighted sound "pressure" level (which is calculated for a specified distance from the source) the following equation is used:

$$L_P = L_W - 20 \log_{10}(d) - 11$$

Where:

- Lw = Sound Power Level re 10-12W (dB)
- Lp = Sound Pressure Level re 20mPa (dB)
- d = Distance from fan in metres (m)

For Example, if an axial fan with Sound power level 98 dB, the dB(A) sound pressure level at a distance of 3m:

$$L_P = 98 - 20 \log_{10}(3) - 11$$
$$L_P = 98 - 10.5 - 11$$
$$L_P = 98 - 21$$
$$L_P = 77 \text{ dB(A) @ 3m}$$

Note that the above calculation assumes that the fan behaves as a point source of noise, that the noise radiates in all directions equally, and that no reflected sound is present.

Lp(A) = Lw(A)-20Log10(D)-11 D= distance in meter

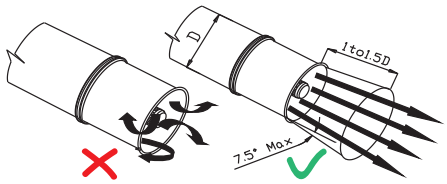
Lw(A)	D = 1	D = 2	D = 3
60	49	43	39
61	50	44	40
62	51	45	41
63	52	46	42
64	53	47	43
65	54	48	44
66	55	49	45
67	56	50	46
68	57	51	47
69	58	52	48
70	59	53	49
71	60	54	50
72	61	55	51
73	62	56	52
74	63	57	53
75	64	58	54
76	65	59	55
77	66	60	56
78	67	61	57
79	68	62	58

Lw(A)	D = 1	D = 2	D = 3
80	69	63	59
81	70	64	60
82	71	65	61
83	72	66	62
84	73	67	63
85	74	68	64
86	75	69	65
87	76	70	66
88	77	71	67
89	78	72	68
90	79	73	69
91	80	74	70
92	81	75	71
93	82	76	72
94	83	77	73
95	84	78	74
96	85	79	75
97	86	80	76
98	87	81	77
99	88	82	78

Lw(A)	D = 1	D = 2	D = 3
100	89	83	79
101	90	84	80
102	91	85	81
103	92	86	82
104	93	87	83
105	94	88	84
106	95	89	85
107	96	90	86
108	97	91	87
109	98	92	88
110	99	93	89
111	100	94	90
112	101	95	91
113	102	96	92
114	103	97	93
115	104	98	94
116	105	99	95
117	106	100	96
118	107	101	97
119	108	102	98

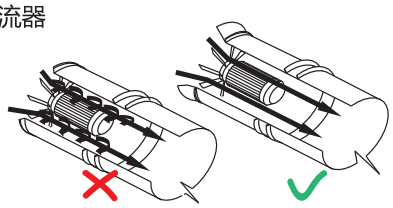
安裝使用說明

1. 安裝擴散筒



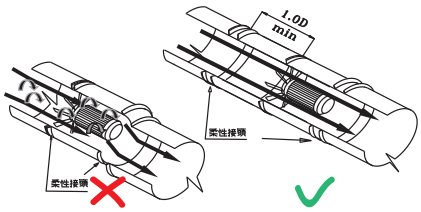
軸流風機的出風口,應裝一擴散筒(如左圖)其錐度≦15°，長度等于(1~1.5)倍管道直徑。這樣可以減少風機的壓力損失，提高風機的使用效率。

2. 安裝集流器



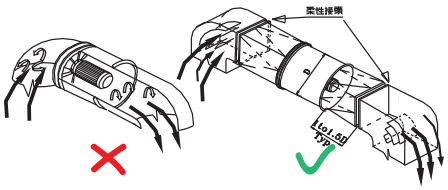
軸流風機的進風口，應裝一集流器（如左圖）這樣可以為軸流風機工作提供合理的氣流，提高風機的性能，降低噪聲。

3. 安裝柔性管道接頭



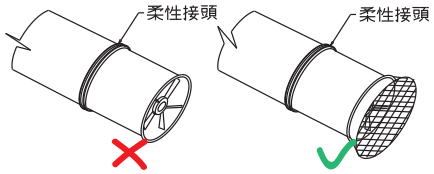
軸流風機兩端接管道，當管道與管道間采用柔性接頭時，要求進風口柔性接頭到風機距离至少為1倍管道直徑，而且柔性接頭要處于張緊狀態，這樣可以避免由于柔性接頭的變動使氣流面積減小而引起倒流、渦流，從而減少壓力損失而降低噪聲。

4. 安裝變截面的彎形管道



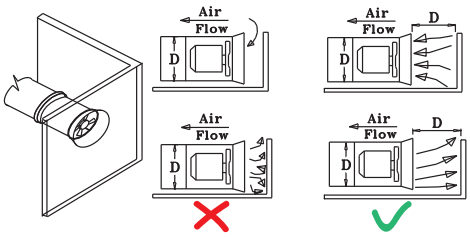
軸流風機兩端安裝變截面的彎形管道時，要求風機與變截面管道要有過度接頭其高度等于（1—1.5）倍風機葉直徑，這樣可以避免由于管道面積突然變化而引起倒流，從而減少壓力損失，提高風幾使用效率。

5. 安全網



軸流風機進風口直接露于大氣中，為了保證人的安全，以及防止雜物的吸入，應在進風口安裝如左圖的安全網。

6. 進出風口有障礙物



軸流風機進出風口有障礙物（如左圖），將會阻撓氣流流向風機,導致氣流撓動,從而使系統阻力增加，流量減少，噪聲增大,所以進出風口與障礙物之間至少保證1倍管道直徑的距離。

7. 電機接線: 按接線圖的方法接線。

使用注意事項:

1、風機在第一次使用之前必須詳細檢查產品銘牌標誌的電壓和頻率是否符合當地的要求,嚴格按照電機額定電壓運行。
2、風機運行前,必須先檢查風機葉與機殼之間有無碰撞磨擦,電機是否接地,絕緣是否良好。
3、風機運行前,必須先檢查葉輪旋轉方向是否正确, 無誤方可運轉,在試運轉中有异常聲和振動現象,應立即停機,切斷電源進行排除,正常后才可使用。
4、風機如要求向上或向下送氣時,電動機應更換壓力軸承方可使用。
5、風機輸送介子的溫度不應超過80℃。
6、風機不應在水易噴洒和直接淋雨雪之處使用。
7、風機不能在化學氣体易腐蝕、易燃、易爆環境中使用。

維修與保養:

1、只有風機設備完全正常的情況下方可運轉。
2、風機維修和保養時必須先切斷電源后進行。
3、風機應定期檢查清除風機內部積垢等雜質防止鏽蝕。
4、風機在維修后開動時,則需注意風機各部位是否正常。
5、除電機和電器外,可用沾有少許肥皂水的軟布進行擦其表面, 切不可用苯、汽油等有機溶劑清洗。

以下情況不列入保養范圍:

1、馬達缺相運行而導致產品損毀。
2、產品因長期擺放而導致外觀殘舊，功能受損。
3、使用環境含腐蝕性，氣體內含有雜質或硬物，溫度過高而導致產品損壞。
4、因整體抽風系統設計錯誤導致產品損壞。