



WING TON FAN INDUSTRY LIMITED



AD SERIES ADJUSTABLE PITCH AXIAL FLOW FANS
CATA-AMCA-AD JANUARY ,2021



AD SERIES ADJUSTABLE PITCH AXIAL FLOW FANS

Wing Ton Fan Industry Limited certifies that

the Axial Flow Fan – AD240, 300, 305, 380, 480, 610 and 760 shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

The AMCA Certified Ratings Seal applies to FEG for Models AD380, 480, 610 & 760 only.

The AMCA Certified Ratings Seal applies to air performance and sound for Models AD240, 300, 305, 380, 480, 610 and 760 only.



FOR AD240, 300, 305



FOR AD380, 480, 610 & 760

The **AD Series** of axial flow fans is available in an extensive range of variants and air flow performance. They can be manufactured to handle most conditions from ambient air and can be ordered in 7 sizes (240, 300, 305, 380, 480, 610, 760mm) diameter. They are available in direct drive type.



Typical Applications Commercial and industrial supply or exhaust air applications such as shopping centers, office buildings and car parks, through to industrial processes and equipment ventilation.

FEATURE

A. CASING

- Standard casings are made of steel
- Coated by strong epoxy powder.
- Equipped with complete flange and mounting feet.
- Casings can be stainless steel or durable hot-dipped galvanized steel can be supplied at request.

B. IMPELLER

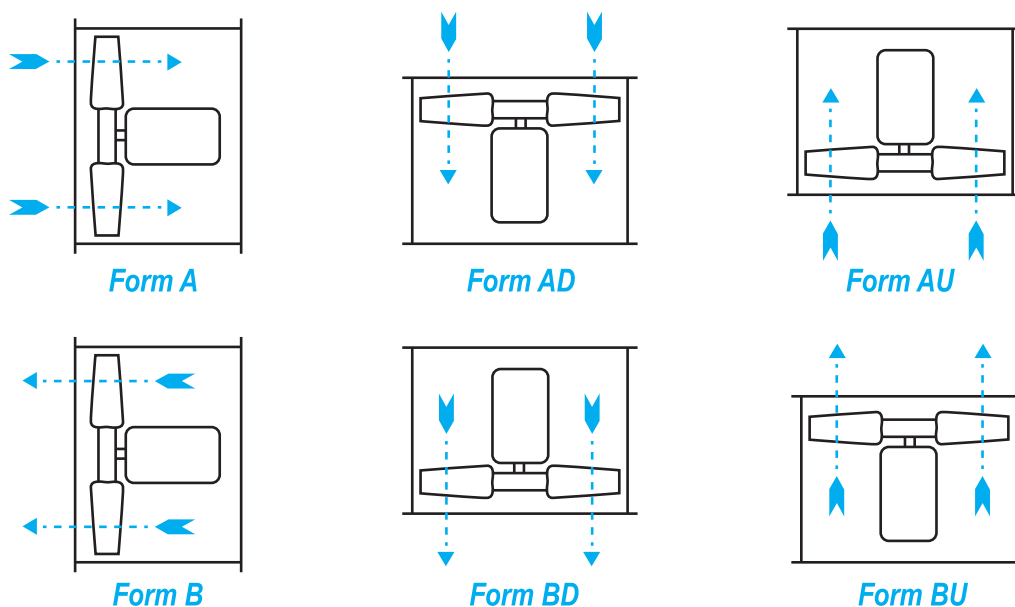
- All impellers are adjustable pitch aero foil section.
- Impeller material is made of die cast aluminum.
- With a specific impeller pitch angle, it ensures selections can be made accurately to the specification.

C. MOTOR

- The standard motors used are foot or pad mounted.
- For normal duty, the motors are of squirrel cage, induction motors to suit virtually any application.
- They are fitted with ball or roller bearings which are fully enclosed and sealed-for life and therefore do not require maintenance.
- Motors are generally wound for 380V/3ph/50Hz or 220V/1ph/50Hz.
- Insulation to Class F with Class B temperature rise is used throughout, allowing for operation in ambient up to +40°C.

D. DIRECTION OF AIRFLOW

- The standard direction of air flow is Form B, BD and BU. However, Form A, AD and AU can be supplied if required. Motors operating at BD, DU, AD and AU require up thrust bearing. Please inform us in advance if the fans are installed vertically.



Performance for Form A airflow direction are not licensed by AMCA International

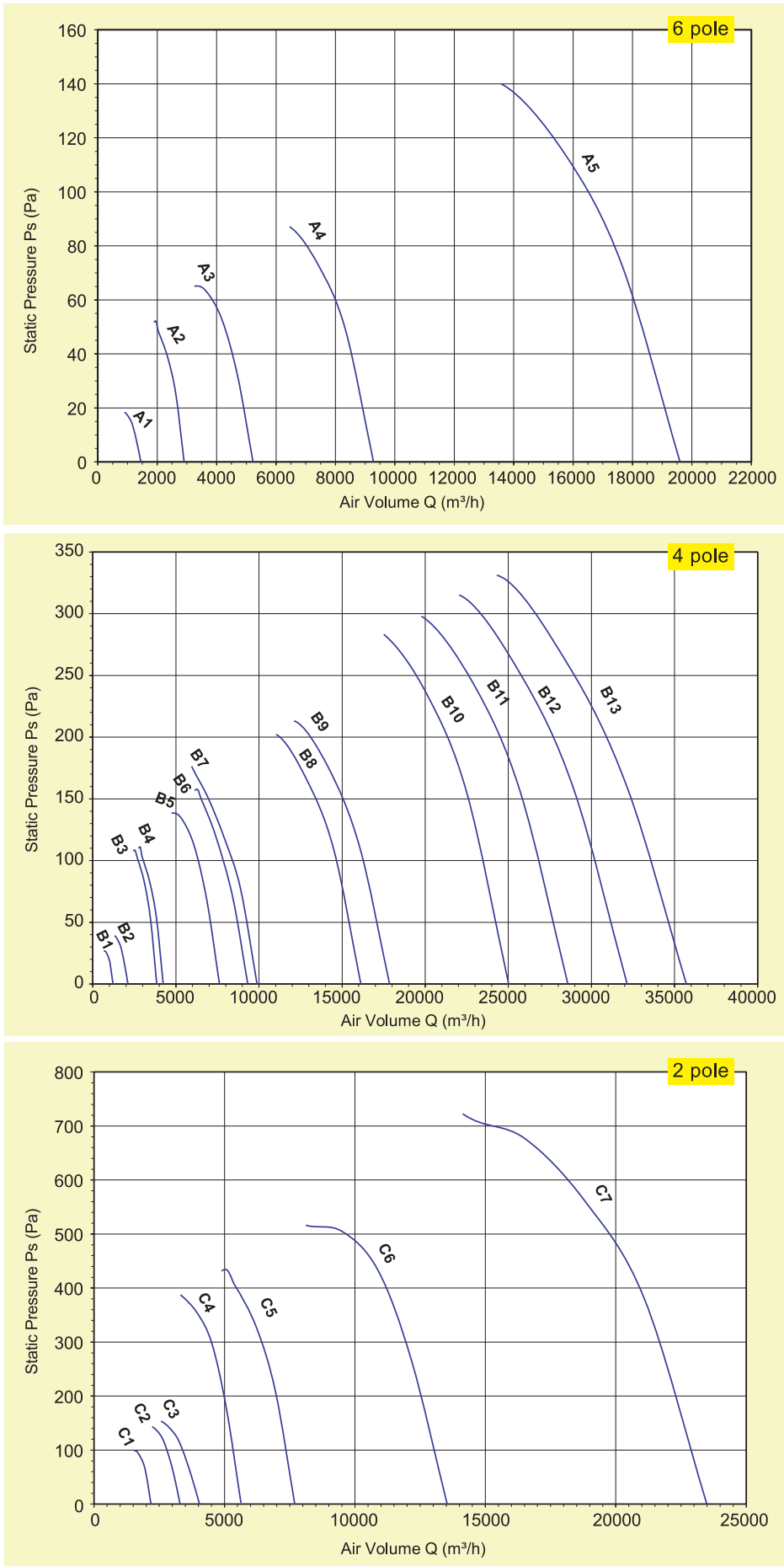
SPECIFICATIONS FOR STANDARD **AD** MODELS

Fan Curve	Standard Model Number	Diameter Inch/mm	Voltage V/Ph/Hz	Motor Power (KW)	Transient Current (A)	Max Motor Speed (RPM)	AirFlow (m³/h)	St.Pressure (Pa)	Noise dB (A)
B1	AD240-1-4	9.5" /240	220-240/1/50	0.05	0.6	1400	950	20	67
C1	AD240-1-2			0.37	2.0	2800	2000	60	87
B1	AD240-3-4		380-415/3/50	0.07	0.6	1400	950	20	67
C1	AD240-3-2			0.37	1.0	2800	2000	60	87
B1	AD300-1-4	11" /300	220-240/1/50	0.09	1.8	1400	1700	27	50
C1	AD300-1-2			0.37	5.5	2800	3400	112	67
B1	AD300-3-4		380-415/3/50	0.09	1.8	1400	1700	27	50
C1	AD300-3-2			0.37	5.5	2800	3400	112	67
A1	AD305-1-6	12" /305	220-240/1/50	0.125	1.8	960	1100	15	46
B2	AD305-1-4			0.125	1.8	1400	1700	37	61
C2	AD305-1-2			0.37	5.5	2800	2700	110	79
A1	AD305-3-6		380-415/3/50	0.125	1.0	960	1100	15	46
B2	AD305-3-4			0.125	1.2	1400	1700	37	61
C3	AD305-3-2			0.75	3.0	2800	3200	130	80
A2	AD380-1-6	15" /380	220-240/1/50	0.125	1.8	960	2200	43	52
B3	AD380-1-4			0.25	3.5	1400	3400	62	61
C4	AD380-1-2			0.75	8.5	2800	4800	240	83
A2	AD380-3-6		380-415/3/50	0.125	1.0	960	2200	43	52
B4	AD380-3-4-0.75			0.75	5.0	1400	3600	75	62
C5	AD380-3-2-1.5			1.5	8.5	2800	7000	200	81
A3	AD480-1-6	19" /480	220-240/1/50	0.18	3.0	960	4000	54	54
B5	AD480-1-4			0.55	6.0	1400	6400	100	63
A3	AD480-3-6		380-415/3/50	0.18	2.0	960	4000	54	54
B6	AD480-3-4-1.5			1.5	8.0	1400	8000	92	65
C6	AD480-3-2-3			3	15.0	2800	12000	300	79
A4	AD610-1-6	24" /610	220-240/1/50	0.37	6.0	960	7700	65	62
B7	AD610-1-4			0.75	12.0	1400	9000	75	71
A4	AD610-3-6		380-415/3/50	0.37	4.0	960	7700	65	62
B8	AD610-3-4-2.2			2.2	12.0	1400	14000	130	76
B9	AD610-3-4-4			4	20.0	1400	15600	135	78
C7	AD610-3-2-7.5			7.5	30.0	2800	20000	490	88
A5	AD760-3-6-2.2	30" /760	380-415/3/50	2.2	14.0	960	16000	110	65
B10	AD760-3-4-3			3	17.0	1400	18000	270	73
B11	AD760-3-4-4			4	22.0	1400	23000	245	74
B12	AD760-3-4-5.5			5.5	29.0	1400	26000	250	75
B13	AD760-3-4-7.5			7.5	30.0	1400	30000	230	76

* Performance certified is for installation type D –Ducted inlet, Ducted outlet. Performance ratings do not include the effects of appurtenances (accessories).

* The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for LwA sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

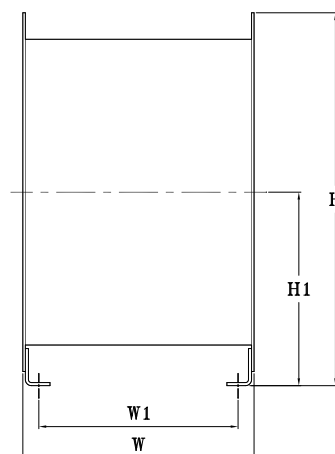
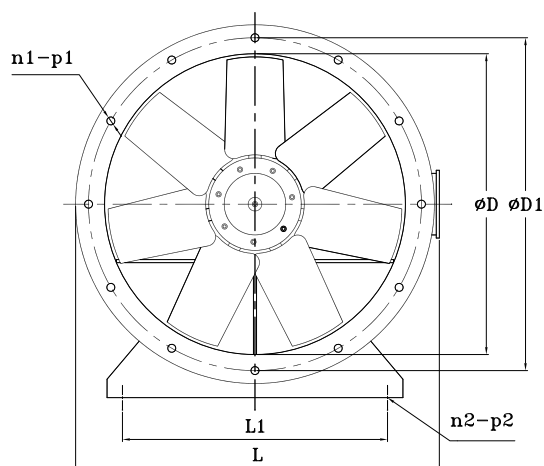
FAN PERFORMANCE CURVES FOR STANDARD **AD** MODELS



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Dimensions

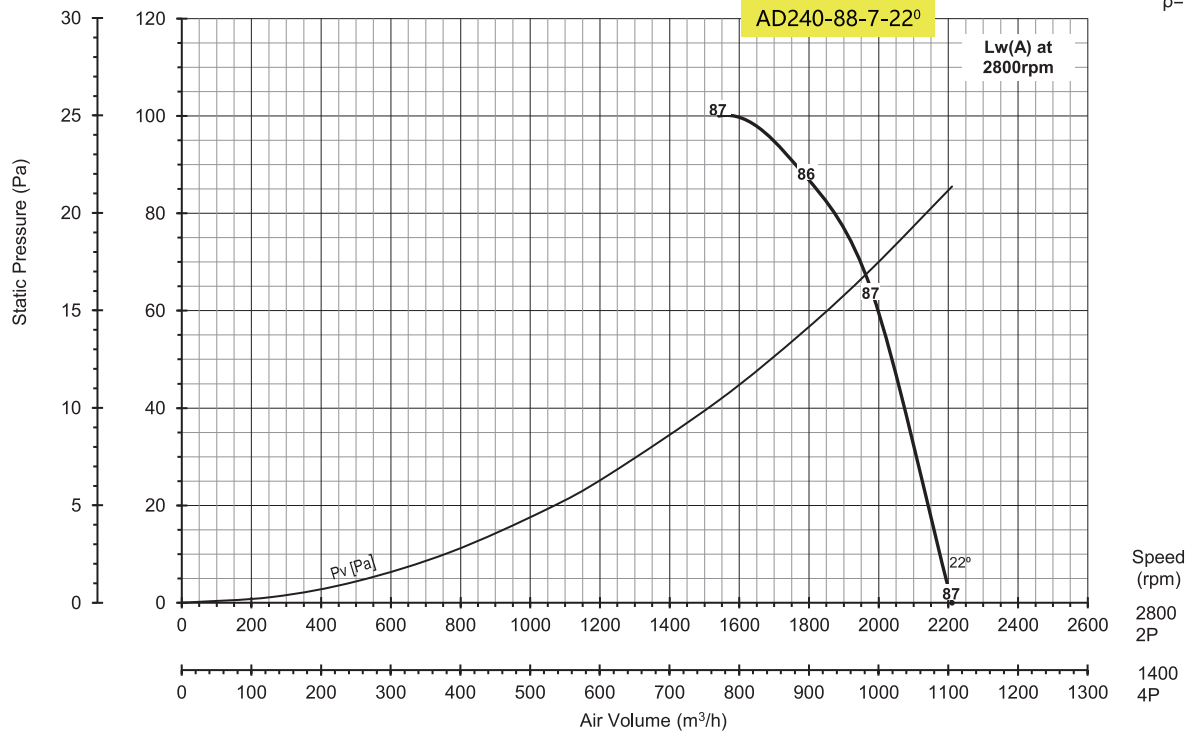
(mm)



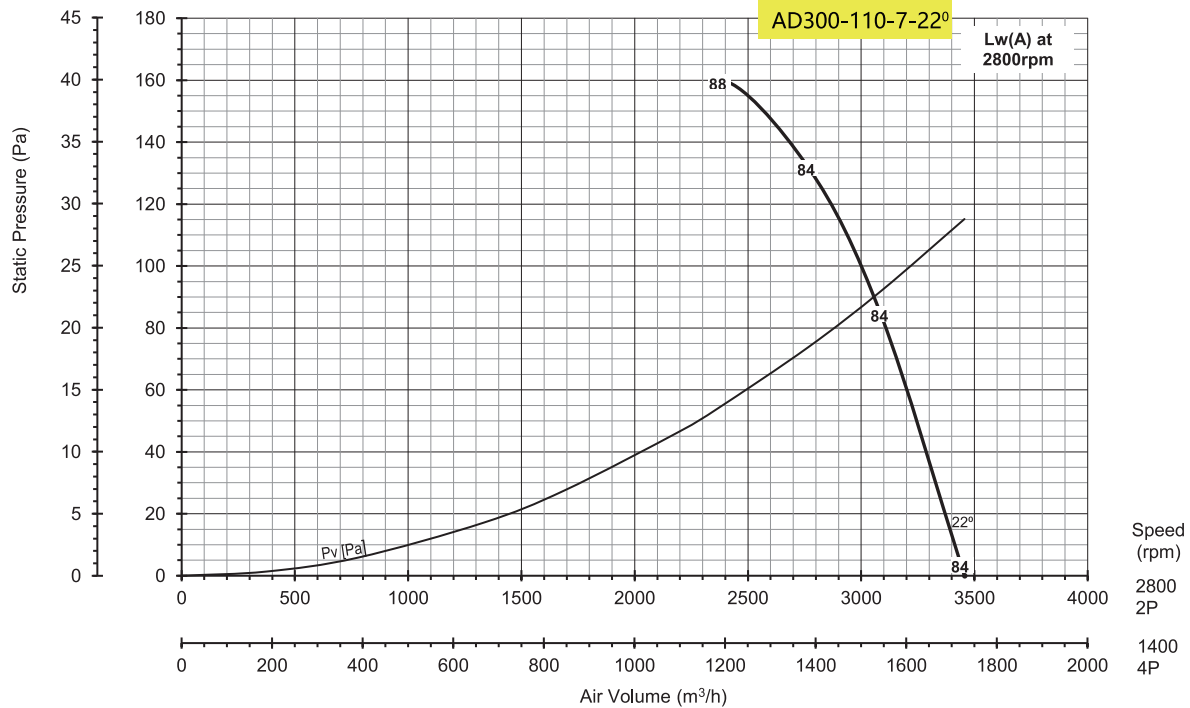
Model	ØD	ØD1	L	L1	W	W1	H	H1	n1-p1	n2-p2
AD240	240	280	305	205	230	180	325	172	6-φ 10	4-φ 10
AD300	300	355	408	260	290	237	408	210	8-φ 10	4-φ 10
AD305	312	355	408	260	290	237	408	210	8-φ 10	4-φ 10
AD380	385	432	482	340	335	280	485	246	8-φ 10	4-φ 13
AD480	488	540	593	430	375	313	605	316	12-φ 14	4-φ 13
AD610	614	665	730	560	430	372	733	374	12-φ 14	4-φ 13
AD760	768	830	910	--	550	--	875	473	12-φ 14	--

AD SERIES AXIAL FLOW FAN

$\rho=1.2\text{kg/m}^3$



Model No	Speed(RPM)	Blade Angle	Motor(Kw)	Peak Absorbed Power(Kw)	LwA dB(A)
AD240-88-7-22	1400	22	0.07	0.036	-19
	2800		0.37	0.288	0



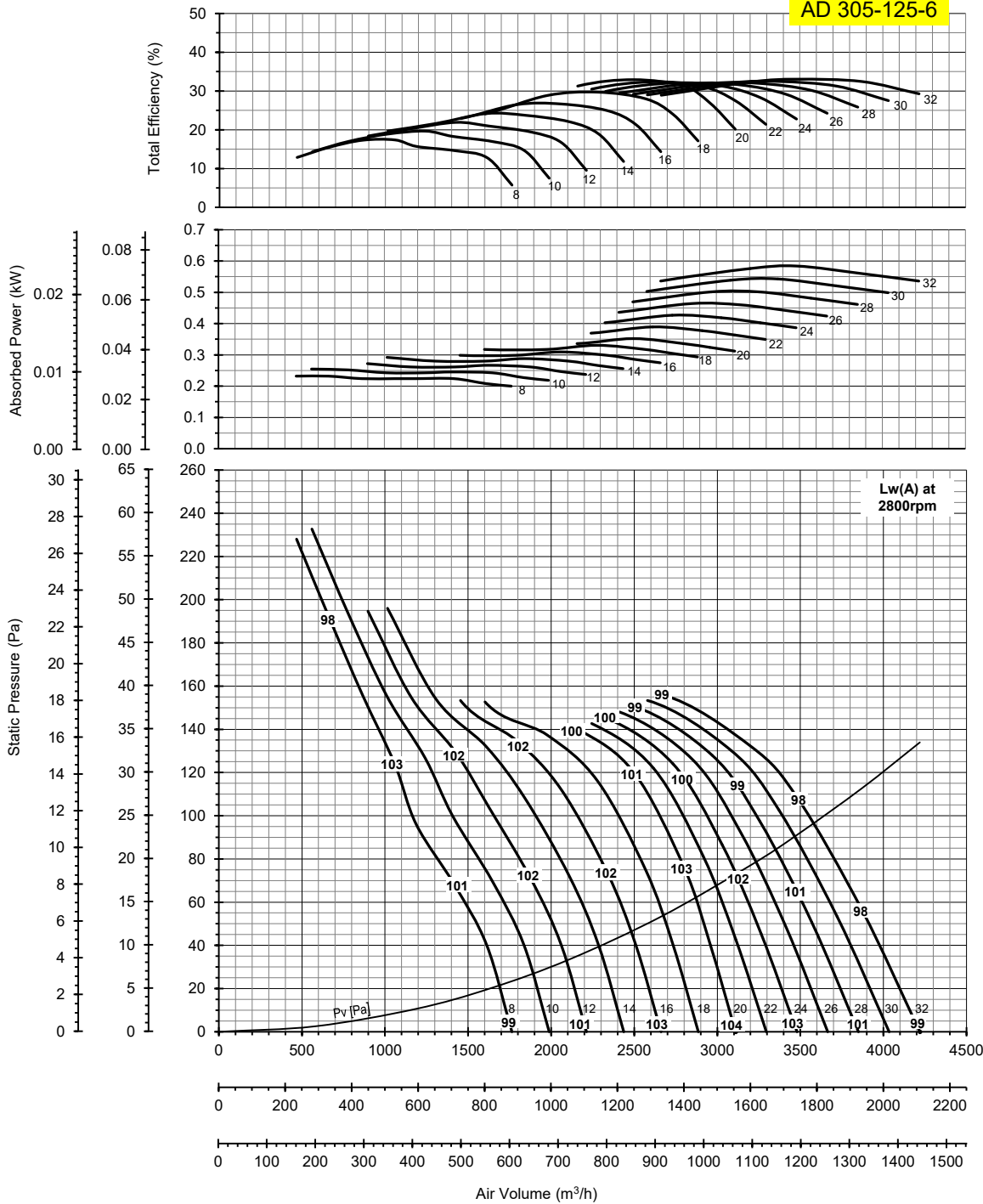
Model No	Speed(RPM)	Blade Angle	Motor(Kw)	Peak Absorbed Power(Kw)	LwA dB(A)
AD300-110-7-22	1400	22	0.09	0.046	-18
	2800		0.37	0.368	0

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- * The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for LwA sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

AD SERIES AXIAL FLOW FAN

AD 305-125-6

$\rho=1.2\text{kg/m}^3$



At 960 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD305-3-6	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	

At 1400 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD305-3-4	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	

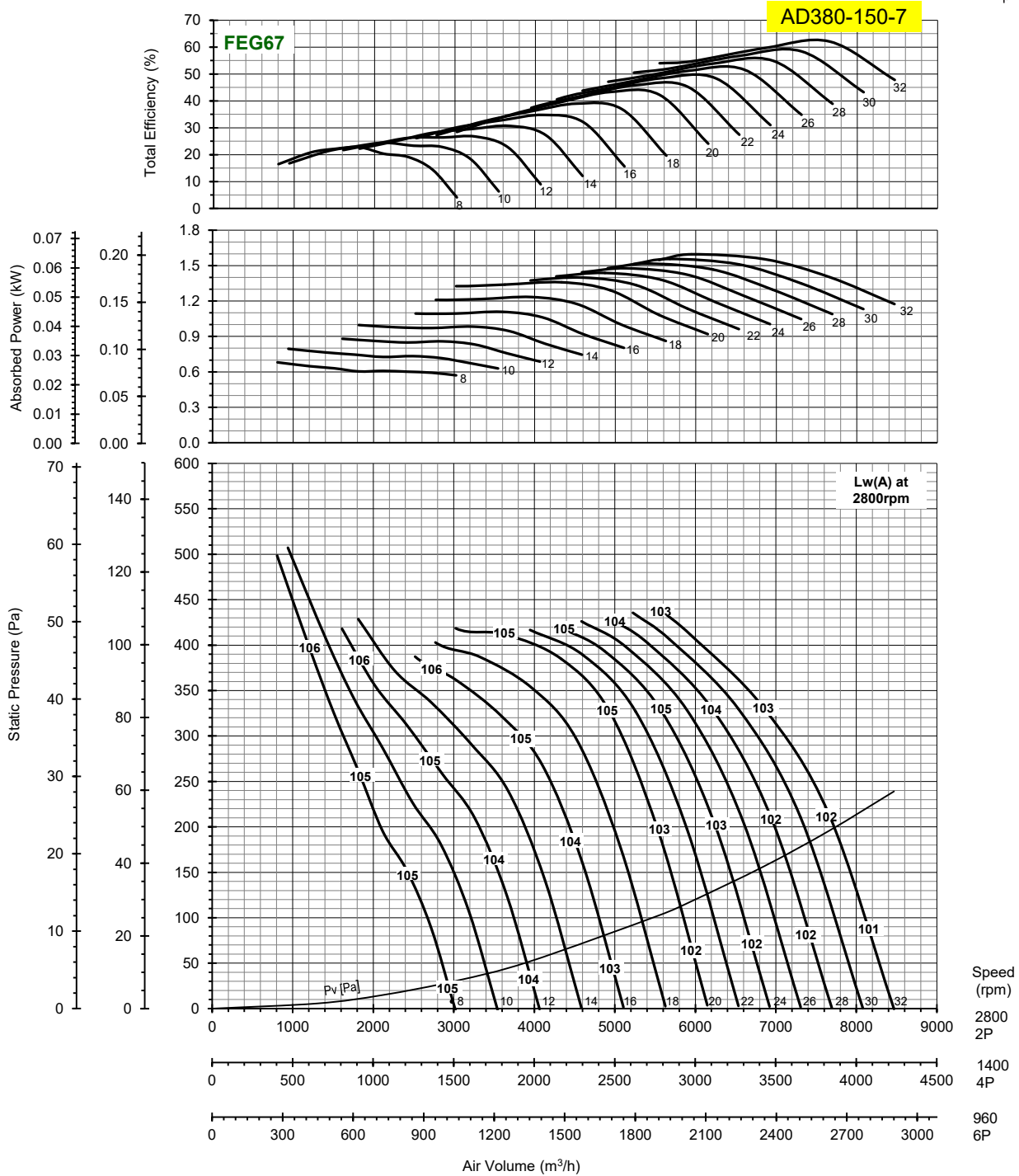
At 2800 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD305-3-2-0.37	8	0.37	0.232
	10		0.256
	12		0.272
	14		0.292
	16		0.309
	18		0.336
AD305-3-2-0.55	20	0.55	0.352
	22		0.389
	24		0.427
	26		0.464
	28		0.501
	30		0.543
AD305-3-2-0.75	32	0.75	0.584
LwA dB(A)		0	

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AD SERIES AXIAL FLOW FAN

$\rho=1.2\text{kg/m}^3$



At 960 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD380-3-6	8	0.18	0.027
	10		0.032
	12		0.035
	14		0.04
	16		0.045
	18		0.05
	20		0.055
	22		0.056
	24		0.058
	26		0.06
	28		0.061
	30		0.063
	32		0.064
LwA dB(A)		-30	

At 1400 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD380-3-4	8	0.18	0.085
	10		0.099
	12		0.11
	14		0.125
	16		0.139
	18		0.154
	20		0.17
	22		0.175
	24		0.18
	26		0.185
	28		0.19
	30		0.195
	32		0.2
LwA dB(A)		-20	

At 2800 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD380-3-2-0.75	8	1.1	0.681
	10		0.795
	12		0.88
	14		0.997
AD380-3-2-1.5	16	1.5	1.109
	18		1.234
	20		1.359
	22		1.398
	24		1.438
	26		1.477
AD380-3-2-2.2	28	2.2	1.517
	30		1.556
	32		1.596
LwA dB(A)		0	

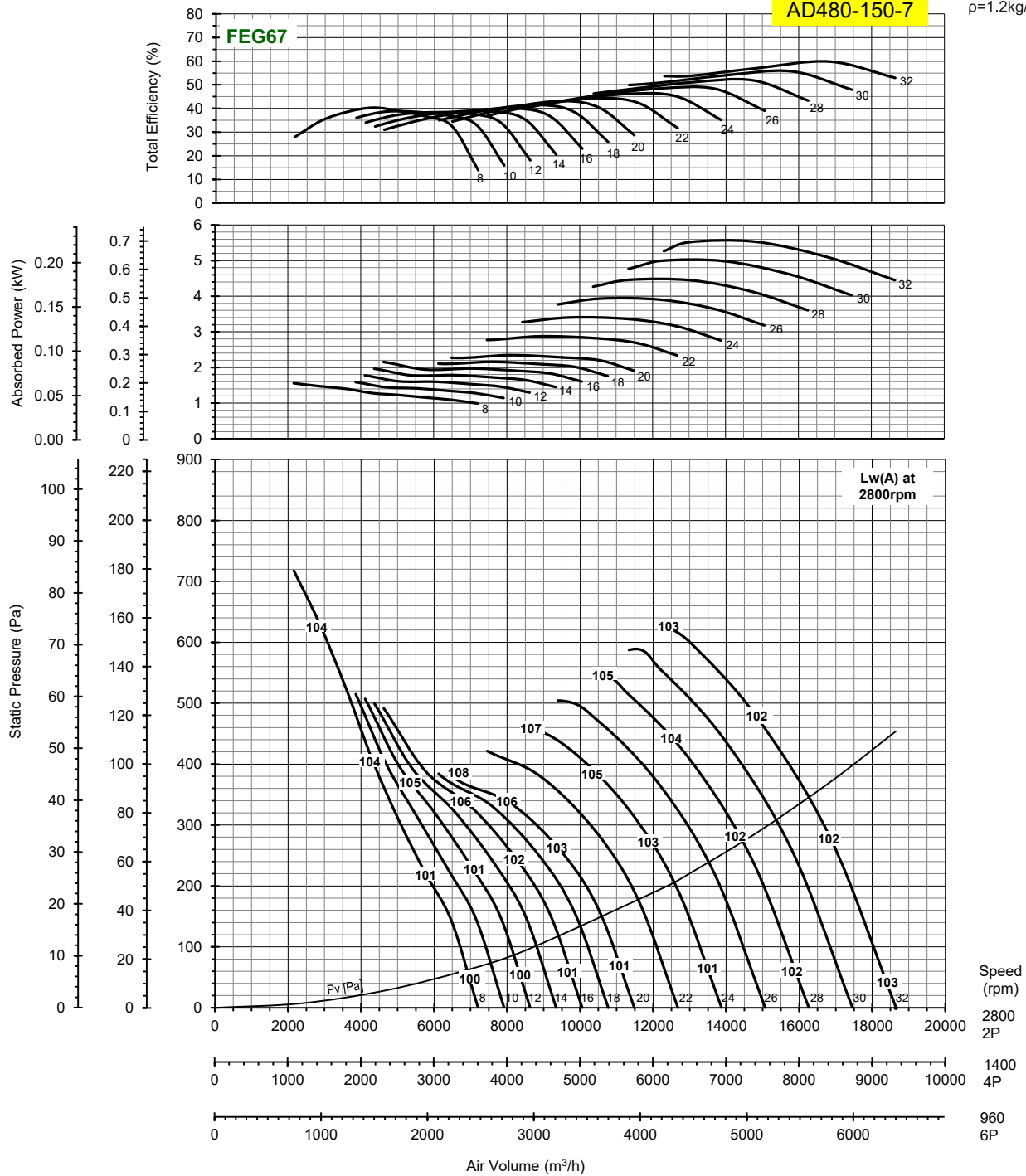
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AD SERIES AXIAL FLOW FAN

AD480-150-7

$\rho=1.2\text{kg/m}^3$



At 960 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD480-3-6-0.18	8	0.18	0.063
	10		0.064
	12		0.072
	14		0.079
	16		0.087
	18		0.087
	20		0.094
	22		0.116
	24		0.137
	26		0.159
AD480-3-6-0.37	28	0.37	0.180
	30		0.201
	32		0.223
LwA dB(A)	-26		

At 1400 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD480-3-4-0.37	8	0.37	0.195
	10		0.198
	12		0.222
	14		0.246
	16		0.269
	18		0.270
	20		0.293
	22		0.359
	24		0.425
	26		0.492
AD480-3-4-0.55	28	0.55	0.558
	30		0.624
	32		0.691
LwA dB(A)	-17		

At 2800 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD480-3-2-2.2	8	2.2	1.556
	10		1.587
	12		1.775
	14		1.964
	16		2.152
	18		2.157
AD480-3-2-3	20	3	2.344
	22		2.874
AD480-3-2-4	24	4	3.403
	26		3.933
AD480-3-2-5.5	28	5.5	4.462
	30		4.992
AD480-3-2-7.5	32	7.5	5.529
LwA dB(A)	0		

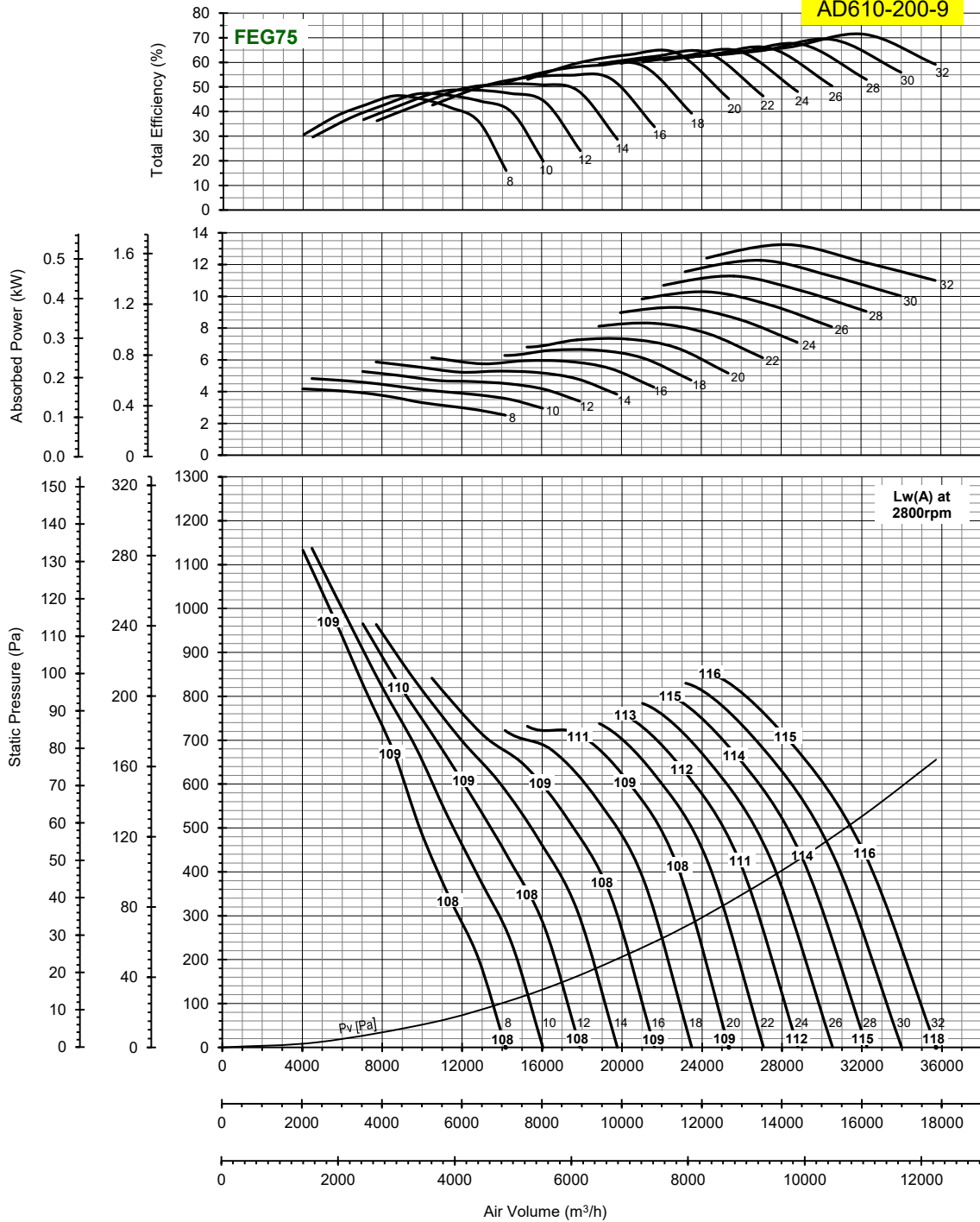
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AD SERIES AXIAL FLOW FAN

AD610-200-9

$\rho=1.2\text{kg/m}^3$



At 960 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD610-3-6-0.37	8	0.37	0.168
	10		0.194
	12		0.212
	14		0.236
	16		0.247
	18		0.266
	20		0.294
AD610-3-6-0.55	22	0.55	0.334
	24		0.374
	26		0.414
	28		0.454
	30		0.494
LwA dB(A)	-27		

At 1400 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD610-3-4-0.55	8	0.55	0.522
AD610-3-4-0.75	10	0.75	0.603
	12		0.658
	14		0.733
AD610-3-4-1.1	16	1.1	0.767
	18		0.826
	20		0.913
	22		1.037
	24		1.161
AD610-3-4-1.5	26	1.5	1.285
	28		1.409
	30		1.533
AD610-3-4-2.2	32	2.2	1.657
LwA dB(A)	-17		

At 2800 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD610-3-2-5.5	8	5.5	4.174
	10		4.824
	12		5.267
AD610-3-2-7.5	14	7.5	5.867
	16		6.138
	18		6.604
	20		7.307
	22		8.299
AD610-3-2-11	24	11	9.29
	26		10.282
	28		11.273
AD610-3-2-15	30	15	12.265
	32		13.256
LwA dB(A)	0		

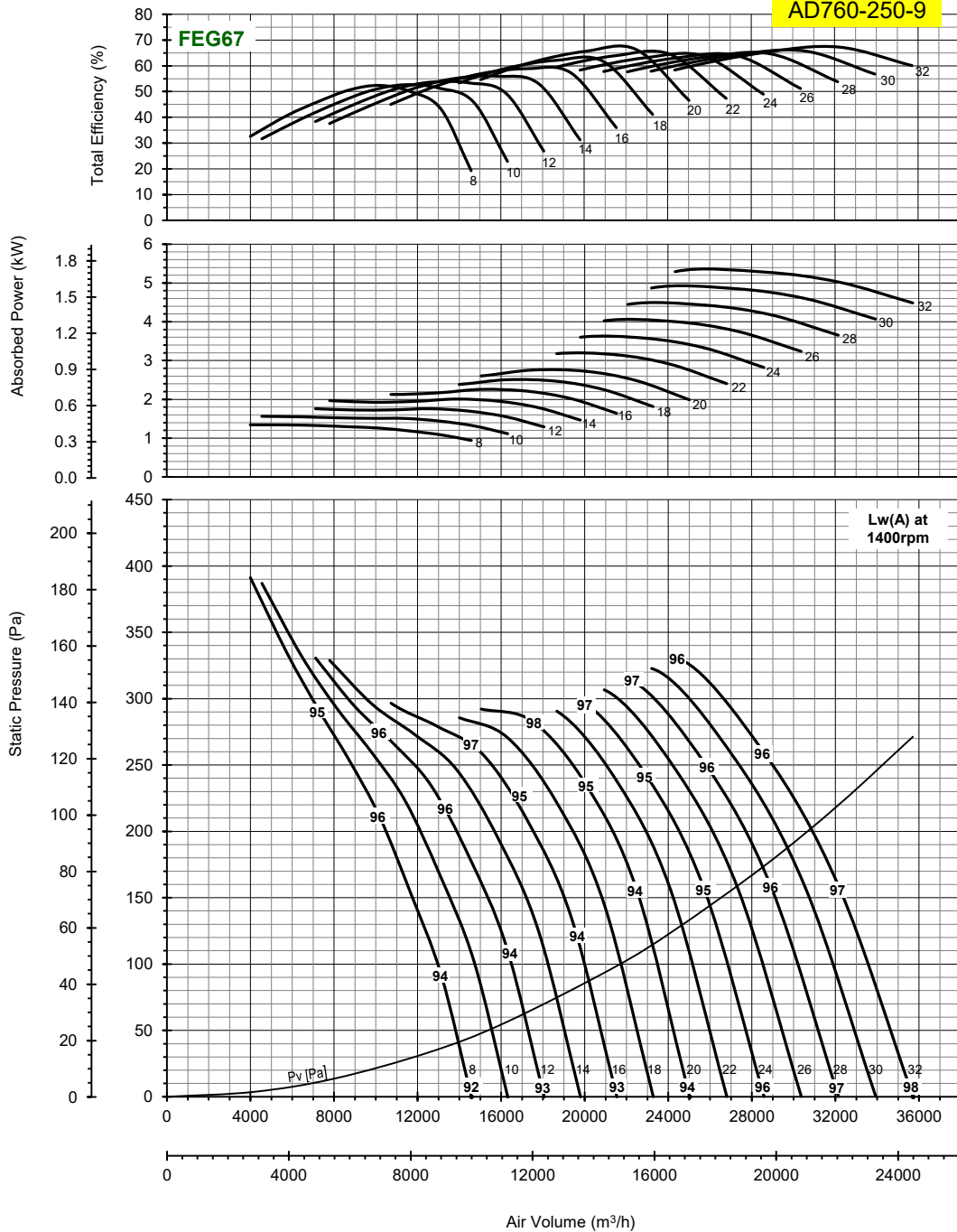
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AD SERIES AXIAL FLOW FAN

AD760-250-9

$\rho=1.2\text{kg/m}^3$



At 960 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD760-3-6-0.55	8	0.55	0.433
	10		0.504
AD760-3-6-0.75	12	0.75	0.587
	14		0.647
AD760-3-6-1.1	16	1.1	0.728
	18		0.808
AD760-3-6-1.5	20	1.5	0.889
	22		1.025
AD760-3-6-2.2	24	2.2	1.161
	26		1.297
	28		1.434
	30		1.57
	32		1.706
LwA dB(A)	-9		

At 1400 RPM			
Model No	Blade Angle	Motor (Kw)	Peak Absorbed Power (Kw)
AD760-3-4-1.5	8	1.5	1.343
	10		1.682
AD760-3-4-2.2	12	2.2	1.759
	14		2.007
AD760-3-4-3	16	3	2.257
	18		2.507
AD760-3-4-4	20	4	2.758
	22		3.179
AD760-3-4-5.5	24	5.5	3.801
	26		4.024
	28		4.447
	30		4.889
	32		5.292
LwA dB(A)	0		

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 * The A-weighted sound ratings shown have been calculated per AMCA International Standard 301. Values shown are for LwA sound power levels for installation type D: ducted inlet, ducted outlet. Ratings include the effects of duct end correction.

OTHER FAN ARRANGEMENTS

The achieved fan performances can differ from the test performances shown on the subsequent due to two main effects

1. The encroachment of irregular or abrupt changes within the system close to the fan. If good design practice is followed, then the system will receive nearly uniform air into its inlet and discharge its air flow in an almost ideal pattern. If this is achieved, the fan will perform to its expected level.
2. Changes to the internal elements of the fan: e.g. large junction boxes on motors, belt drive stacks or excessive blade tip clearances.
3. Tests were conducted to assess these effects and the generalized impact is shown below for fan selections made within the normal operating region over a wide blade-angle range.



AD



AP



AM



HAF

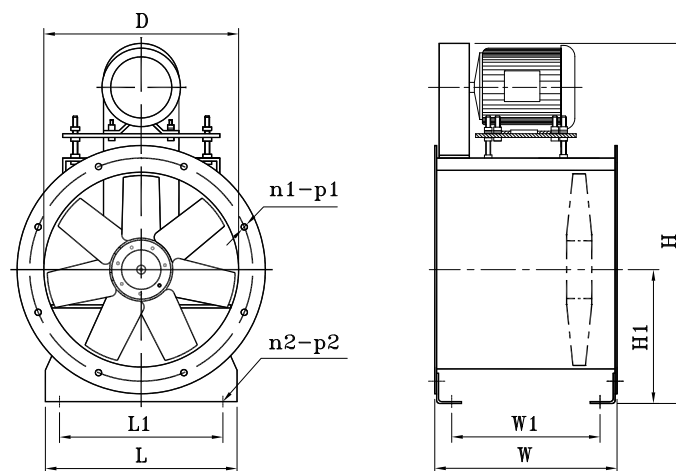


BELT DRIVEN TYPE AXIAL FLOW FANS (**AP** SERIES)

- The **AP Series** of axial flow fans is available in an extensive range of variants and air flow performance.
- In this instance the casing covers the entire length of the impeller and v-belt drive. Motor is mounted outside the fan case.
- They can be manufactured to handle most conditions from ambient air to hot, corrosive or explosive gases and can be ordered in 5 sizes extending from 240 to 610mm diameter.
- These units are generally specified when it is important to keep the motor away from the airstream generated due either to temperature or the nature of the gases being processed. An additional advantage is that by correctly specifying the positioning of the motor ease of maintenance is assured
- Commercial and industrial supply or exhaust air applications such as shopping centers, office buildings and car parks, through to industrial processes and equipment ventilation.
- To overcome the duty pressure losses, **additional 30% duty pressure** should be adjusted to account for the loss before making a selection on the standard performance curves. **+2dB will be adjusted** due to the effect on total sound level
- **Performance of AP Series Axial Flow Fans are not licensed by AMCA International.**

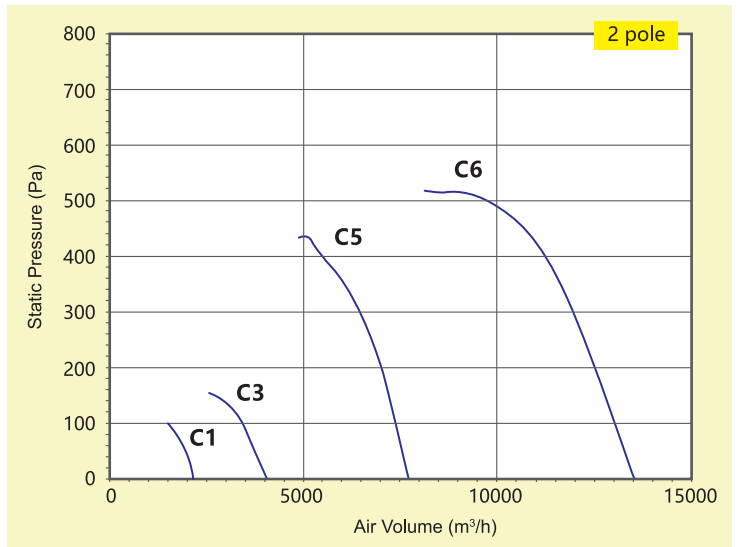
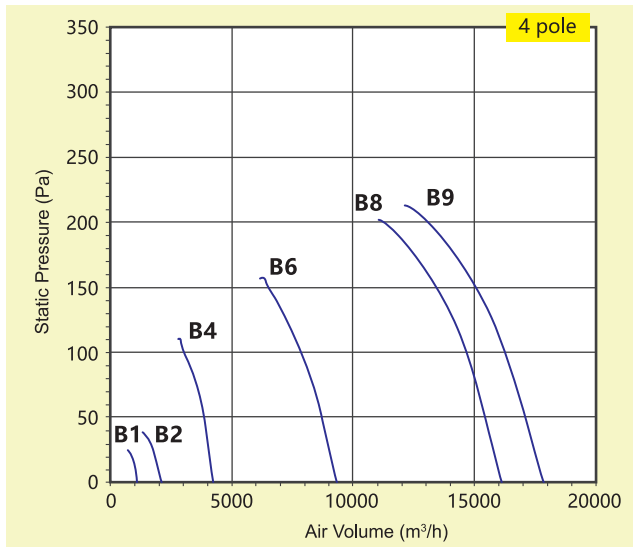
Dimensions

(mm)



Model	D	H	H1	L	L1	W	W1	n1-p1	n2-p2
AP240	243	445	172	280	205	230	180	6-10	4-10
AP305	312	570	210	355	260	290	237	8-10	4-13
AP380	385	670	246	432	340	335	280	8-10	4-13
AP480	488	795	316	540	430	375	313	12-14	4-13
AP610	614	950	374	665	560	430	372	12-14	4-13

FAN PERFORMANCE CURVES FOR “AP” SERIES AXIAL FLOW FANS



SPECIFICATIONS FOR “AP” SERIES AXIAL FLOW FANS

Fan Curve	Standard Model Number	Diameter Inch/mm	Voltage V/Ph/Hz	Motor Power (KW)	Transient Current (A)	Max Motor Speed (RPM)	AirFlow (m³/h)	St.Pressure (Pa)	Noise dB (A)
B1	AP240-3-4	9.5" /240	380-415/3/50	0.37	2.3	1400	900	10	55
C1	AP240-3-2			0.55	3.9	2800	1100	55	71
B2	AP305-3-4	12" /305	380-415/3/50	0.55	4.2	1400	1700	37	61
C3	AP305-3-2			0.75	3.0	2800	3400	130	80
B4	AP380-3-4-0.75	15" /380	380-415/3/50	0.75	5.0	1400	3600	75	62
C5	AP380-3-2-1.5			1.5	8.5	2800	7000	200	81
B6	AP480-3-4-1.5	19" /480	380-415/3/50	1.5	8.0	1400	8000	92	65
C6	AP480-3-2-3			3	15.0	2800	12000	300	79
B8	AP610-3-4-2.2	24" /610	380-415/3/50	2.2	12.0	1400	14000	130	76
B9	AP610-3-4-4			4	20.0	1400	15600	135	78

MANCOOLER - PORTABLE

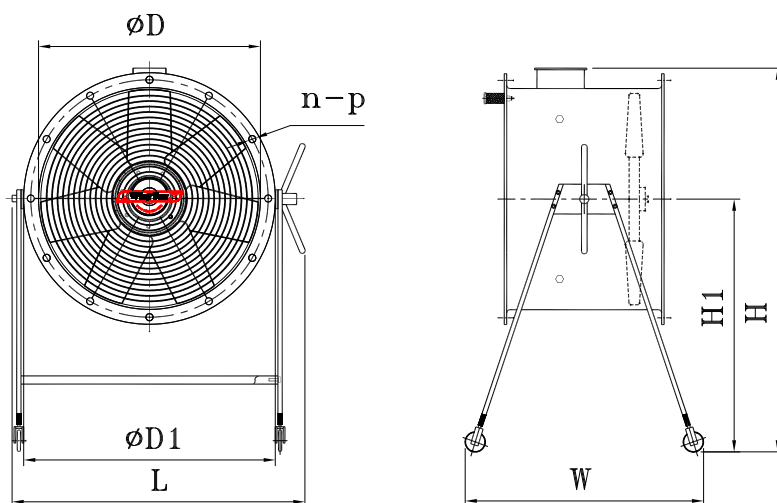
TYPE AXIAL FLOW FANS (**AM** SERIES)

- The AM Mancooler is designed for localized cooling and air circulation.
- This unit features a general-purpose direct drive tube axial fan mounted in an adjustable lightweight steel frame, as well as front and rear guards for maximum protection and safety.
- Air delivery is adjustable through 180°.
- It features Wing Ton AD series airfoil propeller, motor and propeller side safety guards.
- For smooth application, AM Mancooler is also equipped with a set of front and rear wheels to easily move the fan where needed. 10 meters power cord and IP56 single weatherproof switch.
- Available in 4 (305, 380, 480 and 610mm) diameters.
- Optional 5M long flexible duct with matching flanges are available at request.
- **Performance of AM Series Axial Flow Fans are not licensed by AMCA International.**



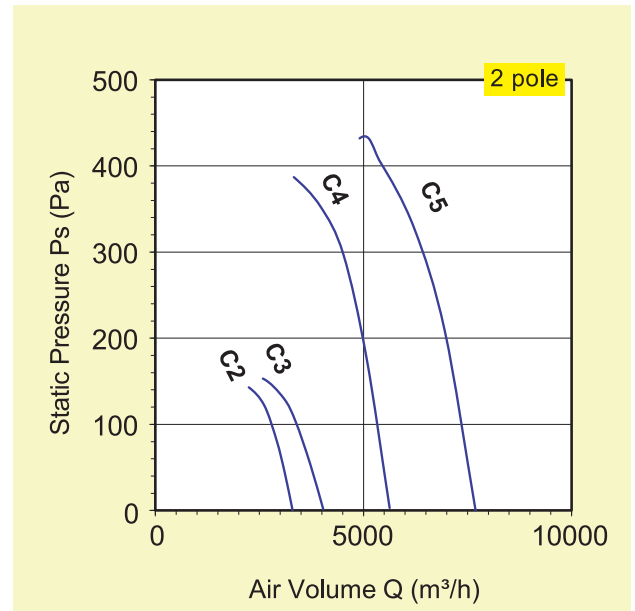
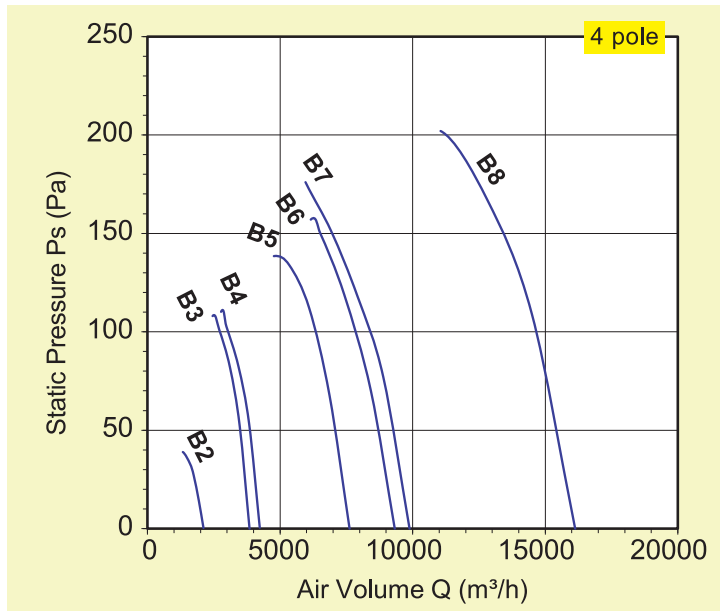
Dimensions

(mm)



Model	øD	øD1	L	H	H1	W	n-p
AM305	312	355	550	735	345	670	8-ø10
AM380	385	432	630	770	388	670	8-ø10
AM480	488	540	730	900	424	718	12-ø14
AM610	614	665	860	960	491	718	12-ø14

FAN PERFORMANCE CURVES FOR “AM” SERIES AXIAL FLOW FANS



SPECIFICATIONS FOR “AM” SERIES AXIAL FLOW FANS

Fan Curve	Standard Model Number	Diameter Inch/mm	Voltage V/Ph/Hz	Motor Power (KW)	Transient Current (A)	Max Motor Speed (RPM)	AirFlow (m³/h)	St.Pressure (Pa)	Noise dB (A)
B2	AM305-1-4	12" /305	220-240/1/50	0.125	1.8	1400	1700	37	61
C2	AM305-1-2			0.37	5.5	2800	3200	110	79
B2	AM305-3-4		380-415/3/50	0.125	1.2	1400	1700	37	61
C3	AM305-3-2			0.75	3.0	2800	3200	130	80
B3	AM380-1-4	15" /380	220-240/1/50	0.25	3.5	1400	3400	62	61
C4	AM380-1-2			0.75	8.5	2800	4800	240	83
B4	AM380-3-4		380-415/3/50	0.75	5.0	1400	3600	75	62
C5	AM380-3-2			1.5	8.5	2800	7000	200	81
B5	AM480-1-4	19" /480	220-240/1/50	0.55	6.0	1400	6400	100	63
B6	AM480-3-4		380-415/3/50	0.55	7.0	1400	7000	83	64
B7	AM610-1-4	24" /610	220-240/1/50	0.75	12	1400	9000	75	71
B8	AM610-3-4		380-415/3/50	2.2	12	1400	14000	130	76

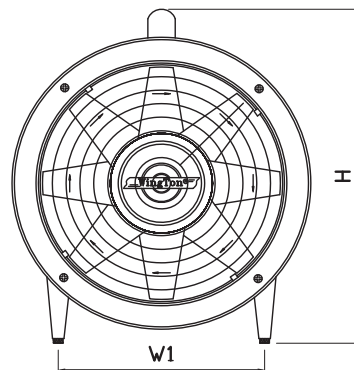
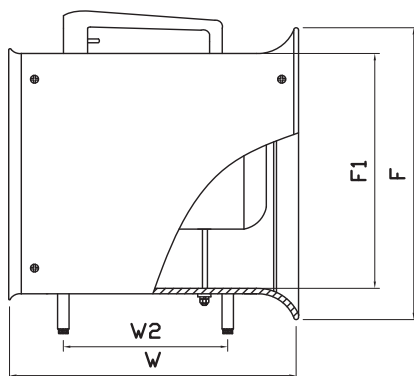
PORTABLE VENTILATOR (**HAF**)

- Available in 240 and 300mm.
- Compact in size, easy to operate, with aluminum blades.
- Good for use in manholes, underground tunnels, shipyards, narrow place, etc. Ideal to provide sufficient air flow and keep air fresh.
- It features Wing Ton AD series airfoil propeller, motor and propeller side safety guards.
- Portable Ventilator is also equipped with 10 meters power cord and handle with built in weatherproof switch.
- Optional 5M long flexible duct with matching flanges are available at request.
- **Performance of HAF Series Axial Flow Fans are not licensed by AMCA International.**



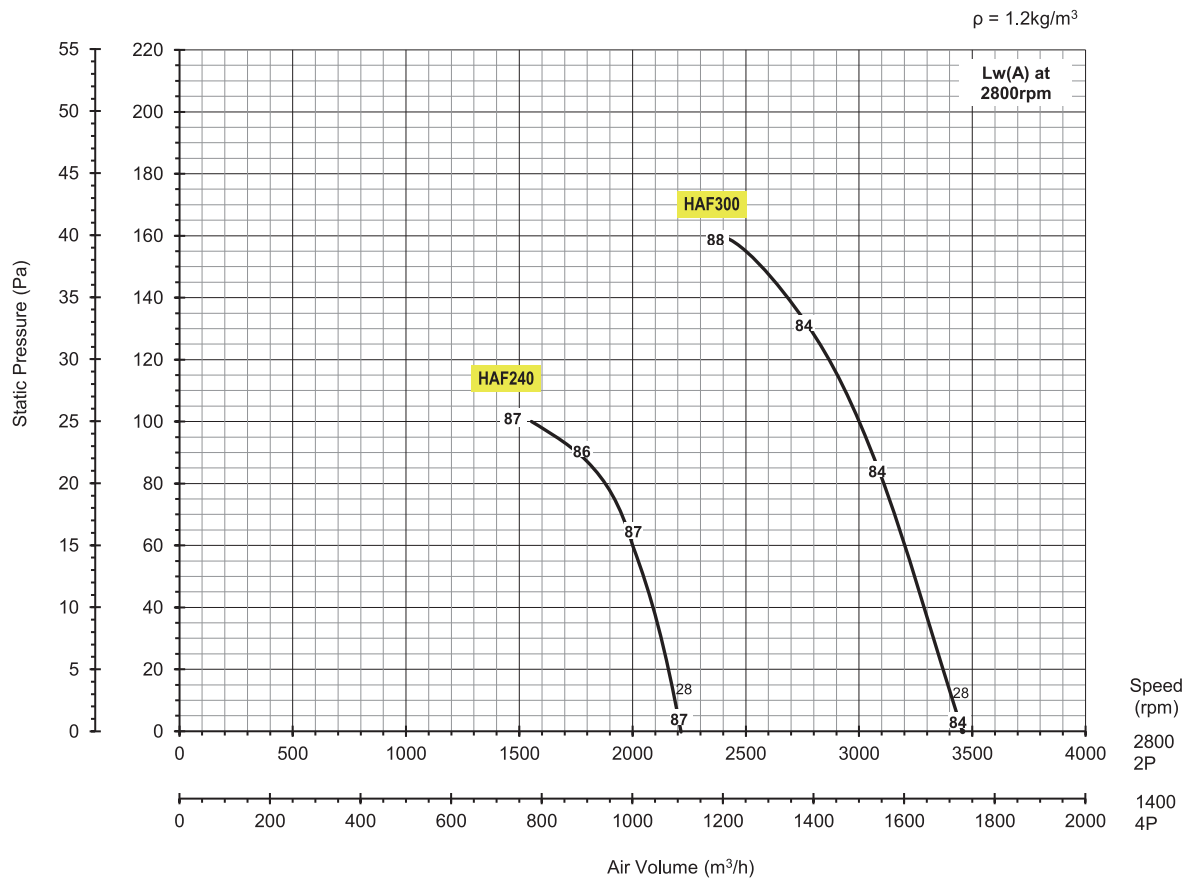
Dimensions

(mm)



Model	F	F1	H	W	W1	W2
HAF240	290	250	395	300	172	195
HAF300	362	310	430	340	210	205

FAN PERFORMANCE CURVES FOR “HAF” SERIES AXIAL FLOW FANS



SPECIFICATIONS FOR “HAF” SERIES AXIAL FLOW FANS

Standard Model Number	Diameter Inch/mm	Voltage V/Ph/Hz	Motor Power (KW)	Max Motor Speed (RPM)	AirFlow (m³/h)	Noise dB (A)	G.W (kg)
HAF240BBV	9.5" /240	220-240/1/50	0.065	1400	1100	48	7.2
HAF240ABV			0.16	2800	2200	66	8.0
HAF300BBV	12" /300	220-240/1/50	0.09	1400	1700	50	8.6
HAF300ABV			0.32	2800	3400	67	10.1



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